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Case No. 18-501-EL-FOR, 18-1392-EL-RDR, 18-1393-EL-ATA

PUCO

PUCO Case Caption: 2018 Long-Term Forecast Report of Ohio Power

Company and Related Matters, Application of Ohio Power

Company for Approval to Enter Into Renewable Energy

Purchase Agreements for Inclusion in the Renewable

Generation Rules, and Application of Ohio Power Company for  
Approval to Amend its Tariffs.

List of exhibits being filed:

Volume VI

AEP 7, 16

IGS/IGS Solar LLC - 748

ONAE65

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Reporter's Signature:

Karen Sue Gibson

Date Submitted: \_\_\_\_\_

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BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

- - -

In the Matter of the 2018 :  
Long-Term Forecast Report : Case No. 18-501-EL-FOR  
of Ohio Power Company and :  
Related Matters. :

In the Matter of the :  
Application of Ohio Power :  
Company for Approval to :  
Enter Into Renewable : Case No. 18-1392-EL-RDR  
Energy Purchase :  
Agreements for Inclusion :  
in the Renewable :  
Generation Rider. :

In the Matter of the :  
Application of Ohio Power : Case No. 18-1393-EL-ATA  
Company for Approval to :  
Amend its Tariffs. :

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PROCEEDINGS

before Ms. Sarah Parrot and Ms. Greta See, Attorney  
Examiners, at the Public Utilities Commission of  
Ohio, 180 East Broad Street, Room 11-A, Columbus,  
Ohio, called at 9:00 a.m. on Wednesday, January 23,  
2019.

- - -

VOLUME VI

- - -

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## Goldilocks and the Three Climates

Jonathan Lesser

*As Jim Hoecker says in his column this month, in Washington and elsewhere these days, environmental issues are "everywhere, all the time." To attempt to add a voice of reason about global warming and other so-far-unproven theories about which many billions are about to be spent, we are pleased to add Jonathan Lesser as a columnist.—Ed.*

With the release in February of the Intergovernmental Panel on Climate Change's (IPCC's) summary of its forthcoming fourth report,<sup>1</sup> all manner of storms, disease, death, plagues of locusts, and generalized mayhem are apparently rounding the global corner as a result of global warming. Apparently, "everybody" agrees that, if we do not immediately reduce greenhouse gas emissions far more than the decreases proposed under the Kyoto Protocol, "grim" and "catastrophic" impacts await. To emphasize the point, many articles on climate change are accompanied by pictures of cuddly polar bears that, from all appearances, have been cast adrift far at sea by a band of evildoers, led by the notorious Captain Coal.

Not to be outdone, France has proposed to create a new, worldwide environmental regulatory body with the power to "punish" greenhouse polluters (read that: the United States). How France

would punish the United States—stop exporting Brie, perhaps—or why the United States would care, is not clear.

All manner of storms, disease, death, plagues of locusts, and generalized mayhem are apparently rounding the global corner as a result of global warming.

Although many scientists view global climate change as a serious problem, many others continue to express doubt regarding both its magnitude and causes.<sup>2</sup> Clearly, the Earth's climate has changed continuously throughout its history and long before mankind was mucking about. Far more recently, at least by geologic time, the Vikings were farming in Greenland during the 1300s, only to be forced to abandon their efforts when temperatures dropped during the Little Ice Age that followed.

For those who, like me, do not wish to reflexively subscribe to some of the predicted doomsday scenarios—after all, it was just 30 years ago the public was bombarded with headlines that the world was entering a new ice age—with all of their dire consequences, the uncertainty about climate change raises a number of issues. First, how accurately can the costs (and, yes, the benefits) of climate change be estimated? Second, what are the best policy approaches to address climate change, and how much of an impact will those policies have? Do we try to reduce climate change, reverse it, or adapt? Third, what will be the unintended consequences of implementing the policies we choose? For surely there will be unintended consequences. Fourth, what is the best way to explain to individuals that, whatever ac-

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tivist policies are chosen—carbon taxes, cap-and-trade systems, shuttering every coal-fired power plant—such policies will affect everyone, and not just those “wicked” polluters like Captain Coal.

### WHEN HAS THE CLIMATE BEEN “JUST RIGHT”?

In reading the IPCC *Summary for Policymakers*, one question leaps out: is there a “best” global climate? No doubt the Vikings preferred the warmer climate that allowed them to farm in Greenland to the subsequent “Little Ice Age,” which did not. The most recent major ice age ended about 20,000 years ago, having lasted for some 40,000 years. During that time, much of North America was covered in mile-thick glaciers. That climate does not sound overly pleasant. Moreover, I doubt that it would be costless. Thus, if we are concerned about a warming climate, more frequent hot spells, and other climate-related phenomena, does that mean we would be better off if average temperatures were a few degrees lower? If we would be, how much lower? Nobody talks about that. Additionally, no one has shown that today’s climate is optimal, in the sense of providing the mix of temperatures, precipitation, and sea level that is just right. Dr. Pangloss, where are you when we need you?

The panic over climate change presumes that, by manipulating greenhouse gas emissions, we can achieve a Goldilocks climate—not too hot, not too cold, but just right. This seems unlikely, especially given examples of rapid climate changing in the past, long before Captain Coal began his reign of terror. For example, according to the National Oceanic and Atmospheric Administration, about 11,600 years ago the climate warmed by 15°C (27°F) in less than a decade.<sup>3</sup> Then, around 8,200 years ago, temperatures abruptly plunged for about 400 years.<sup>4</sup>

I do not know if mankind has the technical wherewithal to prevent those sorts of abrupt changes. I doubt it. Far easier, it seems, is to adapt to a changing climate and minimize the costs to those most affected.

### REAL COSTS, ETHEREAL BENEFITS

Rather than arguing over the pace of climate change and, more important for some, who should be blamed, let us instead assume that the only debate is over the appropriate policies. Given that, before US policymakers leap headfirst into the car-

bon policy pool, they should examine the costs and benefits of each policy alternative (as well as combinations of alternatives). The benefits will be based on each policy’s ability to mitigate climate change, both in absolute terms and the speed at which mitigation would occur under each policy.

Costs will be based on the net impacts on the world economy as well as opportunity costs associated with other policy imperatives, such as improved access to clean water and health care, reduced levels of disease, and so forth. Of course, some argue that climate change will exacerbate certain diseases, such as malaria. If that is the case, then the appropriate framework is to determine whether the least-cost strategy for such impacts is reducing greenhouse gases or, in the case of malaria, direct alternatives such as netting and spraying with DDT.

One issue that is attracting too little attention but that will be crucial for *any* mitigation policy to work is an ability to limit free riders, the numbers of which, in the case of greenhouse gas emissions, may be huge. Just like a cartel, even if all nations agree to a set of emissions reductions, each nation will have a tremendous incentive to cheat, especially as the stringency of the reduction targets increases. After all, monitoring all the world’s greenhouse gas emissions—carbon dioxide (CO<sub>2</sub>), methane, and chlorofluorocarbons—will be neither simple nor cheap. Moreover, the more stringent the emissions reduction targets, the greater the incentive to cheat.

One issue that is attracting too little attention is an ability to limit free riders, the numbers of which, in the case of greenhouse gas emissions, may be huge.

On top of that problem, of course, is the fact that some nations may simply refuse to go along. China, for example, announced earlier this year that global warming was a problem for “developed countries,” implying that it would continue to spew forth carbon dioxide with impunity. If some nations, especially developing nations that “blame” climate change on the developed nations, opt out of climate-change mitigation, then what? (It is probably safe to assume that France’s proposal would be a particularly poor enforcement mechanism.) With those caveats, what would the types of costs and benefits of alternative policies be, specifically with respect to energy consumers?



Policies likely to offer the least benefit at the highest cost likely are the command-and-control variety or, still worse, policies resulting from litigation, such as the lawsuit filed by California's Attorney General last September against US and Japanese automobile manufacturers for creating a "public nuisance" because cars emit CO<sub>2</sub>. The lawsuit alleges that "global warming is causing significant harm to California's environment, economy, agriculture and public health."<sup>5</sup> (No mention if CO<sub>2</sub> emissions from fulminating state attorneys general are also considered to be a public nuisance.)

A more likely command-and-control approach to greenhouse gas emissions will be specific laws mandating emissions reductions, such as those contained in Maryland's Healthy Air Act. Alternatively, these approaches could take the form of higher automobile fuel efficiency (CAFE) standards, banning the use of incandescent lighting (legislation introduced in the California State Assembly), more stringent renewable portfolio standards for electricity generation, and so forth. The impacts of these sorts of policies, especially those that address major stationary source emissions sources like coal-fired generating plants and cement factories, will be to restrict output and raise prices throughout the economy.

Thus, retail consumers will pay more for electricity, and contractors will pay more for cement. Both goods are basic inputs to a growing economy, and price increases will affect everything from the price of homes to the cost of food and health care. Moreover, those economic impacts will ripple through the entire economy. When the prices of basic production inputs increase, so do prices of almost all goods and services. Those price increases, in turn, create more economic ripples that will reduce employment, tax collections, and so forth.

The overall costs of such policies will clearly depend on how stringent the policies are. Raising CAFE standards by one mile per gallon in five years is unlikely to be an economy killer. Ordering all coal-fired power plants to shut down within one year could be. Of course, some, especially those bent on "punishing" polluters, may see this as rough justice for a society that deserves to suffer collectively. However, consumers (and voters) who suffer real economic pain, but who will be unable to discern any benefits whatsoever for that suffering, may rebel.

The other category of policies is market-based, and it includes emissions "cap-and-trade" programs,

carbon taxes, fuel taxes, and so forth. These sorts of policies are more efficient, in the sense that they are more likely to reduce greenhouse gas emissions at a far lower cost. However, these programs will not be costless. It is true that some proposals, such as carbon tax "recycling"—levying carbon taxes while reducing other taxes—would reduce economic harm, compared with simply levying carbon taxes. How much tax recycling would reduce the overall costs will depend on the form of the tax recycling. Moreover, revenue recycling could easily introduce yet more distortions to the US tax code.<sup>6</sup> Again, however, consumers will likely respond poorly to any form of tax scheme that raises the costs of the goods and services that they rely on. Finally, market-based approaches, such as cap-and-trade programs, are likely to be more vulnerable to free-rider problems than command-and-control policies.

Of course, global climate change mitigation policies are complicated by the fact that they must be global. The United States cannot impose its policies on the rest of the world, which cannot, in turn, impose its policies on the United States. Developing nations, especially large polluters like China and India, will be reluctant to reduce economic growth that is finally providing so many tangible benefits to their citizenry. It is those nations, rather than the "developed" nations like the United States, Canada, and Europe, that will ultimately determine the success or failure of climate-change policies. Perhaps, then, another policy must be more actively considered: *adaptation*. That will be the subject of my next column. ●

## NOTES

1. Intergovernmental Panel on Climate Change. (2007). *Climate Change 2007*. Paris: Author.
2. See, e.g., Lindzen, R. S. (2006, June 26). There is no 'consensus' on global warming. *Wall Street Journal*. See also Wegman, E., et al., Ad Hoc Committee Report on the 'Hockey Stick' Global Climate Reconstruction. Presented to the House Energy and Commerce Committee, July 14, 2006.
3. [www.ngdc.noaa.gov/paleo/ctl/abrupt.html](http://www.ngdc.noaa.gov/paleo/ctl/abrupt.html).
4. Baldini, J. U. L., McDermott, F., & Fairchild, I. J. (2002). Structure of the 8200-year cold event revealed by a speleothem trace element record, *Science*, 296, pp. 2203–06.
5. A copy of the actual complaint can be found at the California Office of the Attorney General Web site: [http://ag.ca.gov/newsalerts/cms06/06-082\\_0a.pdf](http://ag.ca.gov/newsalerts/cms06/06-082_0a.pdf).
6. For an introductory discussion, see Parry, I. (1997, June), Revenue recycling and the costs of reducing carbon emissions. Washington DC: Resources for the Future, Climate Issues Brief No. 2. <http://www.rff.org/Documents/RFF-CCIB-02.pdf>.

## Energy and the Environment



# As the Global Climate Turns: The Saga Continues

*Jonathan A. Lesser*

The goofiness of the enviros continues to have a more or less comic-book quality to it, but it should be remembered that they are able to push programs through Congress, and that the cost of these programs dreadfully impacts the efficiency of the electric industry—just look at the huge proportion of environmental expenditures making up the capital budget of any major electric company. To an extent, we are all spokesmen for our industry, and if there is a single area that needs help, it is avoiding unnecessary costs. If environmental policies are unnecessarily running up the bill, we need to speak out when we can.—Ed.

### ALL THE NEWS THAT'S FIT TO PRINT, PLUS SOME

Much happened in the world of climate-change research and policy during 2009. The U.S. House of Representatives and the U.S. Senate each passed their own versions of a "cap-and-trade" system, and each were chockablock full of exemptions for favored constituencies. There was the massive gathering at Copenha-

gen in December, a meeting whose goal was to enact a comprehensive system of greenhouse gas reductions, but which devolved into developing-world extortion for the climate "sins" of the developed world while blizzards raged outside. There was the U.S. Environmental Protection Agency's "endangerment" ruling, under which it determined that carbon dioxide is a threat to human health. The EPA decreed it can—and will—regulate greenhouse gas emissions under the auspices of the U.S. Clean Air Act, unless Congress acts first. And there was "Climategate," in which e-mail communications among numerous climate scientists associated with the Climate Research Unit at the University of East Anglia in Britain revealed them to be less pursuers of scientific truth and more pursuers of political favors and influence, destroyers of inconvenient data, and ivory-tower thugs.

Copenhagen . . . devolved into developing-world extortion for the climate "sins" of the developed world while blizzards raged outside.

There was also real research. In December, University of Waterloo Professor Qing-Bin Lu published a contrarian paper<sup>1</sup> in the journal *Physics Reports*—peer-reviewed, which Climategate scientists insist is the only standard under which skeptics of human-caused climate change may make claims—on the influence of cosmic rays on the earth's climate. Unlike many of the

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Climategate scientists, Professor Lu has welcomed review of his data and findings.

President Sarkozy's tax, like the proposed U.S. cap-and-trade legislation, included a Swiss-cheese-like set of exemptions for industry, exempting 93 percent of industrial emissions—making it worth less than the recycled *papier* it was printed on.

There were also policy changes. In France, on December 30 President Sarkozy's proposed €15 (U.S. \$22) carbon tax was struck down by the French Supreme Court. President Sarkozy's tax, like the proposed U.S. cap-and-trade legislation, included a Swiss-cheese-like set of exemptions for industry, exempting 93 percent of industrial emissions—making it worth less than the recycled *papier* it was printed on. The court ruled that those exemptions created a system with disproportionate impacts, and was thus inequitable. Those same sorts of exemptions were what killed then-Vice President Gore's Btu tax in 1993: what started out as an economically efficient idea was larded with exemptions, until it was mercifully extinguished.

### THE "PRECAUTIONARY PRINCIPLE" AND CLIMATEGATE

When confronted with the uncertainties of climate research—even absent the Climategate shenanigans—advocates of enacting policies to strictly curb greenhouse gas emissions often cite the "precautionary principle" as their guide.<sup>2</sup> The precautionary principle is a "mini-max" approach to risk. It says that we should minimize the risk of catastrophic environmental outcomes, even if the likelihood of such outcomes is small. Moreover, the precautionary principle places the burden of proof on those arguing a policy (including doing nothing) will not have catastrophic consequences. Not surprisingly, a mini-max approach to environmental risks can lead to very different policies than one based on expected costs and benefits.

The problem with the precautionary principle, as it has been applied by policy advocates, is that their application is quite selective. The

precautionary principle supposedly addresses "existential" threats. For example, should a large asteroid—of which there are many floating about the solar system—hit the earth, the consequences—massive and sudden extinctions, global starvation, and plunging the earth into a prolonged ice age—will be far, far greater than the impacts of climate change: just ask the neighborhood dinosaur.

Should a large asteroid hit the earth, the consequences—massive and sudden extinctions, global starvation, and plunging the earth into a prolonged ice age—will be far, far greater than the impacts of climate change: just ask the neighborhood dinosaur.

Nevertheless, while advocating that societies commit to massive changes in lifestyles, mandatory one-child policies to reduce the world population by several billion,<sup>3</sup> and trillions of dollars in lost economic well-being, there is little discussion of increasing our efforts to identify and deflect these earth-shattering asteroids. Similarly, the "precautionary principle" should also mean that, before committing trillions of dollars to combat climate change, we should ensure the underlying research and the policy choices we make as a result are themselves sound.

The "precautionary principle" should also mean that, before committing trillions of dollars to combat climate change, we should ensure the underlying research and the policy choices we make as a result are themselves sound.

Although some believe the science of global climate change is settled, the Climategate scandal has proven that many of the climate scientists who are well known for their vociferous advocacy of major policies (and, of course, lots more research dollars for them) have perverted the scientific method for their own gain. For example, in a December 30, 2009, Letter to the Editor at the *Wall Street Journal*, Professor Michael Mann, one of the best known of the

climate-change scientists, wrote, "Society relies upon the integrity of the scientific literature to inform sound policy. It is thus a serious offense to compromise the peer-review system in such a way as to allow anyone—including proponents of climate change science—to promote unsubstantiated claims and distortions."

The Climategate scandal has proven that many of the climate scientists who are well known for their vociferous advocacy of major policies (and, of course, lots more research dollars for them) have perverted the scientific method for their own gain.

This is the same Professor Mann who, in 1998, coauthored an article in *Nature* displaying the later-debunked "hockey stick" global temperature chart (purporting to show constant global temperatures between the years 1000 and 1900, and then a sudden and rapid increase in temperatures thereafter), but who refused to provide the raw data to two Canadian statisticians who later debunked Mann's research as statistical trickery. It is also the same Professor Mann who in a 2003 e-mail stated, "Perhaps we should encourage our colleagues in the climate research community to no longer submit to, or cite papers in [the peer-reviewed journal *Climate Research*]. We would also need to consider what we tell or request of our more reasonable colleagues who currently sit on the editorial board."<sup>4</sup>

Climategate does not "disprove" man-made climate change, but surely it raises many questions that ought to be answered carefully before the world invests trillions of dollars on economically catastrophic policies to reduce greenhouse gas emissions. Perhaps "regulatory capture" theory applies not just to regulators when they are ruled by special interests, but also to scientists seeking both influence and additional government grant money from those same regulators.

#### WHERE TO NOW?

Thus, after the failure (or success, depending on your point of view) of Copenhagen, the rejection of policies that unduly favor some economic sectors over others, and the unfold-

ing Climategate scandal, where does this leave us from a policy standpoint?

Climategate does not "disprove" man-made climate change, but surely it raises many questions that ought to be answered carefully before the world invests trillions of dollars on economically catastrophic policies to reduce greenhouse gas emissions.

First, how about identifying policies that would increase economic efficiency and have, as a side effect, a reduction of CO<sub>2</sub> and other pollutants? (This is *not* the type of policies on the table in the United States.) For example, recent research suggests that reducing methane emissions would be more effective than reducing carbon emissions.<sup>5</sup> How about developing cost-effective ways to capture and use methane that is now flared? What about a broad-based CO<sub>2</sub> tax whose proceeds are "recycled" back into the economy in the form of lower distorting tax rates, so as to encourage investment and economic growth? Surely that would more effectively reduce emissions, and reduce them sooner, than the current legislation before Congress that exempts large swaths of industry for years, or the tax that was struck down in France because of its exempting almost everybody.

What about a broad-based CO<sub>2</sub> tax whose proceeds are "recycled" back into the economy in the form of lower distorting tax rates, so as to encourage investment and economic growth?

Second, how about investing more in climate research—real research, not politically driven research that focuses on hysteria (drowning polar bears, the end of everything, and so forth). Do we really believe that a slightly warmer earth will be worse than one covered in mile-thick ice sheets? We could also step up research in adaptation, since regardless of the causes of climate change, the earth's climate has always changed, and will continue to change, and not always to



our liking. At the same time, why not devote more resources to some of the more immediate environmental and health issues facing us, such as improving access to clean water in developing countries, reducing the incidence of malaria, and increasing crop yields?

We could also step up research in adaptation, since regardless of the causes of climate change, the earth's climate has always changed, and will continue to change, and not always to our liking.

### ONLY NUCLEAR PLANT CAN PROVIDE EMISSIONS-FREE, ROUND-THE-CLOCK POWER

Third, since the world will continue to need more energy, it is time to embrace nuclear power. Although other countries are doing this, if the United States is serious about reducing carbon emissions and reliance on fossil fuels, we need to recognize the limits of renewable resources and jump-start construction of new nuclear plants. Sure, nuclear opponents complain that new nuclear plants cost too much. But without a web of regulatory mandates and subsidies—renewable portfolio standards, investment and production tax credits, and above market feed-in tariffs—many of those renewable resources would never be built. A nearer-term, lower-cost solution is capacity uprates at existing nuclear plants—the equivalent of turbo-charging a car engine. Using state-of-the-art technology, the output at an existing nuclear plant can be increased by as much as 20 percent without needing thousands of acres of land or new transmission lines, two issues over which opponents of Big Renewables are fighting mad.<sup>6</sup>

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Solar and wind have their place, but they cannot provide the steady, predictable, round-the-clock output of a baseload power plant that

forms the backbone of the electric generating system, and nuclear power is the only baseload source that emits no carbon in the production of electricity and is not geographically constrained. Why not jump-start the construction of new nuclear plants and accelerate installing capacity uprates at existing ones? We can also train a new generation of nuclear engineers and operators, and need to accelerate R&D efforts for nuclear fuel recycling and developing new reactor technologies, especially small modular reactors.

Solar and wind have their place, but they cannot provide the steady, predictable, round-the-clock output of a baseload power plant.

These are but a few steps available today. Instead of focusing on grandiose emissions trading schemes that carve out exemptions for the well connected, or relying on tainted research, we could focus on policies that would provide real economic and environmental benefits in the near term. ○

### NOTES

1. Lu, Q.-B. (in press). Cosmic-ray-driven electron-induced reactions of halogenated molecules adsorbed on ice surfaces: Implications for atmospheric ozone depletion, *Physics Reports*, dx.doi.org/10.1016/j.physrep.2009.12.002.
2. Some like to cite the philosopher, physicist, and mathematician Blaise Pascal (1623–62) as “originating” the precautionary principle. In fact, “Pascal’s wager,” as it came to be known, posited that, although the existence of God could not be proven, believing in God had no downside, while not believing in God, only to find upon one’s death that God existed, could have catastrophic consequences. (Presumably, God would look askance at the unbeliever and toss him into hell, or force him to testify before a Congressional committee.)
3. Francis, D. (2009, December 10). The real Inconvenient Truth: The whole world needs to adopt China’s one-child policy. *Financial Post* (Canada), <http://www.financialpost.com/story.html?id=2314438#ixzz0bNvDNZ48>.
4. The full text of Professor Mann’s e-mail, dated March 11, 2003, can be found at <http://www.eastangliaemails.com/emails.php?cid=295&filename=1047388489.txt>.
5. See, e.g., Watson, R., & El-Ashry, M. (2009, December 29). A fast, cheap way to cool the planet. *Wall Street Journal*, <http://online.wsj.com/article/SB10001424052748704039704574616130812043404.html>.
6. See my column, (2009, February). Renewables, becoming cheaper, are now passé. *Natural Gas & Electricity*, pp. 30–32.



## Global Warming, Climate Change, Er, Climate Volatility: 2012 and Beyond

Jonathan A. Lesser

**T**he strikethrough above is not the result of the editor's failure to remove "redlined" changes. Rather, it reflects the ongoing metamorphosis of environmental doomsayers to failed predictions about the earth's climate. Perhaps because global warming was not sufficiently scary to the public, or perhaps because every time former Vice President Al Gore would speak on the subject, his speech would be accompanied by heavy snow or record cold temperatures, global warming became "climate change."

Perhaps because global warming was not sufficiently scary to the public, or perhaps because every time former Vice President Al Gore would speak on the subject, his speech would be accompanied by heavy snow or record cold temperatures, global warming became "climate change."

Of course, the climate has always changed. In the last millennium we have experienced both mini ice ages and periods where temperatures were much warmer than today. Oddly, it was during the lat-

ter that humanity most flourished, enjoying more bountiful harvests that created healthier populations more resistant to disease. After all, Greenland was so named by the Scandinavians not because of the mile-thick ice sheets that now cover it, but because they were able to farm there. Nor has the litany of predicted impacts from climate "change" decreased, such as attacks by vampire bats,<sup>1</sup> greater levels of mental illness,<sup>2</sup> and (I am not making this up) space aliens destroying the earth because humans are not eco-friendly.<sup>3</sup>

After all, Greenland was so named by the Scandinavians not because of the mile-thick ice sheets that now cover it, but because they were able to farm there.

Nor has the litany of predicted impacts from climate "change" decreased, such as attacks by vampire bats, greater levels of mental illness, and (I am not making this up) space aliens destroying the earth.

Now, the new mantra is "climate volatility," because "volatility" is a scary word. Every day there are stories about stock market "volatility," the "volatility" of oil prices, and so forth. Some electric utilities are fighting deregulation because of the threats posed by "volatile" market prices, even if those volatile prices would still be lower than the steady-as-she-goes, cost-based

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ones. In short, volatility is the cockroach scampering along the kitchen floor you recoil from when the lights are turned on.

The new mantra is “climate volatility,” because “volatility” is a scary word.

Thus, climate alarmists are now focusing on climate “volatility”: more heat waves, heavier rains, flashier floods, and snowier snowfalls, all being caused by carbon emissions. The wildfires that plagued Texas last summer, which burned 1,500 homes and left two people dead, and the continuing drought in that state, were held up by President Obama as “proof” of climate change: “You’ve got a governor whose state is on fire denying climate change.”<sup>4</sup> The actual cause of the wildfires was trees and branches falling onto power lines because of high winds. (To answer the inevitable question, yes, high winds must be caused by climate change.)

Volatility is the cockroach scampering along the kitchen floor you recoil from when the lights are turned on.

On November 18, 2011, the United Nations’ Intergovernmental Panel on Climate Change (IPCC), released a summary of a forthcoming special report on climate extremes. However, despite stating that, “[c]limate extremes, exposure, and vulnerability are influenced by a wide range of factors, including anthropogenic climate change, natural climate variability, and socioeconomic development,”<sup>5</sup> the report focuses solely on human-induced climate change as the cause of “extreme” weather.

### **WHATEVER IT IS, IT’S CAUSED BY CLIMATE CHANGE**

There are a number of problems with this latest focus on climate “volatility.” The first is a statistical one. “Extreme” climate events are just that: extreme. That means that they are rare.

Determining a statistically significant change in “extreme” events is more difficult than de-

termining whether there has been a change in, say, the average.<sup>6</sup> For example, it is relatively straightforward to compare average annual rainfall over the last 30 years and determine whether it has changed significantly from the average of the 30 years before that. But if last summer a large thunderstorm dumped five inches of rain in Dallas and this summer a large thunderstorm dumped six inches of rain in Houston, is that an example of more “extreme” weather?

Determining a statistically significant change in “extreme” events is more difficult than determining whether there has been a change in, say, the average.

According to NASA Chief Scientist James Hansen, one of the most vocal defenders of all things climate change, it would be. Recently, for example, he coauthored a paper claiming that the Moscow heat wave of 2010 and the Texas wildfires were “proof” of climate change based on what is called a “three sigma” event.<sup>7</sup> However, the “proof” is based on three false assumptions: that the statistical distribution of summer temperatures is normal (i.e., a bell-shaped curve); that there is no correlation between summer temperatures from year to year; and that regions like Moscow and Texas are “unique.”<sup>8</sup>

In essence, the new mantra of climate “volatility” is a theory that “explains” every weather event. . . . But a theory that “proves” every climate event is no theory, because it is not testable against a null hypothesis.

In essence, the new mantra of climate “volatility” is a theory that “explains” every weather event, whether heat wave, cold snap, drought, flood, or plagues of locusts and frogs. But a theory that “proves” every climate event is no theory, because it is not testable against a null hypothesis.

### **WHERE THERE’S SMOKE, WILL THERE BE FIRE?**

Because this issue of *Natural Gas & Electricity* focuses on predictions for the coming year,

how will this newest twist to the global warming/climate change debate fare? In a word, poorly.

How will this newest twist to the global warming/climate change debate fare? In a word, poorly.


The US and world economies, both of which continue to sputter, will remain at the forefront of the political “do something” crowd. With the Solyndra debacle worsening, along with the green energy/green jobs mantra fading,<sup>9</sup> the likelihood of any action from Congress to enact climate-change policies that increase the energy prices is nil. But this does not mean that no political action affecting energy prices will be taken.

This does not mean that no political action affecting energy prices will be taken. Such actions will be taken and already have been.

Such actions will be taken and already have been. The president’s postponement of a decision to approve the TransCanada Keystone XL pipeline, which would transport oil from Alberta’s tar sands to Texas, is one example. The US Department of Agriculture recently cancelled a mineral lease auction for Wayne National Forest (WNF) in Ohio, which will postpone any shale gas development there, despite there already being 1,300 oil and gas wells in operation there currently. Moreover, there continue to be looming new rules from the US Environmental Protection Agency regulating air and water pollution from coal-fired power plants and large industrial sources, such as cement manufacturers.

There continue to be looming new rules from the US Environmental Protection Agency regulating air and water pollution from coal-fired power plants and large industrial sources, such as cement manufacturers.

Nevertheless, with the focus on jobs and the economy, as well as the upcoming presidential

election in November, specific policies to curb greenhouse gas emissions will not be forthcoming from Congress. Of course, expect a long, hot summer with more extreme levels of gaseous emissions of the political type. That is a statistical guarantee. 

Expect a long, hot summer with more extreme levels of gaseous emissions of the political type.

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6. There is a branch of statistics focused on “extreme value theory.” See, e.g., Pickands, J. (1975). Statistical inference using extreme order statistics. *Annals of Statistics*, 3(1), 119–131, that discusses “general extreme values” (GEV) analysis. For a recent application of GEV to climate, see Sousa, P. M., Trigo, R. M., Aizpurua, P., Nieto, R., Gimeno, L., & Garcia-Herrera, R. (2011). Trends and extremes of drought indices throughout the 20th century in the Mediterranean. *Natural Hazards and Earth System Sciences*, 11(special issue), 33–51.
7. Hansen, J., Sato, M., & Ruedy, R. (2011, November). *Climate variability and climate change: The new climate dice*. Retrieved from [http://www.columbia.edu/~jeh1/mailings/2011/20111110\\_NewClimateDice.pdf](http://www.columbia.edu/~jeh1/mailings/2011/20111110_NewClimateDice.pdf). Sigma is the measure of standard deviation of a statistical distribution.
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## The Devil and the EPA

*Jonathan A. Lesser*

**T**he late comedian Flip Wilson had a wildly popular television show back in the 1970s, and one of his most famous characters was “Geraldine Jones” (really, Wilson dressed in drag). Geraldine, an oft-misbehaving young “lady,” had a famous catchphrase, “The devil made me do it!”

Even the most efficient coal plant emits at least 1,800 pounds per megawatt-hour, for the simple reason that burning coal releases more CO<sub>2</sub> than burning natural gas.

Maybe that is the real reason behind the EPA’s proposed new carbon dioxide (CO<sub>2</sub>) emission rule, which the agency released on September 20, 2013. Under the proposed rule, known as the New Source Performance Standard, new electric-generating plants will not be allowed to emit more than 1,100 pounds of CO<sub>2</sub> per megawatt-hour of generation. Whereas new natural gas-fired generators will be unaffected, the proposed rule will effectively prohibit construction of new coal-fired power plants. Even the most efficient coal plant emits at least 1,800 pounds per megawatt-hour, for the

simple reason that burning coal releases more CO<sub>2</sub> than burning natural gas.

EPA Administrator Gina McCarthy has insisted that “we don’t have a war on coal.” If not, the EPA has undertaken a “domestic contingency operation,” for which the carbon-emitting enemy is to be destroyed. But whatever one wants to call it, the new rule will have little impact on global carbon emissions and no impact whatsoever on the scourge of climate change.

EPA Administrator Gina McCarthy has insisted that “we don’t have a war on coal.”

What it will accomplish is to contribute to higher electricity prices and further retard domestic economic growth. And contrary to an “all of the above” energy policy, the EPA’s actions, coupled with the almost-impossible task of building new nuclear plants, means that only natural gas-fired plants will be able to supply needed baseload (i.e., “round-the-clock”) electricity. Whatever happened to the importance of diverse generating resources?

The EPA’s actions, coupled with the almost-impossible task of building new nuclear plants, means that only natural gas-fired plants will be able to supply needed baseload (i.e., “round-the-clock”) electricity.

According to data published by the US Energy Information Administration, in 2012, coal-fired

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power plants emitted just over 1,500 million metric tons of CO<sub>2</sub>, less than 30 percent of total US emissions of 5,290 metric tons.<sup>1</sup> According to the International Energy Agency, total world CO<sub>2</sub> emissions were about 31,600 million metric tons.<sup>2</sup> Thus, total US CO<sub>2</sub> emissions, which have been decreasing since 2007, accounted for less than 17 percent of world emissions, and US coal-fired power plants accounted therefore for less than 5 percent of world CO<sub>2</sub> emissions.

In 2012, coal-fired power plants emitted just over 1,500 million metric tons of CO<sub>2</sub>.

Because China and India's carbon emissions continue to increase rapidly, unilateral sword-falling actions taken by the United States will have even less impact on overall world CO<sub>2</sub> levels in the future. Yet the EPA insists on its domestic contingency operation against coal. This makes no economic or environmental sense at all.

Because China and India's carbon emissions continue to increase rapidly, unilateral sword-falling actions taken by the United States will have even less impact.

The EPA insists that these new emissions standards are not an effective ban on new coal plants, pointing to coal plants with "carbon-capture" technology that are under development. For example, in September, construction began on a small plant that will convert CO<sub>2</sub> emissions from a cement plant in Texas to baking soda (calcium carbonate).<sup>3</sup> Although some generating plants intend to use the captured CO<sub>2</sub> in industrial processes,<sup>4</sup> the most common strategy is to inject the captured CO<sub>2</sub> underground.

In extreme concentrations, such as might occur if there were sudden leaks of underground gas at the surface, CO<sub>2</sub> is deadly.

Not surprisingly, that approach raises numerous technical and legal issues: how to

ensure the injected CO<sub>2</sub> stays underground and, if it does not, who gets sued, because, in extreme concentrations, such as might occur if there were sudden leaks of underground gas at the surface, CO<sub>2</sub> is deadly.

### **BASTARDIZING COST-BENEFIT ANALYSIS**

The EPA also released a cost-benefit analysis of the proposed rule.<sup>5</sup> As part of this analysis, which must rate as one of the most dishonest cost-benefit analyses of all time, the agency concludes the following:

The EPA anticipates that the proposed EGU New Source GHG Standards will result in negligible CO<sub>2</sub> emission changes, energy impacts, quantified benefits, costs, and economic impacts by 2022. Accordingly, the EPA also does not anticipate this rule will have any impacts on the price of electricity, employment or labor markets, or the US economy.

For a cost-benefit analysis practitioner like the author, this is a very strange conclusion. How can the proposed rule not have any costs or benefits? The answer stems from the EPA's analytical assumptions. Specifically, because the EPA assumes that no new coal plants will be built, even without the proposed rule, concluding that all new generating facilities will be gas-fired or renewable generation, and thus already meet the proposed emissions standards. Hence, the proposed rule will impose no costs. And because no new coal plants will be built anyway, the proposed rule will provide no reduction in CO<sub>2</sub> emissions below levels without the rule.

Despite this bizarre interpretation, in its analysis the EPA discusses the other benefits of the proposed rule. Specifically, the EPA concludes the following:

This [New Source Performance Standard] would provide regulatory certainty that any new coal-fired power plant must limit CO<sub>2</sub> emissions by implementing some form of partial capture and storage. Therefore, the proposed regulation would provide an incentive for supporting research, development, and investment into technology to capture and store CO<sub>2</sub>.



Thus, to summarize, the EPA's cost-benefit analysis concludes its proposed rule will not have any cost because the EPA assumes nobody will build any new coal plants anyway, with or without the proposed rule. And because the EPA concludes that nobody will build any new coal plants anyway, the proposed rule will not lead to any reduction in CO<sub>2</sub> emissions, which is the EPA's primary goal. Yet somehow, despite not changing anybody's behavior or reducing CO<sub>2</sub> emissions, the proposed rule will still provide greater regulatory certainty for all of those developers who will not be building any new coal plants anyway, because they will nevertheless invest in R&D for carbon capture technologies, even though they will not need those technologies because they will not be building any new coal plants. Perhaps the next time a client asks me to perform a cost-benefit study, I will simply refer them to the EPA.

If the option to build new coal plants is gone, wholesale and retail electric prices are likely to increase. And high electric prices will take a very real economic toll.

Of course, the proposed rule is likely to have real costs. Although coal plant economics have been hurt by low-cost natural gas, thanks to the boom in shale gas production and subsidized renewable resources,<sup>6</sup> the economics in the future may change. As the demand for natural gas increases, especially from construction of gas-fired generating plants, natural gas prices are likely to increase. Similarly, as more coal plants are retired, thanks in part to other, existing EPA regulations, coal prices may decrease.<sup>7</sup> But if the option to build new coal plants is gone, wholesale and retail electric prices are likely to increase. And high electric prices will take a very real economic toll.

The impacts of any reduced CO<sub>2</sub> emissions on the climate will not even be measurable.

As for the benefits of reduced CO<sub>2</sub> emissions from the proposed rule, the EPA is probably correct, although not for the reasons the agency thinks. The impacts of any reduced CO<sub>2</sub> emissions on the climate will not even be measurable.

The real adverse economic impacts of higher electric prices do not seem to matter to the EPA. Either the agency does not understand the role of electricity in the economy, or perhaps it believes intermittent renewables will provide electric nirvana. They will not. And while the proposed rule leaves natural gas-fired generation intact, the agency continues to overplay the dangers of hydraulic fracturing on water quality, despite its flawed studies.<sup>8</sup>

## EPA'S SECOND ACT

With the proposed rule for new generators under its belt, the EPA intends to issue carbon emissions limits for existing generators in 2014. Perhaps the Devil will take the high road, but in the war—er, domestic contingency operation—against coal, do not bet on it. ☐

## NOTES

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4. Construction on the first such plant, the 400 MW Texas Clean Energy facility, is supposed to begin in the fall of 2013. That plant will capture carbon for use in enhanced oil recovery.
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6. See Lesser, J. (2013, Spring). The high cost of low value wind power. *Regulation*, pp. 22–27.
7. One issue in the last few years that is affecting coal is increasing transportation costs for coal delivered via rail. Some coal plant operators have accused railroads of antitrust violations. See Berman, J. (2013, March 26). Railroad antitrust legislation is re-introduced in the Senate. *Logistics Management*. Retrieved from [http://www.logisticsmgmt.com/article/railroad\\_antitrust\\_legislation\\_is\\_re\\_introduced\\_in\\_the\\_senate](http://www.logisticsmgmt.com/article/railroad_antitrust_legislation_is_re_introduced_in_the_senate).
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## Outlook—Sunspot Data May Indicate End of Global Warming Trend

Jonathan A. Lesser

In November 2013, yet another climate conference was held, this time in Warsaw. Like the United Nations Doha conference the previous year,<sup>1</sup> the Warsaw conference devolved into a demand by less-developed nations for climate “reparations” from developed nations, principally the United States. The demanders include China and India, which are the number-one and number-four carbon emitters, respectively. In fact, China led a walkout of 132 developing nations from the Warsaw conference to protest the lack of climate reparations. Nevertheless, the conference was a resounding success, assuming success to be an agreement by participating nations to publish intended carbon emissions reductions before the gabfest to be held in Paris in the fall of 2015.

Rather than examine the Warsaw conference’s allegations and fulminations, which are a fount of humor, this month’s column focuses on the observed decreases in sunspot activity and what that may portend for the world’s climate in the future. Understanding how the sun affects the earth’s climate is perhaps more important for climate policy than the never-ending whining for dollars to which UN climate conferences devolve.

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### CHANGES IN SOLAR ACTIVITY ARE CORRELATED WITH GLOBAL TEMPERATURE CHANGES

Although the sun’s output, called *irradiance*, is remarkably constant, the sun has a well-known 11-year cycle, during which solar activity ebbs and flows.<sup>2</sup> Although sunspots are the most visible aspect of this cycle, other aspects of the sun change as well, such as X-ray emissions, ejections of material from the sun’s corona, and the sun’s magnetic field. Why the sun should have such a cycle is not known.

In addition to the 11-year cycle, observations of sunspot activity over the last 400 years have shown extended periods of relatively low and relatively high solar activity. **Exhibit 1**, for example, illustrates annual and 11-year averages from 1610 through 2012.

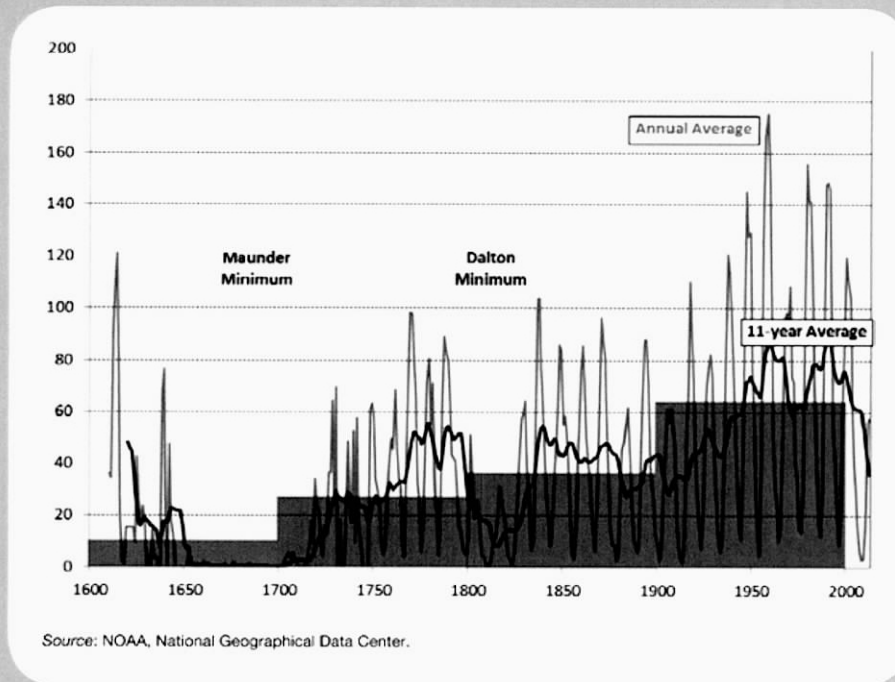
As shown in Exhibit 1, the 60-year period that began around the year 1645 was characterized by very few sunspots. This period, known as the Maunder Minimum, was also associated with an especially cool period during what has been termed the Little Ice Age, which began in the fourteenth century and lasted through the middle of the nineteenth century.

As Exhibit 1 also shows, sunspot activity increased significantly between 1900 and 1960. Another activity maximum took place around 1990. In fact, sunspot activity in the twentieth century was higher than the previous three centuries, as shown by the gray-shaded rectangles.

Since 1990, however, sunspot activity has decreased rapidly. And recent research suggests that the sun may be entering into another Maunder Minimum-like period.<sup>3</sup> Thus, one key question for climate-change issues is, if the sun enters into



### Exhibit 1. Sunspot Activity (1610–2012)



another extended period of low activity, does that mean global cooling is in our future?

Basically, the sun is the sole driver of the earth's climate: without it, earth would be rather chilly. Nevertheless, *correlation* is not *causation*, and there remains significant debate over the relationship between global temperatures and solar activity. Some, for example, have claimed that the Maunder Minimum had nothing to do with the cool period and suggest that volcanic activity was the cause.<sup>4</sup>

Moreover, the relationship between solar activity and global temperatures is further complicated because there is no simple way to take the earth's temperature. As a result, different temperature indices can be, and have been, developed, with each requiring its own level of data torture. For example, **Exhibit 2** shows sunspot activity and global temperature and total solar irradiance. The chart *appears* to show a sudden divergence between global temperatures and solar activity beginning around 1980. Temperatures increase rapidly while total solar irradiance has declined.

Alas, this chart, and the website that publishes it, would have us toss the solar activity causation argument into the rubbish bin. However, the chart itself would have made a fine example for Darrell Huff's classic 1954 book *How to Lie with Statistics*.<sup>5</sup> First, note that the scale on the left is

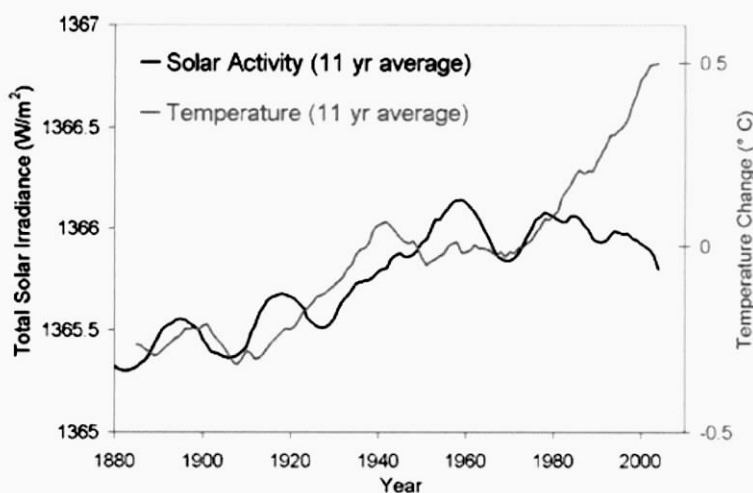
solar *irradiance*, which as previously mentioned stays almost constant. The variation is 2 watts per square meter, or less than 0.2 percent. Thus, the solar "activity" measure is not sunspots.

Second, the temperature data used in the chart, which was developed by NASA's Goddard Institute of Space Studies (GISS) scientist James Hansen, has been shown to be error-riddled and artificially manipulated to show warming temperatures. In fact, GISS itself has admitted the data is flawed.<sup>6</sup> Ironically, in 1999, Hansen, who is one of the most ardent proponents of global warming, said, "In the United States there has been little temperature change in the past 50 years, the time of rapidly increasing greenhouse gases—in fact, there was a slight cooling throughout much of the country."<sup>7</sup>

### GLOBAL TEMPERATURES HAVE NOT RISEN FOR PAST 15 YEARS

Today, there *is* broad agreement that global temperatures have not risen for the last 15 years. Yet none of the climate models has been able to capture this *observed* lack of warming. In other words, none of the climate models that have been used to predict future temperature increases can re-create observed past temperatures. This is like relying on a forecast of electricity demand to determine the need for new generating supplies using a model

## Exhibit 2. Temperature vs. Solar Activity



Source: Skeptical Science, <http://www.skepticalscience.com/solar-activity-sunspots-global-warming.htm>. This website's subtitle is "Getting skeptical about global warming skepticism." The discussion accompanying the chart also states, "Since the sun and climate are going in opposite directions, scientists conclude the sun cannot be the cause of recent global warming."

that consistently overestimates past demand. Such a forecasting model would be dismissed (rightly) as inaccurate and unreliable.

Nevertheless, rather than admit to problems with the climate models, those who insist global warming is real and taking place suggest that the missing heat is hiding in the oceans. Perhaps it is. In fact, new research purports to show that rising ocean temperatures are causing fish to become more anxious.<sup>8</sup> Who knows, this may increase the demand for piscine psychiatric services and create schools of Prozac-gulping guppies.

Many individuals who believe in human-caused climate change say "the science is settled." But science is *never* settled. The inability of current climate models to explain the lack of warming over the past 15 years, plus predictions that the sun may be entering a prolonged period of low activity, suggest that much more analysis must be done before we impoverish ourselves by choking off economic growth.

This analysis is especially important for less-developed countries, which rightly wish to improve their citizens' standard of living and are unlikely to receive any climate reparation payments to do so. ☐

### NOTES

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2. Hathaway, D. (2010). The solar cycle. *Living Reviews in Solar Physics*, 7(1).
3. Ahluwalia, H. (2013, December). An empirical approach to predicting the key parameters for a sunspot number cycle. *Advances in Space Research*. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0273117713007473>.
4. See Lockwood, M. (2013, November). *Solar activity and the so-called "Little Ice Age."* The Carbon Brief. Retrieved from <http://www.carbonbrief.org/blog/2013/11/solar-activity-and-the-so-called-%E2%80%9Clittle-ice-age%E2%80%9D/>.
5. A copy of the book may be downloaded for free at: <https://archive.org/details/HowToLieWithStatistics>.
6. See Snow, B. (2010, March 30). NASA data worse than ClimateGate data, GISS admits. Retrieved from <http://www.foxnews.com/scitech/2010/03/30/nasa-data-worse-than-climategate-data/>.
7. See Hansen, J., Ruedy, R., Glascoe, J., & Sako, M. (1999, August). Whither US climate? NASA GISS. Retrieved from [http://www.giss.nasa.gov/research/briefs/hansen\\_07/](http://www.giss.nasa.gov/research/briefs/hansen_07/). For a comparison, in 2012, Hansen claimed in a YouTube feature, "The oceans will boil." Retrieved from [https://www.youtube.com/watch?feature=player\\_embedded&v=1uxfiuKB\\_R8](https://www.youtube.com/watch?feature=player_embedded&v=1uxfiuKB_R8). In a December 6, 2013, column, Hansen discusses a lawsuit brought by children against the US EPA and the National Association of Manufacturers, "What we owe our kids on climate." [http://www.cnn.com/2013/12/06/opinion/hansen-climate-last-chance/index.html?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+rss%2F+cnn\\_topstories+%28RSS%3A+Top+Stories%29](http://www.cnn.com/2013/12/06/opinion/hansen-climate-last-chance/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+rss%2F+cnn_topstories+%28RSS%3A+Top+Stories%29). The appellants' brief can be found at: <http://ourchildrenstrust.org/sites/default/files/FiledOpeningBrief.pdf>.
8. Rising ocean acidification leads to anxiety in fish. (2013, December 4). *Science Daily*. Retrieved from <http://www.sciencedaily.com/releases/2013/12/131204182219.htm>.





## Talk Is Cheap: The UN's Doha Conference Strikes Out . . . Again

*Jonathan A. Lesser*

Last November, 10,000 delegates converged on Doha, Qatar, for the United Nations' annual conference on global warming/climate change/climate volatility. The Framework Convention on Climate Change is actually the 18th such UN conference, and proved to be as productive as the previous 17.

### MAJOR AGENDA ITEM, EXPANSION, WENT INTO REVERSE

Since 2007, the conference has focused on the Kyoto Protocol, which was signed 15 years ago and committed developed countries (but not less-developed ones) to nonbinding greenhouse gas emissions reductions targets. Kyoto excludes developing countries, including China and India, where emissions are growing most quickly. For example, between 2006 and 2010, China's and India's carbon emissions increased over 40 percent, from 7,100 million metric tons to 10,000 million metric tons (see **Exhibit 1**). China and India now account for about one-third of world carbon emissions. In contrast, US emissions decreased by 5 percent, from 5,900 million metric tons to 5,600 million metric tons.

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Although the main focus of the conference was supposed to be extending the Kyoto Protocol, Canada, Russia, and Japan all effectively abandoned the agreement. The United States never ratified it in the first place. Thus, for all intents, Kyoto has met its well-deserved demise.

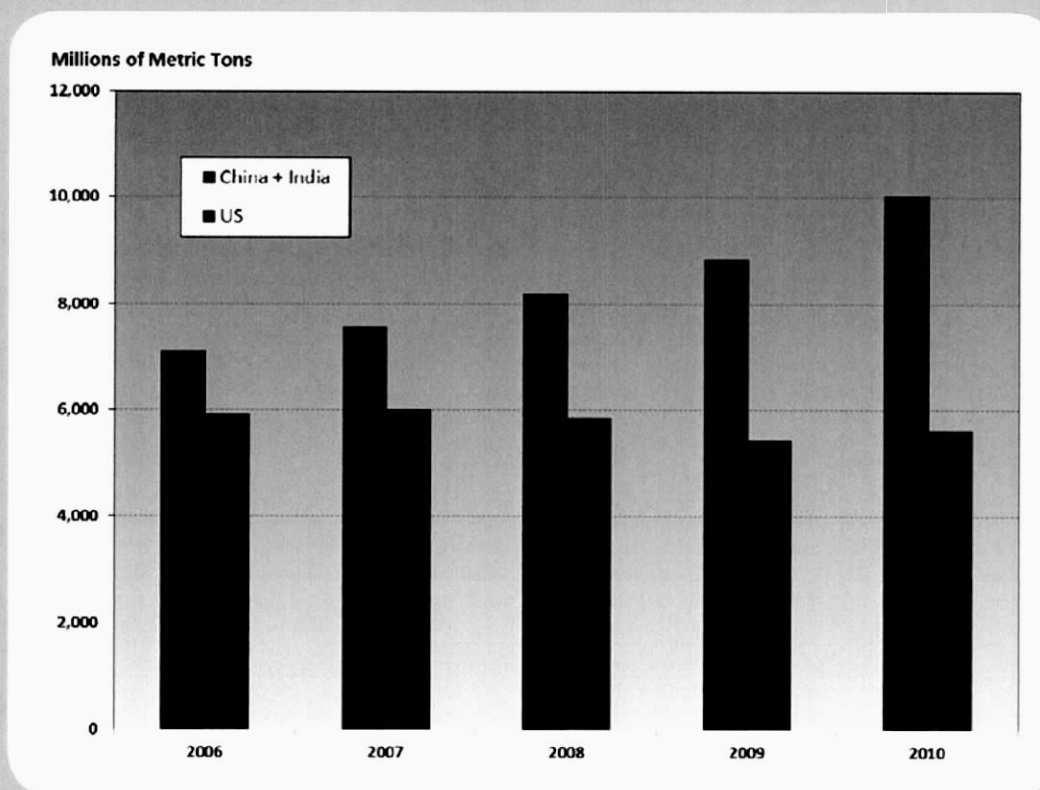
Canada, Russia, and Japan all effectively abandoned the agreement.

### INSTEAD, THEY TALKED ABOUT GETTING MONEY FROM THE UNITED STATES

Instead, the attendees focused on two other issues. First, they agreed to negotiate a new emissions control deal by 2015, which is supposed to take effect in 2020. This agreement will supposedly require all countries—developed and undeveloped—to reduce their carbon emissions. The likelihood of such an agreement being ratified, especially one that accounts for the rapidly growing emissions in developing countries, is vanishingly small. The real focus appears to have been wealth transfers from rich countries to poor ones, as “compensation” for the damage rich countries’ greenhouse gas emissions are supposedly causing.

For example, one of the newer and more novel claims (discounting previous speculation about alien civilizations eradicating the earth because of climate change)<sup>1</sup> is that global warming means the “end of pasta.”<sup>2</sup> Specifically, according to this view, rising temperatures, extreme storms like Hurricane Sandy, and drought will mean the end

**Exhibit 1. Annual Carbon Emissions, US vs. China + India**



of wheat, leading to the “end of pasta.”<sup>3</sup> (As is well known, the storm surge caused by Hurricane Sandy caused severe damage in the Midwest states. Also well known is that global warming causes hurricanes to strike at high tide when there is a full moon.)

Global warming means the “end of pasta.”

Second, developing countries want rich countries to hand over at least \$100 billion annually to compensate for the “damages” that developing countries supposedly have experienced from rising sea levels, extreme weather, and every other ill that can (and has been) attributed to climate change. Of course, it is the United States that these nations are focused on for climate “reparations,” because until 2006, the United States had the largest carbon emissions. The fact that the United States is the largest provider

of aid to developing countries apparently does not factor into the reparation demands. Thus, like so many other UN efforts, the annual climate conference has simply devolved into unadulterated money-grubbing.

It is the United States that these nations are focused on for climate “reparations.”

There is little chance that the United States and other developed nations will agree to huge wealth transfers and emissions reductions, which will further hobble their already struggling economies, especially when emissions of developing countries’ emissions are rapidly increasing. Whether through the imposition of carbon taxes or even greater subsidies for wind and solar energy, the increase in energy costs will simply add to the economic misery. Apparently, the extended hands of developing

nations apparently fail to understand that economic misery will flow “downhill”: damaging “rich” world economies will further damage the developing nations’ own economies. Moreover, why will developing nations wish to deny their own citizens the fruits of economic development, including greater energy use?

### WHERE TO FROM HERE?

Although some see the Doha conference as a rousing success,<sup>4</sup> what Doha reveals is the folly of continued efforts to prevent climate change. After two decades of “end of days” predictions by climate alarmists, climate models still fail to capture past climate behavior. Moreover, the efforts by some to manipulate the scientific process to further their aims, such as the “Climategate” emails reveal, as well as efforts to demean those who dare question the “certainty” of the climate science as cave-dwelling Troglydites, reveals not scientific inquiry but naked politics.

The efforts by some to manipulate the scientific process to further their aims . . . reveal not scientific inquiry but naked politics.

Environmentalism has always been a luxury good. Individuals in the poorest countries are focused on having enough food to eat and clean water to drink; they are not worrying about the effects of a changing climate in the decades ahead. If the climate is changing—and it always has—the solution has always been adaptation.

Environmentalism has always been a luxury good.

However, environmentalists resist adaptation because it challenges the “doom and gloom” narrative that is required to maintain funding. For example, cheap and plentiful natural gas, made possible by advances in hydraulic fracturing, is allowing us to heat our homes and generate electricity far more efficiently than with coal, and to reduce carbon emissions. Nevertheless, environmentalists continue to fight fracking,<sup>5</sup>

as well as emissions-free nuclear power, with a vengeance.

If the climate is changing—and it always has—the solution has always been adaptation.

As for damages caused by extreme weather, it is not impossible to link individual weather events to climate change; the damages are the result of human behavior. Hurricanes have caused increasing damage to coastal areas because people build there and because subsidized flood insurance causes them to rebuild over and over. Eliminating subsidies that encourage behavior that exacerbates exposure to the effects of weather is a first step toward reducing damages. Embracing technology that provides lower-cost, cleaner energy, without endless subsidies, is another.

Hurricanes have caused increasing damage to coastal areas because people build there and because subsidized flood insurance causes them to rebuild over and over.

However, as long as environmental gabfests like Doha continue, real progress will be elusive. After all, why search for real solutions when you can blame scapegoats? ☐

### NOTES

1. See my January 2012 column, Global warming, climate change, er, climate volatility: 2012 and beyond. *Natural Gas and Electricity*, 28(6), 22–24.
2. See Hertsgaard, M. (2012, December 10). The end of pasta. *Newsweek*. Retrieved from <http://www.thedailybeast.com/newsweek/2012/12/09/bakken-oil-boom-and-climate-change-threaten-the-future-of-pasta.html>.
3. Yield data for wheat published by the US Department of Agriculture shows that per-acre yields have more than doubled since 1960, and all the while global temperatures have increased. See [http://www.ers.usda.gov/datafiles/Wheat\\_Wheat\\_Data/Yearbook\\_Tables/US\\_Acreage\\_Production\\_Yield\\_and\\_Farm\\_Price/wheatyearbooktable01full.pdf](http://www.ers.usda.gov/datafiles/Wheat_Wheat_Data/Yearbook_Tables/US_Acreage_Production_Yield_and_Farm_Price/wheatyearbooktable01full.pdf).
4. See Hedegaard, C. (2012, December 14). Why the Doha climate conference was a success. *The Guardian*. Retrieved from <http://www.guardian.co.uk/environment/2012/dec/14/doha-climate-conference-success>.
5. See my December 2012 column, Frack attack—Environmentalists and Hollywood renew attacks on hydraulic fracturing. *Natural Gas and Electricity*, 29(5), 30–32.





## Rethinking Green Energy Mandates

Jonathan A. Lesser

In many US states and European countries, mandates providing large subsidies for preferred flavors of green energy have long been *de rigeur*, whether to reduce carbon emissions or spur moribund economies.

Of course, the subsidies have accomplished neither goal: in Europe, subsidies and carbon taxes have not changed the fact that carbon emissions continue to increase; in the United States, the amount of subsidized wind generation has grown so large that it is damaging the ability of unsubsidized generators to compete in wholesale electric markets, while adding to the costs of “firming” inherently volatile wind generation output. As for creating a robust new green economy, well, record-high European unemployment rates, record low labor participation rates in the United States, and moribund GDP growth on both sides of the Atlantic would seem to demonstrate that green energy’s economic promise is well hidden.

The amount of subsidized wind generation has grown so large that it is damaging the ability of unsubsidized generators to compete in wholesale electric markets, while adding to the costs of “firming.”

Of course, proponents will point to a new solar cell factory here, a wind turbine blade factory there,

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and the jobs created building wind and solar farms as “proof” green energy mandates create economic growth and jobs. That is true, at least for those lucky enough to enjoy subsidized largesse. However, such reasoning ignores the source of that largesse: electric ratepayers and taxpayers at large. Anytime you perform a cost-benefit analysis on a policy and ignore the cost side, discovering that the “benefits” of the policy exceed the costs is easy . . . and meaningless.

Green energy mandates create economic growth and jobs . . . at least for those lucky enough to enjoy subsidized largesse.

Quite simply, governments cannot subsidize their way to economic growth and well-being.

### SUBSIDIES CREATE STRONG ECONOMIC INCENTIVES—TO SEEK OUT MORE SUBSIDIES

It is no secret that industries benefiting from renewable energy largesse have an incentive to keep those subsidies flowing.

The same can be said of most every other industry: unfettered market competition can be brutal; it’s so much easier to rely on subsidies to ease the pain. Economists call this “rent-seeking” behavior. And while all forms of energy have been subsidized to some degree, the subsidies provided to renewable energy and energy conservation far exceed any other form of generation.<sup>1</sup> Moreover, renewable energy and energy conservation programs stand apart: not only are they generously subsidized at both the state and federal levels, but

they are also the only types of energy resources for which states mandate minimum investment. No wonder their defenders are so ardent.

In the United States, the wind energy production tax credit (PTC) is the single-largest subsidy of all. In an April op-ed in the *Wall Street Journal*, Patrick Jenevein, CEO of wind developer Tang Energy, argued that the wind PTC should be repealed. He said the following:

If our communities can't reasonably afford to purchase and rely on the wind power we sell, it is difficult to make the moral case for our businesses, let alone an economic one. Yet as long as these subsidies and tax credits exist, clean-energy executives will likely spend most of their time pursuing advanced legal and accounting methods rather than investing in studies, innovation, new transmission technology, and turbine development. (Jenevein, P. [2013, April 1]. Wind subsidies: no thanks. *Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB10001424127887323501004578386501479255158.html>)

In other words, Jenevein stated an obvious but unspoken truth: the presence of subsidies drives wind developers to devote their efforts to continuing those subsidies, rather than improving the efficiency of their product.

The presence of subsidies drives wind developers to devote their efforts to continuing those subsidies, rather than improving the efficiency of their product.

### **GREEN ENERGY MANDATES HAVE ZERO IMPACT ON CLIMATE CHANGE**

The impact of green energy subsidies on carbon emissions is another example of windmill tilting.

These individual actions have zero effect on the global climate.

Thirty US states, plus the District of Columbia, have renewable portfolio standards, in part to “do something” about greenhouse gas emissions. The European Union has similarly enacted renewable

energy mandates and carbon taxes. Yet these individual actions have zero effect on the global climate. Rather, they simply raise the cost of energy paid by consumers and reduce their economic well-being.

For example, in an article in the (London) *Daily Telegraph*, Christopher Booker considered the adverse impacts on reliability of Britain's escalating carbon tax, which began in April 2013 at £16 a metric ton. The tax will increase to £30 a metric ton in 2020 and to £70 by 2030. As Booker states, those tax rates will make it “wholly uneconomical to generate any more electricity from the coal and gas-fired power stations that last week were still supplying two-thirds of our electricity.”<sup>2</sup> He adds that India plans “to build 455 new coal-fired power stations which will add more CO<sub>2</sub> to the atmosphere of the planet every week than Britain emits in a year.” Already, the new carbon tax is almost 500 percent higher than the carbon price in the EU's ill-fated carbon cap-and-trade scheme, for which prices have collapsed since it was first introduced in 2007.

Wind generation . . . tends not to be available when it is most valuable.

In the United States, as growing quantities of wind generation are injected onto the power grid, they are creating more concerns about overall system reliability. Integrating variable wind generation, which my own research has shown tends not to be available when it is most valuable,<sup>3</sup> is both more costly than for conventional, schedulable generation, and increasingly difficult. The more wind generation to be integrated onto the system, the more impacts sudden changes in wind availability may have on the reliability of the system.

### **MORE-RATIONAL SOLUTIONS?**

The most straightforward way to eliminate the economic harm caused by energy subsidies—of all types—is to eliminate energy subsidies. Of course, this is the author's version of windmill tilting, green or otherwise. It is only when the economic damage caused by green energy subsidies becomes so severe and so obvious that arguments for economic sanity may prevail. Until that time, however, US states could, if they are so inclined, take steps to at least mitigate the economic damage.



First, states can scale back their RPS targets. The drive to enact RPS mandates that lead the nation in the percentage of green energy—California comes to mind—is energy suicide. Making electricity cost-prohibitive may polish environmental credentials, but it will permanently tarnish the economic ones, driving business and jobs away to economically friendlier locales. Moreover, mandates raise the cost of electricity for those least able to afford it. How do green energy advocates justify policies that are both economically harmful *and* inequitable?

States can scale back their RPS targets.

If states kept their RPS targets where they are today, the economic damage would be contained. Additional rate increases could be minimized and the reliability of the electric system would not be jeopardized further. States would also do well to examine the real costs and benefits of their policies by examining both sides of the cost-benefit ledger. If policymakers wish to impose energy policies that cause more harm than good, on the belief that those policies will provide great benefits in the future, at least they should be honest about it. And they should be honest about what is and is not a “benefit.” Subsidized jobs are not.

The wind PTC, which is the most egregious green energy subsidy of all, should be eliminated.

Second, the wind PTC, which is the most egregious green energy subsidy of all, should be eliminated. It was set to expire at the end of 2012. Only budget negotiations to avoid a government shutdown saved it for another year. With abundant natural gas supplies—in its latest long-term energy forecast, the US Energy Information Administration projects natural gas production to steadily increase through 2035—why not use the money lavished on PTC recipients on basic energy research instead? For example, if large-scale forms of energy storage can be developed, solar photovoltaics, which have the potential to become far more efficient, would become a far more useful and economic source of electricity. As for wind generation, its economies of scale appear to be exhausted. The largest wind turbines are almost

500 feet tall. How many of these behemoths do we want covering the landscape?

Third, in areas where there are well-run, competitive electric markets, let market forces drive innovation and improved efficiency, rather than additional subsidies, as Tang Energy CEO Jenevein recommends.

In areas where there are well-run, competitive electric markets, let market forces drive innovation.

Fourth, end the economic sword-falling exercises to reduce greenhouse gas emissions. Even if you believe climate change is responsible for everything from warmer temperatures and sullen polar bears to the cold snap that knackered your flower garden, efforts in the United States and Europe to reduce greenhouse gas emissions will be far outstripped by China's and India's expanding use of fossil fuels. Policymakers are deluding themselves if they believe the individual actions they take will have any impact whatsoever on the global climate. Raising energy prices and committing economic suicide will not help.

End the economic sword-falling exercises to reduce greenhouse gas emissions.

Are any of these solutions possible? Yes. Will they be enacted? Probably not, at least not until, as the late Margaret Thatcher quipped about socialism, we run out of other people's money. ☪

Will they be enacted? Probably not, at least, not until . . . we run out of other people's money.

## NOTES

1. See, e.g., US Energy Information Administration. (2011, July). Direct federal financial interventions and subsidies in energy in fiscal year 2010, Table ES-2. Retrieved from <http://www.eia.gov/analysis/requests/subsidy/pdf/subsidy.pdf>.
2. Booker, C. (2013, March 23). It's payback time for our insane energy policy. *Daily Telegraph*. Retrieved from <http://www.telegraph.co.uk/earth/energy/windpower/9949571/Its-payback-time-for-our-insane-energy-policy.html>.
3. Lesser, J. (2013, Spring). The high cost of low value wind power. *Regulation*, pp. 22–27. Retrieved from <http://www.cato.org/sites/cato.org/files/serials/files/regulation/2013/3/v36n1-8.pdf>.



## Goldilocks Chills Out

Jonathan Lesser

Perhaps it was telling that an April Fools' Day headline for an article by Reuters' environment correspondent was "Global Warming Could Bring Hunger, Melt Himalayas."<sup>1</sup> You just *thought* global warming would only lead to a 20-foot increase in sea levels, massive city-destroying hurricanes, extinction of one-third of all species (including polar bears), the collapse of agriculture, and deadly disease. Al Gore is a piker.

In fairness, the article only refers to predictions in the newest United Nations Intergovernmental Panel on Climate Change summary report issued on April 6, 2007, which says that 80 percent of the Himalayas' glaciers will melt away over the next 20 years. The only thing missing from the tongue-in-cheek predictions I made in my previous column are the plagues of locusts. Who knows, perhaps they are waiting, with Bigfoot and Godzilla, under all of that fast-melting Himalayan ice.

Lately, the Supreme Court has weighed in. In an April 2, 2007, decision,<sup>2</sup> the Court majority ruled that carbon dioxide is a pollutant that falls under the regulatory jurisdiction of the EPA. The case focused on whether the EPA could regulate CO<sub>2</sub> emissions from automobiles. The EPA argued

it had no such jurisdiction under the Clean Air Act. The Court disagreed, claiming that "the harms associated with climate change are serious and well-recognized" and that the Clean Air Act's definition of an "air pollutant" includes anything and everything emitted into the air.

Far be it for an economist to question legal dictum, but it seems odd to equate CO<sub>2</sub>—something every human being releases into the atmosphere as a consequence of breathing—with the more noxious stuff that trains, planes, and automobiles emit. Perhaps the government will figure out a way to tax the air we breathe after all.

More interesting was the majority's acceptance that regulating CO<sub>2</sub> emissions from cars will not reverse global warming. Instead, the Court lamely argued that a reduction in CO<sub>2</sub> emissions, which can be achieved only by increasing fuel efficiency, would slow the pace of emissions increases. In other words, the EPA should raise fuel-efficiency levels, regardless of the cost and regardless of the actual physical impact on climate change. The EPA could ban all forms of motor transport henceforth. The effect on global warming still would be negligible.

More interesting was the majority's acceptance that regulating CO<sub>2</sub> emissions from cars will not reverse global warming.

Finally, the majority appears not to have considered the economic impacts of imposing higher

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fuel-efficiency standards, even though such impacts are well documented. As fuel efficiency increases, the marginal cost of driving falls. Thus, people drive more and the proffered emissions reductions vanish into the ether. This is one reason why higher federal gasoline tax would be a more efficient way to reduce consumption and CO<sub>2</sub> emissions. Moreover, raising the gasoline tax does not restrict individuals' vehicle choices like higher mandated fuel-economy standards; it simply changes the costs associated with those choices. Of course, raising the federal gasoline tax requires political courage, an oxymoron for our time.

Oddly enough, the Court recognized the weakness of emissions standards (higher CAFE standards are just a CO<sub>2</sub> emissions standard in disguise) in another case it decided on the same day. In *Environmental Defense Corp. v. Duke Energy*,<sup>3</sup> the Court unanimously rejected an interpretation of the Clean Air Act's Prevention of Significant Deterioration (PSD) pollution control regulations. Duke argued that the modifications it made to its coal plants did not fall under the PSD provisions, because none of the modifications increased the hourly emissions rates at those plants. The Court rejected Duke's argument, reasoning that what matters are the plant's total, not hourly, emissions. Thus, the Court recognized that a more stringent emissions standard would not necessarily achieve the ultimate policy goal of lower total emissions.

### INEVITABILITY OF ADAPTATION

Even if one were to accept that the wildest temperature extrapolations are correct, that humans bear 100 percent responsibility for climate change, and that we could somehow stop emitting all greenhouse gases tomorrow, global temperatures will continue to rise. Thus, mankind will have to adapt to climate change, just as it had to adapt before. Today, however, our technology, while unable to control the earth's climate a la *Star Trek*, is far more capable of adapting than Europe was 700 years ago, when cold weather at the beginning of the Little Ice Age set off the Great Famine, which began in the year 1315.<sup>4</sup>

It is not as if those at risk from climate change have been previously immune from risk. The highest point of the island nation of the Maldives, which is located in the southern Indian Ocean, is

only 15 feet above sea level. The average height is less than 3 feet. Not surprisingly, the December 26, 2004, tsunami that devastated Indonesia and Thailand caused damage there, too. (Curiously, research shows that since the early 1970s, the Indian Ocean level has fallen some 20–30 centimeters.)<sup>5</sup>

Hurricane Katrina caused extensive damage to New Orleans not because of global warming, but because much of that city lies below sea level. People have always put themselves in harm's way based on an intrinsic cost-benefit analysis. As long as the expected costs are less than the expected benefits, people are willing to assume the risks. When governments subsidize those risks, whether through low-cost flood insurance or dollops of money to rebuild, those intrinsic cost-benefit analyses start to tilt more toward harm's way.

This makes no sense. If we are to adapt successfully to climate change—whether colder or warmer temperatures—we need to become much smarter about it. Nevertheless, among global warming alarmists, adaptation has been given curiously short shrift, other than derided as the skeptics' plot to avoid the massive CO<sub>2</sub> emissions cuts—and economic hardships—climate change alarmists so desperately want.

This reluctance to identify least-cost adaptation strategies is shortsighted, if not disingenuous. Then again, such reluctance may be a natural outgrowth of the far more vicious debates over who should pay, which inexorably lead to the most vicious debates of all: whose fault is it?

From an economic standpoint, however, it does not matter whose fault it is, if indeed it is anyone's. Instead, what matters foremost is how to adapt to climate change, regardless of its cause, at the lowest total cost. That total cost includes economic well-being. Suppose, for example, that shutting down every single coal plant in the world would truly reduce future warming and slow the rise of sea level. Whereas that would certainly lower the cost of building new seawalls and the like, it would drastically raise the price of electricity and lower economic well-being. The world would not have to build new seawalls: a bad thing if we were all too poor to do so.

This is no different than the mistake some environmentalists make when an economist confronts them with the notion of an "optimal"



amount of pollution. How, the environmentalist will splutter, can anything but no pollution at all be optimal? Simple. The point where the cost of further pollution reductions is greater than the benefit of those reductions is the optimal level of pollution (**Exhibit 1**).

### MISTAKING MARGINAL AND TOTAL COSTS

Alarmists point out that warming will cause billions or trillions of dollars worth of economic damages. Whether it is disease, drought, or deluge, one reason the cost of calamities has increased over time is that there are more people who are affected. But in the same way they can fail to balance the costs of adapting and the cost of reduced economic well-being, alarmists are disingenuous when they attribute all of the costs of climate disasters to global warming.

By this, I do not mean they are wrongly ascribing causation, although there seems to be an increasing tendency to blame everything on climate change, whether a hurricane or a hangnail. Rather, environmentalists tally total costs, instead of tallying the change in total costs with and without climate change.<sup>6</sup>

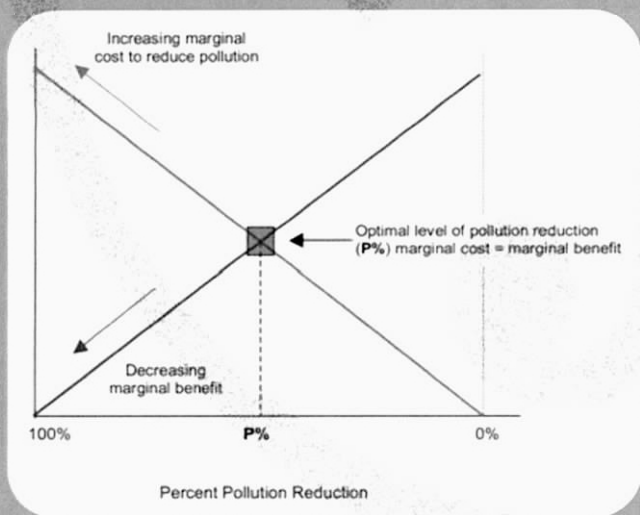
Thus, if higher sea levels will increase the risk of flooding, the appropriate actions should be based on the change in flooding probability, and not on the total cost of flooding itself. Hurricane Katrina, for example, caused perhaps \$100 billion in dam-

age to New Orleans and Mississippi. Suppose climatologists can (accurately) estimate that one Katrina-like Hurricane will hit New Orleans every ten years and cause \$100 billion in damages if sea levels remain constant. However, if sea levels rise, damages will increase to \$110 billion per hurricane. Assuming everything else stays the same, then the expected marginal increase in damage is \$10 billion every ten years, or \$1 billion per year.<sup>7</sup> That's a much more manageable—and more realistic—number.

What Al Gore and other environmentalists are really telling us is that our only adaptation choice is a Hobbesian lifestyle—nasty, brutish, and short—just like the one suffered by the Vikings who were forced out of Greenland in the Little Ice Age in the fourteenth century.

When Al Gore and other environmentalists call for reducing CO<sub>2</sub> emissions 90 percent by the year 2050, what they are really telling us is that our only adaptation choice is a Hobbesian lifestyle—nasty, brutish, and short—just like the one suffered by the Vikings who were forced out of Greenland in the Little Ice Age in the fourteenth century. That is both unreasonable and uneconomic, especially if climate change has little to do with man-made CO<sub>2</sub> emissions. ●

**Exhibit 1.** Determining the Optimal Level of Emissions Reductions



### NOTES

1. Available at: [http://news.yahoo.com/s/nm/20070401/ts\\_nm/globalwarming\\_dc\\_1](http://news.yahoo.com/s/nm/20070401/ts_nm/globalwarming_dc_1) (Last accessed April 2, 2007).
2. *Massachusetts v. Environmental Protection Agency*, Slip Op. No. 05-1120.
3. *Environmental Defense Corp. v. Duke Energy*, Slip Op. No. 05-848.
4. Jordan, W. C. (1996). *The Great Famine: Northern Europe in the early fourteenth century*. Princeton, NJ: Princeton University Press.
5. Morner, N.-A., Tooley, M., & Possnert, G. (2004). New perspectives for the future of the Maldives. *Global and Planetary Change*, 40, 177-182.
6. How these costs are estimated is a far more complex issue. For an introduction to some of the techniques economists use to measure environmental costs, see Freedman, A. M. (1993). *The measurement of environmental and resource values: Theory and methods*. Washington, DC: Resources for the Future.
7. To simplify the example, I am ignoring present value considerations.

**Residential Non-PIPP Responses**



Segment	Do you have any comments regarding AEP Ohio's development of renewable energy generation that you would like to share?	Comment Category
Residential Non-PIPP	Please do this!	Supportive
Residential Non-PIPP	It's about time!!!! Do you really need a survey to know this is the right thing to do and the right direction?	Supportive
Residential Non-PIPP	Continued fossil fuel use is simply not sustainable. We need to invest in alternatives. We did several years ago with a solar set up - and our location is not ideal but it looks as though our roa will be about 10 years.	Supportive
Residential Non-PIPP	Renewable energy needs to be utilized not only on generating at the physical plant, but also utilizing all the wasted square footage on residential homes. No need to use vast amounts of land when we have acres of roofs to utilize.	Supportive
Residential Non-PIPP	Please do something to reduce greenhouse gas emissions through extraction and burning of fossil fuels.	Supportive
Residential Non-PIPP	I think it's great that you're looking at increasing your sourcing from renewable energy. I hope this is a big priority for you and that the process moves quickly. Our climate is in trouble. Thanks	Supportive
Residential Non-PIPP	Investments in renewable energy should be stepped up rapidly. You need to get out from under our backwards looking legislators, and move on. Stop fence sitting.	Supportive
Residential Non-PIPP	AEP needs to stop burning fossil fuels	Supportive
Residential Non-PIPP	We are far behind on a global level already, embarrassing!	Supportive
Residential Non-PIPP	This is a business and moral imperative. Be aggressive. Be bold. Lead!	Supportive
Residential Non-PIPP	Iâ€™m all for seeing an increase in renewable energy. Individuals and corporations should be pushing for this to decrease greenhouse gas emssions and to improve the environment in which we live.	Supportive
Residential Non-PIPP	Do it!	Supportive
Residential Non-PIPP	Climate change is real. Oil seems to impact world politics negatively.	Supportive
Residential Non-PIPP	I believe that alternate forms of energy are inevitable and if AEP doesn't get on the bandwagon, it could become obsolete.	Supportive
Residential Non-PIPP	We are behind. As a state that is growing rapidly, we should already have solar panels and wind turbines across the state for cost efficient and independent energy.	Supportive
Residential Non-PIPP	I think wind in Ohio should be exploited. Likely solar is not as attractive in our climate. Donâ€™t know if offshore Lake Erie is attractive. Renewable energy from anywhere is desirable if not viable in Ohio.	Supportive
Residential Non-PIPP	do it!	Supportive
Residential Non-PIPP	While I applaud the notion of AEP moving to produce its own renewables, I would also love to see AEP be more supportive and open to individuals adopting their own renewables that can feed back to the grid. The shift towards fixed costs and refusal to allow individual houses to sell back large portions of their solar panel production are a frustrating and unnecessary decision.	Supportive
Residential Non-PIPP	The more you can do, the better.	Supportive
Residential Non-PIPP	Just do it already and keep up with the rest of the modern world.	Supportive
Residential Non-PIPP	wise move! take advantage of renewables	Supportive
Residential Non-PIPP	Willing to pay more if it means energy comes from renewables.	Supportive
Residential Non-PIPP	Hope it ends up being cheaper in the long run.	Supportive
Residential Non-PIPP	I hope that AEP will continue to pursue renewable energy to push Ohio forward. It is important to seek renewable solutions to increase the longevity of the planet.	Supportive
Residential Non-PIPP	While I think local job creation is very important, creating renewable energy systems is way more important, especially with the current rate of climate change.	Supportive

Residential Non-PIPP	I think this is economically and technologically inevitable, much like the advances in computer processors, packet switching, and cellular communications led to the smart phone. We need to get ahead of it and generate the jobs and capability in Ohio.	Supportive
Residential Non-PIPP	Drive 2 hours west into Indiana and you see wind farms, solar farms, etc. It's a shame we haven't seen the same kind of commitment to renewable resources in our own state.	Supportive
Residential Non-PIPP	I would love to have a renewal energy option and I would use a smart meter.	Supportive
Residential Non-PIPP	I'm okay with reasonable rate increases to make these improvements. Paying a bit more per Kwh is a small price to pay for long-term sustainability and energy security.	Supportive
Residential Non-PIPP	I'm very happy to hear that they're considering growing how much is renewable because 4.5 percent is laughably inexcusable. There is no logical reason not to go with renewable when it is more inexpensive all around and doesn't risk lives besides the occasional bird	Supportive
Residential Non-PIPP	Appreciate long-term thinking (not short-term) on this matter from AEP, when looking at costs and benefits.	Supportive
Residential Non-PIPP	Move rapidly toward a just transition from unsustainable fossil fuels and nuclear power to renewables. Work to get Ohio's wind setback law changed. Thank you for this survey.	Supportive
Residential Non-PIPP	Continue to invest in renewable energy until independent from other non-renewable sources.	Supportive
Residential Non-PIPP	Just makes common sense to use resources available that do not cause harmful effects to anything around.	Supportive
Residential Non-PIPP	I think it's wonderful that AEP Ohio is investing in renewable energy generation assets for the state and service territory. I would like to see figures on how the impacts (jobs created, GHG emissions reductions, etc.).	Supportive
Residential Non-PIPP	I appreciate the commitment to renewables and hope that other companies (not just power generation) will push the company and the technology forward.	Supportive
Residential Non-PIPP	It is 2018. There is no acceptable reason or excuse that we should still be using fossil fuels. None. We can do better, ya just choose not to. Do better already.	Supportive
Residential Non-PIPP	Great Initiative!	Supportive
Residential Non-PIPP	If it creates jobs, helps the environment, and reduces energy costs then yes I am in favor of energy renewal	Supportive
Residential Non-PIPP	I am so happy that AEP is even considering this!!! This brings me great joy that AEP is working on being a better Avenue for clean energy	Supportive
Residential Non-PIPP	Renewable energy us good for our environment and to help slow down global warming.It will create jobs and help our economy, There is an initial cost to switching over to clean energy vs fossil fuels but in the long run it will provide much cheaper energy for the consumer and the utility companies. This needs to be conveyed to the consumer.	Supportive
Residential Non-PIPP	Regarding production in the state of Ohio...it is important for the local economy, but the price of energy is typically more important to most people. If less expensive sources can be generated outside of Ohio, then I think most people would be okay with that.	Supportive
Residential Non-PIPP	I would love to see more energy sourced that doesn't negatively impact the earth but rather utilizes renewable resources that are easily available. Thanks for considering!	Supportive

Residential Non-PIPP	Windmills, solar instruments, energy production here in the state of Ohio are all important to citizens of this state. Lower bills should be the result, and THAT issue is probably most important of all to customers of AEP.	Supportive
Residential Non-PIPP	Please, the more the better.	Supportive
Residential Non-PIPP	I know every energy source has environmental impacts and overall usage needs to decrease. That said, I hope AEP will switch to sustainable, renewable options as quickly as possible. My son is 3 and I want him to be able to reach adulthood without experiencing irrevocable climate disaster.	Supportive
Residential Non-PIPP	Get it done! 4.5 percent is an embarrassingly low baseline. It shouldn't be difficult to exceed that.	Supportive
Residential Non-PIPP	I believe renewable energy is not just the future but is now. It saves valuable resources that we are depleting at catastrophic rates. I applaud AEP Ohio for being responsible and working to make our world sustainable.	Supportive
Residential Non-PIPP	Please invest in renewables	Supportive
Residential Non-PIPP	use solar as its been hot lately	Supportive
Residential Non-PIPP	This isn't something to think about doing, it's something that MUST be done. We owe it to the people who will live in Ohio in the next 50-100 years.	Supportive
Residential Non-PIPP	Follow through - don't just talk about it. Make certain it is something suitable that can be generated and used in Ohio.	Supportive
Residential Non-PIPP	Renewable energy is the future. Thank you for taking the initiative on long-term thinking for future generations.	Supportive
Residential Non-PIPP	Iâ€™d love to watch AEPâ€™s endeavors in renewable energy. Itâ€™s important to me that this state and country are competitive with others around the world. Additionally, the creation of jobs in an economically depressed area is particularly compelling!	Supportive
Residential Non-PIPP	It's the future of electric power. Don't be stupid, get with the program.	Supportive
Residential Non-PIPP	I support efforts in the development of utilizing renewable energy and know that it and only it, in addition to magnetic forces, is the future of energy.	Supportive
Residential Non-PIPP	I support the idea. Go for it	Supportive
Residential Non-PIPP	It's great they are pursuing this.	Supportive
Residential Non-PIPP	I think increasing the commitment to cleaner, renewable energy sources is very important to the future of our planet.	Supportive
Residential Non-PIPP	Please lobby the ohio legislature to remove laws that hinder clean energy and pass laws that encourage and support wind and solar energy.	Supportive
Residential Non-PIPP	It's the right thing to do for a lot of reasons.	Supportive
Residential Non-PIPP	would really like to see some action and less conversation	Supportive
Residential Non-PIPP	Thank you for requesting input on this topic. I was in south Germany recently, and found their usage very impressive. I'm happy that AEP is making a push to increase our renewable source usage.	Supportive
Residential Non-PIPP	Do it. Now. Seriously. Not just lip service, the future of the human race already depends on renewables.	Supportive
Residential Non-PIPP	I am in full support of developing renewables and reducing dependence on coal.	Supportive
Residential Non-PIPP	Our current administration is making it so hard to do this. We need to go this direction so you do not have to build another facility.	Supportive
Residential Non-PIPP	Not only would it help air quality, It would also create jobs and help bring down the cost of electricity.	Supportive

	<p>Very glad you are doing this - do more; I support wholeheartedly!</p> <p>And I believe it is vital for large organizations such as AEP to step in and do the right thing as a corporate citizen, regardless of the PUCO or current administration.</p>	
Residential Non-PIPP	It is better to be a leader. Go for it.	Supportive
Residential Non-PIPP	It's about time! AEP has always struck me as more socially conscious than the other utilities in our region. A commitment to renewable energy would confirm my impression.	Supportive
Residential Non-PIPP	I believe it would be great if AEP Ohio made significant investments in renewable energy for basically all of the reasons you presented on the previous page. It's very important to make significant and substantial progress toward reliance on clean or at least cleaner and renewable sources of energy. We need to have a strong short and long term plan for improving our air quality, reducing greenhouse gas emissions, becoming energy independent, and keeping jobs in Ohio.	Supportive
Residential Non-PIPP	Best of luck	Supportive
Residential Non-PIPP	USA is way behind other parts of the world with renewable energy. I would proudly display solar panels or a giant wind turbine on my property if it was an option : )	Supportive
Residential Non-PIPP	It is important to me as an AEP customer to be able to purchase energy that has reduced CO2 footprint, along with fewer mercury and sulfur emissions. I'd prefer to see renewable power generated locally to cut down on local fossil fuel plants and transmission losses, but I understand that generation locally may not be the most cost efficient based on our weather.	Supportive
Residential Non-PIPP	When we rely on technology of the past we are ignoring the innovations that have been made in the past 100 (or so) years. Renewable energy use helps reduce the impact on global warming/greenhouse gas emissions, which is really our duty as citizens of the world. If we can, we should.	Supportive
Residential Non-PIPP	I think it's great that AEP is looking to increase use of renewable energy sources!	Supportive
Residential Non-PIPP	I am in favor of renewable energy and would like to see increased production using these methods.	Supportive
Residential Non-PIPP	Not aware this was being done, but feel that it is a great idea. Wind mill farms are great, plus another renewable energy source.	Supportive
Residential Non-PIPP	Please use more renewable energy and please get away from COAL and ultimately any fossil fuels as a result of migration to solar and other renewable sources. Please alleviate restrictions on those who want to produce solar at their own homes. Investment in a smarter grid, influencing the political will facilitating incentives to home owners to install solar, distribution network enhancements to facilitate homeowner installations will result in requiring less investment in generation.	Supportive
Residential Non-PIPP	Renewable energy is our future. We need to reduce fossil fuel usage and protect our planet.	Supportive
Residential Non-PIPP	AEP Ohio should be a leader in renewable energy within the state of Ohio.	Supportive
Residential Non-PIPP	Hurry up!!!	Supportive
Residential Non-PIPP	If possible, information in my billing email or billing statement of how much of my energy consumption is from renewable sources, and where that energy is generated, would be greatly appreciated.	Supportive

Residential Non-PIPP	Preserving the world for future generations comes at a cost. The cheapest and easiest of alternatives are usually are just was of passing on the true costs to others.	Supportive
Residential Non-PIPP	Glad you are reaching out to customers for feedback, renewable energy is so important!	Supportive
Residential Non-PIPP	Climate change is a very real threat yo society and the world. The United States is falling behind and we NEED to catchup...	Supportive
Residential Non-PIPP	I feel that renewable energy is important for the future of our country. We need to be independent from foreign oil. We also need to conserve the environment and protect the land from strip-mining and dangerous underground mining for coal.	Supportive
Residential Non-PIPP	It can't happen fast enough! Break the coal dependence, save lives.	Supportive
Residential Non-PIPP	Great job. Glad utilities are finally "getting it." Let's just hope it's not too late.	Supportive
Residential Non-PIPP	Stop using all fossil fuels	Supportive
Residential Non-PIPP	I am all for it	Supportive
Residential Non-PIPP	Love that you guys are looking into this!	Supportive
Residential Non-PIPP	I would have a more favorable opinion of AEP as the level of renewable energy increases.	Supportive
Residential Non-PIPP	Coal is prehistoric, and kills the environment from digging to burning. NW Ohio is VERY windy...can you say wind turbine and/or solar.	Supportive
Residential Non-PIPP	See all the wind mills in Van Wert looks impressive. If you go to Kansas very impressive	Supportive
Residential Non-PIPP	As an investor in AEP AND a strong supporter of renewable energy, I am aware of the Oklahoma wind farm deal that fell apart, but to no fault of AEP. I strongly encourage AEP to look for a similar deal as well as continued investments in renewables in Ohio!	Supportive
Residential Non-PIPP	I feel very strongly about the benefits of renewable energy. Iâ€™d love to see AEP expand its use.	Supportive
Residential Non-PIPP	It should receive high priority	Supportive
Residential Non-PIPP	I really encourage this!	Supportive
Residential Non-PIPP	We have to get away from coal/oil/gas our lives depend on that. Global warming is here-we have to stop it.	Supportive
Residential Non-PIPP	I believe that being leaders in renewable energy and having a strong commitment to the environment can accompany being fiscally responsible and profitable.	Supportive
Residential Non-PIPP	Our world can't continue on with fossil fuels. They will run out, and we are doing unbelievable damage to our shared planet with them. This has to end.	Supportive
Residential Non-PIPP	This summer is a perfect example of what the future holds if we don't reduce co2 emissions and sequester some of the co2 already in the air. It's only going to get worse.	Supportive
Residential Non-PIPP	Obtain more renewable generation	Supportive
Residential Non-PIPP	Time to get away from fossil fuels. This is the 21st century.	Supportive
Residential Non-PIPP	I have seen the windmills in NE Ohio. They seem worthwhile. It would be nice to see how this has worked for this part of the state.	Supportive
Residential Non-PIPP	Wind, fields of huge windmills using the power of wind... Clean, safe, and forward thinking. Iowa is an excellent example.	Supportive
Residential Non-PIPP	Please continue to use renewable energy.	Supportive

Residential Non-PIPP	It is the responsibility of energy providers to continue to improve through research and development new renewable sources of energy. The electrical grid is the foundation of all modern civilization and maintaining this foundation will ensure future generations will have the ability to continue the advancement of technology improving life for the human race.	Supportive
Residential Non-PIPP	we must do something we are last in the world for renewables china and germany lead	Supportive
Residential Non-PIPP	It's a good thing to do it before you're forced to. Look to the wind farm in Van Wert County. No reason there aren't dozens more like this in windy areas	Supportive
Residential Non-PIPP	I am glad to see AEP is taking this important step.	Supportive
Residential Non-PIPP	I would like to know if there are any investment opportunities available for Aep renewable energy	Supportive
Residential Non-PIPP	I think this is important for our planet.	Supportive
Residential Non-PIPP	It's about time!	Supportive
Residential Non-PIPP	We would like to help, if we can be a helpful in some way	Supportive
Residential Non-PIPP	Would like to see more information on this.	Supportive
Residential Non-PIPP	I believe it is important to create energy in as close proximity to the final use as possible. This way it is easier for the residents of an area to find out where their energy is coming from, and are able to have more of a say in what kind of energy they want through voting. If any given area wants renewable energy, but is dependent on it being produced elsewhere and transported to their community, they likely have less of a say in whether or not it gets to them because the residents of the area where it will be produced have more control. It would be their land, their jobs, and their problem to deal with. Energy being produced nearby also means less energy lost and wasted through conversion/travel.	Supportive
Residential Non-PIPP	Honestly, I intend to move to solar if I can - if AEP can do so first, all the better.	Supportive
Residential Non-PIPP	AEP Ohio needs to take on more of a leadership role to support renewable energy with it's consumers i.e. residential and commercial (factories etc.)	Supportive
Residential Non-PIPP	Helping the environment more is awesome	Supportive
Residential Non-PIPP	Since global warming is a real thing, it is very important to take man made causes out of the equation.	Supportive
Residential Non-PIPP	I applaud your considering investment in renewable energies	Supportive
Residential Non-PIPP	Awesome! Glad you are trying to be environmentally conscious!	Supportive
Residential Non-PIPP	Sad to hear about the cancellation of the wind catcher project.	Supportive
Residential Non-PIPP	Please do something. Renewable energy prevents air and water pollution. It delays the increase in global temperatures and inevitable sea level rise. Don't ignore the conclusions from 400 years of scientific achievement.	Supportive
Residential Non-PIPP	I would like to see more solar, hydro and wind power being created. Anyone can go on YouTube and find thousands of innovation being created daily. Neighborhoods can be power by turbines off the banks of creeks and rivers alone.	Supportive
Residential Non-PIPP	I think the most important thing is developing sources that are better for the environment. If that can be done locally, that's great, but it's not the end of the world if it can't be done that way.	Supportive
Residential Non-PIPP	Yes, would very much like for AEP Ohio to develop/obtain energy from renewable sources. We cannot continue with fossil fuels.	Supportive
Residential Non-PIPP	Thank you for considering making investment in renewable energy. This is so important for us and future generations.	Supportive



Residential Non-PIPP	Would like to see a twenty year plan and then follow up on that plan. Planning and doing something wrong is better than doing nothing at all.	Supportive
Residential Non-PIPP	Important to move to renewable.	Supportive
Residential Non-PIPP	Thank you for caring about the environment in this way. I always thought AEP was this soulless, planet-killing energy company but after this survey I guess I should take a more nuanced view!	Supportive
Residential Non-PIPP	Glad you're on board	Supportive
Residential Non-PIPP	This is our planet we're talking about. We don't get a do-over.	Supportive
Residential Non-PIPP	The more renewable sources, the better. Be a leader in the industry.	Supportive
Residential Non-PIPP	WE LIVE NOW ON OUR PLANET IN A WAY THAT IS NOT SUSTAINABLE. IF WE DO NOT CHANGE SOON, FUTURE GENERATIONS AND OTHER SPECIES WILL PERISH.	Supportive
Residential Non-PIPP	I think it is important to look at ways to improve America's energy independence for the future. Hopefully this will also reduce costs to consumer and improve environment.	Supportive
Residential Non-PIPP	I feel we are far behind in the development and use of renewable energy and need to make this an emergency priority.	Supportive
Residential Non-PIPP	I switched my generation service to a 100% renewable supplier years ago.	Supportive
Residential Non-PIPP	Wish it was all wind and solar!	Supportive
Residential Non-PIPP	Corporations and local government need to work together to move the US away from carbon energy sources. Obviously, it is extremely important and obviously the current administration is going in the opposite direction.	Supportive
Residential Non-PIPP	All attempts to use turbine and solar products is important for the world to continue to be a more healthy place. You might think about working against the Trump Administration who is on track to destroy us in favor of personal and corporate greed.	Supportive
Residential Non-PIPP	This is a huge deal for me. Renewable energy is extremely important.	Supportive
Residential Non-PIPP	Development of renewable energy is very important. Get on it ASAP!	Supportive
Residential Non-PIPP	Anything greener is better	Supportive
Residential Non-PIPP	I believe that it's been well past the time to talk about, consider, and/or make the changes necessary to provide clean, renewable, energy independent solutions for multiple reasons. If I could have checked more than 3 boxes for reasons why I would have checked all of them and more!	Supportive
Residential Non-PIPP	Explore Wind farm development opportunities.	Supportive
Residential Non-PIPP	It's way past time to begin using more renewable energy! I hope AEP really commits to this	Supportive
Residential Non-PIPP	I am very excited about this prospect. In fact, I wonder about partnerships where people could have a discount for having some equipment that could give back electricity from their solar generating items	Supportive
Residential Non-PIPP	I think doing more renewable energy sourcing is important for our future. We should never be dependent on just one or two energy sources.	Supportive
Residential Non-PIPP	Need to start concerning ourselves with how we leave the planet for future generations.	Supportive
Residential Non-PIPP	This would be a great step and would greatly improve my opinion of and appreciation for AEP	Supportive
Residential Non-PIPP	Being someone who has worked in the electric utilities, I understand it is expensive to go with all renewables. However, I am willing to increase my electric bill for this type of development.	Supportive

Residential Non-PIPP	I would love to see Ohio be at least 50% renewable within the next 15-20 years.	Supportive
Residential Non-PIPP	Glad AEP is taking the lead	Supportive
Residential Non-PIPP	The more renewable we can bring into the grid, the brighter our future!	Supportive
Residential Non-PIPP	the sooner the better.	Supportive
Residential Non-PIPP	Have no clue on what renewable energy initiatives aep is a part of.	Supportive
Residential Non-PIPP	Possible credits for solar panels. My nephew is a solar engineer. It has become hugely competitive with china and is employing so many more. AEP must step up now. My other nephew is now a nuclear engineer...he cannot find a job, post-grad school.	Supportive
Residential Non-PIPP	As long as it's environmentally friendly I love the idea!	Supportive
Residential Non-PIPP	Go for it!	Supportive
Residential Non-PIPP	I would be happy to pay a little more on my bill to get more renewable energy. Renewables mean prices won't rise in the future due to dwindling supply, cleaner air for everyone, and helping to keep our planet from getting excessively hot.	Supportive
Residential Non-PIPP	I think it is wonderful that you are moving in this direction. More than wonderful. Thank you.	Supportive
Residential Non-PIPP	Wind & solar energy have been around for years. I have seen solar energy in homes and powering a cabin at the Ohio State fair. I would like to see the savings to our environment and to customers	Supportive
Residential Non-PIPP	Glad to hear AEP is moving forward--difficult decisions, but critical to sustainability. Don't cave to lobbyists. Find a way to bring solar to every corner of the state.	Supportive
Residential Non-PIPP	I fully support it! Thank you.	Supportive
Residential Non-PIPP	I think it is the responsible and intelligent next steps for any business in your field. Good job	Supportive
Residential Non-PIPP	I'm happy and excited that AEP is looking into greater use of wind and solar energy generation.	Supportive
Residential Non-PIPP	I would love to see a variety of options that a customer can choose from. Lets look for something new and not as costly but will keep jobs and have a good affect on the environment.	Supportive
Residential Non-PIPP	We need to utilize natural sources for energy and to lower energy costs for consumers.I would like to see the elderly and severely disabled receive little to no costs on energy costs because I see them struggle to keep up and make decisions that impact their health and well being	Supportive
Residential Non-PIPP	Energy is always priced at the margin, so anything that can be done to reduce reliance on a source of energy or set of energy products (such as fossil fuels) will increase reliability, lower costs, and strategically place Ohio in a better position to compete on the world market.	Supportive
Residential Non-PIPP	I think it is a great idea. We need to think futuristic and have something that will last for generations and not find ourselves in a bind if there are low resources.	Supportive
Residential Non-PIPP	We'd be happy to have anything on our property that will help with this, either wind turbines or solar panels	Supportive
Residential Non-PIPP	Please look into more green energy projects.	Supportive
Residential Non-PIPP	AEP should work with the new Ohio governor to create renewable energy sources and jobs for Ohio. Gov'r Strickland started this process, I would like to see AEP pick up where he left off.	Supportive
Residential Non-PIPP	just do it! hurry	Supportive
Residential Non-PIPP	Very positive step! Happy to hear of this.	Supportive
Residential Non-PIPP	Do as much as possible.	Supportive
Residential Non-PIPP	please make partnership programs available w/ solar companies to make it easy and doable to move forward on these types of projects	Supportive
Residential Non-PIPP	Thank you for doing this. This is extremely important.	Supportive

Residential Non-PIPP	Renewable. Willing to invest in own ability to generate using solar if available and fit budget. It's more visible to me if I generated energy via renewables than not knowing (seeing) from another location. Environmental and independence is motivation.	Supportive
Residential Non-PIPP	Coal and natural gas are limited supply; When wind and solar goes, we are all gone too.	Supportive
Residential Non-PIPP	Congratulations on stepping up to increase renewable energy resources when the federal government won't. We appreciate your leadership.	Supportive
Residential Non-PIPP	I would greatly support a move toward more wind and solar energy!	Supportive
Residential Non-PIPP	It is extremely important to me, to my family, and many friends of mine that we begin doing the hard work to save this planet. I would applaud AEP for making attempts in this direction.	Supportive
Residential Non-PIPP	I see both renewable/sustainable energy sources and job creation as important, but given the trajectory of climate change, greenhouse gas emission, and the rise of the global average temperature, I consider expanding the use of renewable/sustainable energy sources to be much more vital. It would be great to create more jobs in Ohio, but it is much more important that we switch to renewable/sustainable energy as soon as possible.	Supportive
Residential Non-PIPP	I am so glad that your company is taking steps to go green!	Supportive
Residential Non-PIPP	Quit lobbying against green/renewable energy production in the State of Ohio!!!!	Supportive
Residential Non-PIPP	We need renewable energy. How do we get rid of those nut heads that seem to get there way fighting renewable energy.	Supportive
Residential Non-PIPP	I believe that everyone in the energy business should be committed to pursuing renewable energy options. We should pursue options to decrease fossil fuel consumption as quickly as is reasonably possible. I am happy to pay more for my electricity if I know that it is coming from environmentally friendly sources or to pay a premium on top of my bill for documented pursuit of such options.	Supportive
Residential Non-PIPP	This is greatly important, and will be carried by millennials owning houses and championing these issues. Please do this!	Supportive
Residential Non-PIPP	I would be willing to pay more for 100% renewable sourced electricity.	Supportive
Residential Non-PIPP	Thank you for your leadership on this	Supportive
Residential Non-PIPP	Renewable energy from Ohio is great, but renewable energy from anywhere is preferable to air pollution and harming the planet.	Supportive
Residential Non-PIPP	Get on with it. Time 's a wasting.	Supportive
Residential Non-PIPP	One of the biggest drawbacks to the way that energy is delivered has to do with simple physics - energy delivered drops off significantly with the line distance travelled. So, wind and solar created and transmitted as close to the end customers is critical to increasing power while holding costs down during a learning and development period. For me, the key words would be "localized sourcing"	Supportive
Residential Non-PIPP	I hope you continue to develop it and pursue it aggressively. It's more than time we catch up with the rest of the First World.	Supportive
Residential Non-PIPP	Solar and wind power stations that are local will be good for the economy and supply local power supply needs!	Supportive
Residential Non-PIPP	Just Do It!	Supportive
Residential Non-PIPP	I applaud your investment in renewable energy and will be happy to support future efforts in this area.	Supportive
Residential Non-PIPP	I believe at least 50% of AEP's energy should be generated from renewable sources	Supportive

Residential Non-PIPP	Improving services and adding technology to meet consumer needs while being responsible to environmental concerns is absolutely the right thing to do.	Supportive
Residential Non-PIPP	Please begin as soon as possible.	Supportive
Residential Non-PIPP	Definitely in favor of renewable as opposed to fossil fuels.	Supportive
Residential Non-PIPP	This is a good thing.	Supportive
Residential Non-PIPP	You can do better than you do.	Supportive
Residential Non-PIPP	Europe has had diversified and renewable energy sources for decades. Look to them for best practices and answers to questions like "what about the birds?"	Supportive
Residential Non-PIPP	If you choose to do this, you should have someone talk to Marion Technical College in Marion, Ohio.	Supportive
Residential Non-PIPP	After accessing the Apples to Apples website a few years ago, I selected a wind generated rate of \$0.06 per kilowatt hour. My brother was shocked to hear of that rate as Licking County Cooperative rate is about \$0.13 per kilowatt hour. After an initial investment, renewable energy sources would have no fuel cost and little maintenance costs, plus the benefit of no emissions and no fly ash disposal costs.	Supportive
Residential Non-PIPP	Stop pollution - Wind and solar seem to make the most stars rating Please get rid of ugly wires hanging all over	Supportive
Residential Non-PIPP	You definitely need to look into solar & wind sources. Cleaner, less expensive, & less subject to terror problems.	Supportive
Residential Non-PIPP	I would pay up to 15% more for renewably sourced electricity	Supportive
Residential Non-PIPP	Developments in solar power generation appear to be on the verge of comparable costs don't get left behind like Kodak company was.	Supportive
Residential Non-PIPP	I think it would be a great investment	Supportive
Residential Non-PIPP	Take a hard look at distributed generation, in addition to renewable energy. It can increase the dependability of the electrical supply; and be sure to invest in reinforcing the transmission and distribution networks.	Supportive
Residential Non-PIPP	This is a vitally important initiative that AEP should focus on over the next 10 years.	Supportive
Residential Non-PIPP	Be smart. Be creative. Possible cooperation with schools like Hocking College, Ohio University, etc.	Supportive
Residential Non-PIPP	Hope abundant energy will mean low monthly bill for customers	Supportive
Residential Non-PIPP	This survey is welcome news from AEP. Hopefully it isn't just for PR.  We're running out of time. The environmental tipping points don't care about short term profits or politicians worried about their next election.  The science is and has been clear. AEP will be complicit unless it begins to act even more aggressively	Supportive
Residential Non-PIPP	I think it's great!	Supportive
Residential Non-PIPP	I view this as the single most important responsibility by a utility company and would be willing to pay extra, if needed.	Supportive
Residential Non-PIPP	This would reduce our dependence on natural resources and improve air quality	Supportive
Residential Non-PIPP	Would love a program that helps customers to obtain independent renewable energy	Supportive
Residential Non-PIPP	Your current level of using renewable should be an embarrassment. Come on now! See the sun ☀️	Supportive
Residential Non-PIPP	I hope you increase your commitment to renewable/sustainable sources greatly	Supportive



Residential Non-PIPP	Thank you for seeking input from customers as well as looking into renewable energy solutions.	Supportive
Residential Non-PIPP	Should have been sooner!	Supportive
Residential Non-PIPP	I have already switched my source to Acadia(wind power). tho it likely comes from out of state. Would prefer more IN STATE renewables. Thanks 4 the survey!	Supportive
Residential Non-PIPP	It's vital to switch to renewable energy sources, and I'm willing to pay more for my electricity to do so.	Supportive
Residential Non-PIPP	We need better cheaper choices that also help out the local job market and helps the planet all at the sametime. We have the technology but no one wants to be self sustainable.	Supportive
Residential Non-PIPP	Lack on investment in renewable energy is irresponsible.	Supportive
Residential Non-PIPP	Very glad to take part and see AEP is keeping important topics like this in the burner. You should have asked are you willing to pay more and the answer is yes	Supportive
Residential Non-PIPP	Put some wind farms in southeast Ohio	Supportive
Residential Non-PIPP	Renewable energy is the best choice for My grandchildren's future	Supportive
Residential Non-PIPP	The environment should be everyone's chief concern. Poor environmental health equates to poor health for all.	Supportive
Residential Non-PIPP	I believe AEP has taken far too long to invest in wind and solar in Ohio, especially the solar agreed to in the AEP stipulation. Rate recovery or not, it's the right business decision for the distribution company.	Supportive
Residential Non-PIPP	It is very important to reduce our dependence on coal and other fossil fuels.	Supportive
Residential Non-PIPP	Do it yesterday!	Supportive
Residential Non-PIPP	Utilize ways to save money and save the planet!!!	Supportive
Residential Non-PIPP	I support this effort.	Supportive
Residential Non-PIPP	Renewable will last longer. Fossil fuels will run out.	Supportive
Residential Non-PIPP	I support having to pay slightly higher bills in order to increase the amount of renewable energy. I have looked into programs that are 100% renewable energy from other suppliers.	Supportive
Residential Non-PIPP	I believe we have to begin to be more responsible users of energy and it won't be easy. Someone has to do the right thing and soon.	Supportive
Residential Non-PIPP	Renewable energy is vital to maintaining a livable planet. This venture should have been advanced years, if not decades ago. At the same time, this development needs to be done without harming the environment--DO NOT locate wind turbines in Lake Erie bird migration paths, for example.	Supportive
Residential Non-PIPP	Glad you are pursuing this path. Don't stop with just a survey - move forward and implement some form of increase in sustainable energy investments.	Supportive
Residential Non-PIPP	Please act on it now. Solar and wind is the way to go!	Supportive
Residential Non-PIPP	do it!!	Supportive
Residential Non-PIPP	Do everything you can to develop renewable energy.	Supportive
Residential Non-PIPP	It would be nice if it lowered the cost in energy bills.	Supportive
Residential Non-PIPP	I think it's awesome!	Supportive
Residential Non-PIPP	I hope it will drive down the cost of electric energy.	Supportive
Residential Non-PIPP	Do it and don't penalize the customer for using renewable energy.	Supportive
Residential Non-PIPP	Please bring this opportunity back to Ohio!	Supportive
Residential Non-PIPP	I believe renewable energy critical to our resilience as a country for centuries to come.	Supportive
Residential Non-PIPP	It is vitally important for future generations to respect the earth and eliminate our dependence on fossil fuels Continue research to increase use of wind and solar	Supportive

Residential Non-PIPP	The use of renewable resources is very important to me. I do not like when the producers of renewable energies are marginalized or penalized. I applaud individuals that have installed solar installations. To me it is a win-win situation we are all in this world together.	Supportive
Residential Non-PIPP	Been a long time coming! Should be very aggressive in doing this	Supportive
Residential Non-PIPP	Please, Please, do more with renewable energy generation!!!!	Supportive
Residential Non-PIPP	OMG YES BUILD BUILD BUILD its cheaper and better than fossil	Supportive
Residential Non-PIPP	Promoting renewable energy generation should be a priority of any responsible, forward thinking energy production company. Renewable energy generation is more than an opinion or political ideology to promote, but an appropriate trajectory considering current fuel accessibility, global atmosphere conditions, and future societal energy demands.	Supportive
Residential Non-PIPP	I think it's great and I hope one day we burn zero coal and only use natural gas fired plants for backup.	Supportive
Residential Non-PIPP	Your flushed with cash so no reason not to make an investment in renewable energy.	Supportive
Residential Non-PIPP	Continue to reduce use of fossil fuels Thanks	Supportive
Residential Non-PIPP	I personally know 2 grade school boys who died from brain tumors in FL. that lived in the vicinity of a nuclear plant. (\$300K houses) Give me sun and wind.	Supportive
Residential Non-PIPP	We pay extra for renewable energy credits. We would rather actually get renewable energy.	Supportive
Residential Non-PIPP	The more the better!	Supportive
Residential Non-PIPP	I already pay a premium for the Viridian company to supply solar. I hope to get a rebate this fall after a 3 year investment. This may be a good model for Aep	Supportive
Residential Non-PIPP	It should happen as soon as possible.	Supportive
Residential Non-PIPP	Yes, please make use of current renewable energy resources and invest for yourselves in producing renewable energy. This is a part of doing business. Develop & improve. Improve your business model instead of a piss poor relationship with the people you serve.	Supportive
Residential Non-PIPP	It's about time!	Supportive
Residential Non-PIPP	Contact Elon Musk. You know who he is. He already has the best ideas rolling for renewable energy	Supportive
Residential Non-PIPP	Renewable energy=good	Supportive
Residential Non-PIPP	I'm very excited to see AEP starting to take a stand and want to use renewable energy sources to improve our environment!	Supportive
Residential Non-PIPP	Very happy that AEP Ohio is proactive in regards to energy efficiency and reducing greenhouse emissions compared to First Energy.	Supportive
Residential Non-PIPP	Get to work	Supportive
Residential Non-PIPP	I would like to see a larger % come from renewable resources. Perhaps incentives for solar panels or wind turbines.	Supportive
Residential Non-PIPP	I look forward to greener developments that benefit both the earth, AEP and electric customers.	Supportive
Residential Non-PIPP	very happy to see the use of coal become a thing of the past; too bad it took so long!	Supportive
Residential Non-PIPP	Renewable save money in long run,,, Renewable safer Renewable will be cheaper with more use,, save oil, and resource's, , Renewable's better for future life	Supportive
Residential Non-PIPP	I'm really glad to hear that you are doing this. I think the economic feasibility has clearly been demonstrated.	Supportive
Residential Non-PIPP	Great idea!	Supportive

Residential Non-PIPP	I agreed to pay slightly more for the choice that had 100% renewable energy on the ohio choice website and I suspect others do as well.	Supportive
Residential Non-PIPP	I think it is key to become wiser with our decisions as to how we treat the earth and can harness natural alternative resources such as solar power, as well I believe it will create more jobs for Ohioans.	Supportive
Residential Non-PIPP	Do it!	Supportive
Residential Non-PIPP	do more of it faster.	Supportive
Residential Non-PIPP	AEP should commit to 100% renewable by 2030	Supportive
Residential Non-PIPP	I don't care where it comes from but we need to invest in wind and solar power. Get off of coal	Supportive
Residential Non-PIPP	I think this is a great initiative. Hopefully it can get off the ground sooner rather than later.	Supportive
Residential Non-PIPP	We really appreciate all the hard work that goes into the research and development of better energy choices that are beneficial to the environment!	Supportive
Residential Non-PIPP	Please help lead the change that our world so desperately needs.	Supportive
Residential Non-PIPP	I am glad to see AEP looking to the future.	Supportive
Residential Non-PIPP	We need to reverse human caused climate change NOW!	Supportive
Residential Non-PIPP	I think a long term goal of utilizing energy from solar, wind, water, and even geothermal would greatly help this planet for ourselves and future generations	Supportive
Residential Non-PIPP	I am eager to know more about this and would like AEP to continue sharing these important developments, updates, and allow for greater involvement from their customers. This is a critical topic that is of urgent priority.	Supportive
Residential Non-PIPP	We need to get as much energy from renewables, wind and solar, as soon as possible . To stop and reverse climate change for the health of the planet and future generations.	Supportive
Residential Non-PIPP	Exciting news! In the long run--we'll all save money AND the environment. Homegrown energy is also better for Nation Security and the prevention of International conflicts. "Go for it, AEP!"	Supportive
Residential Non-PIPP	I would like solar energy	Supportive
Residential Non-PIPP	I fully support renewable energy.	Supportive
Residential Non-PIPP	Good looking out, smart business strategy for long term.	Supportive
Residential Non-PIPP	We should not be running a 21st century economy on 18th century technologies.	Supportive
Residential Non-PIPP	Ohio based renewable energy provides Ohio jobs and diversifies the energy source. Cleaner air helps with respiratory problems. All will drive more energy favorable business to locate in Ohio.	Supportive
Residential Non-PIPP	less than 75,000 jobs in coal vs 650,000 from renewables	Supportive
Residential Non-PIPP	This is a great initiative!	Supportive
Residential Non-PIPP	Very important initiative! Lead on! Thanks!	Supportive
Residential Non-PIPP	I am very appreciative of your efforts to expand renewable sources for our energy	Supportive
Residential Non-PIPP	Climate change is real and frightening and will result in a much less habitable world for our descendants. We must do everything we can to mitigate our negative effects on the environment.	Supportive
Residential Non-PIPP	I would like to see ocean current power better investigated. Large submerged horizontal cylindrical generators with engaging/retracting teeth I would call it dual gravity power. The gravity of the moon to create the ocean currents, and then the gravity of the earth to position the teeth engaged with the current while extended on the underside, while at the same time retracted on the upper side, thus maximizing positive contact area and driving force.	Supportive
Residential Non-PIPP	Move on this quickly	Supportive



Residential Non-PIPP	Wind and solar energy should be used and should reduce the cost of electricity for all	Supportive
Residential Non-PIPP	Wind farms like in Indiana would be great. Solar would be great too.	Supportive
Residential Non-PIPP	Go for 100% renewable wind and solar. NO FRACKING AND SHALE GAS. Wind and solar is proven to be cheaper than coal, both on the generation side AND the waste removal side.	Supportive
Residential Non-PIPP	It is time to get out of coal!	Supportive
Residential Non-PIPP	I would love AEP to use more renewable energy, and recently started paying my bill through Arcadia power because renewable energy is so important	Supportive
Residential Non-PIPP	Currently switched generation source to be 100% renewable.	Supportive
Residential Non-PIPP	It is better for the environment.	Supportive
Residential Non-PIPP	Our environment needs renewable energy.	Supportive
Residential Non-PIPP	Ohio is very suitable for wind energy. Perhaps offshore wind farms on Lake Erie (out of sight from land) would be perfect.	Supportive
Residential Non-PIPP	I think this is such a great idea and it would be great for marketing too	Supportive
Residential Non-PIPP	Just do it. Quit waiting.	Supportive
Residential Non-PIPP	I appreciate that you are looking to expand your renewable energy portfolio as well as asking your customers about it.	Supportive
Residential Non-PIPP	I appreciate that my energy company is looking into renewables. I think it's the way to go for many reasons.	Supportive
Residential Non-PIPP	This should be a major priority for AEP. The many storms, record high heat, and forest fires across the world this year leave no doubt that global warming is underway, and every business should help control it if they can.	Supportive
Residential Non-PIPP	We seem to rely (and politicians/lobbyists encourage this) on fossil fuels in Ohio, hanging on to old industries instead of training workers for renewable resource jobs. My family were coal miners for generations, but it's time to move on. Coal removal greatly harms our local streams, hills groundwater and wildlife/human environments. "Clean" coal is ridiculous. Go with renewable - I'll support this!	Supportive
Residential Non-PIPP	I encourage moving towards renewables.	Supportive
Residential Non-PIPP	I hope AEP makes a significant commitment to renewable energy. It is the future	Supportive
Residential Non-PIPP	A very good move	Supportive
Residential Non-PIPP	Power generation from renewable sources is extremely important or else the day is not far when we would run out of non-renewable energy sources. Infact, the whole world should take it seriously.	Supportive
Residential Non-PIPP	I appreciate that AEP Ohio is taking steps towards it. Thank you for taking initiative to conserve our natural resources! :-)	Supportive
Residential Non-PIPP	A day late and a dollar short on making this move, don't you think?	Supportive
Residential Non-PIPP	I appreciate that you want to increase your renewable energy availability. I currently get my power through another company through you that is 100% wind power.	Supportive
Residential Non-PIPP	Our future lives depend on it	Supportive
Residential Non-PIPP	The overall commitment to encournaging efficient bulbs and appliances makes me feel that an increase in renewable energy would further the image that AEP Ohio is proactive in protecting our environment while also helping customers.	Supportive
Residential Non-PIPP	Make it happen!	Supportive
Residential Non-PIPP	why has this taken so long	Supportive
Residential Non-PIPP	Came from CA, used nuclear, not in favor of that.	Supportive

Residential Non-PIPP	I think is an extremely positive step forward in progress. We want clean air, to reduce emissions, and to diversify the energy supply to bring costs down. Solar and wind are an excellent natural source of energy.	Supportive
Residential Non-PIPP	I wish the Oklahoma legislators had approved your wind farm. I currently pay you for all my electricity being generated by wind (theoretically) and I hope you can encourage more people to participate in that program. If we can replace GOP legislators throughout the country including in Ohio, we may get a rational green energy industry established.	Supportive
Residential Non-PIPP	Greatest benefit would be reduction in energy cost to individual consumer.	Supportive
Residential Non-PIPP	I would like to see more options available that would be more cost effective for us as energy users that would be more beneficial to the environment	Supportive
Residential Non-PIPP	I think it is important that every state have it's own renewable energy source for its residents. Wherever and whenever possible renewable energy is the way to go. I realize there will be initial expense to implement, but it is essential for our future, and our future generations!	Supportive
Residential Non-PIPP	I do not understand why AEP hasn't done more to use renewable energy, such as solar and wind.	Supportive
Residential Non-PIPP	we are behind in the global race to achieve this important goal	Supportive
Residential Non-PIPP	If you offer any discounts or rebates on getting your house ready or able to use renewables, I'd love to know about them.	Supportive
Residential Non-PIPP	Please do it thinking of the impact for 7 generations in the future, encompassing all aspects to the people, & environment.	Supportive
Residential Non-PIPP	Keep looking to find new energy sources Coal will always be dirty. I spent 36 years in a AEP power plant and in know how this fuel source works.	Supportive
Residential Non-PIPP	Make it happen	Supportive
Residential Non-PIPP	We have lived where this was very important for the environment, the creation of new jobs and for helping fossil fuels last longer. We have decided to embrace it because our Grandchildren are the ones most likely to be impacted by these improvements.	Supportive
Residential Non-PIPP	More companies should be doing this. This is the way of the future. We need to protect Mother Earth.	Supportive
Residential Non-PIPP	I think any natural way to reduce the use if fossil fuels is great	Supportive
Residential Non-PIPP	Renewable Energy is future! I do respec AEP OHIO for moving forward â€œRenewable Energyâ€	Supportive
Residential Non-PIPP	To stay viable into the future it is important to find other sources to produce energy. Not all resources last forever.	Supportive
Residential Non-PIPP	Long overdue!	Supportive
Residential Non-PIPP	Renewable energy should be a priority for AEP Ohio	Supportive
Residential Non-PIPP	Go all in	Supportive
Residential Non-PIPP	Greatly favor renewable, natural sources of energy. Problem might be the cost involved with production and distribution.	Supportive
Residential Non-PIPP	As a former employee of Tesla's solar division, i think Ohio has an incredible market for solar that isn't being utilized enough. Solar farms would be a great investment for renewable energy generation as well as rooftop solar for residential homes through the use of net metering.	Supportive
Residential Non-PIPP	Regardless of whether green house gas emissions are as serious as some would have us believe, renewables should be pursued because they reduce other environmental insults.	Supportive

Residential Non-PIPP	AEP should have been investing in Solar Energy a long time ago, it would have developed much faster and we would have cleaner air today.	Supportive
Residential Non-PIPP	Renewables are increasingly important for a variety of reasons. Particularly as people increasingly turn to electric powered equipment and transportation.	Supportive
Residential Non-PIPP	Alternative sources of renewable energy is needed now and it will be the future.	Supportive
Residential Non-PIPP	As the massive wildfires out West this summer indicate, global warming IS here and we need to take immediate steps to limit the emissions of greenhouse gases!	Supportive
Residential Non-PIPP	I have visited windmill and solar panel fields in Indiana and other states and have wondered why we haven't used solar or wind power here. Humans are destroying the natural balance of earth at a devastating rate, but the immediate gratification, individual comforts and conveniences cause people to forget about the bigger picture, our planet and natural environment as a whole.	Supportive
Residential Non-PIPP	Please continue to expand non-nuclear renewable energy sources	Supportive
Residential Non-PIPP	Where can I find more information about your renewable energy initiatives?	Supportive
Residential Non-PIPP	Glad to hear it. I have been considering switching to Arcadia Power for this very reason.	Supportive
Residential Non-PIPP	Thanks for considering more wind and solar!	Supportive
Residential Non-PIPP	its about time...what took you so long?	Supportive
Residential Non-PIPP	I feel that AEP shall make all power from renewable energy sources. Then pump that energy to existing homes.	Supportive
Residential Non-PIPP	I've been a by standard on global warming, but what is going on around the world is scary! We need to take these changes seriously and be more proactive. Thankyou	Supportive
Residential Non-PIPP	Reuse the refuse landfill areas by erecting solar panels for the generation of electricity. Most of the landfills are publicly owned so most cities would gladly assist if it meant jobs, good land use, and electric generation from renewal sources.	Supportive
Residential Non-PIPP	I would like to encourage AEP to pursue renewable energy generation. I think it is long over due. It would improve my opinion of AEP to see it become a more progressive corporation.	Supportive
Residential Non-PIPP	I have seen energy from Solar Energy allow for more energy at a lower cost that can then be passed on to customers. My energy bills are about 1/3 lower for another home (almost same size) in another state from a company who uses Solar energy to supplement their supply.	Supportive
Residential Non-PIPP	I'm very glad to see the AEP is at least investigating this option. It doesn't make any sense (except to Donald Trump supporters) to stick with non-renewable energy sources.	Supportive
Residential Non-PIPP	I think we should do all we can to use renewable energy sources as a way to take care of the earth!	Supportive
Residential Non-PIPP	I think this is one of the most important issues we currently have.	Supportive
Residential Non-PIPP	Make renewable energy a priority in terms of business planning and capex going forward	Supportive
Residential Non-PIPP	We have 45 acres of land. Would love to use it for renewable resources	Supportive
Residential Non-PIPP	Smart long term investment for all of us.	Supportive
Residential Non-PIPP	We need to do this NOW	Supportive
Residential Non-PIPP	Go for it. I would love to see windmills as far as the eye can see. I think it is so breathtaking seeing the ones that I do coming into Ohio from Indiana on US 30.	Supportive



Residential Non-PIPP	It is very encouraging to learn of AEP Ohio's interest and I am pleased that you sent out this survey! Go for it!	Supportive
Residential Non-PIPP	It is about time. You're way behind NextEra.	Supportive
Residential Non-PIPP	It's just common sense.	Supportive
Residential Non-PIPP	Please share your goals. When do you plan to hit 10% renewable energy	Supportive
Residential Non-PIPP	DO IT and GET STARTED NOW !!!	Supportive
Residential Non-PIPP	Wind catcher being cancelled is a huge loss. I really wonder if significant AEP renewable generation will really happen or if it's lip service	Supportive
Residential Non-PIPP	Yes. The more renewable energy the better. The science of climate change is done. We need to all we can immediately to reduce the effects of climate change for us and for future generations of all species on earth.	Supportive
Residential Non-PIPP	Would like to see AEP invest in more wind energy, but I realize that Ohio is not exactly the windiest state. Can off shore (Lake Erie) be utilized to improve the opportunity for capturing more consistent wind energy?	Supportive
Residential Non-PIPP	All of us need to seek ways of being more environmentally responsible.	Supportive
Residential Non-PIPP	I am extremely concerned that social justice is maintained as we seek alternative solutions to provide this critical service. No solutions should allow for the have-nots left behind.	Supportive
Residential Non-PIPP	Hopefully you will pursue renewables	Supportive
Residential Non-PIPP	Smart move and investment for AEP	Supportive
Residential Non-PIPP	Do it. The sooner the better	Supportive
Residential Non-PIPP	Development of renewable energy generation is critically important to the lives of human beings, other animals and plants here on our only Planet.	Supportive
Residential Non-PIPP	USA should make a priority of renewable energy. We are losing ground now, and are far from the lead position. It got way worst with the president we sadly have now!	Supportive
Residential Non-PIPP	Get on with it.	Supportive
Residential Non-PIPP	Anything that reduces pollution is important to me and for grandchildren I don't know if this makes our electricity more expensive or not	Supportive
Residential Non-PIPP	We need to be able to provide energy from renewable sources in an ecologically friendly manner.	Supportive
Residential Non-PIPP	I would love to be able to say that I chose my power and my power company because I know it is from renewable energy ... I know that getting to 100% is not realistic, but I think we can lead the country if we work together	Supportive
Residential Non-PIPP	There needs to be a greater dedicated effort to securing renewable sources	Supportive
Residential Non-PIPP	Renewable energy is critical to reducing the effects of greenhouse gas and to save our planet for future generations. This should be a top priority.	Supportive
Residential Non-PIPP	More from renewable sources please!	Supportive
Residential Non-PIPP	Express the benefits of renewable energy sources to President Trump and Governor Kasich.	Supportive
Residential Non-PIPP	4.5% is extremely low percentage from renewable energy. Needs to be WAY HIGHER than that. I commend AEP for taking the next steps forward in the advancement of renewable energy in Ohio.	Supportive
Residential Non-PIPP	Go faster into renewables	Supportive

Residential Non-PIPP	I would like AEP to advocate to our government officials for more renewable energy minimum requirements. Our current EPA seems set on destroying all progress that had been made to reduce our carbon footprint and not destroy our environment.	Supportive
Residential Non-PIPP	Do it!	Supportive
Residential Non-PIPP	keep it up	Supportive
Residential Non-PIPP	Utilization of renewable energy would be a greatly benefit the community present and future not just from an energy independent standpoint but also on the financial and job front.	Supportive
Residential Non-PIPP	I support plans for renewable energy in the most efficient, cost-effective, environmentally responsible manner possible.	Supportive
Residential Non-PIPP	Everyone needs to do everything they can to slow global warming.	Supportive
Residential Non-PIPP	Work to make a higher dependence on renewables.	Supportive
Residential Non-PIPP	Think Green! Be Local! Raise Renewables to 25-30% in next 5 years!	Supportive
Residential Non-PIPP	Very thankful AEP is pursuing this.	Supportive
Residential Non-PIPP	AEP should have taken a proactive lead into renewable sources years ago. I think this action now is similar to that of feeding a dead horse, the activities should not be a game of catchup. I send payments to an Ohio address for a product that was perhaps generated or produced in an area on the exterior of the State of Ohio geographical borders. No sympathy on either thought.	Supportive
Residential Non-PIPP	I think it is great that you are thinking about renewable energy- it will keep me a customer of yours for sure.	Supportive
Residential Non-PIPP	Purchasing renewable energy is a no brainer. Its hard to make other lifestyle adaptations to reduce emisions, for example, travelling less, but its very easy to switch to more sustainable energy sources for power we will use anyway.	Supportive
Residential Non-PIPP	Glad EP is moving in this direction!	Supportive
Residential Non-PIPP	Do: 1. Wind farms on Lake Erie 2. Invest in solar in the Southwest	Supportive
Residential Non-PIPP	I would like solar energy	Supportive
Residential Non-PIPP	fossil fuels will run out!	Supportive
Residential Non-PIPP	Make renewable energy priority #1.	Supportive
Residential Non-PIPP	I would like to see the majority if our energy be from wind or solar	Supportive
Residential Non-PIPP	Please move forward with renewable energy generation. Its time!	Supportive
Residential Non-PIPP	Pike county Ohio has access to multiple transmission lines and land available for solar or wind development in land at former Portsmouth Gaseous Diffusion Plant. Please contact Pike County Commissioner Anthony Montgomery 740-352-0706. It could save AEP money with having the infrastructure in place.	Supportive
Residential Non-PIPP	Do this!	Supportive
Residential Non-PIPP	I see that Consolidated is utilizing solar energy in Delaware, Oh. I would like to know that my energy came from solar and wind.	Supportive
Residential Non-PIPP	Please do this!	Supportive
Residential Non-PIPP	The sooner the better for clean renewable energy.	Supportive
Residential Non-PIPP	I would have thought we would have renewable energy by now, but I do understand government gets in the way	Supportive
Residential Non-PIPP	Pursue wind and solar energy	Supportive
Residential Non-PIPP	Please contiune to use more renewable energy sources :)	Supportive
Residential Non-PIPP	Go for it!	Supportive
Residential Non-PIPP	Great initiative, AEP! Creating in Ohio would be great, but is SO much more important to do it in general, and in a cost effective manner. Way to go, AEP!	Supportive
Residential Non-PIPP	yall need to get moving on this now	Supportive

Residential Non-PIPP	The investment in solar energy will help improve technology as a move toward energy independence.	Supportive
Residential Non-PIPP	Renewable energy is important because our fossil resources cannot sustain our use. Mining and drilling our lands have too many negative effects on our environment.	Supportive
Residential Non-PIPP	Would love to see more effort towards renewable energy	Supportive
Residential Non-PIPP	Ohio is on the same latitude as Germany, the country with the highest # of solar panels per person. Ohio had similar weather - we could utilize solar energy just fine! And I know that until a few months ago, solar provided quite a few jobs with installation.	Supportive
Residential Non-PIPP	Climate change is most important challenge for future of creature. if we missed opportunity, we all will not survive.	Supportive
Residential Non-PIPP	Please do commercials telling more about the programs you offer and what you are doing to contribute the the environment through your programs.	Supportive
Residential Non-PIPP	get off of oil.....	Supportive
Residential Non-PIPP	I think this is a step in the right direction. Understanding that because of developing this does not mean higher prices considering that "wind is free". I am hoping this helps save the planet and helps the economy for all.	Supportive
Residential Non-PIPP	I have been looking into switching to solar power.	Supportive
Residential Non-PIPP	lower electric bills through renewables	Supportive
Residential Non-PIPP	just do it. it's the smart thing to do	Supportive
Residential Non-PIPP	Great idea. We are behind the times in this area when it comes to energy. Way more positive than negatives.	Supportive
Residential Non-PIPP	Please lobby the state of Ohio to make renewable energy an important part of its comprehensive energy management policy.	Supportive
Residential Non-PIPP	Solar is not being developed quickly enough.	Supportive
Residential Non-PIPP	encourage new construction to incorporate solar. build wind powered cell towers (cell towers atop wind turbines)	Supportive
Residential Non-PIPP	Ohio is a great location for solar, especially roof top applications in town on factories and other large commercial buildings. Wind is also a very viable resource in the Buckeye State. Put some coal miners to work building the future not the past!	Supportive
Residential Non-PIPP	Keeping the development in Ohio will bring new jobs and prosperity not only to aep but to the people here. Please do utilize free energy sources.	Supportive
Residential Non-PIPP	I am very interested and glad this is being considered.	Supportive
Residential Non-PIPP	AEP should move towards more renewable sources	Supportive
Residential Non-PIPP	We HAVE to make the world BETTER and not continually destroying it. WE HAVE to do the BEST we can do to PROTECT the Atmosphere, oceans, animals, human life, ALL LIVING THINGS. We NEED to take a stand and protect the future NOW!!	Supportive
Residential Non-PIPP	Thanks for drawing attention to the issue. Renewable energy is growing by leaps and bounds in other countries and we seem to be lagging behind.	Supportive
Residential Non-PIPP	It is extremely important to me that AEP Ohio develop and increase renewable energy generation. I am very excited that AEP Ohio is considering this!	Supportive
Residential Non-PIPP	Please continue the investment in renewable energy, building that infrastructure is vitally important to our community and the world.	Supportive



	It's not like I really have a choice in where I get my electricity, since AEP is essentially a monopoly in my area, but I feel a little better knowing that AEP is at least making an effort.	
Residential Non-PIPP	I would be interested to know what AEP's goals are for renewable energy. The survey mentioned a current proportion of 4.5%, which is so low that an "increase" could be nearly anything.	Supportive
Residential Non-PIPP	Way to go	Supportive
Residential Non-PIPP	I would love to see updates (links to articles maybe included in my bill email)	Supportive
Residential Non-PIPP	No Fracking!	Supportive
Residential Non-PIPP	I applaud AEP's interest in renewable energy and away from coal. It would help if AEP provided its customers with incentives for their use of renewable energy.	Supportive
Residential Non-PIPP	The more earth and pocket friendly, the better!	Supportive
Residential Non-PIPP	Go for it.	Supportive
Residential Non-PIPP	Use more Solar!!!!	Supportive
Residential Non-PIPP	I think we as a country need to be very vigilant and look for other means of energy sources and look how those can benefit us in the future	Supportive
Residential Non-PIPP	Farmers in Darby Twp within Pickaway county could greatly benefit from wind turbine "cofarms" especially along Rt 62 and I-71 where the high voltage transmission lines already run. It just makes great sense and it always seems windy out there.	Supportive
Residential Non-PIPP	While I know the upfront costs are prohibitive, I believe they would be worth it to provide renewable energy for years to come.	Supportive
Residential Non-PIPP	I love that you're asking this....this is very important to me and I hope you'll go full speed ahead.....everyone wins with renewable energy.....I don't care what Trump says.	Supportive
Residential Non-PIPP	Glad you're looking into this!	Supportive
Residential Non-PIPP	On previous question: Ohio generous I believe would be beneficial for the state economy, but we should also consider outside competitive sources	Supportive
Residential Non-PIPP	Thank you ! AEP OHIO is Great !	Supportive
Residential Non-PIPP	It's very important that the U.S.A. become independent of importing our energy needs, it should be more cost efficient for customers, instead of costs rising for today's energy - start using our renewable and make it happen quickly other than decades!	Supportive
Residential Non-PIPP	I am hopeful that this is the beginning of a new era in which power companies are investing and delivering in affordable and clean energy resources. I believe the placement of a dam along our Ohio River would solve a multitude of our problems where coal plants are being eliminated.	Supportive
Residential Non-PIPP	You need to rapidly increase the percent from renewable sources. Zero reasons not to.	Supportive
Residential Non-PIPP	Do it smart, not showy. Example: Solar isn't best for Ohio based on climate, but wind is. Talk to environmental professionals who study this at Ohio universities to build a reliable, sustainable, and realistic plan that will work best for Ohio's ecosystems.	Supportive
Residential Non-PIPP	Keep home owners informed of what options are available in future.	Supportive
Residential Non-PIPP	AEP needs to be ahead of the curve. Investing in alternate infrastructures now allows Ohio to hire new workers, and decrease the emission of green house gases.	Supportive

Residential Non-PIPP	We absolutely must make the switch to renewable energy. It will happen eventually, as we currently use limited resources for electricity; however, it is important that it happens soon to save our planet for our kids and grandkids.	Supportive
Residential Non-PIPP	Please keep it up. I am thrilled with the new approaches to and the development and support of renewable energy, and for using the opportunities presented for local job creation and training concurrently with it.	Supportive
Residential Non-PIPP	I'm willing to pay for a line item on my bill for this.	Supportive
Residential Non-PIPP	Keep up the good job. Thanks for being there through all kinds of weather and hazards	Supportive
Residential Non-PIPP	If we expect, as a society, to still be here 50 yrs. from now enjoying a similar quality of life, we have to develop alternative, clean energy sources. Hopefully we're not too late.	Supportive
Residential Non-PIPP	NW part of Ohio has about 250 wind turbines. They seem to be providing a lot of energy.	Supportive
Residential Non-PIPP	Bring it on	Supportive
Residential Non-PIPP	Please do it. All of it. There is no reason to not be using renewable energy.	Supportive
Residential Non-PIPP	They put solar panels in at the West Union school, why not do this for government housing to. This would help cut the cost needed for upkeep at apartments and help save the government some money.	Supportive
Residential Non-PIPP	Ohio has a average windspeed all year long that max most turbines. With investment to better turbines, solar , and water power . We as a world could go totally green . Saving the world resources and putting money into the investors pockets.	Supportive
Residential Non-PIPP	Energy independence helps all and creates jobs if done correctly. Please focus on what u do best helping people when no one can.	Supportive
Residential Non-PIPP	I would be proud to say that my utility companies are providers of alternative energy. This is crucial for future generations well being as well as being financially sound in the long run.	Supportive
Residential Non-PIPP	There is a need to move away from fossil fuels. However until the regulations change AEP has to meet its responsibilities the best they can.	Supportive
Residential Non-PIPP	it needs to be considered because we have way too much pollution and green house gases. We need to be able to make our own power for Ohio within Ohio	Supportive
Residential Non-PIPP	Stay local to support local	Supportive
Residential Non-PIPP	The voters and customers have wanted this for well over a decade. It is time that Ohio start showing a real interest in renewable energy. I think at least half of the AEP energy should come from renewable energy.	Supportive
Residential Non-PIPP	Great that AEP is showing concern and willingness to look for ways to help our crippled environment! Thank you! All power companies should be doing the same	Supportive
Residential Non-PIPP	I am very supportive of AEP expanding its renewable energy sources. We need to be realistic about the future regarding pollution, finite resources and quality of life.	Supportive
Residential Non-PIPP	Do not wait on government regulation(s) to evolve your business model. Continue to innovate now so that we're all prepared for the future.	Supportive
Residential Non-PIPP	Please move forward with this development. Becomes more important every single day. Glad to hear you are doing this!	Supportive

Residential Non-PIPP	It would be really cool to have a dashboard that shows customer how much the various renewables added contribute. Allow teachers/students to use this information in real time to teach about energy, weather, and finding a balance. Oh, and maybe look into partnering with some of the cool CO2 capture tech at Universities.ðŸ™‰	Supportive
Residential Non-PIPP	We are constructing a water wheel to generate DC power to convert, our concept and design have been aided and information provided from a friend, who happens to be an AEP employee!! Imagine that. Thank you AEP for using Ohio people to generate Ohio's power.	Supportive
Residential Non-PIPP	[DELETED DUE TO PERSONAL IDENTIFIABLE INFORMATION]	Supportive
Residential Non-PIPP	I think its a good direction to move in	Supportive
Residential Non-PIPP	Renewable energy is a win-win-win. Better for consumer's (air quality), AEP (diversity and renewable) and business (ultimately lower costs).	Supportive
Residential Non-PIPP	Important addition to energy resources	Supportive
Residential Non-PIPP	Coal very dirty, gas little better. Grid vulnerable to outage. Keep up good work.	Supportive
Residential Non-PIPP	It's a great initiative.	Supportive
Residential Non-PIPP	Stop using Coal...	
Residential Non-PIPP	Trump	Supportive
Residential Non-PIPP	I appreciate the fact that you have solar panels at the schools in Gallia County. If you approached the Village of Vinton they would gladly let you use undeveloped land for solar panels.	Supportive
Residential Non-PIPP	Great idea!	Supportive
Residential Non-PIPP	I think there's tremendous opportunity for wind energy in Ohio, so my hope is that legislators and regulators will follow industry's lead on this.	Supportive
Residential Non-PIPP	It's renewable. We cannot use it up. That in itself is smart. The benefit to the environment is incredible.	Supportive
Residential Non-PIPP	Invest more in renewable energy	Supportive
Residential Non-PIPP	Be an industry energy leader by advancing the wind turbine and solar markets.	Supportive
Residential Non-PIPP	We support your efforts to use renewable energy.	Supportive
Residential Non-PIPP	Do as much as you can as fast as you can	Supportive
Residential Non-PIPP	I believe renewable energy is an important step to secure Earth for future generations	Supportive
Residential Non-PIPP	I think it is a positive step towards creating a future that will be sustainable for our planet.	Supportive
Residential Non-PIPP	Please please please make a bigger move in this direction. If a huge influential company like yours is proactive and takes a stand to reduce the use of fossil fuels, it will give the rest of us hope that maybe we really can save the planet. Most of us care and are willing to pay a little more to preserve this planet and this way of life for our children. Also, coal is gross.	Supportive
Residential Non-PIPP	Do it.	Supportive
Residential Non-PIPP	I hope we continue to work on renewable energy despite the current administration in Columbus and Washington	Supportive
Residential Non-PIPP	Keep things local and enrich ourselves. The price premium will pay for itself in a long run, and it's easier to deal with issues locally than nationwide. You can create your own system to put you in control instead of market forces	Supportive
Residential Non-PIPP	Anything that can be done to improve our environment and turn back the tide of climate change is extremely important.	Supportive

Residential Non-PIPP	Sustainable and non-polluting methods are always superior in the long term. I would happily pay higher rates to not use electricity generated using our limited fossil fuel resources.	Supportive
Residential Non-PIPP	I really have no knowledge what AEP is doing with clean energy, other than what has been said about having to use scrubbers (?) etc. You need more info out to the public.	Supportive
Residential Non-PIPP	We trail the rest of the developed world in the implementation of alternate (non-fossil fuel) sources of energy, at the same time that our climate slips deeper into irreversible global warming. Renewable energy is the only responsible response.	Supportive
Residential Non-PIPP	4.5% that's all, really?! What is wrong with you? You Are not competitive, the market and technology has advanced. This is a great cost competitive opportunity. Support US products too!	Supportive
Residential Non-PIPP	I feel its important to develop renewable energy through the most environmental friendly way possible and reduce our dependence on fossil fuels.	Supportive
Residential Non-PIPP	Expand your renewable portfolio....at much faster rate and trajectory than planned. Several months ago, AEP had a great PR release about your future in the clean energy sector. Let's see the results from this and let's not wait 20 years to see them. Be an innovator and your efforts will be rewarded in the future success of your company. I promise that forward thinking utilities who act now; will be the only ones remaining in 10-30 years. Good luck. Thanks for the smart meter.	Supportive
Residential Non-PIPP	Yes, our Electric runs so high, i feel this will help us with our bill, so our bill will come down. so it will be a win win. Thank You!	Supportive
Residential Non-PIPP	I would be very happy if AEP increased the amount of energy from renewable sources, and would be willing to pay more for electricity from such sources.	Supportive
Residential Non-PIPP	Renewable energy sources should be cheaper than non-renewable ones. We need to encourage the development and adoption of such sources. My kids are already going to live in a world wracked by human-fueled climate changed. I would prefer they live in one where there is at least some hope of a better future, and not one with a collapsing biome.	Supportive
Residential Non-PIPP	This is one of the most important areas to develop in our country, our planet. Thank you for keeping it a priority - please push for more development!	Supportive
Residential Non-PIPP	I'd like to believe that you've been working on this for a long time; but even "late" is better than "never."	Supportive
Residential Non-PIPP	I would like to see a more proactive approach from governmental entities toward supporting solar and wind energy in their communities, whether private or public	Supportive
Residential Non-PIPP	Would be up for Wind Power as my option and to supply to the Grid, place a wind turbine on my property :)	Supportive
Residential Non-PIPP	It's time we finally make meaningful investments into renewables.	Supportive
Residential Non-PIPP	Coal and natural gas are unsustainable and pollutive and the jobs are dangerous. Ohioans deserve better options.	Supportive
Residential Non-PIPP	I'm excited to hear you are planning on increasing the renewable energy sources, wind and solar. If you need a guinea-pig home, I'll be first in line, please!	Supportive
Residential Non-PIPP	The more wind and solar developed the better	Supportive



Residential Non-PIPP	We need to protect our planet for future generations to enjoy. Thank you for looking into this and please consider doing what's best for the environment.	Supportive
Residential Non-PIPP	A magician can only pull so many rabbits out of his magic hat before he runs out of rabbits, and if the magician could pull rabbits out of his hat forever, I think you would find that we would either be over run with rabbits or eating rabbits for dinner every night. Fracking will only be effective for so long before it too runs out. Also, the carbon use by third world countries will continue to increase as their economies expand. It is up to the developed nations to lead the way in phasing out obsolete carbon technology.	Supportive
Residential Non-PIPP	The more renewable energy that can be produced the better this world will be now and in the future.	Supportive
Residential Non-PIPP	Make it more affordable for residence to utilize renewable energy sources through grants and subsidies.	Supportive
Residential Non-PIPP	If AEP is willing to purchase power from individuals who have their personal renewable source and help to educate people about how to implement their own sources, that could have a positive impact.	Supportive
Residential Non-PIPP	Love it. Keep it coming! Would love to see even a greater percentage come from sustainable sources.	Supportive
Residential Non-PIPP	Really hope you start doing this type of investment in clean energy	Supportive
Residential Non-PIPP	Keep it eco friendly. Our environment IS who we are & our future. We use Mother Earth and her wild and natural wonders for ALL our needs, from fresh water to the air we breathe, from food, building supplies, jewelry, shade aesthetic appreciation, outdoor sports, entertainment and connection to other sentient beings. We should NEVER take advantage of her & always show deep appreciation & care as she cares for us! The apple tree, the cow & chicken, the river, the air never asks for appreciation just gives and gives; so too must we. Thx!	Supportive
Residential Non-PIPP	Renewable energy is the key to a future of clean air. We need to use the wind and sun to the best of our ability...we owe it to our future generations. Thanks.	Supportive
Residential Non-PIPP	We are so far behind other countries in developing renewable energy. The discussion should be over. We must have better energy sources.	Supportive
Residential Non-PIPP	Renewable energy is the best long-term solution to Ohio's energy needs. I will always give my business to energy companies that prioritize and value renewable energies, thank you!	Supportive
Residential Non-PIPP	I appreciate the direction that AEP is going for not only the benefit of the customers but the care and concern of our planet as a whole thank you and keep moving forward for future Generations this is the only home we have so let's take care of it thanks again!!	Supportive
Residential Non-PIPP	I highly value the use of renewable energies and will happily continue to do business with an energy supplier that shares these values.	Supportive
Residential Non-PIPP	Please follow up on this plan!	Supportive
Residential Non-PIPP	Do it!	Supportive
Residential Non-PIPP	Switching to renewable energy sources is extremely important in a massive scale as not doing so may, I believe, very possibly lead to the end of society as we know it within our lifetime. It sounds exaggerated, but if you study the predictions of climate scientists, my assumption would be seen as conservative. It's truly a shame, with the wealth and knowledge that the United States has, that we are not already or at least close to already using 100% renewable energy sources. This must happen immediately if we want to continue life as it is currently although many dramatic changes are already unavoidable in the near future because we didn't do anything sooner.	Supportive

Residential Non-PIPP	Do it!!!	Supportive
Residential Non-PIPP	Please more renewable energy investment!	Supportive
Residential Non-PIPP	I am currently using a service (Arcadia) that uses credits so that all my energy comes from renewable sources. We are willing to pay extra for thisâ€”it's that important to us.	Supportive
Residential Non-PIPP	As a millennial, I'm deeply concerned about the climate crisis. It gives me hope to see companies like AEP investing in the Solar project in Southeast Ohio, which can be a blueprint of redevelopment for our region and shifting the grid.	Supportive
Residential Non-PIPP	Exciting!	Supportive
Residential Non-PIPP	Key to the transition from fossil fuels to renewable sources of energy is replacing the jobs lost with new local jobs producing renewable energy equipment and installing and maintaining it.	Supportive
Residential Non-PIPP	Renewable energy is good for all. Good decision!	Supportive
Residential Non-PIPP	I would love the see more energy coming from renewable sources. I think that this is important.	Supportive
Residential Non-PIPP	Do as much of it as you can. We need to do everything to slow the warming of our planet if we care at all about our children and grandchildren.	Supportive
Residential Non-PIPP	I think it should be a priority for AEP.	Supportive
Residential Non-PIPP	Would very much like to see AEP increase the use of renewable resources and less reliance on fossile fuels.	Supportive
Residential Non-PIPP	I think this is the most important thing AEP can do.	Supportive
Residential Non-PIPP	I was very excited to receive This news about AEPs interest in utilizing more renewable energy, If there is any way I could help in furthering this agenda please feel free to contact me at any time.	Supportive
Residential Non-PIPP	Please use more renewable energy	Supportive
Residential Non-PIPP	I donâ€™t typically know about efforts like this from AEP, so it would be good if we could find out - might make me more proud to pay each month	Supportive
Residential Non-PIPP	AEP Ohioâ€™s generation portfolio sends a message to industry that Ohio is forward-leaning and interested in high tech jobs. Access to utility-scale RE is a decision factor for many companies in locating operations in the State of Ohio. Ohio is being overlooked for billions of dollars of investment and thousands of jobs by not adopting an aggressive RE/EE portfolio. Quality of life - breathable air, cleaner water, and the long-term impacts of coal mining on the landscape will all improve. By purchasing solar panels and wind turbines manufactured in Ohio, you increase employment.	Supportive
Residential Non-PIPP	Wind, solar, hemp biomass, hydro all need to happen, now.	Supportive
Residential Non-PIPP	Keep up the good work	Supportive
Residential Non-PIPP	It feels like AEP is slow to modernize. This may be inaccurate, but you don't often communicate with me.	Supportive
Residential Non-PIPP	Ohio can be a leader in renewables and AEP Ohio is in a unique position to be the driver. I hope you seize the moment and run with it. If so, future generations will look back at how forward thinking you all were.	Supportive
Residential Non-PIPP	offer solar source of energy	Supportive
Residential Non-PIPP	While I believe that sufficient resources are available, it is going to be increasingly expensive and damaging to the environment to get them. Renewable energy, if done in the proper location, would be an environmentally sound choice.	Supportive
Residential Non-PIPP	Do it now! The planet depends upon it!	Supportive

Residential Non-PIPP	Poway, CA uses a system called Vivint--based in Utah. Look at this program to develop something like it for use in Ohio, if you haven't already. Vivint Solar Development, 4931 N. 300 W., Provo, UT 84604.	Supportive
Residential Non-PIPP	like to know some results	Supportive
Residential Non-PIPP	I do not want to go back in time to dirty coal and there is no such thing as clean coal! The USA is so far behind so many other countries when it comes to renewable energy. AEP has the opportunity to help employ more people right here in Ohio.	Supportive
Residential Non-PIPP	<p>Because carbon emissions pose a public problem, I strongly oppose Ohio only offering customers the opportunity to select market-based renewable energy supply products based on their private preferences. Carbon emission impact everyone, independent of private preferences, and so I would much rather support utility-level tariffs that feature increased renewable energy supply for all customers. However, I am not a supporter of titling utility energy supply as "renewable" through the purchase and transfer of Renewable Energy Credits (RECs). RECs are only environmentally valuable if the energy generated from renewable sources that produces the RECs actually displaces the production of energy that would otherwise be produced from non-renewable sources. A major concern for me is that the majority of RECs purchased for "renewable" supply in Ohio are produced from wind farms in the American Southwest that feature their highest production at night. And RECs produced from wind-farms at night, when Locational Marginal Prices (LMPs) are negative in certain grid locations and customers are actually paid to use more energy, are unlikely to fully offset the carbon emissions claimed from avoided non-baseload generation. Said another way, wind-based RECs likely provide less than the claimed environmental benefits to the grid or society since the increased usage due to negative LMPs cancels out, at least some of, the desired displacement of carbon-based generation. Therefore, I would like to express my concern over AEP Ohio utilizing RECs as a method of providing "renewable" energy supply. I would far rather support higher tariffs that achieve solar projects or pumped hydro storage that would create real environmental benefits through avoided carbon emissions at the time of the day when energy is also most expensive. Thanks for taking the time to read my long comment.</p>	Supportive
Residential Non-PIPP	Hopefully without charging the customer more, but that probably won't happen.	Supportive
Residential Non-PIPP	My concern is about the grid. I realize President Trump is working on all he can to protect this from happening. Iâ€™m thankful to hear.	Supportive
Residential Non-PIPP	I like your strategy to keep increasing renewable energy. You are preparing for the future.	Supportive
Residential Non-PIPP	<p>It is in AEP Ohio's best interest to invest in renewable generation resources to provide a long term, stable energy supply for customers. Renewable infrastructure investments with shared cost recovery (ie a partial cost recovery rider coupled with capital investment) could provide the company with reliable generation assets and grid services that will reduce/eliminate dependence on fossil-fuel based generation, transitioning to an abundant, free fuel source. Grid modernization improvements to stabilize energy supply (microgrid/distributed generation/battery storage) is an essential investment as well. There is proven technology to accomplish a 100% renewable grid and many best practices across the country that are valuable planning resources. AEP is well positioned to actualize a renewable energy-based grid modernization strategy.</p>	Supportive

Residential Non-PIPP	I am all in favor of conservation of what we take for granted. We, as consumers should take more of an interest in preservation of the planet for this generation, and succeeding.	Supportive
Residential Non-PIPP	Iâ€™m really excited by it! Already starting to see renewable energies grow in pockets of the State, and itâ€™s through efforts like that of the AEPâ€™s that we can see really positive change and growth!	Supportive
Residential Non-PIPP	If we start using local renewable energy, we can generate our own power, using our own labor, without polluting our local environment. It would be crazy not to do more of this. It is the future and we want to be part of it.	Supportive
Residential Non-PIPP	Let's ramp it up before it's too late	Supportive
Residential Non-PIPP	Why are you wasting time asking questions, and not just doing it? And why is it taking AEP so long? Look around the world, beyond Washington D.C. please. There's your answer.  The question about "where" I would like the renewable energy to be "sourced" or "manufactured" - is electricity "lost" as it travels over power lines? If so, then closer to home, the better.	Supportive
Residential Non-PIPP	Keep working on using renewable energy.	Supportive
Residential Non-PIPP	More wind and solar please.	Supportive
Residential Non-PIPP	Just glad AEP is taking such step. Climate change is real and we need to find safe and clean energy to secure a future for our children.	Supportive
Residential Non-PIPP	Get it going.	Supportive
Residential Non-PIPP	Iâ€™m very excited to hear that AEP is making inroads here.	Supportive
Residential Non-PIPP	I would gladly pay more for electricity that is not generated by burning fossil fuels.	Supportive
Residential Non-PIPP	I would be interested in participating in a program to test renewable energy. I have 33 acres in Licking County for testing solar or wind power.	Supportive
Residential Non-PIPP	Kudos for taking this step. I support it 100%!	Supportive
Residential Non-PIPP	I think it's a great idea	Supportive
Residential Non-PIPP	Do more. The rest of the world is leaving us behind. Coal is dead and has been for a long time. renewable energy is clean energy and can create new jobs. No more fracking jobs - this natural gas boom will bust just like they have in the past. We need sustainable energy sources and sustainable jobs.	Supportive
Residential Non-PIPP	Very glad AEP is looking into this!	Supportive
Residential Non-PIPP	I am all for the development and use of more environmentally friendly and renewal sources of energy. I live in an apartment and don't have the options of homeowners but if these energy options are available to renters, also, that would be ideal.	Supportive
Residential Non-PIPP	Very supportive of renewable energy.	Supportive
Residential Non-PIPP	It is vital to switch to all renewable energy for the good of the environment (and thus future generations) and to get our country less dependent on oil that funds theocratic Middle Eastern regimes	Supportive
Residential Non-PIPP	Please do whatever we can to reduce the impact of climate change. We must do what we can for future generations.	Supportive
Residential Non-PIPP	Sounds like great ideas !	Supportive
Residential Non-PIPP	There will always be lots of NIMBYs for renewable projects. Preferable they are convinced, but necessary that they are overcome.	Supportive
Residential Non-PIPP	Solar is best here in SE ohio. Let's turn some of the old coal fields into solar fields.	Supportive
Residential Non-PIPP	this is something I will be watching for in the future and hope there is progress made towards investing in renewable energy	Supportive



Residential Non-PIPP	Climate disruption has reached crisis levels and investing in zero-emissions energy sources is the only responsible path forward. Ohio cities also have severe air pollution and health problems.	Supportive
Residential Non-PIPP	Seems Ohio is not as open minded to change.	Supportive
Residential Non-PIPP	Thank you for asking these questions. We have the ability, knowledge, skills and labor force to invest in this shift. Let's do it! Climate change is a real threat, so let's make progress, Ohio!	Supportive
Residential Non-PIPP	More renewable would be wonderful and the closer to home it is generated the better!	Supportive
Residential Non-PIPP	I am happy to hear you are pursuing renewable energy options! I 100% support this idea!!!	Supportive
Residential Non-PIPP	I am wholeheartedly in favor of moving to clean energy sources. And am excited with the opportunities that low cost power can give us all.	Supportive
Residential Non-PIPP	I think AEP should do much more to use renewable energy to become less reliant on fossil fuels. Also, I strongly feel AEP should bury electric lines to minimize outages, improve aesthetics, and reduce outage overtime costs!	Supportive
Residential Non-PIPP	Pleased that wind and solar is being looked at. We must take care of this earth and our country's best interest!!!	Supportive
Residential Non-PIPP	Broadening resources and controls on new power plants makes good overall sense. More info to homeowners on solar options would be beneficial.	Supportive
Residential Non-PIPP	It would be great if you could help communities like glouster and Chauncey by constructing solar facilities here in Athens county	Supportive
Residential Non-PIPP	I fully support AEP's efforts to increase its commitment to Ohio-based renewable energy projects that create local jobs.	Supportive
Residential Non-PIPP	I think solar is reliable and would like to see this brought to AEP customers if it can readily be transported from high solar radiation areas.	Supportive
Residential Non-PIPP	it is apparent that we will run out of fossil fuels that are easily attained in the near future. All technical developments take time to mature & I'm glad you've begun the process. Thanks!	Supportive
Residential Non-PIPP	My children and grandchildren will benefit from moving away from dirty electric generation.	Supportive
Residential Non-PIPP	Would love to see more renewable power in Ohio! I worry Ohio is moving from coal power into just being a natural gas state instead, there should be a good mix of options. I've shopped for renewable offers but hard to know if the energy is from Ohio.	Supportive
Residential Non-PIPP	I would like to see greater use of solar & wind energy. We have to reduce greenhouse gases and be more independent of foreign energy.	Supportive
Residential Non-PIPP	Anything you can do to reduce greenhouse emissions and global warming (yes, I believe it's a thing) would be great.	Supportive
Residential Non-PIPP	AEP needs to step out from under the coal lobby and our backwards looking legislators and ramp up investments in renewable energy.	Supportive
Residential Non-PIPP	having an alternative to carbon based fuel sources is prudent	Supportive
Residential Non-PIPP	Please invest as much as you in into renewable energy sources! Make it easier for customers to install solar panels and perhaps contribute to the electrical grid	Supportive
Residential Non-PIPP	Put in more solar!! One of the largest solar racking companies in America manufactures there product in Columbus, OH!!	
Residential Non-PIPP	Buy local!! Build the State of Ohio workforce	Supportive
Residential Non-PIPP	Would happily pay more for using renewables.	Supportive
Residential Non-PIPP	Local renewable energy is important. To much energy is lost in lengthy distribution.	Supportive

Residential Non-PIPP	The more, the better. Wind, and even solar, are now more than cost competitive with fossil fuels, so there is no excuse to avoid them.	Supportive
Residential Non-PIPP	I think it would be a step in a great direction to use solar/wind for our energy needs.	Supportive
Residential Non-PIPP	Just the hope of taking this seriously	Supportive
Residential Non-PIPP	I think it is admirable that is is a goal of yours, and it makes me happy to be a customer.	Supportive
Residential Non-PIPP	Phasing out the burning of coal for power generation is the most important thing AEP can do. Replacing coal with solar and wind will be recognized as both a brilliant societal as well as corporate PR move.	Supportive
Residential Non-PIPP	Get on with it.	Supportive
Residential Non-PIPP	I understand that there are costs to developing renewable energy. however, once that is developed, as a consumer who conserves energy, lower pricing should be a fair benefit to consumers like myself who try to keep my environmental footprint as low of an impact as possible	Supportive
Residential Non-PIPP	Get with government and make positive plans!	Supportive
Residential Non-PIPP	We signed up to get emerg produced by Star Energy Partners Partners through you. Believe it's very important to promote wind & solar energy.	Supportive
Residential Non-PIPP	no fracking!	Supportive
Residential Non-PIPP	Do more of it and offer incentives targeted at low-income neighborhoods	Supportive
Residential Non-PIPP	Renewable energy is about to become cheaper than fossil fuels. The cost is already dramatically cheaper if the military cost of defending fossil fuel sources all over the globe is admitted.	Supportive
Residential Non-PIPP	More renewable energy ASAP. More Ohio renewable energy ASAP.	Supportive
Residential Non-PIPP	Keep it local keep it green	Supportive
Residential Non-PIPP	Show us, don't tell us.	Supportive
Residential Non-PIPP	IT SHOULD BE considered seriously	Supportive
Residential Non-PIPP	Iâ€™m thrilled that you are seeking other alternatives. We only have one earth.	Supportive
Residential Non-PIPP	Someday if enough renewable energy is produced there might be a way to just charge businesses and give free energy to residential customers within the state.	Supportive
Residential Non-PIPP	I belong to Sierra Club group that is working on 100% Renewable Energy	Supportive
Residential Non-PIPP	Please do it as much as you are economically able to! This is the only way we as humans should generate power!	Supportive
Residential Non-PIPP	It makes me happy that the company is reaching out to its customers and looking into more renewable energy sources.	Supportive
Residential Non-PIPP	Whatever you can do to make strides toward obtaining more renewable energy sources, please make them ASAP. I'd like to keep the world habitable for my nieces in the future.	Supportive
Residential Non-PIPP	Where ever we can produce energy by using wind and solar would be amazing! Iâ€™m glad you guys are working on this .	Supportive
Residential Non-PIPP	would like to fast track renewable options	Supportive
Residential Non-PIPP	It is very important to make ALL energy renewable using the natural energy of the planet. The planet and her people cannot continue using harmful substances.	Supportive
Residential Non-PIPP	Let's commit 300% to wind and solar energy. Oklahoma squandered the greatest opportunity I have seen in my life for clean energy. Makes me mad.	Supportive
Residential Non-PIPP	It's the right thing to do!	Supportive
Residential Non-PIPP	strongly support	Supportive

Residential Non-PIPP	Start with wind.	Supportive
Residential Non-PIPP	Should be considered an urgent project. Preponderance of science based evidence supports it. Congratulations on this initiative!	Supportive
Residential Non-PIPP	I am for green energy 110%	Supportive
Residential Non-PIPP	Please start to supply energy to our homes from renewable energy resources ASAP. Our world and grandchildren will thank you. I am excited about the future of AEPs green energy sources.	Supportive
Residential Non-PIPP	Go for it!	Supportive
Residential Non-PIPP	I own a place in another state; recently installed solar and am very, very pleased w/ it.	Supportive
Residential Non-PIPP	I feel the United States is way behind when it comes to taking advantage of RENEWABLE RESOURCES. We need to take responsibility as humans for the damage we cause and make huge changes for a positive effect on our environment before it's too damn late!	Supportive
Residential Non-PIPP	Thank you for leading this discussion.	Supportive
Residential Non-PIPP	Yes. Please install as much as possible. Climate change is no joke.	Supportive
Residential Non-PIPP	I would like to see total energy sourced from renewable sources as soon as possible. Moving away from fossil fuels is very important.	Supportive
Residential Non-PIPP	Near Toledo, Ohio, a school district has a wind turbine to cut down on energy bills and they use it as a "hands on" teaching tool for the students to learn about renewable energy sources and benefits.	Supportive
Residential Non-PIPP	We need to move in this direction as fast as possible!	Supportive
Residential Non-PIPP	A good thing to do	Supportive
Residential Non-PIPP	It is imperative that the country move toward 100% renewable energy as soon as possible to slow the progression of global climate change and ecological damage done by using non-renewable energy sources. AEP needs to do its part as quickly as possible.	Supportive
Residential Non-PIPP	Renewable energy sources are a winning solution for everyone except big oil and coal companies.	Supportive
Residential Non-PIPP	I would love to see a substantial change in how we view the creation of energy and fuel. I whole heartedly hope that we see this change sooner rather than later	Supportive
Residential Non-PIPP	Ecstatic you are trying to better things.	Supportive
Residential Non-PIPP	I think solar and wind energy are very exciting options. We need to explore these in order to preserve our world for future generations. I would love to have solar panels on my own home.	Supportive
Residential Non-PIPP	I would love to see this. I believe that this would also help reduce blackout problems.	Supportive
Residential Non-PIPP	With fossil fuel supplies depleting and all of the environmental damage done as a result of their use, it is even more important than ever to start using cleaner, renewable resources.	Supportive
Residential Non-PIPP	I applaud AEP's interest in renewable energy, and the commitment you have shown. It is great when a major corporation takes an issue like this one so seriously. Proud to be your customer.	Supportive
Residential Non-PIPP	The Sun and the wind is free, the cost is in the equipment!	Supportive
Residential Non-PIPP	I would be interested to know more about what is being done and what I, a single residential customer, can do to help or drive the innovation in my (infinitesimally) small way.	Supportive
Residential Non-PIPP	The sooner the better	Supportive
Residential Non-PIPP	We'd be willing to pay a little more for renewable energy generation	Supportive
Residential Non-PIPP	We absolutely must move in the direction of renewable energy generation. This is a non-negotiable.	Supportive
Residential Non-PIPP	Keep working at it. Please.	Supportive

Residential Non-PIPP	We need to be getting away from coal and eventually marketing all energy from wind and solar.	Supportive
Residential Non-PIPP	AEP should look into Solar Highways (solar panels covering parts of highway) in and around cities; remove sun glare and majority of snow and rain from highways while creating energy to recharge electric vehicles on electrified highways.	Supportive
Residential Non-PIPP	More renewable energy!	Supportive
Residential Non-PIPP	Please continue and increase renewable energy.	Supportive
Residential Non-PIPP	Wind generation needs to be accepted by the community. School Districts with solar panels need ability to sell excess energy back to AEP.	Supportive
Residential Non-PIPP	Although I am fairly conservative, I truly believe we are destroying this earth for future generations by depending on fossil fuels so much. I think there is plenty of evidence to support being more environmentally responsible. Additionally I think this could be done at an affordable price without depending on foreign suppliers.	Supportive
Residential Non-PIPP	The more the better. How about supporting solar-power generating roof tiles?	Supportive
Residential Non-PIPP	Needs to be done. Go for it!	Supportive
Residential Non-PIPP	Support it very much	Supportive
Residential Non-PIPP	Hopefully, our bills/ charges would be less.	Supportive
Residential Non-PIPP	We have the tech, but not the will. Let's get it done.	Supportive
Residential Non-PIPP	More solar the better	Supportive
Residential Non-PIPP	AEP should include utility scale battery storage systems such as those provided by Tesla Energy.	Supportive
Residential Non-PIPP	Happy to hear it!	Supportive
Residential Non-PIPP	Renewable energy will create jobs that were lost due to coal mining decline. So I'm all for jobs that will be created.	Supportive
Residential Non-PIPP	It would be nice for AEP to get involved in novel ways/technologies to generate electricity - less coal, more wind and solar	Supportive
Residential Non-PIPP	The future is moving toward renewable energy, and I want to be part of the solution, and therefore who I'm purchasing my energy from.	Supportive
Residential Non-PIPP	get with it	Supportive
Residential Non-PIPP	Strongly encourage this development	Supportive
Residential Non-PIPP	We need this. Badly.	Supportive
Residential Non-PIPP	I like that AEP is going in this direction to serve their customers better. Being aggressive in renewable energy is a plus.	Supportive
Residential Non-PIPP	Thank you for making this investment!	Supportive
Residential Non-PIPP	Great Idea and hope that it would lower cost over time	Supportive
Residential Non-PIPP	4.5 percent is pretty pathetic coming from a company based here in the 1st world	Supportive
Residential Non-PIPP	Very important	Supportive
Residential Non-PIPP	Would be great for renewable energy sources to be developed in Ohio for job creation and economic growth.	Supportive
Residential Non-PIPP	It definitely beats our president's promise to put coalminers back to work. Particularly in comparison to burning fossil fuels, which he, like everyone else should know is bad for the environment.	Supportive
Residential Non-PIPP	In certain countries, I have seen reactors that burn garbage to produce energy. The reactors burn clean, and they actually have a surplus of energy. It would be fantastic if AEP could lead the charge, from Ohio, to do the same.	Supportive
Residential Non-PIPP	Build wind turbines in KS / IL more wind than OH Don't bother with solar in OH - cloudy days 50% - inconsistent power generation	Supportive
Residential Non-PIPP	We need to make sure that we have a good quality of air where we live so that we can breathe properly I'm not injure our future people	Supportive



Residential Non-PIPP	I would like to see a much bigger commitment to renewable energy even if my energy bill increases	Supportive
Residential Non-PIPP	Columbus is leading the way as a smart city I am glad to see AEP taking those steps as well!	Supportive
Residential Non-PIPP	Energy is most efficient the closer it is generated, so renewable energy in Ohio is important. Working with customers to get solar panels, etc., connected directly to their homes is important as well.	Supportive
Residential Non-PIPP	I would like to use my property for solar energy for free electric	Supportive
Residential Non-PIPP	I would hope this leads to lower costs for the future	Supportive
Residential Non-PIPP	OH should be ready to face the challenges from the next decade	Supportive
Residential Non-PIPP	I would pay extra knowing my energy comes from a clean source	Supportive
Residential Non-PIPP	I encourage you to continue to look at renewable and other options that are better for the planet	Supportive
Residential Non-PIPP	Laudable effort!	Supportive
Residential Non-PIPP	The sooner this happens, the better. I switched to Arcadia Power some time ago because of AEP's lack of renewables.	Supportive
Residential Non-PIPP	I love the smell of toxic exhaust fumes while walking to work. They smell so great. I could bathe in it.	Supportive
Residential Non-PIPP	Continue making it better for all of us	Supportive
Residential Non-PIPP	This is a must!	Supportive
Residential Non-PIPP	Solar energy would be welcomed in Ohio	Supportive
Residential Non-PIPP	Natural energy efficiency would save AEP money that could be passed on to their customers.	Supportive
Residential Non-PIPP	AEP should be ashamed at how low the percentage of renewable energy they use. I want see 25% or more.	Supportive
Residential Non-PIPP	I wish you would use more renewable energy for so many reasons. If we do not begin to depend upon more on renewable energy, we will do so much damage to our earth.	Supportive
Residential Non-PIPP	Thanks for taking a step in the right direction. Cheap renewable energy should be our present, not our future.	Supportive
Residential Non-PIPP	I'm sure it will cost me money, everything AEP does cost the customer money.	Supportive
Residential Non-PIPP	Why have you waited so long?	Supportive
Residential Non-PIPP	Corporate America, and others, have for far too long looked at the immediacy of the P&L vs proper methods to generate power. Example, when TEPCO scrapped the building a Tsunami wall, alas, Fukushima. When BP disregarded warnings of the Horizon drill site, alas a record spill. I.E. do it right with extra controls in place and your clients will reward you forever. AEP increasing renewable energy should be marketed beyond anyone's expectations as the right thing to do for their customers, "AEP Tomorrow". Would I pay a surcharge to have it done correctly? Absolutely, every day.	Supportive
Residential Non-PIPP	I'm glad to hear this is being prioritized by AEP, I hope that AEP continues to move towards renewable energy!	Supportive
Residential Non-PIPP	I wholeheartedly support the move toward more green energy sources.	Supportive
Residential Non-PIPP	This is SO important and renews my faith in AEP tremendously. Our country is so far behind on developing and relying on renewable energy sources. It's a no-brainer and I hope AEP can lead the way for other energy companies (or at least get on the bandwagon)	Supportive
Residential Non-PIPP	Every step away from fossil fuels is a good one, especially when we consider the ever-increasing problem of global warming.	Supportive
Residential Non-PIPP	Have 22acres that could become a windmill farm	Supportive
Residential Non-PIPP	Good idea!	Supportive

Residential Non-PIPP	As a widow of an AEP worker, I always thought years ago that the company should be seeking other ways to produce electric power, before they were gradually phased out of the coal-fired generation. I hope it's not too late to do it. My husband's work place is no longer in existence.	Supportive
Residential Non-PIPP	Give me an option to buy renewable energy now!	Supportive
Residential Non-PIPP	Move toward goal of 100% solar and wind generated energy	Supportive
Residential Non-PIPP	I totally support the initiative and am happy to see that it will finally happen!	Supportive
Residential Non-PIPP	Renewable energy is of great importance for now and future generations. The investment now will pay dividends in the future.	Supportive
Residential Non-PIPP	I am all for it	Supportive
Residential Non-PIPP	Making a commitment to using renewable sources of energy just makes good sense. Our children may not feel the impact but our grandchildren and great grandchildren very likely will.	Supportive
Residential Non-PIPP	I love this initiative.	Supportive
Residential Non-PIPP	Very interested in renewable energy in Washington county, Ohio.	Supportive
Residential Non-PIPP	Get this started!	Supportive
Residential Non-PIPP	It is a great step that AEP ohio has decided to do. I would say make sure this renewable source of energy come into realisation.	Supportive
Residential Non-PIPP	Thank you for looking toward energy sources of the future rather than getting stuck in the past.	Supportive
Residential Non-PIPP	Go for it!	Supportive
Residential Non-PIPP	I would like to see AEP go to 100% renewable energy.	Supportive
Residential Non-PIPP	It is of vital importance that we reduce our carbon footprint and invest more in renewable energy.	Supportive
Residential Non-PIPP	I think it is a very innovative idea. It is important to learn new ways to make a more efficient and user friendly source of electricity for humans and also our planet earth	Supportive
Residential Non-PIPP	Investments should be preceded by grid upgrades to insure efficient use of power. Also, when possible, investments should preference Ohio production/manufacturing/sale/installation.	Supportive
Residential Non-PIPP	i would love to see this development and hope it drops our energy bills. However, when I read "investment", I think of increased bills for the consumers, at least initially, unfortunately	Supportive
Residential Non-PIPP	Please do this!! It is vital that you expand to renewable energy as much as possible.	Supportive
Residential Non-PIPP	Need to increase both solar and wind options	Supportive
Residential Non-PIPP	I believe that energy that is renewable (solar, wind, tide, hydro) and not dependent on unclean fossil fuels that is so destructive of the world's environment. Please pursue clean, alternate energy.	Supportive
Residential Non-PIPP	I would like more information about the use of solar power and the current availability of it where we live.	Supportive
Residential Non-PIPP	This should be a no brained. Just do it.	Supportive
Residential Non-PIPP	The more and sooner, the better.	Supportive
Residential Non-PIPP	I had no idea that you only produce 4.5% of your energy from renewable sources. GET MOVING	Supportive
Residential Non-PIPP	It would be proud to have my energy come from renewable energy, earth friendly sources especially if it was produced in Ohio + created local jobs. I don't want Ohio to lag behind in green technology	Supportive

Residential Non-PIPP	What took so long. Let's get moving. Anybody over 50 like me should be embarrassed we are so far behind and will be handing our kids a worse situation than what we inherited. Decisions by the older set should focus on the kids and future children of our world and the country.	Supportive
Residential Non-PIPP	I have seen the windmills in Indiana off I 65 on the farmland. It actually is pretty nice to see. Not loud. We stopped to enjoy it and it probably helps the farmers so it would be a win-win for generates electricity and for the farmers benefit.	Supportive
Residential Non-PIPP	Please do this. Help to save the environment by using renewable energy.	Supportive
Residential Non-PIPP	Should be done. So important. Glad to know AEP is doing this.	Supportive
Residential Non-PIPP	I like renewables	Supportive
Residential Non-PIPP	It is time to invest heavily in renewable energy, both to limit greenhouse gases and to provide good jobs.	Supportive
Residential Non-PIPP	I am hopeful that you will ramp up solar and wind energy production significantly. These technologies are clean, cost effective and will provide new jobs.	Supportive
Residential Non-PIPP	I hope that this is something that is going to lower the bills of aep costumers bc that rates are already so high for the middle class working people.	Supportive
Residential Non-PIPP	I would love to know if there are any incentives or help for individual customers who would be willing to possibly install windmills or solar panels on our own land. Its something i have honestly thought about personally. Just not sure where to start or how it works.	Supportive
Residential Non-PIPP	We support your efforts to generate electricity from wind and solar sources.	Supportive
Residential Non-PIPP	I feel that solar and wind power is the future and should have been implemented years ago, it just makes sense, it's time to look into this renewable energy for the better for people, less costly billing and our amazing planet ! Let's do this !!!!	Supportive
Residential Non-PIPP	Should have happened long ago	Supportive
Residential Non-PIPP	No more coal!!!! Wind and solar generated power are preferred.	Supportive
Residential Non-PIPP	Go to it!	Supportive
Residential Non-PIPP	Help save our future by investing in renewable energy sources.	Supportive
Residential Non-PIPP	local work, local workers	Supportive
Residential Non-PIPP	It's great to produce renewable energy locally. But wherever it can be done most efficiently is best. I would also like to see programs to help homes produce energy through Tesla designed batteries and solar panels.	Supportive
Residential Non-PIPP	Do it ASAP	Supportive
Residential Non-PIPP	Thanks for this initiative. Wishing you and your team all the best for the success of this initiative. May you be listed as the role model for any similar projects in the future.	Supportive
Residential Non-PIPP	Very important, please consider the investment	Supportive
Residential Non-PIPP	I'm guessing that the ROI from switching will be very short term, especially if the social / cultural / environmental factors are considered and measured.	Supportive
Residential Non-PIPP	don't just talk about it do it	Supportive
Residential Non-PIPP	happy this is a priority	Supportive
Residential Non-PIPP	We need to get rid of the coal plants in Ohio and use renewables and nuclear.	Supportive
Residential Non-PIPP	Please use the media to let us, the public know when and how you implement changes to increase your renewable resources. Thank you.	Supportive
Residential Non-PIPP	we need to start implementing changes and stop talking about them	Supportive

Residential Non-PIPP	Go for it!	Supportive
Residential Non-PIPP	I think this is incredibly important and I would love to see more energy investment particularly in south eastern ohio.	Supportive
Residential Non-PIPP	You are starting MUCH too late!	Supportive
Residential Non-PIPP	Just do it	Supportive
Residential Non-PIPP	Just do it!!!!	Supportive
Residential Non-PIPP	We are very happy AEP is prioritizing efforts to make renewable energy Ohio's source for energy.	Supportive
Residential Non-PIPP	Other types of supplies are going to run out at some point. wind we have and sun we have at this point.	Supportive
Residential Non-PIPP	Please invest quickly, 4.5% seems low. I have considered other providers for this reason.	Supportive
Residential Non-PIPP	Glad that you are stepping up to help us to help the world. Thank you!	Supportive
Residential Non-PIPP	Glad to know you are looking into this.	Supportive
Residential Non-PIPP	Coal is not an option. Gas has a limit. As a country we have to find a better source of energy, sun and wind, and push for environmental improvements in building and construction. This needs to happen despite our current administrations efforts to take us back to the early 1900's.	Supportive
Residential Non-PIPP	It is exponentially important to me and my children, and my children's children, that energy companies like yours invest in renewable sources of energy NOW as opposed to later when it will be too late. Fossil fuels are antiquated and obsolete. Clean coal is an oxymoron, so please stop trying to sell it as an alternative to burning dirty fuels. It's time to go all in on renewable energy. Damage has already been done to this planet, but if energy producers take the initiative and invest more in renewables NOW, we can mitigate the loss & damages to minimal levels. We ALL have an obligation to leave this planet in better condition than how it was when we received it. Don't wait for Congress to tell you to do it. Take the initiative and just do it!	Supportive
Residential Non-PIPP	We have this responsibility to our children's children. we must leave them with a sustainable energy plan.	Supportive
Residential Non-PIPP	I think it is an amazing idea and what we need to keep our environment great for the future	Supportive
Residential Non-PIPP	This should definitely be a priority!	Supportive
Residential Non-PIPP	Start now	Supportive
Residential Non-PIPP	I believe renewable energy investments would not only be beneficial for environmental reasons, but also, a business savvy decision on your part. Thank you for creating this survey!	Supportive
Residential Non-PIPP	I am looking forward to cleaner, safer and cheaper energy	Supportive
Residential Non-PIPP	If it is possible to select a green energy only option without going through and outside provider, I would. Is that an option and if so could it be made more widely known?	Supportive
Residential Non-PIPP	I all for renewables. It just makes sense. Please offer more programs and let's get this going already.	Supportive
Residential Non-PIPP	It's important to reduce our dependence on fossil fuels.	Supportive
Residential Non-PIPP	I appreciate AEP asking its customers for their opinions on increasing its renewable energy generation. There is lots of evidence that renewable energy is more cost effective and the long-term impacts on to reduce the effects of global climate change is essential.	Supportive
Residential Non-PIPP	I think this is long overdue. The technology has been available for greener methods of producing electricity, so I truly hope that you invest in renewable forms of energy generation.	Supportive
Residential Non-PIPP	Cleaner and hope it will reduce my electronic bill	Supportive
Residential Non-PIPP	Would love to see more solar and wind generation.	Supportive



Residential Non-PIPP	I am very happy to hear you are considering these options!	Supportive
Residential Non-PIPP	The sooner the better regarding renewable energy generation.	Supportive
Residential Non-PIPP	Continue to develop means of providing renewable energy!	Supportive
Residential Non-PIPP	The sooner the better.	Supportive
Residential Non-PIPP	I am very pleased to see AEP has interest in expanding.	Supportive
Residential Non-PIPP	Good luck with the Trump administration. Would love more options though.	Supportive
Residential Non-PIPP	The United States is falling behind other countries in the race to become energy independent and to reduce our carbon footprint as a nation. I hope AEP does its part to show the world that the United States is aware of the damage our lifestyles cause and we are taking steps to become both accountable for our useage as well as doing whatever necessary to reduce our over-usage.	Supportive
Residential Non-PIPP	I think it is important but understandably it will be difficult to not push the cost to customers.	Supportive
Residential Non-PIPP	I would like more renewable energy sources for my power.	Supportive
Residential Non-PIPP	While it is very important that renewable energy be produced in the State of Ohio if at all possible, this is of such critical importance that starting off immediately with non-local (that is out-of-state) sources is better than waiting.	Supportive
Residential Non-PIPP	Transitioning from non-renewable to renewable energy not only makes good environmental sense, it makes good business sense. Protecting the coal industry benefits a small percentage of the work force and prevents the development of businesses and technologies that could potentially employ a much larger work force and benefit the environment in the process.	Supportive
Residential Non-PIPP	I congratulate AEP on its forward thinking. I believe we need to use wind and solar energy sources to reduce carbon emissions. I am saddened by the lack of the US President and Republican lack of support of the Paris Agreement concerning climate change. Our temperatures are on the increase and we need to decrease destruction of vital components of this planet, such as protecting the polar ice caps. Without reduction in carbon emissions, we will see more fires in the Western States and higher temperatures overall. Ohio has plenty of areas suitable for wind power production. Solar energy installations are also getting less costly and more widely used. We need more public education about these valuable ways to produce the energy we need in our homes, schools, and overall communities.	Supportive
Residential Non-PIPP	With all of the turmoil overseas and oil dependence, it would be very beneficial for the United States to develop and use more renewable energy.	Supportive
Residential Non-PIPP	We have a moral imperative to develop such renewable resources, but it is also a sensible and prudent strategy for economic and environmental reasons.	Supportive
Residential Non-PIPP	Work hard and fast!!!!	Supportive
Residential Non-PIPP	Hope that this will be made a reality in the near future! Would be an important and needed development for the near future and for our younger generations! Thank you for your hard work and dedication to this project! Now to make it a reality!	Supportive
Residential Non-PIPP	go wind	Supportive
Residential Non-PIPP	long overdue	Supportive
Residential Non-PIPP	I am a retired Ohio EPA employee. I believe any improvement in our environmental resources is very important	Supportive

Residential Non-PIPP	I applaud you and believe it is imperative that our country use renewable, clean energy. Ecuador is 100% renewable with hydroelectric, solar, and wind--Ohio can, too. We have reached a climate crisis.	Supportive
Residential Non-PIPP	Thank you for recognizing that this is a VERY important issue.	Supportive
Residential Non-PIPP	Important to all to use our best resources in this matter.	Supportive
Residential Non-PIPP	as long as it does not include fracking	Supportive
Residential Non-PIPP	In my opinion, pursuing renewable sources is not optional for AEP, it's one of your responsibilities.	Supportive
Residential Non-PIPP	Good luck!	Supportive
Residential Non-PIPP	I would like to see more wind and solar power available in Ohio.	Supportive
Residential Non-PIPP	I think that the money saved on the current way things are done would offset any cost related to creating renewable energy sources, so it is not only environmental but economical.	Supportive
Residential Non-PIPP	Great Investment - Make it Happen!	Supportive
Residential Non-PIPP	Don't let current short sighted regulatory attitude blind you to long term benefits of non-fossil fuel energy. A time will come where it will look ridiculous and immoral.	Supportive
Residential Non-PIPP	The work of identifying and developing diverse energy sources is essential to the health of our planet (air, soil, water) for all its inhabitants, and to lessen our dependency on outside sources. Thank you for your continued efforts on this research and your support of conservation and energy reduction.	Supportive
Residential Non-PIPP	Sooner = better	Supportive
Residential Non-PIPP	Just do it, it's the right thing to do!	Supportive
Residential Non-PIPP	I am happy that AEP is moving into cleaner energy. I am using battery powered chainsaws, string trimmers, tillers,, phones, and lights. Electricity is important for charging batteries.	Supportive
Residential Non-PIPP	The renewable energy source must be viable for the location of the source. For example, if solar is an option, we don't want to use it where there is minimal sun.	Supportive
Residential Non-PIPP	I am glad this is being looked into. Better for the environment and is sustainable	Supportive
Residential Non-PIPP	I live in Chillicothe Ohio. The prison here has lots of fields it stop using plenty of room for solar or wind. Sure u can make a deal cheap or by bargaining for the use of the land.	Supportive
Residential Non-PIPP	I completely support this AEP initiative.	Supportive
Residential Non-PIPP	Thank you for taking the next step!	Supportive
Residential Non-PIPP	Go for it!	Supportive
Residential Non-PIPP	Buy local is not just a slogan for the grocery store. Americans are looking at a lot of their purchases and asking: what is made here?	Supportive
Residential Non-PIPP	I hope solar power will become an option for us as a consumer. I would like to continue to reduce my carbon footprint.	Supportive
Residential Non-PIPP	Please continue to progress in this direction. We need to be a leader in this.	Supportive
Residential Non-PIPP	From a previous question, the phrase "better world for future generations" sounds rather abstract and idealistic. It's also misleading. Realistically, a drastic reduction in carbon now will, at best, maintain a relatively stable standard of living for "future generations" of middle class americans. On the other hand, continuing our current consumption of carbon based fuels will guarantee a significantly lowered quality of life in as little as 20-30 years (so, this generation). A 50% increase in renewables in the next 3-5 years is what I would recommend, increasing from there to as close to 100% as we are able to achieve, as soon as possible.	Supportive

Residential Non-PIPP	Bring On The Windmills and Solar Panels! Please Ohio and AEP! Together we can BETTER THIS WORLD! YES	Supportive
Residential Non-PIPP	Just do it already. The tech is ready and will become cheaper as more companies embrace it.	Supportive
Residential Non-PIPP	Love the idea of taking advantage of free wind and sun. We need to go green.	Supportive
Residential Non-PIPP	This effort is far overdue, but if you are truly going to do this then kudos.	Supportive
Residential Non-PIPP	I support your efforts! Let's make the world a better place!	Supportive
Residential Non-PIPP	Go For It. Seems like a good investment.	Supportive
Residential Non-PIPP	I fully support your efforts to increase the amount of renewable energy generation.	Supportive
Residential Non-PIPP	Going green is important	Supportive
Residential Non-PIPP	I think it is great you are even thinking about !	Supportive
Residential Non-PIPP	I'm retired. I have no children. It is of the utmost importance to reverse the effects of industrialization of the entire world. I was part of the early 80's attempt by my industry (HVAC) attempt at solar and energy recycling. Government incentives for a few years, then it was gone. 40+ years wasted. What a shame.	Supportive
Residential Non-PIPP	I switched my electricity supply to the AEP renewable energy program. This took a good deal of research on my part. I think if there was a more clear and easy way to do this, more people would follow suite.	Supportive
Residential Non-PIPP	Solar and wind	Supportive
Residential Non-PIPP	This is very important and needs to happen! Thank you for your interest in this and for soliciting our feedback. Renewable energy just makes sense to anyone with a brain.	Supportive
Residential Non-PIPP	I would like to know more about AEP's renewable resources. How much are you dependent on nuclear energy?	Supportive
Residential Non-PIPP	Job creation is important also, but if you're creating jobs in other states because Ohioans are not willing to allow wind farms, then I suggest you help people understand that.	Supportive
Residential Non-PIPP	need to go faster	Supportive
Residential Non-PIPP	there needs to be more thought put to the science of wind , water , and methane(waste decay)	Supportive
Residential Non-PIPP	The sooner the better! Even if we need to pay a little more, this is an investment that must be made.	Supportive
Residential Non-PIPP	Please get away from fossil fuels. They're killing the planet.	Supportive
Residential Non-PIPP	I urge you to support and encourage wind and solar development IN OHIO!! Fight for it and don't be distracted by political bullies like Bill Seitz!	Supportive
Residential Non-PIPP	Please pursue renewable energy!	Supportive
Residential Non-PIPP	If it is better for the earth than I agree	Supportive
Residential Non-PIPP	Yes to wind and solar. No to biomass. Burning wood is not carbon neutral, destroys forests and produces more co2 than coal for unit of energy produced when used to produce electricity.	Supportive
Residential Non-PIPP	I welcome AEP Ohio's proactive development of sustainable energy resources.	Supportive
Residential Non-PIPP	I would like to see more windmills. I believe every new house that is built should be required to have solar panels.	Supportive

Residential Non-PIPP	I am glad to see AEP taking an interest in renewable energy. i hope AEP's interest will translate to actual investment in renewable energy. I am willing to pay more for renewable energy - it is essential we migrate our energy sources away from fossil fuels to lessen impacts of climate change. It will take bold leadership to do this since our economy is built around a financial system that does not take into account the long term environmental costs associated with fossil fuels. if the true cost of carbon pollution was considered, renewable energy would be an obvious smart investment. government, corporations, and individuals all need to start valuing the future as much as we do the present. as President Johnson said " ...if future generations are to remember us more with gratitude than with sorrow, we must achieve more than just the miracles of technology. We must also leave them a glimpse of the world as God really made it, not just as it looked when we got through with it".	Supportive
Residential Non-PIPP	We have to reduce our reliance on fossil fuels like coal in order to pave the way for a better future for our families. Thank you for looking at these alternative sources of energy to support our future.	Supportive
Residential Non-PIPP	U.S is so far behind many other countries and really needs to increase use of renewable energy sources	Supportive
Residential Non-PIPP	AEP should provide Time of Day (TOD) billing options to consumers and make a supersaver time slot after 11PM. This will it make more likely for consumers to purchase electrical vehicles that will further improve our environment	Supportive
Residential Non-PIPP	Please continue to move away from non-renewable (coal, gas fired, etc.) and destructive (hydropower) sources toward renewable, low impact sources like solar and wind.	Supportive
Residential Non-PIPP	Please keep growing this program. I will continue to purchase 100% renewable energy as long as it is offered. I would like to see more renewables developed in Ohio, but for now, any growth of renewable energy is a good step towards a sustainable future.	Supportive
Residential Non-PIPP	Important priority for Ohio and AEP	Supportive
Residential Non-PIPP	Global warming is a major issue and I like the fact that AEP is going to continue to do its best to help clean up our air and slow down the greenhouse effect by using renewable energies.	Supportive
Residential Non-PIPP	Great, thanks for pursuing this goal.	Supportive
Residential Non-PIPP	Only future for us	Supportive
Residential Non-PIPP	This is fantastic!! Do the right thing and make the push for renewable energy!	Supportive
Residential Non-PIPP	I think it's great, this is the future.	Supportive
Residential Non-PIPP	I would be willing to pay more for cleaner energy.	Supportive
Residential Non-PIPP	Important way to go	Supportive
Residential Non-PIPP	I believe AEP should pursue renewable energy in Ohio as aggressively as possible. Wind and Solar is not only the present but the future as well!!	Supportive
Residential Non-PIPP	It is inexcusable that we are lacking in this arena of the future by so much!	Supportive
Residential Non-PIPP	Thank you for being proactive!	Supportive
Residential Non-PIPP	TWENTY YEARS AGO WAS THE TIME TO DO THIS.	Supportive



Residential Non-PIPP	Set an example for other states and educate Ohio residents about how important switching to renewable energy is! Gas and oil should be a thing of the past after learning about the consequences of burning them!	Supportive
Residential Non-PIPP	Renewable energy sources are becoming so cheap, you can either aggressively pursue them or your current customers will do so on their own and your company will be deader than the dinosaurs	Supportive
Residential Non-PIPP	I think it would be a wise investment, to be explored. It seems to be the way of the future. And, it would be the most inexpensive way to provide for our electricity needs for now and in the future...	Supportive
Residential Non-PIPP	So many choices in this state for renewal energy. Wind up north, rivers all throughout the states, Lake Erie and the amount of sun in the summer. More jobs hiring the engineers, construction workers, people to upkeep the structures, etc. It will be a great investment if time is given for it.	Supportive
Residential Non-PIPP	Please create a large solar array in Athens County or in one of the counties near us in Southeast Ohio.	Supportive
Residential Non-PIPP	I think it's a great idea.	Supportive
Residential Non-PIPP	I hope this is something that AEP is seriously looking into doing.	Supportive
Residential Non-PIPP	What's taking you so long?	Supportive
Residential Non-PIPP	I am extremely supportive of increasing renewable energy generation. I believe AEP should attempt to increase the percentage of energy generated from renewable sources every single year in the future.	Supportive
Residential Non-PIPP	AEP should get the current weak politicians we have in Ohio to change the setbacks so we can reap the benefits of wind, particularly in Van Wert County!!	Supportive
Residential Non-PIPP	We all know that a cleaner world is a better place for us all ! The future depends on what we care about now !	Supportive
Residential Non-PIPP	Are we too late to the game? AEP has a moral responsibility to promote environmentally sound policies here in Ohio and in DC. I don't believe AEP and other utility companies are acting at all responsibly on this issue.	Supportive
Residential Non-PIPP	Renewable energy, i.e. wind and solar, is a win-win. Even better would be to bring some of the technology to SE Ohio to help coal miners transition into new skills and jobs.	Supportive
Residential Non-PIPP	This is exciting news. I have recently switched all of my home gardening tools (lawn mower, trimmer, blower and chain saw) to lithium ion battery power. I think electricity from diversified renewable sources is the future of power for most things we use on a daily basis. Please increase AEP's renewable generation capacity.	Supportive
Residential Non-PIPP	There is no excuse to continue the expansion of fossil fuel extraction. It's time to phase out oil coal and natural gas that are non-renewable and devastating to our health and environment.	Supportive
Residential Non-PIPP	Innovation is important and appreciated	Supportive
Residential Non-PIPP	Yes!	Supportive
Residential Non-PIPP	I lived in several countries in Europe, and some of them are leading the way when it comes to renewable energy. It is very positive to hear that AEP Ohio would increase their investment in wind and solar, as the benefits for the community, the environment and future generations will show that you are a very progressive company.	Supportive
Residential Non-PIPP	It's time to act responsibly- stop telling the Trump lie of "clean coal". Trump's agenda of destroying environmental regulations in favor of petroleum based businesses will leave our generation accountable for the wastelands we leave future generations.	Supportive

Residential Non-PIPP	It is my highest priorities when selecting who will provide my electricity.	Supportive
Residential Non-PIPP	Very exciting news! A move towards renewables will make us more competitive in the world.	Supportive
Residential Non-PIPP	Fossil fuels are coming to the end of their usefulness. Clean renewable energy is well worth the investment.	Supportive
Residential Non-PIPP	I certainly don't understand all of the science behind it, but I think it is extremely important to move towards renewable energy sources. I feel it would lead to job creation at a greater rate than our traditional means of energy could, and it will certainly help improve the environmental quality over time.	Supportive
Residential Non-PIPP	We welcome this initiative and will support as a customer	Supportive
Residential Non-PIPP	You should supply and provide us with the option to have solar power and allow us to back feed to AEP reducing or eliminating some peoples electric bill and also allowing some people to store it could also be another option to offset cost in both directions, thanks [DELETED DUE TO PERSONAL IDENTIFIABLE INFORMATION]	Supportive
Residential Non-PIPP	We need to make sure generations to come have a good quality of air	Supportive
Residential Non-PIPP	I fully support development, keep up the good work!	Supportive
Residential Non-PIPP	Would like to see AEP increase its renewable energy generation very soon!	Supportive
Residential Non-PIPP	I think this is a great.	Supportive
Residential Non-PIPP	I am from upstate New York, and the only thing that I do not like about Ohio is the fracking that is going on here.	Supportive
Residential Non-PIPP	I like solar and wind as energy sources.	Supportive
Residential Non-PIPP	Build a small demonstration site in Columbus so school kids and adults can see how it works.	Supportive
Residential Non-PIPP	If there is a way to localize jobs in southeast Ohio, I think that could save more lives than you realize. / / We could also draw resources from local vendors as well; I know there are several kickstarters within Athens Rural Action that are exploring environmental sustainability.	Supportive
Residential Non-PIPP	We in Ohio need to be leaders in renewable energy production. Europe and Canada have far more wind turbine installations than we do. Surely we can do better -- provide local good paying jobs in clean renewable energy and protect our environment and our health.	Supportive
Residential Non-PIPP	I think this is a very important issue. I have actually opted for a more expensive electricity provider (through the Choice program) because they used renewable energy.	Supportive
Residential Non-PIPP	Thank you for the opportunity to comment. AEP's interest in renewable energy is promising, and I hope to see commitment and results in much greater generation and use of renewables. As a consumer who is aware of and concerned about my own energy consumption and use of resources, I applaud you for taking steps toward more sustainable, renewable energy generation.	Supportive
Residential Non-PIPP	Retire all coal burning power plants.	Supportive
Residential Non-PIPP	I consider it very important that AEP pursue renewable energy options aggressively.	Supportive
Residential Non-PIPP	Move faster!	Supportive
Residential Non-PIPP	there should be an incentive to allow for renewable energy generation to occur including installation and ease the red tape	Supportive
Residential Non-PIPP	Support renewable energy through advocating for tax rebates and other incentives as other states like Massachusetts has done!	Supportive

Residential Non-PIPP	Please develop renewable energy. I would love to see AEP use only renewable energy. It's crazy we're only at 4.5% now. Any assistance you can provide for your customers to create renewable energy from solar and wind would be welcomed also.	Supportive
Residential Non-PIPP	We need to improve our air quality.	Supportive
Residential Non-PIPP	The future is something that factors heavily into my choices, and I much prefer energy options that will work out better for us in the long run, like wind and solar.	Supportive
Residential Non-PIPP	Please make this something you take seriously! We only have one planet, and we need to take better care of it by getting away from fossil fuels. Plus if you create solar panels, wind turbines, or hydro plants, it creates jobs, giving you great optics.	Supportive
Residential Non-PIPP	I believe that it is very important that big companies do as much as they can to make as little impact on the world as possible while also trying help rectify the problems they have already caused, so AEP Ohio increasing their use of renewable energy is a big step in the right direction.	Supportive
Residential Non-PIPP	It is an extraordinarily important endeavor!	Supportive
Residential Non-PIPP	Use what we can reuse.	Supportive
Residential Non-PIPP	Make it happen!	Supportive
Residential Non-PIPP	I think all of the reasons you listed for what is important for using alternative energy sources in very important but I could only select 3.	Supportive
Residential Non-PIPP	I just feel it could only bring positive results in an ever- changing world. Let's not sit back and think someone else will help change the world for the better, let's be a part of making that change!	Supportive
Residential Non-PIPP	Invest in more solar/wind energy options!	Supportive
Residential Non-PIPP	Good to see this initiative in progress. Thank you!	Supportive
Residential Non-PIPP	Providing renewable energy options should be a top priority	Supportive
Residential Non-PIPP	Please add more renewable energy!	Supportive
Residential Non-PIPP	Bring on the Windmills! And Solar Panels! Let's just do this USA! All together now!	Supportive
Residential Non-PIPP	Better for our world and our kids! Do it!	Supportive
Residential Non-PIPP	This is super important. Our over-reliance on fossil fuels is setting ourselves up for failure in the future. Do not, I repeat DO NOT find yourself swayed by lies from the President and his trash EPA. Coal is a dead energy source. It's high time instead of relying on burning trash to make the lights go on that we find and utilize better resources that will not disappear from the planet (sun, wind, fusion). This is a crucial crisis if humanity expects to make it another millennium.	Supportive
Residential Non-PIPP	Just do it. Invest on it.	Supportive
Residential Non-PIPP	Please encourage Ohio lawmakers to reverse the changes made to wind setback requirements.	Supportive
Residential Non-PIPP	AEP must lead on this issue and create renewable energy production in Ohio with Ohio workers.	Supportive
Residential Non-PIPP	When do you start?	Supportive
Residential Non-PIPP	I hope renewable energy is high on AEP's priority list. This is too important to delay.	Supportive
Residential Non-PIPP	Do more more marketing more reconfiguring of energy sources. Lead on this issue	Supportive
Residential Non-PIPP	I think that it is important that AEP continue to increase the amount of energy produced from renewable sources.	Supportive
Residential Non-PIPP	I'm ready for solar and wind!! Bring it to my house.	Supportive
Residential Non-PIPP	Renewable energy could help create jobs, lessen electric bills and create consistent eneeegy	Supportive

Residential Non-PIPP	I tried calling to find out where my energy comes from and no one could tell me.	Supportive
Residential Non-PIPP	I demand renewable and safe energy	Supportive
Residential Non-PIPP	Please do this sooner than later.	Supportive
Residential Non-PIPP	Renewable energy is paramount to our continued existence and should be done safely and ethically with the community AEP serves in mind.	Supportive
Residential Non-PIPP	I am happy to hear this is being considered.	Supportive
Residential Non-PIPP	Less dependence on coal would benefit the environment.	Supportive
Residential Non-PIPP	This is an extremely important issue. I feel we must start investing in as much renewable energy as possible	Supportive
Residential Non-PIPP	This is great!! I hope Ohio puts some real investments into renewable energy. The more we solar and wind power we can create, the better. When I'm able to purchase a house I'm planning on investing in solar immediately.	Supportive
Residential Non-PIPP	Love to see more wind turbines.	Supportive
Residential Non-PIPP	Why now and not 20 years ago and why are electric apartments so expensive, more than my home was. The cost of electricity is just too high. Will have to move because all electric is too expensive to live in.	Supportive
Residential Non-PIPP	A much greater emphasis must be placed on the development of renewable energy sources in Ohio and nationwide. Sending out this survey is a good step toward obtaining feedback from AEP customers on the importance of renewable energy.	Supportive
Residential Non-PIPP	Use as much renewable as possible!!	Supportive
Residential Non-PIPP	I would like to see AEP develop their own assets instead of simply sign PPAs	Supportive
Residential Non-PIPP	Every possible opportunity that arises where solar power is a viable source of energy, it should be utilized	Supportive
Residential Non-PIPP	It is sad how little of our energy is generated through renewable energy and I hope there is an urgency to change that.	Supportive
Residential Non-PIPP	Wind energy has been shown to help farmers crops	Supportive
Residential Non-PIPP	The sooner the better. / A question: / Ohio used to grow corn; can corn be used to make fuel?	Supportive
Residential Non-PIPP	they do a great job . keep up the good works . [DELETED DUE TO PERSONAL IDENTIFIABLE INFORMATION]	Supportive
Residential Non-PIPP	I think that it is an important long term strategy for the energy sector to find and develop long term sustainable solutions for energy production. Thank you for looking into this.	Supportive
Residential Non-PIPP	I am disappointed that the current usage of renewable energy is so low.	Supportive
Residential Non-PIPP	I would like to have information on incentives for renewable energy farms. Are there business opportunities for people who own land to install a renewable energy farm on their land?	Supportive
Residential Non-PIPP	This is a good idea	Supportive
Residential Non-PIPP	It's about time. Get on with it.	Supportive
Residential Non-PIPP	Please support home owners who are investing in renewable energy, too. It will be a group effort to make this really work well for everyone. AEP needs to be act as a community member, not just a profit making business for shareholders. Collaborative effort will get us all further along in making Ohio a great place to live for generations.	Supportive
Residential Non-PIPP	It is very important that AEP move forward with increasing their use of renewable energy technology.	Supportive
Residential Non-PIPP	Not aware of what AEP is currently doing WRT renewable energy generation	Supportive
Residential Non-PIPP	i think it is extremely important that you take this step forward	Supportive
Residential Non-PIPP	Considerations for the future of the planet are to be commended. The bottom line is a matter of perspective.	Supportive

Residential Non-PIPP	It's all about the environment! We need to take care of it now!	Supportive
Residential Non-PIPP	It was great to find 100% wind energy available at a reasonable cost.	Supportive
Residential Non-PIPP	I would like to see you develop and use solar energy produced in Ohio.	Supportive
Residential Non-PIPP	reduce fossil fuel energy generation as soon as possible. The USA is way behind other countries.	Supportive
Residential Non-PIPP	More renewable energy is a great idea and a wonderful step in the right direction.	Supportive
Residential Non-PIPP	State by state generation would help stabilize the grid in the event of a natural disaster such as storms damaging transmission lines.	Supportive
Residential Non-PIPP	Please keep pursuing this important initiative!	Supportive
Residential Non-PIPP	It's time for a change for the better. And thank you for doing so.	Supportive
Residential Non-PIPP	If given the chance, I would prefer 100pct of my energy to be from wind or solar. I would install solar but do not want to feed a grid that supports fossil fuels. They are the past. Let's move to the future	Supportive
Residential Non-PIPP	Do your best	Supportive
Residential Non-PIPP	I see wind energy being highly utilized in other states and hope Ohio does so also.	Supportive
Residential Non-PIPP	I have contacted several companies in the past about leasing our property for wind or solar. We own 187 acres in Piketon Ohio. It is all in direct sun all day long. We would be interested in someone looking at our property to see if it would qualify for this program.	Supportive
Residential Non-PIPP	Given the improvements in solar cells and wind turbines much happier seeing that increasing than the use of coal plants.	Supportive
Residential Non-PIPP	It's a fantastic way of thinking towards reducing the emissions & a big step towards reducing global warming.	Supportive
Residential Non-PIPP	The best technology should be used. Stop using old energy techniques when there is more efficient ways of producing energy. Less focus on making money and more focus on Implementing small carbon footprint sustainable energy	Supportive
Residential Non-PIPP	This administration is reversing all of Obama's policies and its bad for our planet and future generations.	Supportive
Residential Non-PIPP	Own a solar array on our home's roof. While that satisfies me and my personal commitment - agree that the efficiencies of a community array make more sense in the bigger view. Applaud AEP's efforts to support wind and solar, especially within their regional markets.	Supportive
Residential Non-PIPP	Increased use of wind and solar power is critically important for our environment for our future!	Supportive
Residential Non-PIPP	Will appreciate any efforts to getting us less dependent on coal and gas. Thank you!	Supportive
Residential Non-PIPP	Use of wind generators makes sense like those in Illinois and Iowa. Ugly, but effective.	Supportive
Residential Non-PIPP	Anything's better than you messing up my driveway and lawn with your trucks then refusing the fix any of it.	Supportive
Residential Non-PIPP	Moving to renewable energy will help us and AEP in the long run. This is a great move by AEP and you will reap benefits down the road.	Supportive
Residential Non-PIPP	renewable energy is the only sustainable option!	Supportive
Residential Non-PIPP	I am still an AEP customer but also switched to Arcadia Power so some of my electricity would be coming from renewable sources.	Supportive



Residential Non-PIPP	Despite the recent Trump administration roll backs on coal fired power plant emissions, we need to advance the scientific and engineering approaches to electric power generation and transmission. Solar, wind, and geothermal options would work in our region and there will be investment in that. AEP also needs to ensure the power grid is secure. Significant updates are lagging. I have a new smart meter installed yesterday on my home yet the transmission lines are faulty and we lose power at least once a month during storms. Buried power lines make the most sense; new communities seek this but our older communities need this stability as well.	Supportive
Residential Non-PIPP	I applaud you for taking the energy situation seriously...if Saudia Arabia is diversifying then , well, it should give us pause for thought!!	Supportive
Residential Non-PIPP	I like the vision of progressing towards renewable energy. I support that idea fully	Supportive
Residential Non-PIPP	Hydrocarbon based fuels are finite and have adverse environmental effects. I think it is very important to transition away from hydrocarbon based energy sources as quickly as possible.	Supportive
Residential Non-PIPP	Clean renewable that will eventually lower costs	Supportive
Residential Non-PIPP	I am thrilled that you are developing renewable energy, especially in light of our current administration. Thank you.	Supportive
Residential Non-PIPP	Always keep trying to increase renewable usage!	Supportive
Residential Non-PIPP	Do it	Supportive
Residential Non-PIPP	Applaud AEP Ohio's efforts in this regard.	Supportive
Residential Non-PIPP	I think it would be great to see more wind turbines and Ohio to relax the setback regulations which are way too extreme versus neighboring states.	Supportive
Residential Non-PIPP	It is important that our utility companies reduce their dependency on fossil fuels and switch to renewable energy sources.	Supportive
Residential Non-PIPP	renewable is going to happen, Ohio needs to be a part of it, maybe a leader. Good for Ohio's future, employment, finances, etc., helps fix global warming. /	Supportive
Residential Non-PIPP	Please invest and lead. The community can adjust and will support the changes. We need and appreciate your help and leadership. If you don't move forward now the next generation if useers will happily leave your company behind.	Supportive
Residential Non-PIPP	Thanks for considering renewable energy. Hope to see more investment in this resource in the future.	Supportive
Residential Non-PIPP	I think Ohio invested, built, and operated renewable energy resources should benefit all ohioans	Supportive
Residential Non-PIPP	Windmill in my yard would work for me	Supportive
Residential Non-PIPP	This is a critical issue. Please continue your efforts despite political influences and greed.	Supportive
Residential Non-PIPP	<i>The more renewable energy the better!</i>	Supportive
Residential Non-PIPP	Don't think you're doing enough. Stop focusing on shareholders and focus on your work	Supportive
Residential Non-PIPP	I believe it is an awesome idea to use different means for energy such as solar wind and the use of water to generate electricity furthermore I believe we should take care of our state to develop more jobs not outsourced anything and I believe each state should do the same and we do it as a country everybody works together but within their state trade-ideas want not things like that but to produce jobs cleaner energy for future Generations is an awesome idea thank you	Supportive
Residential Non-PIPP	Please pursue these initiatives. Clean air and diversification of sources are critical.	Supportive
Residential Non-PIPP	Global Warming is not a Joke! We need renewable energy!	Supportive

Residential Non-PIPP	It is so important for many reasons! I would love to see jobs created in Ohio or at least nearby. But we have to make a better future by investing.	Supportive
Residential Non-PIPP	Please explore renewable energy sources for the future well being of this earth.	Supportive
Residential Non-PIPP	It must be done to improve air quality and reduce greenhouse gas emissions and try to turn around climate change even though we're 40 years too late for that.	Supportive
Residential Non-PIPP	Customers weren't asked if they wanted coal so why ask if they want renewables? It makes sense so just do it.	Supportive
Residential Non-PIPP	Become involved in the sale and distribution of solar panels, wind turbines etc.	Supportive
Residential Non-PIPP	Being responsible to future generations by producing renewable energy is important to our current generation.	Supportive
Residential Non-PIPP	Coal is dead. Solar and wind farms need to be your focus as an corporation going forward.	Supportive
Residential Non-PIPP	All of the listed benefits are important.	Supportive
Residential Non-PIPP	Don't give up!	Supportive
Residential Non-PIPP	Thank you, AEP, for moving in the direction of renewable energy. It is good for the planet and good for the job market.	Supportive
Residential Non-PIPP	Just do it!	Supportive
Residential Non-PIPP	I think it is a great idea!	Supportive
Residential Non-PIPP	do more, and be more friendly to those of us that have rooftop solar units.	Supportive
Residential Non-PIPP	I was in AEP green energy generation option but it was canceled.	Supportive
Residential Non-PIPP	Mitigation of climate change is critical. Solar and wind provide economic opportunities and practical approaches to the reduction of greenhouse gas and pollutant emissions. Either we will be part of the solution or part of the problem. Let's train our workforce to be part of the solution, so that we can all enjoy the benefits.	Supportive
Residential Non-PIPP	There is no doubt that solar and other renewable energy sources are the future and we need these sources developed as soon as possible.	Supportive
Residential Non-PIPP	Do it!	Supportive
Residential Non-PIPP	I applaud AEP Ohio for their initiatives to include renewable energy sources in their offering. It shows great stewardship and forward thinking.	Supportive
Residential Non-PIPP	I applaud your intentions!	Supportive
Residential Non-PIPP	Get to work to much talk not enough work.	Supportive
Residential Non-PIPP	Aim for 100% solar / wind energy like Hawaii	Supportive
Residential Non-PIPP	Please! Wind and solar would be so progressive and appreciated.	Supportive
Residential Non-PIPP	Pursue renewable energy in an efficient manner, not a politically correct one	Mixed
Residential Non-PIPP	If we do start renewable energy I would prefer if it was done without affecting my bill. I would not be okay if this project was started and the cost to use electric went up.	Mixed
Residential Non-PIPP	If customers were able to participate, I'm sure many of us would allow solar panels on our homes!	Mixed
Residential Non-PIPP	Why not work with home owners to have them install solar panels to help offset the current energy generation? There are many square miles of roof top that would be prime for this investment.	Mixed
Residential Non-PIPP	Renewable energy is great, if it's economically feasible at this time. Don't underwrite its cost. When the time is right, it will become an option that fits into the economics of energy supply and demand.	Mixed
Residential Non-PIPP	Would like to see AEP support Ohio energy credits for homeowners who choose to install renewable energy for their homes	Mixed

Residential Non-PIPP	Generation should be on the lowest cost basis. AEP should lobby the government to remove incentives for all types of generation and allow the market to choose.	Mixed
Residential Non-PIPP	Overall environmental impact is probably the most important thing, moreso than focusing on renewable energies. So the impact of solar panel, battery, and turbine creation, and how that compares to current methods.	Mixed
Residential Non-PIPP	Since such investments are highly sensitive to advances in technology, strong consideration should be given towards leasing equipment over owning it.	Mixed
Residential Non-PIPP	the all in cost over time must be cheaper than standard market portfolio offering	Mixed
Residential Non-PIPP	I have read about programs with other electric utilities about "virtual" power plants fueled by home batteries. I would love to have a similar program here in conjunction with something like a Tesla PowerWall battery system. If there were such a system and any incentives, I think it could help offset the only negative qualities of renewable energy.	Mixed
Residential Non-PIPP	As long as it doesn't add cost to my bill, I'm all for it. There needs to be a balance sheet for jobs added in renewable to jobs lost in coal. Everyone needs to know the toll, whether good or bad.	Mixed
Residential Non-PIPP	Offer to build solar on people homes to help with energy production.residential roof space offers an substantial square footage with no additional impact to green space or land aquisition. It will also instill pride in thpse who accept, by allowing those want to help tje opportunity with zero to minimal personal expense.	Mixed
Residential Non-PIPP	If we get more help with solar roofs and rebates to promote such investments , that would help	Mixed
Residential Non-PIPP	Need incentives for homeowners to install Panels	Mixed
Residential Non-PIPP	Least cost resources should continue to be the goal. Customer choice of rooftop should be facilitated but not harm other captive customers or in other words no subsidies. Rates should reflect costs of services.	Mixed
Residential Non-PIPP	Rebates should be offered to homeowners who add renewable energy sources to their personal residences.	Mixed
Residential Non-PIPP	As a customer I want the least cost generation for my service. Unless wind/solar projects and or purchase agreements can provide energy at a cost comparable or cheaper than current market prices then I'm not interested it in.	Mixed
Residential Non-PIPP	I would like to see the use of more residential wind/solar electricity generation technology to supplement electricity from the grid. Homes should be more freestanding with regard to the power they utilize.	Mixed
Residential Non-PIPP	I assume there will still be a cost assocaited with distributing renewable energy. I would expect that it would be cheaper if it was produced within the state in which we live. I would like more information about this.	Mixed
Residential Non-PIPP	Solar farms before wind farms	Mixed
Residential Non-PIPP	AEP's support for the installation of solar systems on individual or group residences would be deeply appreciated.	Mixed
Residential Non-PIPP	Offer programs to help get solar on the roofs of homes.	Mixed
Residential Non-PIPP	Whatever investments should be cost effective.	Mixed
Residential Non-PIPP	I would accept a modest increase (< 10%) in my energy bill for more renewable energy, but not a huge one.	Mixed
Residential Non-PIPP	Please stop. The windmills are ugly, they kill birds and bats, and they are a giant waste of money (literally). If you have to use renewables, then give more credits for homeowners to purchase their own solar panels.	Mixed

Residential Non-PIPP	It is important but if it is significantly more expensive than the current service it might not be worth it for customers	Mixed
Residential Non-PIPP	You should offer to put solar panels on all houses and buildings you service. OR at least hugely discounted solar panels.  Also, AEP should consider offering residential customers a discounted rate for running appliances during off-peak hours. (EX. Running a dishwasher or clothes dryer between midnight and 5am.)	Mixed
Residential Non-PIPP	This should not be at the expense of customers.	Mixed
Residential Non-PIPP	I don't think aep really cares about renewable energy. You want to surcharge people that are doing their part for the environment now (with solar or wind power) a surcharge.	Mixed
Residential Non-PIPP	We have been talking about getting solar panels installed on our house, even if it costs us a large amount of money out of pocket up front, it is worth it for our future.	Mixed
Residential Non-PIPP	I'm okay with it as long as it doesn't increase my costs. The cost to implement this should not be passed down to the customer.	Mixed
Residential Non-PIPP	More attractive subsidies and tax incentives for residents investing in solar energy products.	Mixed
Residential Non-PIPP	I wish we had local assistance on planning for installing solar panels. AEP could charge and help provide the materials perhaps?	Mixed
Residential Non-PIPP	Be smart and think about the unintended consequences. Wind turbines kill birds, have been shown to have serious health consequences for those living near them and lower property values for home owners near them. Don't just cave to Progressives and do something stupid just to be trendy. Solar and hydroelectric make much more sense than wind. Do your due diligence.	Mixed
Residential Non-PIPP	I would think that there would also be an ultimate decline in prices (after initial investments), and I hope that AEP passes the savings on to its customers	Mixed
Residential Non-PIPP	Energy in general is far too expensive. Even with that being said, I would be willing to pay a renewable energy tax each month if I was assured my energy was generated by renewable means which would then include a tax rebate on my income taxes. I wouldn't want to pay more than 5%, however.	Mixed
Residential Non-PIPP	If this will keep the cost of electricity the same or lower I am all for change. If not then no.	Mixed
Residential Non-PIPP	I don't know if AEP already offers this, but information on how customers can safely provide energy back to the grid via their own renewable installation would be helpful.	Mixed
Residential Non-PIPP	You pay for the solar, panels I'll have them installed on my roof!	Mixed
Residential Non-PIPP	I would be interested in solar panels if they were more affordable	Mixed
Residential Non-PIPP	While I agree with exploring renewable energy sources, I do not agree with wind being used. My reason is because it takes more energy to manufacture wind turbines than what they will output during their life of service.	Mixed
Residential Non-PIPP	I prefer solar over wind	Mixed
Residential Non-PIPP	I would like to see incentives placed on Home energy solar systems to help reduce demand on the grid.	Mixed
Residential Non-PIPP	Maximize Hydro-Electric. Solar & Wind. DO NOT pass investment costs to consumer.	Mixed

Residential Non-PIPP	Allow customers an "affordable way" to tap in to this area. Infrastructure is too expensive for the average home owner to put in their own wind and solar. Give credits (government or private) to loyal customers to be able to invest in their own infrastructure to sell back to the power grid and provide for other customers as a group, especially in rural areas.	Mixed
Residential Non-PIPP	AEP should advise consumers on best ways to add solar power or wind power	Mixed
Residential Non-PIPP	Need to address intermittent availability and the negative impact to reliability posed by inverter based resources.	Mixed
Residential Non-PIPP	Would be good to encourage homeowners to have systems that supply back to the grid.	Mixed
Residential Non-PIPP	Hydroelectric power is also a renewable energy source	Mixed
Residential Non-PIPP	I wish you would do something... These bills are crazy and should not be this much...Last yr my bill in winter was sometimes \$1,500 a month that's crazy.. I am going solar next summer so I don't have to deal with these kinds of bills.	Mixed
Residential Non-PIPP	I have solar. Its a shame I was prevented from having a bigger array due to potential categorization as a generation site.	Mixed
Residential Non-PIPP	Help consumers with doing their own renewable energy capabilities and supply	Mixed
Residential Non-PIPP	I would let you put solar panels in my roof if it wasn't costly to me. I would expect the wind and solar energy to help keep prices at a reasonable rate	Mixed
Residential Non-PIPP	I am opposed to this matter if my costs will increase. It would be good to have alternative and back up utilities but not at increased pricing. Obama had said our prices would significantly increase and he invested heavily into solar and wind with little benefit.	Mixed
Residential Non-PIPP	Be very careful re environmental impacts. Renewable does not always mean greener and cleaner.	Mixed
Residential Non-PIPP	I still believe the focus should be on producing low cost generation, regardless of fuel type.	Mixed
Residential Non-PIPP	No objection as long as it doesn't increase the cost.	Mixed
Residential Non-PIPP	Make solar sources AFFORDABLE to homeowners. Allow us to HELP produce this energy. Stop the greed. Focus on what is important LONG TERM FOR ALL CITIZENS OF OHIO AND THIS EARTH!!	Mixed
Residential Non-PIPP	Allow Ohio residents to sell back solar energy created at home, by providing at least Net Zero metering.	Mixed
Residential Non-PIPP	Renewable investments need keep in mind reliability and costs, no renewable energy if there are lower cost alternatives.	Mixed
Residential Non-PIPP	are you exploring other potential sources outside of solar and wind?	Mixed
Residential Non-PIPP	Renewable energy approaches are expensive and have a greater impact on the environment than coal or gas. But if you chose to use renewable energy platforms they should be from Ohio employing ohio workers.	Mixed
Residential Non-PIPP	Only if it is cheaper than other energy sources.	Mixed
Residential Non-PIPP	Better Rebate on Solar installation at home and remainder energy can be sent to the grid for free.	Mixed
Residential Non-PIPP	I don't want to see a big price increase to pay for it. Take some of your profits and do it.	Mixed
Residential Non-PIPP	Why not provide a large subsidy to homeowners who want to put solar on the residence. Solar is still not cost effective to install.	Mixed
Residential Non-PIPP	While I applaud this move (and hope it'll translate to AEP being more energetic about helping consumers with home solar panels), is this going to raise our bills? would the money be better spend upgrading the current infrastructure (like moving more lines underground)?	Mixed



Residential Non-PIPP	Any chance for incentives for people that are willing to install solar panels?	Mixed
Residential Non-PIPP	Unfortunately this would mean higher utility cost and I am at the top now on my electric bill. I can see converting if this is not going to cost me more money. Plus with the increase knowledge and safety that has been done to the nuclear energy it is safer than the unknown side effects and waste from solar and safer to the environment than wind b/c of the oil/gas to run the wind. We can enrich uranium at very low cost to benefit customers.	Mixed
Residential Non-PIPP	I would like renewable energy but don't want to pay more for electricity Plus coal is very clean burning now...	Mixed
Residential Non-PIPP	I would like to see more ideas around solar panels on customers roofs/property to cover their own energy needs and to be able to supply AEP with extra power.	Mixed
Residential Non-PIPP	AEP should support customer generated renewable energy production as it would be the most efficient and secure source for the future	Mixed
Residential Non-PIPP	Has to make economical sense	Mixed
Residential Non-PIPP	Very much in favor of solar energy if it can be done without using more resources than other sources. Do not like the tall wind turbines at all!!	Mixed
Residential Non-PIPP	I'd prefer to see more solar sourced energy over wind, as an over abundance of wind farms have the potential to be detrimental to populations of birds.	Mixed
Residential Non-PIPP	Keep the cost to the consumer below what other generation methods would be. If it's higher, don't do it.	Mixed
Residential Non-PIPP	Natural gas. Use it too.	Mixed
Residential Non-PIPP	Provide energy based on most cost effective technology not politics.	Mixed
Residential Non-PIPP	Price is my major concern. I will not pay extra for wind, solar or any other alternative energy source. If the cost is not competitive to other sources, do not pass those additional costs to me.	Mixed
Residential Non-PIPP	How did you decide to only focus on solar and wind?	Mixed
Residential Non-PIPP	I don't want it if it drives my cost higher. I think we have been too quick to abandon nuclear energy.	Mixed
Residential Non-PIPP	There is massive untapped potential in hydro, several locks and dams merely control water flow without harnessing any power.	Mixed
Residential Non-PIPP	Would be interested in exploring this option for my home, but would want to see an immediate benefit as well as long-term. Whether through rebates, or discounted purchase of material, or even through AEP-provided (and owned) materials allowing the customer to assist in your efforts, but not have the financial burden.	Mixed
Residential Non-PIPP	If it's not going to lower my energy costs what good is it? It does not do anyone any good to jack up the cost to use something that is suppose to lower it	Mixed
Residential Non-PIPP	Renewable energy sources should be cost effective, reliable and efficient. It should not be done with government subsidies or substantially higher cost to the consumer.	Mixed
Residential Non-PIPP	I would like to see more distributed generation. Solar panels on my house with a battery that feeds my needs and produces excess energy for the grid would be ideal. Possible now, but could be easier/more incentivized.	Mixed
Residential Non-PIPP	Are the electric producing algae programs viable at this time or are you only looking at wind and solar energy right now? How many Ohioans help to produce or offset energy with their solar panels? Is that number growing?	Mixed

Residential Non-PIPP	I am all for alternative energy as long as it is cost effective.	Mixed
Residential Non-PIPP	Don't do it unless it makes economic sense for your customers and the long term viability of the solar and wind systems is assured.	Mixed
Residential Non-PIPP	Solar panels on flat useful land makes no sense when the land could be used for other projects and the panels could be on the tops of buildings	Mixed
Residential Non-PIPP	Prefer the use of solar for renewables. Many downsides to wind turbines...huge bird deaths, degradation of view sheds.	Mixed
Residential Non-PIPP	I think renewable energy is the way to for our county's future. Also seems like it should cost in check, espically for people on fixed or little income.	Mixed
Residential Non-PIPP	solar installations on private residences is not supported adequately; that should be changed to benefit homeowners, ratepayers and the public	Mixed
Residential Non-PIPP	Solar energy is fine but wind turbines have a negative impact on some wildlife.	Mixed
Residential Non-PIPP	Renewable energy has to be affordable to all. Expensive renewable energy negates the effort to build it.	Mixed
Residential Non-PIPP	Solar is a good idea.	
Residential Non-PIPP	Windmills are old tech from the middle ages and they kill birds; especially eagles.	Mixed
Residential Non-PIPP	If you would purchase power from customers, it would encourage users to shift to solar/wind and give you more local power sources.	Mixed
Residential Non-PIPP	Great idea, but don't increase my rates.	Mixed
Residential Non-PIPP	This is a very important thing for AEP Ohio to be doing. Incorporating more renewable sources of energy is critical for our future. Ohio is probably not the best place for wind energy, except possibly the shores of Lake Erie. Solar is a more feasible choice.	Mixed
Residential Non-PIPP	Bird kills are of great importance.	Mixed
Residential Non-PIPP	AEP should help customers acquire Solar powered energy.	Mixed
Residential Non-PIPP	I would like solar panels on my home. I'm not sure if it's permitted. These are things that need to be allowed regardless of what home associations may say.	Mixed
Residential Non-PIPP	Helping to push more solar incentives programs in Ohio for not just the utility, but all solar companies to make it easier for behind-the-meter residential customers	Mixed
Residential Non-PIPP	Just don't pass on the costs to consumers.	Mixed
Residential Non-PIPP	Is AEP looking at incentive programs for residents to add solar/wind generation so excess can go back into the grid?	Mixed
Residential Non-PIPP	I am very interested in adopting solar at my home in the next few years, would love to be a part of any educational programs.	Mixed
Residential Non-PIPP	Encourage homeowners to utilize solar applications where possible	Mixed
Residential Non-PIPP	Renewable energy should only be increased if the cost, unsubsidized is beneficial and profitable.	Mixed
Residential Non-PIPP	I have Solar PV at my home and took part in the renewable energy rebate program AEP offered a few years ago. I think that if AEP is looking to increase the usage of renewable energy, bringing back a program like that to encourage individuals to help in that goal is a good thing to consider.	Mixed
Residential Non-PIPP	Renewable energy, wind and solar, at this time are impracticable at the utility generation level. There will always be a need for central utility generation complex. A better way forward is to improve nuclear or fuel cell technologies with consumer level wind or solar generation.	Mixed
Residential Non-PIPP	What about nuclear?	Mixed
Residential Non-PIPP	There should be no limitations on private producers of renewable electricity.	Mixed

Residential Non-PIPP	If investing in renewable energy sources lowers cost to AEP, those savings MUST BE passed down to its customers.	Mixed
Residential Non-PIPP	Make investments as renewable becomes competitive with existing sources. Phase in over time as outdated generators are taken offline. Reliability also has to be kept in mind of course as wind and solar energy fluctuates.	Mixed
Residential Non-PIPP	Put solar panels on my house and you can keep the energy produced	Mixed
Residential Non-PIPP	It is also important to evaluate possible negative environmental effects of adding solar and wind energy and to evaluate other alternative energy sources.	Mixed
Residential Non-PIPP	Please consider the solar "rental" option, like Solar City. This is an effective model and a win-win for everyone.	Mixed
Residential Non-PIPP	I am a solar energy producer already, and I would like to see that AEP goes along this path and enables home producers by offering incentives and good buy-back prices. AEP should ensure that it remains profitable to install solar systems on private homes.	Mixed
Residential Non-PIPP	A shared generation model could be implemented, so customers could sell their surplus to the network.	Mixed
Residential Non-PIPP	If it is done I don't want towers or turbines anywhere near my house. We already have a transmission line thru out front yard and I hate the sight of it.	Mixed
Residential Non-PIPP	I would honestly love to see a program here in Ohio where AEP would foot the initial bill for home owners to install solar panels on their house, and then let the owners pay it back over a decade or two through producing extra energy to put back into the grid daily, on top of their normal power bill payment. I would be one of the first to volunteer.	Mixed
Residential Non-PIPP	I wish I understood more about supplementing with solar or wind on our residential property	Mixed
Residential Non-PIPP	I am hopeful that greater use of solar-produced energy would lower costs of manufacture and installation on private residences. I am somewhat concerned over the equipment needed for wind-generated energy.	Mixed
Residential Non-PIPP	If it is going to lower or allow ekec energy costs to remain constant for a long time then yes. We want this.	Mixed
Residential Non-PIPP	More nuclear in Ohio would be awesome. Maybe look into a NuScale SMR prototype project?	Mixed
Residential Non-PIPP	I would love to be involved in any programs for sourcing from your customers property like home solar.	Mixed
Residential Non-PIPP	If it creates jobs in Ohio with no support from countries outside of USA, I will support it.	Mixed
Residential Non-PIPP	I would like to get involved in solar on my house but can't determine which companies are valid representatives of AEP and which are fly-by-nights that will leave me with a leaking roof.	Mixed
Residential Non-PIPP	from a common sense factor I would hope that these energy producing options would aide in lower consumer rates and not added cost factors???	Mixed

Residential Non-PIPP	How about you offer solar panels for free to everyone who wants them. There are thousands and thousands of rooftops just begging for solar panels. You pay for the panels, materials, and installation - and then charge a reasonable monthly amount that the consumer pays back to you through a customer/company contract. You get all excess energy and can distribute it to other homes. There will be plenty of people who do not take advantage of this, so you will still get your money. Of course, you can't rip off your customers much this way, but it would be the right thing to do.	Mixed
Residential Non-PIPP	Not a fan of giant windmills but solar panels on homes and commercial buildings is cool.	Mixed
Residential Non-PIPP	Want to make sure the savings from these sources are passed on to the consumer	Mixed
Residential Non-PIPP	Important to reduce or contain energy costs while maintaining sustainable and reliable energy	Mixed
Residential Non-PIPP	I would like to see incentives for installing solar panels on roofs of private homes and businesses to supplement grid.	Mixed
Residential Non-PIPP	Keep looking for ways to develop renewable. Can you put solar panels on parking garages or give some discounts to homeowners?	Mixed
Residential Non-PIPP	Home owners need credits offset the cost to install solar and wind to their homes.	Mixed
Residential Non-PIPP	I would like to see more solar programs including subsidies as an incentive for the home owner to install solar power. I am not in favor of wind turbines.	Mixed
Residential Non-PIPP	Personally, I wish it was affordable to add solar panels to my home. I believe Ohio has enough 'sun' days to make it worthwhile. I think my current electric bill is very high and that is true for many people. Solar energy would seem to be a more effective and cost-effective solution.	Mixed
Residential Non-PIPP	I am only in favor of sources of renewable energy that LOWER my utility bill!	Mixed
Residential Non-PIPP	Would like to see use of renewable energy sources however, cost needs to remain similar or even lower than current source.	Mixed
Residential Non-PIPP	Rather have cheaper than more expensive renewable.	Mixed
Residential Non-PIPP	This along with solar paneling built into roofs, roads, etc will help everyone involved going forward.	Mixed
Residential Non-PIPP	as long as it's done because it cost effective and makes since I'm all for it. however if it's just because someone wants to appease some environmentalist group then I say it's not worth it.	Mixed
Residential Non-PIPP	I'm all for this as long as it doesn't increase the cost per unit or adversely affect the reliability of the service.	Mixed
Residential Non-PIPP	I would not be in favor, if the costs outweighed the benefits. In other words, if my bill went up significantly, just because of renewable energy usage, I would not be in favor of these.	Mixed
Residential Non-PIPP	Develop wind outside of bat migratory flyways and don't build any hydroelectric dams. Solar should be on people's rooftops and not in farm fields	Mixed
Residential Non-PIPP	I'm enthusiastic about pursuing cost-effective renewable energy generation.	Mixed
Residential Non-PIPP	I do not feel the customer should pay for it.	Mixed
Residential Non-PIPP	Look into all renewable resource options!	Mixed
Residential Non-PIPP	My biggest concern is related to the unknown world of politics. The increasing socialist agenda could one day become a reality where real regulations on current energy sources becomes problematic and costly. Not having alternatives in place would be bad sort of way	Mixed

Residential Non-PIPP	Do what makes sense financially. Use the cheapest and most legal source of energy. Over time, renewable technologies could become more competitive and that's when they should be used if we are being responsible with people's limited incomes and spending ability. If we believe in other climate related items, that's fine, and I actually agree with many of those myself, but let regulation affect the pricing of energy, which would likely make renewables then the cheaper option. Do enough to learn how to adapt to renewables now, but wait for market pricing to be advantageous and ideally let the technology mature.	Mixed
Residential Non-PIPP	Programs should be available to individual residents to install solar power with low cost loans. Any any surplus could be sold to AEP/	Mixed
Residential Non-PIPP	More Residential Solar	Mixed
Residential Non-PIPP	I would love to be able to have a solar panel on my house at a reasonable cost	Mixed
Residential Non-PIPP	I am on fixed income. I can't afford increase to my electric bills to fund this venture. If this can be done at no increase in my costs or lower my bill, I am for it.	Mixed
Residential Non-PIPP	We need to explore all options!	Mixed
Residential Non-PIPP	I would consider being a pilot house to see if solar could fund my energy bill.	Mixed
Residential Non-PIPP	long term, is it equal or cheaper than gas. Not if it costs significantly more.	Mixed
Residential Non-PIPP	Cost to the customer is very important as well. Not all sources (wind etc.) are efficient in all states/areas. Such as Washington state has many cloudy days, so solar may not be as efficient.	Mixed
Residential Non-PIPP	More people would b willing to switch to solar if it could b done in payments.	Mixed
Residential Non-PIPP	Not interested in renewable energy if it cost more to produce than nonrenewable energy.	Mixed
Residential Non-PIPP	Research the health effects that are attributable to renewable energy - Proximity to wind turbines/water turbines. Insider building in more remote areas to minimize these risks.	Mixed
Residential Non-PIPP	Why no focus on nuclear energy?	Mixed
Residential Non-PIPP	I have always wanted to have solar on my roof. It is daunting, no idea where to start or to getting funding. It would be helpful if AEP would be a leading voice in this.	Mixed
Residential Non-PIPP	Consider doing what you can to help local residence adapt their homes to attain renewable energy.	Mixed
Residential Non-PIPP	If you can make it economically feasible for both the wealthy and the economically disadvantaged it would be more desirable.	Mixed
Residential Non-PIPP	Hopefully Aep will come out with a program that would help with costs for consumers to use solar panels, etc	Mixed
Residential Non-PIPP	Itâ€™s only worth doing if itâ€™s also economical for both AEP, and us COSTUMERS.	Mixed
Residential Non-PIPP	I think renewable energy is a great idea, as long as it's cost effective. Last I checked, at least as a consumer, renewable energy was still quite a big investment and not really worth it for financial incentives alone.	Mixed
Residential Non-PIPP	Would like AEP to invest in customer wind/solar to provide service to a single client/home and reap the benefits of energy production during low use times. Win/Win.	Mixed
Residential Non-PIPP	Where is geothermal on the spectrum?	Mixed
Residential Non-PIPP	cost of production is very important - do not go to renewable energy at any cost	Mixed



Residential Non-PIPP	It's great as long as the cost to the consumer stays as low as producing current electricity.	Mixed
Residential Non-PIPP	I despise wind energy! more use of solar would be better!!!!	Mixed
Residential Non-PIPP	Increasing renewables should ONLY be done if it will not drive up price. There are some serious problems with making large, far-reaching decisions based on the largely faulty science of anthropocentric global warming. Throughout earth's 4.5 billion year history, CO2 levels have fluctuated without being correlated to temperature. Now, all of a sudden, CO2 is the climate control knob, so-to-speak. It doesn't make sense. Likewise, making policy and other important, cost-affecting decisions based on this garbage doesn't either.	Mixed
Residential Non-PIPP	Like the concept, but don't want to pay a higher cost for it.	Mixed
Residential Non-PIPP	I placed a 5 KW solar array on the roof of my house, [DELETED DUE TO PERSONAL IDENTIFIABLE INFORMATION], and I've generated almost 8 MWH of energy in the past 2 years. I want to thank AEP for being so cooperative in this effort and working with me to install a net meter. Considering that the net effect of this was that you are selling me less of your product now, this is pretty darned impressive! I read about utilities in the sunny states of Florida and Arizona that are erecting road blocks to the use of solar and it actually makes me proud to be an AEP customer.	Mixed
Residential Non-PIPP	We also have rivers to run turbines in. Wind can be still and skies can be cloudy, but water always runs downhill.	Mixed
Residential Non-PIPP	Look for outside investors to help keep your current customers costs as low as possible.	Mixed
Residential Non-PIPP	In central Ohio, it might be an opportunity to work with housing developments for apartments and condominiums to leverage solar panels and windows/sliding doors. I'd be interesting in participating but my condo association would have to be amenable to the plan.	Mixed
Residential Non-PIPP	We have been interested in putting solar panels on our house. It seems that the biggest road-block is hooking those panels up to the energy 'grid' ... It is hard to believe that in the USA, we are stumbling over this technology ... !!!	Mixed
Residential Non-PIPP	I'd prefer solar energy to wind. Wind farms are hideous and have a limited life span. Once they are obsolete, what do you do with all that hardware? Also, they kill birds.	Mixed
Residential Non-PIPP	I am not willing to pay more for it.	Mixed
Residential Non-PIPP	Thank you for requesting feedback. I also feel that nuclear would be a good bridge/gateway to greater proliferation of renewable energy.	Mixed
Residential Non-PIPP	Only invest in renewable energy if it available at the same cost as traditional energy sources.	Mixed
Residential Non-PIPP	I would like to see AEP increase use of renewable energy and to reduce costs; my bill from AEP has steadily increased while service has not	Mixed
Residential Non-PIPP	prefer solar enhancements to wind power due to impact of wind turbines on birds and flying insects	Mixed
Residential Non-PIPP	Do the right thing and create jobs in Ohio but don't sacrifice environmental health	Mixed
Residential Non-PIPP	If you must go green, I would rather it not be solar. By far I would prefer a new safer type nuclear plant.	Mixed
Residential Non-PIPP	IF IT IS CHEAPER IN THE LONG RUN WHY NOT DO IT.	Mixed
Residential Non-PIPP	You should pass savings on to your customers!	Mixed
Residential Non-PIPP	If it costs more than coal, nuclear or coal, don't do it.	Mixed
Residential Non-PIPP	Affordable home solar roof panels.	Mixed

Residential Non-PIPP	Energy derived in the future should keep in mind the footprint it leaves for Ohio's green spaces and forests that can not be replaced	Mixed
Residential Non-PIPP	Renewable energy is very important to me. Even more important is reducing the number of power outages in my neighborhood!	Mixed
Residential Non-PIPP	Renewable energy makes good sense and I think that AEP should invest in it. My biggest concern is the investment will be through increased rates rather than corporate investment in other sources of energy.	Mixed
Residential Non-PIPP	INCORPORATE SMALLER WATER TURBINES IN THE OVERFLOW OF RESERVOIRS SUCH AS HOOVER DAM IT HAS A CONSTANT FLOW OF WATER THAT SUPPLIES THE CENTRAL OHIO AREA WITH DRINKING WATER. CONSTANT FLOW EQUILIBRIATES POWER SUPPLY	Mixed
Residential Non-PIPP	Keep the jobs in my area I pay for & use	Mixed
Residential Non-PIPP	please consider impacts to wildlife and the environment when choosing new energy sources	Mixed
Residential Non-PIPP	I assume renewables will cost more. I'm ok with that as long as it's not too much.	Mixed
Residential Non-PIPP	I would love to have solar panels on my roof. but the cost is too high. If there was a program that deferred the cost of the equipment and installation. And provided power during outages while routing the energy back into the grid I think a lot of people would be interested.	Mixed
Residential Non-PIPP	if you are called AEP OHIO.... then keep it OHIO!! If you can sell any energy to surrounding states.... do so BUT those funds should also be shared to OHIO AEP customers in cheaper rates.	Mixed
Residential Non-PIPP	I would like solar panels on my south roof. Financial assistance with that would be good.	Mixed
Residential Non-PIPP	I'm willing to pay slightly more for renewable energy, but not much. I believe most people are the same way.	Mixed
Residential Non-PIPP	Balance is important, investment vs return. But oil, coal, and gas (consumable) are too volatile to be 100% relied upon, and renewable is the only proper means to maintain stability in such markets. Despite the reduced efficiency.	Mixed
Residential Non-PIPP	The free market and technology innovation should determine the pace at which renewable energy is implemented	Mixed
Residential Non-PIPP	Solar panels on roofs	Mixed
Residential Non-PIPP	Encourage business & residential customers to install & use solar or wind power, that would tie in or somehow collaborate with AEP.	Mixed
Residential Non-PIPP	would like to see programs offered with solar and wind mills for customers.	Mixed
Residential Non-PIPP	Subsidize solar panels on homes.	Mixed
Residential Non-PIPP	No displacement of residents or interference with their lifestyles when installing new energy production.  Have an open discussion with all sides to reach compromises.  Use a percentage of stockholder dividends to help with costs as well as raising customer rates, which is always inevitable.	Mixed
Residential Non-PIPP	More important to decrease the use of coal for energy generation. Renewable energy is only one option to decrease the use of coal (the most carbon intensive fuel).	Mixed
Residential Non-PIPP	You need to keep in mind migration patterns of birds, bats when you place the turbines. Also how much more waste is being created from the batteries you use to store the electricity. How are those recycled?	Mixed
Residential Non-PIPP	Would it be possible for AEP to support renewables at the individual home level. Credits for Home Solar systems as a way to increase Solar with no large infrastructure.	Mixed

Residential Non-PIPP	Residential solar panels provided by AEP would be nice.	Mixed
Residential Non-PIPP	As long as my energy bill doesn't go up as I'm retired and on a fixed income. I am a proponent for wind and solar but fear the cost is still too high.	Mixed
Residential Non-PIPP	it should and can cost less . don't use it as an excuse to charge more .	Mixed
Residential Non-PIPP	Pass the savings on to your customers!!	Mixed
Residential Non-PIPP	Do all you can without raising rates	Mixed
Residential Non-PIPP	I support initiatives like this if they are cost neutral. I do not think these types of initiatives are worth paying higher rates for.	Mixed
Residential Non-PIPP	Happy to have on home contributors to energy generation. Saving money long term. NOT interested in being overcharged	Mixed
Residential Non-PIPP	Solar seems like a great idea. Could cut back on production of electricity on summer days when A/C units are running. I am not sure if this would be more of a peak shaving thing or if you guys were looking at storage too. Would be interested if there was a program to in place to receive power from local customers who already have solar in place. You might be able to incentives people to install more grid tied systems.	Mixed
Residential Non-PIPP	I vote for the use of solar panels, problem being they are expensive to install.	Mixed
Residential Non-PIPP	Investment into renewable energy should be focused on projects which do not leech harmful chemicals into aquifers and other natural water sources. They should also be planned for 30 years of utility at a minimum due to the significant investment required.	Mixed
Residential Non-PIPP	Personal solar panel plan and other options	Mixed
Residential Non-PIPP	Even though the state legislature doesn't mandate solar credits come from OH, I would like to see solar investment remain local.	Mixed
Residential Non-PIPP	In the past, utilities rammed every suitable river for hydroelectric power. This is now recognized as a mistake. Much of the current growth in "renewable" power is in solar power is large solar farms that are following the same philosophy. This is the same short sighted mistake and I don't support making it.	Mixed
Residential Non-PIPP	Wind can be useful but is not benign. Damaging to bird migration when placed in migration path.	Mixed
Residential Non-PIPP	Will these renewable resources (windmills) be cost effective? Do we know or are we building them not sure of future maintenance costs the public will have to pay for.	Mixed
Residential Non-PIPP	I would like to see these new developments without a noticeable increase in rates.	Mixed
Residential Non-PIPP	If solar, how will materials be disposed of once reach useful life? Many of these materials are harmful and are mined in foreign countries by child labor.	Mixed
Residential Non-PIPP	We should use reasonable economical practices. Common sense solutions.	Mixed
Residential Non-PIPP	My only concern is that utilities seem to charge customers more to make "renewable energy" that's suppose to make it cheaper since it is renewable.	Mixed
Residential Non-PIPP	Renewable energy is nice but not if it raises my electricity rates	Mixed
Residential Non-PIPP	While I would prefer our energy sources be within the state, I think they need to be done smartly. Cut trees selectively, not just clear a whole area. Closely monitor when fracking and if problems develop, stop fracking and fix the problems. If the problems can't be fixed, stop fracking.	Mixed
Residential Non-PIPP	do it where it can be done. Keep all options open	Mixed

Residential Non-PIPP	Future of coal is questionable, nuclear will not happen, hydro power is miniscule in this country so it makes perfect sense to diversify energy production on a scale large enough to keep rates affordable	Mixed
Residential Non-PIPP	Renewable investment that does not grossly increase the end consumer cost	Mixed
Residential Non-PIPP	Costs of electric power provided with renewable energy SHOULD be comparable to those of fossil fuels.	Mixed
Residential Non-PIPP	AEP should also make it easier to sell back locally generated electricity at competitive rates.	Mixed
Residential Non-PIPP	I would prefer, whatever you do, it be cost effective above all. If we have to wait a few years for that...so be it. Thanks for including us in your decision-making.	Mixed
Residential Non-PIPP	We would like the opportunity to use solar panels on our home in this endeavor.	Mixed
Residential Non-PIPP	Only do it if it is cost effective. Don't do stupid stuff like try to generate solar in Ohio.	Mixed
Residential Non-PIPP	Encourage larger corporations to partake in energy creation somehow. Reward them for their efforts. Reward/incentivize homeowners to do the same. Is it possible to mount solar panels to sides of tall buildings to take advantage of the large surface area exposed to sunlight?	Mixed
Residential Non-PIPP	allow people to put solar on their homes	Mixed
Residential Non-PIPP	All the affects of renewable resources, both pros and cons, need to be considered before being accepted. Some sound good in theory but the total affect of producing a wind turbine, what affects they have on the local wildlife, the constant up keep of solar fields and maintenance of a turbine can have just as much damage to the overall environment. And communities need to be educated on BOTH the advantages and disadvantages. Just because it's "green" does not always mean it's clean.	Mixed
Residential Non-PIPP	Energy needs to be cheap and reliable. This is also renewable that's good but not required	Mixed
Residential Non-PIPP	In CA they have the solar panels on roof tops of residence I think that is a fantastic idea!	Mixed
Residential Non-PIPP	Yes, let customers have the ability to make their own energy...	Mixed
Residential Non-PIPP	If there is subsidy to install solar shingles I will like to be part of the pilot program as a tester and provide info back to AEP	Mixed
Residential Non-PIPP	I tend to like solar because of lower unintended negative wildlife impacts.	Mixed
Residential Non-PIPP	Energy companies need to promote methods available for renewable energy. A reasonable, society friendly means for generation. In Germany my friends have solar panels on their roof. These methods need to be promoted. Also there needs to be developed that the birds don't kill themselves running into the windmills.	Mixed
Residential Non-PIPP	Advances in solar makes sense for homeowners. Wind is suspect in terms of reliability.	Mixed
Residential Non-PIPP	I'm more interested in getting rid of above ground power lines. I would also prefer renewable energy to be done by homeowners rather than AEP.	Mixed
Residential Non-PIPP	GO NUCLEAR	Mixed
Residential Non-PIPP	I am all for it as long as my rates don't go up.	Mixed
Residential Non-PIPP	invest in renewable technology with profits and not raise bills.	Mixed
Residential Non-PIPP	You need to reevaluate how you treat those of us with solar panels on our roofs. Policies should "encourage" solar rather than discourage. Make the rules easier and pay us for what we feed into the system.	Mixed

Residential Non-PIPP	Increasing net metering incentives for home owners that have solar and overproduce is a great idea. Similar to the AEP program that bought customers SREC credits back in 2010-2012 or so. Give homeowners the incentive to sell their excess energy back to AEP at decent rates.	Mixed
Residential Non-PIPP	open investment in land owners to support them changing to solar energy and billing for the equipment over time would be a good role for you and home owners. grow your role in to long term leasing of the euipment and buy back power to resell under contract	Mixed
Residential Non-PIPP	Do not think wind energy is a good option, much prefer solar.	Mixed
Residential Non-PIPP	Keep an eye on aesthetics on anything new that is built - must not visually be a "threat" to nearby homes. Has to be visually nice to its neighbors. Also, give back to the local community in some positive "community togetherness" fashion.	Mixed
Residential Non-PIPP	should not be forced on to the consumer unless it makes economical sense	Mixed
Residential Non-PIPP	Offer programs for houses to use solar panels to generate electricity and use excess energy to supply others.	Mixed
Residential Non-PIPP	Why not move wind and solar to the consumer end to minimize cost and line loss? Each house generates its own, AEP fills in the demand gaps and darkness no wind times.	Mixed
Residential Non-PIPP	Don't switch to energy sources that cost more.	Mixed
Residential Non-PIPP	Your expansion into solar and wind power should have low environmental impact.	Mixed
Residential Non-PIPP	Renewable energy generation must be cost effective.	Mixed
Residential Non-PIPP	Don't take farm land.	Mixed
Residential Non-PIPP	start small and learn from the experience	Mixed
Residential Non-PIPP	reward customer to locally invest and produce- example give them credits on rates with reassurance that the rug will not be pulled out from underneath them if they make this investment. Ex. Nevada policy changes that impacted solar adoption.	Mixed
Residential Non-PIPP	Alternative energy is the only responsible choice, both fiscally and ecologically. Between wind and solar, I strongly feel that solar is the better choice: no moving parts that require maintenance, no bird kills or disruption of migration patterns, no vibrations or noise. There is also less resistance to solar from neighbors, as it can't be seen above trees. Solar is silent, still, unobtrusive power that is perpetually and consistently available.	Mixed
Residential Non-PIPP	It is good to pursue this. I personally think the giant windmills and the large fields of solar panels are unsightly. It would be great if solution could be identified that would be more astecially pleasing as well as environmentally sound.	Mixed
Residential Non-PIPP	we would appreciate if the energy resources could be found in our Great State of Ohio, as our rates continually go up. We the customers need a break from high prices continually	Mixed
Residential Non-PIPP	I have heard that it's possible to get a wind turbine/mill? installed on a residential home, which would generate electricity. Options such as this are of interest to me, and is live to learn more about any which may be available. It is important to me that equipment, from vehicles to appliances and more, are built to last thereby reducing costs as well as waste (electrical, maintenance, water, and landfill.)	Mixed
Residential Non-PIPP	cost should be as low as gas or oil	Mixed

Residential Non-PIPP	Don't push the cost of transitioning to other power sources onto customers. It may backfire and cause customers to exodus to other companies. Making a transition one this is important, but alienating your customers when you're already a multi-billion dollar company is a very unwise move. But with that being said, moving towards the goal of 100% renewable energy is a very worthy cause and I applaud the effort no matter how big or small!	Mixed
Residential Non-PIPP	Offering current customers the ability to supplement their energy with solar/wind plus give back to the grid would be useful	Mixed
Residential Non-PIPP	Try to do it without raising my bill.	Mixed
Residential Non-PIPP	It comes down to costs.... If it cost me more, then Im not for it. On the contrary, if I could utilize solar and get rid of the energy company, I would do that!!!	Mixed
Residential Non-PIPP	keep cost low, diversify sources. be mindful of quality of life..	Mixed
Residential Non-PIPP	Please no big ugly windmills that kill birds. Solar would be fine.	Mixed
Residential Non-PIPP	AEP should allow homeowners with Solar to sell unused generated electricity back to AEP.	Mixed
Residential Non-PIPP	Any thought to install solar panels on client's roofs and let them lease them from you? Buying outright for a home owner is tens of thousands of dollars	Mixed
Residential Non-PIPP	We need to use what resources are there for us to use. Regardless	Mixed
Residential Non-PIPP	It is not at all clear in these questions how the Distribution Utility/AEP is going to collect costs of renewable energy from customers who purchase their power from competitive suppliers. If the revenue recovery issue were included in this survey, your results might be quite different, I would think.	Mixed
Residential Non-PIPP	my biggest concern is market price. If the price of renewable energy is greater than that of "non renewable," it's of no importance to me.	Mixed
Residential Non-PIPP	I would like the option of havin solar panels installed on my house that would be paid off through my AEP bill, and be able to sell excess energy back to the grid.	Mixed
Residential Non-PIPP	All AEP Ohio customers should pay for the development of renewable energy production, at the regulated distribution utility level, based on the amount of demand and total usage. This will encourage efficiency at all rate classes. There should also be an opt-in opportunity for ratepayers to chip in more money toward renewable energy production in their area code, as would be provided in an "eligible customer list" for governmental electric aggregation programs. If possible, these opt-in contributions could be treated as if they are micro-investments that come with a guaranteed return that is feasible for AEP Ohio to continue providing the service. The return back to opt-in subscribers can be granted as an on-bill credit or can be reinvested back into the program, at the customer's choice. AEP Ohio should also encourage customer choice in generation supply that offer 100% renewable energy-backed products.	Mixed
Residential Non-PIPP	My house is a ranch and the south roof would be GREAT for solar panels	Mixed
Residential Non-PIPP	Renewable energy is a great thing, but there are areas where AEP spends customer money without regard (paper energy usage reports) that could save paper and money that could be better spent, not at all, or instead on renewable energy.	Mixed
Residential Non-PIPP	Solar, wind and such are great. BUT, not worthy of spending excess amounts of money to have them.	Mixed
Residential Non-PIPP	I know there are issues with wind power affecting the migration of birds, so I would want to make sure that alternative energy sources are not even worse for the environment than our current system.	Mixed



Residential Non-PIPP	Not all landscapes are able to provide substantial renewable energy. However, since AEP is such a large company I assume there could be significant investments in renewable energy all over that would serve as a reliable resource. Given this I would expect not to see much of an effect on my monthly bill. Which is a concern, even though I'd be willing to pay a 10% more if I knew the majority of my electricity was being supplied through renewable energy generation.	Mixed
Residential Non-PIPP	Would love to see incentives or at least encouragement for distributed generation behind the meter. Also would like to see incentives for EV chargers	Mixed
Residential Non-PIPP	This land belongs to the next generations too. We have to put to minimum level the unintended consequence of any development, including energy needs.	Mixed
Residential Non-PIPP	Wind sounds great if it doesn't kill birds & ruin the land. Solar is fine as well if it really works and isn't just another "green scam"	Mixed
Residential Non-PIPP	Homeowners capable of producing 100% of their energy should not be penalized, fined or taxed	Mixed
Residential Non-PIPP	We have to do this without injuring animals such as birds who are killed by wind turbines.	Mixed
Residential Non-PIPP	Possible renewable energy solutions without harm to our environment is ideal.	Mixed
Residential Non-PIPP	The main issue with renewable energy is the cost difference with conventional sources. I don't want to have huge increases in my bill just to say that we are using more renewable energy. If the cost analysis makes sense then I am for it but I don't want to just add it to say we are helping the environment while hurting my budget.	Mixed
Residential Non-PIPP	Make sure the renewable energy generation is up, running, and reliable before starting to cut back on non-renewable generation.	Mixed
Residential Non-PIPP	It is good to look for better energy sources but not if we have to pay for you to do this I lived where they raised our rates to build a nuclear plant but it never happened and we never got our money back you are a very big company and help in lots of disasters which is good but not for use if you raise our rates to do this I'm on a fixed income I keep paying more for everything which is making it hard for me to live.	Mixed
Residential Non-PIPP	I'm a big advocate, but am not sure, if I was faced with higher prices, how much more I'd be willing to pay for renewable energy. Take for example solar panels for individual homes: I've never been able to afford the investment. Even if I was not investing in the equipment, a substantially higher energy bill would be hard to handle. This is important to me and future generations. Makes sense on so many levels.	Mixed
Residential Non-PIPP	unless it can be done for the same cost or less, STOP.	Mixed
Residential Non-PIPP	I don't know a whole lot, although I think renewable energy sources are good, costs are also important and coal should not be neglected. I don't think coal is nearly as bad as the popular media would like you to think.	Mixed
Residential Non-PIPP	The development of solar energy is okay, but wind turbines are utterly destructive of the human and natural environment. Turbines are being sited too close to citizens' homes and are harming them with noise, shadow flicker, and other problems. I do not approve of your reliance on wind power.	Mixed
Residential Non-PIPP	I prefer solar over wind.	Mixed
Residential Non-PIPP	build nuclear power plants like Canada has that do Not produce high level, long life waste.	Mixed

Residential Non-PIPP	why can't we use currents from Ohio and other rivers to generate electricity at dams?	Mixed
Residential Non-PIPP	If using wind turbines, please make sure that they don't disturb residents	Mixed
Residential Non-PIPP	would hope the development of renewable energy will result is lower bills for the consumer and not an increase to pay for the deveolpment	Mixed
Residential Non-PIPP	Take it from your company profits, not by raising customer rates	Mixed
Residential Non-PIPP	I have solar and geothermal at my residence and I would like to see more encouragement to others to do the same.	Mixed
Residential Non-PIPP	Diversify and invest for the future.	Mixed
Residential Non-PIPP	I was enrolled in a wind program with another supplier but recently disenrolled due to the extra \$15 monthly fee I was charged. I do not want AEP to tack extra monthly fees on in order to access renewable energy.	Mixed
Residential Non-PIPP	Give customers credits/rebates to purchase their own renewable energy equipment for their home. Do not force every customer to bear the cost.	Mixed
Residential Non-PIPP	Will there be incentives for residential or commercial solar installations?	Mixed
Residential Non-PIPP	Don't raise my energy rates because of these new investments. Any investment in new technology should reduce energy costs	Mixed
Residential Non-PIPP	We went solar because we are tired of getting d by AEP	Mixed
Residential Non-PIPP	Renewable should be treated like a high cost trend. If the energy is truly better than what we have now the cost to customer should not be more.	Mixed
Residential Non-PIPP	Power sourcing should be cost effective (cost neutral). I would not be interested in paying higher prices for the sake of wind/solar.	Mixed
Residential Non-PIPP	Is wind and solar cost-effective and viable in Ohio? I have no idea. Please also consider nuclear despite the recent stigma - long term I believe a combination of multiple sources is the best option. Renewable, nuclear, and limited 'clean' fossil fuels. Glad to see this is a priority for AEP.	Mixed
Residential Non-PIPP	I don't particularly care about how the energy is generated. If the utilization of renewable energy is financially advantageous to me, great. If not, let those that view the topic as paramount spend their money on personal sources of renewable energy.	Mixed
Residential Non-PIPP	You should encourage homeowners to install solar panels.	Mixed
Residential Non-PIPP	It's going very slow. You shouldn't have a survey to see if it's wanted, just do it. Your customers will thank you for it. But DON'T hike prices for the investment because you already make billions of dollars a year in profit. You will create loyalty if you invest yourselves and not off the backs of your customers.	Mixed

Residential Non-PIPP	The survey is screaming that you want to go in front of the energy commission to ask for an increase in utility costs based on the fact to promote clean energy / renewable energy. In so many words you are looking for an excuse to raise rates and at the same time really produce nothing and invest nothing into renewable energy. Just to make bigger profit without any real change on your part. I know you will use my words to bite me in the butt in the long run by playing up some big campaign to dupe the energy commission to raise my rates under the falsehood that you are bending to the people's will of wanting renewable energy. You will state that this doesn't come without costs and you need to raise the rates. Just another "emperor's new clothes" rate increase by you. I wish that one time you would actually do what you claim you will do without raising our rates. However, I can see the writing on the wall. You will use this to get your rate increase and then do nothing.	Mixed
Residential Non-PIPP	A solar power co-op between AEP and homeowners would be awesome.	Mixed
Residential Non-PIPP	Wind production needs to provide a protection to prevent slaughtering birds	Mixed
Residential Non-PIPP	It would be good if AEP made investments in distributed generation via rebates or other means to encourage roof top solar or wind to decrease the reliance on transmission network.	Mixed
Residential Non-PIPP	use the most efficient source (costwise) for electricity. If solar, hydro, wind, is cheaper then use it. Don't spend investment money on inefficient sources	Mixed
Residential Non-PIPP	More solar incentives, strengthen delivery infrastructure to not allow power outages. Think longer term and at a systems level.	Mixed
Residential Non-PIPP	I have an EV and would consider a solar powered house	Mixed
Residential Non-PIPP	while it appears beneficial-is it cost effective-fuel cells are my choice in the home-no transmission lines	Mixed
Residential Non-PIPP	Incentives for consumer owned grid connected alternative energy sources.	Mixed
Residential Non-PIPP	More home or business mounted solar.	Mixed
Residential Non-PIPP	Partner with and encourage residents who can have solar or wind power on their property to be able to put any extra power generated back into the grid. Yes, it's your infrastructure, but there is a way that you can still make money, the residents who invested in renewable energy can get some pay back, and the overall system is more enduring.	Mixed
Residential Non-PIPP	Adding solar to my house was pretty easy. AEP was reliable and made it easier than four years ago. Would AEP consider incentives to encourage more homes to adopt solar? If getting above 4.5% is your goal, then maybe further incentives are necessary.	Mixed
Residential Non-PIPP	My husband used to work at a scrap yard. I KNOW how much AEP wastes in materials. How about you stop doing this and invest it in renewable resources.	Mixed
Residential Non-PIPP	Help homeowners who want to go solar.	Mixed
Residential Non-PIPP	Do us a favor, and absorb at least some of the costs yourself, since eventually you'll need to use all renewables anyway	Mixed
Residential Non-PIPP	We need residential programs to promote solar on homes. Every house in Ohio should have solar panels to reduce peak consumption. I am very interested in him having solar panels at my house.	Mixed
Residential Non-PIPP	Allow customers to provide electricity to grid	Mixed
Residential Non-PIPP	I want AEP to hold high ethical standards in considering the environmental impact and local community disruption caused by all forms of electricity generation, now and in the future.	Mixed

Residential Non-PIPP	Take care with wind power not to kill or injure migrating birds.	Mixed
Residential Non-PIPP	I am open to the concept. However, I feel that I am not as knowledgeable about the topic as I should be. I would be interested in installing solar panels. As long as the installation cost are not prohibitive.	Mixed
Residential Non-PIPP	I am all for it, provided the cost associated with the investment does not increase to overall cost to the consumer.	Mixed
Residential Non-PIPP	Do not pass the cost on to your customers. Find a way to pass the savings on to customers. You will save money.	Mixed
Residential Non-PIPP	Solar as a primary. Wind requires too much upkeep of the turbines. Wind turbines are also unsightly and solar is less unsightly if installed prudently.	Mixed
Residential Non-PIPP	Renewables are the future and should be invested in because it's the right thing to do and we should rely on oil or coal which have a finite life span. However this shouldn't be done on the backs of customers dollars to protect AEPs bottom line and shareholders. Renewables should start to replace old generation. Not be an add for cost while you protect profit margins and ceo salaries and dividends.	Mixed
Residential Non-PIPP	I would love to use solar power shingles, however my HOA does not allow any sort of solar equipment. Very disappointing.	Mixed
Residential Non-PIPP	There should be more options available that provide incentives to customers who stabilize their energy consumption. Dealing with fluctuating demand can create a lot of wasted natural resources if the power company has to constantly start and stop wind turbines in order to keep voltages regulated across the grid. As an energy concious customer, I'm very interested in the benefits of things such as the Tesla power walls; sometimes I'm using 10 amps, sometimes I'm using 100. I believe that if there was an incentive (or more likely, a pentalty) for me to not exceed a certain usage figure in a given day, that my bill should reflect that. I would consider purchasing a power wall if that meant my steady 20-amp usage throughout the day would lower my bill vs my wildy fluctuating consumption. ...This incentive or penalty could be accomplished by varying the cost per kwh depending on the time of day or even like how a lot of commercial or industrial billing occurs -- by taking peak usage into consideration. ...Hopefully that makes sense. Thanks.	Mixed
Residential Non-PIPP	There is a balance of developing renewable energy to make future improvements with the costs associated to do so - there weren't any questions regarding costs so I assumed price to consumer is negligible.	Mixed
Residential Non-PIPP	I think its a good idea, enviromentally speaking, but fear it will be used as an excuse to raise an already high electric bill.	Mixed
Residential Non-PIPP	Assist users with adding home solar to add back to the grid	Mixed
Residential Non-PIPP	Nurture customer solar & net metering.	Mixed
Residential Non-PIPP	Let us add solar and sell excess power to AEP	Mixed
Residential Non-PIPP	I am personally researching solar panels. Does AEP have any resources to help your customers with this choice.	Mixed
Residential Non-PIPP	I worry it will be very costly and AEP will pass those costs on to their customers.	Mixed
Residential Non-PIPP	I get the impression that if a home owner gets a professionally installed and certified solar or wind solution that they don't receive fair value for anything they put into the grid if they net produce on any month. Green is Green, should not penalize if that is truly occurring.	Mixed
Residential Non-PIPP	I believe as technology brings renewable energy into line cost wise to other production methods the production will switch on it's own	Mixed

Residential Non-PIPP	If it is good for people, profit and planet, then it is sustainable. If this is just a green initiative to "clean up the air" without a business plan, then it will fail. And I don't mean subsidies and sky high rates, either. There is always an up-front investment...make it a bond issue...or empower people to generate power on their own land and sell it back to the grid...that is energy independence and sustainability.	Mixed
Residential Non-PIPP	It would be ideal if solar energy could be passed from one customer to another or even allow the customer to rent or purchase solar units for power.	Mixed
Residential Non-PIPP	Cost to implement and operate should be equivalent or close to the existing generation cost (to the customer).	Mixed
Residential Non-PIPP	I did not see solar as an option. Our local schools use solar. Rebates would be good to help people afford solar energy at home that will further diversify the energy supply.	Mixed
Residential Non-PIPP	Help make solar panels (for middle class) more affordable.	Mixed
Residential Non-PIPP	I'd like to see a clear and honest discussion of the costs and benefits. My impression is that the costs would be substantial and the benefits illusory. I understand that significant capex will increase AEP's rate base and profits, but those are not the benefits I'm looking for.	Mixed
Residential Non-PIPP	Do it over time. Not all at once.	Mixed
Residential Non-PIPP	help people put up panels on roof tops and also by back what they don't use see others that have done this very successful	Mixed
Residential Non-PIPP	Would love to have solar panels on my home. If there was an affordable program to make this happen, we would sign up immediately.	Mixed
Residential Non-PIPP	I would be very interested in having solar panels on my roof and in my neighborhood to generate electricity locally. If I could afford the up front cost I would have panels installed tomorrow.	Mixed
Residential Non-PIPP	What about consumer generated power?	Mixed
Residential Non-PIPP	Solar energy produced on vacant sites that would otherwise be unused makes sense, for example, landfills and rooftops. Wind power makes sense where there is enough wind and does not create visual obstruction, noise and bird kills.	Mixed
Residential Non-PIPP	If a home owner installs solar panels do they get a discount or rebate on the cost?	Mixed
Residential Non-PIPP	we shouldn't be gouged in pricing for using renewable energy	Mixed
Residential Non-PIPP	If you offer to install solar panels, I would be interested.	Mixed
Residential Non-PIPP	Service is more expensive than other options when you go direct through AEP, so hope this is well intended & not a way to increase prices.	Mixed
Residential Non-PIPP	Excellent idea if it can be done gradually and in keeping with newer technology to minimize any energy costs that would be passed on to consumer	Mixed
Residential Non-PIPP	The issue is not as simple as trading a coal plant for a wind farm because it's simply renewable. The focus should be on which source least damages the environment taking into consideration all costs.	Mixed
Residential Non-PIPP	I feel that AEP should find ways to utilize renewable energy, but I am also a realist. I know that these changes cannot happen overnight, and even with the benefits of renewable energy, there are drawbacks	Mixed
Residential Non-PIPP	Concerned about the ability to store renewable energy since solar and wind can't be relied upon 24/7.	Mixed
Residential Non-PIPP	Don't abandon nuclear	Mixed

Residential Non-PIPP	I still believe that a clean way to use coal should continue to be reserached	Mixed
Residential Non-PIPP	I am a retired chif engineer of a plastic products packaging company, and recognize the need for cost effective power to our companies as well as the need to improve our atmosphere reducing the greenhouse effect.	Mixed
Residential Non-PIPP	Produce clean renewable energy, do not leave garbage from its production. Years ago I saw gas being burned off an oil well. I was told the gas was not worth saving. As a child I thought this was stupid. Oil company left the site a nasty filthy pit after removing the pumper.	Mixed
Residential Non-PIPP	keep the cost of electric down, use the most cost efficient means	Mixed
Residential Non-PIPP	I donâ€™t mind if AEP invest in these, but I do not want to bare the cost way of an increased bill for you to make your investment off of my dime. Iâ€™d rather continue using the power I get now. Thank you	Mixed
Residential Non-PIPP	Only if it is economical to customers. There is plenty of NG and also nuclear energy with the right controls and clean technology.	Mixed
Residential Non-PIPP	Finding ways to utilize all varieties of energy; create new jobs for residents of Ohio; and reduce what we're paying each month on our electric bills.	Mixed
Residential Non-PIPP	Renewable energy should be provided to businesses and consumers at no additional cost. Itâ€™s natural energy so no fees are necessary. Cost to convert to these sources should be footed by AEP. Additionally if a household uses less energy than others a rebate or credit should be offered.	Mixed
Residential Non-PIPP	Coal has served us well, no doubt. Wind and solar energy should continue to be explored.	Mixed
Residential Non-PIPP	I really like that you are considering solar. It is a much better choice than wind power.	Mixed
Residential Non-PIPP	Is it a good investment? How reliable is it? Don't just do something because its politically correct. If its a viable source of energy and cost effective I am all for it. If its not then don't. If you are going to do it keep those jobs in OHIO.	Mixed
Residential Non-PIPP	Don't raise prices just to be "green". It has to balance.	Mixed
Residential Non-PIPP	Are the plans to take up lots of land to create huge solar fields/wind fields or to potentially retrofit homes individually to prevent more deforestation?	Mixed
Residential Non-PIPP	A partnership between AEP and owners of solar panels would be phenomenal. I wouldn't want to compete with you, I'd want to work with you in achieving that and I think other citizens would agree.	Mixed
Residential Non-PIPP	I would put solar panels on my roof if I had someone I could trust to set it all up and ensure everything was done correctly.	Mixed
Residential Non-PIPP	While I agree with migrating coal to natural gas as coal plants obsolete, the decision as to choice should be made solely in the interest of providing customers with the lowest cost source. If solar and wind don't compete without subsidies, then they are not ready for consideration	Mixed
Residential Non-PIPP	I believe it is important to balance competitive costs/pricing while still making investments to manage long-term risks and advancing technology that potentially positively impacts the environment, energy independence, and long-term costs.	Mixed
Residential Non-PIPP	Cost is a factor, since it should not be done for PR and politically correct reasons, but only if practically expedient.	Mixed
Residential Non-PIPP	Cost vs Benefit	Mixed
Residential Non-PIPP	Focus on cost effectiveness not PR or political correctness.	Mixed



Residential Non-PIPP	I would like to see funding for clients of AEP to be supplied with reduced cost application of wind and solar on their properties.	Mixed
Residential Non-PIPP	I don't want to do this just to say we're doing it. It should be cost-effective. It should pay for itself, or else use other methods. Diversity is a reason to do it that might require some added expense, but I believe innovation will bring about the changes needed to drive investment in this arena. We don't need to force it.	Mixed
Residential Non-PIPP	I want the most efficient power generation possible. Paying more for politically correct electricity generation does not interest me.	Mixed
Residential Non-PIPP	I would like to see encouragement (financially and technologically) of aep for existing customers to supplement energy consumption with residential production of energy through wind and solar.	Mixed
Residential Non-PIPP	If I could I would have solar power in my house	Mixed
Residential Non-PIPP	A sustainable model of power generation is needed. I also think that working with municipalities and counties in Ohio on allowing residents to install solar and associated battery systems (eg, Tesla home power) would be a great benefit.	Mixed
Residential Non-PIPP	I hope to be self sufficient one day. I installed a solar system on my house 5 months ago.	Mixed
Residential Non-PIPP	Protection of the local environment is important. We need to invest adequate resources to ensure development is done carefully and responsibly. This is the best compromise between those who want to expand energy development and those who want to protect the environment.	Mixed
Residential Non-PIPP	With more solar panels being used by home owners. It would make sense for AEP to make incentives to those home owners to use their unused energy. Or for them to produce more.	Mixed
Residential Non-PIPP	I will happily look into investing in solar for our home if I know AEP will use any overage I store with solar energy.	Mixed
Residential Non-PIPP	maybe it would be ok,if it is efficient.i just don,t know how to answer these questions.	Mixed
Residential Non-PIPP	Why are we not talking about water turbines? Even if it's on a smaller scale. There's got to be a way to create power from the Ohio river.	Mixed
Residential Non-PIPP	I would be concerned if AEP's electricity rates increased as corporate earnings increased while developing this renewable energy. Also, I am not interested in burdening the costs of developing alternative energy for other customers around the state.	Mixed
Residential Non-PIPP	If wind and solar were the economically superior sources of energy, AEP would be using more of those resources already, wouldn't they?	Mixed
Residential Non-PIPP	I would to see a program where residents can purchase equipment for solar or wind energy at a low cost.	Mixed
Residential Non-PIPP	If research and reality indicated it could be done efficiently and economically so that there are no subsidies then go for it.	Mixed
Residential Non-PIPP	The free market, capitalism, innovation and competition should dictate the rate of renewable energy acquisition.	Mixed
Residential Non-PIPP	There should be an investment in individual home owners generating solar electricity and each adding their surplus to the grid.	Mixed
Residential Non-PIPP	Make it more accessible financially for households to have solar panels.	Mixed
Residential Non-PIPP	Do you have a program for wind or solar generated by the homeowner and feed back into your network?	Mixed
Residential Non-PIPP	Nuclear power has less co2 emissions than coal, is more efficient than coal, wind, and solar.	Mixed
Residential Non-PIPP	Support rooftop home solar..	Mixed
Residential Non-PIPP	make virtual net metering available for community based solar	Mixed
Residential Non-PIPP	Provide solar installation incentives	Mixed

Residential Non-PIPP	Allow credits for energy generation from solar and wind when individuals install solar panels.	Mixed
Residential Non-PIPP	If renewable energy is cheaper then using it is a great idea. Don't charge me a higher rate based on you deciding to use a more expensive source of electricity generation.	Mixed
Residential Non-PIPP	You should organize a campaign to support and encourage home owners to contribute producing renewable energy.	Mixed
Residential Non-PIPP	Would prefer the most economical resource be utilized not the most politically correct. Windmills and hydroelectric have been available for a century yet not utilized. Solar is expensive and trendy. Fear of being usurped by another utility or group seems to be the driver of usage. Our rates should be taken into consideration and "investments" in unpredictable or more expensive alternatives needs to be the driver not politically correct trendiness.	Mixed
Residential Non-PIPP	Should support homeowners placing solar panels on house	Mixed
Residential Non-PIPP	I'd like to know about how to get solar panels installed on my roof to cooperatively help the supply	Mixed
Residential Non-PIPP	Let's look at cost -- cost to supply, cost to maintain, cost to sustain. Let's do what makes the most sens economically.	Mixed
Residential Non-PIPP	Develop the reliable renewable energy sources before shutting down the coal / natural gas power plants. Wind and solar power generation is not at a stage to replace current power plants - can only supplement current energy sources.	Mixed
Residential Non-PIPP	I would like the possibility to access to information from AEP and its affiliates to gain knowledge on affordable options for home/residential solar and other renewable energy solutions/services	Mixed
Residential Non-PIPP	What is generated in Ohio should be sold to Ohio: citizens, hospitals, industry. We are or used to be the center of transportation. We could be that again. Our population demands we be place in a higher level of national importance. Too many people along the Ohio river are still in the poverty category, we need to focus on job re-training to get them into entry level jobs in the energy sector as it pertains to renewable generation operations.	Mixed
Residential Non-PIPP	should lower bills as plenty of return on your stock should cover investments	Mixed
Residential Non-PIPP	What opportunities are there for residents, like us, to utilize solar within suburb neighborhoods?	Mixed
Residential Non-PIPP	Provide more incentive and make it easier for individual households to adopt and participate (i.e. solar panels on the house, etc.)	Mixed
Residential Non-PIPP	I am all for renewable energy and all of the benefits that come from it, but as a sole provider for my household I am not for it enough to see costs that are passed on to the customers in the form of higher electric bills.	Mixed
Residential Non-PIPP	Look and see what mistakes or consequences that other companies and state have made in the past. Don't be in a rush to get it out there.	Mixed
Residential Non-PIPP	It would be great if electric generation costs savings were passed to the consumer.	Mixed
Residential Non-PIPP	Help customers put solar panels up to help relieve current grid	Mixed
Residential Non-PIPP	Get energy where it's lowest cost.	Mixed
Residential Non-PIPP	Give better incentives for customers who want to install grid tied solar generation on their roofs.	Mixed
Residential Non-PIPP	AEP shut down 2 coal fired plants here. I'd like to see something built here in Beverly, Ohio to replace the job losses	Mixed

Residential Non-PIPP	Between wind and solar, wind is the better choice because the sun goes down and those systems need storage batteries. At best the utilization is 50%. Winds continue to blow and you can generate power at night.	Mixed
Residential Non-PIPP	Windmill farms can be noisy and ugly. I think solar does not have these problems.	Mixed
Residential Non-PIPP	Don't like the wind mills everywhere: unsightly and hear ROI is less than 5% so why bother, especially if we end up paying more for less? Also, what about water? There are so many rivers, why can't we tap into those existing resources with water generated turbines?	Mixed
Residential Non-PIPP	If renewable energy development is a lower cost source, I'm all for it. I would like to see improvements in the grid (Power transmission and substation upgrades) as a high priority too.	Mixed
Residential Non-PIPP	Look for more affordable ways of installing solar panels. In Europe they have solar equipment for residential homes that look like a sculpture.	Mixed
Residential Non-PIPP	Develop renewable resources only if they can be competitive with other energy sources.	Mixed
Residential Non-PIPP	it must justify the cost, not be a government funded , tax payer funded project.	Mixed
Residential Non-PIPP	Put Solar voltaic cells on my house.	Mixed
Residential Non-PIPP	Cost is important when deciding to increase the amount of renewal energy.	Mixed
Residential Non-PIPP	You pay for it yourself. You have fleeced your customers enough as it is. How about you do the right thing and treat your customers as partners. Customers benefit by reducing their expenses, and you benefit because customers are happier. Don't worry, you will still make enough money to survive.	Mixed
Residential Non-PIPP	It is important to understand the impact on ecology as well as economy. If our use of resources tramples on the rights of animals then we must find another way to live with them. That is also important to me. Consider their right to exist as well.	Mixed
Residential Non-PIPP	If it will help save my household money, I am all for it.	Mixed
Residential Non-PIPP	Would love a program to help individual consumers to obtain privat renewable energy. I e solar panels or wind turbine	Mixed
Residential Non-PIPP	what do you do when the wind doesn't blow and at night and when there is cloud cover? Is there any potential in geothermal?	Mixed
Residential Non-PIPP	Please make it easier to select renewable energy and energy efficiency as choices through AEP. Explain how the bill works through education efforts and what each portion of the consumer's bill goes to cover.	Mixed
Residential Non-PIPP	Cost comparison existing versus proposed renewable.	Mixed
Residential Non-PIPP	No need to push renewables. Keep the generation playing field level. Lowest cost generation first.	Mixed
Residential Non-PIPP	I am in favor of solar panels on roofs of houses	Mixed
Residential Non-PIPP	Do you offer renewable energy as an option for home use?	Mixed
Residential Non-PIPP	Help customers go off the grid - allow them to opt in as needed - especially if they can produce excess energy that can be sold back to AEP	Mixed
Residential Non-PIPP	I'd like for are cost, the customer to go down if your use renewable sources, such as wind and solar it shouldn't cost the customer as much	Mixed
Residential Non-PIPP	Consider the feasibility of retrofitting existing dams with hydroelectric generating assets. Floating solar panels might be worth investigating also.	Mixed
Residential Non-PIPP	Yes, increasing renewable energies should not increase our monthly bills. Need to achieve proper balance by making renewables cost effective.	Mixed

Residential Non-PIPP	If renewables can provide power at equal or lower cost than we pay today, that is fine. If other power sources will increase the cost of electricity than I would not be interested.	Mixed
Residential Non-PIPP	I'd like to see options for solar roofs paid off by generating and supplying electricity back to AEP.	Mixed
Residential Non-PIPP	In general, reduction of dependency on foreign energy sources is positive; the initiatives need to be cost-effective.	Mixed
Residential Non-PIPP	Renewable energy should not harm the earth.	Mixed
Residential Non-PIPP	Only make the investment if it will save consumers money in obtaining their electricity. I'm not interested in proving up industries that can't survive in a free market. Contact me if the reader is not familiar with a free market. I know many seem to be more and more with the concept, just kidding. Thanks for the opportunity to provide feedback.	Mixed
Residential Non-PIPP	I WOULD LIKE HELP SETTING UP SOLAR PANELS AT MY HOUSE. I ALSO NEED HELP WITH SETTING UP A CHARGING STATION FOR AN EV.	Mixed
Residential Non-PIPP	I am all for solar renewable energy. The wind farms however, I do not support.	Mixed
Residential Non-PIPP	If AEP is picking a technology, then solar within Ohio or within our electricity market (PJM) would be good.  However, leveling the playing field across electricity generation technologies by properly pricing carbon emissions (and other pollutants) via a tax or cap-and-trade regime would be preferred. Market-based mechanisms are best economic policies to yield the desired benefits at the lowest total cost.	Mixed
Residential Non-PIPP	As older methods of electricity generation deteriorate they should be replaced with renewable sources.	Mixed
Residential Non-PIPP	Wind and Solar are great goals but they require huge amounts of land and endanger hundreds of thousands of birds. There simply is not enough land to satisfy our energy needs with Wind and land based Solar. While Solar and Wind generation should be increased two other sources should be developed that too many "loud" people have shouted down, These are nuclear power with the newer safer designed reactors and microwave power from solar collecting satellites. Both the later two are achievable if someone puts the effort and dollars into it now in parallel with Solar and Wind. Too much of the direction of future energy decisions is being driven by politics & PC'ism rather than science and economics.	Mixed
Residential Non-PIPP	I am not interested in seeing whatever AEP decides to do costs me more money. If solar panels are installed to bring renewable energy it should also cost less to the consumer.	Mixed
Residential Non-PIPP	Offer solar rooftop package to customers	Mixed
Residential Non-PIPP	While expanding/developing renewable energy sources, it is extremely important that it is also cost saving to the consumer.	Mixed
Residential Non-PIPP	Use local labor in the state of ohio.if using solar or wind try utilizing southeastern ohio for all three.	Mixed
Residential Non-PIPP	I've looked several times into installing solar panels on my home, but the cost is still too restrictive. Would very much support your development of clean energy resources.	Mixed
Residential Non-PIPP	I'm all for renewable energy, but I think I feel like most people, It's good as long as it doesn't increase electricity rates.	Mixed
Residential Non-PIPP	A rather interesting source about which I have not heard much in development is geothermal HVAC, i.e. underground heat pumps	Mixed

Residential Non-PIPP	Sounds good , but it's not wise. without a strong nuke component to any renewable plan, it's doomed to failure. .	Mixed
Residential Non-PIPP	Are you also using water power as a source? I'm glad to know that you are moving in the direction of renewable energy.	Mixed
Residential Non-PIPP	Please develop those that also make economic sense	Mixed
Residential Non-PIPP	I'm good with this pursuit but I'm concerned that it will increase rates. I want low prices. I am ok with renewable energy. Those are my priorities. :)	Mixed
Residential Non-PIPP	It should be cost effective i.e. be expected not to cause an increase in rates.	Mixed
Residential Non-PIPP	If it helps to lower my bills, by all means invest.	Mixed
Residential Non-PIPP	If AEP is seeking to change to renewable energy, It's very important that those working in the Gallopolis area be offered jobs there, because this community is coal country, & if jobs are moved elsewhere, this whole community could shut down, & people around here are struggling so much as it is.	Mixed
Residential Non-PIPP	You should buy back power even past the zero amount.	Mixed
Residential Non-PIPP	AEP should pay for their own investments and not expect the customer to pay more for renewable green energy that cost less to produce.	Mixed
Residential Non-PIPP	I would love to see a drop in price for consumer-friendly solar power. A neighborhood or county commitment to purchasing solar powered equipment might lower the price enough to get a majority to agree to installing it.	Mixed
Residential Non-PIPP	make sure the method is financially feasible	Mixed
Residential Non-PIPP	My husband works for an Ohio based solar design and installation firm, ARP-solar, and if AEP doesn't step up their game, ARP-solar will take over renewable energy generation in Ohio - one roof at a time.	Mixed
Residential Non-PIPP	Windmill farms are killing birds! They are ugly monstrosities! I don't believe that we need windmill farms cluttering our farmland! / I have no problem with solar power!	Mixed
Residential Non-PIPP	I would love to see this happen - but is the cost going to be paid by us, the consumers??	Mixed
Residential Non-PIPP	Solar and wind takes land which is required to supports Ohio's agriculture. If wind turbines or solar panels would not disrupt our forests or wildlife then I support AEP's endeavor however, as I consumer I would want this concern addressed. I'm 100% in favor of nuclear energy.	Mixed
Residential Non-PIPP	I don't believe the quality of service should suffer due to this venture. Additionally, the current price of power needs to remain the same with AEP providing the capital to fund the venture with which they will profit. This is not a cost that needs to be passed to the consumer.	Mixed
Residential Non-PIPP	Renewable energy sources have to be cost effective compared with other conventional sources. If that can be done in Ohio, then locate them in Ohio. If they are better suited for other states, then locate them there.	Mixed
Residential Non-PIPP	only if it will reduce costs to customer	Mixed
Residential Non-PIPP	I do not know enough about it. We need to make sure that this is NOT overly expensive. A small premium provided that this is used for investment and making the renewable energy more efficient is realistic. However, this should not be corporate greed.	Mixed
Residential Non-PIPP	It shouldn't raise our electric bill's.	Mixed
Residential Non-PIPP	It's a good idea and the right thing to do but not at a higher cost to the customer as Aep like all other utilities companies profit and price gouge to the extreme.	Mixed

Residential Non-PIPP	I support cost neutral development. I do not rate increases for renewable energy. We pay more than enough already.	Mixed
Residential Non-PIPP	Development of renewable energy should be done in a cost effective manner with the end cost to consumers a priority	Mixed
Residential Non-PIPP	Create a solar program that is easy to understand, helps the consumer and helps you. /	Mixed
Residential Non-PIPP	Please do not start using more free resources and then turn around and charge us more, using solar and wind should make our bills cheaper not more expensive	Mixed
Residential Non-PIPP	Can I rent my roof to AEP to install solar panels the utility can use to generate electricity for the city?	Mixed
Residential Non-PIPP	Don't waste our money on renewable sources that the ROI isn't profitable and requires Federal dollars to subsidize.	Mixed
Residential Non-PIPP	It will be ok if it's affordable poor people can't afford huge prices I can't buy my groceries now until my utility bills come in it's not a very good feeling to not be able to eat until your utilities are paid first	Mixed
Residential Non-PIPP	Great if you can manage it, but I don't want to pay significantly more for it. (Some premium is probably unavoidable; double? Not okay).	Mixed
Residential Non-PIPP	The cost should be less than now.	Mixed
Residential Non-PIPP	Im interested in expanding our green eneegy but think the additional cpst needs to be considered carefully. Currently many electric bills are unreasonable putting hardship on your customers	Mixed
Residential Non-PIPP	The technology has been available for many years. AEP deliberately fights and charges people for using renewable energy. I live in poverty and get charged an arm and a leg for energy costs. I honestly don't believe AEP gives a █████ what we think, other that how can they gain knowledge to destroy the renewable energy movement. █████ OFF	Mixed
Residential Non-PIPP	I'm all for renewable energy. But a landscape of windmills in Ohio doesn't excite me. But not opposed to a few. Solar would seem better.	Mixed
Residential Non-PIPP	Only if it makes electricity cheaper. Don't increase my bill to make someone feel good.	Mixed
Residential Non-PIPP	I would like to see solar programs available for individual homes	Mixed
Residential Non-PIPP	I am opposed to wind powered energy and fracking for renewable resources. Wind Power is not nearly as efficient as solar and it blights the surrounding areas with it's intrusiveness to the landscape	Mixed
Residential Non-PIPP	Would like info about installation on my house	Mixed
Residential Non-PIPP	AEP should not force its coustomers to pay for its upgrades and investments. █████ AEP CORP.	Mixed
Residential Non-PIPP	I would like to see AEP providing an option to install solar panels on roofs of homes to help reduce electric costs. Not only would this help the customer, AEP would also benefit.	Mixed
Residential Non-PIPP	Why not generate at each house instead of centrally? AEP would be main supplier through coal, gas, and nuclear. Each household would reduce needs from AEP.	Mixed
Residential Non-PIPP	Offer options to which rental customers can take advantage. Provide reasons for landlords to install renewable sources, such as solar roof tiles.	Mixed
Residential Non-PIPP	I would hope this effort would reduce energy costs to the consumer and not raise them.	Mixed
Residential Non-PIPP	Need less emphasis on profit to AEP and more money, research, resources put into making renewable energy available to everyone - so we are no longer at the mercy of giant power companies.	Mixed
Residential Non-PIPP	I would like to see a program to install renewable energy resources at a local level. An example would be to have AEP Ohio install solar panels on the roof of a residence.	Mixed



Residential Non-PIPP	offer homeowners the option of adding AEP Ohio Solar panels to reduce energy bills by allowing the consumer to participate in the energy diversification production	Mixed
Residential Non-PIPP	Do not do anything that is not already economical without government subsidy.	Mixed
Residential Non-PIPP	AEP's only investment into renewable energy should be to offer credits/rebates to customers for them to purchase solar panels for their own property. Each customer should have their own choice regarding renewables and NOT be forced into it by having their rates increased due to the online opinions of others.	Mixed
Residential Non-PIPP	Hopefully that would bring cost down for electricity /	Mixed
Residential Non-PIPP	If embarking on the development of renewable energy will cause electric bills to escalate, then I do not support it. Have your CEO and other administrators pay for this development out of their enormous salaries.	Mixed
Residential Non-PIPP	Hopefully this will reduce the amount of our bills each month.	Mixed
Residential Non-PIPP	We want renewable energy to be employed. But want our costs to stay down.	Mixed
Residential Non-PIPP	Develop sources other than coal and nuclear when these sources are economically too expensive	Mixed
Residential Non-PIPP	Only if it makes it cheaper to the end user	Mixed
Residential Non-PIPP	AEP needs to focus on energy and the right mix of reliable sources. It should investigate alternative sources without regard to politics, tax policy and the whims of the electorate.	Mixed
Residential Non-PIPP	Lets make the bills more reasonable.....use our system and solar panels, help the people to know how to use them, help the little people....not the rich	Mixed
Residential Non-PIPP	Diversifying into alternate energy sources should be a priority. Wind Turbine, Solar, Water generated ways all provide so many less permanent detriments to our overall environment. Finite sources of energy production, like coal, will not always be available. Even investment into renewable methane sources should be an option kept on the table.	Mixed
Residential Non-PIPP	Please continue to provide the lowest cost, most efficient energy. Politically correct goals that are not economically sound investments do not benefit your customers. As renewable energy becomes economically competitive with other sources, then absolutely make those investments.	Mixed
Residential Non-PIPP	Ohio's climate not be the best for solar (too many cloudy days), but there are plenty of open fields that could be used for wind. Assuming the property owners are appropriately compensated.	Mixed
Residential Non-PIPP	worth exploring	Mixed
Residential Non-PIPP	AEP is a huge profitable company. Why must I fund AEP regardless of how little the monthly increase in bill considering in order for ME to go solar I HAVE to fund it myself? Use some of YOUR profit to fund renewable energy instead of keeping your bottom line the same by reducing my income by increasing my bills.	Mixed
Residential Non-PIPP	Whatever avenues AEP chooses, they must be cost effective and while I know the start up cost would be high the cost of the new cannot raise the rates to the consumer. If your profit margin increases without we the consumers rates holding steady, or, like a snowball's chance in hell , our bills drop, you will not get support from the consumers.	Mixed

Residential Non-PIPP	maybe providing solar as an option at customer premises would work as well. whatever they don't use goes back on the grid and in the event of natural disasters they would maintain power . If you had several customers in every neighborhood that had solar this would help keep your power grid stable a small investment for your company for a huge investment in to customers. Just my humble opinion.	Mixed
Residential Non-PIPP	I prefer that AEP focuses on solar energy development and expansion. Wind generated power units often interfere and kill/injure wildlife fowl.	Mixed
Residential Non-PIPP	Get municipalities to allow solar panels for individuals use.	Mixed
Residential Non-PIPP	need more long term tax incentives for developers and independent owners of office, industrial or retail to add solar or wind power as alternative sources of energy.	Mixed
Residential Non-PIPP	This is all dependent on the cost to customers. While I personally would pay a bit more, it has to be affordable.	Mixed
Residential Non-PIPP	If solar power were less expensive to install, ie affordable at working class income, use would increase quickly.	Mixed
Residential Non-PIPP	it should be cost effective	Mixed
Residential Non-PIPP	I would like to see more solar than wind generated energy. If wind energy is used, it must be located so as to not adversely impact bird migration and nesting areas.	Mixed
Residential Non-PIPP	in my previous state our energy provider gave deep discounts and rebates for homes that added solar panels and had them setup to collect the energy back into the grid. I have been here a year now and have never heard of such a thing from AEP. So either you have it and don't advertise it or you don't have this kind of program setup.	Mixed
Residential Non-PIPP	Consider nuclear energy generation	Mixed
Residential Non-PIPP	How can we answer when you have not told us what the cost will be to us? everything should have a cost/benefit component which you are not sharing.	Mixed
Residential Non-PIPP	While I see value in investing in renewable resources, I would have to point out that to most consumers, they would rather focus on lower energy bills since the cost of energy rises at a consistent basis, the idea of investing means higher consumer cost. If it can be done at a level that is as cost effective as nonrenewable resources or even if it cost only a little higher , then I would see the value of a cleaner safer fuel for our electricity. thank you!	Mixed
Residential Non-PIPP	Converting to solar and wind energy sounds good, but not if it increases consumer costs.	Mixed
Residential Non-PIPP	Many customers would participate in solar panels if they were more affordable.	Mixed
Residential Non-PIPP	Doesn't windmills kill birds	Mixed
Residential Non-PIPP	I like the thought of renewable energy but I don't want it to take away the jobs people depend on such as coal miners	Mixed
Residential Non-PIPP	Just because it's a renewable energy source, does not mean that the consumer should pay more for it.	Mixed
Residential Non-PIPP	I do not want an increase of my bill because of renewable energy	Mixed
Residential Non-PIPP	I think a company should use their profits to improve or update their equipment and not the customers. stop the MONOPOLY.	Mixed
Residential Non-PIPP	I support renewable energy, but have a concern about wind energy. If you are developing this, you must be responsive to those who do not want wind farms near them. Too often, those who oppose these farms being near them are ignored. Pay attention and do this right! Also, everyone is obligated to know about cobalt mining. Children are basically enslaved to mine it!	Mixed

Residential Non-PIPP	Important to keep jobs in ohio - but renewable sources can take up much land and hurt wildlife - so using energy farm in Nevada may be better than Ohio - Keeps from infringing on too much nature.	Mixed
Residential Non-PIPP	Just need something that, even if has some upfront investment, that is low maintenance and cheaper for customers in the long run	Mixed
Residential Non-PIPP	Renewables are very inefficient and expensive they drive up the cost of my electricity. They cannot stand alone in the market. It's all politically correct	Negative
Residential Non-PIPP	Stop wasting our money on green boondoggles.	Negative
Residential Non-PIPP	I DO NOT want to pay for higher cost unreliable electricity so that some environmentalists can sleep at night. These folks are not even AEP customers who want renewables, let them pay extra.	Negative
Residential Non-PIPP	Don't bother with it until the technology becomes more efficient.	Negative
Residential Non-PIPP	This is a bad idea.	Negative
Residential Non-PIPP	I believe renewables increase the price of electricity.	Negative
Residential Non-PIPP	solar is not cost effective, equipment wears out before it's pays for itself. It should be used only when when practice. You cost to the customer is already to high due to you construction choices.	Negative
Residential Non-PIPP	Put that money into client service	Negative
Residential Non-PIPP	Dont do it. I want cheaper bills...	Negative
Residential Non-PIPP	I want AEP to produce power using the most economical and reliable sources available. At this time, I do not believe renewables provide the most reliable or the most economical power available.	Negative
Residential Non-PIPP	I'm sure some how this is going to cost the consumer big \$\$\$\$. AEP rips off its customers on a daily.	Negative
Residential Non-PIPP	If it costs more, don't do it. We have plenty of resources.	Negative
Residential Non-PIPP	Why don't you invest in buried lines. Upgrade the line infrastructure first!	Negative
Residential Non-PIPP	I don't expect your company to do anything right. Let's call it like it is. You aren't interested in doing anything but taking money from your customers. We are one good thinderstorm away from not having power for weeks because you people won't upgrade your systems. Stop acting like you care about anything. You care about money. That's it. Nothing else.	Negative
Residential Non-PIPP	We are strongly opposed to wind energy as wind turbines have been shown to have detrimental health effects on people and animals including decreased quality of life, annoyance, stress, sleep disturbance, headache, anxiety, depression, and cognitive dysfunction. Suggested causes of symptoms include a combination of wind turbine noise, infrasound, "dirty electricity", ground current and shadow flicker. Don't give in to the politically correct nonsense that wind energy is any kind of viable alternative to fossil fuels.	Negative
Residential Non-PIPP	The wind turbines are ugly.	Negative
Residential Non-PIPP	I'm ok with coal, gas, and nuclear as well, as long as measures are taken to minimize environmental impact.	Negative
Residential Non-PIPP	Windmills and solar are not cost efficient, they take up valuable land and are an eyesore especially the windmills. Ohio is not a good location for either	Negative
Residential Non-PIPP	There needs to be a push for cleaner on-demand energy supplies (i.e. nuclear) to supplement the times when the renewable sources do not produce sufficient supply.	Negative
Residential Non-PIPP	Really could care less. Use whatever is most cost efficient. And that is not solar,wind, etc..	Negative

Residential Non-PIPP	I prefer to do business with "socially acceptable" companies. Socially acceptable companies can not take money from the government or accept tax breaks.	Negative
Residential Non-PIPP	Burn coal. Keep Ohio jobs.	Negative
Residential Non-PIPP	I look at the brownouts California experiences and how they have bought into this and want dependable electricity.	Negative
Residential Non-PIPP	Don't raise customer bills because of political pressure to get into a "renewable energy" boondoggle!	Negative
Residential Non-PIPP	I don't want to pay the higher cost	Negative
Residential Non-PIPP	AEP should generate power that has the best mix for clients and is not subject to the whims of political correctness. Just because it is labeled "renewable" does not make it clean or efficient!	Negative
Residential Non-PIPP	Keep coal	Negative
Residential Non-PIPP	There is no reason to buy energy that isn't cost effective. Until the cost of production of renewable energy reaches the cost of fossil and nuclear, using it is only for publicity and helps on one	Negative
Residential Non-PIPP	From what I have read, renewable energy from solar and wind are expensive and harmful to the environment	Negative
Residential Non-PIPP	I want to know who is going to cleanup the ugly wind/solar farms when the equipment rusts/breaks down or are closed down....	Negative
Residential Non-PIPP	Renewable energy sources have historically increased the cost of electricity to consumers, and at this time are a liability, not a benefit to the public.	Negative
Residential Non-PIPP	I have heard in the past that wind energy is not efficient and uses as much energy as it generates. If so, not sure why adding that would make sense.	Negative
Residential Non-PIPP	they need lower there rates	Negative
Residential Non-PIPP	I believe we need to find more ways to produce energy but I do not believe in the liberal and Democratic Party views on anything including energy.	Negative
Residential Non-PIPP	Cost not efficient - still need electricity to run wind turbines. When product doesn't work anymore, what environmental consequences will occur? I.e. unrecycleable material, cost of replacing them.	Negative
Residential Non-PIPP	this needs to be done without increasing costs to us customers. Really probably would be better and have less environmental impact to invest in nuclear instead.	Negative
Residential Non-PIPP	not in favor if it drives up rates. From what I read, these options need large subsidies to make them competitive and we are charged either through taxes or higher rates.	Negative
Residential Non-PIPP	Until some breakthrough in electrical energy storage occurs Solar and Wind electric generation will remain non economically competitive relative to conventional generation technologies.	Negative
Residential Non-PIPP	I detest the giant wind turbos. Until or unless wind energy can be obtained from smaller and less invasive and ugly means, I will resist these. What good is it to destroy our birds and disturb wildlife, not withstanding the look of pristine land/ water with these, don't think it's a good trade off	Negative
Residential Non-PIPP	It's a waste of money, and can only work with subsidies. Installing solar farms in a state that averages 65 days per year of sunny days is absurd, and we need the backup gas powered plants anyway.	
Residential Non-PIPP	It's a political thing, and has nothing to do with economics. Stick to nuclear and gas	Negative

Residential Non-PIPP	The production of equipment for wind energy creates huge amounts of pollution. Windmills are a real threat to avian wildlife! They are visually extremely unsightly! Solar maybe a better option but great amounts of pollutants are created in the production of solar cells. No "free lunch" in either of these options!	Negative
Residential Non-PIPP	Burn coal. Why is it that I'm using less electric but my bill keeps going up?	Negative
Residential Non-PIPP	Obama tried this with wind farms and it was a huge failure. Whatever way you go, I hope it is with this in mind.	Negative
Residential Non-PIPP	Generating plants are already in place and furnish adequate and reliable power to the point that some units are idled during periods of less demand. The costs associated with the development of solar and wind power does not make sense.	Negative
Residential Non-PIPP	Wind/solar power is notoriously unreliable and extremely expensive way to generate electricity in this area. Although I believe they have their place in the ideal geographical locations, I do not believe they are well suited for Ohio, nor am I willing to pay extra for the electricity generated by these systems. We have an all electric house, we have a geothermal (ground source) heating and cooling system. I love alternative energy, but it HAS to be affordable, efficient, and maintainable. Solar is awesome in the very sunny south west, wind only where there are no alternative energy sources and where no one minds the death toll of the birds.	Negative
Residential Non-PIPP	To save on costs, please produce the minimum legal requirement of renewables. "Renewable" is a nice idea, but it just doesn't make financial sense yet. Taxpayer subsidies might make it look better, but we're still footing the bill... but through our taxes instead of electric bill.	Negative
Residential Non-PIPP	It is a shame that we cannot use the coal that we have.	Negative
Residential Non-PIPP	Coal.	Negative
Residential Non-PIPP	Do Not support renewable energy	Negative
Residential Non-PIPP	Usually these renewable energy sources consume more natural resources to build than they will save in their lifetime.	Negative
Residential Non-PIPP	I find it unfortunate that government regulations pushed AEP away from coal. I believed the scrubbers being used at coal plants were good.	Negative
Residential Non-PIPP	I believe wind energy does more harm than good. Look at the amount of concrete and steel used to build them and the amount of maintenance required. It also is a health hazard to neighbors who are not compensated for the encroachment on their land. I oppose this.	Negative
Residential Non-PIPP	Stop wasting money on these expensive sources of power when there are much cheaper and proven alternatives.	Negative
Residential Non-PIPP	Renewable energy is nice. But, I want and need RELIABLE energy. I am not willing to pay extra for fad projects. I am not willing to sacrifice reliability for untested, unproven PC projects that are not as efficient, not as reliable.	Negative
Residential Non-PIPP	All this "climate change" GARBAGE is nonsense. COAL is our area's greatest natural resource, and we should use it. Using COAL keeps the COST of our electricity LOW, and keeps many in Ohio and neighboring states EMPLOYED. QUIT closing coal-fired power plants just because the radical left says you should.	Negative
Residential Non-PIPP	Measure the real economic and environmental consequences of renewable energy, including the manufacture of equipment required. There are real dangers with this path.	Negative

Residential Non-PIPP	The marketing of renewable energy suppliers resembles that of disreputable products such as cheap electronics or cancer insurance.	Negative
Residential Non-PIPP	Renewable energy is great, but it doesn't need to be developed by AEP Ohio.	Negative
Residential Non-PIPP	I understand that we will still need traditional fuel sources for electricity because of reliability, especially in Ohio where there is less wind, less sunshine and less hydro potential.	Negative
Residential Non-PIPP	Clean Coal baby	Negative
Residential Non-PIPP	I have no interest in AEP increasing the use of renewable energy. I do not want to pay the increased cost of such energy sources. I'm fine with the reliable, efficient and economical energy sources such as gas and coal.	Negative
Residential Non-PIPP	renewable energy is way to expensive	Negative
Residential Non-PIPP	I do not want energy provided by wind. The wind mills or whatever you call them are not cost-effective and they kill tons of birds. As for solar energy in central OH, good luck with that!ðŸ™,	Negative
Residential Non-PIPP	AEP is sitting on plentiful natural gas. Use it to produce the cheapest electricity possible.	Negative
Residential Non-PIPP	Suggest you double and triple check your projected return on investment before you go spending a bunch of cash on renewable energy.	Negative
Residential Non-PIPP	It would be a poor use of ratepayer funds. Those are intermittent and unreliable forms of energy production. Better to keep nuclear plants running, with natural gas as peaking units.	Negative
Residential Non-PIPP	Renewable energy is not cost competitive with traditional sources without government subsidies supporting and distorting the market. It is feel good policy that accomplishes little. The free market is best to address current and future energy needs.	Negative
Residential Non-PIPP	Renewable energy is an expensive farce, and will never be able to supply adequate energy. Coal, oil, and gas is the only real answer.....and we have lots of those items.	Negative
Residential Non-PIPP	Stop wasting my time and money on pipe-dream ridiculous utopian fantasy-land liberal environmental policies! Dig for coal and burn it!!! Simple as that. You should be spending your time and investment money on ways to burn coal more efficiently so you get more bang for your buck. And btw, isn't hydroelectric generation a cheaper alternative to wind and solar anyway? If your soooooo concerned about the environment (yea right, you're just virtue signaling with this survey nonsense), then build cost effective hydro producing lakes every where you can!! Solar and wind power. Pfft. What a joke! Hippies	Negative
Residential Non-PIPP	Use clean coal technology until the supply makes it no longer feasible.	Negative
Residential Non-PIPP	AS A RETIRED COAL MINER CLEAN COAL IS THE ONLY WAY TO GO	Negative
Residential Non-PIPP	I believe coal mining is extremely important, so anything else is unimportant to us.	Negative
Residential Non-PIPP	I am tatallly against the use of windmills to produce energy. They are killers of birds and are ugly to observe!!!	Negative
Residential Non-PIPP	Bring back reliable cheap pleantiful coal with modern reasonable pollution standards	Negative
Residential Non-PIPP	Put your money into your distribution system. Your reliability totally sucks.	Negative
Residential Non-PIPP	I don't like the turbines. For the amount of electricity they provide, it's not worth it. It also defeats the purpose of the environmental impact because I think they produce their own impact on the environment.	Negative



Residential Non-PIPP	Believe it will be too costly to implement and maintain therefore passing more costs to the consumer. Also, flying creatures such as birds may be harmed.	Negative
Residential Non-PIPP	It was a mistake to go away from your coal power plants.	Negative
Residential Non-PIPP	Power generated by wind and solar are very expensive. I believe the country is better served by using coal and natural gas.	Negative
Residential Non-PIPP	renewable energy, particularly wind, is a worthless feel good waste of resources	Negative
	<p>Ohio ranks about # 40 out of the 50 states for the quality of wind and solar for energy. This means "green" energy is energy that takes a lot of my "Green"</p> <p>A large solar installation in sunny CA in it 4 th year produced a record high of 1/4 of its predicted yearly KWH output. During the peak noon sun CA must pay other states to use their excess power, buying it from residents at full retail rates, shooting up costs.</p> <p>Modern countries like CA, France and Sweden enjoy safe, reliable and plentiful power at about 5 c/KWH from Nuclear (without the choking regulations shooting the cost out of sight), China is building 19 new plants and went critical on 4 Westinghouse a few years ago, 7 years after ordering them.</p> <p>Ref: Wall St. Journal 8-13-18, pagesA17 Phony numbers and B9 top. Also Dr. Muller, "Physics for Future Presidents" Seville Spain generates solar for only 28 cents/KWH ! Germany shutting down Nuclear has so far tripled power costs and increased carbon emissions greatly.</p>	
Residential Non-PIPP	[DELETED DUE TO PERSONAL IDENTIFIABLE INFORMATION]	Negative
Residential Non-PIPP	Wind and solar energy will never come close to meeting the energy needs of our economy. The only reasonable sources of energy are fossil fuels and nuclear energy. Renewable energy is simply pie in the sky dreams of ignorant citizens who are unaware of this reality.	Negative
Residential Non-PIPP	nuclear could replace all of the choices you're looking at.	Negative
Residential Non-PIPP	For now, it's a toy.	Negative
Residential Non-PIPP	Wind farms are an ugly and terrible plight on local communities.	Negative
Residential Non-PIPP	Any investment should make economic sense based on its own merits, and not rely on tax subsidies or redistribution of wealth.	Negative
Residential Non-PIPP	too expensive - lower the cost to natural gas based supply	Negative
Residential Non-PIPP	FACTS and factual information critical to making informed decision. Wind turbines & solar, require open, treeless swaths of land ... which can lead to deforestation. Amber waves of grain, are far more attractive than fields of black solar panels.	Negative
Residential Non-PIPP	Natural gas I'd plentiful	Negative
Residential Non-PIPP	Renewable energy is not consistent, it is subsidized at our expense, it cannot be stored and often is not available when needed.	Negative
Residential Non-PIPP	Windmills are way too costly to build then to maintain...also take up too much green space and are noisy... for the actual amount if energy supposedly saved!!!!	Negative
Residential Non-PIPP	I wouldn't do it, your cost are going to go through the roof, all these other companies that are doing this , aren't able to be competitive with AEP... It is not worth it... Stay with what you are doing....	Negative
Residential Non-PIPP	I just want reasonable energy costs for reasonable use. No wasting money to seem politically correct.	Negative
Residential Non-PIPP	Its expensive and faulty.....don't waste money on it! Foolish!	Negative

Residential Non-PIPP	So you really think 'solar' is going to work in Ohio? You're dreaming!	Negative
Residential Non-PIPP	Choices of source of energy should be based of least cost. Wind and solar apparently are not least cost based on all I have heard. Besides cost issues both do serious damage to the bird population.	Negative
Residential Non-PIPP	Lower prices, use gas or coal	Negative
Residential Non-PIPP	Wind turbines are annoying, ugly and kill birds.	Negative
Residential Non-PIPP	Don't build those ugly windmills	Negative
Residential Non-PIPP	Wind and solar require are eye pollution for the amount of quality land. Wind and solar are kill wildlife. Wind and solar do not work if the wind doesn't blow or the sun isn't shining.	Negative
Residential Non-PIPP	Wind and solar energy production in it's current form has been proven to be a total failure and waste of monetary resources better spent on updating and upgrading the current outdated electrical infrastructure.	Negative
Residential Non-PIPP	Maintenance and generation costs are much higher with wind / solar power, and they can not accommodate variable load demands.	Negative
Residential Non-PIPP	Renewable energy sources are not cost-effective compared to more traditional means of power generation, and shouldn't be considered unless, or until they become so.	Negative
Residential Non-PIPP	Renewable energy in OH is probably not worth the investment since we do not have many sunny days and the only wind that can be counted on is off Lake Erie.	Negative
Residential Non-PIPP	It's so expensive to install!	Negative
Residential Non-PIPP	Renewable energy is to expensive!	Negative
Residential Non-PIPP	"Renewable energy" doesn't solve environmental issues	Negative
Residential Non-PIPP	Wind energy is very expensive, an eye sore, very lethal to birds and bats, and uses too much land. If it wasn't heavily subsidized by tax payers you wouldn't be doing it.	Negative
Residential Non-PIPP	Don't waste money on wind generation: There a maintenance nightmare and if the wind doesn't blow you don't any power. Same with Solar , a waste of money, if the sun doesn't shine, no power. You need to stick with baseline power coal generation, Natural gas and nuclear.	Negative
Residential Non-PIPP	Renewable energy... ahh the fashionable thing to do. Why not go more to natural gas, economical and abundant... and it does not require tax incentives to be viable. Let the free market system determine the viability of renewable energy. Mars is warming along with the earth. Perhaps the sun has something to do with climate change. What a novel idea.	Negative
Residential Non-PIPP	Please consider the entire cost to the environment as well as to your customers. Don't give in.	Negative
Residential Non-PIPP	Renewable energy is currently more expensive to the customer. It is necessary to reduce the overall expense of renewable energy particularly to the retired, physically impaired, and those that are out of work for any reason.	Negative
Residential Non-PIPP	Another AEP ripoff. Your customers are forced to pay but never receive any ROI.	Negative
Residential Non-PIPP	Windmills and solar are a foolish waste of money. Burn the thousand years worth of coal, and natural gas that are in this country.	Negative
Residential Non-PIPP	I think the wind farms are ugly and has a high rate of killing bird's. We have lots of coal and the technology to keep the coal burning safe and clean.	Negative

Residential Non-PIPP	Unnecessary and not economically feasible at this time in my opinion. Until the state of the art can compete on equal footing with current methods and sources of energy generation...Donâ€™t waste your/my time!	Negative
Residential Non-PIPP	Renewable energy is fraught with problems and really isn't mature enough to be of any significant benefit. All the while, it unnecessarily drives up prices. Deliberately shifting investments into a less reliable, less flexible, more expensive power source is not a wise course of action.	Negative
Residential Non-PIPP	Wind and solar are overpriced, and unreliable. I hope that if you go down this ill-conceived route, it will be the shareholders, and not the customers, who are stuck with the expense.	Negative
Residential Non-PIPP	Use coal that's readily available, but plan ahead. You've cleaned it up greatly but you really need to stop letting them take the fly ash to spray on us!	Negative
Residential Non-PIPP	Renewable energy in its current form is not helping reduce harmful emissions and is not anywhere near â€œrenewableâ€. The investment at this point is NOT worth our financial support.	Negative
Residential Non-PIPP	Get rid of electric cars, they are a huge pull on electricity. They will never replace the foot print it takes to build, or charge them.	Negative
Residential Non-PIPP	Natural gas is the future	Negative
Residential Non-PIPP	What lessons can be learned from windcatcher?	Negative
Residential Non-PIPP	I believe renewable energy should only be used if they can be utilized without government subsidies. They should stand alone or they really aren't cost effective.	Negative
Residential Non-PIPP	I want AEP to wait until there is a renewable energy format that is economically feasible. Right now neither solar nor wind are reliable or cost effective. You should stick to natural gas or clean coal until such time as a renewal source is reliable and economical.	Negative
Residential Non-PIPP	Wind energy has been demonstrated to have adverse health effects on people and animals. Wind energy is NOT an intelligent or reasonable alternative to the use of fossil fuels.	Negative
Residential Non-PIPP	Yeah they should put the two coal fired power plants back online.	Negative
Residential Non-PIPP	Wind power kills birds and looks bad outside is novel appearance. Solar power is not efficient cost wise to my understanding.	Negative
Residential Non-PIPP	Renewable energy is a big no no. Energy should be new only once, and then be old â€” and let it move on. I mean, what if old energy doesnâ€™t want to be new again? You just gonna be all like â€œwelp, tough youâ€™re new now!â€	Negative
Residential Non-PIPP	Can anything be done to lower our electricity bills?	
Residential Non-PIPP	I do not want any of those large wind-mills near my home. They are loud and ugly	Negative
Residential Non-PIPP	If it raises costs WHAT SO EVER I am against it. Why not invest in infrastructure before looking for other things to spend money on. Each outage take you longer and longer to respond, yet you have available resources for windmills and solar panels???	Negative

	<p>Solar panels in Ohio ??with all our crappy rainy weather?. Overcast dYs ?. Not to mention our dreary cloudy 4 month winters !</p> <p>Windmills that make tons of noise chop up our</p> <p>Birds an break down an wear out fast !!. Don't waste your \$\$ on these pie in the sky sceAms !!. None of these screams can put out the kilowatt hours coal can !!.</p> <p>An I don't wann hear the global warming scams !! It's all total BS to get a carbon tax approved to charge me to breathe!!.</p> <p>An these total bs wind mills that can't hold a candle to coal power will raise my electric bill how much ??.</p> <p>As far as the argument that coals to dirty ?? Ever hear of scrubbers ?? They actually work !!.</p> <p>An coals</p> <p>Plants with good 1,s can put out very little emissions!! If operated correctly!!!..so drop these wind mill solar panel sceems an still to coal !!... I'm not a tree hugin liberal an will never ever believe In climate change scams !!</p> <p>It's all fake just like CNN news !!!</p>	Negative
Residential Non-PIPP	Wind Turbines are ugly and kill birds. It is too cloudy for solar in Ohio.	Negative
Residential Non-PIPP	Just another way of soaking the public into believing AEp will invest billions of dollars into renewable energy with no long term benefit to the average person customer.	Negative
Residential Non-PIPP	Donâ€™t waste your money	Negative
Residential Non-PIPP	I have read that the cost of transmitting wind-generated energy is quite high.	Negative
Residential Non-PIPP	Plenty of natural gas, clean..	Negative
Residential Non-PIPP	Taxpayer subsidies should not be used to create renewable power projects.	Negative
Residential Non-PIPP	Wind and solar should stand upon their own with respect to economics.	Negative
Residential Non-PIPP	Perhaps investigate "cleaner" ways to use coal.	Negative
Residential Non-PIPP	I do not see it as that important if you are only meaning wind and solar. There is plenty of coal and nat gas. Our electric costs are high enough already.	Negative
Residential Non-PIPP	Renewable energy cannot compete with coal or nuclear. Both in terms of price and energy output	Negative
Residential Non-PIPP	Stop wasting money on renewables. Build nuclear.	Negative
Residential Non-PIPP	I do not want any wind turbines in Central Ohio.	Negative
Residential Non-PIPP	wind farms harm bird life and are noisy to residents	Negative
Residential Non-PIPP	Go with nuclear. Itâ€™s clean. It produce a lot more power than solar or wind. Keep our nuclear plants alive.	Negative
Residential Non-PIPP	Wind turbines KILL birds, and solar panel farms require large amounts of land that cannot be used for other purposes. Not a fan of either.	Negative
Residential Non-PIPP	Renewable energy programs are not cost effective in the future.	Negative
Residential Non-PIPP	Since government subsidies are typically needed to make renewable energy economically feasible, please do not waste tax payer money on this.	Negative
Residential Non-PIPP	Do not like wind farms	Negative
Residential Non-PIPP	I am opposed to politically motivated reasons to use this source or that. The only criteria should be what is the most reliable source that provides the most reliable power at the best price and value.	Negative
Residential Non-PIPP	Investing in renewable energy for political correctness is not in the best interests of your customers. Prices will go up because renewable sources cost more to install and more to operate.	Negative

Residential Non-PIPP	Renewable is currently and in the foreseeable future totally uneconomical. AEP and other utilities would be much wiser to spend major resources to educate the public on the safety and wisdom of nuclear power. Utilities have refused to challenge gov regulators re the safety of nuclear power.	Negative
Residential Non-PIPP	Stick with COAL or gas more dependable.	Negative
Residential Non-PIPP	Renewable energy is BS. Cost too much. Benefits over exaggerated	
Residential Non-PIPP	Not at all good for the environmentally friendly.	Negative
Residential Non-PIPP	I support coal!	Negative
Residential Non-PIPP	Use Ohio natural gas also to for power generation.	Negative
Residential Non-PIPP	Wind and solar need to compete without government subsidies. They are currently both inefficient and expensive. Wind turbines are offensive and will at some future date, be eliminated ( I hope)	Negative
Residential Non-PIPP	do not cave to pressure from whacko's	Negative
Residential Non-PIPP	<p>Wind and solar are giant wastes of time and money that people who are bad at physics pay lipservice to so they can appear virtuous.</p> <p>Anyone who knows the difference between a megawatt and a gigawatt can tell you that nuclear is only possible alternative if you're looking to get away from fossil fuels.</p> <p>Green energy initiatives touting windmills and solar panels are mostly run by charlatans looking for opportunities for graft. I lose respect for any company that gets mixed up in that chicanery.</p>	Negative
Residential Non-PIPP		
Residential Non-PIPP	Dont waste the shareholders money on this crap. The only thing it does is makes environmentalists feel good. It won't reliably keep my welder running.	Negative
Residential Non-PIPP	Complete waste of money & time. Man made global warming is a fraud.	Negative
Residential Non-PIPP	AEP NEED NO RENEWABLE ENERGY IDEVELOPPEMENTS!!!	Negative
Residential Non-PIPP	<p>With regard to energy generation, I believe the entire process and environmental impact must be considered. Solar and wind energy sources certainly appear to have smaller carbon footprints. And while important, itâ€™s the popular environmental focal point. What about the materials being mined, the chemicals used in the production, the energy used in the entire life cycle, the storage of generated power, the equipmentâ€™s disposal/end of life strategies. Green house gases show a negative trend with regard to the environment. Yet wind turbines for example show an immediate impact on avian mortality. Many other biological systems are codependent on the avian population and increasing mortality rates is not environmentally friendly.</p> <p>In conclusion I am very positive on innovative and cleaner energy production and consumption. 15 years ago I purchased monthly wind energy credits to offset my carbon footprint from fossil fuel grid power. As the topic became more political, less environmental and data more available, it became apparent that I was not only â€œoffsettingâ€ my carbon footprint, I was throwing money at something we were being shamed into to feel a little bit better and more self righteous.</p>	Negative
Residential Non-PIPP	Use coal.	Negative

Residential Non-PIPP	IMO current "renewable" energy sources are expensive and unreliable. I would prefer that AEP invest in current infrastructure such as nuclear energy and low-impact carbon-based fuels.	Negative
Residential Non-PIPP	Not a fan of wind energy as it can kill birds and bats which are necessary for the eco system.	Negative
Residential Non-PIPP	Use coal	Negative
Residential Non-PIPP	Windmills for electric kills birds flying and is ugly.	Negative
Residential Non-PIPP	Too soon	Negative
Residential Non-PIPP	AEP made a mistake by retiring their coal plants and moving away from coal power plants.	Negative
Residential Non-PIPP	do not support	Negative
Residential Non-PIPP	Renewable energy is not consistent, can't be stored and is more expensive than traditional fuels.	Negative
Residential Non-PIPP	along with global warming it's hoax perpetuated by hollywood weirdos, elizabeth warren types and OBOMBME PUHTUI	Negative
Residential Non-PIPP	I do not want to purchase power generated by windmills in Ohio. I do not believe they are in our best interests. IT is a waste of valuable resources and encroaches on the property rights of Ohio citizens. It is a waste of taxpayer dollars to subsidize this and they aren't even made in the USA. .	Negative
Residential Non-PIPP	Wind Turbines are going to ruin ohio. They are too big to be put in rural communities. Ohio has the most relaxed regulations for big wind companies for the siting of the turbines next to non participating neighbors. Keep the Turbines Out Of Ohio. When all the customers are moved out of area due to the turbines my guess is the loss of customers wouldn't be worth it. It's also a proven fact that Wind Power raises electric bills which nobody wants to see. Turbines do nothing to lower the carbon.	Negative
Residential Non-PIPP	A gentleman from Midwest Electric spoke at a meeting in Van Wert, Ohio a while back. He stated that they had a contract with a wind energy company, but was going to let the contract expire because they were losing tons of money on it. Wind energy is unreliable, expensive, and inefficient. If it weren't for government subsidies, they wouldn't even build wind farms. There are also dangers and negative health effects associated with wind turbines. I would say that AEP needs to do some research on other countries that were gung-ho about renewable energy and then lost their butts because of it.	Negative
Residential Non-PIPP	Coal is abundant in Ohio and Midwest. Stay with coal for base generation and natural gas for on demand.	Negative
Residential Non-PIPP	Industrial wind turbines cannot stand on their own without tax abatements. They only have a life expectancy of 20 to 25 years, most likely not being replaced or removed once the life expectancy is done. They harm wildlife like bats and birds, including our national bird the bald eagle. They can cause many health effects in both humans and livestock. They cause flicker from sunlight and disturbing red flashes at night. The disadvantages far outweigh the advantages.	Negative
Residential Non-PIPP	Renewable energy provided by IWT is not a reliable source and drives costs up for consumers. IWT are not welcome in southern Van Wert County and we have voiced our opinion on this loud and clear.	Negative
Residential Non-PIPP	Wind is a joke. I live near turbines and on many hot humid days they do not turn. Wind is unreliable as is solar. More is spent promoting and paying out than is produced. Think twice before promoting more.	Negative



Residential Non-PIPP	Industrial Wind Factories are nothing but a big scam and money grab on hard working tax payers. Stop the destruction of our communities, our environment and our very way of life.	Negative
Residential Non-PIPP	The I with your windmills!!	Negative
Residential Non-PIPP	too expensive	Negative
Residential Non-PIPP	Stop. It's unreliable and grossly inefficient: solar only works half the day at best; wind only generates . . . when the wind is blowing. Then there's the birds getting killed by the turbine blades, the infrasound pollution, and on top of that it's three times more expensive. I don't want to pay for that.	Negative
Residential Non-PIPP	Go Back to Ohio coal. AEP spent millions to meet EPA standards only to shutter up the plants. AEP needs to stand up to EPA. It is a waste of money to go into "renewable energy" when it has its own dangers and the EPA will keep changing the regs on it.	Negative
Residential Non-PIPP	I despise wind energy, I is a part without citizens paying for the subsidies. They ruin the beautiful sky, & lower property values,	Negative
Residential Non-PIPP	need to diversify,,,,,fossil fuels are still necessary and important for american jobs.....the liberal energy views will not work	Negative
Residential Non-PIPP	Too expensive now. You are just catering to the extreme left in this area. Lower your rates thtough our abundant existing resources.	Negative
Residential Non-PIPP	I would like to see AEPOhio to support the development of resources utilizing Ohio's plentiful shale gas.	Negative
Residential Non-PIPP	My uderstaning is it has a higher cost.	Negative
Residential Non-PIPP	Stop caving to leftists who want to make us poorer, colder in winter, hotter in summer under a false belief that fossil fuels will cause climate change that would not otherwise happen & that nuclear power can't be used safely.	Negative
Residential Non-PIPP	Wind power in populated rural areas should not be considered as it is in many areas today. Health and safety risks are too great to have them close to homes. They are not efficient producers of electricity.	Negative
Residential Non-PIPP	Since the sun does not always shine and the wind does not always blow, will also need redundant fossil, hydro, or nuclear generation unless you want to spend a lot on battery storage. Just go with the lower cost technically acceptable option that complies with environmental regulations.	Negative
Residential Non-PIPP	Wind generation is not the answer. Return on investment is very low,even in 30 years. They cannot generate enough electric energy to cover the carbon footprint, because of yearly declining name plate capacity.	Negative
Residential Non-PIPP	Think u should concentrate on ower best asset that is coal. Coal is cheaper and produces jobs for Ohio thatâ€™s more important than the political renewal eneargy & use nat gas as backup but I do not see nat has as renewal energy or comes from the ground just like coal. Time to think about the people not politics.	Negative
Residential Non-PIPP	I think it is a waste of time and money at this point because both wind and solar do not pay for themselves but rather need significant subsidies to be viable.	Negative
Residential Non-PIPP	Stick with natural gas and oil, we have plenty and Global Warming is False	Negative
Residential Non-PIPP	I'm not crazy about wind energy and not sure Ohio has what it takes to make solar energy work. What about nuclear?	Negative

Residential Non-PIPP	For me the important issue is not the source of my home electricity but its price. At the moment solar energy is neither efficient or nor price competitive.	Negative
Residential Non-PIPP	To the average AEP distribution customer, this survey conflates the role of the AEP utility with the (competitive) AEP power supplier. Is the provision of renewable energy only limited to the standard service offer, or would there be some mechanism at the utility level, such as a rider, which would apply to customers taking power through a competitive supplier? This survey does not feel "right" and is potentially misleading.	Negative
Residential Non-PIPP	Not interested because it is too expensive.	Negative
Residential Non-PIPP	I don't feel it's necessary at this time. It's very expensive to do and the cost is passed on to the customer.	Negative
Residential Non-PIPP	Not interested in renewable energy...	Negative
Residential Non-PIPP	Cut cost instead of expansion. Added expense for something easily wiped out by other polluting countries like China and India.	Negative
Residential Non-PIPP	Why is my electric distribution company considering making investments in generation? Are such investments within Ohio law?	Negative
Residential Non-PIPP	Let people who want renewable energy pay the additional cost. Don't make everyone pay for something the only a segment of society wants.	Negative
Residential Non-PIPP	If you're spending money, put it into upgrades that keep the system robust. Bury power lines. Shield major infrastructure from emp damage (both man made and solar).	Negative
Residential Non-PIPP	renewable energy is way overpriced	Negative
Residential Non-PIPP	I shouldnt have to pay a penny more to make some tree huggers feel better about turning on their lights or air conditioning. I appreciate the reliable service we have now and feel good that the reliability is due in no small part to our coal industry. Dont.mess with it.	Negative
Residential Non-PIPP	Do not waste money with renewables. In the end, this will only increase the price for costumers.	Negative
Residential Non-PIPP	It is a wasteful farce. Just produce energy cheaply, please.	Negative
Residential Non-PIPP	Sun does not shine at night. Sun does not shine much from November to March in Ohio. Wind does not blow much at night. Appreciate the effort but there are technology hurdles. I like Germany's approach. Local generation as opposed to generate and transmit.	Negative
Residential Non-PIPP	Would rather see infrastructure improvements such as more underground wires and better grid security.	Negative
Residential Non-PIPP	Reduce the cost of our energy not increase it. Wind and solar energy are more expensive than fossil fuels. Man made global warming is not proven science and has been a big lie with false information. Invest in clean coal and other fossil fuels that will ultimately reduce energy costs.	Negative
Residential Non-PIPP	Wind and solar energy are more expensive and less efficient than current fossil fuels. Man made global warming is not proven science	Negative
Residential Non-PIPP	The science related to renewable energy is just not there--	Negative
Residential Non-PIPP	Feel the generation from wind and solar versus current technology from natural gas is more expensive and will result in increased rates. What is wrong with natural gas? We have significant supplies and it is clean energy source.	Negative
Residential Non-PIPP	I favor nuclear energy as the best energy source.	Negative
Residential Non-PIPP	Wind turbines are ugly, kill birds and are inefficient.	Negative
Residential Non-PIPP	Climate change is a hoax. Keep going with coal if you can and really want to.	Negative
Residential Non-PIPP	I'm not sure that out latitude and average wind and sun hours are suitable for investing substantially.	Negative

Residential Non-PIPP	There is no need to use the inefficient renewable sources. We have plenty of natural gas. In the state. Wind turbines kill millions of birds across the country it's devastating the bird and bad population bad for our community	Negative
Residential Non-PIPP	You are wasting your time, effort and money on solar and wind.	Negative
Residential Non-PIPP	I used to think wind & solar were the way to go.... even back 40 yrs ago. But having followed the progress, implementation & economics, I concluded that they are not efficient as once thought and have unintended consequences that are hurtful to the environment, consumers & economy. / The numbers just haven't added up. Nuclear power plants, as the USA has developed & managed them seems like the long, long range solution. / The coal plants have been cleaned up amazingly over the decades and are the way to go for the next few decades.	Negative
Residential Non-PIPP	It must be cost effective. If it lowers my electric bill, then investigate the opportunity. Don't succumb to the "feel good" society when it makes no economic sense. Natural gas and coal are abundantly available at low cost. You should be investigating opportunities to exploit those resources.	Negative
Residential Non-PIPP	It's a waste of money /	Negative
Residential Non-PIPP	Take advantage of the fossil fuels ( Nat. Gas) available in this region and quit acting like you are pressed to find non-Fossil Energy Sources. If you did this we / all know you would be saving us unnecessary expense. Your all into the far Left, get off your butts and believe in Trump.	Negative
Residential Non-PIPP	When it's viable people will use it without government or other political pressure. I love that the smokestacks are cleaner, natural gas burns cleaner than coal etc tho	Negative
Residential Non-PIPP	stick with what works,	Negative
Residential Non-PIPP	I would be very upset if I saw AEP was accepting tax breaks for renewable energy project or production.	Negative
Residential Non-PIPP	Too much energy wasted on catering to the politics in this. Focus on value and technology not on climate alarmists.	Negative
Residential Non-PIPP	Wind and solar depend on weather. Not sure if these will be usable for Ohio.	Negative
Residential Non-PIPP	Too expensive	Negative
Residential Non-PIPP	unreliable, inefficient, expensive, unsustainable	Negative
Residential Non-PIPP	The electricity generating market is both regional (Multi-state) and competitive. Regulated monopolies should not be engaged in this business in any other form than as a competitive bidder to end-users	Negative
Residential Non-PIPP	What your loyal customers want is lower electric bills. Renewable energy is expensive, and we don't want to pay for it. Stop investing in renewable energy!	Negative
Residential Non-PIPP	There are other cost-effective options to decrease greenhouse gas emissions and air pollution such as using more natural gas and less coal.	Negative
Residential Non-PIPP	Until the technology improves, its not worth it.	Negative
Residential Non-PIPP	At present, renewable energy is not cost efficient compared to natural gas and coal, particularly in this part of the country.	Negative
Residential Non-PIPP	I want electricity generated efficiently and reliably. I do not want to pay more for virtue signalling and the unintended consequences that often arise from well-intentioned but misguided plans.	Negative
Residential Non-PIPP	No but I appreciate being able to participate in future decisions that AEP may be considering	Excluded
Residential Non-PIPP	No	Excluded
Residential Non-PIPP	no	Excluded
Residential Non-PIPP	No	Excluded

Residential Non-PIPP	Not at this time	Excluded
Residential Non-PIPP	no	Excluded
Residential Non-PIPP	No comments at this time	Excluded
Residential Non-PIPP	N/A	Excluded
Residential Non-PIPP	N/A	Excluded
Residential Non-PIPP	N/A	Excluded
Residential Non-PIPP	NA	Excluded
Residential Non-PIPP	No	Excluded
Residential Non-PIPP	I've actually already taken this survey once, but I wanted to say that there was a question regarding my being okay with adding up to \$1.25 to my monthly energy bill. If that is what	Excluded
Residential Non-PIPP	This is the second time this survey was emailed to me.  It's important for AEP to invest in the future, but there is absolutely no reason your *customers* should need to foot the bill through raised rates for your new-found greenness. Fix your in-house finances first, then invest where you want.	Excluded
Residential Non-PIPP	Keep costs to consumers low as possible.	Neutral/Unclear
Residential Non-PIPP	lower my cost	Neutral/Unclear
Residential Non-PIPP	Do what it takes to keep the costs low, it's important to retired on fixed income	Neutral/Unclear
Residential Non-PIPP	I'm only interested if it does not raise the cost per unit. Like most folks that I know, my family can barely cover the price of our AEP bill and often have to make sacrifices in other areas just to be able to cover the electricity bill...	Neutral/Unclear
Residential Non-PIPP	If its going to increase the cost of electric or add another fee/tariff to my bill, don't do it	Neutral/Unclear
Residential Non-PIPP	I am more concerned with cost.	Neutral/Unclear
Residential Non-PIPP	Keeping the jobs in Ohio will come back ten fold.	Neutral/Unclear
Residential Non-PIPP	Continue to provide quality service at a reasonable price.	Neutral/Unclear
Residential Non-PIPP	I wish AEP had lobbied for a market structure similar to NH and NJ where excess energy credits are sold at market rates and not what currently exists in the state of Ohio.	Neutral/Unclear
Residential Non-PIPP	Figure out how to store electricity.	Neutral/Unclear
Residential Non-PIPP	Would it make our bills lower	Neutral/Unclear
Residential Non-PIPP	Reduce salary's of upper management.	Neutral/Unclear
Residential Non-PIPP	Ohio is a deregulated state, so how is AEP Ohio developing this renewable energy? Via AEP Energy arm, or through PPA's with other developers ?	Neutral/Unclear
Residential Non-PIPP	To help reduce costs of electricity to home owners an bring back jobs to the workers that lost their jobs in Ohio from shutting down plants	Neutral/Unclear
Residential Non-PIPP	Too damn high	Neutral/Unclear
Residential Non-PIPP	What ever it takes to lower my electric bill.	Neutral/Unclear
Residential Non-PIPP	What is 5 and 10 year plan and target % to add capacity.	Neutral/Unclear
Residential Non-PIPP	I don't really know about it.	Neutral/Unclear
Residential Non-PIPP	This is only good if it lowers my utility bill.	Neutral/Unclear
Residential Non-PIPP	I would not want to see increased expense in my bill.	Neutral/Unclear
Residential Non-PIPP	What impact will this have on our costs?	Neutral/Unclear
Residential Non-PIPP	By local job creation I would expect real Americans. Not jobs created overseas. Not jobs given to those who just came to the United States. And not jobs to those enticed to go to the United States.	Neutral/Unclear
Residential Non-PIPP	Do what you want as long as it doesn't increase my cost.	Neutral/Unclear
Residential Non-PIPP	Please use my money more wisely.	Neutral/Unclear
Residential Non-PIPP	I am not in favor of anything that would increase my bill	Neutral/Unclear

Residential Non-PIPP	Your job is to provide low cost, reliable, clean energy. Don't just pick one of the above!	Neutral/Unclear
Residential Non-PIPP	Transmission and storage are just as important as generation -- how will the energy get here if it isn't generated in Ohio, and how will excess production be stored to meet peak demand periods?	Neutral/Unclear
Residential Non-PIPP	Please consider funding or sponsoring indoor aquafarms.	Neutral/Unclear
Residential Non-PIPP	Renewable is important, but it's not important that you build the infrastructure. If you can buy and resell renewable in a way that makes sense then do that.	Neutral/Unclear
Residential Non-PIPP	Just provide cheap, reliable, stable electricity, and as long as you're not nuking the ocean like Tepco, we're all good.	Neutral/Unclear
Residential Non-PIPP	I think all of you at AEP do a good job. I would trust that you would do what's right for business and man kind. Treat us right, you'll be respected, and profits will surely come your way.	Neutral/Unclear
Residential Non-PIPP	THE USERS WILL HAVE TO PAY FOR THE DEVELOPMENT AS USUAL. SO WHY DO YOU ASK??	Neutral/Unclear
Residential Non-PIPP	How much will it cost?	Neutral/Unclear
Residential Non-PIPP	Pros and cons notwithstanding, I am finding it very difficult to have the ability to pay and my biggest concern is what would this do to cost. Many things in this world may be wonderful, but if I can't afford them, they are out of the question. Example: I don't have central air and use my small window air conditioner and fan only when desperate.	Neutral/Unclear
Residential Non-PIPP	Not important to me at all. The priority should be to provide the cheapest, most reliable electricity regardless of source.	Neutral/Unclear
Residential Non-PIPP	Please do not turn this into something that will increase the bill down the road. The rates are already ridiculously high.	Neutral/Unclear
Residential Non-PIPP	I do not want AEP's efforts at integrating renewable energy to increase my bill. I have to service sites and cannot afford any increase.	Neutral/Unclear
Residential Non-PIPP	Where does the equipment come from, Asia or is it American made? Does it cost more or less to purchase this equipment than a new coal or gas fired power plant? Will maintenance cost more or less than a power plant?	Neutral/Unclear
Residential Non-PIPP	Keep it cheap	Neutral/Unclear
Residential Non-PIPP	I'd prefer a cheaper bill. I do not care about wind or solar.	Neutral/Unclear
Residential Non-PIPP	Need to introduce DC long line transmission. Convert to AC at major terminals in the state. This allows use of energy sources from long distance generation.	Neutral/Unclear
Residential Non-PIPP	just keep my bill as low as possible	Neutral/Unclear
Residential Non-PIPP	We that live in the country need our lines replaced , they are old and break easy	Neutral/Unclear
Residential Non-PIPP	Do whatever necessary to provide lower cost to me.	Neutral/Unclear
Residential Non-PIPP	If this will result in higher monthly bills, I am not in favor of the development of this process.	Neutral/Unclear
Residential Non-PIPP	I hate AEP, they are the only source of electricity in the city of Columbus which gives them the power to charge us very high electric bill. AEP is like the NAZI in Columbus Ohio. them.	Neutral/Unclear
Residential Non-PIPP	I currently have roof top solar. Do you count my generation as part of this goal?	Neutral/Unclear
Residential Non-PIPP	Renewable energy generation is a good idea, but my electric bill has been a lot higher since the meter was changed. I am not too excited for my bill to go up even more	Neutral/Unclear
Residential Non-PIPP	Will wind and solar still work if we are hit with an EMP?	Neutral/Unclear
Residential Non-PIPP	Just don't want to receive another bill increase, seems to happen much too often.	Neutral/Unclear

Residential Non-PIPP	I want my energy to be as inexpensive as possible. I don't care about renewable energy.	Neutral/Unclear
Residential Non-PIPP	I don't know where my electric is coming from now but \$180 monthly budget is really really bad.	Neutral/Unclear
Residential Non-PIPP	I don't care where or how my electricity is generated. I want the most reliable service for the cheapest price.	Neutral/Unclear
Residential Non-PIPP	Please increase your use of alternative production devices from CO2 producers.	Neutral/Unclear
Residential Non-PIPP	How's this gonna effect my electric bill i sure dont need it to go any higher	Neutral/Unclear
Residential Non-PIPP	Don't raise rates much because of it	Neutral/Unclear
Residential Non-PIPP	Please have a program for off peak EV charging.	Neutral/Unclear
Residential Non-PIPP	Cheaper bills	Neutral/Unclear
Residential Non-PIPP	It would be useful to share any studies regarding the economics of customers installing renewable energy vs utilities installing renewable energy.	Neutral/Unclear
Residential Non-PIPP	Everything is important if it has to do with AEP. There is none better than AEP	Neutral/Unclear
Residential Non-PIPP	It should not increase the cost of energy. If it does don't do it.	Neutral/Unclear
Residential Non-PIPP	I am more concerned with keeping our prices down than with spending extra dollars to utilize 'greener' forms of energy.	Neutral/Unclear
Residential Non-PIPP	If it is going to raise the bills I would rather you not do it.	Neutral/Unclear
Residential Non-PIPP	As AEP make investments in renewable energy, how much savings should the average consumer expect to see in their monthly bill? Also, how soon will it be implemented: 2020?	Neutral/Unclear
Residential Non-PIPP	If it costs the consumer more, I'm agin it.	Neutral/Unclear
Residential Non-PIPP	Keep costs low that is the most important issue.	Neutral/Unclear
Residential Non-PIPP	Don't pass added costs to consumer. Your rates are already exorbitant.	Neutral/Unclear
Residential Non-PIPP	keep the cost down.	Neutral/Unclear
Residential Non-PIPP	Just try to improve the dependability. We get a lot of brown outs and outages when there isn't even bad weather. Thanks.	Neutral/Unclear
Residential Non-PIPP	Will it increase the cost of electricity for us or reduce it?	Neutral/Unclear
Residential Non-PIPP	Anything to make our bill cheaper	Neutral/Unclear
Residential Non-PIPP	Im concerned about keeping the cost of electricity down so senior citizens can pay their bill. Along with low income people.	Neutral/Unclear
Residential Non-PIPP	will my electric bill go up?	Neutral/Unclear
Residential Non-PIPP	Think it is a good plan, however, I am limited budget.... is this going to be an increase in my costs?	Neutral/Unclear
Residential Non-PIPP	I support Worthington Ohio's ballot initiative.	Neutral/Unclear
Residential Non-PIPP	I do not want blackouts like CA and may foreign countries have because they depend too much on renewable energy. I prefer affordable and abundant energy over green energy.	Neutral/Unclear
Residential Non-PIPP	Lower energy costs	Neutral/Unclear
Residential Non-PIPP	not fully aware of projects being proposed within AEP. Being a retiree of 40+ years I believe employee input needs to be more involved	Neutral/Unclear
Residential Non-PIPP	Livable price is primary consideration.	Neutral/Unclear
Residential Non-PIPP	I do not want AEP to rely on renewable energy if it means that my bill will be higher.	Neutral/Unclear
Residential Non-PIPP	Only if it reduces the price for customers. I don't see the point of renewable energy if we have to pay more	Neutral/Unclear
Residential Non-PIPP	Don't want to pay more.	Neutral/Unclear
Residential Non-PIPP	How will this effect our electric costs that we (the public) pays to you?	Neutral/Unclear
Residential Non-PIPP	In the long run of bureing, maintaing and replacing, how cost effecty is your socalled renewable energy? How will this affect my bill?	Neutral/Unclear

Residential Non-PIPP	Reliability and cost are most important to everyone I speak to. I am an AEP employee. My friends and neighbors know this. The only things they ever talk about are with regard to AEP is: Cost, reliability, and community service.	Neutral/Unclear
Residential Non-PIPP	Have you considered co-op operations	Neutral/Unclear
Residential Non-PIPP	I live in a 1500 sq ft house my bill is almost always over 300\$ which is absolutely stupid but I already no you donâ€™t care thanx	Neutral/Unclear
Residential Non-PIPP	In the near and long term electricity should be as inexpensive for consumers as gas is!	Neutral/Unclear
Residential Non-PIPP	I can barely afford to pay my bill as it is...disabled vet farmer ....	Neutral/Unclear
Residential Non-PIPP	I want energy that I can afford and are from sources that make that happen.	Neutral/Unclear
Residential Non-PIPP	Please keep energy affordable for low income and fixed income individuals.	Neutral/Unclear
Residential Non-PIPP	I care if I am going to see a reduction in my electric bill. If I am going to pay more \$ so you can invest or u keep the \$ for yourself and we rep no benefit in our bill. I donâ€™t care	Neutral/Unclear
Residential Non-PIPP	choose the cheapest power - doesn't matter if it is renewable.	Neutral/Unclear
Residential Non-PIPP	will this increase or decrease our electric bill??	Neutral/Unclear
Residential Non-PIPP	Some areas within Franklin county especially the lower income areas have a transformer that is not strong to handle severe winds, hail. Will this be looked into at in those areas?	Neutral/Unclear
Residential Non-PIPP	Will it be safe from computer hacks? Will it cost less?	Neutral/Unclear
Residential Non-PIPP	these changes have to produce an affordable energy option that is cost effective for all consumers. it must be affordable and not increase the service to the place. where baby boomers are strapped with the bill while the generation. behind. us reaps the benefit. of our. payment	Neutral/Unclear
Residential Non-PIPP	Do not invest in renewable energy unless it will reduce costs to consumers. I do not want to pay more for your renewable energy investment. Keep costs affordable for the poor.	Neutral/Unclear
Residential Non-PIPP	If it lowers my bill Iâ€™m fine with it. If it costs more on my monthly bill, then I will choose a different provider. Itâ€™s my bottom line that matters most right now. Not in a position to pay more	Neutral/Unclear
Residential Non-PIPP	The only concern is that the AEP Ohio generation is very reliable!	Neutral/Unclear
Residential Non-PIPP	I want my energy cheap a reliable	Neutral/Unclear
Residential Non-PIPP	cost of service	Neutral/Unclear
Residential Non-PIPP	I think u should do what is most economical. Not political.	Neutral/Unclear
Residential Non-PIPP	the new meter gives higher amount bills since replaced	Neutral/Unclear
Residential Non-PIPP	would it be more expensive?	Neutral/Unclear
Residential Non-PIPP	All for it so long as it doesn't increase my bill.	Neutral/Unclear
Residential Non-PIPP	At what cost is this to me the customer. I know it will either increase your profits or shares but what does it do for me the consumer.	Neutral/Unclear
Residential Non-PIPP	Yes, your costs are ridiculously high and seem to increase during Summer and Winter. Find alternate energy means for the sake of my savings; future generations can deal with there own issues as I am dealing with you now.	Neutral/Unclear
Residential Non-PIPP	Keep the price of electric low.	Neutral/Unclear
Residential Non-PIPP	Anything that reduce energy costs to the consumer!	Neutral/Unclear
Residential Non-PIPP	Generate power at lowest cost.	Neutral/Unclear
Residential Non-PIPP	Like I answered to the first question cost is most important. I am all for all of the things that were listed as choices but if it is significantly more expensive it is not worth it to me	Neutral/Unclear
Residential Non-PIPP	Lower bills...????	Neutral/Unclear



Residential Non-PIPP	If this means a rate increase, I cannot afford it.	Neutral/Unclear
Residential Non-PIPP	stop stealing money from poor citizens	Neutral/Unclear
Residential Non-PIPP	Just reduce the cost to us.	Neutral/Unclear
Residential Non-PIPP	stay as you are supplying constant electric to my home	Neutral/Unclear
Residential Non-PIPP	would the cost of energy come down?	Neutral/Unclear
Residential Non-PIPP	No bill increase	Neutral/Unclear
Residential Non-PIPP	You are already charging too much for energy, please do not make investments that will cost your customers more.	Neutral/Unclear
Residential Non-PIPP	Is it saving me money or is it going to cost me more because of development	Neutral/Unclear
Residential Non-PIPP	The energy costs need to be lowered and energy use more efficient	Neutral/Unclear
Residential Non-PIPP	Why the [REDACTED] did my bill triple this month? [REDACTED] money hungry pigs. I'm broke as [REDACTED] and yet you still want to steal my money.	Neutral/Unclear
Residential Non-PIPP	As a customer, getting my bill reduced is more important than anything. Only invest in renewal energy that will help consumers reduce the cost of their bills.	Neutral/Unclear
Residential Non-PIPP	How much will the cost of change affect the cost of use?	Neutral/Unclear
Residential Non-PIPP	I want reliable and cheap power. Nothing else matters.	Neutral/Unclear
Residential Non-PIPP	I just wish my darn electric would stay on and that AEP would do a better job at maintaining their lines	Neutral/Unclear
Residential Non-PIPP	The most important consideration for energy generation is cost, far and above everything else.	Neutral/Unclear
Residential Non-PIPP	How expensive would this be to the consumer?	Neutral/Unclear
Residential Non-PIPP	My electric bill is too expensive is the anyways you can help me	Neutral/Unclear
Residential Non-PIPP	I am tired of my AEP bill going up expentially higher! I do not think I can ever afford wind or solar energy. Give people like me barely making it a break! I actually got NASA complete insulation in my house and keep my thermostat at 82! My bill still goes up! What can I d to lower my AEP bill!?? Also have new double plane windowsss! I need help!	Neutral/Unclear
Residential Non-PIPP	Our household is in agreement for any service that helps to maintain an honest Energy Supplier.	Neutral/Unclear
Residential Non-PIPP	You charge way too much. If this lowers the cost then do it but if I have to pay more then forget it.	Neutral/Unclear
Residential Non-PIPP	I hope this investment by AEP will not increase our electric bills.	Neutral/Unclear
Residential Non-PIPP	As long as it does not increase monthly costs for those of us that are retired and living on a pension and it will be fine, but it does increase the monthly cost - then I would have to vote against it.	Neutral/Unclear
Residential Non-PIPP	Although I support the development of renewable energy, I cannot afford the continuous and dramatic increases in my electric bills.	Neutral/Unclear
Residential Non-PIPP	dont raise rates on the customers	Neutral/Unclear
Residential Non-PIPP	Don't raise my bill.	Neutral/Unclear
Residential Non-PIPP	Now will This increase my bill or lower it	Neutral/Unclear
Residential Non-PIPP	Iâ€™m good either way.	Neutral/Unclear
Residential Non-PIPP	AEP is enjoying a monopoly around where I live so I donâ€™t believe they care about cost to consumers	Neutral/Unclear
Residential Non-PIPP	I would our cost to go down not up!!!	Neutral/Unclear
Residential Non-PIPP	what really do you mean by renewable energy	Neutral/Unclear
Residential Non-PIPP	Well first of all I really think AEP should focus more on their customers first, The bill is always high I feel like AEP rip people off with high monthly bills I don't understand why AEP charge so much I have check the meter and is running slow and I'm not the only one that think like this google it.	Neutral/Unclear
Residential Non-PIPP	Why bill too much for older peopleâ€™s account holder person in Ohio	Neutral/Unclear

Residential Non-PIPP	Cost. The current costs seem too high. I am hoping the new meters will fix some serious problems with usage.	Neutral/Unclear
Residential Non-PIPP	AEP SUCKS! I changed my address and did not receive a notice from collections until it appeared on my credit report I did not know it was delinquent. I would have paid the bill in full if I had known it existed. If you do not REMOVE NEGATIVE INFO after payment is received you will meet my attorney and I will be suing for damages as I have a home loan application in process and if denied housing due to you lack of due diligence I will be seeking monetary damages.	
Residential Non-PIPP	[DELETED DUE TO PERSONAL IDENTIFIABLE INFORMATION]	Neutral/Unclear
Residential Non-PIPP	You charge way too much for electric service, actually it's all the riders you put on the bills. If your new endeavors further increase the riders and utility charges then forget it, I don't want things to change.	Neutral/Unclear
Residential Non-PIPP	Right now, electric bills our way too high- higher than all other utilities - never know when electric is going to be out.	Neutral/Unclear
Residential Non-PIPP	try keeping the cost down cause we're all POOR.	Neutral/Unclear
Residential Non-PIPP	What I would prefer is that AEP focuses on keeping my power on consistently NOW. We have lost power in my area 3 times in the last 2 months.	Neutral/Unclear
Residential Non-PIPP	Concerned if there is going to be an increase in cost per month.	Neutral/Unclear
Residential Non-PIPP	I do not want my bill to raise at all 0 increase	Neutral/Unclear
Residential Non-PIPP	Unit price is the biggest concern. As long as the electricity bill does not increase, I don't care.	Neutral/Unclear
Residential Non-PIPP	we cant afford to put out any more money and I think that if aep is up grading they need to do it with there money in stead of charging the costumer	Neutral/Unclear.
Residential Non-PIPP	What are the upper limits for Solar energy percentage in Ohio, and what are the upper limits for Wind energy percentage?	Neutral/Unclear
Residential Non-PIPP	Is my electric bill going to increase/decrease & by how much?	Neutral/Unclear
Residential Non-PIPP	I cant afford no more expence..	Neutral/Unclear
Residential Non-PIPP	I didn't realize when I signed up there were going to be 2 bills to pay.	Neutral/Unclear
Residential Non-PIPP	American Electric Power is affiliated with American Energy Partners. This is so misleading and needs to be stopped. You are ripping people off. Just provide low cost energy possible with honesty.	Neutral/Unclear
Residential Non-PIPP	Please reduce the electricity price. Thanks	Neutral/Unclear
Residential Non-PIPP	If it makes my prices any higher not interested.	Neutral/Unclear
Residential Non-PIPP	what is this going to cost taxpayers or customers?	Neutral/Unclear
Residential Non-PIPP	I don't want to see my electric bill go up as a result	Neutral/Unclear
Residential Non-PIPP	The minimal cost mentioned now will likely increase considerably soon after implementation.	Neutral/Unclear
Residential Non-PIPP	I can't believe you people are taking something so much cheaper to produce and actually make it more expensive just to get more money. Ugh.	Neutral/Unclear
Residential Non-PIPP	Is it possible for locals here in Ohio to have solar Power	Neutral/Unclear
Residential Non-PIPP	ø¥Ù+ ø§Ù,,ø-ø§Ù,ø© ø§Ù,,Ù...ø³ø-ø-ø-ø© Ù±Ù§ ø-ø§Ù,ø© Ù+ø,Ù§Ùø© ø³ø§ø¹ø- ø¹Ù,,Ù%ø ø³ø°Ù§Ùø§Ù,,ø¥Ù+ø-ø¹ø§ø«ø§ø³ ø§Ù,,ø¶ø§ø±ø© Ù¹ø³ø¥Ù...Ù+ Ù...ø³ø³Ù,ø-Ù,, øEÙø¶Ù,, Ù,,Ù,,øEø-Ù§ø§Ù,, ø§Ù,,Ù,ø§ø-Ù...ø©	Neutral/Unclear
Residential Non-PIPP	Hope you are looking to keep costs down for customers.	Neutral/Unclear
Residential Non-PIPP	of not knowing my usage of electric is unexpected. I need actual reading, not For 2 month a guessing game.	Neutral/Unclear

Residential Non-PIPP	This questions on this survey are so slanted toward AEP how can it be impartial?	Neutral/Unclear
Residential Non-PIPP	My bill is always toooooo high.	Neutral/Unclear
Residential Non-PIPP	What are the costs involved?	Neutral/Unclear
Residential Non-PIPP	will this result in yet another charge to the customer?	Neutral/Unclear
Residential Non-PIPP	The Important to the customer is to lower our bill.	Neutral/Unclear
Residential Non-PIPP	Will this increase or decrease my extremely high electric bills???	Neutral/Unclear
Residential Non-PIPP	Because is rally expensive	Neutral/Unclear
Residential Non-PIPP	I need for AEP to keep my electric bills as low as possible.	Neutral/Unclear
Residential Non-PIPP	I just donâ€™t want this to end up with increased utility bills.	Neutral/Unclear
Residential Non-PIPP	I am curious about the question about renewable energy creation within the State of Ohio... wouldn't line loss reduce the efficiency and viability of renewable energy creation distant from it's point of use?	Neutral/Unclear
Residential Non-PIPP	Itâ€™s very Important to keep our prices down expically for older people on fixed income so they can eat and live a little better!	Neutral/Unclear
Residential Non-PIPP	Only consideration should be cost and reliability.	Neutral/Unclear
Residential Non-PIPP	Concerned for continuous uninterrupted or at least limited interrupted service.	Neutral/Unclear
Residential Non-PIPP	Keep it as cheap as possible however that looks.	Neutral/Unclear
Residential Non-PIPP	DON'T RAISE PRICES TO DO IT	Neutral/Unclear
Residential Non-PIPP	Thank you.	Neutral/Unclear
Residential Non-PIPP	Cost for the customer is also one of the most important factors	Neutral/Unclear
Residential Non-PIPP	AEP rates are already excessive. Do not raise them further.	Neutral/Unclear
Residential Non-PIPP	Will development of renewable energy require investments that will translate into higher electric bills at any point in time? Will the use of renewable energy positively impact families living in poverty? Organizations like Godman Guild are able to work with AEP Ohio to develop training programs for individuals needing jobs with tracks to careers.	Neutral/Unclear
Residential Non-PIPP	If we're heading towards the increasing use of automatons & automatic readers why not invest in cleaner & cheaper (per cost by watt & hopefully recyclable products/parts) labor overall locally so that at least towards the great lakes region & the Ohio river it could compete with the western/eastern parts of the U.S. as well as use less coal in southern Ohio & parts of the Virginias	Neutral/Unclear
Residential Non-PIPP	lower the cost of energy	Neutral/Unclear
Residential Non-PIPP	I would like save every electrics less cost i alway keep light off at nite I used tv on when I'm watch tv and so less cost save my money live my place no plm	Neutral/Unclear
Residential Non-PIPP	I want the most affordable power possible.	Neutral/Unclear
Residential Non-PIPP	don't increase electricity price	Neutral/Unclear
Residential Non-PIPP	great service	Neutral/Unclear
Residential Non-PIPP	Price is more important	Neutral/Unclear
Residential Non-PIPP	Do anything that will lower my cost. I can't afford your electric now.	Neutral/Unclear
Residential Non-PIPP	quit sending me survey, I'll drop you	Neutral/Unclear
Residential Non-PIPP	Why my bill is to mouch and i make fix pament can u get me offer for builing is great dill for me	Neutral/Unclear
Residential Non-PIPP	It might help your customers if you use less confusing words in some of your messaging. The email titled "Utility-sourced renewable generation" did not encourage my interaction. Additionally, I get too much volume of email from AEP and am not likely to read what you send.	Neutral/Unclear

Residential Non-PIPP	I cant afford any more money for extra bills I live on a limited income I cant even buy food and have no public assistance to help pay for anything	Neutral/Unclear
Residential Non-PIPP	your power is way to over priced. i can never retire because of this never ending expense !!!!!	Neutral/Unclear
Residential Non-PIPP	I don't want to pay any more than what I currently do	Neutral/Unclear
Residential Non-PIPP	Keep rates as low as possible.	Neutral/Unclear
Residential Non-PIPP	/ アンケートにご協力いただいた皆様、ありがとうございました！調査をすでに完了している場合は、このメッセージを無視することができます。	Neutral/Unclear
Residential Non-PIPP	If it is going to continually spike our rates which are ridiculous already then can the idea. Electric regardless of how big of home and efficiency should not be what it is. Private residences 3000 sq. ft. and under should not have \$600 to \$1k bills in the winter, and spring and fall should never reach 3to4 hundred. I seen my by go up insane amounts in just one year about 6 to 7 years ago when rates started to climb. If ESO regulations have reduced or is holding steady with current standards then do not invest in renewable in the midwest.	Neutral/Unclear
Residential Non-PIPP	How will this effect my bill?	Neutral/Unclear
Residential Non-PIPP	Don't raise my bill	Neutral/Unclear
Residential Non-PIPP	I honestly don't care if you do or don't do the renewable energy as long as you don't increase my bill. But you most likely will so I may just switch over to solar.	Neutral/Unclear
Residential Non-PIPP	I'm guessing this survey is for the consumer to agree with "greener" ways of receiving electric. With that being said, I also guessing that that will come with a price that will be extended to the consumer.	Neutral/Unclear
Residential Non-PIPP	Just that, my AEP bill is off the charts with AC, night lites, tv only electric and necessary items being used. Lights are never used but on occasion.	Neutral/Unclear
Residential Non-PIPP	If it is a lot more expensive to use renewable sources I would prefer not to I like my electric bill as low as possible.	Neutral/Unclear
Residential Non-PIPP	Do not increase my bill.	Neutral/Unclear
Residential Non-PIPP	How expensive?	Neutral/Unclear
Residential Non-PIPP	I don't want higher bills!	Neutral/Unclear
Residential Non-PIPP	Already did	Neutral/Unclear
Residential Non-PIPP	Don't have enough information to make reasonable comments. How much is my bill going to go up to finance this development? As a senior I cannot afford additional utility bills.	Neutral/Unclear
Residential Non-PIPP	Will this new development as you call it, lower my bill? That's all I care about	Neutral/Unclear
Residential Non-PIPP	Why should I pay \$30 plus dollars even if im not home for 2 months not using any electricity? I'm from NYC and over there IF you dont use energy, then you dont get charged for it! It's ridiculous that I have to pay for distribution even if I didn't use energy.	Neutral/Unclear
Residential Non-PIPP	Hopefully this doesn't raise our power rates again!	Neutral/Unclear
Residential Non-PIPP	I installed solar hot water \$10,000. 1983. Sold house in 2009. Very very long pay back for high investment. Based on putting money on the table and 26 years experience I am NOT CONVINCED that solar, or wind are viable in Ohio or Connecticut where I used to live. / Ask me about photovoltaic installed on each house grid connected with the "meter running backward" and I have definite opinions - that AEP will not want to hear and therefore the reason you are NOT asking! Hundreds and thousands of little electricity producers with photovoltaic beats solar or wind concentrated in one hand (AEP) -hands down!	Neutral/Unclear

Residential Non-PIPP	Way to expensive I wish there was another energy company	Neutral/Unclear
Residential Non-PIPP	thanks always for providing us with out electricity	Neutral/Unclear
Residential Non-PIPP	I would want to ensure that energy costs did not become even more unaffordable because of this change.	Neutral/Unclear
Residential Non-PIPP	No	Neutral/Unclear
Residential Non-PIPP	As long as the prices come do I'm good with whatever you me to do !!	Neutral/Unclear
Residential Non-PIPP	Reliable power and dependable	Neutral/Unclear
Residential Non-PIPP	My bills are always huge. I live in a small condo and in between two others. So in other words I m enclosed on both sides by other units. It makes no sense to me. I have tried very hard to keep my electric turned off if I'm not using it. I've changed all my light bulbs to LED light bulbs. I don't get it. And I'm tired of being ripped off. I also need to get on the budget plan for the winter. But I'm sure that's a huge hassle like everything else.	Neutral/Unclear
Residential Non-PIPP	I don't care about renewable sources. Want lowest utility bills possible however you make that happen please!	Neutral/Unclear
Residential Non-PIPP	Will the rates go down with this?	Neutral/Unclear

## Residential PIPP Responses

Segment	Do you have any comments regarding AEP Ohio's development of renewable energy generation that you would like to share?	Comment Category
Residential PIPP	This is the most wonderful initiative I've seen in a while! Please. Please do this. Our planet needs us!	Supportive
Residential PIPP	Hopefully it will allow us to have less power outages ever since the Beverly hydroplant closed the power goes out on a continued basis	Supportive
Residential PIPP	Renewable energy means lower bills and a better environment.	Supportive
Residential PIPP	Hopefully it makes the energy bills lower in cost.	Supportive
Residential PIPP	Wind turbines make great electricity. Use them in the state to reduce costs. On the old land fill out side of mount Vernon is a great high point to put one. It could power the city and more.	Supportive
Residential PIPP	If we in the more Rural areas were able to help, whether by solar or wind, it would help everyone. We could reduce the destruction of the ozone layer, clean the air , which would be beneficial to the health of people, and make us energy independent.	Supportive
Residential PIPP	What took you so long?	Supportive
Residential PIPP	I believe renewable energy is the key to solve the global warming problem, we should always be on the front of new technology instead of trying to keep the old way up to date by "patching" it. I say embrace the new way, the better way of doing things. It is time to catch up with Europe on many things, and to help make our planet better.	Supportive
Residential PIPP	I hope to see great advancement in renewable energy in the very near future.	Supportive
Residential PIPP	Do it quickly. The environment is in trouble. I like the idea of clean energy.	Supportive
Residential PIPP	It would hopefully create more jobs!!!	Supportive
Residential PIPP	Anything that will save energy and cost on our electric bills I am for !	Supportive
Residential PIPP	Renewable energy should most certainly be used to make our State better.	Supportive
Residential PIPP	Using wind and solar is a great idea. If we can harvest it to also use during the winter when the sun is out for a shorter time period it would be fantastic. I personally would put panels on or near my home.	Supportive
Residential PIPP	Very good program: maintain, and do more.	Supportive
Residential PIPP	I'd love to see alot more solar/wind incentives for residential usage.	Supportive
Residential PIPP	It could lower the cost to the customers as well as the company due to carrier charges an whatnot	Supportive
Residential PIPP	Put some on our land	Supportive
Residential PIPP	I've always been interested in solar energy.	Supportive
Residential PIPP	I have land if interested for wind mills.	Supportive
Residential PIPP	Should save customers some money!	Supportive
Residential PIPP	Very happy you are considering investing in renewable sources for our future. Thank you.	Supportive
Residential PIPP	Be nice to be 100% renewable energy	Supportive
Residential PIPP	Slmply YES...more more more wind and solar!!	Supportive
Residential PIPP	Wind turbines needed.	Supportive
Residential PIPP	Finally? planet preservation overrides greed? This is a fantastic move on AEP's part, but WE all know that money supersedes common sense and goals.	Supportive
Residential PIPP	Iâ€™m thrilled to learn that this is something AEP is looking to do!! I believe using renewable energy sources is very important for so many reasons, not the least of which is our personal health and the health of our planet.	Supportive
Residential PIPP	It would be nice if it was in Ohio, but if you are switching to solar and wind for more of the energy, it can come from anywhere in the us.	Supportive
Residential PIPP	Go to it	Supportive



Residential PIPP	I have seen in Europe that they use trash to generate energy. Roads to generate solar energy. Roof tops for solar energy. Huge amounts of potential for real change if we will look and do for human benefit not just profit.	Supportive
Residential PIPP	I am glad to know that renewables are being used for power production...it will help protect the earth for generations to come...we have to stand up and be responsible caretakers for the gift of life we have on this planet called Mother Earth...	Supportive
Residential PIPP	I would like to see AEP using wind and solar energy more then any other resources. Also helping it's customers to be more independent with solar energy.	Supportive
Residential PIPP	I'm glad you've(AEP) finally taken an interest IN preserving the earth.	Supportive
Residential PIPP	Taking advantage of free energy just seems like a no-brainer to me.	Supportive
Residential PIPP	Another round of low cost programs for solar and small wind turbines for residential customers is necessary. Stopping ALL fossil fuel usages to power and heat homes in this and future centuries is irresponsible to the planet and causing its death unnecessarily! Why does AEP's COO believe the weather is becoming so extreme? It is the people occupying this planet that causes most of the reactions by the atmosphere and the planet. It is the base greed by all fossil fuel companies that has created so much turmoil with this green earth. It can be turned around by the countries and companies that abuse the fossil fues byl drilling, but only by refusing to continue using all fossil fuels to enrich themselves.	Supportive
Residential PIPP	Honestly I think itâ€™s a wonderful thing and am even exploring options for my home since I know it isnâ€™t the bulk of AEP generated electricity supplied to me.	Supportive
Residential PIPP	I personally think this is an amazing idea and one that would not only help Ohio, but the world. People are going to disagree with this because they lack common sense but you can teach them and show them renewable energy is the way to live. Good luck.	Supportive
Residential PIPP	Cleaner is better for our offspring, period....	Supportive
Residential PIPP	Free energy. It's really a no-brainer. Get it done.	Supportive
Residential PIPP	I think each year we need to better our electricity. We need to keep getting it from Ohio and giving Ohioans jobs. We need to keep getting cleanerP air for future generations. And we sure need to get better programs for people who cannot afford aep all the time. We need to also find a way to lower the cost of electricity especially since we are getting it from Ohio.	Supportive
Residential PIPP	Divest from coal. Start lobbying for green energy. Promote an energy buy-back program for homeowners and businesses, install the meters for it.	Supportive
Residential PIPP	renewable energy generation is the right thing to do for the country and for the world. If the US doesn't get on board we will be left behind in the future.	Supportive
Residential PIPP	do it, don't just talk about it	Supportive
Residential PIPP	Please use wind turbines	Supportive
Residential PIPP	It's our future to provide a clean environment for generations to come.	Supportive
Residential PIPP	Environmently Friendly!!!	Supportive
Residential PIPP	I believe that this is a greater step to ensuring a better quality of life for all people that are customers or not. Jobs created within the state of Ohio as well as supply and demand at hopefully a better rate.	Supportive
Residential PIPP	go for it	Supportive

Residential PIPP	If you're going to create local jobs make it fair in the education of and hiring procedures for all races	Supportive
Residential PIPP	We're seeing catastrophic global events due to climate change. It's imperative we not kill ourselves. That is all.	Supportive
Residential PIPP	Generation in Ohio may create jobs.	Supportive
Residential PIPP	Glad your trying	Supportive
Residential PIPP	Just do it, (&thumb your nose at Trump).	Supportive
Residential PIPP	Its good that AEP Ohio's development of renewable energy generation	Supportive
Residential PIPP	Doing a great job.	Supportive
Residential PIPP	as a electrician, I understand the need for energy diversity, fossil fuel has been the norm, but will not last forever.	Supportive
Residential PIPP	I am glad you are working in this direction to improve our environment	Supportive
Residential PIPP	aep development of energy well help all of us.an hope it bring down the coast of useage.	Supportive
Residential PIPP	I fully believe that as a whole mankind cannot afford not to diversify our energy sources. Life moves on and we cannot hold this evolution of the society back so we must move forward.	Supportive
Residential PIPP	I think its a great idea for AEP to invest. I have read so much on renewable energy.	Supportive
Residential PIPP	Solar the best bet for now. Hydrogen should be used also, on a limited basis due to necessarily limiting it because of the danger of it falling in wrong hands. Helium 3 the ultimate best source known. Mine the MOON !	Supportive
Residential PIPP	We need to start depending on renewable energy, to further ourselves, our planet, and the future generations. We can't depend on non renewable energy forever, and we have to take better care of the planet on which we all live.	Supportive
Residential PIPP	While initial costs for solar wind towers are quite high, they produce enough energy to pay for themselves within a relatively small window frame. I throughly enjoyed the opportunity to see how it works first hand when I lived in a different state.	Supportive
Residential PIPP	Keep the public informed.	Supportive
Residential PIPP	Speed it up! Ohio is always behind on these types of issues. Bring it to the people with confidence and a voice. People in this area don't want a survey, they want a hand shake and commitment.	Supportive
Residential PIPP	I think it this is another brilliant step in the right direction.	Supportive
Residential PIPP	do it	Supportive
Residential PIPP	I think the biggest benefit is diversity. Just my opinion.	Supportive
Residential PIPP	It's great that AEP is considering using more renewable energy, thanks so much!	Supportive
Residential PIPP	I would love to see more wind and solar provided energy sources in Ohio and around the country. I feel it is important to our country's future and the future of generations to come. Eventually oil will no longer be a resource that is readily available and we will need to have other sources to provide for our needs. These other sources will be a valuable commodity to our communities.	Supportive
Residential PIPP	Keep striving to make renewable energy sources.	Supportive
Residential PIPP	I'm pleased to see that your company is moving into the future of renewable energy. We as a species should contribute to the earth and take only what we need.	Supportive
Residential PIPP	I would like to see more "healthy" energy produced for our earth and future generations with the cost for the middle class kept in mind when considering which sources and/or combination of energy generating sources to use.	Supportive

Residential PIPP	As long as it doesn't cost consumers more money it's a good idea. While we need as many ways as possible to get energy people can't afford to pay more for it.	Mixed
Residential PIPP	I think it's a good idea as long as they do not get anything from China	Mixed
Residential PIPP	Why not put solar panels on the top of the wooden poles that go along our road.	Mixed
Residential PIPP	Hopefully you're also exploring how to provide these services so they will be more affordable especially to those on low or fixed incomes	Mixed
Residential PIPP	I like to see you help customers get solar panels for their homes to use as a backup power supply	Mixed
Residential PIPP	As long as it doesn't make rates go up in all for it! Solar and wind energy have proven what they can do. It's time to use it!	Mixed
Residential PIPP	Try adding hydro power into it.	Mixed
Residential PIPP	Looking forward to this happening, as I'm sure the savings will be passed into the customers....through lower costs in the future.	Mixed
Residential PIPP	I wish I could afford solar panels & wind mills for my home. Being on a fixed income it isn't possible.	Mixed
Residential PIPP	Offer those who own their home and live on limited income a way to lower the bill & help bank energy with solar panels and/or wind.	Mixed
Residential PIPP	I think we should be allowed to go fully solar we as customers want to, but also have backup service for when solar isn't working well.	Mixed
Residential PIPP	I like the idea of solar energy but not big on the idea of wind because of having those turbines in this county (Seneca). I don't think that would be a good thing to do to the environment and the people who live here. They should be put somewhere where there's more open space and no people.	Mixed
Residential PIPP	Need to use our own solar panels	Mixed
Residential PIPP	Residents near wind turbines are strongly put off by the intense noise pollution stating the turbines sound like jet engines running frequently. Property values are dropping near these wind farms...let us explore various uses of wind power to find a more silent and effective "windmill".	Mixed
Residential PIPP	The renewable energy needs to be a reliable source.	Mixed
Residential PIPP	Just hope it won't cost us more if this is the way you decide to go.	Mixed
Residential PIPP	I think our power bill is high enough with all the taxes and fees charged. But natural resources is a very good option.	Mixed
Residential PIPP	It's important for each state to have independent energy resources to include an energy grid for each state. This would prevent many states from losing power if there is a grid problem. (Example: Texas) Fossil fuels are our most reliable source of energy followed by hydro- electric. Until solar and wind generated power can be as reliable; they will have to remain as supplemental power sources.	Mixed
Residential PIPP	Renewable energy is supposed to be cheaper than what we have now. How much will this increase our electric bills?	Mixed
Residential PIPP	Let's not create laws making renewable hard to implement for individual people then being off the grid helps the grid provide power to others.	Mixed
Residential PIPP	Why don't you pick some houses and put solar on their roofs that way we can all save money	Mixed
Residential PIPP	Don't rush into anything that hasn't been fully vetted. Take the time necessary to make sure any renewable energy is really sustainable and dependable.	Mixed
Residential PIPP	Do it without raising our bills	Mixed
Residential PIPP	Sounds great if it doesn't cost us more on our already high rates	Mixed

Residential PIPP	Ok renewable energy is great but at what cost? Utility companies cannot have a blank check cannot waste our \$ on the name of research and charge whatever price they want.	Mixed
Residential PIPP	Solar panels on houses that are billed by AEP at lower cost, or even with a payment plan that could lower electric bills of that household and possibly feed back to the grid. If that would be put into effect also offer insurance (like the gas company monthly payment within the bill) to service and repair those issues that would be considered the homeowners responsibility after install.	Mixed
Residential PIPP	I would love to convert home to solar power. I have been told there are programs to help with this and fixing insulation etc in homes. I would love to contact these programs!!! The earth needs us! And we need it. We cant continue wasting it!	Mixed
Residential PIPP	Hydroelectric seems to be the best solution to me. The fish hatchery program was developed to deal with the migrating fish issue. I also do not believe these dams have to be so high. They make them high so the gravity of the water falling increases energy in the water but this is not absolutely necessary to generate electricity. Smaller dams would not produce year round because they do not have a huge reservoir but neither will wind or solar.	Mixed
Residential PIPP	I think it's a great idea assuming that it also cut the cost on your electric bill	Mixed
Residential PIPP	Offer solar panels are a more reasonable price to consumers to help with energy generation	Mixed
Residential PIPP	When wind farms are built they should not be within a reasonable distance from a town or so close to property lines. There where 3 large wind mills placed about three hundred yards from my home. On windy days we can hear them. I wish we had a choice in this.	Mixed
Residential PIPP	The more you do to create jobs and save the environment the more support you will have. Just dont eliminate current jobs instead train them to your new systems.	Mixed
Residential PIPP	Ya we over pat as it is stop riasring the price we barley can feed are families now	Negative
Residential PIPP	The cost of manufacturing windmills and solar panels greatly counter the practicality of using them. Any savings is substantially offset by this. Also, these forms are not constant. The wind doesn't always blow and the sun doesn't always shine. The only way to harness the power is by using batteries, which again, the harm done by manufacturing batteries and then disposing them is far worse than coal or natural gas to the environment.	Negative
Residential PIPP	i think you should use gas to generate power its cheep and renewable	Negative
Residential PIPP	My husband currently works at AEP and his coal plant is scheduled to close down in the next couple years so I am against them changing to a different kind of energy!!!!	Negative
Residential PIPP	Stick with coal. Or do you not care about saving the consumer money?	Negative
Residential PIPP	what a wast of money on tech rthat is not efficient enough for the commercial market. what is the problem with clean coal. it's proven,efficient and cost effective, not to mention Ohio has an abundance of it ,so does the rest of the country. Politics destroy's good tech for rthe wasteful benefit of "trying " to look "green".	Negative



**Small C&I Responses**

Segment	Do you have any comments regarding AEP Ohio's development of renewable energy generation that you would like to share?	Comment Category
Small C&I	We need to slow down carbon emissions to slow global warming!	Supportive
Small C&I	Less than 10% of energy coming from alternative renewable resources seems low. Of course I don't know what the industry standard is. I would be interested to see/hear what AEP's goal is over the next 5 and 10 yr. period to increase this %.	Supportive
Small C&I	We have solar panels that were made possible by your rebate program several years ago. Thank you for your support of solar energy! [any chance of another rebate program???	Supportive
Small C&I	Please stop depleting the planet's resources and switch to 100% renewable energy as soon as possible. Thank you.	Supportive
Small C&I	Do it	Supportive
Small C&I	Would be interested in renting out ground for solar panels.	Supportive
Small C&I	Think this is a worthwhile endeavor and encourage you to pursue it	Supportive
Small C&I	Should have been done years ago	Supportive
Small C&I	Yes start using your resources and lower the cost of generation service it's border line crimina	Supportive
Small C&I	Please make the effort to move towards greater renewable energy. As a country, we've been far too driven by profits over responsibility and have likely dragged our feet on moving towards renewable energy due to the cost of conversion. Lead the way.	Supportive
Small C&I	It will be easier for us to get behind the initiative if it is providing jobs in our communities.	Supportive
Small C&I	I think it's wonderful. A company so big to really look to the future and protect our planet is a huge and worthy investment.	Supportive
Small C&I	Check out Florida's energy services. They switched all their plants to natural gas and supplemented with solar panels. They may have the least expensive electricity in the country. Ohio may not have enough sunshine for solar panels.	Supportive
Small C&I	Would like it to happen as soon as possible for my grandchildren's long term health.	Supportive
Small C&I	Yes I have a perfect 8Y'CE very large open flat parcel of property with a transmission line running through it. You should contact me!!	Supportive
Small C&I	Again I would like to see AEP do what they can to embrace renewable & get away from fossil fuels so to protect the planet for our children. If AEP could invest into more R&D it could create more jobs & investments in the USA rather than China.	Supportive
Small C&I	It would be nice to have the type independence with the grid in Ohio that Texas has. If the effort was made to allow our "state produced" power to be shared with other utilities until circumstances warrant the "state produced" utilities be diverted back to statewide use only, such as in the event of EMP strike or other type of grid damage do to outside attackers.	Supportive
Small C&I	This would be one of the most amazing things ever. I have always wanted to move to solar panels, but couldn't afford to. If energy companies moved to renewables, nobody would have to do that! It seems like the only thing that really makes sense. We are wasting trillions of gallons of fresh water with fracking for gas, etc. It makes no sense when we could move en masse to something better that made more sense.	Supportive
Small C&I	We have a large area of farmland that is not farmable. We think it would be a perfect location for solar panels. We are very interested in renewable energy's.	Supportive



Small C&I	Solar Energy has finally reached the place where it makes good business sense. AEP Ohio needs to encourage all customers to include solar in their construction plans.	Supportive
Small C&I	It is important and well worth increasing use of renewable energy resources.	Supportive
Small C&I	Solar and wind are much better options than fracking to get natural gas.	Supportive
Small C&I	Renewable energy is good for everyone and I am very happy as a design professional to see AEP pursuing this.	Supportive
Small C&I	I hope with possible developments of renewable energy it will cost cheaper.	Supportive
Small C&I	Changing from proven energy sources to newer, cleaner ones is difficult but I fully support the effort and I appreciate the hard work.	Supportive
Small C&I	It is about time you get with the program.	Supportive
Small C&I	We have visited so many other states that are taking advantage of renewable energy. Ohio needs to do the same.	Supportive
Small C&I	I beleive it is the future of energy and should be utilized as soon as possible.	Supportive
Small C&I	Ohio jobs for Ohio Families!!	Supportive
Small C&I	I always wondered if it was feasible to use sewer flow to generate power	Supportive
Small C&I	I own land along your power line lets do solar and or wind	Supportive
Small C&I	Please continue to pursue utility renewables. I fully support, especially because it's still difficult and confusing for consumers to pursue their own residential renewable generation	Supportive
Small C&I	I believe that it is a responsible business approach that will benefit customers.	Supportive
Small C&I	Wind!!!	Supportive
Small C&I	AEP has earned my trust as a company through their quality service and product. I trust them to make decisions that will keep our great state and country well supplied with the energy we need, energy diversified, energy independent and position us to be an energy exporter.	Supportive
Small C&I	Please move forward!	Supportive
Small C&I	Very glad to know that AEP is developing renewable energy options.	Supportive
Small C&I	Love to hear that this is a focus of AEP!	Supportive
Small C&I	it is about time.	Supportive
Small C&I	No fracking	Supportive
Small C&I	Iâ€™d love to get in on solar energy	Supportive
Small C&I	Go for it	Supportive
Small C&I	I feel there should be more accessibility to customers to get their own renewable energy sources	Supportive
Small C&I	We have MANY wind turbines in our county, if we have to look at them, let's get some benefit from them!	Supportive
Small C&I	anything that helps the environment while also lowering energy bills is a win win	Supportive
Small C&I	Please do anything you can!	Supportive
Small C&I	I'd be willing to have a wind energy generator attached to my office if it were cost efficient.	Supportive
Small C&I	I would like to help. What can I do?	Supportive
Small C&I	Very happy that you are making this effort and hope that it keeps improving and increase the energy efficiency	Supportive
Small C&I	The more the merrier. The sooner the better.	Supportive
Small C&I	Yes, I wan to go solar with my business!	Supportive

Small C&I	I would like to see more sources for power development rather than fossil fuels	
Small C&I	The more diverse sources we have .the greater benefits for the future generations and the environment.	Supportive
Small C&I	It is about time--you need to get with the program	Supportive
Small C&I	Seems like NOT pursuing renewal energy generation is counter productive! We will run out of oil and natural gas. And renewables don't create greenhouse gases. Should be a winwin, no brainer decision!	Supportive
Small C&I	IT'S GREAT THAT YOU ARE SERIOUSLY TAKING THIS ON. THANK YOU!	Supportive
Small C&I	As a country, we need to reduce our dependence on oil. Coal is dirty and dangerous. Solar and Wind power are infinite, and don't spoil air and water quality. We NEED to do this, NOW!	Supportive
Small C&I	Don't give up. I know the State legislature changed the setback for turbines. Coal is not dead, it's just really dirty. While cheap to mine, it's expensive to clean. Diversify the supply.	Supportive
Small C&I	Use of alternative forms of energy generation will accelerate improvements in efficiency and dependability, thus lowering cost of alternative energy systems. Whereas continued use of fossil fuel sources will demand increases in the scale and efficacy of pollution controls and thus increase the cost of generation. Balanced alternative sources will result in both social and economic benefits.	Supportive
Small C&I	Would AEP have any input in putting in an electric high speed rail from rural communities to larger cities? Country people need the same healthcare as city people but it's harder to achieve due to distances.	Supportive
Small C&I	This is such an important issue, if we value things like every city on a coastline, for example; and energy companies are one of the biggest players in the game, the people who can really make a difference with their choices. Yes, it's up to consumers to reduce their own energy consumption and to make better product and investment choices, but nothing we individually do could ever make as much difference as switching the entire electrical grid (or a lot of it) to renewables.	Supportive
Small C&I	Would like to see more programs for customers to participate in renewable programs.	Supportive
Small C&I	You are behind on this. /	Supportive
Small C&I	It is important for future generations to increase renewable energy sources. AEP should work towards increasing its renewable energy sources for the good of the environment.	Supportive
Small C&I	I enjoy using AEP Ohio electricity high-quality reliable energy for me at a very reasonable rate thank you [DELETED DUE TO PERSONAL IDENTIFIABLE INFORMATION]	Supportive
Small C&I	I hope that AEP comes through with plans to use renewable energy, it just makes good business sense.	Supportive
Small C&I	I have land available for a windmill. It is always windy there.	Supportive
Small C&I	Get it done	Supportive
Small C&I	Less polutuon, better quality of life, and taking care of the environment is very important to us. We do our small share and would appreciate aep doing what they can do ,too.	Supportive
Small C&I	Keep up the good work you have good employees like [DELETED DUE TO PERSONAL IDENTIFIABLE INFORMATION]	Supportive
Small C&I	Yes Please do all you can	Supportive
Small C&I	We also need to allow virtual net metering so smaller scale community based solar can be input to the grid. This allows for local involvement.	Mixed
Small C&I	if it is cost effective do it if not don't	Mixed

Small C&I	If it's done, there has to be manufacturing jobs that are attached to any large investment by customers.	Mixed
Small C&I	Maybe give people options on their bills to have solar or wind generation options to buy or lease to own.	Mixed
Small C&I	What about hydroelectric generation?	Mixed
Small C&I	Diversification is always important in all things. Having one type of source leave you open to unforeseen issues.	Mixed
Small C&I	I want whatever provide cheaper energy!	Mixed
Small C&I	I am investigating and participating in a solar co-op to consider solar panels for my business. It would be great if AEP provided some monetary incentive to help cover the install costs.	Mixed
Small C&I	Using Renewable sources of energy makes sense if the cost is competitive with other forms of energy for example coal and natural gas.	Mixed
Small C&I	I believe diversity of sources is very important. Conesville is very important to our community and I see to big a shift to completely get away from coal.	Mixed
Small C&I	If it will make costs go up, than I'm not interested.	Mixed
Small C&I	I hear in New Jersey they have a program for solar electric panels on homes, why not Ohio	Mixed
Small C&I	I would like to think that with renewable generation, solar panels, etc., could be make available to customers at prices we could actually afford	Mixed
Small C&I	Make it easier for customers who already have solar and wind to connect, feed to and draw from AEP. Last time I checked the coops were making it very easy and AEP was making it at least somewhat difficult.	Mixed
Small C&I	Would put solar panels on my house if for very inexpensive or offered thru aep with done kind of a payment	Mixed
Small C&I	I simply want access and choice in selecting various degrees of clean energy in my tariff.	Mixed
Small C&I	Make it easy to do net metering for individual home owners. With runaway climate change a distinct possibility, there should also be a cost associated with polluting for the producers of dirty energy. That could help fund your costs associated with the clean energy conversion.	Mixed
Small C&I	Very interested in participating in any solar pilot program that you might come up with in the future. Much like the electric supplier in Vermont.	Mixed
Small C&I	I would like the lowest cost power, no more and no less. If renewables can not produce power at a lower cost than nat gas or coal then it should not be considered.	Mixed
Small C&I	I would like to see better support for on site generation, i.e. net metering for commercial customers. Or subsidies to help me install solar that will benefit the grid.	Mixed
Small C&I	I would like to see AEP continue its commitment to community by diversifying energy sources for the future. Until AEP invests, we cannot improve options with more efficient alternatives/new technologies.	Mixed
Small C&I	I moved here from MN. I would not participate until I was assured that a solid company with a sound business plan was proved. Solar energy and wind companies just do not have their act together. Many times sold to a new company mid build.	Mixed
Small C&I	I would much rather use solar or water than wind. Wind in the long run can cause issues to a person's health	Mixed
Small C&I	Renewable energy should be a BENEFIT to Ohio customers...not an increased cost	Mixed

Small C&I	Renewable energy should not endanger anything. Today's wind mills are environmentally dangerous due to leaking and birds. Wind mills should be placed where they offer little risk to wildlife. Even cost saving light bulbs that were pushed contain materials that should be treated as hazardous waste but nobody is taking a strong effort to reclaim them. What concerns should there be with solar panels after they are no longer in use? Before jumping into the next new thing better understanding of the long term effects should be better understood.	Mixed
Small C&I	Renewable energy is extremely important for our planet but it must be developed with a strategy that controls costs as well. It must be affordable to all or it will not develop as quickly as it should.	Mixed
Small C&I	I just mentioned the fact that we do not want the good cleared land to be used when there are many acres of unused land available for less money	Mixed
Small C&I	I might be interested in a solar system in my facility.	Mixed
Small C&I	Only if the renewable energy is cheaper	Mixed
Small C&I	invest ONLY in ventures that are cost efficient and profitable to users and your stockholders!	Mixed
Small C&I	solar over wind since solar is more practical.	Mixed
Small C&I	We of course want to protect our environment but not to the point of going overboard on expense to do so.	Mixed
Small C&I	If renewable energy is a higher cost then don't invest until the cost is equal to natural gas or coal.	Mixed
Small C&I	Cost Effective Renewable energy is a wise investment. But if it's an expensive transition simply for unbalanced EPA rules then screw them....	Mixed
Small C&I	Don't waste time and money on technology that does not produce results. This overall looks like a money losing project, so don't invest into it until a small project shows it can be productive on a mass scale.	Mixed
Small C&I	I love solar but I hate the way the windmills look. I live on a farm and they have ruined the landscape at night. Looks like I live in the middle of an airport.	Mixed
Small C&I	NEED TO KEEP THINGS IN PERSPECTIVE ECONOMICALLY, COAL AND GAS ARE STILL A GOOD SOURCE OF ECONOMICAL POWER, THE WINDMILLS ARE HIGH RISK!!	Mixed
Small C&I	If the development does not come at an even higher energy cost increase to customers, I think it is a pretty good idea.	Mixed
Small C&I	I'm in Zanesville, I would love to see the dam we have by the river produce energy. Diversifying is an unavoidable necessity.	Mixed
Small C&I	If you go after renewable energy sources, do not raise our rates	Mixed
Small C&I	Hope The Investment Cost Doesn't Make It Unaffordable.	Mixed
Small C&I	Build some new nukes with modern technology.	Mixed
Small C&I	Wind energy does not have a ROI that can be utilized before it is obsolete.	Mixed
Small C&I	I am for whatever energy is the most economically available. Be it wind, solar, coal, natural gas or nuclear	Mixed
Small C&I	I think it's too costly. Which means I'm going to pay for it. I don't think it's a good return on my dollar	Mixed
Small C&I	I don't want to pay a penny extra for renewable energy. If coal is cheaper, burn it.	Mixed
Small C&I	Why do we not use more hydroelectric power at the dams on the Ohio River for example?	Mixed
Small C&I	Make it easy for your customers to generate some of their electric from solar or wind and use AEP for the rest of their requirement.	Mixed

Small C&I	This is a cost of doing business and should lower your profit and not have a higher cost passed on to us, the customer. You are protected by PUCO and can set profits, we can't.	Mixed
Small C&I	I recommend you generate electric energy using the most cost effective means available.	Mixed
Small C&I	Creating jobs, even temporary ones, in the areas where AEP owns coal-powered plants would help offset the impact of the scheduled closure of those facilities.	Mixed
Small C&I	It would help if AEP provided substantial financial aid for wind & solar energy equipment for homeowners with the agreement that unused energy generated would be sold at a discounted price, or given back to AEP.	Mixed
Small C&I	While I love the idea of renewable energy generation I also recognize the value of non-renewable sources regarding jobs in those sectors. I would hope all energy sources could be used wisely to benefit both people and the environment without leaving people in traditional sectors of energy "out in the cold and dark."	Mixed
Small C&I	I have no interest in renewable energy if it's going to increase my electric bill.	Mixed
Small C&I	Wind power is not efficient. Solar is slightly better. Not in favor of wind production at all.	Mixed
Small C&I	I thought renewable energy was more expensive, I would not like to see you invest money into it if that's the case	Mixed
Small C&I	I believe AEP needs to invest in itself as any other business needs to invest in itself. I do not like that AEP wants its customers to pay for their renewable energy.	Mixed
Small C&I	I want the cheapest electricity possible, please DO NOT invest in renewable energy if it increases costs.	Mixed
Small C&I	if cost effective do it if not don't	Mixed
Small C&I	Ya, use your profits to pay for it.	Mixed
Small C&I	it needs to be made easier to put up solar panels in individuals homes and not have to deal with all the red tape	Mixed
Small C&I	Rebates or credits to businesses investing in solar/wind technology.	Mixed
Small C&I	I would hope that it doesn't add any cost to our bill.	Mixed
Small C&I	nice for future power generation, but not to replace current plants	Mixed
Small C&I	Pass the savings along to your customers. If you can generate electricity cheaper by using renewable energy then we should pay less for it.	Mixed
Small C&I	There is no need for renewable energy. Use Ohio natural gas and coal.	Negative
Small C&I	You guys have [REDACTED] service so you not try to make even more customers unhappy by bring this in to up charge more	Negative
Small C&I	Hard to beat conventional sources of electrical generation that is not dependant on sometimes unreliable sunlight or wind.	Negative
Small C&I	I already have options for renewables through the deregulated choice market. AEP Ohio should not be building generation. The financial risk of any generation including renewables should be left to independent developers and certainly not rate payers of AEP Ohio.	Negative
Small C&I	I care about the cost of energy, not the source. Renewable energy is generally more expensive and a less stable source.	Negative
Small C&I	I am not in favor of using renewable power if it costs us customers more like it did a couple years ago. That wasn't good.	Negative
Small C&I	The return on cost doesn't seem to be there. Political correctness doesn't pay my bills.	Negative
Small C&I	Wind and solar will not work in the North	Negative

Small C&I	Keep the price as low as possible. We are disappointed the distr/transmission are more expensive now than making electricity.	Negative
Small C&I	What I do value is consistent reliable energy and i feel that the cost of using renewable energy sources has not been fully examined. I believe the actual cost lifetime of renewable energy will be much more expensive and the worn out turbines and panels may be worse for the environment than coal or nuclear.	Negative
Small C&I	I am happy with natural gas supplied power, especially with the recent moves for cleaner production. We (Ohio and USA) have an abundance of natural gas available, so that as the primary energy source is most logical to me.	Negative
Small C&I	No more wind tubines near homes. Keep the current Ohio setbacks	Negative
Small C&I	i feel that the wind mill farms are the cause of a lot of the climet change	Negative
Small C&I	I am a coal miner I wish to see the continued use of coal.	Negative
Small C&I	No more renewable until it is cost competitive, and no subsidies.	Negative
Small C&I	Most renewable energy sources have a larger negative impact on the environment than fossil fuels. Solar because of toxic chemicals used to produce the cells and wind because of a tenuous (if not negative) energy balance (i.e., it takes nearly as much energy to produce, erect and maintain the wind turbines than is returned)	Negative
Small C&I	RELIABLE ENERGY IS IMPORTANT, NOT THE SOURCE. I tend to believe that energy that is subsidized by government is extremely unreliable, just like government regulation.	Negative
Small C&I	I am not interested in being PC about electric generation. We should not 'cave' to the radical environmental crowd that does not understand the problems with wind and solar. The high cost of these is prohibitive.	Negative
Small C&I	those windmills are nothing but a waste, can.t understand why you would want to waste good money on this crap	Negative
Small C&I	We need to try and be as competitive as possible providing electricity if we want to attract future business to Ohio	Negative
Small C&I	From my knowledge of renewable energy sources, they are not cost efficient to use. Also, they are not as good for the environment as many in the media and government would want us to think. Ask the many, many birds that are killed each year by wind turbines.	Negative
Small C&I	I think that this is a waste of money. Wind and solar are the most expensive forms of energy. Instead use the abundance of natural gas in the area to generate lower cost electric. Lower my rate instead of raising my rate for solar or wind produced electric. I am against any form of electricity generation if it comes at a higher cost to me.	Negative
Small C&I	Do not put wind turbines near our homes. They should not be closed we to anyone's home! They are unreliable and are bad for the environment.	Negative
Small C&I	Renewable energy on first glance appears to be a wonderful idea. However, it is more a PC flavor of the month being pushed as a solution to a described problem that has virtually no scientific basis. Renewables MAY become economically viable in the future but currently do little more than increase overall costs and destabilize the power grid. Those that call renewables "cheap energy" ignore the costs of government subsidies, which I believe must be accounted for in the final cost of energy. Renewables sounds great but the reality is that they are unreliable and much more expensive. My hope is that those advocating large scale mandated renewables, have their entire personal electrical usage supplied solely by renewables.	Negative

	Renewable energy is TOO expensive.	
Small C&I	Bring back clean-burning coal-fired electric generating plants - just as efficient, costs MUCH less, America's coal supply is almost limitless.	Negative
Small C&I	waste of resources raising our bills	Negative
Small C&I	I'm from Van Wert County, Ohio and the wind farms have been terrible and are very unpopular with our community. Please do not "push wind" on your customers at the expense of rural quality of life.	Negative
Small C&I	What ever is cheaper	Negative
Small C&I	We have an abundance of fossil fuel in this country. Use it. Renewable is still in the talking stages & can't possibly compete with the sources of fossil fuel.	Negative
Small C&I	Wasted money.	Negative
Small C&I	WASTE OF MONEY	Negative
Small C&I	Renewable energy sources are not a viable replacement for fossil fuel. In addition renewable energy projects usually require government subsidies (taxes).	Negative
Small C&I	Stay on task	Negative
Small C&I	The most economical form of energy is always the best. Fossil fuel is not the demon non-thinkers want us to believe it to be while expensive wind and solar power are not the deliverers the same people want us to believe them to be. I pay several AEP monthly bills and assure you that cost, convenience and service are my bottom line! Thanks for asking.	Negative
Small C&I	Coal	Negative
Small C&I	I'm against wind and solar for electric generation. Use the abundance of natural gas in the area. Lower my electric instead of raising the price of electric.	Negative
Small C&I	Renewable energy should only be pursued when it is competitive in the market place. Renewable energy as it is today is not a good option.	Negative
Small C&I	No windmills!	Negative
Small C&I	Renewable energy is too expensive and too unreliable	Negative
Small C&I	Burn coal. It's the most reliable and provide s. Many jobs. Remember the wind doesn't always blow and the sun doesn't always shine	Negative
Small C&I	Those types of energy are extremely expensive. Solar panels and so forth are outrageously priced. You pass on those expensive costs to the consumers which will cost customers much more. Stay affordable.	Negative
Small C&I	"Renewables" are more expensive and most have a greater negative environmental impact that current generation methods.	Negative
Small C&I	dont waste the money	Negative
Small C&I	Solar energy is not cost effective in our area without government subsidies.	Negative
Small C&I	Use coal. It provides jobs it more reliable and it can be burnt clean and it is cheaper	Negative
Small C&I	Develop renewable energy in the areas of the country where it is financially viable to do so without subsidies. Generating power from wind in Ohio is a waste!	Negative
Small C&I	No	Excluded
Small C&I	No	Excluded
Small C&I	Not at this time	Excluded
Small C&I	Renewable energy generation must be accompanied by energy storage. Commercial-scale energy storage units must be developed for effective use and distribution of renewable energy.	Neutral/Unclear



Small C&I	Need to increase jobs for the loss of are steel and manufacturing industries	Neutral/Unclear
Small C&I	Work on storage as this is biggest obstacle to most renewables	Neutral/Unclear
Small C&I	PLEASE REDUCE ENERGY COST TO USERS.	Neutral/Unclear
Small C&I	Is there an estimated cost that would be passed on?	Neutral/Unclear
Small C&I	I am not happy with extra fee we have to pay for another supplier to pay besides paying for AEP.	Neutral/Unclear
Small C&I	I would like to see the current workers for AEP trained so they can continue to work near their homes instead of laid off or transferred to other locations in order to continue to work. How can each village, town, city help provide locations to retain our workers?	Neutral/Unclear
Small C&I	the only thing i care about is affordability	Neutral/Unclear
Small C&I	Should make it easier for individuals to have dual use systems. This is because not everyone would use this type of system.	Neutral/Unclear
Small C&I	you would think the bill would be cheaper i get bills from other electric companys and they are way cheaper you guys	Neutral/Unclear
Small C&I	I would like to see energy produced at the least cost whether that be coal, nuclear, renewable or some or means.	Neutral/Unclear
Small C&I	The bill is way to high. Especially for transport and delivery when we have 2 electric plants in our county.	Neutral/Unclear
Small C&I	Yorkville OH Hydro Electric Plant	
Small C&I	Empice Ohio Hydro Electric Plant	Neutral/Unclear
Small C&I	I don't care what you do. Just quit charging me for excuses you call expenses.	Neutral/Unclear
Small C&I	You provide a commodity that is required for the society to operate. Regulatory governmental controls are necessary yet difficult for the consumer to evaluate. We need to protect our environment and that has its costs on a business and personal level. We are hopeful that R & D will have something on the horizon that benefits production profits, environmental foresight and consumer price strangulation in mind.	Neutral/Unclear
Small C&I	Will it raise bills?	Neutral/Unclear
Small C&I	I don't care too much about renewable energy. I would like to see demand charges go away. Particularly if I put my own renewable energy in.	Neutral/Unclear
Small C&I	I don't see it as being too important how the energy is generated.	Neutral/Unclear
Small C&I	You have to go thru too many vendors to get your electricity or energy. That makes extra costs for us.	Neutral/Unclear
Small C&I	What incentives are available for small business in Ohio to offset current electric usage charges? As far as I can see - none.... seems there should be more monies available for businesses to develop some of the alternatives....	Neutral/Unclear
Small C&I	Unfortunate that Texas is not a forward-thinking state.	Neutral/Unclear
Small C&I	keep the lower prices keep it basic keep the lower prices keep the lower prices	Neutral/Unclear
Small C&I	I am not a business. Homeowner	Neutral/Unclear

	<p>The fields of solar panels would be better suited on lands which aren't in a building zone. The cost to build the renewable stations is crazy. The consumers now, will pay for the cost of you building it. Then you will reap profits forever and the consumers will see no cost reduction. So basically if it's going to cost me higher bills for you to increase your future profits I am against it! I have seen nothing but increase after increase yet I consume less energy. You keep adding in more customer charges and costs for misc things that you as a company should be paying. Why am I paying costs that are associated for you running your business? I don't even have an actual live person read the meters here yet we are charged as if someone drives here and looks at 3 different meters. We are charged 3 times for renewable energy program and whatever the PUCO says you can now add into the bills also. It's ridiculous. You will get government funding to go more "green" yet you will charge the consumers for the rest of the cost. You should come out smelling like a rose while the actual consumers see no benefit of it. I can see why the amish use solar and gas as main sources. They can control their costs and use whereas us dumb electric consumers have to pay your prices or go without.</p>	
Small C&I		Neutral/Unclear
Small C&I	We rent the space	Neutral/Unclear
Small C&I	thanks for wanting my opinion	Neutral/Unclear



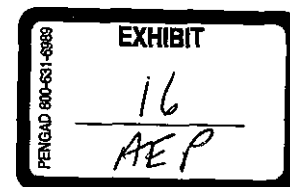
## Jonathan A. Lesser

Adjunct Fellow  
President, Continental Economics

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Request An Interview

### Biography



**Jonathan Lesser** is an adjunct fellow at the Manhattan Institute. As president of Continental Economics, Lesser has more than 30 years of experience working for regulated utilities, for government, and as a consultant in the energy industry. He has addressed economic and regulatory issues affecting energy in the U.S., Canada, and Latin America. Those issues include gas and electric utility structure and operations, generating asset valuation under uncertainty, cost-benefit analysis, mergers and acquisitions, cost allocation and rate design, resource investment-decision strategies, cost of capital, depreciation, risk management, incentive regulation, economic impact studies, and energy

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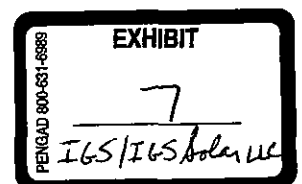
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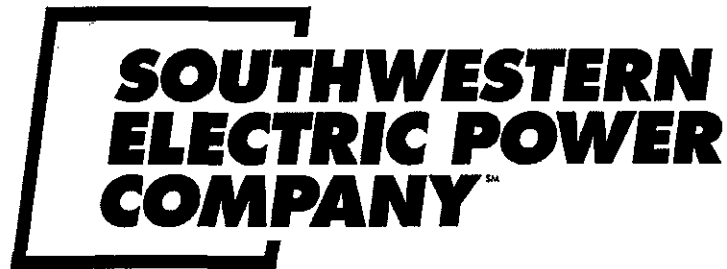


Wyandot Solar Facility	
Year	Capacity Factor, %
2010 <sup>1</sup>	17.6%
2011	16.1%
2012	17.8%
2013	16.1%
2014	16.5%
2015	16.5%
2016	16.3%
2017	15.4%
2018 <sup>2</sup>	15.3%

Note 1: Wyandot achieved its commercial operation date on May 26, 2010.

Note 2: Data represents the period January 1 - October 31, 2018.



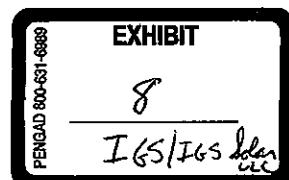


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BOUNDLESS ENERGY<sup>SM</sup>

**INTEGRATED RESOURCE PLANNING REPORT  
TO THE  
ARKANSAS PUBLIC SERVICE COMMISSION**

**December 14, 2018**





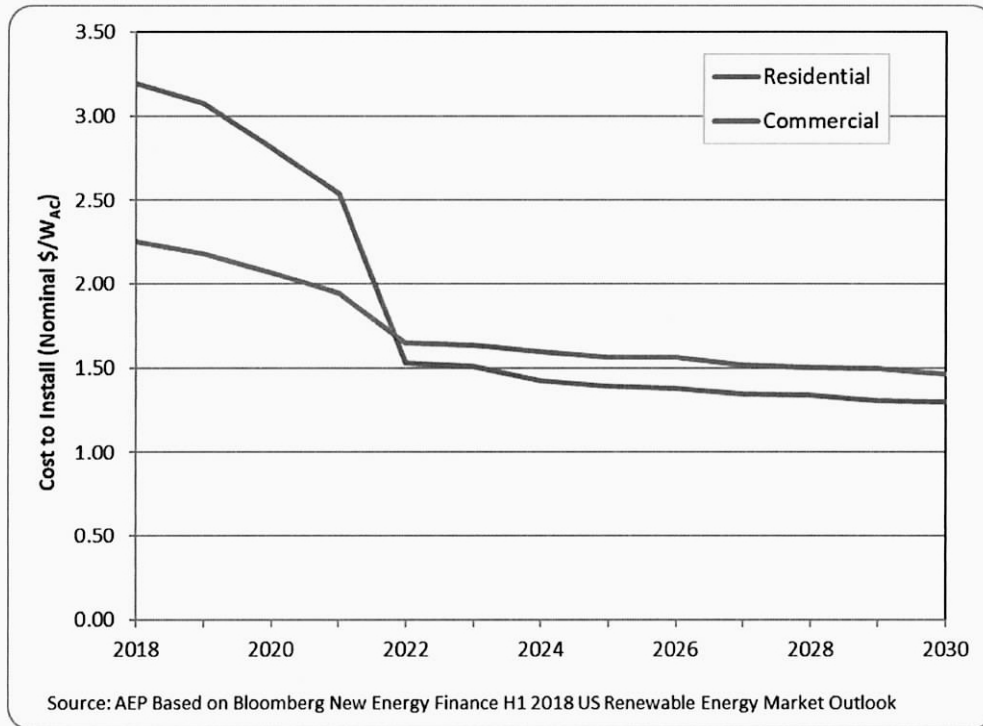
#### **3.4.4.1 Existing Levels of Energy Efficiency (EE)**

SWEPCO currently has EE programs in place in its Arkansas, Louisiana, and Texas service territories. SWEPCO forecasts EE measures will reduce peak demand in 2018 by 3.9MW and reduce 2018 energy consumption by approximately 26GWh.

#### **3.4.5 Distributed Generation (DG)**

DG typically refers to small-scale customer-sited generation behind the customer meter. Common examples are Combined Heat and Power (CHP), residential and small commercial solar applications, and even wind. Currently, these sources represent a small component of demand-side resources, even with available federal tax credits and tariffs favorable to such applications. SWEPCO's retail jurisdictions have "net metering" tariffs in place which currently allow excess generation to be credited to customers at the retail rate.

The economics of DG, particularly solar, continue to improve. Figure 12 below charts the fairly rapid decline of expected installed solar costs, based on a combination of AEP market intelligence and the Bloomberg New Energy Finance's (BNEF) U.S. Renewable Energy Market Outlook forecast. The following installed cost forecast as well as the breakeven values calculated and shown in Figure 12 and Figure 13 do not include an estimate of the impact of the solar tariffs that went into effect earlier this year.



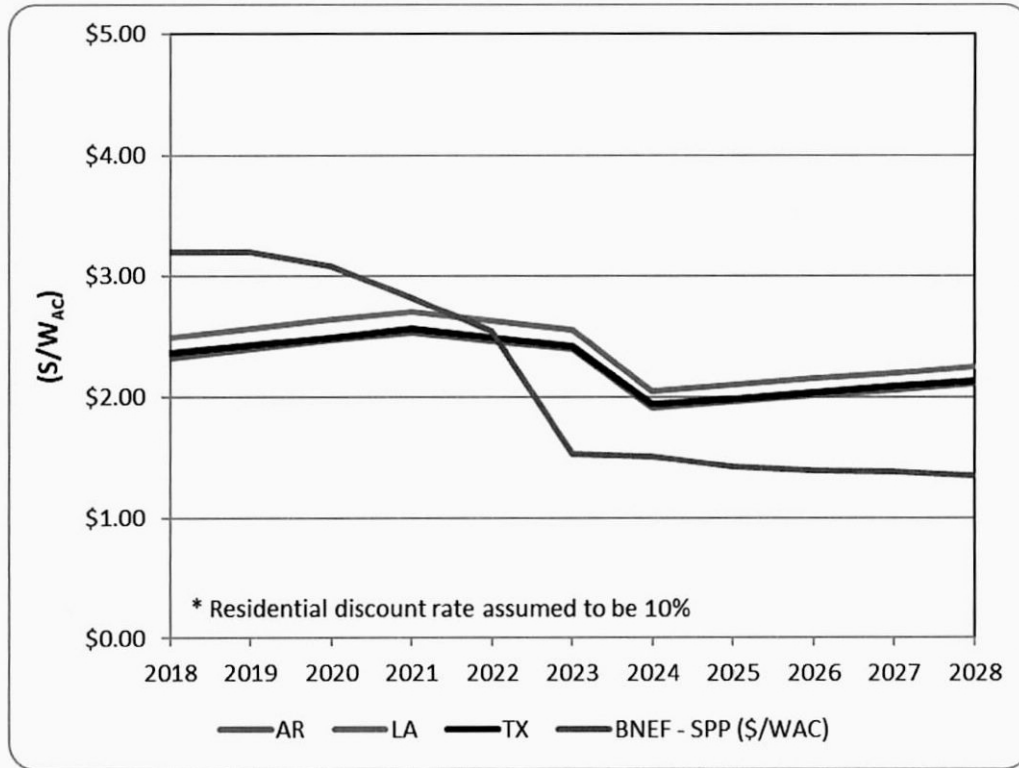
**Figure 12.** Residential and Commercial Forecasted Solar Installed Costs (Nominal \$/W<sub>AC</sub>) for SWEPCO States

Prior to 2022, during the ITC phase out for residential systems, costs for residential customers are expected to decline rapidly. This decline, which is forecasted to bring residential costs down to commercial cost levels, is attributed to a shift from value-based pricing to cost-plus-margin pricing. Installers are expected to spend less on customer acquisition and less on customer specific solutions as they aim for the lowest cost installations possible.

While the cost to install residential solar continues to decline, the economics of such an investment are not favorable for the customer for a number of years. Figure 13 below illustrates, by SWEPCO state jurisdictional residential sector, the equivalent value a customer would need to achieve, on a dollar per watt-AC (\$/W<sub>AC</sub>) basis, in order to breakeven on their investment, assuming a 25-year life of the installed solar panels based on the customer's avoided retail rate. Also included is the average cost of solar residential installations in SPP. Figure 13 below shows that the current cost of residential solar exceeds the cost which would allow a customer to breakeven on an investment over a 25-year period.



## 2018 Integrated Resource Plan



**Figure 13.** Distributed Solar Customer Breakeven Costs for Residential Customers (\$/W<sub>ac</sub>)

A challenge of determining the value of a residential solar system is assigning an appropriate cost of capital or discount rate. Discount rates for residential investments vary dramatically and are based on each individual's financial situation. Figure 14, below, shows how the value of an Arkansas residential customer's DG system can vary based on discount rate.

**OHIO POWER COMPANY'S RESPONSE TO  
THE OFFICE OF THE OHIO CONSUMERS' COUNSEL'S  
DISCOVERY REQUEST  
PUCO CASE NO. 18-501-EL-FOR 18-1392-EL-RDR AND 18-1393-EL-ATA  
TENTH SET**



**REQUEST FOR ADMISSION**

OCC-RFA-10-007      Admit or deny that the effect of including a cost of carbon in the fundamentals forecast will increase the operating cost of natural gas fired combined cycle plants which increases the benefits of the renewable energy projects under the AEP Ohio impact analysis.

**RESPONSE**

Admit.

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