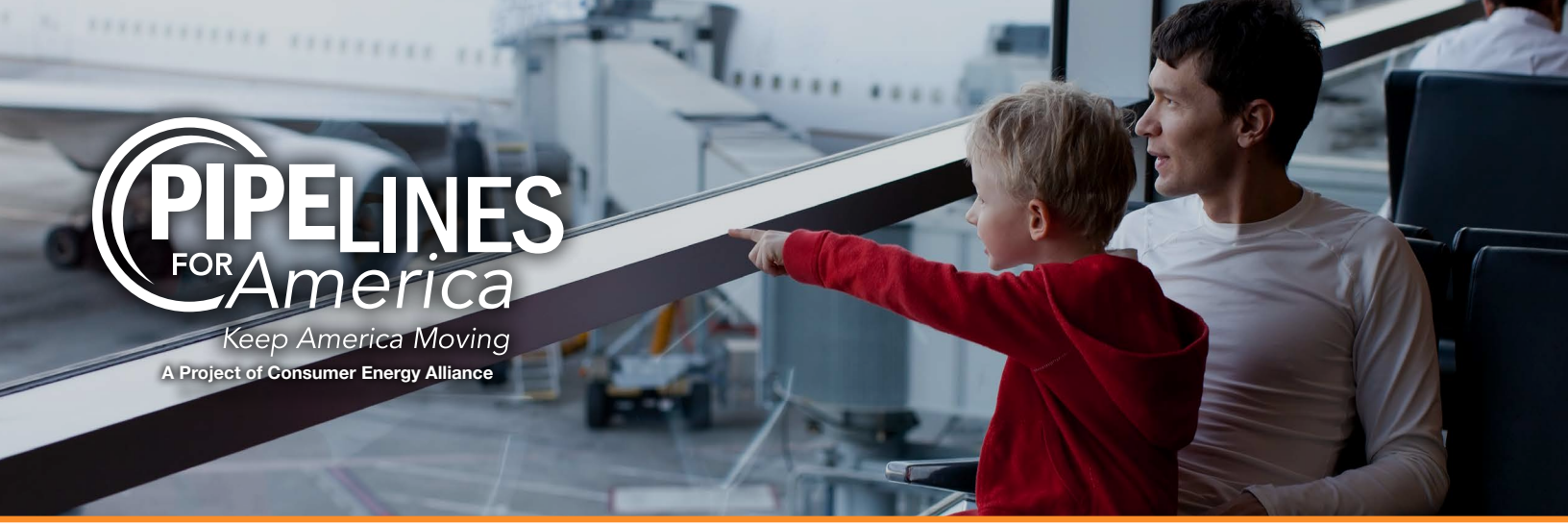


MID-ATLANTIC STATES PAY $233 MORE THAN U.S. AVERAGE FOR ELECTRICITY, STILL REJECT PIPELINES THAT COULD BRING RELIEF

Analysis Shows New York States Pays a Whopping 141% More for Power than the National Average

The Mid-Atlantic region, comprised of Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia and Washington, D.C., spend nearly $233 more on electricity over the course of a year. Families in New York paid $559.21 more than the national average; New Jersey residents paid $340.35, Maryland $181.55, and Pennsylvania $159.03, according to data from the U.S. Energy Information Administration (EIA).[1]

Energy delivery is vital for Mid-Atlantic families, small businesses, and manufacturers, for fuel, home heating and cooling, and transportation. Increasingly, natural gas suppliers rely on efficient energy delivery systems – such as pipelines – to provide nearly half the region's electricity. With the high cost of electricity caused by decreases in pipeline availability it's important that infrastructure and pipelines in the Mid-Atlantic are expanded to keep pace and deliver affordable energy supplies.

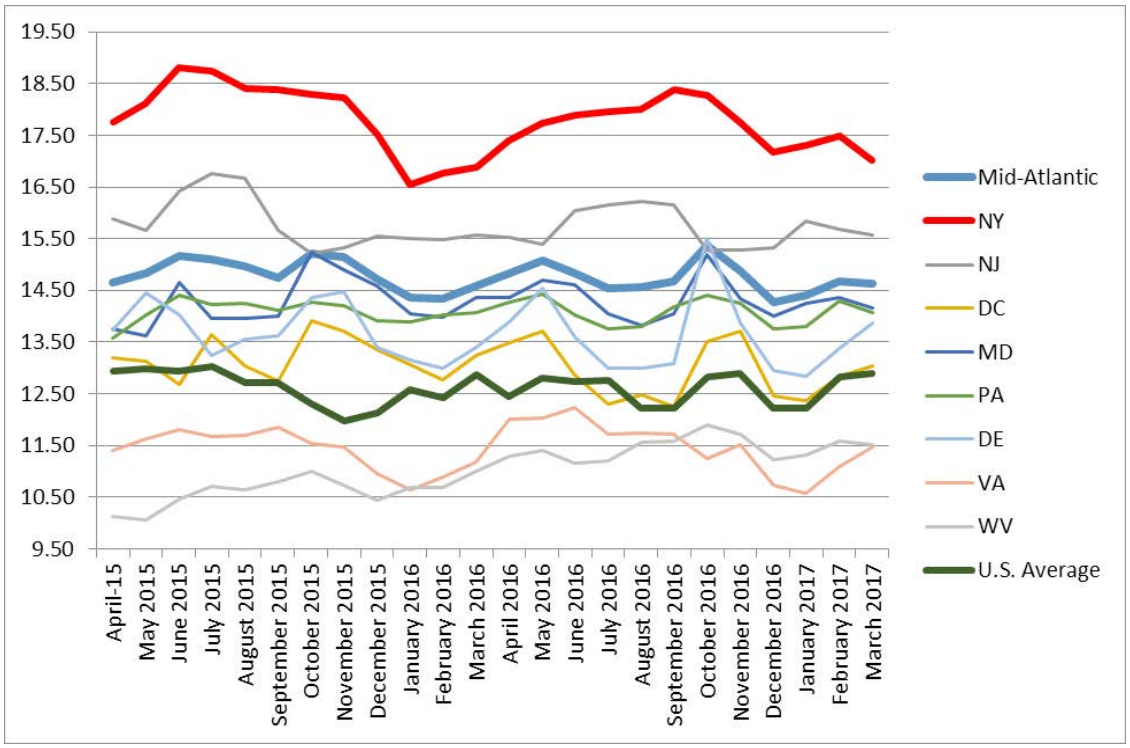
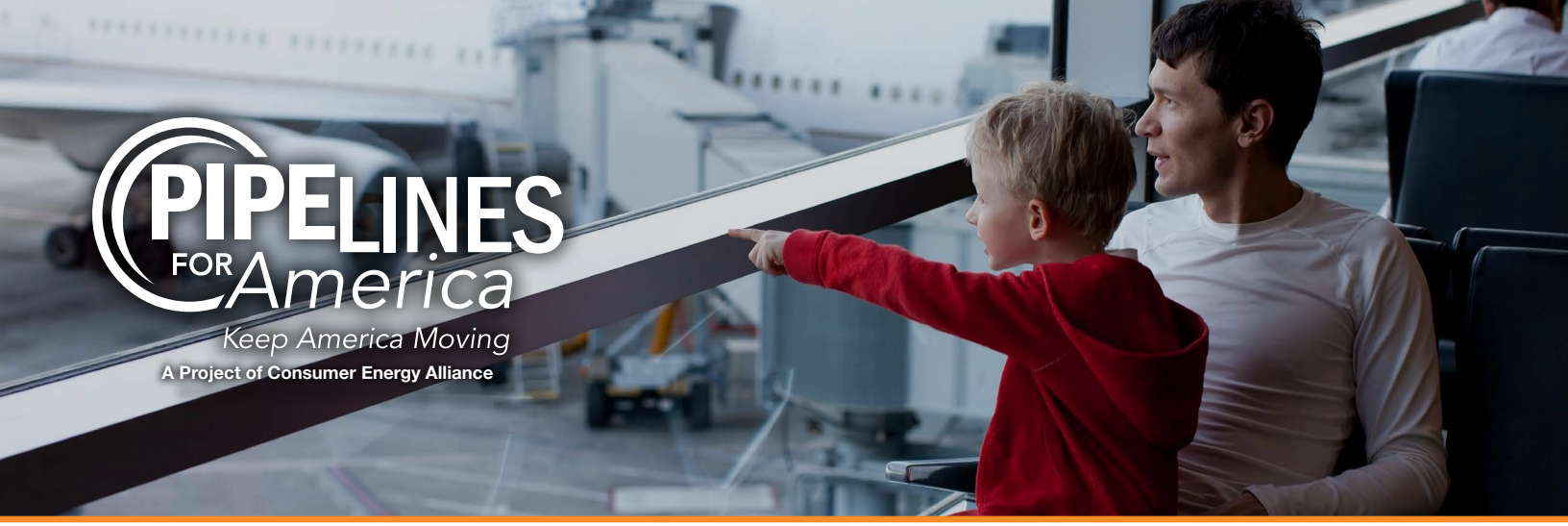


Figure 1: Average Price of Electricity to Customers (Residential)



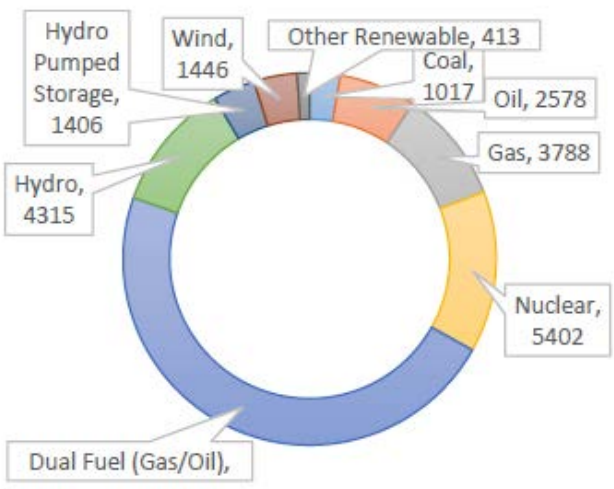


Figure 2: NYISO 2016 Fuel Generation Capacity (in MW)

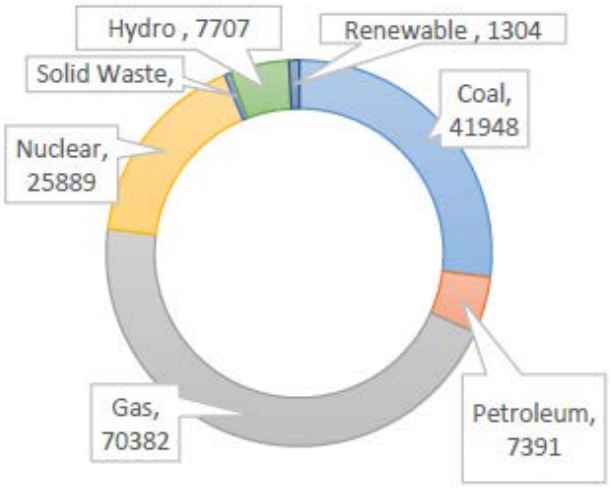


Figure 3: PJM 2016 Fuel Generation Capacity (in MW)

This is especially true for small towns like Johnstown, PA; Crestwood Village, NJ; Cumerberland, MD; Salamanca, NY; and Princeton, WV, where the average household income is $29,150[2] – 47.73 percent less than the national average.

So, why is electricity in the Mid-Atlantic more expensive than the rest of the United States?

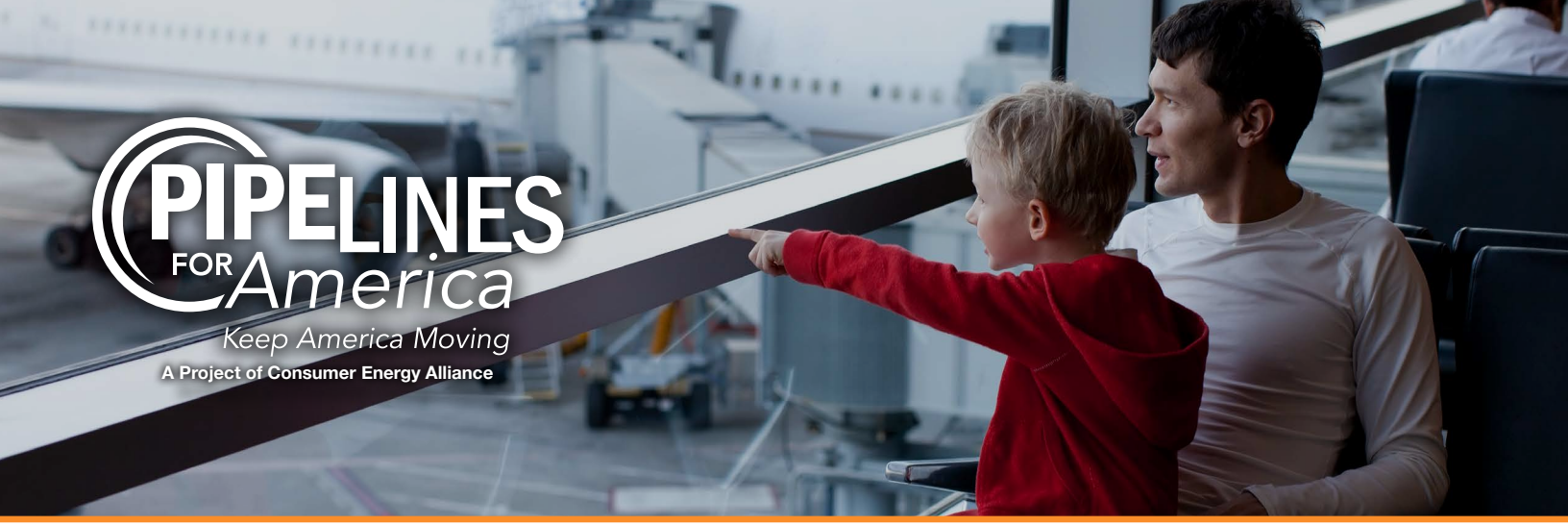
The answer is simple: tight supply and increasing demand. with prices worsening because of failed public policies. These policy choices led to the rejection of infrastructure and pipeline projects that would have produced and delivered natural gas in and around the region, which is now inflating the price of electricity, especially in New York.[3]

To understand why it is important to note that the Mid-Atlantic region is served by two regional transmission organizations: The Pennsylvania-New Jersey-Maryland Interconnection (PJM) and the New York Independent System Operator (NYIS). While PJM and NYIS are adjacent to one another, and have similar fuel mixes (see graphs below), NYIS is hamstrung by a self-inflicted lack of access to affordable oil and natural gas.

In addition to banning hydraulic fracturing throughout New York in December 2014,[4] Governor Cuomo also rejected both the Constitution and Northern Access pipelines, in 2016 and 2017, respectively. Additionally, Governor Cuomo's administration has fought against the Algonquin pipeline expansion and has been slow to approve a pipeline needed for electric generation in Wawayanda.

The New York Post recently editorialized:

Cuomo needs natural gas for his plan to steer the state toward renewable energy. "I don't think you can get from here to there without using natural gas," Cuomo said last week. Yet pipelines are the safest way to ship natural gas, and Cuomo's crew isn't approving them, so how are New Yorkers supposed to get gas to run generators and keep the lights on?[5]



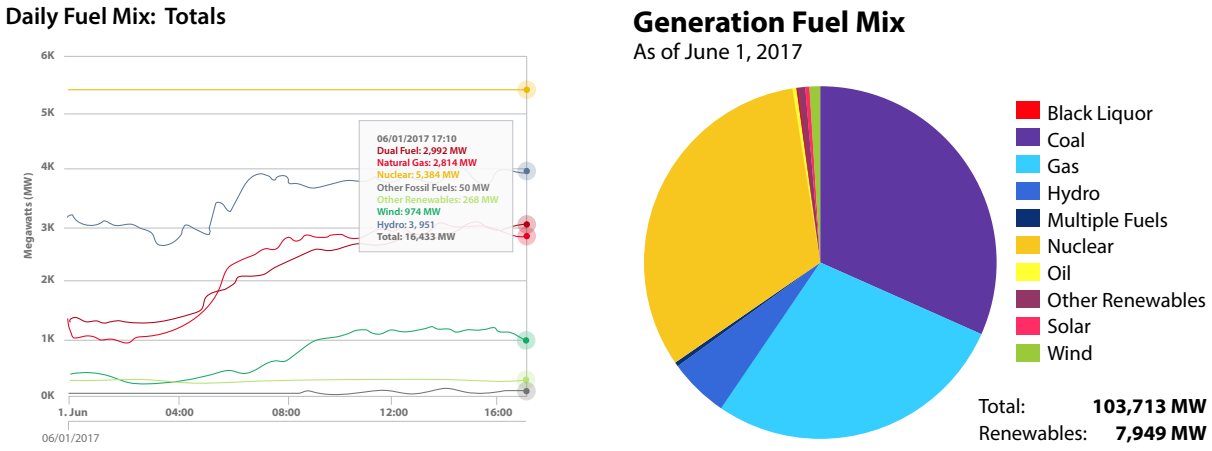
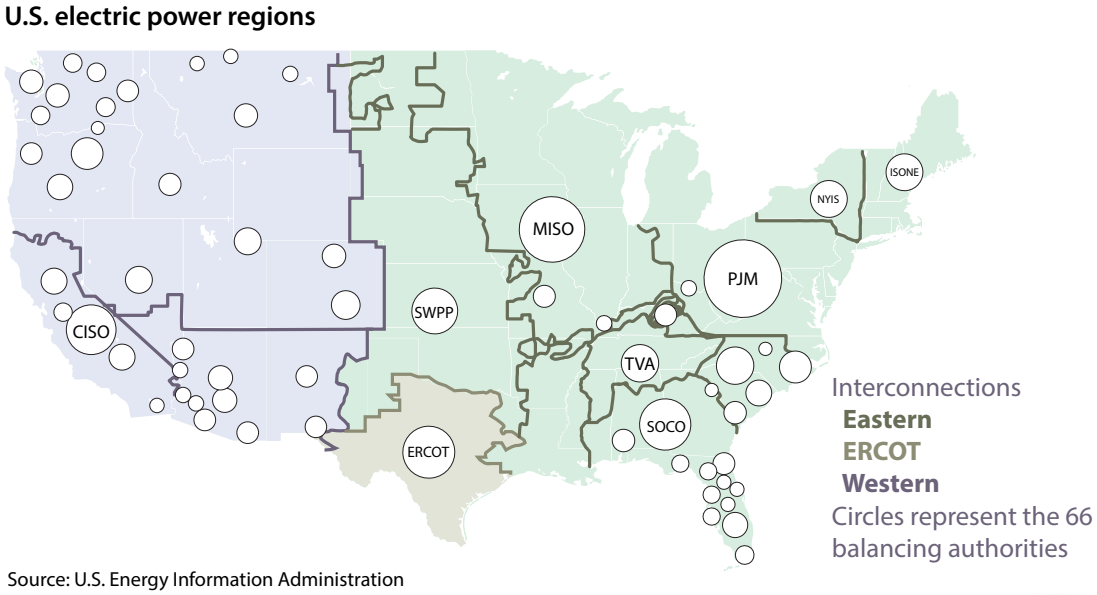
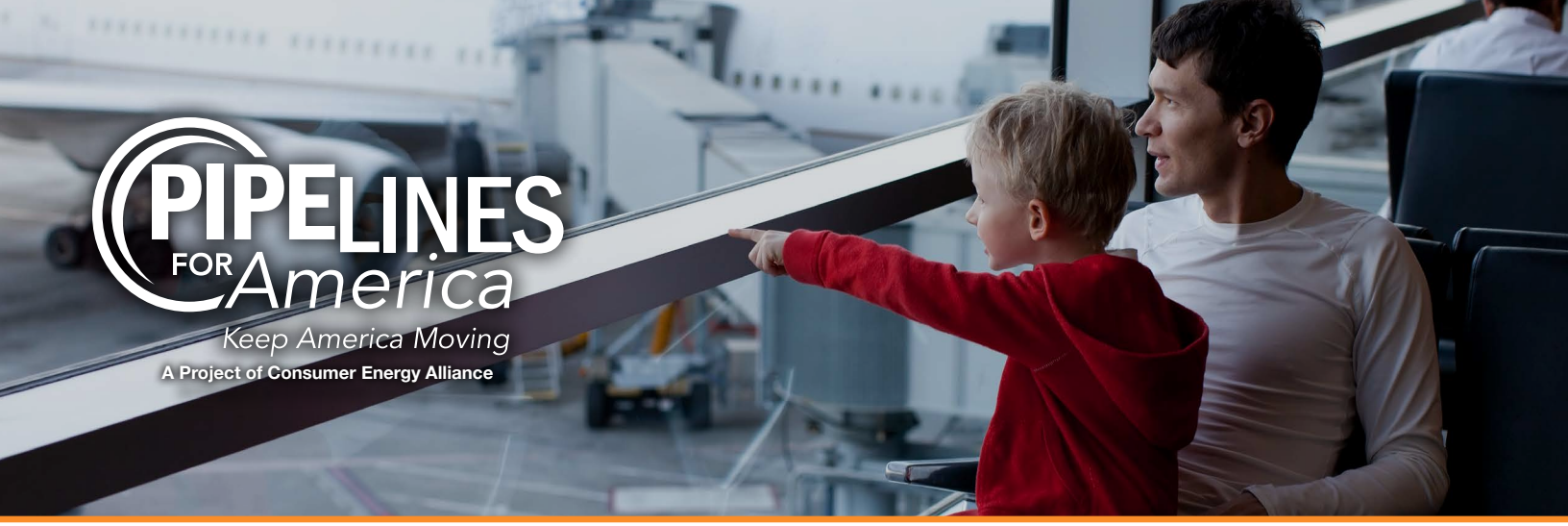


Figure 4: Fuel Mixes By Region (NYISO: Left) (PJM: Right)

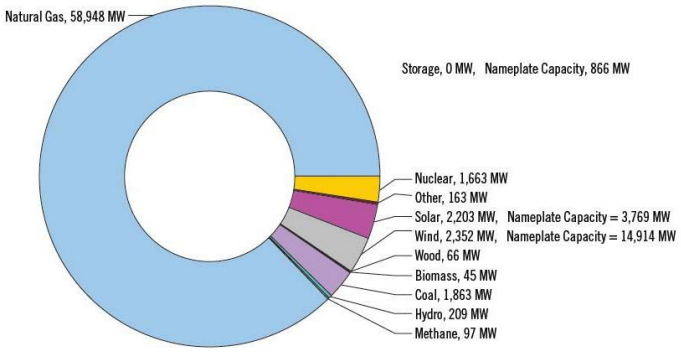


Source: U.S. Energy Information Administration
Note: The locations of the electric systems are illustrative and are not geographically accurate
The sizes of the circles roughly indicate the size of the electric system.

Figure 5: Identification of the NYIS and PJM regions



The New York Times penned a similar piece recently, writing that New Yorkers will become more reliant on natural gas to meet their electricity needs.[6] The upcoming closure of the Indian Point nuclear power plant will undoubtedly further augment the demand for natural gas.[7]



PJM Queued Generation by Fuel Type – Requested Capacity Rights (Dec. 31, 2015)
Note that the Natural Gas used (queued) is much higher than overall capacity; in other words, electricity providers tend to use natural gas before they use other fuel sources.

So, what is the solution? Building more pipelines.

If bans on energy production were lifted and more pipelines were built to expand energy delivery in the region, electricity would become less expensive.

That would mean low-income families who, according the Bureau of Labor Statistics (BLS) are spending close to 22 percent of their after–tax income on residential utility bills and gasoline could have more room in their budget for things like food, clothing and housing. And while median incomes in the Mid-Atlantic are higher than the national average, they also pay a disproportionately higher amount for energy than other states across the nation.

Implications of Energy Delivery in the Mid-Atlantic[8]

- A recent analysis found that the bottom 20 percent of earners spend almost 10 percent of their income solely on electricity, more than seven times the portion of income that the top fifth pays.[9]
- Of those low-income earners that spend 10 percent of their income on power bills, 50 percent of them are African-American families.[10]
- The average household in the Mid-Atlantic currently pays 14.62cents per kilowatt hour (KwH). In the latest EIA data from 2015, the average U.S. household used 901 KwH per month. These figures equal $131.73 in monthly electricity bills, or 5.42% of the average incomes for poorest Mid-Atlantic communities cited earlier. Stated another way, Mid-Atlantic families spend nearly $200 more on electricity than the national average.[11]

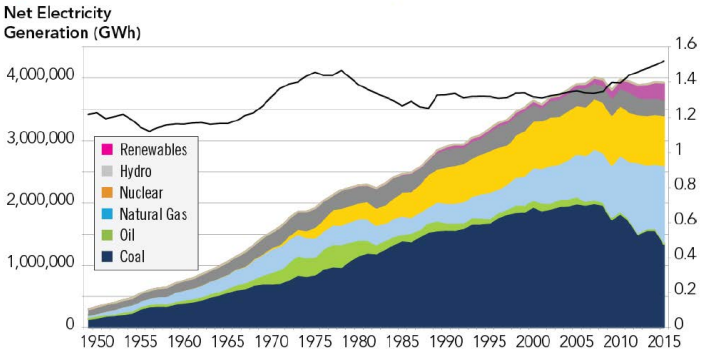
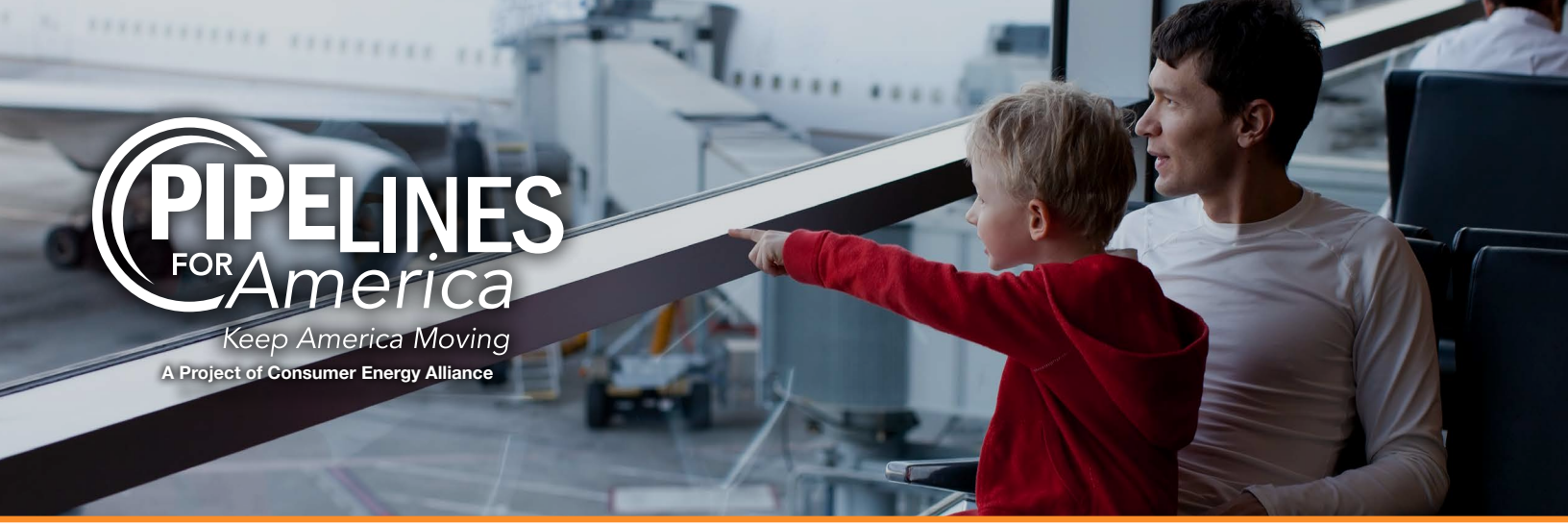


Figure 6: Evolution of US Generation Mix and Relative Diversity Index (Appendix to PJM Evolving Resource Mix and System Reliability)



- Citizens at or near the poverty level are disproportionately impacted. Of the 43.3 million people on food stamps nationwide, over 7.8 million reside in the Mid-Atlantic (DE- 147,477, DC-131,545, MD- 722,228, NJ- 865,632, NY-2,941,315, PA-1,854,367, VA -813,726, and WV 359,665)[12]
- According to USDA data, Washington, D.C. (19.6%) and West Virginia (19.5%) have the third and fourth highest percentages of populations dependent on food stamps[13]
- Based on EIA data, the Mid-Atlantic would be one of the most severely impacted regions in a Shortfall Case scenario spelled out by Consumer Energy Alliance (CEA) in our recent report, with both sustaining a 44.8% energy shortfall by 2030 due to prematurely shutting off natural gas, nuclear, and coal production and preventing the construction of energy delivery infrastructure[14]
- Governor Cuomo's rejection of the Constitution pipeline cost the region 2,400 construction jobs and $13 million in annual property tax revenue for communities in New York. It also denied access to vital energy resources needed to meet the state's growing electricity needs[15]

Despite these consequences, there is good news. Expansion of energy delivery from pipeline buildouts have had a positive effect on consumers across the Mid-Atlantic and the nation as a whole. Currently, families and motorists in the region are saving, collectively, more than $25.9 billion in gasoline costs compared to 2012 levels, based on EIA data. With pipelines responsible for moving roughly 70% of the nation's crude oil and petroleum products,[16] these savings have been achieved, in large part, because of stable energy delivery.[17] Many families and households in the Mid-Atlantic are turning those savings into more travel and leisure activities. Just this year, over Memorial Day Weekend, AAA estimated that travel was at its highest levels since 2005, with 39.3 million Americans driving or flying more than 50 miles from home.[18] To put that in perspective, a road trip from Charleston, West Virginia, to New York City would cost $48.82 less than it would have in 2012.[19]

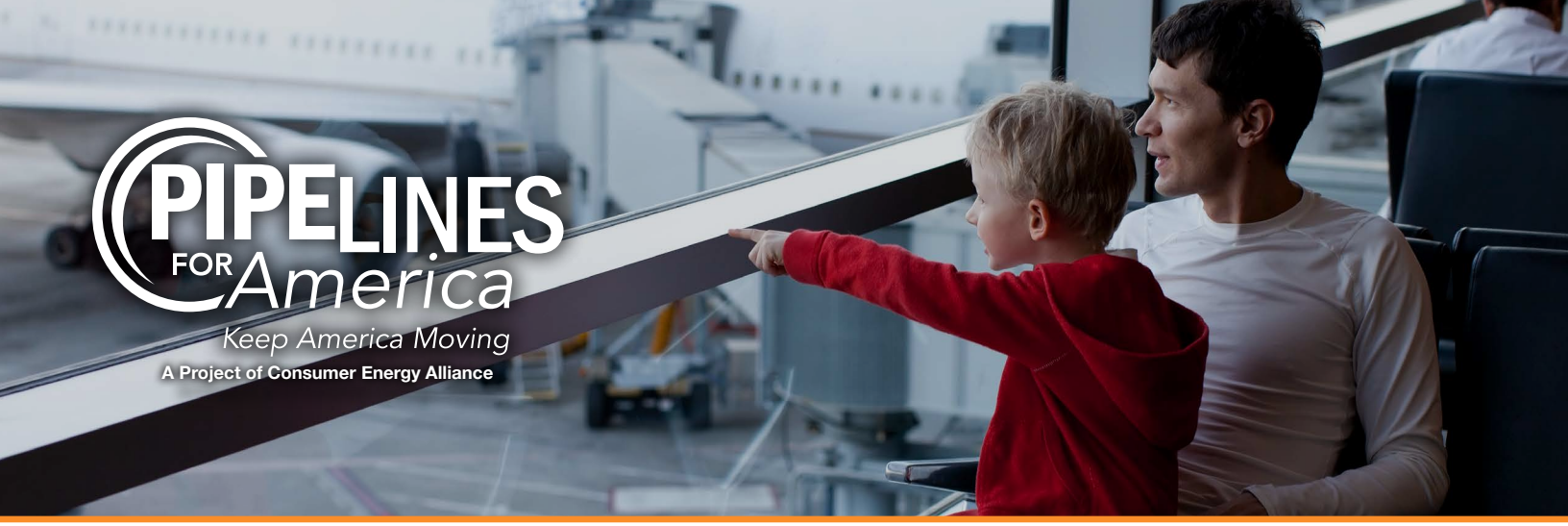
A recent report from the American Chemistry Council (ACC), shows that the Mid-Atlantic/Appalachian region could become another center for petrochemical and plastic resin manufacturing, similar to the Gulf Coast. This development could bring 100,000 permanent jobs to the Mid-Atlantic and its neighboring states, and add $2.9 billion in new federal, state, and local tax revenues annually. It is essential, however, that more pipelines are built for this economic potential to be realized.[20]

Public Policy Has Negatively Impacted Mid-Atlantic Energy Delivery

As of June 2017, policy-makers and regulators in the region have prevented several important opportunities to bring on necessary supplies and capacity improvements by denying pipeline infrastructure development and expansions. Despite the inability to address shortfalls during extreme weather events, like the Polar Vortex of 2014, policymakers have been unable or unwilling to remove barriers to allow for pipeline expansion.

Families, Communities and Finances: The Consequences of Denying Critical Pipeline Infrastructure

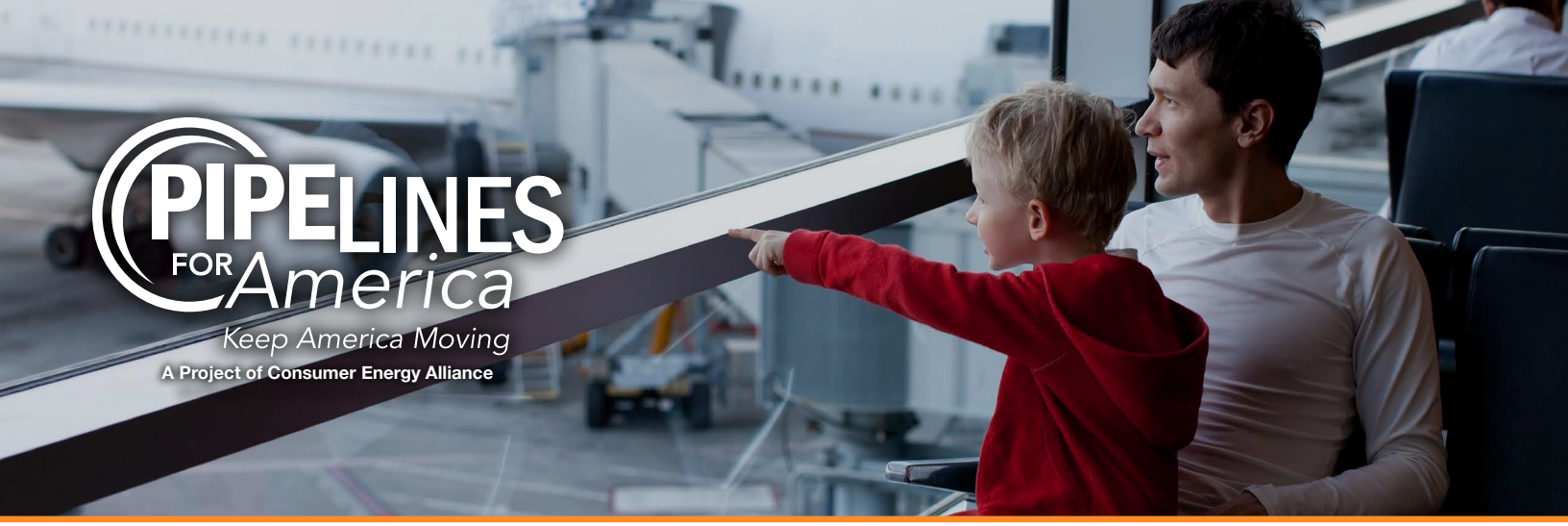
CEA's aforementioned report found that rejecting



pipeline infrastructure and baseload power generation would remove almost a third of U.S. electricity generation capacity by 2030, dangerously raising electric rates nationwide, especially on poverty-stricken households. It also found significant impacts on energy security and fuel supplies as well as varying harmful regional implications.

About Consumer Energy Alliance

Consumer Energy Alliance (CEA) brings together families, farmers, small businesses, distributors, producers and manufacturers to support America's energy future. With more than 450,000 members nationwide, our mission is to help ensure stable prices and energy security for households across the country. We believe energy development is something that touches everyone in our nation, and thus it is necessary for all of us to actively engage in the conversation about how we develop our diverse energy resources and energy's importance to the economy. Learn more at ConsumerEnergyAlliance.org.



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2. ***Poorest Towns in Every State***, 247 WallST. http://247wallst.com/special-report/2017/05/03/poorest-town-in-every-state-2/

3. https://www.bloomberg.com/news/articles/2014-02-06/northeasts-record-natural-gas-prices-due-to-pipeline-dearth

4. ***Citing Health Risks, Cuomo Bans Fracking in New York State,*** New York Times, https://www.nytimes.com/2014/12/18/nyregion/cuomo-to-ban-fracking-in-new-york-state-citing-health-risks.html

5. ***Why does Cuomo keep rejecting pipelines New Yorkers could benefit from?***, New York Post, http://nypost.com/2017/04/16/why-does-cuomo-keep-rejecting-pipelines-new-yorkers-could-benefit-from/

6. ***How New York City Gets Its Electricity***, The New York Times, https://www.nytimes.com/interactive/2017/02/10/nyregion/how-new-york-city-gets-its-electricity-power-grid.html?_r=0

7. Nuclear power supplies about one-third of the power in New York.

8. Consumer Energy Alliance (CEA) recently issued a report entitled, "Families, Communities and Finances: The Consequences of Denying Critical Pipeline Infrastructure," which found that rejecting pipeline infrastructure and baseload power generation would remove almost one-third of U.S. electricity generation capacity by 2030, dangerously raising electric rates nationwide, especially for poverty-stricken households. It also found significant impacts on energy security and fuel supplies as well as varying harmful regional implications.

9. http://groundswell.org/frompower_to_empowerment_wp.pdf

10. http://groundswell.org/frompower_to_empowerment_wp.pdf

11. Over the course of a year, while the average American family spends $116 monthly ($1392 annual) on electricity while the average Mid-Atlantic family spends $131.73 month ($1581 annually).

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14. ***Annual Energy Outlook 2016***, U.S. Energy Information Administration, https://www.eia.gov/outlooks/aeo/workinggroup/transportation/pdf/aeo2016%20transportation%20working%20group%202%20presentation.pdf

15. Constitution Pipeline, ***Constitution Pipeline Committed to Building Federally Approved Pipeline, Delivering Energy Savings and Environmental Benefits to Northeast U.S.*** http://constitutionpipeline.com/constitution-pipeline-committed-to-building-federally-approved-pipeline-delivering-energy-savings-and-environmental-benefits-to-northeast-u-s/

16. https://www.manhattan-institute.org/pdf/ib_23.pdf

17. https://www.eia.gov/opendata/qb.php?category=40715

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19. Based on the most recent gasoline price and consumption data available from the Energy Information Administration.

20. ***New Report Shows Potential for Major Appalachian Petrochemical Industry***, American Chemistry Council, https://www.americanchemistry.com/Media/PressReleasesTranscripts/ACC-news-releases/New-Report-Shows-Potential-for-Major-Appalachian-Petrochemical-Industry.html