

Energizing Our Economy



***How Proper Energy Investment
will Power New Jersey's Economic Recovery***

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Affordable Energy for New Jersey is committed to creating a balanced, stable, and cost-effective energy mix in our state – an “all of the above” approach as opposed to the picking of favorites we see today from federal and state administrations alike. Our hope is to open a productive dialogue with state leaders to discuss how New Jersey can use energy infrastructure investment and common-sense public policy to kickstart our economic recovery from the COVID-19 recession and keep costs manageable for residents in the long term.

Energizing Our Economy is our contribution to the greater conversation facing New Jersey’s economic future. We see this document as a roadmap that shows how investing in our energy infrastructure will boost our economy, in both the short and long-term, and give the state a strong foundation on which to build for years to come.

While some are advocating for a complete overhaul, we find that the fundamental backbone of our current energy mix is strong and, with some fine tuning, will chart a course for success that brings NJ into the future without bankrupting its present. Expanding existing transmission and distribution systems and increasing access to clean, affordable natural gas will lower costs across the board, freeing up capital to invest in the nuclear, wind and solar goals, as outlined in the Energy Master Plan, and lowering costs for residents and businesses when they need it most.

Affordable Energy for New Jersey will share three subsequent whitepapers detailing a clear, actionable roadmap for New Jersey’s elected officials, business community, and residents to build the energy systems we need. These will explore:

1. Tackling the Cost Chasm: Providing Affordable Energy for our Families and Businesses
2. Spurring Economic Growth to Help Recover from the Covid-19 Pandemic
3. Seeing the Big Picture: Making Smart Investments for a Regional and Global Impact

The first – exploring the devastating cost chasm facing our residents if we don’t take action immediately – is below. Now is the time to take action and create an affordable, clean, and reliable energy system that works for all.

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Tackling the Cost Chasm

Providing Affordable Energy for our Families and Businesses

Since March of 2020, COVID-19 and the subsequent ripple effects have touched every New Jersey resident, whether they became ill or not. The economic downturn from forced closures of businesses large and small make us look at our costs in a different way—are certain investments affordable or advisable at this time?

Just this fiscal year alone, state officials estimated a potential budget shortfall of nearly \$5 billion and at the time of this writing, there are revenue streams available to close that gap; leaders are proposing to put the money on a credit card in the form of bonding. Understanding the significant financial challenges we face, it is critical that we look at our energy future from the total costs associated and not just select ones that fit a narrative.

The Problem

New Jersey has become a chokepoint for energy projects that force consumers to pay higher prices—the elderly, minorities and lowest socio-economic brackets are hit hardest. As we begin to emerge from the COVID-19 recession, those communities most at risk are the ones current energy policy aims to protect—however those policies miss the mark.

Since our state leaders and lawmakers are currently forced to take account of all costs across the board to balance the budget for this year, Affordable Energy for New Jersey is providing a look at current energy costs based on the administration's proposals made before the impacts of COVID-19, proposals they have made no effort to halt in the face of new economic realities.

According to the Energy Master Plan, electric heat pump and natural gas provide the clear lowest costs. However, this is assuming the modern heat pump is already installed—but according to Energy Information Administration, more than 75% of NJ homes are heat by natural gas and not equipped with a modern pump, and this cost doesn't address the high cost of conversion we will address in a later section.

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Going further, more than 87% of the state's total housing stock is not equipped for electric heat and electric hot water and that extraordinary cost of conversion will fall directly on the ratepayer. Also, of the aforementioned sources (included rebate to convert to electrical) only natural gas is not subsidized by taxpayers in any way.

Average Consumer Expenditures for Heating Fuels in the 2017-2018 Winter in the Northeast U.S.

Natural Gas	\$742
Heating Oil	\$1,376
Electricity (mostly baseboard)	\$1,406
Electricity (modern heat pump, estimated assuming average performance)	\$703
Propane	\$1,856

Source: 2019 New Jersey Energy Master Plan

To start, the domestic production nature of clean natural gas is a major driving force around the low prices. Couple this with the abundance of the resource and efficiency with which it can be collected and transported around the country and consumers everywhere are seeing low costs passed on to them. And while no one is denying the impacts climate change is having on our environment, it is important to note national policy set out by the Obama Administration called for an all-of-the-above strategy that expanded production of American energy resources, like oil and natural gas; increased energy efficiency to save families and businesses money at the pump; and developed cleaner, alternative fuels to reduce our oil dependence.

According to a January 2017 article in Science Magazine authored by President Barack Obama himself, "since 2008, the United States has experienced the

first sustained period of rapid GHG emissions reduction and simultaneous economic growth on record. Specifically, CO2 emissions from the energy sector fell by 9.5% from 2008 to 2015, while the economy grew by more than 10%." In fact, under the Obama Administration, domestic natural gas production was the largest year-over-year volumetric increase in history.

Looking more broadly, in 2019, the U.S. recorded the largest decline in carbon dioxide emissions of any advanced economy, with an amazing 2.9% reduction. This is equivalent to removing 140 million tons of emissions, and it includes a 1.7% drop in emissions from fossil fuels. Further, from 2005 through 2017, our overall greenhouse gas emissions have fallen an impressive 12 percent, according to the Environmental Protection Agency. That is far more than any major world economy, and is on the very pace organizations like the Intergovernmental Panel on Climate Change have been calling for. However, some in New Jersey are suggesting that we forgo our economic sustainability to try and battle climate change alone by canceling all projects until 100% renewables are online in 2050 – a goal we are unlikely to meet.

Issue
Negative stigma surrounding energy generation is costing New Jersey jobs and significant economic benefit.

At a time when we need sustainable growth more than ever, building a domestic energy economy on clean natural gas will reduce emissions and provide the funding for long-term renewable investments at costs the taxpayers can handle.

Instead of letting current and future market forces dictate our energy sector investments with gentle guidance from government, New Jersey instead over compensated – setting completely unattainable goals

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that will cost billions, result in a weaker standing among the regional energy sector as net-importer vs net-exporters, and still not address our growing energy demands. Simply increasing energy efficiency standards will not make up the gap in growing energy demand through electrification and population growth.

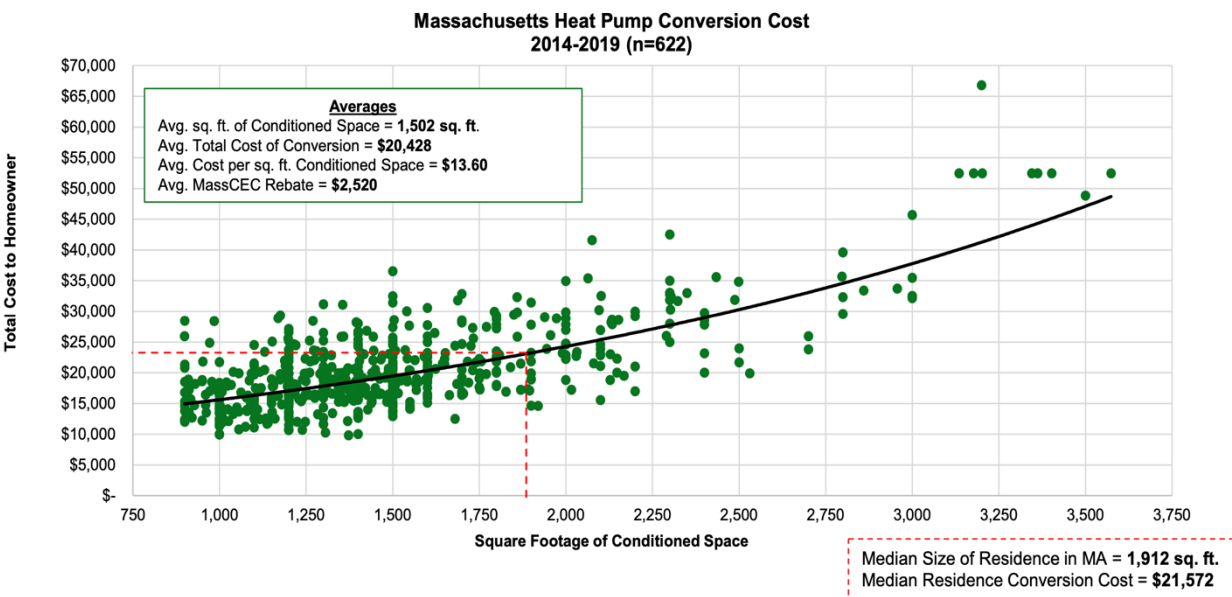
This has resulted in proposals of forced electrification that will cost NJ resident tens of thousands of dollars out of their own pockets. A recent study of the actual cost of heat pump installations in Massachusetts – a state which NJ officials hope their policy will emulate – using data from 2014 through 2019 paints a dark and expensive picture. The cost of converting to an electric air-source heat pump system in Massachusetts is substantial and isn't affordable for most low- and middle-class residents. The actual data from the MA Clean Energy Center and Department of Energy Resources show the average cost of conversion would be \$20,428, with

the state providing a miniscule rebate of \$2,520.

What is also undetermined is the amount of impact this increase in electrification would have on peak demand, generation and monthly costs. Additionally, there are also risks associated with New Jersey's lack of pipeline diversity bringing natural gas supply into this state. Utility companies depend on minimal pipelines for nearly 100% percent of supply capacity – just 2 supply lines provide 90% of South Jersey's supply, for example. Any disruption of supply on these pipelines in the winter heating season would jeopardize the health and safety of potentially millions of New Jersey residents.

Fact
Despite narrative to the contrary, shifts from coal and oil to natural gas and renewable energy are leading the fight against climate change.

While our state leaders are regionally crafting policy to combat the spread of COVID-19, they seem to be shortsighted on expanding the regional approach to our energy policy. As an example, projected natural gas shortages are not inclusive of New Jersey's power sector, which will only exacerbate the challenges we



Source: MA Clean Energy Center and Department of Energy Resources.

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face during the transition to renewable energy.

The existing supply and resiliency concerns stem from the fact that the interstate pipeline companies serving New Jersey are fully subscribed, which means natural gas utilities cannot purchase additional firm capacity to meet demand. This is a regional problem, impacting other states such as New York and Massachusetts – driving all costs up at a time when we have the ability to reduce them.

Without additional supply infrastructure, New Jersey Natural Gas and other natural gas utilities estimate a shortage of natural gas to meet our coldest-day demand needs. And, without greater diversification of our supply infrastructure, the risks of a major disruptive outage affecting service to our customers continues to loom.

New Jersey's natural gas utilities are currently tapping into safety reserves to meet growing demand, which is not sustainable or consistent with the prudent planning process that natural gas utilities undertake to ensure reliable service to customers.

Based on supply forecasts, by 2021, New Jersey Natural Gas may not have access to sufficient supply of

natural gas to serve its customer. Renewable energy will not be available to fill this critical need until at least 2030, begging the question: What are consumers to do for the next 10 years?

Conclusion

Now more than ever, as budgets at all levels of government are facing revenue shortfalls, forcing difficult decisions upon our elected and government officials, it is crucial to invest in our energy systems to create jobs and spur our economy while cutting costs for our residents. By diversifying our energy portfolio, rather than picking winners and losers, we can decrease volatility and increase supply, both of which lower costs in the energy market, which reduces costs for all of us. Even better, every dollar spent on infrastructure creates three dollars in economic activity; at a time when businesses are struggling to stay afloat these projects and the good-paying construction jobs and economic activity they create are more crucial than ever.

This is the kind of forward-thinking reinvestment of our energy policy dividends that can power our post-COVID-19 economy, and that most importantly, takes cost into account.



Like the current aging rail tunnels under the Hudson, one of the primary natural gas pipelines going down would cause catastrophic results to the economy and quality of life.

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