



On March 28, 2019, the New Orleans City Council Utility Cable, Telecommunications and Technology Committee introduced a resolution to establish rules for a Renewable Portfolio Standard in New Orleans. This rulemaking creates a framework to build healthier and more affordable energy options that has significant economic impacts including local job creation and investment. Many cities have committed to 100% renewable energy across the country, from densely populated cities like Los Angeles, CA to small towns like Abita Springs, LA across Lake Pontchartrain. New Orleans has the opportunity to join these cities and become an economic leader in renewable energy.

Resilient Power Economic Power



On July 15, 2019 the Energy Future New Orleans coalition submitted the Resilient and Renewable Portfolio Standard (R-RPS). The R-RPS is focused on growing the energy jobs and industry of tomorrow, establishing leadership in the energy future of New Orleans utilizing the talent and ingenuity of energy workers today.

Our Energy Jobs Future



Renewable energy and energy efficiency industries are experiencing unprecedented growth across the country, leading to economic benefits and investment from companies that value sustainability goals. The growth of these industries are proof that having a sustainable and resilient energy economy is a path to prosperity and not austerity.



Nationally, there are 2.25 Million Americans working in the energy efficiency industry. This is the largest sector of clean energy employment, and holds great potential for lowering energy costs for New Orleanians.



In the year 2018 alone, battery storage industries grew by 45%. Manufacturing for battery storage is planning for a six-fold increase by 2023, to match increasing demands for electric vehicles, home battery storage and utility energy storage.



From 2013-18, solar employment grew six times faster than the overall U.S. economy. Making it the fastest growing sector in all of the country and putting it on pace with a Bureau of Labor Statistics projection of 105% growth in coming years. It continues to be a job creator in Greater New Orleans.



600k by 2050

The Department of Energy stated that wind energy jobs are expected to increase to nearly 500,000 jobs from the current 114,000 employed in wind energy. Jobs in offshore wind can revitalize coastal communities, and deliver large amounts of clean, reliable energy to New Orleans.

Tier 1 | Resilient Energy Innovation

New Orleans has unique challenges as a coastal city that is threatened by seasonal heavy weather events bringing storm surge, flooding and heavy winds. These events also bring power outages that threaten critical services and facilities in the city.

It's essential to plan the grid with distributed resources in mind for short and long term economic stability and safety for New Orleanians. Tier 1 of the R-RPS provides solutions that will establish leadership in resilient and renewable energy planning, and provide jobs in growth industries like energy storage, rooftop solar and project management software that helps increase performance of these assets. Local hiring and diversity requirements under Tier 1 and 2 will also require a demonstrated commitment to the City of New Orleans' Disadvantaged Business Enterprise (DBE) Program and ensure that subcontracting entities meet DBE qualifications to ensure fair access to business and employment opportunities for disadvantaged communities.

Behind the Meter **Solar and Storage**

Local industries have played a vital role in developing nearly 40MW of rooftop solar in New Orleans, (approximately 5,000 homes). Residential solar provides nearly 12 times as many jobs per MW as utility scale solar.

Residential solar and storage can play a beneficial role in making the city's grid more resilient by allowing an electrical utility to access these resources during high energy demand and emergency outages, like a power plant made of many homes, that participating ratepayers would be compensated for.

The company SunRun recently cooperated with utility National Grid for a 20MW 'Virtual Power Plant'

Local solar and battery storage industries employ Rooftop Solar and Battery Installers, Electricians, Project Managers and Developers, Operations Professionals, Field Technicians and Technical Design Staff. They also provide jobs in Office Administration, Sales, Marketing, Customer Service, Finance, HR and IT.

Grid Connected **Storage + Microgrids**

When heavy weather events happen in New Orleans, it's essential for the Sewerage and Water Board's water pumps to work. It is also critical that hospitals and emergency services have power. By developing grid connected, and microgrid resources that use large scale batteries and solar that can provide instant power to these facilities at crucial times, the city can become more resilient to these events while providing opportunities for economic growth and innovation.

Local company Advano is currently developing new longer lasting batteries, right here in New Orleans!

Development of grid services like microgrids and energy storage can employ workers from a diverse array of industries from Construction to the Tech Industry, helping address longstanding issues of reliability while creating the jobs of the future.

Tier 2 | Jobs and Affordability

Tier 2 of the R-RPS addresses the economic resilience of New Orleans. The rate of poverty in the city stands at 18.6% of the population, and a driving factor is something called 'energy burden'. The American Council for Energy Efficient Economy (ACEEE) defines energy burden as spending a disproportionate amount of income on monthly utility bills. New Orleans ranks 2nd worst in the country by this metric due to a number of factors.

A focus on energy efficiency, and resources like community and rooftop solar yields benefits to homeowners by allowing fair access to affordable energy that creates local jobs. Local hiring and diversity requirements under Tier 1 and 2 resources also require that qualified vendors be certified through the Office of Supplier Diversity and display a commitment to provide jobs with fair wages and safe working conditions for economically disadvantaged communities.

Council Approved Energy Efficiency



Energy efficiency is widely recognized as the most affordable resource, but it is also the largest job creator in the energy industry in the country. These are largely comprised of construction jobs that cannot be outsourced, since they require a workforce that is close to projects.

New Orleans has an opportunity to implement energy efficiency on a scale unlike many other cities due to a warm climate and an aging building stock. For this reason it can be said that the city is 'rich' in energy efficiency potential like many other regions are rich in other resources.

The Department of Energy estimates that the average household can save up to 25%, or roughly \$2,200 a year on energy efficiency measures.

20,839 workers are employed in energy efficiency work in Louisiana, with roughly 6,883 workers in the Greater New Orleans Area. Although largely comprised of construction professionals, almost as many workers are employed as architects, engineers and R & D professionals.

Fair Access Community Solar



Community solar offers low cost solar energy for those who cannot install solar on their roof, either because they do not own a home, or because it may have too much shade, or other roof issues. It also offers opportunities for solar developers to build solar projects and provide opportunities in the construction, operation and administration of these facilities. Community solar provides subscription-based energy services that expand energy choice and provides jobs.

Community solar rules were recently adopted by the New Orleans City Council for developers to help increase low income access to solar energy!

Community solar is usually smaller in size than utility scale installations and provides jobs in sales, design, construction and electrical work. Additional jobs in maintenance, finance and administration are needed for ongoing operations.

Tier 3 | Leadership in Energy Jobs

South Louisiana's reputation as a leader in the energy industry spans generations. As the worldwide energy transition continues to place a stronger emphasis on renewable energy resources, industries that contributed to the power generation of the past, can contribute to those of the future.

Large scale solar and wind resources in Tier 3 of the R-RPS like solar and wind farms can provide large amounts of electricity at low cost while creating a multitude of jobs. Additionally, offshore wind has the potential to revitalize coastal communities and port infrastructure by providing jobs that utilize specialized marine vessels and the expertise of generations of oil and gas workers.

Utility Scale Solar



Roughly 60% of new solar installed is utility scale. This can be defined as any installation too large fit on even a large non-residential rooftop and so is sited in rural areas where there is an abundance of land. Solar facilities of 20MW and upwards could be considered utility scale for example, and generates enough energy to power 3,813 homes.

Utility scale projects produce an average of 297 jobs per 90MW.

Despite challenges in the industry, according to the Solar Jobs Census Louisiana, along with 31 other states in the US saw job growth in 2018.

Many workers in construction and electrical occupations can find employment in building large scale solar facilities with minimal training and certifications taking less than 6 months. Furthermore, jobs are created in the procurement and permitting for locations, as well as ongoing operations.

Onshore and Offshore Wind Power



The potential for offshore wind is sizeable in Southwest coastal Louisiana, and this power can be brought to many cities across the state, including New Orleans. The potential for the wind industry to transform coastal communities with their long-standing expertise in fabricating offshore oil and gas platforms is particularly powerful.

Recently, marine vessels, design firms, and fabrication facilities in Louisiana that have traditionally worked in oil and gas, were utilized to help build Block Island Wind Farm in Rhode Island, the first offshore wind farm in the U.S. Siting manufacturing facilities in Louisiana near existing ports can further revitalize the local economy.

LM Wind in New Orleans East manufactures record-breaking wind turbine blades that can span 3 soccer fields length and power 10,000 homes when 3 are assembled atop a turbine

In addition to offshore wind potential, there is a great potential for jobs building transmission to bring electricity from 'wind rich' areas outside of Louisiana to New Orleans. Construction professionals and linemen all stand to benefit from this energy transition.



New Orleans is a city with a rich history and cultural tradition that spans many cultures and traditions. This diversity is the strength of the city, and deserves a voice. Energy Future New Orleans is a coalition of many of these diverse voices, that was founded on the principles of community participation and greater democracy in choice of energy resources. These local and national groups work in collaboration to promote affordable and resilient energy solutions that help revitalize the local economy, create jobs, strengthen the grid, and ensure energy security even under extreme weather events. In a region known for leadership in energy, EFNO has developed the Resilient + Renewable Portfolio Standard to reposition that leadership for a technologically-advanced world that works for everyone.

The R-RPS proposal provides fair access to resources and opportunities, addressing and avoiding racial, economic and environmental disparities stemming from traditional energy systems with solutions that benefit systematically disadvantaged communities and customers for years into the future in New Orleans.

R-RPS EFNO Coalition



For more information, visit <https://www.all4energy.org/renewable-portfolio-standard--nola.html> or info on how to get involved in the R-RPS, contact Andy Kowalczyk - a.kowalczyk350no@gmail.com

Further Reading

Solar Jobs Census 2018

<https://www.solarstates.org/#states/solar-jobs/2018>

Energy Efficiency Jobs in America

<https://e4thefuture.org/2-25-million-energy-efficiency-jobs-in-u-s/>

American Wind Energy Association (AWEA)

<https://www.awea.org/>

The Virginia Advantage: The Roadmap for the Offshore Wind Supply Chain in Virginia

<https://www.vaoffshorewind.org/supply-chain>

Energy Storage Association (ESA)

<http://energystorage.org/>

Renewable Energy in Louisiana

PosiGen Solar

www.posigen.com

Solar Alternatives

www.solalt.com

Joule

www.joule-energy.com

LM Wind

www.lmwindpower.com

Keystone Engineering Inc.

www.keystoneengr.com

Gulf Island Fabrications Inc.

www.gulfisland.com

For more information, visit <https://www.all4energy.org/renewable-portfolio-standard--nola.html> or info on how to get involved in the R-RPS, contact Andy Kowalczyk - a.kowalczyk350no@gmail.com