

# A MESSAGE FROM OUR EXECUTIVE DIRECTORS

The Green Recruitment Company was founded in 2010 with the sole vision of becoming the leading specialist provider of global recruitment solutions to the Green Energy and Technology sector



**Matt Churchward, CEO** 



Patrick Wall, SVP

With an initial focus on Renewable Energy and Energy Management the company quickly expanded in line with the wider Green Energy sector. As technology continues to transform the sector our business has similarly adapted. International Offices have been created and new divisions arisen to meet the needs of markets such as E-Mobility, IoT, Connected Cities, Storage and DSR. Our North America business is headquartered in New York. We also have offices in Europe, Middle East, Australasia, Latin America, and Asia.

Our consultants have both a technological and geographic focus which allows us to provide our clients and candidates with expert support no matter the location or expertise. Our client base covers the full Green Energy Life cycle from Finance Houses, Developers and EPCs through to Manufacturers, Utilities and Energy Consultancies. We offer a full suite of recruitment services from Executive Search to Global Contactor Mobilisation through to Managed Service Provision.

We'd like to welcome you to our latest piece of market research; a renewable energy salary survey for the U.S. East Coast.

Our focus in this report will be slightly different compared to previous editions of this report. This year we have combined our renewable energy focused salary survey with our green finance survey to make one single report. We have also included some opinion pieces and predictions for the year ahead.

We hope you find this report interesting and should you have any questions or would like to discuss the report further we'd be happy if you got in touch.

Matt Churchward, CEO

Patrick Wall, SVP

# FOUR THINGS TO WATCH IN EAST COAST SOLAR



Harry Davies is our Country Manager for the US Renewable Energy Market. With expertise spanning a number of years across the entire value chain in Green Energy he is able to bring value at every step. Having grown the European, MENA and LATAM divisions he has been able to expand our offering into the US market where he currently operates across the full Renewable Energy life cycle.

If you'd like to know more about how the Green Recruitment Company can help your business, please get in touch:

harry.davies@greenrecruitmentcompany.com

In January 2018 the Trump administration placed a 30% tariff on solar imports coming into the United States. The 30% tariff will decrease each year by 5% until it's at 15% in 2021. By June 2018 \$2.5 billion in commercial installation projects had been cancelled, along with thousands of jobs. Most of these were in the utility grid-tied sector.

Solar installers have been outraged at the short-sightedness of the bifurcated tariffs. The tariffs on steel and aluminium have hurt the US solar industry as well as the agricultural sector who make tractors and other agricultural implements.

However, the sun continues to shine on the solar energy industry. Despite tariffs, the solar sector has so much momentum it continues to grow. While projections dropped by 9% the industry continues to grow albeit more slowly than it would without tariffs.

"It didn't destroy the market," David Bywater stated, "but it cut volume from the market."

#### **Solar Energy Growth in New York City**

Solar energy is growing rapidly in New York. Clearway Energy Group was recently awarded a large contract to provide installations for New York's "Solar for All" program. Clearway is a progressive renewable energy supplier with 500 employees.

The Solar For All initiative is funded by the \$1 billion NY-Sun initiative signed into law by Governor Andrew M. Cuomo. Cuomo has shown a commitment to developing renewable energy in the state of New York, making New York one of the fastest growing solar states in the nation.

"Clearway's Solar for All projects will help provide the Hudson

Valley's most underserved families with access to free community solar, thereby reducing their electricity bills, reducing harmful emissions, and creating a clean, more sustainable energy system for all." Said Alicia Barton, CEO of New York State Energy Research and Development Authority (NYSERDA).

NYSERDA will be administrating over 7000 residential and small business solar installations. This will include solar community projects for eight towns throughout the state of New York.

#### Climate Change Affects Renewables as well as Fossil Fuels

The federal government presented their Climate Report written by thirteen scientists in the U.S. Global Change Research Program. The report links climate threats to many energy sectors. The grid infrastructure is considered perilous and subject to an increased amount of failures.

Grid-tied solar customers are likely to be affected by both natural and terrorist damage to the grid. Increasing wind was also noted to affect the solar industry with the possibility of damaging equipment especially large pole mounted arrays.

According to the Energy Information Administration, solar energy production grew by 44 percent in 2016. In the United States, renewable energy installations are now equal to coal and natural gas industries. Solar accounts for about half of the renewable energy total with 25 percent of total new power plant capacity installations during 2017.

Solar energy is a viable way to mitigate climate change and work toward lessening harmful environmental disruptions. One-third of the greenhouse gases released into our atmosphere is caused by producing electricity using fossil fuels.

#### Will Virginia Finally Get Some Sun?

Virginia has been at the bottom of the barrel when it comes to solar installations. Currently, Virginia is ranked 39<sup>th</sup> in the USA for solar capacity per capita and lagging far behind its neighbors North Carolina and Maryland.



The good news is solar is on the rise. Communities in Southwest Virginia, which is the heart of coal country will be getting a big solar boost. The Solar Workgroup just announced major projects happening.

The Solar Work Group is a non-profit solar advocacy group that is made up of people and business across public and private sectors. They will be administering solar installations at numerous public buildings including:

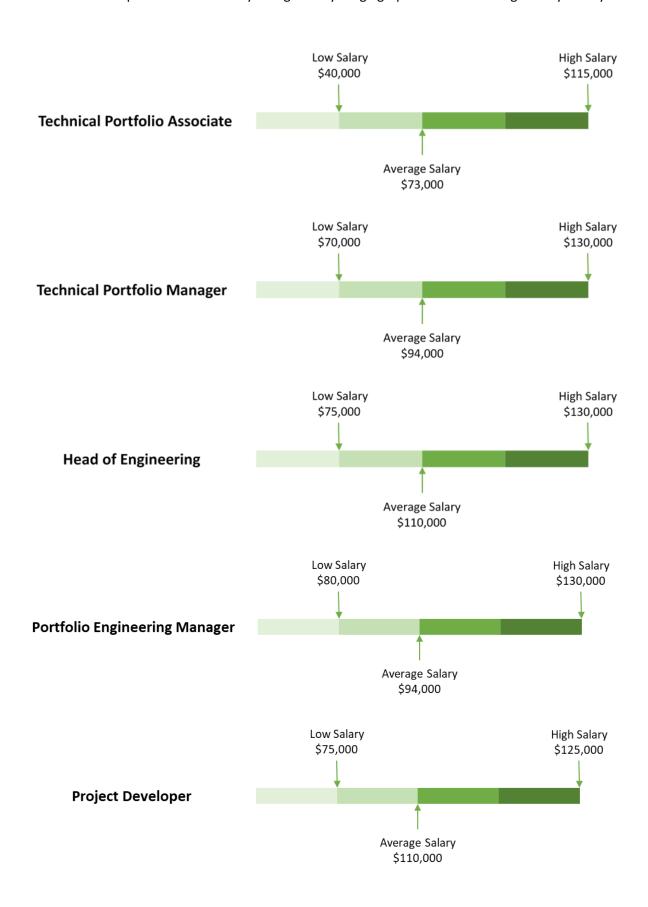
"Wetlands Estonoa Learning Center, University of Virginia-Wise Oxbow Center in St. Paul, Va., Norton Green Apartments in Norton, Va., the Lonesome Pine Industrial Center in Wise, Va., and two high schools in Wise and Dickenson counties".

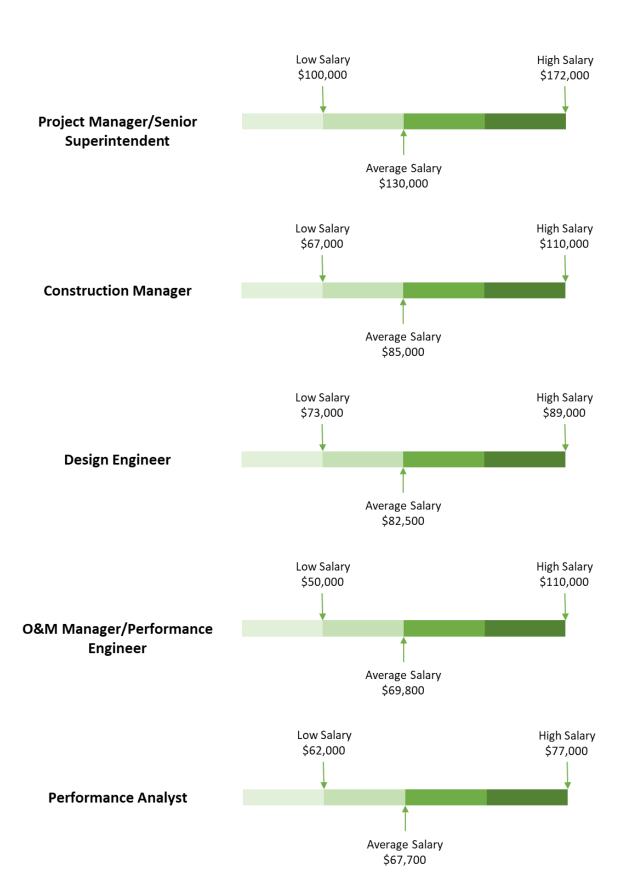
The build to install the solar systems were won by NCI, a Richmond, Virginia based solar installation company. They will team up with Acorn Electrical Specialists in Tennessee and Rockbridge Energy based in Georgia. NCI will be hiring and training local residents in the installation of solar technologies.

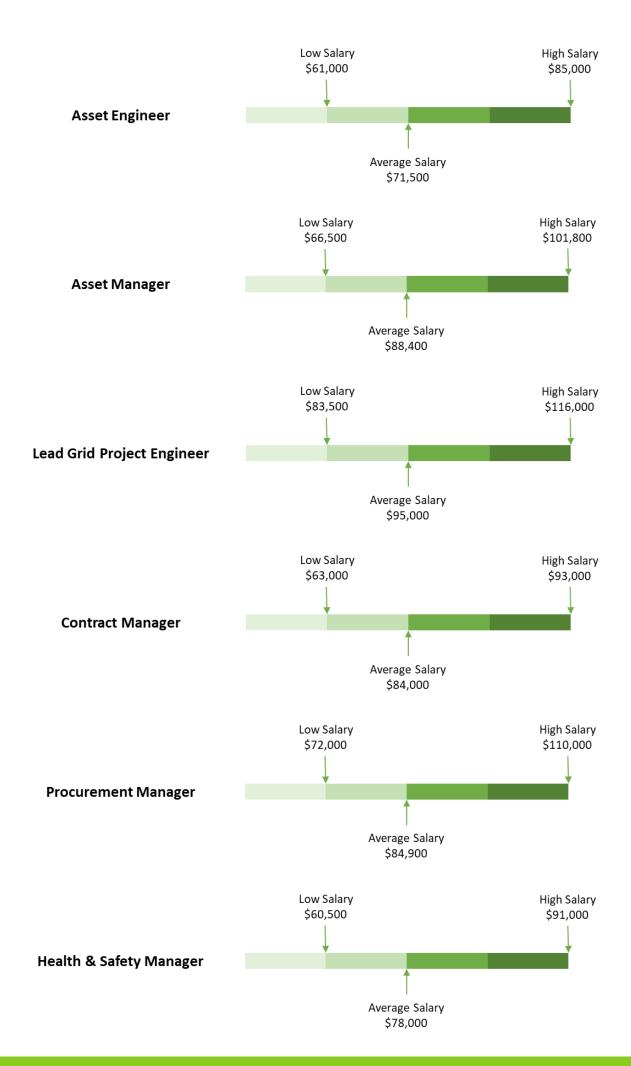
In addition, the Solar Energy Industries Association announced that approximately 200,000 more homes in Virginia will receive solar installations over the next year. As installation and costs come down solar is rising all over the nation.

### TECHNICAL, ENGINEERING, DEVELOPMENT & CONSTRUCTION

The salary data presented in this section is for technical, engineering, development, and construction candidates. For each role we have provided a low salary to high salary range graphic with the average salary clearly marked.







## WHICH WAY IS THE ONSHORE WIND BLOWING?

Onshore wind is gearing up for another fabulous year. A new report out last month showed US wind costs dropped 7% in 2018. In some US locations, wind energy is cheaper than gas. Upstate New York was one of the locations where wind is cheaper. Unsubsidized costs are running \$29/MWh and \$56/MWh according to a November 2018 report 'Levelized Cost of Energy and Levelized Cost of Storage 2018.'.

If we compare those figures to the price average of a coal plant at \$36/MWh we can see that wind is outpacing coal.

2019 appears to be a year of growth in the New England wind industry. States are making legislative changes to allow wind expansion in their communities. And the November 2018 elections saw positive changes in governments towards a friendlier environmental outlook.



#### **Massachusetts working towards Greater Wind Production**

Wind energy is growing in Massachusetts, both on and offshore operations. The government of Massachusetts is promoting wind energy as a clean, dependable, and secure form of energy for the state.

State government offices such as the Office of Geographic and Environmental Information (MassGIS) is working with local towns and communities to rewrite ordinances to favor placement of wind turbines. Local residents have expressed concerns about the environmental impact such as bird and bat safety as well as noise and aesthetics of the turbines. To help with this Massachusetts has developed examples of wind bylaws to aid local communities with developing wind energy. Massachusetts has several regional areas that are quite good for wind development. Along the coastal section of the state as well as in the western mountain areas.

#### A Windier Future with Maine's New Governor-Elect

While wind power grows nationally, the current governor of Maine Paul LePage had set up several political roadblocks. LePage's past eight years in office have been very critical of renewable energy and has singled out wind as being an unworthy source of energy.

Maine has a tremendous capacity for wind power and currently has 16 commercial land-based wind farms that provide 900 megawatts of power. According to the federal Energy Information Administration, they generated 20 percent of the state's net energy last year.

The Bingham Wind project in western Maine one of the largest wind farms in New England producing 185 megawatts. They have been saddled with legislative roadblocks and issues with connecting to the regional electric grid.

Governor LePage's disparaging attitude towards wind has also affected the growth of ocean energy in the state. In 2013 his administration forced out Statoil, a Norwegian company wanting to expand wind energy in the state.

Other states in New England such as Massachusetts, Connecticut, and Rhode Island have mandated their utility companies to buy power from renewable energy sources. This has fuelled a boom to both land and offshore wind farms.

However, great news came out of the November 2018 elections for Maine's Renewable energy future. LePage was soundly defeated by Democrat Janet Mills. In addition, democratic majorities in both the state house and senate were elected.

Mills will be Maine's first female governor. A lifelong environmentalist Mills campaigned on restoring Maine's environment. She has stated that she will put expansions in wind and solar energy the top of her political agenda. Mills also plans to restore net metering which was curtailed under LePage.

Jeremy Payne of the Maine Renewable Energy Association (MREA), expressed enthusiasm and stated that they look forward to "a positive, fact-based discourse around energy policy." Growth has been stalled since 2016 but Payne says now they can get back on track.

Two wind farms, Weaver Wind and Downeast Wind, will move forward in 2019. Weaver Wind is a 22-turbine, a 72.6-megawatt project located in Hancock County and Downeast Wind is a \$270 million coastal project.



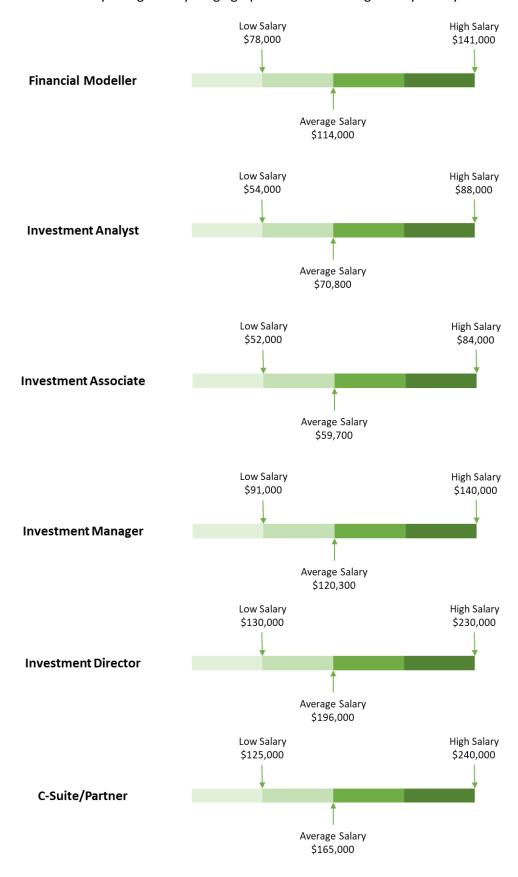
#### **New England Looks Towards Kansas**

We don't normally look towards Kansas as a leader in wind energy. Kansas is a very conservative state that is not considered environmentally friendly. Yet 36% of their state's energy comes from wind. They have not been pushed by climate change or stalwart environmentalists as many states have.

Kansas has embraced wind energy because of pure economics. Farmers are making much more money by leasing land to wind power companies. Kansas residents see wind energy as a form of independence. They do not want to depend on fossil fuels from the middle east or Canadian shale oil. And in addition, Kansas is experiencing job growth and lower energy costs due to the growth in renewables.

### PROJECT FINANCE & INVESTMENT

The salary data presented in this section is for project finance and investment candidates. For each role we have provided a low salary to high salary range graphic with the average salary clearly marked.



### SIX STATES TO WATCH IN 2019

It's fair to say that while the current US President is looking one way with regards to renewable energy, many US states are continuing to look in an entirely different direction. If anything, the US has become noticeable for its recent growth in clean, renewable energy projects, ideas and innovation.

Trump may have pulled the US out of the Paris Climate Accord, and hit the solar industry with tariffs in January 2018, but plenty of states are moving ahead with their clean energy plans regardless. The stereotype that the US is somehow the "dirty energy culprit" of the Western world is not true, as the following will show.

We are of course looking at the world's biggest economy and the third most populated country on the planet, rich with industry, commerce and agriculture – all of which are heavily energy reliant.

Here are six states, varied, diverse and spanning the East Coast of a continent, that are at the forefront of the charge for renewable energy. While each has a different tale to tell, we'll feed in total wind and solar use too to get you a common denominator across all of the states identified – if that's your kind of thing.

#### **New Hampshire**

The Granite State has been no slouch of late when it comes to clean, renewable energy vision for the future. Unsurprisingly therefore, it released the "New Hampshire Climate Action Plan" in 2009, that "recommends maximizing energy efficiency and increasing renewable and low-CO2-emitting energy sources as two chief strategies to curbing energy consumption and greenhouse gas emissions."

Add to that a long-term approach to renewable energy that looks to have 100 percent renewable energy by 2040 and you get a good feel as to how New Hampshire is embracing change and innovation for its energy needs of the future.

Total wind and solar use in 2017: 501 GWh generated, enough to power 47,000 homes.

#### Vermont

New England's Vermont may be small but is big on action when it comes to renewable energy strategies. In 2015, it enacted the first integrated energy standard in the United States, with the stipulation that by 2032, 75% of retail electricity sales are to come from renewable sources.



And the renewable credentials of Vermont didn't just stop in 2015 – far from it. The state has continued to go from strength to strength, meaning that by 2017, the state was deemed by the Union of Concerned Scientists to lead "...the nation in clean energy jobs per capita and for its carbon reduction target and has top-five scores in energy savings, electric vehicle adoption, and energy efficiency policy. The Green Mountain State earns 10 top-10 appearances, the most of any state."

Total wind and solar use in 2017: 518 GWh generate, enough to power 48,000 homes.

#### Maine

Another New England state doing its bit for renewable energy, Maine prides itself that in 2017, some 75% of its generated electricity came from renewable sources.

Maine benefits from not-for-profits like the Maine Renewable Energy Association (MREA) – a collective of energy suppliers, consumers and other associated parties. MREA emphasized the importance of "hydro, biomass, wind, tidal, and waste-to-energy." The geography of the state is of course quite conducive to renewable energy, being rocky, woody and maritime. Natural resources are therefore in abundance.

Maine is another great example of a state operating outside of federal constraints, implementing its own renewable energy policies and initiatives free of the prevailing political winds emanating from Washington DC. In doing so, its creative renewable energy policies capture the imagination of both the citizens of Maine and further afield too. Total wind and solar use in 2017: 2,273 GWh generated in 2017, enough to power 211,000 homes.

#### **New York**

Venturing south of New England, the Empire State may have a reputation for noise, hustle and bustle (at least as far as New York City is concerned) but it's green credentials when it comes to renewable energy are gaining a solid enough reputation.

In 2015, New York launched its "State Energy Plan" which committed the state to affordable, clean and sustainable energy. The plan focused on the need to have New York State achieve "a 40% reduction in greenhouse gas emissions from 1990 levels; obtain 50% of electricity from renewable sources of energy and a 600 trillion Btu increase in statewide efficiency."

Total wind and solar use in 2017: 5,339 GWh generated in 2017, enough to power 496 thousand homes. New York bonus time – electric car purchases are a healthy feature of the renewable energy market in New York State. In 2017, state residents purchased close on ten thousand (9,346) electric vehicles.

#### **South Carolina**

Moving even further south into warmer climes, the Palmetto state basks in a good deal of yearly sunshine. Therefore, it should come as no surprise that its use of solar power is on the rise in recent years. In 2017, for example, solar growth in South Carolina was recorded at an impressive rate of 439%.

South Carolina, given its climate and geography, has been identified as being one of the most promising states in all the US for the development of sustainable, renewable energy. It's potential for continued solar growth, as well as having ample, yet mostly untapped wind resources, means that South Carolina has a great potential future for clean energy development and investment. However, harnessing the political will-power to do so in this traditionally conservative state is something to keep in mind.

Total wind and solar use in 2017: 246 GWh generated in 2017, enough to power 23,000 homes.

#### **Texas**

Moving down to the Gulf of Mexico, the good folk of the Lone Star State have reason to be optimistic about their renewable energy future, despite's the state's long running love affair with oil. Raising an eyebrow? Well, some staring

stats for you. Texas is the wind energy powerhouse of the Union, generating more wind power than any of the other 49 states.



Texas basks in a mix of sunshine and wind, vast as it is, so the potential for clean energy production is equally as vast and quite unique in the American grand scheme of things. "...wind and sunshine in Texas complement each other exceedingly well, helping the grid provide enough power even at moments when electricity demand is highest..."

Total wind and solar use in 2017: 69,906 GWh generated in 2017, enough to power 6.5 million homes.

Texas bonus time (and this is Texas after all, so size matters) – out of the six states we have looked at, Texas tops the table for electric cars sold in 2017, coming in at 12,455. Sure enough, Texas is a heavily populated state, but for a state defined for so long by its relationship with "Texas Tea", that number of sales can only be a positive sign regarding the growth and embrace of renewables in the state.

The US has taken a lot of flak in just the last two years alone regarding its international standing and reputation per renewable energy, climate change and sustainable futures. While the current administration has arguably amplified and exacerbated that perception, at state level, the story is quite different. While there is no unified approach to renewable energy at a national level, individual states are continuing to be innovative and creative when it comes to renewable energy strategies.

As we have seen, each state differs – be that in size, population, natural resources, renewable strategies, prevailing governments and so on. However, to ignore the latent and growing potential of the US as renewable energy market would be incredibly short-sighted. We are of course looking at the very same country that put man on the moon and gave the world the iPhone, rock 'n' roll and mass-produced cars, amongst many, many other things. The United States' creative and visionary credentials should therefore never be in doubt and the same applies to renewable energy too.

For years, the coal and oil industries have held sway and, despite breakthroughs in clean energy thinking and technologies in recent years, are in no rush to let go of that grip. However, the renewable charge is on, state by state, and it is now a matter of when, not is, clean energy becomes complete king Stateside.

### THANK YOU FOR READING

Thank you for taking the time to read our East Coast Salary Survey 2019. We hope you found it interesting and informative. If you would like to discuss any of the contents of the report or if you require any specific USA renewable energy research or would like us to undertake a recruitment project for you, then please get in touch.



#### **New York**

757 Third Avenue, New York, NY, 10017 + 1 646 781 8335 harry.davis@greenrecruitmentcompany.com

#### London

Capital Tower, 91 Waterloo Road, London, SE1 8RT +44 (0) 203 640 2130 info@greenrecruitmentcompany.com

#### **Beijing**

Design Plaza, No.8 Huixin East Street, Chaoyang District, Beijing, China +86 (0) 10 6482 3419 info.cn@greenrecruitmentcompany.com

#### **Sydney**

133 Castlereagh St, Sydney, NSW 2000, Australia +61 405 862 492 tim@greenrecruitmentcompany.com

#### Dubai

Jewellery & Gemplex, Jumeirah Lakes Tower, Dubai, UAE harry.gibson@greenrecruitmentcompany.com

#### Santiago

Alta Business Center S.A, Las Condes 5335, XIII Metropolitan De Santiago, Chile +56 2240 5354 49 Info@greenrecruitmentcompany.com

