



#### Welcome

By Dominic Wall, Director dominic@greenrecruitmentcompany.com



Welcome to the 2019 Spring Edition of the Green Insider. The Green Insider project is both something new and a continuation of the traditions of the Green Recruitment Company. The new part is that this newsletter is something different for the business. It is the first time we have collected our content and vacancies in this way. It is also a continuation of the business' belief in being the premium provider of global recruitment solutions to the green energy and technology sectors. The Green Recruitment Company has always sought to create relevant industry content, share insight, and demonstrate the specialist knowledge our consultants have.

In this edition we've tackled floating renewable energy technology with articles on floating solar in Asia and floating wind (and Charles Dickens?) in Europe. Sticking with the wind theme, our USA Country Manager, Harry Davies looks at the growth of offshore wind on the US East Coast. Elsewhere, Harry Moncur talks about the UK solar sector and how its responding to current market conditions. Our expert on Electric Vehicles, Will Mackay discusses Scandinavia and asks if happiness is owning an EV. From our Sydney office, Tim Hall looks at how Australia is tackling the overloaded grid dilemma and Harry Gibson gives us the MENA perspective on Saudi Arabia's renewable ambitions.

We have worked hard to make sure that you find this newsletter interesting and entertaining as well as useful. If you have any suggestions for future articles or content, we'd love to hear back from you!

Yours Sincerely,

Dominic Wall

## Can the Sun still shine on UK Solar?

By Harry Moncur, Head of European Solar harry.moncur@greenrecruitmentcompany.com

The UK is a thought leader on global matters and especially on matters of climate change. The UK is the global leader for offshore wind power. It is currently likely to outperform it's targets for its third carbon budget which ends in 2022. Yet there are challenges ahead. By 2021 China will overtake the UK as the world's top offshore wind power producer. At home, the Government's own committee on climate change, announced in 2018 that the UK was likely to miss it's targets for its fourth and fifth carbon targets. We're not at a crisis point yet, but something needs to change.

#### No Solar Please We're British

Solar power has always suffered in the British psyche because of a national preoccupation with the weather. It's often viewed with suspicion because we tend to believe that we don't get enough sunshine to make it worthwhile. In fact, Solar accounts for 3.4% of our power generation and can do much more. So, it is a particular area for concern in the UK's Green Energy mix that Solar is getting less support than it should. The main challenge to the UK Solar Industry has been its reliance on subsidies. Years of subsidy cuts and subsidy abolition have seen a contraction in the size of the UK solar market. We have seen a significant decline in the last two years in the number of projects generating over 20MW. With solar on the rise in Europe, is it time to re-evaluate Solar in the UK?

#### Two "I"s on the UK Solar Sector

The sector may in the long term be better off for the loss of subsidies for two reasons; investment and innovation. Without subsidies the UK solar market will need to seek greater efficiencies and a more effective business plan. With investment, it may be that 2019 sees the start of a subsidy free solar boom. A good case study for this will be Horus Capital's new solar development arm Suncore Energy. Suncore Energy is launching 45MW of new projects throughout 2019. For us though, it is the

innovation taking place in the UK for Solar that is incredibly exciting.

#### **Record efficiency for Solar Cells**

If the global solar industry has a challenge, it is that solar technology has not developed at the same pace as other areas of manufacturing. Improving yields from Solar is both a UK and global priority. One firm to watch is Oxford Photovoltaics. Oxford **Photovoltaics** developing a material known as perovskite. They combine perovskite with conventional silicon solar cells. This tandem configuration demonstrates highest conversion efficiencies, which are expected to exceed 30%. In June 2018, one such tandem solar cell by Oxford-PV, set the world record for highest certified efficiency of 27.3%.

#### **Integrating Renewables and Transport**

EVs tend to steal the headlines when it comes to CleanTech, however the UK is taking a more holistic approach across several areas of transport. The Department of Transport (DfT) has funded a multi-million-pound project for developing solar technology for pavements, roads and railway tracks. Projects in Central Bedfordshire and Buckinghamshire have already received £1.05 and £4.49 million respectively for solar road and footway construction. The DfT has recently started working on a project to assess switching to solar powered trains. This is in response to a study conducted by the Energy Future Lab at Imperial College London and climate charity 10:10. The research claims that solar panels could account for 10% of the total electricity required to power the UK's electric train routes. The effective use of land and energy efficiency make this project of significant interest. Elsewhere. the construction of onshore windfarms and a fleet of solar along the controversial HS2 line are being considered.

For occasional observers of the UK Solar Industry the current situation may seem worse than it is. Yes the industry has contracted but it is also now on the cusp of something great through investment and innovation.

Technical Lead Home Energy & IOT London £85,000

**Contact: Cory Rogers** 

#### **Opportunity**

A rare opportunity has arisen to work with one of the most innovative energy solutions providers in the UK. They are looking for a new Technical Lead for their Home Energy & IOT business unit. London based, this individual will take a solution driven lead on rolling out home energy management technologies and wider services to 1000's of domestic & commercial customers nationwide.

Senior Analyst Investment & Strategy Renewables London £70,000-£80,000 Contact: Rory Chandler

#### **Opportunity**

Excellent opportunity to join a global renewable energy company as they scale their global, mutli-technology, renewable portfolio. This newly formed position bridges the gap between the investment team and the company board-level strategy.

In addition, this role has a large strategy component. As the company enters new markets and renewable technologies, there will be a focus on governance, reporting, and a close link to the group accounting function.

## **UK VACANCIES**

**Head of Project Development** 

London £80,000

**Contact: Will Mackay** 

#### **Opportunity**

The Green Recruitment Company represents a leading UK developer that works with a variety of flexibility assets including energy storage. The company is small but extremely well-funded. This opportunity is perfect for someone looking to scale a business from a small organisation to major player in the grid flexibility/resilience sector.



#### **Contact Details**

Cory Rogers: cory@greenrecruitmentcompany.com
Rory Chandler: rory@greenrecruitmentcompany.com
Will Mackay: will.mackay@greenrecruitmentcompany.com

## The Tide is Turning for Offshore Wind

By Harry Davies, USA Country Manager harry.davies@greenrecruitmentcompany.com

I am standing on the beach in eastern Massachusetts looking out over the ocean. I can see tremendous potential and expanding options for offshore wind energy.

The wind that flows over the offshore turbines are the same winds driving innovation and economic development on land. According to the US Department of Energy thirteen states have offshore wind projects in development that will bring an estimated 25,464 MW of power to their local communities.

### New York is Taking the Wind Market by Storm

On January 15, 2019, the governor of New York, Andrew M. Cuomo, gave his 2019 State of the State address. In his address, Cuomo reiterated his commitment and dedication to renewable energy. He announced funds for a New York State Advisory Council on Offshore Wind Economic and Workforce Development including investing in an offshore wind training center, in addition, he stated that he anticipated having offshore wind power reaching 9,000 MW by 2035.

New York is currently reviewing bids from wind energy companies and will be announcing upcoming projects in spring 2019.

## Vineyard Wind of Massachusetts is Sailing Ahead of the Rest

Vineyard Wind has committed fifteen million dollars to wind development in the state of Massachusetts. They are poised to develop three offshore wind projects along with necessary infrastructure. They are currently developing a supply chain and working with local infrastructures and facilities that will bring the electricity into communities.

Two million dollars will be going towards educational opportunities to recruit and train local residents in the wind energy industry. This program called the Windward Workforce will

partner with local community and tech schools to offer training. Organizations such as the Fishing Partnership Support Services will be able to offer training for affected fishing industries. Vineyard plans to hire between 1,706 and 2,120 men and women for this project. Construction will begin in 2019 and be fully operational by 2021. This will benefit the economies of south-eastern MA towns such as New Bedford, Fall River, Cape Cod, Martha's Vineyard, and Nantucket.

Expected salaries trained average for personnel will be between \$78,000 and \$85,000. In addition, they have made peace with environmental watchdogs by signing a "landmark agreement" to protect the North Atlantic Right Whale, an endangered species. Construction on turbines will stop during the weeks that the whales are migrating through the area. Turbines have also been developed to produce less noise. Studies have shown that loud noises adversely affect marine mammals. This compromise between Vineyard, National Wildlife Federation, and Conservation Law Foundation proves that big corporations are ready to listen to public concerns. Vineyard also has taken local fisherman into account and listened to their needs.

#### Maine's New Governor Embraces Wind

Janet Mills, who was sworn in as the new governor of Maine in January 2019, says she supports offshore wind development. Under the previous administration, Maine was failing to meet its renewable energy goals.

Mills recently signed an executive order ending a previous moratorium on wind turbine permits. On February 28, 2019, she announced that she will enact legislation to develop a Maine Climate Council and that Maine will join the United States Climate Alliance. She stated that "The Maine Climate Council will be responsible for developing an action plan and a timetable to meet our emission reduction goals and to ensure that Maine's communities and economy are resilient to the effects of climate change". With a favorable political climate and a population eager for renewables, Maine's offshore wind development is ready to move forward.

Director of Development Solar New York Contact: Harry Davies

#### **The Opportunity**

This is a rare and exciting opportunity for a driven development director to join a growing team who manage largescale solar and wind energy technologies. The successful candidate will lead and expand the solar development portfolio by establishing and maintaining key relationships with potential landowners, solar developers, and energy off-takers. This position is part of a small, collaborative, entrepreneurial team, exposed to all aspects of the project development life cycle.



## **USA VACANCIES**

harry.davies@greenrecruitmentcompany.com



Head of Technical Asset Management Solar & Wind United States Contact: Harry Davies

#### **The Opportunity**

A challenging opportunity for a highly skilled technical manager to lead a large team of Asset Managers focusing on optimising Solar and Wind Assets. This will involve the development of junior asset managers and data engineers as well as overall operational performance of the division. The business pride themselves on being a leading turnkey service provider with the United States Renewable Energy Market.

#### Could the Future of Solar be all at Sea?



### By Qihan Geng, APAC Lead qihan@greenrecruitmentcompany.com

Floating Solar also known as Floating Photovoltaic (FPV)/Flotovoltaics is enjoying a rapid rise amongst renewable energy technology. For those unfamiliar, it is an array of solar panels that float on top of a body of water, usually mounted on a buoyant structure to keep them afloat.

Tradition solar panels are land hungry. For countries with dense population or rapid urbanisation as seen in Asia a developing answer to energy needs is to install floating solar panels above artificial reservoirs, dams, and lakes. Out of the total 1.1 gigawatts of floating solar capacity worldwide, 450MW is based in Asian countries including China, Japan, India, and South Korea.

#### Flotovoltaics vs Traditional PV

Floating solar panels aren't just a gimmick they enjoy some significant technical advantages over traditional PV solutions:

- Floating solar panels installations can be deployed in currently unused space without the usual site clearance challenges.
- Floating solar panels are proved to be more efficient as the water bodies cool down the panel in a hot and sunny climate thus increasing the overall power output.
- The floating panel structure provides shade to the water bodies and reduces evaporation which prevents water shortage. The shade also prevents the growth of algae blooms in water that is harmful to aquatic life.

- Floating power plants are more compact than traditional solar panels and they are easy to install and manage.
- Another advantage of floating solar panels is that they can be installed near a hydropower plant site, offering colocation benefits.

#### Asia is leading the way on Floating Solar

Despite the first floating solar project being installed in the USA, it is in Asia and particularly China where the technology has taken off. Most of the recent FPV developments have taken place in China and it is China that is home to the world's largest floating solar farm (which is 40MW and powers 15,000 homes). Elsewhere in Asia Thailand's hydropower plants also offer ideal staging for floating solar panels. The Electricity Generating Authority of Thailand has planned to install a 45MW floating power plant above Sirindhorn Dam in the country's northeast.

Countries like Singapore, Japan, and India are also investing in floating solar panel technology. Singapore is developing one of the world's largest offshore floating solar systems in the Strait of Johor. Japan has also installed 60 such projects.

It is clear that Asia is ideally suited to the mass deployment of floating solar and this is being matched by world leading innovation in the field from within Asian countries.

Ultimately the appeal of Floating Solar will come from its superior efficiency to traditional PV. Innovation in China serving to reduce unit cost to allow competition on price as well as capability, the future of solar could be all at sea.

Solar Project Manager South Korea Salary Flexible Contact: Qihan Geng

#### The Opportunity

We are currently working with a renewable investment platform sponsored by a private equity fund. they operate over 1.5GW clean energy power projects in East Asia and South East Asia, and actively developing over 300MW solar and wind projects in Korea. 500MW power plants are expected to be developed in the coming 3 years.

Finance Manager Seoul, South Korea Contact: Qihan Geng

#### **The Opportunity**

You will be working with a leading project developer in the renewable energy sector. They develop, construct, own and operate renewable energy projects across Asia. They are now looking to hire a CFO to join their newly established Korea Operations team.

## **ASIA VACANCIES**

gihan@greenrecryuitmentcompany.com

Operations Director Beijing Contact: Qihan Geng

#### The Opportunity

This excellent opportunity is with a Non-profit Organization focusing on stimulating the innovative changes in current environmental policies to create a better platform/social setting for the incubation of new energy/environmental projects. The Operations Director is responsible for managing, directing, developing, and implementing complex projects or programs to accomplish strategic goals and business objectives of the organization.

Project Manager - Wind Hanoi, Vietnam Contact: Qihan Geng

#### **The Opportunity**

A fantastic opportunity to work with a renewable investment platform sponsored by a private equity fund, they operate over 1.5GW clean energy power projects in East Asia and South East Asia, and actively developing over 300MW renewable projects in Vietnam.

# Three Ways Australia is Offering Leadership to the Overloaded Grid Dilemma

By Tim Hall, Australia Country Manager tim@greenrecruitmentcompany.com



Australia is gaining a great reputation in the world of renewable energy. The combination of a passionate public, mainstream politicians who campaign on issues of sustainability, and business interests that embrace the potential of renewable power generation, have all made Australia the poster child for renewable energy.

Since the start of 2018 Australia has installed 100MW a month of solar power and their onshore wind market is performing strongly. But underneath all of this, Australia has a problem. Soon it's grid won't be able to handle the excess level of distributed electricity.

Australians however have amazing resilience. This article looks at how Australians are tackling this major dilemma by providing global thought leadership on energy storage projects.

## Australia is looking beyond Lithium-Ion Technologies

The success of the world's biggest storage project by Tesla in SA put Australian energy storage on the map and Australia is now becoming a serious testing ground for new energy storage technologies.

One example is the Angas Zinc Mine in Strathalbyn, which is utilising an Advanced Compressed Air Energy Storage (A-CAES) facility. Early indicators suggest that this technology will offer similar benefits to the more well-known pumped hydro energy storage systems. This is an exciting time to be following

the technology, and many people believe that compressed air is on the edge of a serious breakthrough.

Elsewhere, Sydney based Gelion have produced a Zinc Bromine Gel battery, which could be a real threat to traditional Lithium based technology. By the end of 2021, Gelion anticipates mass producing its zinc bromine gel battery expertise for applications varying from residential to grid at a cost less than \$100 kWh.

#### Strategic Leadership for Off Grid Storage

The isolated location of Western Australia has made energy storage a priority for the state. WA offers a textbook case study of how a coordinated approach can deliver effective storage solutions off grid. WA government officials have signed contracts of off-grid programs in regional properties worth \$8.8 million. Perth-based, "Hybrid Systems" and their partner BayWA are working on the project. The contract is for 57 Standalone Power Systems (SPS) units which combine solar and battery technology with a backup generator, to be deployed across the state. Meanwhile last March, Western Power announced they are launching 60 SPS systems within the South West Interconnected Network (SWIS). These units are scalable, and their range is less than 5KWh which is used to supply to electric fences and dam pumps mainly benefiting agricultural businesses.

## Land Reclamation and Regeneration is Turbo Charged Recycling

A lot of credit must go to State Governments for working with industry to use energy policy to produce lasting legacies. A great example is how renewable energy projects are being used as part of land reclamation and regeneration projects. The use of old mining sites such as the Granny Smith Gold Mine, WA, which is set to install 20,000 solar panels and a 2MW battery system, showcase how Australia's mining industry will leave a lasting legacy for the country. Where other countries are in a rush to clear new sites for energy projects, Australia is offering real thought leadership on how to really make these projects sustainable.

#### Grid Connection Manager Grid & Power Distribution Melbourne

**Contact: Tim Hall** 

#### The Opportunity

A leading renewable energy developer are seeking a Grid Connection Manager to join their growing Central Melbourne based Grid Connection team. With an impress project portfolio with Solar PV sites across Australia to work on in various stages of development, this is an opportunity for an experienced grid professional to full utilise their skill set on a variety of projects.

Project Manager Solar PV Sydney

**Contact: Tim Hall** 

#### **The Opportunity**

A brilliant opportunity to join an international renewable energy developer. They are seeking an experienced Project Manager to join their Global Project Business. You will be a confident and highly capable individual, with strong experience in Project and Construction Management of Solar PV sites.

## **AUSTRALIA VACANCIES**

tim@greenrecruitmentcompany.com

**Design Team Leader** 

Solar PV Sydney

**Contact: Tim Hall** 

#### The Opportunity:

Our client, an award-winning solar company are seeking a Design Team Leader to join their industry leading engineering department based in Sydney. You will be a proven leader with experience in commercial scale solar PV projects.

You will be a technical, resourceful, and innovative engineer who will lead a passionate team of engineers and deliver projects and designs with the optimum quality and safety standards.

You will be working within one of the most rapidly expanding companies in the Australian energy sector and this role offers the opportunity for much growth and career progression if you match our client's ambition and determination to be the best you can be.

## Five Ways Saudi Arabia Plans to Drive Renewable Energy

By Harry Gibson, Lead Consultant MENA harry.gibson@greenrecruitmentcompany.com



For those of us with an interest in renewable energy in the Middle East, the start of 2019 has seen a lot of intent and statements emerging from Saudi Arabia. The Kingdom has in classic fashion bet big on a number of different schemes and projects, even for seasoned observers it can be hard to keep pace. This article is a survey piece on five major areas of their renewable energy policy:

#### Saudi Arabia has big plans for Solar CSP

Saudi Arabia's "Renewable Energy Program 2030" announced by (REPDO), in which the country's renewables target for 2030 has been revised up, with 2.7 GW from Concentrated solar power. For that 11 solar tenders are being planned. KSA will if it follows through on this be in prime position to push past Morocco and the UAE as the leading Solar CSP player.

#### **Even Oil is getting the Solar Treatment**

3.5 MW of Solar PV has been installed on land belonging to the world's largest oil research Centre; the "King Abdullah Petroleum Studies and Research Center" in Riyadh. On an area of 55,000 m² a total of 12,684 Sun tech modules were installed. it produces 5,800 MWh of solar electricity annually and thus saves 4,900 tons of CO2 emissions. Ron Shen, Vice President Ron Shen, of Asia Pacific has declared that this project is an important milestone for the development of the solar industry in Saudi Arabia.

#### The Future is Going to be Windy

The (REPDO) of Saudi Arabia's Ministry of Energy, Industry and Mineral Resources (MEIM) has awarded its Dumat Al Jandal wind project to a consortium led by EDF Energies Nouvelles and Abu Dhabi Future Energy Company (Masdar). its predevelopment studies showed a strong mixture of wind capabilities on the site. The average annual generation from the wind plant is expected to be around 1.4 TWh. The National Renewable Energy Program is a strategic initiative under Vision 2030 and the King Salman Renewable Energy Initiative.

## Geothermal Power is Critical to Reducing Oil Dependence

The Kingdom is keen for effective utilization of geothermal energy to be developed and implemented by K.A.CARE. By successfully implementing geothermal energy development programs, the Kingdom of Saudi Arabia will be able to supply the GCC with cheap renewable energy, providing thousands of MW of baseload power, and replace thousands more MW through direct industrial applications. All indicators are that the Kingdom sees Geothermal Power as being crucial for its internal power market and the pathway to phasing out Oil usage.



### Waste to Energy is an Important Part of the Wider Vision for KSA

Waste management issues in Saudi Arabia have traditionally focused on water, now land, air and marine resources are getting attention. Sustainable integrated solid management (SWM) is still in its the infancy but there are increasing numbers of studies identifying waste related environmental issues in KSA. The current SWM activities of KSA require a sustainable and integrated approach with implementation of waste segregation at source, waste recycling, WTE and value-added product (VAP) recovery. By 2032, Saudi government is aiming to generate about half of its energy requirements (about 72 GW) from renewable sources such as solar, nuclear, wind. geothermal and waste-to-energy systems.

Tender Director Renewable Energy Riyadh, Saudi Arabia Contact: Harry Gibson

#### **The Opportunity:**

In the recent years, tenders have become a high-stakes, complex, ultra-competitive businesses, with no second chances and no negotiation for those who aren't the best.

The tendering team's role is therefore becoming vital to the company's growth as it will be helping secure future projects for the group and ensure job security.

The Manager of the tendering department shall therefore have a leading role within the company and shall directly be reporting to the CEO

Salary depends on experience.



## **MENA VACANCIES**

harry.gibson@greenrecruitmentcompany.com



Construction Manager Solar PV Riyadh, Saudi Arabia Contact: Harry Gibson

#### **The Opportunity:**

This an interesting positions for a construction manager to not only be involved in executing some of the largest projects globally, but to also be involved in the development phase of projects.

As the MENA region increasingly depends on success in government auctions the tendering process has become critical. The CM will be responsible for the preconstruction EPC plan, therefore integral to the company's success.

Salary depends on experience.

## Is Floating Offshore Wind the Future of European Wind Power?

By Andrew Green Head of Energy Solutions and Wind Energy andrew@greenrecruitmentcompany.com

The current state of innovation in renewable energy reads a bit like something from Charles Dickens. You wouldn't be faulted if you considered it to be both the best of times and the worst of times. Renewable Energy has captured the popular consciousness and consumers are forcing businesses as diverse as ski resorts, ice cream makers, theme parks and luxury goods manufacturers to use green energy. Conversely on a global scale many local industries are struggling from subsidy cuts and attacks from entrenched interests aligned with fossil fuels. Despite the setbacks and perhaps because of them the renewable energy sector has become more efficient and is using innovation to overcome its challenges.

#### A Tale of Two Continents

You might say that what we have now is a tale of two continents. In Asia, there is a huge drive towards floating solar. Floating solar ticks so many boxes for Asian renewable energy, including maximising land resources and the interconnectivity of energy with water projects. Europe however is following a different path. Coastlines and sea are a significant resource and Europe seems to be turning to floating wind power as a major growth area for its energy needs. This article is intended to provide an update on the latest developments in the European floating wind sector.

### Please Sir, Can I have Some More Wind Power?

The UK is the world's leading offshore wind power player. In 2017 it opened the world's first floating wind project with the 30MW Hywind Scotland project. 2019 has seen the UK kick on with its offshore and floating wind plans. Earlier in March the new Offshore Wind Sector Deal, it has ambitious plans to add 20,000 jobs in UK Offshore Wind and increase output to 30GW or a third of UK energy demands. Renewables UK and Scottish Renewables have launched a new floating wind industry board. Whilst Shell, Equinor, GE, Aker Solutions, Atkins, Principle Power, and the ORE Catapult have formed a floating wind task force. Its certain that a lot can be expected from the UKs initiative in this

sector, it has managed to align policy, serious business, and technology to meet its energy goals.

#### **Great Expectations from New Trial Projects**

There are two exciting trial projects underway elsewhere for floating wind. The European Marine Energy Centre have received approval from the Sustainable Energy Authority of Ireland for a €31m floating wind scheme off the coast of Co. Mayo. The project, known as AFLOWT (Accelerating Market uptake of Floating Offshore Wind Technology), is hugely exciting not just for the technology but also because of the pan-European support and supply chain behind it. Ireland has a lot of ambitions to become a serious player in wind power and this will be a key step along that path. Elsewhere France has received approval for four floating wind projects. Three in the Mediterranean and one in the Atlantic. The projects are the Groix Belle Ile wind farm in the Atlantic Ocean, and the Golfe du Lion, Eolmed, and Provence Grand Large wind farms in the Mediterranean Sea. The trials are of significant interest because each site will use different technology, including foundations and turbines. This will hopefully provide genuine insight on the best way to continue floating wind innovation.

#### Floating Wind is no Humbug

Perhaps the most important development for floating wind technology is the pace at which it has commercialised. The technology seems to be benefitting from a willingness of finance to fund it. Last October, Windpower Plus a JV of EDP Renewables, Repsol and Principle Power received \$68m in funding for a 28MW scheme off of Portugal from the EIB.

There was a similar project to the Windplus scheme near Norway for Windfloat Atlantic (a collaboration of Innogy, Shell and Stiesdal). The consensus from these projects is that they allow for shallower water and can be deployed regardless of depth, this may open up new markets on the US west coast and in countries like Japan. With rapid innovation, commerciality, and flexibility on its side it looks like floating wind technology could be the next big thing for Europe and the World.

Development Project Manager Amsterdam

Salary: Flexible on Experience

**Contact: Andrew Green** 

#### **The Opportunity**

A chance to work alongside one of the leading renewable energy businesses with their expansion plans. The business operates in development, design, building and management of power production plans that include wind, solar, waste to energy and biomass. They are a pure play business in the European market with global expansion plans in place.

Senior Quantitative Analyst Dusseldorf Flexible Salary on Experience Contact: Andrew Green

#### The Opportunity:

A great opportunity to work with a global energy firm that generates, trades and markets power on a large scale. The business procures, stores, transports, and supplies commodities including nat gas, LNG and coal, alongside energy-related products. The business operates in more than 40 countries with around 40 GW of generation capacity and is one of the leading names in the energy industry globally.

## **EUROPE VACANCIES**

M&A Transaction Manager Renewables 65,000 Euro Montpellier – France Contact: Harry Moncur

#### **The Opportunity**

Fantastic opportunity to work with an established and expanding IPP focused on various renewable projects who are looking for a Transaction Manager to be based in the South of France.



#### **Contact Details**

Andrew Green: andrew@greenrecruitmentcompany.com Harry Moncur: harry.moncur@greenrecruitmentcompany.com

# Is Happiness an Electric Car? What Scandinavia can teach us about EVs

By Will Mackay
Head of E-Mobility & Energy Storage
Will.mackay@greenrecruitmentcompany.com

The past two years can be termed as a turning point for the adoption of new-age mobility. Yes, we are talking about the increasing demand of electric vehicles (EVs) the world over. The automotive industry is at crossroads as various brands are placing electric vehicles and technology at the heart of their future. With global warming being considered an important issue (regardless of a few exceptions), policymakers are betting big on EVs to clean the air of pollutants emitting from diesel and gasoline vehicles.

When it comes to electric vehicles, it must be said that the Scandinavian countries are leaders in making the necessary changes to promote these new age green vehicles. If EVs are to be the future of human mobility, which we think they are, Europe and most of other countries across the world can take a leaf out of Scandinavia's adoption of electric cars. Here's why:

#### **Government support in Norway:**

Guess the highest selling car in Norway in 2018? Yes, it is the popular Nissan Leaf, which sold over 12,000 units in the last year. The Nissan Leaf is not only the bestselling vehicle in Norway but is also the bestselling electric vehicle across Europe and the world! The country, which has pledged the total adoption of electric cars by 2025 is leaning towards electrification with a vengeance. Of the top 5 selling models in Norway, four of them were electric cars in the form of Nissan Leaf, BMW i3, Tesla Model X and Volkswagen's Golf.

The recent success of electric mobility in Norway is no overnight success though. The roots of this lie way back in the late 1990s and early noughties, when the country introduced zero purchase tax and absorbed the 25% VAT on EVs and electric car batteries. Add to that, if you own an EV in Norway, you get benefits such as 50% rebate on company car tax and

lower road taxes, tolls, parking fees and ferry charges.

Another source of motivation to shift to electric vehicles is the installation of ultra-fast charging stations across Norway by EON-SE, CLEVER and YX. These new chargers will have the ability to recharge 400 km range batteries within 30 minutes and will be located along Norway's main highway corridors connecting Oslo with Kristiansand, Stavanger, Bergen, and Trondheim as well as neighboring Sweden.

Here's what Christina Bu, CEO of Norwegian EV association, has to say about the country's government policy towards EVs: "While initial support from the government is very crucial in setting up charging infrastructure, a good network and possibility of large volumes will eventually make private players jump in, to tap into the opportunity of a profitable business."

### Denmark's ambitious plan to phase out conventional fueled vehicles by 2030:

Last year Danish Prime Minister Lars Lokke Rasmussen made an announcement to phase out diesel and petrol cars by 2030 and hybrids by 2035. "It is a big ambition that will be hard to achieve. But that's exactly why we need to try," he said.

This announcement was a U-turn from the previous year's decision to cut the EV incentive, which saw sales of pure electric car fall by 73% in the following year. While the EV market has still not recovered completely, the government does realize its folly and is taking the right steps to amend the same. What's more, the country is aiming to become totally fossil fuel free by 2050 as it cuts down coal-based generation of electricity.

For those still not convinced with the use of electric vehicles in everyday life, electricity is way cheaper than gasoline or diesel. If your car costs \$12 per kilometer, an electric vehicle will cost you just \$2-\$4 to cover the same. Then there are carmakers like Renault and Nissan encouraging buyers to shift to EV by offering the car's battery on lease rather than buying them outright. This further brings down the overall cost of running an EV.

### The importance of charging infrastructure in Sweden:

The first question that every buyer considers when opting for an EV is its range. Can I take my car for long drives? Is it good for vacations? What if I run out of charge midway? Are some of the common doubts that every skeptical EV buyer faces. Let's calm your horses.

Consider the new Renault Zoe. One look and it's like a normal compact hatchback – cool and swift. Well, indeed it is. The all electric car boasts a jaw-dropping 400-km range. That is at par with the fuel tank capacity of a conventional petrol guzzling sedan! Most of the electric cars offer a decent 150-300 km range which can take care of daily commute to work or even long drives and vacations.

One of the flag bearers of developing a sustainable charging network is Sweden. Since 2014, the country installs 10 new fast and 100 normal charging points. Also, the government has now decided to involve private players in this task. A strategy which sees private players install charging points and then cover the service and maintenance charge is a win-win situation for all the parties involved.

As for the duration to charge an EV, most of the automakers claim that a car can be charged up to 80% in an hour or so, which is not bad at all. Mind you, as newer technologies come up, the charging time will start to decrease gradually.

## The importance of a pro electric vehicle culture in Finland:

Finland has a relatively low population compared to its Nordic neighbours, largely due to its frosty winters which aren't exactly suited to electric vehicles. However, this does not deter the people to opt for EVs over diesels and petrol. This is largely due to their dealers which encourage buyers to choose an electric car rather than the conventional vehicle. The Finnish government has set a target of 250,000 EVs by 2030, which has resonated with the people, making the country move in the right direction.

Taking into account the government policies, the role of private companies as well as down to the salesmen in an automotive dealership, all of them have played their part in electrifying mobility in these Scandinavian countries. While a lot of other European countries have also made big statements about the adoption of electric vehicles, there is little work to show the same.

For all their pros and cons, electric vehicles are the future. There is no other way. Further, automakers like Volkswagen, Daimler and the Renault-Nissan Alliance have pledged millions of dollars to develop new electric models. Electricity suppliers are working hard on the development of charging stations and according to UBS, EV sales are tipped to surge by 54% in the next quarter of a decade according to Bloomberg New Energy Finance study.

Also, before signing off, Finland was the world's happiest country in 2018, while Norway topped the list the year before. What's more, all the Scandinavian countries are among the world's happiest. Is there a direct correlation between electric vehicles and peace of mind? While there's no direct evidence, why not give it a shot if it will make you happy!

## **EV VACANCY**

**EV Charging Project Manager London** 

**Contact: Will Mackay** 

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#### **The Opportunity**

One of the UK's leading developers and service providers in the Electric Vehicle rapid charging space, is looking to bolster its dynamic team with the appointment of Project Manager. This is an opportunity to join a fast growing and innovative business and be at the forefront of the rapidly growing EV market in the UK. The EV Project Manager will take ownership for coordinating delivery of projects from start to commissions to operations. This role will require a multitasking mindset that can deal with several ongoing projects at once.

## How Many Oil Firms Does It Take to Change a Light Bulb?

By Tom Brookes, Energy Procurement Lead tom.brookes@greenrecruitmentcompany.com



If you're a fan of music, you've probably experienced the moment when your particular musical sub culture has gone mainstream. It can be a particularly jarring experience for fans, success can be bittersweet with a niche identity giving way to wider but more commercial access to the sound you have come to appreciate. We all have a friend who has shunned a music scene because it has become popular. I bring this up because clean energy has reached that point, the successful advocacy of activists, scientists, entrepreneurs, and enthusiasts has taken the renewable energy sub culture into the mainstream. We now find ourselves at a nexus point where renewable energy is not only the environmental choice but also increasingly the economic and commercial choice. A sign of success that causes some conflicting emotions is the rising involvement of Oil & Gas Majors that are moving into renewable energy.

### Changing Tastes: from Texas Tea to "Green Tea"

It can be hard to keep up with all the M&A activity in the energy and power sector, but it is useful to look at all the recent acquisitions and rebrands as they show how the oil & gas industry is strategically buying its way into the renewable energy sector. Here is quick highlight selection:

- Shell purchased Limejump
- Total purchased NovEnergia
- ENGIE acquired a major stake in Kiwi Power
- BP acquired a major stake Lightsource
- Dong rebranded as Ørsted
- Statoil rebranded as Equinor

### What the Oil & Gas Industry learned from the Stone Age

There is a somewhat apocryphal quote attributed to Ahmed Zaki Yamani, an Oil Minister of over 20 years' experience in Saudi Arabia; "The Stone Age didn't end for lack of stone, and the oil age will end long before the world runs out of oil". If the quote is hard to accurately attribute, the sentiment is not. This has led many to wonder if Oil Major interest is simply diversification and transition to a new market, old habits die hard and many struggle to view big business with anything other than cynicism. However, it is time to recognise that we have actually reached a point which we have all been working towards, making renewable energy mainstream. The question is not why the oil firms have moved into renewables but how they can best further the cause of clean energy, then we can judge them on what they achieve.



How the Oil & Gas Industry can help Renewable Energy

The renewables sector can benefit greatly from the expertise of the Oil Majors. There are perhaps three significant benefits that could be developed quickly from this new relationship. The first is that Oil firms have a greater appetite for risk than most businesses and have money to back it up, this should hopefully translate into larger more marginal projects getting the green light. The second benefit is engineering expertise. Offshore wind especially could seriously benefit from an industry that is one of the world leaders in offshore engineering. Finally, Oil Majors are unsurprisingly active in countries with large oil reserves, they are established parts of those infrastructure. This may be the biggest global benefit, they are in place to be powerful advocates for renewables in the countries where a transition to a green economy could have a lasting impact for the world.

#### What the Future Holds: If you can, I can!

Whilst many can see the natural synergy between fossil power firms developing and potentially transitioning to renewable energy, it would be wrong to assume that they will be the only organisations that see the opportunity. In 2001, Chris Zook a prominent business theorist released a book called "Profit from the Core", his big argument was that firms looking to grow should seek out adjacent business markets to their core offering. This idea is hugely relevant to the renewable energy sector. Renewable energy removes a disconnect in the energy supply chain that exists in fossil fuels because of the local nature of its generation. This means that it is now an adjacent sector for many companies; different firms are looking to take

control of their supply chain and insource their energy provision to improve their image and secure access to energy for their operations. Energy thirsty tech organisations such as Google and Microsoft are becoming more engaged in energy production. Google has been taking an active role in floating solar for an example. Car manufacturers too are getting in on the action; in January 2019 Volkswagen outlined plans to be a green energy supplier. The motor trade hurt by the diesel scandal and the rise of EVs has seen renewables as logical next step for its business model. So, what does that mean for the future? It means that renewable energy will in time just be known as energy and most business sectors will be in on



Commercial TPI Business Development Manager Energy Supplier Home-Based UK Contact: Tom Brookes tom.brookes@greenrecruitmentcompany.com

#### The Opportunity

The Green Recruitment Company are working alongside a large, independent renewable energy supplier in their expansion plans. They are expanding into new markets and enhancing their customer base that has naturally seen a growth in headcount. They specialize in supplying energy to businesses of all sizes. They pride themselves in putting the customer at the forefront of their operations, which sees them challenge, develop and invest in their staff whilst continuing to grow. They need people with ambition, a passion to succeed and a creative drive to bring innovation to the energy space.

The firm holds their values at the core of everything that they do. They have a consultative approach to their customers, understand the requirements and challenges at hand and identify how they can add value. A passion for excellence, growth and learning they are committed to making hires for individuals that are looking for a long-term career. They encourage new ideas in how they do business and this role will have influence on the division for years to come.

### **ENERGY SOLUTIONS VACANCIES**

Corporate Account Manager Energy Supplier North West England Contact: Tom Brookes tom.brookes@greenrecruitmentcompany.com

#### The Opportunity:

The Green Recruitment Company are working alongside a large, independent energy supplier in their expansion plans. The business is part of a global group and has sustained continuous growth over the last ten years. They are expanding into new markets and enhancing their customer base that has naturally seen a growth in headcount. They specialize in supplying energy to businesses of all sizes, being one of the largest in the B2B space in the UK. They pride themselves in putting the customer at the forefront of their operations, which sees them challenge, develop and invest in their staff whilst continuing to grow and build a European retail organization. They need people with ambition, a passion to succeed and a creative drive to bring innovation to the energy space.

#### **Final Thoughts**

By Dominic Wall, Director dominic@greenrecruitmentcompany.com

#### Thank You

Thank you for reading this inaugural edition of the Green Insider. We hope you've enjoyed reading it as much as we have in pulling it together. We're passionate about the green energy and technology sector and its been a pleasure to share our insights and opinions with you.

#### Whilst you're here

Hopefully you've heard of us before you read the Green Insider. If you haven't then we're the Green Recruitment Company and we have a vision to be the premium provider of global recruitment solutions to the green energy and technology sector.

It has been an exciting 12 months at the Green Recruitment Company. We have recently grown to 50,000 followers on LinkedIn, we won an Apsco (our industry governing body) award for "Best Recruitment Company of the Year" in October 2018 and we have also just been shortlisted in three categories at the Recruiter Awards (in best agency, best engineering agency and best international recruiter.) Our Green360 Solution was highly commended at the Apsco awards for best client initiative as well. This Green360 tech offering provides an online portal for recruitment that combines the best of collaboration tools with psychometric and competency testing. It has led to industry leading retention rates which has delighted our clients. In parallel with this we have developed a model to accurately calculate and itemise the monetary cost of poor retention. (<a href="https://tgrc.goodhire.agency/">https://tgrc.goodhire.agency/</a>) We strive to keep innovating in our space.

The Green Recruitment Company have been successful placing industry influencing individuals literally all over the world. There have been placements in Amsterdam, Madrid, Munich, Paris, Sydney, Dubai, New York, Sao Paulo and Shanghai (just to name a few!) - we have completed retained search assignments for industry leading companies (big and small) in Energy Finance, Renewable Energy, Energy Storage and Electric Vehicles. We take great joy in facilitating the transition to a cleaner, greener international energy mix.

Once again, we'd like to thank you for reading and we hope to be in touch again in the future!

Best Wishes,

Dominic Wall Director

