

New Stream Insight : Update on Subsidy-Free Solar Projects

Update on Subsidy-Free Solar Projects

- Subsidy-Free Solar Projects are increasing at pace throughout the UK.
- Lightsource BP is among the companies announcing 49.9MW solar farms.
- Potential UK subsidy-free development pipeline of over 10GW.
- We have seen a clear shift in sentiment towards low carbon generation.
- Investment appetite for post-subsidy renewables supported by carbon targets and corporate responsibility.
- Serves approximately 12.5% of GB Demand -Growing annually.
- Installed GB PV (Solar) Capacity is 13.08 GW according to National Grid.



Case Study : Cleve Hill Solar

Cleve Hill Solar Park will generate up to 350MW of clean renewable electricity, saving 68,000 tonnes of CO2 emissions every year, and making it the largest solar park in the UK.

It is sited on the former Graveney grazing marshes between Faversham and Whitstable, Kent in the UK, the Solar Farm will house 800,000 panels and a lithium battery storage plant across an area of 360 hectares (890acres) and is the largest site of its type in the UK.

It will have a different design to other solar developments – rather than south-facing panels, they will face east and west, meaning they can be installed much closer together and due to the susceptibility to flooding, the panels will be mounted in an elevated profile.

Consent for Cleve Hill in May 2020 was an important and tangible step on the UK's world-leading path to bring all greenhouse gas emissions to net-zero by 2050 and the solar park will not require any government subsidies and



aims to be one of the lowest cost generators of electricity in the UK. New Stream Renewables is proud to have played its part in achieving that milestone.

"It has been really interesting working on such a strategically important project as Cleve Hill as it will support UK power requirements for years to come. New Stream support included: writing and presenting a Statement of Need to support the case; developing a detailed financial model for the development, developing a strategic approach to take the power to market via a PPA."



Charlie Ward Head of Renewables at New Stream UK NBP Gas continues to show strength on sentiment and underlying fundamentals:

Commentary on current gas market fundamentals and impact on UK power





Jamie Banks

PPA MANAGER AT NEW STREAM.

"As always we don't suggest we have a crystal ball and any recovery will not be "straight line" but in our view we can see reasons to suggest potential for further upside price risk to both gas and power contracts. If you look at the US market we have seen Henry Hub forward gas curve now above pre-Covid-19 levels and they have seen a strong rally over the summer. Here in Europe the Dutch benchmark TTF forward curve is also back towards pre-Covid-19 levels. And this recovery is being supported by Asian LNG demand that is reducing the surplus volume of LNG cargoes flowing into European import terminals. With gas-fired plants







Easington maintenance was completed on schedule.

Gas for power demand is forecast at circa 50 mcm.

LNG send out is currently at 28 mcm with two LNG vessels arriving in UK in the next two weeks.

Temperature in UK is forecast to be below seasonal normal today.

dominating marginal power price setting we have also seen positive signs for UK power pricing that we are factor in to clients PPA trading strategies."

"This morning, prompt gas contracts are showing signs of support again with the day ahead contract trading in the 28 – 30 p/ th range .Again the UK gas system was was under supplied with UKCS flows at 90 mcm and NCS flows at 50 mcm. Import through the Norwegian Langeled pipeline was nominated to flow at 25 mcm." Banks added.

New Stream PPA and Trading Strategy

PPA Outlook : UK Power market continues to shows signs of recovery with gas and carbon providing fundamental support.

New Stream Summary PPA Recommendation :

"We are still working with clients to put in place short term PPA fixes of 3 to 12 months but also ensuring we have flexibility to re-contract on a forward looking basis if current market rebound continues. As always every client has slightly different requirements so we work with them on a bespoke basis to find the best PPA solution."

NEW STREAM'S VIEW

New Stream PPA Fundamentals Summary

"Gas is still very much the driver of spot market power pricing and short term PPA fixing" said Jamie Banks, PPA Manager at New Stream.

- UK Winter 2020 power contract is trading in the £48 to £50/MWh range.
- The summer power contract is trading around £42.50/MWh.
- New Stream continue to monitor PPA wholesale levels against FiT pricing and make recommendations on a case by case accordingly.
- EUA Carbon continues to look bullish despite a small pull back as the market tested the €30/t level.



contracts further out on the power price curve have been trading up on sentiment around potential "V shape" recovery and price action in but now we are seeing some fundamental support on the gas side. This is positive news for our PPA clients."



Charlie Ward at New Stream.

Other news:



Will German pull plug on Russian gas pipeline?

The German chancellor Angela Merkel is under pressure to abandon an underwater gas pipeline from Russia to Germany in response to the poisoning of the Kremlin critic Alexei Navalny.

- Nord Stream 2 is owned and operated by Nord Stream AG, whose majority shareholder is the Russian energy company Gazprom.
- Nord Stream 2 pipeline project is forecast to carry 55 bcm of gas to Germany each year, enough for two thirds of Germany's consumption. Much will be sold on to other European Union states.
- Nearly \$8bn has already been spent on the project with estimate completion at the end of the year.
- New Stream doubt if it can really be stopped now.....



Hydrogen on EU's agenda...

Europe is set to unveil a strategy to boost hydrogen production and drive down costs to invigorate an industry that'll help the region to achieve climate neutrality by 2050.

The Commission's President Ursula Von Der Leyen wants the EU to build its economic rescue plan around the Green Deal that aims for a stricter 2030 emission-reduction target and zeroing out greenhouse gases by 2050.

"For the EU green hydrogen seems to be the priority. It's created using renewable energy, but it's a long way from being at the scale needed for industry. There is a big opportunity here as hydrogen accounts for less than 1% of Europe's energy consumption and is mainly used as feedstock in the chemical sector. Scaling the technology up would not only help big energy users cut carbon but this could also offer a solution to store energy generated from intermittent renewable energy sources. This kind of flexibility is going to be key."

Paul Sanders, Head of Generation at New Stream.

NEW STREAM POSITION

"We work closely with developers and funders to build duration of individual assets or for entire portfolios.""



Solar sees rare supply chain cost increase from China.

Tongwei Solar Company halted production at its polysilicon factory in southwest China because of flooding, the latest blow to the solar supply chain that has seen rare cost increases this summer due to disruptions.

The company is the world's No. 3 polysilicon producer.

The facility can make 20,000 tons of polysilicon annually, which would have been about 4% of global output.

nders to build an optimal PPA structure for the project e portfolios.""



EDF announce plans to close Hinkley Point B earlier than expected – it was due to stop generating in 2023.

As safety checks near their end, EDF have released a statement to the effect that the 1GW plant, which opened in 1976 could close as soon as summer of 2022. This will exacerbate the shortfall of capacity predicted from nuclear closures to 4GW by March 2024.

The French utility will likely review its future late in the year.

"It is possible we may need to move into defuelling within the next two years. We will review this decision in the same detailed way as we have with Hunterston B and expect to be able to confirm the outcome by the end of this year," said a spokesman for EDF Energy, part of France's EDF.



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New Stream Renewables is a specialist consulting and support services group operating across renewable energy markets and technologies.