

New Stream Insight:
Is The Hydrogen
Economy's Time Coming?

# Is The Hydrogen Economy's Time Coming?

Will governments use some of the trillions marked for post-coronavirus stimulus spending to advance this green technology?

"Green hydrogen is probably at a similar stage of development to wind and solar in the mid-2000s" said Charlie Ward, Head of Renewables and PPAs at New Stream.

Green hydrogen is produced by splitting water molecules apart with a renewable-powered electric current.

"Hydrogen has potential in an array of industrial uses where traditional renewables are unsuitable because of the baseload nature of demand and the size of that requirement. If you look at steel-making or cement manufacturing it's difficult to make renewables plus storage work but Hydrogen could be a solution. The problem is the vast amount of power needed to produce it." Ward said.

"I can see Hydrogen as a way of enabling greater use of renewable electricity as a form of storage and cleaner source of power generation to balance the intermittency of renewables. There is clearly a window of opportunity as governments look for economic stimulus post Covid. We have seen subsidy systems work well in the UK for renewables so why not for Hydrogen" said Ward.



# **National Grid Explores Reducing Nuclear Output:**

The system operator is in discussions with EDF (the French state utility) about reducing output at the 1.2GW Sizewell nuclear station.

It is exploring the possibility of "one-off" fixed term contracts with generators to reduce output.

This would replace daily payments structured through the balancing market.

National Grid said that it was exploring all options in light of Covid demand destruction and high renewables.

Last month demand averaged 26.7GW which is down from 32.5GW in April 2019.



### Chinese Oil Demand Rebounds to "Pre-Virus Crisis Levels":

China is the world's second largest oil consumer behind the U.S.

The country's quick turnaround as it exited lockdown protocols has helped tighten the oil market sooner than expected and this added further support to prices.

Chinese demand crashed by about 20% as the country went into lockdown in February.

Equity markets also rallied on this news with indexes up in the U.S. and Europe.

#### DID YOU KNOW?

"PPAs are not standardised and each transaction requires a customised solution. New Stream have been delivering those PPA solutions for over 10 years now." "We still view market sentiment as being the key price driver in the short to medium term as data on demand destruction is assessed. The outlook in the broader commodity complex is obviously positive but we still view any strength as a PPA price fixing opportunity for our clients

We continue to monitor
the market and crunch the
numbers in terms of where we
are relative to where we should
be without the Covid demand
impact but unfortunately
the underlying market
fundamentals are pretty weak.
Having said that when UK
power and gas prices recover
from a trough historically the
rebound tends to be fast but I
am just not sure we are at that
point yet."

#### **DID YOU KNOW?**

"Our team of market specialists are responsible for sourcing and structuring PPAs for all projects throughout Europe but the focus remains on the UK where it all started. What we bring is market know-how, genuine trading experience, a huge amount of data and analaytics".

# **New Stream PPA and Trading Strategy**

**Recommendation:** Short term PPA fixes to protect against downside risk whilst monitoring potential bounce back as we exit Covid-19 lockdowns

#### **New Stream PPA Strategy Rationale:**

- New Stream see potential price support from sentiment and rises in broader commodity markets.
- However, we caution the supply demand fundamentals pre Covid-19.
- European energy markets were oversupplied with pipeline gas and global LNG supply.
- In the UK despite some signs of demand increases we continue to view downside demand risk through summer and possibly into Q4.

### **UK Power Chart:**

Off the lows but still volatile

**Recommendation:** Short term PPA fixes to protect against downside risk whilst monitoring potential bounce back as we exit Covid-19 lockdowns.



## **Green Certificates : UK REGO's and Green Gas Certificates**

The market for REGOs remains weak on lower demand.

We still see some limited buying interest for Deep Green certificates (wind, solar and hydro). However, we expect pricing to remain soft in the short term.

New Stream continue to support corporate buyers to structure longer term offtake contracts.

There is still strong European demand for Green Gas Certificates albeit at lower pricing levels.

#### **DID YOU KNOW?**

"We work closely with developers and funders to develops an optimal PPA structure for the project duration individual assets or for entire portfolios."

### In Other News....



Coal to gas conversion wins Irish T-4
Capacity Market auction contract

The Czech utility EPH won a 10 year contract to convert the Northern Irish Kilroot coal fired power station to gas.

Austria has become the second European country to eliminate coal power from its electricity supply mix and said it's looking toward renewable energy to fuel future economic growth.



The country follows Belgium in completely eliminating generation from coal. France, Sweden, Slovakia, Portugal, the U.K., Ireland and Italy also plan on exiting coal by 2025.

challenge will be managing the energy transition as we see coal and nuclear baseload generation retired and more renewables deployed. We have some flexibility in terms of storage and smaller gas assets but we are going need more of them."



Paul Sanders,
Head of Generation
at New Stream



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