Inenco RE News

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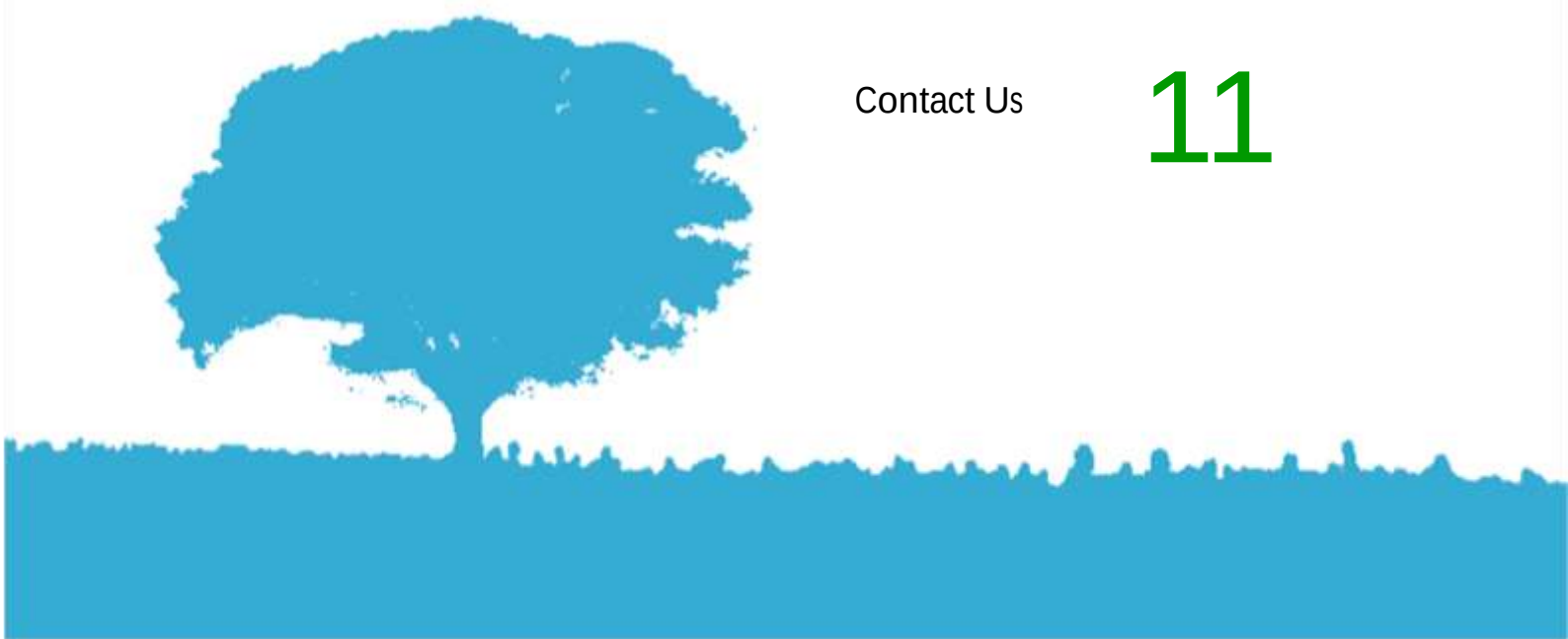

John Dodds

Hello and welcome to the latest edition of Inenco RE News.

Once again, it's been an interesting time in the renewables world with announcements and retractions, FiT reviews and High Court drama, the long-awaited Renewable Heat Incentive (RHI) finally becoming a reality and the first accreditation completed.

In this issue we have the regular columns from David, Emma and Bruce as well as an interesting look at Smart Grids and aggregation or distributed generation by Gary Swandells of Flexitricity.

Emma is taking a look at the downward pressure on energy prices we have seen over the last few months and the short to medium term view, but let's not forget the long term reality is still up to 50% increases over the next 10 to 15 years. David addresses this and his normal eclectic range of topics in his article. Bruce has rounded up some of the highlights over the last few weeks.

The Electricity Market Reforms (EMR) will, without doubt, bring more uncertainty into the renewables industry, even though they are designed to reduce volatility. A guaranteed price for renewable electricity may help certain developers; I suspect it will be below the true market value.

In this issue, it's a pleasure to welcome Frinkly Farm and F G Brewer to Inenco. I am also delighted to announce that Inenco won 'Energy Consultant of the Year 2011' for the second year running as well as 'Energy Broker of the Year 2011'.

You may also want to take a look at our Energy Updates 'Renewables Special' at www.energyupdates.com where David, Emma and myself discuss topical issues in the world of renewables including FiTs, Renewable Obligation, RHI and the impact the EMR will have on renewable generators.

Article by John Dodds

Gary Swandells

Sharing the Benefits of Smart Grid

By Gary Swandells, Commercial Development Manager, Flexitricity

'Smart Grid' has rapidly become one of those new buzz phrases along with 'Super Grid', 'Green Economy' and 'Renewable Revolution' but what do the users mean and what difference will it actually make to you or your business? What makes a grid Smart? Who is educating it?

In fact the term 'Smart Grid' is probably overused and has become a bit of a 'catch all' term, much like the 'Information Super-highway' which became the title slide of every internet company's sales presentation. For many within the energy industry 'Smart Grid' means little more than the widespread deployment of 'Smart Meters' which is arguably a very valuable progression from the way we traditionally use and monitor energy use. It doesn't however merit the accolade of being described as a 'revolution'.

'Smart Grids' for most is still a thing of the future that we are only just starting to work towards and requires the widespread adoption of 'Smart Meters' or it is something that only affects other businesses that are more directly involved with the energy industry. While the term hasn't yet been accepted with a definition by the Oxford or Cambridge dictionaries, there seems to be a consensus that Smart Grid is about using two-way communications to improve the efficiency of not just the delivery network but all aspects of energy generation and use.

On this basis, 'Smart Grids' have already been operating in the UK for a number of years. These are not exclusive to some sort of 'energy industry elite' and include all sorts of organisations from industries as diverse as retail, financial services, manufacturing, agriculture and logistics. Flexitricity is a Scottish based company that established a 'Smart Grid' service generally known as 'Demand Side Management' with the primary client being the UK National Grid. This was developed to address the variations in balance between the amount of power being generated across the UK and the demand of electricity consumers.

Flexitricity work with industrial and commercial consumers who have emergency generation, CHP, Hydro, AD or consumers with the ability to defer their consumption for a short period of time. With the benefit of real time monitoring of sites and patented technology to aggregate this together for the National Grid, it is possible to create a smarter, more efficient network that helps balance itself. Not only does this create opportunities for consumers to earn very attractive new income, but it also helps address some of the big questions over how to integrate and balance the intermittency associated with renewable generation.

It may be that, in the future, there are many new developments in 'Smart Grids' which will include energy storage, increased micro-generation, hydrogen-based technology and electric vehicles. These, however, will need to be joined up and made to operate effectively and efficiently with each other and that is the real role of a 'Smart Grid'. It is important to recognise that this is not just the future but also available today.

flexitricity
Unlocking smart grid revenue

Article by Gary Swandells

Emma Pinnock

What's Driving Energy Prices?

Over the past month, we have seen concerns over the Greek economy quickly grow to concerns about all of the Eurozone countries, with fears that these economies could move back into recession if the crisis is left unresolved. As such, any positive data coming from the US regarding employment and sales has been quickly offset by increasing reports of a drop in growth from the Eurozone. This sentiment in the economy has pulled forward energy markets lower, with UK gas, power, coal, carbon and oil prices remaining in a gradual downward trend. In the short term at least, it appears prices look set to fall further and, if we look at previous price trends, there is often a dip in February before a recovery in prices in March.

Furthermore, in a stark contrast to Winter 2010, we have seen much milder weather during October, November and December, with some weather forecasts suggesting milder weather with only a few small short-term cold spells all the way out to March. Due to the higher temperatures, we have not been as reliant on our gas storage facilities to balance the increasing demand. UK gas stocks are currently at 93.52% capacity and, as such, conditions for the first quarter of 2012 look more comfortable. If conditions remain mild, there is a pressure on storage facilities to start sending out gas ahead of summer, and we could see lower prompt prices as a result. Q1'12 prices have shed over 22p/th in value since the end of August, a 24% fall in prices.

Power prices have also continued to fall since beginning the downward trend in April, with Q1'12 hitting a low of £45.40/MWh, and Summer '12 hitting a low of £44.85/MWh at the start of December. A blend of lower demand, healthy supply from wind power generation, a fall in EUA prices, and a move towards higher coal-fired generation during November, kept prompt power prices lower, with the average of Day-Ahead at £46.24/MWh, significantly lower than the summer average of Day-Ahead at £49.25/MWh.

EUA prices fell to historic lows for December '11 contracts, as the Eurozone crisis weighed on the market alongside expectations of a surplus of supply in the market soon, and lower demand in 2012. Banks quoted that a fall below €6 euros would indicate a return to recession conditions.

Overall, prices are still in a downward trend, the oil market is expected to remain volatile, however we saw some recovery around the 14th December as the Organisation of Petroleum Exporting Countries met to discuss global oil production.

Article by Emma Pinnock

David Oliver

Renewables - a Loss of Interest?

Hundreds of solar PV installers braved high winds to get their panels fitted before 12th December 2011. For many of them their reward will be a P45 on Monday as the work comes to an abrupt end. Any investors who were starting to think that DECC is Santa Claus are waking up with a hangover!

To be fair, the drop in solar PV prices has happened faster than expected and many projects were giving returns of investment of well over 10%. Good news for investors but over-generous when it's being paid from public funds in the middle of a recession. DECC needed to reduce the tariffs, but the size and speed of the changes has, once again, damaged the confidence of businesses in renewables. The Government has made it clear: they want us to invest in renewable, but they are not prepared to pay a commercially attractive rate!

For some people the new opportunities are with 'green heat' rather than electricity. The new Renewable Heat Incentive (RHI) scheme offers better returns than renewable electricity tariffs and biomass boilers and heat pumps may be attractive for small and medium sized heat users, particularly those who are currently using oil or LPG. For big users of gas, the benefits are unlikely to be attractive.

Of course, this doesn't mean the end of renewable electricity. The prudent developer can still make a good return by building the right project in the right location. However, for businesses located in our towns and cities, there are few financially viable opportunities left for on-site renewable electricity generation.

So, you're a big energy user and you want to invest in low-carbon electricity to protect yourself against future energy price rises, what should you do?

Energy Efficiency

Solar PV will have a payback of around 15 years when the new tariffs start (though this should fall as panels get cheaper and electricity gets more expensive). Other renewables such as wind and anaerobic digestion can payback in under 10 years, but are unlikely to be viable on industrial sites.

By comparison, energy efficiency can still achieve paybacks of under three years. Companies shouldn't forget that the cheapest and lowest carbon energy is the energy that they don't use!

Back in 2007, one major UK retailer set itself a seemingly impossible task of reducing its electricity consumption by 25% in a five-year period. As they looked into the technologies available, they found more and more opportunities for savings and achieved their target nearly a year early! Energy saving became good business sense and the budget for such work has increased, even in times of difficult trading.

David Oliver

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Off-site Renewables

The best way to reduce carbon emissions for the UK is to build wind turbines in areas where the average wind speeds are high and then bring the electricity to the consumers via the National Grid. Although the electricity has to be traded through licensed suppliers, the consumer can enter into direct contracts with the renewable generator to lock-out a price, typically for periods of 5 to ten years. This provides certainty of revenues for the generator, who has to pay back a bank loan and the consumer gets the comfort of protection against big price hikes in the future.

Inenco helped to set up the first such contract in 2007 and these Power Purchase Agreements are growing in popularity.

Combined Heat and Power (CHP)

CHP used to be of interest only to really big heat users (>3MWth) due to economies of scale. The economics are driven by the difference between gas prices and electricity prices, something known as the 'spark spread'. As this spread gets bigger, CHP looks more attractive.

Current forecasts of energy prices suggest that wholesale electricity prices will increase in price by around 40 to 50% in real terms over the next decade. However gas prices are forecast to rise at much lower rates.

On top of this we are starting to see increases in transmission and distribution costs, particularly at peak periods and the Electricity Market Reform is likely to add to this burden.

This means that delivered electricity prices are likely to increase at a far greater rate than gas prices and the spark spread may be larger than at any time since privatisation of the electricity industry. This offers the potential for short paybacks on CHP and, more significantly, it may allow small-scale CHP in the range of tens or hundred of kilowatts to be cost-effective (provided that the host has a need for the heat!). This isn't renewable energy , but it's lower carbon than big power plants and it's probably going to be cheaper.

For companies that are committed to becoming '100% renewable', there may be a future opportunity to buy 'green gas' from bio-methane injection facilities. However, the only biofuels available for small-scale CHP at this time are bio-diesel and other plant-derived liquid fuels, and there is an argument that these are more economical as vehicle fuels.

David Oliver

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Summary

Returns on solar PV look likely to be capped in the future, but 4 to 5% may still be attractive if the alternative is an ISA at 2.75%. Investment in larger projects is likely to be set at 5 to 8%, but the right projects should be able to do better, particularly if current forecasts of electricity price rises come to pass.

If you currently use oil or LPG to heat your premises or for process use then now is a good time to look at biomass boilers or ground source heat pumps.

For many businesses the interest in on-site renewables may be over and now is a good time to focus on other ideas. Top of the list is energy efficiency, but green energy trading strategies and CHP may also help to deliver the CSR message along with long-term price certainty.

Article by David Oliver

News Round-Up

Solar FiT Cuts Ruled Unlawful

The High Court has ruled that Government proposals to cut FiTs for solar schemes installed after the 12th December 2011 are unlawful. DECC has lodged an appeal against this ruling, which means there is still uncertainty as to what and when tariff levels will be in place. It follows that if subsidy levels are unknown, new installations will be stalled.

If DECC wins the appeal against the decision, the reduced tariff would apply to solar PV installations accredited on or after 12th December 2011, as proposed in the recent consultation. If the appeal is lost then there would be a window for new installations - possibly up until the 1st April 2012 - which would receive the original higher level.

Friends of the Earth, Homesun and Solar Century were responsible for lodging the legal challenge, which led to the ruling and Chairman of Solar Century, Jeremy Leggett, commented on the situation stating: "The Court has stopped Government abusing its power but it doesn't make up for the fact that DECC has created chaos for the renewable energy industry as a whole and not just solar."

It has also been speculated that the changes to the FiT scheme could have a negative impact on uptake of the Renewable Heat Incentive scheme.

ROC Banding Consultation Published

The Government also recently released a consultation document, detailing proposed levels of banded support available for renewable electricity generation under the Renewables Obligation (RO) from 2013-17. The consultation mainly addresses scalable lower-cost renewable technologies that should deliver the majority of the electricity required to meet the UK's 2020 targets. A new feature of the scheme is degression – subsidies for certain technologies will decrease, reflecting a reduction in technology costs.

The marine and offshore wind industries seem to have benefited most. The proposed support levels for marine technologies is to increase significantly from 2 ROCs/MWh to 5 ROCs/MWh. Offshore wind will remain at 2 ROCs/MWh until 2014/2015 then degress yearly by 0.1 ROC until 2016/2017 - the same support level will apply to anaerobic digestion. It was previously speculated that offshore wind could drop to 1.5 ROCs/MWh from 2014/2015. Onshore wind will decrease from 1 ROC/MWh to 0.9 ROCs/MWh in 2013 in line with falling technology costs.

Bruce Aspden

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RHI Launch

The long awaited Renewable Heat Incentive (RHI) scheme was launched on the 29th November 2011; providing tariff payments for heat generated by renewable technologies such as biomass boilers, heat pumps and solar thermal installations. New projects built after 15 July 2009 can now apply for the payments on Ofgem's website, which also provides guidance for applicants.

The scheme was due to be launched for non-domestic installations on the 30th September 2011, but there was a delay due to EU state aid rules. This delay was primarily due to the proposed level of support for large-scale biomass, which had to be reduced to 1p/kWth for installations larger than 1000kWth. The scheme has the potential to create thousands of green jobs and significantly reduce carbon emissions, helping the UK towards the 2020 targets. The scheme will be funded from general government spending and not through the previously proposed RHI levy. On the day the RHI was launched, Energy Minister Greg Barker said: "The RHI will usher in a new era in clean green heat technology. It's a world first and has the potential to put the UK at the forefront of a vibrant new green technology sector."

Extra Funds for Green Deal

The UK Government has also announced an additional £200 million funds for the Green Deal. It is hoped that this extra funding will act to encourage early adopters of the scheme which aims to eliminate the need to pay upfront for energy efficiency measures - instead providing reassurances that the cost of the measures will be covered by savings on electricity bills. An agreement has also been reached between the UK and Scottish Governments for an additional £100 million boost for renewable energy in Scotland. The capital will be derived from the Scottish Fossil Fuel Levy Fund, and will provide further certainty to the sector.

Article by Bruce Aspden

Contact Us

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