



## what you need to know about sustainable energy

### Market Update

#### Flying start to the year for renewables and its contribution to the UK energy mix

This year continues to prove itself as a record breaking one, having kick started over the weekend of 8-9 April 2017. According to the Sheffield Solar website, solar output was 4.82GW at 11:30am on Saturday 8 April, which was around 13% of the UK's total energy mix. Then, on Sunday 9 April, renewable energy delivered unprecedented levels of generation to the UK distribution network. Solar PV provided more than a quarter (26.25%) of the nations total energy demand whilst wind power and other sources bolstered the contribution further to almost half (46.98%). Solar PV capacity is now estimated at just under 12GW spread across nearly 1 million installations. With record breaking days like these being recorded as early as April, National Grid has suggested in its summer outlook that inflexible generators [like nuclear and CHP] could be curtailed to make way for soaring levels of solar PV generation. Furthermore, it was confirmed that Britain generated more electricity from wind farms in the first 3 months of the year than ever before.

Although gas-fired plants remained the biggest source of power during the first quarter of 2017 providing almost 41% of the UK's needs, renewable energy (principally wind and solar) accounted for 23.4%, nuclear 20.1%, coal 11.8% and interconnectors 3.9%. For farmers and landowners who have land available near the right grid infrastructure, their sites could soon become viable again in what is anticipated to become a 'subsidy free' era. Solar PV developers are expecting the cost of the equipment to fall further and the price they receive for selling electricity to rise. If this transpires and a reasonably priced export connection can be secured without upgrades and improvements to the grid network, this could open up the solar park market once again.

#### Balancing the Grid

More than 500MW in capacity of battery storage projects received 15-year grid balancing contracts via the Capacity Market in February 2017. This is in addition to the 200MW of storage projects which won 4-year support under National Grid's Enhanced Frequency Response tender in August 2016. It means there is now over 700MW in total awarded, spread across just over 50 projects and contracted to be operating by 2020. The contracts are necessary to stimulate growth within the increasingly important energy storage/balancing sector, because buying lower priced electricity at times of low demand to release at a higher price at time of high demand is not yet bankable for investors.

However, commentators have estimated that lithium-ion batteries have fallen in price 73% in the past 6 years, and are still falling, and if this trend continues as anticipated, it should ensure that battery storage can prosper without subsidies in the future. Given the increasing reliance on electricity from solar parks and wind farms these batteries are essential to react quickly to changes in demand, balance supply and maintain power in winter.

#### Top Tips for farmers with renewable energy installations:

- Consider re-financing as a way of improving your rate of return or releasing capital for re-investment elsewhere on the farm.
- Be wary of Valuation Office Agency (VOA) business rate increases from April 2017 and cash flow implications. It may be possible to challenge the VOA over the Rateable Value applied to your project.
- For sites leased to renewable energy companies (i.e. solar parks), seek professional advice if re-approached about incorporating a battery storage system into the scheme.

### Top Tips for farmers considering a renewable energy installation:

- Do not be deterred by all the negative press surrounding renewable energy – attractive returns can still be achieved under the right circumstances and for carefully planned projects.
- Seek to match the energy supply with your demand on-farm for maximum financial benefit.
- Brexit may present new opportunities – notably cheaper solar PV kit through the abolition of EU import taxes – creating viable investments in a subsidy free market place.

### Renewable Heat Incentive (RHI) update

The long awaited new RHI legislation was due to be laid before Parliament in April but withdrawn for amendments and then caught up in the snap election hiatus. BEIS were hoping to introduce emergency regulations before Parliament but this was not achieved before Parliament dissolved on 3 May. The existing scheme therefore continues until the reforms can be re-laid after the election, subject to clearance by new ministers. For some sectors this may be an advantage before new rules come in under biogas and biomethane sustainability criteria.

The new regulations, if implemented, would have re-set the RHI tariffs to earlier levels and given a boost to the biogas and biomethane sector in particular, despite the introduction of measures to crop the level of crops use in digesters.

For further news on what is happening in the sustainable energy market please visit:

[www.fishergerman.co.uk/renewable-energy](http://www.fishergerman.co.uk/renewable-energy)