



# Local Energy Matters



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# East Anglia energy news

## Energy sector leaders say changes to CfD scheme will provide opportunities for East Anglia

Alterations to the Contracts for Difference (CfD) scheme announced on 23 July bring good news for the UK offshore industry, according to industry leaders in East Anglia. The auctions - in which companies bid for minimum prices for the electricity they produce - are to be held more regularly, on a biannual basis. The aim of this is to incentivise investment into renewable generation by increasing clarity on the occurrence of auctions.

Sector leaders in East Anglia believe this certainty will increase opportunities for the local supply chain to develop and will be helpful in increasing the rate of coastal regeneration, especially in wind farm hot-spot regions Norfolk and Suffolk. Graham Hacon, chief executive of Great Yarmouth company 3sun Group, believes there is now “longevity in the pipeline” for East Anglia, standing it in great stead for the future.

## £2.5mn East Anglia One contract could create 30 jobs at Great Yarmouth firm

The contract to service the construction stage of the £2.5bn East Anglia One project was given to 3sun Group in July, making it one of the biggest single site contracts ever secured by the company.

The £2.5mn contract will see the firm provide a range of services including warehousing, training and the provision of manual labour. Through execution of the agreement, 3sun Group are expected to add up to 30 personnel to their 320-staffed workforce, and will look to source many of the candidates from the new East of England Offshore Wind Skills Centre, which opened on 22 June.

In addition to the number of East Anglian companies already involved in the project, the 3Sun Group deal looks to bring further opportunities in this sector, as well as cementing the region’s position as a key driving force for offshore wind advancement.

## Anglian Water appoints HBS New Energies for solar roll-out

In the second phase of Anglian Water’s solar push, a deal has been struck with HBS New Energies to provide a 30MW solar power purchase agreement (PPA) programme. Increasing carbon and energy savings is the key aim of the agreement and, with Anglian Water one of the largest energy users in the East of England, will help the region in achieving its low-carbon future. As one of the largest solar PPA deals in the UK, the expected carbon saving is about 9,000 tonnes a year – equivalent to that produced by over 1,000 UK households.



# Tariff headlines

## Medium suppliers follow large with price rises

The first quarter of this year saw large suppliers apply default tariff price rises, which last month stood at an average of 5.1%. Following the announcement by EDF Energy on 5 July that it would be applying another increase, equivalent to a 6% price rise for typical dual fuel customers, this brings the average price rise from large suppliers to 6.1%.

But this trend has not been exclusive to the large suppliers, with multiple medium suppliers also applying price increases to their default tariffs. The average increase for a dual fuel customer using the Ofgem medium Typical Domestic Consumption Values (TDCVs) was 5.5%, exactly mirroring the increase in the safeguard tariff cap applied in April.

As with the large suppliers, the press releases announcing these changes focused on the increasing cost of wholesale energy as the root cause. For example, Bulb's price update highlighted that wholesale costs have increased by around 21% since February. The announcement from First Utility also referred to increasing industry costs, stating that "costs to support renewable energy, efficiency schemes, smart meter programme and help vulnerable customers" had increased 30% year on year.

## Ecotricity EV tariff launches on price comparison websites

Ecotricity's Green Electricity + EV tariff has appeared on price comparison websites, joining the ENGIE EV Home tariff which launched in April. The dual fuel tariff is priced at £1,137/year for consumers using Ofgem medium TDCVs, £121/year cheaper than Ecotricity's standard Green Electricity + Green Gas tariff.

The EV tariff can be selected as part of the supplier's Fully Charged EV service bundle. As with similar offers from other suppliers, customers on the EV tariff can opt for a discounted home charging point installation, with Ecotricity providing a Rolec Wallpod charging unit for £99.

## Economy Energy tariff changes

Economy Energy retracted its cheaper Switch Saver variable tariff in June, leaving just its standard variable tariff available for new credit customers.

Economy Energy has tended to run cheap fixed acquisition tariffs alongside its standard variable product, so the move to offering just two variable tariffs in May, and the subsequent retraction of the cheaper option in June, represented a £395/year increase in the cheapest tariff available to new customers. This change marks a noticeable shift in Economy Energy's pricing strategy. Whether this a temporary break in its push for customer acquisitions or a refocusing back on prepayment customers remains to be seen.

Energy prices vary by region due to variations in demand, predictions about demand and different charges imposed by the region's distribution network operator.

# East of England tariffs

The table below displays the best tariff deals in the Eastern region for each customer archetype, whereas Figure 1, overleaf, shows the range of annual cost of tariffs for the Eastern supply region, updated to July 2018.

Tariffs are split between three main types: fixed, standard variable tariff, and prepayment. The definitions of these tariffs are given in the inside margin.

Customer archetypes are based on Ofgem's analysis of typical electricity and gas consumption values.

The average saving between the most and least expensive deals across all archetypes in the Eastern region is £389. This is £12 more than June's difference.

The average price of the lowest cost standard variable tariff (SVT) across all archetypes is £845, which is £17 cheaper than the average lowest cost fixed tariff. Simplicity Energy and Utility Point provide the cheapest fixed deals. The cheapest SVTs are provided by Powershop, Toto Energy and Utility Point.

For prepayment (PPM) customers, highest priced tariffs are always significantly less than SVT or fixed deals but cheapest tariff prices remain more expensive than the best deals.

The cheapest PPM tariff suppliers are unchanged since June for all archetypes. This segment of the market is more static than the fixed and SVT deals, with a limited supply of the PPM options in the region. With only archetypes 1 and 2 seeing reductions in their tariff prices, the trend of rising PPM tariff prices may be set to continue.

## Best buys in Eastern region (July 2018)

A	SVTs			Fixed tariffs			PPM tariffs		
	Supplier	Tariff	£/year	Supplier	Tariff	£/year	Supplier	Tariff	£/year
1	Powershop	Top Shopper	749	Simplicity Energy	Simplicity Exclusive	712	Robin Hood Energy, Elica, Angelic Energy	e.g. Robin Hood Energy Evergreen	869
2	Toto Energy	TOTO Smart Meter Saver	1067			987			1222
3		TOTO Plain and Simple	441			441			521
4	Powershop	Top Shopper	602			582			702
5			573	Utility Point	Just Up	588	Nebula Energy	Holy Tariff	719
6	Utility Point	Flexi Online Tracker	708			727			866
7			689			707			844
8	Powershop	Top Shopper	870			897			1046
9			925	957	1108				
10			1122	1180	1344				
11	Toto Energy	TOTO Smart Meter Saver	1079	1133	1292				
12			1326	1413	1587				

### Fixed tariff

A tariff which offers guaranteed standing charges and unit rates, usually until a defined end date.

### Standard variable tariff (SVT):

A supply contract with an indefinite length, which has variable prices that can go up and down with the market.

### Prepayment tariff:

A tariff for customers with prepayment meters, which enables payment for energy in advance through 'topping-up' using prepay tokens, cards or a key.

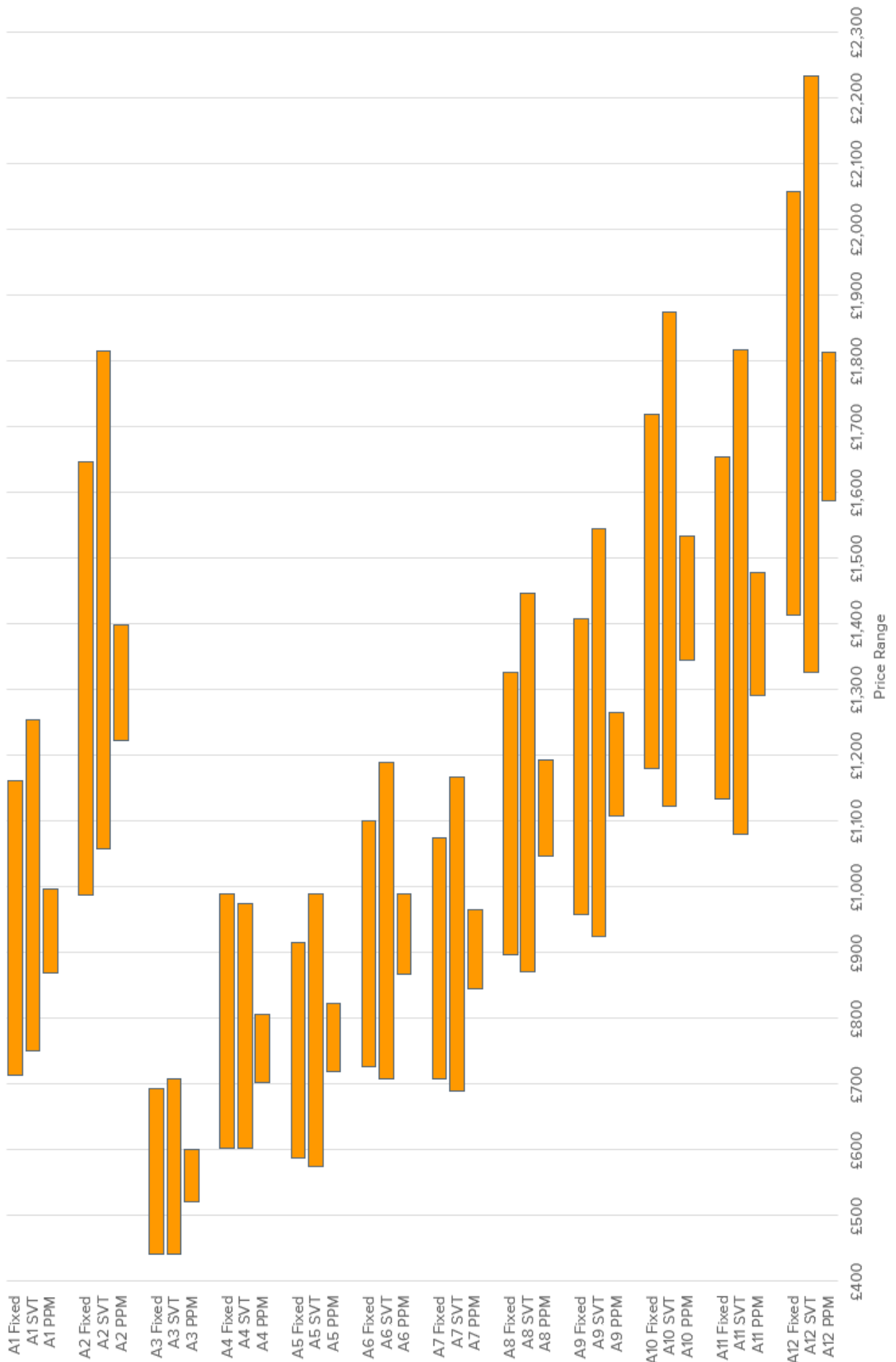
### Non-mains gas households:

- A1: Low-income electrically-heated
- A2: All other electrically-heated
- A3: Low-income non-metered fuel-heated
- A4: All other non-metered fuel-heated

### Mains gas heated households:

- A5: Low-income, out-of-work single adults in small 1-bed social rented flats
- A6: Young working adults in rented flats
- A7: Low-income single adults (lone parents or elderly) in social rented houses
- A8: Younger working families in medium-sized rented houses
- A9: "Average" mains gas-heated households
- A10: Wealthy working families in 3-4 bed semis owned with mortgage
- A11: Asset-rich, "empty-nesters" in detached houses in less urban areas
- A12: Wealthy working families in larger detached houses in less urban areas

Figure 1: Annual tariff cost spread in the Eastern region at Ofgem medium typical consumption value (July 2018) by archetype



# Heat programme and network support high on the agenda

Several new heat programme support policies and recommendations were published recently, illustrating a thrust behind developing energy efficient heating schemes.

The new Industrial Heat Recovery Support Programme launched on 5 July. Aimed for applications beginning in August, the scheme will research and demonstrate new technologies that recover waste industrial heat. These technologies are then to be developed for roll-out in industrial processes, recovering energy and reducing emissions. This policy was released in draft and is therefore subject to change.

The funding for the policy is split into two phases. Phase 1 funding is allocated for feasibility and preliminary engineering studies. Phase 2 will be allocated for design, construction and operational activities. Both phases must be applied for separately. The policy is aiming to go towards capturing 5TWh of wasted heat that is within commercially viable limits. The policy also is not specified to a specific heating technology and is technologically neutral. The grants available are worth a total of £18mn and encourage innovative competition.


The Innovations in the Built Environment policy also received updates on 17 July, with the results of the Thermal Efficiency Innovation Fund and the Low Carbon Heating Technology Innovation Fund announced. The funds were distributed to 12 and 8 projects respectively and allocated £7.5mn and £8.5mn in grant funding respectively.

Projects for the Thermal Efficiency Innovation Fund included the Spray Applied Wall System (focusing on innovative solid wall insulation), Whole House Retrofit (a more detailed energy efficiency retrofit analysis) and Naturally Intelligent Ventilation (integrating ventilation and heating technologies) among others. Projects for the Low Carbon Heating Technology Innovation Fund included The Zero Carbon Home (concentrating on thermal storage), Oxypod (a compact de-aeration device), and the FlexiCell project (a combined fuel cell, heat pump and combined heat and power system) among others.

Under the Innovations in the Built Environment policy, the Modern Energy Partners project was also announced in July. This scheme is demonstrating the integration of multiple energy and heating technologies in six public sector sites, demonstrating integrated electricity and heating systems.

BEIS also produced a policy on heat networks, publishing a Heat Networks guidance for developers and the supply chain on 27 July. Guidance within this includes detailed information on strategic and commercial case development, economical and financial guidance, gaining state aid, revenues and licensing guidance, and guides for project managers. The Revenues and Licensing Guidance was co-produced between Lux Nova and Cornwall Insight. This new guidance is designed to make applications for new heat networks easier for potential new developers.





The Competition and Markets Authority (CMA) has recommended that heat networks be subject to regulation, saying that lack of regulation can lead to unfair price hikes and disadvantages to the heat consumer. In its Heat Networks Market Study, published 23 July, the CMA recommended a statutory set of rules for heat networks, as well as addressing consumer concerns from the study. These concerns include consumer protection, network design, pricing monopolies, and low transparency. The CMA will work further with government and industry bodies to implement its recommendations and remind relevant stakeholders within the heat networks industry of its obligations to consumers.

Consumer groups have also backed this call for regulation. Citizens Advice responded to the CMA's recommendations, welcoming further protection for consumers. The organisation reiterated that while many heat networks provide good customer service and value for money, too many were overcharging and responding ineffectively to customer complaints. Due to the growing number of heat networks anticipated over the coming years, Citizens Advice recommended that heat networks have greater transparency over billing, protection from expensive billing, and similar levels of protections to other energy services.

## EPSRC invests in Supergen Energy Hubs and Solar Network

On the 24 July, the Engineering and Physical Sciences Research Council (EPSRC) announced the formation of three £5mn energy research hubs and a new £1mn network for solar energy.

The three Supergen Energy hubs will be focused on offshore renewable energy (ORE) to progress the UK's leading position on wave, tidal and offshore wind research; bioenergy and increasing the research into a zero-emission fuels; and energy networks to deepen understanding of wholesale approaches to tackle the challenges the network infrastructure faces. These hubs will involve academics from 19 universities, and 70 stakeholder partners.

The SuperSolar Network will act as a knowledge exchange mechanism. It has been put forward to maintain the co-ordinated network for the solar PV research community in the UK, creating greater opportunities for collaboration.

EPSRC's Executive Chair, Professor Philip Nelson, commented on the arrangements: "As we move towards a low-carbon future we need to explore the fundamental science that can spark new technologies and systems as well as linking researchers to industry to meet their needs."

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# Energy efficiency updates

## Energy efficiency grants available for Derby businesses

The Derby and Derbyshire Energy Efficiency Project (D2EE), responsible for funding £688,000 to medium and small businesses since February 2017, has announced the availability of more grants to install LED lighting. The aim of the project is to reduce costs of businesses at the same time as lowering carbon emissions locally.

Recipients of LED lighting installation grants include the Royal Crown Derby and family run furniture store Hunters, who have expectations of reducing electricity consumption by 43,000kWh and 114,628kWh respectively - leading to savings of approximately £5,000 and £11,000 per year.

Nina Sheard, director of Hunters, expects payback from the project within 12 months and has used the grant as a catalyst to reviewing the overall lighting scheme's efficiency.

## Wrexham Council to allocate funds for energy efficiency projects

In a bid to reduce local carbon emissions, Wrexham Council is to spend over £400,000 towards energy efficient projects in the area. The funding is sourced from its local solar farm in Legacy, which has generated of 2,355MWh of electricity per year since opening in 2015.


Initial carbon emission reduction measures include the approval of planning applications for electric vehicles charging points in five of Wrexham's car parks. Already around 3,500-4,000 people own electric or hybrid vehicles in Wrexham County Borough. It is hoped that installation of more chargers will encourage further uptake.

Further measures such as improving the efficiency of street lights and school's lighting systems add to the aims of reducing the borough's energy consumption.

## Perth and Kinross Council to award £150,000 for energy management ideas

Perth and Kinross Council is hoping to improve energy efficiency in its jurisdiction through funding smart generation techniques, storage and trading of renewable energy. The fund will be allocated for research and development into solutions that look at managing and controlling energy in a smart and flexible way.

In order to be successful, the application will need to be capable of trading energy within and outside of the council to enable efficient generation and usage across its estate. The competition is set to open on 20 August, with a deadline for all applications by 10 October.



**Energy efficiency is the best way to cut bills: the cheapest kWh is the one you don't use**





## £12.5mn for more efficient, high-quality buildings

BEIS has announced that UK Research and Innovation will provide a £12.5mn fund for projects to transform the construction sector, as part of a competition which opened on 23 July 2018.

BEIS stated that there is a clear shortage of high-quality buildings in the UK, with affordable, energy-efficient housing and workplaces top of the agenda for new construction projects. The funding available is one element of the Industrial Strategy Challenge Fund, which promotes research into innovations of building construction, new construction networks, as well as the creation of an active building centre and innovation hub.

To meet Industrial Strategy Challenge Fund objectives, projects must help to address the three main stages of the construction lifecycle: design and management, construction, and powering.

Projects also must:

- Encourage adoption of design approaches favouring pre-manufacturing and assembly
- Increase construction project productivity
- Develop methods to enhance construction and certainty over budget and timescales
- Develop integrated building generation, distribution and storage at lower costs
- Reduce the costs of built assets across their lifetime, and
- Improve the value and safety of built assets, while reducing their environmental impact.

The competition closes on the 19 September 2018.

## Energy and Climate Intelligence Unit shows drop in energy bills

Research by the Energy and Climate Intelligence Unit (ECIU), published on 1 August, showed that the average dual fuel bill for customers fell by £6 between 2016 and 2017 in spite of higher energy tariffs. This was due to an increased uptake of energy efficiency measures, especially in the use of more efficient household energy appliances.

The findings have shown that there was a drop of over £100 in energy bills since the introduction of the Climate Change Act in 2008. The £6 figure is considering the weather variations – without these factored in, there was a £36 drop in annual dual fuel bills.

# Pivot Power plans 50MW EV charging hub

On 17 July, battery storage company Pivot Power announced that it plans to build a 50MW grid-scale battery and an electric vehicle (EV) charging hub on the edge of Southampton. It is estimated that the project will cost up to £25mn. It is the first of 45 similar developments the company aims to set up across the UK over the next five years. Test Valley Borough Council has approved the battery project, which is expected to be operational by July 2019; however, a site for the EV charging hub is yet to be confirmed.

The development will be one of the biggest in the country, with the UK's current grid-scale battery storage capacity at 300MW in total. Pivot Power says that all 45 charging sites could store enough electricity to supply nearly 235,000 average homes for a whole day. As renewable energy production continues to make up a greater part of the UK energy mix, the ability to store large amounts of electricity will be vital in tackling the potential for brownouts and blackouts. The aim of securing a green future set out in 2015 by the Paris Agreement means renewable investment is a must, and therefore so is electricity storage.

The EV charging hub will also help in meeting ambitions of a green future, with the inclusion of rapid charging connections for up to 100 vehicles at any given time. Other emerging charging hubs include the Princes Street Hub opened in Dundee at the start of August, and the GUL (Go Ultra Low) funded project set to open by the end of 2018. After the UK's decision to ban the sale of all new petrol and diesel vehicles by 2040, construction of infrastructure like this will be key to facilitating the expected up rise in electric vehicles.

## Community energy conference discusses the state of the sector

Delegates gathered in Manchester at the Community Energy Conference to assess the state of the community energy sector on 23 June, focusing on renewable technology and energy regulation. Attendees were told that they must engage with policymakers to ensure a more reliable legislative and regulatory regime in future.

Max Wakefield, lead campaigner at 10:10 Climate Action, stated that planning blocks and a lack of financial support posed a "de facto ban" on onshore wind. He blamed past governments for failing to address the issue of expanding what he described as "the cheapest and the cleanest energy alternative" for the UK. He stated that a minority of MPs maintaining a strict view on the technology act as a block for onshore wind. This is despite the shift in the national position and softening of government opinions towards onshore wind in the last Conservative manifesto.





**Community energy groups help keep the value of generation in the local area, supporting other community projects and vulnerable or fuel poor households**

Small-scale renewables were also said to have experienced a complex progression, with unexpected regulatory changes and the approaching closure of the FiT scheme.

Emma Bridge, CEO of Community Energy England, said that the sector needs to explore new pathways for growth and development. She advocated expanding community ownership and the related skill base for “more holistic approaches” due to technology like battery storage. Carla Blockley, from network operator Electricity North West, backed this approach, stating that in a recent survey 2% of respondents were involved in community energy schemes, but 70% were interested in them.

Patrick Allcorn, head of local energy at BEIS, added that community energy is an important investment, stating that it provides opportunities in heat, storage, energy efficiency and the transition of distribution network operators (DNOs) to distribution system operators (DSOs). “Community energy is not just about generation” Allcorn said, pointing out that decentralisation of energy requires the operator to take a more active management role. He also said that the sector required an evidence base to ensure better planning arrangements, as substantial possibilities are present concerning social issues related to elderly care, fuel poverty and mental health. However, he warned that community energy must support those most at risk, rather than transferring costs other customers.

## **Churches investing in solar power**

More than 5,500 churches and 15 cathedrals across the country are now using 100% renewable energy. The Church of England said that the move was an effort to address climate change, calling the issue “one of the greatest moral challenges of our time”.

With an average annual church electricity bill of around £1,000, it is estimated the churches have diverted more than £5mn from fossil fuels to clean energy providers. Bishop of Salisbury Nicholas Holtam, the Church of England’s Lead Bishop for Environmental Affairs said: “Switching to responsible sources of electricity may seem like a small thing on its own, but when joined together it can make a real difference,” and added: “It’s fantastic to see churches doing their bit to ensure they reduce their impact on the environment.”

With the cost of renewable electricity generation continuing to fall, the example set by churches and cathedrals across England is one that could be followed by many businesses and organisations across the UK. This announcement is a positive step towards decarbonisation and sends a message on what can be accomplished.

# The need for a route to market for small-scale generation

On 19 July the government published a consultation, *Consultation on The Feed-In Tariffs Scheme*, confirming its intention to close the Feed-in Tariff (FiT) scheme on the 31 March 2019 to new applications. It proposed the closure of both the generation and export tariffs to prospective installations past this date. The announcement raises questions concerning a guaranteed route to market for small-scale generation in the future.

The FiT scheme was first introduced on the 1 April 2010 and is designed to promote the uptake of small-scale (up to 5MW) renewable electricity generation technologies. The Central FiT Register reports that as of 19 July 6,042MW of capacity is accredited across 826,323 installations in GB. It has been estimated that the FiT scheme costs consumers approximately £1.6bn annually.

Along with the consultation on FiT closure to new applications, a call for evidence was made in an accompanying document to identify the role that small-scale generation can following the end of the subsidy scheme.

The call for evidence sets out several considerations for such a last resort intervention in its call for evidence. These include an end to deeming, an opt out mechanism with a low cost to consumers, all of which appear sensible. They will also complement incentives arising from increasing retail prices to locate generation so that the bulk of output can be used behind the meter.

With the closure of the scheme, new ideas for a guaranteed route to market for small-scale generation will be essential. New opportunities which will create choice and deliver new sources of income for smaller generators around flexibility and capacity are still some way off, and there will always be a significant diseconomy of scale for sales of power.

A major issue, we believe, is the level of a threshold, and the implied 50kW boundary, which BEIS concedes is too low a threshold for community schemes. Furthermore, on price, it remains to be seen what BEIS means by a guaranteed support price that is a “meaningfully lower rate” compared to power purchase agreement prices. These are prices agreed between a purchaser of electricity and a privately owned power producer.

Discussing these issues is a good place to start the debate but it is one that needs to be quickly resolved.

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