



21st ANNUAL CONFERENCE
28-30 MARCH 2017

 GLOBAL GOALS:
LOCAL ACTION



Local Action: The electricity cost drivers for change.

Steve Creighton
Head of Member Services
The Energy Consortium

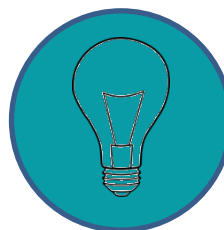
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About TEC



Sector experts
**164 University &
College Members**



**1.3TWh of
Electricity**



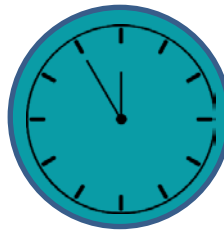
Member Owned
Compliance
Governance



**1.7TWh of
Gas**

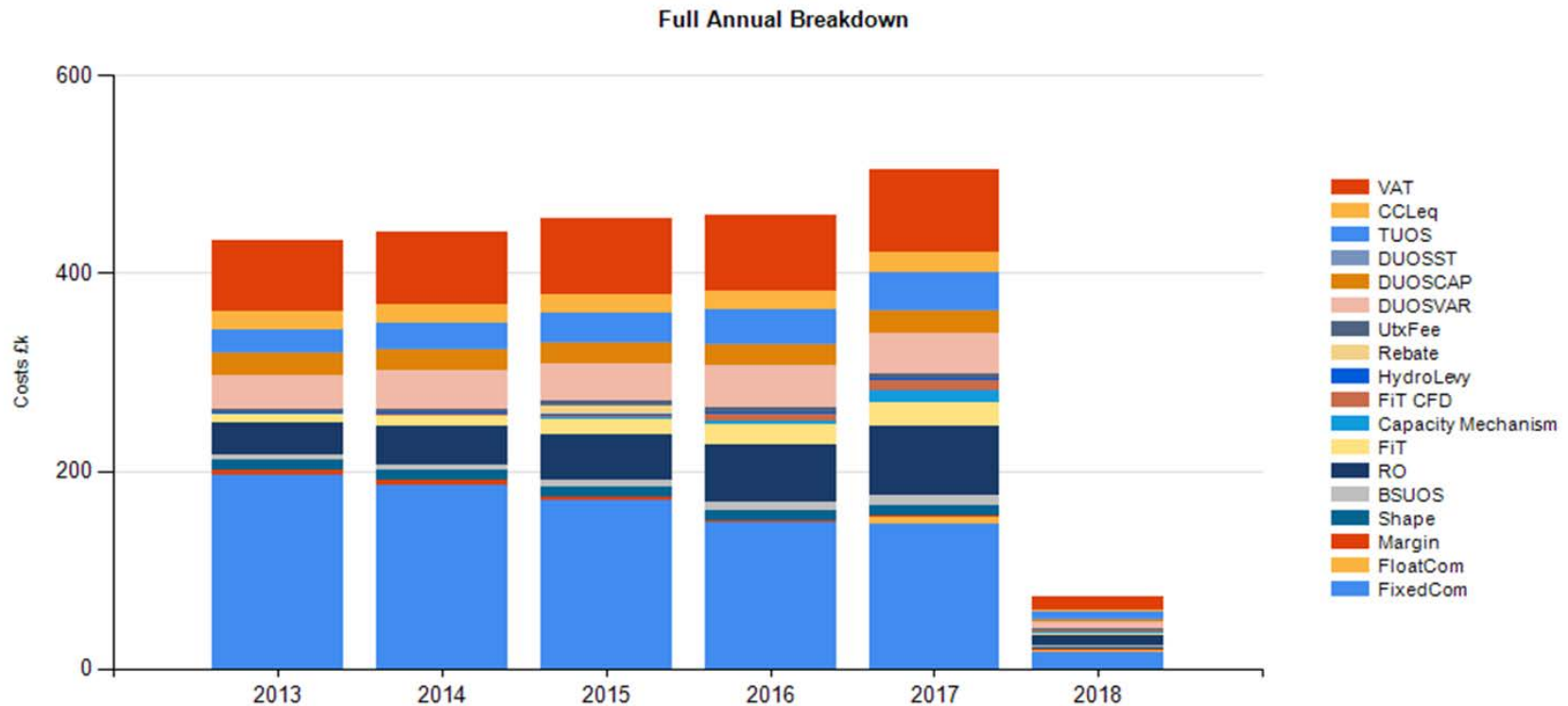


**£189M Member Spend on
Utilities**



**95 Years
Experience in
Energy**

It's not all about the commodity.



Decarbonising UK generation, environmental taxes.



Environmental taxes include levy-funded spending policies such as the Renewables Obligation (RO), Contracts for Difference (CfD), Feed-in Tariffs (FiTs) and Capacity Market

The cost of environmental levies on UK energy bills is expected to rise to £12.6 billion by 2020 according to latest figures from the Office of Budget Responsibility (OBR).

That's an increase from £6.9 billion in 2016/17 and could rise to £13.5 billion in 2021/22,

The OBR's report states the increase mainly reflects the build-up in the CfD scheme – which is designed to boost renewable energy – and the development of the Capacity Market scheme which focuses on security of supply.

The carbon reduction commitment (CRC) scheme – which will close following the 2018/19 compliance year, meaning businesses will report under the CRC for the last time by the end of July 2019 – is also projected to add £0.5 billion to bills.

It expects household energy bills to “rise faster than previously assumed” in the near term.

Capacity Market



T-1 Capacity Market closed at just £6.95/kW well below expectations. This charge is applied during the 4-7pm peak between November and February and the £6.95/KW price struck will add around £26/MWh to charging at the time, on top of Red-Rate charges, from next winter. This will then increase to £65/MWh the following year.

However, this has failed to deliver adequate funding for the new large scale thermal plant that is needed.

21GW of capacity closing in the next 17 years, mandatory for all existing UK coal by 2025 then all but one of UK's existing nuclear plants to close by 2030.

Closure of three large coal plants and nuclear outages in France over Winter 2016 sending usual imports into reverse meant the UK system struggled to cope, sending prices skyward.

This is contributing to a growing focus on Demand Side Management and Response.

Distribution - DCP228



Current state: electricity distribution companies have higher charges for half-hourly (HH) consumers during late afternoon. These Distribution Use of System costs (DUoS charges) are commonly known as 'Red Band'. This does not provide the correct investment signals for distribution companies. Costs need to be spread more equally across the day.

Going forward: From April 2017 for HH and P272 consumers this modification will lower Red Band charges, while increasing the prices in the Amber, Green and Night rate bands.

The net effect is that charges for HH consumers in aggregate will rise

There will be a stronger need for a connected, controls-based strategy, as the costs of delivery shift.

Organisations may have focused on TRIAD avoidance but may now need to look wider.

DCP 228 at a glance

Distribution Use of System Charges (pre and post DCP228)										
	Eastern Power Networks		London Power Networks		Southern Electric Power		WPD - South West		Electricity North West	
	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19
Red Time Band										
LV Network Domestic	15.253	14.086	7.031	8.049	12.082	8.116	31.407	13.893	13.094	9.803
LV Network Non-Domestic Non-CT	13.855	12.159	4.633	4.942	11.125	7.601	33.360	14.143	12.734	8.908
LV HH Metered	10.911	9.710	4.367	4.898	9.021	5.889	25.237	10.317	9.657	6.623
LV Sub HH Metered	7.717	6.831	2.594	3.146	8.838	5.803	22.362	8.281	8.153	5.405
HV HH Metered	6.384	5.534	1.921	2.425	6.572	3.863	19.170	6.463	6.265	3.953
Amber Time Band										
LV Network Domestic	0.131	0.312	0.434	0.295	0.992	1.413	0.544	1.806	1.349	1.855
LV Network Non-Domestic Non-CT	0.119	0.284	0.289	0.051	0.915	1.355	0.578	1.817	1.312	1.724
LV HH Metered	0.078	0.227	0.221	0.000	0.589	1.032	0.365	1.617	0.910	1.341
LV Sub HH Metered	0.035	0.164	0.048	0.000	0.335	0.800	0.221	1.480	0.702	1.133
HV HH Metered	0.020	0.142	0.017	0.000	0.210	0.675	0.117	1.383	0.463	0.894
Green Time Band										
LV Network Domestic	0.023	0.140	0.011	0.000	0.238	0.728	0.146	1.420	0.174	0.668
LV Network Non-Domestic Non-CT	0.021	0.135	0.007	0.000	0.220	0.716	0.155	1.423	0.169	0.651
LV HH Metered	0.014	0.126	0.005	0.000	0.141	0.655	0.103	1.376	0.116	0.604
LV Sub HH Metered	0.007	0.115	0.001	0.000	0.079	0.619	0.072	1.347	0.089	0.578
HV HH Metered	0.004	0.111	0.000	0.000	0.044	0.585	0.046	1.324	0.057	0.548

What can you do?



Firstly, report. Do you know what you use and can you forecast, per fiscal meter, each element of the built up fully delivered unit rate?

- Reduce demand
- Shift demand
- Self generate

Ensure you have long term flexibility and legal mechanisms built into your energy supply frameworks that support your institution's carbon plans and management of estate assets

Ensure you have the additionality in your frameworks to support demand side response.

Questions



Contact details:
stephen.creighton@tec.ac.uk
www.tec.ac.uk