

Sedt

# EV Tariff Workshop

Energy related cost headings to consider for EV Charging 27<sup>th</sup> October 2022

# On today's agenda



- Who we are and what we do
- Wholesale Energy
- Non energy costs
- **Distribution Charges**
- **Transmission Charges**
- Next Steps
- Thank you



### Today's 3 takeaways



# Who are we and what do we do







### One business. Six specialist areas.

We're proud to be Britain's biggest generator of zero carbon electricity. And here in the UK we're a lot more than that too. We're one of the largest suppliers of electricity to British organisations; and as our business customers look to better manage the value of their energy, we have developed a full suite of solutions to help them do just that.

Here in the UK, EDF is operated as six business areas:

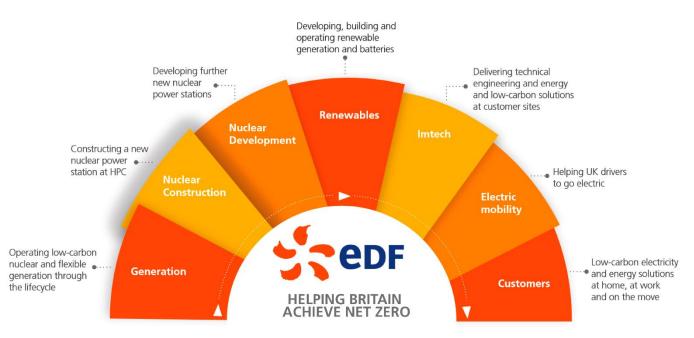




# **Helping Britain Achieve Net Zero**

# edf

Our unique mix of capabilities makes us the UK reference in zero carbon electricity



# **Net Zero solutions**



Putting Net Zero at the heart of your organisation is not only good for the planet – it's good for your budget too.

A smart approach to buying, using and managing your energy will accelerate your organisation's journey to Net Zero.

At EDF, we can help you to select the right solutions, designed to solve your very real organisations needs. We're here to help your organisation take the best next step to achieving Net Zero.





# **Electrical Vehicle Solutions**

### **Switch to Electric Vehicles**

Select and install EV charging infrastructure that works for your organisation.

### What's the change?

Take charge of your carbon footprint and switch to EVs. Understand your fleet and infrastructure needs and install charging points in your organisation's premises.

### What are the benefits?

- Cut carbon: Helps to reduce your carbon emissions.
- Reduce your transport costs: Significantly lower tax and running costs.







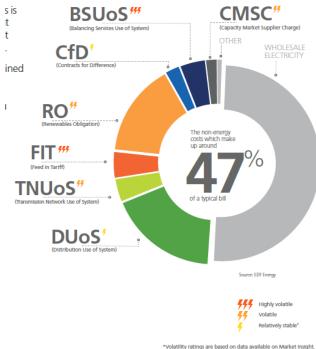
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# Energy and non-energy costs

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# 2022/23 Rates Overview





Volatility ratings are based on data available on Market insig To find out more visit marketinsight.edfenergy.com

### **Key Points?**

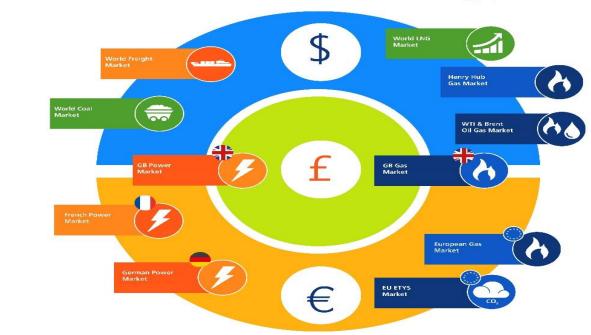
- Non energy costs account for circa. 47% of total costs.
- Several different non energy costs included in billing rates.
- These non energy costs are reconciled once actual scheme costs are known.
- Transmission and distribution charges are passed through at cost on the invoices.
- Reporting available specific to EV chargepoint supplies confirming gross average pence per unit values per site.





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### What influences the wholesale energy price







### Potential impact on EV Charging costs

Depending upon situation in particular contract year, wholesale energy rate reconciliations may occur. This situation would arise if all wholesale energy is not procured at point annual billing rates are generated.

When billing rates are set, and all wholesale energy not procured, a reference price is included for the wholesale energy element which is then reconciled. To actual rate.

Situation unlikely to occur based upon most recent information.

Recent wholesale market price increases driving this cost element upwards.

Quarterly price risk guidance issued by Scottish Procurement providing regular updates on wholesale market price.



### **Non-energy costs**



### NON-ENERGY COSTS AT A GLANCE...

Non-energy costs (NECs) components form just over half your bill. The cost of your energy (wholesale power costs) make up the rest.

### POWER STATIONS GENERATE ELECTRICITY

#### CMSC 455

Capacity Market Supplier Charge Pays for: investment in new capacity, mantaining existing capacity, eevelopin more active demand management.

#### RO 644 Renewables Obligation

CfD **CfD** Contracts for Difference Pays for: support for low-carbon electric to generators

#### HIGH VOLTAGE TRANSMISSION SYSTEM CARRIES ELECTRICITY CROSS-COUNTRY

TNUOS 57 Fransmission Network Use of System Residual costs pay for: maintaining the high-voltage power ins that camy disctricity

rom power stations to local listribution stations orward looking costs

transmission network

### LOCAL LOW VOLTAG

ARRIES ELECTRICITY TO IOMES AND BUSINESSES

DUOS CF Distribution Use of System Residual costs pay for: maintaining the substations and power lines that carry electricity from the high-worbage transmission network to businesses and homes

Forward looking costs pay for: any additions to the distribution network

### HOMES AND BUSINESSES USE ELECTRICITY

BSUOS 
+ ###
Balancing Services Use of System
Pays for: Incentivising power generators
and large pusinesses to increase or
decrease their anome consumptions — In-

decrease their energy consumption – to help National Grid balance generation and demand across the country

### FIT **4**555

Pays for: encouraging more small-scale renewable electricity generation, such as solar particls on houses

Volatility ratings are based on data available on Market Insight. To find out more visit marketinsight.edfenergy.com



**Monitor:** Overview of changes to non-energy costs

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### NECs - OVERVIEW OF CHANGES

CHANGE <sup>+</sup>	THIS ISSUE '21 – '22	LAST ISSUE	
1 смыс	FORECAST / APR 21 - MAR 22 ^* £50.89 - £58.31/MWh	FORECAST / APR 21 - MAR 22 ^* £50.89 - £56.19mm	
↓ CfD	FORECAST / APR 21 - MAR 22 - <b>£1.04 - £1.93</b> /MWh	FORECAST / APR 21 - MAR 22 -£0.86 - £2.15	
	FORECAST / APR 21 - MAR 22 ^ <b>£24.99 - £26.24</b> /MWh	FORECAST / APR 21 - MAR 22^ £24.99 - £26.24	
	ACTUAL / APR 21 – MAR 22 £3,319million	ACTUAL/APR 21 - MAR 22 £3,319million	
→ DUoS	ACTUAL / APR 21 – MAR 22 £5,863 million	ACTUAL / APR 21 - MAR 22 £5,863 million	
BSU0S	FORECAST / APR 21 - MAR 22 <sup>‡</sup> £6.50 - £8.31/MWh		
Fit	FORECAST / APR 21 - MAR 22 <b>£5.81 - £6.36</b> /MWh	FORECAST / APR 21 - MAR 22 £5.82 - £6.89	

- + Based on upper forecast figure / APR'21 MAR'22.
- \* This forecast range relates to chargeable periods (4pm -7pm on working days between November and February).
- ^ Includes impact of any mutualisation.
- Includes the impact of CMP345, CMP350 and CMP373 cost recovery in 2021/22



# **CMSC:** Capacity Market Supplier Charge



### What is it?

The energy network is all about ensuring we can meet our national demand with enough supply. This charge helps keep generators ready to go when demand is most needed.

The Capacity Market is a part of a government initiative designed to ensure enough reliable energy capacity is always available. So, Suppliers are obligated to make payments to generators who are contributing to the network's energy supply. This cost also goes towards active demand management in the electricity market.

### How does it impact your bill?

This cost is calculated based on your business' consumption during periods of high demand, defined as between 4pm and 7pm on workdays from November to the end of February. So, if you're a heavy energy user during these times, your costs will be higher.

### What is likely to change in the future?

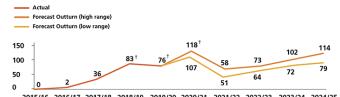
### **EDF FORECAST RANGE**

APRIL 2021 - MARCH 2022

# £50.89<sup>mm</sup> £58.31<sup>mm</sup>

CHARGE POINT: NOTIONAL BALANCING POINT (NBP)

### CHARGEABLE DEMAND RATE (£/MWh) \*



2015/16 2016/17 2017/18 2018/19 2019/20 2020/21 2021/22 2022/23 2023/24 2024/25

Source: Derived from historical National Grid and EDF data t includes impact of any mutualisation \*Chargeable periods 16:00 – 19:00, workdays, November – February.



# **RO:** Renewable Obligation



### What is it?

Renewable energy is an important part of our mix, and vital for cutting carbon emissions and tackling climate change. So energy suppliers in the UK have an obligation to support renewable electricity generators. The money collected from users of the network is used to support large-scale renewable electricity projects – along with certain small-scale projects.

The RO scheme closed to new generators as of April 2017, but your charge will continue to provide support up until 2037 for those generators who are already a part of it.

### How does it impact your bill?

This is currently one of the largest non-energy costs so it's worth keeping an eye on any changes.

### What is likely to change in the future?

### **EDF FORECAST RANGE**

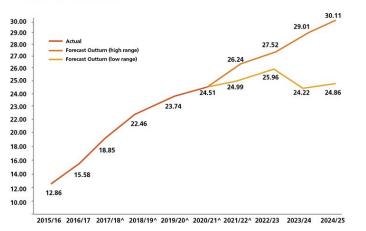
APRIL 2021 - MARCH 2022

# £24.99<sup>--</sup>£26.24<sup>---</sup>

CHARGE POINT: CUSTOMER TERMINAL (CT)

### INDUSTRY SCHEME COSTS

ACTUAL AND FORECASTS (£/MWh)





^ Includes impact of any mutualisation Source: Derived from historical Ofgem and EDF

# **CfD:** Contracts for Difference



### What is it?

The CfD aims to secure our low carbon energy future. It is a financial obligation for suppliers to support generators of low carbon electricity.

The level of support and in turn, the cost is determined by CfD contracts that government offers to low carbon electricity generators, and by the volume of electricity they generate.

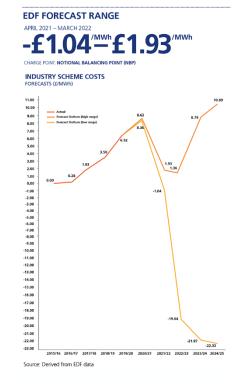
The money paid by energy users for the CfD charge is distributed to low carbon electricity projects with generating capacities of 5 MW and upwards. Eventually, this scheme will replace the RO scheme, but the two are going to operate in parallel for a while.

It's worth knowing that generation capacity may only be supported under the RO or the CfD scheme - not both.

### How does it impact your bill?

This is a new cost, but it is expected to grow, and potentially grow quite quickly. So definitely one to stay on top of.

### What is likely to change in the future?



# **BSUoS:** Balancing Use of System charge



### What is it?

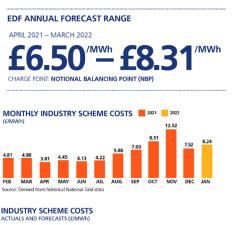
BSUoS, or your Balancing of System charge, is there to help keep our Energy System running smoothly by covering the costs of balancing supply and demand.

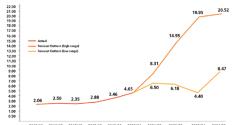
It incentivises businesses to manage their demand and use less energy during peak times, and also encourages those small generators who can put energy supply into to the energy system, too.

### How does it impact your bill?

It should be noted that the cost is incurred in each half hour, so the actual charge depends on your actual within day consumption.

### What is likely to change in the future?





Source: Derived from historical National Grid and EDF data



### What is it?

The Feed-in Tariff is a charge on suppliers to fund and promote the uptake of small-scale renewable electricity generator projects in the UK, such as solar panels on people's houses or small wind turbines. They can use the energy themselves or sell the energy back for a prearranged price.

The scheme formally closed to new participants at the end of March 2019, though 'grace periods' remain for a small amount of capacity to accredit. Following this, the £ cost of the scheme is now expected to increase in line with inflation, while the £/MWh rate may continue to rise due to changes in the demand charging base and exemptions from the scheme.

### How does it impact your bill?

This scheme is typically one of the smaller non-energy cost components of a business' electricity bill.

### What is likely to change in the future?

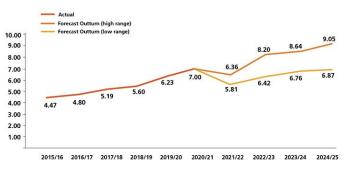
### EDF FORECAST RANGE

APRIL 2021 – MARCH 2022

# £5.81<sup>-</sup>£6.36<sup>-</sup>

CHARGE POINT: CUSTOMER TERMINAL (CT)

INDUSTRY SCHEME COSTS ACTUALS AND FORECASTS (£/MWh)



Source: Derived from historical Ofgem and EDF data

# **DUoS:** Distribution Use of System charge



### What is it?

Once your energy has left the national transmission network, it enters your local area's distribution network.

Your Distribution Use of System Charge – DUoS – is the charge you pay towards using and maintaining your local distribution network.

### How does it impact your bill?

This is often one of, if not your largest, non-energy cost. This varies between geographic regions and it is based on your consumption in peak periods. The more use at these times the more your business will pay.

## Latest information and potential impact on EV charging costs?

2023/24 DUoS Charges have been published by SSE/SPEN and available if required.

Updated DUoS Cost tool being prepared using April 21 – March 22 data.

Under new charging methodology sites have been banded depending upon Available Capacity levels. The higher the capacity, the higher the banding and therefore the higher the fixed charge.

Ensuring that capacity levels are set appropriately, both to cover current and future demand plans, is more important than ever.



# **TNUoS:** Transmission Network Use of System charge



	2021/22 Triad Charge £/kW	2022/23 Triad Charge £/kW	Percentage Increase
SSE Area	£20.376396	£27.446662	34.7%
SPEN Area	£29.300172	£35.465718	21%

### What is it?

Your Transmission Charge, is the charge you pay towards getting energy from the generators, across the country, to the local distribution network in your area.

These charges are used to fund the maintenance and upgrading of the transmission network and they vary by area.

### How does it impact your bill?

TNUoS is the third largest non-energy cost contributor of a business electricity bill, so it's good to watch out for fluctuations.

### Latest Information and potential impact on EV charging costs?

Charging method for Transmission Charges remains the same in 2022/23 – final cost dependent upon your average demand across the three triad charging periods.

As part of Ofgem targeted charging review (TCR) latest indication is that charging will be 90-100% fixed charge based, again based upon similar banding structure to distribution charging.

# Stay up to date: TalkPower



### At EDF, we want to keep all of our customers informed, updated and in-the-know.

It's not always easy to keep on top of everything that's changing in energy. And, we know that our customers are happiest when they have all of the information they need.

### That's where our Talk Power team come to offer you

- Expert analysis on the big energy issues facing British business.
- The opportunity to join one of our regional Talk Power live events for in-depth analysis and debate,
- To catch-up on the latest updates from your desk with our webinars and blogs.

So, no matter how the UK's energy landscape changes, we'll help you to stay one step ahead.

Sign up today





### Help you make informed decisions

You can gain access to quality data and expert analysis to help you navigate the ins and out of the energy markets and changes in non-energy costs. Here's how to get those insights working for you:

### A customisable real-time dashboard:

Discover insights that are more up to date than ever – drill down to the finest detail, or simply skim the surface; customise how much you want to see.

### Insights in your pocket:

Market Insight seamlessly works across your mobile and tablet devices - access your reports on-the-go.

### More alerts than ever:

We'll keep you up to date on the latest trends in the market. You decide on the reports you wish to be notified about.

A sparkling new interface: With simplified navigation and awesome dynamic graphing.

Find out how Market Insight can help you.



# Stay up to date: Market Insight

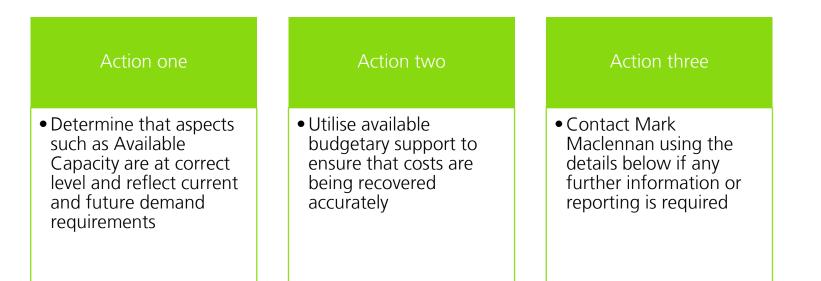




**Next steps** 

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### The 3 key actions we can take away



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# Thank you

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