

Third Party Costs

A guide to changes in TPCs
and how they could affect
your organisation

September 2021



Contents

Introduction	2
2020/21 was a remarkable year for electricity	3
Commodities	4
REGOs	4
How the changing environment has affected TPCs	5
Make up of a bill	6
Cost Breakdown, 2021/22	6
Distribution Use of System (DUoS)	7
Transmission Network Use of System (TNUoS)	8
Balancing Services Use of System (BSUoS)	9
Renewables Obligation (RO)	10
Feed-in Tariff (FIT)	11
Contracts for Difference (CfDs)	12
Capacity Market (CM)	13
Other TPCs	13
Jargon Buster	14

Introduction

Third Party Costs (TPCs) make up almost 60% of a typical electricity bill, with the other half covering the power your organisation uses. Therefore, any changes to TPCs can make a significant difference to your energy costs overall.

Some TPCs cover policy costs that help pay for the investment needed to decarbonise the electricity sector. Others are network costs that help pay to construct, maintain and balance our electricity networks, getting power from where it's produced to where it's needed.

We've seen a lot of changes to TPCs recently with increasing renewable capacity, higher balancing costs and the impact of Covid-19, including deferrals of additional costs. Going forward, Ofgem's Targeted Charging Review (TCR) will restructure parts of the network related TPCs, bringing further adjustments.

We've produced this guide to help you understand the likely impacts of these developments – and potentially help you reduce your organisation's exposure to them. We hope you find it useful.

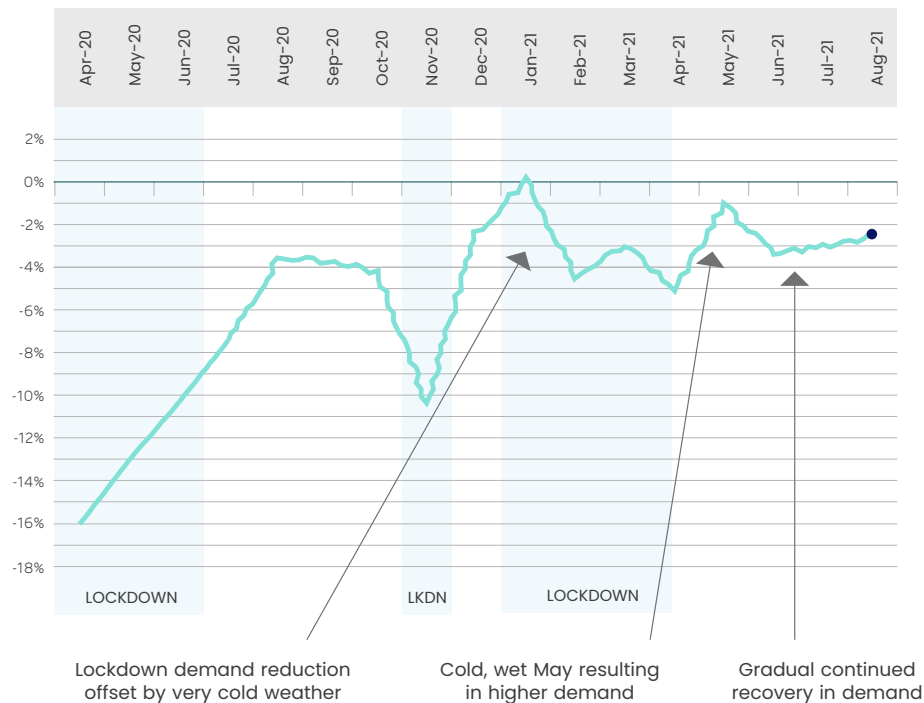


2020/21 was a remarkable year for electricity

Restrictions and lockdowns during 2020/21 meant a significant reduction in total electricity demand. At the height of the first lockdown, demand fell by up to 16%. Overall, the full year outturned 6.3% below 2019/20, despite winter being much colder.

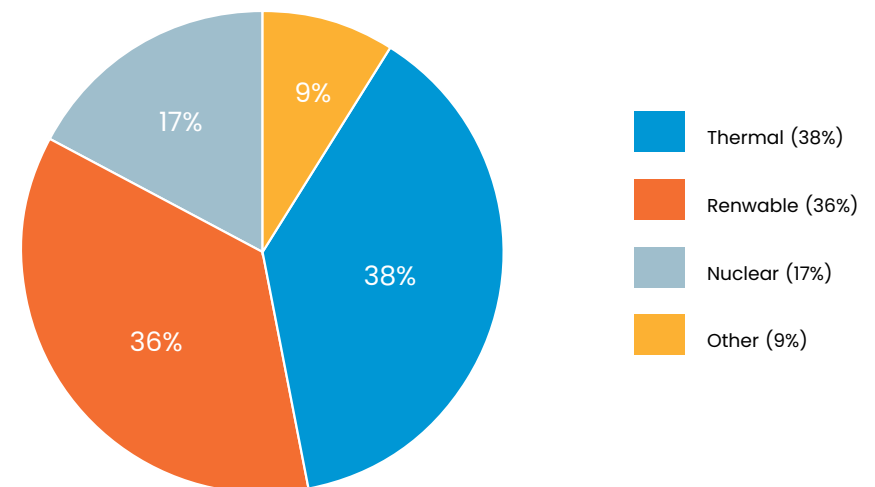
With the lifting of restrictions following the last lockdown, we've seen a slow return in demand this year. Overall, we still anticipate that for 2021/22, demand will be around 2-3% below that in 2019/20. However, the exact figure will depend on the level of economic recovery during the remainder of this period.

Demand change vs 2019/20



The other noteworthy point for 2020/21 was the continued increase in renewables. Renewable generation (wind, solar, hydropower and biomass) made up a record 36.4% of Britain's generation. However, this was still slightly below thermal generation, which was boosted by the demands of a very cold Q1 2021.

Generation mix 2020/21



Commodities

Wholesale prices have risen sharply over the last twelve months, with power trading for winter 2021 as high as £140/MWh (as of September 10th 2021) – over double the trading level at this time last year. The height of lockdown saw historic lows, with power in May 2020 averaging just £22/MWh. By comparison, prices in July 2021 averaged £94/MWh. These are the highest prices we've seen in 12 years, and equal to those preceding the financial crash in 2008.

In addition to the re-opening of the economy, the two main drivers for the rebound in prices have been gas and carbon prices. Cold weather in Asia and Europe over the winter meant that liquid natural gas (LNG) cargoes were re-routed, and stocks ran low. Simultaneously, the relatively low levels of renewable generation in Britain in Q2 pushed up our demand for gas along with our exposure to gas prices. Gas prices have also rebounded since lockdown lows, with winter 2021 gas now trading at 145.75ppt (as of Sept 10th 2021), versus 42.57ppt this time last year.

Carbon prices have also surged this year as governments have upped their climate pledges. The price of carbon in the EU Emissions Trading System (ETS) has traded as high as €55/tonne, compared to sub €20/tonne pandemic lows. The UK also established its own carbon trading scheme after exiting the EU ETS due to Brexit. This started in May, with an inaugural auction of 6m credits where prices cleared at £43.99/tonne.

Renewable Energy Guarantees of Origin (REGOs)

This year, we've also seen a marked increase in Renewable Energy Guarantee of Origin (REGO) pricing. Generators receive a REGO for each MWh of renewable energy generated. Suppliers buy and submit REGOs to Ofgem in their annual Fuel Mix Disclosure (FMD), as evidence that the supply is from renewable sources. In previous compliance periods, REGOs have traded in the 10-20p range regardless of renewable source (biomass, wind, solar, hydro). In May this year, that changed with the e-POWER REGO auction, and REGOs for wind, solar and hydro traded as high as 70p. At the time, it was thought this was the result of a few distressed buyers requiring REGOs for FMD disclosure. However, since that auction, the market has continued to rise with biomass REGOs trading around £1.40/MWh, and wind/solar/hydro pushing above £2/MWh.

There have been fewer imports of EU GoOs (Guarantees of Origin, the EU equivalent of REGOs) for the last quarter. Additionally, due to interconnector trading rules changing because of Brexit, forward purchases have also contributed to the price increase. This is particularly true along the curve, as suppliers are unsure of the long-term supply.



How the changing environment has affected TPCs

Continued regulatory changes, increasing wholesale prices and rising intermittent generation capacity all continue to contribute to variation within TPCs. Key updates since the last newsletter include:

- Removal of embedded generation benefits from Balancing Services Use of System (BSUoS) in April this year, meaning suppliers now pay BSUoS on their gross demand and not net volume. This increases eligible BSUoS volumes and reduces costs by ~10%.
- The increasing Wholesale Market Price is currently helping to reduce scheme costs for Contracts for Difference (CfD) and Feed-in Tariff (FIT), reducing top up payments and export tariff costs.
- As part of the Targeted Charging Review, Ofgem published its “minded-to decision” to delay the implementation of Transmission Network Use of System (TNUoS) residual charges until April 2023. The consultation on the minded-to decision closed in July 2021 and, as at 12 September 2021, Ofgem had published no further updates.
- We’re continuing to see suppliers exit the market and as a result, the Renewables Obligation (RO) mutualisation trigger will be hit for the fourth year running. This means that the unpaid RO costs for the 2020/21 period for these failed suppliers will be mutualised across all remaining suppliers. However, the full cost won’t be known until the end of 2021.



Make up of a bill

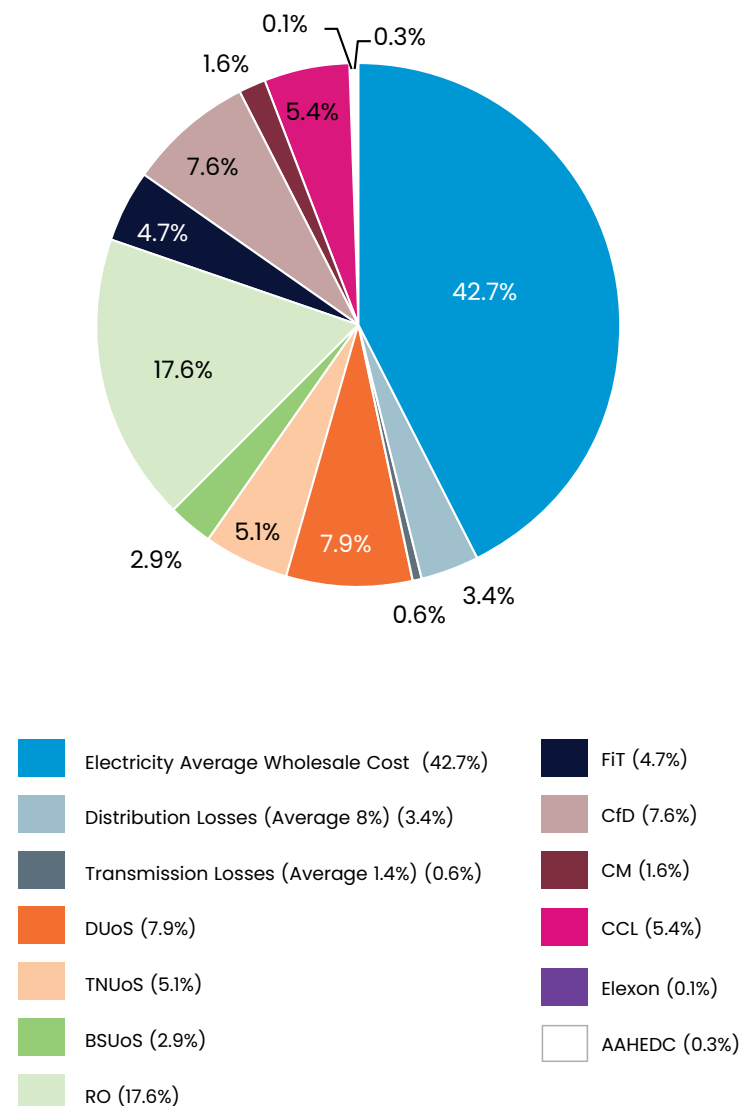
This chart shows the rises and falls in the TPC forecast (middle case) from our team of experts.

These figures are indicative and rounded to two decimal places, and they're portfolio averages. Please be aware that DUoS and TNUoS charges can significantly vary between customers.

Charge (£/MWh)		2021/22	2022/23	2023/24	2024/25	2025/26
Energy	Energy Average Wholesale Cost	92.40	81.58	65.44	61.29	61.45
Losses	Distribution Losses (Average 8%)	7.39	6.53	5.24	4.90	4.92
	Transmission Losses (Average 1.4%)	1.29	1.14	0.92	0.86	0.86
Distribution / Transmission	Distribution Use of System (DUoS)	11.26	12.97	13.22	13.92	15.13
	Transmission Use of System (TNUoS)	7.27	7.41	7.09	6.91	6.67
	Balancing Service Use of System (BSUoS)*	4.92	5.25	9.43	10.21	11.04
Levy Control Framework Charges	Renewables Obligation (RO)	24.99	25.04	25.85	26.67	27.50
	Levy Control Feed in Tariff (FiT)	6.56	6.80	7.10	7.41	7.74
	Contracts for Difference (CfD)*	7.53	11.17	13.04	13.83	14.64
Other	Capacity Market (CM)**	2.26	1.49	3.07	3.71	4.47
	Climate Change Levy (CCL)	7.75	7.91	8.06	8.22	8.39
	Elexon*	0.08	0.08	0.08	0.08	0.08
	AAHEDC**	0.40	0.45	0.45	0.44	0.44
	Total		174.10	167.82	158.99	158.45

* National Balancing Point (NBP) Grid Supply Point (GSP)

Cost Breakdown, 2021/22



Distribution Use of System (DUoS)

The DUoS charges will rise over the next few years due to various adjustments to allowed revenue. The way the residual element is charged will change from April 2022 onwards as a result of the Targeted Charging Review.

2023/24 is the first year of the new RIIO-ED2 price control period. The required 15-months' notice for charges means that the final revenue determinations for the new period will not be known when the 2023/24 and 2024/25 charges are set. This could result in increased volatility in future years for any significant corrections.

In more detail

2022/2023

There are several factors contributing to the increase in tariffs:

- An under-collection of revenue in 2020/21, resulting from Covid-19
- Revised adjustments to base revenue for 2020/21 and 2021/22, as directed by Ofgem
- From April 2022, the residual element will be recovered via the fixed charge (as laid out in Ofgem's Targeted Charging Review).

This residual charge varies by meter type – low-voltage, high-voltage, extremely high-voltage and Non Half Hourly (NHH). It also varies by sub-banding, depending on whether the customer falls into band 1, 2, 3 or 4. The banding for each meter point administration number (MPAN) is determined by the meter's capacity (for Half Hourly – HH – customers) and by Estimated Annual Consumption – EAC – for NHH customers.

On average this will increase the proportion of the fixed charge from around 1-3% to anywhere between 50% and 90% for low voltage and high voltage sites. This will vary depending on the Distribution Network Operator, the connection and the sub-band.

†	2021/22	2022/23	2023/24	2024/25	2025/26
DUoS High Case			19.68%	27.32%	30.83%
DUoS Middle Case	4.10%	15.20%	1.94%	5.27%	8.71%
DUoS Low Case			-15.20%	-14.99%	-12.66%

2023/24 onwards

2023/24 is the first year of the new RIIO-ED2 price control period, with final revenue determinations not due to be published for DNOs until winter 2022. The current methodology requires a 15-month notice period for charges.

DNOs had raised concerns around increased price volatility in future years – specifically, if significant corrections are needed for charges set before final determinations. As a result, DNOs sought a derogation to the 15-month notice period for the publication of DUoS charges.

Following an industry consultation, Ofgem have confirmed the 15-month notice period will remain, concluding that the forecasting risk faced by DNOs was outweighed by the supplier and customer benefit of earlier notice of DUoS charges. DNOs will instead not be subject to any penalty interest rates on excess over/under recovery of revenue.

There may however be increased charge volatility in future years of the price control period should significant corrections be required.

Transmission Network Use of System (TNUoS)

TNUoS charges are forecast to continue increasing over the coming charging years due to rising tariffs and an increase in chargeable revenue. The Targeted Charging Review (TCR) changes to the TNUoS residual (i.e. long-term fixed costs) are expected to be delayed until 2023.

†	2021/22	2022/23	2023/24	2024/25	2025/26
TNUoS High Case		14.74%	4.62%	2.16%	0.29%
TNUoS Middle Case	3.31%	1.99%	-4.28%	-2.60%	-3.42%
TNUoS Low Case		-7.65%	-10.45%	-10.10%	-6.52%

In more detail

Targeted Charging Review (TCR)

Ofgem published a minded-to decision to delaying the implementation of the Transmission Demand residual charges until April 2023. While a delay to the transmission charging element is likely, it's not certain at this stage. The consultation closed in July 2021, with a decision still outstanding as of 31 August 2021.

Other TCR changes, including changes to the transmission-connected generation residuals and DUoS demand residuals, will still be implemented in April 2022.

When implemented, the charging methodology used in recovering the residual element of TNUoS (i.e. long-term fixed network infrastructure costs) will change significantly.

Residual costs for HH customers won't be allocated to only the period from November to February (i.e. Triads) but across the entire charging year (April to March). The residual element (yet to be determined, although certainly the majority) will be charged on a fixed charge basis (i.e. p/day) not £/kW.

The rates will vary by meter type (i.e. low, high, and extra-high voltage) and, still further, by four sub-bands with each meter type.



Balancing Services Use of System (BSUoS)

BSUoS costs for 2020/21 exceeded £2bn for the first time ever (according to National Grid Report Data). Going forward, we expect costs to continue increasing as more wind generation comes online, making it harder to balance the system. National Grid has recently increased its forecasts for 2021/22 to £2.2bn, anticipating a 10% increase in costs from last year.

In line with these expectations, costs so far for the April to June quarter of 2021/22 are on a par with the previous year. This is despite demand being a lot higher due to the easing of Covid-19 restrictions.

However, the expected recovery in national demand post-pandemic will have an effect. Overall, BSUoS charges are likely to be lower (on a £/MWh basis) in the next couple of years than they were in 2020/21. Now that suppliers are charged on their gross demand rather than net (removing embedded benefits from generators), we anticipate a 10% demand increase. This will reduce the £/MWh value slightly.

Looking further forward, BSUoS charges will increase dramatically in charging year 2023/24, as a result of CMP308. This involves a move from being charged across both generation and demand to being recovered solely from demand.

‡	£/MWh	2021/22	2022/23	2023/24	2024/25	2025/26
BSUoS High Case		5.57	6.35	12.08	13.93	16.05
BSUoS Middle Case		4.92	5.25	9.43	10.21	11.04
BSUoS Low Case		3.81	3.92	6.75	6.91	7.06

In more detail

2021/22

Total costs of £64m have been deferred from 2020/21 into this year. This follows modifications to help alleviate the increased costs incurred from Covid-19, and from recovery errors.

The Western Link High Voltage Direct Current (HVDC) cable between Scotland and England has seen outages in July for several weeks. Prolonged issues often mean that National Grid needs to take additional actions to balance the system, increasing constraint costs.

Our cost assumptions have increased to reflect the above points, plus the 2020/21 outturn and increases in National Grid forecasts for this year.

Further out

We believe, due to the increased challenges facing National Grid in terms of balancing the system, costs will continue to exceed £2billion annually. This increases our forecasts in all years. Following the outcome of the second BSUoS task force, the energy industry continues consulting on the fixed price BSUoS costs set by National Grid. However, these aren't likely to come into effect until 2023.

National Grid is implementing several projects (such as Accelerated Loss of Mains Change Programme (ALoMCP) and Pathfinder) to reduce the future impact of increased renewables on the system. However, these are unlikely to offset the full impact of changes to the system mix.

CMP308 – Removal of costs from generators

Following the outcome of the second BSUoS task force, the energy industry continues consulting on a proposed move to fixed price BSUoS costs set by National Grid. However, even if agreed, these aren't likely to come into effect until 2023.

Renewables Obligation (RO)

Due to the prolonged period between compliance starting and obligation fulfilment, we continue to see suppliers exit the market. This will have an impact on the 2020/21 period; the shortfall is believed to be well above the current combined mutualisation trigger of £16.9m (for England, Wales and Scotland).

This will cause mutualisation for a fourth consecutive year, although the full extent of the impacts won't be known until the end of 2021. We'll continue to see increases in energy costs, adding further pressure onto smaller suppliers, meaning we could see further failures in the next few months. During this time, other obligations such as renewable subsidies are due.

‡	£/MWh	2021/22	2022/23	2023/24	2024/25	2025/26
RO High Case			27.13	28.78	30.51	32.32
RO Middle Case	24.99		25.04	25.85	26.67	27.50
RO Low Case			23.09	23.21	23.27	23.36

In more detail

Since the last newsletter, we've reviewed our future RO Certificate (ROC) generation assumptions based on the latest generator capacity data and the ROC issue from Department for Business, Energy and Industrial Strategy (BEIS). We've also updated our demand forecast, including the Energy Intensive Industries (EII) exemption, to reflect recent outturns.

For the 2021/22 reporting period onwards, BEIS has raised the mutualisation trigger value (for England and Wales only) from £15.9m to 1% of the total scheme costs (around £65m).

While this will make mutualisation less likely, it will lead to a reduction in the ROC recycle value. We're now starting to see suppliers exit the market, leaving a shortfall for this period. BEIS and Ofgem have recently consulted on changing the way suppliers fulfil their obligations, to try and reduce the impact of mutualisation on consumers.



Feed-in Tariff (FiT)

There was a steep increase in the FiT charge for 2020/21 due to the pandemic. There was also higher than normal renewable generation, due to record-breaking sunshine hours in April and May 2020. We anticipate a reduction in cost for 2021/22, with the scheme now closed to new installations.

Q2 2021 (April – June 2021 or Q1 of FiT Year 12) outturned at £6.13/MWh, which was £1.81/MWh lower than expected. This was mainly due to lower than anticipated renewable load factors, resulting in the scheme cost outturning 29% (or £102m) lower than our forecast.

In more detail

2021/22

We expect that generation costs will be lower than our previous forecasts due to generation levels being lower than anticipated. In Q2 2021 (April to June 2021), we saw costs outturn lower than we've seen for the period since 2016. Indicative load factor data suggest lower than average outputs for both solar photovoltaic (PV) and onshore wind than we've in the last few years. Similarly, the data suggest fewer installations under grace periods than originally anticipated. Our forecast has been adjusted to include the latest Tariffs from Ofgem, which uplift costs by 1.2%.

Following an increase in the Wholesale Market Price, we've reduced our Export Metered Cost assumptions. We've seen an uptick in the number of generators moving from the export meter tariff to Power Purchase Agreements (PPAs) because the Market Price greatly exceeds the highest tariff. This makes PPAs more attractive to generators. While the Wholesale Market Price is higher than the tariffs, we expect a benefit on the FiT costs rather than a charge. This is because FiT Licensees pay the difference between the Export Tariff and the Wholesale Reference Price back into the levelisation pot, so reducing total costs.

Further out

We continue to see lower than previously forecast generation and reductions in metered export payments.



Contracts for Difference (CfDs)

Charges have fallen compared with our previous assumptions, due to an increase in wholesale market prices. However, as more generators commission the CfD, charges will increase.

Q2 2021 (April – June 2021) outturned at £7.17/MWh including £1.16/MWh, or £75.1m, for the BEIS loan amount (£7.55/MWh when deducting Green Excluded Electricity – GEE – volume).

This is predominantly driven by reductions in scheme cost (around 9% or £48m) due to low wind and higher than expected wholesale prices (Market Reference Prices).

In more detail

2021/22

Market prices on average have significantly increased since our previous newsletter. Therefore, the top-up payment levied on consumers to cover the difference between strike price and market reference price (MRP) has reduced over £3/MWh for 2021/22 from our previous forecasts.

We've seen several delays in generators, including MGT Teesside Biomass plant. This plant suffered several delays in construction and is currently expected to come online early September 2021. This reduces scheme costs in the short term.

This reduction is partially offset by the increase of strike prices into 2021/22 money, published in April by the Low Carbon Contracts Company (LCCC). This averaged an increase of 1.4% from previous years. As referenced in our previous TPC guides, we saw the recovery of the agreed £75.1m BEIS loan provided to LCCC in the April to June Quarter of 2021.

This loan covered the shortfall in funds in generator payments in the second quarter of 2020. This shortfall was caused by the drop in eligible demand due to the pandemic and added £1.16/MWh to the Q2 2021 outturn.

LCCC has reduced its published Interim Levy Rate Mid-term in every quarter so far in 2021, due to over recovery of scheme costs. This is because of increases in the Market Reference Price (MRP) over the course of this year and lower than average load factors for some renewables.

Further out

Increases in MRP will continue to reduce scheme costs from previous forecasts, but to a much lesser extent than in 2021/22.

BEIS has confirmed that for the next Auction Round (AR4), which is due to start at the end of this year, will have a draft total budget of £265m (in 2012 money) for renewable generation to start between 2023 and 2026 depending on technology. This is the first auction that includes 3 Pots, 1 for more common techs such as solar PV and onshore wind will have a draft budget of £10m and a capacity cap of £5m, Pot 2 for lesser known technologies such as Remote Island wind, Tidal and for the first time Floating Offshore Wind. Pot 2 has no capacity cap and a draft budget of £55m with a minimum of £24m for Floating Offshore Wind. Pot 3 is solely Offshore wind, again this has no capacity cap but has the biggest budget of £200m.

The final draft budget will be published at least 10 days before the auction opens in December and the results are expected to be published at the end of February/early March after the auction ends.

Capacity Market (CM)

In March 2021, both the T-1 2021/22 and T-4 2024/25 Capacity Market auctions took place.

The 2021 T-1 auction cleared at £45/kW, the joint highest auction clearing price to date, with 2.3GW of capacity gaining an agreement. This auction had 4.2GW of capacity competing for 2.4GW (up from the 0.4GW target set in July). The high clearing price is likely to have been driven by West Burton (1.7GW) exiting the auction.

The 2024 T-4 auction cleared at £18/kW, with 40.8GW of capacity gaining an agreement.

In July 2021, the parameters for the upcoming 2022 T-1 auction and 2025 T-4 auction were published.

The 2022 T-1 auction has a target capacity of 4.5GW (up from the 1.2GW target set aside in 2019). The increase follows concerns over the system shortages seen in winter 2020, and therefore may increase costs for 2022/23.

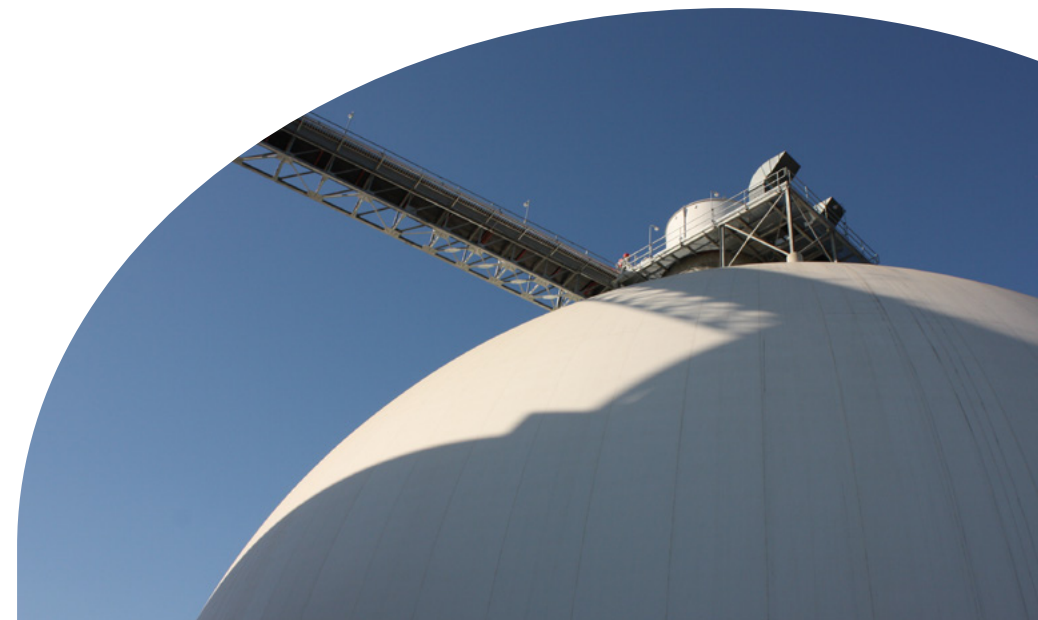
The 2025 T-4 auction has a target capacity of 44.1GW, which is a 2GW increase from the 2024 T-4 auction target.

Other TPCs

The following TPCs have seen no significant changes in the short to medium term:

- Climate Change Levy (CCL)
- Elexon
- Assistance for Areas with High Electricity Distribution Costs (AAHEDC)

National Grid published the final AAHEDC tariff at £0.404/MWh, an increase of £0.10/MWh from the 2020/21 final tariff. This is to include the additional costs to cover the Shetland Cross Subsidy (agreed by Ofgem at £27m for 2021/22).



Jargon Buster

BEIS	The Department for Business, Energy and Industrial Strategy
BSUoS	Balancing Services Use of System
CCL	Climate Change Levy
CM	Capacity Market
CfD	Contracts for Difference
CP	Compliance Period
CPIH	A new additional measure of consumer price inflation including a measure of owner occupiers' housing costs
DECC	Department of Energy and Climate Change
DNO	Distribution Network Operator
DSBR	Demand Side Balancing Reserve
DUoS	Distribution Use of System
EII	Energy Intensive Industries
EMR	Electricity Market Reform
ESO	Electricity System Operator
GoOs	Guarantees of Origin
HH	Half Hourly
ILR	Interim Levy Rate
LCCC	Low Carbon Contracts Company
LCF	Levy Control Framework
NBP	National Balancing Point
NHH	Non Half Hourly
OFGEM	The Office of Gas and Electricity Markets
RO	Renewables Obligation
ROC	Renewables Obligation Certificate
SBR	Supplemental Balance Reserve
ss-FiT	Small-scale Feed-in Tariff
TNUoS	Transmission Network Use of System
TPCs	Third Party Costs





Who are we?

At U4L, we're helping to enable a zero carbon, lower cost energy future.

We're an energy consultancy specialising in energy procurement, efficiency technologies and compliance. Our clients include a mix of hospitality, healthcare, education and manufacturing businesses. We're always looking for new partners to join us on the journey.

How can we help you?

If you'd like to find out more about how we can help you and your organisation, we'd love to talk to you.

[Get in touch](#)



u4luk.com