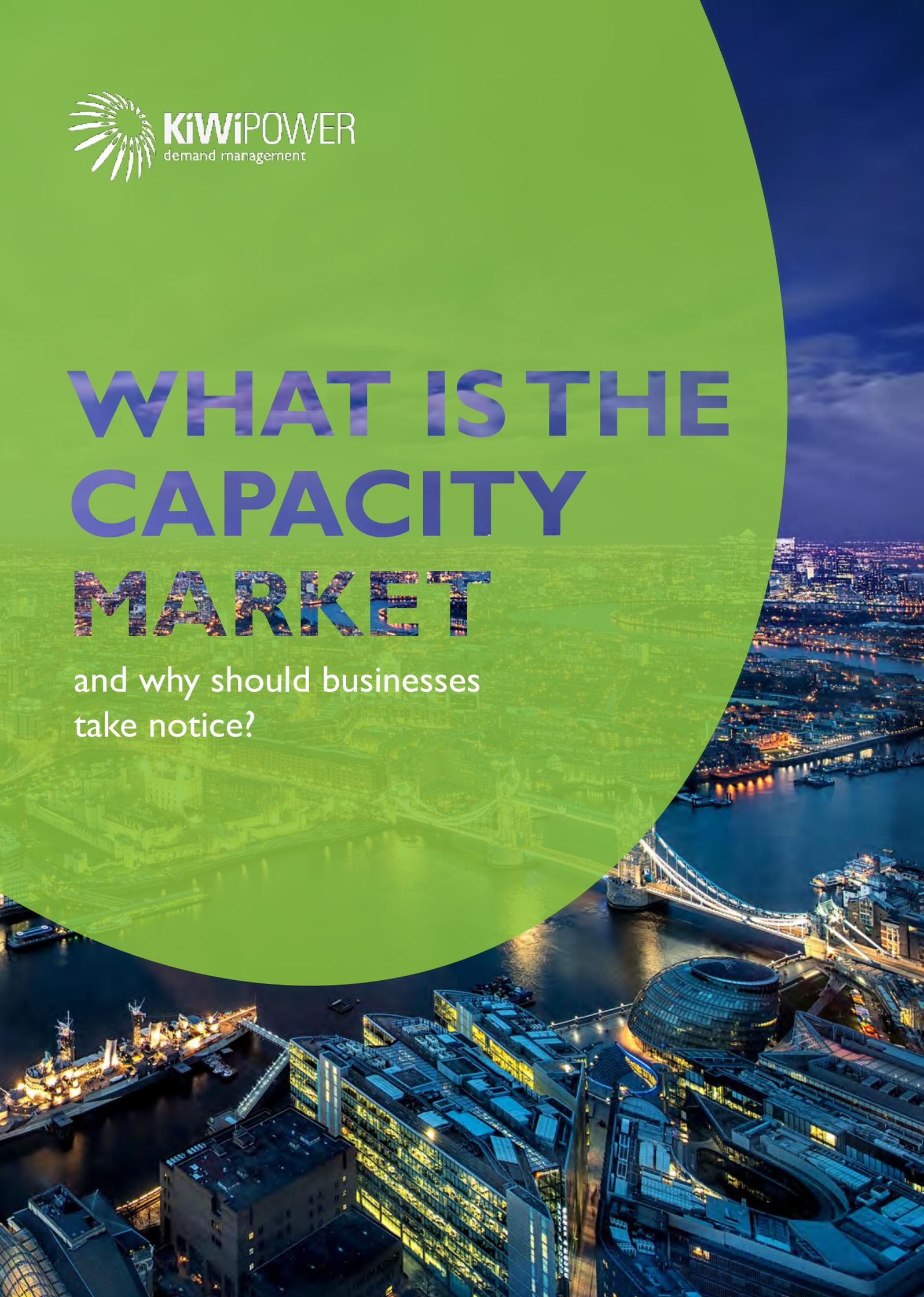




WHAT IS THE CAPACITY MARKET

and why should businesses
take notice?



What is the Capacity Market and why was it created?

The Capacity Market (CM) is the biggest reform in the UK's energy policy in over 20 years. It was set up to create a mechanism to provide capacity to replace old, polluting power stations reaching the end of their life with new, lower carbon ones and encourage smart grid technologies such as demand response. The Capacity Market is one of the main building blocks of the UK Government's Electricity Market Reform programme. Its overarching goal is to ensure adequate capacity within an electricity system that in future will rely increasingly on intermittent wind and inflexible nuclear generation. The immediate focus is on replacing the 25% of the UK's generating coal fired capacity that will have shut down by 2020 due to Large Combustion Plant Directive (LCPD, 2001/80/EC).

The CM offers a unique opportunity for businesses to be part of the future UK smart grid and has clear aims of providing commercially attractive options for businesses to take part in providing capacity with the established mechanisms of demand response.

Secretary of State for Energy & Climate, Amber Rudd's, "Energy Policy Reset", announced 1 March 2016, now also takes into account the changing energy generation landscape and sharp, unpredicted decline in the UK's capacity margin.

For businesses looking for opportunities to take part, it helps to understand the mechanics of the Capacity Market Auctions and how they work.



How does it work?

New, more efficient, less polluting power stations and demand response providers are awarded an annual capacity allotment and price per megawatt through competitive tenders. These are held once per year, and through three different auctions: T-4, T-I and the Transitional Arrangement (TA).

T-4 Auctions

These auctions are held each year and the winners of contracts then have four years to build power stations. Two auctions have been held in 2014/15, for generation delivering capacity in 2018/19. Prices for this auction cleared at a lower price than was anticipated at £19,400 and £18,000 per MW in 2018/2019 respectively.

T-I Auction

These auctions are held each year for delivery of capacity the following year. They are to provide "top-ups" for the main T-4 auction and are specifically designed for demand response. The first T-I auction was originally designed for delivery in winter 2018. Following the Energy Reset proposals on 1 March, T-I will be brought forward for delivery in winter of 2017/18 - providing an additional year of revenue.

TA Auction

The TA is a special demand response auction set up to encourage businesses to get involved in balancing the grid. It is designed to deliver two years ahead of the T-4 delivery. The first auction was held in January 2016 with prices clearing at a much higher level than expected at £27,500 per MW in 2016/17.

How can businesses take advantage of CM Demand Response opportunities?

National Grid has committed to 30-50% of grid balancing requirements being met through demand response by 2020 and the Government has created the CM with a view to commercially incentivising businesses to get involved in demand response. This represents not only a significant commercial opportunity to participating organisations, but an imperative to secure supply.

There will be an increasing number of options for businesses to benefit from taking part in helping to balance the grid. The CM provides several opportunities to do so. It is expected the 1 March Reset proposals will remove some anomalies in the way the auctions have been designed, including any mutual exclusivity between T-4 and TA/T-I.

There will be an increasing number of options for businesses to benefit from taking part in helping to balance the grid.

Businesses will select which auction is right for them by the amount of revenue they want to receive for participating and when they want to receive it.

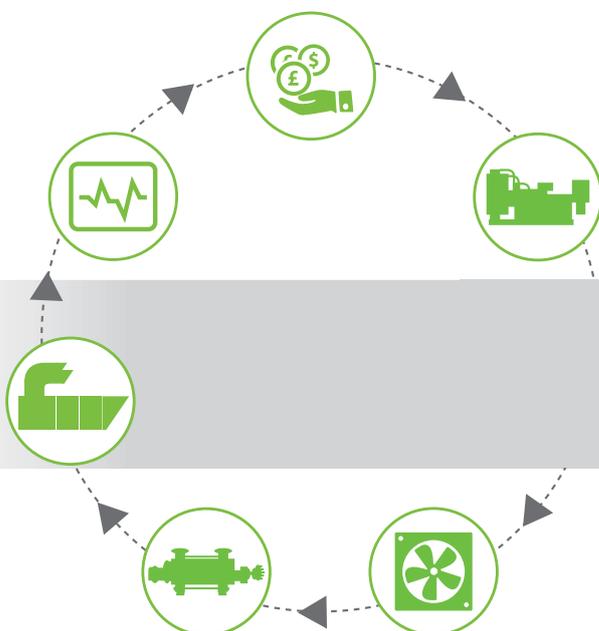
To simplify this, the opportunities for businesses are as follows. (Amounts indicated are the gross amounts per megawatt of committed demand reduction from the grid):

The T-4 amounts cleared at lower than anticipated levels and are fixed rates of earning for businesses for 2018/19.

	2016/17	2017/18	2018/19	2019/20
T-4	£0k	£0k	£19,400 per MW	£18,000 per MW
T-1	£0k	Brought forward under reset c.£20 - 25,000 per MW (expected)	c.£20 - 25,000 per MW (expected)	c.£20 - 25,000 per MW (expected)
TA	£27,500 per MW	£27,500 per MW (expected)		

The TA auctions cleared at higher than anticipated levels and present an immediate opportunity for businesses with backup generation to start earning from Winter 2016. Combine this with expected levels of earnings for TA in 2017/18, the brought forward T-1 opportunity and the anticipated removal of mutual exclusivity between programmes and there is a very material revenue generation opportunity, at the best available rates, **for businesses who act now.**

It is anticipated that in 2020, capacity auctions will align and contracts will be procured in a single auction moving forward.



Businesses that act quickly can earn significant revenues at the best rates, but they must act now.

HOW CAN YOU TAKE PART?

What are the technical requirements for participation?

Businesses must be able to reduce consumption from the grid during a time of system stress. This can be done by adjusting processes to decrease consumption or switching to backup generation for brief forewarned periods.

These periods are expected to occur when demand is at peak or during a significant event, such as failure of a power station. These events are expected to occur infrequently, perhaps a few times per year, and limited to a four hours in duration. Businesses are paid the indicated amount for being available for these events 24 hours, 7 days a week.

In order to take part, suitable smart metering technology is installed, together with control equipment and strategies to reduce load. KiWi Power designs, manufactures and installs all the equipment necessary for CM participation and payment using DECC funded, National Grid approved technology and hardware.

How does this work with existing Demand Response programmes such as STOR, Frequency Response and Triad Avoidance?

- ✓ For businesses already participating in existing demand response programmes such as STOR, Frequency Response or Triad avoidance, it is likely that all the required equipment and processes are in place to benefit from CM immediately.
- ✓ Depending on the assets you have metered and the flexibility of your processes, you could participate in a combination of programmes.
- ✓ KiWi Power has the largest allocation of TA capacity volume available.
- ✓ KiWi Power's technology and smart meter provides our clients access to a full suite of grid balancing programmes.

Find out what this means for your business.

Almost any site can participate in balancing programmes. KiWi Power works across all industries, from heavy industry to hospitals to multi-site water utilities and international hotel groups. A brief site audit is conducted to assess what is required to get assets up and running in balancing programmes.

KiWi Power manages the full process for clients from conducting site audits, installing all required equipment and site / asset monitoring, at no cost.

Contact us TODAY to ensure your site can be enrolled by 31 May 2016 for inclusion in the Transitional Arrangement.



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