

TIME TO SHIFT FROM BEING **AN ENERGY CONSUMER**

TO AN ENERGY PROSUMER

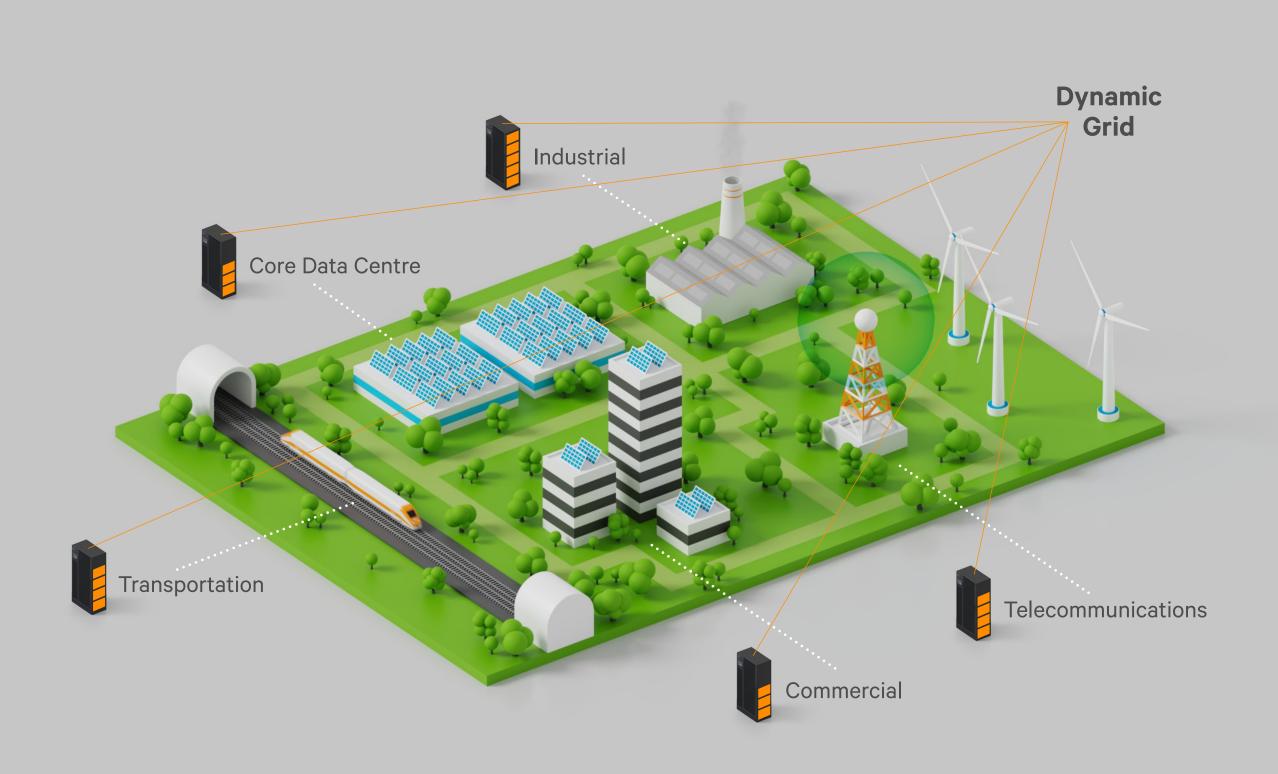




Owners of UPS devices are generating new revenues and saving money from energy storage combined functions

Are you?

Dynamic grids need additional flexibility at times when none is available Grid operators will pay for UPS that serve as battery energy storage



allows you to come off grid at peak times

REFERENCE DATA CENTRE - IRELAND

UPS

UPS energy storage

ever compromising availability

DATA HALL

20 MW with 5 mins autonomy in N+2 arrangement

to save money without



THROUGH YOUR NATIONAL GRID Discover how much you can earn each year over a 5-year fixed term contract

CREATE NEW REVENUE STREAMS

	Addressable Load*		9,600 kW		
	Available UPS Energy**		320 kWh		
	Flexibility Contract Structure (annual incomes on 5 year contracts)	Battery Seconds/Minutes	UPS Only (€000s) 9.6 MW load	UPS & Diesel Generators*** (€000s) 9.6 MW load	
-	Fast Frequency Response****	0.5 – 10 s	562	562	
	Primary Operating Reserve	5 – 15 s	495	495	

Туре)	Fast Frequency Response****	0.5 – 10 s	562	562		
(Response	Primary Operating Reserve	5 – 15 s	495	495		
ices (Re	Secondary Operating Reserve	15 – 90 s	299	299		
m Services	Tertiary Operating Reserve	90 s – 5 m	-	237		
System (Tertiary Operating Reserve (manual)	5 – 20 m	-	189		
	Steady State Reactive Power (reactive)	Indefinite	39	39		
	Diesel Generator Income	20 m – 8 hr	-	154		
	Total Site Revenus p.a.****		1,400	1,975		
Revenues are assumed to be set at regulated rates (based on Nov 2017), although some may be lower due to competitive auctions						

Notes * Addressable load is 50% of design load with no export capacity.

** Available UPS energy is based on 1 minute worth of energy (i.e. 20%) at design load being made available for occasional System Services. This is ½ minute at addressable site load based on a UPS system with 5 minutes of autonomy at design. *** Technical feasibility and potential revenues available with extended run-time due to pairing generators with UPS to be confirmed.

for high-availability services such as batteries.

**** Scalar applied to service provided quicker than 2 seconds, the base Firm Frequency Response (FFR) requirement. ***** Figures might not sum exactly due to rounding.

Let us be your single point of contact for demand side response:

A new model to save energy A new revenue model for costs by going off-grid at



No risk to critical IT or

businesses who own UPS devices



You are always in control of

peak times



No legal, licensing or

non-IT loads



power decision making



administrative barriers to entry

Widely used in Germany, Spain,



opt-out at any time

Be part of sensible

You control the right to



UK, US and growing sustainability



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