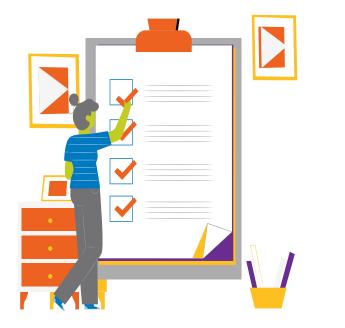


# Make DeCarbonisation Secure, Smart and Affordable



# What is the problem?





#### 20% 15% 10% 5% 0 2010 2015 2020

Quarterly-average cost of balancing the UK power system, as % of generation cost (Source: Drax Electric Insights)

## **Problem Statement**

- No digital tool to integrate EV, Solar, Heatpump and Battery with Time of use tariff price and grid trading
- Customers(C&I and residential) can't sell their electricity flexibility back to grid easily
- 3. Serious delay with grid connection offer(6-8 years waiting list)

# What we do about it

### **Orange Power's** Power Rewards<sup>TM</sup>

is AI powered autonomous energy trading, controlling and settlement system. It can offer site connection with minimum impact to network with no additional cost

Currently managing 38MW consumer flexibility with 6-12MW tradable flexibility.

- We are Air B&B in energy.
- We turn every sites/home into a virtual power plant
- We connect Ultra EV charging(10-20mins charging time) with 0-minimium kw additional grid capacity requirement with minimum cost



## **Products and Services**

#### **Trading Platform**

1st of its kind platform that integrated with grid in different markets. Turn each site into power plant

Receive trading command from 8 different energy markets like congenital generators

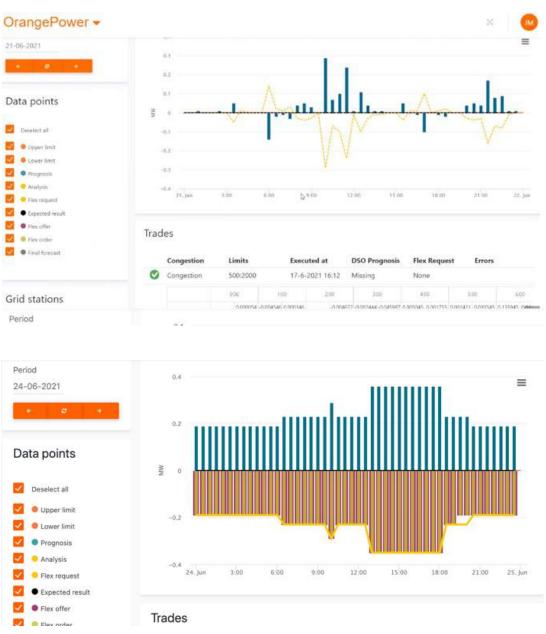
Translate trading command into control command to liked site devices to help out grid like a power plant

Auto tracking of each household contribution and auto settlement and get paid from grid to customers Ultra Fast charge

Software+Hardware based solution that running almost decoupled with minimum disturbance to grid

- 8-16 times more 180kw Ultra fast charging station to be managed with dynamic load control
- 2. All sites capable of V2G
- 3. High utilisation rate and and high ROI
- 4. Fast connection without delay
- 5. Minimum upgrade cost

### Confidential



## **Orange Power Current Projects**



Orange Power

Your Virtual Power Plant

Confidential

## **Orange Power Team**

12 years in Energy Trading & Grid



Operation

Justin Ma **CEO**/ Director of Operation and Business Development



12 Years

software

backend

experience

Scott Taylor Interim Engineering Manager



Harpal Singh Senior Developer 6 years JS



Nikhil Abraham Software Engineer



Ioannis

Mobile

Lafazanis

developer



Ismail Akinsemoyin Tester/QA



Mahendar Verma I.O.T Manager



Jun Ming Moey Software Engineer





Akash Murali Full stack Developer Mohammed Azhar Frontend Developer



Ajil Oommen Head of Product

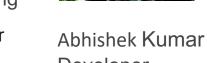
6 years Mobile development



Yassine Bebba Interim-Head of Engineering

4 years Full Stack Developer





Developer



Microsoft





# Appendix



Orange Power

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KY10.2

#### Public Charging station Power Rewards<sup>™</sup> Solutions

Power Rewards<sup>™</sup> connect to over 100 public charging points. We have managed trial with the charging points of following service:

- Flexible connection
- DSO Constraint Management
- ESO Constraint Management
- Virtual Lead Party for balancing mechanism



#### Confidential

#### Battery Storage Power Rewards<sup>™</sup> Solutions

Power Rewards<sup>™</sup> connect to 20 batteries. We have managed trial of following service:



- Frequency response
- DSO Constraint Management
- ESO Constraint Management
- Virtual Lead Party for balancing mechanism
- Capacity Market

#### Heatpump Power Rewards<sup>™</sup> Solutions

Power Rewards<sup>™</sup> connect to over 30 Heatpumps. We have managed trial of following service:

- Flexible connection
- DSO Constraint Management
- ESO Constraint Management
- Virtual Lead Party for balancing mechanism



### Confidential

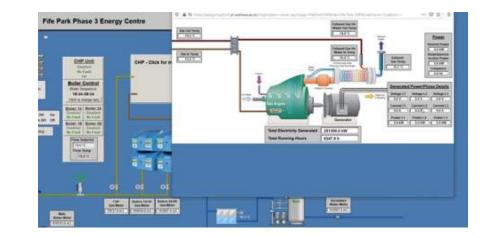


#### Confidential

## CHPs Power Rewards<sup>™</sup> Solutions

Power Rewards<sup>™</sup> connect to 3 CHPs. We have managed trial of following service:

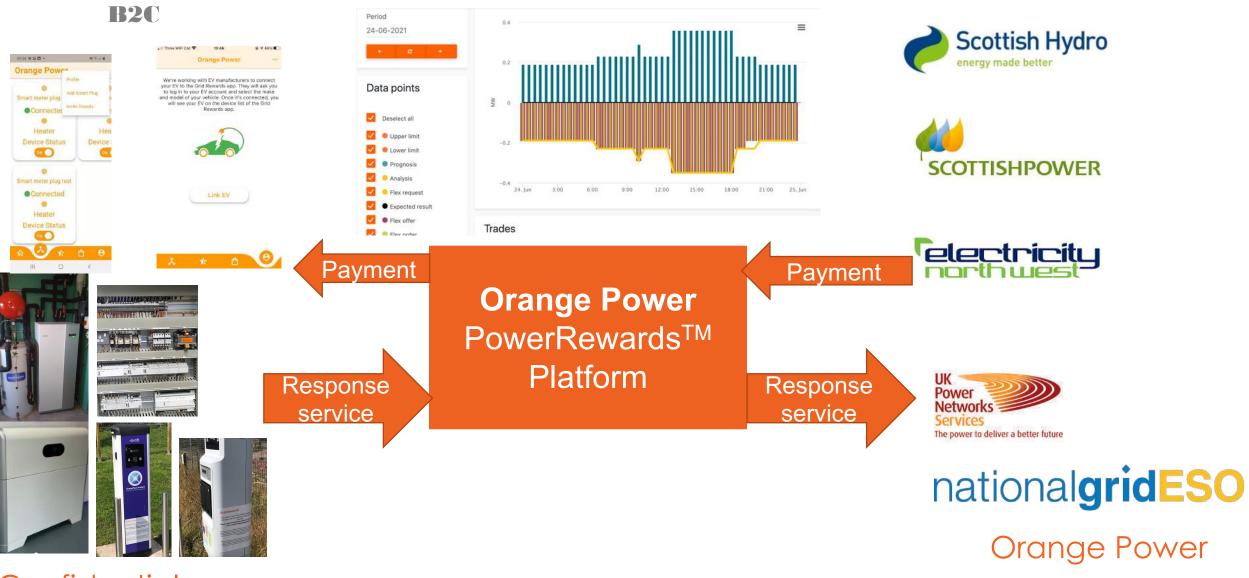
- DSO Constraint Management
- ESO Constraint Management
- Virtual Lead Party for balancing mechanism





## **Orange Power** Power Rewards<sup>™</sup>

#### **B2B**



Confidential

## EV Power Rewards<sup>™</sup> Solutions

#### Confidential

Power Rewards<sup>™</sup> connect to 100 EVs. We have managed trial of following service:

II Three WiFi Call	<b>?</b> 13:46	. ♥ 46% ■
	Orange Power	
your EV to the to log in to yo and model of y	g with EV manufacturer Grid Rewards app. The our EV account and sele our vehicle. Once it's c Ir EV on the device list Rewards app.	ey will ask you ect the make onnected, you
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#### One login to connect 12 brands of EVs

- Free charging during windy condition(Constraint management)
- Virtual Lead Party for balancing mechanism

22:01 🖬 🌥 🖬 🔸

myAudi account

· Make and model information

· Control of vehicle charging

· Control of charging schedule

To show mileage, we'll access:

Odometer reading

Deny

111

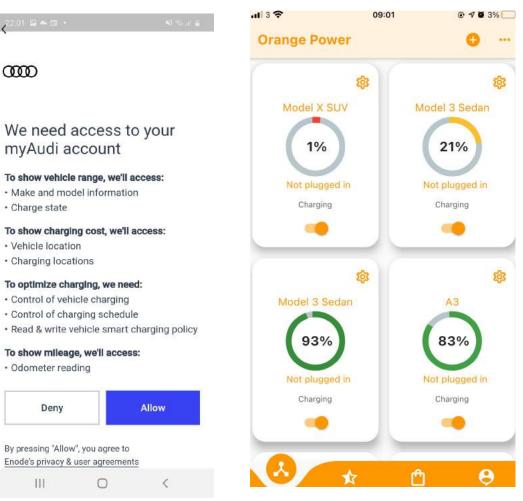
By pressing "Allow", you agree to Enode's privacy & user agreements

0

· Charge state

 Vehicle location Charging locations

000



## **Orange Power**

Please join us on this journey. With our technology, we will achieve Net Zero faster

# THANKS

Any questions?

Justin.ma@orangepower.co.uk www.orangepower.co.uk



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