



Cornwall Local Energy Market

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Flexibility Workshop

13 February 2020











Imperial College London

Cornwall LEM overview

Platform

- V1 'Quote and tender' DNO flex procurement market
- V2
 - Auction-based market for local flex for constraint management
 - DNO & ESO buyers
 - Auto-clearing
 - API + UI
 - Designed for optimal system value



Business

- CHP, storage, renewables, DSR
- 6 installations
- 5,600 tCO2e saved / yr
- 100 energy monitoring grants



Consumers

- 100 homes
- Solar PV and Storage
- Microaggregation to LEM platform

Research



- Regs and policy barriers
- Quant. of systems benefits
- LEM value proposition



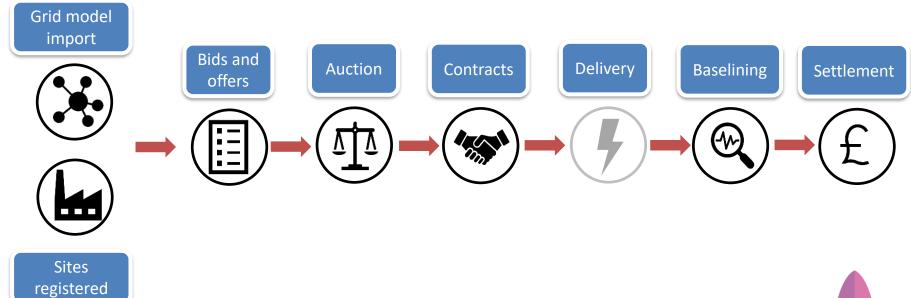
LEM explained

Key capabilities of the LEM platform



More than auctions

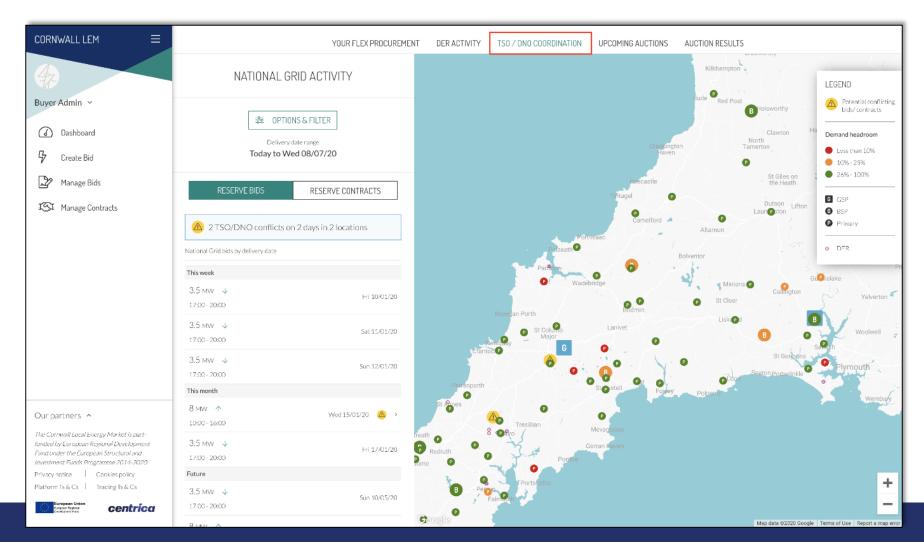
The platform manages the end-to-end process





T/D Co-ordination

Informational and within the Algorithm



Platform trials

DSO and ESO Activity

~300MWh

Reserve contracts target

~150MWh

Utilisation contracts target

201 MWh

Reserve contracts secured to date

90 MWh

Volume Delivered to Date

11 locations so far:

7 Primary Substations 3 BSP's 1 GSP

Seller Activity

25MW+

Registered Flexibility in Cornwall

41 Dispatches

Including residential battery VPP

End-to-End Platform Functionality

107 Auctions Run

