

Revenue Streams and Value Pools of Storage Assets in GB

The Energyst DSR Event 2017

Eamonn Boland, Senior Manager, Baringa

eamonn.boland@baringa.com



An Overview of Baringa Partners



We aim to be the consulting partner of choice for our clients, based on a flexible approach, deep industry knowledge and excellent people

Our history

- ▶ Baringa was founded in the UK in 2000, we have over 500+ employees and a market turnover of approximately €120m
- ▶ Baringa is a market-leading consulting company with a focus on energy and utilities, commodities, financial services and telecoms
- ▶ Baringa Partners' end-to-end consulting capability is unique in the Energy consulting space, with market leading expertise in governmental policy and regulation, corporate, commercial and operational strategy, and the delivery of operational change (through organisation, process and IT)

Our people and culture

- ▶ We attract top talent due to our culture, business model (ten years in the top 10 – UK's Great Place to Work) and the quality and nature of our client work



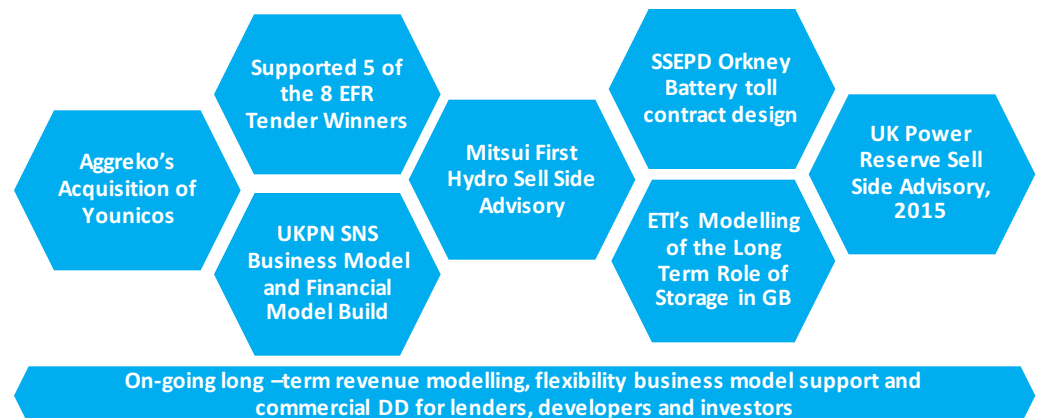
Strategic footprint

Our strategy: "good for our people, our clients and our brand"



¹ ASG: Austria, Switzerland, Germany

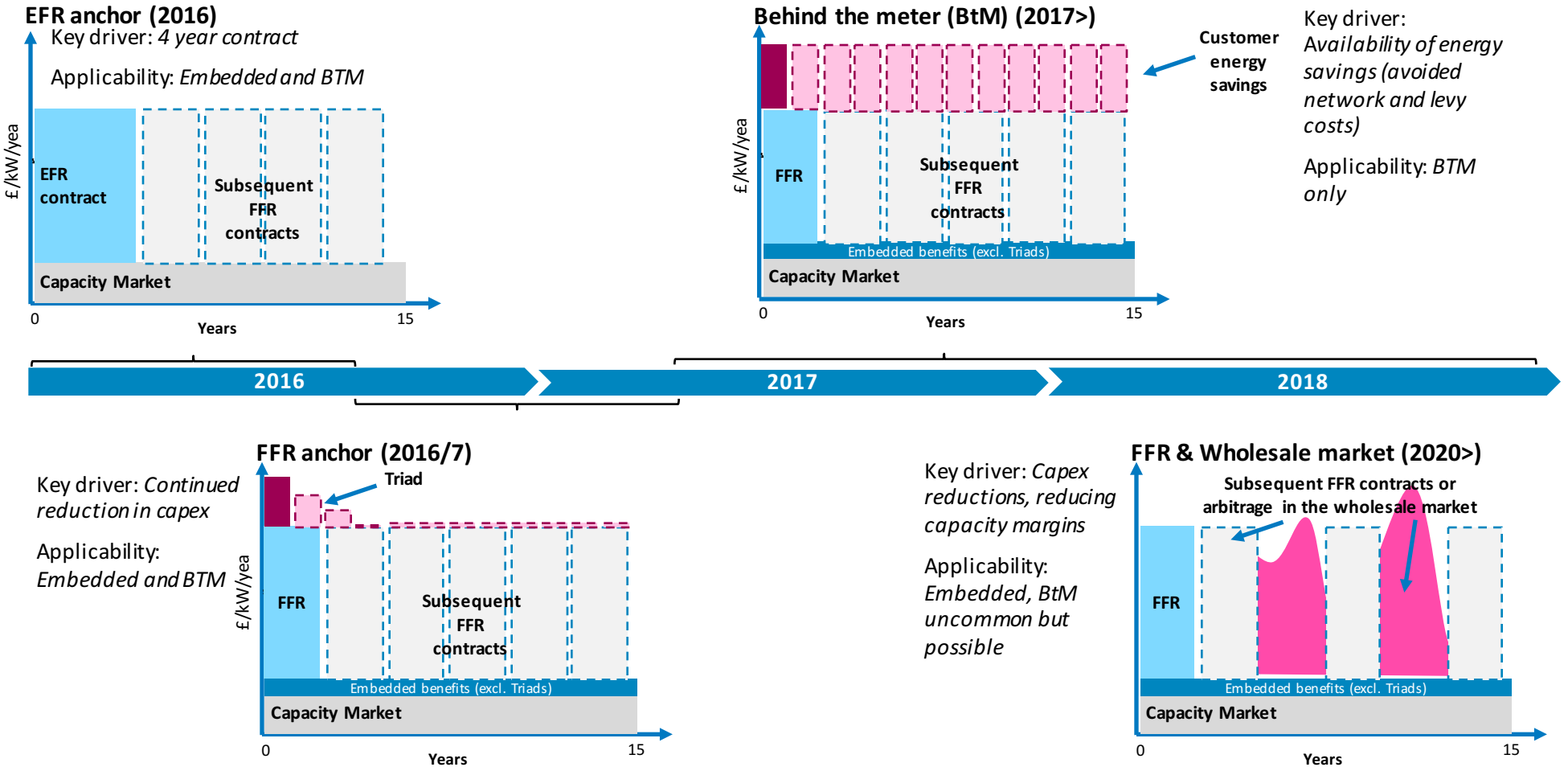
Some Flexibility Projects



Evolving business models of battery storage



Asset contracting models will change as markets saturate, open and closed and as regulation changes



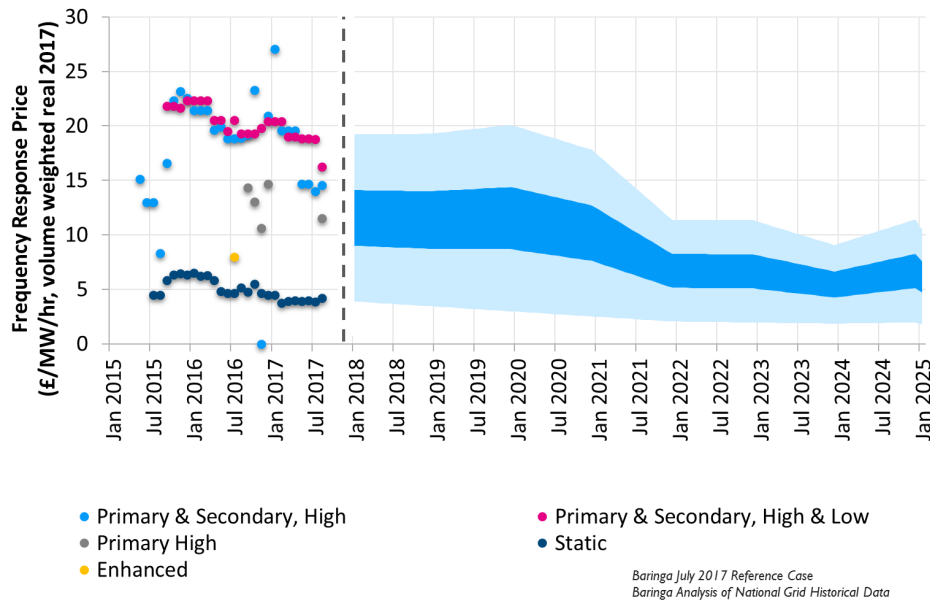
Business Model of Battery Projects Today



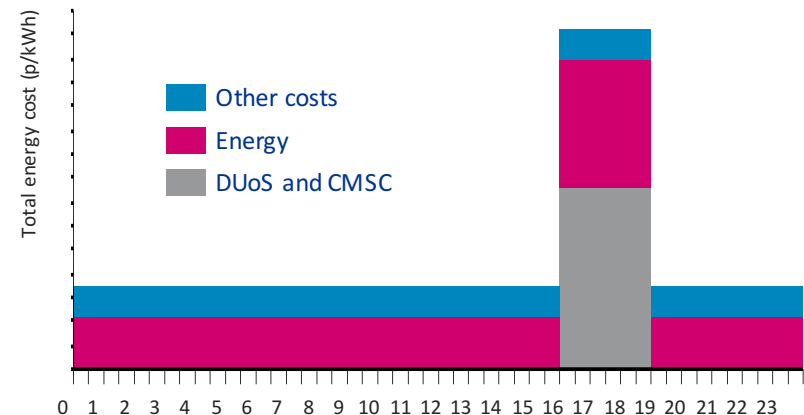
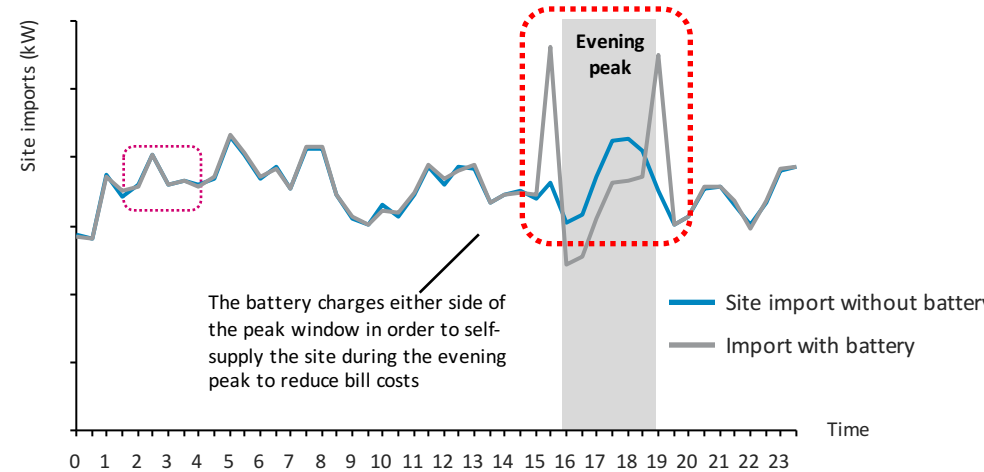
The frequency response market cannot sustain the level of battery interest while maintain historical price levels, while other market opportunities are difficult to access at scale

Frequency Response Markets

- ▲ Frequency Response at today's prices can support battery deployment
- ▲ The shallow market ~2 GW cannot sustain battery deployment without price compression
- ▲ Lower CAPEX batteries in the future will require lower FFR prices potentially stranding existing assets



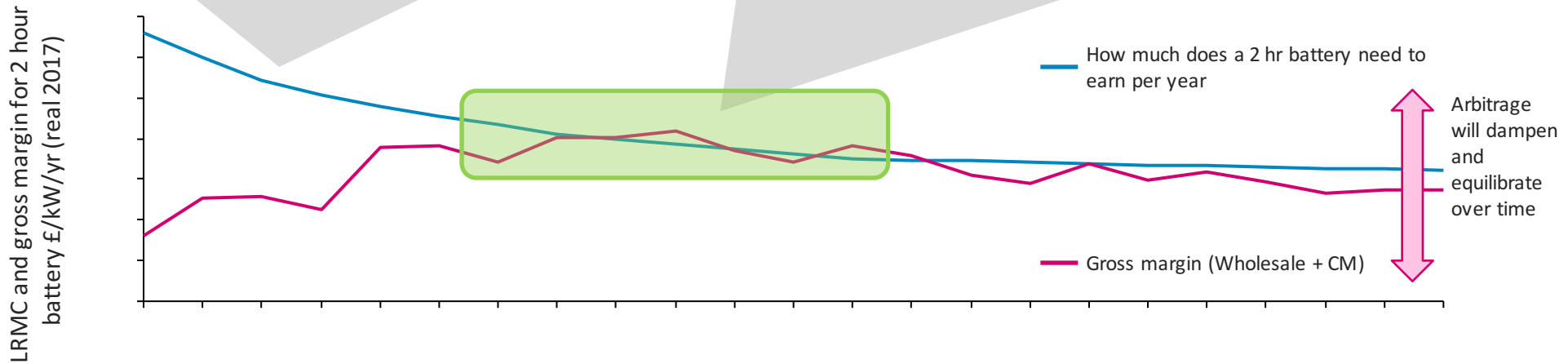
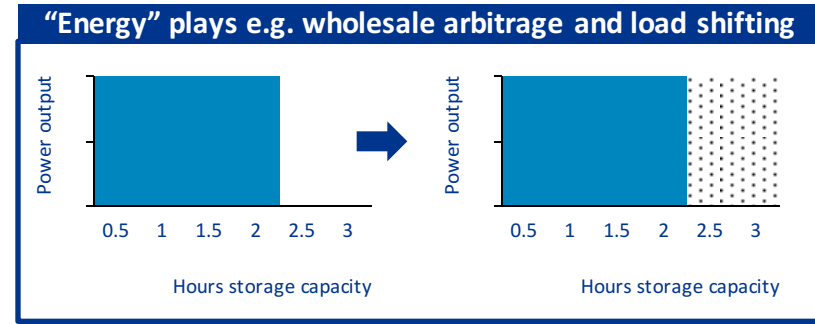
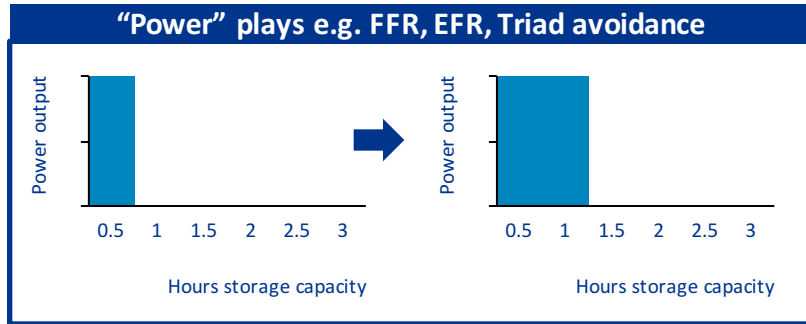
'Behind the Meter' Batteries



Wholesale electricity and balancing market arbitrage



As battery costs decline wholesale power and balancing mechanism arbitrage will become commercially viable, offering a deeper merchant revenue pool for batteries





This document: (a) is proprietary and confidential to Baringa Partners LLP (“Baringa”) and should not be disclosed to or relied upon by any third parties or re-used without Baringa's consent; (b) shall not form part of any contract nor constitute an offer capable of acceptance or an acceptance; (c) excludes all conditions and warranties whether express or implied by statute, law or otherwise; (d) places no responsibility or liability on Baringa for any inaccuracy, incompleteness or error herein; and (e) is provided in a draft condition “as is” and any reliance upon the content shall be at user's own risk and responsibility. If any of these terms is invalid or unenforceable, the continuation in full force and effect of the remainder will not be prejudiced. Copyright © Baringa Partners LLP 2017. All rights reserved.