



Corporate Presentation

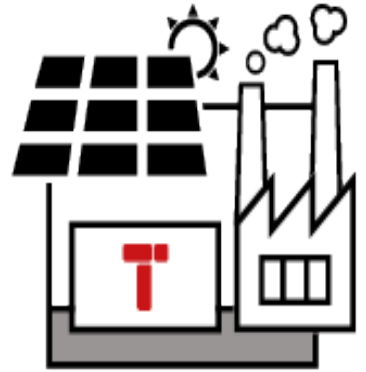
redT energy plc (AIM:RED)

Executive Summary

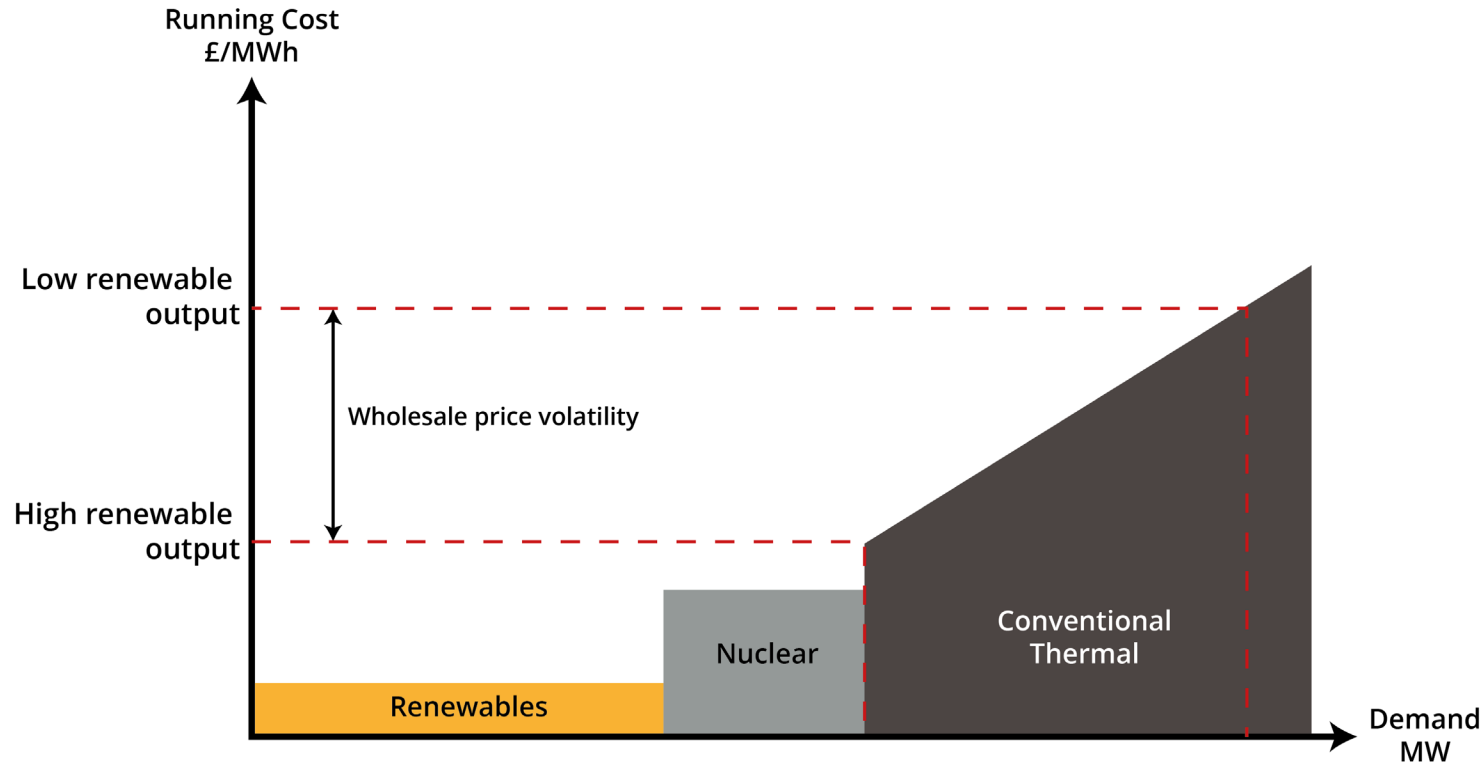
- Energy storage to enable cheap baseload renewables
- Trusted energy storage expert with 20 years in the sector
- In-house proprietary, heavy-cycling flow machine technology
- Energy storage solutions (including finance) in key sectors; C&I, Grid, Large Solar
- Business model; product margin and 20 year asset management contracts

Sector Opportunity

Macro trends in global energy and the role energy storage will play in our future energy system



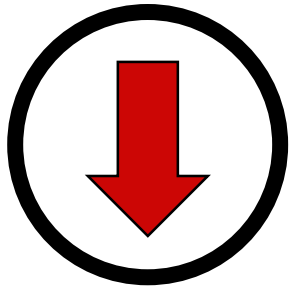
A changing generation mix



- Low-cost renewables are replacing gas and coal power from the merit order
- Drives increasing volatility in the wholesale power market, opening up new opportunities for energy storage

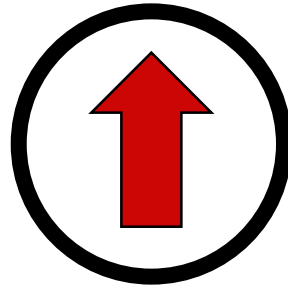
Solar + Storage: Tipping Point

Price of Energy



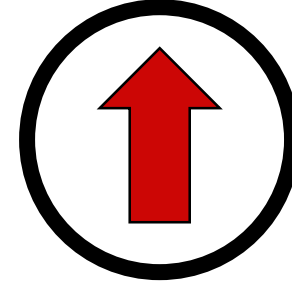
*Tending to \$0/kWh
Free abundance of energy*

Power Price Volatility



Peak Prices Rising

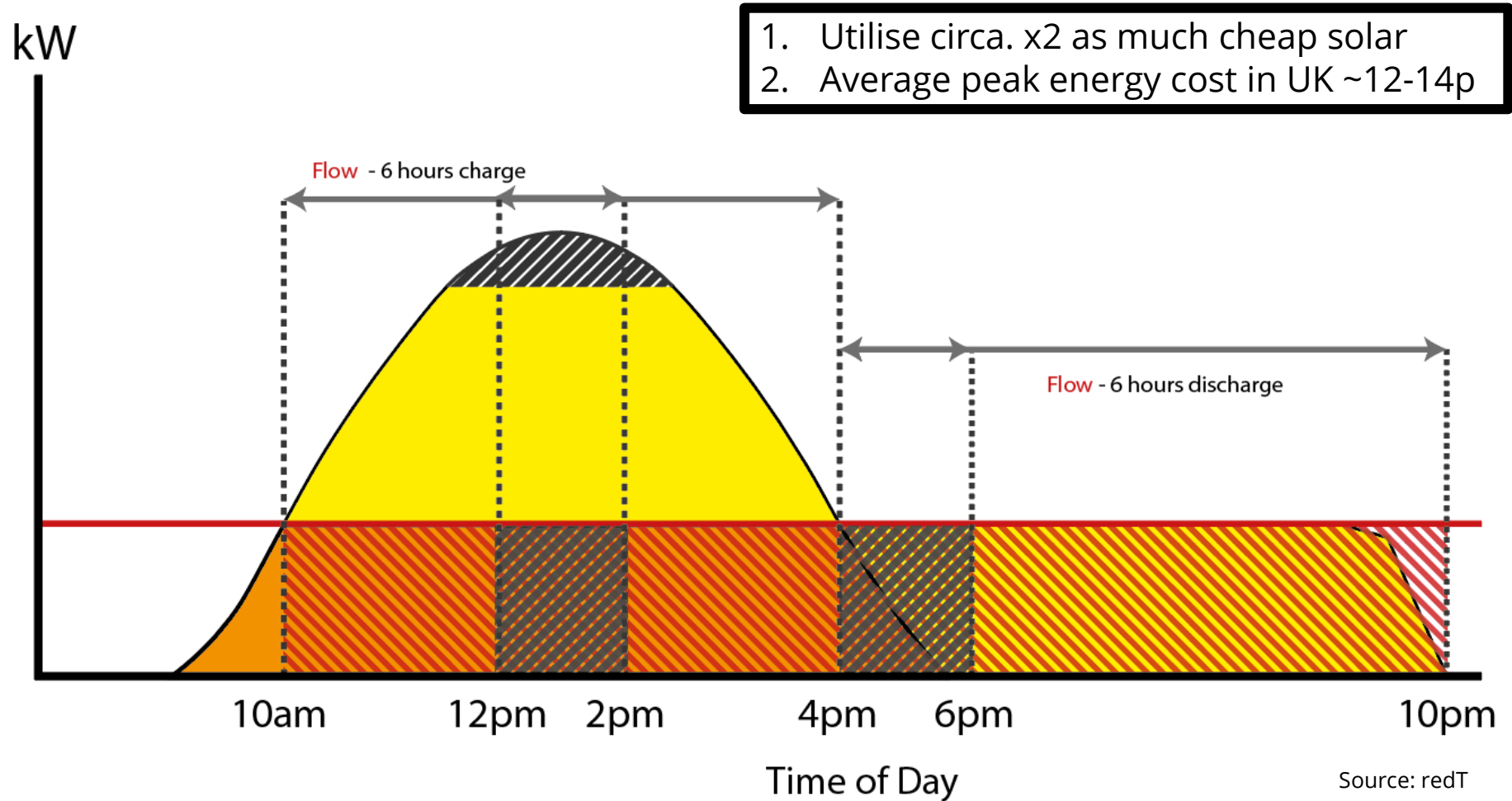
Grid Service Revenues



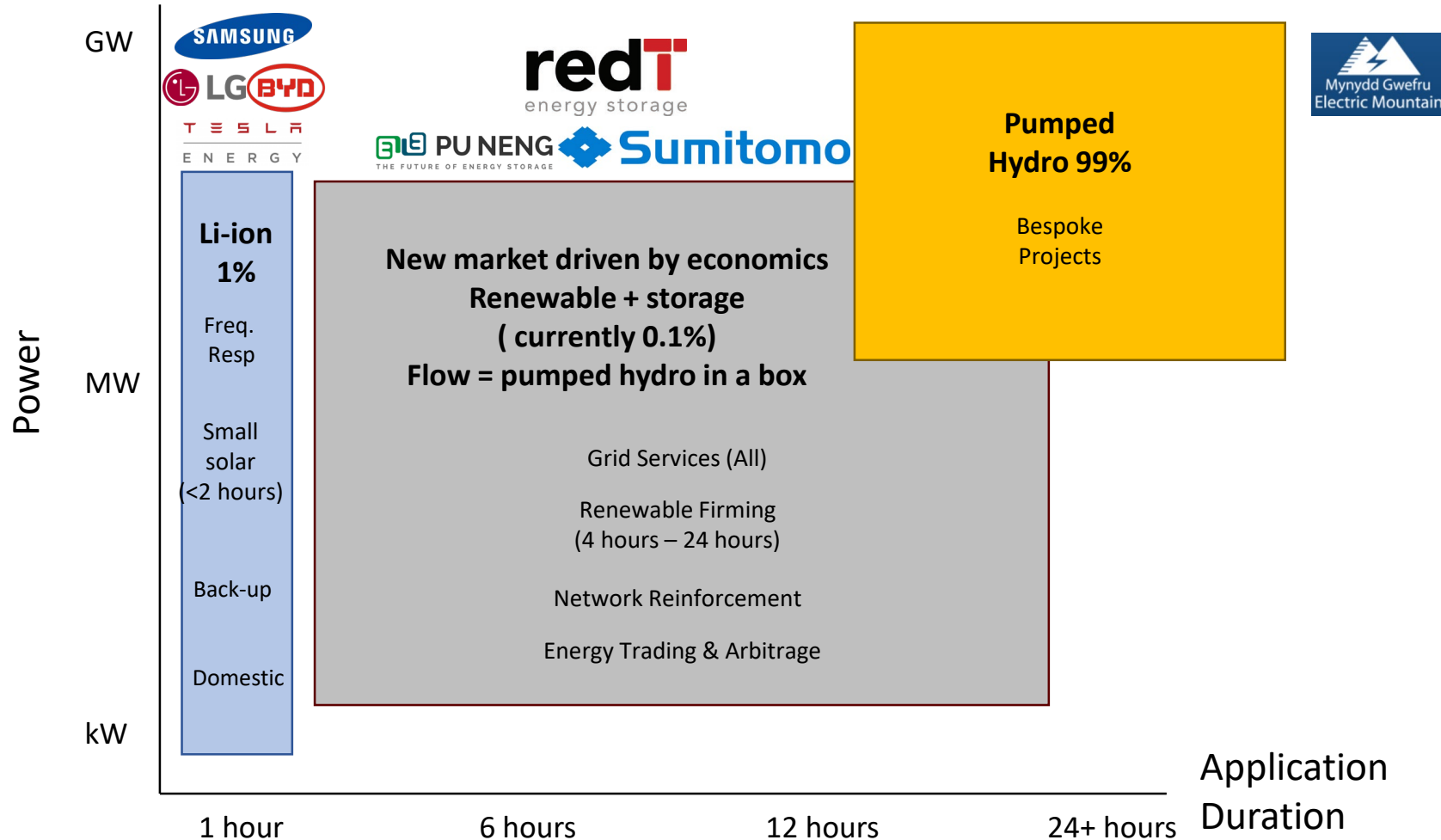
USA, UK + others coming online

Energy storage is enabling more renewables to come online
Cheaper, cleaner energy, globally

Maximise Use of Cheap Solar Power

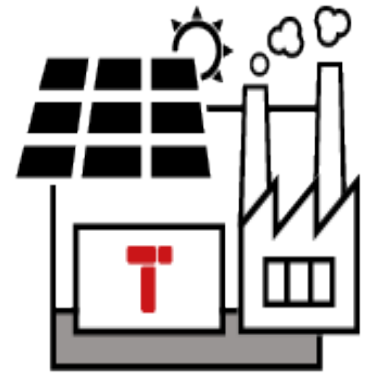


Stationary Energy Storage Market



Company Overview

redT energy – key differentiators, technology and position within the sector



Who we are and what we do



Trusted experts

- **20 years** in energy sector – detailed client models
- **Our experts are based in:** London, Edinburgh, Denver, Munich, Johannesburg, Melbourne and Bangkok.



Technology

- **IP proven, patents, know how**
- **Energy storage machines** and **Lithium batteries**
- **>1.8 million machine operating hours**
- **Gen 3** functionality



Solutions and finance

- **Low risk infrastructure** – 20+ year assets and 3rd party validated
- **Financed solution** available
- **Bankable** with **Product insurance**

Our experience and track record

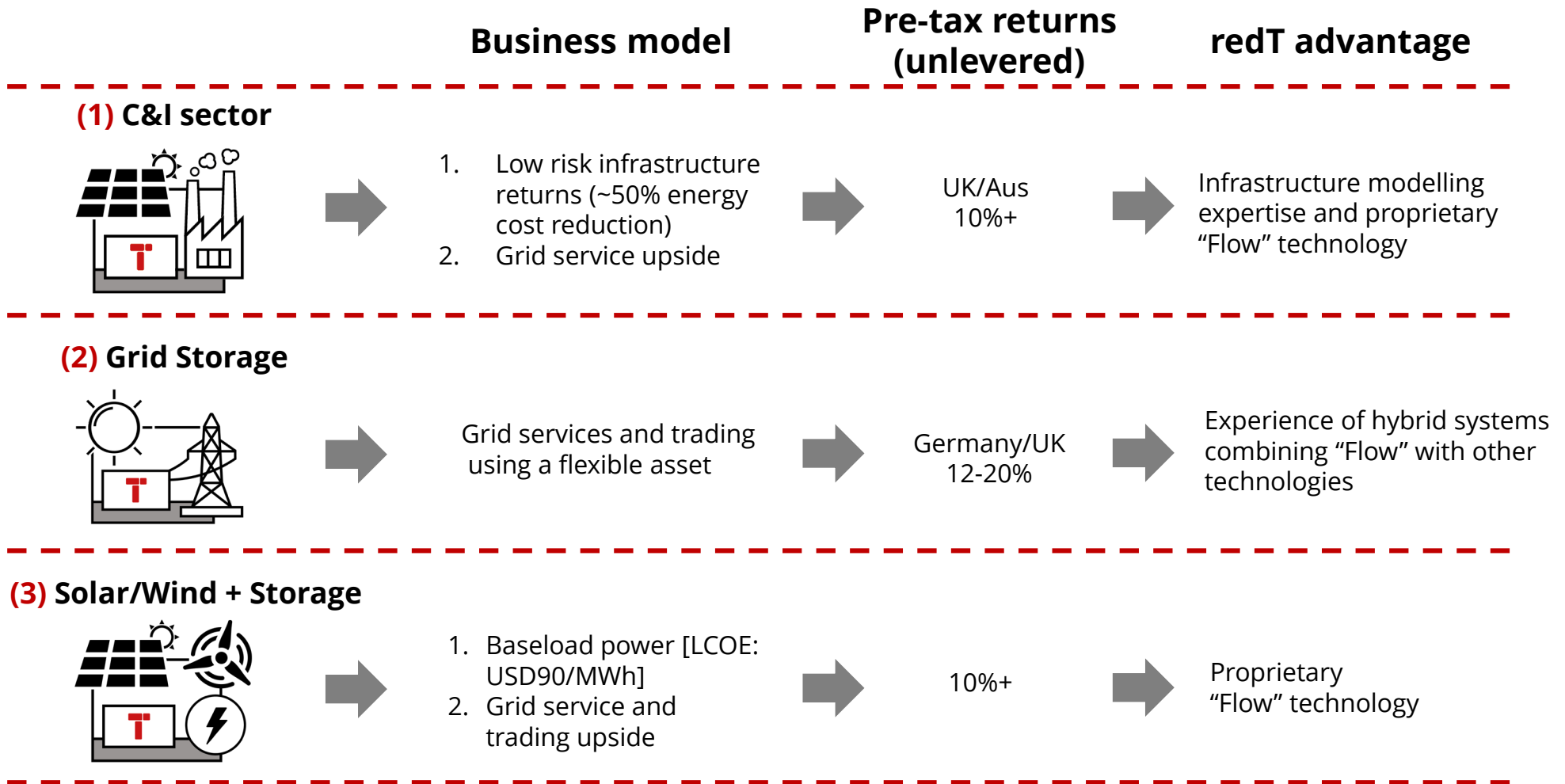


Recent Contract Wins

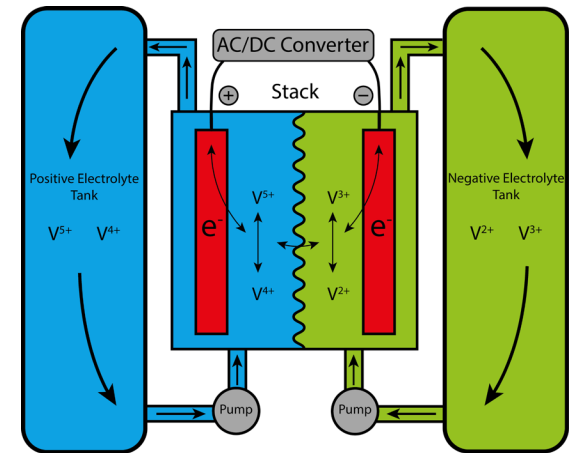
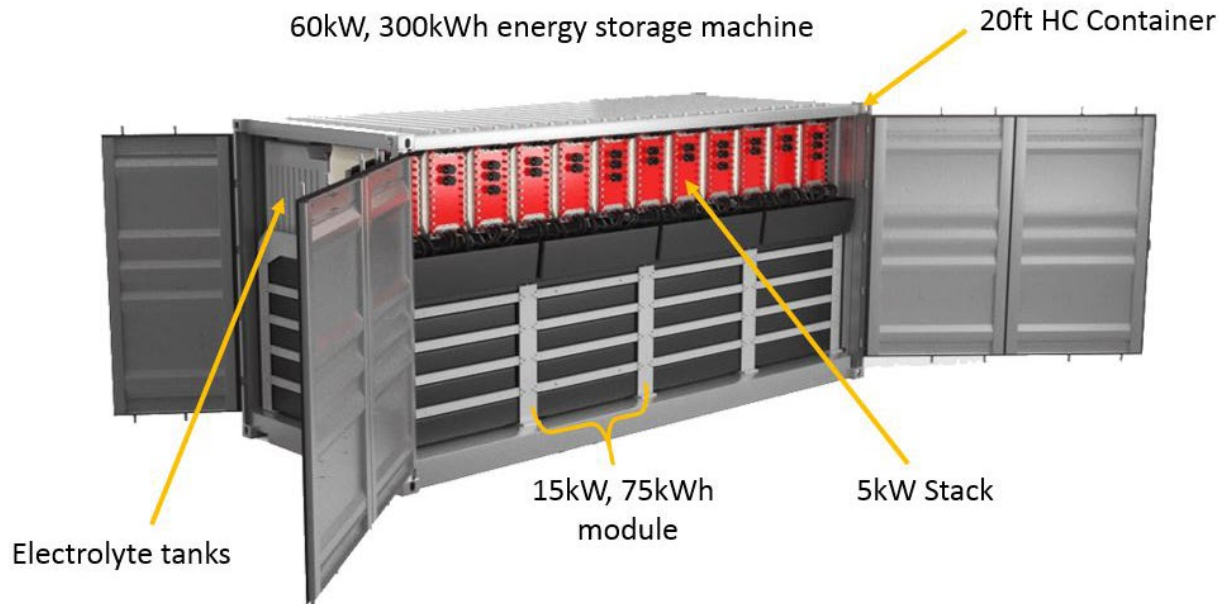
- Anglian Water: Collaboration agreement and initial 4 unit order for pathfinder site
- Awarded framework contract to supply the NHS and UK Public Sector
- German grid storage 700MWh of projects
- Australian largest commercial BTM system Lithium + Flow 1MWh



Our energy solutions and finance

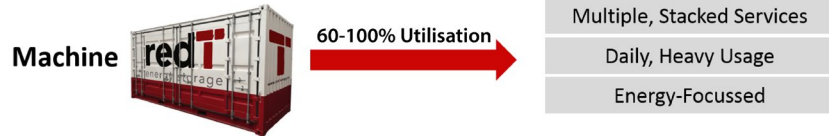


How redT Technology Works

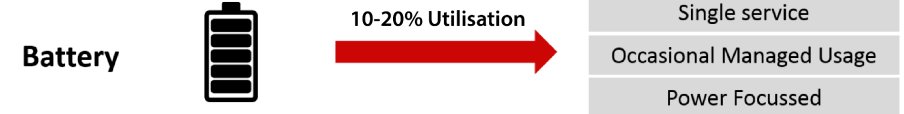
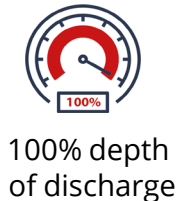


redT – Flow Machine Technology

Differentiation within the energy storage sector



Pumped Hydro in a box - Doesn't degrade
Lowest Levelised cost, financeable, infrastructure asset



High cost of degradation – Single application use
High Levelised cost, requires regular replacement

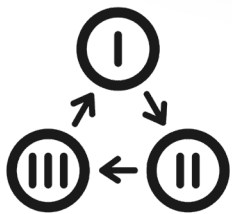


Our flow machine technology

Pure Vanadium redox flow machines



Gen 3 Technology with
embedded functionality to
enhance customer returns



Simple



Durable

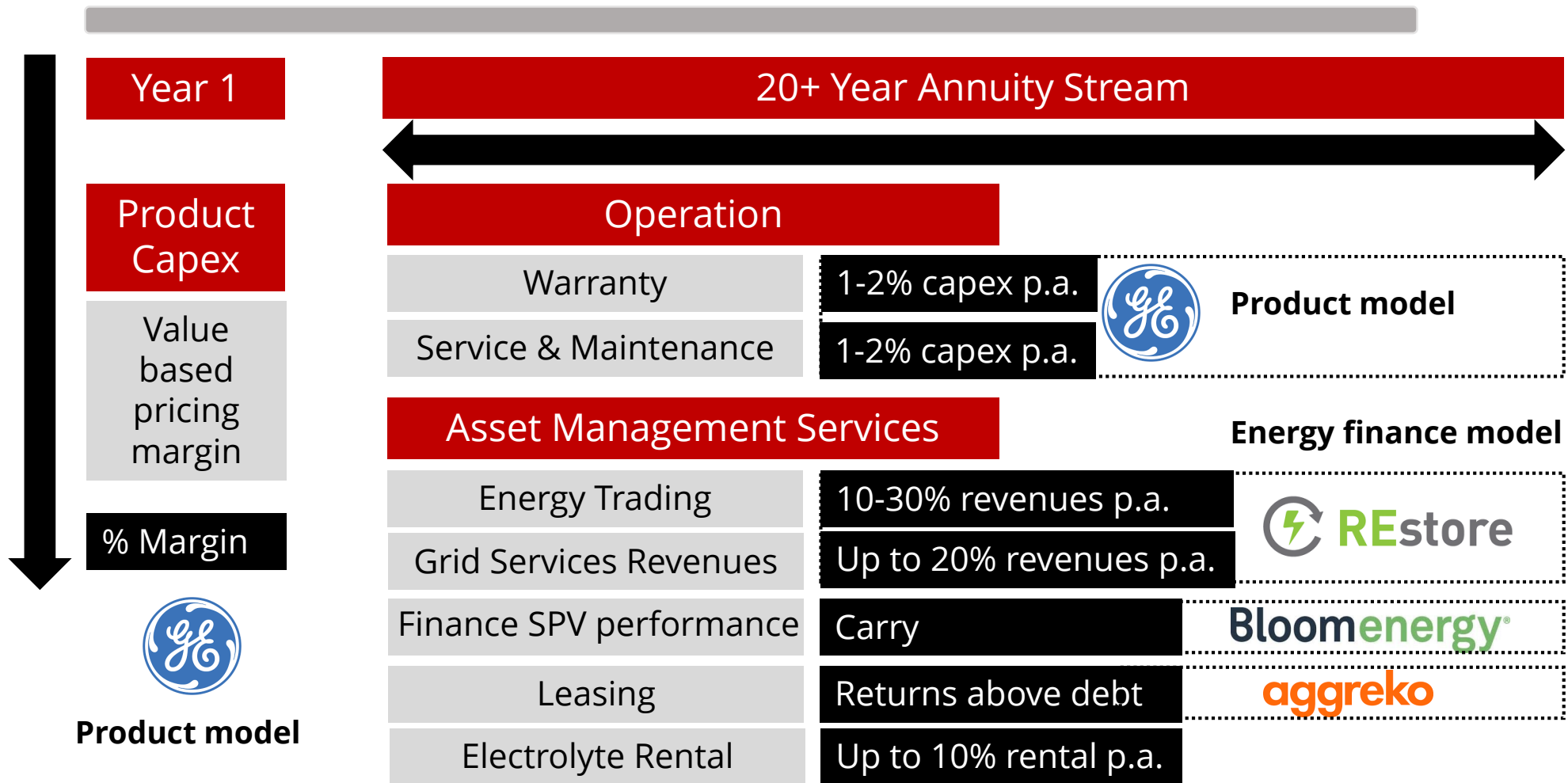


Low-Risk

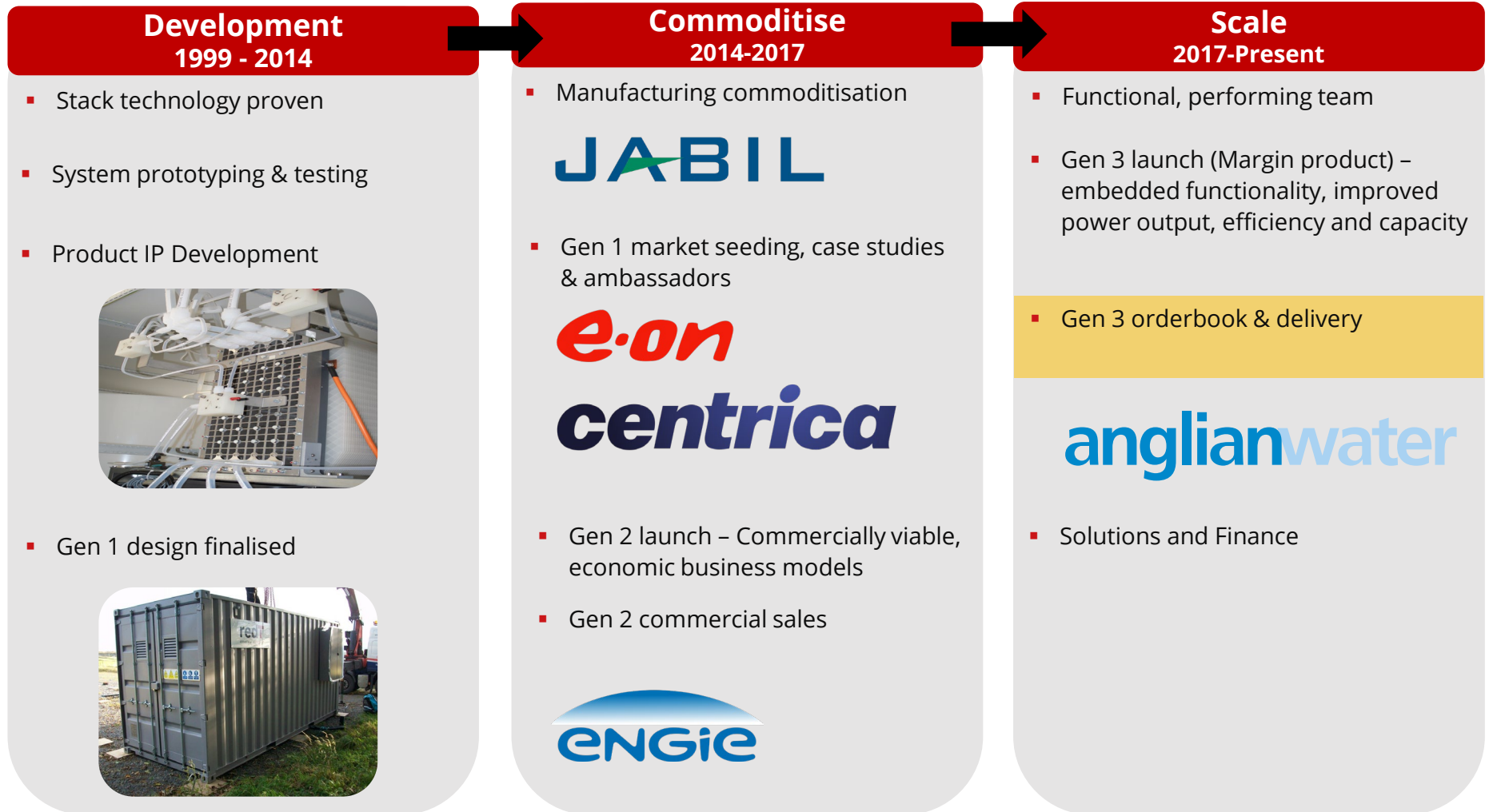


Flexible energy infrastructure

redT - Business Model



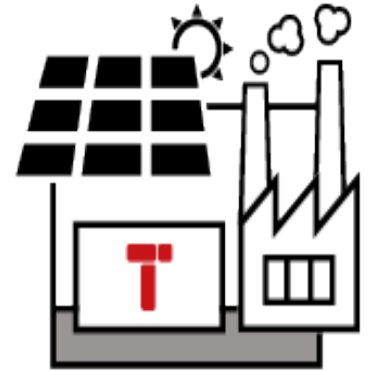
Development Map



Market Opportunity

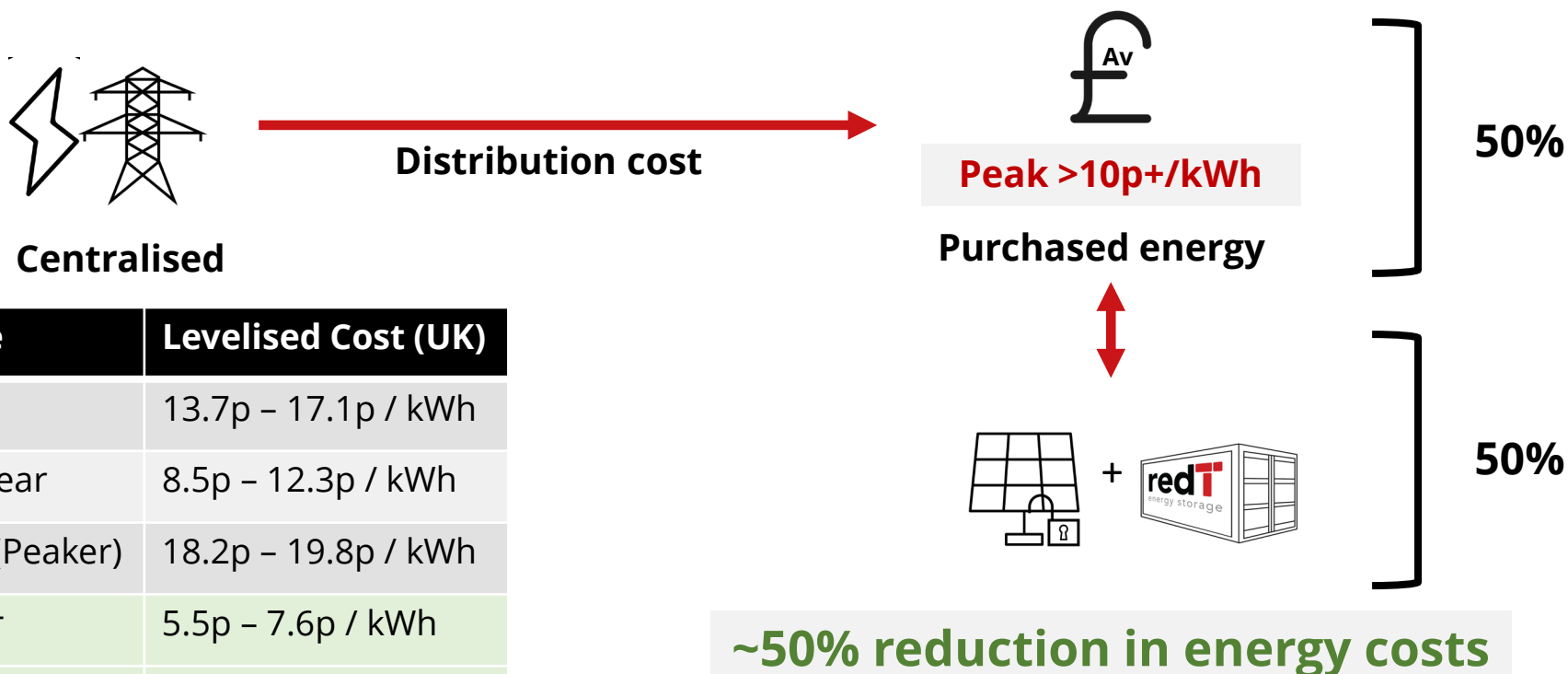
Core Customers:

1. Commercial BTM C&I
2. Grid Storage
3. Large Solar + Storage FTM



Sector 1: Distributed energy infrastructure

Distributed energy storage infrastructure is now open for business
This is real, economic, distributed infrastructure



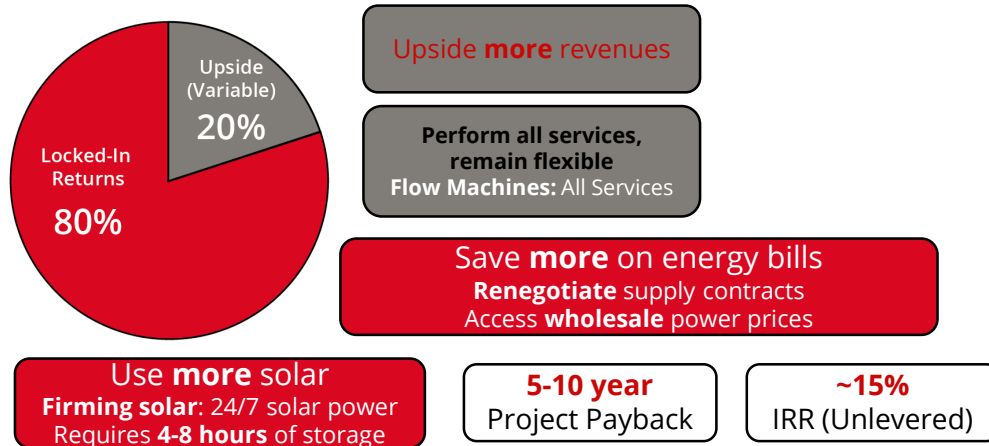
Type	Levelised Cost (UK)
Coal	13.7p – 17.1p / kWh
Nuclear	8.5p – 12.3p / kWh
Gas (Peaker)	18.2p – 19.8p / kWh
Solar	5.5p – 7.6p / kWh
Wind	4.6p – 7.4p / kWh

Source: BEIS (commissioning in 2025)

Behind the meter distributed energy infrastructure

Sector 1: Commercial BTM C&I

redT PV + Energy Storage Infrastructure



Market : 5,000+ sites & \$500m capex in the UK

Recent Contract Wins

- Anglian Water: Collaboration agreement & Initial 4 unit order for pathfinder site. **(August 2018)**
- Awarded framework contract to supply the NHS and UK Public Sector **(September 2018)**

Sector facts:

- ✓ Energy costs core to business (water sector 50% of site costs)
- ✓ Low risk infrastructure investment
- ✓ Pressure due to rising energy costs
- ✓ Desire to reduce carbon impact – harness 2x PV

Sector Opportunity

- ✓ Simple energy solution: PV + Storage + Energy supply billing

Sector 1: Case study – Anglian Water



Initial site – 300 kWh redT machine and 700kWp solar

redT machine:

- Increase site solar from 240kWp to 700kWp (~3x more PV)
- Reduces energy costs by up to 50%
- Unlevered pre-tax IRR 10+%

Anglian Water:

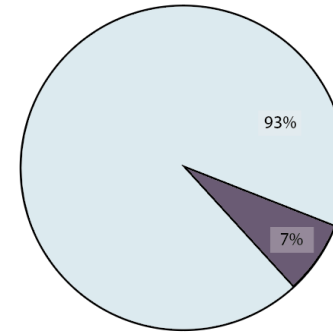
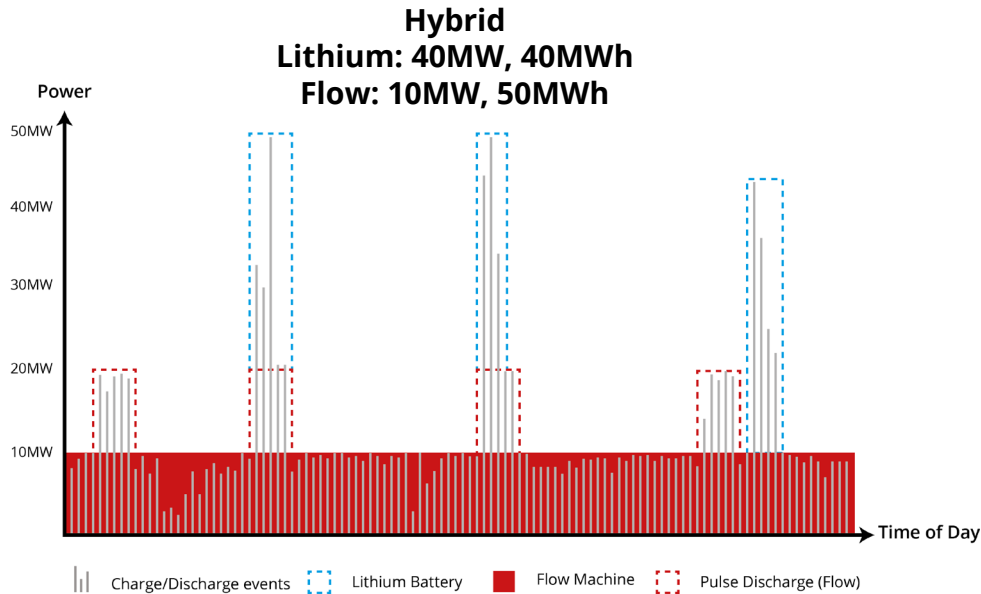
- Installed to date 15% renewables (106GWh)
- 30% renewables by 2020
- redT solution can accelerate decarbonisation by doubling renewables by site
- 7,000 sites in the UK

redT and Anglian Water collaboration agreement to optimise solar & energy storage, ideally financeable structure across Anglian sites

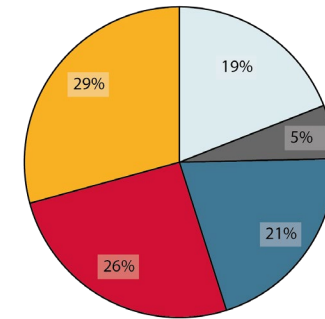


Sector 2: Grid Storage

Market Value: \$bn's – initial markets
UK, Australia & Germany



~5-7%
IRR (Unlevered)
Single revenue
risk



~10%+
IRR (Unlevered)
Diversified asset

Wholesale Market
Imbalance
Embedded Benefits
FFR
Capacity Market
Various Trading

Source: redT

Sector Facts

- ✓ Grid assets subject to policy and market risk
- ✓ Current market: bespoke, inflexible assets
- ✓ redT hybrid provides flexible diversified asset for 20+ years

Sector Opportunity

- ✓ Flexible Diversified Asset for trading advantage
- ✓ Asset can be worked hard for returns due to no degradation
- ✓ Bankable infrastructure asset

Recent Wins

- Exclusivity on 700MWh portfolio of German grid projects (**July 2018**)

Sector 2: Case Study - German Grid Storage

Initial project

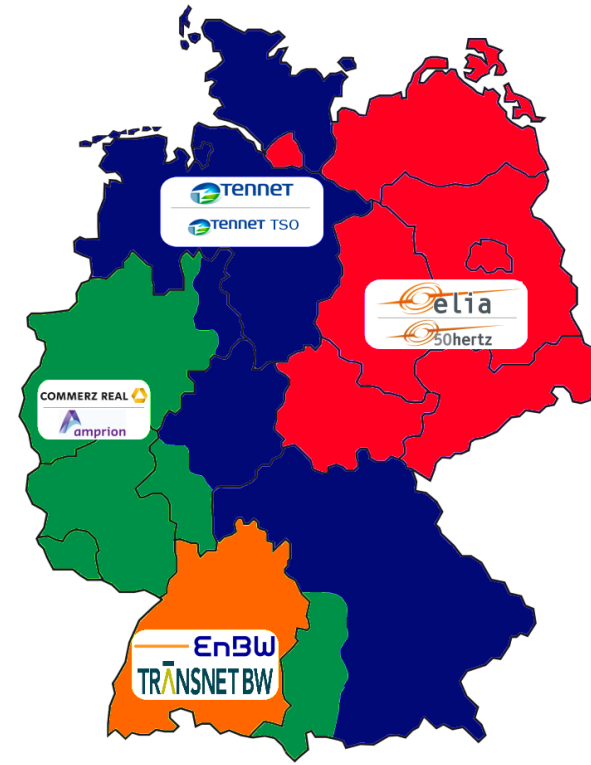
- 8MWh (200 redT units) hybridised with 32MW Gas turbines
- Heavy cycling flow machines (>30% load factor) enable addition of low cycling gas generation to maximise project returns

German SCR Market – Energy storage 2.0

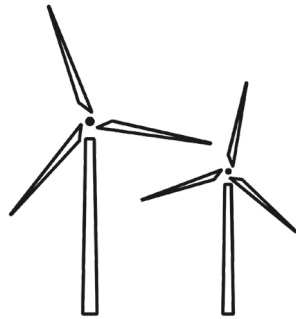
- 4 hour service to balance grid – true balancing of grid
- redT first project 1% of current SCR market
- Current services by Coal – 5 minute ramp time
- Coal will phase out – renewables will create more SCR market
- Deep market 2GW+ Secondary Control Reserve

Further Phase

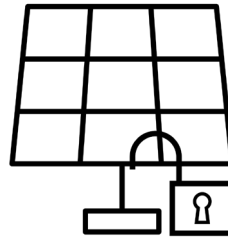
- 2nd project identical to initial project + further project expansions
- Total exclusive project portfolio ~700MWh



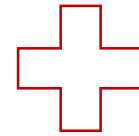
Sector 3: Solar/wind + storage



Wind



Solar



Long duration
energy storage

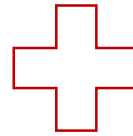


Baseload Energy

Now < \$90/MWh

Future < \$50/MWh

New sector in UK: Energy storage + EVs



Long duration
energy storage

EV charging
infrastructure

Cheaper connection costs for EV chargers

- Smaller connection size required when storage used
- Ability to implement 'flexible' DNO connections for the site

Ability to create arbitrage opportunities

- More cost effective procurement of energy
- Additional revenues for charging station operators
- Cheaper "cost of charge" to end customer