

Stationary Energy Storage: Young and Fast Growing Market

By

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Electricity Is Not Storable Commodity (Yet)

Volatile prices and supply problems

Energy and money waste



Energy Storage Is a Solution

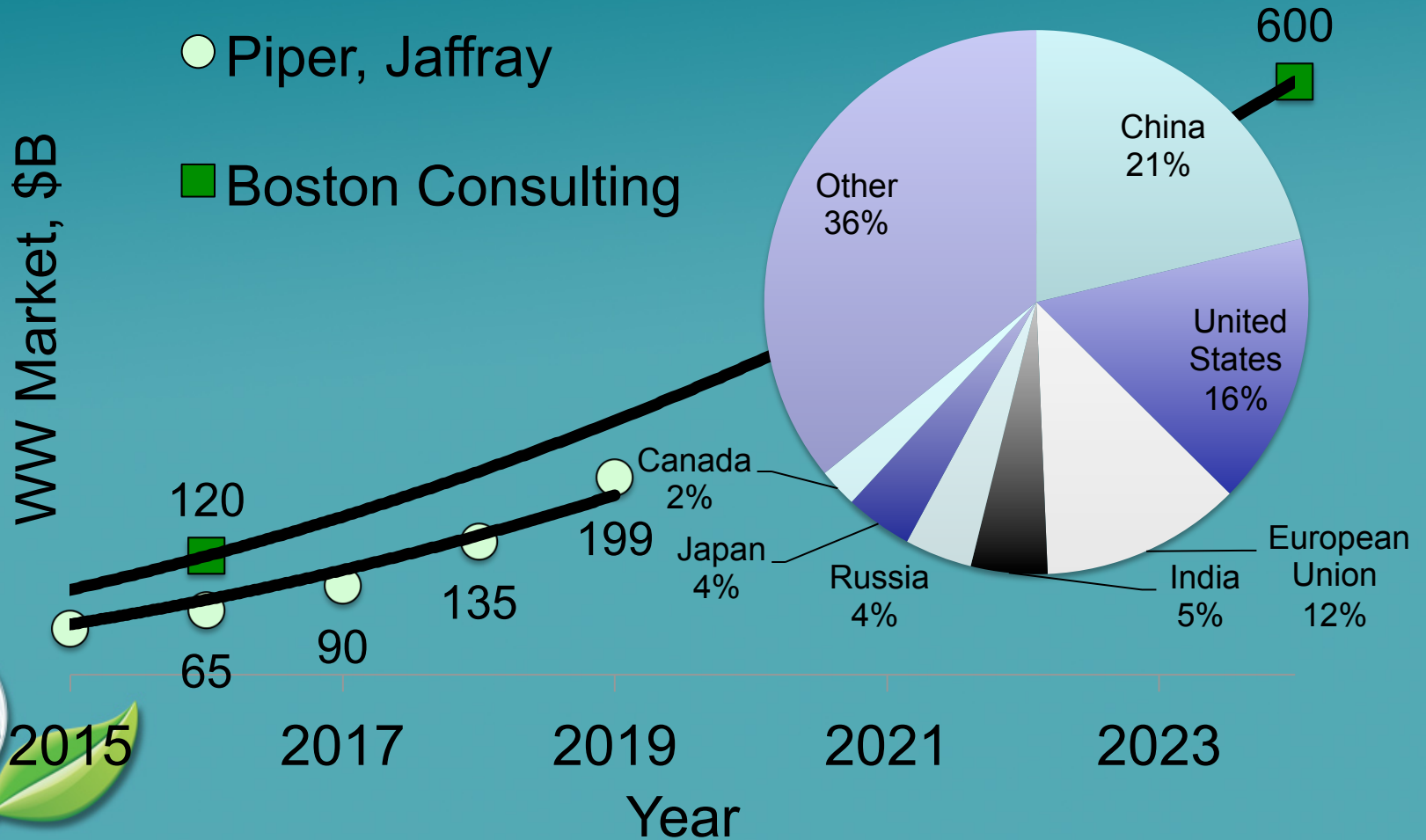
It turns electricity into a storable commodity for customers big and small

Efficient use of electricity generated instead of increasing generation

Stable supply & up to 40% reduced electricity price



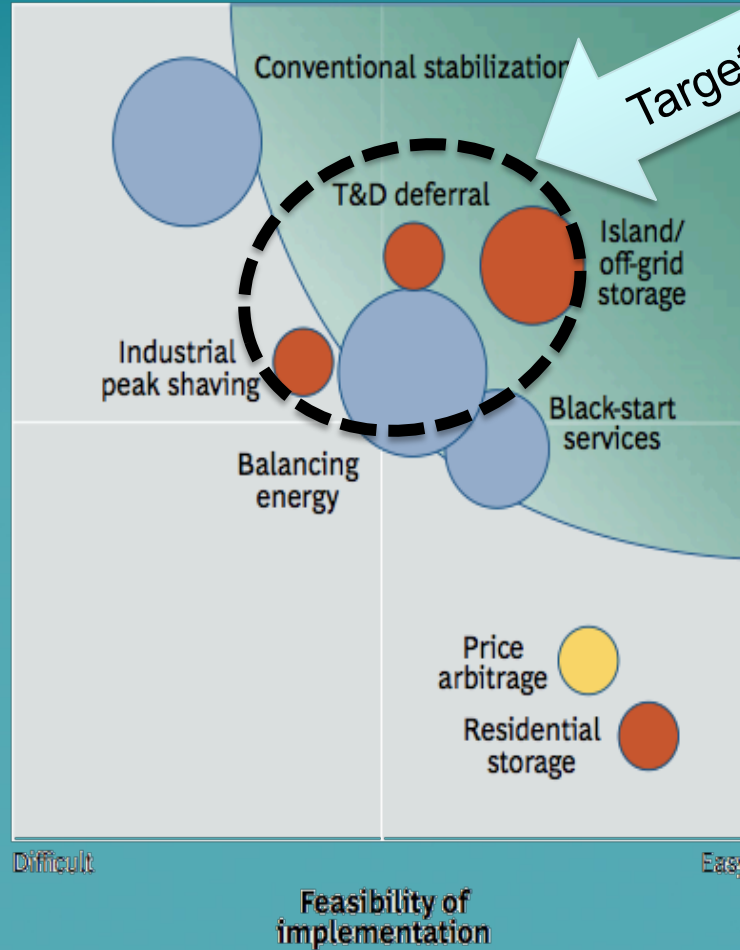
Market Young and Growing Fast



Target Markets



Profitability of the business case



Target markets

- Centralized
- Decentralized
- Mixed

Market size to 2030

- >€50 billion
- €25–€50 billion
- <€25 billion



Calculations based on estimated storage prices for 2015-2020. Price decreases would improve profitability in :

Problem

Installation of energy storage does not make money sense now

Low savings

High ownership cost:

Purchase

Operating and maintenance

Recycling/ decommissioning



Solution

Energy storage with conceptually new rechargeable battery developed by 4D Energetics

High savings and low ownership cost

Electricity cost reduction by up to 40%

Installation in remote community powered by 200 kW diesel generator would save up to \$10K per month



Product

Easy to use

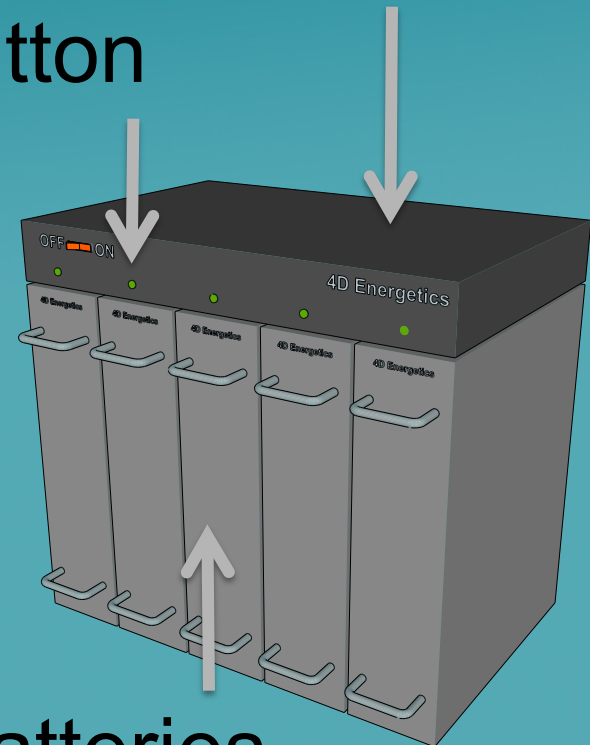
Scalable

Customer configurable

No service required

On/Off
button

Electronics



Batteries



Status

Laboratory cell production
and battery assembly

Mass production:
Can be done at any Li-ion factory

\$50M pre-orders

Finnish factory is ready to start tomorrow



Business Model

Energy storage system



Product sales

Services: electricity cost reduction

Letters of interest for \$50M/year from:



Investors and Partners

Equity investment

2016 \$5.5M

Investor's exit: 4X in
2019 - 2020 (MBO)

2016

To start pilot production,
testing at customer's sites and
signing sale agreements for
\$20M to \$50M

Future investments:
\$0 – 15M for expansion

We are also interested in teaming with
Swedish partners to start manufacturing and
sales in Russia and Europe



Thank You

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