



Battery Energy Storage Systems (BESS) ... There's an App for that!

*Data-driven solutions
are essential for green
energy infrastructure*



BESS asset owner/operators need digitally-enabled **business agility** to win in the global market transformation

- A critical enabler for the shift to net zero globally is the exponential growth of **Renewable** generation capacity being deployed, now the cheapest form of power
- **BESS** is set to become clean energy's next Trillion \$ industry, critical to balancing both power grids *physically* and traded markets *financially*
- The associated operational & financial **complexity** of batteries creates the necessity (and the opportunity) to harness the power of data-driven software solutions
- Rapid advances in **AI/ML** and in **digital infrastructure** are enabling these green energy infrastructure assets to be relied upon as 'the new normal' around the globe

Seismic MARKET shifts underway ... as renewable asset build-out accelerates and complexity explodes

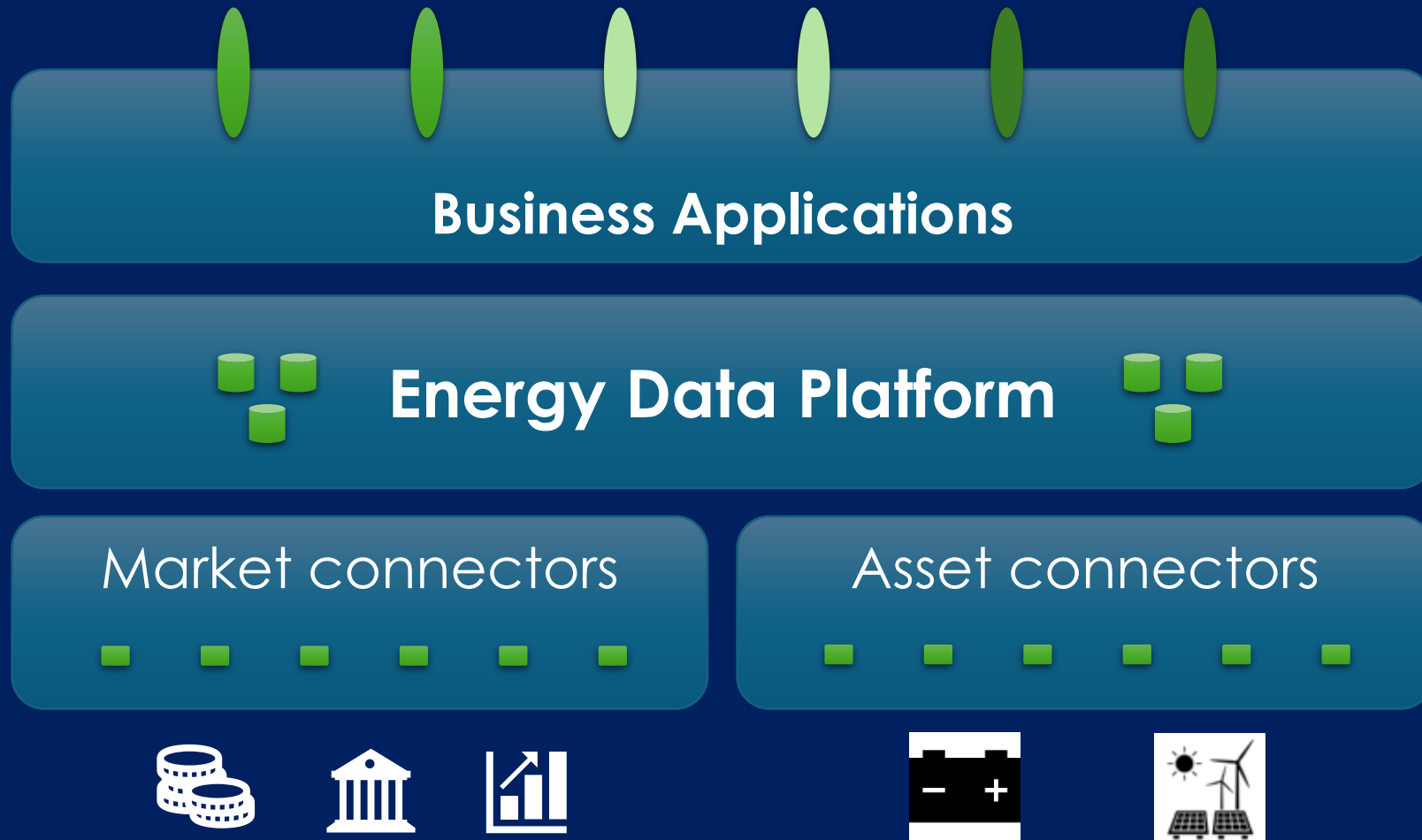
Fund
manager



Asset
manager

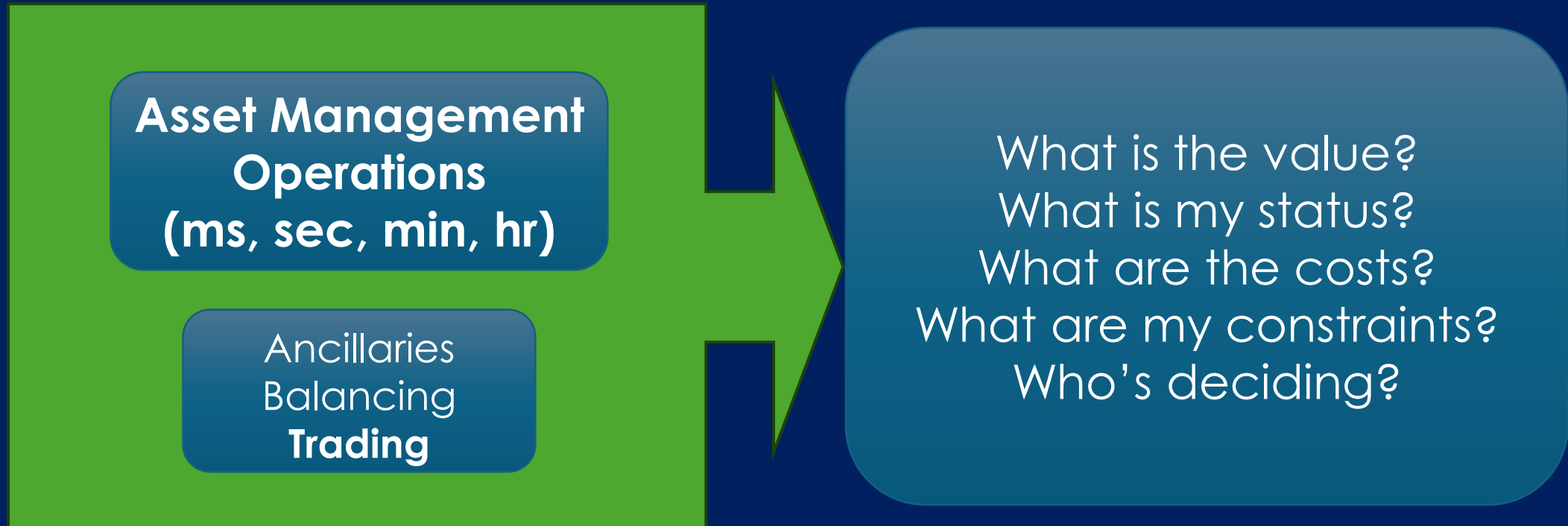


Spine's SOLUTION ... changes the game and puts asset managers in control with their own technology



A day in the life of BESS asset management ...

To cycle or not to cycle? - that is the question!



To cycle or not to cycle? ... VALUE



What is the [likely]
VALUE:
revenue potential
... now, future?

Key data & Apps

Contracts

Prices &
auctions

Market
forecasts

Value Pools
Optimisation

...

To cycle or not to cycle? ... STATUS



What is my
[actual]:

Status?
Environment?
Capabilities?

Key data & Apps

SoC

Temp
(int/ext)

SoH /
capacity

Availability
Mngmt

...

To cycle or not to cycle? ... COSTS



What are the
[expected] costs:

Losses?
Opex?
Capex?

Key data & Apps

Round
trip losses

Degradation
& RUL

SoH &
NAV

WACC &
Re-Fin/Aug

...

To cycle or not to cycle? ... CONSTRAINTS



What are my
constraints:

Contractual?
Financial?
Regulatory?

Key data & Apps

Warranty
mngmt

Debt
T&Cs

RTM
contracts

Grid
constraints
(imp/exp)

...

To cycle or not to cycle? ... DECIDING



Who decides:

**Outsourced
Vendor?
Internal team?
Ops? / Exec?**

Key data & Apps

Situation
specific
config

Quality
real-time
data

Interoperable
Apps

Common
digital
backbone

Automation
+ human
oversight

Spine: initial funding secured and focused on deploying AI-driven applications with BESS asset owners

£0.5m pre-seed raised



HNWI

Tech / AI ecosystem
Business building support

Electricity markets
Fund management

Operational Focus

Value-driven use cases

Product: Digital Spine & AI Apps

Team: Commercial & GTM

Partners: Trading-as-a-Service

Testing: Apps lab & customers



Spine: complementary team established ... entrepreneurship, tech & energy

Experienced founder & CEO

£ Seed to IPO
Industry contacts
Product vision



Focused delivery team

Software Applications
& Customers

Platform, Infrastructure
& InfoSec



**We're just getting started ... but aiming high.
Please get in touch!**

web: www.spineplatform.com

email: info@spineplatform.com