BREAKTHROUGH LOW-COST, MULTI-DAY ENERGY STORAGE

Form energy

Energy Storage
For A Better World

Rising to the challenge of climate change with a team that will deliver

LED BY ENERGY STORAGE VETERANS

Decades of cumulative experience in energy storage

- GW's of projects deployed

OUR INVESTORS: LONG-TERM AND IMPACT-FOCUSED

$820M+ in venture capital from top investors including: Breakthrough Energy Ventures (BEV), TPG's Climate Rise Fund, Coatue Management, GIP, NGP Energy Technology Partners III, ArcelorMittal, Temasek, Energy Impact Partners, Prelude Ventures, MIT's The Engine, Capricorn Investment Group, Eni Next, Macquarie Capital, Canada Pension Plan Investment Board, and other long-term, impact oriented investors

Form Factory 1

Form Factory 1 | Groundbreaking

May ‘23 — Break ground

June ‘23 — Foundations

July ‘23 — Steel

Sep ‘23 — Utilities

Dec ‘23 — Building dried-in

Mid-Late ‘24 — Start operations

Early ‘25 — Expansion

The Challenge

The electrical grid needs to fundamentally transform to meet the challenges posed by climate change

Intermittency of renewable assets creates periods of undersupply

Transmission congestion and interconnection queues are increasing

Thermal phase out leads to increasing adequacy challenges

Extreme weather events will become more frequent and disruptive to customers

Over 5 GWh of Commercial Contracts - 2x installed li-ion capacity in the UK today

First-of-its-kind **1.5 MW /150 MWh** MDS project in Cambridge, Minnesota to come online in 2024

Two 10 MW / 1,000 MWh MDS systems; one in Becker, MN and one in Pueblo, CO. Both expected to come online as early as 2025

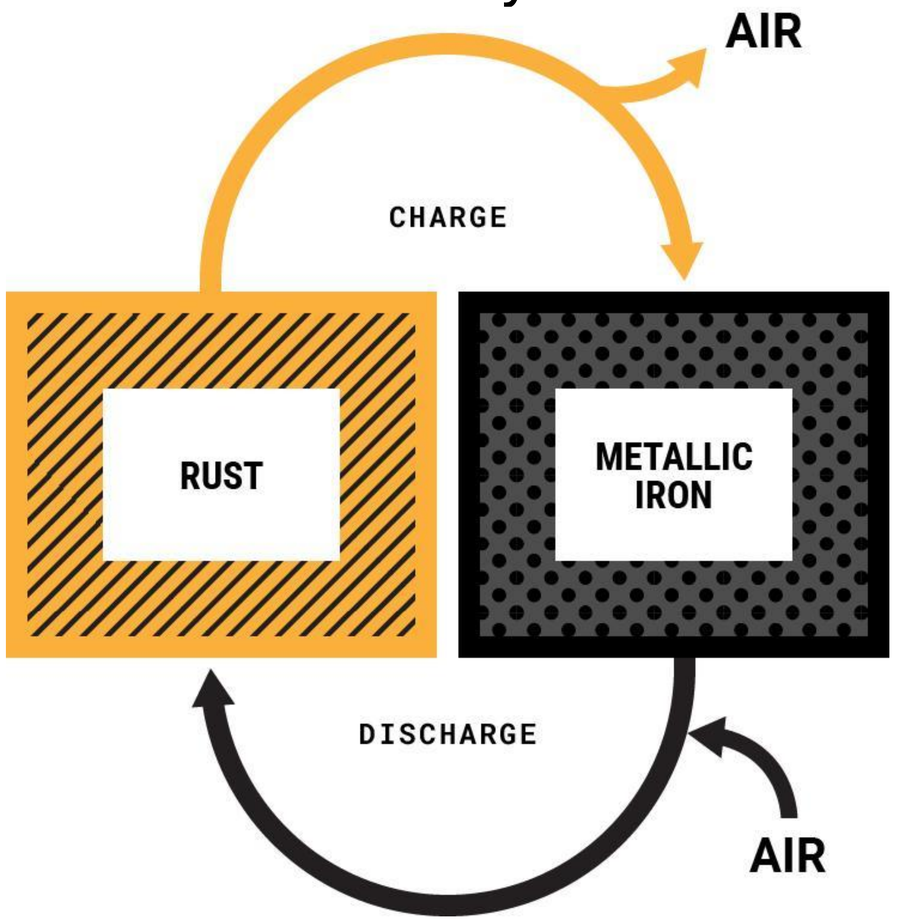
10 MW / 1000 MWh MDS system in New York to come online as early as 2025

15 MW / 1500 MWh MDS system in Georgia to come online as early as 2026

5 MW / 500 MWh MDS system in Virginia to come online as early as 2026

Rechargeable iron-air is the best technology for multi-day storage

100-hour Reversible Rust Battery



COST

Lowest cost rechargeable battery chemistry.
Less than 1/10th the cost of lithium-ion batteries

SAFETY

Non-flammable aqueous electrolyte. No risk of thermal runaway.

SCALE

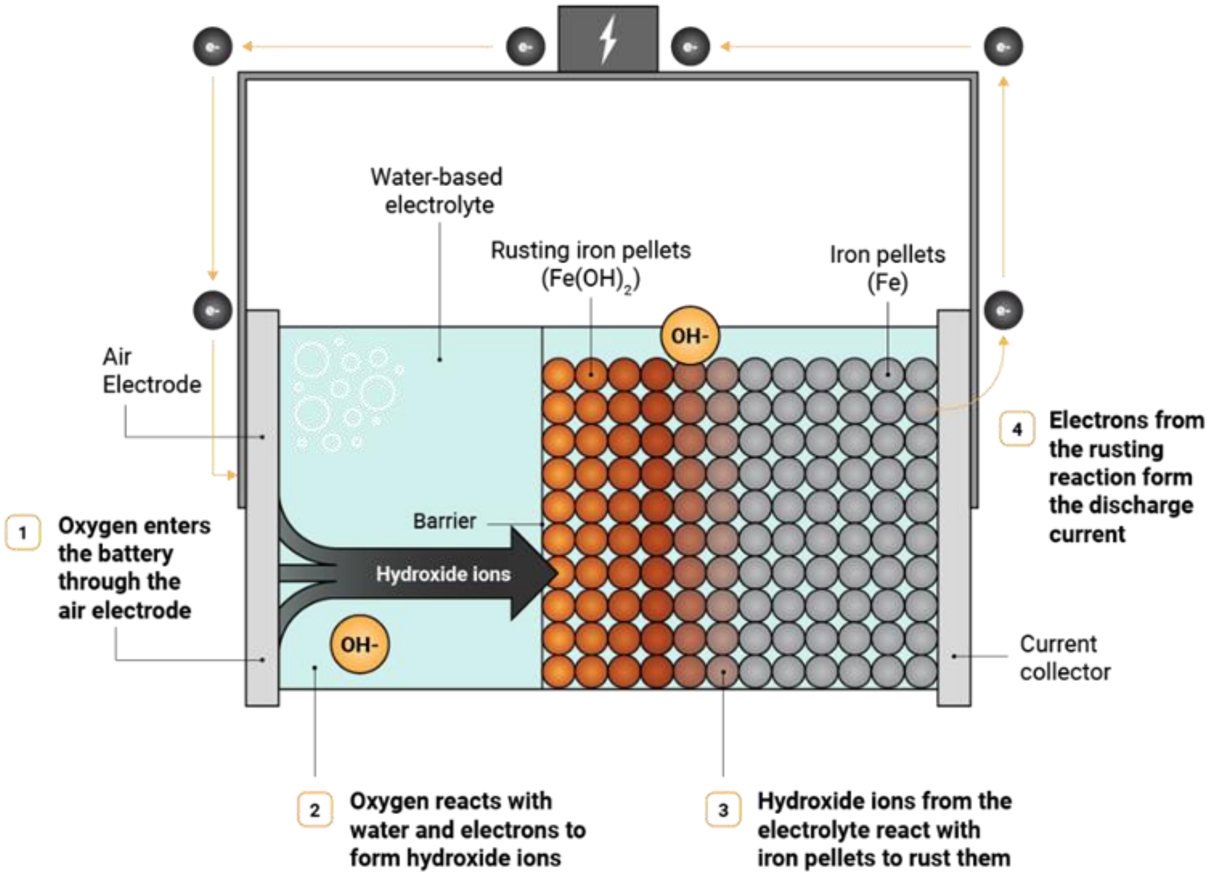
Uses materials available at the global scale needed for a zero carbon economy. High recyclability.

DURABILITY

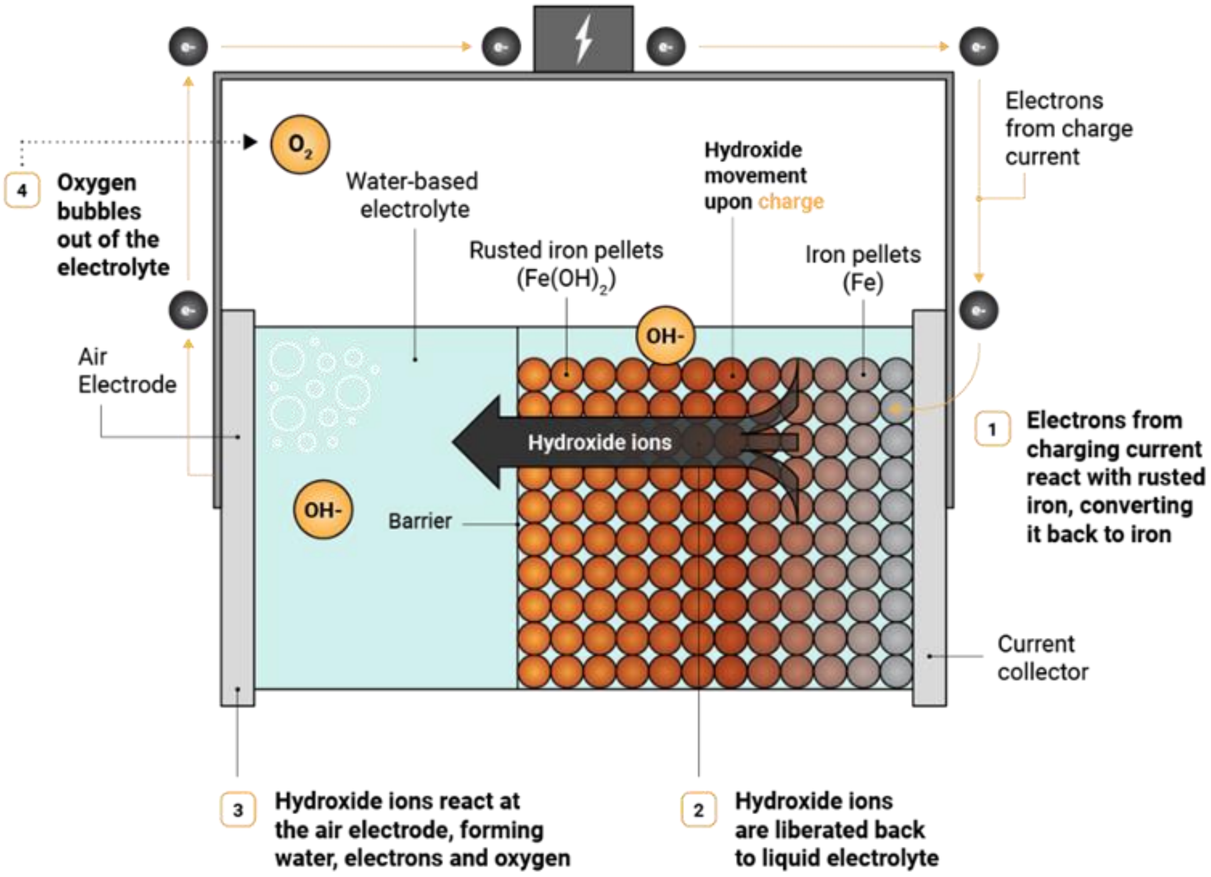
Iron electrode durability proven through decades of life and 1000's of cycles

Iron-Air Principle of Operation: “Reversible Rust”

Discharge



Charge



What makes up a Form Energy system

Modular design enables easy scaling to GWh systems

Cell

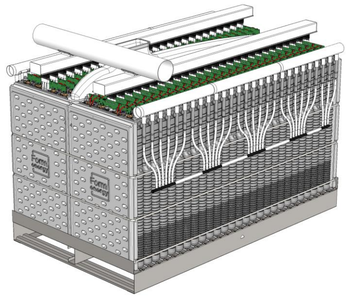
~0.10 kW / 10 kWh

~1m x 60 cm

Electrodes + Electrolyte

Smallest **Electrochemical** Functional Unit

Battery Module



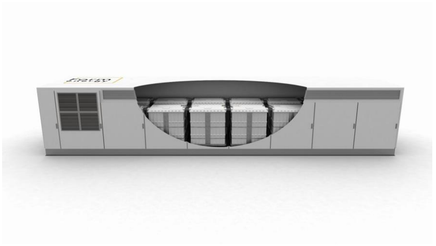
~5 kW / 500 kWh

~2.3 x 1.3 x 1.3m

~50 **Cells**

Smallest Building Block of **DC** Power

Enclosure



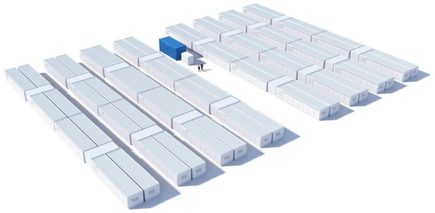
~50 kW

8.6’ x 40’

~10 **Modules**

Product Building Block with **integrated module auxiliary systems**

Power Block



~3.5 MW / 350 MWh

<2 acres

~50 - 100 **Enclosures**

Smallest independent system and **AC Power** building block

System

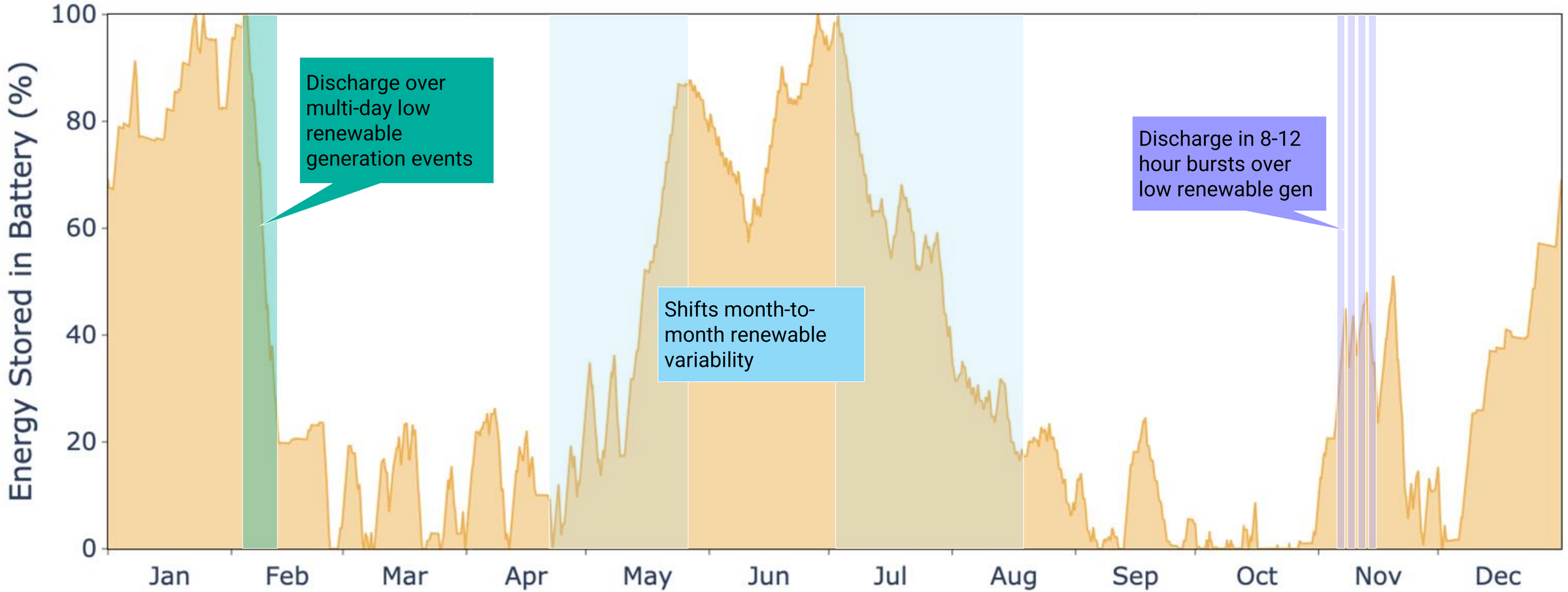
100+ MW / 10 GWh

50+ acres

10s - 100s of **Power Blocks**

Commercial Intent System

Multi-Day Storage operates year-round to balance seasonal, multi-day, and intra-day variability in renewables



Multi-Day

Seasonal Up
(net charge with excess renewables)

Seasonal Down
(net discharge during peak load season)

Intra-Day

Form Energy Multi-Day Storage delivers grid-scale reliable capacity year-round

System Overview

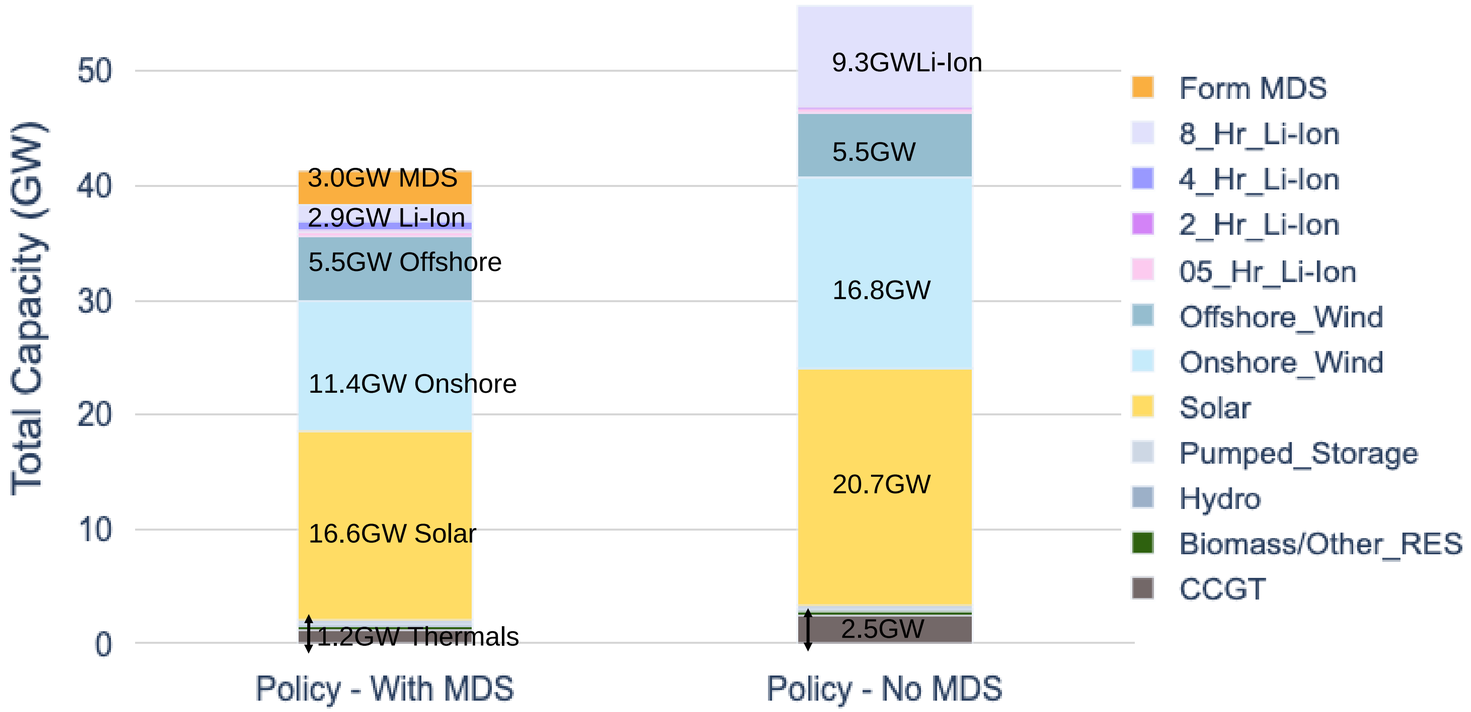
Rated AC System Power	10 - 500+ MW
System Capacity	1 - 50 GWh
Repeatable Power Block	3.5 MW / 350 MWh
Discharge Duration	100 hr
Overall Round Trip Efficiency*	35-38%
Annual Throughput Cycles	13
Self-Discharge at 10-100% SOC	1-10% month
Ramp Rate	< 10 minutes
Areal Energy Density	> 200 MWh/acre
Operating Temperature**	-40°C - 50°C
System Lifetime	20 years

**System round-trip efficiency inclusive of losses from power conversion and auxiliary loads at full power*

I-SEM - Policy Scenario

Form MDS vs No Form MDS: Form MDS replaces thermals and other storages

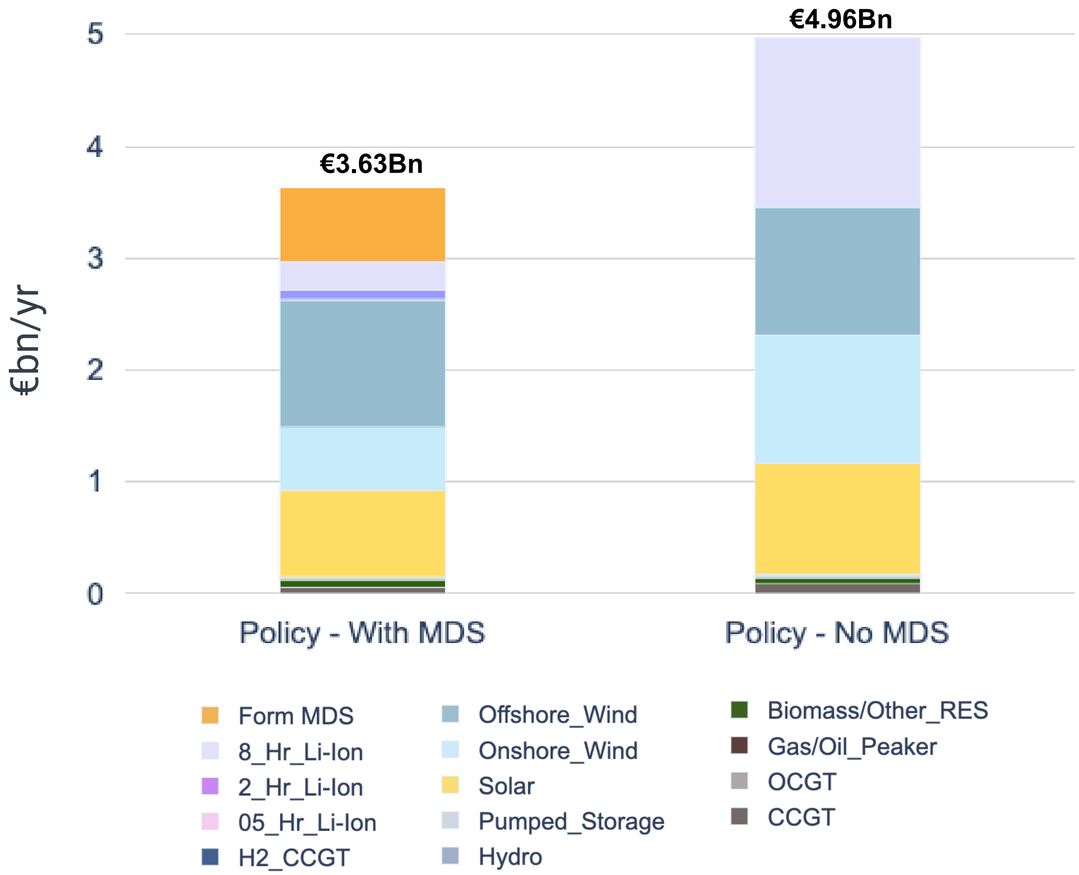
Policy Scenario, Capacities with and without Form MDS*



* Form MDS cost, self-discharging and lifetime assumptions for COD2030 is used (see “Storage Assumptions” slide)

Form MDS vs No Form MDS: Cost of meeting 2030 renewable targets decreases in 2030 with Form MDS

Policy Scenario, Annualised resource system costs



NPV of Form MDS system cost saving for 25-year period

Discount Rate	Policy
6%	€17.1Bn
8%	€14.3Bn
10%	€12.1Bn

- Up to €17.1bn savings enabled by Form MDS capacity in the Policy scenario.

MDS replaces shorter duration storages and thermal

Policy Scenario

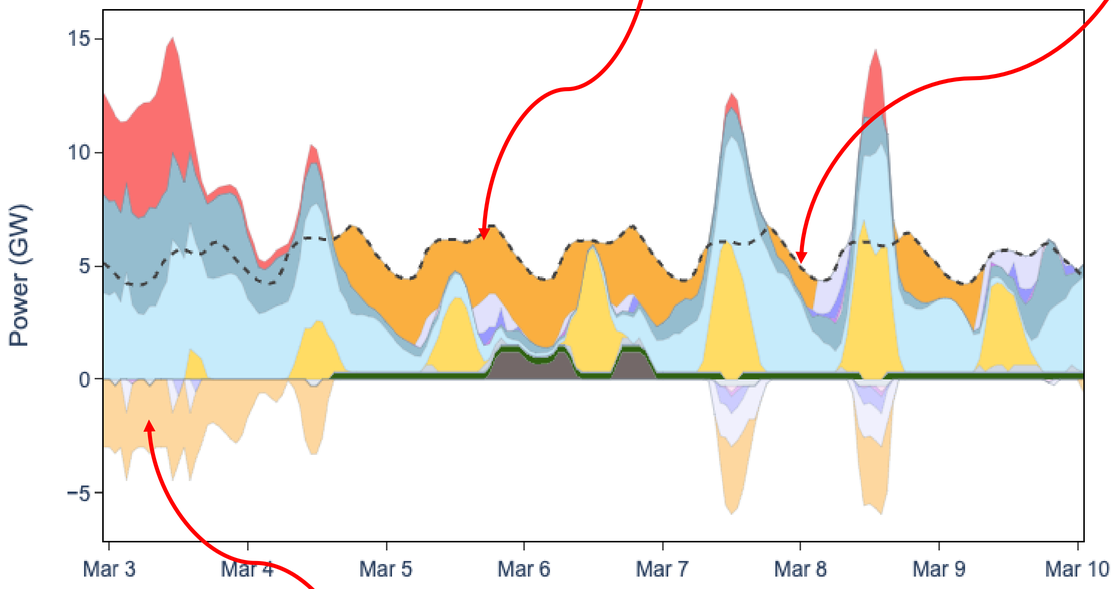
Discharging to meet demand during a multi-day lull in renewable generation

Enough charge left for peak load the next day

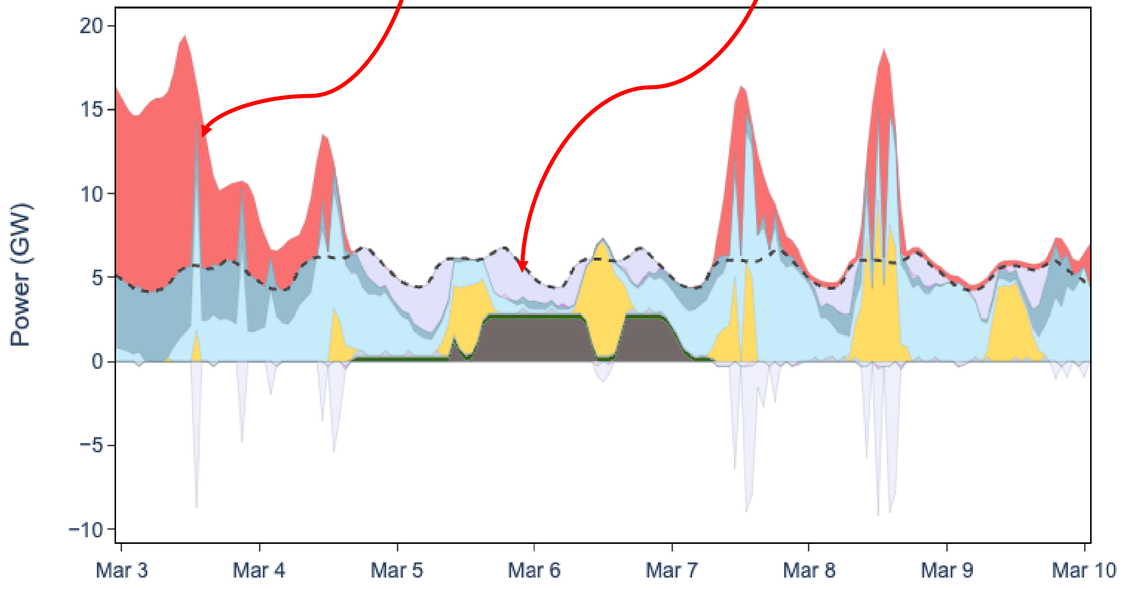
More curtailment

Shorter duration storages discharging

With MDS



No MDS



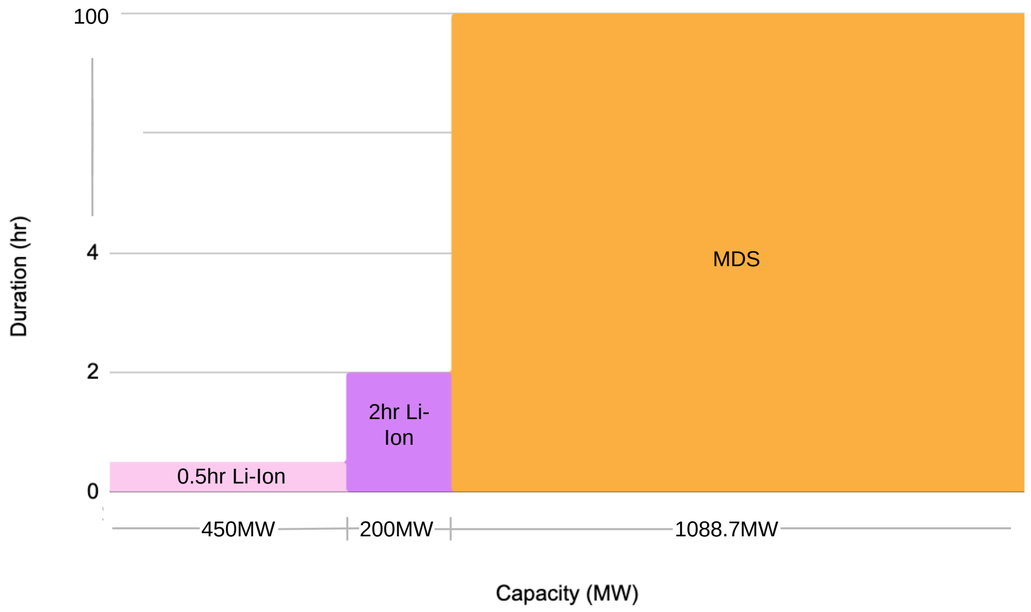
MDS Charging with excess renewables generation

Demand
Curtailed Renewables
Form MDS Discharging
Form MDS Charging
8_Hr_Li-Ion Discharging
8_Hr_Li-Ion Charging
4_Hr_Li-Ion Discharging
4_Hr_Li-Ion Charging
2_Hr_Li-Ion Discharging
2_Hr_Li-Ion Charging
05_Hr_Li-Ion Discharging
05_Hr_Li-Ion Charging
Offshore_Wind
Onshore_Wind
Solar
Pumped_Storage Discharging
Pumped_Storage Charging
Hydro
Biomass/Other_RES
OCGT
CCGT_must-run
CCGT

MDS vs Li-Ion

Duration vs Capacity

Base Scenario



Policy Scenario