Focus on 5 signature projects

France
Alata
4.4 MW solar PV plant coupled with 2.4 MW/4.3 MWh BESS, used to stabilize plant’s output and support local network’s operation.

United States
Mt. Tom
5.7 MW solar PV plant coupled with 3 MW/6 MWh BESS to mitigate the impact of intermittency and support the local network in Congestion Relief Management.

Germany
Pfreimd
137 MW pumped storage plant coupled with 12.5 MW/13.1 MWh BESS, providing Frequency Response to the German Transmission System Operator.

United States
Virtual Power Plant
32 BESS assets distributed across multiple sites totaling 7 MW/14 MWh, controlled remotely and as one single asset to reduce peak demand. Engage to our customers’ business and customers’ business to Network Operator.

Belgium
Drogenbos
7.2 MW battery BESS providing Frequency Response services to the Belgian Transmission System Operator.

Battery Storage Solutions
Pioneering Energy as a Service
Storage enables a paradigm shift in global energy

Storage: the necessary game changer for renewables

In response to the climate emergency, many countries have begun their energy transition and are committed to reducing CO₂ emissions from the energy sector, while aiming for greater energy independence. To meet this challenge, we must take into account the integration of renewable energy into the electricity grid, and address the key issue of intermittency and comparing energy production and consumption.

We need a game changer and we found it: energy storage. Renewable energy is clearly the solution, providing access to energy for all. It is also a high performance solution when compared to other technologies. It is also a high performance solution when compared to other technologies.

An enabling factor for a pure energy production to energy as a service.

“Storage enables a move from pure energy production to energy as a service.”

Storage at the heart of the renewable carbon transition

Energy storage will play a key role in the future of our energy system, namely in supporting the integration of intermittent renewables. Battery-based solutions in particular are modular and easily scalable, valuable to improving grid operational performance.

Moving forward, the Battery Storage Industry will also benefit from the strong uptake of Electric Vehicles across the world, both in terms of decreasing costs and improved operational performances. Storage is also a missing block of ‘Smart Grids’, which harness the potential of information and communication technology to improve systems' holistic efficiency and dynamic. As the early stages, the combination of renewables and storage systems will allow a wider range of energy services when compared to energy production alone.

Services to the Grid

- Improving Grid Connectivity
- T&D Infrastructure Investment Deferral
- Ancillary Services
- Frequency Response/Regulation
- Voltage Support
- Powering Capacity
- Capacity Reserves
- Black Start

Services to Power Generation

- Energy Shifting
- Capacity Market
- RES Integration
- Power Smoothing/Frame Rate Control
- Limit Curtailment/Avoid Clipping (for PV)
- Optimization of Conventional Generation

Services to Customers

- Increased self-consumption (coupled with on-site generation)
- Peak Shaving/Demand Charges/Network Charges
- Back-up Power/Reliability
- Power Quality (Industrial Processes)

Applications for Battery Energy Storage Systems

Batteries can provide multiple services to three stakeholder groups

Energy Storage Solutions: why ENGIE?

Because experience & expertise

ENGIE believes that being technology agnostic is a key advantage, ensuring that the best solution is always found, partners with reputable OEMs in designing optimal systems using the best approach to address the client’s needs, quick to deploy and with very little site constraints. It is also a high performance solution when compared to other storage technologies.

Because customer centricity

ENGIE is a global energy player capable of offering integrated solutions to its clients that go beyond Battery Storage. The fact that ENGIE is able to integrate Battery Storage in a wider offer is a clear advantage for our clients. Ultimately, ENGIE is capable of designing, financing, installing and operating fully integrated and complex systems that meet all our client’s energy needs.

Because added value

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A glance at our in-house capabilities

ENGIE devotes significant resources to research and development, designing and developing its own solutions that address the energy transition challenges. It has developed its own energy storage technologies.

SERVICES TO CUSTOMERS

ENGIE Storage

ENGIE Storage is the specialized arm of ENGIE, mainly engaged in the design, development, implementation and operation of large-scale energy storage solutions.

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ENGIE is the global energy player with the largest energy storage solutions portfolio, expanding its ambition and capacity in energy storage solutions.

ENGIE Storage has commissioned the largest energy storage system in the world.

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