SUNSHINE HYDRO
keeping the lights on®

As we decarbonise our energy systems, we need affordable solutions,
that take us all the way to 100% carbon-free, every hour of every day, everywhere.
We have the solutions – have we got your attention?

WELCOME TO THE NEXT LEVEL OF CARBON-FREE

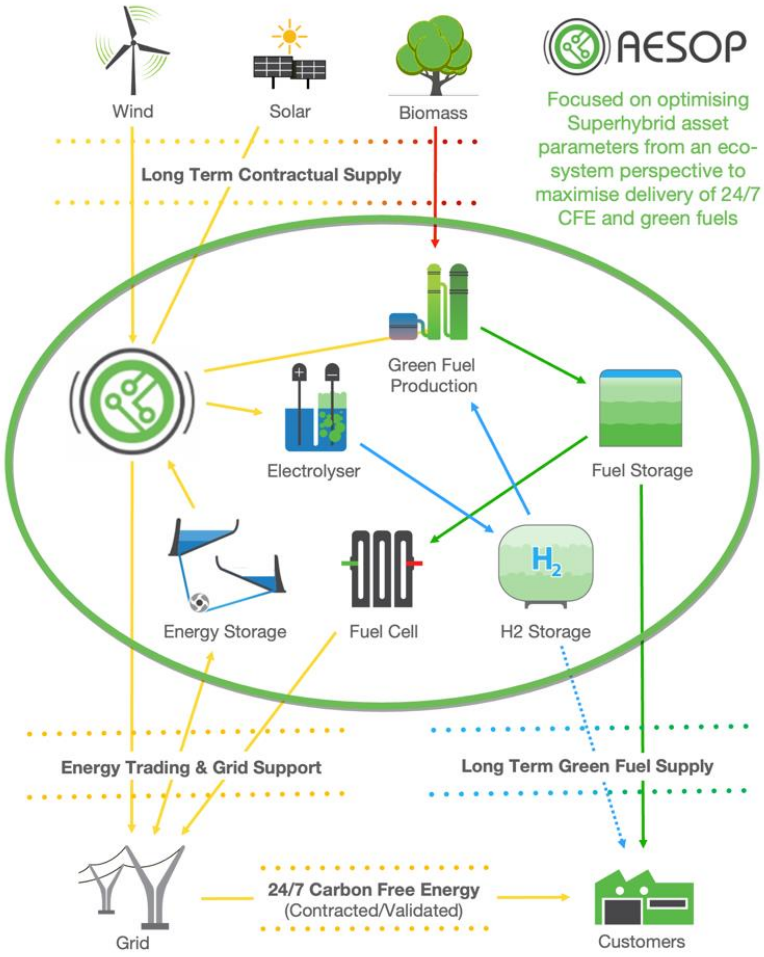
Superhybrid™ is a novel way to contract and operate proven technologies, with a remarkable advantage.

Superhybrid™ combines assets that in isolation may not be bankable, but when working together, they produce:

- ✓ 24/7 carbon-free energy that is cheaper than nuclear and equally reliable (> 98%)
- ✓ green fuels for the growing demand of heavy transport
- ✓ peaking power and grid services that enable renewable transition

Our tools can transform your renewable portfolio or add value to your existing or new PHES or long-duration battery. Our modeling enables you to make decisions with high confidence.

Book a demo
and we'll show you how!



Digital Twin AESOP enables you to test your asset combination using a digital twin that operates virtually on real market data and real forecasts.

Funding Model Once you're confident about the configuration, AESOP creates a project funding model to assist you to make your project a reality.

Optimiser Once operating, AESOP maximises your returns by optimising the Superhybrid™, i.e. bidding each asset live on the market.

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Your Journey from an Idea to a Superhybrid™ Funding Model

Step 1 Scoping study to investigate and develop an outline of viable project option(s)

Face-to-face introductory meetings and **kick-off workshop(s)** with the development team to understand the project process and scope:

- Assets to be included in the Superhybrid™ model (current, pipeline, external)
- Defining best practice methodology for the operating environment
- Determining acceptable risk levels
- Identifying the roles and responsibilities of key people
- Identifying resource requirements (data collection, IT, reporting)

Project scoping document outlining viable project(s) for modelling and data sources, including recommendations.

✓ **Checkpoint**: your confirmation of the scope for modelling the digital twin(s)

Step 2 Establishing the digital twin using AESOP

Establishing **interfaces to real-time data sources** and determining back-casting period

- Wind and solar data
- Live and forecast data (energy price and demand, weather)

Detailed configuration based on commercial figures, sizing and constraints for each asset, storage, connection, transmission and supporting infrastructure

✓ **Checkpoint**: your confirmation of the chosen configuration

Establishing the **live model using AESOP**, including a real-time digital user interface. Running the model for the back-casting period (without using perfect foresight).

- Energy flows and storage levels for each trading interval
- Wind and solar forecast
- Gross profit

Face-to-face meeting to introduce the live model and to discuss the learnings from the model.

Step 3 Refining the design and developing a project funding model

Refining the project configuration based on learnings gained from the initial design and **projected future scenarios** for the chosen project to support investment decision.

Developing a **Superhybrid™ funding model** to prepare the investment case for developing the assets for the project (IRR, ROI, Payback period, NPV and levelized costs).

Commercial Operation Phase of your Superhybrid™

AESOP communicates directly with the market operator through bid stacks and integrates with asset control systems. It optimises the assets to defend the long-term contracts for 24/7 carbon-free energy and green fuels and trades on energy and frequency markets to maximise revenues. It features a live dashboard and comprehensive financial and technical reporting.

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