SUDOCO

The control room of the future

FOR OFFSHORE WIND FARMS

sudoco.eu

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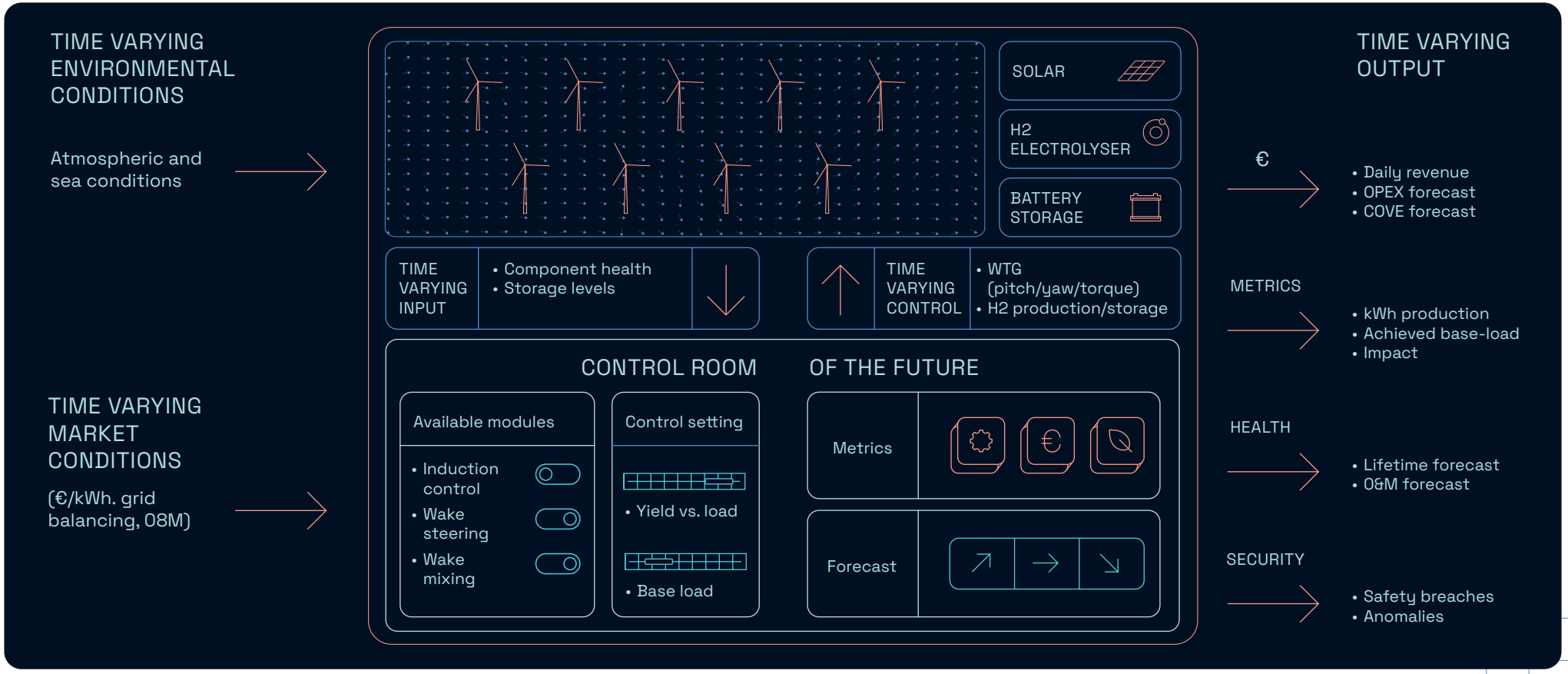
CONTROL ROOM OF THE FUTURE

The SUDOCO project will introduce an innovative open-source, data-driven platform designed to achieve an optimal equilibrium between maximising energy production and mitigating structural stresses for offshore wind farms. SUDOCO's control room will ensure a substantial enhancement in wind farm performance by utilizing extensive experimental data and physics-based machine learning.



MAIN GOALS

- Develop a control system for a 10% reduction in the Cost of Valued Energy (COVE) metric
- Optimise the entire wind farm system to decrease lifetime CO2-equivalent emissions by 20%
- Enhance cybersecurity to ensure an uninterrupted energy supply

IMPACT

SUDOCO's innovative solutions promise substantial benefits for wind farm operators, developers, and original equipment manufacturers (OEMs).

- Operators can maximise the financial returns from their wind farms
- Developers can minimise operational risks
- OEMs have the flexibility to enhance the open-source tools with additional features

PARTNERS OF SUDOCO PROJECT ARE:

TU Delft

Youwind Renewables

ICONS

POLITECNICO MILANO 1863

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