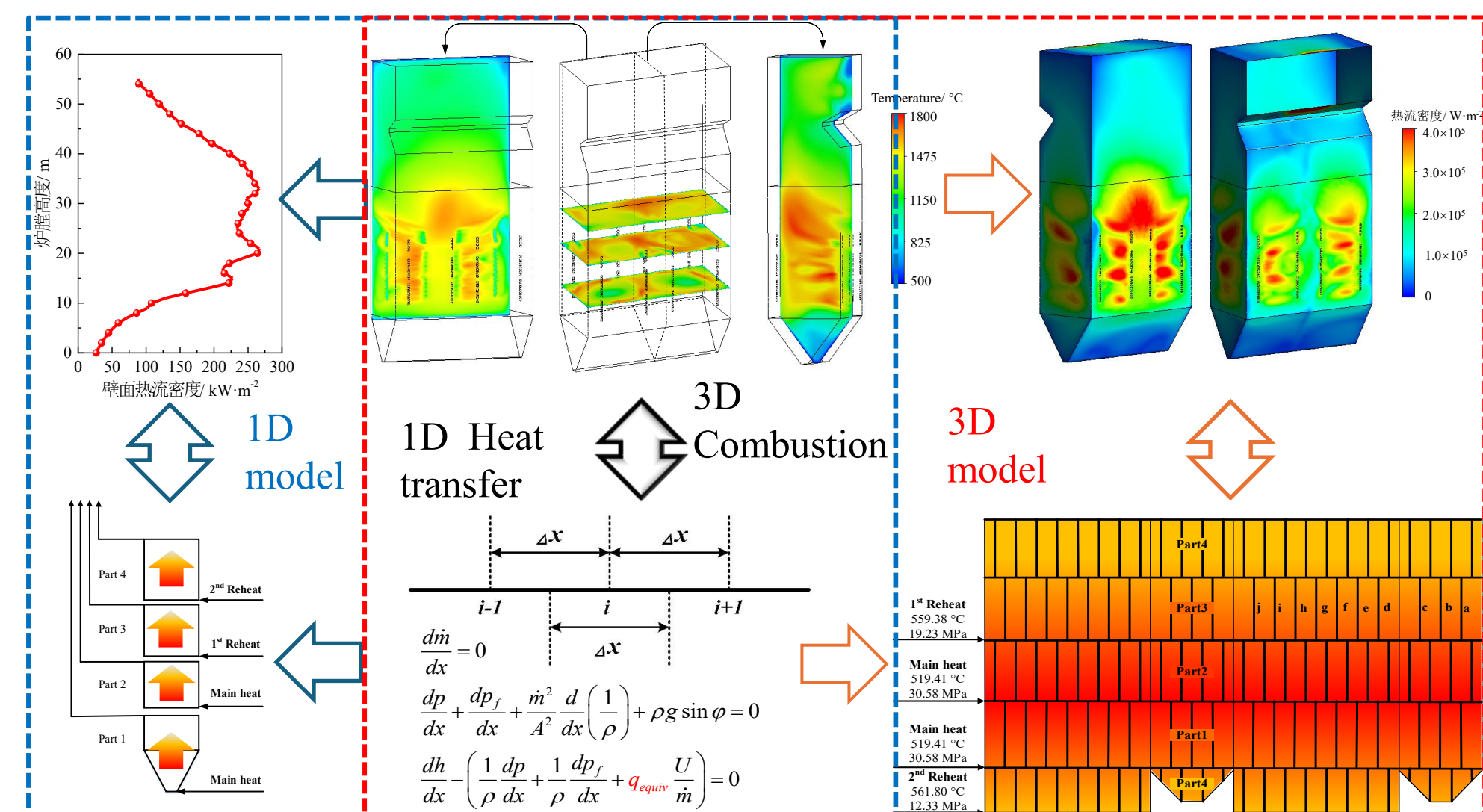


Studies in Energy Systems and Engineered Fluids

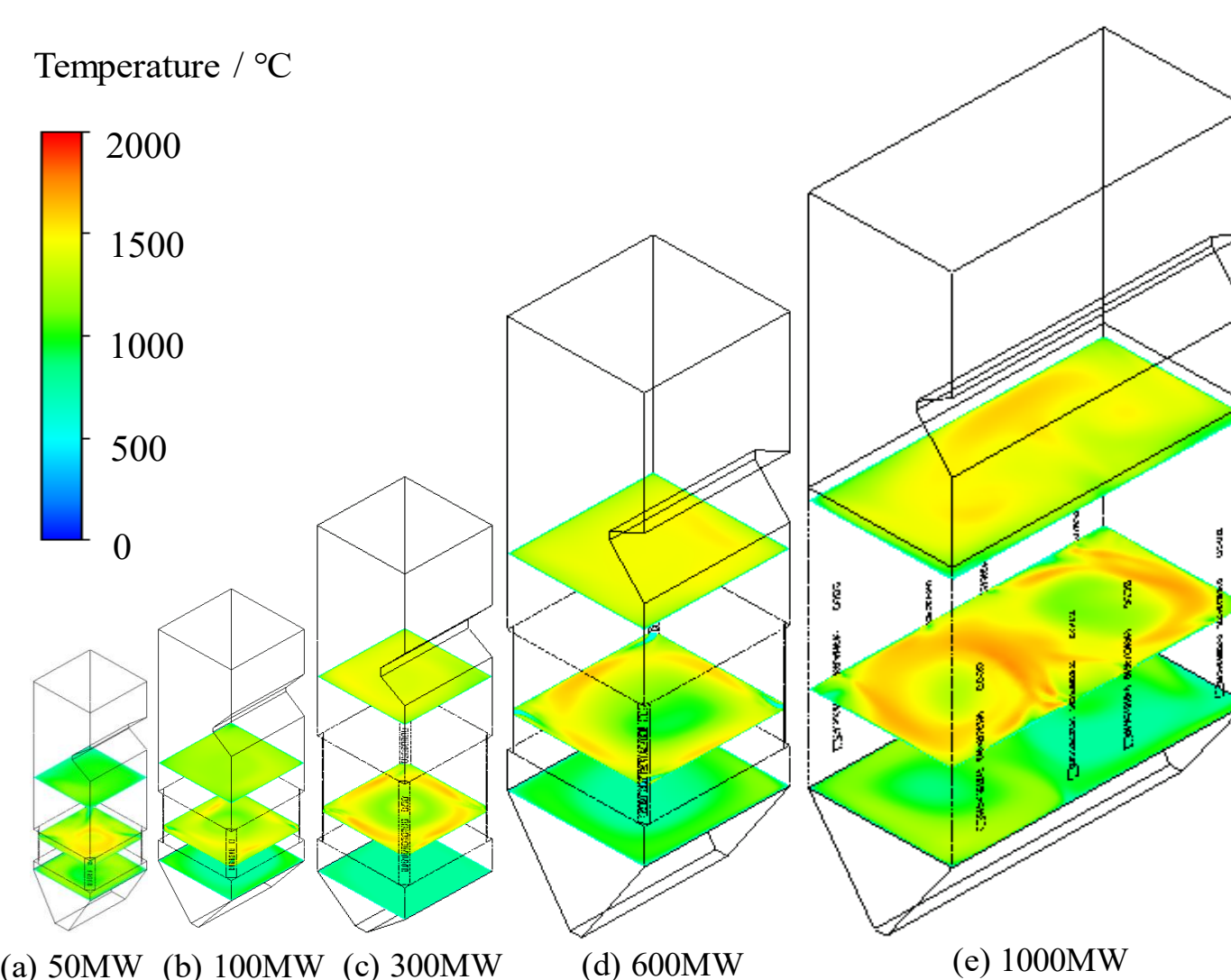
Danlei Yang

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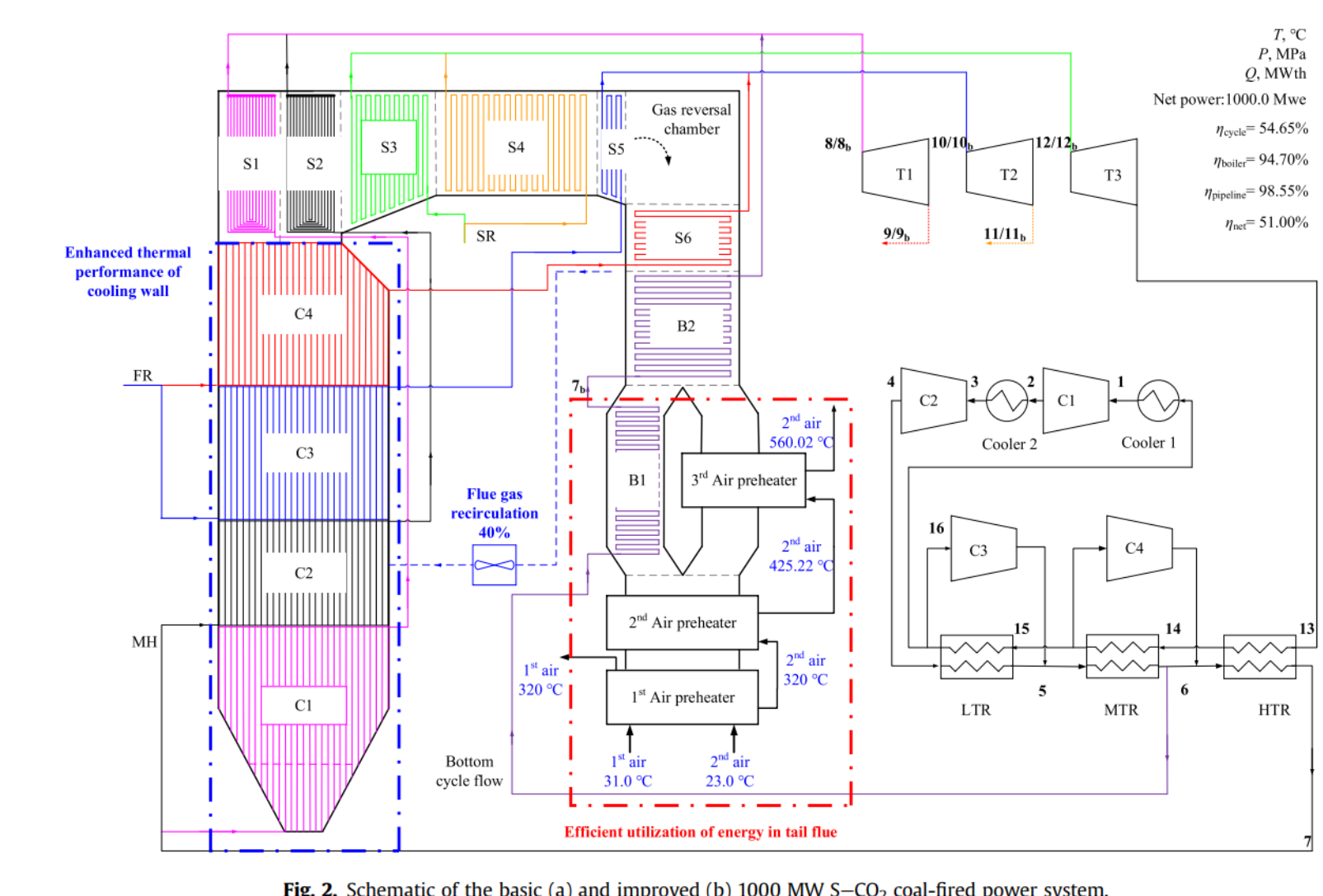
Supercritical carbon dioxide power generation and energy storage systems



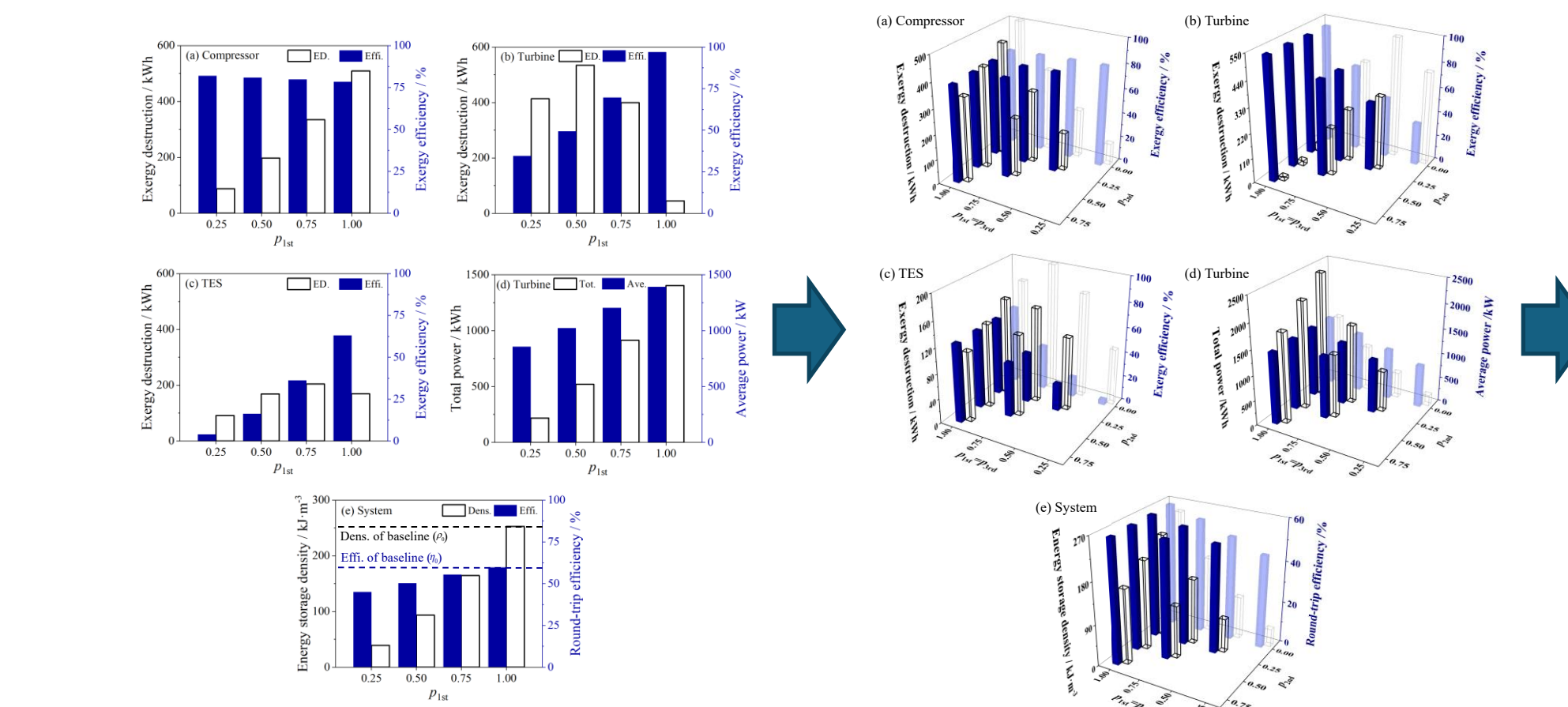
Coupled model of combustion and S-CO₂ heat transfer



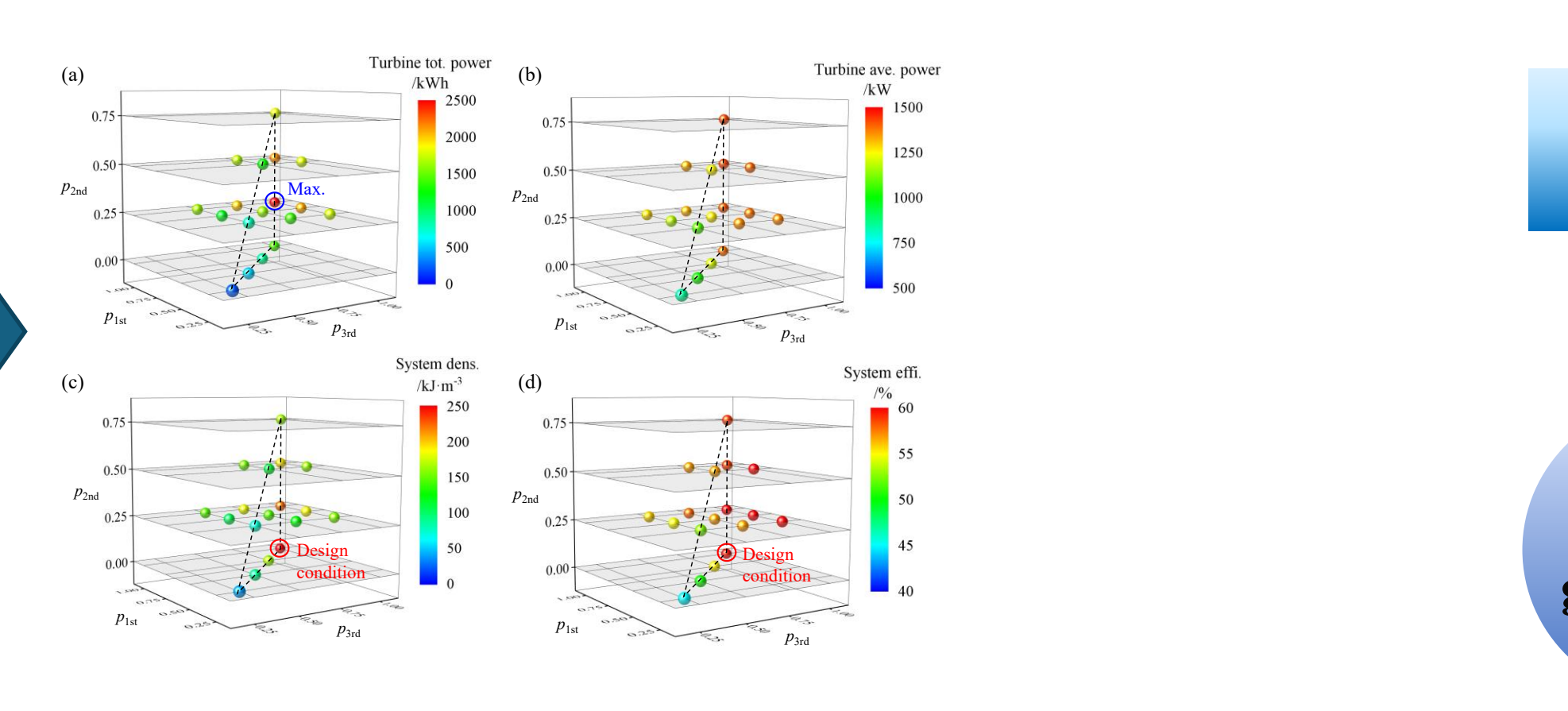
Unified model of different capacity S-CO₂ coal-fired boilers



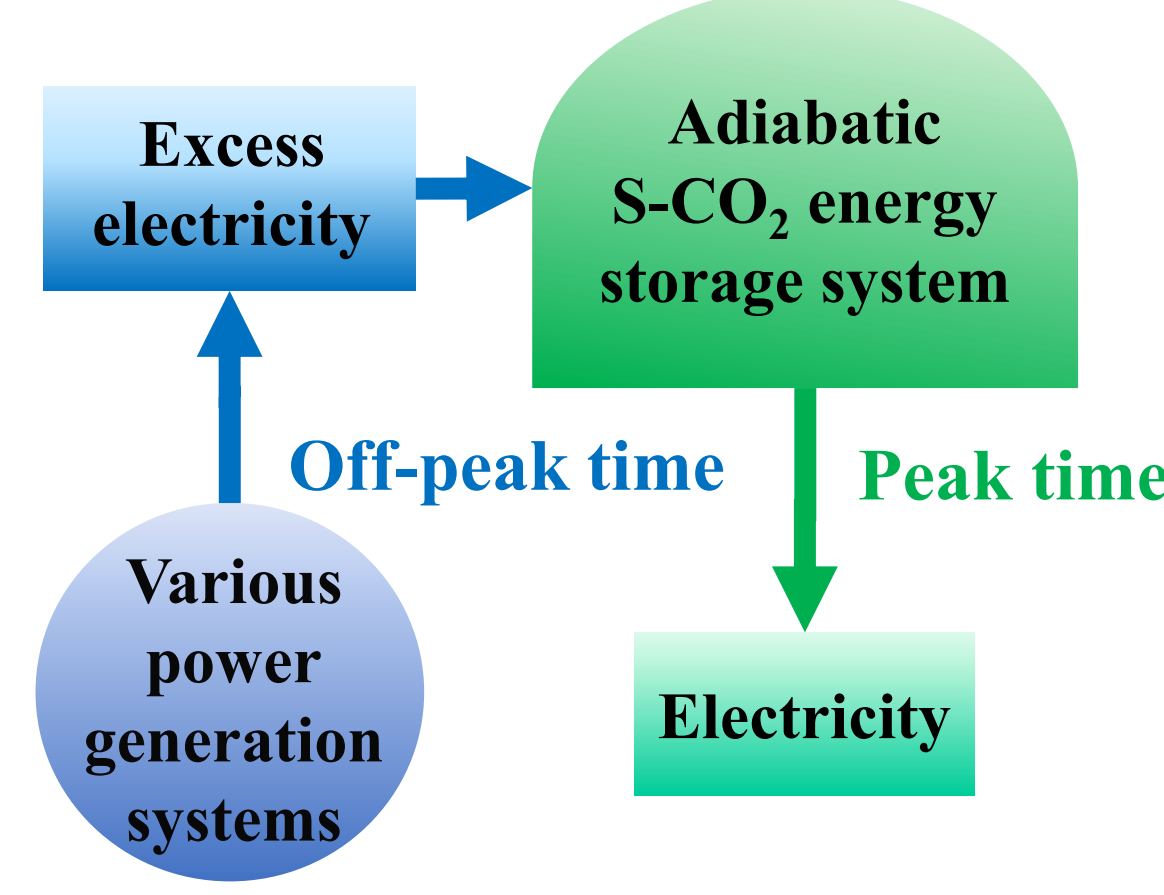
1000 MW S-CO₂ coal-fired system design



Insufficient charging and discharging on compressed carbon dioxide energy storage due to renewable energy variability

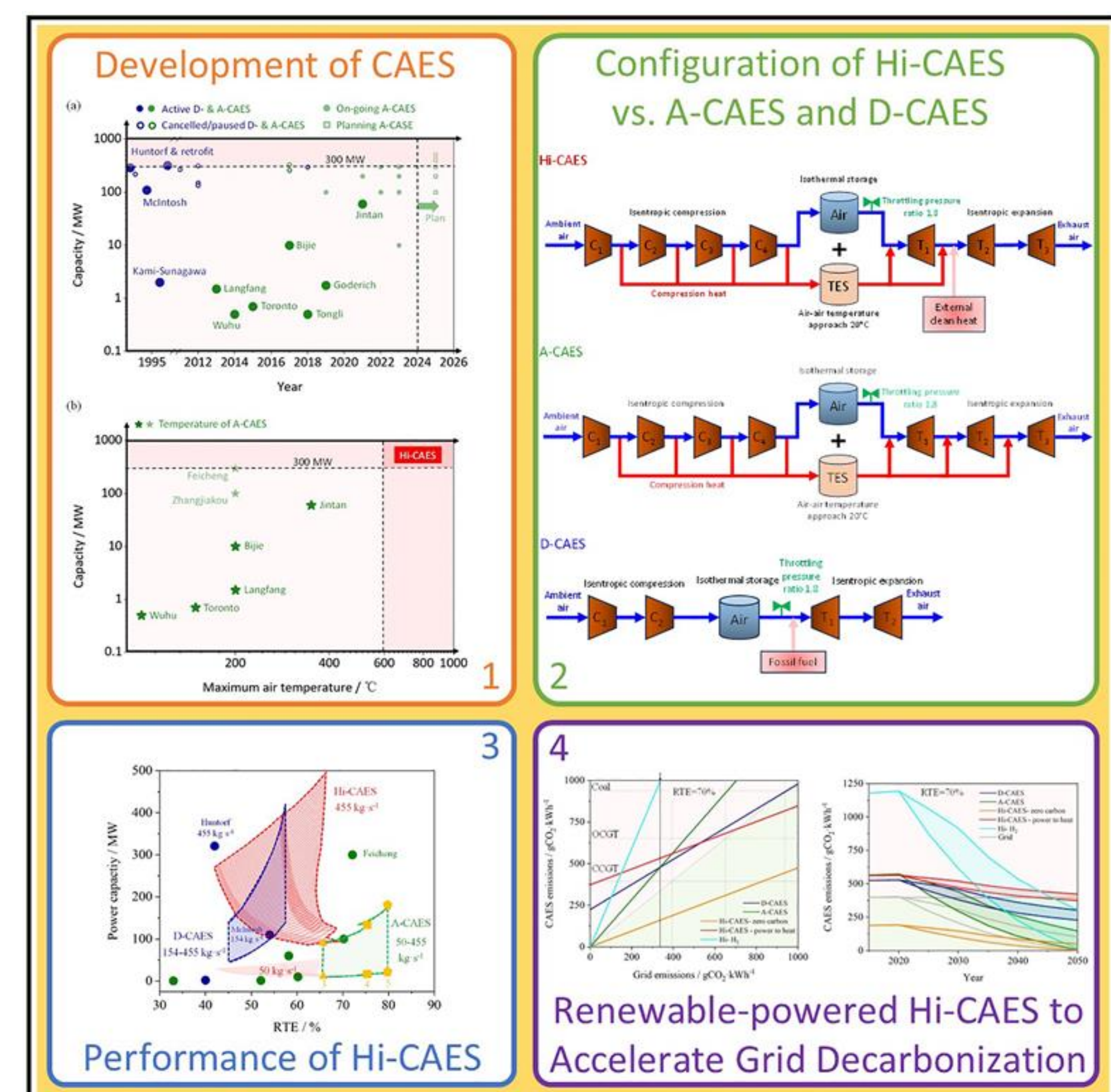


Integration and conversion of S-CO₂ coal-fired power generation and energy storage

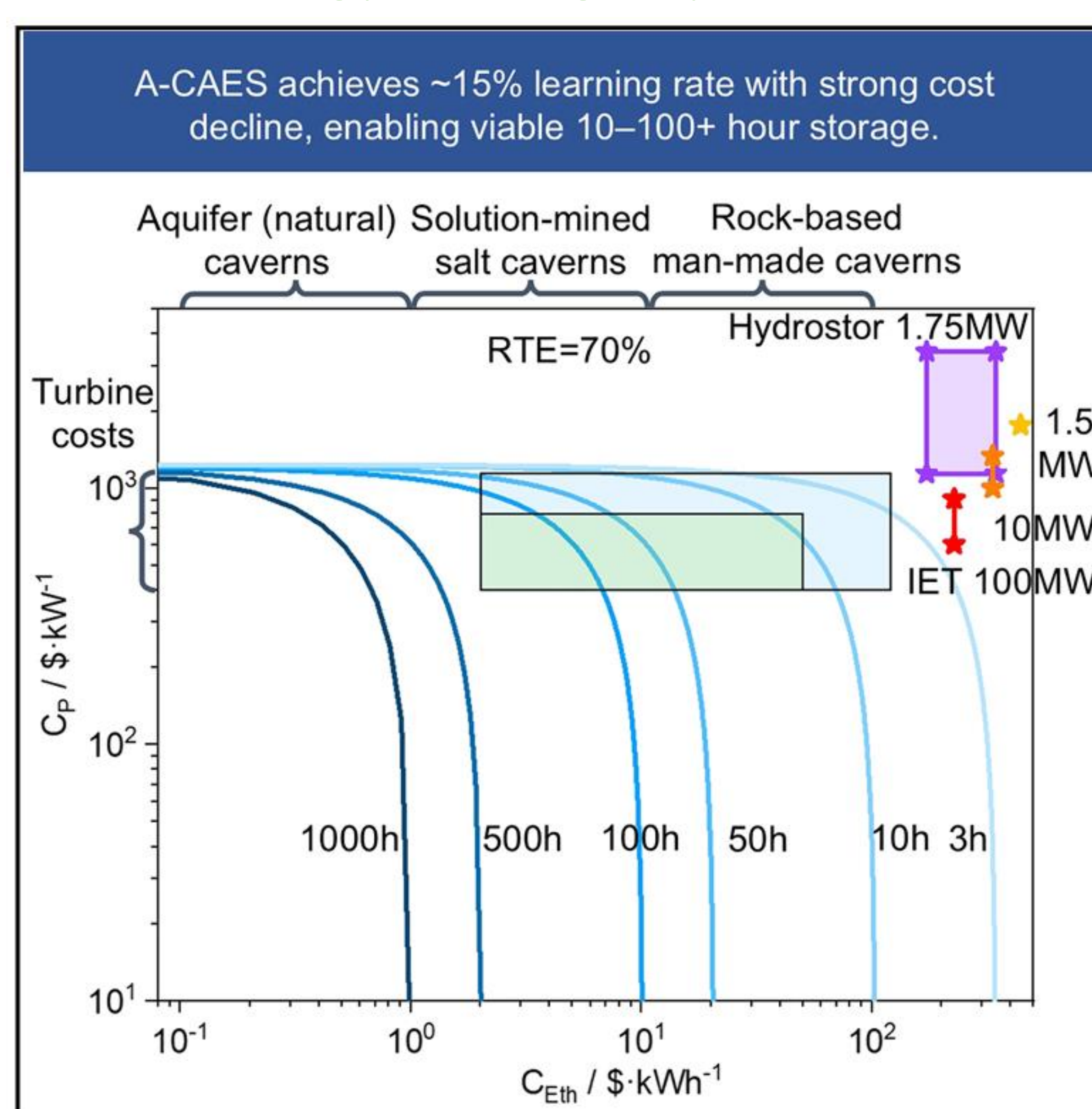


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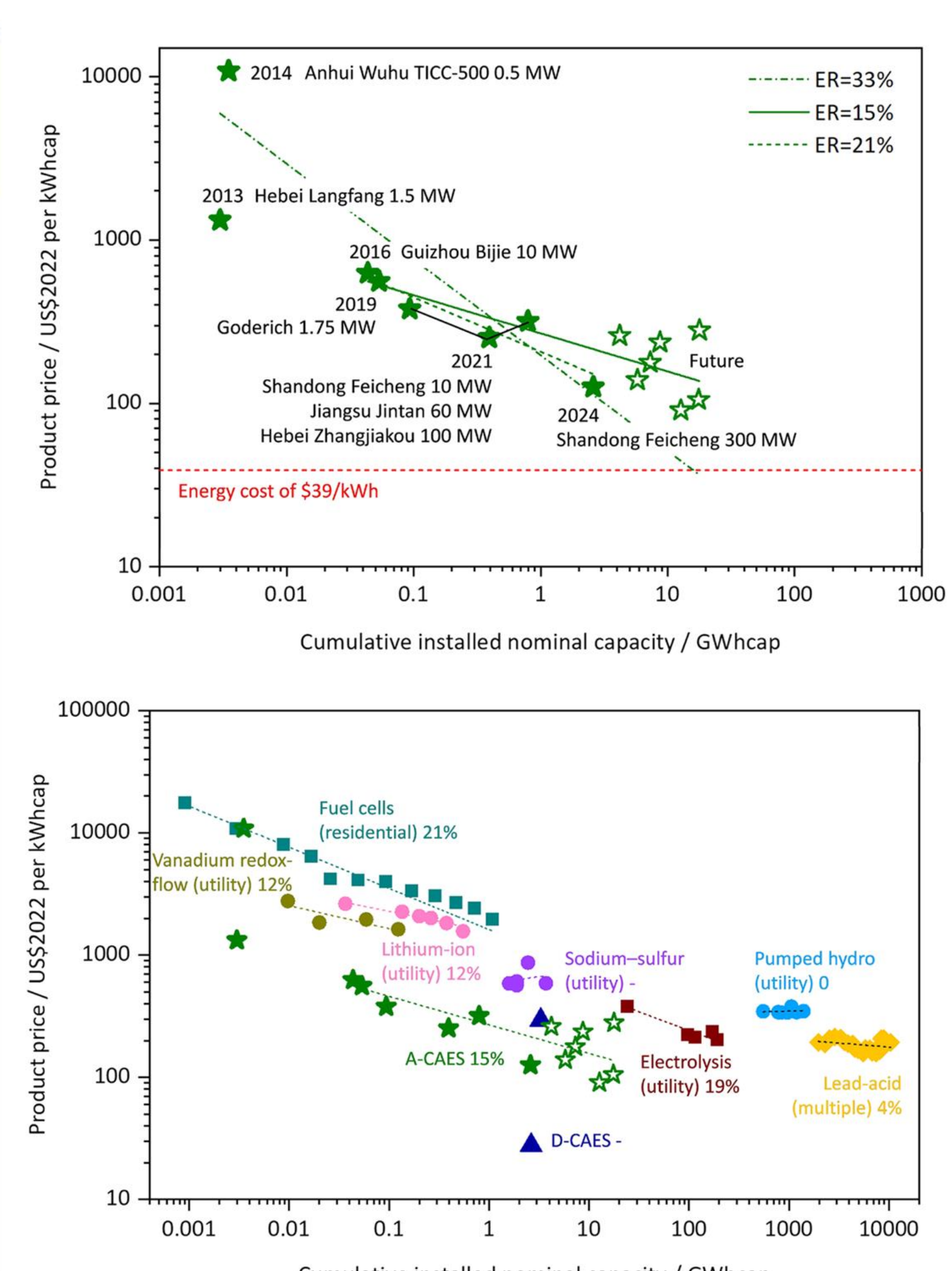
Compressed air energy storage systems



Renewable-powered high-temperature compressed air energy storage to accelerate grid decarbonization

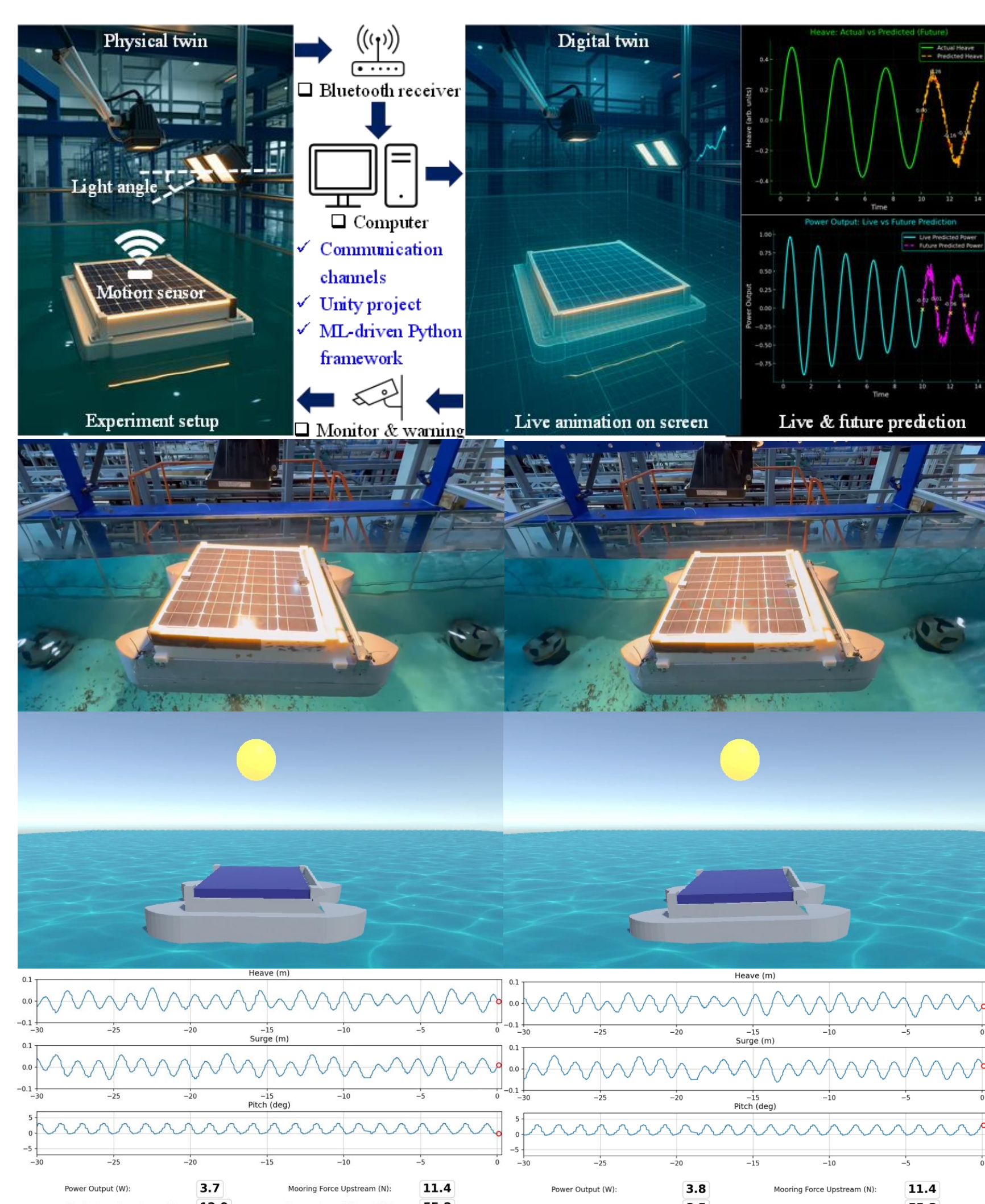


Cost-reducing adiabatic compressed air energy storage for long duration energy-storage applications

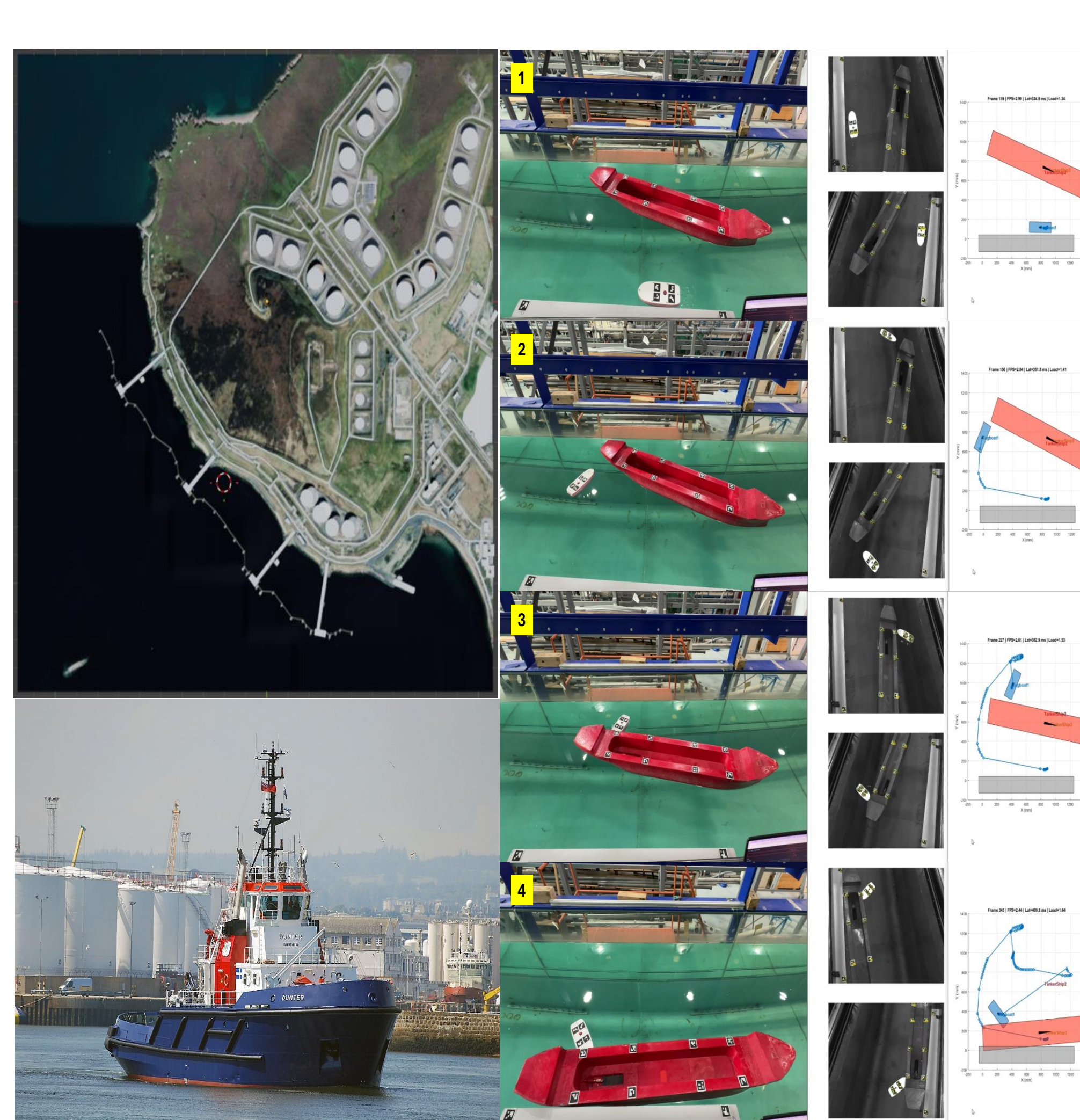


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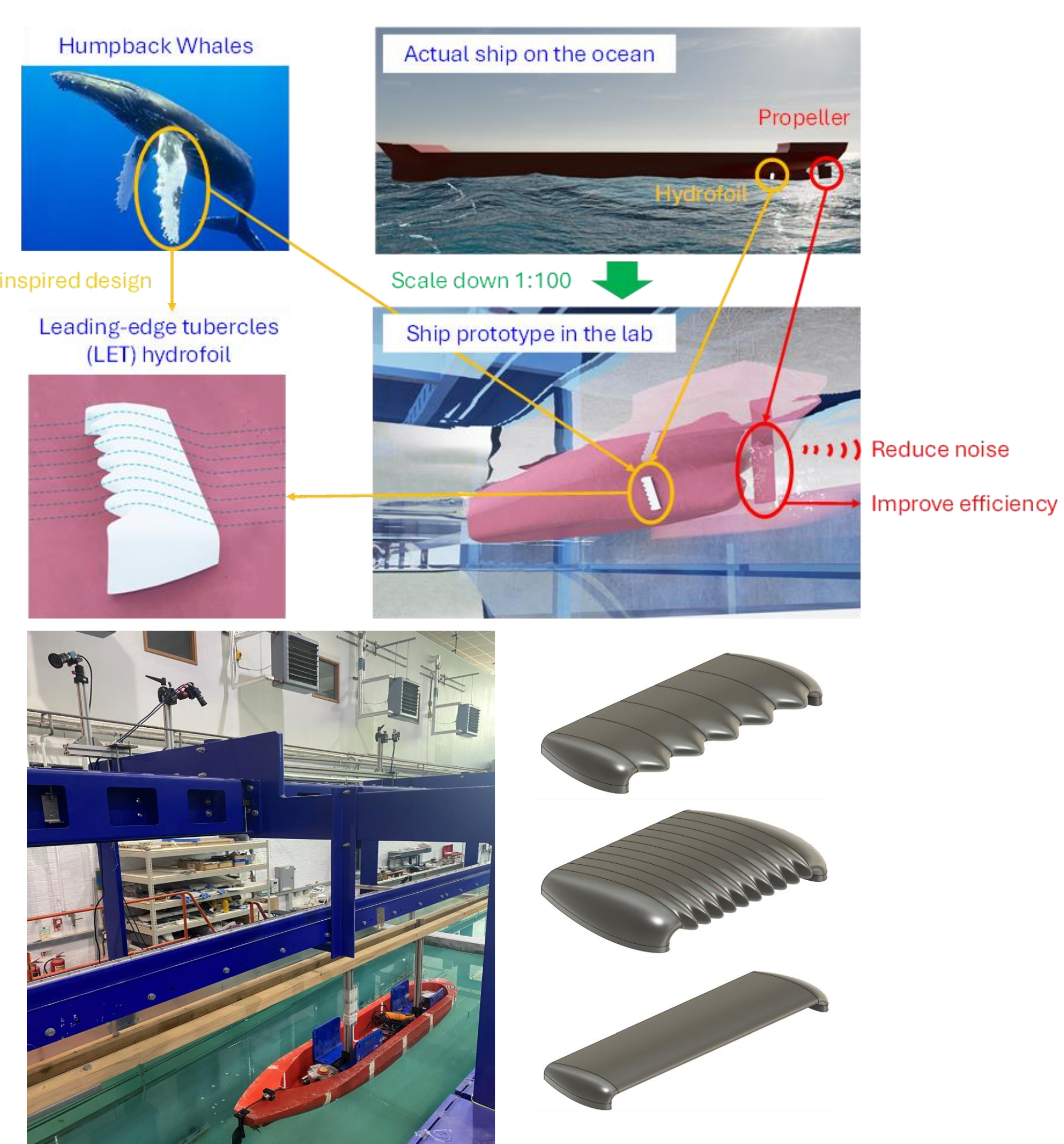
AI-driven digital twins technology for marine energy systems



Real time digital twins for floating photovoltaics



A stereo vision-based digital twins for tugboat



PINN-based bio-inspired tubercle propulsion design

Organizers