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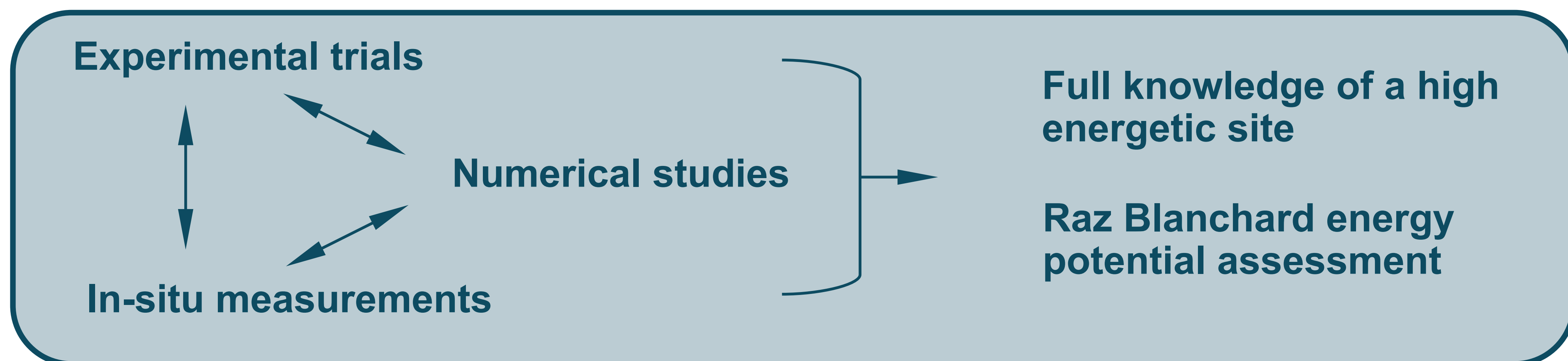
A first tidal farm project in the Raz Blanchard 2025 - 2029

Objectives

- Deploy the first French tidal farm in the English Channel
- Validate the industrial development tools based on comparisons of experimental, numerical and in-situ data.
- Reduce uncertainty on the estimation of the energy potential of the Raz Blanchard and on our abilities to capture this predictable energy resource
- Tidal energy potential assessment of the Raz Blanchard and its optimization for a commercial deployment

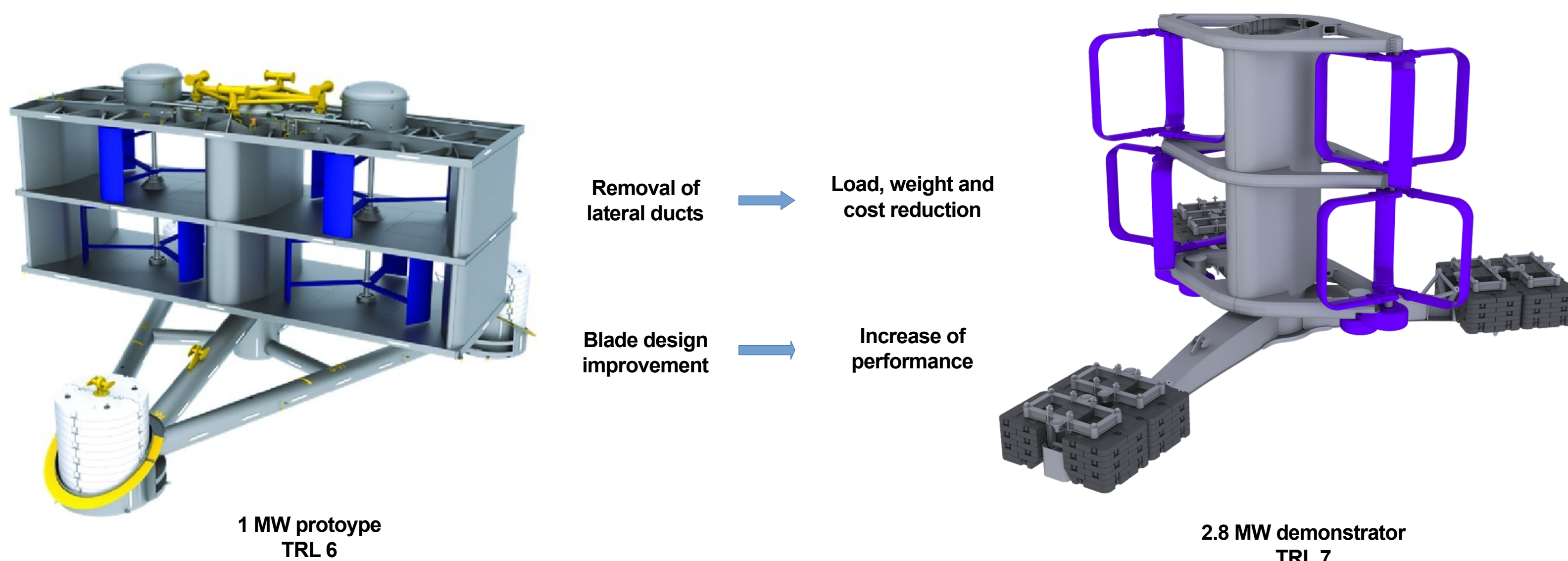
Experimental, numerical and in-situ tools

- Ifremer **Wave and Current flume tank** for model scale studies
- Local and regional **numerical models** to quantify the tidal potential of the site.
- High Frequency and X-band **radars** to qualify a theoretical evaluation of the Raz Blanchard.
- **Hind-cast database** ResourceCode to provide relevant estimation of the Raz Blanchard power potential



Expected results

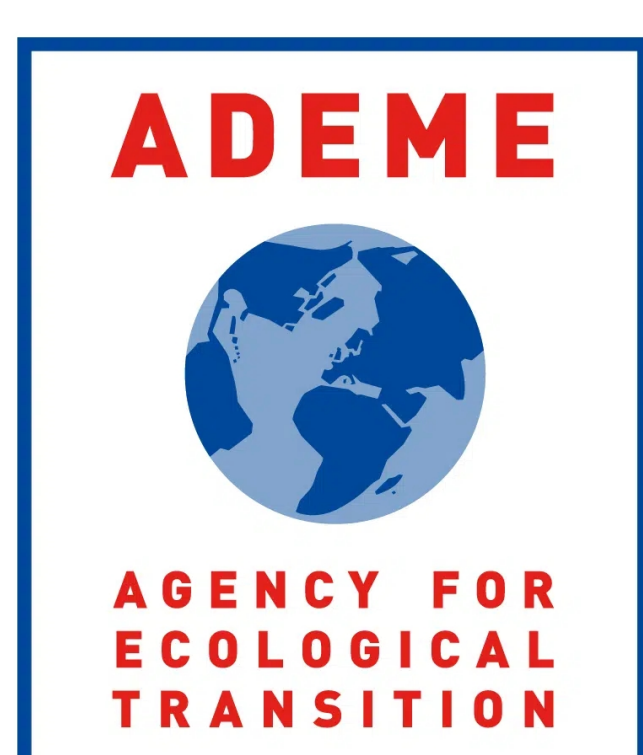
- Full deployment of the six 2.8 MW vertical axis tidal turbines in the Raz Blanchard site in 2028.
- Fine characterization of the resource and environmental conditions of the Raz Blanchard.
- Fine calculation of the producible tidal turbine for large-scale deployment on the Raz Blanchard.
- Evaluation and optimization of the environmental impact of a large-scale farm.



Design evolution of HydroQuest's tidal turbine: from the 1MW to the 2.8 MW capacity bottom mounted twin vertical axis tidal turbine



Artist's rendering of the pilot farm FloWatt project based on 2.8 MW capacity turbines deployment in the Raz Blanchard (English channel, France)



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