

FLOATING PV

Marine	100MW+ installations (Maltese demonstrator project underway)
Lakes	Large scale power generation (Prototype tested in Sudbury, ON)
Reservoirs	Reduced water evaporation
Tailing Ponds	Barrier for wildlife and dust prevention



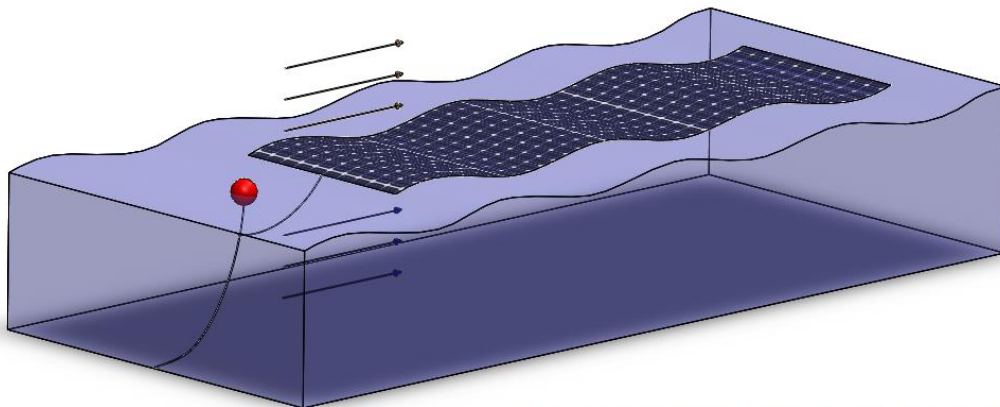
BENEFITS

- Encapsulating polymer can be customised to water chemistry
- Improved PV efficiency from water cooling
- Roll to roll manufacturing technology allows easy scaling to large arrays
- Buoyancy integrated within manufacturing
- Self-cleaning and anti-fouling coating
- Evaporation reduction and dust retention
- Remote electricity generation applications

TECHNOLOGY[†]

- Efficiency 5 to 14% + 1% increase from water cooling of PV
- Installed capacity 60 – 150W_p/m² or 7-16m²/kW_p
- Carbon footprint ~ 20gCO₂-eq/kWh
- Manufactured cost of PV \$0.63/W_p
- Cost ~ \$6/W_p installed (non-commercial scales)

[†] Efficiency and installed capacity is dependent on the PV type installed with CIGS and CdTe being the more efficient, so having a higher installed capacity per square metre



CONCEPTUAL RENDERING OF THE FLOATING PV CONCEPT