

This episode examined how marine renewable energy connects with ocean literacy, highlighting both opportunities and barriers to scaling solutions while ensuring community engagement and environmental protection. Speakers were Brendan Cahill, and Denis Istrati, with the session moderated by Ned Dwyer.

Ned Dwyer



"Community engagement is not a box-ticking exercise. It makes our projects better and strengthens technology through local knowledge." – Brendan Cahill

Challenges

- Harsh marine environments cause reliability and survivability issues for devices.
- Regulatory fragmentation and long permitting delays slow project deployment.
- Public acceptance remains low in some regions (fear of disrupting local lifestyles).
- Funding gaps and difficulty attracting private capital hinder scaling.
- Noise, ecological impacts, and cumulative effects of multiple farms are under-researched.

Brendan Cahill



Denis Istrati



Ideas

- Ocean literacy builds public trust, informs stakeholders, and develops a skilled workforce.
- Early and continuous community engagement is key to acceptance and smoother deployments.
- Co-developing projects with local stakeholders ensures local benefits (jobs, energy security).
- Using digital twins and advanced modelling can predict long-term impacts and support decision-making.
- Multi-use marine spaces (energy + aquaculture, or energy + coastal protection) offer integrated solutions.

Solutions

- Smart microgrids: bring tidal/river energy into local grids for resilience.
- Demonstration projects: grow from pilots to arrays while collecting data.
- Workforce development: integrate ocean literacy in training for new jobs.
- Policy alignment: simplify regulation and match EU decarbonisation goals.
- Adaptive management: monitor impacts and adjust with stakeholder input.

Watch it again...

