

# 2025 SIDS NDE Joint Programme

Energy systems World Cafe

PRESENTER

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**Exploring climate vulnerabilities  
in energy systems of SIDS and  
adaptable solutions for enhancing  
resilience**

# Question 1

What key climate vulnerabilities challenge energy systems in Small Island Developing States



# Question 2

What adaptation solutions have been or could be successfully implemented to enhance energy resilience in island nations



# Question 3

How can these energy adaptation solutions provide broader socio-economic benefits and be replicated in other SIDS

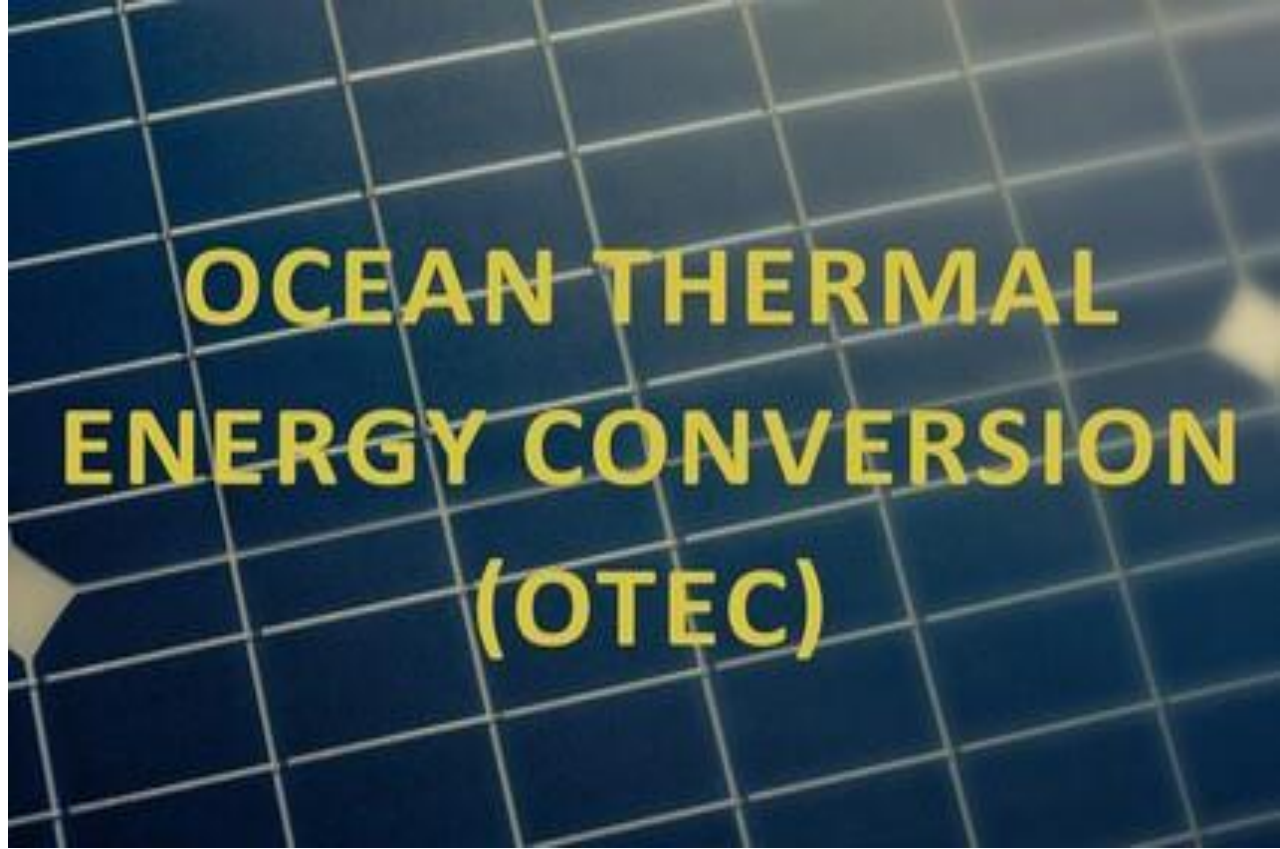


# Case : OTEC: Ocean Energy Technical Pre-Feasibility Study

As the participants reflect on the vulnerabilities of SIDS' energy systems discussed in the w. café, they will now explore how OTEC technology offers a promising renewable energy solution that taps into the steady thermal gradient of tropical oceans, providing constant and resilient power unlike intermittent sources

Participants will discuss how this project exemplifies innovative adaptation through technology suited specifically for island contexts—floating OTEC plants that can withstand storm conditions, reduce reliance on fossil fuels, and support energy independence

## OCEAN THERMAL ENERGY CONVERSION (OTEC)



# CTCN Support

Encourage participants to consider how the integration of such emerging technologies fits into broader resilience planning, decentralization, and diversification strategies explored earlier.

Emphasize the potential socio-economic co-benefits: cost savings, enhanced energy security, and empowerment of island communities through sustainable blue economy opportunities.



# CTCN Support

Highlight the importance of collaboration among governments, and private innovators to turn such promising concepts into tangible, scalable outcomes for SIDS.

Finally, participants to reflect on practical next steps: supporting policy frameworks, fostering innovation ecosystems, and knowledge sharing to accelerate energy resilience in small islands.

