



“RIGS –TO-REEFS”: PROSPECTS FOR LARGE SCALE ARTIFICIAL REEFS IN TROPICAL SOUTHEAST ASIAN SEAS

(A MARINE SCIENCE, ENGINEERING, LAW AND POLICY WORKSHOP)

**12 – 13 November 2013,
NUS Bukit Timah Campus, Blue Bali @ Cluny, Singapore 259600**

BACKGROUND

Coastal urbanization and unsustainable fisheries practices, are responsible for a rapid degradation and large reduction in reef coverage across Tropical Southeast Asia and the South China Sea. With climate change, sensitive reef habitats are likely to be further compromised. 88% of Southeast Asia’s coral reefs are under threat and the net economic benefits derived from ecosystem services provided by these coral reefs are valued at between US\$23,100 and US\$270,000 per square km per annum.

Small scale artificial reefs have been used for centuries by traditional fisheries to increase the catch and manage target resources. More recently, larger artificial reefs have been placed to enhance fisheries but also to replace destroyed reefs and more generally as a tool to re-build damaged or lost marine habitats and ultimately to enhance marine biodiversity and re-gain lost ecosystem functions.

The large number of offshore installations nearing the end of their shell life is creating an opportunity for large scale artificial reefs in Southeast Asia. However, these are controversial.

OBJECTIVE

This two-day workshop aims to explore whether the concept of rigs to reefs is relevant and applicable to tropical Southeast Asia, given the environmental issues in the region and the legal, political and economic context; and if it can contribute towards fisheries and biodiversity enhancement and climate change mitigation and adaptation by enhancing ecosystem resilience.

Experts from around the world and the region will share the results of their research and current best practices.

Please see behind for programme synopsis

WHO SHOULD ATTEND

**Marine Biologists and Ecologists
Offshore Engineers
Marine Policy Experts
Law of the Sea Experts
Environmental Economists**

**Country Representatives from
the Ministries of Energy,
Fisheries and/or Environment**

**Oil and Gas Industry
representatives**

**IMO, London Convention or other
International Organizations
Interested NGOs**

TOPICS

- 1. The Ecological Argument**
- 2. Engineering Aspects and
Technical Feasibility of
Reefing of Obsolete Offshore
Structures**
- 3. Institutional and Legal
Challenges**
- 4. Industry Perspectives**

12 – 13 November 2013, Tuesday & Wednesday

Blue Bali @ Cluny, House 1D Cluny Road, NUS Bukit Timah Campus, Singapore 259600

Day 1

Session 1: The Ecological Argument

Reef habitat, biodiversity losses and wild capture fisheries status in Southeast Asia.
Enhancing fisheries and biodiversity: aggregation vs. production debate.
Artificial reefs as pathways for coral and fisheries export.
Review of artificial reefs experience in Southeast Asia.

Session 2: Technical Feasibility and Practical Considerations of Reefing of Obsolete Offshore Structures

Impact of offshore installations' fatigue on removal and reuse as artificial reef.
Are offshore structures well suited to be reused as artificial reefs?
Construction parameters of old offshore installations in the region.
Marine growth monitoring and treatment.
Experience from the Gulf of Mexico and Brunei.

Drinks Reception at the Blue Bali

Day 2

Session 3: Institutional and Legal Challenges

International regulations on decommissioning and rigs-to-reefs.
When would an artificial reef qualify as illegal dumping at sea?
The case of endangered species hosted by offshore installations.
Transfer of institutional responsibility from the Ministry of Energy or Natural Resources to the Ministry of Fisheries or Environment
Who bears the residual liability?

Session 4: Is it an Opportunity for the Offshore Industry?

Perspective of the Offshore industry and potential benefits from rigs-to-reef.
Competing alternative reuses of 'obsolete' rigs.
Assessing ecosystem services provided by a rigs-to-reef project.
Risk and reputation management considerations.

REGISTRATION (Registration is free, limited to 80 participants)

To register your interest or for more information, please [click here](#)
or email Ms Geraldine Ng at cilnwfg@nus.edu.sg

Locating **Blue Bali @ Cluny**, 1D Cluny Road, Singapore 259600 (opposite Law Faculty Eu Tong Sen Building)



HOW TO GET TO BLUE BALI :

- TURN LEFT FROM BUKIT TIMAH ROAD TO EVANS ROAD
- ENTER FROM NASSIM GATE, SINGAPORE BOTANIC GARDENS
- FOLLOW AROUND THE CIRCLE AND KEEP TO YOUR LEFT
- PASS THE RAFFLES BUILDING, CONTINUE UP THE HILL
- TURN LEFT AT CJ KOH LAW LIBRARY BUILDING
- CONTINUE TILL YOU SEE BLUE BALI ON YOUR LEFT (HOUSE 1D)



Blue Bali

Eu Tong Sen Building