Special Lunch Time Talk

Tuesday, 18 June 2019, 1:00-2:00 p.m.

K-HUB

The Ocean Economy

Point of Contact:
Dan Millison, Sustainable Energy Technology Expert, ADB Consultant,
dmillison.consultant@adb.org

Background

The ocean economy is an organizing principle for organic growth in ADB's investment operations flowing directly from Strategy 2030 operational priorities, as manifest in the announcement of ADB's ocean health action plan at the ADB Annual Meeting in May 2019.

Opportunities exist for new commercial investments across the spectrum of ADB operations—sovereign and non-sovereign—in climate mitigation and resilience, energy, food, health, transport, waste management, and water. Island and archipelagic countries generally see their geographic realities as binding constraints on development, but the oceans offer comparative and competitive advantages which are limited only by imagination and ingenuity. The flip side of this opportunity is a challenge for planetary health in an area that ADB has traditionally ignored: the oceans, which provide a large part of the oxygen we breathe (likely more than 50%), 15% of the protein humans consume, and which absorb about 40% of the global CO2 emissions. Humanity cannot survive without the oceans, but they are mentioned only once in the Paris climate accord.

Objective

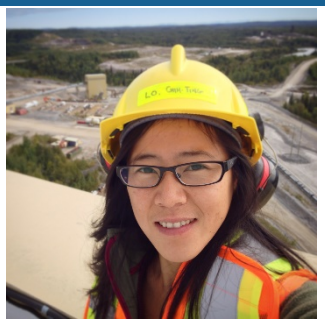
This ACEF Lunch Talk session will provide an overview of ADB's ocean economy initiative announced in May 2019 with brief presentations on scalable solutions for marine aquaculture, coral propagation, and coastal zone waste-to-energy. In the 21st century, ocean energy development needs to happen in a holistic manner: while energy projects can be developed in isolation around power purchase agreements, an alternative approach is a multi-resource development program beginning with high-value seafood production powered by captive renewables, energy recovery from coastal / ocean wastes, and coral propagation for biodiversity conservation and more eco-friendly tourism. This approach emphasizes early revenue generation and modular expansion, with utility-scale ocean energy development via horizontal and vertical integration of the initial revenue-generating activity. Complementary activities could include coastal zone protection, specifically cultivation of

mangroves, reefs, and wetlands which provide additional carbon sequestration and climate change adaptation benefits.

Agenda

Time	Activity
13:00 – 13:10	Introduction – Steve Peters, Waste to Energy Specialist, ADB
13:10 – 13:20	The World's Lowest Carbon Protein: Marine Aquaculture Chih-Ting Lo, EELO Solutioms
13:20 – 13:30	Growing Reefs Faster Than We Are Killing Them: The Coral Engine Remmente ter Hofstede, Van Oord
13:30 – 13:40	Modular Systems for Coastal Waste to Energy Adam Aleksander, PtP Energy Services
13:40 – 13:55	Q & A

Indicative List of Speakers



Chih-ting Lo, President, EELO Solutions, Inc.

Chih-Ting Lo is an entrepreneur and president of EELO Solutions. She works with large industrial organizations to develop and implement innovative energy and climate change programs around the world, focusing on people, processes, and technologies. She has extensive knowledge and experience in low carbon energy supply, energy efficiency, and energy storage technologies. In her 15+ years of experience, she has worked on projects in North America, Latin America, Africa, China and Asia.
Chih-Ting advises leading innovators in their sectors, including Cermaq, Grieg Seafood, Government of Canada, Barrick Gold, Newmont Goldcorp, Teck Resources, Port of Metro Vancouver, and the Asian Development Bank.

Remment ter Hofstede, Senior Ecologist, Van Oord Ltd.

Remment ter Hofstede is senior ecologist at the international marine contractor Van Oord DMC. He has worked over 20 years as a researcher to facilitate integrated management of the marine environment. After his graduation at the University of Groningen, he has extensively studied the effects of climate change and human pressures on coastal systems at Wageningen University & Research. He joined Van Oord in 2014,and is responsible for bringing science into practice. He applies innovative nature-based solutions for infrastructural development, to improve coastal resilience across the world.

Adam Aleksander, President, PtP Energy Services

Dr. Adam Aleksander is a Mechanical and Industrial Engineer, with degrees from San Jose State Univ., Univ. of Colorado, and a PhD from Texas A&M Univ. and is a licensed Professional Engineer in multiple States. During a career spanning 50 years, he has significant experience in material handling, process energy systems, biomass boilers and STG's, and investigative forensic engineering. He has worked extensively in Asia, including the Philippines, Bangladesh, and most recently Indonesia in support of power energy projects. This experience led to the recent concept of a barge mounted processor, adapted to developing country challenges. Many plans are offered to help mitigate the deleterious effects of waste plastic, but few are practical, or available now, or with technology that is both robust, effective and cost-effective.