

# OCEAN THERMAL ENERGY CONVERSION:

## Assessing Potential Physical, Chemical and Biological Impacts and Risks

### Breakout Session Questions

- **Breakout Session I: Biological Impacts and Receptors – June 22**
  1. What possible impacts are missing from our list? (Refer to handout)
  2. What are the best available technologies to assess OTEC impacts and risks?
  3. What baseline assessments, monitoring strategies and modeling methods are needed to develop quantifiable levels of impact and risk for OTEC facilities?
- **Breakout Session II: Baseline – June 23, AM**
  4. What is the geographic extent of the population/community to which impacts should be related (e.g., Pacific Ocean [whales], U.S. waters surrounding Hawaii [phytoplankton], waters around Oahu, or waters between Barbers Point and Diamond Head)?
  5. What additional research is needed in order to assess potential biological impacts of OTEC facilities?
- **Breakout Session III: Moving Forward – June 23, PM**
  6. How can potential physical, chemical and biological impacts be avoided, minimized or mitigated within the operational and design parameters of an OTEC system?
  7. What are potential tradeoffs between biological impacts and operational efficiency?

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### Breakout Session IV: Integration - June 24 [Note: New Group Assignments]

#### *Groups 1- 4 - Integration of Baseline and Monitoring Data and Information Needs*

- What is the geographic extent of the population to which impacts should be related (e.g., Pacific Ocean [whales], U.S. waters surrounding Hawaii [phytoplankton] waters around Oahu, or waters between Barbers Point and Diamond Head)?
- For your group, determine baseline, monitoring, and modeling data needed for understanding the potential environmental impacts associated with an OTEC facility.
- Assign (High, Low, or Medium) priority to each data need and note why this level of priority is being assigned.
- Identify what further research is needed.

#### *Group 5 – Integration of Regulatory Needs*

- Based on what was discussed on Days 1 & 2, what else may be needed above and beyond baseline assessment, monitoring strategies, and modeling methods to assess the biological impacts of an OTEC facility?

#### *Group 6 – Integration of OTEC Facility Design and to Avoid, Minimize and Mitigate Environmental Impacts*

- Based on what was discussed previously (Days 1 & 2 of workshop), how might the OTEC facility design be adjusted to avoid, minimize or mitigate biological impacts without compromising the operational viability of an OTEC facility?