# OTEC Technology Workshop Platform Group

Session 1 Report-Out:

What are the state of the art technologies for the platform?

### Available Platform Technologies

- Assumptions:
  - 100 MWe Commercial OTEC
  - Offshore
  - Open or Closed Cycle
  - Maximumpayload/weight =10,000 tons
  - All weather conditions
  - Moored platforms

- Options:
  - Ship Shape
  - Spar
  - Semi-submersible including Tension Leg
    Platform

#### Summary of Technology Options

TYPE	MOTION/ SURVIVABILITY RISK	ARRANGEMENT DIFFICULTY	COST	TECHNICAL MATURITY
SEMI- SUBMERSIBLE	SMALL	MEDIUM	MEDIUM	HIGH
SPAR	SMALL	HIGH	MEDIUM-HIGH	MEDIUM
SHIP SHAPE	MEDIUM	LOW	LOW	HIGH

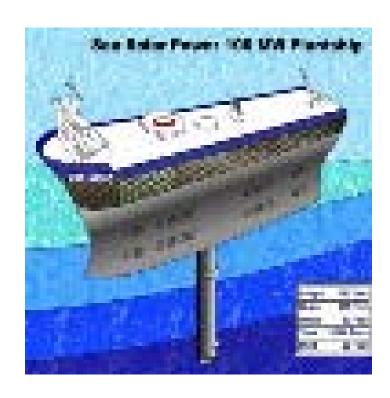
NOTE 1: Estimated Technology Readiness Level is 9 for all options for an oil rig/floating platform

- 2: None of these have been done for a 100 MWe (or smaller) OTEC system (OTEC configuration for Spar technology likely to be the most difficult relative to oil rig configurations)
- 3: Offshore oil rig requirements far exceed the requirements for OTEC

## Semi-Submersible Used for Oil and Gas Drilling



## Ship Shape



## "Red Hawk" Spar Platform

