



Natural Resources
Canada

Ressources naturelles
Canada

C E T C

CANMET ENERGY TECHNOLOGY CENTRE

Assessing Progress in Ocean Energy Technology

CLEAN ENERGY TECHNOLOGIES

Morel Oprisan, CETC-Ottawa
OREG Symposium 2005

Canada 



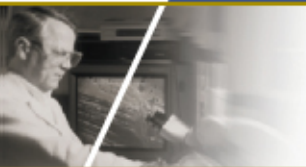


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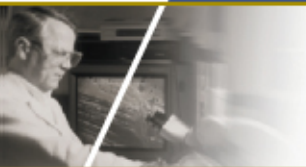




CANMET Energy Technology Centre

- NRCan research arm
- Programs include renewable energy, energy efficiency, alternative transportation fuels, & low emission combustion technologies
- Develop and deploy leading edge energy products and processes





RET Program

Support Renewable Energy Technologies that show a potential for being economically viable while contributing to sustainable development.

- Small Hydro
- Wind
- Solar Thermal
- H₂ Production from RETs
- Ocean



FOEWG

- Federal Ocean Energy Working Group
- Support for project initiatives
- Interdepartmental representation
 - NRCan
 - NRC
 - Industry Canada
 - Environment Canada
 - WD and ACOA



Ocean Energy Projects

- Industry Canada – Sector Capacity
- NRC – Resource Assessment
- Environment Canada - Environmental Screening
- NRCan – Technology Screening
CANMET and NRC



Ocean Energy Technology Screening

- **Goal:** Assess Canadian and international ocean energy technologies in terms of market potential and global position
- **Activities:**
 - Criteria for assessing potential and progress
 - Review of current and emerging technologies (Cdn and international)
 - Analysis of common technology challenges and barriers
 - Proposal for actions and related projects



Assessment Criteria

- Defining technology readiness levels
 - Where they are at in the commercialisation spectrum
- Criteria for assessment
 - How to measure progress and success
- Methods for moving them forward

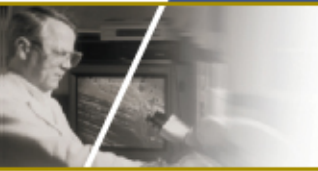




Technology Review

- What ocean energy technologies are being developed in Canada?
- What are the “leading” ocean energy technologies internationally?
- How does Canada compare?

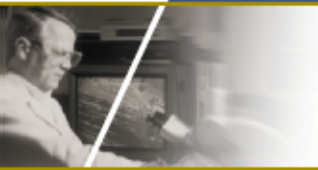




Common Challenges and Barriers

- Common technology issues faced by each developer.
- Opportunities for collaboration.
- Existing areas of expertise.
 - E.g. Ocean engineering





Proposals for Action

- Further development of assessment criteria and methodology
- Development of testing procedures
 - Lab and field

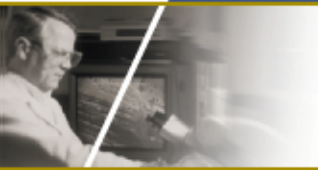




Proposals for Action Cont.

- Demonstrating value for further government funding
- Methods for moving the technologies from R&D through to demonstration and market readiness





Conclusions

- Ocean energy is at an early development stage
- Numerous technologies are being developed world-wide
- Canada has an opportunity to take a leadership role
- Extensive support for R&D and demonstration is needed for viability

