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# Ocean Energy in BC and Beyond

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**Ocean Energy Conference II**

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- **BC Technologies**
- **BC Project Activities**
- **Provincial Government Activities**
- **Industrial Supply Chain**
- **Collaborative Opportunities**
  - **PNWER**



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# Blue Energy

**Took on commercialisation activities after early Davis hydro turbine testing**

**Final prototype testing in UBC tow tank as part of WD agreement**

**Completing details on demo project for later this year**



# SyncWave Energy

**Resonating point  
absorber**

**R&D continuing with  
corrosion and stress  
tests**

**Have identified four  
prospective remote  
power customers**

**Conducting resource  
analyses**



# Clean Current Power

**Bi-directional ducted  
horizontal axis turbine**

**Direct drive variable speed  
permanent magnet  
generator**

**Race Rocks demo project**

**Currently developing 19.5  
m, 2 MW turbine for  
installation 2009**





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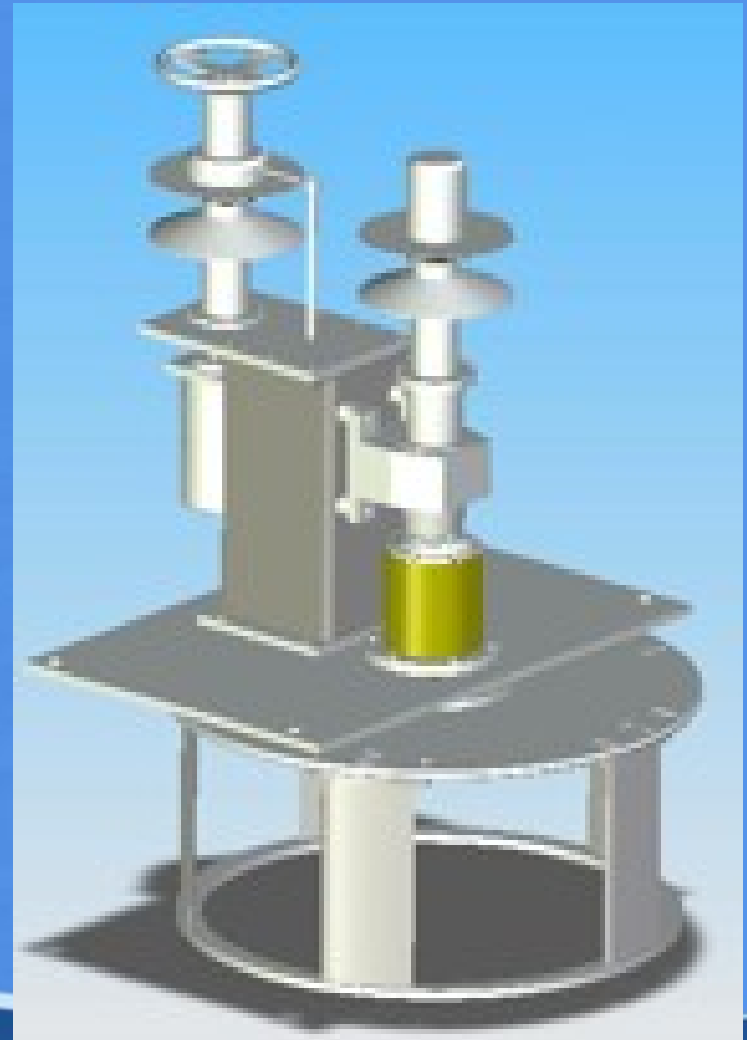
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# New Energy Corp.

**Vertical axis “EnCurrent”  
turbine based on Davis  
hydro turbine research**

**Tested 3 kW and 5 kW  
prototypes**

**Currently designing turbine  
for Canoe Pass  
demonstration project**





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## Pearson College – EnCana – Clean Current Tidal Power Demonstration Project at Race Rocks

- 60 kW turbine installed in Sept 2006 – first system of its kind in world
- Generator, blade and duct have met or exceeded expectations
- Looking for next stage, commercial scale prototype project – open to development centre concept



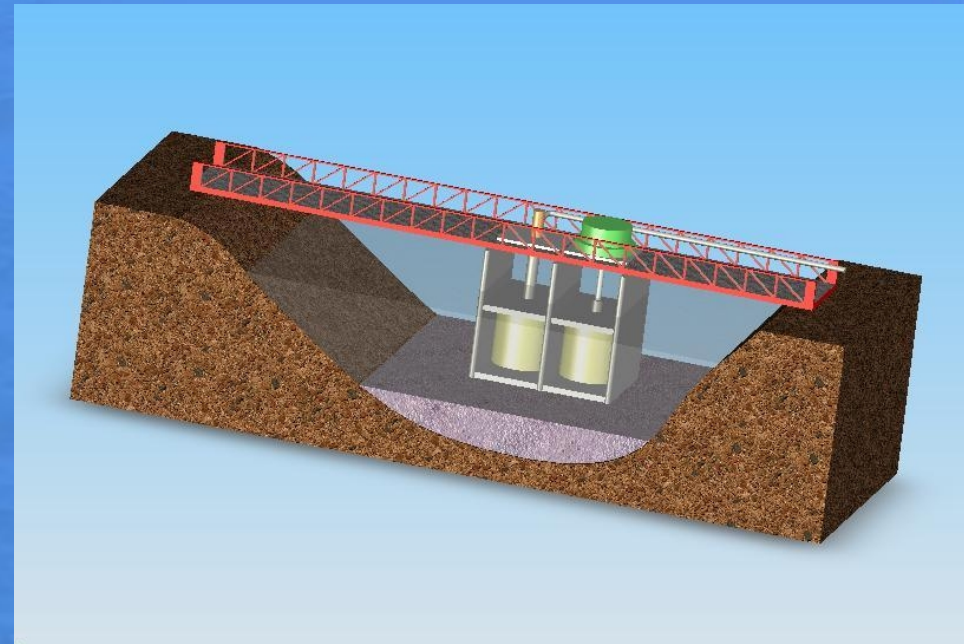


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## Canoe Pass Tidal Demonstration Project

- Permit applications underway
- 500 kW capacity, New Energy EnCurrent turbine
- Currently expanding proposal for testing facility





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## Coastal Hydropower

- Operating rights for Gorlov turbine and Davidson & Hill ducted turbine for use as Combined Technology
- Plans/agreements for deployment in Campbell River area, Sonora Island, and Columbia River
- Other sites identified on BC coast, rivers in BC, Yukon, Alberta, ON, WA and Alaska



# Provincial Activities

- **Tenuring policy under development**
  - 26 investigative permits
- **Ocean Energy Strategy due by end 2007**
- **New Energy Plan – ocean energy research chair, \$25m innovation fund, self-sufficiency by 2016**
- **BC Hydro Standing Offer Program**



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# Industrial Supply Chain

- **AXYS Technologies**— resource monitoring wave buoys
- **OceanWorks** – tidal turbine manufacturing and engineering validation
- **Triton Consultants** – resource analyses
- **Roper Resources** – bathymetric studies
- **AMEC** – engineering and installation
- **Xantrex** – power technologies



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# Collaboration Opportunities

- **PNWER Action Items**
  - Practical resource analysis
  - Inclusion of California energy market
  - Work with utilities to include ocean neegy in long term plans
  - Incentive and engagement programs
  - PNW Working Group



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# The PNW Working Group

- **Multi-organisational task group**
  - **Research**
  - **Resource assessment**
  - **Environmental interactions**
  - **Policy**
  - **Information exchange & heighten awareness**
  - **Regional supply chain**
  - **Web-based discussion, newsletters and meetings**



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- **Learning from each other and from doing**
- **Sharing data and information**
- **Filling expertise gaps and expanding capabilities**
- **Convergence of technology**
- **Acceleration of the industry**



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# Contact

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