

Presentation to the ACZISC 23 September 2009

*Oceans of
Opportunity*



NEWFOUNDLAND
AND LABRADOR'S
OCEAN TECHNOLOGY
SECTOR STRATEGY

Ocean Technology Sector Strategy

The purpose of *Oceans of Opportunity* is to increase the level of ocean technology activity in Newfoundland and Labrador with programs designed to:

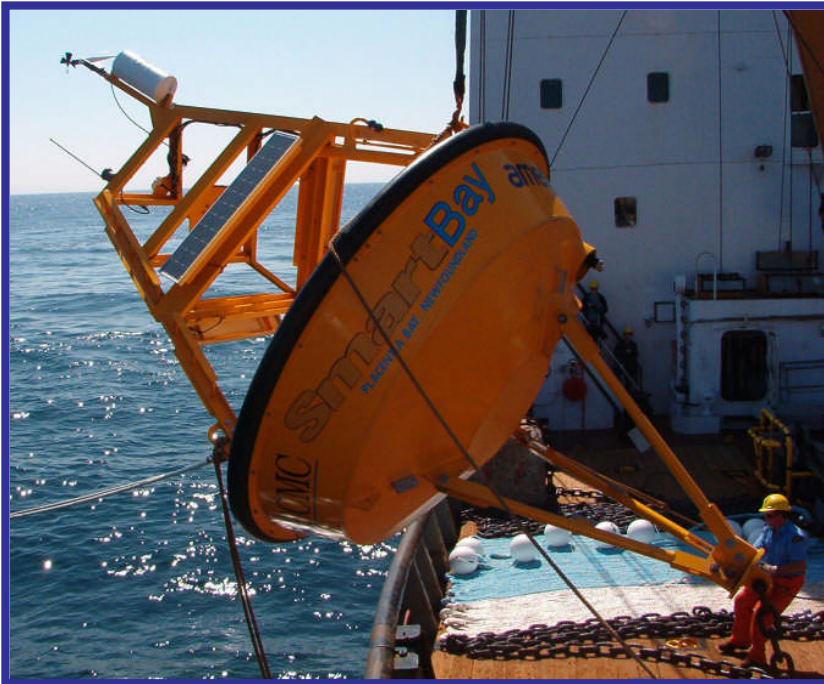
- improve supports to business;
- strengthen ties between institutions and industry; and,
- develop a new marketing approach for select target markets.



Why Ocean Technology?

- **Oceans matter in NL:**
 - **Fisheries, aquaculture, offshore oil, transportation, tourism, weather**
 - **Culture and daily life**
- **Oceans account for 30% of Provincial GDP**
- **Concentration of ocean technology companies**
- **Existing institutional infrastructure for R&D**
- **Strategic geographic location**
- **Provincial government is a willing and committed partner**
- **National / international recognition of ocean technology expertise**

The Opportunity



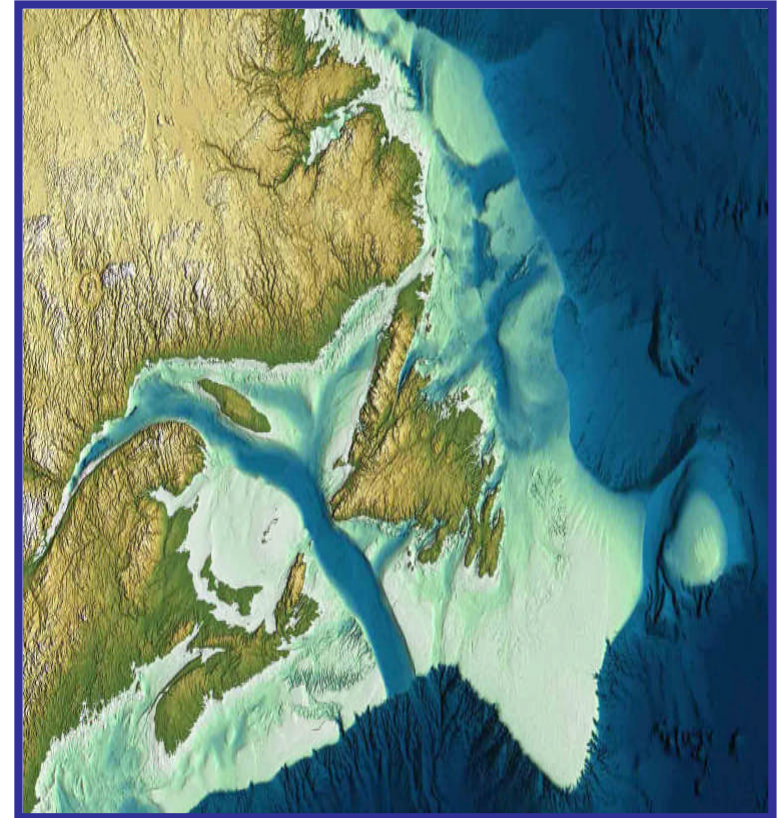
Ocean technology is a critical global industry:

- **Offshore oil and gas**
- **Ocean exploration**
- **Ocean monitoring**
- **Safety and security**
- **Resource management**
- **Climate change**

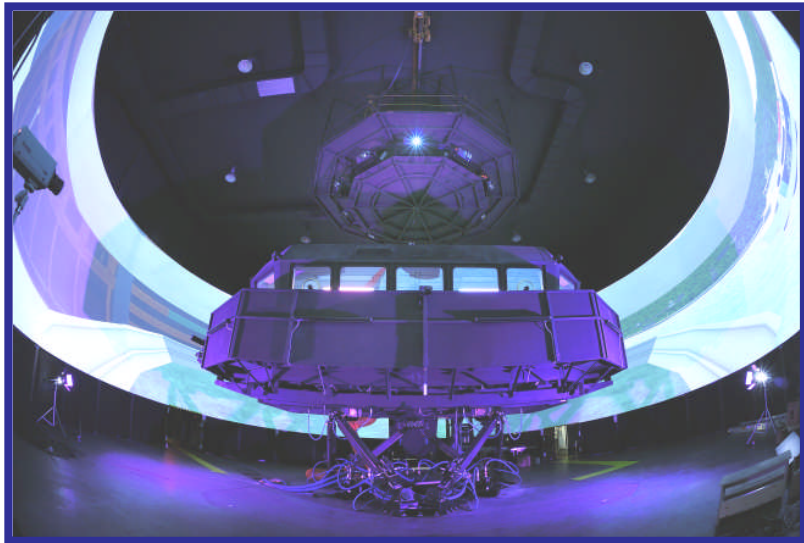
The Opportunity (cont.)

Adequate resources and focused government efforts can:

- **Turn oceans from perceived problem to profit**
- **Utilize government research to support industry**
- **Secure industrial growth potential**
- **Enhance understanding of environment and climate change**
- **Improve safety and security in coastal regions**
- **Foster Memorial University, its Marine Institute and other research organizations as sources of expertise**



Rationale for Ocean Technology Strategy



- **Builds upon the Innovation Strategy.**
- **Ocean technology is identified in the Innovation Strategy as a sector that builds on the Province's natural abilities, environment, requirements and opportunities.**
- **Is a response to both industry growth and the wider recognition by government of ocean technology's potential.**

For the purposes of this strategy, the ocean technology sector is defined as:

The ocean technology sector facilitates the use and monitoring of ocean and coastal resources by developing, producing or adding value to products and / or services based primarily on technological and business innovation.

NL Ocean Technology Cluster



- **Over 50 firms with ~ \$300 million in revenue**
- **Industry target of \$1 billion in revenue by 2015**
- **Direct employment: ~ 1500 people**
- **Export-oriented**
- **OceansAdvance clustering initiative**
- **Supported by R&D infrastructure and three levels of government**

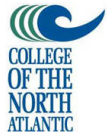
Existing Research Capacity



Ocean Sciences Centre (OSC)
Bonne Bay Marine Station
Ocean Engineering Research Centre (OERC)
Marine Environmental Research Laboratory for Intelligent Vehicles (MERLIN)
RAVEN Unmanned Aerial Vehicle Project (partnered with Provincial Aerospace)
SEAformatics Group (partnered with Rutter)
Canadian Healthy Oceans Network (partnered with 12 universities and DFO)
C-CORE



Centre for Marine Simulation (CMS)
Offshore Safety and Survival Centre (OSSC)
Centre for Sustainable Aquatic Resources (CSAR)
Centre for Aquaculture and Seafood Development (CASD)
School of Ocean Technology – Applied Research Group



Office of Applied Research



Institute for Ocean Technology (NRC-IOT)



Fisheries and Oceans
Canada

Northwest Atlantic Fisheries Centre

New R&D Corporation

- **The Research & Development Corporation (RDC) is a provincial Crown corporation that was established in 2008.**
- **Its mandate is to improve Newfoundland and Labrador's research and development (R&D) performance.**
- **RDC works closely with INTRD**
- **www.researchnl.com**



Overall budget of \$28 million over 5 years

Direct Support to Industry

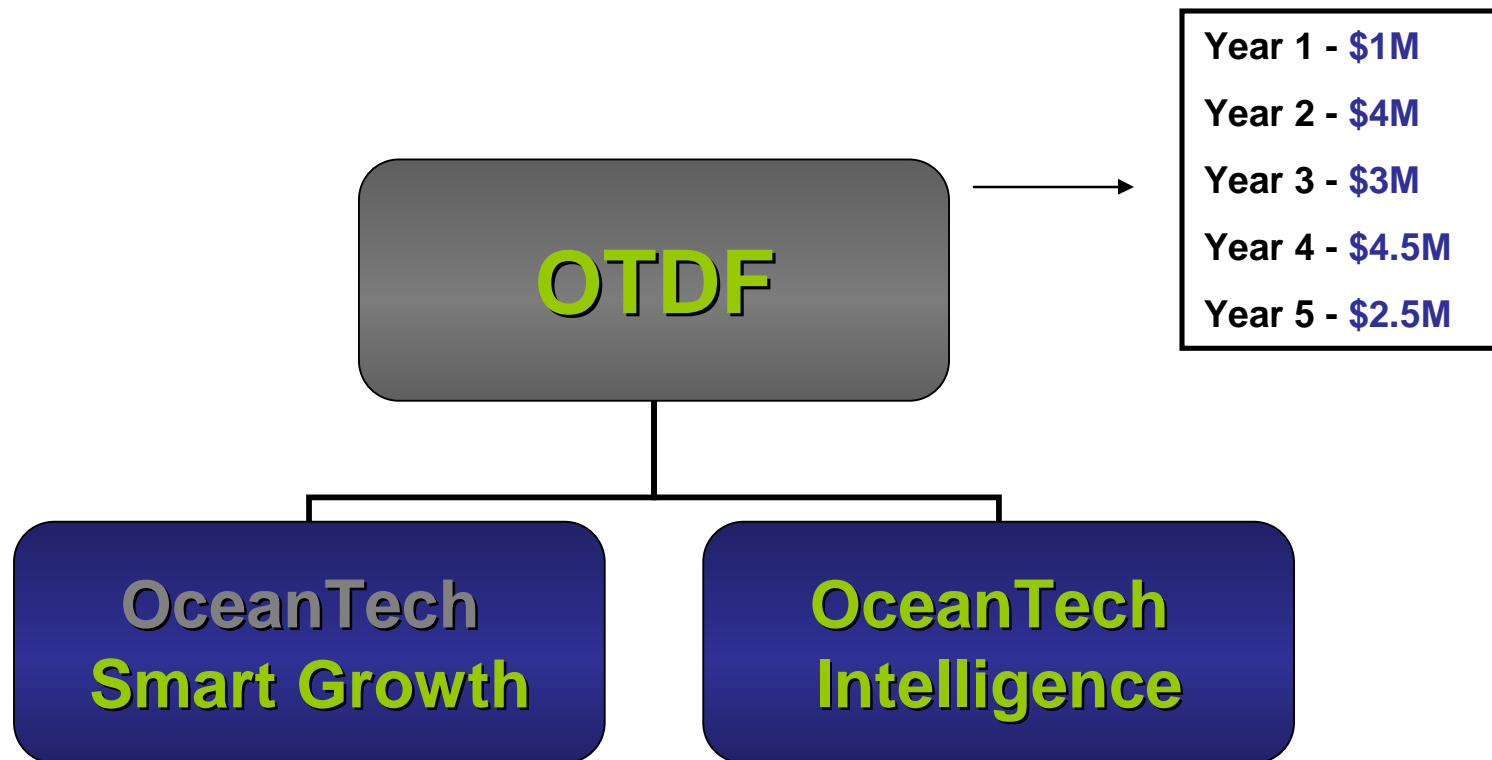
- **Ocean Technology Development Fund (OTDF)**
- **Travel support for business development activities (OceanTech Global)**
- **Incubation Support**

Ocean Observing

- **Polaris Program**
- **Northwest Atlantic Ocean Observation System Partnership**

Government Led Initiatives

Ocean Technology Development Fund



- **Commercial program component.**
- **Focuses on support for high growth potential private sector enterprises with projects that center on ocean intelligence, ocean observation, vessel operations and ocean energy.**
- **Contributions will be in the form of conditionally repayable loans and equity investments with potential investments of up to 75 per cent of total project costs, to a maximum of \$500,000 per project.**

- **Non-commercial program component.**
- **Focuses on support for universities, research institutions, industry associations and other not-for-profit organizations whose mandates contribute to the growth of the Province's ocean technology sector.**
- **Contributions to public sector institutions and not-for-profit organizations are non-repayable with potential investments of up to 80 per cent of total eligible project costs, to a maximum of \$250,000 per project or \$500,000 per applicant for multi-project submissions.**

- **Commercial and Non-commercial program clients.**
- **Provides travel support for national and international oceans-related business development activities.**
- **Contributions to public sector institutions, not-for-profit organizations and private-sector clients are non-repayable to maximum of \$10,000 per client per fiscal year.**
- **Budget = \$200K / year for 5 years.**

Ocean Observing

- **The Polaris Program, budgeted at \$5 million, will be a series of collaborative ocean observing projects that will involve industry, educational institutions and government.**
- **The initial investment through Polaris was announced in August 2009: \$330,000 to SmartBay to enable the purchase of WatchKeeper buoys to improve the operations of the system.**
- **The Northwest Atlantic Ocean Observation System Partnership, a collective that was originally established through OceansAdvance, will also be supported.**
- **INTRD and RDC will be collaborating on future OO projects.**

In summary, this strategy seeks to improve the business and technology environments so that ocean technology companies are assisted in developing their abilities, markets and profits in the world, knowing that they have a strong foundation of support, infrastructure and interests right here at home.