

VERSCHUREN CENTRE

For Sustainability in Energy
and the Environment



June 2016



VERSCHUREN
CENTRE

For Sustainability in Energy
and the Environment

Verschuren Centre

Who we are

Atlantic Canada's **Only** Contractible R&D and **CleanTech Commercialization** Centre

What we do

- ✓ Laboratory Services & Training
- ✓ Initiation, Planning and Design Services
- ✓ Incubator & Seed Funder
- ✓ Technology Development & Evaluation

Sectors

Fisheries, Agri-Food, Oil & Gas, Mining,
Forestry, Institutional, Government





**VERSCHUREN
CENTRE**

For Sustainability in Energy
and the Environment

Eco-System

Facility

\$15 M “LEED Gold” Facility

35,000 ft² Labs & Office

\$2.5 M Analytical Equipment

10,000 ft² Piloting Warehouse

900 ft² Greenhouse

Aquaculture Rearing

3 x 3 acres experimental farm plots

Capacity

Interdisciplinary Support Teams

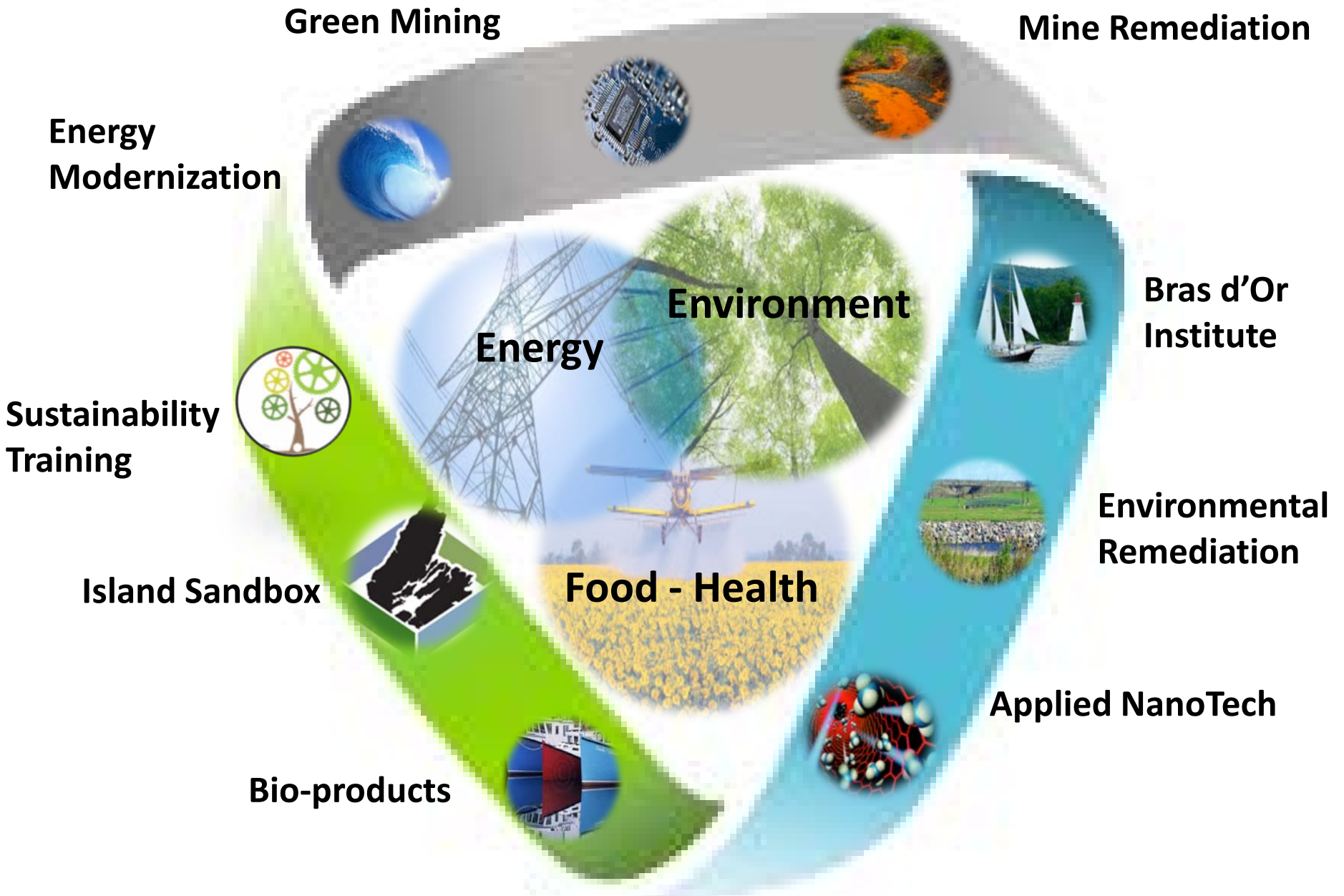
Corporate Network & Mentors

CBIFF Investment Fund

“Sandbox” Incubator



Teams





VERSCHUREN CENTRE

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Snap-Shot

	<u>2015-16</u>	<u>Since 2012</u>
Staff	28	49
Students	14	34
Organizations	41	73
Corporations	56%	56%
Atlantic Corps	71%	74%
SME's Incubated	5	15
Revenues	\$2.3 M	\$10 M (+4)





Management

Andrew Swanson (**Phycal**)

David Wheeler (**Body Shop**)

Kevin Francis (**Xerox Canada**)

Annette Verschuren (**NRStor**)

Jim Irving (**JD Irving Ltd**)

Vicki Sharpe (**Sustainable Dev. Tech. Canada**)

Robert Bennett (**Emera USA**)

Robert Orr (**Ocean Nutrition**)

Sheldon Levy (**DMZ-Ryerson**)

Keith MacLeod (**Can-NS Offshore Petro Board**)

Hector Jacques (**Jacques Whitford-Stantec**)

George MacDonald (**McInnes Cooper**)

Gail Rudderham-Chernin (**Breton Law Group**)

Leroy Denny (**Eskasoni First Nation**)

Marlene Usher (**SydPort**)





Waste Valorization

Organics



Crop Residues



Industrial Produced Waters



Mine Remediation Sludge



Fly Ash, Foundry Dust,
& Tailings





Waste Valorization

Organics

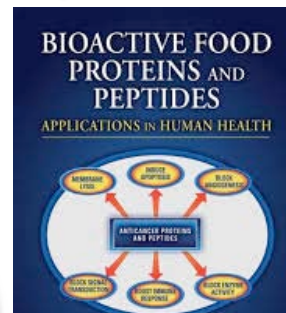


Bio-transformation

BSF Larvae



Lactic Acid Fermentation





Waste Valorization

Thermo-mechanical Conversion

Agri & forestry Residues



BIRCH WATER PRODUCTS



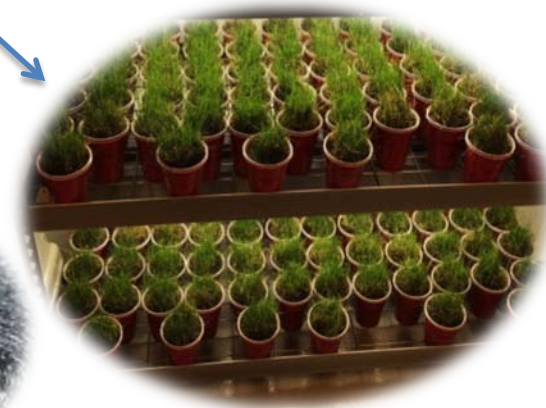


Waste Valorization

Mine Remediation Sludge



Treatment Reactor





Waste Valorization

Fly Ash, Foundry Dust,
& Tailings



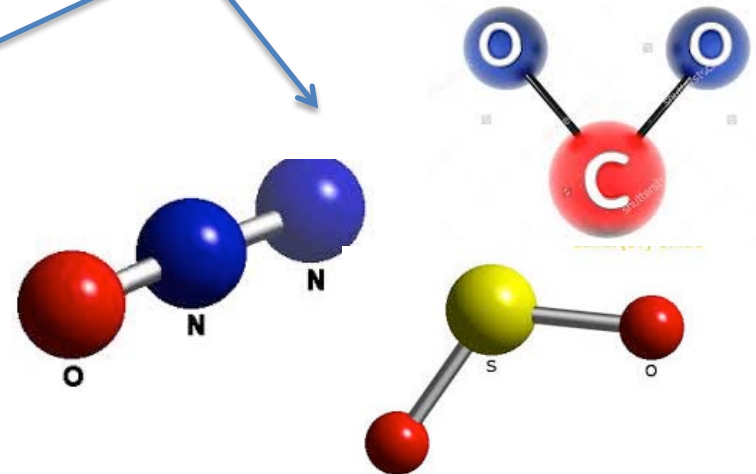
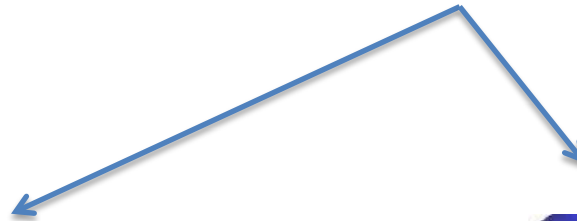
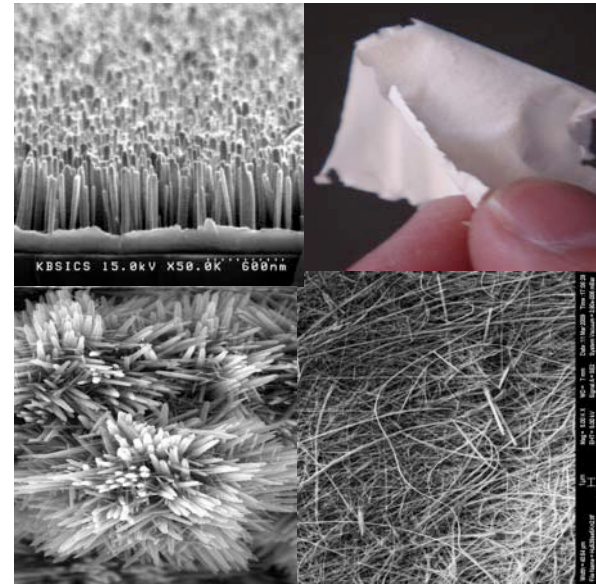
Treatment Reactor





Waste Valorization

Industrial Produced Waters





Green Energy

Biomass Heating Fuel



E- Conservation



5.8 MW Wind Farm



Electric & Thermal Storage



Geothermal



Solar PV Thermal



North America's
**1st Energy Self-Sufficient
University**



Living Laboratory



**Clean Tech
Start-ups**



**Energy
Self-Sufficiency**



**Food
Self-Sufficiency**