

# DESCARE SALARSER

## **COMMERCIALIZING AGRI-TECHNOLOGY:** Bringing Innovation to Market

Rattan Gill

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Outline

# Why do we need innovative agricultural clean technologies?

What does the commercialization pipeline look like?

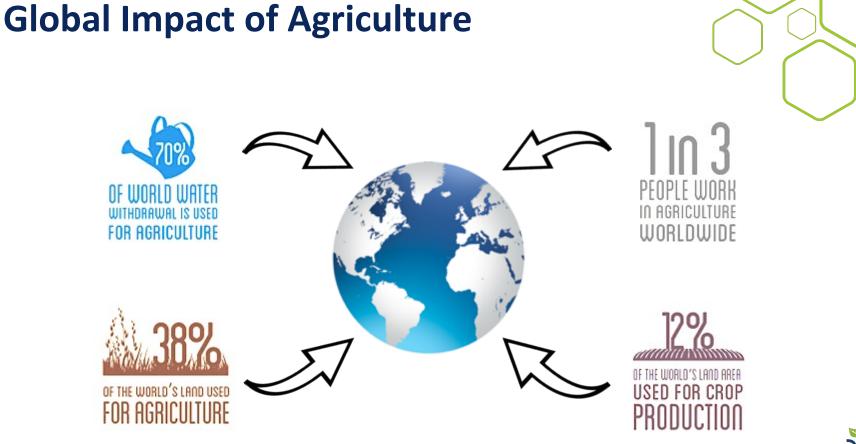


Outline

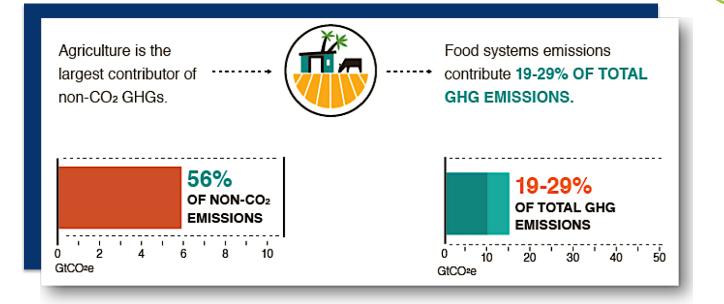
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#### **Environmental Impact: Direct Agricultural Emissions**



Sources: ccafs.cgiar.org, US-EPA, 2011 and Vermeulen et al., 2012



#### **Agriculture Sector's Unique Challenge**



### "To produce more food while reducing greenhouse gas emissions caused by food production"

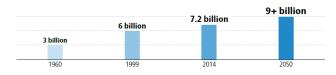


#### **Agriculture Sector's Unique Challenge**









To nourish another 2 billion people in 2050, food production must rise by 60%.

but the way we produce more food cannot be at the expense of the planet





Natural resources are diminishing Ecosystems are compromised and biodiversity lost

npromised Climate is changing

Sustainability will be at the heart of new global development goals that will replace the MDGs after 2015

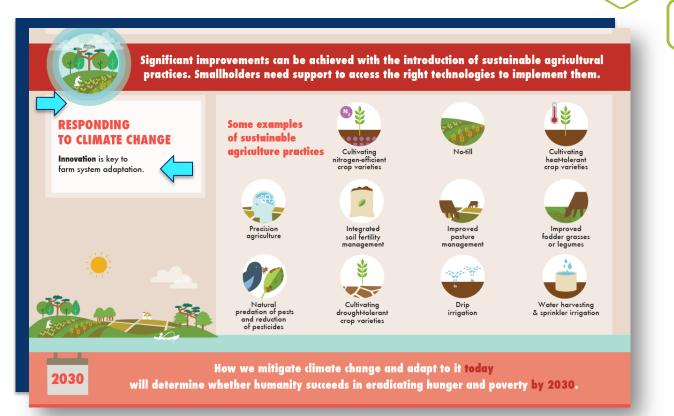






Source: © FAO, September 2015

#### **Responding to the Challenge**



Source: © FAO, 2016



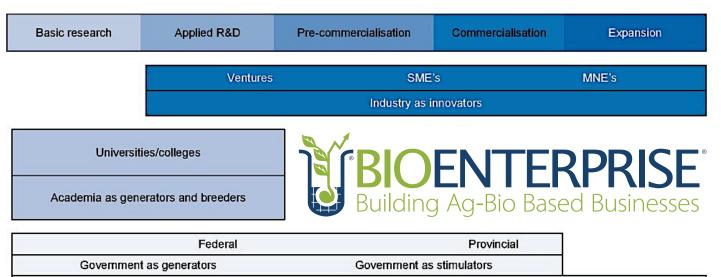


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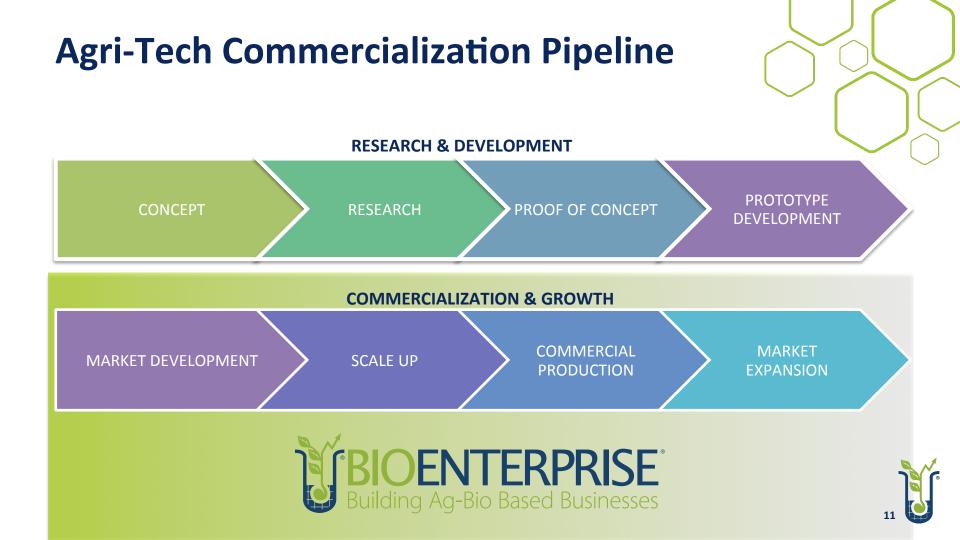


#### **Agri-Innovation Continuum in Canada**



Government as enablers





#### **Bioenterprise: Who we are?**

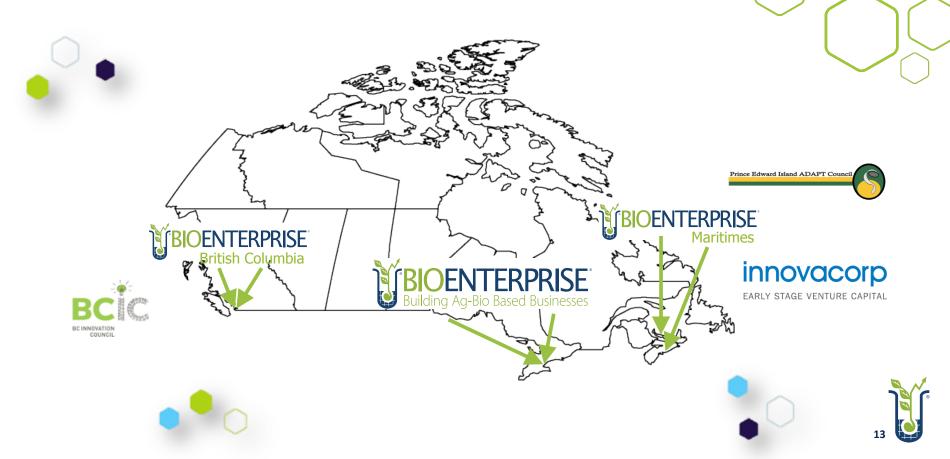


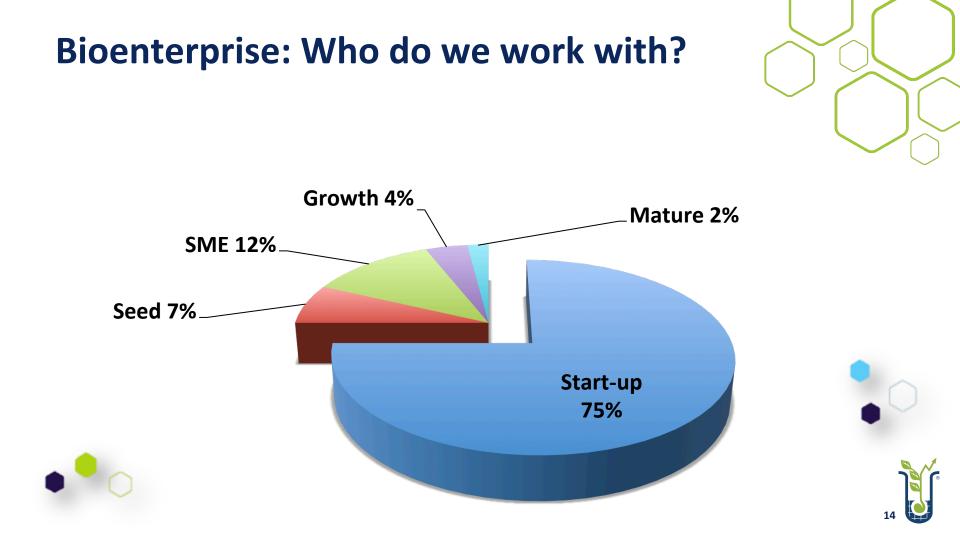
- Canada's agri-technology focused business accelerator
- Advancing innovative agri-technology ventures to market since 2003
- Provide business commercialization services

• Connecting investors to high-potential opportunities



#### **Bioenterprise: Who we are?**





#### **Agri-Technology: Sector Scope**

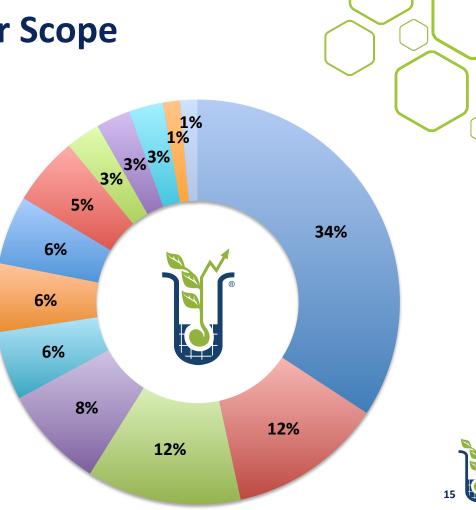
Food & Beverage

- Food Processing
- Crop Science
- 😂 🛛 🗏 Bio-products

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- 💉 🛛 🗖 Animal Health
- Agri-based Life Sciences
- 🞾 🗧 Ag Management Tools
- Agriculture Waste Management
- 🐗 🛛 = Equipment Development
- -☆- Bio-energy
- 🔶 🛛 📮 Aquaculture
- Precision Ag
- 🔗 🛛 🗏 Water Management



### **Agri-Technology: Clean Tech Umbrella**

Clean Technologies: reduce environmental pollution, resource use and/or waste

- Precision Agriculture: sensor based water management, input management, automated agricultural systems
- Biosecurity applications
- Alternative protein production
- Improved efficacy of agricultural inputs, Biopesticides
- Resource sharing
- Bio-based energy & Cogeneration solution
- Biodegradable packaging



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#### **Funding: Southern Ontario**

#### **Bioenterprise Seed Fund**

- Non-repayable seed financing, coaching and mentorship to assist ag-based companies headquartered in Southern Ontario
- Up to \$30,000 in matching funds to the recipients
- Supported through FedDev Ontario



### Funding Opportunities : Nova Scotia





EARLY STAGE VENTURE CAPITAL

#### **Clean Tech Accelerate Program**

- a specialized venture capital fund to support high-potential start-ups and early-stage companies in the clean technology sector
- Examples









#### **Funding Opportunities: Multiple provinces**

#### **Bioenterprise Commercialization Support Program**

- Funding for companies, headquartered in BC, NS, and PE
- Eligible to receive additional support for specific projects
- Supported through NRC CAIP













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