



Keeping Alberta Growing: Alberta Innovates Bio Solutions

Dr. Stan Blade, Chief Executive Officer

Presentation: Parkland County

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Funded by the Government of Alberta



**We invest in science and research
to grow prosperity in Alberta's agriculture,
forest and healthy food sectors**

Our Board: Talented and Diverse



- Mr. Art Froehlich, Chair – AdFarm
- Mr. Ray Price, Vice-Chair – Sunterra Meats
- Dr. Neil Cashman – (Prion) University of British Columbia
- Dr. Bruce German – University of California
- Mr. Joerg Goetsch – Daishowa-Marubeni International
- Mr. Brian Hesje – Fountain Tire
- Mr. Doug MacKenzie – Permolex International
- Dr. Jack Saddler – (Forestry) University of British Columbia
- Mr. Paul Schmidt – Kirchner Private Capital Group
- Dr. Jacqueline Shan - Entrepreneur
- Dr. John Webb – Maple Leaf Foods

Alberta Industry Drivers

- A need to be profitable
- Next generation economy opportunities
- Sustainable practices
- Greenhouse gas emissions
- Ecosystem adaptation to climate change
- Rural development
- Enhanced agricultural and forestry productivity
- Demographics/industry structure
- The need for innovation



We have mature, established industries....

**Alberta Farm
Gate Value
(2010)**

Product	Value (\$mil)
Beef	3,065
Canola	1,711
Wheat	1,129
Hogs	372
Dairy	478
Poultry	260
Pulses	178
Barley	153
Potatoes	151
Greenhouse	116

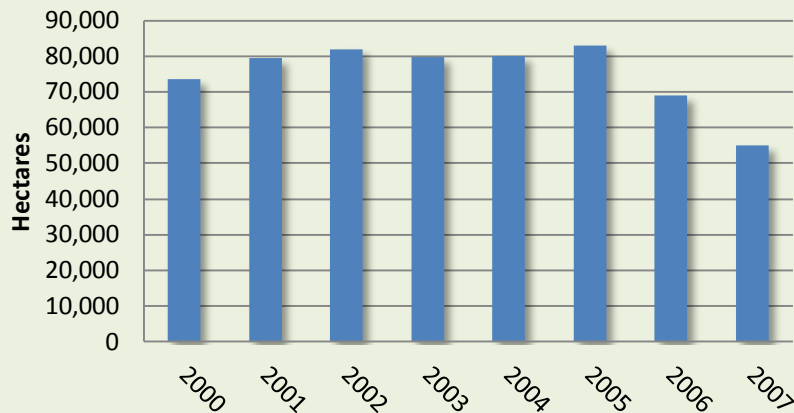


Processing - \$12.2B

Growing Prosperity

Harvesting Alberta's Forests

Forest Area Harvested in Alberta



Softwood:

- Spruce.....35.4%
- Pine.....23.7%
- Fir.....1.6%

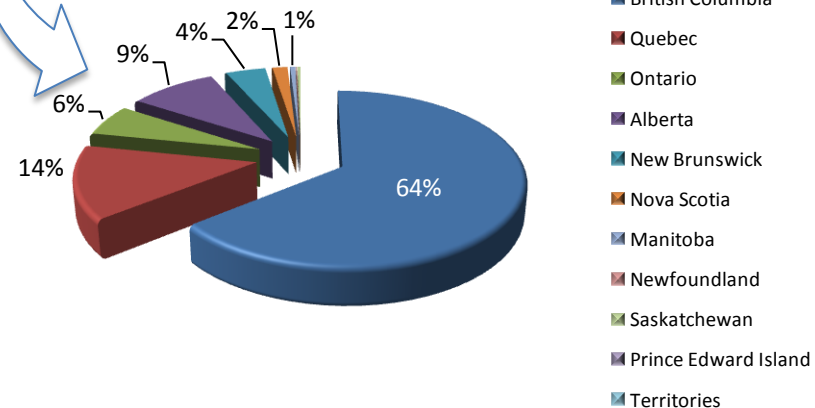
Hardwood:

- Aspen/Poplar.....35.2%
- Birch.....1.4%

97.3%



Canadian Forest Product Exports, 2008



Vision:

Growing Alberta's prosperity, health and sustainability through the innovative use of our renewable resources.

Mission:

Alberta Innovates Bio Solutions advances science and technology to optimize the economic, social and environmental value of Alberta's agriculture and forest resources.

Making a difference !

Our Operating Principles

Leadership

- We foster leadership at all levels. encourage innovation, and promote excellence

Dedication

- We are dedicated to achieving new levels of innovation and product diversity in agriculture and forestry.

Integrity and Transparency

- We behave and communicate sincerely and honestly.

Partnership

- We engage our partners in a mutually acceptable and responsive system of research and innovation.

Our Core Functions

- Provide foresight
- Leadership (strategy development and specific initiatives)
- Evaluation (technologies, opportunities)
- Broker (make connections)
- Invest (stimulate R&D)
- Create and expand networks
- Knowledge translation
- Communication
- Measure performance

Our Progress

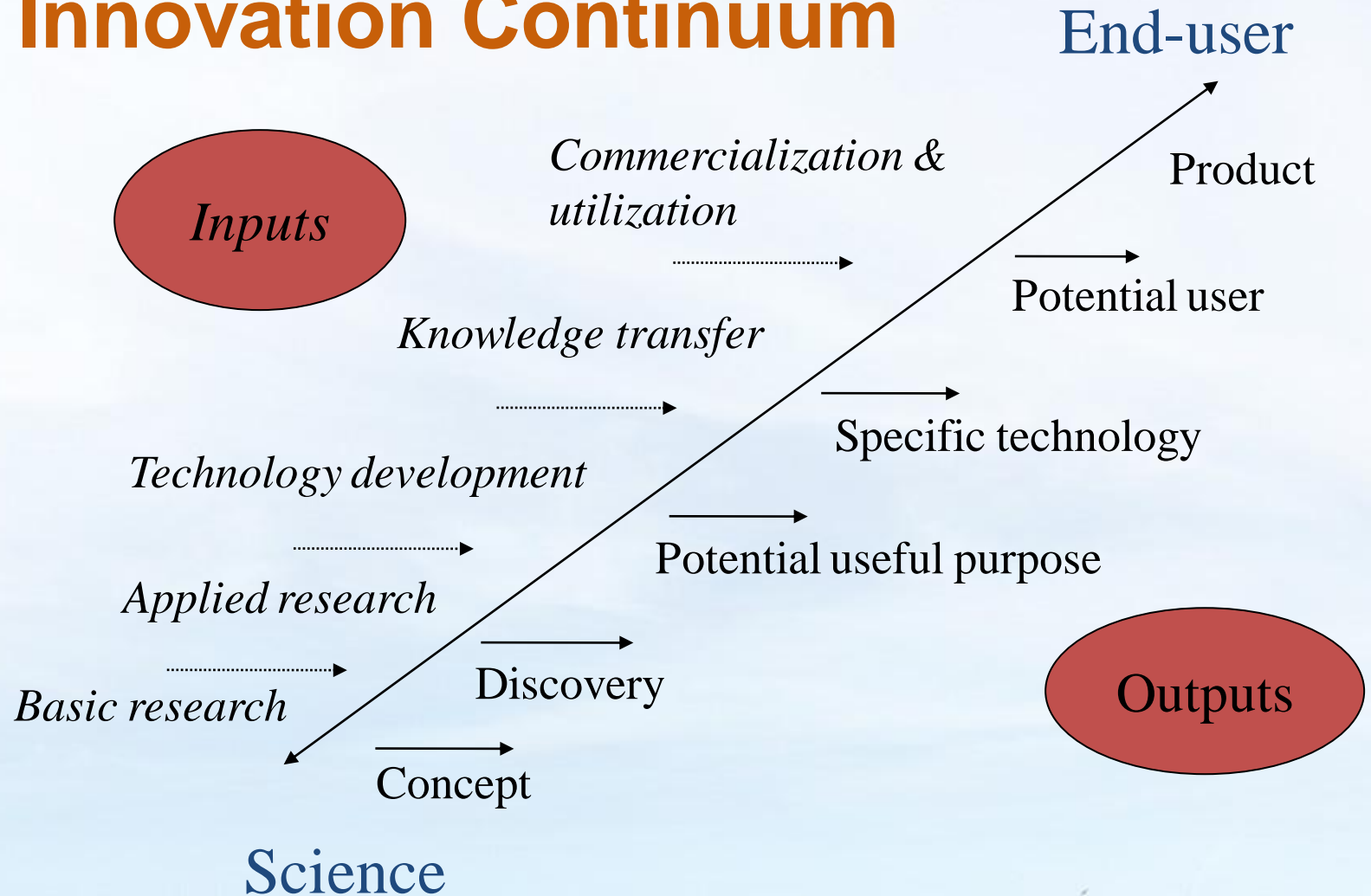


AI Bio:

- has established our focus areas (Board is engaged)
- is working with Alberta Innovates and other partners (GOA Ministries, AB Innovates, Government of Canada [WD and AAFC] and collaborator agencies)
- has a strong “book” of investments (\$65m of more than \$170m total project value)
- has made new investments with a clear timeline for new additional initiatives (genomics, value addition, advanced materials and chemicals)
- is connected to companies (MNEs, SMEs, AB-based and external potential investors)
- is presenting AB to the world (“Bioeconomy Alberta”, USDA Forest Service, CLIB [Germany])
- is creating new partnerships aligned with our focus areas (\$3m Food for Health call for research proposals has additional investors from Health Solutions, Alberta Milk, Alberta Pulse Growers and Alberta Canola Producers-as well as AB Meat and Livestock Agency and Alberta Crop Industry Development Fund)
- has a strong team of dedicated professionals (experience, well-networked, global recognition of technical competence, enthusiastic!)



The Innovation Continuum



Where Innovation Meets Opportunity

- AI Bio Solutions has established a solid financial and operational foundation since it started in 2010, and the financial outlook going forward is increasingly positive.
- Funding allows AI Bio Solutions to ensure program effectiveness through economic and political cycles, to retain high quality staff, and to provide optimal and sustainable services to the provincial research and innovation system.
- 2012-13 Budget Estimate: \$16,736,000





Priority Area One: Sustainable Production

GOAL ONE

Sustainable agriculture, food and forest production

- Competitive production for a global marketplace.
- Economically, environmentally and socially sustainable production systems.



Priority Area Two: Advancing the Bioeconomy

GOAL TWO

New chemicals, materials and energy from biomass

- Development of new bioindustrial products and processes.
- Growth of bioindustrial sector.



Priority Area Three: Quality Food for Health

GOAL THREE

Healthy food products and effective food safety processes

- Food ingredients and products for improved wellbeing.
- Reduction of food-borne illnesses.



Priority Area Four: Ecosystem Services

GOAL FOUR

Excellence in environmental innovation

- Enhanced ecosystem services through market-based approaches.
- Development of bio-based environmental services.
- Documentation of environmental integrity.



Priority Area Five: Prion and Prion-like Neurological Diseases

GOAL FIVE

Effective management of prion and prion-like neurological diseases

- Robust Canadian livestock markets.
- Reduced risk management costs of prion diseases in livestock industries and wild cervid management.
- Research leadership in prion and human neurodegenerative diseases.



Priority Area Six: Sector Leadership

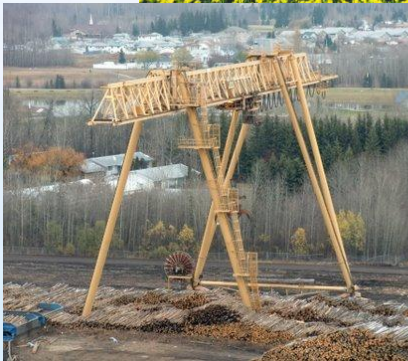
GOAL SIX

Recognized sector leadership in science and innovation

- Sector innovation spurred by investments.
- Optimized resources.



Sustainable Agriculture, Food & Forest Production



Advancing the Bio-economy



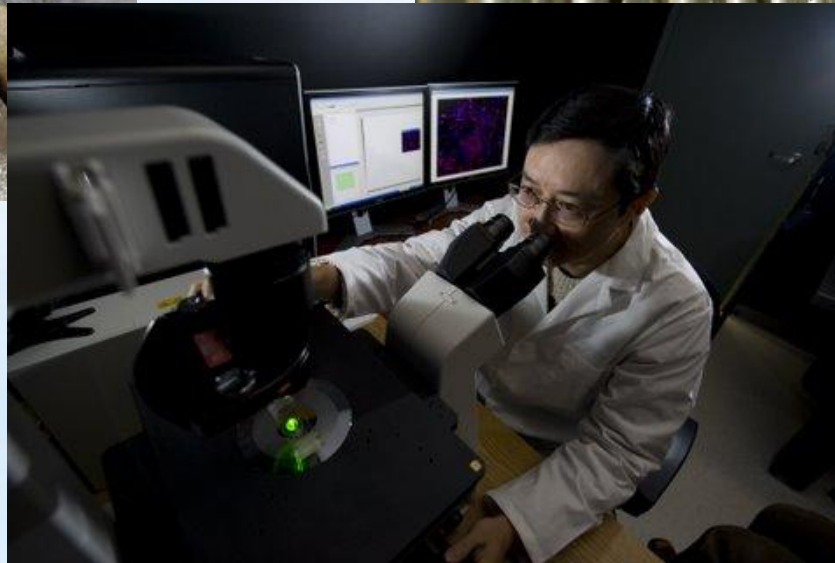
Healthy Food & Food Safety

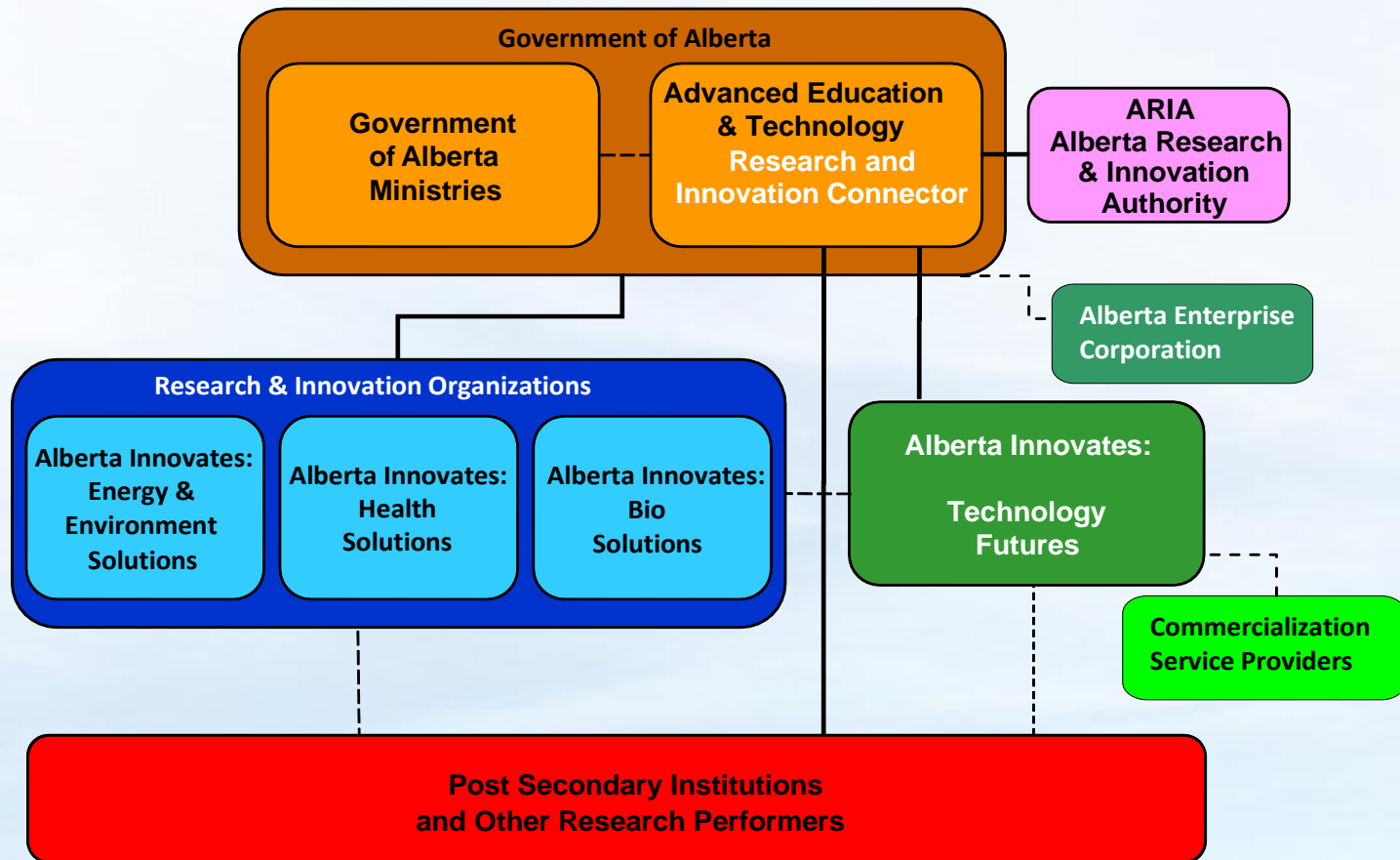


Ecosystem Services



Prion & Prion-like Disease Management





'Capturing Value' from Industry for Society

Advice from Industry and Society

Stanford Blade, Ph.D.

Chief Executive Officer

Alberta Innovates - Bio Solutions

1800 Phipps McKinnon Building

10020-101A Avenue

Edmonton, Alberta Canada T5J 3G2

Telephone: (780) 427-0367

Fax: (780) 427-3252

Email: stan.blade@albertainnovates.ca

Website: www.albertainnovates.ca/bio

Twitter: BioSolutionsCEO

