



Harvesting 21st Century Light

Alberta
Life Sciences Institute

Alberta's biomass assets and energy strengths . . . Opportunities for Collaboration

Alberta has world-class knowledge and expertise in the energy sector – from innovation to financing to management to facilities – built over many decades. Building off this highly-developed energy industry infrastructure, enables Alberta to provide unique opportunities in the emerging bioeconomy

Vision

A diversified economy that captures the value of Alberta's biomass feedstocks by producing and delivering new environmentally responsible bio-based fuels, chemical materials, energy, health and food products.

Outcomes

By adding value to Alberta's biomass resources, the province's bioproducts sector will grow to \$8.5 billion by 2025 through achieving the following goals:

- Producing 3 to 4% of Alberta's energy demand from bioenergy sources,
- Manufacturing 15% of Canadian biofuel (bioethanol & biodiesel) demand,
- Penetrating 2% of the expected global bio-based chemicals market, and
- Creating new bio-materials industries with product sales of \$1B annually.

Alberta's Biorefining opportunities will be driven by Alberta's capability to supply feedstock that can deliver the biologically-derived "green" molecules that will make up marketable bio-based products (energy, fuels materials, chemicals, food, health products).

Strategies

Facilitate bioindustrial sector development by:

- Sharing technology risk through targeted incentive programs
 - Bioenergy Nine-point Plan:
 - Commercialization / Market Development Program - \$24 million through 2008-09
 - Bioenergy Infrastructure Development Grant Program - \$6 million through 2008-09
 - Renewable Energy Producer Credit program (\$209 million, 2007 – 2011)

Support the new bioindustrial sector growth by:

- Enhancing the province's research and technology commercialization capacity that the bioindustrial sector will rely on