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Collaborations with Amii

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Edmonton

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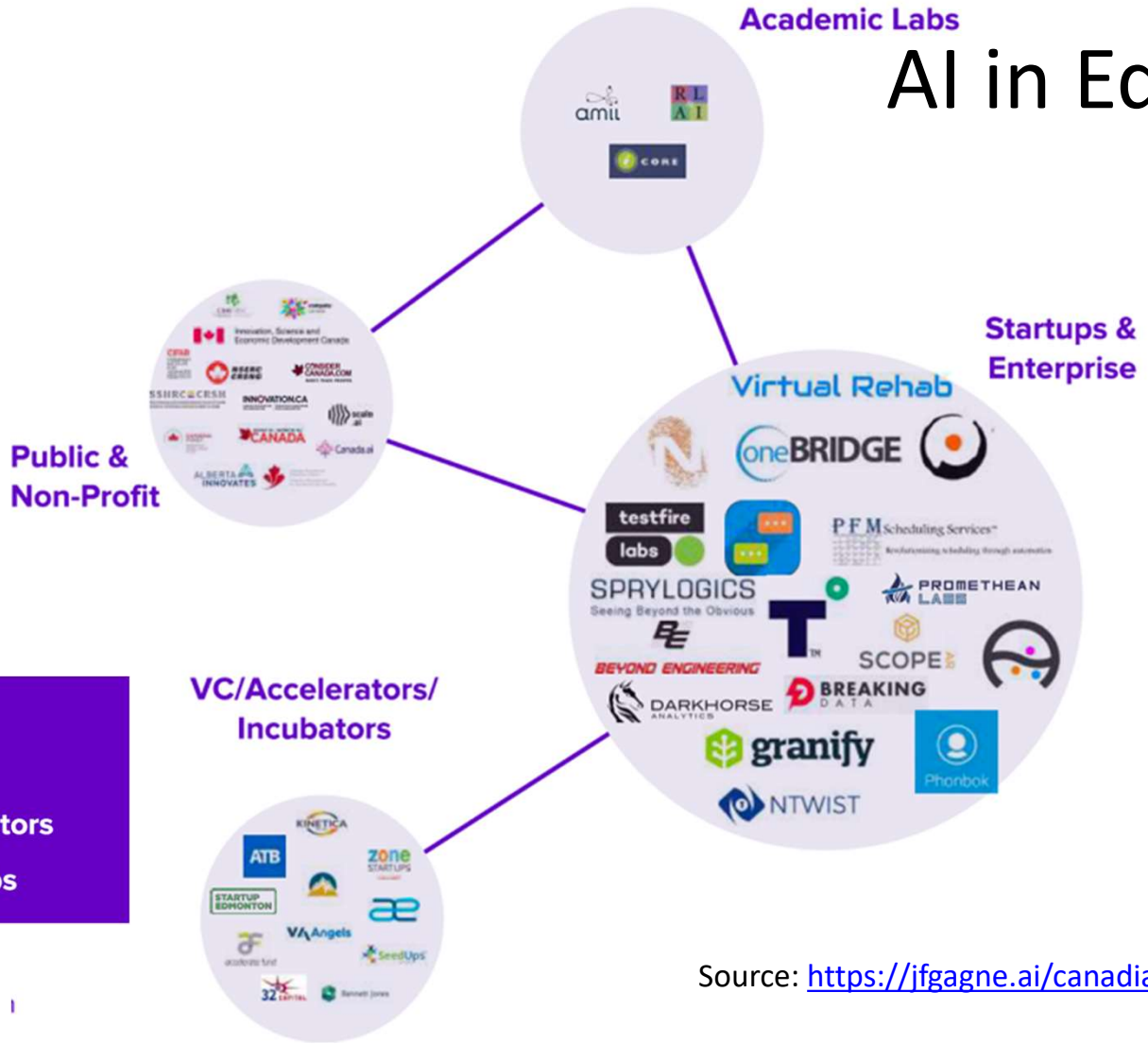
AI in Edmonton



20+ Startups
11 Investor Groups
6 Accelerators/Incubators
5 Public Research Labs

Source: https://jfgagne.ai/canadian-ai-ecosystem-2018-en/

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Amii (Alberta Machine Intelligence Institute)

research areas:

- Algorithmic Game Theory & Opponent Modelling
- Algorithms & Theory
- Artificial Intelligence
- Bio-/Medical Informatics
- Data Mining & Analysis
- Deep Learning
- Human-Machine Interaction
- Information Extraction & Visualization
- Machine Learning
- Medical Imaging
- Natural Language Processing
- Privacy
- Reinforcement Learning
- Robotics
- Social Network Analysis

https://www.amii.ca/

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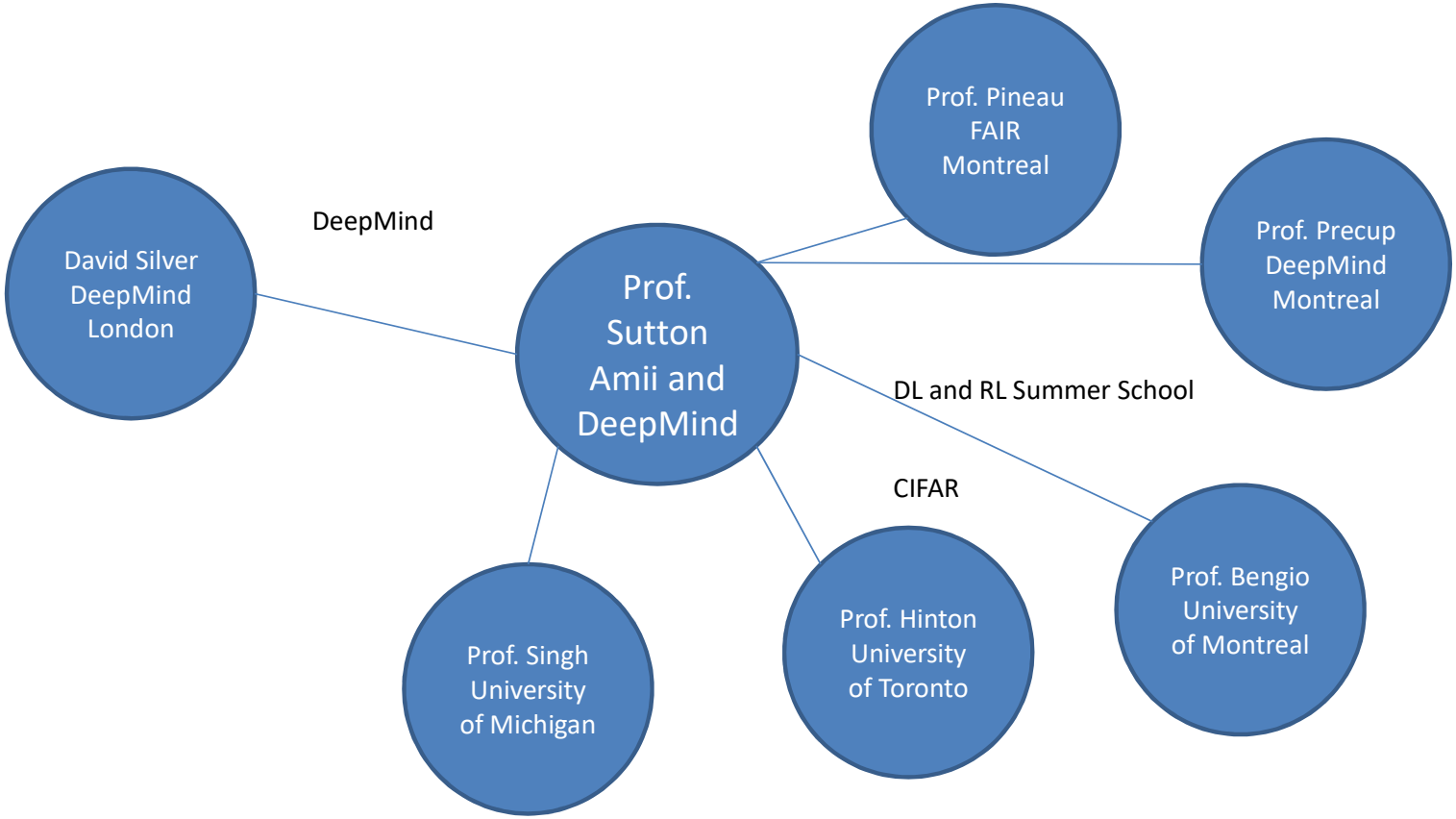
Hub for AI(Deep/+RL) Researchers



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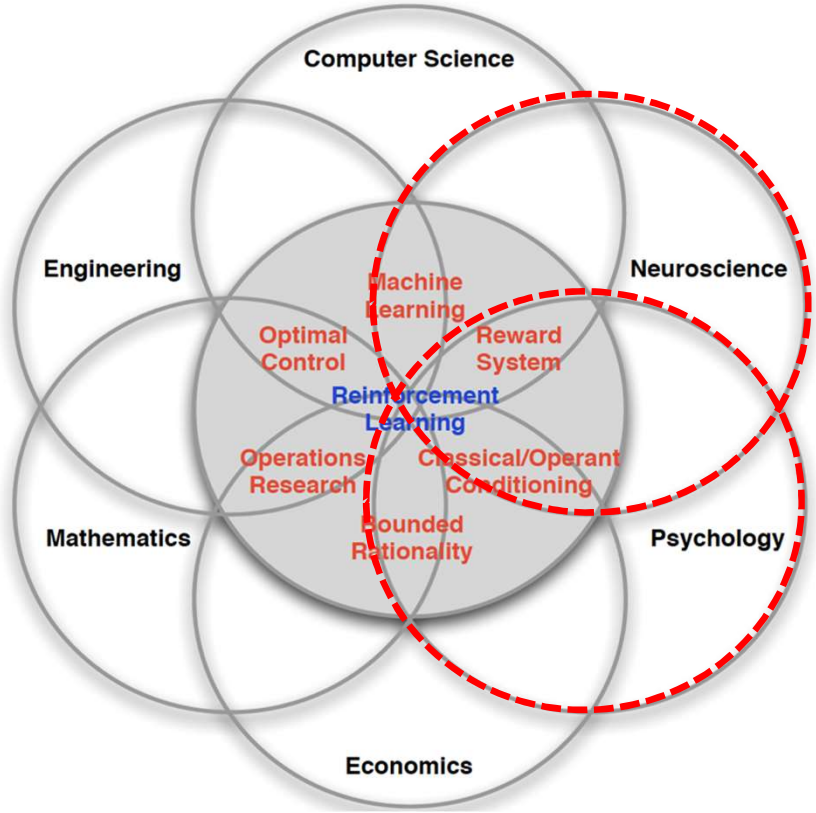
RL Research Projects at RLAI/Amii Labs

- Curiosity
- Exploration
- Perception and prediction
- Representation learning
- Step size (learning rate)
- Off-policy learning
- General Value Function (GVF), etc.



Many Faces of RL
Source: Silver, 2015

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Alberta Economic Development, Trade and Tourism

Partnership Opportunities

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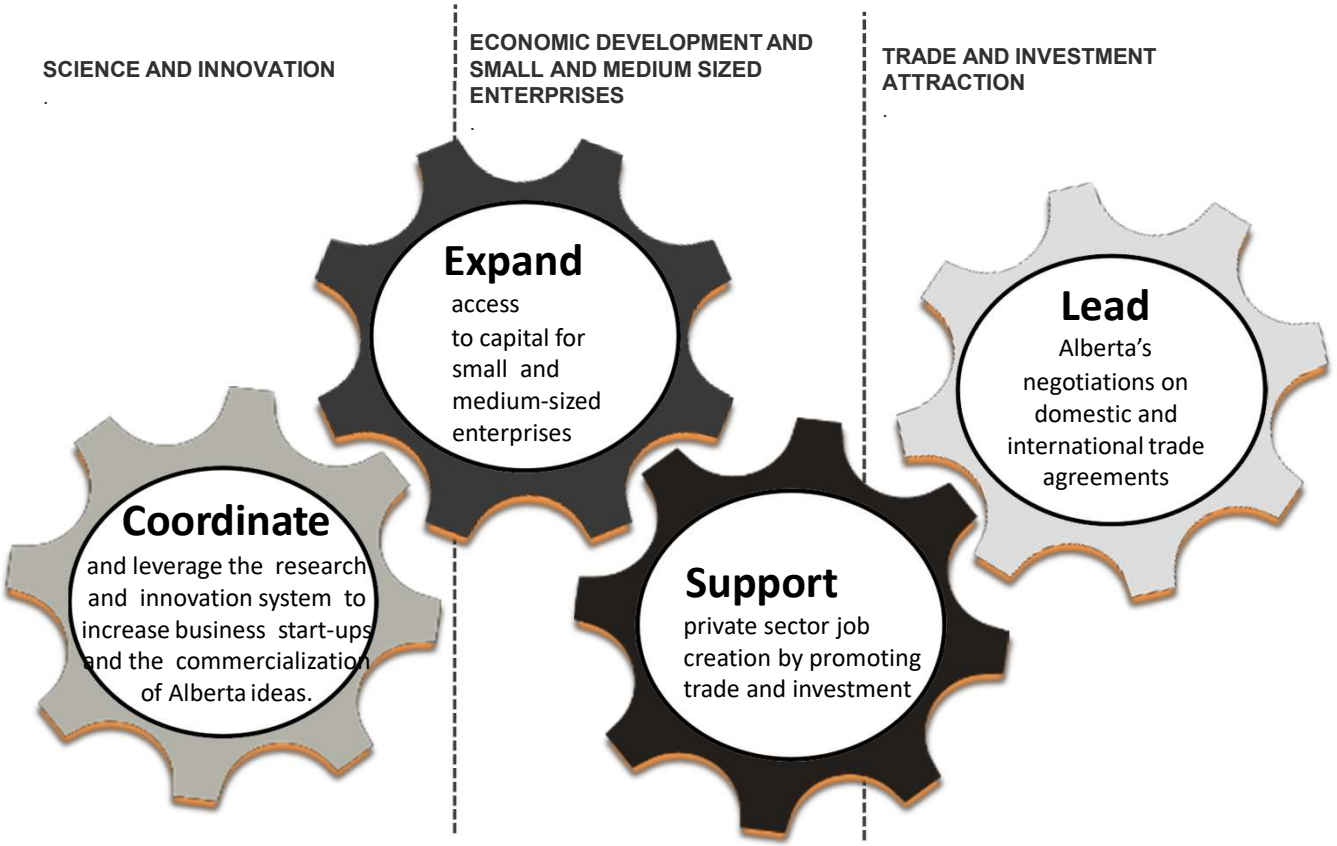
Economic Development, Trade and Tourism



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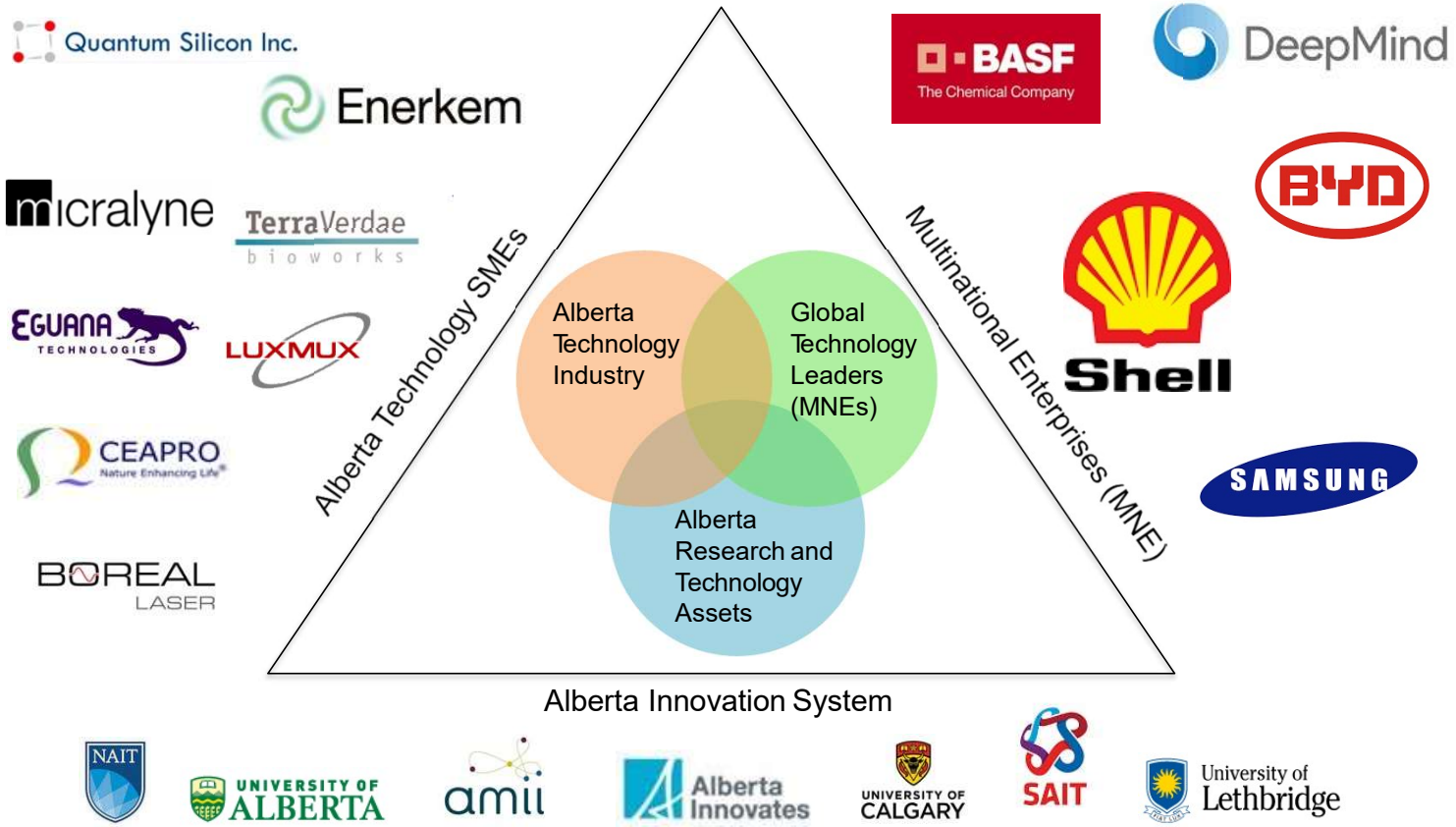
Scope of Activities



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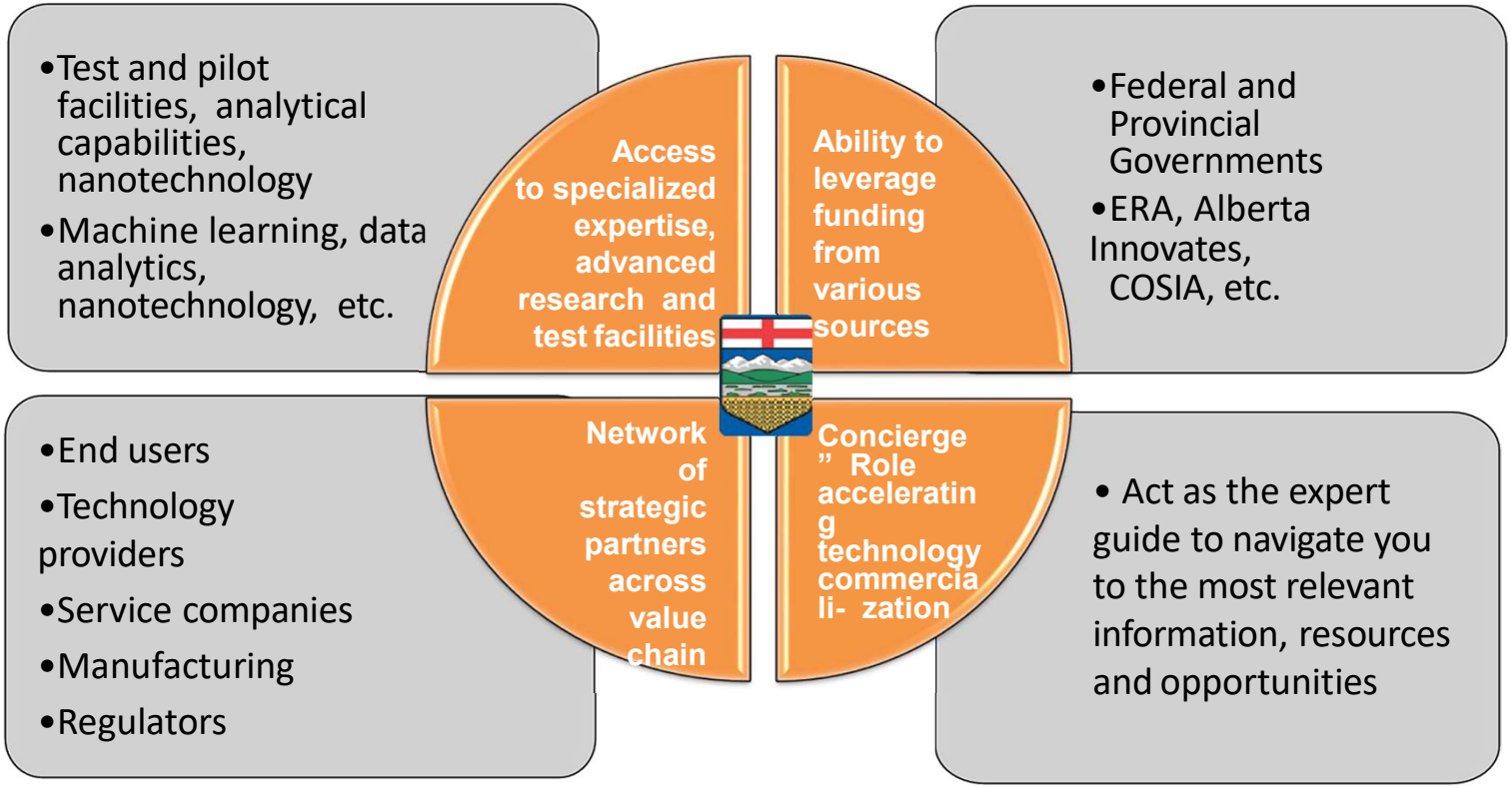
Partnership with the Government of Alberta: Value to MNEs



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Distributed Energy Management Initiative

NAIT ATCO UNIVERSITY OF ALBERTA SIEMENS Alberta Government

$6.7M

Project Components

- "Plug and play" micro-grid applied research facility
- Laboratory validation and technical support to industry
- Path to commercialization and supply chain connectivity

Strategic Outcomes

1. ENVIRONMENTAL SUSTAINABILITY AND RESILIENCE
   - GHG Reductions
   - Low Carbon Electricity Grid
2. ECONOMIC DIVERSIFICATION
   - Job Creation
   - Market-ready Technologies
3. INNOVATION SYSTEM PERFORMANCE
   - Technology Development & Commercialization
4. OPTIMIZATION AND TRANSFORMATION OF INDUSTRY
   - Alberta Decarbonization Study

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THANKS

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