Business and Biodiversity: A SaskPower Perspective

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SASKATCHEWAN’S PRIMARY ELECTRICITY SUPPLIER

- 520,000 CUSTOMERS (9,800 new in 2015-16)
- 4,400 MW CAPACITY
- 3,747 MW NEW PEAK LOAD (2017)
- 157,000 KM OF POWER LINES
GENERATING CAPACITY - TODAY

- **NATURAL GAS - 40%**
  - 1,760 MW
- **CONVENTIONAL COAL - 32%**
  - 1,408 MW
- **HYDRO - 20%**
  - 880 MW
- **WIND - 5%**
  - 220 MW
- **OTHER - 3%**
  - (COAL WITH CCS, IPPs, ETC.)
  - 132 MW

**GENERATING CAPACITY**

**4400 MW**
POTENTIAL GENERATING CAPACITY - 2030

- NON-RENEWABLE - 50%
  - 3,500 MW
- WIND - 30%
  - 2,100 MW
- HYDRO - 15%
  - 1,050 MW
- OTHER - 5%
  - 350 MW

GENERATING CAPACITY
7000 MW
OUR KEY CHALLENGES

• Growing demand for power
• Aging system requires significant investment
• Emissions regulations eliminate one of our primary baseload power sources: coal without carbon capture
• Adding more renewable (but intermittent) generation sources
Biodiversity

“the variety of species and ecosystems on earth and the ecological processes of which they are a part”

Genetic Diversity

Species Diversity

Ecosystem Diversity
Threats to Biodiversity

ISSUE

Economic Development

THREATS

- Agricultural expansion
- Industrialization
- Improper waste disposal
- Exploitation of natural resources
- Urbanization
- Overharvesting of fish and wildlife
- Introduction of non-native species
- Zoning revision / land take

CONSEQUENCES

- Changes in ecosystem functions and species balances
- Habitat fragmentation and degradation
- Air, soil, and water pollution
- Deforestation and habitat conversion
- Soil erosion and sedimentation
- Disease
- Climate change
- Species extinction
- Vulnerability to natural disasters
- Lost opportunities
Global to Local Response

- 185 National Biodiversity Strategy and Action Plans
- SARA
- MBCA
- Fisheries Act
- The Wildlife Act
- Species Activity Restriction Guidelines
- Offset Guidelines
A Changing Landscape
Adaptation
Failure to Adapt?

- Project Uncertainty
- Social License
- Legal/Financial Penalty
- Development Restrictions
- Offset Requirements
- System Inefficiency
Strategic Approach

- Analyse impacts and dependencies of business activities on biodiversity
- Integrate biodiversity into management system
- Identify and assess risks and opportunities
- Take action to avoid, minimize, mitigate or compensate
- Monitor progress
  - Assess plan
  - Adjust plan
- Report internally and externally
- Consult stakeholders
- Establish indicators, objectives and targets
- Partner and consult through entire process
- Engage government
- Supply chains
Outcomes

- Securing a license to operate
- Reducing operating costs
- Enhancing reputation and brand
- Improving productivity and staff morale
- Increasing market access
- Maintaining access to capital

The case for biodiversity management

Canadian Business and Biodiversity Council
Our Vision

• Manage impacts to biodiversity by aspiring to a net neutral or net positive impact

• We will pursue this by:
  – Preventing or mitigating biodiversity risks throughout the business cycle
  – Implementing science based stewardship
  – Offsetting our residual impacts where economically feasible
  – Involving communities and stakeholders
Short Term Initiatives

- Vegetation Management
- Avian Protection
- Invasive Species Management
Emerging and Longer Term Initiatives

- Habitat Offset Approach

- Habitat Inventory and Management Plan

- Supply Chain Management

- Certification
Partnerships

• Environmental Education and Energy Efficiency
  – ~$140,000 contributed in 2016.

• Conservation and Habitat Securement
  – ~$85,000 contributed in 2016

• Research
  – U of S multi year graduate program studying vegetation management approaches and indigenous engagement
  – Caribou range and sturgeon movement research partner and in-kind support
  – Strategic research that supports business plan
Questions?