How to **scan for possible futures for better strategies**

**Lessons learned**

**Effective strategic foresight requires:**

- **High-level political demand.** Engaging in foresight requires a cultural change in the government’s approach to policy making.

- **A dedicated centre of expertise.** A unique best institutional arrangement does not exist, but a common principle is to identify and empower a dedicated unit in charge of the exercise.

- **Coordination across the whole government.** Effective scenario setting requires interactions across different institutions.

- **Multi-stakeholder dialogue.** This helps reach alignment and share visions across different groups.

- **Targeted training.** Experts in charge need specific training.

- **Integration of strategic foresight into national strategy setting.** This ensures that results trickle down to each policy area of the country.

**Key findings**

- Scanning even for weak signals is an essential component of successful strategies because, at an early stage, it factors in events with low probability and significant disruptive impacts.

- Effective prioritisation needs to be based on scanning for potential futures through strategic foresight, and should ensure the engagement and commitment of all stakeholders (the private sector, academia and local communities) from the start.

- The private sector can anticipate disruptive changes. In these cases, the government’s role is to react quickly and enable transformation.

- Engaging in foresight and scenario setting can be a tool for consensus building.

**Major technological shifts**, including digitalisation, open up new opportunities for countries to diversify.
**OPPORTUNITIES**

- Endowed with very specific, high UV radiation, Chile has a comparative advantage in solar energy. The Atacama Desert has the highest solar incidence in the world with 4,000 hours of sun a year with 65% UV-B radiation, higher than the European average.

- Chile is endowed with 52% of the world’s lithium reserves, an essential component of electric car and solar energy batteries.

- Chile has 30% of the world’s copper reserves. While internal combustion engine cars require up to 23 kg of copper each, a hybrid electric vehicle uses nearly double that amount at 40 kg of copper, and a plug-in hybrid electric vehicle uses 80 kg.

- Energy efficiency and cutting energy consumption by 23% would allow the mining industry to reduce its CO2 emissions by 18% by 2020.

**Chile’s:**

- **Strengthening the innovation system.** Chile invests 0.4% of its GDP in R&D, while Sweden invests 3.2% of its GDP in R&D.

- **Getting the private sector on board.** 32% of R&D investments in Chile come from the private sector, while 62% of R&D investments in Sweden come from the private sector.

- **Getting the right skills.** Only a minor share of government-funded PhD scholarships in Chile were assigned to scientific training, and only 1.4 researchers per 1,000 employees work in Science, Technology, Engineering and Mathematics (STEM), while Sweden has 14.2.

- **Institutionalising foresight.** Scenario-setting to inform policy making is not fully institutionalised in Chile.

**THE CASE OF CANADA**

Institutionalised foresight has enabled Canada to anticipate reduced fossil fuel demand.

**Metascan 4,** a foresight exercise requested by the Prime Minister and involving over 20 government agencies, demonstrated that the rise of Asia might not drive the commonly forecasted sustained high fossil fuels demand. Instead, recent developments in India’s and China’s green growth can lead to lower consumption of fossil fuels than expected, rapidly decreasing the price of renewables and increasing demand for electric mobility technology. This plausible scenario has serious implications for Canada, a high-cost petroleum products producer. A decrease in demand in the sector would lead to a loss in royalties and tax revenues and a significant decrease in investments.