

Scenarios and Policies

BBE Scenarios Group

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Policies to Promote the BBE

FRAMEWORK

- **Decide on objectives (*policy options*)**
- **Check available tools (*governing instruments*)**
- **Anticipate consequences (*planning scenarios*)**
- **Test results, ask for feedback, revise as needed (*dialogue with participants*)**

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Scenarios Workshop Update

Progress so far

Session #1 – SWOT analysis and elaboration

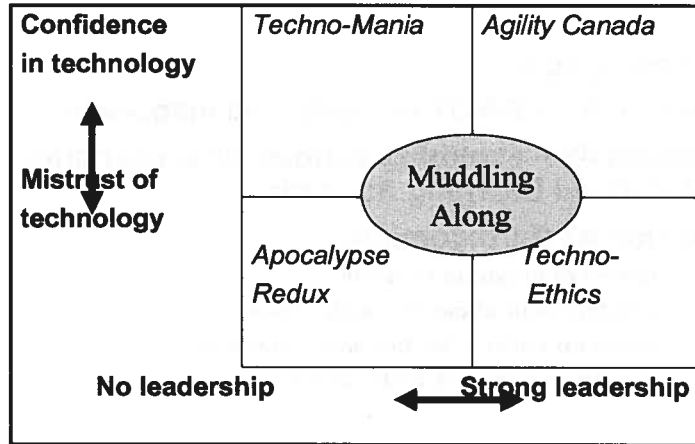
**Session #2 – exploring various NRC scenarios
& defined Learning Scenarios**

Session #3 (forthcoming)

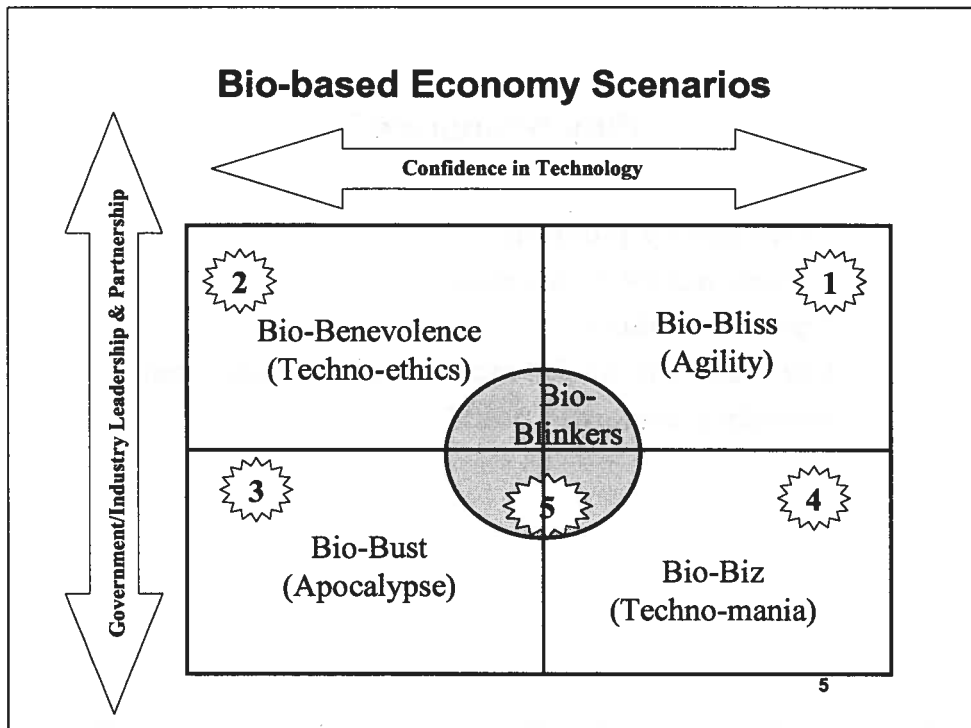
- review of previous sessions
- identification of generic policy tools
- focus on policies for bio-based economy
- testing scenarios & BBE policies

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Mixing & matching scenarios



Five of the NRC scenarios have been juxtaposed to provide one possible context in which to think through possibilities within the BBE as they relate to various federal policy options.



Why Scenarios?

- **Contingency planning**
- **Robust policy development**
- **Communications**
- **Consistent financial modelling – Benefit-cost**
- **Identify a preferred path?**

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GoC Policy Objectives

- **Create a comprehensive national Environmental Bioproducts Strategy to produce new Canadian technologies, products and services for domestic and export markets by 2010**
 - **Improve the Science Base**
 - **Create Viable Clusters**
 - **Accelerate Market Development**
 - **Manage Risks & Benefits**

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- (2005?) To have a policy
- 2010 To have visible results

Generic Policy Tools

- **Dollars** - Subsidies, grants, providing goods & services & facilities
- **Taxes** – Tax expenditures, deferrals, write-offs
- **Regulations** – substantive & performance standards
- **Suasion** - Information activities, public messaging, demonstration projects, consultation
- **Coordination** - Harmonization of public and private sector activities, intergovernmental cooperation and coordination, consensus processes.

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Individuals in society make millions of transactions and decisions by themselves, within their frameworks and without state intervention.

But actions by the state may be necessary due to market failure or to offset some of the results of markets.

The four tools of government cover most of the actions taken.

Coordination is not really a tool; rather it is a necessary, or at least desirable, attribute associated with each of the four tools, particularly in a federal state.

The key thing is to recognize that there are choices about what tools are used for a given problem. Indeed, multiple tools may be employed for a given objective.

At the same time, remember the old saying, "When all that you have is a hammer, everything looks like a nail!".

Specific Policy Tools

- **Eco-clusters**
 - bio-industrial parks
 - NCE bio-energy/bio-products
- **Accelerated Market Development**
 - inventory & showcase
 - standards development
- **Managing Risks & Benefits**
 - federal stewardship, ecological baseline
 - national bioresources centre, SD assessment tools, regulatory foresight, policy data & stats
- **Improve the Science Base**

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NCE – National Centres of Excellence

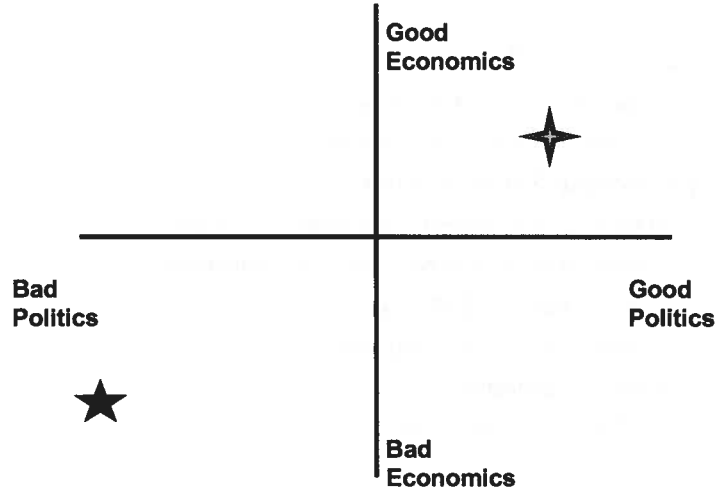
SD – sustainable development

Policy Criteria

- **Robustness**
 - remains relevant over a range of inputs
 - remains relevant across several scenarios (e.g., R&D Tax Credit)
- **Tailored or Focused**
 - specialized for particular inputs
 - only applicable to particular scenarios (e.g., various regulatory regimes)
- **Economic efficiency**
- **Political attractiveness**
- **Portfolio approach?**

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Tradeoffs



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Possible Policy Frameworks

- **Substantive Topics**
 - Economics, Political Science, Sociology
 - Environmental Sciences, etc.
- **Governing Instruments**
 - statutes, regulations, policies, programs
 - public/private partnerships, subsidiarity
- **Administrative Efficacy**
 - legally/constitutionally consistent
 - Cost effectiveness
 - politically acceptable

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Improving the Science Base

- **Instrument Identification**
 - More \$ for government labs
 - R&D grants to universities (e.g., CIHR style)
 - Tax/subsidy incentives for private sector
 - MNCs to add research facilities
 - Promote rapid immigration of skilled professionals
- **Apply criteria**
- **Test against the scenarios for robustness**

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Workshop Tasks

- **Form breakout groups to simulate policy development**
 - Clusters
 - Market Development
 - Managing risks and Benefits
- **Think 10-20 years ahead to a successful BBE**
- **Trends might lead to any of the 4 scenarios**
- **What "lessons learned" would you apply?**
- **Develop a policy agenda:**
 - how to advance BBE over the next 5 years
 - achieve optimal benefits (domestic & international)
 - avoid economic, environmental, social problems
- **Fiscal Sizing**

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Questions for Breakout Groups

- **How to secure industry & capital markets buy-in?**
- **Which new technologies to target for investment?**
- **Does early market demand need stimulation?**
- **How to make regulation effective and efficient?**
- **Are there any key regional considerations?**
- **What is your communication plan?**
- **Are there additional considerations or policies to be included in these efforts?**

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The Link to Scenarios

- **Do your policies work better under one scenario than another?**
- **Do one or more scenarios make it difficult to achieve objectives?**
- **What about existing policies? Do they continue to work as well under all scenarios?**

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•Wrap-up

- **What modifications to the scenarios are desirable?**
- **Different names?**
- **Should we add a list of possible policy initiatives to the scenario descriptions?**
- **Can you use them in your work?**

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