



National Assessment of Climate Change Impacts and Adaptation in Canada: Nature, Scope and Purpose

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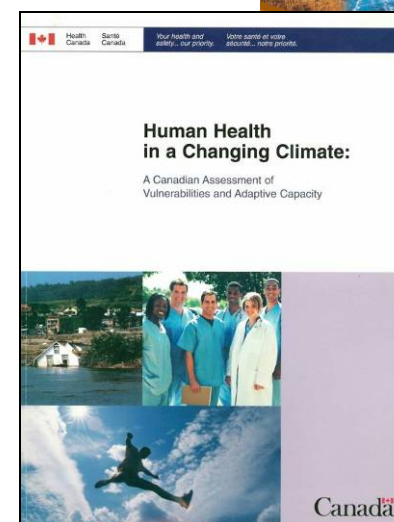
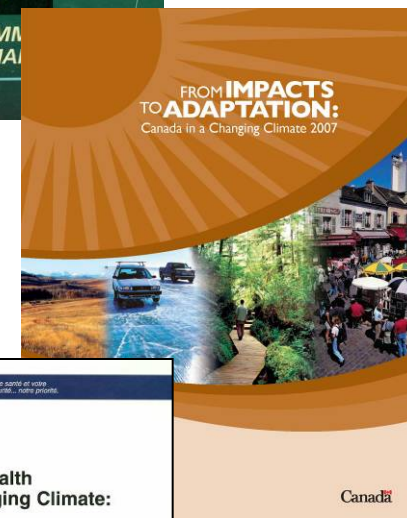
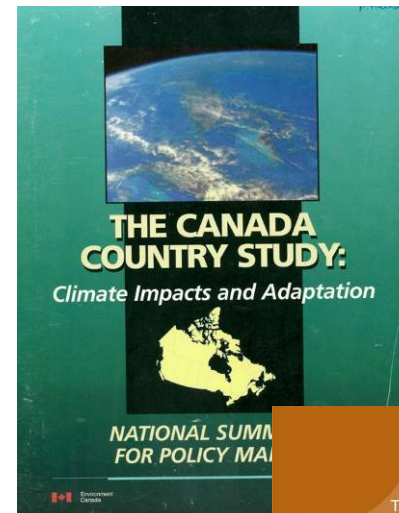


Past Science Assessments

- Canada Country Study (1998) – eight volumes (regions, sectors, cross-cutting issues)
- From Impacts to Adaptation: Canada in a Changing Climate (2008) – regions + international context
- Human Health in a Changing Climate (2008) – significant research component

Commonalities

- all lead by federal government as part of non-core funding
- science assessments (as opposed to risk / vulnerability assessments)
- policy neutral
- focus on impacts and adaptation, not climate science (or attribution)
- products – hard copy reports, web pdf & HTML



Ongoing and Planned Assessments

- Update to 2008 Assessment report (2013/14) – sectoral organization
- Sectoral Assessments (testing different approaches)
 - Coastal (2014/15)
 - Transportation (2015/16)
 - Mining (2015/16)
- Third National Assessment (2018?)
 - planning to begin once 2008 update is completed
 - likely (hopefully?) very different from previous

Note:

- again lead by federal government as part of non-core funding – but with clear policy mandate
- more rigorous institutional arrangements (Adaptation Platform)

2008 National Science Assessment: Purpose – to provide a comprehensive and authoritative understanding of the state of knowledge regarding climate change impacts and adaptation in Canada.

Goals

1. Inform adaptation decision-making
2. Raise awareness
3. Contribute to capacity building

Users

- Policy and science advisors – *feed into decision-making processes*
- Practitioners (engineers / planners)
- Industry
- University level instructors and students
- General public
- Media

How determined?

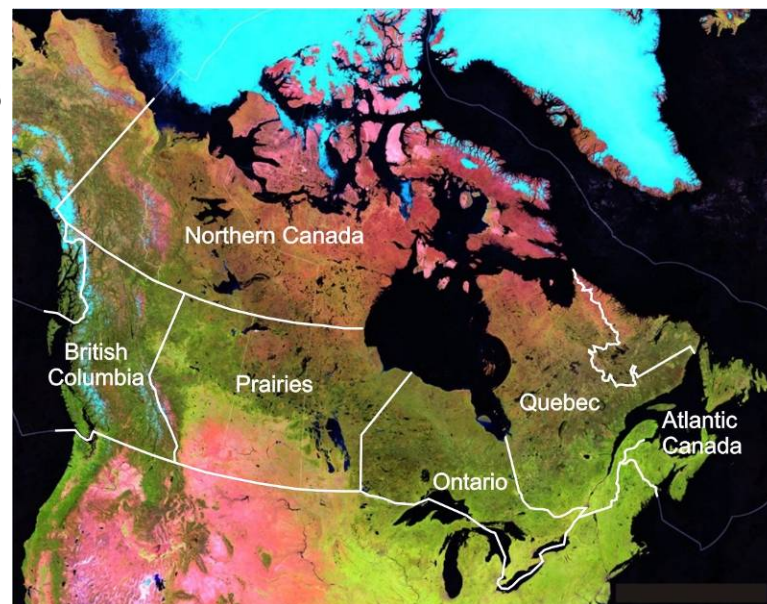
- Need identified at program level
- Scoping workshop, included lessons learned from other assessments
- National advisory committee involving all levels of government, aboriginal organizations, practitioners and NGOs (INTENDED USERS)



2008 National Science Assessment – approaches used

Why a regional approach?

- Desire to increase political attention to issues – regions corresponded to provincial / territorial boundaries
- To that point – attention to impacts and adaptation very uneven across Canada
- Regional approach also provides advantages for discussing cumulative impacts and maladaptive practices



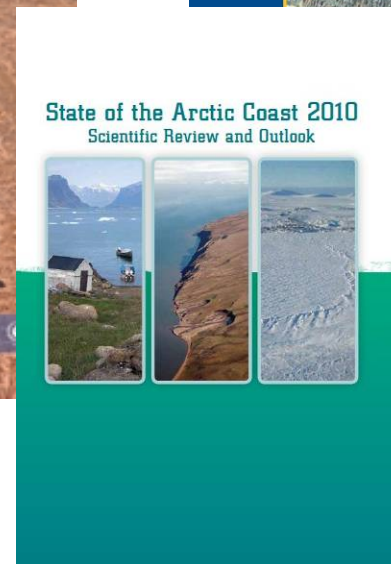
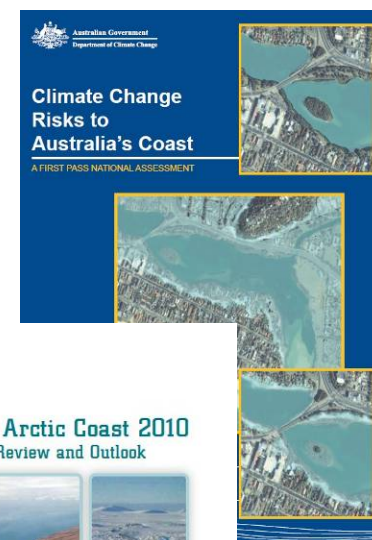
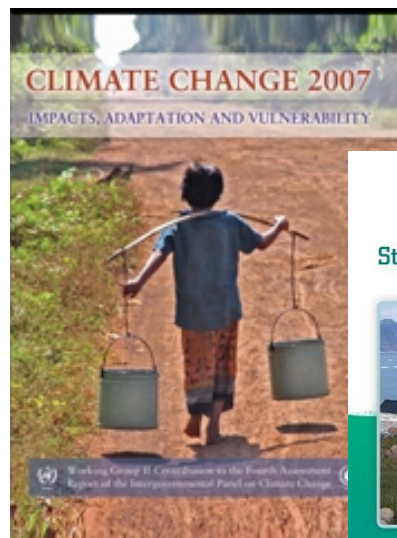
Why a science assessment?

- Deemed useful – abundance of information – sometimes conflicting – little applied to country as a whole
- More straightforward to provide “national” perspective than other types of assessments
- Resource limitations

Explaining Science Assessments

Definition:

Collective, deliberative processes by which experts review, analyze, and synthesize scientific knowledge in response to users' information needs relevant to key questions, uncertainties, or decisions (NRCNA, 2007).



Science Assessments are:

Scientific reports

Critical analyses of knowledge

Focused on issues of concern

Intended to inform decision-making

Science Assessments are not:

Policy, guidance or best practice documents

Literature reviews

Fully comprehensive reports

Intended to direct decision making



2008 National Science Assessment – approaches used

Sources of Information*

- peer-reviewed published literature
 - grey literature
 - local / practitioner knowledge
- } includes traditional (Aboriginal) knowledge

* - failed miserably in getting authors to expand beyond “climate change” literature

Likelihood and Confidence

- use common-sense language rather than prescribed expressions
- confidence strongest where projections are consistent with historic trends and/or well established relationships

2008 National Science Assessment

What we did right / well

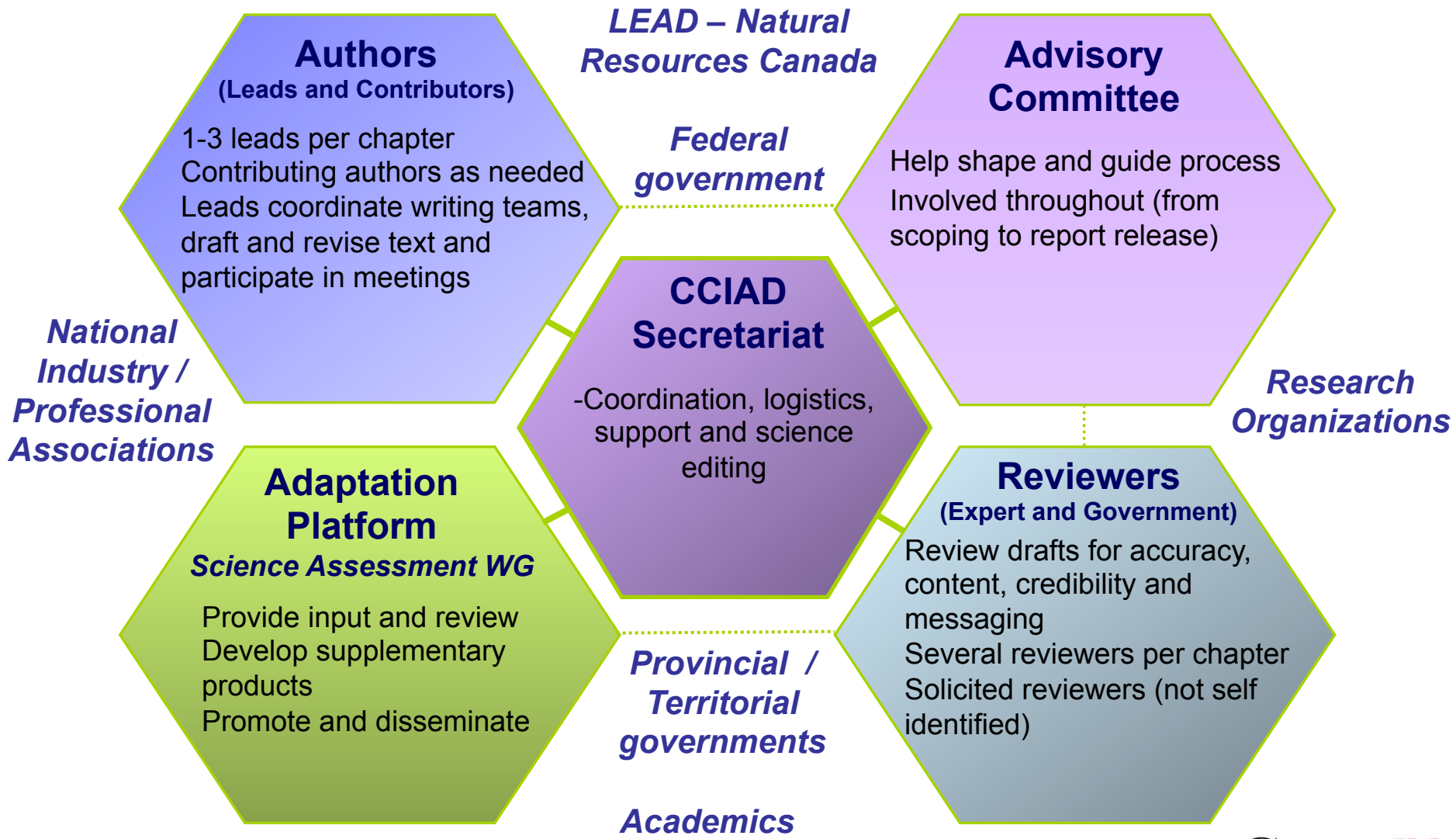
- Focus on what we know
- Chapters start with key findings (4-5 points) of relevance to decision-making
- Use of Case Studies to provide detailed information
- Synthesis Report takes a concise, storyline approach

Where we could have done better

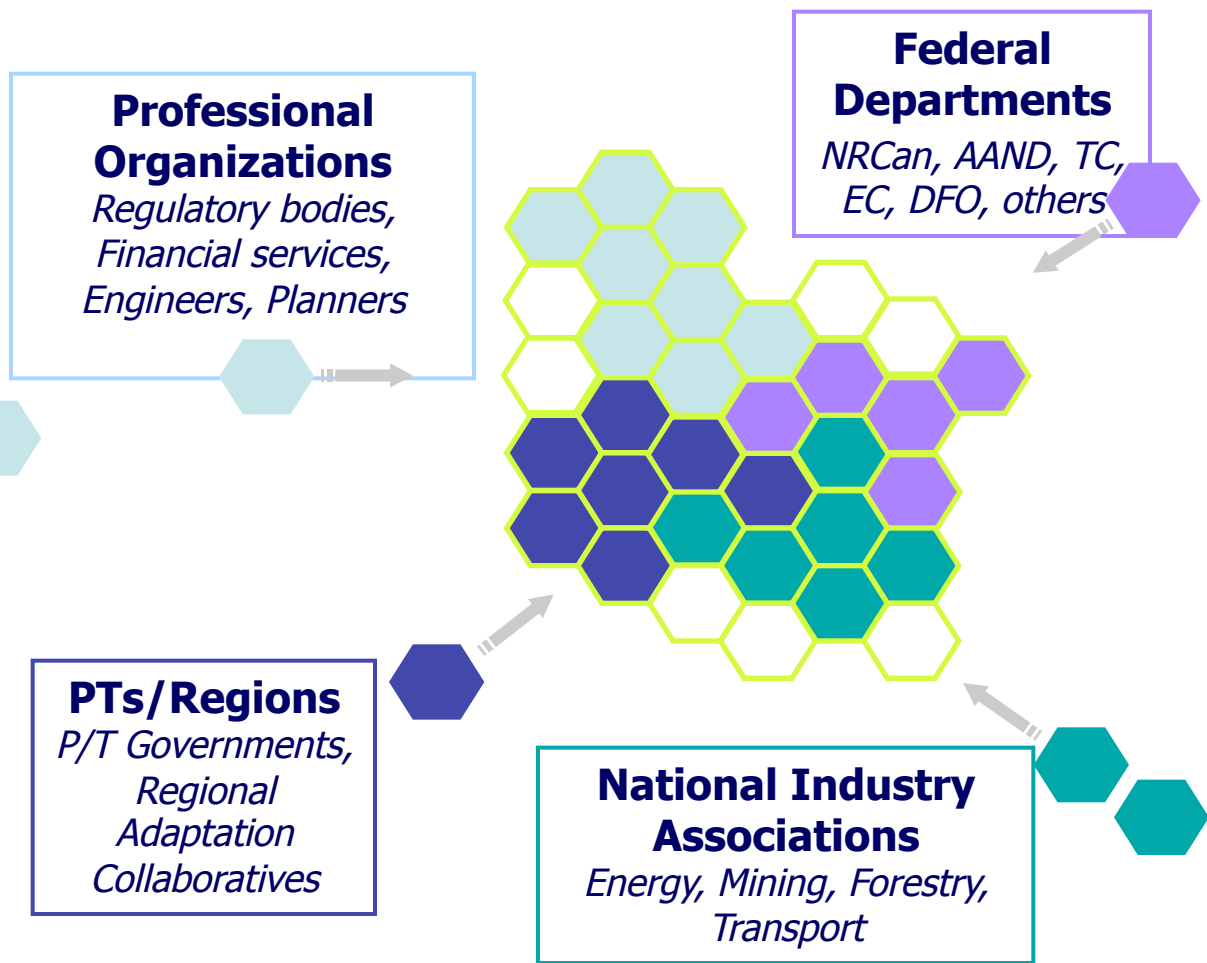
- Timing
- Products
- Communication – planning and implementation
- Monitoring / documenting impact



2012-2016 Assessments – Responsibilities and Governance



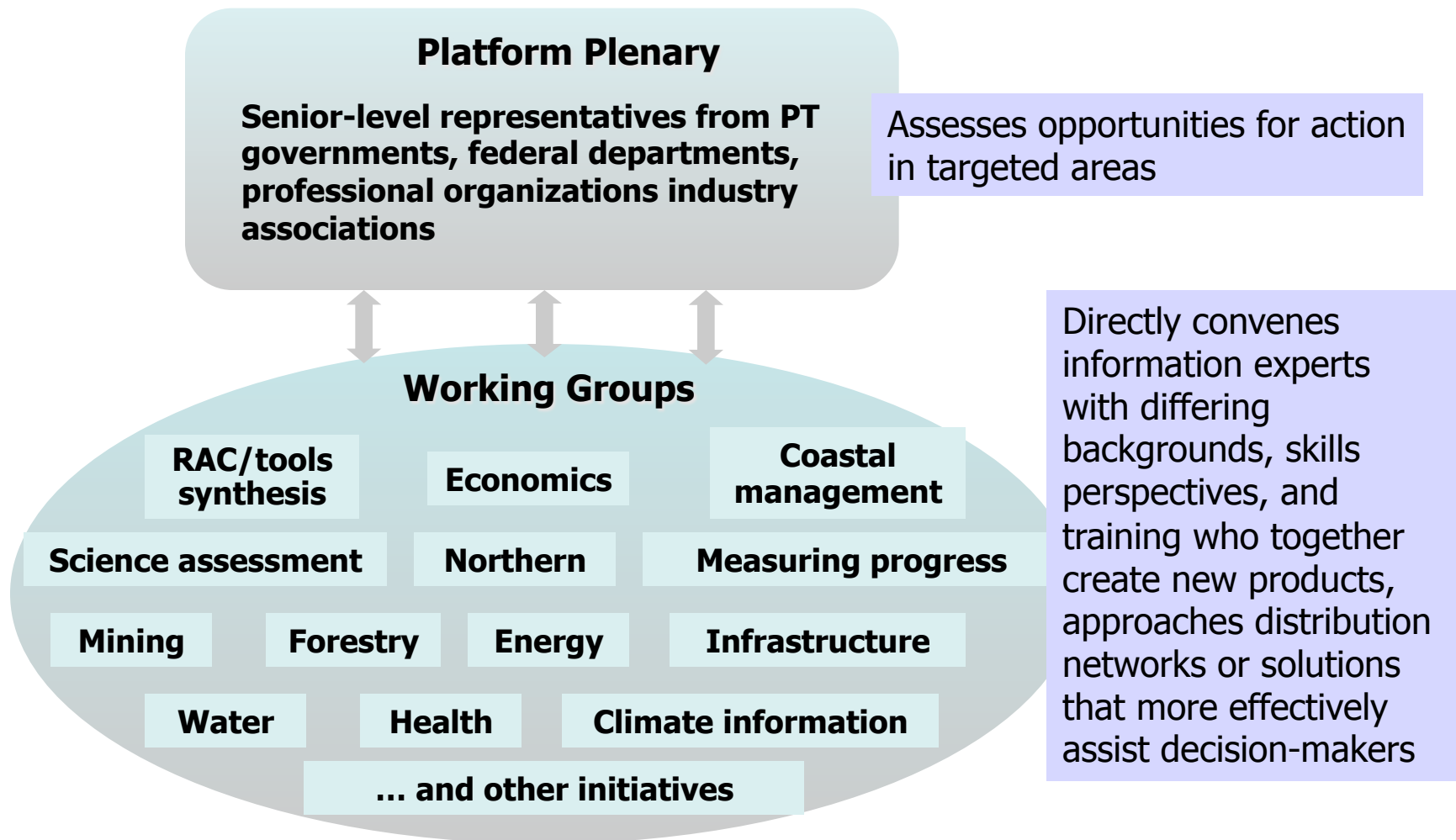
The Adaptation Platform provides the structure to enhance collaboration



- Mechanism for bringing together knowledge, capacity & financial resources
- Expanding the tent
+ industry, financial sectors
+ federal departments
- Each participating organization brings its own resources, priorities and mandate

Channelling diverse sources of knowledge into focused action

The Adaptation Platform



Lessons learned

- Need to develop clear definitions of target audience(s) and scope early in assessment process
- As policy / economic / other context can change while assessment is being developed, assessment should be structured to inform these drivers but not be dependent on them
- Nobody reads the whole report! Need to find ways to draw readers beyond the “backyard” interest
- Planning and coordination of communication and product release is critically important – and can be challenging
- Gradual dissemination – percolate through peer networks - can be effective but takes time

Challenges

Governance

- Supporting a sustained (and sustainable) assessment process in the absence of core funding
- Expanding ownership of the process beyond federal government

Content

- Ensuring scientific rigour
- Communicating uncertainty
- Delivering relevant information across spatial scales

Resources and capacity

Products

- Conveying findings in innovative ways – use of new media
- Developing products targeted towards specific audiences (partnership with national associations?)