Sustainability assessment, climate change and lasting community wellbeing

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The starting (and ending) point: lasting community wellbeing

Characteristics:

“equitable, good-quality and lasting health, security, education, employment, recreation, housing, green space and ecosystem services, food, respect-based friendliness, and preparedness for surprises – at the many interacting scales that constitute community”

- Kumagai and Partidario

- many interacting components
- all threatened by broad trends towards deeper unsustainability, including climate change
Communities and climate change

- Climate change is a huge global challenge.
- Climate change threatens lasting community wellbeing.
- Communities (and community level undertakings subject to assessment) contribute to climate change.
- How then should community level undertakings be planned and assessed?
Communities and climate change mitigation

- many laudable community scale initiatives
- mostly conventional mitigation
  - useful steps to reduce GHGs
  - sometimes with long term reduction commitments
  - not pursued as parts of a carefully considered collective effort to **do enough**
Canada and climate change mitigation

Formal commitment to climate change mitigation

• signatory to Paris Agreement
  – best efforts to do Canada’s share in keeping global warming to “well below” 2°C
  – fair share for Canada probably means achieving GHG neutrality before 2050

• 2050 is soon relative to the time needed for major structural transformations

• some useful steps but no translation of implications for project level assessment, community planning and other initiatives
Climate in assessment practice

- governments at all levels still approving projects and programs that entail or facilitate further GHG emissions beyond 2050
- no tie to how the results may be consistent with Canada’s climate change mitigation commitments
- many current projects and programs
  - entrench path dependence on fossil-based technologies and structures
  - make transition to a more sustainable and climate-viable future slower, more difficult and more expensive
  - will frustrate compliance with climate commitments or leave the public and private interests involved with stranded assets
Current EA-related GHG mitigation guidance

- initial inter-governmental agreement and promotion of some plans and mechanisms for abatement actions
- contested guidance on what project-related GHG emissions to consider
- vagueness on how to judge the “significance” of a project’s GHG emissions/effects
  - encouragement to mitigate GHG emissions
  - some references to interim overall reduction targets and particular requirements (e.g., Nova Scotia’s cap on GHG emissions from electricity)
- little on what may or may not be acceptable (sufficient to meet GHG mitigation commitments)
Evident needs

- clarification of implications of Paris Agreement and other climate commitments for practical decision making in Canada, including on proposed new undertakings (projects and programs)
- integration of the resulting climate responsibility guidance with other considerations for lasting community wellbeing
The long list of required steps

gain working understandings of
• the Canadian fair share of further GHG loadings (an **overall budget**)
• the consequences of the Canadian fair share for **allocation** of GHG budgets and abatement deadlines among regions and sectors
• the best **pathways** for meeting the commitments (in different sectors and regions, with provisions for exchange between categories)
• also complementary non-pathway tools (e.g., social cost of carbon calculations)
... plus working understandings of ...

- what undertakings (what categories of projects and particular policies, plans and programs) should be subject to **assessment requirements** because of their potential GHG implications
- what **criteria** should be used for application decisions (e.g., potential effects on getting and staying on GHG abatement pathways and what potential social costs of associated GHGs)
and also ...

- what GHG emissions are properly attributable to an individual undertaking
- what GHG emission reductions elsewhere in Canada may be recognized as offsets for GHG emissions attributed to the undertaking
- what alternatives must be compared
- what level of confidence to place on future technological advances and other key uncertainties
- whether an undertaking will contribute to or detract from reaching and staying on the relevant pathways to compliance, and facilitate or block transition to climate responsibility
and ...

- how to ensure equivalent attention to **existing undertakings** (fair treatment of new and existing activities)
- how to ensure that climate-focused considerations are **integrated into** the full suite of context-specified **sustainability objectives** in and beyond EA
- how to judge proposed **trade-offs** (i.e., how to determine where negative effects on pathway compliance may be acceptable)
and (finally) ...

- how to incorporate **adaptability** in the design of all process components (e.g., to respond to evolving international understandings and commitments to climate change, unexpected successes and failures in politics, technology)

- how to achieve all of this through **public processes** that are open, participative, learning-centred, law-based and consequently **credible and authoritative**
The obvious challenges

- that is a **very long list** and most of the particular items are difficult
- the worst climate **effects are decades away**
- preventing them entails cooperative **anticipatory action** at all levels from local to global
- the needed **changes are transformative** (require replacement of deeply entrenched existing systems of thought, institutional organization and capacity, infrastructure, economic dependence and power) and inevitably face stiff resistance, as we have seen
The crucial role of communities

- historically important leading role of communities in GHG abatement
- important as examples of commitment and action, venues for greater understanding as well as actual contributions to GHG emission reduction
- communities also relatively advanced in consideration of other sustainability objectives and measures (e.g., community vitality indices)
- communities are where the effects land