

# Climate Change and Acadian Forests: Effects, Mitigation, Adaptation

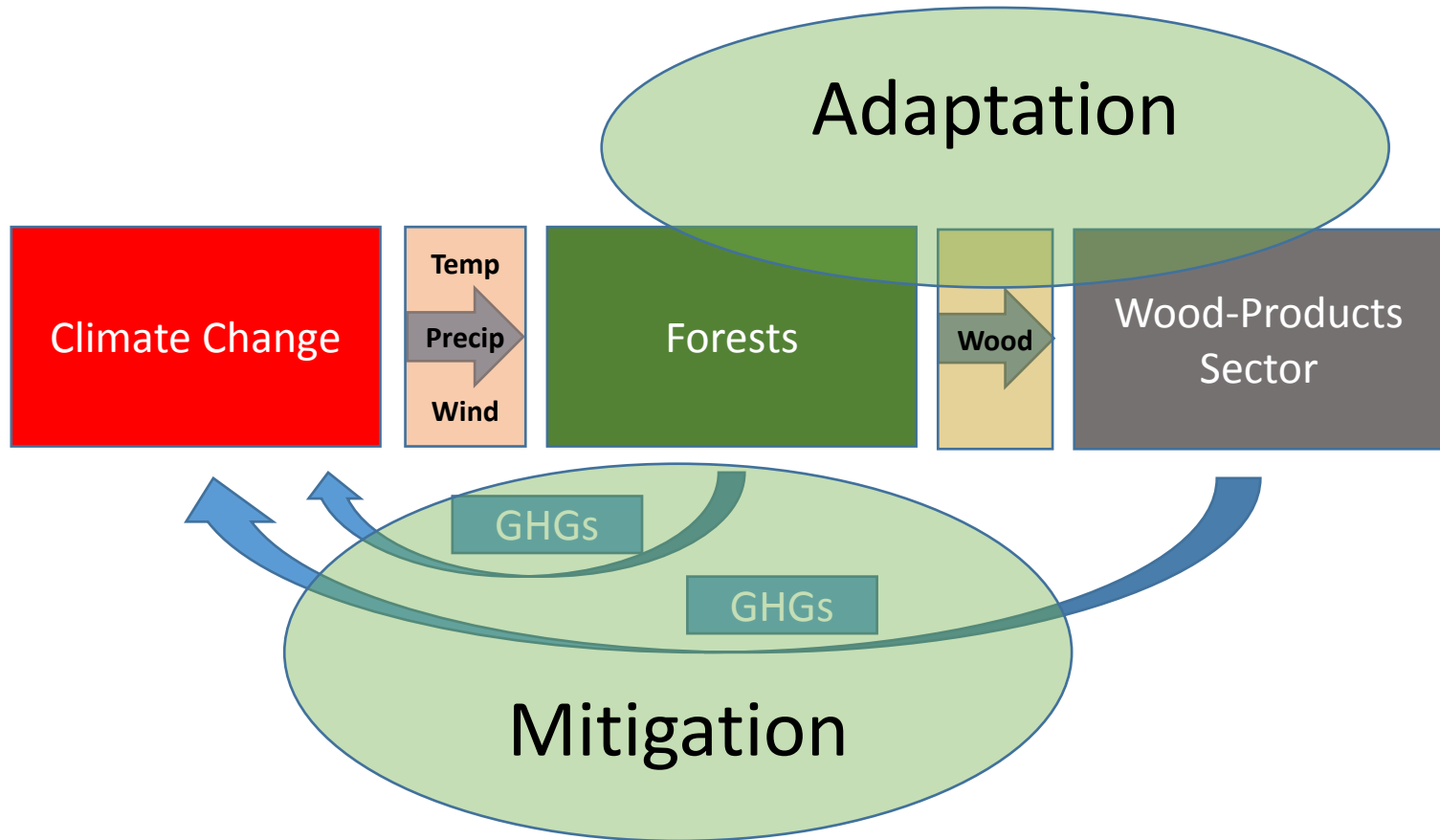
**Peter N Duinker, PhD, and James WN Steenberg, PhD**

**School for Resource and Environmental Studies, Dalhousie University**

**Halifax, NS**

**2017-10-03**

**Presentation to the Senate Standing Committee on Agriculture and Forestry**



# Talking Points

- 1. CC is happening already, and much more will come.**
  - 1. We are not optimistic about mitigating GHG emissions sufficient to arrest CC**
- 2. CC is already influencing forests, and will much more in the future.**
  - 1. The forests we have today are in some sync with the climate of the last millennium**
  - 2. Greater heat, disrupted precip patterns, and more wind will, on balance, stress current forests (more fires, changed insect and disease patterns, more windthrow)**
- 3. This will, in turn, deeply affect the wood-products sector of the economy.**
  - 1. Mountain pine beetle in BC is a great example; hurricane Juan in NS**
- 4. Can Canadian forests and the wood-products sector sequester and store enough carbon to affect CC? NO! But . . . we must do our share.**
- 5. Can forest management and policy enhance forest and wood-sector resilience through adaptation? YES!**
- 6. How?**
  - 1. Careful soil management (don't mine nutrients, keep organic matter abundant)**
  - 2. Promote diversity, especially all facets of biodiversity (esp. tree species and ages)**
  - 3. Establish C-credit systems (the more carbon in the woods, the better)**
  - 4. Support community forests and woodland owners (it's not just about wood fibre!)**
  - 5. Encourage a culture shift around CC-adaptive forest management (resilience!)**
  - 6. Diversity of wood products – sophistication in processing and manufacturing (AND “build with wood”!) (can't we do better than pulp and 2x4s?)**