

Project Drawdown 25 Solutions for Atlantic Canada

September 2017

Projectdrawdown.org lists 100 solutions for carbon mitigation on their website. Thinkers attending the Sept 28-Oct 1, 2017 60th Anniversary Thinkers Lodge Retreat on Climate Change, Pugwash, NS, were asked to filter these 100 solutions down to the top 25 most applicable to Atlantic Canada. The selection criteria and resulting 25 solutions below were suggested primarily by Graham Fisher, one of the retreat Thinkers.

Filters: (solution must be 'Yes' - for all or most - to make the list)

- 1. Is it applicable within the context of Atlantic Canada?
- 2. Is this a practical and achievable solution scalable, implementable at local/provincial scale?
- 3. Are there existing conditions or conditions that are favourable for developing or implementing the solution?
- 4. Does the solution favour local entrepreneurship and/or local skills?
- 5. Is there opportunity for solutions to be (a) inter-connected to form a closed system or (b) the ability to cluster solutions into mutually-beneficial economies of scale/advantage?

List One - 25 for Atlantic Canada

The above filters were applied to the list of 100 Drawdown solutions. The following is a list of solutions that could be developed and successfully applied in Atlantic Canada.

The 25 filtered solutions have been grouped in similar themes/categories. The solutions have not been weighted or ranked, as each solution has its own inherent merit/potential.

Energy Production/Independence

- Biomass
- Geothermal
- In-stream hydro
- Methane digesters
- Offshore turbines
- Tidal/wave energy
- Micro wind

Energy Efficiency/Mitigation

- Net-zero buildings
- Micro-grids
- Smart thermostats
- Ride-sharing

- District heating
- Heat pumps
- Water savings

Emerging Products/Technologies

- Bioplastics
- Industrial hemp
- Ocean farming
- Perennial biomass
- Artificial leaf
- Biochar

Conservation/Natural Capital/Ecosystem Services

- Temperate forests
- Peatlands
- Coastal wetlands
- Conservation agriculture
- Pasture cropping

List Two - Five that we can't afford not to employ

This is a list of solutions that Atlantic Canada is well positioned to take advantage of, and should explore, because of their green economic advantages and benefits. It is not a top-priority list of the 25 List One selections.

- Coastal wetlands
- Cogeneration/District heating
- Forest Protection
- Wave and tidal
- Offshore and onshore wind turbines

List Three – These are a few solutions that have **great potential for getting-in at the ground level**, and developing associated R&D, products, skills and exportable knowledge. There could be a strong link between these and the universities and learning institutions within Atlantic Canada. Solutions identified in the three lists are not mutually-exclusive, or prioritized above any of the other solutions.

- Artificial leaf
- Bioplastics
- Energy Storage (distributed and utilities)
- Grid flexibility/microgrids
- Marine permaculture
- Microbial farming
- Ocean farming
- Wave and tidal