

RE-ARCTIC: Promoting renewable energy, eliminating fossil fuel subsidies and benefitting communities in the North

Ivetta Gerasimchuk, Richard Bridle, IISD

**Meeting of the Sustainable Development Working Group of the Arctic Council,
Whitehorse, 1 March 2015**



Costs of fossil fuels

(compilation from different sources)

Example of Nunavut – energy costs

- from 52.39 cents / kWh in Iquluit
- to 102.71 cents / kWh in Kugaruuk
- 20 % of Nunavut budget spent on energy
- CAD 7.4 M for electricity subsidies
- CAD 40 M on all energy subsidies

Benchmarks for comparison:

- 11 cents / kWh in Ontario
- estimated 51 cents / kWh in Nunavut (preliminary calculations by McDonald et al.)

**How can we address the barrier
of high cost of upfront investment?**

Selected renewable electricity trailblazers

Electricity from renewables today:

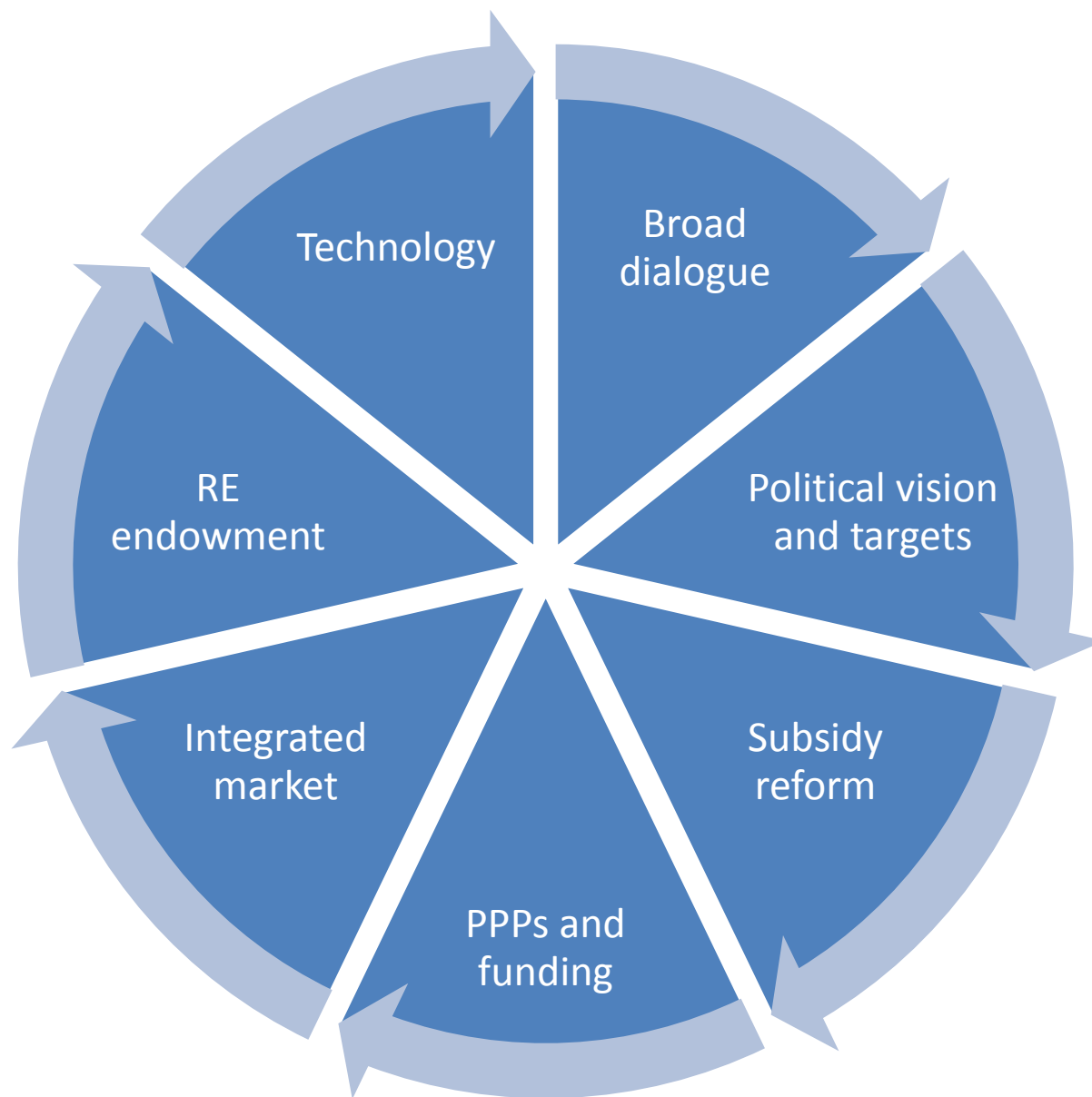
- Iceland, Tokelau – 100%
- Norway – 98%
- Paraguay – 90%
- Greenland – 70-75%
- Canada – 63%

Aiming to have 100% electricity from RE:

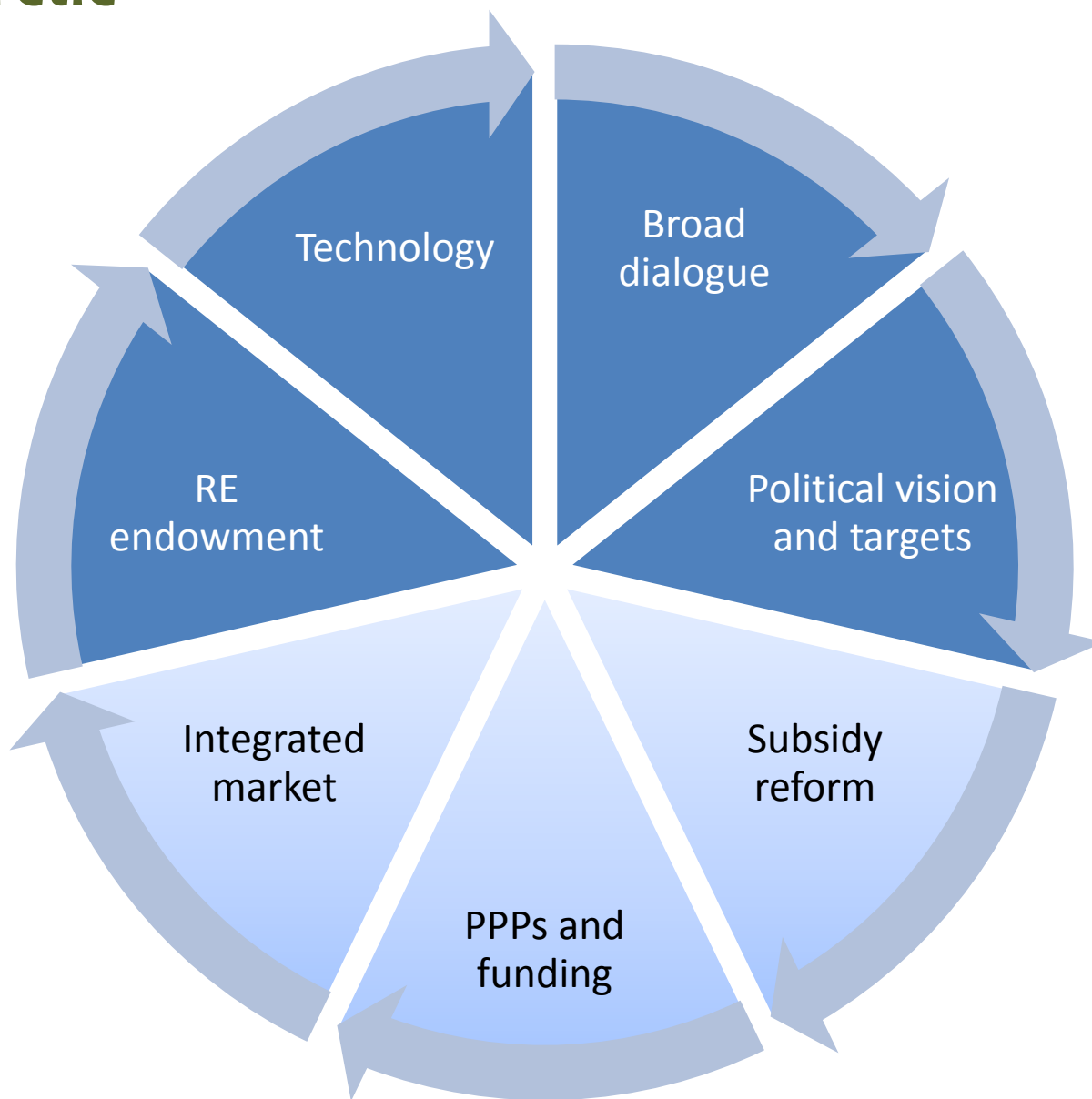
- Costa Rica by 2016
- Galapagos Islands, Tuvalu, Cook Islands, Scotland, Cape Verde by 2020
- The Philippines by 2023
- Greenland by 2024, Denmark by 2050




Elements of transformation to RE




Elements of transformation to RE in the Arctic



Energy subsidy reform

- Subsidize energy, not fossil fuels
 - Good news: low oil prices mean savings
 - A wave of fossil fuel subsidy reform in 2014 – 2015: India, Indonesia, Malaysia, Angola, Ghana
 - Mitigation measures and demand-side management critical in terms of energy efficiency audits and trainings, cash transfers to the negatively affected groups as required
- 

Integrating market and raising capital for RE in the Arctic

- Political commitments create investors' confidence
 - PPPs: “Green public procurement”, “green bonds” and securitization of loans (e.g. Massachusetts aggregated all municipal property to attract a large RE investor)
 - Taxes on tourism, pollution, car registration, flexible taxes on motor fuels (varying with world price fluctuations)
- 

- Transformative knowledge platforms, researchers
- * Inter-governmental organizations: Arctic Council, potentially UN Sustainable Energy for All, potentially NCM, potentially International Renewable Energy Agency (IRENA)
- Permanent participants of the Arctic Council
- National government agencies
- Regional and local governments & communities
- Funders
- NGOs, civil society and youth
- Polar research stations
- Renewable Energy Businesses
- Hydropower companies
- Mining companies
- Financial institutions

Thank you!

iisd International
Institute for Sustainable
Development Institut
international du
développement
durable



Ivetta Gerasimchuk
Senior Researcher
igerasimchuk@iisd.org
www.iisd.org