

Acting on Climate change



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Sustainable Canada Dialogues

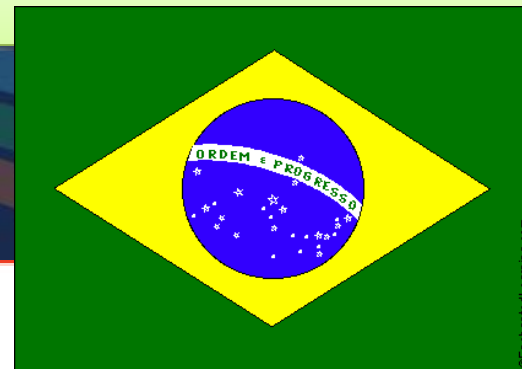


FINANCING : \$3.9 billions
According to donor countries

HALF OF TREE BIOMASS IS CARBON

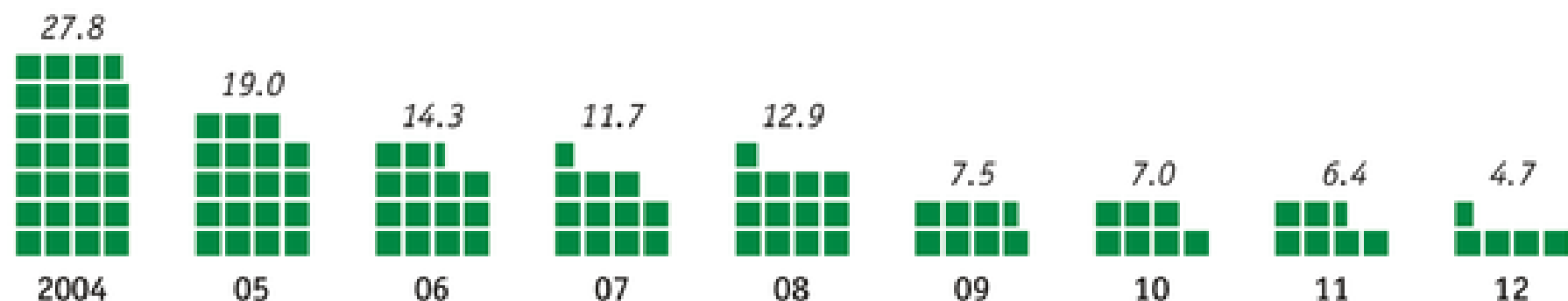
WHY DEFORESTATION?

Commitment to reduce deforestation by 80% for 2020!



Can't see the deforestation for the trees

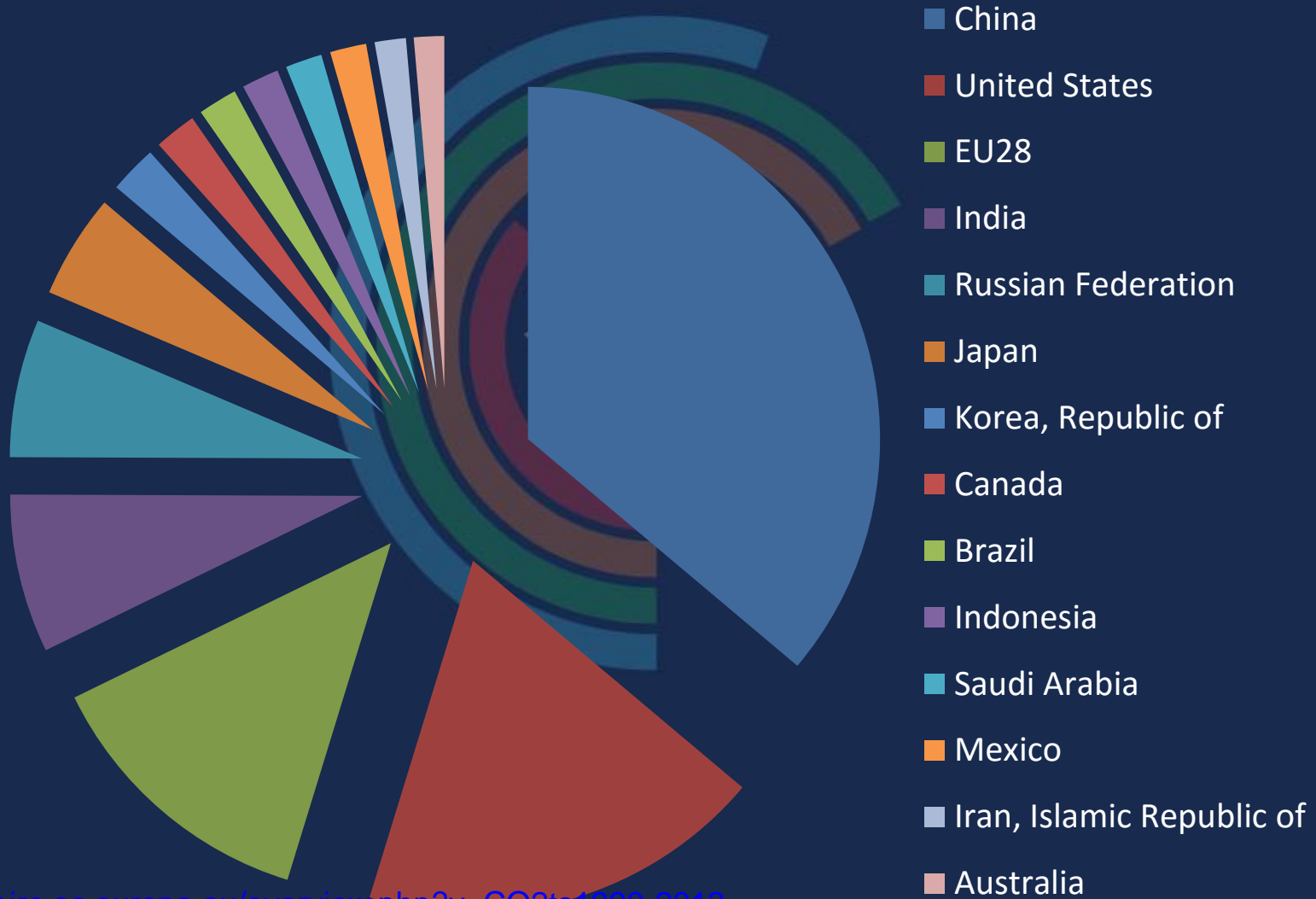
Annual deforestation in the Brazilian Amazon, '000 km²



Source: Imazon

-The economist, Sept 14th 2013
-<http://www.obt.inpe.br/prodes/index.php>

The Largest Emitters in 2013



<http://edgar.jrc.ec.europa.eu/overview.php?v=CO2is1990-2013>

U.S.-China Joint Announcement on Climate Change and Clean Energy Cooperation



www.washingtontimes.com

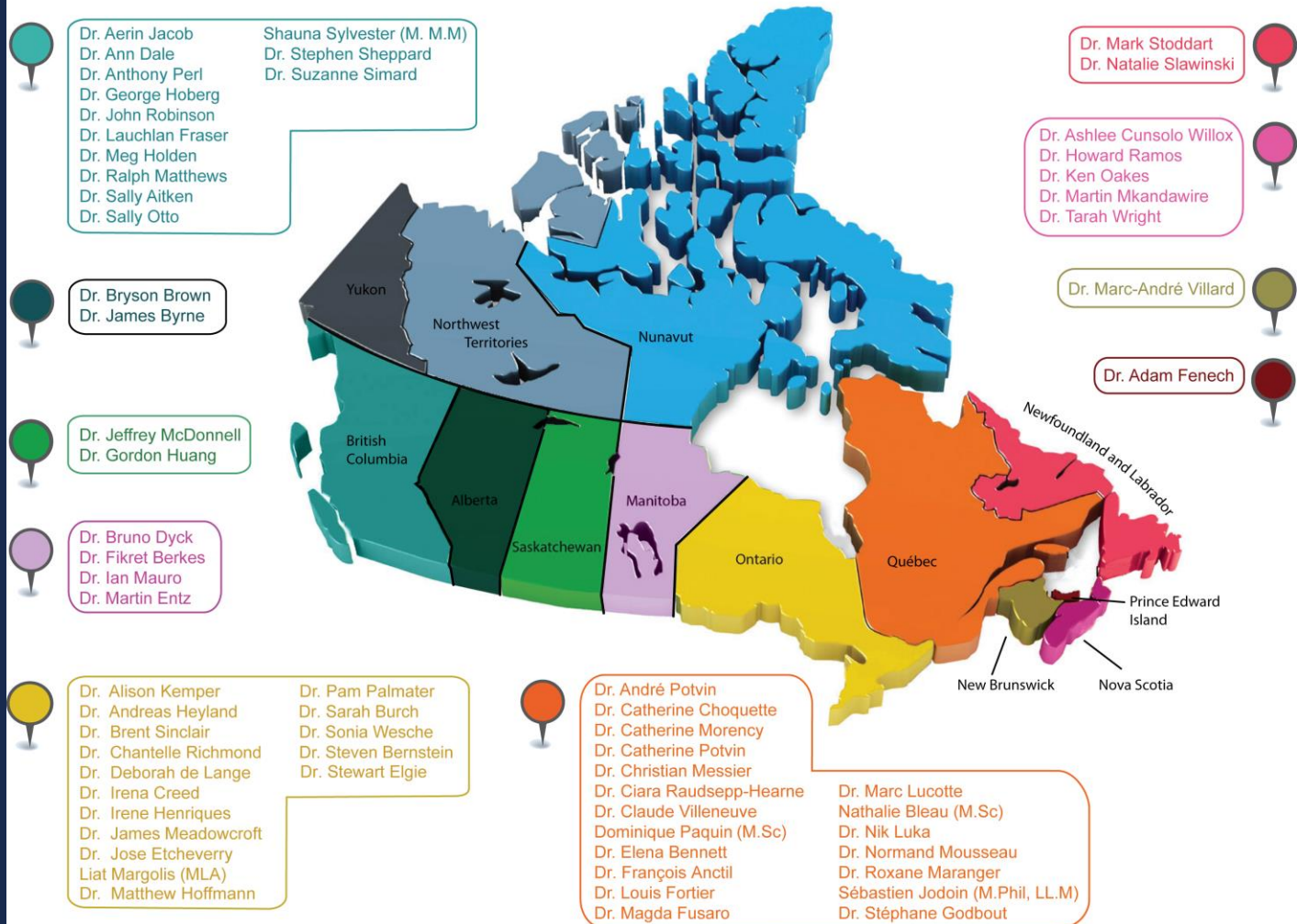
- New target for the USA: **-26-28% of 2005 in 2025**
- China: Peak in CO₂ emissions ~2030 and increase in renewable energy use by 20% for 2030

Canada's place in global cleantech markets



© 2015 Analytica Advisors Inc., source 2015 Canadian Clean Technology Industry Report

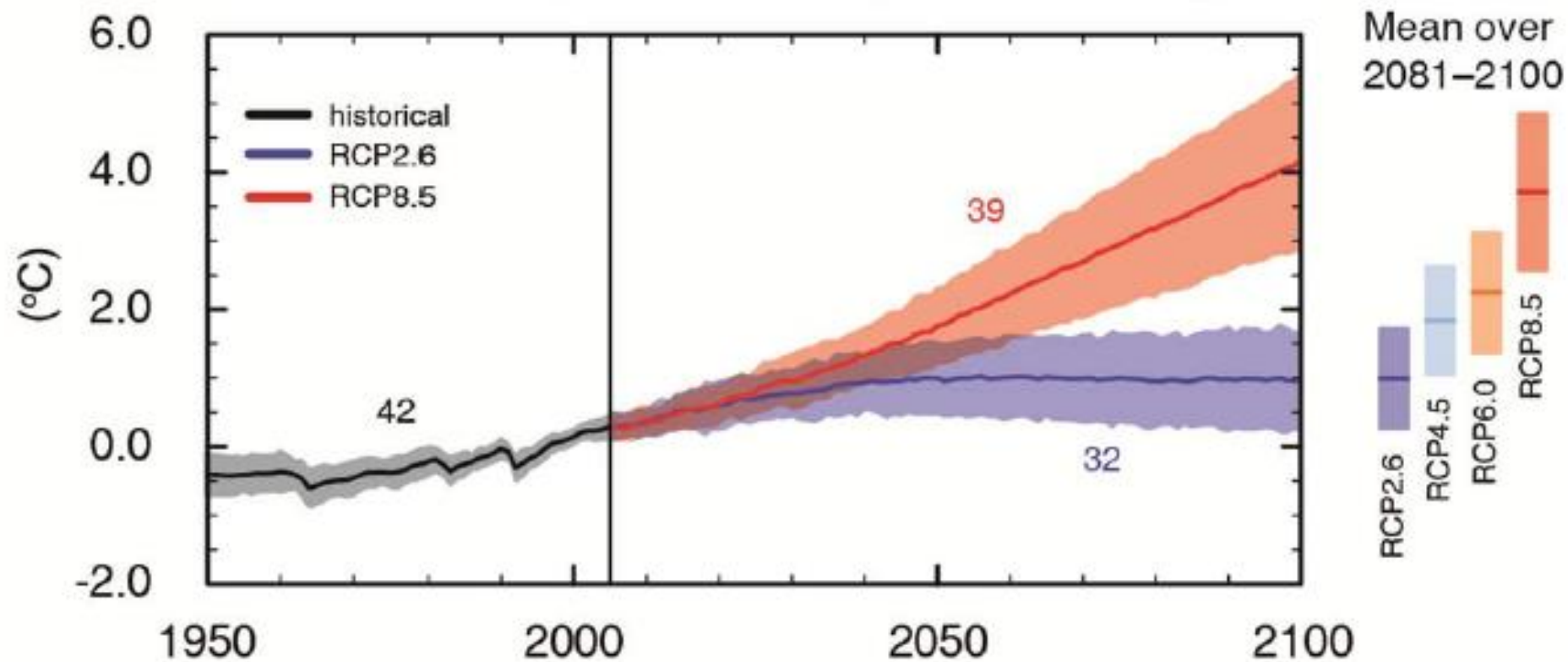
MAP OF SCD SCHOLARS



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(a)

Global average surface temperature change



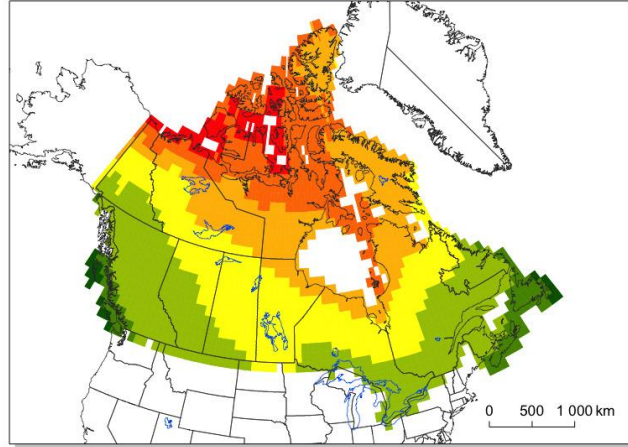
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Executive Summary Figure SPM7

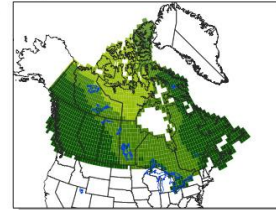
Climate change scenarios over the next 100 years according to 2 IPCC scenarios

2071-2100 : RCP 4.5

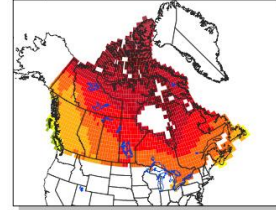
50th percentile



10th percentile



90th percentile

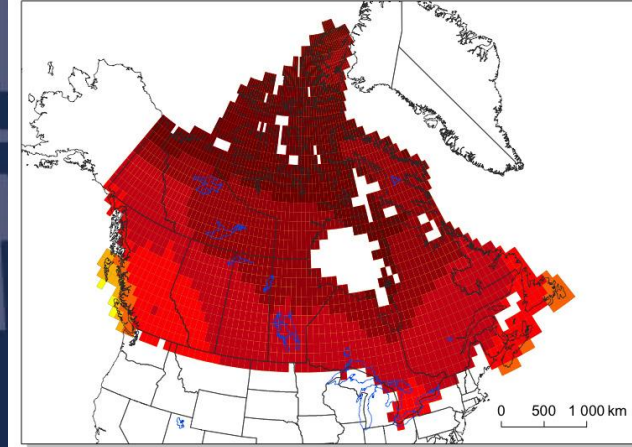


$\Delta 2m$ Temperature (°C) : ANN

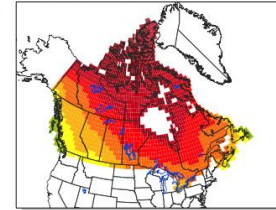


2071-2100 : RCP 8.5

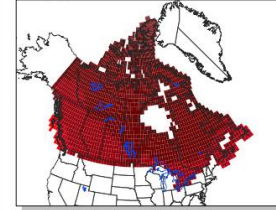
50th percentile



10th percentile



90th percentile



$\Delta 2m$ Temperature (°C) : ANN



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ACTING ON CLIMATE CHANGE

Solutions
from Canadian Scholars



McGill



TROTTER ISPP
INSTITUTE FOR SCIENCE AND PUBLIC POLICY
WITH A FOCUS ON CLIMATE CHANGE



Réseau
Environnement



Association francophone
pour le savoir

Acfas

10 KEYS

TOWARD A LOW-CARBON SUSTAINABLE CANADA

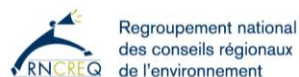
- 1 Put a price on carbon
- 2 Include aggressive goals for low-carbon electricity production in the federal and provincial climate action plans
- 3 Integrate the oil and gas production sector in climate policies
- 4 Adopt a multi-level energy policy with energy efficiency and cooperation in electrification at its core
- 5 Throughout Canada, rapidly adopt low-carbon transportation strategies
- 6 Integrate landscape planning with land use, transportation and energy infrastructure planning policies at multiple scales (building, neighbourhood and region) to ensure climate change mitigation
- 7 Support evolution of the building sector toward a carbon neutral or carbon positive sector
- 8 Safeguard biodiversity and water quality during Canada's transition to a low-carbon society, while aiming for net positive approaches when possible
- 9 Support sustainable fisheries, forestry and agricultural practices that offer opportunities to not only limit GHG emissions but also, where possible, enhance carbon sequestration while protecting biological diversity and water quality
- 10 Facilitate the transition to a low-carbon sustainable society through the implementation of more participatory and open governance institutions

-28% EMISSIONS
REDUCTION IN 2025

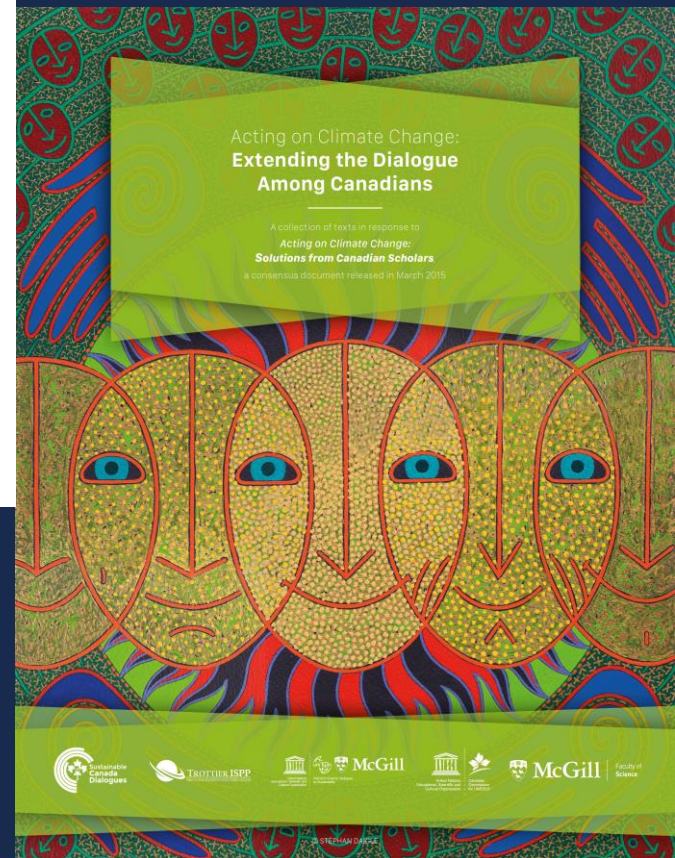
100% LOW-CARBON
ELECTRICITY IN 2035

-80% EMISSIONS
REDUCTION IN 2050

The Contributors



GENERATION | squeeze



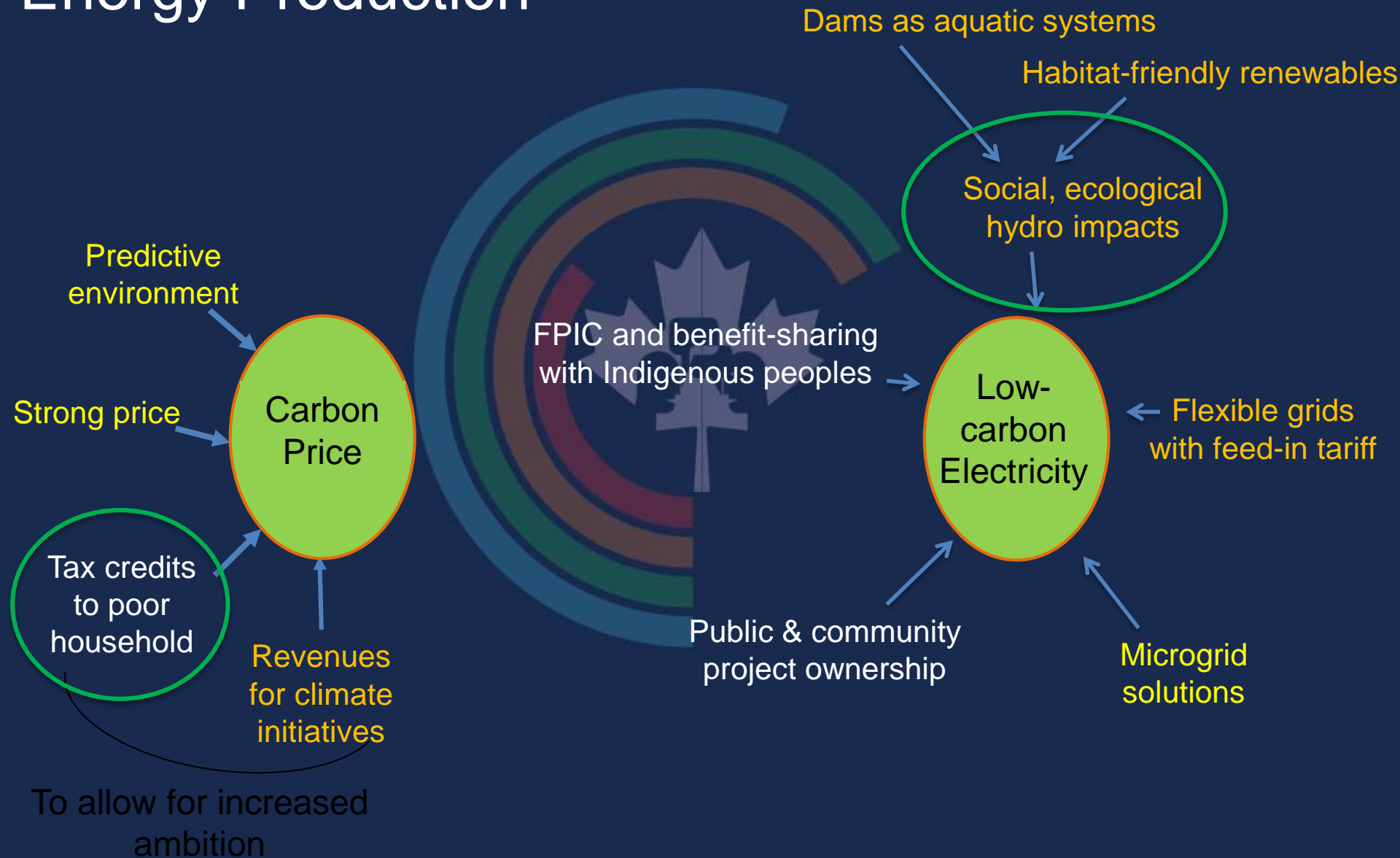
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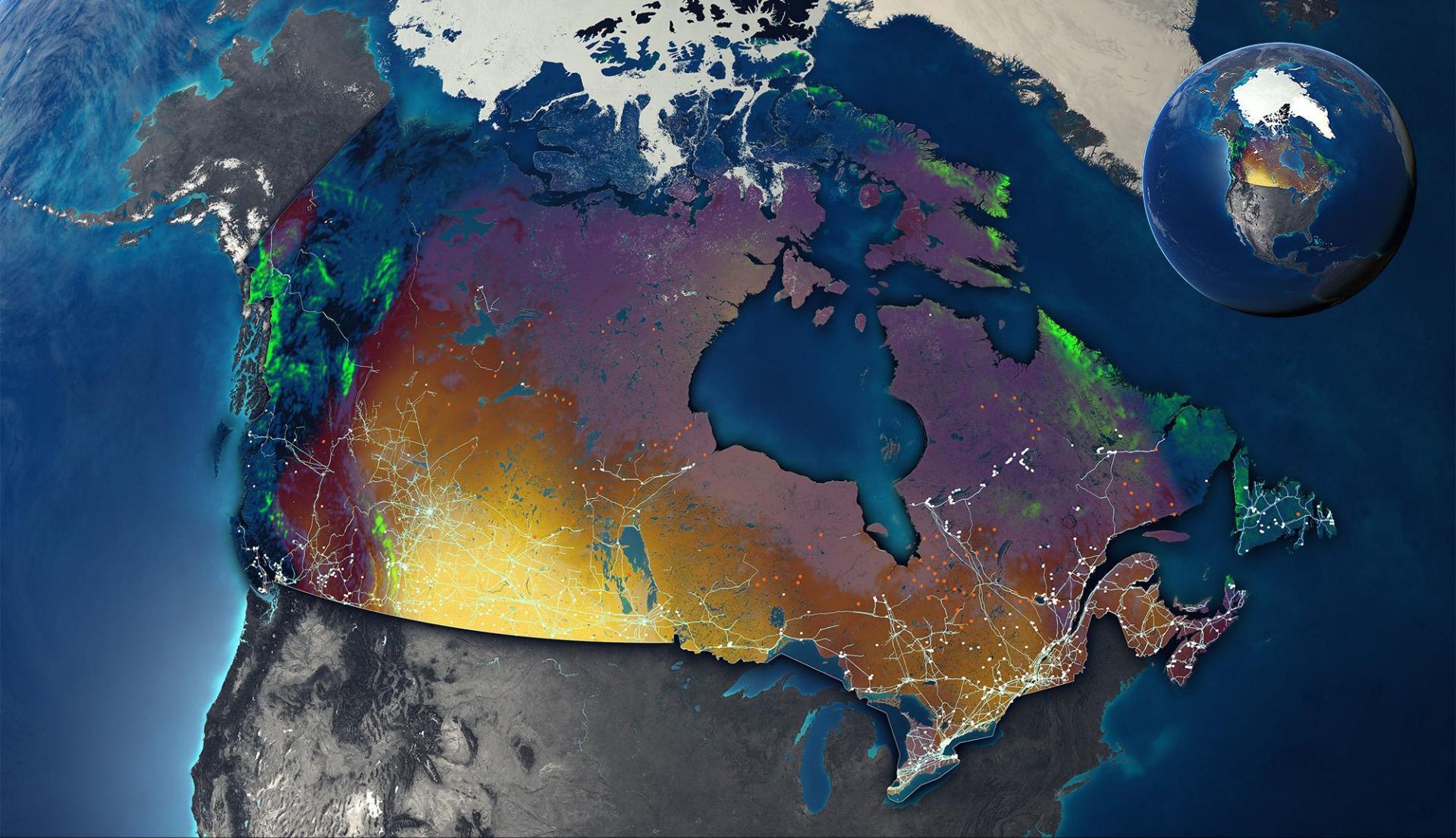


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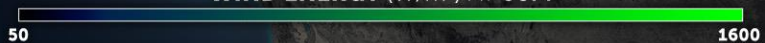
Energy Production



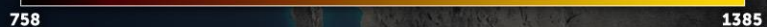


Canada's vast renewable energy potential

WIND ENERGY (W/m^2) AT 50M



SOLAR ENERGY (kWh/kW)



 Existing Dams

 Potential Dams

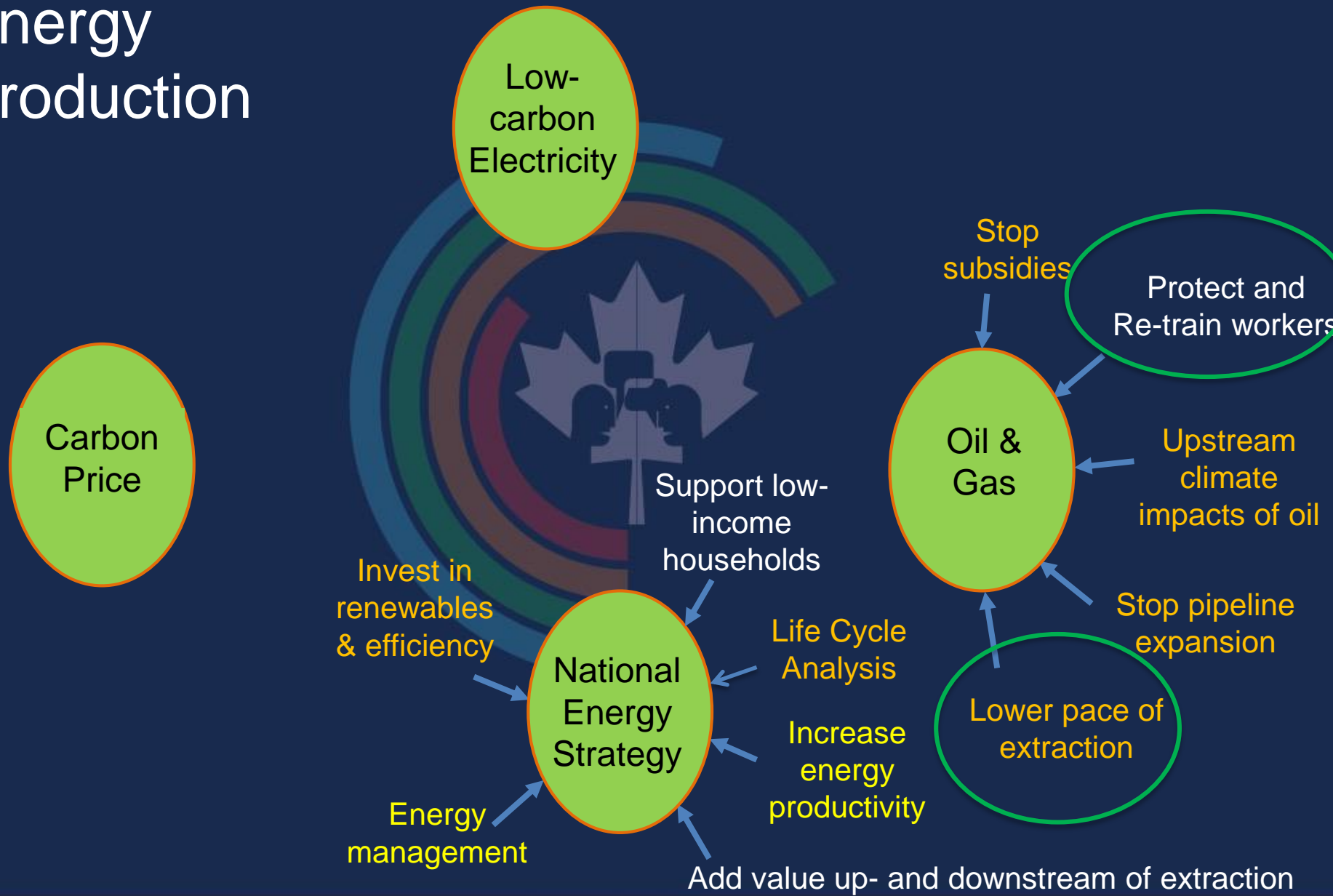


Transmission Lines

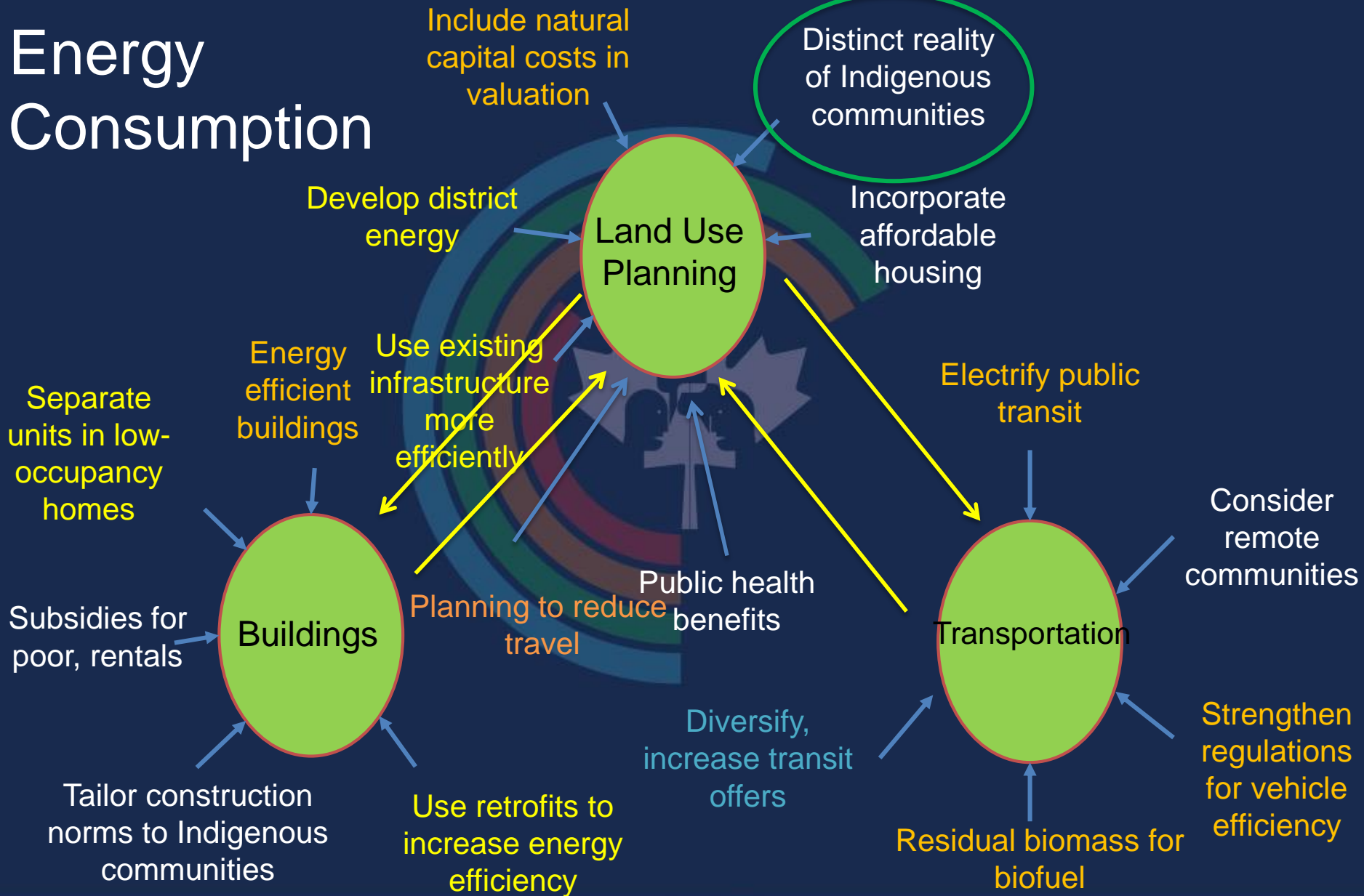


GLOBAlIA

Energy Production



Energy Consumption





- Estimate
- Reduce
- Offset
- Think outside the box



New ways/Old ways:

- Uber like apps for rides
- Car sharing/pooling
- Fruit, bread, milk truck

(1990-2007)

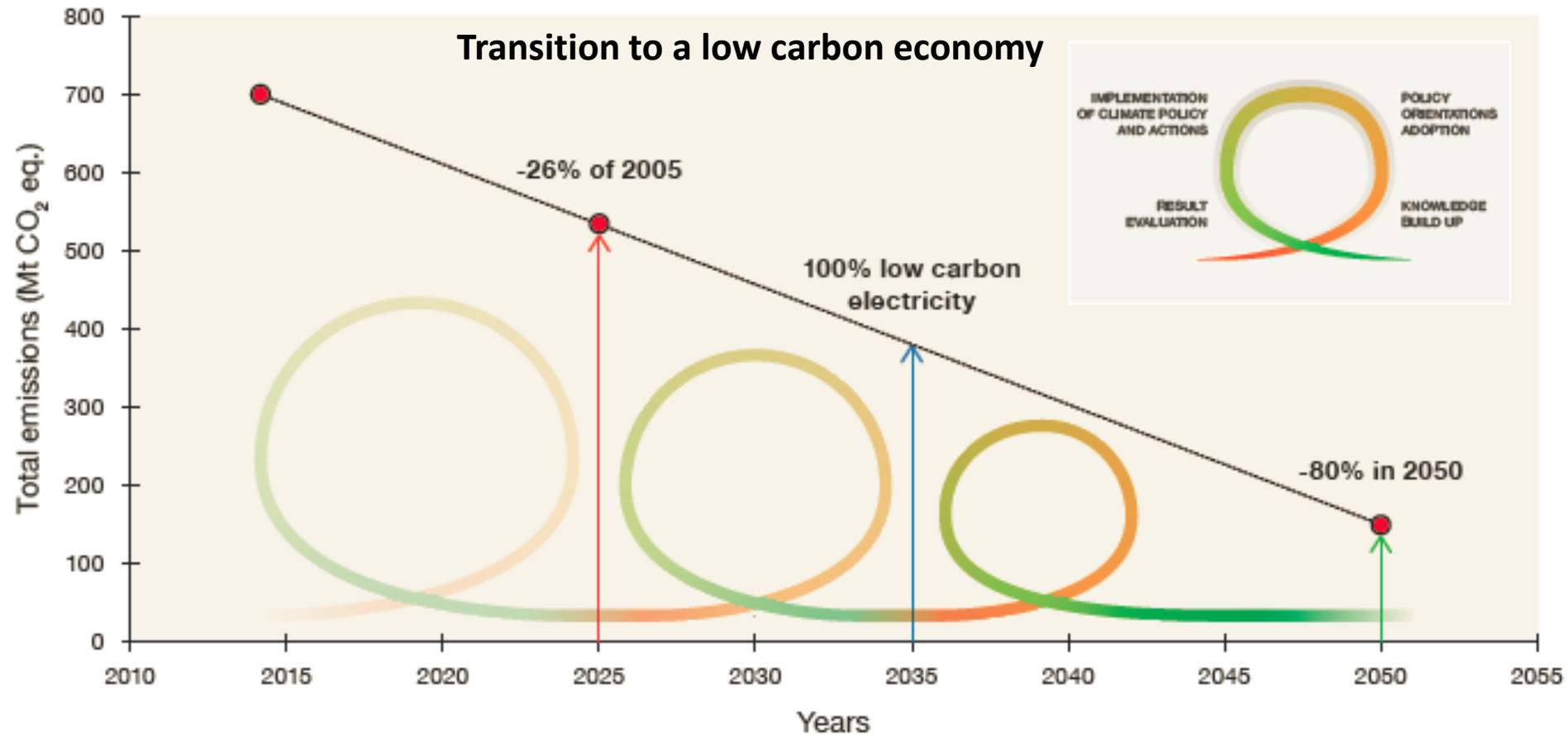
- Energy efficiency improved 29 %
- Energy use increased 7 percent.
- Number of households increased 31 %
- Average Canadian home became 10 % larger

(2015-onward...)

- Small is beautiful!



Transition to a low carbon economy



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Take risks

- Met with >70 policy-makers
- > 45 public events
- > 60 radio interviews
- 12 Op-Ed

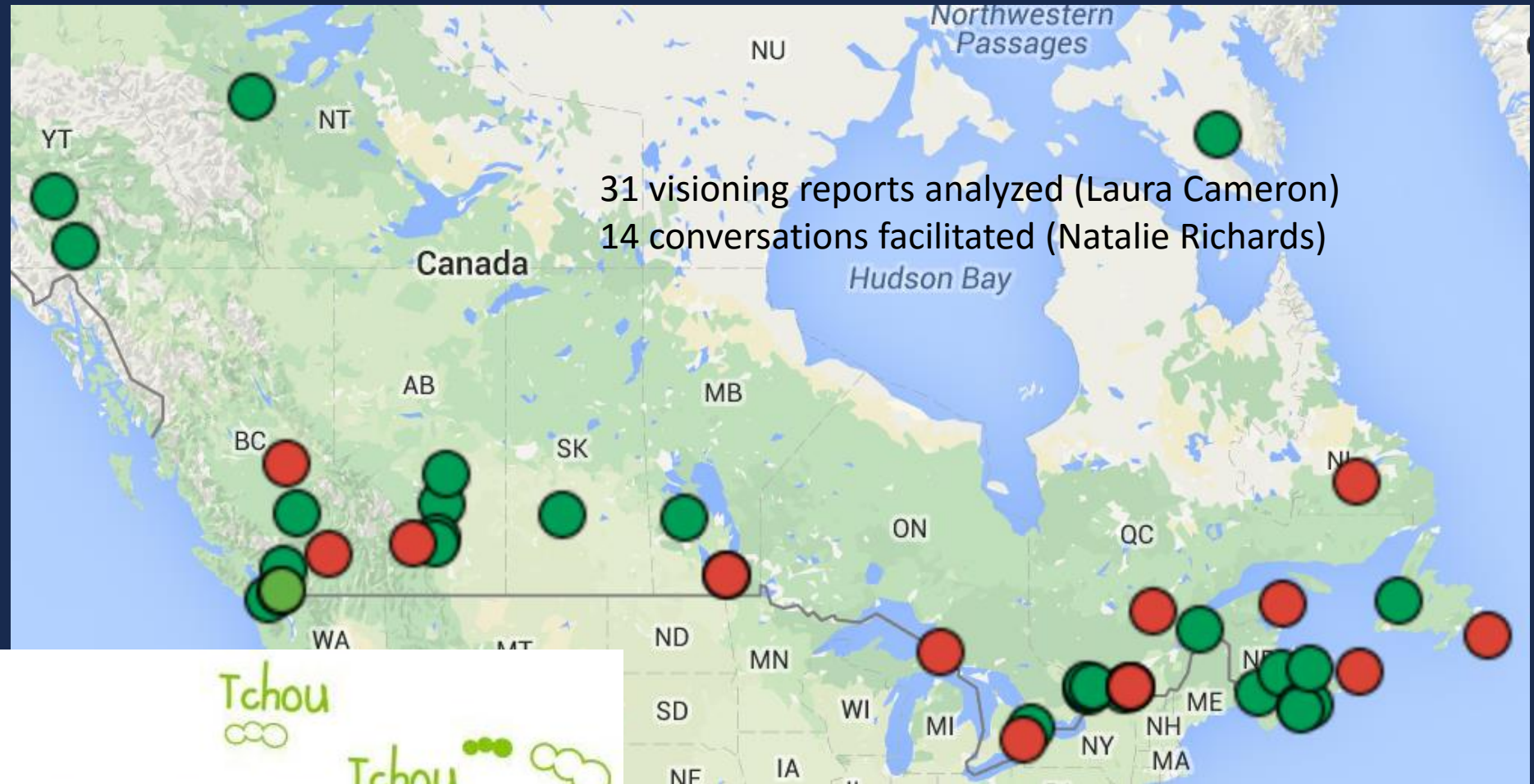
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Acting on Climate Change: Indigenous Initiatives



T'souke Nation, Vancouver Island

Climate Action building on the desire of Canadians



The Climate train Movement



Pour **Adèle** (2 mois), **Alice** (4 ans), **Arthur** (17 mois),
Avery (2 ans), **Brookelyn** (7 ans), **Camille** (3 ans),
Elias (5 ans), **Emma** (1 semaine), **Evan** (8 ans),
Gabriel (2 jours), **Hanah** (9 ans), **Isis** (3 ans), **Jai** (10 ans),
Josh (10 ans), **Jules** (2 semaines), **Keestin** (5 ans),
Louve (11 ans), **Maggie** (13 ans), **Megan** (13 ans),
Manami (2 ans), **Matthew** (6 ans), **Mireille** (13 ans),
Naomi (13 ans), **Penelope** (7 ans), **Samantha** (18 mois),
Tal (16 mois), **Wilson** (12 ans), **Wusko** (9 ans),
et tous les autres.

Votre futur est notre inspiration.



<http://www.sustainablecanadadialogues.ca>

Facebook: <https://www.facebook.com/mcgillatwork>



TISPP, Fac. Science-McGill, N. Richards, R. Faucher, J. Néron, N. Serraioco
C. Sanchez-Vallero, L. Cameron, D. Sharma, F. Rivault, C. Graveline, C. Smith.
Merci!!!!!!!!!!!!!!

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