The Economic Impact of Climate Change

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Climate change is leading to significant changes in the economy

- Industry: food producing industries particularly at risk from changes in ocean environment (fishery) or drought (agriculture)
- Communities: livelihood and infrastructure at risk from flooding, wildfires and rising sea levels
- Individuals: employment, housing and health risks: rising inequality
- Environment: risks to ecosystems and loss of biodiversity

How big will that impact be?

Governments target reducing GHG emissions to limit the damage of climate change

- Canada: adopted Paris Agreement to keep global temperature rise to 1.5 degree C. Committed to achieving net-zero emissions by 2050, as is Newfoundland and Labrador
- Pricing carbon is the core element of Canada's strategy: placing a price on the emissions from fossil fuels to create an incentive to use cleaner energy options and requiring heavy industry to become more efficient
- Currently the carbon price is $40 per tonne, rising to $170 per tonne in 2030.
- Provincial plans vary: but all must meet minimum standard
- Newfoundland and Labrador adopted a hybrid plan: fuel charge plus performance standards for large emitters.
- Measuring progress (the accountability framework) will be a big challenge for governments

Policies to combat climate change create economic winners and losers

- Carbon intensive industries face the biggest disruption as the price of carbon rises, as do the provinces, communities and individuals most reliant on these industries
- Clear winners:
  - Renewable energy
  - Green tech (including carbon capture and storage, emissions reduction)
  - Electric vehicles
- Clear losers: firms who fail to adjust their business model to adapt to the realities of climate change
- Wild cards: Big risk, big reward technologies which could make a big difference to reaching climate goals (eg. hydrogen fuel cell)

The path to Net Zero in 2050 is achievable

- Net-zero = the balance between the amount of GHG emissions produced and the amount removed from the atmosphere
- Most of this will be achieved by our success in cutting emissions
- The balance will depend on the effectiveness of negative emissions technologies to remove residual emissions, such as carbon capture and storage
- A recent study suggests we have the tools to achieve this, but will need a strong commitment from business, governments and citizens