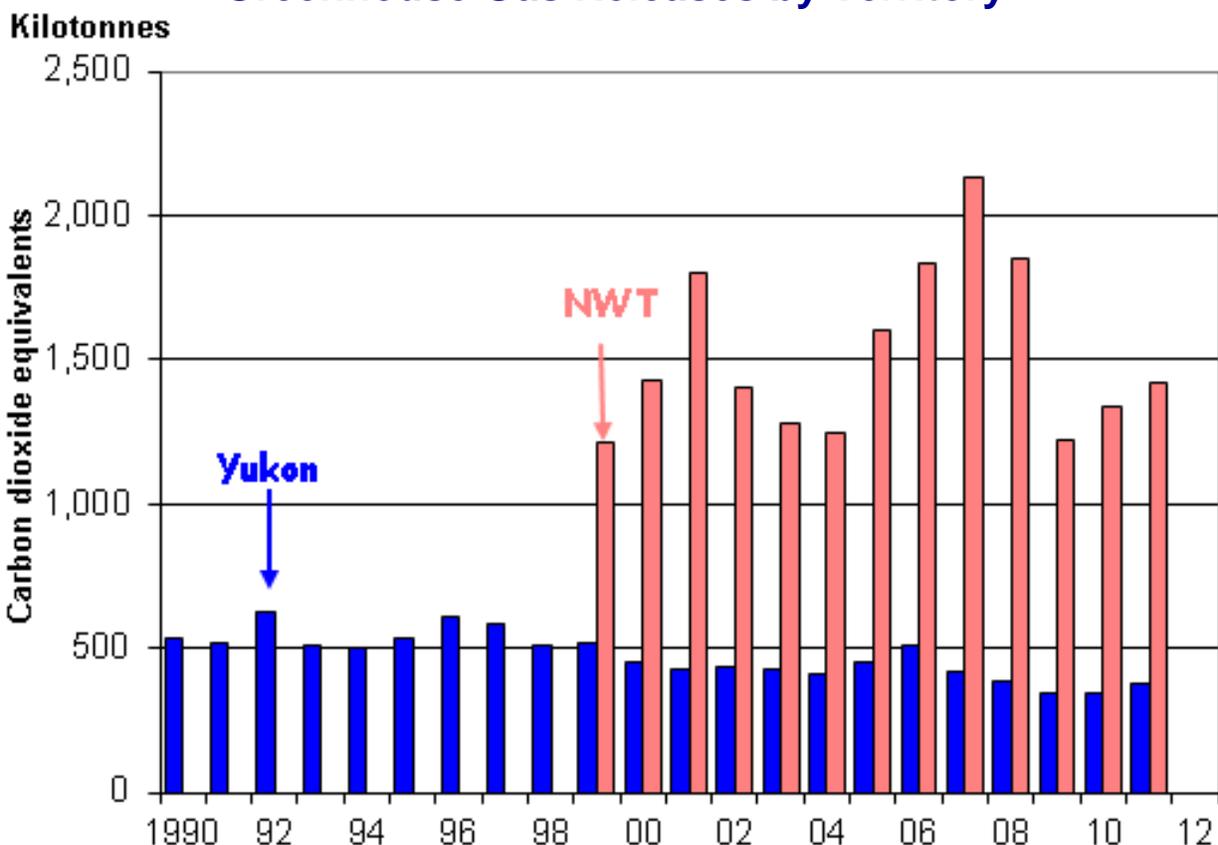


## Greenhouse Gas Releases by Territory



Data source: Environment Canada

### What is happening?

- These graphs show the annual changes in the release of greenhouse gases (expressed as the number of metric tonnes of carbon dioxide).
- Compared with the Yukon, the NWT has over three times the rate of emissions and this stems from their larger population and higher rates of resource development.
- In 2011 about 27% of the NWT emissions for the year were attributed to mining and fossil fuel production while the comparable figure for the Yukon was 5%.
- The NWT burns more fossil fuel to produce electricity than the Yukon does. In 2010 hydro electricity (which releases no greenhouse gases during operation) accounted for 95% of Yukon electrical production but only 32% in the NWT.

### Why is it happening?

- The release of greenhouse gases increases when we burn fossil fuels, change some land practices such as clearing forests or allow gases, such as methane, to escape from landfills.

## Why is it important?

- Human activities that release greenhouse gases will contribute to global warming.
- The Borderlands study area has been experiencing significant warming in recent decades and this raises concerns about the future impacts of these changes in climate.

## Technical Notes

- These data were obtained from the 2011 report titled National Inventory Report 1990–2011: Greenhouse Gas Sources and Sinks in Canada available from Environment Canada.
- Units are in kt or kilotonnes and equal 1,000 kg.
- Emission data for the NWT is tracked from 1999 when the separate territory of Nunavut was created.
- Canada is following an international monitoring effort to track 6 gases: carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, perfluorocarbons and hydrofluorocarbons. The release of each gas is estimated and converted to a equivalent amount of carbon dioxide based on the global warming potential of each individual gas.

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