

# Energy Flows Hackathon

April 17-19, 2019



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STATISTICS CANADA

ONE HUNDRED YEARS AND COUNTING



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- Sankey Diagram
- Energy Intensities
  - Visualisation Tool for Energy Intensities by Province and Industry
    - Which sectors/industries should each province concentrate on as they attempt to improve energy intensity?
  - SDG 7.3 Tracker
    - GOAL: By 2030, double the rate of improvement in energy efficiency.
    - Which provinces are on-track to meet their 2030 targets?



# Sankey Diagram

- Web-based visualisation for public consumption.
- Added detail on sources and removed detail on uses:
  - Integrated renewable electricity
  - Grouped final outputs for simplicity
- Used historical imputation for suppressions.



# Energy Intensities

- Analytical Power BI tool designed primarily for GoC analysts.
- Energy intensities at the provincial- and/or industry-level.
- **Energy Intensity = Energy Demand/GDP**
  - Tonnes of oil equivalent per 1,000 chained 2007 dollars
  - CANSIM 128-0016 – contains energy demand by industrial sector (TJ)
  - CANSIM 379-0030 – GDP by province/territory (chained 2007 dollars)



# Energy Intensities - SDG 7.3 Tracker



- Tool to track provincial progress on 7.3
  - SDG 7.3: By 2030, double the **rate of improvement** in energy efficiency.
- Benchmark rate of improvement is the rate of change in provincial energy intensity between 2000 and 2010.
- 2030 target is 2X provincial benchmark.
- Compound annual rates of improvement (CARI) calculated to determine the annual improvement required to meet the 2030 goal.
  - CARI adjusted each year based on the previous year's performance.



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# THANK YOU!

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