

# Industrial Energy Data

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CEEDC

Canadian Energy & Emissions Data Centre

# CEEDC

Government and industry sponsorship provides public access to quality and unbiased information on Canadian industry

- Comprehensive database on physical production, energy use, GHG emissions
- disaggregated by (province), sector, and fuel (including intensity indicators)

# Energy & Materials Research Group

Academic energy & GHG policy modelling group (led by Mark Jaccard)

- Focused mostly on provincial and federal policies
- Detailed technology pathways
- Always trying to be relevant to changing political / policy landscape

# Industry energy and GHG data

## Primary sources for energy

- ICE, RESD, ECCCC NIR, NRCan

## GHGs

- ECCCC NIR, Provincial accounts, CEEDC

## Physical production

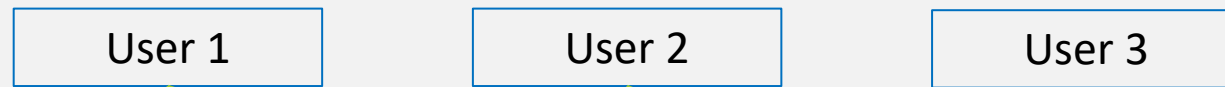
- Various StatCan tables, NRCan, Industry associations
- GDP / Gross Output, if no other source

# Experiences & challenges with Canadian data

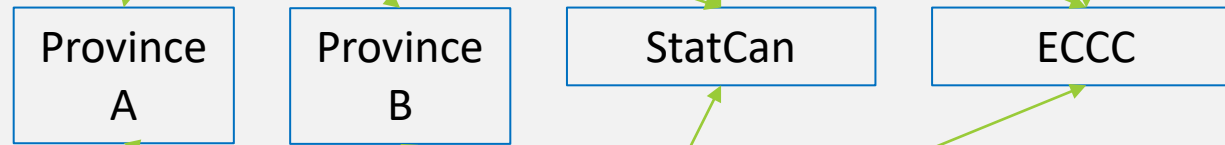
- As a policy modeler, need information on energy supply, transformation, and demand (as well as costs & prices!)
- Physical production data often cancelled over time or conducted on cost recovery basis -> **not stable situation**
- **(Until recently)** increasing data suppression for ICE
- Values from different sources appear to disagree, but often just different scopes
- Can be difficult to find definitions of energy terms and conversion factors

# Multi-location access

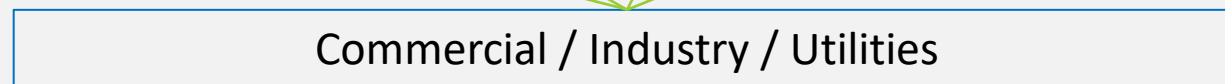
User



Provider



Source



- Conflicting data – unclear what is the “real” data
- Onerous for industry to report to multiple organisations with different methods
- Difficult for users to search for data
- Each data provider has full control over what is collected and what is public

# Balance public and private interests

## Provincial-level data should be minimum publicly available

- Needed for policy analysis, modelling, and benchmarking since it captures regional differences

## Only select groups need actual fine-grained data – most users only need something representative

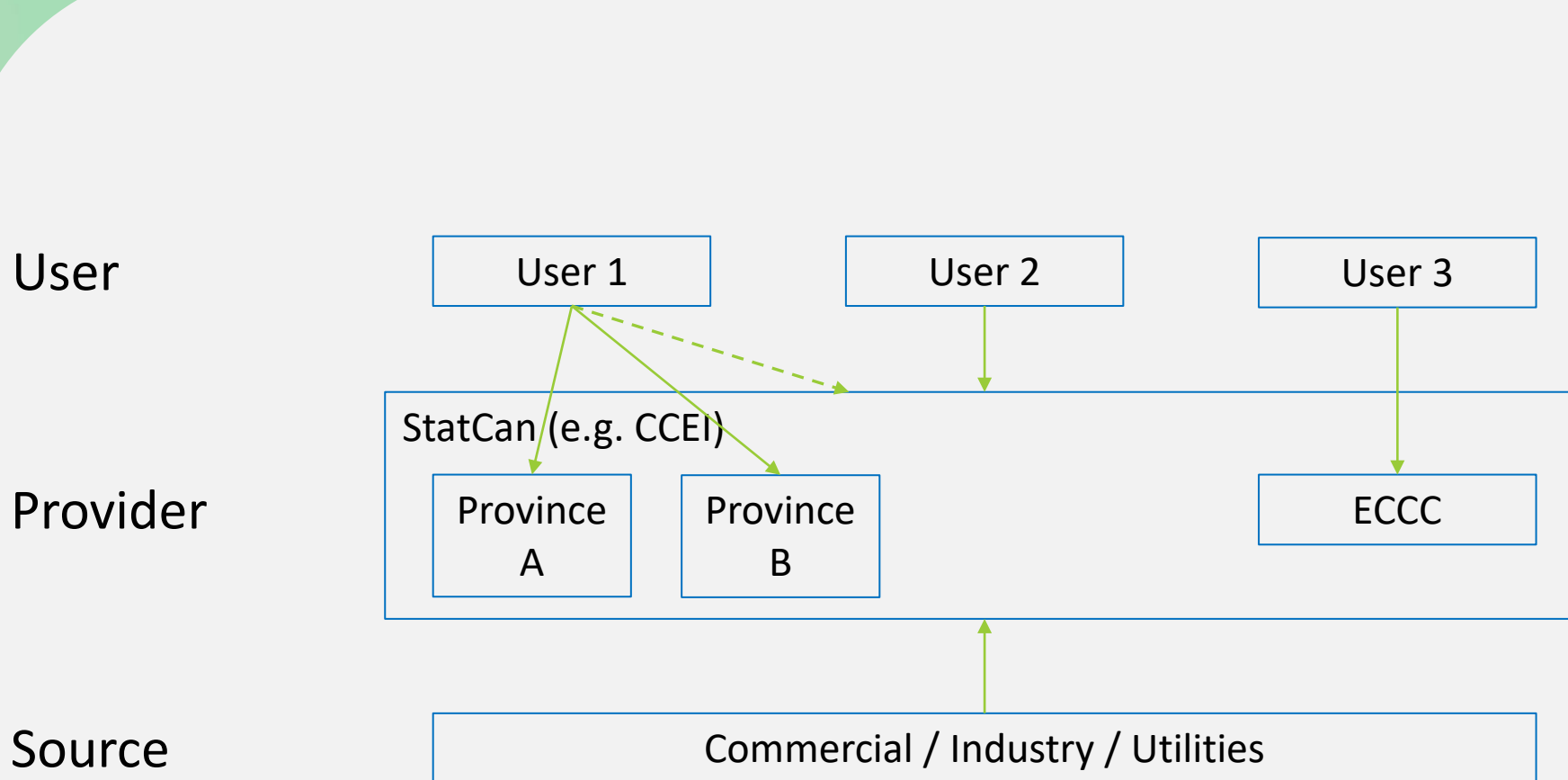
- For example, the Output Based Pricing System (ECCC) collects actual production, energy, and GHG data from businesses to accurately benchmark, but approximations/aggregates of those data could be provided publicly

# How to get better data?

## Single window data access!

- Currently, too many sources for individuals to search
  - StatCan, ECCC, NRCan, provinces (all have different structures), utilities, industry, NGOs
- Need harmonisation across governments, but jurisdiction is complicated
  - CCEI could be the coordinating body for all energy data
  - Already have a federal-provincial-territorial steering committee
- More consistency needed on energy metrics

# Single window access



- All levels have consistent data since only one source for each value
- Better for industry to report to a single place with consistent method
- Users can search for data easily at single window, but other places are consistent
- Data providers must agree over what is collected, what is public, and what methods to use



# Other possible improvements

- **Timeliness of data**
  - For example, official GHG emissions data delayed by two years in NIR
- **Innovation and commercialization of new technologies**
  - Always evaluating prospective technologies to decarbonise economy (e.g. hydrogen, batteries, biofuels)
- **Wholesale and retail energy costs**
  - Competitiveness implications for provincial / international trade

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