North American Cooperation on Energy Information (NACEI)

For
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Goals of trilateral cooperation on energy information (MOU 12/15/14)

- **Energy trade statistics**
  Consistent energy trade data across and within jurisdictions; harmonized methods and definitions; aligned international reporting practices

- **Geographical energy information**
  Fully integrated maps of North American energy infrastructure

- **Outlooks for energy supply and demand**
  Process for exchanging views and projections of cross-border energy flows.

- **Cross reference for energy terminology**
  Catalogue of concepts, terms and definitions consistent across North America and translated into each country’s official language(s)
The trilateral website was created to showcase the cooperative energy information that has been gathered on comparing, validating, and improving trade data.
Energy Trade Data Statistics

• *Tables and graphs* presenting respective country energy trade data for easy comparison have been compiled and a tool for systematic and efficient refreshing of data tables is in development.

• *Graphical examples* demonstrating variations in data series are being posted.

• *Guide detailing the specific methodologies for each country’s energy trade data series* has been developed.

• *Glossary cross referencing terminology used by the Trilateral countries and the International Energy Agency (IEA) and the United Nations (IRES)* has been developed for ease of analysis and to help identify opportunities for harmonization.
Trade Data: Petroleum and Other Liquids

Crude oil flows from Canada to U.S.

Crude oil flows from Mexico to U.S.
Trade Data: Natural Gas

The data align closely between the U.S. Energy Information Administration (EIA) and the Canada National Energy Board (NEB).

The differences between Mexico and the U.S. natural gas trade data vary significantly. Mexican analysts are still working on consolidating their natural gas trade data.
Trade Data: Electricity

Electricity flow data from Canada to the United States fairly consistent because it is primarily based on NEB data.

EIA is collecting and testing its own electricity import/export information collection.
GASOLINES

International Recommendations for Energy Statistics (UAE)
Gasoline: Complex mixture of volatile hydrocarbons distilled between approximately 25°C and 220°C and consisting of compounds in the C4 to C12 range.
Remark: Gasoline may contain blending components of biomass origin, especially oxygenates (mainly ethers and alcohols), and additives may be used to boost certain performance features.

International Energy Agency (IEA)
Gasoline: This category includes motor gasoline blending components, e.g. alcohols, isomerate, reformate, cracked gasoline destined for use as finished motor gasoline.

This category includes motor gasoline blending components (excluding Additives/oxygenates), e.g. alcohols, isomerate, reformate, cracked gasoline destined for use as finished motor gasoline.

United States
Motor Gasoline (finished): A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D 4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 166 degrees Fahrenheit at the 10 percent recovery point to 385 to 374 degrees Fahrenheit at the 90 percent recovery point. Motor Gasoline includes conventional gasoline, all types of oxygenated gasoline, including gasohol, and reformulated gasoline, but excludes aviation gasoline. Note: Volumetric data on blending components, such as oxygenates, are not counted in data on finished motor gasoline unless the blending components are blended into the gasoline.

Motor gasoline blending: Mechanical mixing of motor gasoline blending components, and oxygenates when required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or...
Interactive North American Energy Map

Energy Infrastructure of North America

Layers/Legend
- Natural Gas Processing Plants
- Liquefied Natural Gas Terminals
- Refineries, by Types
  - Refinery
  - Upgrader
  - Asphalt Refinery
- Power Plants, 100 MW or more
  - Biomass
  - Coal
  - Geothermal
  - Hydroelectric
  - Natural Gas
  - Nuclear
  - Other
  - Petroleum
  - Pumped Storage
  - Solar
  - Wind
- Renewable Energy Power Plants, 1 MW or more
  - Biomass
  - Geothermal
  - Hydroelectric
  - Pumped Storage
  - Solar
  - Wind

North America Static Maps
- Natural Gas Processing Plants PDF
- Liquefied Natural Gas Import and Export Terminals PDF
- Refineries and Upgraders PDF
- Electric Power Plants PDF
- Renewable Electric Power Plants PDF

Map Resources
- Map Definitions
- Map Data (Spreadsheets, Shapefiles, Web Services)

Related Links
- Government of Canada: Energy Infrastructure of North America
- Government of Mexico: North American Energy Map

Print
Static map of North American – Electric Power Plants (100 MW or more)
Static map of North American – Renewable electric power plants (1 MW or more)
Map Data Files

Shapefiles and spreadsheet files available on the individual elements and country level.

This gives flexibility to public users to select only the datasets that they are interested.

Uniform table and file structure allows for easy merging and comparing.

Can make updating country level data easier for developers.
The outlook for energy trade between the three neighboring countries.
North American Energy Outlook Project

- Trilateral Energy Outlook Project is presented for comparison purposes and to identify areas where further coordination and understanding could yield the greatest mutual benefit.

- Comparison of the respective modeling frameworks and each country's current official projections, with a particular focus on understanding cross-border trade.

- Results of using a common set of assumptions across all three countries while maintaining the same respective models and methods used by each to produce national outlooks.
Partners

• United States
  – Department of Energy
    Energy Information Administration

• Canada
  – Department of Natural Resources
  – National Energy Board
  – Statistics Canada

• Mexico
  ▪ Secretariat of Energy
  ▪ National Hydrocarbons Commission
  ▪ National Statistics and Geography Institute
  ▪ National Energy Control Center
  ▪ Federal Electricity Commission
  ▪ National Electricity Control Center
  ▪ National Natural Gas Control Center
  ▪ Energy Regulatory Commission
  ▪ PEMEX