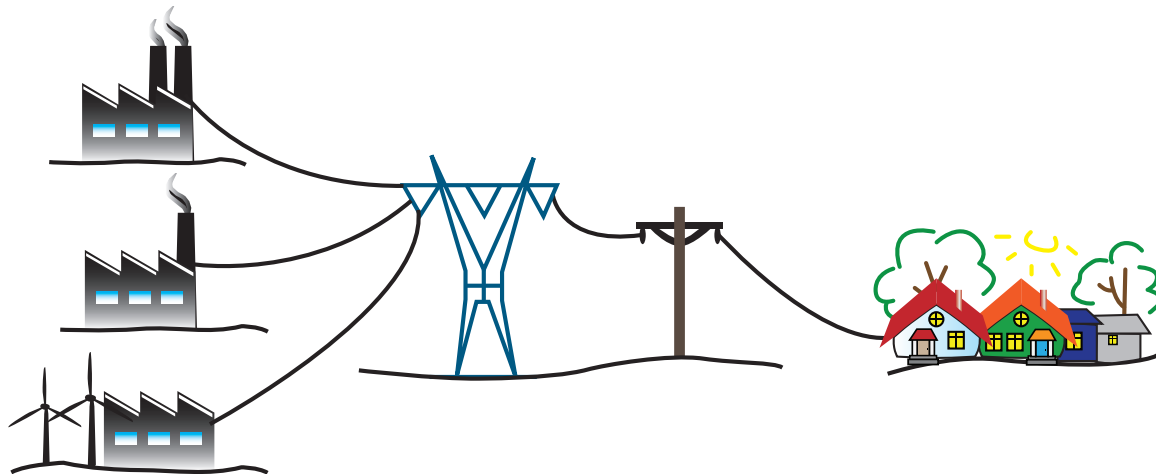


# Electricity Generation

Electricity is **generated** from various fuel sources, including coal, gas, wind and hydro.

## Electricity System Overview



### Generation

- Competitive/market based
- Private investment
- Energy only market design

### Transmission

- Fully regulated
- Cost-of-Service Model
- One rate for Albertans

### Distribution

- Fully regulated
- Supports retail competition

### Retail/Customer

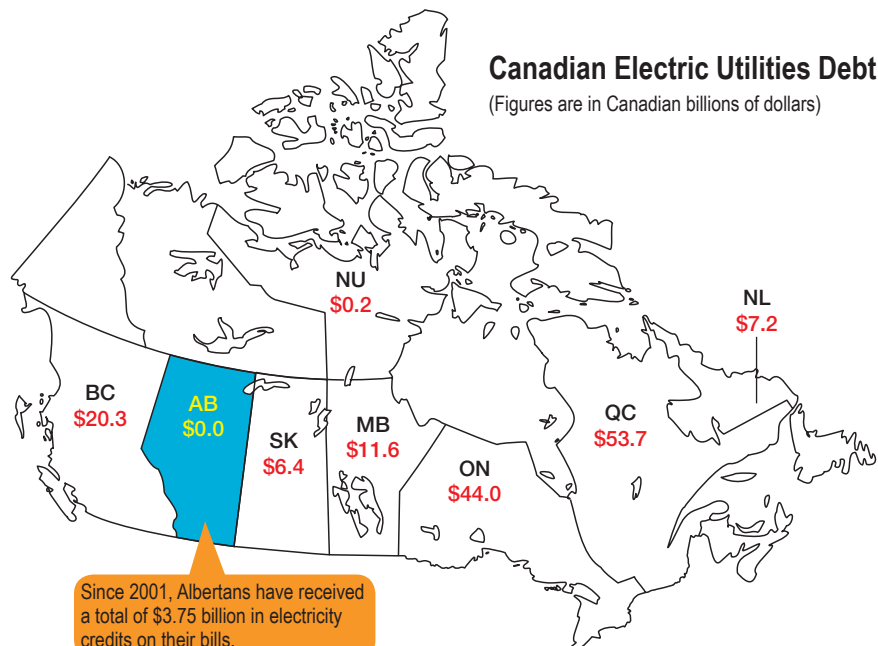
- Partially deregulated
- Competitive Contracts
- Regulated rate option for small consumers

## Generators

In Alberta, generation facilities are owned by private investors or municipalities. This means that private investors bear the risk of investing and building, operating and maintaining these facilities and Albertans do not bear this risk. This is why Alberta carries \$0 utility debt.

## Canadian Electric Utilities Debt

(Figures are in Canadian billions of dollars)



Since 2001, Albertans have received a total of \$3.75 billion in electricity credits on their bills.

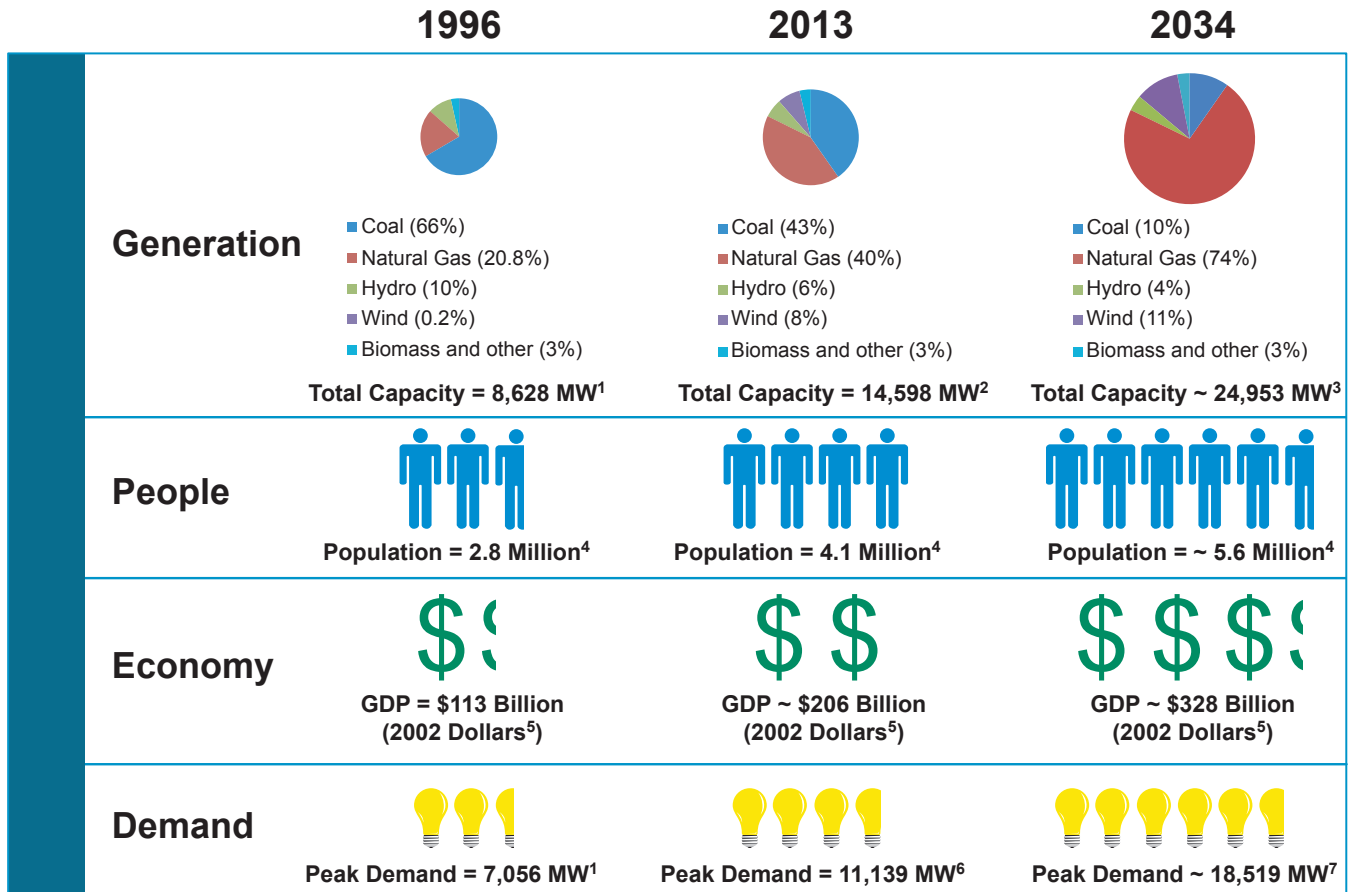
Source: London Economics 2014

# Electricity Generation

## Demand

Over the next 10 years, it is expected that demand for electricity in Alberta will increase.

- Alberta is the fastest growing province in the country – and that means that we need to generate more electricity to power our province.
- In 2013, Alberta's generation capacity was 14,598 megawatts (MW). The Alberta Electric System Operator forecasts that peak demand will increase to more than 18,000 MW by 2032.



1 Energy and Utilities Board, Alberta Electric Industry Annual Statistics (ST-28).  
 2 Alberta Utilities Commission, Installed Capacity 2013  
 3 Alberta Electric System Operator 2012 Long Term Outlook  
 4 Alberta Treasury Board and Finance, Alberta Population Projections Summary Statistics, Medium  
 5 Conference Board of Canada  
 6 Alberta Electric System Operator 2013 Annual Market Statistics  
 7 Alberta Electric System Operator 2014 Long Term Outlook

## Alberta Electric System Operator (AESO)

The AESO is responsible for the day to day operation of Alberta's electricity grid. They ensure the minute-to-minute electricity demands in the province are met in a safe and reliable manner. [www.aeso.ca](http://www.aeso.ca)



## Market Surveillance Administrator (MSA)

The Market Surveillance Administrator (MSA) is the market watchdog that monitors the market and checks that participants are operating in a fair, efficient and openly competitive manner. More serious transgressions are prosecuted by the MSA before the Alberta Utilities Commission (AUC). [www.albertamsa.ca](http://www.albertamsa.ca)

