COMPARATIVE INDEX OF ELECTRICITY PRICES RESIDENTIAL CUSTOMERS

Monthly bill (taxes included) for a consumption of 625 kWh

* At January 1, 1999

Sources: Hydro-Québec, Comparison of Electricity Prices in Major North American Cities at May 1, 1999.
Electricity Association, International Electricity Prices of January 1, 1999.

1996 • POPULATION

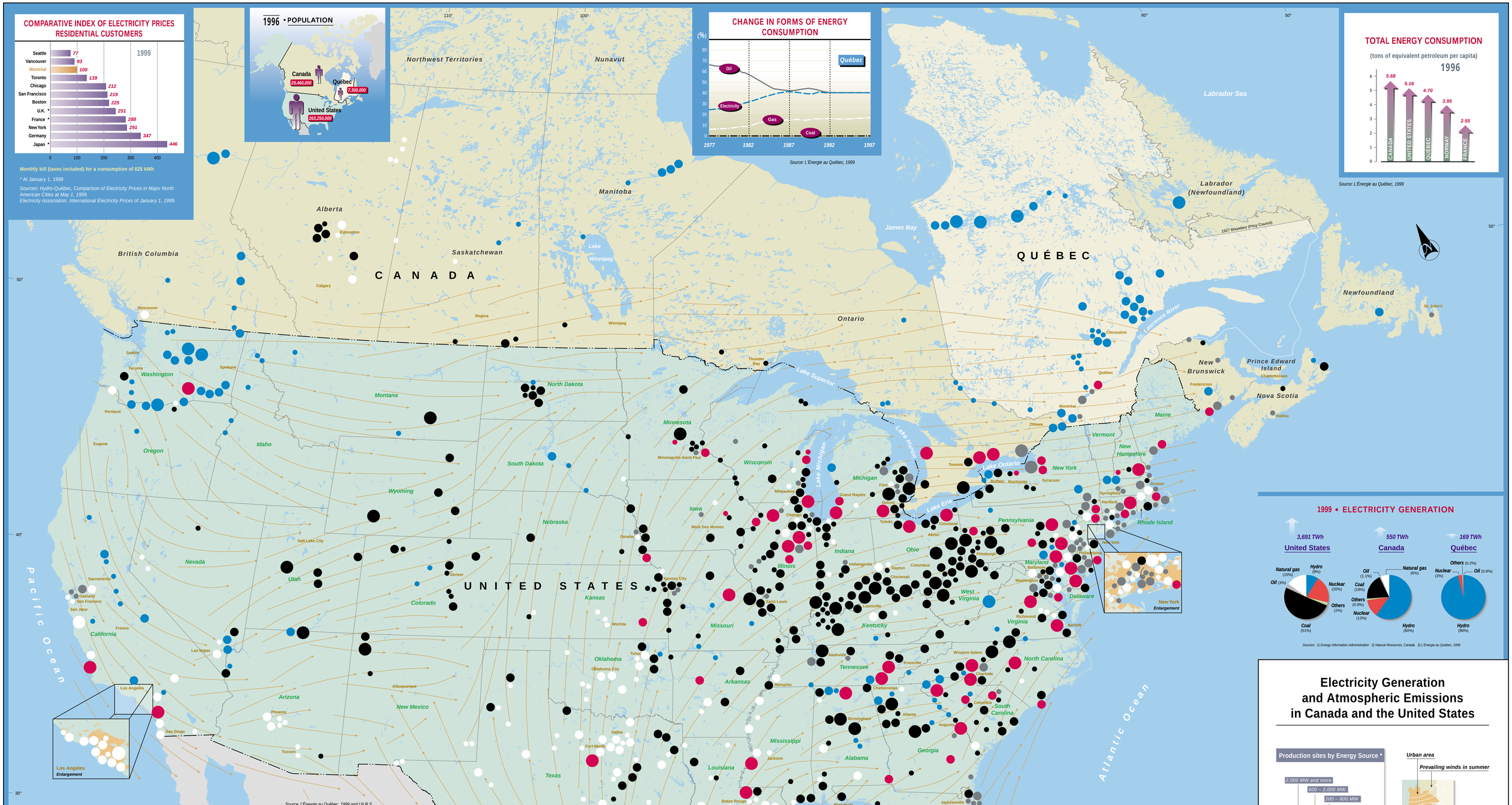
CHANGE IN FORMS OF ENERGY CONSUMPTION

Source: L'Énergie au Québec, 1999

TOTAL ENERGY CONSUMPTION

(tons of equivalent petroleum per capita)

Source: L'Énergie au Québec, 1999



Source: L'Énergie au Québec, 1999 and I.N.R.S.

1999 • ELECTRICITY GENERATION

Sources: 1) Energy Information Administration 2) Natural Resources, Canada 3) L'Énergie au Québec, 1999

Electricity Generation and Atmospheric Emissions in Canada and the United States

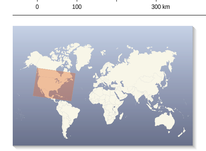
Production sites by Energy Source *

- 2,000 MW and more
- 600 – 2,000 MW
- 200 – 600 MW

Hydro
Nuclear
Coal
Oil
Natural gas

* One site may include several generating stations

0 100 200 miles
0 100 300 km



Urban area

Prevailing winds in summer

Limits

International border

Provincial or state border

Hydro Québec

Lambert azimuthal projection, central meridian 96°00' West.
Cartography: Carto-Média (91608901 qrd , December 20, 2000).

December 2000, 1st edition

Internet:
techno-info.hydro.qc.ca/produits et services/geomatique/thematique/

Sources:

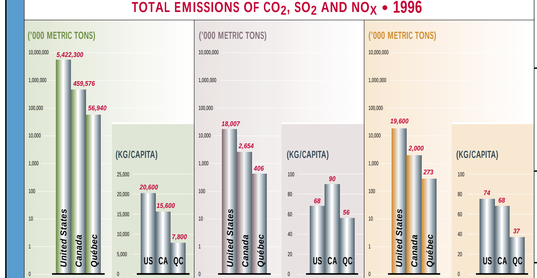
Base map:
National Atlas of the United States, USGS.
National Atlas of Canada, EMR, Canada.
Ministère des Ressources naturelles, Gouvernement du Québec.

Winds:
Resource Data International Inc.

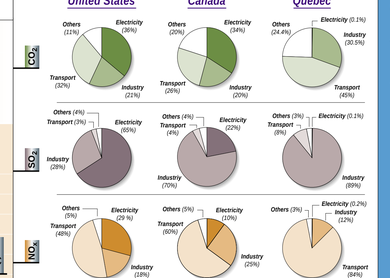
Plants:
Powermap - Powerdat, Resource Data International Inc.
Provincial Generation and Transmission Grid, Newfoundland Hydro
BC Hydro, TransAlta
System operating map of Nova Scotia, Nova Scotia Power Inc., 1996
Territories/Zones, Northern and Southern Ontario, Ontario Hydro, 1998
Sites de production d'électricité au Québec en 2000, Hydro-Québec.

CO_2 = Carbon dioxide | SO_2 = Sulfur dioxide | NO_X = Nitrogen oxides

TOTAL EMISSIONS OF CO_2, SO_2 AND NO_X • 1996

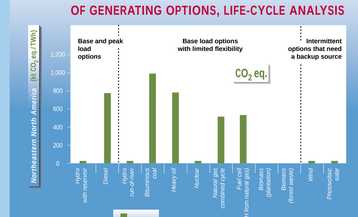


SOURCES OF EMISSIONS OF CO_2, SO_2 AND NO_X • 1996



Source: Hydro-Québec, 2000

GREENHOUSE GAS EMISSIONS OF GENERATING OPTIONS, LIFE-CYCLE ANALYSIS

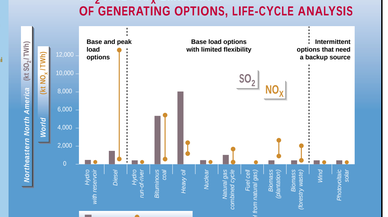


For emissions of CO_2, SO_2 and NO_X, all life cycle of the generating option is considered.

Fossil fuel or nuclear:
Exploration and resource extraction, preparation, transportation, storage of fuel, construction of plant, combustion, maintenance, dismantling

Renewables:
Construction of plant, maintenance, dismantling

Source: Hydro-Québec, 2000

Source: Hydro-Québec, 2000

SO_2 AND NO_X EMISSIONS OF GENERATING OPTIONS, LIFE-CYCLE ANALYSIS