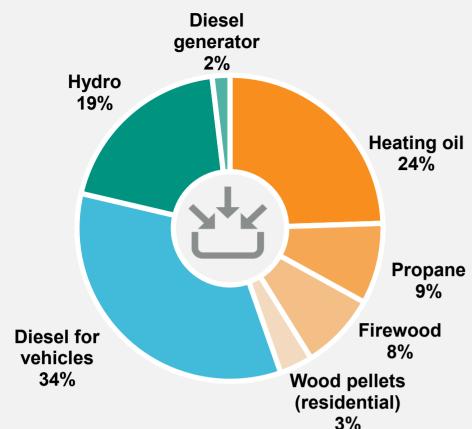
Energy Sources – 1 Year





Diesel generator produces electricity and heat

34% electricity66% waste heat



Energy cost

Total: \$632,000

Cost per person: \$5,500

38% hydro

6% propane

1% diesel generator

3% firewood

31% diesel for vehicles

2% wood pellets

19% heating oil



Renewable energy

31% of total energy

19% of total from hydro

8% of total from firewood

3% of total from wood pellets

Unless otherwise noted, numbers reflect energy sources purchased or sourced in the community, and do not include industry or commercial transport. Percentages may not add to 100% due to rounding.

ENERGY PROFILE

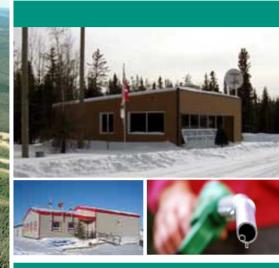
Where we get energy and how we use it

ENTERPRISE 2018

Population: 115





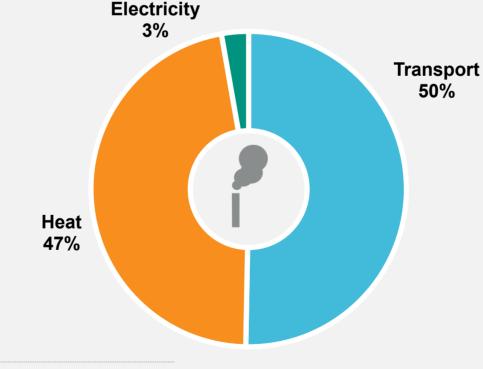


Greenhouse Gas (GHG) Emissions – 1 Year

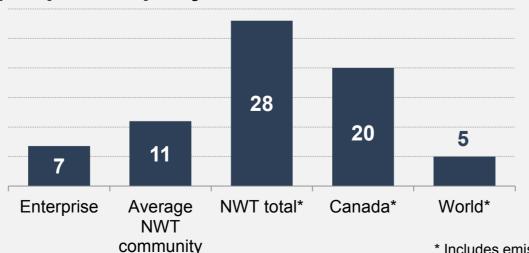
Community total GHG emissions per year

800 tonnes

7 tonnes/person

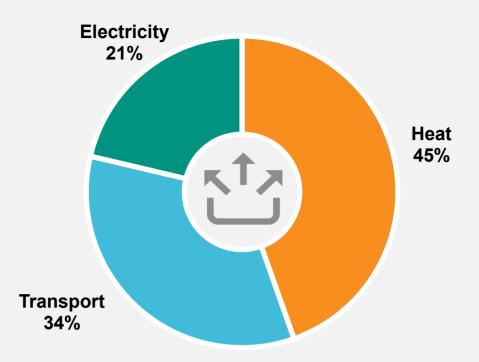


Average tonnes of GHGs per person per year



* Includes emissions from industry and commercial transport.

Energy Use – 1 Year





Energy use in homes

29% of total energy use
36% of total electricity
43% of total heating oil
100% of total firewood pellets

Energy use in other buildings



Store, school, church, office, arena, library, etc.

25% of total energy use64% of total electricity

57% of total heating oil19% of total propane

Transport (local – no air transport)

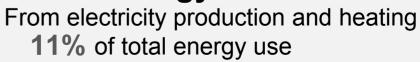


Cars, trucks, boats, ATVs, skidoos, etc.

34% of total energy use

Fuel purchased in the community.

Waste energy







ENERGY PROFILE

ENTERPRISE 2018

EXTRA INFO

What's a megajoule (MJ)?

A joule is a unit of energy. A megajoule is 1 million joules.

Some examples:

- 1 BBQ propane tank = 500 MJ
- 1 kWh = 3.6 MJ
- 1 L of heating oil = 38.4 MJ
- 1 L of propane = 26.6 MJ
- 1 tonne of wood pellets = 19,200 MJ
- 1 cord of wood = 18,700 MJ

What's waste energy?

When fuels are burned, some of their energy is released as heat that can't be used. The amount of energy that an appliance or device can use is called its efficiency. For example:

Diesel generators can usually only convert 25–35% of the diesel's energy to electricity, while 65–75% is released as heat.

Furnaces, boilers, wood stoves and other heating applicances can use anywhere from 70% to more than 95% of the heat they produce. The rest is released up the chimney.

Energy sources



Diesel for vehicles

- 34% of total energy
- Cost: \$194,000
- Amount: 146.000 Litres
- GHGs: 392 tonnes
- Energy: 5,600,000 MJ



Heating oil

- 24% of total energy
- Cost: \$121,000
- Amount: 105,000 Litres
- GHGs: 282 tonnes
- Energy: 4,030,000 MJ



Hydro

- 19% of total energy
- Cost: \$240,000
- Amount: 889,000 kWh
- GHGs: 0 tonnes
- Energy: 3,200,000 MJ



Propane

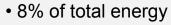
- 9% of total energy
- Cost: \$39,400
- Amount: 52,800 Litres
- GHGs: 81 tonnes
- Energy: 1,400,000 MJ



Community GHG emissions

- Homes: 30%
- Other buildings: 17%
- Transport: 50%
- Diesel generator: 3%

Firewood



• Cost: \$19,600

• Amount: 71 Cords

• GHGs: 2 tonnes

• Energy: 1,330,000 MJ



Wood pellets

• 3% of total energy

• Cost: \$9,600

• Amount: 30 tonnes

GHGs: 1 tonne

• Energy: 576,000 MJ



Diesel generator

- 2% of total energy
- Cost: \$7,800
- Amount: 8,100 Litres
- GHGs: 22 tonnes
- Energy: 310,000 MJ

Total community energy use

- 16,500,000 MJ
- 140,000 MJ/person

The AEA has tried to ensure our data is as accurate as possible, but there could be mistakes. If something seems incorrect, please contact us to let us know.

References

Energy source and use data: Private suppliers and utilities, and the Government of the Northwest Territories Bureau of Statistics and Department of Infrastructure.

GHG emissions data: https://www.cer-rec.gc.ca/nrg/ntgrtd/mrkt/nrgsstmprfls/nt-eng.html
https://ourworldindata.org/grapher/co-emissions-per-capita?tab=chart&country=AUS+CAN+USA+OWID_WRL

Total NWT energy use (2017)

Total: 20 billion MJ/year

