

ENERGY RIDDLES



Purpose:

- Students learn about the sources of energy used in NS
- Students explore in detail the impacts of their assigned energy source
- Students are introduced to energy efficiency as a viable fuel

Time: 30 minutes

What you'll need:

- Energy Sources fact sheets (Included in Appendix)
- Paper
- Pens/Pencils
- A computer with internet access and projector

Activity:

1. Students are split into groups of 3 or more, depending on class size.
2. Each group is given an Energy Sources Fact Sheet, that describes a source that is used here in Nova Scotia for energy.
3. Students are tasked with brainstorming what their specific source of energy could be.
4. Once they have figured out what their source of energy could be, they then let teacher/facilitator know, & continue to create two fun riddles to get the other students to guess what their source could be.
5. Students share riddles and each group makes a guess at identifying their source
6. Once finished students watch the [ENS Efficiency as a Fuel Video](#)

Curriculum Links:

B Environmental Systems and Society SL Gr 11 & 12

- ENV2: apply and use information, terminology, concepts, methodologies, and skills with regard to environmental issues

ENERGY SOURCE 1**COAL**

Guess what I am?

- I am the most commonly used energy source in Nova Scotia.
- I contribute to 58% of Nova Scotia's power
- I am a non-renewable resource

ENERGY SOURCE 2**WIND**

Guess what I am?

- I am a renewable resource
- I use kinetic energy to generate clean & renewable energy
- I contribute to 18% of Nova Scotia's power

ENERGY SOURCE 3**TIDAL**

Guess what I am?

- I am the only generating station of my type in North America thanks to the Bay of Fundy
- I use fans to create energy
- I work from changing sea levels

ENERGY SOURCE 4**HYDRO**

Guess what I am?

- I am produced by the up & down motion of floating devices
- I generate ~8% of Nova Scotia's energy, harnessing my energy is not as simple as wind or solar
- A generator converts the mechanical energy into useful electricity

ENERGY SOURCE 5**OIL**

Guess what I am?

- I am a non-renewable resource
- I am contracted via a mining process that involves drilling holes into the ground
- I am burned to heat water to create steam that generates electricity

ENERGY SOURCE 6

SOLAR

Guess what I am?

- I allow particles of light to knock electrons free from atoms
- I use photovoltaic cells to capture & convert the energy
- I am expensive to implement at first, however in the long run, I save Nova Scotians a lot of money

ENERGY SOURCE 7

ENERGY EFFICIENCY

Guess what I am?

- I am the cheapest source of fuel for Nova Scotians
- I am considered a clean source of energy
- The more of me Nova Scotia generates, the less coal we would need to use