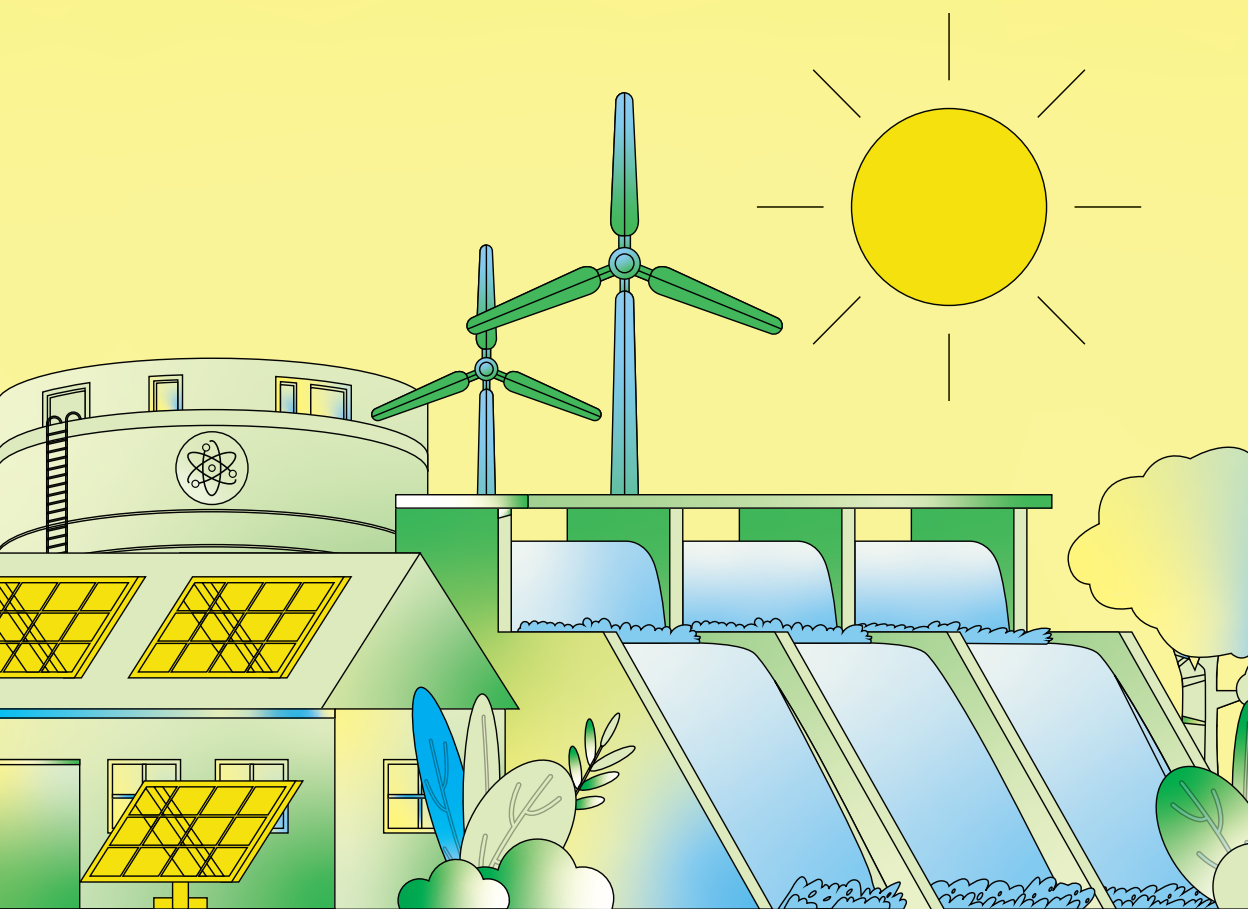




POWER PUZZLES & PLAY

OPG's **WATT
NEXT**™

Hello!



Welcome to the WattNext activity booklet

Packed with fun activities that make energy exciting and help power up your brain, this book helps you discover quick, cool facts about energy in everyday life—from lights and screens to the gadgets and machines you use every day. Visit wattnext.ca with a grown-up to keep the energy adventures and learning going.

WATTNEXT

POWERED BY



ONTARIO
SCIENCE
CENTRE



OntarioTech
UNIVERSITY

Watt Matches Watt?

FUN FACT

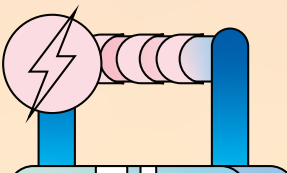
Did you know?
Nuclear technology
can help doctors see inside the
body and help people feel better
when they are sick.

FUN FACT

Some energy sources can be used
again and again because nature
replaces them. These are called
renewable energy sources. In Ontario,
water, wind, sunlight, and biomass
help make renewable electricity.

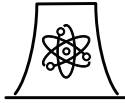
FUN FACT

Ontario uses different kinds
of energy to make electricity.
Some are very steady, like
nuclear and hydro. Some
can quickly go up or down
when needed, like natural
gas. Others use energy
from nature, like wind
and sunshine.



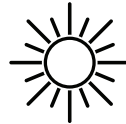
NUCLEAR ENERGY

This type of energy uses fission to safely boil water to create steam that turns turbines and generates electricity.



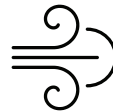
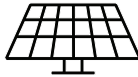
HYDRO ENERGY

This energy form takes flowing water which turns turbines to generate electricity.



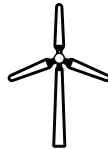
SOLAR ENERGY

This type of energy uses sunlight. Solar panels soak up the sun's rays and turn them into electricity.



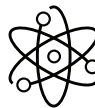
WIND ENERGY

This type of energy uses moving air. Wind spins big blades (like a giant fan), which turns a machine that makes electricity.



GAS

This type of energy uses natural gas as a fuel. Burning the gas makes heat, which helps create electricity.



INSTRUCTIONS

Look at the power icons and read each clue. Draw a line to match each clue to the energy source that makes that kind of electricity. When you're done, check your matches with a parent/guardian then give them a powerful high five.

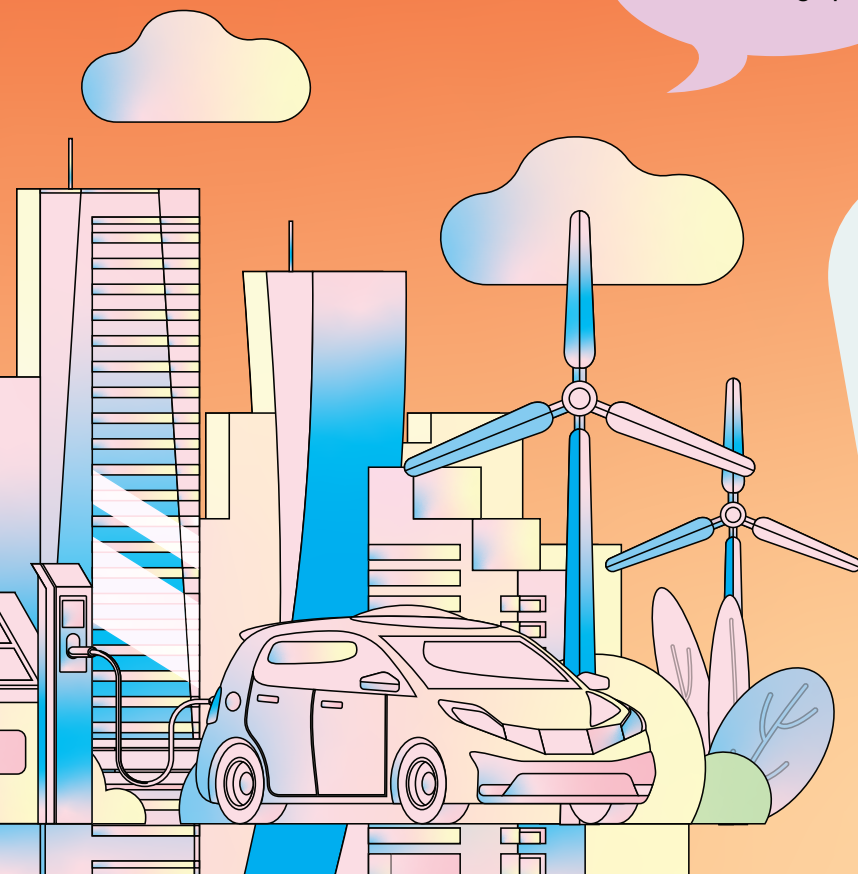
Power Word Search

FUN FACT

Electricity doesn't magically appear; it's created from different sources like nuclear energy, water, wind, and the sun, to name a few, and is sent to your home through power lines.

FUN FACT

We use electricity every day to turn on lights, keep food cold in the fridge, charge phones and tablets, run computers and TVs, and power things like traffic lights and school equipment.



N	A	G	A	W	I	N	H	Z	U	V	A	E	X	I	J
K	U	A	R	A	I	A	C	Y	A	A	L	N	M	I	G
L	A	C	A	I	A	N	A	O	D	O	I	A	M	E	G
M	R	E	T	N	U	H	D	A	C	W	J	R	R	R	E
N	E	L	E	C	T	R	I	C	I	T	Y	A	E	C	A
O	A	A	A	A	U	E	H	A	O	N	L	T	R	N	Y
E	N	M	N	O	R	N	A	A	A	O	N	O	A	U	E
G	Q	R	G	N	B	E	P	A	S	U	E	A	S	C	L
A	R	A	I	H	I	R	S	O	H	G	A	A	G	L	O
A	A	I	A	A	N	E	A	A	W	A	G	A	I	E	M
N	A	O	D	A	E	L	R	A	A	E	A	A	M	A	E
A	N	C	R	T	Y	A	G	H	A	A	R	S	I	R	I
P	A	C	E	N	E	R	G	Y	E	A	A	F	P	A	H
I	O	A	L	A	A	E	A	D	L	N	A	O	N	A	S
Q	A	W	A	G	E	L	A	R	O	A	G	E	A	A	U
G	N	U	C	E	N	E	R	O	C	A	N	E	A	A	B

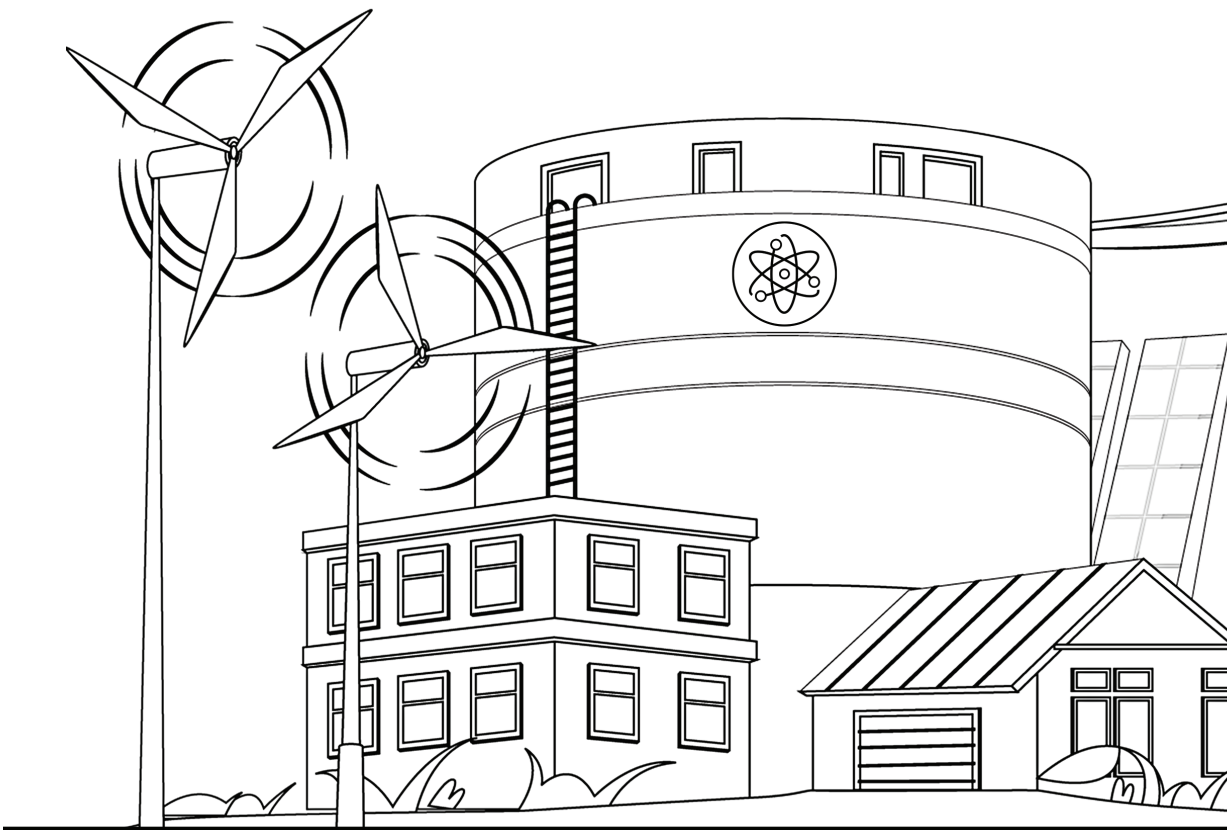
INSTRUCTIONS

Find the energy words hidden in the puzzle. Words can go across, down, or diagonal. Circle each word you find, then read your list with a parent/guardian and learn how each word connects to electricity and power.

1. POWER
2. ENERGY
3. ELECTRICITY
4. SOLAR
5. HYDRO

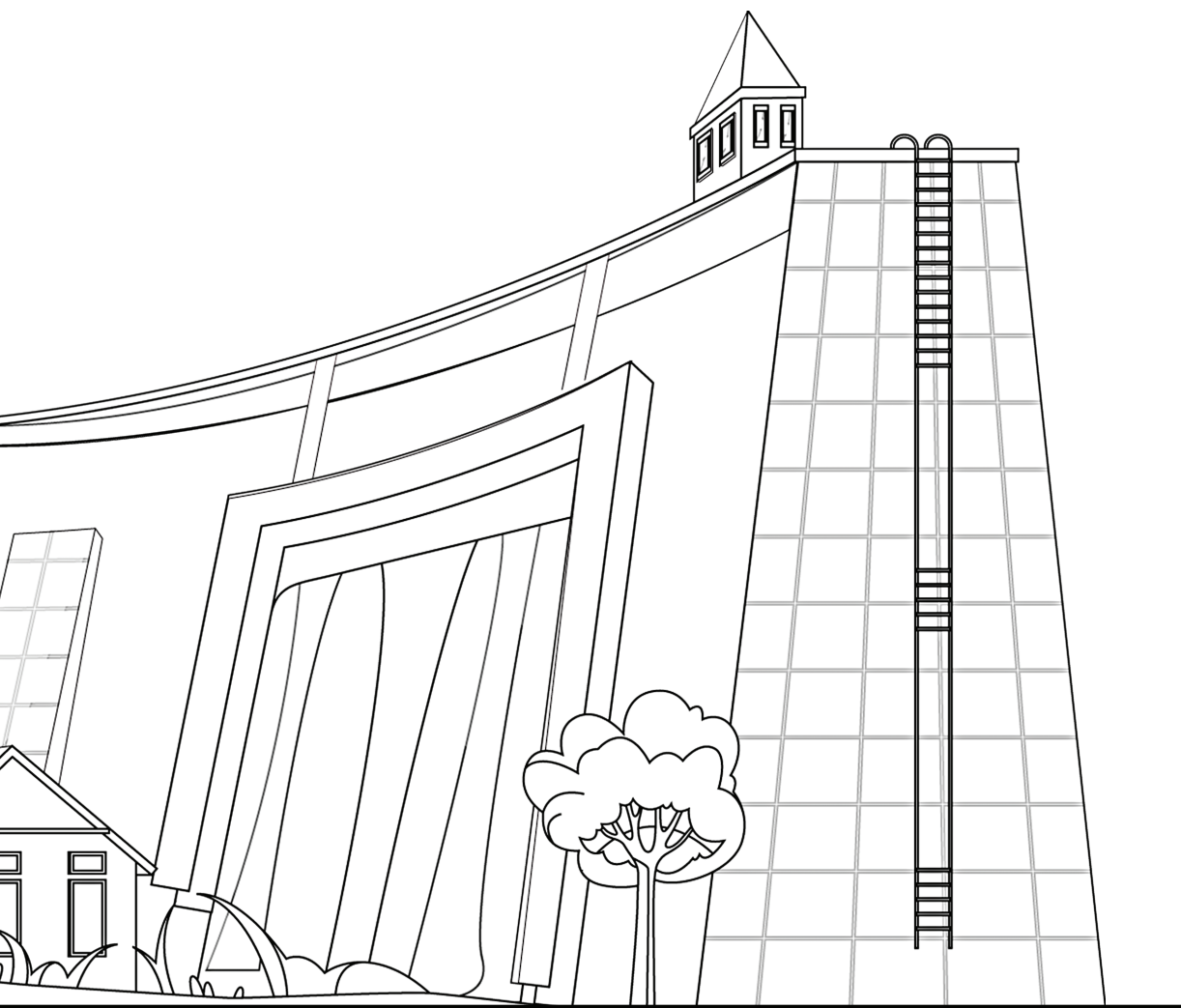
6. WIND
7. NUCLEAR
8. GAS
9. TURBINE
10. GRID

Electricity
is Ontario's
super power.



INSTRUCTIONS

Colour the power picture using your favourite colours.
When you're done, share one thing you learned about
energy with a friend or family member.



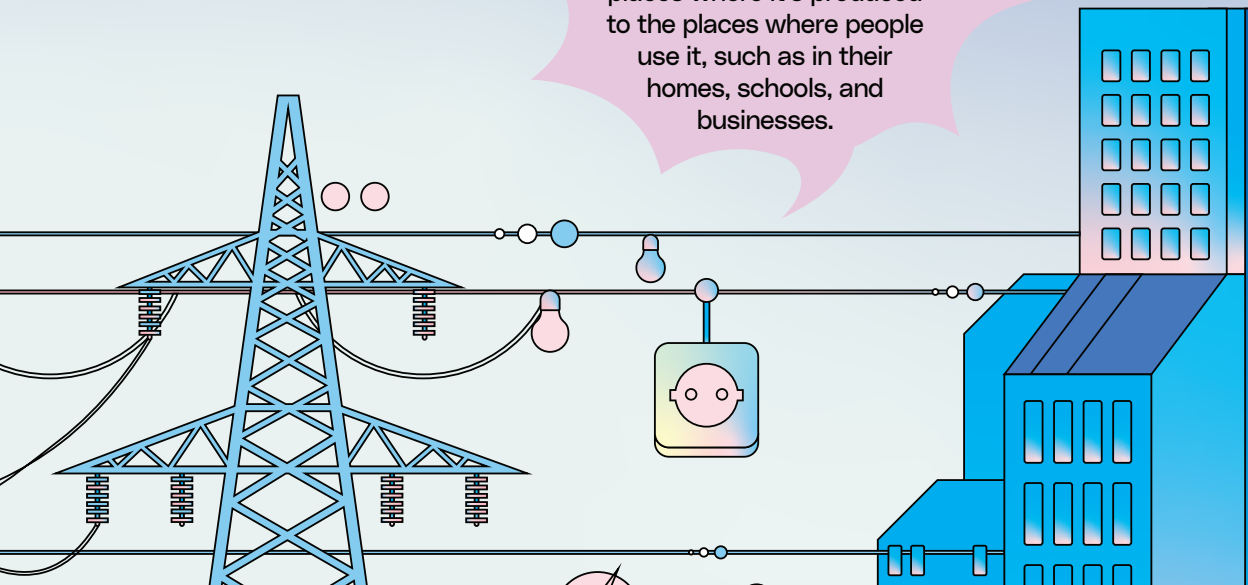
Connect the Power Lines

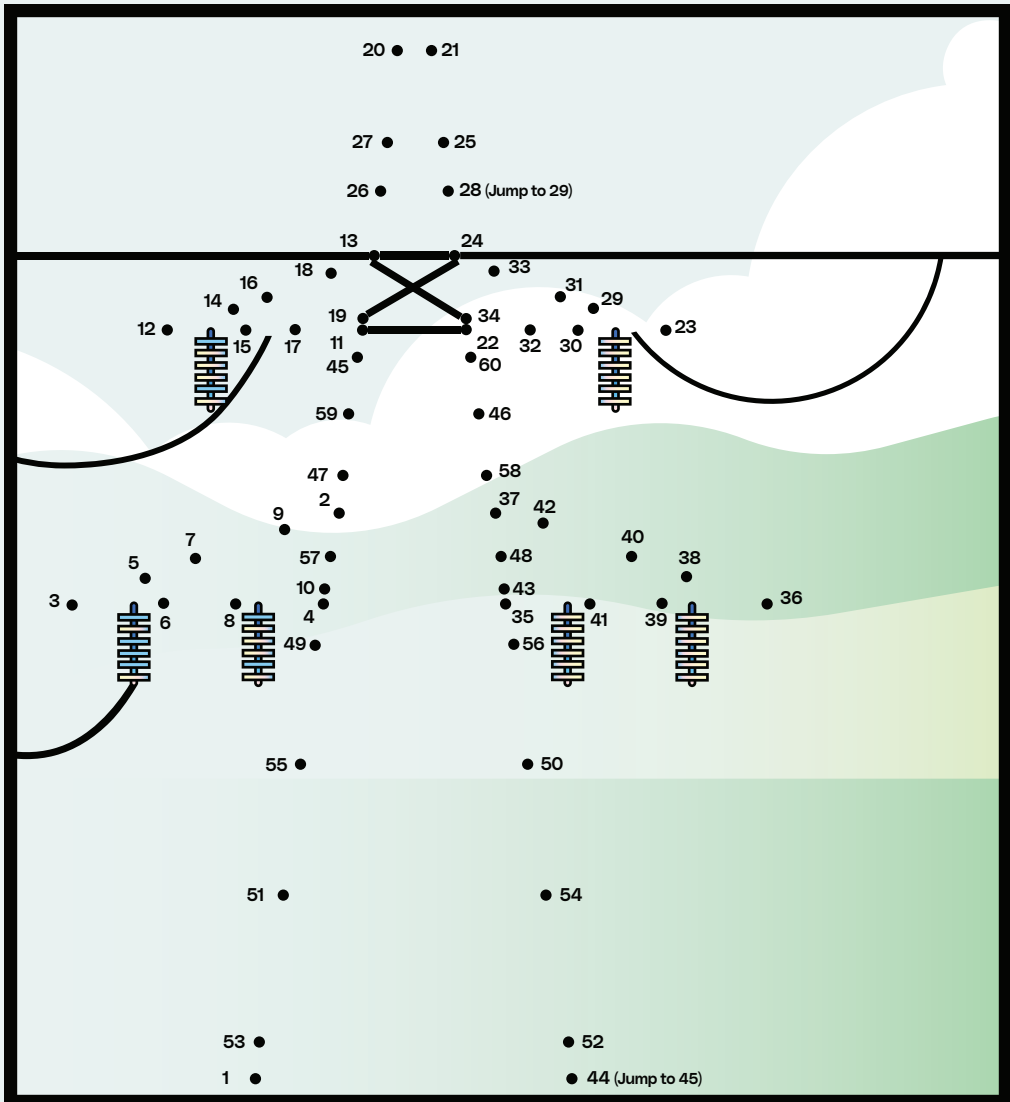
FUN FACT

Transmission towers are tall structures, often made of steel, that you may have seen around your community. These towers carry high-voltage electricity through special conducting cables that help deliver electricity to your schools and homes.

FUN FACT

The electrical grid is an interconnected network, like a giant highway system, that delivers electricity from the places where it's produced to the places where people use it, such as in their homes, schools, and businesses.





INSTRUCTIONS

Connect the dots in order (start at 1 and keep going!) to reveal a power transmission line that helps carry electricity over long distances. When you're done, colour it in, and talk with a parent or guardian about all the places that need electricity every day, like your house or your school.

Watt Way Out?

FUN FACT

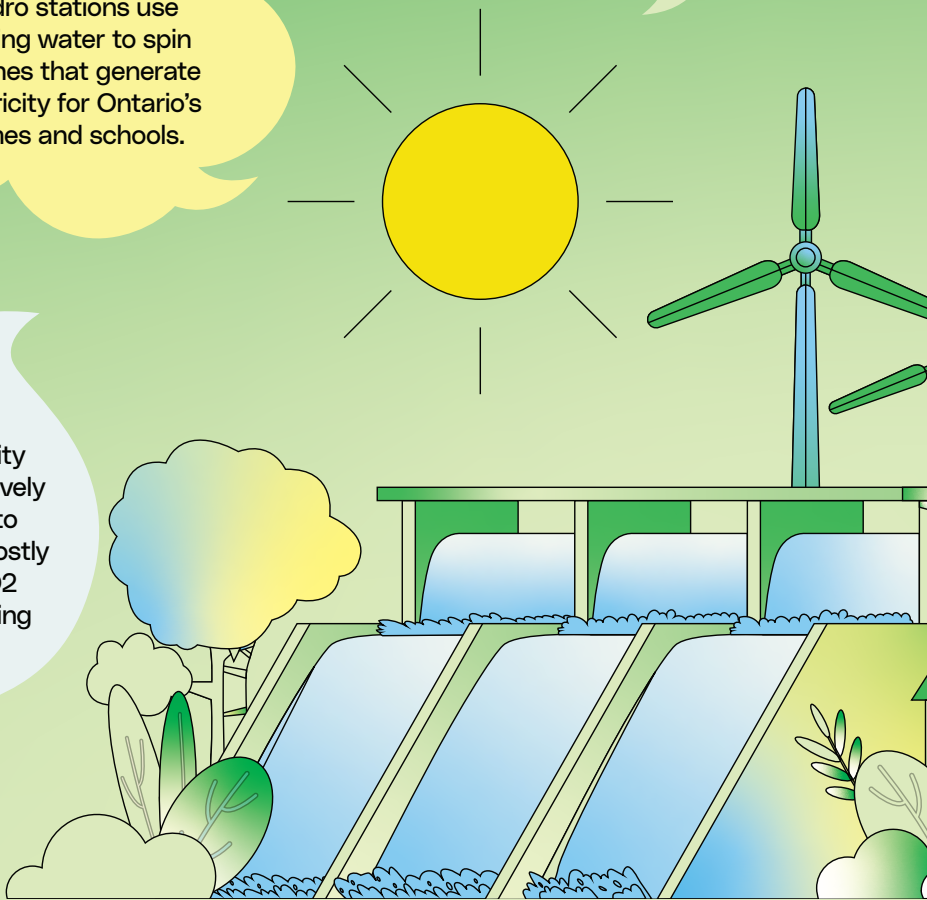
Hydro stations use moving water to spin turbines that generate electricity for Ontario's homes and schools.

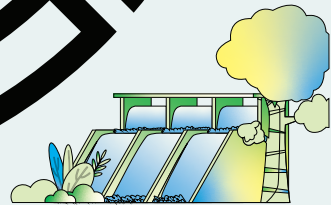
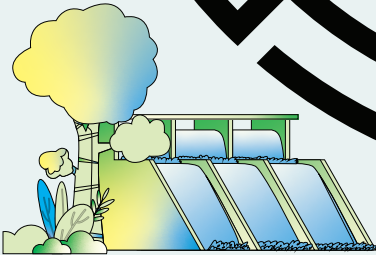
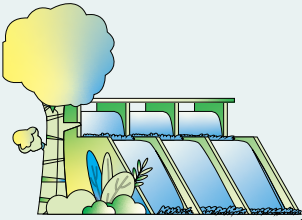
FUN FACT

Flowing water has energy. It also flows downhill. And the higher the hill, the more energy it has.

FUN FACT

Hydroelectricity is reliable, relatively inexpensive to operate, and mostly free from CO₂ emissions during operation.





INSTRUCTIONS

Help the water flow through the maze! Start at the hydro stations and trace a path to the turbine. When the water reaches it, the turbine spins to generate electricity that powers homes, schools, and communities across Ontario.

My Power Pledge

Use this space to write your own promises about how you can help save electricity at home or school.

I will...





I will turn off the lights in rooms I'm not using.



I will unplug chargers and electronics
when they're not in use.



I will



I will



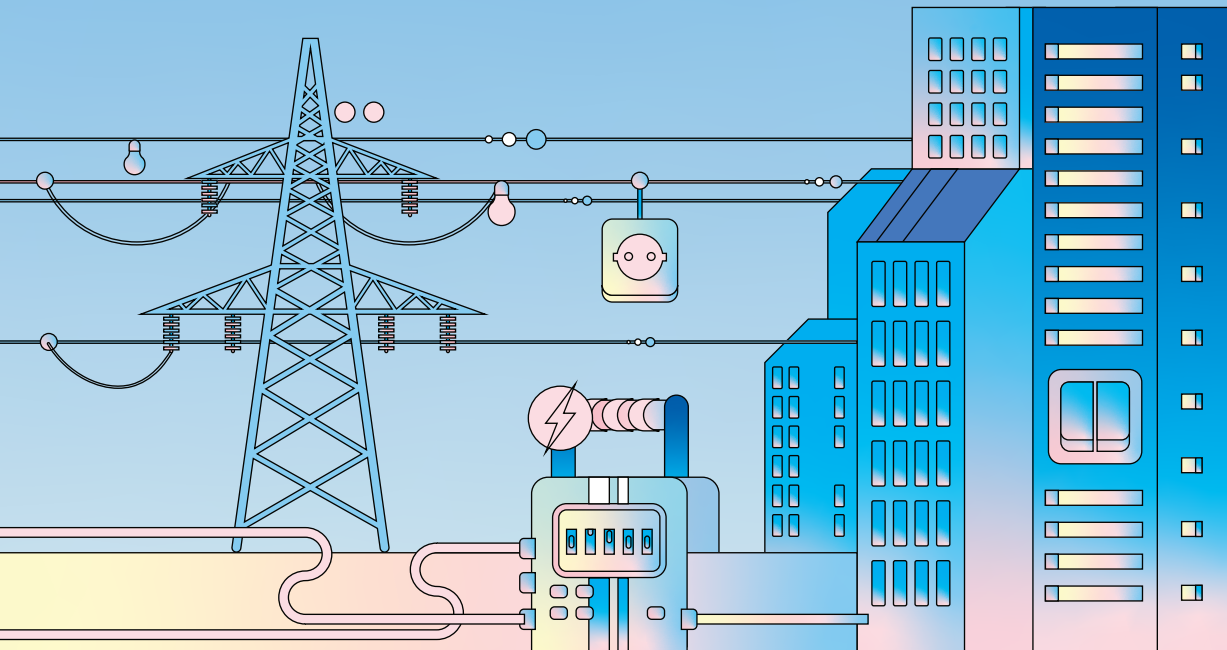
I will



I will

Way to power through!

Thanks for learning about energy and exploring ways to save it. Visit wattnext.ca or scan the QR code and sign up to learn more.



WATTNEXT

POWERED BY

