

# Harnessing the Wind

45 Minutes

Pre-Recorded session for LSF's Youth Forums

## Target Audience:

Grade 4-10 students across Canada.

## Learning Goals

- I can describe how wind can be harnessed to generate electricity;
- I can list the benefits of wind energy as a renewable energy source;
- I can generate ideas on how to participate in the energy transition.

## Materials

- Internet-enabled devices
- Workshop recording
- [Wind Turbine Simulator](#)
- [Student handout](#)
- Optional: [Exit Ticket](#)

## Description

In this session students will explore how we capture and use wind to generate electrical energy, how wind energy is being used across the country and how students can support the transition to renewable energies.

## Session Guide

Time	Topic	Student tasks
	Introductions Land Acknowledgement Learning Goals	
	Renewable vs. Non-Renewable Energy	
Pause at 4:20	Breakdown of energy generation in your province or territory	Complete the <i>Predict</i> column on the <a href="#">digital handout</a>
Pause at 4:35-5:15	Energy generation by province & territory	Complete the <i>Actual</i> column on the <a href="#">digital handout</a>

Pause at 5:35	Discuss the results	<p>Guiding questions for discussions:</p> <ul style="list-style-type: none"> <li>• What surprised you about where your electricity comes from?</li> <li>• Why do you think there are such differences in the source of electricity among provinces and territories?</li> <li>• What would need to happen for your province or territory to transition to renewable energy?</li> </ul>
	Wind turbines	
Pause at 9:39	Wind Turbine Simulator	<p>Go to: <a href="https://greenlearning.ca/animation/wind-mill/">https://greenlearning.ca/animation/wind-mill/</a> &amp; complete the simulator activity</p>
	Benefits of wind energy	
Pause at 11:32	Discuss suitability for large scale wind energy	<p>Is your region suitable for large-scale wind energy generation? Why do you think some areas are better for wind energy than others?</p>
	Take action with the Re-Energy Challenge	<p>Register for the Re-Energy Challenge <a href="https://programs.greenlearning.ca/take-the-re-energy-challenge">https://programs.greenlearning.ca/take-the-re-energy-challenge</a></p>
Pause at 13:02	Innovative thinking	<p>Complete the <i>Re-Energy Design Thinking</i> on the <a href="#">digital handout</a></p>
	Learn more about renewable energies with free lessons and activities at: <a href="https://programs.greenlearning.ca/re-energy">https://programs.greenlearning.ca/re-energy</a>	<p>Register for the Re-Energy Challenge: <a href="https://programs.greenlearning.ca/take-the-re-energy-challenge">https://programs.greenlearning.ca/take-the-re-energy-challenge</a></p>