# CHAPTER 4:

# Is it hard to be green?

*A Project of Learning for a Sustainable Future*

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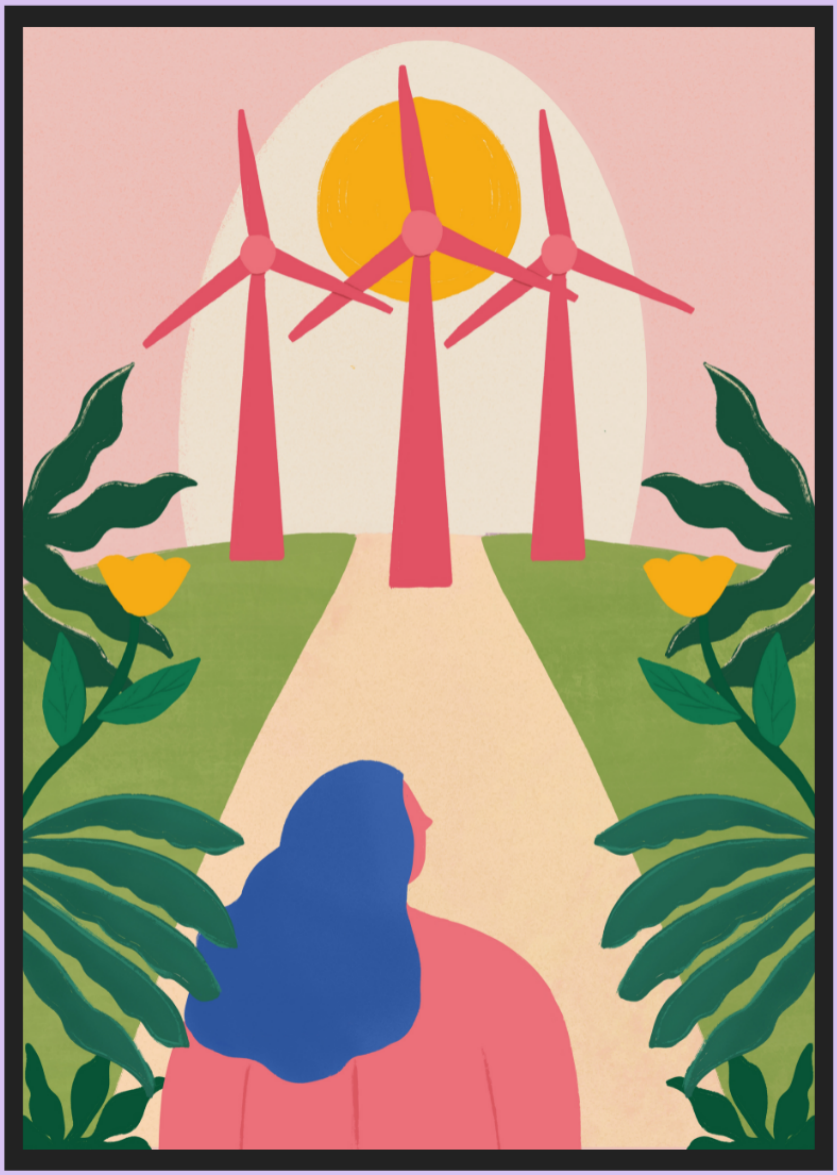

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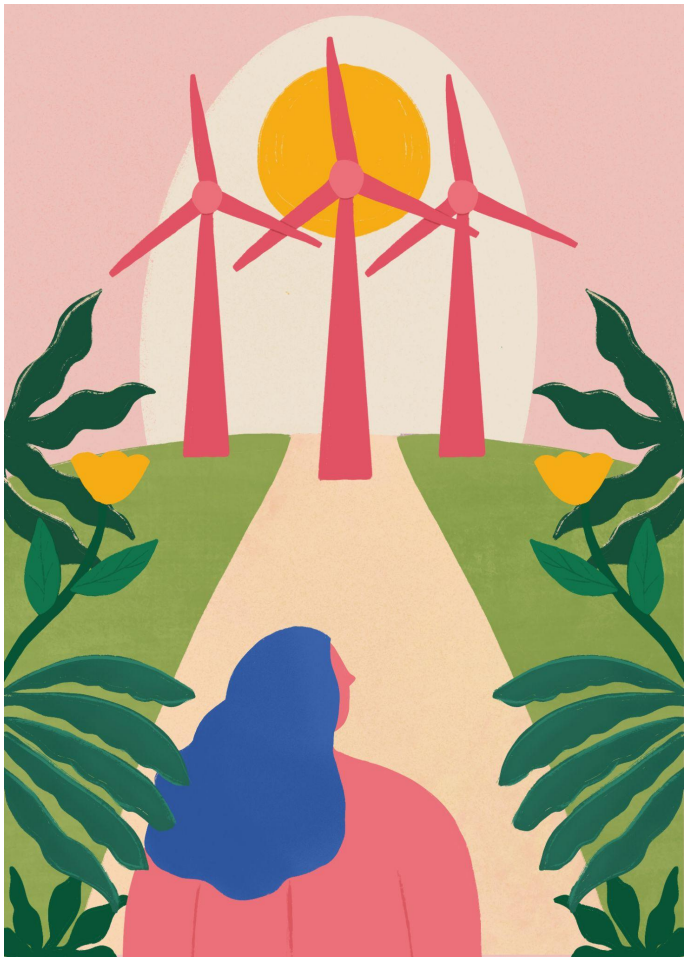
# Chapter 4. It’s Easy Being Green!

This chapter explores energy and the green options available to consumers. It then explores the difference between needs and wants, as well as rights and responsibilities so that students understand and can act on the dire need to explore alternative energy options in their lifetime. The chapter concludes with students exploring and identifying careers that are greener to broaden their knowledge and understanding from those traditional professions many aspire to.



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### Before You Begin: Background Information for Educators

The Future of Careers in Climate Change: The Green Economy & Climate Opportunities

The environmental impacts of climate change have a direct effect on the working world. Many jobs that rely on ecosystem services, and therefore also on sustainable environmental management (e.g. farming, fishing, forestry, air and water purification, soil fertilization etc.) are immediately threatened by climate change as it deteriorates these natural ecosystems

and processes. As well, the rising temperatures are increasing the risks and hazards associated with labour-intensive work. These risks being felt in many sectors of work can be contrasted with a progressive shift to a green economy in many other sectors around the world. Green industries have grown exponentially over the past decades, and according to an InfoDev report in 2014, green industries have evolved from “a niche 1970s environmental aspiration into a competitive force motivating many of the world’s most progressive business planners and boardroom strategists”.

According to National Geographic, the top eleven growing green jobs include: urban growers, water quality technicians, clean car engineers, recyclers, natural scientists (measuring and monitoring our impacts on the world around us), green builders (including those using ecologically friendly materials), solar cell technicians, green design professionals, wave energy production workers, wind energy workers, and biofuel jobs (increasing, constructing, and producing renewable fuel). In many ways, it is productive and beneficial for students to conceptualize economic changes in the context of the many emerging careers and climate opportunities that accompany these changes. Throughout the upcoming years, there will be an increasing demand for skilled professionals in not only the green jobs mentioned by National Geographic, but also in sectors like urban planning, health care, architecture and information technology just to name a few. By educating and informing students on the subject of green careers, green energy and the green economy, possibly sparking interest in these fields students will enter the workforce more prepared and more capable of being successful in an economy and workforce that will likely look very different from how it does now.

Climate change is a current reality, but the future remains to be determined by the actions that we take now to stop the impacts from intensifying. The current economic impacts exist and are a part of a much larger interconnected story involving the environment, health, cultural dimensions, infrastructure etc. There is an inevitable level of uncertainty that accompanies any climate forecasting; however, there are concrete adaptation measures that can help prevent job losses and negative effects on workers and income. Governments and citizens can contribute to economic protection measures against climate change by investing in infrastructure, the conservation of treatment water, reforestation, moving to a new energy future (renewables) and skills development to help displaced workers transition to relevant, growing professions.

## General Introduction To The Inquiries In This Chapter:

This chapter offers 3 different structured and scaffolded inquiries to support *It’s Easy Being Green!* Numerous strategies are included in each of the inquiries. These explorations can be completed in their entirety as stated, however, because we know inquiry is an organic and fluid

process based on student input, educators may wish to take parts of each of the 3 ideas presented and even adapt, modify or replace what's suggested to create their own inquiry with their class.  It is therefore suggested that teachers review the whole chapter first in order to determine and plan what works best with their particular group of learners.

The following 3 inquiries are connected to curricular concepts as shown in this chart. These curricular concepts are applicable across Canada.

| **Curricular connections** | **Concepts** |
|---|---|
| Science | Sustainability<br>Stewardship<br>Ecosystems<br>Interdependence<br>Changes<br>Cycles<br>Climate<br>Conservation<br>Action<br>Innovation |
| Language | Critical literacy<br>Media forms<br>Reading<br>Text features<br>Text forms<br>Inference<br>Retelling<br>Restating<br>Communication |
| Social Studies | Physical features<br>Human-environmental interactions<br>Choice<br>Employment<br>Contribution |
| Physical Education and Health and Wellness | Motivation<br>Participation<br>Outdoor education |
| The Arts | Composition |

| | |
|---|---|
| | Interpretation<br>Symbolism |
| Math | Data literacy |

| **Tool:** Journaling |
|---|
| Encourage students to record their thinking and learning throughout the learning process. The main reason for developing a journal is for students to then be able to look back and track their growth and progression with their connection to climate change. Students scaffold their thinking throughout their learning journey. The entries can be a combination of personal reflections and assigned reflections. This can be done as illustrations, concept maps or written reflections. |

## Inquiry 1: Understanding Green Energies - Alternative Energies

Students will explore innovations in alternative energy production by exploring a true story of a small Danish island that transformed into a model of sustainability. This book will inspire and motivate readers to learn about renewable energy systems.

**Resources:**

- ***Energy Island: How One Community Harnessed the Wind and Changed their World*** by Allan Drummond (book)
- Access to the Internet

## Inquiry 2: Green Economy - Needs, Wants, Rights and Responsibilities

What do children need to survive and live a healthy, happy life? The activities in this inquiry help students distinguish the difference between the things they want and the things they need. Students will come to understand that needs such as clean water, education and protection from abuse are things that all children have a right to. These rights are enshrined in the United Nations Convention for the Rights of the Child.

As citizens of their classroom, school and community, students will also learn that each right that protects them comes with an individual responsibility to act. (Global Education Activity Resource World Vision Canada)

**Resources:**

- Global Education Activity Resource (GEAR) by World Vision, can be accessed at: Global Education Activity Resource
- Strength Chain handout

## Inquiry 3: Green Careers - When I Grow Up I Want to be Green

What are green careers? How do we view career choices with an environmental lens? As an introduction to green career opportunities, begin by having students watch this video by TVO Kids which introduces them to two careers, a forest manager and water treatment technician. Forest Manager & Water Technician

**Resources:**

- Access to the Internet
- Copies of Exploring  Career Choices handout