

KEY TOPICS and LEARNING OBJECTIVES 2023



CURRENT ENVIRONMENTAL ISSUE ADAPTING TO A CHANGING CLIMATE

Key Topic 1: Factors Contributing to a Changing Climate.

- 1. Describe climate change and the process through which it occurs.
- 2. Outline the factors, both anthropogenic and natural, which influence climate and climate change.
- 3. Describe the major economic sectors that contribute to greenhouse gas (GHG) emissions.
- 4. Describe major energy sources and explain how each contributes to climate change.
- 5. Outline indicators of climate change.

Key Topic 2: Measuring and Monitoring a Changing Climate

- 1. Describe the history of international collaboration on climate change and analyze the successes and shortcomings.
- 2. Describe the various sources of scientific data which are used as evidence of climate change and explain how we know this data to be reliable.
- 3. Evaluate climate data and draw conclusions based on that data.
- 4. Explain the use of modelling in forecasting climate and the sources of uncertainty in climate projections.

Key Topic 3: Risks and Impacts to Natural Resources and Society from a Changing Climate

- 1. Explain the consequences of climate changes on aquatic, forest, wildlife and soil ecosystems.
- 2. Describe the social and economic impacts of climate change.

Key Topic 4: Policies and Programs for Adapting to a Changing Climate

- 1. Explain how various levels of government, non-governmental organizations, and individuals are involved in mitigating and adapting to climate change at the local, national, and international levels.
- 2. Describe innovative technologies and programs designed to combat climate change.
- 3. Explain the importance of primary resource sectors (forestry, agriculture, fisheries) to the economy of New Brunswick.
- 4. Describe the unique challenges faced by regions largely dependent on primary resources, and how climate change influences these challenges.
- 5. Explain how to best apply climate change risk assessment and adaptation measures in regions with primary resource dependent economies.