

Outcome 12.0: evaluate human-environmental interactions

Read “What Are Energy Issues?” on pp. 318-343 and respond to the items below.

1. **Comparison:** Complete the organizer to compare major conventional energy sources and the benefits and challenges of their use.

Energy Source	Benefits of using the resource	Challenges of using the resource
Crude Oil		
Natural Gas		
Coal		
Nuclear Power		

Hydroelectric Power		
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2. **Perspective:** Read the case study on p. 339 called “The Alberta Oil Sands: Mining Oil” and complete the table.

What are the oil sands?	
In what ways might oil sands development be beneficial to Canada?	
In what ways might development of this resource be problematic?	
How does development of this resource affect prosperity? Are all stakeholders affected in the same ways? Explain.	

Read “Other Renewables” on pp. 335-336 and pp. 340-343 and complete the following.

- 3. Comparison:** Complete the table to assess available alternative sources of energy and summarize its use. Highlight what you think are the most important consequences of each energy source’s use, based on the information provided in the text.

Alternative Energy Source	What is it and how is it used?	What are the most important consequences of its use?
Biomass		
Solar Power		
Wind Power		
Geothermal Energy		
Hydrlicity		
<p>Of the alternative energy sources you studied above, which do you think should be prioritized and developed by countries? Does your answer change when you consider differences between those countries that are MEDC and those that are LEDC? Explain.</p>		

Effects of Energy Issues - Climate Change

4. **Cause and Consequence:** Briefly summarize the impacts of global warming on pp. 355-361.

Impact	Summary of key points	Impact	Summary of key points
Higher Average Temperatures		Effects on Agriculture and Food	
Effects on Oceans		Health Consequences	
Changes in Precipitation		Effects of Lower Temperatures	

Sea Level Increases		Human Migrations	
Ecosystem Change		Global Security	

Read “What Are the Politics of Climate Change” on pp. 362-365 and complete the following.

7. **Comparison:** What are the key goals and issues surrounding the international climate conferences below.

Kyoto Conference, 1997	Paris Conference, 2015

8. **Significance:** Read pp. 366-368. Summarize the below responses to the climate change issue and determine which would be the most important to prioritize.

Possible Responses to Climate Change	Summary of Response
Cap and trade system	
Carbon tax	
Geo-engineering	
Which response or responses above would you prioritize? Explain.	