

## **Unit Synopsis**

### **Human Energy Choices and Their Impact on the Planet**

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This unit is intended to teach students how negative human impacts and burning fossil fuels create more carbon dioxide in our atmosphere and cause our planet to warm overtime. Students will explore several culminating activities that involve independent and group research. This unit will discuss the differences between climate, climate change, and global warming, as well as the causes and consequences of climate change. Mountain top removal and livestock production are just a few human impacts that will be discussed to help students relate to real world issues and show them that all humans play a day to day role in the increased greenhouse gas emissions in our atmosphere. Next, students will work in jigsaw groups to look at a case study of the Antarctica Peninsula in depth and learn how climate change can cause inter-ecosystem effects on the organisms that live there. Non-renewable energy and renewable energy will be reviewed as well as the advantages and disadvantages of both. Finally, students will work in groups to learn what actions can reduce greenhouse gas emissions and research what renewable energy sources are available to support the world's future energy needs.