

**Earth Science Institute II June 28, 2010**  
**Day 6 Correlation of EarthComm Curriculum and HSCE's**

<b>EarthComm Curriculum Unit Code</b>	
<p><b>EDG1</b> = Earth's Dynamic Geospheres: Chapter 1, Volcanoes</p> <p><b>EDG2</b> = Earth's Dynamic Geospheres: Chapter 2, Plate Tectonics</p> <p><b>EDG3</b> = Earth's Dynamic Geospheres: Chapter 3, Earthquakes</p> <p><b>EFS1</b> = Earth's Fluid Spheres: Chapter 1, Oceans</p> <p><b>ENR1</b> = Earth's Natural Resources: Chapter 1, Energy Resources</p>	<p><b>ENR3</b> = Earth's Natural Resources: Chapter 3, Water Resources</p> <p><b>ESE1</b> = Earth System Evolution: Chapter 1, Astronomy</p> <p><b>ESE2</b> = Earth System Evolution: Chapter 2, Climate Change</p> <p><b>ESE3</b> = Earth System Evolution: Chapter 3, Changing Life</p>

<b>Location:</b> Coal Power Plant- JB Sims Generating Station		
EarthComm Connections	<b>ENR1</b> = Earth's Natural Resources: Chapter 1, Energy Resources, Activity 1, p. R4, Activity 2, p. R16, Activity 3, p. R25, Activity 4, p. R35, Activity 5, p. R43, Activity 6, p. R53, Activity 7, p. R62, Activity 8, p. R72	
<b>Learning Outcomes:</b>		<b>HSCE</b>
<ul style="list-style-type: none"> <li>○ Describe the Earth's principal sources of internal and external energy (e.g., radioactive decay, gravity, solar energy).</li> <li>○ Identify differences in the origin and use of renewable (e.g., solar, wind, water, biomass) and nonrenewable (e.g., fossil fuels, nuclear [U-235]) sources of energy.</li> <li>○ Describe natural processes in which heat transfer in the Earth occurs by conduction, convection, and radiation.</li> <li>○ Describe renewable and nonrenewable sources of energy for human consumption (electricity, fuels), compare their effects on the environment, and include overall costs and benefits.</li> <li>○ Explain how the impact of human activities on the environment (e.g., deforestation, air pollution, coral reef destruction) can be understood through the analysis of interactions between the four Earth systems.</li> </ul>		<p>E2.2A</p> <p>E2.2B</p> <p>E2.2C</p> <p>E2.4A</p> <p>E2.4B</p>

<b>Location:</b> Cook Nuclear Plant		
EarthComm Connections	<b>ENR1</b> = Earth's Natural Resources: Chapter 1, Energy Resources, Activity 1, p. R4, Activity 2, p. R16, Activity 3, p. R25, Activity 4, p. R35, Activity 5, p. R43, Activity 6, p. R53, Activity 7, p. R62, Activity 8, p. R72	
<b>Learning Outcomes:</b>		<b>HSCE</b>
<ul style="list-style-type: none"> <li>○ Describe the Earth's principal sources of internal and external energy (e.g., radioactive decay, gravity, solar energy).</li> <li>○ Identify differences in the origin and use of renewable (e.g., solar,</li> </ul>		<p>E2.2A</p> <p>E2.2B</p>

<p>wind, water, biomass) and nonrenewable (e.g., fossil fuels, nuclear [U-235]) sources of energy.</p> <ul style="list-style-type: none"> <li>○ Describe natural processes in which heat transfer in the Earth occurs by conduction, convection, and radiation.</li> <li>○ Describe renewable and nonrenewable sources of energy for human consumption (electricity, fuels), compare their effects on the environment, and include overall costs and benefits.</li> <li>○ Explain how the impact of human activities on the environment (e.g., deforestation, air pollution, coral reef destruction) can be understood through the analysis of interactions between the four Earth systems.</li> </ul>	<p>E2.2C</p> <p>E2.4A</p> <p>E2.4B</p>
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<b>Location:</b> Trash to Energy site in downtown GR / Landfill and burning Methane	
EarthComm Connections	<b>ENRI</b> = Earth's Natural Resources: Chapter 1, Energy Resources, Activity 1, p. R4, Activity 2, p. R16, Activity 3, p. R25, Activity 4, p. R35, Activity 5, p. R43, Activity 6, p. R53, Activity 7, p. R62, Activity 8, p. R72
<b>Learning Outcomes:</b>	<b>HSCE</b>
<ul style="list-style-type: none"> <li>○ Describe the Earth's principal sources of internal and external energy (e.g., radioactive decay, gravity, solar energy).</li> <li>○ Identify differences in the origin and use of renewable (e.g., solar, wind, water, biomass) and nonrenewable (e.g., fossil fuels, nuclear [U-235]) sources of energy.</li> <li>○ Describe natural processes in which heat transfer in the Earth occurs by conduction, convection, and radiation.</li> <li>○ Describe renewable and nonrenewable sources of energy for human consumption (electricity, fuels), compare their effects on the environment, and include overall costs and benefits.</li> <li>○ Explain how the impact of human activities on the environment (e.g., deforestation, air pollution, coral reef destruction) can be understood through the analysis of interactions between the four Earth systems.</li> </ul>	<p>E2.2A</p> <p>E2.2B</p> <p>E2.2C</p> <p>E2.4A</p> <p>E2.4B</p>