Instructional Unit Title: Whose Earth is it…Anyway?

The teacher may engage students in a discussion of Colorado's (dominant) energy sources and usage (possibly utilizing personal energy use examples) so that students can examine and document how they use energy in their lives.

The teacher may bring in guest speakers (principal) and/or documents (school policies) around school energy use-lights, heat/AC so that students can analyze the need for these policies and for corresponding/similar energy "policies" in their personal/home lives.

The teacher may utilize energy efficiency policies (e.g., Colorado's SB13-279, Energy Star policies, auto efficiency standards) so that students can examine the steps the state and the nation are taking toward conserving existing resources.

The teacher may utilize video clips, media reports, and articles about hydraulic fracturing (fracking) in Colorado so that students can understand fracking practices and processes and explain its necessity (in relation to natural gas/fossil fuel extraction).

The teacher may provide sources (e.g., primary, secondary, maps) related to fracking and/or fracking policies at the national level so that students can consider the conflicts (advantages and disadvantages) surrounding fracking.

The teacher may provide documents about national environmental standards concerning coal usage and how the coal industry has attempted to address the standards (e.g., clean coal) so that students can decipher how government and industry are cooperating in order to utilize this fossil fuel.

The teacher may bring in diverse (and conflicting) perspectives regarding clean coal so that students can critically consider the environmental and economic claims made by both sides.

The teacher may provide fact sheets about the work to create/improve hydroelectric energy output (e.g., the Aswan Dam in Egypt and the Three Gorges Dam in China) so that students can understand and begin to assess the opportunity costs of dam building across the globe.

The teacher may provide students with world (fossil fuel) resource availability and consumption maps so that students can comprehend the finite nature of some physical resources and begin to consider the necessity for renewable energy sources.

The teacher may provide examples of Colorado incentives (e.g., tax credits/deductions, rebates, tax relief, implementation grants, loans) for individuals/ corporations so that students can identify/categorize the benefits associated with utilizing renewable energy resources (wind, solar, hydro, geothermal, etc.).

The teacher may bring in information regarding opposition to some Colorado incentives (e.g., from Xcel and Black Hills energy) so that students can analyze the conflicts that can surround policies for increasing the usage of renewable energy resources.

The teacher may present and discuss national level programs/policies (e.g., Leadership in Energy and Environmental Design (LEED)) aimed at encouraging renewable energy sources to help students discern national goals and analyze the commitment towards renewable energy.

The teacher may bring in resources and information regarding cooperative international efforts to increase the use of sustainable forms of energy (e.g., the European Union's (EU) efforts to move towards renewable resources) so that students can analyze why and how countries are working together for sustainable energy.

The teacher may revisit efforts to utilize existing and find sustainable future resources so that students can critically reflect on how people around the world are attempting to sustain/improve quality of life factors while balancing the environmental and economic issues around energy production.

PERFORMANCE ASSESSMENT: The U.S. Senate Committee on Energy and Natural Resources is convening a hearing to explore the national implications of Colorado's energy resources (e.g., wind, solar, fossil fuels). As a concerned Coloradoan (energy worker, CEO, environmentalist, land owner, citizen, etc.) you have a particular interest in this discussion. Given the increasingly interdependent nature of our global community, your goal is to persuade the Committee that pursuit of a given energy source is ultimately either beneficial or detrimental. Therefore, in making your case you will highlight either the inherent conflicts OR the cooperative opportunities associated with developing/extracting the resource.