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Curriculum Units by Fellows of the National Initiative
2019 Volume IV: Energy Sciences

Islands and Their Energy Needs

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The unit titled *Island's and Their Energy Needs* is a unit that is intended to expose high school environmental science students to energy resources available throughout the world, the effects of human-induced climate change, the effect climate change has on islands, and how islands can become self-sustaining leaders of the world by utilizing alternative energy sources. Students will conduct research to receive an overview of each renewable and non-renewable source of energy that also includes the impacts they have on the environment, human health, and economy. Students will learn this by designing and creating a hands-on, engaging museum exhibit that includes background, an interactive activity, and an exit ticket. From here, students will participate in a stations activity where they will build models of a windmill, hydroelectric plant, and a solar generator. Lastly, students will organize a debate to defend a renewable option to fuel the energy needs of an island. This will give students an understanding of energy, its use, and its effect on the environment.

(Developed for AP Environmental Science, grades 10-12; recommended for General Science, grade 8, Environmental Science and Earth Science, grades 9-12)

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