



# YALE NATIONAL INITIATIVE

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Curriculum Units by Fellows of the National Initiative  
2007 Volume V: Renewable Energy

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## **Solar Energy -- Architectural Alternatives for Home Building**

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by Georgia Redonet

*"The will to act—that's a renewable resource—let's do it."*

Al Gore, February 25, 2007

Former vice president, Al Gore, made the above statement when accepting an Academy Award for his documentary *An Inconvenient Truth*. It is a point well taken. Humans possess the energy and ability to affect change and that energy is a limitless renewable resource. Whether our ideas are big or small, they can all add up to a change in how we live that can improve the world in which we live. The issue of global warming bypasses any questions as to how much petroleum energy is left for the world to use. CO<sub>2</sub> emissions must be reduced and every individual can play a role in that reduction. This curriculum unit will focus on architectural alternatives in home construction using solar energy. Our studies will culminate with a look at Earthships. These homes present what appears to be the most all-inclusive use of alternative applications using solar energy. The main purpose of this unit is to use architecture to introduce my students to the topic of renewable and alternative energy, which is quickly becoming a part of our mainstream dialogue.

(Developed for Texas History, grade 7; recommended for Science and History, grades K-12, and Architecture, Construction, and Engineering, High School Grades)

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