

ES 79 Renewable Energy

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Final Assignment. -- Design your own Renewable Energy System.

- Select a renewable technology
- Describe the location of your project (longitude, latitude, elevation, etc.)
- Select and size the necessary equipment
- Estimate the installed project cost
- Calculate energy produced by the RE system using either a web based program or the techniques described in class.
- Perform a payback calculation (you may use a web based program)
- Include drawings, photographs, product literature, as appropriate/available.

To help you get started, please provide short answers to the following questions (on a separate sheet of paper):

1. What is the goal of your renewable energy (RE) project?
Example:
 - i. Save money
 - ii. Reduce pollution
 - iii. Grid Independence
2. How will you know if you have met your goal?
3. What is the annual energy consumption at your site?
4. What is the peak electrical demand at your site? (or thermal demand as appropriate)
5. What components are necessary?
6. Are there man-made or geographic obstacles that could impact your RE production?
7. Are rebates available?