

# Eco Home Project

Eco homes are already growing in popularity, especially among people who are 'green pioneers'.

For this project you are tasked with designing and/or building (a model version of course!) and ecologically sustainable dream house. We are looking for function and fashion here. Eco homes are designed to use as little energy (electricity) as possible and often can operate 'off-grid'. They strive to be self-sustainable with regards to water use. Most construction materials are frequently re-purposed from other sources. Some examples of these will be evident in the links below.

**Project objective:** To design an ecologically friendly house considering energy use, renewable construction materials and waste management.

## 1. Home requirements:

- At least 1 bedroom, kitchen and bathroom
- Additional rooms are recommended to aid with comfort of the house
- Must have access to green energy source, water, waste disposal and (depending on location) heating and cooling.

We would suggest doing some research for inspiration. There are some links below to serve as a starting point.

<https://www.youtube.com/watch?v=j7SUjcwXY8w> (example of an Earth ship home in Canada)

<https://www.youtube.com/watch?v=wzragsRr5IU> (example of an eco-home home in Tasmania)

<http://www.eco-homeni.org/cgi-bin/generic?instanceID=3> (website with ideas)

<https://www.homebuilding.co.uk/eco-homes-design-ideas/#:~:text=The%20term%20eco%20home%20is,demand%20in%20the%20first%20place.> (15 examples of eco-homes in the UK)

## 2. Presentation format: Your house can presented in the following ways – be as creative as you want.

- Design blue prints  
[https://www.google.com/search?q=blueprints+for+homes&source=lnms&tbm=isch&sa=X&ved=2ahUKEwi50uOpx-DpAhXGQ0EAHRitCI4Q\\_AUoAXoECBAQAw&biw=1366&bih=657#imgrc=WzymMnU8\\_zV2BM](https://www.google.com/search?q=blueprints+for+homes&source=lnms&tbm=isch&sa=X&ved=2ahUKEwi50uOpx-DpAhXGQ0EAHRitCI4Q_AUoAXoECBAQAw&biw=1366&bih=657#imgrc=WzymMnU8_zV2BM)
- 3D modelling online/software <https://www.sketchup.com/plans-and-pricing#for-personal>
- Diorama <https://study.com/academy/lesson/what-is-a-diorama-definition-ideas-examples.html>

## 3. Additional requirements: Your design/model needs to include the following

- Description of home location. It does not need to be your home location, but it must include topography, population, availability of resources.
- Description and justification of the different eco-friendly elements of your house (e.g where does the house get its power (electricity), water (hot and cold), heat etc AND what do people do with their rubbish, waste water etc)
- Description of what materials you will use in construction and how your home will interact with its surroundings.

***Email your completed work to your teacher. We look forward to enjoying your creations.***