# Project proposal for Ecovat

As Ecovat searches for economic sites for their heat storage system, our idea was to give an estimation on the regions most suitable for their use with renewable energy. By using excess electric energy produced by wind and sun, in the ideal case the Ecovat system could provide heating throughout the year without the help of any supplementary energy source. At the same time, the initial investment should be kept as little as possible per household, so the overall plant size per household should be kept at a minimum.

This means, that places with high production in solar- or wind energy would be seen as most suitable. Also places with high demand in heating power would be preferable as this would indicate a high density of households that would spread an initial investment with growing plant size among more involved parties.

**Planned Methodology:**

There are meteorological datasets available (<http://projects.knmi.nl/klimatologie/daggegevens/selectie.cgi>) that can be used to pinpoint good sites by the high and constant availability of wind- or solar power.   
Other datasets about the yearly consumption of energy in the Netherlands (<https://www.kaggle.com/lucabasa/dutch-energy>) could be used to point out places with high heat consumption.   
With a location database (<http://global.census.okfn.org/entry/nl/postcodes>) a heatmap could then be created for Ecovat that gives a location based estimate about the rentability of their storage system.