

Sustainable Energy

The symposium for the sustainable energy cluster consists of four projectgroups that will present the findings of their projects.

Timetable:

15:00 - 15:25: Smart Grid Demokit 2.0

15:30 - 15:55: Freeform Heat Storage

16:00 - 16:25: Flexibility on the electrical Grid

16:30 - 16:55: Quantifying the Impact of Balancing Radiators

Smart Grid Demokit 2.0

Motivating the behaviour of the residents of Aardenhuis to increase the level of self-sustainability. The main product created for this is a website that gives feedback and analyse the user's energy consumption and production. The website consists of personal page for each user and allow to get graphs based on SEDCON database. Students of this project will show of their created website by a live presentation.

Freeform Heat Storage:

Storing warm tap water in a house is a good way to not waste heat. But right now if you want to store warm water you have to use large cylindrical tanks that take up way to much space in your house. That's why in this project, students came up with a way to store warm tap water without taking up to much precious space. During this part of the symposium a video will be played that shows the three concepts the students created, for a buffertank system that stores warm tap water without taking up to much space. After the video is played the students from this project will elaborate on what was shown and then answer questions.

Flexibility on the Electrical Grid:

How can the imbalance of NieuweStroom be reduced through a platform of smart devices which are able to adjust demand based on supply? That's what a group of students have researched in this project. During the symposium the students will show their findings and elaborate on them with a live presentation.

Quantifying the Impact of Balancing Radiators:

Students have researched whether adjusting al radiators in a house will lead to a decrease of gas consumption. This research was done by analysing data from this year as well as last year. To analyse all this data the students have created a tool that loads in all the data. During this part of the symposium the students of this project will elaborate on their research and their created tool by means of a live presentation



The future is here

