

MARIJE KOK

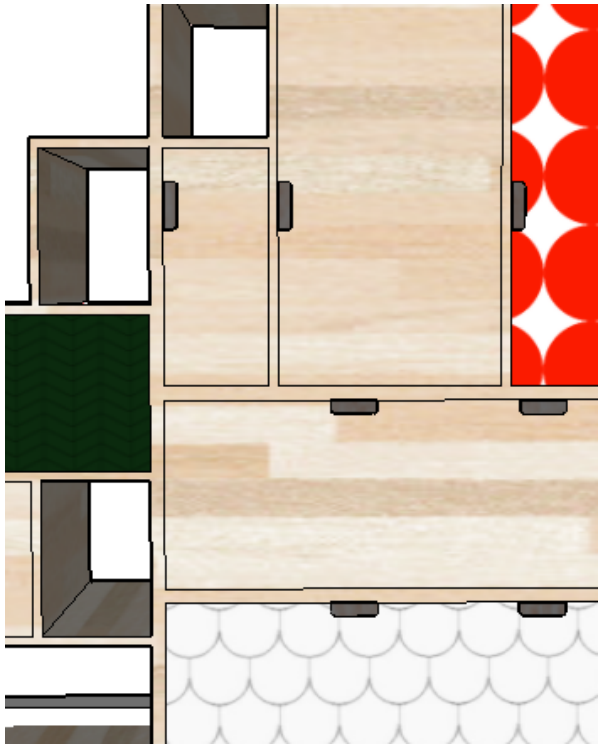
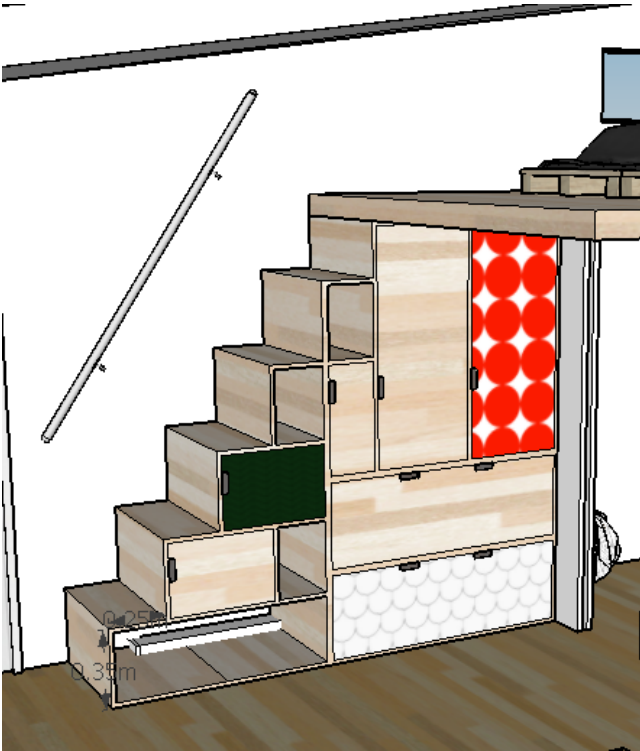
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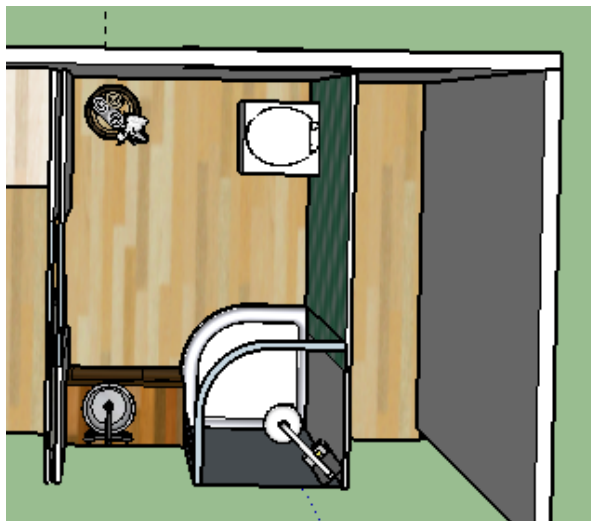
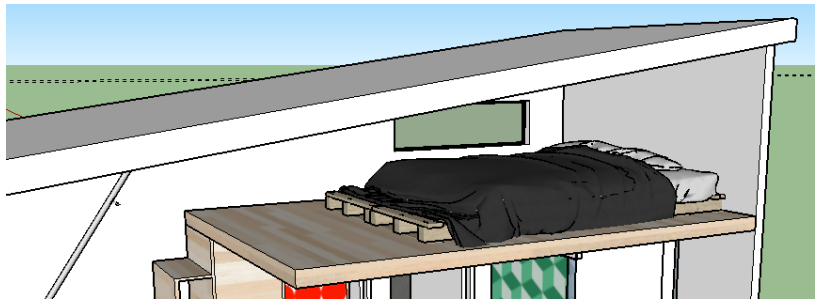
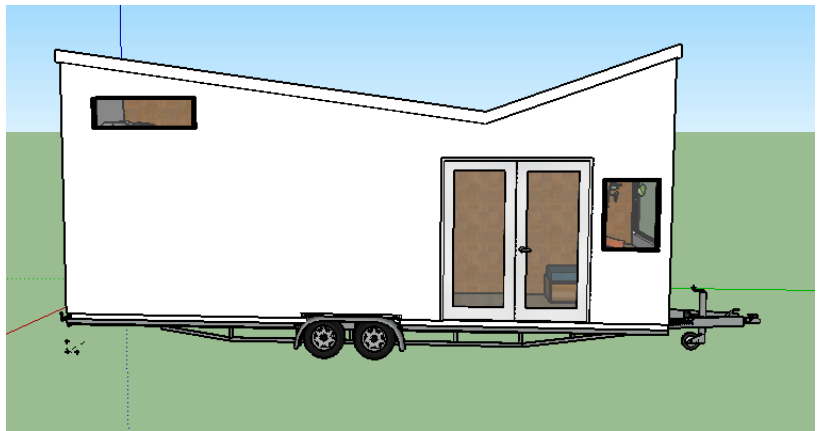
PORTFOLIO

Hi! I'm Marije Kok, 19 years old. I'm enthusiastic, creative, love learning new things and have a passion for cinematic imagery. I like combining more technical skills with my art and filmmaking.

TINY HOUSE FOR HOSTEL REBEL REBEL



For my O&O class we had to find a client who would give us an assignment. Together with the client we had to come up with a suitable goal. My group of two girls and I were looking for a client we could design a tiny house for. After placing an ad the hostel Rebel Rebel in Groningen contacted us and we ended up designing a tiny house for them. I made the SketchUp you see here for our final design. Design Requirements: mobile, low ecological footprint, energy neutral, maximum dimensions according to legislation.



SOLARCIRCLE

REQUIREMENTS

USE OF LOCAL MATERIALS

The product needs to fit in with the community and isn't meant to make the village more western.

VANDALISM PROOF

The product needs to be strong enough to survive vandalism or have a security system that prevents it from getting stolen.

AFFORDABLE

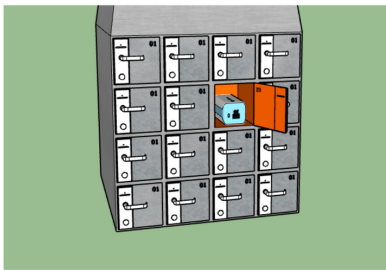
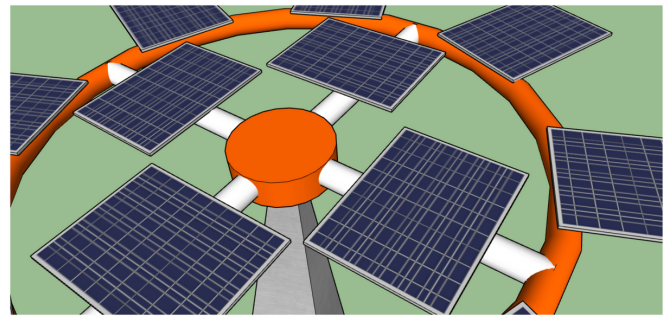
The targeted citizens should be able to afford the product.

ENOUGH ELECTRICITY

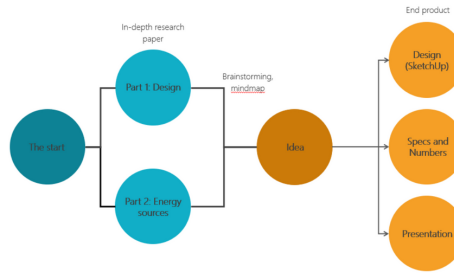
The product needs to be able to generate enough electricity for a household.

GREEN ENERGY SOURCE

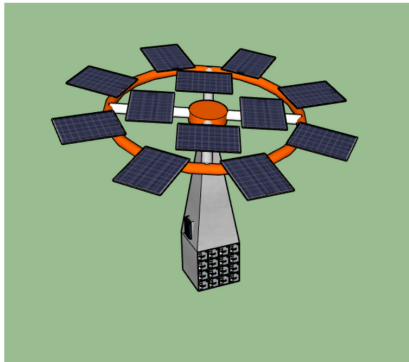
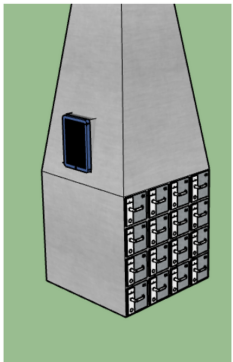
The product uses a green energy source that doesn't harm the planet.



THE PROCESS



BATTERY DISTRIBUTION



Battery-sharing system

Access to electronic/manual lockers is granted by an electronic service like a subscription

PROS

- Energy is used when it is needed
- Pay for what you get
- Efficiently reduces battery need
- Keep track of usage

CONS

- Might mean the tower contains money
- More expensive

Battery distribution by a middleman

Access to electronic/manual lockers is granted by a local middleman either with a key or electronically

PROS

- Energy is used when it is needed
- No paying system in the tower
- Pay for what you get
- Efficiently reduces battery need
- Keep track of usage

CONS

- Someone extra to pay
- Trustable middleman

Battery ownership

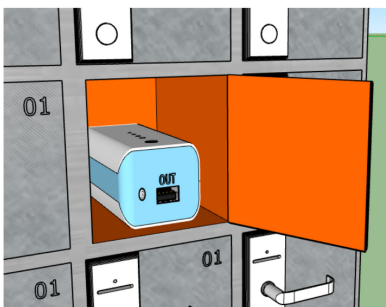
Everyone owns two batteries

PROS

- Cheaper
- Easiest to manage
- One time customer interaction

CONS

- Need more batteries
- Energy could be wasted when battery is full and not in use



SPECS

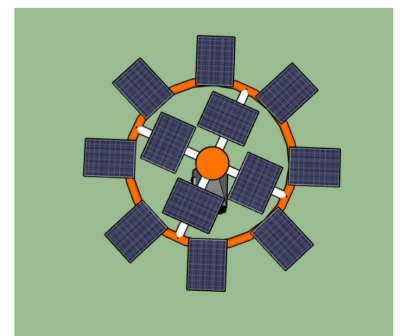
In Mozambique, to gain as much energy from the sun as possible, the solar panels need to be placed with an angle of 19 degrees with the earth.

An average household would need a total of 0.50 Mj each day to meet basic needs. (Our calculation for this number can be found in our in-depth paper)

We calculated that for 10 households, we would need 2 m² solar panels, but we made it three to have a buffer. (Our calculations for this number can be found in our in-depth research paper)

We decided to use recycled stainless steel, since it's a strong material, which makes it is vandalism proof and the fact that its recycled will reduce the cost.

Solar panels: €530,24
Batteries: €2240
Locker: €609,84 (+ €1600)
Main material: €1600
Total: €4679,28 + (1600 for electronic lockers)



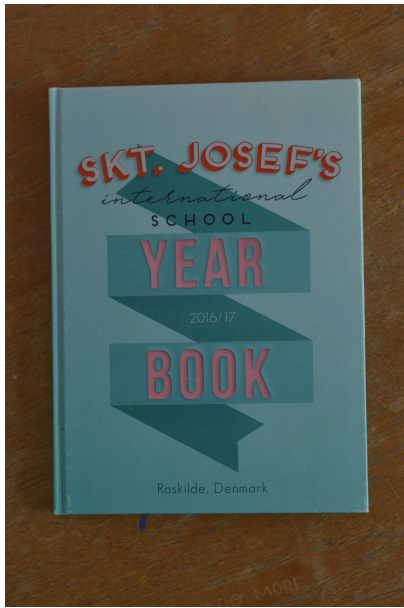
My school combined to Meesterproef for O&O in VWO6 with the Profielwerkstuk. we had to complete the assignment our client gave us and write, within the same topic, an extensive reasearch paper. We were looking for a sustainability project, preferably for an organization in a developing country.

For our final-subject "Research and Development" we acquired an assignment concerning the energy supply in the African country Mozambique. The country has a substantial part of its inhabitants living in rural areas where on-grid electricity is not an option. The assignment given was to think of a solution to provide these citizens with enough electricity for their daily needs, without turning to the grid as an answer.

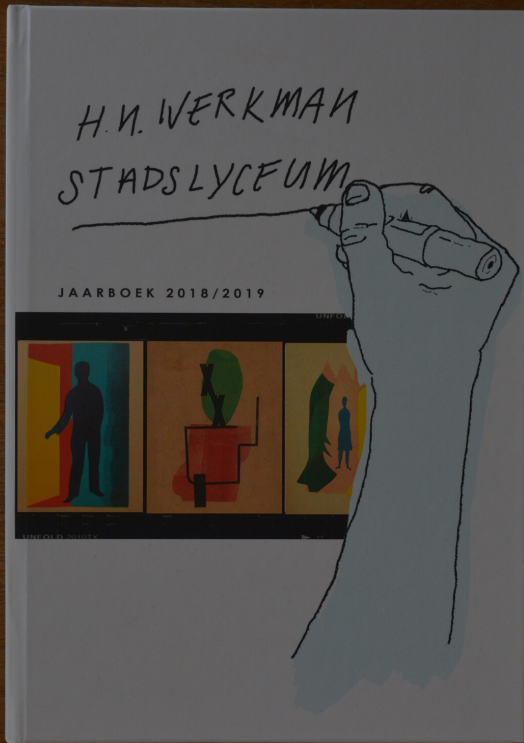
This assignment was given to us by a professor at the Hanze Hogeschool and a professor at the University of Eduardo Mondlane from Mozambique.

The whole paper was written in English.

YEAR-BOOK DK



YEAR-BOOK NL



I have created two yearbooks, one when I lived in Denmark and one when I graduated high school in the Netherlands. In Denmark a group of students and I created the book, led by a teacher. In Groningen I led the yearbook committee and created the entire formatting of the book.



Printable posters
to brighten up your
day



EYTY
FYVE

to the dreamers, creators &
wanderers

THIS ETSY STORE

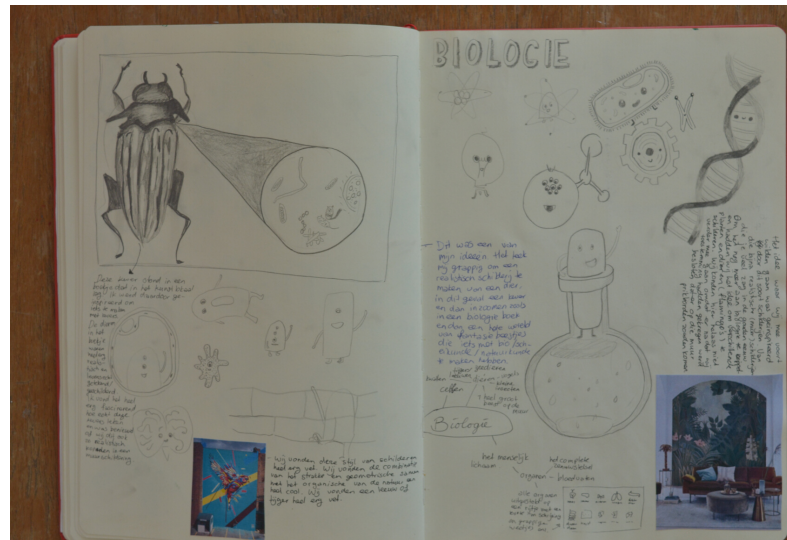
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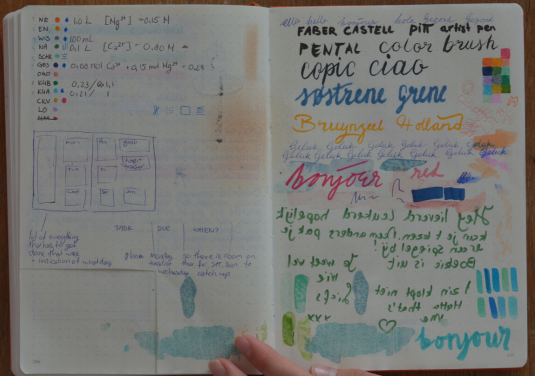
WELCOME! I'M REALLY HAPPY
YOU FOUND THIS NEW CORNER
OF THE INTERNET!

EYTY
FYVE

EYTY
FYVE

to the dreamers, creators &
wanderers





These are several photos of graphic design projects I did I thought were relevant, pages from my dummy and my bullet journals.

- branding for online store EYTY FYVE
- Mural in Math classroom, H.N. Werkman Stadslyceum
- Poster design the Voice of Werkman
- Dummy skeches and moodboards
- Bullet journal

