# **SoUNd ride**

I.D. Ciro Dávila

# SoUNd ride

# Concept.



Sound Ride is inspired in the SUN RIDE project, an open project of the DIS (Design and Innovation for Sustainability) unit of research in the design department of Politecnico di Milano.

Is a tricycle front wheels, which by using solar energy is capable of powering two electric motors (Brushless hub motor) and a small mobile radio station. The vehicle is divided in three main parts. 1. Front box, 2. Tricycle 3. Optional roof.

1. Front box is a micro radio station when the vehicle is not in motion.

2. The tricycle is an adaptation of a standard bicycle frame (reusing an abandoned bicycle) adapting the front and changing the position of the pedals and the seat to a type of semi recumbent tricycle for better comfort of the user.

3. The roof is an optional module that consists of a simple structure with two additional solar panels.

## Life Cycle Design strategies.

#### Choosing low impact resources.

With an electric system that work completely with renewable energy, avoiding the use of diesel generator.

The tricycle is powered by solar and muscular energy. Making that is use generate almost zero emissions to the environment.

Selection of low impact materials for the front box. HDPE and Pine wood.

#### Minimizing resources.

Minimizing energy consumption during Pre – production and production by using recovered bicycles frames from abandoned bicycles in the city, most of the material for the new tricycle is saved. Also is avoided the impact in the environment of the old frame.

Optimizing product life.

Intensifying product use by adding the electrical motors (Brushless hub motor), so the distance traveled can be increased and with less fatigue.

Simplifying disassembly.

Avoiding permanent joining when is possible

Extending material life.

# Inspiration.

## Users.

Push tweens. 8 - 12 years



Expo teens. 13 - 18 years



### Reference.



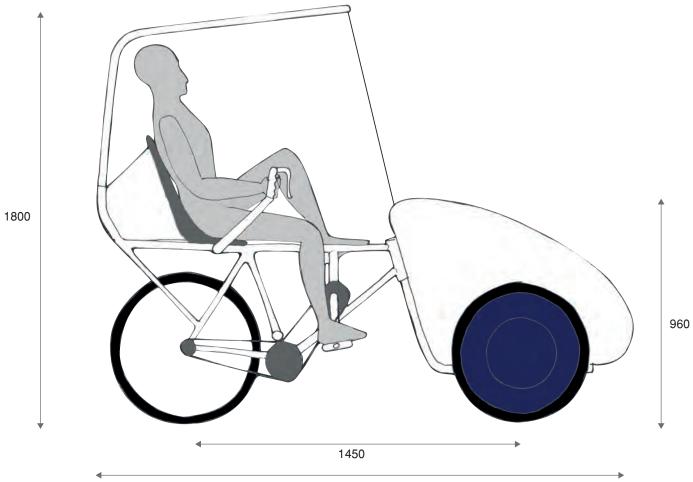
## Secundary problem.

Abandoned bicicles in cities.

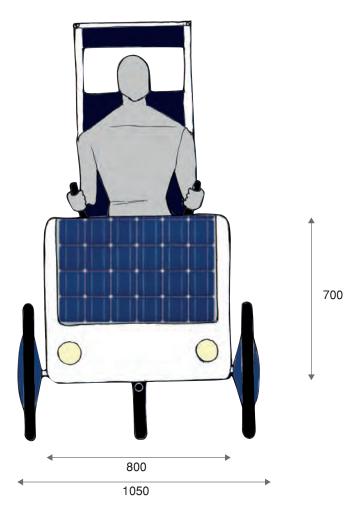


http://mattinopadova.gelocal.it/padova/cronaca/2015/03/20/news/il-comune-mette-all-asta-140-biciclette-senza-padrone-1.11080863

## Views.



2300



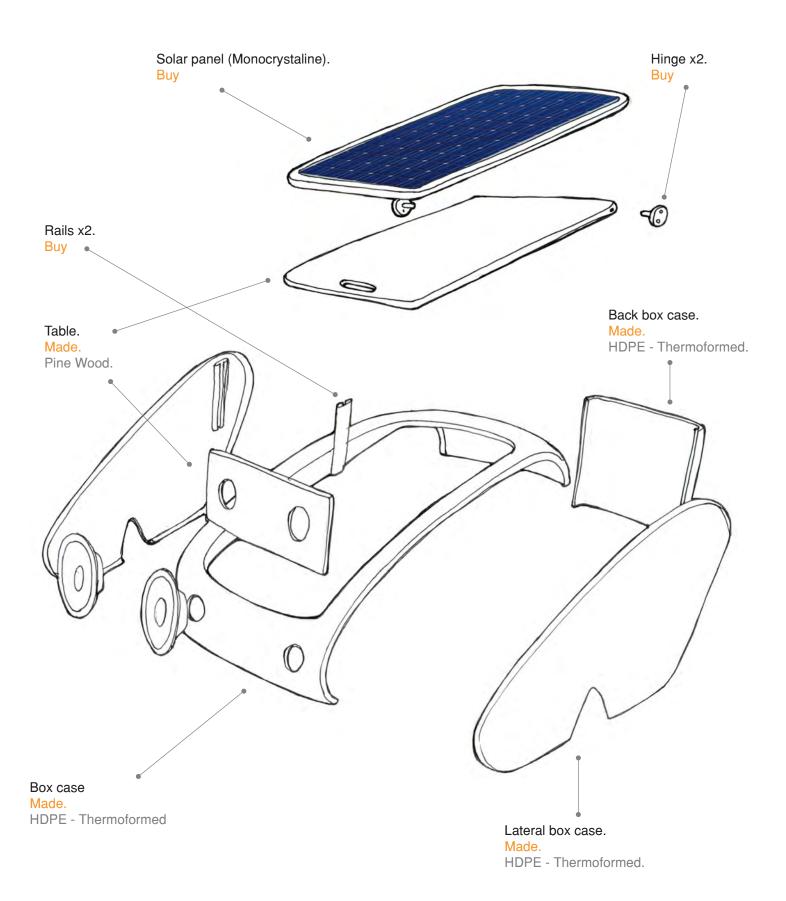
# Front box.

Steps for install the mobile Radio station.

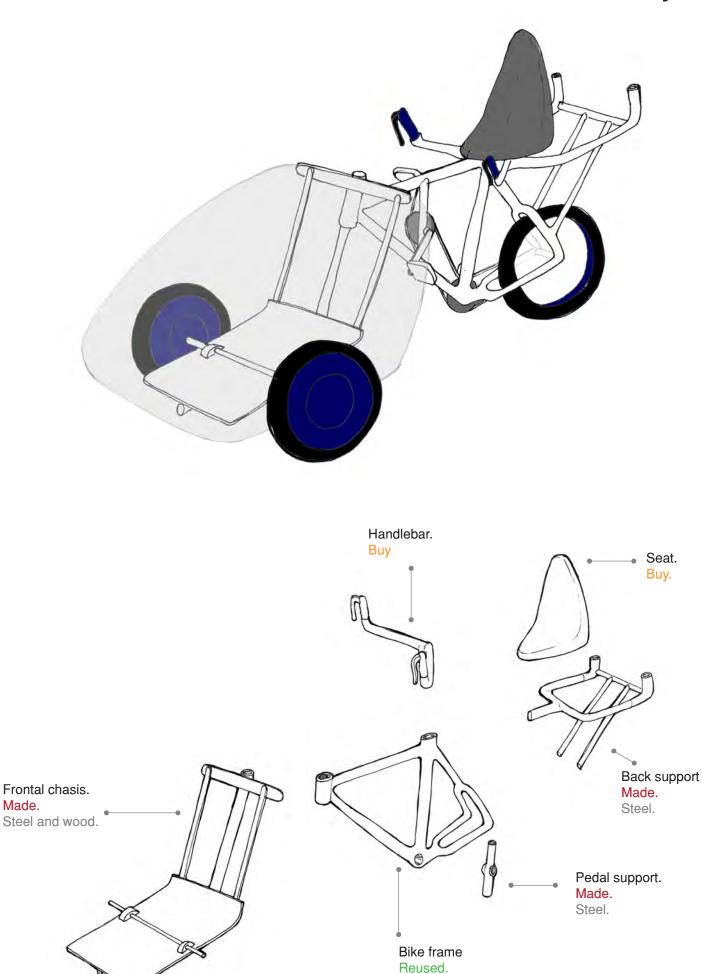
- 1. Unlock the frontal Solar panel and put it in direction to the sun.
- 2. Pull up the table.
- 3. Switch on and connect the components.
- 4. Make RADIO!



## Front box disassembly.



# Triclycle.



Steel.

# Optional roof assembly.

