

STOP FOOD WASTE

Sustainable Bike Design for Soup Kitchen

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ABSTRACT

Food waste is generated in large amounts; in Denmark we waste 700.000 tons of eatable food every year. Increasing expectations to the standard of food - a knocked apple or a broken packaging are losing value. A hypersensitivity to expiry dates makes both companies and private households throw out food in almost perfect conditions. Expectations of never missing anything on the shelves leads to overproduction of food. The reasons are many why we create food waste, but one fact is burning – we need to use our resources wisely while worldwide population and pollution is growing.

A non-profit organization tries to bring awareness about food waste to the Copenhageners. By dumpster diving food or in other words collecting food from supermarket containers the organization cook healthy food, which they distribute free of charge or with a small donation. The food is distributed via a special build Christiania bike.

The bike need to be redesigned to fit the organizations vision of being sustainable and green. This not only include the management of food waste but also the energy consumed when the food are heated up or cooled down during distribution. Throughout the project, the organization is analyzed to find ways to optimize the energy consumption according to the thermos dynamics. The casing on the bike will be redesigned to better fit the organization needs of cooling down the dishes. Cooling alternatives will be researched to be greener and still suitable for mobility. By June 2015 a functional prototype will be built by reused materials. The project aim to inspire others, to find greener alternatives both for food waste and energy consumption.