Green box – think inside the box

C. Ellingsen¹, C. Fisker², S. Johnstrøm² and B. Kurdi²

¹DTU Electrical Engineering, Technical University of Denmark
²DTU Process and Innovation, Technical University of Denmark

ABSTRACT
The Danish government has made a goal that 50 % of all waste in Denmark shall be recycled within the year 2020. This is stated in the report “Danmark uden affald” by the Environmental Protection Agency made in 2008. Numbers shows unfortunately that last October only 22 % of all waste from households are sorted and recycled. As the year 2020 approaches we see more and more Danish households receiving sorting containers outside. In most homes in Denmark today the waste sorting possibilities outside does not correspond to the waste bin(s) inside. Most Danes today only have one waste bin for all trash in their kitchen, and they believe that waste sorting is complicated, expensive and takes a lot of space in I kitchen. This is where the Green Box comes in.

In our project we wanted to develop a concept for easy sorting in the kitchen. The product that we came up with is a modular trash bin, designed to be compact, but still have the same volume as the typical trash bin.

Green box interior is three colored frames that hold a bag for each material the user wants to sort. The bags are specially designed with right dimensions and made of reused plastic. A second alternative is to use special reusable bags made of a thicker more robust material. The box can easily be mounted on a cupboard door or placed where ever it might be suitable.

The concept is now in an early prototype state, and we can already see the great potential for the Green Box to make sorting waste easy, enjoyable and cheap.
We are sure that the Green Box will make something as simple, but important, as waste sorting attractive for the masses and thereby taking a further step in the right direction that is a greener future.