Cool alternative to electric kettle avoids excess water

May 24 2015, by Nancy Owano

A Berlin-based team is proposing you exercise your sensitivity to all that can be sustained by paying attention to their Miito device, which can cut down on your daily use of excess water and energy.

They call Miito the sustainable alternative to the electric kettle. It is a two-part device consisting of simply of rod and plate. The advantage is that you are only using the amount of water you need and you are not wasting energy in heating up water or other liquids. This is a one-button system, which heats liquids directly in the vessel used.

Leyla Acaroglu during her 2014 TED Talk, noted how 67 percent of people in Europe admitted to overfilling their kettle each time they used it. She also said that "one day of extra energy use from boiling kettles is enough to light all of the streetlights in England for a night."

Miito co-founder Jasmina Grase said the team was inspired by the quote and they turned toward a rethink of the electric kettle. Miito started as a student project when Nils Chudy and Grase were still at the Design Academy Eindhoven. Jasmina and Nils set up their base in Berlin and teamed up with engineer David Riding to work on Miito.

Writing about the Miito in *CNET*, Michelle Starr said, "The device uses a form of electrical induction for heating much like induction cooktops. The induction plate contains a coil that produces a high-frequency electromagnetic field when powered on. Normally this means very little; but when a magnetic material comes into contact with the plate, this closes a circulating electric current, which in turn produces heat in the rod."

Directions for use are provided. Here is what the FAQ section on the team's Kickstarter page answers in response to the question, "How do I use Miito?" using a cup of tea as an example.

"Simply place the water-filled cup on the induction base, take the heating rod, place it in the cup of water and press the touch-sensor button on the Miito base. The electromagnetic sensors in the base will

sense the rod and begin heating." You do not have to hold the rod because the disk on its bottom keeps the rod upright. "Once the water reaches boiling point, Miito is intuitive enough to go into Standby mode. Then once the rod is lifted out of the water, the base will shut off and the rod can be placed back on the base to cool off."

The rod is stainless steel with silicone coating for heat resistance. The base is plastic with a glass top. Is the device safe? Miito will not keep heating your liquid after it reaches the boiling point, they said. The top of the base always stays cold.

The boiling time will vary depending on the vessel used and liquid to be heated. The thicker the vessel on the bottom, the longer it will take the liquid to boil. (They said, "while we may advise you to use a thinner bottom-based vessel over a thicker bottom-based one, thicker ones will still work.") Can Miito even handle different temperature settings? The team said, "A temperature setting is something we are currently developing and is our top stretch goal."

Any vessel made from non-ferrous materials such as ceramics (including porcelain, earthenware and stoneware), glass and heat-resistant plastics can be used. Examples given are a ceramic mug, glass, heat-resistant plastic container, or porcelain teapot.

The creators said the device is easy to clean. The shape of the rod minimizes limescale and makes it easy to clean with running water; you can wipe the base with a moist cloth.

Berlin-based Miito has a working prototype and have turned to Kickstarter to gear up for manufacture, with the goal of $167,383. They are already encouraged by recognition and awards gathered so far including a James Dyson Award National Winner and energy winner of the 1776 Challenge Cup Berlin.

For about $100 (their pledge amounts are in euros) you get your Miito with estimated delivery in April next year. They said they are offering shipment to EU countries and continental Europe, North America, Australia, New Zealand, Gibraltar, Russia, Israel, Japan, Hong Kong and Singapore.

More information: miito.de/