

SOLAR COOKER INFORMATION TFL 2009

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Every day women and children in developing countries carry firewood. Their daily load would fill approximately 70.000 big lorries.

Many studies indicate that one third of this amount could be compensated by solar cookers, thereby diminishing health problems caused by smoke and giving women more time for other duties. Another contribution to public health is that solar cookers can be used for sterilising water.

Today, there are only about 2 million solar cookers in use, but the calculated need is 200 million, which costs about 1000 million euros in year, (which is about 0.07 % of the military expenditure of the world in year.)

By using solar cookers, about 25.000 km² of forest could be saved.

The CO₂ emission of the use of solar cookers is zero and the costs of CO₂ reduction is only about 3 euros/ton.



There are hundreds of different models of solar cookers available. TFL presents here five of them - all tested, prepared and used in TFL-projects. Many other well operating types can be found on the internet.

For building instructions contact TFL or the other organisations mentioned!



COO-KIT PANEL COOKER

Model of Solar Cookers International (SCI)

www.solarcooking.org

The aperture area: 0.5 m²

Power max: 150 W

Time for boiling 1 litre of water: 3 hours

The cooker is used in refugee camps in Africa by tens of thousands of people.

Coo-Kit is made of cardboard and aluminium foil. The material costs are only about 3-4 euros. For cooking you need a black pot of 2 litres and a high-temperature plastic bag. The life-time of the cooker is under 1 year.

More information from SCI.



TFL BOX COOKER

Designed by TFL Finland

The aperture area: 0.4 m²

Power max: 200 W

Time for boiling 1 litre of water: 2 hours.

Some hundreds are made and used in Africa, mostly in Namibia, in Owambo and by Penduka women's organisation, in Windhoek.

The cooker is easy to build of cardboard or plywood, foil, glass and some metal parts. The material costs are about 25 euros. The cooker is easy to use and several pots have place in the box. Black pots are necessary. The life time is 2-4 years.

More information and building instructions from TFL.



PANEL COOKER TFL- 0.36

Designed by TFL Finland for equator-countries
 The aperture area is 0.36 m²
 Power max: 200 w
 Time for boiling 1 litre of water: 2 hours.
 A black pot of 2 litres needed.
 The cooker needs aiming at sun about once in an hour, 15 degrees.

Material needed: Cardboard or Propwell or plywood -sheet and aluminium foil for reflector, polycarbonate sheet and transparent tape for cover. Material costs 6-12 euros. Life-time 2-5 years
Building information from TFL.



PARABOLIC COOKER TFL- 0,75

Developed by TFL
 The aperture area: 0.75 m² (D=1000mm)
 Power max: 400 W
 Time for boiling 2 litre of water: 0.75 hours
 Suitable also for frying.
 Black pot of 4-5 litres needed..
 Life time 25 years.

Metalworking tools are necessary for building this model. For reflector sections aluminium foil or bright aluminium sheet are needed. Recycled material, like from fluorescent lamps, is highly recommended. Material costs are 25 – 50 euros.

Building instructions from TFL.



PARABOLIC COOKER SK-12

Made by EG-Solar,
 Kari-Valentin str. 20
 84524 Neuötting, Germany
 The aperture area: 1.5 m²
 Power max: 800 W
 Time for boiling 4 litre of water: 0.75 hours
 Black pot: 8-10 litre
 Also suitable for frying.

The cooker is ready to assemble when delivered from Germany or it is possible to build one in a metal workshop by metalworking tools. The price is about 200 euros, life time 25 years.

Building instructions from EG-Solar.

DELICIOUS COOKING - AND THANK YOU FOR A CLEANER WORLD !