

FOR IMMEDIATE RELEASE

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## **Horn of Africa Famine – Ethanol Cookstoves for Dadaab Refugee Camp**

Project Gaia, Inc., a U.S. non profit with operations in East Africa, is working with the UNHCR and others to bring relief to refugees from the Horn of Africa Famine in a very immediate way—cooking.

Project Gaia promotes alcohol fuels and appliances for household energy use in Least Developed Countries (LDC). Alcohol fuels are clean, safe and can be locally and sustainably produced on a small scale. LDCs have great difficulty in affording the purchase of imported fossil fuels, which impacts balance of trade and adversely affects the entire economy. Most LDCs suffer from advanced deforestation, made worse by reliance on wood fuels for cooking, especially charcoal. Bioethanol produced from efficient, fast-growing crops such as sugarcane and sweet sorghum is a clean energy solution that small farmers can provide. It offers a local solution.

Project Gaia uses the Dometic “CleanCook” stove, developed especially for Project Gaia by the Dometic Group (formerly Electrolux). The Dometic Group is a U.S. and international appliance manufacturing and sales company. Its ethanol stoves have long been known in the marine and leisure markets. After conducting a worldwide survey of alcohol stoves, Project Gaia selected the Dometic alcohol stove and approached the company to adapt its stove for emergency and crisis use as well as for “base of the pyramid” consumers. Dometic took this challenge and the CleanCook stove was the result—a rugged, portable one or two burner stove with cooking power sufficient to meet the heavy demands of families who do all of their cooking on one stove.

With the assistance of the Shell Foundation, the U.S. Government, the Ashden Trust, the Swedish International Development Cooperation Agency, UN agencies and others, the CleanCook stove was thoroughly tested in the laboratory and the field. In 2006 it was launched for scale-up in three Ethiopian refugee camps housing Somali people fleeing war. It has become the stove preferred by Somali families living in these camps. For a short video, please see [http://www.youtube.com/watch?v=JLh3cQ-JU\\_o](http://www.youtube.com/watch?v=JLh3cQ-JU_o).

The UNHCR in Kenya has now approached Project Gaia and Dometic to assist in bringing the ethanol stove to the giant Dadaab Refugee camp, which is experiencing a rapid influx of refugees fleeing war and famine in the Horn. Because of the scarcity of fuel wood and the high cost of kerosene, cooking solutions for Dadaab are a challenge. Fortunately, there is a modern ethanol distillery in Kenya with an annual 24-million liter production that has ethanol available to fuel the stoves.

The Dadaab Camp, in semi-arid northeast Kenya, is the largest refugee camp in the world. The camp has swollen to almost half-a-million inhabitants as a result of the Horn of Africa famine. Thousands of people arrive weekly—mostly women and children. The head of the UN refugee agency, Antonio Guterres, visited Dadaab in July and appealed for support to stem the “worst humanitarian disaster” in the world.

“The mortality rates we are witnessing are three times the level of emergency ceilings,” High Commissioner Guterres said. “The level of malnutrition of the children coming in is 50 percent.”

Cooking is tightly linked with providing nutrition. Currently relief agencies are supplying some kerosene stoves and fuel to the camp and some wood, trucked from great distances. Both the wood and the kerosene are expensive, and this severely limits what can be provided. Kerosene stoves are dangerous in the camp’s crowded conditions and cause accidental fires and burns. Wood fires are smoky and pollute the air, affecting the health of the women and their young children who stay close to them by the fire. In contrast, the ethanol stoves are very safe, having earning a perfect safety record in the Ethiopian camps, and they burn cleanly, without smoke, soot or harmful emissions.

The Spectre International distillery, located in Kisumu, western Kenya, is a modern plant, producing ethanol efficiently from sugarcane. The cost of the ethanol is 50% to 60% that of kerosene. Up to 125,000 stoves may be needed in Dadaab. For every 5,000 kerosene stoves replaced by ethanol stoves, a fuel cost savings approaching one million dollars per year can be achieved. Full deployment of ethanol stoves will save many millions of dollars in fuel.

Project Gaia is accepting donations for stoves for the Dadaab camp. Donations go in full to purchase stoves. Project Gaia also urges donors to contact the UNHCR Donor Relations and Resource Mobilization unit directly, located in Geneva.

The UNHCR and Project Gaia will seek additional ethanol from outside Kenya to augment supply. Up to 40 million annual liters of fuel may be required to sustain the camp. Kenya’s total annual production stands at just under 30 million liters, only a portion of which is available for the camp. More than 80 billion liters of ethanol are produced worldwide, of which 10 to 15 billion liters enter global commerce. Project Gaia encourages producers and traders to contact Project Gaia to let us know of the availability of ethanol fuel for Dadaab and the other camps. It is our hope that eventually ethanol can be traded to serve the greatly underserved market of cooking fuel, especially in crisis situations.

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To donate stoves please go to Project Gaia “Donate a Stove”  
or <http://www.projectgaia.com/>

Photos from Ethiopia Project (see also <http://www.flickr.com/photos/projectgaia>)



**Cooking on wood in kitchen shelter**



**Same family with clean stove cooking in home**



**Two-burner stove in use in Kebribeyah Camp – first introduced in 2005**



**Stove training at Kebribeyah Camp**



**Monitoring at Awbarre Camp**