



StoveTeam International

About the Founder of StoveTeam International

Nancy Hughes founded StoveTeam International in 2001. Hughes volunteered with a medical team for two years in Guatemala after losing her husband to cancer. In Guatemala, Hughes met Irma, a young woman, who had been badly burned at the age of two from falling on an open fire in her home. Irma's hands were so damaged from the flames that they had burned shut. Hughes also witnessed how children were often strapped to the backs of their mothers during meal preparation, thus exposing them to the toxic carbon emissions from the smoke. Not surprisingly, the leading cause of death for children under the age of five in Latin America is asphyxiation and respiratory infections.

This experience provided the catalyst for Hughes to develop with the idea to found an organization that specialized in aiding families in South America by distributing a safe fuel-efficient stove, the ecocina.

A Safe, Fuel-Efficient Stove, the Ecocina

The ecocina has a unique design that lowers the levels of smoke emitted from a typical open fire stove used indoors. The ecocina stoves reduce burns, respiratory, eye and skin problems and reduce carbon emissions by 68 percent. The ecocina also reduces wood use by over 50 percent diminishing the amount of time a woman or child would typically spend cutting wood. The ecocina is portable, with no installation necessary and is built from local materials such as concrete, pumice and tile.

The ecocina is built in six different parts:

1. **The pot**, which sits on top of the stove used for cooking, the ecocina also supports pots of almost any size.
2. **Pot Skirt**: The pot skirt is an adjustable metal skirt that fits a variety of pots and pan. The skirt forces hot air around the pot for maximum cooking efficiency.
3. **Removable "plancha"**: The plancha is used for cooking meat or tortillas, which caters to typical Latin American style cooking.
4. **Pot Supports**: The pot supports elevate the cooking surface above the stovetop and allow cooking with almost any size pot or griddle.

5. **Insulated Ferro-cement Body:** The ferro-cement body is the internal chimney of low-fired tile surrounded by insulating pumice that keeps the stove exterior cool to the touch.
6. **Wood Support (Portaleña):** The portaleña raises the wood off the bottom of the combustion area to allow sufficient air to enter, increasing burning efficiency.

The ecocina also has a “rocket elbow” design, which has an air-intake opening the same size as the exit, which allows oxygen entering through the bottom to move efficiently through the internal chimney. This feature drives heat directly to the cooking pot while burning the gasses and particulate matter, thus reducing air pollution. The introduction of the ecocina led to reduced air pollution by almost 90 percent.

How StoveTeam Builds Factories in Latin America:

Along with selling of individual stoves, StoveTeam is also responsible for the creation of factories built in local Latin American communities to build and operate the ecocina stoves. Over the last 10 years, StoveTeam opened five factories with two more in the process of opening. Factories in El Salvador, Guatemala, Honduras and Mexico have produced large numbers of stoves, also creating jobs for local community members.

The various factories built over 40,000 ecocina stoves throughout the years, all sold to local families.

How StoveTeam Benefits Local Communities:

The introduction of StoveTeam in Latin American communities has led to a significant difference in bettering the lives of those affected by poor air quality in their own homes.

StoveTeam uses local materials for manufacturing, stimulating economic growth in the areas where factories are built. Each factory employs up to 45 people and helps in creating jobs which otherwise would not exist in these small communities. Also, due to the fuel-efficient style of the ecocina, deforestation is also reduced from the decrease in the number of trees being cut down for firewood.

Overall, the positive impact of the ecocina is easy to identify in the communities affected.