



Mission Statement:

StoveTeam solves medical and environmental problems by helping local entrepreneurs start factories to promote the use of safe, affordable, fuel-efficient stoves in the developing world.

Why stoves?

Globally, nearly 3 billion people are using dangerous, smoky open fires or inefficient cooking methods each day to prepare meals for their families. Women spend large parts of their day indoors over smoldering fires. Inhalation of harmful particles emitted from these fires is the cause of an estimated 2 million deaths per year.

MEDICAL PROBLEMS OF OPEN-FIRE COOKING

- Pneumonia, chronic obstructive pulmonary disease, upper respiratory infections, emphysema, cardiovascular disease, lung cancer, chronic bronchial illnesses. These issues are especially prevalent in women and children, who spend most of their time at home indoors.
- Burns and scars from falling into open cooking fires, especially in children.
- Chronic eye and skin irritation from constant exposure to smoke.
- Hernias from carrying large amounts of wood.

ENVIRONMENTAL PROBLEMS DUE TO THIS TYPE OF COOKING

- Rapid deforestation and mudslides
- Climate change due to emissions of black carbon (BC)
- Pollution from the emissions of particulate matter (PM)
- Unemployment continues to contribute to Central American poverty.





Children carrying firewood is a sight often seen in Central America

StoveTeam Methodology

StoveTeam helps raise seed capital from grants and donations to help start sustainable factories in emerging countries. We provide advice and assistance in all phases of factory startup and operation. These factories produce safe, fuel-efficient stoves using local labor and materials. The stoves are affordable and offer the advantages of using much less fuel, reducing deforestation and pollution. As less time is spent collecting fuel, more time is available to pursue other enterprises.

How lives are changed by our work

The installation of more efficient and cleaner-burning stoves improves the quality of air in homes where women and children spend much of their day. The Ecocina stove is portable and can be moved outdoors when weather permits or to the roadside or central plaza where woman earn extra income. A reduction in time needed for gathering fuel-wood results in more time for income-generating activities. One woman in Guatemala even sells chow mien.

"The World Health Organization (WHO) estimates that more than two million premature deaths annually are caused by exposure to smoke from traditional cookstoves and open fires, with women and children the most afflicted. The toxic emissions are blamed for low birth weights, pneumonia in young children, and chronic obstructive pulmonary disease, emphysema, cardiovascular disease, lung cancer, cataracts and other health problems. Half of all deaths among children under age five from acute lower respiratory infections are due to indoor air pollution from household solid fuels." – www.cmaj.ca, October 12, 2010

A smoke-free environment promotes better respiratory health for all.



STOVE TEAM HONDURAS



StoveTeam Board members and factory owner, Anibal Murcia, in front of Copán Ruinas

New Factories:

COPÁN RUINAS, HONDURAS

The factory in Copán Ruinas, Honduras received grant approval in April 2010 and began producing stoves in June. It produced and sold approximately 1,025 stoves between June and December 2010.

It is experiencing high demand and plans to increase production in 2011. A team of StoveTeam volunteers traveled to Copán Ruinas in November to help with factory improvements, stove production and demonstrations.



LEÓN, NICARAGUA

The factory in León, Nicaragua is currently producing and selling stoves. The grant was approved in March, and after solving some technical issues it began production at the end of December 2010. With the support of the local Rotary club, we expect Juan's production to increase greatly in 2011.





El Salvador factory staff with shipment of stoves going to Mexico

Existing Factories:

NAHULINGO, EL SALVADOR

The factory in Nahulingo, El Salvador was the first factory established. Since 2007 it has produce over 10,000 stoves, 3,113 of which were produced in 2010. It continues to experience high demand and makes shipments of stoves as far away as Mexico.

Factory owner, Gustavo, has experimented with additional adaptations of the Ecocina including one using it as the base for a pizza oven.



SAN ANTONIO AGUAS CALIENTES, GUATEMALA

The factory in Guatemala added the Ecocina stove to its inventory of fuel efficient stoves. The Ecocina is the least expensive and only portable stove in its production. The factory produced and sold 750 Ecocinas in 2010 and is also marketing Ecocinas in Belize.

Volunteers visited this factory in November 2010 and helped with stove demonstrations.



CHOLUTECA, HONDURAS

Ecocina stoves are produced and sold by INCATEC technical school in Choluteca, Honduras in conjunction with tree-planting. The operation produced and sold 700 stoves in 2010 and is anticipating increased production in 2011.





STOVE
TEAM

Alternativa para
el cambio

StoveTeam volunteer helps with Ecocina demonstration in Guatemala

2010 Results

- In 2010 StoveTeam International further disseminated fuel-efficient stoves to families in need by establishing locally owned stove factories in Copán Ruinas, Honduras, and León, Nicaragua.
- StoveTeam International established an Advisory Board and Brain Trust to assist with U.S. operations
- StoveTeam International made available open-source documents for the production of the Ecocina stove
- Volunteers from StoveTeam International wrote Rotary grants for seed capital for factories
- Volunteer teams traveled to new factories to assist with construction of infrastructure and to provide technical assistance in engineering, design, and business consulting.

TOTAL STOVES PRODUCED IN 2010

Copán Ruinas, Honduras (established 2010)	1,025
León, Nicaragua (established 2010)	50
Nahulingo, El Salvador (established 2007)	3,113
San Antonio Aguas Calientes, Guatemala (established 2009)	750
Choluteca, Honduras (established 2009)	700
Total	5,638

TOTAL STOVES PRODUCED TO DATE

Total	14,025
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NUMBER OF FAMILIES DIRECTLY IMPACTED BY STOVETEAM

Total stove production to date is over 14,000 Ecocinas. Each stove is sold to a single family, and as average family size ranges from six to eight, including 4 to 6 children, the individual impact was 56,000 – 84,000 children and 28,000 - 56,000 adults.

EMPLOYMENT

New employment was provided to an average of five individuals in each of five factories.

STOVETEAM'S BIGGEST SUCCESS IN 2010

The Copán Ruinas “Eco-Copán” factory opened in 2010 and was the greatest success of the year. Under the guidance of Anibal Murcia, the factory produced 1,025 stoves from July through December 2010. We couldn't have chosen a more hard-working, dedicated, compassionate factory owner. His attention to detail and dedication to the project have made this factory a real success. Anibal's background is in agricultural development and politics.

He is the former vice-mayor of the municipality of Copan Ruinas, and is currently the Coordinator of the Environmental Consultancy for the Production Sector, an Advisory Board Member for the Environment in Copan Ruinas and a City Councilman. He is also a proud “stover.”





Team of volunteers assist in Guatemala, November 2010

Areas of focus in 2010

- Complications with changing requirements for Rotary Matching Grants resulted in a slow start for two of the factories. StoveTeam has been working with Rotary on the Club, District, and International levels to address these complications and, despite delays, StoveTeam has been very successful at obtaining Rotary funding.
- StoveTeam began working with both micro-financing operations and carbon credit schemes to improve affordability of the Ecocina. These will be included in future factory programs.
- StoveTeam improved promotional brochures in both Spanish and English thus further encouraging factory owners to improve marketing strategies and partner with existing non-profit organizations for promotion and distribution.

HOW FUNDING HAS INFLUENCED FUTURE OPERATIONS

- Having adequate funding has permitted StoveTeam International to:
 - help community leaders, organizations, and agencies evaluate whether a stove factory would be useful in their area
 - aid in determining the site and setup of the factory, evaluate the availability of materials, understand the market, consider the costs, provide experienced factory owners to help with setup and operations, and continue to support existing factory operations.
- StoveTeam has helped with new stove issues including sending institutional stoves for observation and testing to hospitals in Honduras, and helping with experimental stoves for use in Haiti.



- StoveTeam has hired an administrator to handle increasing inquiries from throughout the world. The hiring of a first employee has allowed StoveTeam to increase promotion, research & development, and handle new requests for collaboration. Requests for new factories continue with strong possibilities in Mexico, Ghana, Togo and Kenya. With additional funding, a factory development specialist can be hired to travel to new locations.

CURRENT GRANT AND FOUNDATION FUNDING

StoveTeam International further achieved its mission with quality grants from Synchronicity Foundation, the Milagro Foundation, The Singer Foundation and The Sanford Foundation. StoveTeam received the majority of its support from private donors and more than 50 Rotary Clubs.

Individual Rotary Districts and The Rotary International Foundation provided matching funding for the El Salvador, Guatemala, Nicaragua and Honduras factories. Local representatives of The Peace Corps, Habitat for Humanity and other non-profit organizations in each country assisted with stove sales and distribution.

AWARDS AND RECOGNITION

This year, the Founder/President of StoveTeam International was invited to present programs at Engineers in Technical and Humanitarian Opportunities of Service (ETHOS) in Kirkland, Washington, and the U.S. Environmental Protection Agency's Partnership for Clean Indoor Air (PCIA) Forum in Lima, Peru.

The Partnership for Clean Indoor Air advised StoveTeam International that it would receive the Special Achievement Award for Developing Local Markets at the January, 2011 PCIA Forum in Lima Peru.



Board of Directors

NANCY HUGHES – PRESIDENT & FOUNDER

Nancy directs the work of StoveTeam and is the founder and the face of the organization. She represents StoveTeam at conferences such as ETHOS and the Partnership for Clean Indoor Air (PCIA) Biennial Forum. She began StoveTeam after working with a medical team and observing the results of burns and upper respiratory diseases caused by cooking over open campfires inside unventilated homes. Nancy is a graduate of Whitman College, an active member of Rotary and has been a tireless volunteer with many organizations. She is an inspiring speaker and travels extensively for StoveTeam International.

GERALD REICHER – VICE PRESIDENT

Gerry assists factory owners by providing appropriate business tools. On the first team he assisted with developing the concept of creating sustainable businesses rather than simply distributing stoves. Prior to his volunteer work with StoveTeam International he owned and operated a software business. Prior to that, Gerry was on the faculty of The University of Oregon where he taught and did research in Cognitive Psychology. He has traveled many times to Central America.

DON STEELY – TECHNICAL DIRECTOR

Don assists with stove design and the physical development of new factories. He advises factory owners about the purchase of appropriate tools and efficient factory set-up. He has built his own homes and is the “hands-on” arm of StoveTeam. After traveling to El Salvador he started a second non-profit agency to bring donated medical and computer equipment into the country. He was a volunteer election observer in El Salvador in 2009. In private life he is a Rotarian and works as an educational curriculum designer and program evaluator.



GAIL NORRIS – VOLUNTEER COORDINATOR

Gail speaks fluent Spanish and assists in Central America with volunteer teams where she is an inspiring leader. In private life she is the Volunteer Coordinator for the Oregon Bach Festival, a Southtowne Rotarian, and a substitute teacher.

SCOTT WILBER – CERTIFIED PUBLIC ACCOUNTANT

Scott is an active Eugene Southtowne Rotarian and works as a professional C.P.A. He has been unable to travel to Central America but takes an active role assisting with StoveTeam financial accounting.

MARGA LARSON – FINANCIAL ADVISOR

Marga is an active member of the Eugene Downtown Rotary Club and works as a professional C.P.A. She visited the factory in El Salvador and assisted with the development of the accounting model for stove factories.

JOHN COSTELLO – MEMBER

John is the former owner of North Bank Restaurant and a retired Director of Food Services for the University of Oregon. He has traveled extensively in Central and South America checking on stove factory status and stove acceptance.



Advisory Board

SUSIE HANNER – PRESIDENT

Susie is a retired author of reading programs and an active Rotarian. She has successfully written and edited all of the Rotary Matching Grants that have more than tripled the contributions received by StoveTeam International.

Staff

SANYA DETWEILER – ADMINISTRATOR

Sanya handles the administrative side of StoveTeam's operations, including volunteer coordination, fundraising, and promotion. She has visited factories in Guatemala and Honduras. A graduate from UC Berkeley with a degree in Architecture and Global Poverty & Practice, she spent a semester building stoves in rural Peru. She has also worked as a researcher with the Berkeley Darfur Stoves Project.

