









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 mud slides
- Climate change due to emissions of black carbon (BC)
- Pollution from the emissions of particulate matter (PM)















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.

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.

"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!













New Factories

With five successful factories in Central America, StoveTeam expanded to other regions in need of safer cooking technologies. In 2011 StoveTeam established a factory to produce stoves for the rural communities surrounding San Miguel de Allende, Mexico.

SAN MIGUEL DE ALLENDE. MEXICO

The factory in San Miguel de Allende received grant approval in April, 2011. El Salvador factory owner Gustavo Peña and Honduras factory owner Anibal Murcia visited San Miguel to assist owners Eric Ramirez and Deyanira Ferrer with factory improvements, stove production, and marketing. The "Herreria Lupita" factory began producing colorful stoves in August and has produced just under 300 stoves between August and December. The new factory currently has two employees.

A team of volunteers will visit the area in March of 2012 to assist with factory expansion and conduct Kitchen Performance Tests in the village of El Tigre. They will measure the amount of wood used in open cooking fires. One year later, follow-up testing will be conducted by a second volunteer group.

The factory is interested in establishing a distribution center in Dolores Hidalgo, a few hours away, to provide more stoves to the Central Highlands region of Mexico.

In collaboration with the San Miguel de Allende Rotary Club, educational materials were created to explain to the community the health and environmental benefits of clean cookstoves. Señor Ramirez and others provided numerous stove demonstrations at community events to educate the public about the Ecocina. He is working with local environmental advocacy organizations such as GAIA, Apoyo a Gente Emprendedora, and Centro de Desarrollo Agropecuario (CEDESA) to promote the Ecocina through their numerous initiatives to provide training, education and community development tools to people in rural communities. The factory is also seeking to collaborate with a local municipality, Desarrollo Social, to develop and provide educational workshops on a variety of environmental topics.









Ongoing Factories

COPÁN RUINAS, HONDURAS

The factory in Copán Ruinas, Honduras received grant approval in April 2010 and began producing stoves in June. It has now produced and sold stoves in many colors.

It is experiencing high demand and plans to increase production in 2012. A team of StoveTeam volunteers traveled to Copán Ruinas in November 2011 to conduct the first field-tests and help with factory improvements and stove production.

LEÓN. NICARAGUA

The factory in León, Nicaragua is still producing various types of fuel-efficient stoves. It has produced Ecocinas along with the production of other types.

NAHULINGO. EL SALVADOR

The factory in Nahulingo, El Salvador was the first factory established. Since 2007 it has produced 14,249 stoves. It continues to experience high demand. Factory owner, Gustavo Peña, 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 EcoComal stove factory in Guatemala has expanded and continues to produce the Ecocina as well as two other types of fuel-efficient stoves. The Ecocina is the least expensive and only portable stove in its production. The factory has now produced and sold 6,275 stoves of various types.

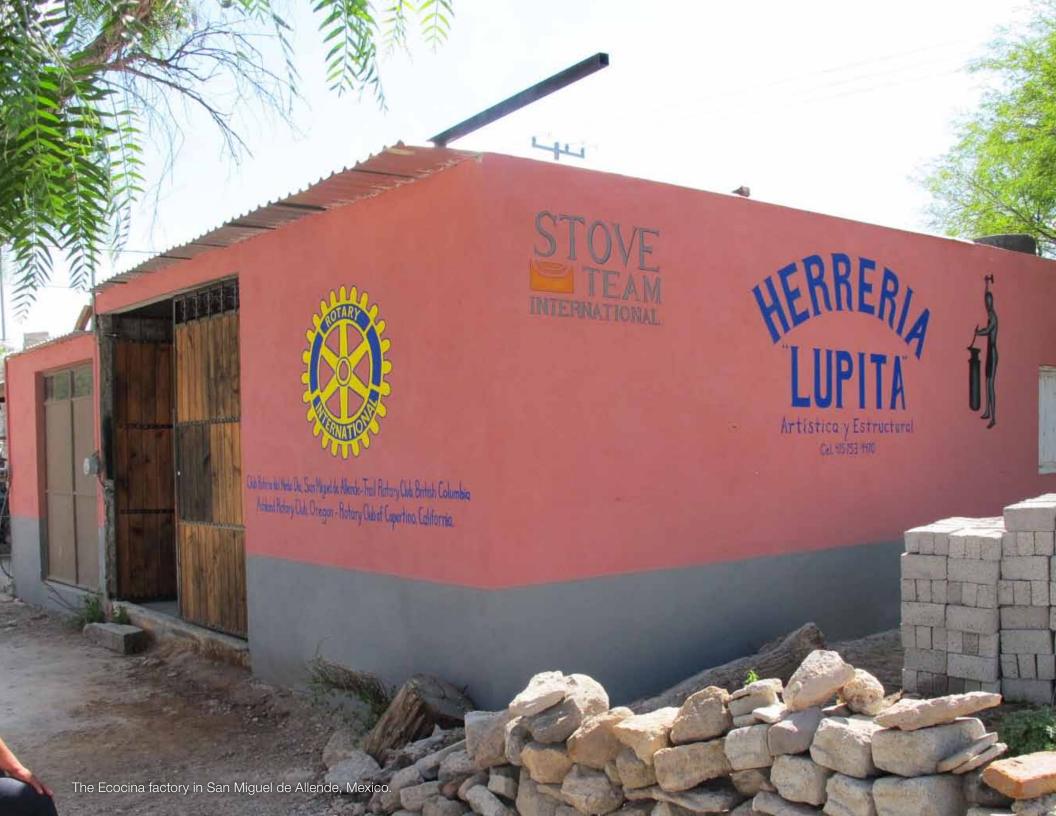
CHOLUTECA, HONDURAS

The grant for Ecocina stoves produced and sold by INCATEC technical school in Choluteca, Honduras in conjunction with tree-planting as been completed and the school has produced and sold approximately 1,621 stoves.















- In 2011 StoveTeam International distributed fuel-efficient stoves to families in need by establishing a locally owned stove factory near San Miguel de Allende, Mexico.
- StoveTeam International made available more open-source documents for the establishment of a factory to produce the Ecocina stove.
- StoveTeam International instituted regular newsletters.
- StoveTeam International worked with a variety of Rotary Clubs to write matching grants for seed capital for new factories in Mexico.
- StoveTeam International began investigating carbon contract developers who would allow StoveTeam factories to participate in receiving carbon credits to reduce the price of the Ecocina stoves.
- The StoveTeam Administrator and two board members traveled to Mexico to meet with potential new factory owners.
- StoveTeam began improved quality control and testing for stoves. Volunteer teams traveled to Honduras to assist with the first round of field testing.









Bringing fuel-efficient stoves to the world

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TOTAL STOVES PRODUCED IN 2011

Copán Ruinas, Honduras (est. 2010)	2,899
León, Nicaragua (est. 2010)	850
Nahulingo, El Salvador (est. 2007)	14,249
San Antonio Aguas Calientes, Guatemala (est. 2009)	6,275
Choluteca, Honduras (est. 2009)	1,621
San Miguel de Allende, Mexico (est. 2011)	290
Total	24,796

NUMBER OF FAMILIES DIRECTLY IMPACTED BY STOVETEAM

Total stove production to date is 24,796 Each stove is sold to a single family, and as average family size shown by our field testing data is 7.5, the individual impact resulted in a total of more than 185, 000 people.

EMPLOYMENT

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











AREAS OF FOCUS BETWEEN 2010 AND 2011

- Complications with changing requirements for Rotary Matching Grants resulted in a slow start for new 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 created promotional brochures in Spanish, thus further encouraging factory
 owners to improve marketing strategies and partner with existing non-profit organizations
 for promotion and distribution.

HOW FUNDING HAS INFLUENCED 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 a factory, evaluate material availability, understand the market and evaluate costs
- Provide experienced factory owners to help with setup and operations
- Continue to support factory existing factory operations
- Hire an Administrator to handle increasing inquiries from throughout the world.

The hiring of a new employee has allowed StoveTeam to increase promotion, Research & Development and handle new requests for collaboration. The Administrator was instrumental in promoting Nancy Hughes who received the \$100,000 Purpose Prize in December 2011.

HOW ADDITIONAL FUNDING COULD INFLUENCE OPERATIONS

A new factory development specialist would be hired to travel to new locations where factories are needed.









CURRENT GRANT AND FOUNDATION FUNDING

StoveTeam International further achieved its mission with quality grants from the Milagro Foundation, The Singer Foundation, Synchronicity Foundation, Oregon Country Fair Foundation, Civic Ventures, and The Sanford Foundation. StoveTeam received the majority of its support from private donors and more than 75 Rotary Clubs.

Individual Rotary Districts and The Rotary International Foundation provided matching funding for all of the Central American and Mexican factories. Local representatives of The Peace Corps, Habitat for Humanity, World Vision, Rotary, and other non-profit organizations in each country assisted with stove sales and distribution.

AWARDS AND RECOGNITION

The Partnership for Clean Indoor Air (PCIA) awarded StoveTeam the Special Achievement Award for Developing Local Markets at the 2011 PCIA Forum in Lima, Peru.

During this past year, the Founder/President of StoveTeam International has presented programs at numerous Rotary clubs, Engineers in Technical and Humanitarian Opportunities of Service (ETHOS), The Public Interest Law Conference, University of Oregon Leadership Classes, and Civic Ventures.

Nancy Hughes was also the recipient of the prestigious Purpose Prize and donated the entire prize amount to StoveTeam International to further its work. As a result of the prize, she was named a Cordes Fellow and received an invitation to the 2012 Opportunity Collaboration where she will showcase the work of StoveTeam International.











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, the Partnership for Clean Indoor Air (PCIA) Biennial Forum, and the Global Alliance for Clean Cookstoves.

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. As a member of 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. Gerry is a former member of the faculty of The University of Oregon where he taught and conducted research in the field of 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 is 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 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.

SUSIE HANNER - DIRECTOR

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 doubled the contributions received by StoveTeam International.









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Staff

SANYA DETWEILER - ADMINISTRATOR

Sanya handles the administrative side of StoveTeam's operations, including volunteer coordination, fund-raising, 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.

VOLUNTEER STAFF.

Over 200 volunteers contribute time and effort to StoveTeam projects.











Data

DEMOGRAPHIC DATA

StoveTeam now has projects in Mexico and four Central American countries—El Salvador, Honduras, Guatemala, and Nicaragua. The populations that benefit from our programs are mainly from rural indigenous communities. For example, in the communities that are served by the San Miguel de Allende, Mexico factory, the majority of the population is Otomi or Nahuas. Those who will benefit most will be women and children under the age of five who spend time in the home exposed to open cooking fires.

Reflection

SUCCESSES

- StoveTeam was successful in helping secure Rotary Grants, which more than tripled the funds used for the establishment of a very successful factory on the outskirts of San Miguel de Allende in Mexico.
- We successfully established an excellent working relationship with the Host Rotary Club in San Miguel de Allende, which facilitated the smooth development of the factory.
- StoveTeam hired a full time Administrator who has been an enormous help in managing the
 high volume of requests for information including assistance in developing stove factories
 throughout the world. The Administrator was crucial in managing volunteers and insuring that
 important projects stayed on track. In addition, her efforts helped increase donations and were
 critical in Nancy Hughes' receipt of the 2011 International Purpose Prize.
- We established a relationship with ERM, a very important environmental compliance company. They have agreed to aid us on developing information that will help us establish norms for fuel use and medical issues and to measure environmental and health results.









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- StoveTeam established relationships with organizations that market carbon credits. If successful, carbon credits could very markedly reduce the price of the stove for poor people throughout the world.
- StoveTeam began improved quality control and testing for stoves. Inspired by our need to show the results of wood and CO₂ savings for possible carbon credit funds and by the incomplete standards of the testing being done in the stove community, we have begun by using standard stove-community testing rules but collecting expert opinion to refine the methods. In 2011 we sent a group of volunteers to Honduras to test wood usage before installation of an Ecocina stove. In March we will send another group to test wood usage for those who are using these Ecocina stoves.





