

# Project Gaia Annual Report 2014



PROJECT  
GAIA ENERGY  
REVOLUTION



Dear Friends of Project Gaia,

Project Gaia has always been a small and nimble organization. By operating a "back office" in the US, we are able to rely heavily on our staff and partners in the field. In 2014, we put all of our efforts into innovating our projects and products that are at the core of what we do. We worked closely with Dometic to develop and field-test a brand-new stove which is cost-effective and can be assembled and manufactured locally.

We finalized our site in Ethiopia where the first microdistillery of its kind will produce ethanol for cooking fuel. In partnership with the Gettysburg College Office of Experiential Education, we led a team of students and faculty to Ethiopia where they learned about energy poverty firsthand and trekked in some of Ethiopia's last remaining forests. We scaled-up our operations in the Ethiopian refugee camps, increasing our commitment to the humanitarian community and including new camps in our efforts.

We engaged strong partners, POET and Novogaz, to make our project in Haiti a viable commercial success. In Latin America, we conducted a scoping trip to Guatemala to lay the groundwork for a new market for clean ethanol and stoves.

Our vision to create a network of microdistilleries in Nigeria dedicated to producing ethanol stove fuel was realized with the signing of new contracts for equipment.

2014 saw more health professionals calling for clean fuels, pointing to ethanol as one of the alternatives we need to tackle the problems of Household Air Pollution. Project Gaia representatives spoke at the American Public Health Association's annual meeting on how our efforts address health and the environment at their nexus. And finally, we completed and launched a rebranding campaign. The same Project Gaia, but with a new look and website meant to provide resources and advocate for clean alcohol fuels and stoves.

The global community is becoming increasingly interested in our solutions, and we couldn't have done it without all our supporters. **Thank you for joining us as we enter what is sure to be an exciting 2015!**

Sincerely yours,

A handwritten signature in black ink that reads "Harry Stokes". The signature is fluid and cursive, with a long horizontal stroke at the end.

Harry Stokes  
Executive Director







# ETHIOPIA HIGHLIGHTS

## StarStove Pilot Study

Conducted a 30-stove pilot study in Ethiopia to test the Dometic StarStove, designed to be the most affordable model yet

- Coordinated stove assembly, conducted safety trainings, field tests and focus group discussions
- Carried out monitoring and evaluation
- Identified key challenges/areas of improvement

## Nationwide Study to Determine Ethanol Scale-up Potential

Advanced groundwork on DFID-funded Strategic Climate Institutions Programme (SCIP), launched with Ethiopian government in October 2014

7,000 households interviewed across all of the regions in Ethiopia

- Engaged local and international experts in: feedstock cultivation, distillation, marketing, private sector, economic analysis

## Microdistillery

Finalized civil works and erection of 1,000 liter per day (LPD) distillery in Addis Ababa, Partnered with the Former Women Fuelwood Carriers Association to manage the distillery.

## Expansion with UN Refugee Agency

Led a pilot study in Sherkole camp in partnership with UNHCR examining the appropriateness of StarStove ethanol stoves among refugees

- Transported 1,000 liters of ethanol
- Conducted safety and assembly trainings
- Delivered 30 Dometic StarStoves to participating households







# HAITI HIGHLIGHTS

POET, one of the world's leading producers of ethanol, committed to Haiti

Donated 12,000 gallons of American ethanol to jumpstart Haiti's ethanol industry

PG and POET partnered with Novogaz, a local business to distribute ethanol fuel and stoves

Tested new StarStoves, with improved firepower



# NIGERIA HIGHLIGHTS



## CleanCook Stove Commercialization:

Facilitated the start of ALLGO CleanFuels Limited, a CleanCook stove sales and fuel distribution company in Lagos

## StarStove:

Conducted a 25-stove pilot study in Benin City, Nigeria to test the new StarStove, designed to be an economy model that is affordable for base-of-the-pyramid families

Carried out monitoring and evaluation

Identified challenges/areas for improvement

## Microdistilleries:

Assisted in the delivery of Green Social Bioethanol 1,000 LPD ethanol microdistillery in Ogbomosho.

Facilitated the purchase of four units of 2,000 LPD EMD for the Kogi State government.

Commenced feasibility studies that examine the economic viability, feedstock development, supply chain, and the business plan for the distilleries.





# ZANZIBAR HIGHLIGHTS

Completed a scoping study in early February with Ethio-Resources Group. Findings were favorable for the ethanol fuel and cooking.

Partnered with United Nations Industrial Development Organization and Zanzibar Sugar Factory to run a 120 stove pilot study.

Began initial phases in October, including hiring and training staff, creating the supply chain, establishing quality control for the ethanol, and meeting with government officials.



# GUATEMALA HIGHLIGHTS



Completed a scoping trip in July to determine potential for a market for ethanol fuel and stoves.

Plan to focus on Guatemala for a pilot study in 2015.

Cooked tortillas, a staple in Latin American countries, successfully on CleanCook.



## GUATEMALA FACTS:

Large ethanol producing country

PEOPLE ARE  
SPENDING BETWEEN  
\$0.40 - \$0.70 DAILY  
TO COOK WITH  
WOOD OR CHARCOAL



OVER  
**64%**  
OF THE POPULATION  
IS STILL COOKING  
WITH SOLID FUELS







# HEADQUARTERS

Partnered with Gettysburg College Office of Experiential Education to make possible a 14-day trek through the Ethiopian Highlands to help students and faculty learn more about the complex health and environmental impacts of cooking with biomass fuels.



Project Gaia became a Partner of the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants. PG was invited to take on the role of Actor in the Coalition by lead partners Nigeria and the Global Alliance for Clean Cookstoves.

PGI Executive Director Harry Stokes presented the research paper entitled "Micro distilleries plus Stoves: A Distributed Energy Strategy that Solves Supply and Demand" at the World Bioenergy Conference. The study was led by a team at the Duke Nicholas School for the Environment, combines PG and external research, and is based on the PG community stoves and fuel model.



PG launched  
new website  
and brand.

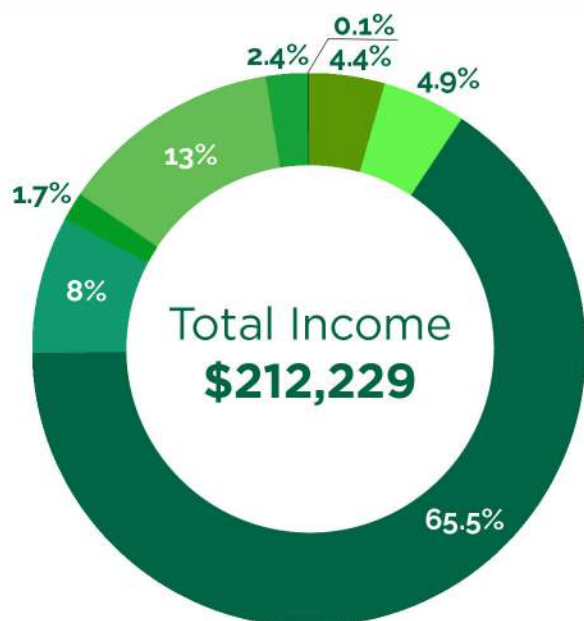
PG led two presentations at the 2014 American Public Health Association Conference in New Orleans regarding technologies to mitigate indoor air pollution mitigation and refugee health.

PG and Dometic featured in Partner Spotlight, Global Alliance for Clean Cookstoves.





# REVENUE

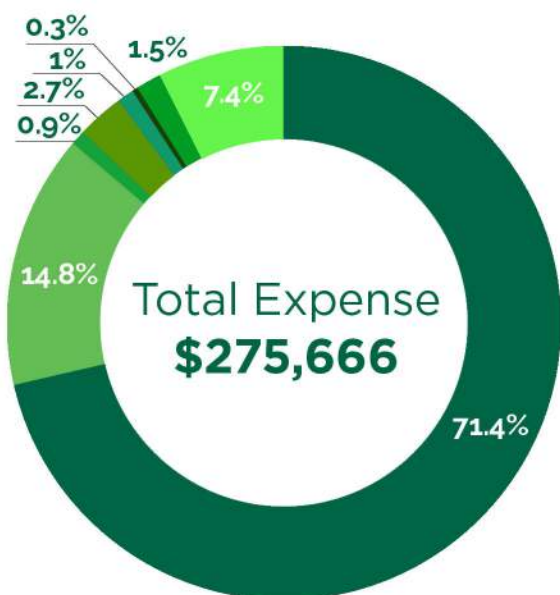


## Contributions

- Individual
- Grants
- CSR/Corporate
- In-kind Donations
- Fundraising Campaigns
- Services
- Contracts
- Other Income

Project Gaia received a grant from the Episcopal Church of Women of St. Michael's to carry out programs in Ethiopia. Corporations continued their support of PG activities as part of their CSR commitment. PG also mobilized support from 61 individuals through fundraising campaigns. Furthermore, in 2014, PG continued to provide services such as stove testing while also beginning work under contract with UNIDO in Zanzibar.

# EXPENSES



- Program Services
- Wages
- Employee Benefits
- General Operations
- Website Design
- Fundraising
- Other (taxes, insurance, etc.)
- Support to Gaia Association (Ethiopia)

2014 was a year of action for projects, with lots of support going to the field, including pilot testing of new stove models in Ethiopia, Haiti, and Nigeria. PG rebranded and launched a new website as well as continued to support Gaia Association in Ethiopia in their efforts both in the humanitarian and commercial sectors.



