

2016 PROGRESS REPORT CLEAN COOKING: key to achieving global development and climate goals





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# GUATEMALA

"I tried out some of the stoves at the demonstration event and I knew we had to get one. Since we purchased our new stove, we use a lot less wood and there's much less smoke. We save money, the air is better for my children, and my husband even told me one night that I no longer smelled like smoke, which made me very happy."

-AMALIA QUEXEL CAY, STOVE USER IN GUATEMALA



## INDIA

"Until recently we used solid fuels for cooking. This year, we got LPG. It is a whole new level of convenience for us. Before we used to have to sit out in the sun with a simple chulha using wood or charcoal. Now it is a lot easier and the food cooks faster. When cooking the old way, there used to be a lot of smoke and my eyes kept watering all the time. My sister and brother-in-law live in the neighboring village and they still use wood and charcoal for cooking. This is very inconvenient for them and I would really recommend using LPG to them and all my neighbors."

-SUDHA SHARMA, STOVE USER IN INDIA



#### UGANDA, NAKIVALE REFUGEE SETTLEMENT

"Without fuel, we have to collect wood from very far away so we can make a fire to cook with. Without light, it is very dangerous, and women are afraid to leave their homes after dark. When girls and women go far from the camp to get firewood for cooking, it can take many hours, and they face the possibility that they may be attacked. As a woman and as a refugee, I believe that we all should have light and cooking fuel. If we have light and fuel for cooking, we can work more, study more, and enjoy our time together more. And if we can do all that, I believe we will be able to do anything."

# **FROM THE CEO**

This was a year of both promise and increased challenges. The global community came together to sign the historic Paris Agreement at the end of 2015, and the Sustainable Development Goals are ushering in a new era of international development.

But 2016 also witnessed the most severe humanitarian crisis since World War II, with over 65 million people worldwide being forced from their homes by war and persecution. Most of those displaced still lack sufficient access to energy, which can cause tension between them and their host communities.

The threat of air pollution is also increasing. A recent report shows that 92% of the world's population live in areas where air quality levels exceed guidelines set by the World Health Organization.

The good news is that clean cooking is increasingly recognized as critical to addressing a broad range of global goals, from saving lives to mitigating climate change.

A major Alliance focus this year was on continuing to strengthen the sector and mainstream clean cooking as a key intervention. Together with our partners, we successfully advocated for the inclusion of clean cooking and household air pollution indicators to track progress on multiple SDGs, and ensured that clean cookstoves and fuels were on the agenda at this year's G20 Summit, Women Deliver Conference, and World Humanitarian Summit. More than 50 countries have now included clean cooking in their national climate plans.

This was also a year of many firsts. Following coordinated advocacy efforts in our focus countries, governments across Africa and Asia set new policies or enacted tax reductions that are enabling a stronger and more vibrant cookstoves and fuels market. India's unprecedented plans to connect 50 million households to cooking gas over the next three years are also moving forward rapidly, and are expected to deliver significant benefits locally and globally.

We are now seeing a clearer picture of the health benefits of clean cooking, as preliminary results from Alliance-supported research point to improved maternal health and a decrease in childhood pneumonia from reduced exposure to household air pollution. In response to these findings, several public health agencies, including UNICEF, are already recommending and incorporating clean cooking into their work. In another first, the Alliance worked with UNHCR to develop procurement guidelines that include evaluation of stove and fuel performance, affordability, usability, safety, and durability. This is an example of how organizations can adapt international standards to support their priorities and decision-making.

The good news is that clean cooking is increasingly recognized as critical to addressing a broad range of global goals, from saving lives to mitigating climate change.

The clean cooking sector is also becoming more cohesive and dynamic, with an expanding base of partners, many new entrants, and a growing variety of stoves and fuels available to the end user. I think it's safe to say that clean cooking is here to stay.

Of course none of this would be possible without our more than 1,600 partners, as well as the generous and consistent support of our donors, many of whom have been with us since our founding. We thank you.

While we move into 2017 with strong momentum, there is still much to do on our mission to make clean cooking affordable and accessible for all. Our work continues.



Juster Mullet

Radha Muthiah Chief Executive Officer

# 2015 SECTOR RESULTS AND MARKET TRENDS

Each year the Alliance invites organizations working in the sector to share their annual sales and distribution numbers. This self-reported data is compiled and published as an important tool to help track and measure progress toward increasing access to and adoption of cleaner, more efficient cookstoves and fuels.



The sector has evolved considerably since the Alliance launched, as has the ability to gather quality data. **Based on results reported by partners this year and careful analyses of the trends in available data, an estimated 20.6 million stoves and fuels were distributed in 2015, of which 13 million (63%) were clean and/or efficient.**<sup>1</sup> **Cumulatively, an estimated 82 million stoves and fuels, including 53 million clean and/or efficient, have been distributed since 2010.** The data also indicate that increasing proportions of clean and efficient stoves and fuels are being distributed each year—an encouraging trend that is critical to achieving the Alliance's objectives.

As is typical with voluntary reporting, data completeness and consistency remain a challenge each year. While many longstanding partners have reported consistently, not all organizations in the sector have reported each year.

At the same time, the Alliance's growing partner base is reflected in the proportion of new respondents each year (50% in 2015). New companies have entered the market, while others have expanded or downsized. Although these changes naturally create some uncertainty in the overall numbers, the Alliance has leveraged all of the information collected this year and in previous years to analyze trends and paint a broader picture of sector progress.<sup>2</sup>

1 The definitions of clean and efficient are aligned with the interim performance guidelines in the ISO International Workshop Agreement (IWA). For this report, stoves and fuels that meet Tier 2 for efficiency are considered efficient and those that meet Tier 3 for indoor emissions are considered clean for health.

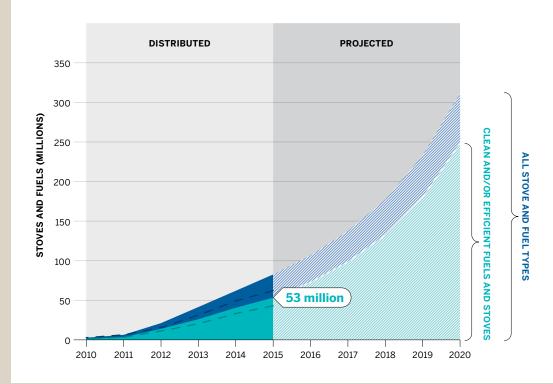
2 Aggregated trends from Alliance partners who have reported consistently were used to estimate distribution trends in the sector. Detailed technical documentation of estimation methodology is available at www.cleancookstoves.org/sr2015.

# DISTRIBUTION OF CLEAN AND EFFICIENT STOVES AND FUELS

Based on conservative estimates, trends in reported data suggest that 100 million households will be reached with clean and/or efficient stoves and fuels ahead of the Alliance's original 2020 goal.

Figure 1 below illustrates cookstove and fuel distribution since 2010, based on data reported from partners. Using information voluntarily reported by partners since 2012, the Alliance was able to model unreported activity to estimate distribution to date. This graph illustrates the number of non-traditional or improved stoves and fuels distributed through 2015, and the portion of those that meet the criteria for clean and/or efficient. The Alliance estimates that 82 million cookstoves and fuels have been distributed since 2010, 53 million of which are clean and/or efficient. Based on current trends in the sector, the Alliance projects that going forward, the majority of cookstoves and fuels being distributed will meet the clean and/or efficient criteria, as reflected by the increasing height of the turquoise shaded area every year through 2020.

#### FIG. 1: CUMULATIVE GLOBAL STOVE AND FUEL DISTRIBUTION: REPORTED AND ESTIMATED DISTRIBUTION FROM 2010 TO 2015, AND PROJECTED DISTRIBUTION THROUGH 2020



This area graph represents all stove and fuel types. The turquoise area represents the subset of those stoves and fuels that are **clean** and/or efficient. The solid area from 2010 to 2015 shows the estimated distribution to date, and the shaded area from 2015 to 2020 shows the projected distribution. The dashed lines from 2010 to 2015 represent the reported distribution of all stoves (blue) and clean and/or efficient stoves (turquoise) from which the estimated totals were derived. Distribution of stoves and fuels by organizations who are not Alliance partners or have never reported data is not included.

# PUTTING THE 100 MILLION BY 2020 GOAL IN PERSPECTIVE

The Alliance's initial 100 million by 2020 goal has been helpful to focus the sector and test the potential of a market-based approach. Tracking toward a quantifiable goal has also helped to clarify the relationships between production, distribution, and adoption. But this goal is only one part of a complex story.

Factors such as functionality, durability, and performance of stoves and fuels in household settings influence adoption of clean and efficient cooking technologies. To enable 100 million households to adopt clean and/or efficient cookstoves and fuels, many more than 100 million need to be distributed. Efforts to improve stove design and performance are helping to close the gap between distribution and adoption, but it is critical that the sector continue driving adoption at the household level. In addition to tracking distribution, it will be critical to monitor and evaluate the drivers of adoption as we progress toward the goal of universal adoption of sustainable energy by 2030.

# ADVANCEMENTS IN STOVE PERFORMANCE

Improved and more consistent testing data is revealing promising trends in stove performance over time. Since 2013, there has been an encouraging shift toward the production and distribution of higher-performing biomass cookstove options. Combined with the increase in the distribution of clean fuels (including biogas, ethanol, and LPG), the overall market is also shifting toward higher-tiered stoves and fuels over time.

#### FIG. 2: IMPROVING PERFORMANCE: REPORTS SHOW INCREASE IN PROPORTION OF HIGHER-PERFORMING STOVES IN THE MARKET EVERY YEAR\* EFFICIENCY TIER 0 TIER 1 2013 TIFR 2 2014 TIER 3 2015 TIER 4 (NON-BIOMASS) INDOOR EMISSIONS 2013 2014 2015

60%

70%

80%

90%

100%

Efficiency is a marker for potential environmental benefits and Indoor Emissions is a marker for potential health benefits. The Alliance rates stove performance according to the IWA Tiers of Performance. Tiers 0-4 range from lowest- to highest-performing stoves.

\* Includes all stoves reported for which there was sufficient data to characterize performance

40%

50%

# ENTERPRISE PIPELINE

20%

0

10%

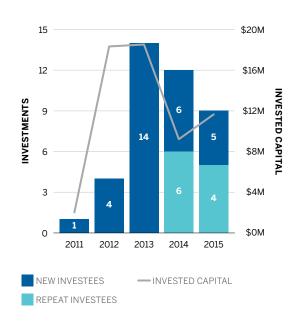
Over the last five years, cookstove and fuel companies have raised nearly US\$60 million of debt and equity finance. While both the number of companies raising investments and the amount of capital invested peaked in 2013, many companies received substantial follow-on investment in 2014 and 2015 based on the viability and scalability of their business models (Figure 3).

30%

Companies that have support grants from the Alliance have also shown meaningful growth. Grantees of the Alliance's Spark Fund achieved an average increase of 125% in revenues over their two-year grant periods. This demonstrates that a conducive market environment, well-conceived business model, strong management capability, and appropriate capitalization can promote enterprise growth. Spark Fund grantees have leveraged Alliance funding to attract more than US\$13 million in follow-on investment, which equates to more than 3x private capital leverage on the Alliance's grant funding.

Though carbon finance has driven significant capital into the clean cooking sector historically, this market remains challenging given limited demand and therefore downward pressure on pricing from a limited number of offset buyers such as development agencies and multinationals.

#### FIG. 3: NUMBER AND AMOUNT OF COOKSTOVE SECTOR INVESTMENTS PER YEAR (IN US\$)



# PROJECTING THE IMPACT OF OUR WORK

The health, social, environment, and climate benefits of clean and efficient cooking depend on technology and fuel performance, degree of sustained use, and number of households reached. These three areas (performance, adoption, and scale) are the focus of the Alliance's marketbased strategy. The Alliance has developed evidence-based models to estimate potential impacts under scenarios with major advances in each of these three areas. For example, using clean-fuel burning stoves exclusively is more likely to result in improved air quality and associated benefits than using them only occasionally. The examples below illustrate some of the results that can be achieved through promoting performance, adoption, and scale of clean cooking technology.



# **BEYOND 2015**

Reporting to date has focused on stove and fuel production and distribution. Moving forward, the Alliance intends to broaden its efforts to better monitor and evaluate the health of the clean cookstoves and fuels sector. Such factors include an enabling policy environment; reduced trade barriers and tariffs; consistent availability of a range of affordable, high-performing products that satisfy local cooking needs; consumer awareness and demand; and better integration of women and girls into the value chain. Taken together, these factors echo the Alliance's threepronged approach (see page 10) and help create a more comprehensive representation of market health. The Alliance and its partners have made strides in each of these areas, but a more comprehensive assessment of market health will require a substantially greater investment in data collection on a broader set of market indicators with longer timelines. This would include an increased focus on the user perspective, such as the role of behavior change communication and gender in fostering adoption. It would also involve assessing barriers and enablers at the household, community, institutional, and policy levels, and tracking the impact of new investments in the sector over a longer time horizon.

# STRENGTHENING THE SECTOR

The Alliance's market-based approach is helping create a more cohesive and dynamic clean cooking sector. Using a three-pronged model focused on increasing demand, strengthening supply, and fostering an enabling environment, the Alliance works with hundreds of partners from around the world to establish a market capable of enabling 100 million households to adopt clean and efficient cookstoves and fuels by 2020.

Continuing the momentum begun during its first six years, the Alliance has made significant progress over the past 12 months.



#### ENABLE MARKETS

Standards & Testing Research Advocacy & Policy



#### STRENGTHEN SUPPLY

Innovation Capacity Building Financing Inclusive Value Chain



#### **ENHANCE DEMAND**

Awareness Accessibility Affordability Behavior Change



# FOSTER AN ENABLING ENVIRONMENT

Leveraging research, advocacy, standards, and policy change to facilitate further sector growth

#### IMPROVING CHILDREN'S HEALTH



Researchers have finalized three Alliance-funded studies that examine the impact of cooking with advanced biomass stoves and liquid fuels on children's health. Emerging evidence suggests that reducing exposures to household air pollution not only promotes improved fetal development and child health, but can also protect against development of chronic respiratory conditions in adulthood. The findings are expected to more clearly establish the health benefits of clean cooking and attract additional engagement and resources to address household air pollution.

#### PRESCRIBING CLEAN COOKING FOR HEALTH



In an effort to better engage clinicians worldwide in the fight against household air pollution (HAP), the Alliance hosted the first certified HAP-focused continuing medical education training for public health professionals in Ghana. More than 60 physicians, public health practitioners, and researchers participated in the training on how best to address HAP during individual patient-provider interactions. HAP-focused training represents a significant behavior change communication opportunity that could help clinicians better recognize health issues caused by exposure to HAP.

#### ADDRESSING OUTDOOR AIR POLLUTION



New Alliance-funded research in India and China shows that outdoor air pollution can't be solved without addressing emissions at the household level. In India researchers found that 30% of outdoor particulate matter pollution is from household emissions. A study in China showed that efforts to reduce household air pollution have been considerably more effective at reducing overall pollution than efforts to regulate emissions from the transportation and power sectors. Alliance partners are leveraging these findings to ensure that efforts to reduce air pollution include addressing household emissions.

#### CHANGING POLICIES TO ENABLE MARKETS AND DRIVE ADOPTION



Thanks to coordinated advocacy efforts, governments across Africa and Asia are taking steps to enable a stronger and more vibrant cookstoves and fuels market, including Kenya's elimination of a 16% tax on cooking gas and Bangladesh's 10% reduction in its import duty on improved cookstoves. Leaders in India and Ghana have approved programs to dramatically increase distribution of clean cooking gas. Officials in Nigeria and Uganda are also examining changes in subsidies, tariffs, and taxes that could further spur the market for clean cooking technologies.

# EDUCATING CONSUMERS WITH LABELS



To help consumers better understand the quality of the cookstoves and fuels they purchase, the Alliance is helping develop national standards for labeling. In Ghana and Uganda, draft labels are being tested to determine how they can raise consumer awareness and influence buying decisions. Government ministries in these countries are also developing monitoring, verification, and enforcement plans that will ensure proper usage of the labels. Based on the lessons learned in these first two countries, the Alliance plans to launch standards and labeling programs in additional focus countries in the coming years.

# STRENGTHEN SUPPLY

Boosting innovation, capacity, and investment

#### **INVESTING IN THE SECTOR**



Building on the success of its enterprise strengthening programs such as the Catalytic Small Grants and the Spark Fund, the Alliance is developing a US\$15 million investment facility called Spark+. The new fund will provide risk-tolerant capital for businesses which manufacture and distribute clean cooking technologies. The facility will be housed by the Carbon Initiative for Community Impact, a non-profit entity created with Deutsche Bank to house the Working Capital Fund it manages. With the Alliance's successful Spark Fund having deployed grants to companies that have raised more than US\$13 million in follow-on investment, Spark+ will continue to build the investment pipeline with an increasingly sustainable, market-based orientation.

#### TAKING COMPANIES TO SCALE



This year, the Alliance announced the first round of funding from the US\$4 million Clean Cooking Working Capital Fund. Financing was awarded to two stove manufacturers to be used as working capital to expand local production, distribution, and customer support in existing and new markets in sub-Saharan Africa, India, and Latin America. The Fund will continue to serve as a market accelerator to spur development of the clean cooking supply chain in low-income communities by supporting enterprises that face difficulty accessing traditional sources of capital.

#### FUELING GROWTH IN THE SECTOR



Identification and extension of promising fuel supply chains have been a critical part of the Alliance's ongoing efforts. The Alliance has analyzed clean and/or efficient fuel options in each of its focus countries and developed clear strategies that both highlight the impacts from use of these fuels and support their greater reliability and availability. The Alliance is seeing progress with pellets in Bangladesh and China and with LPG in Ghana and India.

#### BOOSTING FUEL PRODUCTION AND DISTRIBUTION



Strengthening fuel supply chains requires supporting fuel producers and distributors. The Alliance provides capacity building to fuel-focused enterprises by working with them to evaluate and analyze their fuel value chain, set strategic targets, and optimize those targets in a sustainable way. Enterprises that have received this support include briquette manufacturers in Cambodia and Uganda, pellet distributors in Kenya, biogas digester producers in Uganda, and ethanol producers in Nigeria. Continued support from the Alliance helps fuel grantees restructure their supply chains, scale up production, and use the results to effectively communicate with clients and investors.

# INCREASE DEMAND

Driving uptake through awareness, accessibility, and behavior change

#### BUILDING AWARENESS AND CHANGING CONSUMER BEHAVIOR



2016 marked the ramp-up of the Alliance's awareness and behavior change communication (BCC) program, which aims to increase demand for clean cookstoves and fuels by reaching millions of people with messaging about clean cooking. In collaboration with national alliances, the Alliance implemented BCC campaigns in Bangladesh, Ghana, Guatemala, and Uganda that delivered high-impact, evidencebased communications designed to influence consumer purchasing decisions and encourage the consistent use of cleaner cooking options. Through catchy radio ads, lively demonstrations, and even a soap opera, these campaigns reached millions of households, with partners reporting increased sales.

#### LAUNCHING LARGER-SCALE INTERVENTIONS



Seeking to expand on the progress achieved in its initial BCC campaigns, the Alliance awarded grants to four recognized leaders in BCC and health to design and implement larger-scale interventions in Bangladesh, Kenya, and Nigeria. These interventions will take place over two years and will employ a variety of outreach tools, communication channels, and creative concepts, including a new cooking-focused reality TV show, radio programming, mobile messaging, roadshows, and street theater.

#### BOOSTING CONSUMER MARKETING AND COMMUNICATIONS



To help businesses in the sector enhance their marketing and communications programs, the Alliance launched the Enterprise Marketing Fund (EMF). The EMF is aligned with Alliance efforts to increase consumer demand at scale, and awarded its first round of funding to 11 organizations in Bangladesh, Guatemala, and Kenya. Grantees leveraged the funds to build brand recognition through designing and producing better collateral and conducting promotional campaigns via radio, live demonstrations, community level outreach, and other channels. In all three countries, the grantees coordinated their efforts with BCC interventions taking place at the same time. Plans are underway to launch the EMF in additional focus countries in the coming year.



# PRIORITIZING CLEAN COOKING AT THE GLOBAL LEVEL

From the ongoing implementation of the Sustainable Development Goals and the Paris Agreement on Climate, to inclusion in global convenings such as the G20 Summit and the World Humanitarian Summit, the Alliance is highlighting the power of clean cooking to help achieve the world's development objectives.

## SUSTAINABLE DEVELOPMENT GOALS

In 2015, 193 nations adopted the Sustainable Development Goals (SDGs). Designed to drive progress over the next 15 years in areas of critical importance for humanity and the planet, these 17 global goals aim to address poverty, inequality, disease, climate change, and a host of other development challenges. The Global Alliance for Clean Cookstoves has worked with partners to advocate for the prioritization of household energy access and clean cooking as part of this new development agenda.

As a result of the efforts of the Alliance and its partners over the past few years, the SDG measurement framework now includes strong indicators on ambient and household air pollution, unpaid work, and cooking energy. Clean cooking can directly help deliver progress across 10 of the 17 SDGs, while contributing to an enabling environment for achieving the entire Agenda 2030. The Alliance is continuing to work to ensure that clean cooking remains a core part of SDG implementation.



"As countries seek to deliver on the ambition of the SDGs, we must seize every opportunity to implement crosscutting development solutions that address disease, climate change,

and poverty. Clean cookstoves and alternative fuels offer an effective means for delivering dramatic improvements in health, air quality, and livelihoods, while providing women with critical time savings and safety benefits."

- AMINA MOHAMMED, FORMER SPECIAL ADVISER TO UN SECRETARY-GENERAL BAN KI-MOON ON POST-2015 DEVELOPMENT PLANNING AND MINISTER OF THE ENVIRONMENT FOR NIGERIA

# CLEAN COOKING CRITICAL TO ACHIEVING THE GLOBAL GOALS

#### Goal 1

Clean cooking is part of basic services necessary to lead a healthy and productive life and saves households time and money.

#### Goal 2

Efficient cookstoves reduce the amount of fuel needed to cook, thus reducing the burden on families who would otherwise have to collect it, buy it, or trade their food for it.

#### Goal 3

Reducing smoke emissions from cooking decreases the burden of disease associated with household air pollution and improves wellbeing, especially for women and children.

#### Goal 4

Children, particularly girls, are often kept out of school so that they can contribute to household tasks, like cooking and collecting fuel.

# Goal 5

Unpaid work, including collecting fuel and cooking, remain a major cause of gender inequality.



#### Goal 7

Clean cooking is essential to addressing energy poverty and ensuring sustainable energy security for billions of people.

## Goal 8

Energy access enables enhanced productivity and inclusive economic growth. The clean cooking sector offers many job opportunities.

#### Goal 11

Clean cooking addresses household and ambient air pollution, resource efficiency, and climate vulnerability.

## Goal 13

Up to 25% of black carbon emissions come from burning solid fuels for household energy needs. Clean cooking solutions address the most basic needs of the poor, while also delivering climate benefits.

### Goal 15

Up to 34% of woodfuel harvested is unsustainable, contributing to forest degradation, deforestation, and climate change.

# PRIORITIZING CLEAN COOKING AT THE GLOBAL LEVEL

# MITIGATING CLIMATE CHANGE WITH CLEAN COOKING



The Alliance and its partners have been working with policy-makers and civil society to share the evidence on the important connection between inefficient cooking and climate change, and to advocate for the inclusion of clean cooking interventions in national, regional, and global climate action plans. As a result of the sector's advocacy, clean cooking is increasingly understood as a means of mitigating climate change in an inclusive way. More than 50 countries included clean cooking in their national climate plans to realize the Paris Agreement. The Alliance is working with a diverse range of ministries and multilateral organizations, such as UNICEF and the African Development Bank, to ensure the full integration of clean cooking solutions into mitigation efforts.

# RECOGNIZING CLEAN COOKING AS A G20 PRIORITY



Together with support from partner governments and Sustainable Energy for All, the Alliance has made important strides to ensure the G20 includes clean cooking as a priority energy access intervention that results in significant health and climate co-benefits. In 2016, the G20 Energy Ministerial process resulted in two major outcome documents with a significant focus on clean cooking: the "G20 Energy Ministerial Meeting Beijing Communiqué" and the "Enhancing Energy Access in Asia and the Pacific" action plan. These multilateral policy statements directly call for more attention and support for clean cooking interventions as an integral means of ending energy poverty and enabling sustainable development.

# BOOSTING ENERGY ACCESS FOR REFUGEES



In partnership with former High Commissioner for Refugees António Guterres, now Secretary-Generaldesignate of the UN, the Alliance helped UNHCR to launch its Global Strategy for Safe Access to Fuel and Energy, a plan to enable millions of displaced people to have regular and reliable access to cooking fuel and energy without threat to their lives or wellbeing. In addition, following commitments made at the 2016 World Humanitarian Summit, the Alliance worked with humanitarian agencies to set minimum performance standards for cookstoves procured in emergencies and camp settings. The Alliance also commissioned research to better understand which types of cooking interventions are most likely to reduce the risk of violence for women and girls during fuel collection.

# EMPOWERING WOMEN THROUGH CLEAN COOKING

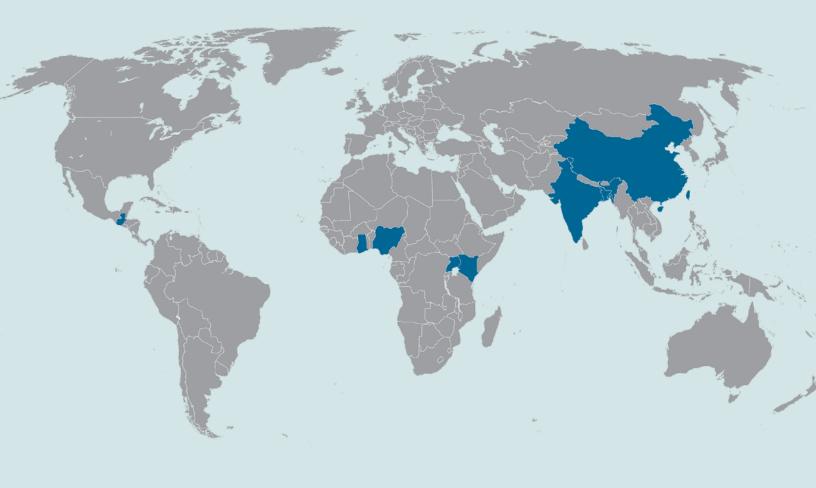


Access to and use of clean cookstoves and fuels continues to gain recognition as a driver of gender equality. This year, UN Women announced a powerful partnership with the UN Environment Program to remove barriers that female energy entrepreneurs face, which will help boost innovation and job creation for women in the sector. To better measure the impacts from programs like this, the Alliance and the International Center for Research on Women developed a tool that helps organizations improve monitoring of their social and economic effects and quantify the difference their work is having on the lives of their customers, employees, and communities. The Alliance has also worked to increase investment in women's energy entrepreneurship, through initiatives such as ENERGIA's Women's Economic Empowerment program and the U.S. State Department's wPOWER partnership, which increased access to financing for gender-informed business models.

# PROGRESS FROM ALLIANCE FOCUS COUNTRIES

As part of a strategy to maximize impact and strengthen national markets for clean cooking, the Alliance continues to concentrate market-development efforts in eight countries: Bangladesh, China, Ghana, Guatemala, India, Kenya, Nigeria, and Uganda. These focus countries form the foundation for the Alliance's work to promote a thriving market for clean and efficient cookstoves and fuels.

The following sections showcase some of the major highlights in these countries over the past year.



There has been significant progress in Bangladesh this year, in terms of its demand and supply-strengthening activities as well as efforts to foster a more sector-friendly enabling environment. With strong advocacy from the Alliance and its partners, the government in Bangladesh reduced by 10% its import duty on improved cookstoves, making cooking technologies more affordable to consumers. The Alliance also worked with public and private sector partners to launch a behavior change communication campaign to drive awareness and adoption of cleaner cookstoves and fuels. The campaign, which brings together leading sector companies under the "Modern Cookstoves" brand, includes government-sponsored digital communications outreach, door-to-door visits, market demonstrations, street theater, mobile audio-visual program shows, outdoor branding, and radio spots. The campaign has reached more than 15 million consumers this year. As part of efforts to enhance Bangladesh's market for cooking technologies, the Alliance awarded three Catalytic Small Grants and four Enterprise Marketing Fund grants to companies working in the sector. The support is enabling these companies to invest in production, distribution, human resources, and marketing, and receive capacity-building support and training on marketing and financial management.

**HOUSEHOLD ENERGY PLATFORM:** The Alliance partnered with the Bangladesh government's Sustainable Renewable Energy Development Authority (SREDA) to launch the Household Energy Platform. A public-private partnership made up of representatives from the private sector, civil society, academia, and multiple government ministries, the Household Energy Platform is helping to prioritize the needs of the sector based on broader understanding and interest from key stakeholders. The platform already has more than 40 members, and is enabling greater coordination between the Ministry of Health and Family Welfare, the Ministry of Women and Children Affairs, and the Department of Environment.



The Alliance's market-based approach and activities to support the Government of Bangladesh to achieve the Country Action Plan are commendable. Our government is taking measures to promote clean fuels like LPG for cooking purposes. SREDA is also working to promote clean and efficient biomass stoves and

alternate renewable fuels, so that people can gradually pull out from the traditional ways of cooking which are harmful to the health and environment. As a lawmaker and business man I support the Alliance's advocacy policy and market-based approach to achieve the goal of the Country Action Plan for Clean Cookstoves in Bangladesh."

-MR. TAJUL ISLAM, CHAIRMAN, PARLIAMENTARY STANDING COMMITTEE FOR MINISTRY OF POWER, ENERGY AND MINERAL RESOURCES

# FOCUS COUNTRY: BANGLADESH





# BY THE NUMBERS:

15 million households have been reached via behavior change campaign

7 grants awarded to support companies in the sector

10% reduction in Bangladesh's import duty on improved cookstoves

# FOCUS COUNTRY: CHINA



Together with local partners, the Alliance launched a series of clean cooking pilots to increase production and distribution of cleaner, more efficient fuels. As a result, more than 75 new fuel distributors started operations and an additional 250,000 households gained access to clean cooking fuels. This is part of the country's shift from dependence on coal to alternative fuels. An international biomass pellet study tour also was hosted in Hebei province, where entrepreneurs and experts exchanged knowledge and outlined programs to increase fuel production. Best practices and lessons learned from the pilots and study tour are being used in the creation of a new China National Clean Stove and Fuels Program. This has prompted the Chinese government to add a clean cookstove provision to the country's 13th Five-Year Plan, ensuring cooking and household air pollution will receive priority funding moving forward.



**ALLIANCE CHINA COUNCIL:** To attract investment, spur broader engagement from the private sector, and highlight China's expertise in addressing the clean cooking issue, the Alliance launched a China Council, which is bringing together corporate CEOs, venture capitalists, influential leaders, and celebrities to further raise awareness around clean stoves and fuels. The Council is being led by Madam Zhao Xinzhu, Chairwoman of Zhongyi Group, with support from Alliance Leadership Council members Xie Zhenhua, Special Representative on Climate Change of the People's Republic of China, and Wang Shi, Founder and Chairman of Vanke.

## BY THE NUMBERS:

250,000 consumers reached through new pilot projects

60 additional retailers/ distributors developed

3 biomass pellet facilities established

"The Alliance has made great strides in building a market for clean and efficient cookstoves and fuels in China. I am excited to help champion their efforts to reduce household air pollution, a particularly significant health challenge for women and children in the developing world. As an entrepreneur and climate activist,



I support the Alliance's market-based approach and its strategy to boost entrepreneurship and inclusive, sustainable growth in the cookstoves and fuels sector."

-WANG SHI, FOUNDER AND CHAIRMAN OF THE BOARD, VANKE, AND ALLIANCE LEADERSHIP COUNCIL MEMBER Ghana has seen steady advancement in transforming the cookstoves and fuels sector in 2016. As part of the government's efforts to reduce deforestation and provide a cleaner cooking fuel, Ghana's Petroleum Minister Hon. Emmanuel Buah launched a program to provide households with cooking gas connections. The program has distributed 70,000 LPG cylinders to families across six regions. This work is complemented by Alliance efforts to drive demand for cleaner biomass cookstoves. In addition, through a partnership with World Education International and the Ministry of Education, the Alliance has launched a project to teach students the benefits of clean cookstoves and fuels. The project is implementing a curriculum that will be evaluated to gauge impact and scalability, with plans to expand the program across Ghana and internationally. The Alliance is also working with an international coalition to integrate HAP into the air quality management program for Accra, Ghana's capital. Once completed, the system will enhance air pollution monitoring and better allocate the resources needed to address it. Leveraging lessons learned in Ghana, the Alliance expects to use this platform in other cities throughout the developing world.

**BEHAVIOR CHANGE COMMUNICATION:** Together with a host of local partners, the Alliance launched the Campaign for Improved Cookstoves, dubbed "Obaatan Boafo" or "Mother's Helper," to encourage urban and peri-urban dwellers who depend on biomass and charcoal for cooking to switch to more efficient cookstoves. The new stoves burn fuels more efficiently and effectively, reducing smoke emissions and the amount of money spent on fuel, while also helping to protect the environment. The campaign, focusing on the message "Cleaner, healthier, easier cooking, every day," included three key components: a Women's Advocacy Campaign, a series of Community Market Activations, and a Radio Awareness Campaign targeting women in Accra and Kumasi.

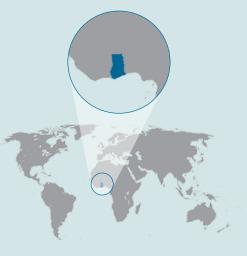


"The medical community is a tremendous untapped resource in the fight against household air pollution. By integrating household air pollution into medical research, curricula and clinical training programs, which the Alliance's work is helping achieve, health providers can play a critical role in identifying

those affected and advising individuals and families on strategies for improving the environmental conditions in their home."

-DR. GLORIA J. QUANSAH ASARE, DEPUTY DIRECTOR-GENERAL, GHANA HEALTH SERVICE

# FOCUS COUNTRY: GHANA





# BY THE NUMBERS:

70,000 new cooking gas connections under the government's new LPG program

3,500,000 consumers reached via the behavior change communication campaign

+60 medical professionals trained to better recognize health impacts of cooking

# FOCUS COUNTRY: GUATEMALA



In Guatemala, work this year focused on supporting the sector, raising awareness, and boosting consumer access to clean cookstoves and fuels. Together with the National Program for Competitiveness (PRONACOM), the Guatemalan Ministry of Environment and the Inter-American Development Bank, the Alliance is working on a new US\$13 million Nationally Appropriate Mitigation Activities Facility to accelerate consumer access to clean cooking solutions. The first phase, which is currently underway, focuses on generating microcredit options for clean cookstoves and fuels, supporting stove testing, and conducting market research. To boost awareness efforts, Guatemala's First Lady Patricia Marroquin became a public advocate for clean cooking, kicking off her work by helping launch a program to equip kitchens in 200 schools with clean cookstoves. The program will also educate students on the hazards of cooking with traditional fires and the benefits of cleaner, more efficient options. The Alliance also led efforts to open Guatemala's first stove store. Called "Estufas Mejoradas y Mas" (Improved Stoves and More), the store is run by a group of women entrepreneurs working in the sector and is supported by the Municipal Women's Office.



**BEHAVIOR CHANGE COMMUNICATION:** To boost cookstove awareness and sales, the Alliance launched a behavior change campaign to reach 350,000 consumers in the state of Sacatepéquez. The campaign included market activations, digital media outreach, and marketing messages distributed via flyers, local cable, and radio. A nine-chapter radio novela was developed to aid in creating links between open fires and challenges that the women face every day while preparing meals. The novela's final episode was performed live in three of the state's largest cities, driving in-person sales and promotions. The campaign will serve as a platform for other regions of Guatemala.

# BY THE NUMBERS:

US\$13 million toward the Nationally Appropriate Mitigation Activities Facility launched to accelerate consumer access to clean cooking solutions

200 schools to be equipped with cleaner, more efficient cookstoves under new government-supported program

350,000 consumers reached via the behavior change communication campaign "Cooking is so much nicer now with our new stove — faster and there's no smoke. My wood lasts longer too. We had to save our money to buy it, but I'm so glad we did."

-ERICA DE XAR, WHO LEARNED ABOUT CLEAN COOKING AS PART OF THE ALLIANCE BEHAVIOR CHANGE CAMPAIGN



India has seen unprecedented progress this year on scaling clean cooking. The Indian government announced plans to connect 50 million households below the poverty line to cooking gas by 2019. Thus far, nearly 14 million households have been connected to cooking gas, and the Alliance is in active discussions with the Indian government on efforts to increase consumer uptake. The Alliance has also engaged with the Ministry of Health and Family Welfare, in collaboration with UNICEF and WHO, to develop a strategy for including clean cooking as part of India's integrated Action Plan for Prevention of Pneumonia and Diarrhea. In keeping with the Alliance's efforts to stimulate the cookstove supply chain, the first round of funding from the US\$4 million Working Capital Fund was awarded to cookstove manufacturers to support the expansion of local operations in India. In addition, with support from Narayana Murthy, Chairman of Infosys, the Alliance launched the India Council to bring together corporate CEOs, venture capitalists, influential leaders, and celebrities from across India to further raise awareness around clean cooking, attract investment, spur broader engagement from the private sector, and highlight India's expertise in addressing the clean cooking issue.

**ADDRESSING INDIA'S AIR POLLUTION:** India is home to some of the world's most polluted cities, and new Alliance-funded research shows that household air pollution is a major contributor. By evaluating the impact of household energy consumption on 640 districts across India, researchers found that almost 30% of the country's outdoor air pollution is due to household energy combustion. In some districts, household air pollution contributes up to 50% of outdoor air pollution, making a clear case that reducing outdoor air pollution requires addressing air pollution at the household level as well.

"We have long known of the health impacts of cooking in India, where far too many people still cook with heavily polluting fuels. The Ministry of Health & Family Welfare, in collaboration with concerned ministries and stakeholders, is helping to mitigate the impact of air pollution on health. One of

the proven solutions is increasing the use of safer, cleaner fuels and stoves for cooking. We're glad that partners like the Global Alliance are making efforts in this important endeavor."

-DR. DAMODAR BACHANI, DEPUTY COMMISSIONER, MINISTRY OF HEALTH AND WELFARE

# FOCUS COUNTRY: INDIA





# BY THE NUMBERS:

50 million households to receive cooking gas connections under new LPG program by 2019

30% of India's outdoor air pollution is caused by household emissions

US\$1.2 billion allocated for cooking gas program for the poorest households

# FOCUS COUNTRY: **KENYA**



As part of efforts to create a more enabling environment, the Alliance has worked with local partners and the Clean Cookstoves Association of Kenya to encourage government officials to remove or reduce taxes and tariffs that impede the growth of the clean cooking sector. The government has also prioritized clean cooking as a key intervention for realizing its emissions reduction target under the Paris Agreement. Working with local and international partners, the Alliance is helping to create a labeling program for clean cooking technologies. The program will provide consumers with easy-to-understand information on stove and fuel performance to help them make informed purchasing decisions. Program outcomes will be monitored closely as a potential foundation for similar labeling initiatives in other countries. Broadening its support of the sector in Kenya, the Alliance has also awarded funding to multiple enterprises, including three Catalytic Small Grants to boost capacity, three grants from the Alliance Enterprise Market Fund for brand-building and marketing efforts, and support to two women-owned businesses from the Alliance's Women's Empowerment Fund.



# **KENYA DROPS TRADE, TAX BARRIERS:** The Kenyan government has taken concrete steps toward increasing adoption of cleaner, more efficient cookstoves and fuels. In its 2016-2017 budget, the government announced the removal of the 16% value added tax (VAT) on LPG. The VAT had increased the cost of LPG, hindering the uptake of a cleaner-burning cooking fuel. Officials also announced the simultaneous increase in the cost of kerosene, disincentivizing its use while making LPG more affordable. The government also reduced the import duty on efficient cookstoves from 25% to 10%, and placed a zero-rating VAT on clean cookstoves, raw materials, and their accessories in an effort to make the cooking technologies more affordable.

# BY THE NUMBERS:

100% reduction of excise duty on denatured ethanol for cooking and heating

10% increase in cost of kerosene

8 enterprises supported through Alliance grants programs

"The Global Alliance has actively engaged the Kenyan government to ensure that all Kenyans have access to clean cooking. I look forward to continued collaboration in taking the actions elaborated in the Kenya Sustainable Energy for All Action Agenda to the next level to realize this aspiration."



-FAITH WANDERA-ODONGO, DEPUTY DIRECTOR OF RENEWABLE ENERGY, MINISTRY OF ENERGY AND PETROLEUM, KENYA Despite a challenging environment, Nigeria continues to see progress in supporting a more robust clean cooking sector. The Alliance has been in active discussions with the Ministry of Environment to support government incentives to increase the use of clean fuels such as LPG and ethanol for cooking. In addition, the Alliance has awarded a grant from its Clean Cooking BCC Fund to carry out a large-scale behavior change communication intervention to motivate women in Nigeria to switch from kerosene to LPG for cooking. The campaign will launch early next year, and will include household visits by outreach workers as well as TV and radio campaigns that will also reach audiences in neighboring states. This intervention comes at an opportune time in Nigeria, as the government recently lifted a long-time subsidy for kerosene. In addition, Nigerian Senate President and Alliance Leadership Council member Abubakar Bukola Saraki convened a meeting of sector stakeholders in October and announced plans to pursue legislation to expand access to clean cooking energy in the country.

**PROGRAM TO ADDRESS DEFORESTATION:** In Katsina State, the Alliance is working in partnership with the European Union, Oxfam, and the International Center for Energy, Environment and Development to reduce firewood dependency. The joint program provides support to women-owned enterprises and conducts business development training for local entrepreneurs on the production and marketing of a more consumer-friendly, fuel-efficient stove.

# FOCUS COUNTRY: NIGERIA







"It is a fact that apart from saving lives, the use of clean cookstoves would also help to create jobs for our people. We must step up actions to expand access to clean cooking, and those actions must be supported by legislation."

-ABUBAKAR BUKOLA SARAKI, PRESIDENT OF THE SENATE, NIGERIA, AND ALLIANCE LEADERSHIP COUNCIL MEMBER

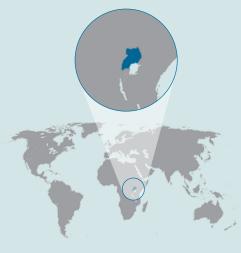
# BY THE NUMBERS:

35,000 efficient woodburning stoves to be installed as part of Katsina project

140 entrepreneurs trained, including 39 women, in Katsina State to help improve business skills and boost capacity

15% reduction in rural fuel wood consumption projected by the end of the Katsina project

# FOCUS COUNTRY: **UGANDA**



As part of efforts to increase adoption of cleaner, more efficient cookstoves and fuels, the Alliance has been working with the Uganda National Bureau of Standards and the Ministry of Energy and Minerals Development to improve consumer awareness and stove quality through a standards and labeling process. Building on existing Ugandan national standards and labeling implementation procedures, as well as a stakeholder workshop, the program is developing an operations manual with recommendations for labeling implementation. Activities also include conducting market research to investigate how Ugandan consumers respond to labeling, with the aim of ensuring that quality cookstoves enter the markets for consumer purchase. Looking to replicate its successful policy work in Kenya, the Alliance and its partners are lobbying the Ugandan government to eliminate the tax on cookstoves and components used to make cookstoves and push for enforcement of the import duty reductions for clean cookstoves in the East African Community. The Alliance also continues to support the Uganda National Alliance on Clean Cooking, which has improved coordination of sector stakeholders and is monitoring progress for the Uganda Country Action Plan.



**BEHAVIOR CHANGE COMMUNICATION:** Working with local partners and government ministries, the Alliance launched a behavior change campaign to encourage local consumers to adopt improved cookstoves as a way of saving energy and reducing smoke from cooking appliances. Dubbed Fumbalive (or "cook and live" in English), the campaign targeted five regions and is estimated to have reached close to five million people through roadshows, radio messages, home visits, and print and wall branding in peri-urban areas. The cookstove brands promoted under the campaign carried a "Good Stove-Better Cooking" label as a standard sign for authenticated stoves.

# BY THE NUMBERS:

5 million consumers reached through a behavior change communication program

75 cookstove distribution outlets established as a result of the BCC campaign

6 grants awarded to support companies in the sector

"We've appreciated the continued support of the Alliance in helping us scale market penetration of cleaner and more efficient cookstoves. Our work together is helping unify the sector and bringing a sense of direction to national efforts around increasing access to energy and clean cookstoves."



-ENG GEOFFREY SSEBUGWAWO, DIRECTOR OF BUSINESS DEVELOPMENT SUPPORT AT THE ENERGY FOR RURAL TRANSFORMATION PROJECT

# GLOBAL CHEFS ADVOCATING FOR CLEAN COOKING

Led by world-renowned Chef José Andrés. the Global Alliance Chef Corps is made up of highprofile chefs from around the globe who help raise awareness about the harmful impacts of traditional cooking techniques in their native countries and far beyond. This year, Chef Corps members conducted a broad range of activities to spread the clean cooking message.



#### CHEF SUSAN KAMAU KENYA

Chef Kamau launched a digital media campaign to increase adoption of clean cookstoves and fuels in Kenya. The #CookCleanForKenya campaign highlighted the benefits of switching to cleaner, more efficient cookstoves and fuels and encouraged Kenyans to share their stories about how cooking affected their lives.



#### CHEF SANJEEV KAPOOR INDIA

At an India meeting of the world's most exclusive gastronomic society, Le Club des Chefs des Chefs, Chef Kapoor talked clean cooking and demoed cookstoves with the personal chefs to 18 world leaders, including Cristeta Comerford, chef to U.S. President Barack Obama, and Mark Flanagan, chef to Queen Elizabeth. Kapoor also hosted Alliance Ambassador Rocky Dawuni on his popular program Sanjeev Kapoor's Kitchen.



#### CHEF RON DUPRAT HAITI

Chef Duprat led a cooking demonstration and briefed attendees at the inaugural FoodLovesTech (FLT) event in New York, which brought together tech entrepreneurs, culinary experts, visionaries, and artists. The FLT event garnered diverse media attention and reached a new and passionate audience with information about the impact of unsafe cooking in developing countries.



#### CHEF PATI JINICH MEXICO

Chef Jinich is host of the popular Emmy- and James Beard-nominated Public Broadcasting Service series Pati's Mexican Table, which is viewed throughout the United States, Canada, Australia, and Southeast Asia. As part of her new season, Jinich invited Alliance Ambassador Chef José Andrés to join her to talk about clean cooking and the work they're doing together on this global crisis.



#### CHEF JOSÉ ANDRÉS GLOBAL

At a White House event focused on tackling some of the world's toughest challenges, Chef José Andrés joined CEO Radha Muthiah to talk clean cooking with the more than 2,000 attendees, including Valerie Jarrett (pictured above), Senior Advisor to U.S. President Barack Obama. The event featured a cooking demonstration showcasing nine types of cookstoves and fuels, including wood, charcoal, gas, and solar.

# **1,600** PARTNERS AND COUNTING

The Global Alliance for Clean Cookstoves brings together a broad and everexpanding base of partners: more than 1,600 organizations representing the private sector, governments and multilaterals, NGOs, philanthropists and donors, the humanitarian sector, and academic fields. Here we provide just a few of the year's highlights from Alliance partners working to enable 100 million households to adopt clean cookstoves and fuels by 2020.



#### Global Affairs Canada

Building on its longstanding history of support for environmental initiatives in Haiti, Global Affairs Canada is working with the Alliance to design a national action strategy for a clean and efficient cookstoves and fuels market in the country. Goals for the joint initiative include delivering measurable environmental benefits, such as reduction in deforestation caused by charcoal production; protection of land from degradation and biodiversity loss; lower emissions of greenhouse gases and short-lived climate pollutants; and improved health and gender outcomes.



A UNICEF report released this year showed that 300 million children are breathing toxic air, and recommended clean cooking as a priority intervention to reduce exposure. UNICEF has also included clean cooking within the Global Diarrhea and Pneumonia Working Group, resulting in the integration of clean cooking with the Every Breath Counts Coalition. This also lays the groundwork for clean cooking to be included in India's Integrated Strategy for Prevention of Pneumonia and Diarrhea.



This year, the African Development Bank (AfDB) began to implement the New Deal on Energy for Africa, a transformative partnership to light up and power Africa by 2025. As part of the New Deal, the Alliance has been working closely with AfDB President Akinwumi Adesina and his team to frame the policy, regulatory, and financing needs to help reach AfDB's goal of increasing access to clean cooking energy for around 130 million households.

# CATERPILLAR FOUNDATION CATERPILLAR

The Caterpillar Foundation's mission is to lift 50 million people out of poverty by 2020. As part of that effort, Caterpillar is collaborating with the Alliance on a suite of global and in-country programs to enable households to adopt clean cookstoves and fuels. The partnership has generated a number of important impacts on the clean cooking sector: boosting investments in Kenya and Uganda through the Alliance's Catalytic Small Grants program; increasing the Paradigm Project's recruitment of Kenyan women entrepreneurs by 700% via the Alliance's Women's Empowerment Fund; and successfully integrating clean cooking into the UN's Sustainable Development Goals indicator framework.

#### NEW YORK DECLARATION ON FORESTS

As part of its efforts to halt global deforestation by 2030, the New York Declaration on Forests released a report that showcases the impact clean cooking can have on forests. The Alliance is a lead partner on assessing progress for NYDF's Goal 4: Support alternatives to deforestation driven by basic needs in ways that alleviate poverty and promote sustainable and equitable development.

# kiva

The Alliance is partnering with Kiva to provide a much-needed avenue of short-term financing for clean cooking enterprises around the world. Alliance partners who are vetted through Kiva's process

can raise working capital loans from US\$10,000 to US\$50,000 on the Kiva platform.

# TATA TRUSTS

The Alliance and the Tata Trusts have formed a strategic partnership to further catalyze and grow the clean cooking sector in India. Tata Trusts is one of

India's oldest non-sectarian philanthropic organizations and works in several areas of community development including clean cooking, making them an ideal partner for the Alliance's work.



A program launched by the East Africa Global Environmental and Occupational Health Hub is examining the respiratory health of 4,000 children in areas with varying degrees of biomass fuel use, vehicular traffic, and industrial pollution. The study will

include household-level air pollution assessments, permitting a richer understanding of children's exposure profiles.



The International Organization for Standardization (ISO) and the Alliance have worked together since 2012 to develop a set of global performance standards for the cookstoves and fuels sector. ISO's proven process and decades of experience developing standards help

stakeholders address differing priorities and develop consensus. ISO Technical Committee 285 is completing and publishing standards with input from 42 countries around the world, with the final vote for approval of laboratory testing standards expected in early 2017.



Under the Alliance's co-leadership with the World Food Programme and the Food and Agriculture Organization of the UN, the Safe Access to Fuel and Energy Humanitarian Working Group continued to lead efforts to improve and expand energy access for refugees and displaced people. The Working Group convened high-level representatives to discuss energy at the World Humanitarian Summit, and also added 10 new members to its roster, including UN

OCHA and the International Organization on Migration.

THE GLOBAL ALLIANCE FOR CLEAN COOKSTOVES IS GRATEFUL FOR THE GENEROUS FINANCIAL AND IN-KIND SUPPORT OF OUR DONORS

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Climate and Clean Air Coalition

Department for International Development (DFID), United Kingdom of Great Britain and Northern Ireland

> Deutsche Gesellschaft fur Technische Zusamarket managerenarbeit (GIZ)

> > Environment Canada

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Director, wPOWER Hub at the Wangari Maathai Institute



Juan Carlos Paiz Co-Founder and President, Pani-Fresh

José Andrés

Founder of World Central Kitchen, and chef/owner of ThinkFoodGroup



Kofi Annan

Former Secretary-General of UN, and Chairman of Kofi Annan Foundation



**Rocky Dawuni** International musician and humanitarian advocate



Julia Roberts Actor



Zhao Wei Actor and director

for Clean Cookstoves



**Radha Muthiah** CEO, Global Alliance





"Our new stove is so much better than my old one. The old one used a lot more wood and leaked smoke everywhere. The cooking now goes faster, I don't cough as much, and my son can stay with me in the kitchen while I cook to play and do homework."

-ROSA GUISELA ESCOT, STOVE USER IN GUATEMALA

#### **PHOTOGRAPHY CREDITS:**

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- Page 17 (Empowering Women Through Clean Cooking): MimiMoto
- Page 31 (António Guterres): Dutch Ministry of Foreign Affairs



"I have seen firsthand the importance of access to energy and clean cookstoves, especially in humanitarian settings. This is an issue that impacts multiple Sustainable Development Goals and it must play a central role in our work to ensure the realization of human needs and fundamental rights."

#### ANTÓNIO GUTERRES

SECRETARY-GENERAL-DESIGNATE OF THE UNITED NATIONS, MEMBER OF THE LEADERSHIP COUNCIL OF THE GLOBAL ALLIANCE FOR CLEAN COOKSTOVES



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