



Executive Summary

2012

RESULTS REPORT

Sharing Progress on the Path to
Adoption of Clean Cooking Solutions



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Acknowledgements

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An always expanding list of Alliance partners is available within the Alliance community's searchable online directory (<http://community.cleancookstoves.org/>). We are also grateful to those carbon market participants that provided additional survey information about their clean cookstoves market activities via Ecosystem Marketplace's 2013 survey of carbon offset providers. For additional information on the results of that survey and a list of clean cookstove carbon offset provider respondents, see *Maneuvering the Mosaic: State of the Voluntary Carbon Markets 2013*, available for free download on the Ecosystem Marketplace website (<http://www.ecosystemmarketplace.com/>).

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Photos courtesy of World LPG (front cover), Romana Manpreet (back cover), and Corinne Hart (back inside cover).



GLOBAL ALLIANCE FOR
CLEAN COOKSTOVES

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Executive Summary

{ Full text available at
www.cleancookstoves.org/results2012 }

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Executive Summary

The Global Alliance for Clean Cookstoves (Alliance) was launched in 2010 with a goal to drive the adoption of clean cookstoves and fuels in 100 million households by 2020. In pursuit of this objective, the combined efforts reported by a wide range of Alliance partners working on different aspects of the issue are having positive impacts on public health, women's empowerment, improved livelihoods, reduced environmental degradation, and enhanced energy access.

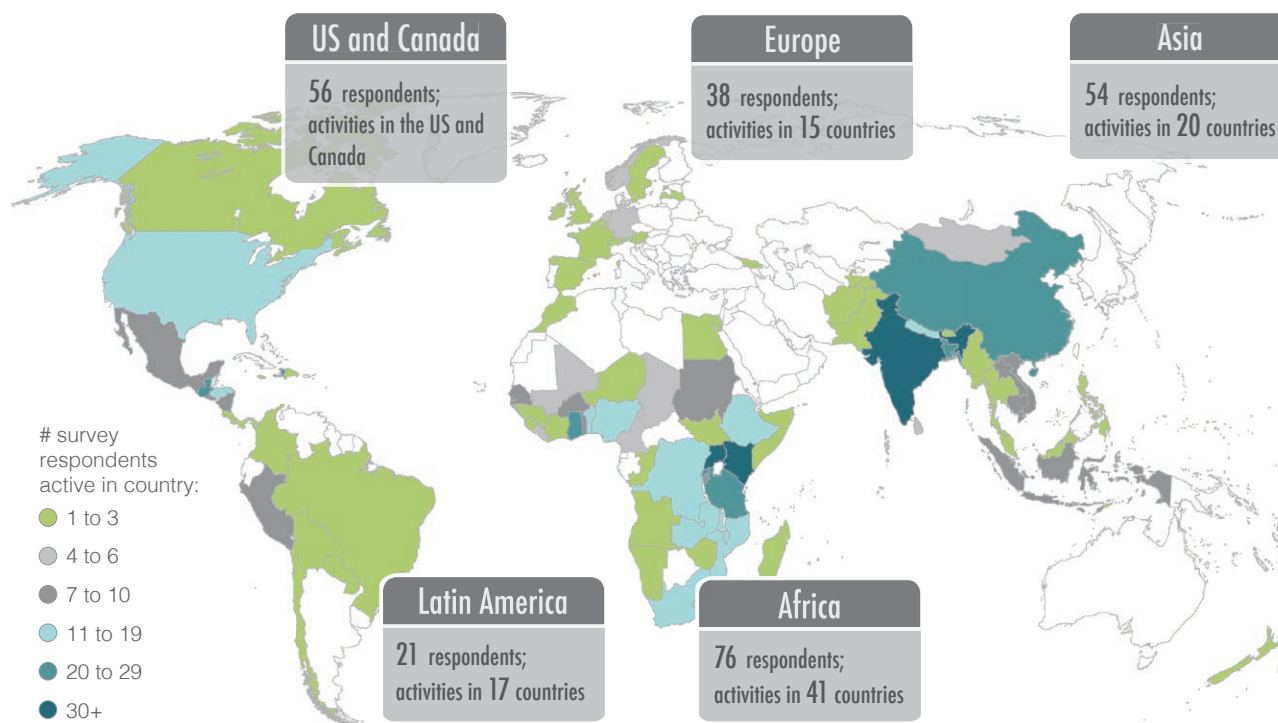
This report tracks partners' global progress in 2012 toward their shared adoption goal, building on previous years' results reporting conducted by the

United States Environmental Protection Agency's Partnership for Clean Indoor Air (PCIA).

This year, as part of its commitment to monitoring and evaluation, the Alliance assumed lead responsibility for annual results reporting.

In doing so, the Alliance has refined and further expanded results reporting to better enable a broader group of stakeholders to share progress and learn from one another.¹ The *2012 Results Report: Sharing Partner Progress on the Path to Adoption of Clean Cooking Solutions* is envisioned to be the first in a series of annual results reports

Figure 1: Distribution of Regional Response Rates and Count of Reporting Partners Active In-country



Source: 2012 Results Report. Global Alliance for Clean Cookstoves.

Notes: Based on 246 organization responses. Shading represents locations of respondents' activities, not headquarters.

¹ The Alliance defines the cookstove sector to be all those involved in supporting the adoption of clean cooking practices and technologies, either directly (e.g., stove and fuel manufacturing and distribution); or indirectly (e.g., research, stove and fuel testing, consulting, philanthropy, and investment).

Table 1: 2012 Alliance Partner Performance: By the Numbers

Response rate	246 partners	Partner headquarters:	
		Africa: 31%	US & Canada: 23%
		Asia: 22%	Europe: 15%
		Latin America: 9%	
Stoves manufactured	9.6 million stoves	Portability:	
		Portable: 70%	Fixed/Built-in: 30%
Stoves tested	84% of manufacturers reported stove/fuel testing in 48 countries	% testing occurrences by setting:	
		Lab: 41%	
		Field: 38%	Both: 21%
Stoves disseminated	8.2 million stoves in 59 countries	Stove user location:	
		Africa: 52%	Asia: 45%
		Latin America: 2%	
		Stove user setting:	
		Urban slum: 31%	Rural: 32%
		Urban/Peri-urban: 33%	
		Humanitarian setting: 1%	
Fuels produced	6.4 million kilograms (kg)	Fuel types produced:*	
		Biomass: Briquettes: 31%	
		Biomass: Pellets: 26%	
Fuels disseminated	7.5 million kg	Fuel types disseminated:	
		Liquefied Petroleum Gas: 54%	
		Biomass: Briquettes: 23%	
		Biomass: Pellets: 22%	

Source: 2012 Results Report. Global Alliance for Clean Cookstoves.

Notes: Based on thousands of data points from 246 survey respondents. *Due to limited responses to this question, many fuel types are included in the "other" category and not reported in figures or tables to protect the confidentiality of responses.

illuminating traction and trends in the cookstove and fuel sector. Since comparison with PCIA's early data provides limited information on stove distribution trends, in most cases the information collected here will serve as the broader baseline for future reporting.

Methods

The Alliance has over 800 partners globally,² and the information presented in this report is based on data collected from that partnership base, including cookstove and fuel manufacturers, distri-

butors, testing organizations, researchers, local implementing partners, consultants, carbon asset and offset project developers, multilateral institutions, investors, and other organizations.

The majority of the data was collected via an online survey designed by the Alliance with technical support from INFOSYS. The goal of the data collection effort was to help track activities relevant for each partner category. In addition, the Alliance partnered with Forest Trends' Ecosystem Marketplace to obtain survey-based information on carbon offsets contracted from projects that

² The Alliance had 745 partners when the survey was conducted.

reduce emissions from the distribution and use of clean cookstoves. The Alliance also partnered with Ecosystem Marketplace to analyze and present the results of the 2012 survey, culminating in this report.

Approximately one-third of partners responded to the survey. Submitted surveys were reviewed to clarify and confirm responses.

Findings are not meant to be definitive, but rather illustrate the momentum of the Alliance, its partners, and the sector in general. Readers should consider these findings as conservative, to be weighed alongside the rapidly expanding body of knowledge in this sector.

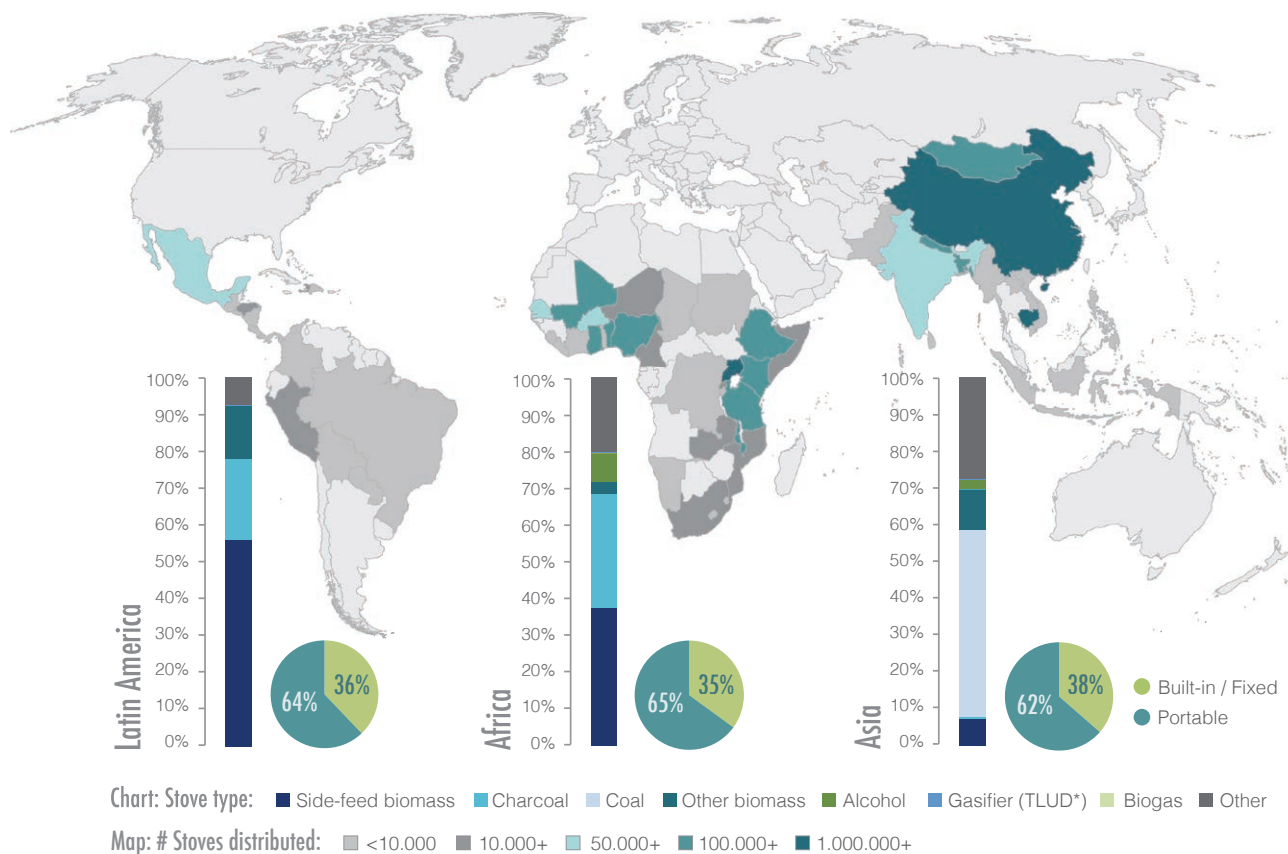
Results

Based on data from survey respondents, Alliance partners distributed approximately 8.2 million stoves in 2012, more than twice the number reported in 2011 (3.6 million) and accounting for almost half

of all stoves distributed (17.5 million) since PCIA started tracking progress in 2006. Over half of all stoves (3.3 million) were sold directly to end users by manufacturers or other intermediaries. Another 2.5 million stoves were sold to intermediaries themselves, such as retailers or distributing organizations, to disseminate to end users in 2012 or in the future. Carbon offset project developers reported distributing the remaining 2.5 million stoves, but did not specify whether these stoves went to distributors or directly to end users.

Alliance partners reported on the income brackets and locations of the end users targeted by their activities. Poor and low-income consumers in urban or peri-urban areas were the most commonly targeted end users, followed by users within other income brackets in urban and rural areas. Rural residents represent 32% of cookstove end users, just slightly behind urban/peri-urban cookstove users at 33%. Emergency aid programs account

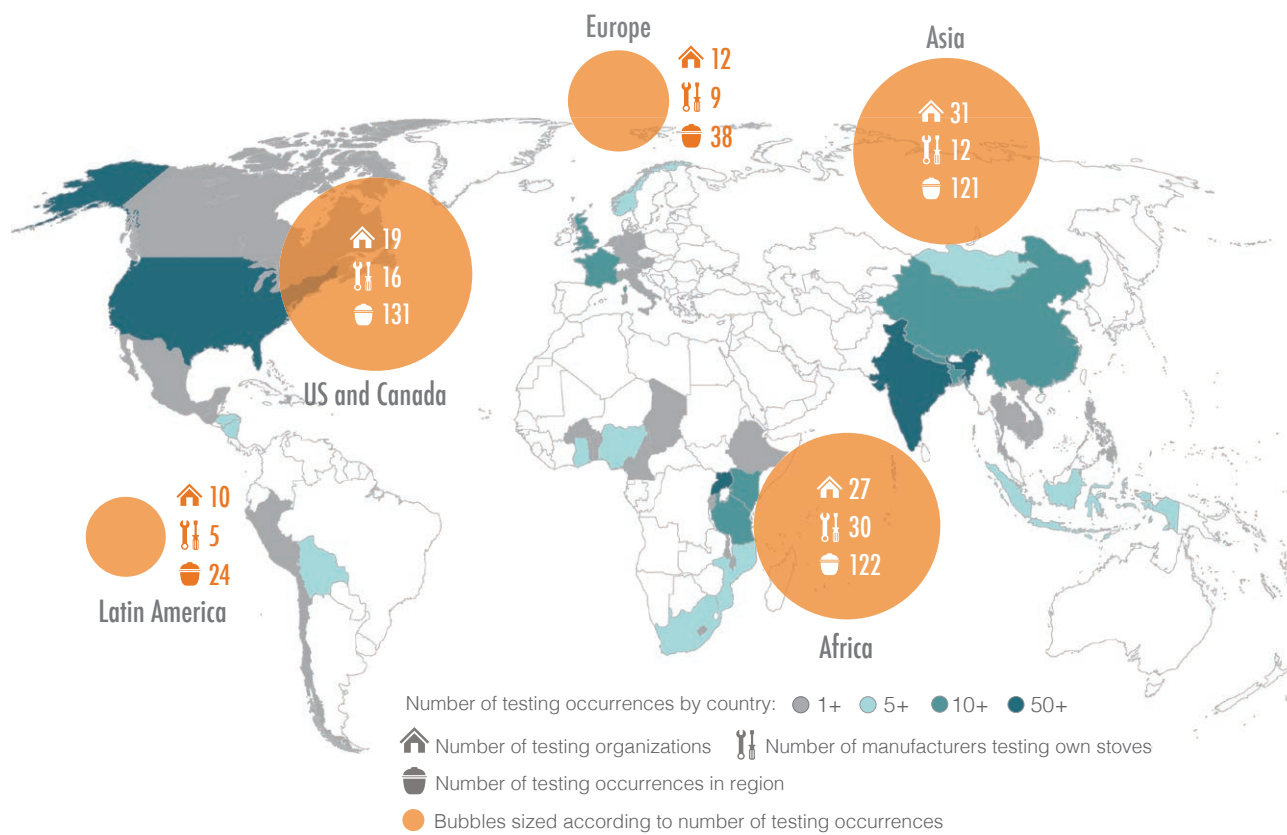
Figure 2: Stoves Distributed by End-User Country or Region



Source: 2012 Results Report. Global Alliance for Clean Cookstoves.

Notes: Based on 774 observations. *"TLUD" references top-lit updraft gasifiers.

Figure 3: Regional and Country Distribution of Testing Activities by Manufacturers and Testing Organizations



Source: 2012 Results Report. Global Alliance for Clean Cookstoves.

Notes: Based on responses from 246 survey respondents. Due to challenges in accounting for unique stove models as reported in the 2012 survey, it is possible that some models might have been reported as being tested more than once. Thus, this report tracks occurrences of testing - in which the test (but sometimes not the stove model) is unique.

for only 1% of the 8.2 million cookstoves distributed, reaching around 0.7 million people. This indicates the large unmet need for better cooking technologies for the over 42 million people living in humanitarian contexts.

Testing

Testing cookstove and fuel performance with standardized methods enables more transparent information about and comparisons across various technologies and programs. Survey results demonstrate increasing activity by testing organizations providing services to other organizations, as well as by manufacturers testing their own products. Both types of testing are valuable - internal testing can be used for product development, and independent verification of testing results provides reliable reporting to consumers,

investors, and donors. Around 84% of cookstove manufacturers reported testing their own stoves or enlisting third-party organizations to do so.

The sector is developing standardized testing methods to better evaluate technologies. A reported 12% of testing activities included safety testing. This expanded use of a relatively recently developed protocol indicates the sector's willingness to quickly utilize new testing methods. Thus, anticipated developments for other testing areas can be expected to be adopted quickly.

Comparing testing data described in reports and publications to testing activities tracked in this survey, it is clear that only a small fraction of testing data is being reported publically. In many cases, testing data should remain proprietary, especially in the technology development phase. However,

increased openness and transparency of data can help the sector understand and improve performance and quality over time.

This report offers an informational baseline against which the Alliance will be able to track progress on the scaling up of more efficient and lower emissions technologies alongside the development and application of International Organization for Standardization (ISO) standards for the sector.

Gender

Women are the most exposed to and harmed by household air pollution and are therefore disproportionately impacted by the use of dirty and inefficient cooking practices and reliance on biomass for fuel. Because women are the primary cookstove users, their preferences and needs must be met in order for clean cooking technologies to be purchased, adopted, sustainably used, maintained, and replaced.

Many cookstove and fuel programs engage women in their activities. Only a handful of partners did not involve women in some way in their 2012 activities, and 172 partners actually prioritize women's empowerment in their missions. While only one-third of respondents provided sex-disaggregated employment data, those that did reported that over half (54%) of positions were filled by women. Sex-disaggregated data is key to truly understanding the gender dynamics of the sector.

Research

Information is vital to furthering the adoption of clean cooking technologies and techniques, including investigating what consumers want, how they are using stoves and fuels, and the wide range of benefits they derive from doing so. In 2012, 87% of partners' research activities were focused on household cooking devices, particularly related to users' acceptance of cleaner technologies.

Geography and funding priorities helped shape partners' research priorities. While market studies topped the research agendas in Africa and Latin America (16% and 19% respectively), it was the third-most researched issue in Asia, behind capacity building and technology adoption.

While around 4 million deaths are associated with household air pollution from cooking each year,

few research efforts are being carried out on the health benefits of improved cookstove and fuel adoption.

Financing for programs and enterprises

Alliance partners operate at the crossroads of public, private-sector, and not-for-profit finance, where organizations' activities may be simultaneously financed by multiple revenue streams. Beyond financial returns, these funding streams may expect to see additional results, including demonstrable benefits to the environment, public health, and/or and livelihoods.

Sector-wide, the most commonly cited sources of partner funding were government grants (supporting 36% of respondents and combining domestic and international public giving); foundation grants (31%), individual donations (28%) and stove/fuel sales revenues (27%). Other major sources included private equity investments (another 30% of respondents) and multilateral grants (15%). Figure 4 depicts the sources of financing most commonly reported by partners across the value chain and presented according to partners' roles and primary program beneficiaries. This report does not track the value of these financing arrangements, a topic ripe for future research.

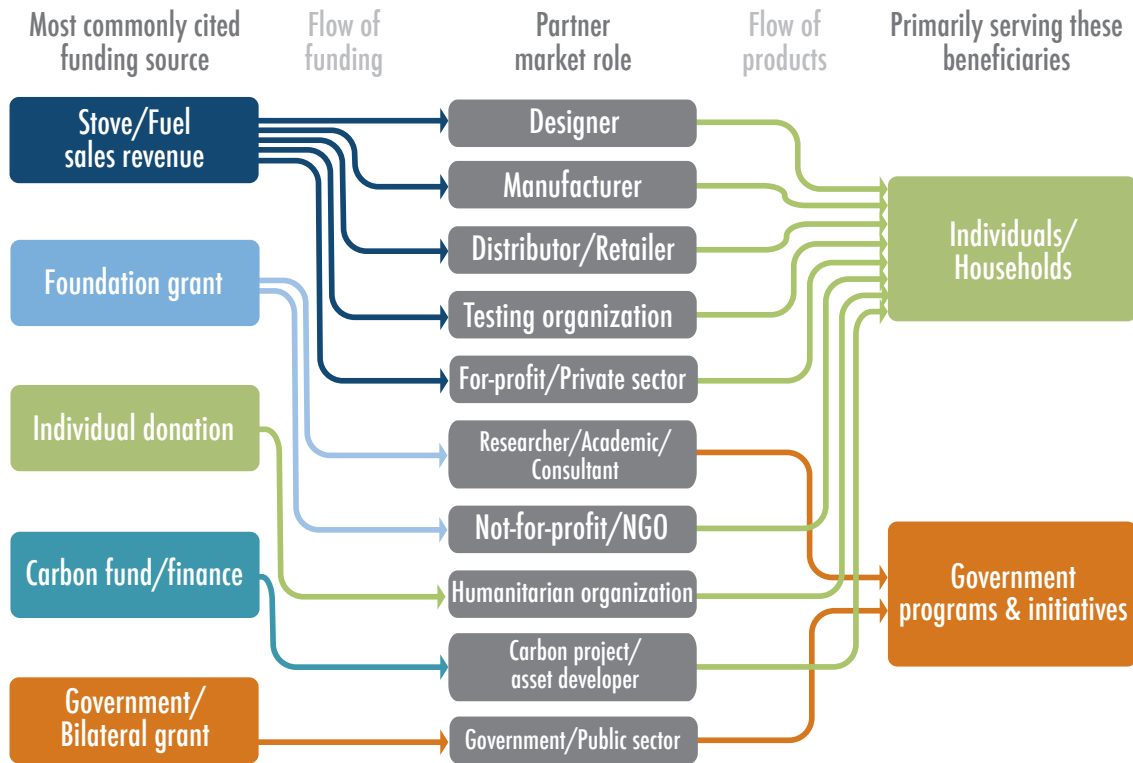
In 2012, 4.1 million of the total 8.2 million cookstoves tracked in this report were distributed with at least some support from carbon finance, up from 15% in 2011. A total of 16.9 million carbon offsets were sold from cookstove projects in 2012, up from 4.2 MtCO₂e in 2011, and representing emissions reductions that have already resulted from partners' activities or will in the future. These emissions reductions, valued at \$167.3 million, are equivalent to closing between four and five coal-fired power stations for one year.

Discussion

The Alliance is already looking at lessons that can be drawn from the limited information presented in this report and is encouraged by the general alignment of partners' missions with the overall Alliance mission, as well as the potential for continued growth.

Over time, and particularly as the Alliance continues its efforts to scale the global market for clean cooking technologies and fuels, this collective infor-

Figure 4: Most Commonly Cited Funding Sources by Partner Role(s) and Primary Stove/Fuel Recipients



Source: 2012 Results Report. Global Alliance for Clean Cookstoves.

mation on partners' progress can help inform the direction of Alliance efforts. For example, the data reveals strong engagement and momentum in the Alliance's initial focus countries, and also a hint of other promising markets. It also sheds light on areas with less representation within the Alliance community that require attention – in the clean fuels and humanitarian sectors, for example.

This report is a first step toward developing a broad baseline to enable tracking of trends and identifying key highlights and challenges in the Alliance community, such as those described above. While the report suggests strong momentum among those partners who responded to the survey, there is still more work to be done, including developing a better understanding of the diverse needs of consumers and users; supporting enterprises in their distribution efforts; enhanced manufacturing through greater investment and brokering of partnerships; standardizing evaluation methods and data;

and continued sharing of best practices and emerging research to further catalyze the sector while minimizing duplication of efforts.

The benefits of clean cookstoves and fuels will only be realized if they are sustainably adopted at scale. While this report is a key tool for benchmarking and tracking progress, it should be viewed as one component of the Alliance's overall monitoring and evaluation strategy. Other components, including national results reporting, country-specific strategies in focus countries, qualitative and quantitative data on sustained adoption, and the development of tools for participatory approaches to monitoring progress, will be used to supplement this data on partner activities.

The Alliance is grateful to its partners that contributed valuable time to supporting data collection for this report, alongside their many other contributions to the sector.

Key Alliance Resources and Online Tools:

Alliance Homepage

www.cleancookstoves.org

Alliance Reports and Research Homepage

www.cleancookstoves.org/resources/reports-and-research/

Alliance Partner Community Homepage

community.cleancookstoves.org

REPORT:

Igniting Change: A Strategy for Universal Adoption of Clean Cookstoves and Fuels

www.cleancookstoves.org/resources/fact-sheets/igniting-change.pdf

PRESENTATION:

Alliance Business Plan

www.cleancookstoves.org/resources_files/alliance-business-plan.pptx

Regional Resources

Partner Country Toolkit (also available in Spanish)

www.cleancookstoves.org/resources_files/partner-country-toolkit.docx

Country Action Plans / Market Assessments

www.cleancookstoves.org/resources/reports-and-research/

Testing, Standards, and Data

Clean Cooking Catalog

www.catalog.cleancookstoves.org

Data & Statistics Homepage

www.cleancookstoves.org/resources/data-and-statistics/

REPORT:

Stove Performance Inventory Report

www.cleancookstoves.org/resources_files/stove-performance-inventory-pdf.pdf

Gender

REPORT:

Scaling Adoption of Clean Cooking Solutions through Women's Empowerment: A Resource Guide

www.cleancookstoves.org/resources/reports-and-research/

The **Global Alliance for Clean Cookstoves** is a public-private partnership led by the United Nations Foundation that seeks to save lives, improve livelihoods, empower women, and protect the environment by creating a thriving global market for clean and efficient household cooking solutions. The Alliance's "100 by '20" goal calls for 100 million households to adopt clean and efficient cookstoves and fuels by 2020. The Alliance is working with hundreds of public, private, and non-profit partners to help overcome the market barriers that currently impede the production, deployment, and use of clean cookstoves and fuels in developing countries.





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