GACC Futures Summit Nov. 20, 2014

The stated goal of the Global Alliance for Clean Cookstoves is: "To save lives, improve livelihoods, empower women, and protect the environment, by enabling 100 million households to adopt cleaner and more efficient cook stoves and fuels by 2020."

At the GACC's two-day Future's Summit in New York City Alliance Director Radha Muthiah announced the next step in this process—securing major financial commitments from public and private sector investors. The majority of the four hundred Summit participants including the author of this report were invited to attend only the first day of the conference, which included a series of panel discussions. Day two was a closed session for representatives from target and donor countries, UN agencies, investment institutions, social impact funds, multinational corporations and NGOs. These donors made seventy-nine pledges, which included \$286 million in grants and \$127 million in investments—totaling more than four hundred million dollars in support of Alliance objectives.

USAID Director Rajiv Shah announced a collective U.S. government effort to attract private investment and top scale science and technology by investing "up to \$200 million to develop, scale and test groundbreaking solutions in clean cookstoves." (*As you know, the Department of Energy, which provided the GACC with its first \$12.5 million for clean cookstove R&D in 2011, has refused to fund any research on solar thermal cookstoves.* Also the EPA, which tested three commercially made solar cookers in June 2012, has yet to release those results. It remains to be seen if any of these newly pledged hundreds of millions of dollars will be directed toward the solar cooking sector, which is now at a distinct technological disadvantage vis-a-vis the biomass stove sector, since they have benefitted from almost a decade of U.S. government and Shell Foundation R&D funding.)

A <u>short video shown to investors</u> on day two of the summit included a rapid montage of photos of biomass cookstoves. It also included this photo of a CooKit and a retained heat basket, which I believe was taken in Kenya.





It was also on the morning of day two that Hillary Clinton, at the very end of her keynote speech to the major donors highlighted the fact that students at the Clinton School of Public Service had traveled to Bolivia, India and Zanzibar to teach solar cooking. "They all come back thrilled by their experience," she said, "because of the delight that the women they work with experience in having this new approach to cook their food, to

create more time in their lives, less drudgery, less going out looking for fuel. It's just such a winwin for everyone."

What prompted this surprising statement? We'll never know for sure but the day before at lunch Kris Balderston sat down next to me and we talked. Kris was Hillary Clinton's Deputy Chief of Staff when she was a senator; former Special Representative for Global Partnerships at the State Department and is now the director of Fleishman-Hillard's Washington, D.C., office. I told him there is significant concern about the GACC's increasingly aggressive promotion of subsidized

LPG in the developing world. I also mentioned the GACC's virtual exclusion of funding for R&D, field tests and market studies related to solar cooking. I asked him if Mrs. Clinton was even aware of this. He didn't know the answer. He said he would take the issue up with the GACC board on which he serves. I gave him a copy of the spring issue of the SCR (*with Jose Andres on the cover*). Later in the afternoon, I also gave copies of this SCR issue to the Foreign Minister of Ghana and to Rocky Dawuni (*one of the three GACC celebrity ambassadors who attended the conference*).

The GACC event was held at the <u>Conrad</u>, a 4.5 star hotel near New York's financial district. Breakfast was served in the multi-story upper lobby. Lunch was a sit down affair. The Thursday evening reception included an open wine bar with a delicious spread of international hors d'oeuvres. (*I find such lavish locales inappropriate for an organization with the mission of helping the world's poorest people.*)

Throughout the day, participants could explore the large display of clean cookstoves which included a large, plancha-style Envirofit\* that resembled a pot bellied stove and others (*including Aprovecho, Burn Design, Bio-lite, Pratki, Oorja, and Darfur stoves*) all of which I have watched evolve over the past few years through countless iterations (*thanks to millions of dollars in R&D funding*). The GoSun, the only solar cooker on display, attracted a lot of attention. (*I asked Seema Patel a few weeks ago if I could display a Haines solar cooker (which I'm taking to Chad for Jewish World Watch since Derk Rijks now wants to try it out in the refugee camps.*) Seema told me there was no room. There was in fact plenty of room in that enormous atrium where the cookstoves and fuels were displayed.)









The fuels exhibit featured large and small LPG canisters along with 'clean' bio fuels including wood, ethanol, charcoal, pressed sawdust, sugar cane briquettes and eucalyptus pellets. When participants exited the conference room for lunch, another stove display had been added to the collection—an electric induction stovetop—recently promoted by Kirk Smith. (*I was puzzled by Smith's advocacy of an electric cooking device given his decade-long promotion of LPG until I read* 



that Shell's future plans include a major focus on the <u>extraction of more natural gas and the</u> <u>promotion of its use for electricity generation</u> in the developing world.) It's important to note that at least 1200 watts of electricity are needed to power a single induction stovetop. This requires either access to direct grid power or a 5x15/20 sq.ft solar PV rooftop array with battery storage not an affordable option for the world's poorest three billion people.

\*Thanks to a \$25 million infusion of cash along with managerial and PR assistance from its partner Shell and additional grants from the GACC and USAID, Envirofit is now one of the biggest manufacturers of combustion cookstoves in the world. Four enormous screens mounted on the conference room walls projected panelists and speakers along with filmed testimonials by world leaders and canned videos showing women in developing countries cooking over smoky fires or with clean biomass cookstoves. LPG was discussed throughout the day as an important alternative to smoky cooking fires. The topic of solar cookers was never raised, except by me during one of the Q&A sessions. All the panel discussions and speeches can be viewed on the <u>GACC's YouTube website</u>.

In her introductory remarks, GACC Director Radha Muthiah shared this enigmatic quote from Ted Turner (*who started the UN Foundation in 1997 with a billion dollar donation and who's funding ends next year*): "It's time to stop doing dumb things and start doing smart things." Radha noted that the Alliance has funded 39 studies across 23 countries on marketing, gender, health. (*Unfortunately only one— David Whitfield's gender study in several South American countries— includes a solar cooker.*) She said the Alliance had distributed \$100 million to promote innovation/design/distribution/gender empowerment for biomass and other combustion stoves (*With its \$75,000 grant received earlier this year, the GoSun is the only solar cooking manufacturer to have received funding for field tests in Guatemala.*)

Radha said the Alliance's 'technology neutrality' has been a huge factor in its success (*a questionable assertion given the almost total absence of funding for solar and retained heat cooking devices by the Alliance*). She said that although a <u>truly clean stove with clean fuel</u> might be years away, the Alliance intends to reach sixty million more households by 2016. She noted that WHO has recently released its guidelines for indoor air quality. (*The WHO report calls for greater investment in LPG distribution.*) She added that in phase two, the Alliance would be making efforts to support fuel supply chains including for LPG.

During panel one, UN Foundation Director Kathy Calvin asked EPA Director Gina McCarthy and Hanna Tetteh, Minister of Foreign Affairs Ghana how to "take this issue forward". McCarthy said nothing of substance about the clean cookstove initiative but she did say that when she learned about this issue, and made former EPA Administrator Lisa Jackson and Hillary Clinton aware of it, "They were both outraged." Ms. Tetteh, said that 84% of the population in her country cooks with wood and charcoal. She noted that Ghana had funded cookstove projects in the past, but said that, "When we became more concerned with deforestation, we tried to get more people to use LPG." Tetteh noted that when people learned they could use gas to power motor vehicles, there was increased competition for natural gas and the price went up. She said Ghana had joined <u>Sustainable Energy for All to increase LPG</u> use from 18% to 50% now that Ghana produces its own gas. She wants energy companies help provide the people with access to more LPG and to develop Ghana's own gas resources so people won't have to burn solid fuels. She said Ghana is very close to the equator and doesn't want more deforestation.

Between panels, former President of Ireland Mary Robinson (via video)—called for access to affordable, renewable energy for the world' poor.

<u>Wanjira Mathai</u> moderated panel two with panelists again praising LPG. <u>Nii Darko Asante</u> of Ghana said that in her country: "80% of the population uses wood and charcoal" and deforestation is a big issue. She noted that Ghana now has off-shore gas fields. She said the goal is to have the gas cylinders owned by the distribution companies and to have the private sector invest in distribution networks. She said that the 50% not using LPG would be moved from three stone fires to more efficient wood and charcoal stoves. Ghana is also encouraging people to plant trees and to produce

charcoal more efficiently. Asante added, "The <u>Sustainable Energy for All initiative</u> has put clean cooking on the agenda in a way it's never been put before. Standards will tell people which stoves are better as we transition to LPG. We want to increase LPG usage and give clean cookstoves to the rest."

<u>Nasrul Hamid</u>, Minister of Power and Energy Bangladesh, said: "95% of our people cook with traditional cookstoves. We have changed 1.5 million cookstoves to clean cookstoves. We have 3.3 million solar [*PV*] home systems and plan to have 3 million more systems. In 3 years we want to have 100 million people using clean cookstoves. We want to increase the use of LPG and keep the price low." He said that even religious leaders in Bangladesh have been recruited to encourage people to start using LPG,

**Lawrencia Laraba** Ministry of the Environment (Nigeria) noted that, "The encroachment of the desert in the north is another big problem for Nigeria.... We want to move from cooking with firewood to these clean (*LPG*) cookstoves. Nigeria is a large country with over 150 million people. We want women to change from bio-wood to clean energy." (*Nigeria is Africa's largest producer of natural gas and Shell one of its largest extractors.*)

Panel three, "Clean Cooking: The burden, the imperative and the progress" was moderated by Gene Bukhman of Harvard medical school. Tami Bond, U. Illinois said that there is 800 times more warming from black carbon than from CO2. She noted that rural cooking creates enormous continental plumes that we can see from space.

**Solomon Mpoke** of the Kenya Medical Research institute said that in Kisumu refugee camp alone there are 250,000 people. He called for a study in refugee camps on the effectiveness of clean cookstoves. (*Note: SCI introduced the Cookit into Kisumu in the 1990s.*)

**Kirk Smith:** Said that the clean cookstove sector has for years been promoting biomass stoves, "which haven't offered any significant improvements". He noted that WHO has issued a new definition of 'clean' that is required to get real health benefits. He declared that there aren't any biomass stoves that are as clean as gas. He admitted it's not possible to move everyone to gas and electricity right away, but he said, "We have to try". He said there are basically two approaches-"the one we've taken for decades"-make biomass-burning cookstoves clean, "which is very difficult given wet fuels, different fuels and the fact that women don't operate stoves the way they are used in a lab". He said he is sponsoring a competition to develop a high-end combustion chamber (with Rolls Royce, other big companies) for villages. He called for donors and governments to make 'the clean' (gas and electricity) available to the world's poor. "Everyone in this room uses gas and electricity. The question is how to get this to poor people. Our initiative in India is to push gas down to the poor people. As electrification proceeds, these [*induction stoves*] can be used. I was in a village in India just two days ago and everyone in the village had an induction stove. They're safer, faster." Smith called for more social pressure like the anti-smoking laws that have reduced tobacco use. Then he said this: "Throw out your ideology. Don't worry about renewable energy. If you want to cook with renewable energy, do it yourself. Don't ask the poor to do it." The poor don't cause global warming. We do." (Dr. Smith's call to stop worrying about renewable energy was met with loud applause.) Smith is working on a project in India that supports targeted LPG subsidies for the poor. He praised Ghana, Brazil and India for promoting subsidized LPG for the poor.

At the end of this session, I raised my hand to ask Dr. Smith why he was opposed to renewable energy for the poor. Harry Stokes of Project Gaia (ethanol stoves) at my table also raised his hand. The MC pointed at our table and the GACC microphone handler started to pass the mike to Harry, who looked over at me and said, "I'll give my question to Pat." I thanked him but before I could speak, the mike was handed to someone at another table. I never got to ask my question. Harry got up and walked out.

The first afternoon panel on advances in standards and testing was moderated by David Martin, General Manager Production, **Shell Petroleum Development of Nigeria.** I asked the panel if it made sense to develop one single set of testing standards for solar and biomass cookstoves since the two most important things measured in biomass stoves are emissions and fuel efficiency—neither of which apply to solar cookers. The respondents proceeded to discuss differences in biomass stoves and never answered my question.

The next panel, A Market for Clean and Efficient Cooking Solutions: The Supply Side was moderated by Bahijjahtu Abubakar, National Coordinator of Renewable Energy Program Min. Environment Nigeria. Tokunboh Ishmael, President of Alitheia Capital said Althea had partnered with the largest indigenous fossil fuel company in Nigeria that already had stations all over the country to sell LPG. Althea believes there are a significant number of people who could benefit from the health side of clean cookstoves. When the company realized they could make money, they expanded their distribution channel beyond the existing 600 gas stations. They invested \$20 million to develop a distribution channel and made smaller gas canisters that people could afford. They are continuing to convert more people from using wood/charcoal to using LPG. With micro-finance companies Althea is writing 2,000 loans per month for LPG stove purchases.

**Jennifer Pryce, CEO Calvert Foundation said that** for twenty years Calvert has raised capital from private investors and put it to good work in communities. Three years ago they saw the opportunity to bring their funds into the clean cookstove area.

**Paul Speigel, Deputy Director, Div. of Programme support and Management UNHCR noted that there are** over fifty million refugees/displaced persons around the world. He said the most important task UNHCR has is to protect the women and children who have to search for wood to cook with. The UNHCR is looking for fuel and fuel-efficient stoves they can stockpile. They also need locally made stoves. After the panel, I gave Spiegel a copy of the Haines solar cooker info sheet and told him I'd been in touch with UNHCR's Steve Corliss.

Kris Balderston moderated the first afternoon panel, which included Sarah Collins, the Founder of Wonderbag, who didn't provide much new information other than that the Wonderbag is available on Amazon.

**Stephen M. Macharia, General Manager of Market Research and Product Development, Equity Bank, Kenya** said that in Kenya there are regions where there is no wood left at all and in these places people are burning plastic, garbage, anything they can find. He said that people are stealing and burning hedges, fence posts and toxic wood. I gave him a copy of the Spring 2014 SCR and pointed out the article about Faustine and Mrs. Ruto at the GACC conference in Nairobi. **Ibrahim Hafeez Rehman, Director, the Energy Resource Institute said that** for countries like India, biomass would be the primary fuel for a long time since LPG and electricity are too expensive for many people.

Aaron Sherinian, UN Foundation VP of PR moderated the final panel with the GACC's three celebrity ambassadors. I found this session to be fawning, condescending and frankly embarrassing. You can watch it here. These attractive and famous (*in their countries*) young people (*one musician and one athlete from Ghana and a Chinese movie star*) have no connection whatsoever to clean cookstoves—except for the Ghanian athlete who does TV promos for LPG. It's a mystery to me how or why (*except for the Ghanian's LPG connection*) these young people were chosen or what they can contribute to this effort other than giving the GACC access to their millions of Twitter and Facebook fans, who may not be terribly interested in clean cookstoves. Chinese actress Zhao Wei (*who spoke through a male translator*) did note that the Chinese people are concerned about air quality and that the downside to growth is the harm it causes the environment.

Just before I left the hotel, I asked John Mitchell about the two and a half year delay in reporting the results of the tests conducted on three solar cookers in June 2012 by Jim Jetter at the EPA lab in North Carolina. John said the results would be published soon. ##