SE4All Bulletin
A Daily Report of the Second Annual Sustainable Energy for All Forum
Published by the International Institute for Sustainable Development (IISD)
in collaboration with the Sustainable Energy for All Forum
ONLINE AT HTTP://WWW.IISD.CA/ENERGY/SE4ALLFORUM/2015/
ISSUE #2, VOLUME 181, NUMBER 9, WEDNESDAY, 20 MAY 2015

SE4All Highlights:
Tuesday, 19 May 2015

On Tuesday 19 May, participants convened in plenary and in parallel multi-stakeholder dialogues organized under thematic tracks on finance, access, energy efficiency, renewable energy, global policy agenda and growing the movement. Several major initiatives and reviews of SE4All global targets were presented during the day, including: a European initiative to boost electrification, known as ElectriFI, that aims to catalyse private sector investments; a new methodology on short-lived climate pollutants; a Pew Charitable Trusts report analyzing clean energy investment, finance and deployment trends in emerging markets; the 2015 edition of IRENA’s ‘Renewable Energy and Jobs Annual Review’; and REN21’s Renewables Global Status Report.

Progress under the three SE4All objectives of access, energy efficiency and renewable energy was addressed in sessions covering, among other topics: the SE4All High Impact Opportunities (HIO) on Clean Energy Mini-Grids, the Water-Energy-Food Nexus and Sustainable Bioenergy; the SE4All Energy Efficiency Accelerator Platform, a public-private partnership programme to scale up energy efficiency policy, action and investment; the energy efficiency and cities initiatives; the 1 Gigaton Coalition on promoting emission’s savings from renewable energy and energy efficiency; a World Bank-led initiative to reduce global gas flaring by 2030; innovative financing for clean cooking solutions; energy access in conflict settings; and integrating action on climate mitigation and energy access.

During the MASDAR-hosted high-level luncheon on SE4All with the Advisory Board and Ministers, dignitaries discussed acceleration of innovative solutions on SE4All.

This report highlights discussions in plenary as well as a selection of multistakeholder dialogue sessions.

Opening Plenary: Doubling the Global Rate of Improvement in Energy Efficiency

Clay Nesler, Vice-President for Corporate Sustainability, Johnson Controls, moderated the session. Observing that the energy efficiency community is “in a bit of an identity crisis,” he said the Global Energy Efficiency Accelerator Platform aims to showcase the role of diverse new actors, including cities and sub-national governments, in driving energy efficiency improvements. Stressing that current levels of efficiency improvements fall far short of SE4All targets, Harry Verhaar, Head of Global Public and Government Affairs, Philips Lighting, called for changing the efficiency narrative to focus on two key messages: energy productivity, which he characterized as “how much economy you create for the energy you consume”; and the potential to save US$2 trillion annually through reduced energy expenses, while also creating new jobs. Bruno Berthon, Vice-President for Sustainability, Accenture, expressed hope that the 21st session of the Conference of the Parties (COP 21) to the UN Framework Convention on Climate Change (UNFCCC) will showcase significant bottom-up initiatives and mobilize a broader range of stakeholders. Sheila Watson, FIA Foundation, discussed the Global Fuel Economy Initiative (GFEI) ‘50by50’ campaign, which calls for a 50% fuel economy improvement by 2050, underscoring the importance of improving efficiency in passenger vehicles due to expected fleet growth in developing countries. John Lee, New York City Mayor’s Office of Long-Term Planning and Sustainability, highlighted his city’s policies in the buildings sector, including a retrofit accelerator programme that promotes optimal management of energy use in existing buildings.
PLENARY SESSION ON DOUBLING THE SHARE OF RENEWABLE ENERGY IN THE GLOBAL ENERGY MIX

Adnan Amin, Director-General, IRENA, presented his organization’s Renewable Energy and Jobs 2015 Annual Review. He underscored unprecedented growth in the renewable energy sector and predicted further prosperity. Amin observed that unique public-private partnerships are creating a flourishing job market and providing responses to climate change and development challenges. José Manuel Entrecanales, CEO, Acciona, noted the 7.7 million jobs the renewables sector accounts for. He noted that the challenge to maintain growth in the sector will be finding enough skilled manpower to keep up with the speed of expansion.

MASDAR-HOSTED HIGH-LEVEL LUNCHEON ON SE4ALL WITH ADVISORY BOARD AND MINISTERS

At this Masdar-sponsored event, participants discussed acceleration of innovative solutions on SE4All. Nawal Al-Hosany, Masdar, emphasized the commitment of the United Arab Emirates (UAE) to enhance its partnership with SE4All through Masdar, highlighting the company’s strong track record in delivering clean, safe and sustainable energy across the world. Leaders from international energy agencies, development institutions, and the UN System then made brief statements. They included: Kandeh Yumkella, Special Representative of the Secretary-General and Chief Executive, SE4All; Jan Eliasson, UN Deputy Secretary-General; LI Yong, UNIDO Director-General; Isabella Lövin, Sweden’s Minister for International Development Cooperation; and Rachel Kyte, World Bank Group Vice President and Special Envoy for Climate Change.

HIGHLIGHTS OF SELECTED PARALLEL DIALOGUE SESSIONS

FINANCE: Project Development Facility – Why We Need It: The session, organized by the Asian Development Bank (ADB) and moderated by Christine Singer, SE4All, investigated the role of project development facilities in making projects finance-ready. Gil-Hong Kim, ADB, said the bank started its project development facility 30 years ago to provide mentoring to in-country entrepreneurs, so that their ideas could be converted to financeable action. Jiwan Acharya then gave a comprehensive overview of the experience of the facility, which now delivers a range of customized services to match the needs of entrepreneurs and projects, including, inter alia: “blended financing,” mentorship; business development workshops; working capital; and investment forums aimed at generating interest from private equity. Hans Olav Ibrekk, Norwegian Ministry of Foreign Affairs, noted that as an investor, he was pleased with results of the ADB facility. Joao Duarte Cunha, African Development Bank (AfDB), agreed that mentoring can help, noting he has seen very bankable deals in sub-Saharan Africa take a long time to mature and materialize. He expressed hope that the Sustainable Energy Fund for Africa (SEFA), hosted by the AfDB, can address these bottlenecks. Peter Storey, Private Finance Advisory Network, said good mentorship can also reduce execution risk, one of biggest worries of investors. Roger Platt, President of the US Green Building Council (USGBC), said that standards help to drive investment, noting that USGBC is the sole certifier for the World Bank/IFC EDGE green building promotion program. Giving a country perspective, William Sabandar, Ministry of Energy and Mineral Resources of Indonesia, explained how Indonesia plans to meet its ambitious target of 23% clean and renewable energy by 2025, beginning with an energy pipeline of US$135 billion in investment capital. He said the government is currently developing a sustainable energy fund and a biofuel subsidy.

Launch of the Electrification Financing Initiative, ElectriFI: Roberto Ridolfi, European Commission, presented the launch of EuropeAid’s new Electrification Financing Initiative (ElectriFI). He said ElectriFI offers an innovative financing approach that will unlock private sector investment in renewable energy in developing countries. With initial capitalization of €75 million, he said ElectriFI will use public development funds as unsecured grants that would convert into subordinated debt and only be repaid if investments succeed, which would allow for “crowding in” of finance from established banks comprising senior debt. Irene Muloni, Minister of Energy and Minerals of Uganda, appreciated the timely nature of ElectriFI, emphasizing that a huge barrier in her country is the lack of start-up funds. She expressed enthusiasm that the initiative aligns with Uganda’s strategy and policy to provide universal access to energy. Kate Steel, Power Africa, agreed that crowding in is critical, also noting that ElectriFI aligns with the approach of Power Africa. Frederik-Jan van den Bosch, Netherlands Development Finance Company (FMO), said the company is supporting ElectriFI by conducting feasibility studies.

Launch of a Methodology on Short-Lived Climate Pollutants: During this session, moderated by I. H. Rehman, TERI University, and Nithya Ramanathan, CEO, Nexleaf Analytics, panelists discussed the methodology developed by
Project Surya and the Gold Standard Foundation to quantify and monitor emissions reductions from black carbon and the role of this methodology in climate change mitigation and sustainable development. Veerabhadran Ramanathan, TERI University, hoped the discussion would “break the bottleneck of cost” of clean cookstoves. Stressing the need for viability and scalability of initiatives, I. H. Rehman said the methodology opens avenues for carbon financing. Nithya Ramanathan emphasized that the methodology’s specific focus is on the most efficient and advanced cookstoves only, the use of which would translate into emissions reductions from black carbon. Lisa Hodes Rosen, The Gold Standard, noted that the methodology does not produce carbon credits, expressing readiness to work towards creating a black carbon market and invest in infrastructure to support it. Romina Picolotti, President, Center for Human Rights and Environment (CEDHA), discussed sources of black carbon other than cookstoves. Highlighting public health, economic and gender co-benefits of clean cookstoves, Radha Muthiah, Executive Director, Global Alliance for Clean Cookstoves, highlighted awareness-creating and market-readying efforts of the Alliance. Ajay Narayanan, International Finance Corporation (IFC), addressed how development of the methodology contributed to the creation of sustainable business models. John Mitchell, Environmental Protection Agency (EPA), suggested moving away from field consumption and looking at actual emissions reductions.

**ACCESS: Financing Energy Access in Crisis Settings – Ensuring Sustainable Energy for those Affected by Natural Disasters and Conflict:** This session was moderated by Simon Collings, Global Village Energy Partnership. Sarah Costa, Executive Director, Women’s Refugee Commission, decried the “collective failure” of the humanitarian and development community to address the vulnerabilities of women and girls in conflict settings. She highlighted the World Food Programme’s Safe Access to Fuel and Energy (SAFE) approach in Darfur as a good practice in addressing the health-food-energy-livelihoods nexus. Radha Muthiah, Executive Director, Global Alliance for Clean Cookstoves, stressed that humanitarian staff need the right tools and capacities to effectively integrate energy access in their support programmes. Stressing that “pilot projects alone will never meet the needs of more than 50 million displaced people,” she said the ongoing SDG process provides an opportunity to bring this neglected issue to the attention of policy makers and funders. Koen Peters, Executive Director, GOGLA Secretariat, said network members develop solar energy solutions that meet the requirements of safe energy. He suggested that the expertise of industry associations work with humanitarian agencies to develop sustainable business models and introduce minimum standards for energy solutions. Amare Gebre Egziabher, UN High Commissioner for Refugees (UNHCR), discussed social, political and environmental perspectives in humanitarian policies, noting that displaced persons are often resettled in remote and ecologically fragile areas, which accelerates environmental degradation and creates conflicts over resources. In the ensuing discussions, participants highlighted, inter alia: the rise of permanent refugee camps, which further entrenches social and ethnic tensions; ensuring that host populations also benefit from energy access and livelihoods programmes, especially in urban settings; consulting end users of improved cookstoves and other energy solutions to ensure they meet their needs; and moving towards cash transfers as soon as possible after an emergency in order to help kickstart market solutions.

**Driving Energy Access in the Developing World through Innovative Financing for Clean Cooking Solutions:** Leslie Cordes, UN Foundation, opened the discussion, noting ongoing development of financial and capacity-building mechanisms aimed at unlocking the potential of the clean cooking sector. Jonathan Cedar, Co-founder and CEO, BioLite, discussed his company’s clean burning cookstoves that reduce indoor emissions by 90% and also enable lighting and mobile device charging capabilities. Moya Connelly, Deutsche Bank, stated that subsidies and carbon credits can be useful but investors are unlikely to invest in projects that are too reliant on these mechanisms. Najada Kumbuli, Calvert Foundation, highlighted the intersection between gender and energy, noting the great potential for raising capital from women investors. Sean Moore,
Acumen, discussed some issues for investors in early-stage enterprises, noting that investment risks are not easy to assess. Malcolm Cosgrove-Davies, World Bank, identified barriers to scaling up, noting particular challenges associated with results-based financing approaches as small companies often lack the working capital to develop their businesses.

**ENERGY EFFICIENCY: Energy Efficiency Accelerator Platform:** Thierry Van Landegem, Vice-President, Open Innovation Bell Labs, opened the session, which was moderated by Clay Nesler, Johnson Controls. Van Lange gem discussed the vast potential for energy efficiency improvements within the communications sector, highlighting the resulting emissions reductions that can be achieved across multiple industries. Josué Tanaka, European Bank for Reconstruction and Development (EBRD), discussed accelerating financial support for energy efficiency through the development of a global alliance of banks. Jigar Shah, Executive Director, Institute for Industrial Productivity (IIP), discussed accelerating industrial energy efficiency progress, noting recent achievements in manufacturing energy standards and suggesting greater inclusion of the private sector in SE4All. Felming Voetmann, Head of Public Affairs and Leadership Communication, Danfoss, introduced a district energy accelerator that brings together public and private actors to improve energy efficiency in cities. Steven Kukoda, Vice-President, International Copper Alliance, described financing as the biggest hurdle for appliance accelerators as initial investments can be too burdensome for emerging markets. Harry Verhaar, Philips Lighting, noted that, globally, two-thirds of current lighting is inefficient and suggested that lighting partnership funds could offer a solution. Pradeep Monga, UNIDO, underscored the multisectoral benefits that can be achieved through industrial energy efficiency improvements, calling for further capacity building and funding for small- and medium-sized enterprises. Bruno Berthon, Vice-President, Sustainability, Accenture, insisted on the need to be more ambitious and aggressive, and to better leverage technologies.

**RENEWABLE ENERGY: IRENA’s Project Facilitation Platform – A Virtual Market Place to Enhance Project Development and Financing in Africa:** This session was moderated by Henning Wuester, Director, IRENA’s Knowledge, Policy and Finance Centre. Wuester discussed the objectives of the IRENA Coalition for Action, noting it aims to dispel some common myths that suggest renewables are too expensive, unreliable, immature and small-scale, and offer few economic benefits. Wuester then introduced IRENA’s Project Facilitation Platform, noting that it aims to provide a virtual market place for renewables project owners, financiers and service providers in Africa. He described the IRENA project navigator as one of the tools developed by the Platform to support project development on a step-by-step basis, noting that more than 350 projects with a combined capacity of 60 GW are currently in the pipeline. During the ensuing discussion, one participant noted that “Arab donors are moving into renewables in a big way” but do not understand the African market. He said the platform could help open up project financing from such emerging sources, while also facilitating donor coordination.

**Energy Efficiency and Cities Initiatives:** This session was hosted by SE4All in collaboration with the UN Secretary-General’s Climate Change Support Team and moderated by Kerry Constabile, UN Secretary-General’s Climate Change Support Team, and Luis Gomez-Echeverri, SE4All. Representatives from major cities initiatives highlighted their work on energy efficiency and explored ways of strengthening collaboration among them. Constabile then invited panelists to consider how national governments can strengthen their work with cities on climate. Luis Gomez-Echeverri urged scaling up work in the lead-up to COP 21 in Paris. Christopher Jones, Covenant of Mayors, noted that the European Commission initiative has been successful in signing up cities outside Europe. Seth Schultz, C40 Cities Climate Leadership Group, highlighted the Compact of Mayors initiative. Vincent Kitio, UN-Habitat, identified urban planning, urban economy and urban legislation as the three components of UN-Habitat’s work on cities. Patricia McCarney, Director, World Council on City Data, discussed the first ISO standard for cities outlining key measurements for evaluating a city’s service delivery and quality of life. Sandy Tung, 100 Resilient Cities, addressed areas of support rendered by her organization, including funding to hire a chief resilience officer and support to develop a city resilience strategy. Angie Fyfe, ICLEI – Local Governments for Sustainability, discussed...
ICLEI’s efficiency accelerator and district energy accelerator platforms. Ivan Jaques, World Bank, reported on the City Energy Efficiency Transformation Initiative. Evan Juska, The Climate Group, discussed the States and Regions Alliance.

The session was moderated by Phyllis Cuttino, Director of Pew’s Clean Energy Initiative. Highlighting key findings from the report, she said renewable energy investment in developing countries has grown and that clean energy is likely to play a large role in the future. Yaroslav Golitsyn, Permanent Mission of Ukraine to the UN, discussed the report’s findings on Ukraine, which underlines that the country’s feed-in tariff programme has facilitated clean energy investment and deployment, as well as the government’s goal of 12% of electricity from renewables by 2020. Ethan Zindler, Bloomberg New Energy Finance, expressed optimism for renewables in the future. He said that, with equipment and capital priced at Western Europe standards, emerging markets could build renewable projects that would out-compete coal. Cuttino thanked Bloomberg New Energy Finance for their collaboration in the report, and fielded questions from the audience.

Sneak Preview – REN21’s Renewables 2015 Global Status Report: The session was opened by Irene Giner-Reichl, President, Global Forum on Sustainable Energy. Christine Lins, Executive Secretary, Renewable Energy Policy Network for the 21st Century (REN21) presented a preview of key observations from the report, to be released officially at the Vienna Energy Forum on 18 June 2015. She highlighted the success story of the power sector, underscoring great progress outside North America and Europe as renewable energy becomes more accessible. She further reported on moderate progress in heating and cooling, calling for additional attention to this sector. Henning Wuester, IRENA, stated that it makes economic sense for governments to pursue renewable energy due to reducing costs, technological maturity and socio-economic benefits. Ernesto Macias, President, Alliance for Rural Electrification, underscored the contribution of renewable energy to climate change mitigation, and highlighted the importance of public investment, stating that private investment would follow. Geng Dan, Chinese Renewable Energy Industry Association, presented information on China’s sustainable energy goals. She noted uncertainties in hydro- and nuclear power development, suggesting that China’s 2015, 2020 and 2030 goals may need to be adapted to reflect unexpected difficulties in these sectors, adding that growth in wind and solar power may be able to compensate for those difficulties.

GLOBAL POLICY AGENDA: Regional Interconnection – Unlocking the SE4All Potential: At this session, moderated by Jose Antonio Vargas Lleras, World Energy Council, Latin America and the Caribbean (WEC LAC), panelists discussed regional integration of infrastructure and markets in Latin America to address uneven distribution of energy resources in the region. They elaborated on, inter alia: priority projects; their key benefits; key barriers and enabling conditions; the role of governments and stakeholders; ways to promote renewable technologies and energy efficiency, and eradicate poverty; and how Latin America’s success stories can catalyze action in other parts of the world. Describing universal access to affordable energy services as one of the most formidable challenges facing governments and the industry today, Jose Antonio Vargas Lleras invited participants to address energy security, environmental sustainability and equity. Pedro Luiz De Oliveira Jatobá, Eletrobras, discussed the examples of gas pipelines between Bolivia and Brazil, Central American Electrical Interconnection System (SIEPAC), the Andean Electrical Interconnection System (SINEA) project and La Plata River Basin integration. Emphasizing the need to garner regulatory and institutional support for regional and sub-regional integration, Francesco Giorgianni, Enersis, highlighted the importance of political and economic integration as well as electrical interconnections. Hamilton Moss de Souza, Development Bank of Latin America, addressed the Bank’s role in supporting regional integration and, distinguishing integration from interconnection, identified the need for strong and reliable institutions.
GROWING THE MOVEMENT: The Clean Energy Mini-Grids HIO: Richenda Van Leeuwen, UN Foundation, opened the session, highlighting the potential of mini-grids for energy access and suggesting further discussion on policy barriers and gaps in implementation. Marcus Wiemann, Executive Director, Alliance for Rural Electrification, highlighted gaps in financial assistance, suggesting the creation of a SE4All financial facility to assist with leveraging funds. Guilherme Collares Pereira, Energias de Portugal (EDP), presented a video demonstrating a joint UNEP/EDP project to create clean mini-grids in Mozambique based on solar power and energy from transformed waste. Faris Hasan, OPEC Fund for International Development, noted that development banks are often unable to fund projects below US$10 million due to high transaction costs, highlighting the need for aggregated projects to make financing viable. Venkata Ramana Putti, World Bank, detailed the Bank’s Energy Sector Management Assistance Program (ESMAP) that promotes mini-grids, focusing on, inter alia, knowledge and capacity building, and market development in Africa. Joao Duarte Cunha, AfDB, stated that policy frameworks are not yet in place in Africa and called for countries to make use of the available funding to create enabling conditions for scaling up off- and mini-grid electrification. Clare Boland, Associate Director, Rockefeller Foundation, presented her company’s work on renewable energy mini-grids in India, stating the need to develop market building solutions to drive economic development rather than rely on unsustainable grant funding. Abhishek Pratap, Greenpeace India, presented solar micro-grid projects in Dharnai and Bihar, India, highlighting the benefits of community-led, bottom-up approaches.

Sustainable Bioenergy HIO – Launch and Ambition: During this session, moderated by Gerard Ostheimer, Global Lead, High Impact Opportunity on Sustainable Bioenergy, panelists discussed the HIO partnership, which is designed to facilitate sustainable bioenergy solutions to help SE4All reach its goals. Emphasizing the complexity of the issue and the importance of context, Olivier Dubois, FAO, stressed the need for: in-depth understanding; implementation of good practices through optimizing land-use efficiency and biomass use; an enabling policy and institutional environment; appropriate reporting and verification; political will; and good governance.

Underscoring that biofuels are “neither good nor bad,” Barbara Bramble, Roundtable on Sustainable Biomaterials (RSB), said RSB aims to facilitate collaboration among all HIO programme members to reach SE4All goals, and to demonstrate that smallholder projects can benefit from access to markets. Thomas Videbaek, Novozymes, identified the need for knowledge sharing. Edu Willemsen, SNV – Netherlands Development Organization, highlighted the HIO’s potential to drive innovation. Ignaas Caryn, KLM – Royal Dutch Airlines, reported on KLM’s biofuel programme, citing the Bioport Holland project on creating a biojet industry for Europe as an example of a High Impact Initiative (HII) under the HIO. Ethan Zindler, Bloomberg New Energy Finance, emphasized that bioenergy needs to be economically viable. Mosad Elmissiry, The NEPAD Agency, stressed the need for favorable investment environments. Sergio Rivera-Zaballos, Inter-American Development Bank (IDB), described the lack of bankable projects on biofuels as a challenge. Meghan Sapp, Executive Secretary, Partners for Euro-African Green Energy (PANGEA), presented on bioenergy technologies in rural electrification markets.

Global Initiative: Combining Forces to End Routine Gas Flaring: This session was facilitated by Anita Marangoly George, World Bank. Bjorn Hamsom, World Bank, provided an overview of gas flaring globally, noting thousands of gas flares at oil production sites burn approximately 140 billion cubic meters of natural gas annually, emitting more than 300 million tons of carbon. Describing this issue as a “low hanging fruit on the climate agenda,” he outlined the broad range of actors involved in the Global Gas Flaring Reduction Partnership. Charlotte Wolff-Bye, Vice-President Corporate Sustainability, Statoil, said the company was the first industry actor to join the global initiative. Acknowledging that policy measures taken by the Norwegian government to prevent waste of resources, improve energy access and reduce emissions initially helped to drive energy efficiency in the country’s oil sector, she said the company is on track to meet its gas flaring reduction targets by 2020. During the ensuing discussion, participants highlighted regulatory hurdles and the lack of resources as key barriers to meeting the Initiative’s goals, and noted the work of the Climate and Clean Air Coalition as an example on how to achieve innovations in the sector.

Members of the SE4All Advisory Board