



TERMS OF REFERENCE

Joint ADB-UNDP-ESCAP SE4ALL Hub for Asia and the Pacific (AP-SE4ALL) hosted by the Asian Development Bank

1. As part of the Sustainable Energy for All (SE4ALL) Initiative, three regional hubs (Africa, Asia and Latin/Central America) are being set-up to facilitate and coordinate the implementation of the Initiative at the regional level. These hubs are hosted by the Regional Development Banks because of their regional expertise and long-term financial commitment to their specific regions. In May 2013, representatives from the Asian Development Bank (ADB), the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Development Programme (UNDP) discussed the establishment of a regional hub for Asia and the Pacific (AP-SE4ALL) which will be hosted by ADB, based in Manila, Philippines. This partnership has now been strongly endorsed by SE4ALL. The following sections provide an overview of the AP SE4ALL Hub's terms of reference.

A. Introduction

1. Sustainable Energy in Asia and the Pacific and its Investment Needs

2. Asia and the Pacific is the region with the majority of the energy poor globally. The International Energy Agency estimates that around 628 million people in the region account for almost 50% of the total number of people globally without access to electricity. Access to electricity, particularly from clean energy resources, has tremendous impacts on the environment and the socio-economic situation of people. For example, it provides the opportunity for income-generating activities, improves conditions for students and reduces the strains on environment, especially through the reduction of GHG emissions and indoor air pollution.

3. Asia - Pacific also ranks the highest in terms of dependence on traditional solid fuels for cooking. In the region, 1.8 billion people – out of a global total of 2.6 billion – lack access to clean cooking energy solutions. Dependence on traditional solid fuels has dramatic impacts on the health of the people, particularly women and children. Furthermore, women will not be able to engage in more productive and income-generating activities and children in educational activities, as they have to spend hours collecting fuel for cooking.

4. The International Energy Agency estimates that an additional \$602 billion in investment is required to provide universal access to electricity by 2030, an average of \$35 billion per year – a figure which has been revised upward by several more recent studies. The Asia Pacific region accounts for 36% of this investment need.

5. By 2035, the share of developing Asia, specifically in primary global energy consumption, is expected to increase from 34% in 2010, to as much as 56% according to some projections.¹ This trend reflects Asia's increasing role as a center of manufacturing, and its status in claiming over half of all global megacities. Meanwhile, Asia's dependence on energy imports is growing. Most countries in the region, 2 decades from now, will produce 50% or less of the energy they require. Energy imports, and specifically imported oil, will continue to be critical in the region. A recent report by ADB states that a 1%–4% investment in energy efficiency, as a share of overall energy sector investments, can meet as much as 25% of the

¹ Asian Development Bank (2013). Asian Development Outlook 2013: Asia's Energy Challenge. Manila

projected increase in primary energy consumption in developing Asian countries by 2030. Throughout Asia and the world, a critical emerging need exists for energy solutions that simultaneously conserve economic and environmental resources while bolstering the performance of existing energy infrastructure.²

6 The Pacific Islands are extremely dependent on imported petroleum for their commercial energy needs. The Pacific islands region has the highest petroleum fuel dependency of any region or sub-region in the world. Energy access in the Pacific varies with significant gaps in electricity and/or fossil fuel access in Melanesian as well as other countries including the Marshall Islands, Federated States of Micronesia and Kiribati. There are, of course, low income households in most Pacific countries, which use little petroleum fuel or electricity because of their high costs, even though these can be accessed. In the Pacific, considering national level impacts (e.g. fuel savings and electricity reduction), in general, energy efficiency investments seem to be significantly more attractive than renewable energy, while renewable energy systems (e.g. grid connected solar photovoltaic) are approaching parity with fossil fuels and in remote areas given the high fossil fuel costs and the associated vulnerability due to price fluctuations.

7. Clean energy is seen as the win-win solution with multiple benefits to respond to climate change - a way to decouple economic and social development from increased greenhouse gas emissions. Renewable energy's contribution to the global energy mix is at 648 gigawatts (GW), not counting large hydropower. Counting all sources of hydropower, the percentage of energy sourced from modern renewable sources is estimated at 9.7% of the global energy mix. Wind is the leading renewable energy resource with 280 GW installed - mainly in the People's Republic of China (PRC). Today, renewable energy development is the fastest growing sector of energy generation, and the PRC and India are not only leaders in Asia, but globally as well. Asia - Pacific, under threat from climate change, and faced with growing dependence on energy imports, is turning to renewables to meet energy demand. The wide range of technologies available benefits the region's diverse landscape - India has vast solar resources, while the Greater Mekong Subregion in Southeast Asia has untapped hydropower potential. The IEA predicts that by 2016, renewables will surpass natural gas as the second biggest source of electricity, after coal.

2. The Sustainable Energy for All (SE4ALL) Initiative

8. The Sustainable Energy for All (SE4ALL) Initiative was launched by the United Nations Secretary General in September 2011 to achieve three inter-related goals by 2030: (1) Ensuring universal access to modern energy services; (2) Doubling the global rate of improvement in energy efficiency; and (3) Doubling the share of renewable energy in the global energy mix. The SE4ALL Initiative will help to catalyze major new investment opportunities to speed-up the transformation of the world's energy systems, pursue the elimination of energy poverty, and enhance prosperity. The Initiative brings together the global convening power of the United Nations, the ability to mobilize bold commitments and leverage large-scale investments, and a rapidly expanding knowledge network. Comprehensive solutions will require a suite of approaches involving several complementary actions, including institutional, sector and policy reforms supported by broad coalitions at the country-level as well as off-grid, small-scale, decentralized and community-based sustainable energy services, to serve the energy service needs of rural and urban communities and entrepreneurs who are not served by the central grid in case of electricity or centralized distribution systems in case of cooking and heating fuels. To

² Asian Development Bank (2013). Same Energy. More Power. Manila.

achieve the 3 above cited SE4ALL goals, 11 action areas (7 sectoral areas and 4 enabling environment areas) have been proposed.³

9. The current SE4ALL Governance Structure includes an Advisory Board, an Executive Committee and a Global Facilitation Team (GFT) headed by a Chief Executive. The Regional Hubs are linked to the Global Facilitation Team that operates under the guidance of the SE4ALL Executive Committee and Advisory Board. Three Regional Hubs and four thematic Hubs (Knowledge Hub, Renewable Energy Hub, Energy Efficiency Hub and the Decentralized, Off-grid & Bottom up Energy Solutions Hub) are being created. They are conceived as the platforms for engagement and action, drawing upon and building partnerships, designing and implementing program of activities to achieve the SE4ALL objectives in their respective areas of responsibilities.

3. The organizations and their contribution to SE4ALL

10. Asian Development Bank (ADB): Recognizing the large investment needs in the region, ADB has made it a policy priority to increase energy efficiency and the development of renewable energy investments in the region and also maximize access to energy for all through its Energy Policy 2009, which targets the annual lending of \$2 billion in clean energy investments by 2013. Since 2008, ADB has provided funding of 3.7 billion USD for energy access which is expected to raise new connections to modern energy to more than 13 million households and 9.3 billion USD in clean energy. Between 2008-2012, ADB's completed projects connected 4.089 million households. ADB is contributing to the achievements in the three priority areas of energy efficiency, renewable energy and energy access through tapping into existing partnerships and already ongoing initiatives like the Clean Energy Program (Energy Efficiency and Renewable Energy) and the Energy for All Initiative (Energy Access), which aims to provide access to sustainable energy services to 100 million people by 2015 through Energy for All Partnership.

11. United Nations Economic and Social Commission for Asia and the Pacific (ESCAP):

United Nations Economic and Social Commission for Asia and the Pacific (ESCAP): ESCAP is the regional development arm of the United Nations for the Asia-Pacific region fostering sub-regional and regional cooperation in the areas of access to energy services, energy efficiency and renewable energy. For its 62 member states and associate members ESCAP provides a platform for intergovernmental dialogue and cooperation, providing capacity development, implementing technical cooperation projects, and conducting research and analysis to promote policy development and participating in various global, regional and sub-regional initiatives on energy. One of the key areas of action is developing an intergovernmental dialogue on common infrastructure and harmonized energy policies, so called "Asian Energy Highway" with a view to increasing regional economic integration. ESCAP can contribute to the regional HUB by bringing in an intergovernmental regional framework on energy which has been recently strengthened by the Asian and Pacific Energy Forum (APEF). APEF was the first energy-focused ministerial conference held in May 2013 under the auspices of the United Nations. This framework can facilitate region-wide promotion of sustainable energy policies, projects and

³ **Seven sectoral areas:** (1) modern cooking appliances and fuels; (2) distributed electricity solutions; (3) grid infrastructure and supply efficiency; (4) large-scale renewable power; (5) industrial and agricultural processes; (6) transportation; and (7) buildings and appliances. **Four "enabling" action areas:** (1) energy planning and policies; (2) business model and technology innovation; (3) finance and risk management; and (4) capacity building and knowledge sharing.

good practices developed at the subregional and country level. Also it will support the recognition of SE4ALL related national actions by the governments in the region. Based on the regional consensus achieved by APEF we can work together with partners on further promotion of SE4ALL goals and its acceptance in the region.

12. United Nations Development Program (UNDP): In Asia - Pacific, UNDP supports 36 developing countries with comprehensive programs focusing on removing barriers to promote energy access, renewable energy, and energy efficiency as part of broader efforts to reduce poverty, achieve the MDGs, and mitigate greenhouse gas emissions to reduce the impacts from climate change. In the last two decades, UNDP mobilized over US\$ 600 million to help finance energy projects in the region. Country demand for state-of-the-art knowledge, expertise and financial solutions to deliver energy services remains high. UNDP is committed to intensify and accelerate its engagement thus expanding energy access, increasing use of renewable energy and adopting energy efficient practices. UNDP will contribute to the implementation of the SE4ALL work program, in particular the SE4ALL “country actions”. UNDP will build on its experience of implementing sustainable energy solutions, its substantive/ technical strengths around energy and climate change, its engagements with national and local governments and civil society on governance, policies and public participation. Within the SE4ALL partnership, UNDP will prioritize in conceptualizing and supporting decentralized energy solutions.

13. The Global Facilitation Team (GFT): The GFT is one of the principal organs of the governance structure of SE4ALL. The regional hubs will serve as a major resource to the Global Facilitation Team in strengthening partnerships and expanding SE4ALL’s networks in their respective regions. The GFT’s role is to ensure that the strategic and operational activities of each hub directly align with the SE4ALL strategic goals and objectives, vision, approach, prioritization and sequencing of activities. In carrying out their actions, the Hub will coordinate closely with the GFT as they facilitate country action, develop approaches to catalyze business action and leverage investment financing, undertake advocacy and outreach, and undertake monitoring and evaluation. The role of the GFT will be to help harmonize these actions at the global level. The GFT will support the Hub in its preparation of the Work program to ensure that it is aligned with the SE4ALL strategic goals and objectives. The GFT will help the HUB in its task of developing its work in the countries selected and provide support, when and as needed, with local partners. It will also help the HUB prepare a brief annual report on its activities. The GFT will help strengthen the collaboration and communication with key partners in the region and the HUB and its partners- which in the case of Asia and Pacific is the ADB working in collaboration with the UNDP and ESCAP.

B. Proposed AP SE4ALL Hub

14. The AP-SE4ALL Hub will leverage the existing structures of ADB, UNDP and ESCAP energy programs and integrate the strengths of all three development partners to support the achievement of the three SE4ALL goals in the Asia-Pacific region. The mission of the AP-SE4ALL Hub is to accelerate and facilitate the achievement of the SE4ALL objectives in the Asia Pacific Region⁴. The Hub will harness its three development partners’ convening power, country presence and networks to mobilize partnerships to catalyze concrete actions at the country level. The Hub, in close cooperation with the Global Facilitation Team (GFT) will facilitate and coordinate core activities with respect to the SE4ALL goals. It is envisaged that much of the SE4ALL Hub work would be aimed at information sharing, forging partnerships, and providing a platform for cooperation around specific action areas.

⁴ ADB’s support will be limited to its developing member countries

15. The objectives under this hub in the first two years will include :

1. Support to countries in their preparation of Rapid Assessments and preparation and implementation of **country actions plans and action agendas**
2. Building constructive **dialogue on policy**, investment and market development by governments, businesses and civil society.
3. **Catalyzing investments** in energy access, renewable energy, energy efficiency and provision of innovative financing including through the Energy for All Project Development Facility (E4All PDF) of ADB as well as mobilizing bilateral and global funds such as the Global Environment Facility. On the E4All PDF, it is the intention to mobilize additional donor support for the Facility so that there are greater resources for project development emerging from the action agendas and investment prospectuses to be prepared in target countries.
4. Promoting transition to low carbon development through the **development of market based approaches** for the delivery and consumption of energy
5. **Building synergies** among stakeholders by connecting through partnerships, improvement of communication and knowledge sharing.
6. **Promoting joint and coordinated action** among stakeholders interested in supporting the implementation of action agendas at the country level
7. **Promoting regional cooperation in SE4ALL activities implementation in Asia-Pacific.**
8. Supporting efforts to **mobilize resources for SE4ALL** activities in the region

In order to measure the success in achieving these goals, the hub will conduct regular monitoring and evaluation activities.

C. Proposed Tasks

16. The main tasks identified for the hub initially will include but not limited to:

1. Preparation of Rapid Assessments, Country Action Plans and Investment Prospectus, where relevant
 - Development of country-specific and country-driven road maps for achieving SE4ALL relevant objectives by 2030;
 - Development of short to medium-term action agendas to support investments in energy access, renewable resources, and energy efficiency;
 - Implementing a technical assistance program to utilize indigenous renewable energy resources to supply electricity and improve living standards of poor, and remote communities that are not covered by power grids;
 - Design Country Action Plans to be the instrument of strategic coordination among development partners and countries' programs in the energy sector;
 - Prepare Investment Prospectus identifying specific projects and programs to mobilise public and private investments; and,
 - Develop capacities of partner organizations and government agencies on relevant topics related to energy access, energy efficiency and renewable energy (EA/EE/RE).
2. Policy dialogue among stakeholder:
 - Provide resources that support policy and institutional reforms and regulatory frameworks that encourage development of sustainable energy production and use;

- Conduct stakeholder workshops to identify the capacity barriers and needs of countries including sub-regional or thematic workshops;
- Promote existing regional, sub-regional and national initiatives that align with the objectives of SEF4ALL; as well as initiatives that arise from individual and joint efforts taken at the country level on sustainable energy;
- Hold an annual hub forum during the Asia Clean Energy Forum in June;
- Develop platforms to lower key barriers to develop utility-scale RE technologies while developing incentives to accelerate technology diffusion;
- Showcase the potential of sustainable energy to governments in Asia and the Pacific region by developing mechanisms that reduce the risk of all stakeholders, remove policy barriers. Support South-South knowledge and learning exchange through capturing lessons learnt, peer assistance, and focused institutional advisory support; and,
- Formulate recommendations to remove barriers for tested, clean, efficient and renewable energy technologies and energy efficiency measures, in particular for productive purposes in areas not served by the grid.

3. Catalyzing investment:

- Build a pipeline of projects from champion organizations in the region that are pioneering viable solutions in the key areas of energy access, renewable energy and energy efficiency (EA/RE/EE);
- Explore building on current pipeline of projects and programs⁵ in a selected number of countries for potential expansion of these into SE4ALL programs; Build the E4All Project Development Facility of ADB into a full-fledged SE4ALL PDF supported by a large number of donors;
- Help countries prepare Investment Prospectus and market it to investors;
- Support demand-side energy efficiency interventions with customized financing mechanisms and by developing the market for energy efficiency to leverage more private financing into energy efficiency investments and into bankable efficiency projects, specifically in the industrial and buildings sector;
- Assist in building investment platforms for investment facilitation of EA/RE/EE projects;
- Mobilize public sector seed capital, concessionary finance and risk mitigation instruments to create the conditions under which private sector investors will be attracted to invest capital at scale into emerging Asia-Pacific markets;
- Assist private equity funds to develop and operate investment windows dedicated to EA/RE/EE projects; Assist energy companies in accessing the right funding support (grant/loan/equity) and facilitate investment through supporting preparation of project proposals;
- Provide incentives for local financial institutions to provide solutions for financing Bottom-Up energy solutions/decentralized energy services; and,
- Organize Investor Forums and other events to facilitate investment.

4. Development of market-based approaches:

- Build incubation centers for different technologies with experienced champion organizations in Asia and the Pacific to replicate best practices through the region;
- Assist pioneering and early stage companies through necessary financial, technical and mentoring support to make companies investment ready;
- Establish marketplaces for transfer of low-carbon technologies;

⁵ Including utilities, SMEs, CSR and others.

- Pilot innovative business models for energy service delivery, especially those that strengthen income-generating and entrepreneurial opportunities by promoting productive uses of energy;
- Integrate decentralized energy systems with productive uses of energy and entrepreneurial activities using the energy plus approach; and,
- Promote commercial approaches for the delivery of energy services supported with partnerships between traditional and 'non-traditional' businesses involving the private sector, government, non-government organizations, enterprise associations, social enterprises and communities and entails actions through High Impact Opportunities at the country level.

5. Building synergies and promote knowledge sharing:

- Develop platforms of key stakeholders to promote knowledge and information exchange and new partnerships to advance sustainable energy solutions;
- Actively promote and carry out advocacy, outreach and communication activities to increase the knowledge and information about sustainable energy business models and available financial resources among energy practitioners;
- Compile and disseminate innovative financial and business models to address the existing and future demand of electricity and non-electricity needs of small businesses, households and communities such as innovative models at the aggregator or intermediary level to infuse large amounts of capital to support enterprises;
- Together with SE4ALL partner organizations, jointly organize flagship events like the Asia Clean Energy Forum and conferences on sustainable energy, including those in support of the UN Decade on Sustainable Energy for All;
- Provide inputs to the SE4ALL main website⁶ for the activities related to AP-SE4ALL(news, data/figures, reports);
- Inform stakeholders of the financing windows and instruments available for investment and inform regularly about call for proposals from donors and funds and deadline of fund applications via the website;
- Develop in coordination with thematic and other regional hubs, case studies, reports and other knowledge products on different EA/RE/EE related topics and document solutions or best practices in achieving the three 2030 goals;
- Work closely with SE4ALL hubs as well as with SE4ALL relevant partners (e.g. World Bank, IRENA, UNDP, UNEP, REN21) as well as other initiatives such as Energy+, Global Alliance for Clean Cookstove in sharing experiences and information about the availability of best practices in energy access, energy efficiency and renewable energy; and
- Compile, together with all relevant SE4ALL partners an annual update on the SE4ALL related activities in the Asia and Pacific Region. Such report, while serving as a stand-alone document, will also form inputs into the global SE4ALL annual report.

6. Monitoring and Evaluation:

- Contribute to the Global Tracking Mechanisms by tracking activities and initiatives of energy stakeholder and development practitioners in the region;
- Assist governments in the preparation and up-dating of country action plans, investment prospectuses and implementation plans;
- Develop and up-date regularly the hub's specific work program, which will be shared with the GFT; and,

⁶ <http://www.se4all.org/>

- Building a dedicated supporting unit for the Asia and the Pacific wide tracking process.

D. The AP-SE4ALL Governance Structure

17. ADB will host and lead the AP-SE4ALL Hub and allocate necessary resources to facilitate tasks described under C, with a governance structure that will have UNDP and ESCAP to harness synergies and will work closely with other thematic hubs and GFT. For this purpose, the ADB will establish a team responsible of managing the SE4ALL Hub. All three organizations will provide guidance and support in developing the AP-SE4ALL initiative, assist in joint implementation of tasks described under C and implement pilot projects and document best practices with support from GFT and other thematic hubs. The AP-SE4ALL Hub will fully integrate existing programs and tap into on-going initiatives already implemented by the countries through funding by public resources or development partners such as ADB, UNDP, ESCAP, MDBs and bilaterals. AP-SE4ALL Hub will consolidate achievements and communicate to all partners and stakeholders as well as to GFT the achievements of AP SE4ALL. It is envisioned to jointly organize workshops and events under SE4ALL. The Hub will also forge partnership and collaboration with various governments, private sector, civil society organizations, financial institutions and other development partners to consolidate efforts to promote Sustainable Energy for All in the Asia and Pacific region.

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