Recommendations to advance clean energy mini-grids in the Philippines

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About the Alliance for Rural Electrification

The Alliance for Rural Electrification (ARE) is the global business association representing the decentralised renewable energy (DRE) sector for rural electrification in emerging countries.

ARE unites 150+ committed and innovative Member companies working to promote a sustainable DRE industry for the 21st century. More than 25 ARE Members present at IOREC!

ARE works via four work streams:

- Global voice
- Acting locally
- Funding & financing
- Powerful partnerships
Opportunities for Mini-Grids

Estimated source of additional generation required to achieve universal electricity access by 2030 (by region)

- Africa: 42% (Stand-alone), 17% (Mini-grid), 40% (On-grid)
- Developing Asia: 37% (Stand-alone), 19% (Mini-grid), 44% (On-grid)
- Latin America: 60% (Stand-alone), 10% (Mini-grid), 30% (On-grid)

Note: Figures are rounded. Total generation requirements: 468 TWh in Developing Asian, 463 TWh in Africa, and 10 TWh in Latin America. Source: Based on IEA, UNDP, and UNIDO, 2010

Source: Microgrid Investment Accelerator, 2017
**Opportunities for Mini-Grids in Philippines**

**Abundance of off-grid sites**
- 7,641 islands, 1,702 potential off-grid sites.
- 2,399,108 households in the Philippines remain unserved.

**Opportunities for hybridisation of diesel mini-grids and power plants**
- 400 MW of diesel generating capacity installed in over 320 off-grid missionary areas.
- Recent study by ASEP revealed that savings of up to 4-5 PHP/kWh diesel power plants are possible.

**Policy frameworks for mini-grids being re-worked by government**
- DOE aims to attain 100% electrification for all islands of the Philippines by 2020.
- Streamlining of the process for Qualified Third Parties (QTP) and New Power Producer (NPP) investments in hybrid and clean energy mini-grids in the Philippines under way.
Outcomes: Philippines Mini-Grid B2B Forum
Manila, 19-21 September 2018

Key figures
• 283 participants
• 200+ B2B meetings
• 125 private sector representatives
• 60+ representatives from electric cooperatives
• 25 ARE Members present
• 30+ presentations

Early outcomes
• 55% of foreign participants in the Forum very likely to invest in mini-grids in the Philippines.
• 37% of B2B meetings resulted in the expected business cooperation between the meeting partners.
Capacity building for electric cooperatives

Challenge: Gap between the larger electric cooperatives and the most remote cooperatives in capacity to develop RE solutions, write tenders, access information as well as funding opportunities.

Recommendation: ASEP and future donor programmes to provide additional support to ongoing NEA efforts, which focus on capacity building for the most challenged Philippine electric cooperatives in the field of energy efficiency and renewable energy.
Further improving regulations for mini-grids in the Philippines

**Challenge 1:** Long application processes for NPPs and QTPs

**Recommendation 1:** Uniform process for NPPs and QTPs to bring down processing times

**Challenge 2:** Competitive selection procedures in remote areas

**Recommendation 2:** Exemptions in the CSPs to projects under a certain threshold

**Challenge 3:** Exclusion of unsolicited proposals

**Recommendation 3:** Unsolicited proposals to be allowed under specific criteria

**Challenge 4:** Mini-grid interconnection with national grid

**Recommendation 4:** Develop a mechanism and ruleset for mini-grid developers in areas where the main grid might arrive
Financing and subsidies for mini-grids in the Philippines (1)

**Challenge (1):** Reducing diesel subsidies

**Recommendation 1.1:** Efficiency improvements: such as improved maintenance and servicing of diesel power plants to bring down costs.

**Recommendation 1.2:** Increased share of renewables via hybridisation to lower costs with the support from institutions to improve procurement procedures.
Financing and subsidies for mini-grids in the Philippines (2)

Challenge (2): Rationalising UCME subsidies

Recommendation 2.1: Full cost charging where customers are charged TCGR instead of SAGR to spur more competition.

Recommendation 2.2: Graduation Program where off-grid areas that have achieved a certain level of economic development would gradually reduce UCME subsidies (subsidies to move to poorer area).

Recommendation 2.3: Compare costs of one-time interconnection of off-grid with main grid vs. remaining off-grid.
Financing and subsidies for mini-grids in the Philippines (3)

Challenge (3): Gap between commercial financiers and mini-grid developers in understanding of ‘good projects’ and procedures.

Recommendation 3.1: ARE to work on standardisation of project applications and evaluations with commercial banks.

Challenge (4): Aging distribution lines in remote islands

Recommendation 4.1: Additional support for maintaining distribution lines (e.g. via NEA Barangay Line Enhancement Programme)
Coordination between private sector mini-grid developers, government and electric cooperatives

**Challenge:** Seeming lack of private sector interest, limited information and lack of transparency on mini-grid opportunities in Philippines

**Recommendation (1):** Develop a Philippines online mini-grid portal

**Recommendation (2):** Develop a mini-grid developer guide for the Philippines
We look forward to see you at the ARE Off-grid Workshop at Intersolar India.

Bangalore, India
13 December 2018