Project Update: EWG 25 2015A

Strategy for Large-Scale Implementation of Biogas Capture from Palm Oil Mill Effluent and Reuse for Renewable Electricity Generation

- Proposing economy: USA
- Co-sponsoring economies: Indonesia, Japan, Chinese Taipei, Thailand
- **Project overseer:** Mark Reichhardt, United States Department of Energy
- Competitively-selected contractor: Winrock International
- **Publication number:** APEC#216-RE-01.31
 - http://publications.apec.org/publication-detail.php?pub_id=1830

Strategy for Large-Scale Implementation of Biogas Capture from Palm Oil Mill Effluent and Reuse for Renewable Electricity Generation

- <u>Goal</u>: Develop a strategy to finance and implement biogas capture for renewable electricity generation at large scale encompassing a significant portion of the APEC region's palm oil mills
- <u>Approach</u>: This strategy proposes the design for a publicprivate partnership (PPP) to address the challenges that hinder implementation of palm oil mill effluent (POME)-toelectricity projects in APEC economies
- <u>Benefits</u>: This strategy can result in more environmentally and economically sustainable growth and lead to electrification of remote communities surrounding palm oil mills, which can foster increased productivity and economic empowerment for the people in these communities

Functions of the Proposed PPP

- Vetting parties for participation in the PPP
- Sustainability screening
- Early-stage development activities
- Facilitating buy-in of electric utilities and governments
- Feasibility studies
- Construction partnering and advising
- Finance partnering and advising
- Monitoring
- Communications and capacity building

Recommended Next Steps

Depending on available resources, the PPP could be implemented in full or as disaggregated stand-alone activities that would still reduce project risks

- Priorities for full implementation of the PPP
 - Identify and engage interested donor and financing partners
 - Secure donor funding for PPP start-up
- Priorities for partial implementation of the PPP through stand-alone activities
 - Develop case studies and technical resources
 - Conduct in-depth analysis of regions with electric utilities to prioritize project locations
 - Conduct a market-level screening to identify mills with characteristics most likely to result in cost-effective projects
 - Conduct mill outreach, engagement, and awareness-raising
 - Develop and disseminate project-assessment templates and procedures
 - Elaborate on the design of a blended capital facility
- <u>The big question</u>: Which stakeholders from APEC economies are interested in collaborating to form the PPP and implement the strategy?
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