ICA – APEC Cooperation

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Director – ICA Southeast Asia
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Introduction to ICA

- International non-profit organization
- Dedicated to promote the use of copper in end-use products while contributing to the achievement of the UN SDGs
- ICA’s intervention logic based on copper’s natural attributes including:
  - Higher efficiency in electrical and thermal conductivity (40% more efficient than Al)
  - Higher safety in low voltage electricity distribution
- ICA’s programs dedicated to support, inter alia:
  - Development of enabling regulatory and policy environment for higher efficiency electricity-using products
  - Development of decentralized renewable energy systems
ICA-APEC Cooperation

- Project-based cooperation, started in 2010
- EWG Guest Status since 2015
- So far 8 projects with EGEEC and EGNRET (total APEC funding: 1 million; ICA co-funding: 1.5 million (in-kind and in-cash)
- ICA’s support to economies:
  - Technical expertise
  - Managerial support to implement the project and conduct the studies
  - Financial support
Integrating Electrical Vehicles and Solar Rooftop PV in Electricity Distribution Systems with Continued Performance of Distribution Transformers

<table>
<thead>
<tr>
<th>EWG 03 2020A</th>
<th>Integrating Electrical Vehicles and Solar Rooftop PV in Electricity Distribution Systems with Continued Performance of Distribution Transformers</th>
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<tbody>
<tr>
<td><strong>Sponsor</strong></td>
<td>Thailand</td>
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<td><strong>Problem statement</strong></td>
<td>EV charging stations and solar rooftop PV create disturbances on the electricity distribution system (power quality, harmonics, peaks) which affect, among others, the performance and life expectancy of distribution transformers</td>
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<td><strong>Objectives</strong></td>
<td>Assess the impact of new electric vehicles and solar rooftop PV on electricity distribution systems in APEC economies Create awareness among policy makers about this issue Build capacity of policy makers on how to prevent such problems through enabling regulatory and policy environment Provide recommendations</td>
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<td><strong>Activities</strong></td>
<td>Carry out study, with support of international experts panel Conduct interviews with strategic stakeholders (DT manufacturers, utilities) Prepare report including: • Description of the problems (technical) and experts recommendations • Impact assessment on electricity distribution systems (APEC-wide) Conduct capacity building workshop</td>
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<td><strong>Status</strong></td>
<td>Consultant contracted; study initiated May-Sep Nov</td>
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ICA’s new initiative
CORE – Cornerstone of rural electrification

**Scope:** decentralized renewable energy electrification in rural and peri-urban areas (all geographies)

**Mission:** CORE enables resilient rural and peri-urban communities by ensuring safety, efficiency, reliability and sustainability become the cornerstone of decentralized electrification

**Value Proposition:** offer technical assistance on aspects related to increasing safety, efficiency and reliability of DRE systems, and on strengthening local communities’ resiliency and empowering women on productive use of electricity
ICA’s new initiative
CORE – Cornerstone of rural electrification

**Mission:** CORE enables resilient rural and peri-urban communities by ensuring safety, efficiency and reliability become the cornerstone of decentralised electrification

<table>
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<th>Target Groups</th>
<th>Practitioners</th>
<th>Local communities</th>
<th>Policy Makers</th>
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<td></td>
<td>Capacity development on safety, efficiency and reliability of DRE systems (design, installation, operation and maintenance)</td>
<td>Capacity development and women empowerment on productive use of electricity</td>
<td>Technical assistance and capacity building on improving policy and regulatory frameworks for decentralized electrification</td>
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**CORE Academy**
- Develop national/regional training and certification frameworks
- Open source online knowledge platform

**Approach**
- Deliver technical assistance and capacity building
- Cooperation with ongoing projects/programs
- Design new programs and secure funding
- Tailor-made services

**Cooperation** with ongoing projects/programs
Potential areas of cooperation APEC-ICA/CORE

Empower women and local communities on productive use of electricity

Context:
• With efforts to expand access to electricity through decentralized renewable electricity systems, women play a key role as agent of change in rural economic development

Approach:
• Scope: developing economies in APEC
• Stakeholders mapping and capacity building needs assessment
• Development of e-learning modules and tools to empower women and local communities on productive use of electricity
• Conduct training of trainers
• Policy recommendations
• Capacity building workshop with policy makers (EGNRET)
Thank you

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