



International Copper
Association
Copper Alliance

Asia Solar PV Initiative

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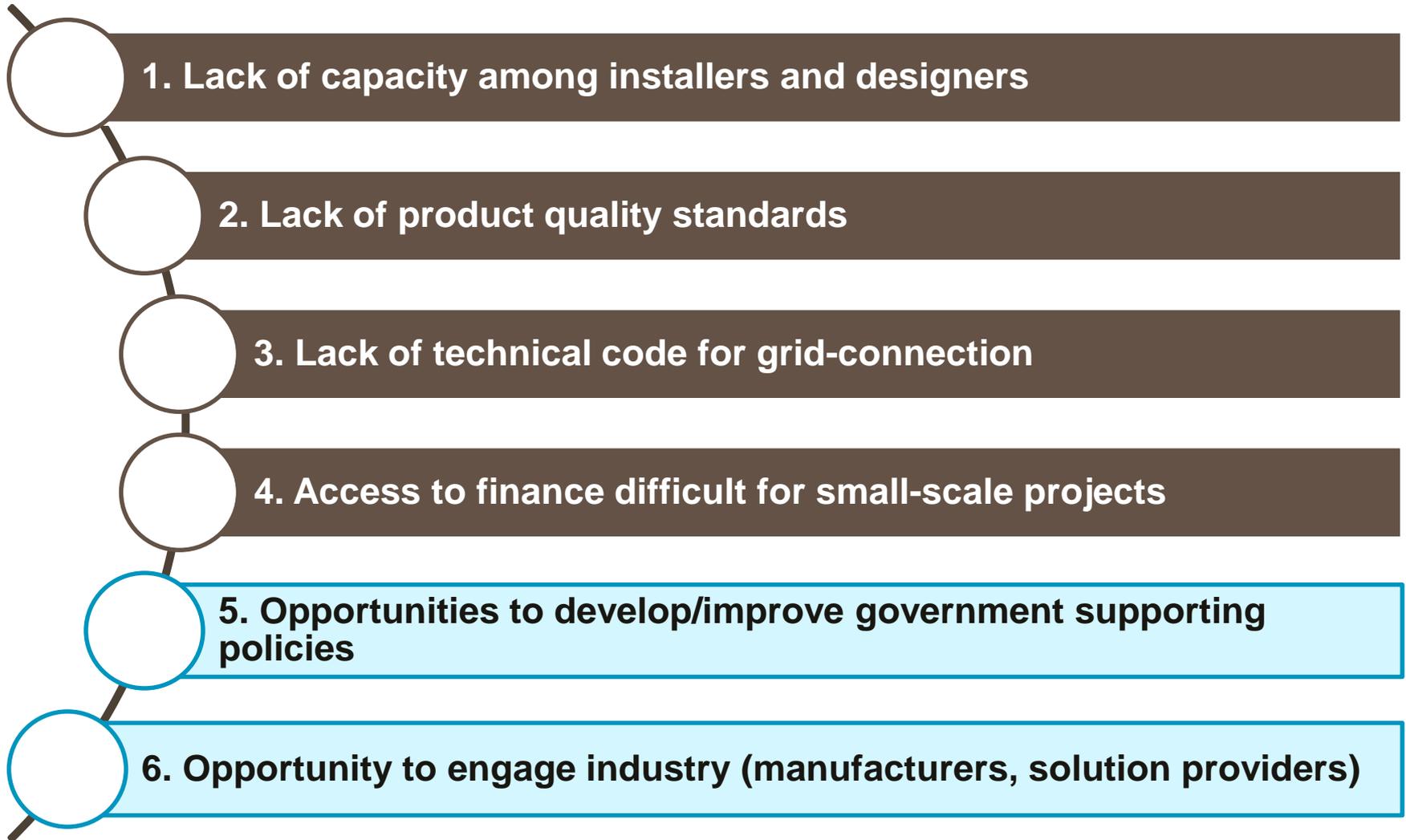
- **Remove barriers to the market development of solar PV installations**

Scope:

- Grid-connected solar PV installations
- Off-grid solar PV installations (with distributed generation)
- Rooftop solar PV installations (with or without grid connection)

Geography:

- China and Southeast Asia



1. Lack of capacity among installers/designers

- **Installers:**

- Not aware of proper installation practices, lack of knowledge of product selection (cables, connectors, etc.)

- **System designers:**

- Lack of knowledge on safety aspects, selection of products (cables, connectors, inverters, grid-connection issues, etc.)

- **PV system's performance below design (lower output-efficiency; higher operation and maintenance cost: lower ROI for investor)**
- **Safety not ensured (safety of installers OHS; impact of PV installations on fire safety conditions (esp. for rooftop installations))**
- **Problems for grid connection**

1. Lack of capacity among installers/designers

Solution:

■ Training of installers and designers:

- Develop training curriculum with practical demonstration such as videos (for installers)
- Develop practical training materials
- Develop train-the-trainers curriculum and materials
- Transfer training tools to strategic organizations who will conduct training of trainers in-country

■ Certification

- To ensure that the training of designers and installers is self-sustainable (that is when participants will pay for training fee), a certification scheme must be put in place, which needs to be recognized by the market. Ultimately, it is necessary to create a demand for certified installers and certified trainers
- Actions necessary include: design of certification system with criteria for testing, evaluation, certification; establish certification scheme (certification bodies); lobby to government to have certification scheme recognized (ultimately becoming mandatory); promotion targeting investors and operators (to create demand for certified installers and designers).



2. Lack of product quality standards

- **Absence of product quality standards and certification/labeling prevents investors and operators from selecting the good quality products**
 - Reduce efficiency/output of PV system
 - Increases operation and maintenance cost
 - Negatively affect reputation of solar PV (especially for home/building owners) with long-term impact
- **Solution:**
 - Develop product quality standards

6. Engaging industry and solution providers

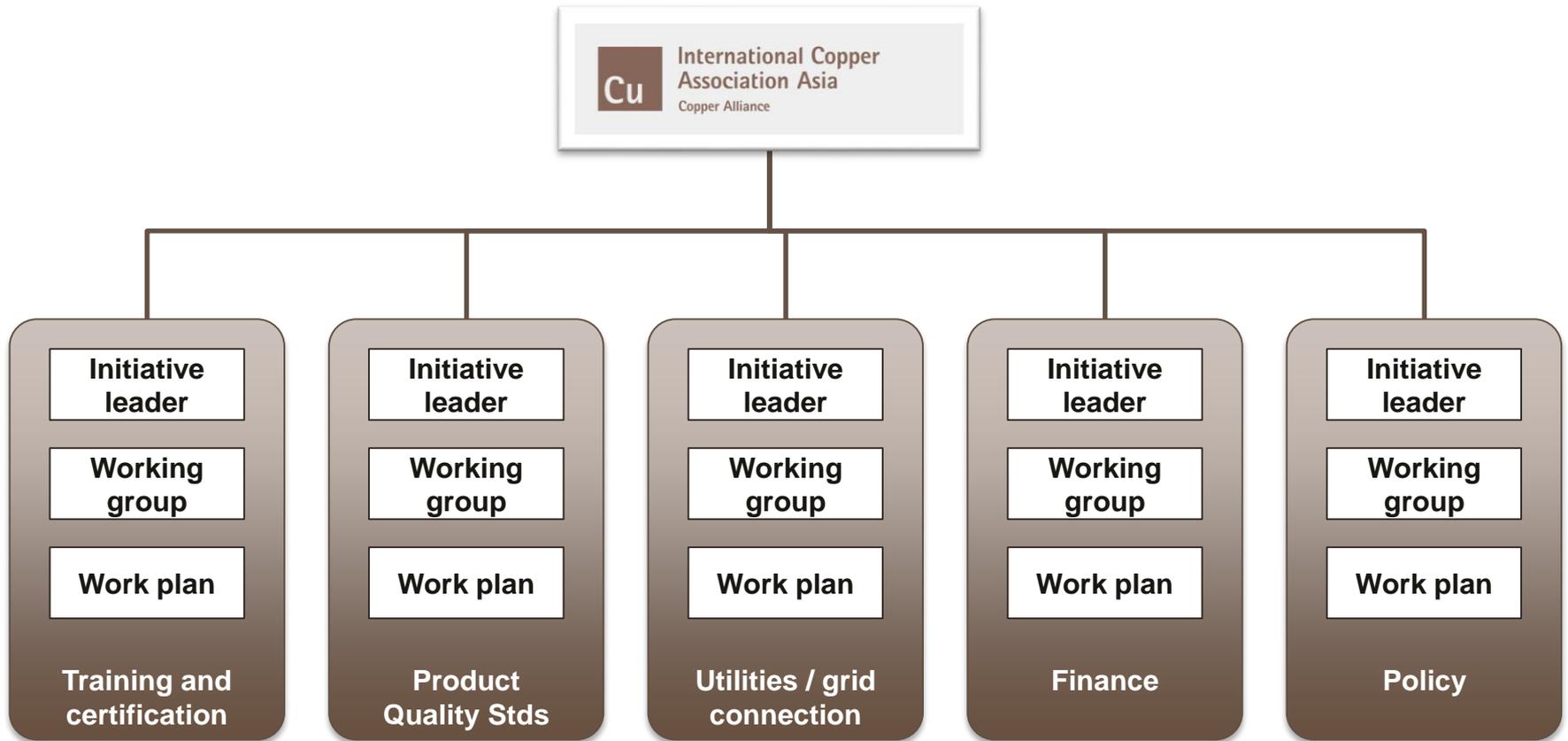
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- **Manufacturers and solution providers have interest in solar PV market development**
- **The should be associated with corresponding initiatives to:**
 - Support “lobbying” of government for policies/subsidies
 - Develop training and capacity building tools
 - Develop technical codes
 - Promotion

- **The Asia Solar PV Initiative aims to address all these barriers in order to accelerate the deployment of solar PV installations in Asia**
- **Scope:**
 - Grid-connected solar PV installations
 - Off-grid solar PV installations (with distributed generation)
 - Rooftop solar PV installations (with or without grid connection)
- **Approach:**
 - The Asia Solar PV Initiative, coordinated by the Copper Alliance, will be implemented through the establishment of the Asia Solar PV Platform
 - The Asia Solar PV Platform will bring together:
 - Knowledge organizations
 - Major target groups (utilities, governments, financing institutions, industry-solution providers)

The Asia Solar PV Platform

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- **Initiative leaders:**

- One leading organization per initiative
- Coordination with ICA
- Create and coordinate working group
- Lead brainstorming and development of work plan
- Manage implementation of work plan

- **Working group:**

- Composed of stakeholders with:
 - Strategic interest (like industry, solution providers)
 - Technical/knowledge capacity
 - Influential position
 - Implementation capacity
- In charge of developing and implementing work plan

- **Work plan:**

- To be developed by the working group under guidance from the initiative leader
- Prioritize actions
- Identify sources of funding

Thank you

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