



Ministry of Power and
Energy Sri Lanka

WB Energy Efficiency Program Support in Sri Lanka



Sri Lanka Sustainable
Energy Authority

Implementation and Financing Mechanisms in Commercial, Public & Industrial Buildings Sectors

National Consultation and Dissemination Workshop

November 10, 2022

Bridging the energy efficiency capital gap in the energy end-use sectors through ESCOs

Removing barriers to debt finance and equity capital flowing through ESCO markets



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10 November 2022

Sri Lanka Sustainable Energy Authority (SEA) National
Workshop: Implementation and Financing Mechanisms in
Commercial, Public and Industrial Buildings Sectors

APEIA

Asia-Pacific ESCO Industry Alliance



APEIA

Asia-Pacific ESCO Industry Alliance

Ten country ESCO associations have officially established the Asia-Pacific ESCO Industry Alliance (APEIA) through its six meetings since June 2018.



Knowledge flow

Knowledge events (e.g. seminars, conferences, workshops, exhibitions) and knowledge-sharing channels (e.g. website, publications, other knowledge products)

ESCO sector development

Build technical capacities in nascent ESCO markets by organizing and conducting training programs leading to the certification of energy managers, measurement & verification professionals and other ESCO specialists

Carbon market transactions

Facilitate carbon asset management projects, carbon emission reduction and energy savings offset trading for RE and EE companies

Easing technology deployment

Facilitate and encourage research & development, test-bedding & pilot-testing of technologies in energy efficiency

Facilitating investments

Provide a platform for governmental, developmental and commercial investors to engage with developers of energy efficiency projects

Business development

Promote business development through conferences, ESCO trade missions, business matching meetings, exhibitions and other networking events

Enabling market interventions

Engage with the relevant government agencies, development agencies, international financial institutions and industry associations to mobilize grant, debt capital, knowledge and other in-kind resources to enable the implementation of the above-mentioned activities



China



India



Indonesia



Japan



Korea



Malaysia



Philippines



Singapore



Taiwan



Thailand

Global ESCO Network

The **Global ESCO Network** gathers ESCO associations of the world as well as international institutions and ESCO experts for the promotion of ESCOs and Energy Performance Contracting in response to the global climate change challenge and the goals set out by the Paris Agreement. It is the **Vision** of the Global ESCO Network **to be the global driver and inspire government actions for scaling up the contribution of ESCOs to the global response for mitigating the threat of climate change and the goals set out by the Paris Agreement.** To realize this, it is the **Mission** of the Global ESCO Network **to add to and reinforce existing efforts of National and Regional ESCO Associations to promote increased activities by the ESCO Sector at a global scale.**

The Global ESCO Network **recognizes the regional role of APEIA** as convener of ESCO associations under its membership and will work through APEIA to advance the Network's objectives in the Asia-Pacific region.

The Global ESCO Network has its Secretariat anchored in the **UNEP Copenhagen Climate Centre** and the **Efficiency Valuation Organization (EVO).**



Emerging concepts: Role and growth of the ESCO industry

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Mobilizing USD 24.5 trillion in EE investments through 2040 may require over USD 16.5 trillion flowing outside the balance sheets of end-users, such as through ESCO performance contracts



There may be no distinction between being in a developed economy or emerging market as far as the evolution and growth of an ESCO industry is concerned



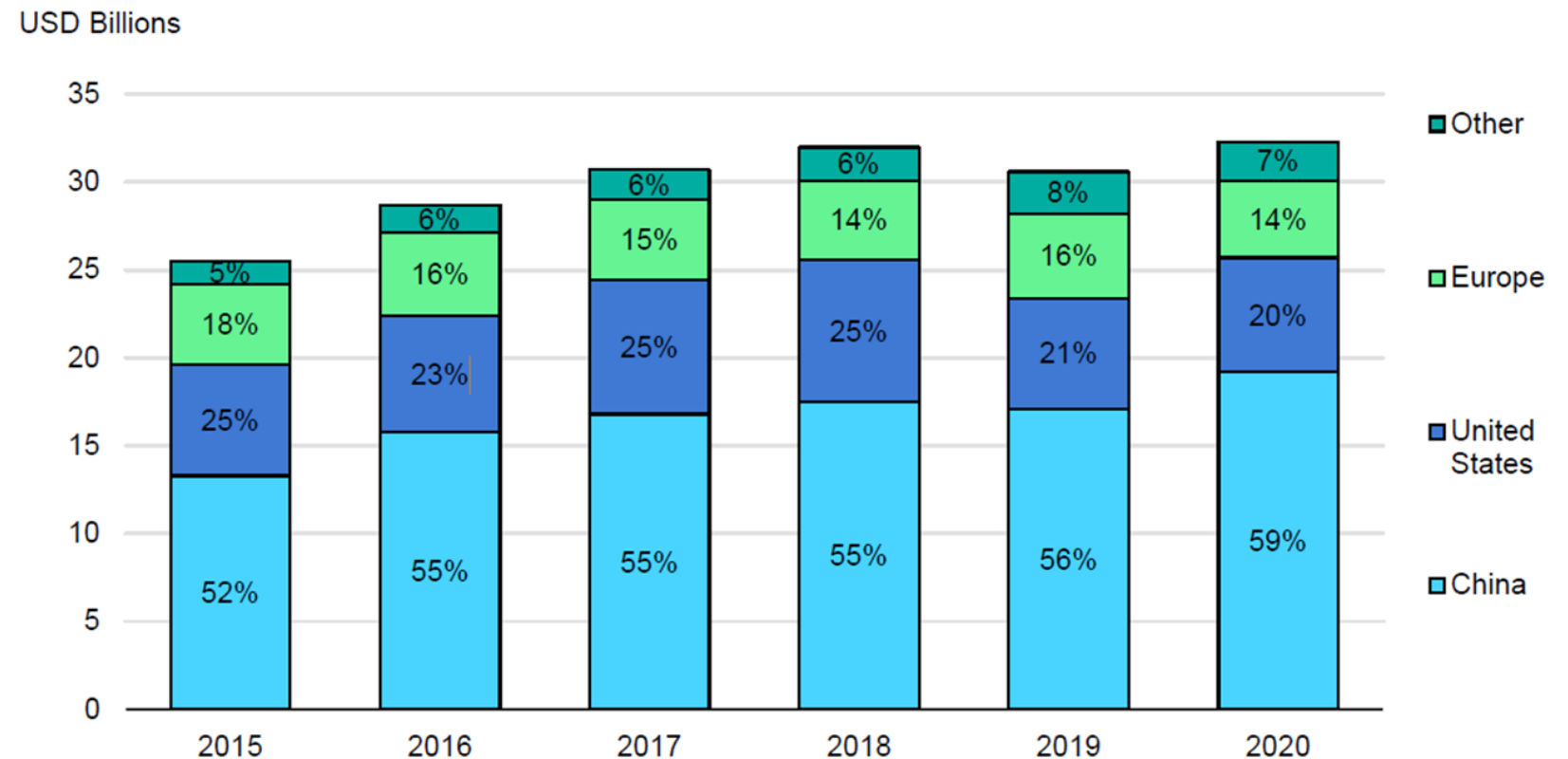
“60% of the global
energy service company
(ESCO) market is in Asia”

Asia-Pacific ESCO Industry Alliance, 5 June 2018, Asia Clean Energy Forum 2018
(based on IEA estimates, 2016)

ESCO market has been growing steadily since 2015

- Although the global ESCO market has grown to about USD 33 billion in 2020, the full potential of the industry remains hindered by multiple barriers with the Covid-19 adding restraints.
- China's close to USD 20 billion ESCO market represents 59% of global size.

Global ESCO market growth, 2015-2020



Source: IEA annual ESCO survey, 2021.

Panel Discussion 1

Challenges and Opportunities of Energy Service Performance Contracts

Major policy and market barriers impeding ESCO market development across Asia

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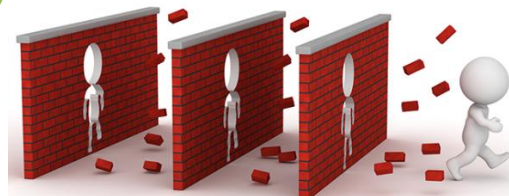
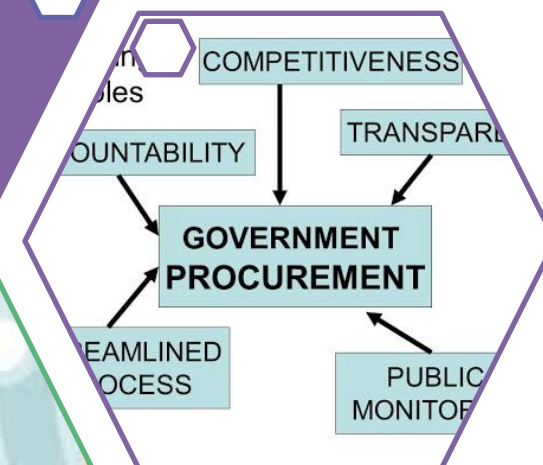
ESCO sector need to build technical (e.g. capacities)



Government procurement and budgeting disallow ESCO contracts

ESCO accreditation system needs to be strengthened

EE consumption thresholds for EE obligations are too high



Removing ESCO policy and market barriers

Policy or Market Barrier

• Barrier Removal Interventions

EE consumption thresholds for EE obligations are too high

- Review and amend EE laws to capture more mandatory action from end-users across more sizes and sectors

ESCO accreditation system needs to be strengthened

- Create or strengthen ESCO accreditation, registration or certification systems

ESCO sector need to build capacities

- Intensify training and certification of CEMs, CMVPs and other EE/ESCO professionals and develop industry performance contract templates
- FIs will need to build up and sustain EE lending capacities and EE loan products

Government procurement and budgeting disallow ESCO contracts

- Correct Government procurement rules to allow procurement and budgeting for ESCO performance contracts, PPP transactions and JV agreements

Conclusions / Key Lessons

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Government policies, incentives and donor capacity building have effectively evolved ESCOs and enabled market growth



ESCO Associations play a valuable role of accelerating policy reforms and sustaining market development



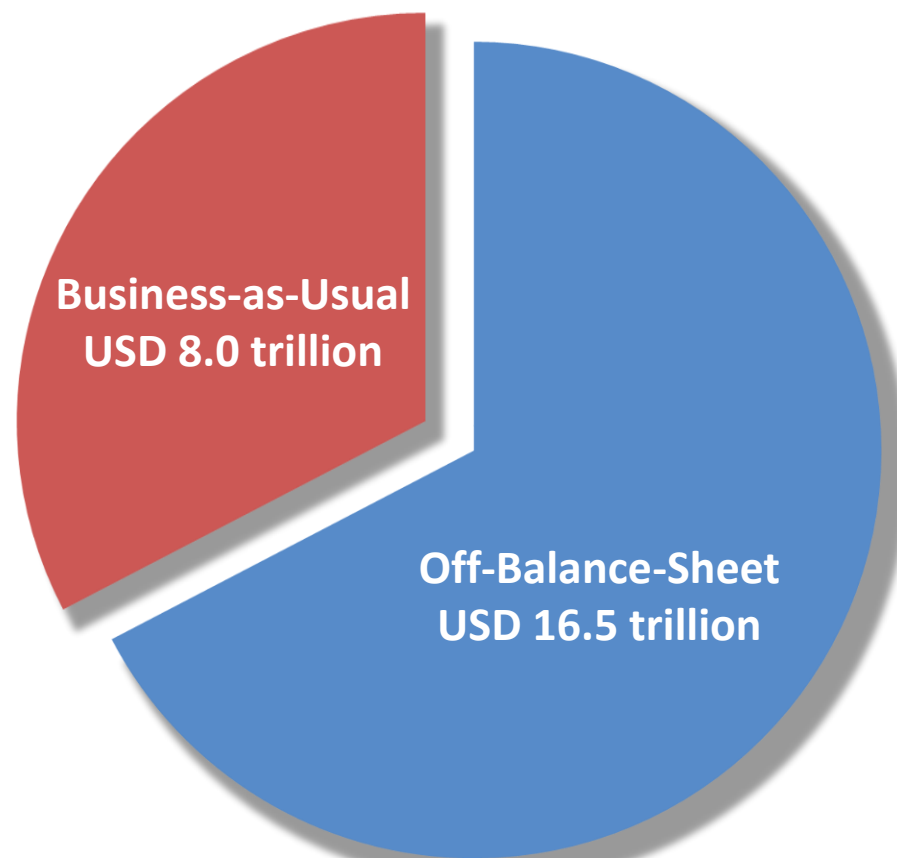
Further ESCO market growth will be driven by **digitalization and Government procurement** of ESCO services

Panel Discussion 2

Financing and Risk Mitigation Models for Energy Efficiency

EE Investment Gap

- Self-Financed
- Debt-Financed
- Lease-Financed



- ESCO Performance Contracts
- PPP Transactions
- Risk-Sharing Facilities
- Budget Financing
- Other modalities

Global EE Investments Needed through 2040 to Meet
IEA's Efficient World Scenario (EWS)
by Financing Modality

Role of the Public Sector

Public agencies and facilities represent scalable EE opportunities that are largely untapped



Business-as-Usual
USD 8.0 trillion

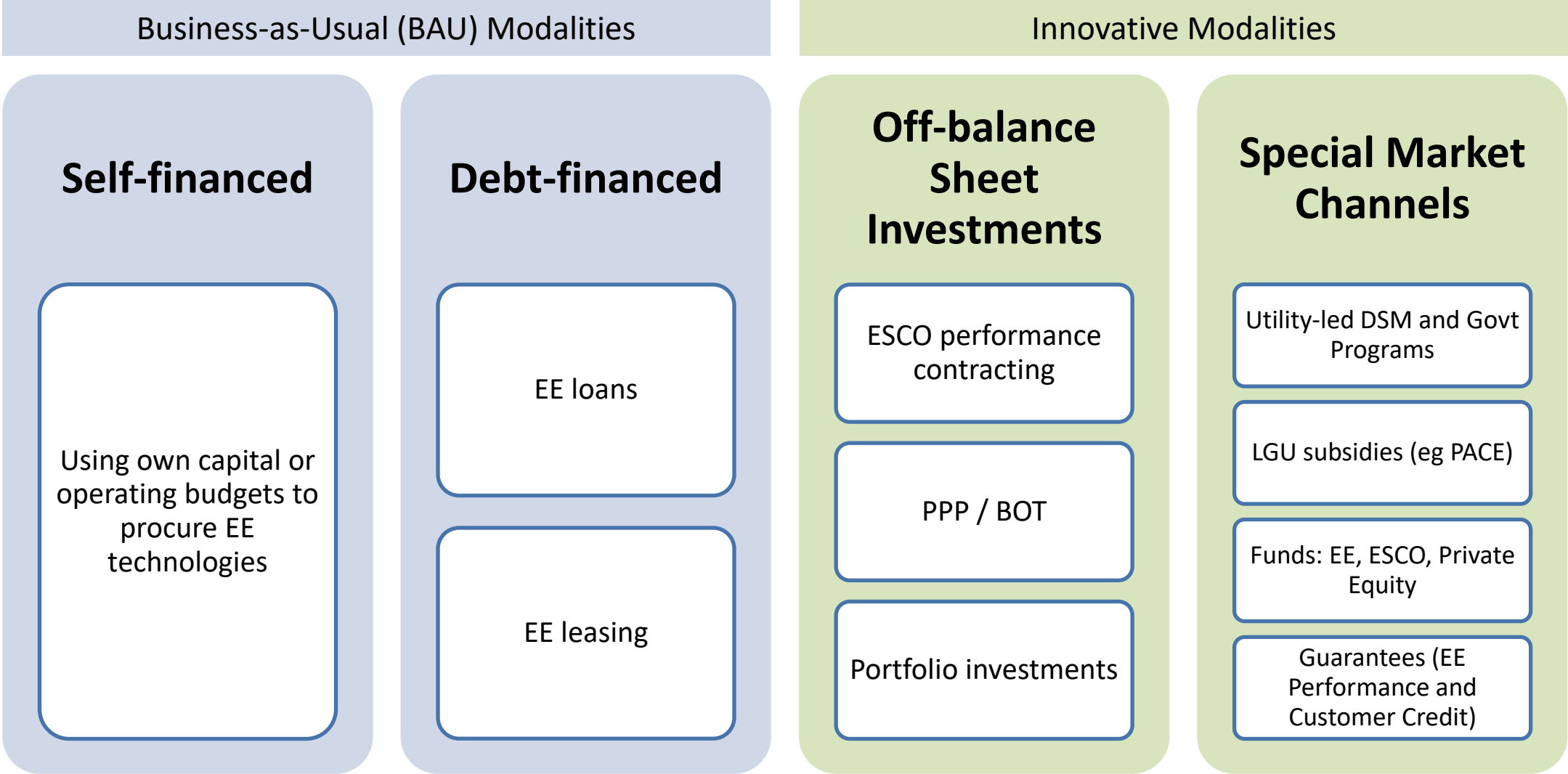
Off-Balance-Sheet
USD 16.5 trillion



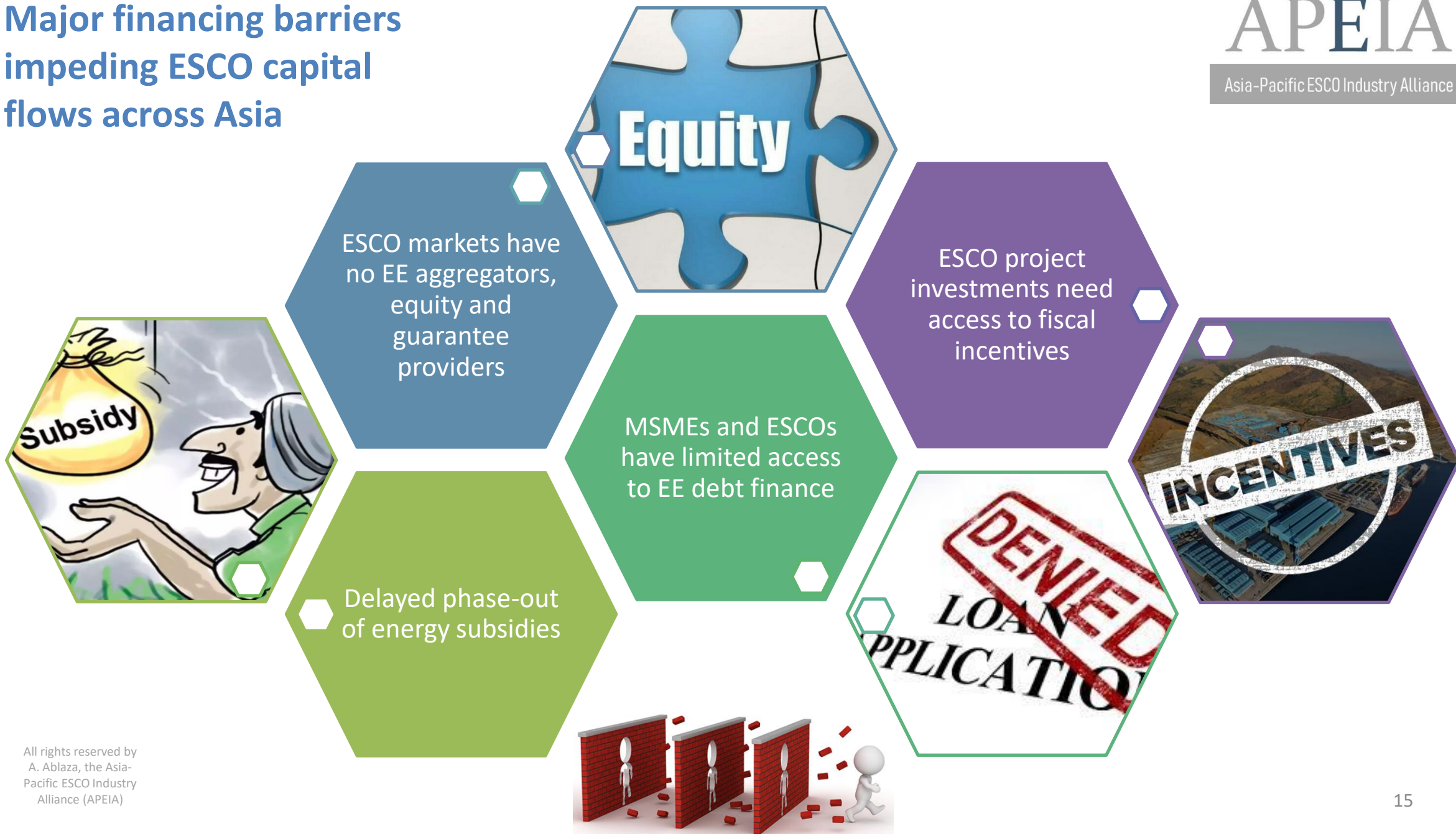
Public policies can enable off-balance-sheet mechanisms that will support EE investment

Global EE Investments Needed through 2040 to Meet
IEA's Efficient World Scenario (EWS)
by Financing Modality

Energy Efficiency Financing and Investment Modalities



Major financing barriers impeding ESCO capital flows across Asia



Removing ESCO financing barriers

Financing Barrier

- **Barrier Removal Interventions**

MSMEs and ESCOs have limited access to affordable EE debt finance

- **De-risk EE bank lending with risk sharing facilities and guarantee mechanisms**
- **Blended finance may be used to price-down EE loans**

ESCO markets have no EE aggregators, equity and guarantee providers

- **Design, establish or enable EE portfolio aggregators, equity providers, ESCO guarantee funds (public or private) or facilitate entry of energy savings insurance products**

ESCO project investments need access to fiscal incentives

- **Government EE subsidies or tax incentives should be rolled out to ensure improved equity returns and debt service or de-risk long-term capital investments**

Delayed phase-out of energy subsidies

- **Accelerate phase-out of subsidies or mobilize Viability Gap Funding for EE projects**

Conclusions / Key Lessons



Asia will need to bridge its EE capital gap through 2040 by **enabling off-balance sheet equity flows and ESCO-responsive debt finance** through steadily **growing ESCO markets**



Further ESCO market growth will be driven by **innovative financial structures such as portfolio aggregation through Super-ESCOs**

Thank You

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