Unshackling ESCO Potential: Public Financial Mechanisms that Enhance the Viability of ESCO Projects

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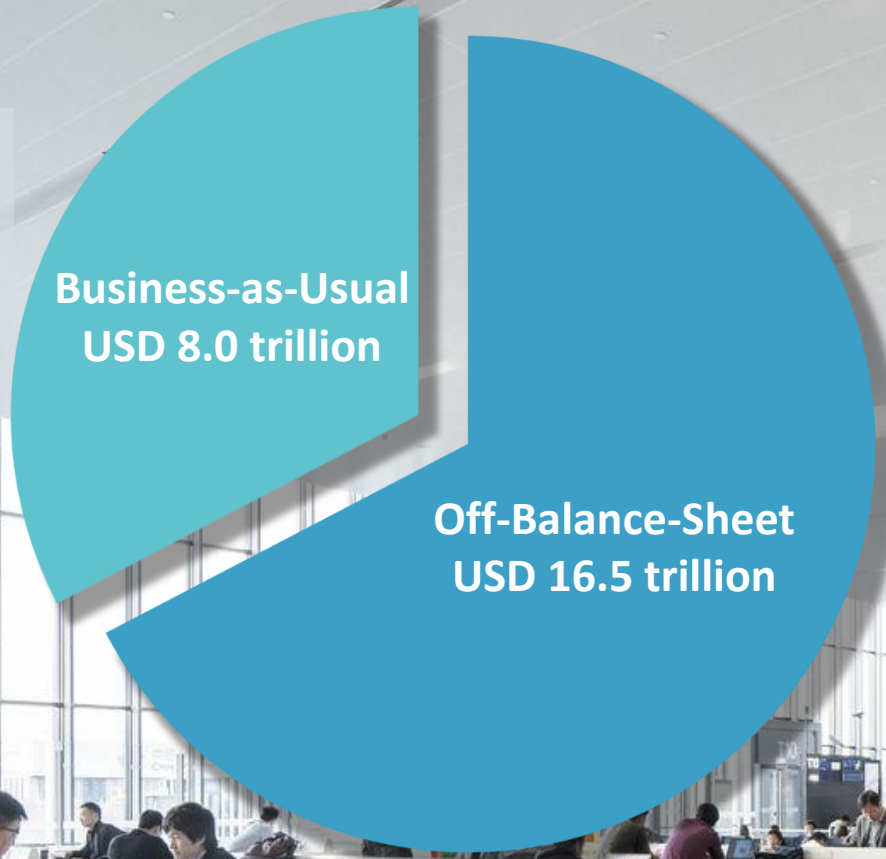
EE Investment Outlook

- 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

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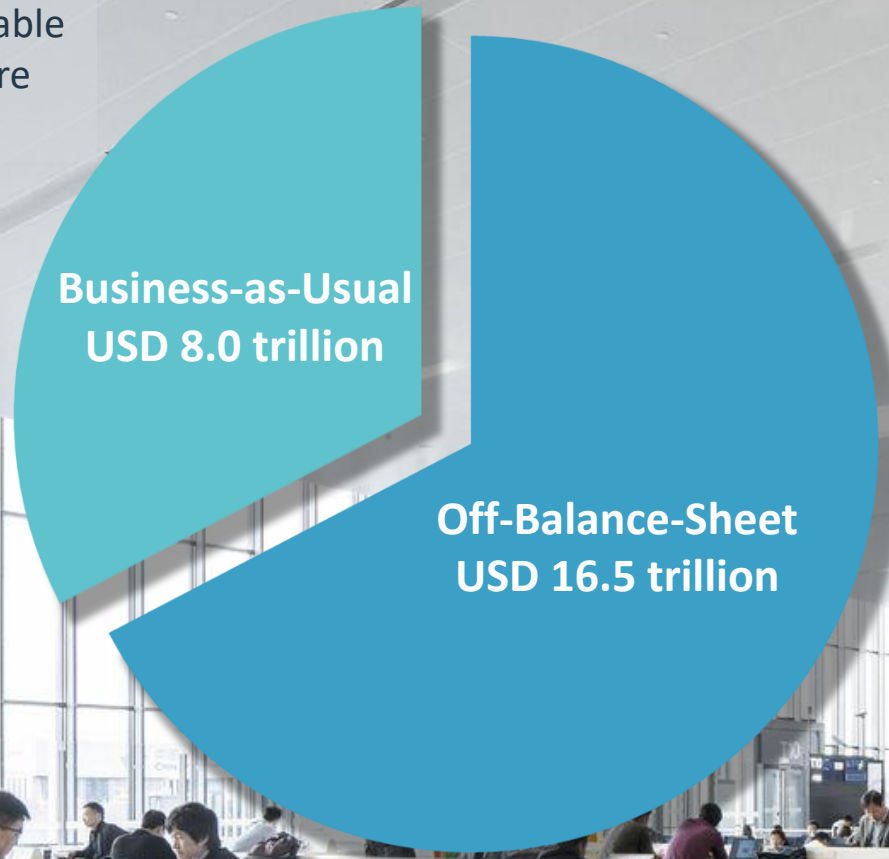
Role of the Public Sector

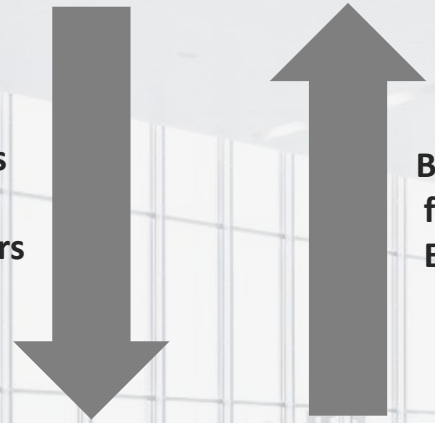
Public agencies and facilities represent scalable EE opportunities that are largely untapped



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

Utility Programs: On-Bill Financing



Global examples

- Brazil (Contribuição para Custeio do Serviço de Iluminação Pública)

Positive impact on project viability

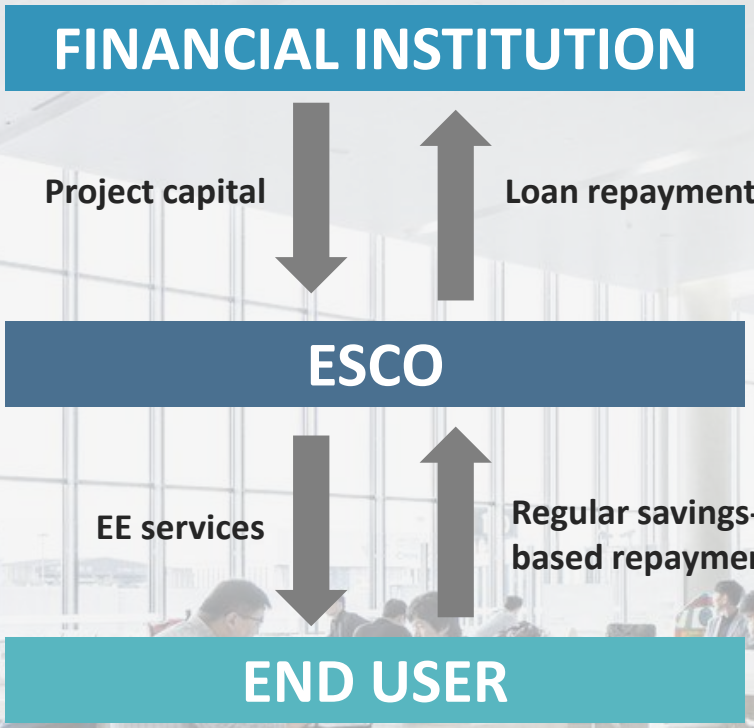
- Lower customer credit risk from bundling project repayments with utility bills
- Leveraging ratepayers' consumption behaviors to tailor-fit EE offerings
- Scalability of EE offerings across customer base

Enabling conditions

- Public utilities must be allowed to implement and profit from EE projects
- Billing infrastructure should be able to accommodate bundling of EE project repayments
- Public utilities must have a sizeable asset base or financing access to fund EE projects

Energy Performance Contracting for Public End Users

SHARED SAVINGS MODEL



Global examples

- United States, Canada, Belgium, Croatia, Denmark, Italy, Slovenia

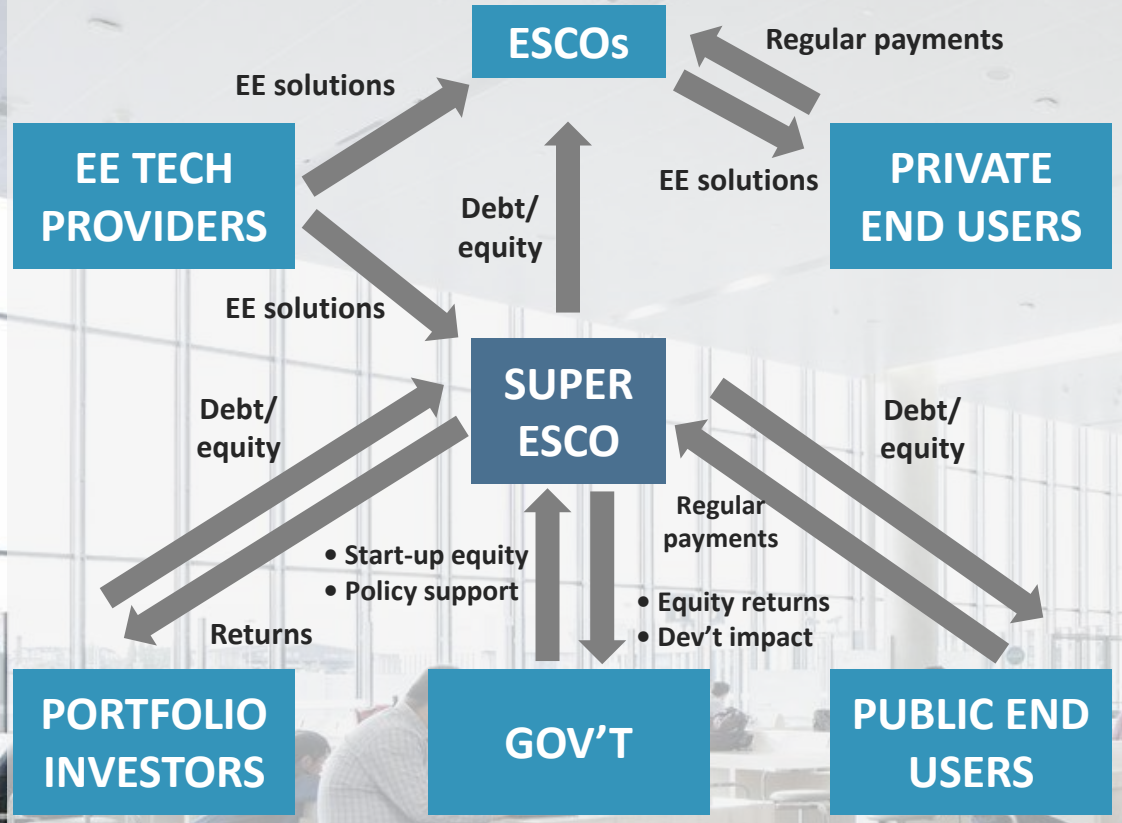
Positive impact on project viability

- Project and financial risks are distributed more efficiently across the contract parties
- Upfront costs for the end users are reduced
- More public end users can be included in ESCO project pipelines

Enabling conditions

- Public procurement processes must allow public agencies to engage in EPCs
- Public agencies must not be deterred from taking on multi-year contracts that could span beyond one election cycle

Government-Owned EE Service Providers as Super ESCOs



Global examples

- Armenia (R2E2), Belgium (FEDESCO), Croatia (HEP ESCO), Saudi Arabia (Tarshid)

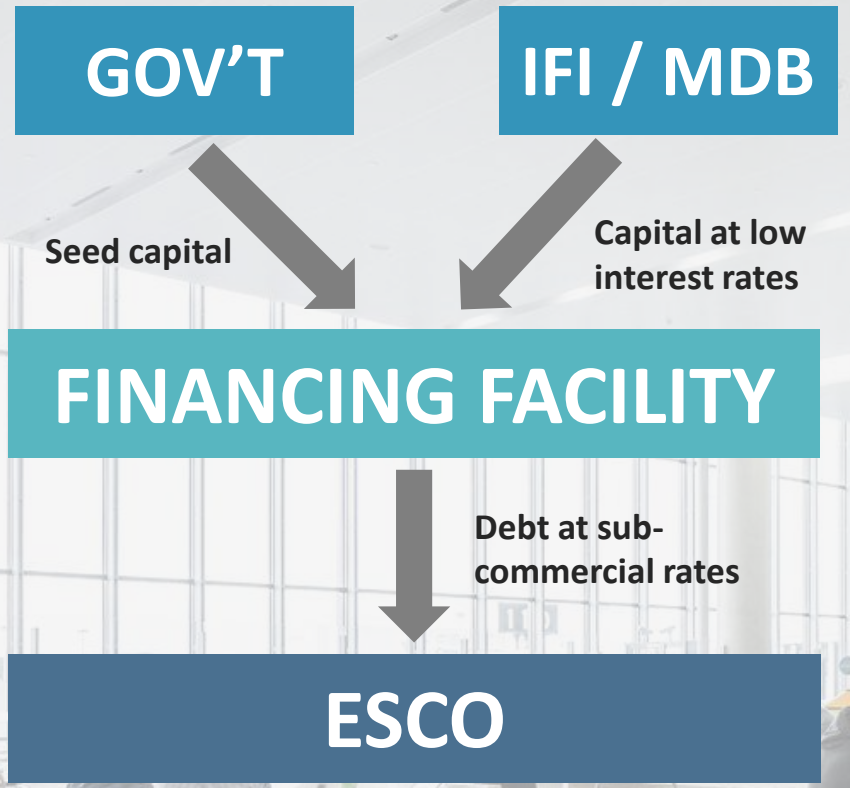
Positive impact on project viability

- The public nature of Super ESCOs facilitates taking on large-scale public EE projects.
- The large asset base allows Super ESCOs to provide financing to smaller ESCOs.
- Super ESCOs can implement capacity-building activities.

Enabling conditions

- The local ESCO industry is typically in its early stages.
- Super ESCOs would not behave competitively against other ESCOs.
- Supportive policies and financial resources must be made available by the government to the Super ESCO.

Long-term Concessional Financing



Global examples

- China (Shandong Green Development Fund), Haiti (Green Climate Fund)

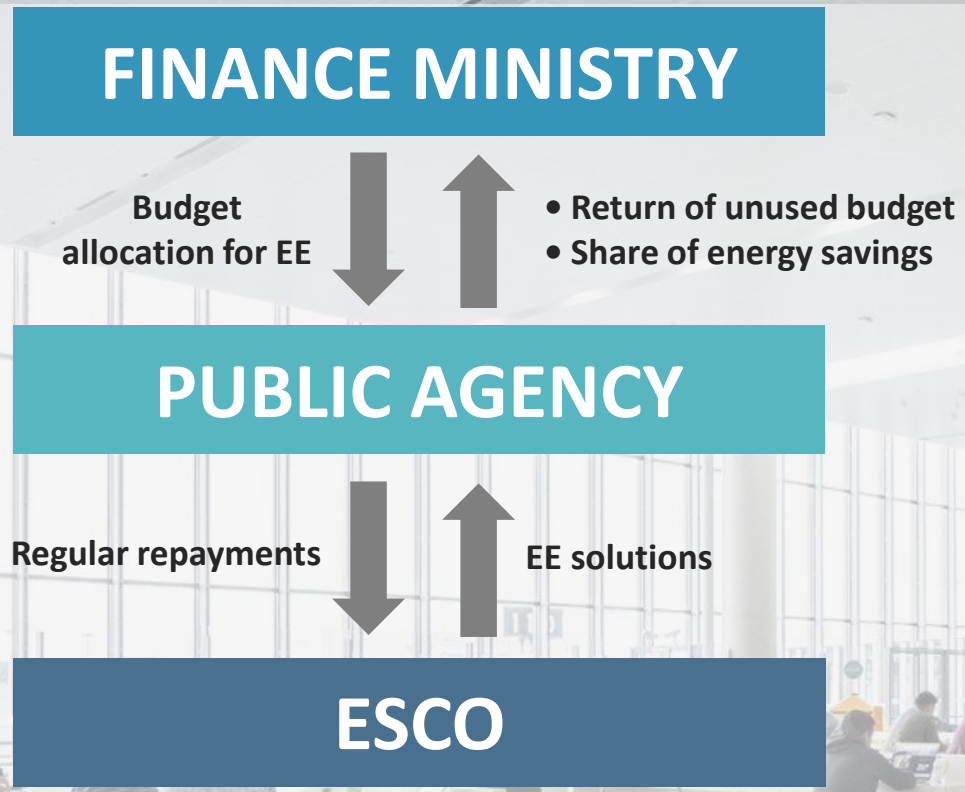
Positive impact on project viability

- Lower financing cost would lead to more prospective projects meeting minimum return thresholds.
- Long-term investment horizon of the financing facility would allow funding of entire project pipelines.

Enabling conditions

- Governments should establish relationships with IFIs and MDBs to provide supplementary capital.
- Achieving sustainability and climate goals should be a national priority to entice IFI/MDB funding.

Fiscal Tools and Policies: Budget Financing with Capital Recovery



Global examples

- Macedonia (Municipality Services Improvement Project)

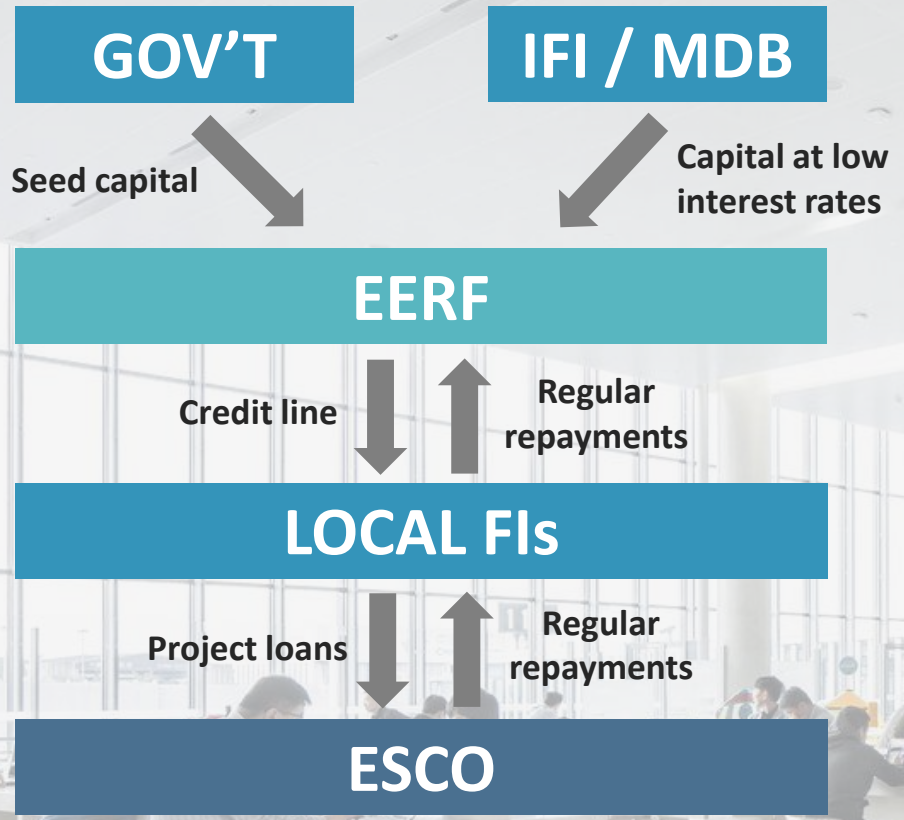
Positive impact on project viability

- Less credit-worthy public agencies gain access to financing for their EE projects.
- Typical restrictions on public agencies' use of public funds and incurrence of debt are addressed.

Enabling conditions

- Government agencies should be subject to mandates to reduce energy consumption.
- Public agencies should be allowed to retain a portion of realized energy savings to incentivize pursuit of EE projects.

Energy Efficiency Revolving Fund



Global examples

- Thailand (Thai EERF)

Positive impact on project viability

- EERFs help create a sustainable local funding source for ESCOs through involving local FIs.
- Participating FIs would lower risk premiums as they better understand ESCO business models.

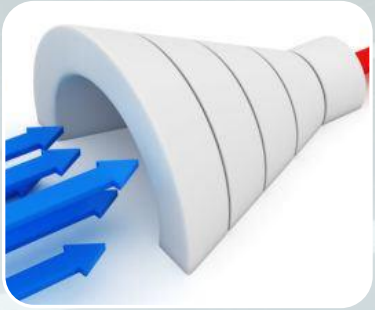
Enabling conditions

- Marketing campaigns on the merits of EE investments to encourage participation of local FIs
- Participating local FIs should eventually increase investment exposure as support from the EERF tapers off

Recommendations (1-5)

Conduct EE market-mapping analyses and estimate the market potential of public-sector and less-creditworthy customer segments relative to the entire country

Allocate funding to the preparation of public-sector EE projects, including budgets for investment-grade energy audits, PPP transaction support and the design of large-scale ESCO procurement programs



Assess the existing ESCO industry and identify bottlenecks to the growth of project pipelines, and the accreditation and technical capacities of new ESCOs

Assess the current environment for private-sector and government lending to ESCOs, and estimate the financial intervention needed from IFIs, MDBs, and the government to achieve EE market potential

Review public procurement rules and how the policies allowing public-sector EPCs can be adapted

Recommendations (6-10)

Create innovative financial vehicles and structures (e.g. equity and guarantee funds, Super ESCOs, PPP, joint venture transactions) that can enable public funding and private-sector capital flows into ESCO-led EE retrofits in public facilities

Create a road map for gradually removing subsidies in energy prices in order to improve EE project economics and the viability of ESCO financing

Implement an incentives framework to improve after-tax returns for a wide range of EE technologies and services, and require establishments meeting a given energy-consumption threshold to create energy-use reduction plans

Identify competency gaps across the EE value chain and establish training and international partnerships

Conduct technical training and marketing campaigns to raise stakeholders' confidence in EE projects and ESCO business models

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Recommendations (11)

Accelerate public spending towards EE improvements as a key component of post-COVID economic stimulus programs

MAIN INVESTMENT AREAS

Buildings
- New construction
- Retrofits of existing buildings

Technology
- Subsidized replacements
- Rollout of new tech.

Infrastructure
- EE-enabling tech.
- Public transportation infrastructure

- **Provision of subsidies and rebates**
- **Leveraging existing large-scale EE programs**
- **Delivering programs through public utilities**
- **Bulk procurement and installation**

DEVELOPMENTAL OUTCOMES

Reduction in carbon emissions

Investment in a labor-intensive sector

Reduction in energy intensity

Thank you

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