

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

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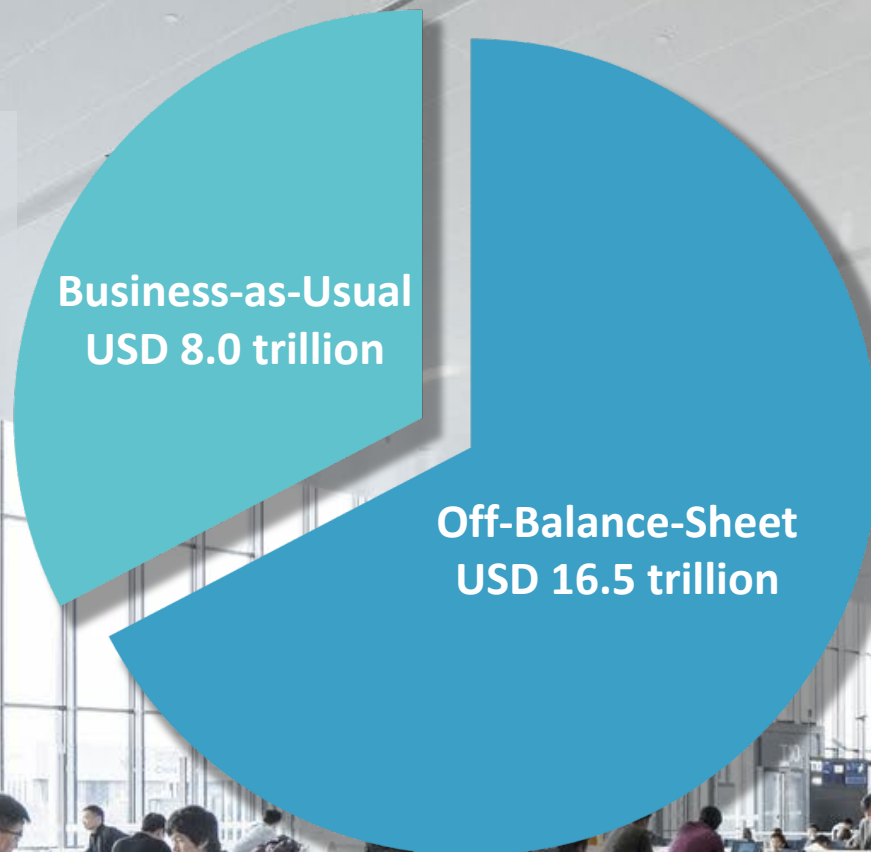
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EE Investment Outlook

- 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

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
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Role of the Public Sector

Utility Programs: On-Bill Financing

PUBLIC UTILITY

- Electricity services
- EE services for qualified customers

Bundled payment
for electricity and
EE services

RATEPAYERS

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

FINANCIAL INSTITUTION

Project capital

Loan repayments

ESCO

EE services

Regular savings-based repayments

END USER

Global examples

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

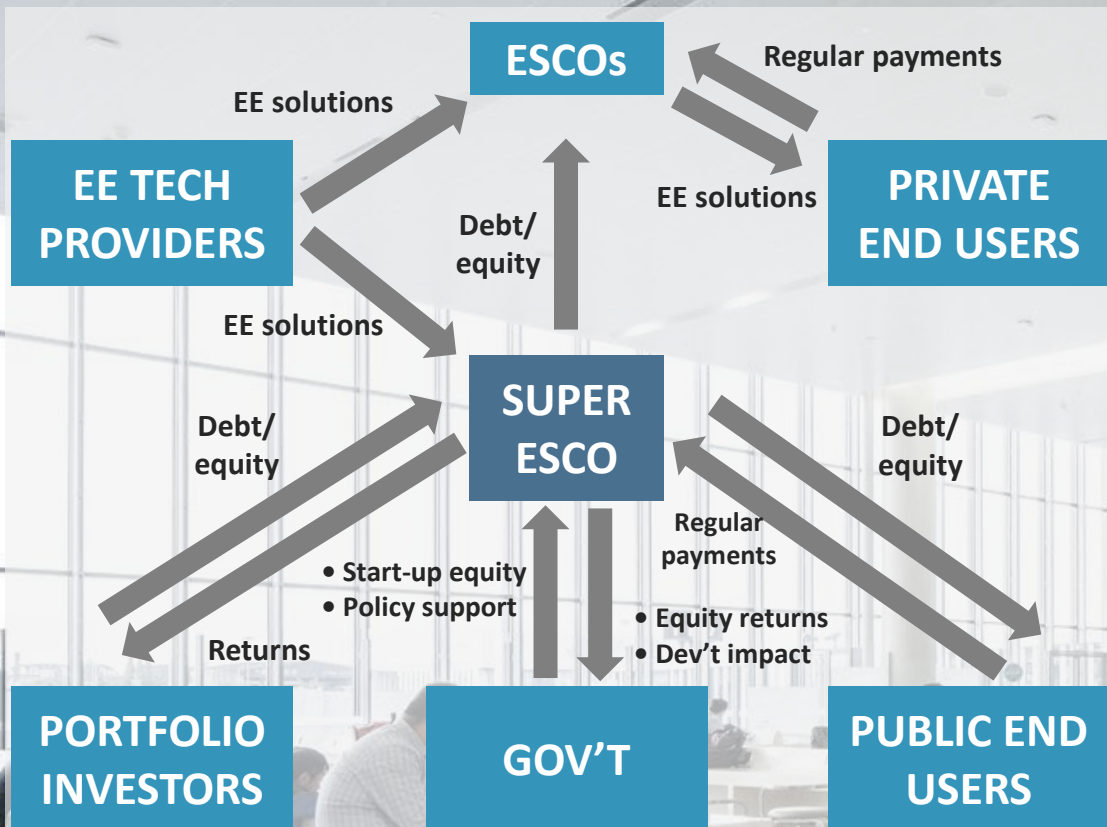
Positive impact on project viability

- 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)

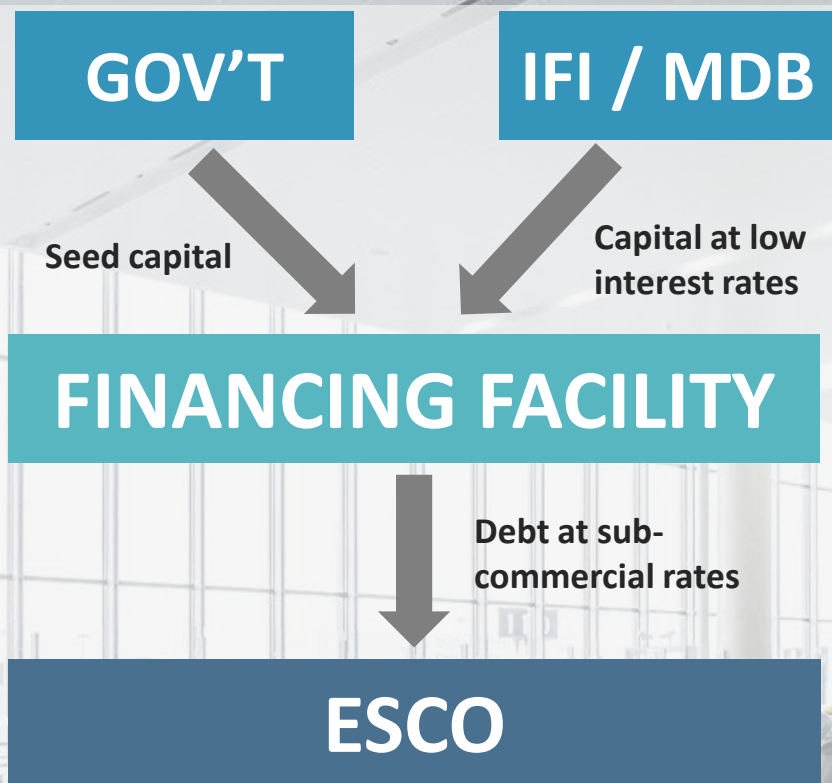
Positive impact on project viability

- 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



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.

Global examples

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

Fiscal Tools and Policies: Budget Financing with Capital Recovery

FINANCE MINISTRY

Budget
allocation for EE



- Return of unused budget
- Share of energy savings

PUBLIC AGENCY

Regular repayments



EE solutions

ESCO

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.

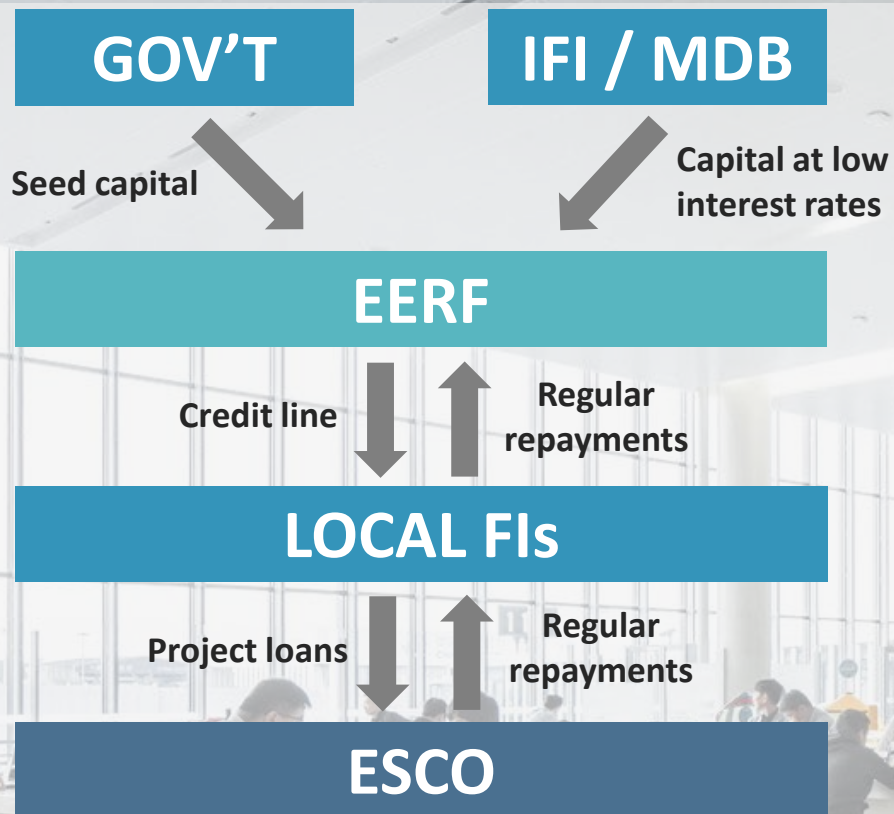
Enabling conditions

- 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.

Global examples

- Macedonia (Municipality Services Improvement Project)

Energy Efficiency Revolving Fund



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

Global examples

- Thailand (Thai EERF)

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

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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