

# How Super ESCOs can bypass regulatory restrictions for contracting private ESCOs

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# What is an ESCO (Energy Services Company)

- ESCOs are specialized providers of turnkey energy efficiency services
- ESCOs often offering outcome guarantees to their clients
- ESCOs services include:
  - auditing buildings to evaluate efficiency potential
  - baselining energy consumption
  - identifying all sources of energy waste
  - defining Energy Savings Measures (ESMs) to generate savings
  - installing the defined ESMs
  - keeping these ESMs operational for a number of years
  - measuring, verifying and guaranteeing the savings to their clients

# What is an ESCO (Energy Services Company)

- ESCOs are active in multiple building sectors
  - Commercial buildings
  - Public sector buildings
  - Industrial facilities
  - Multi-residential buildings
- They focus on improving efficiency of:
  - Lighting, HVAC and control systems
  - Building insulation
  - Water systems
  - Waste heat, compressed air systems, industrial cooling, etc.
- They can also install decentralized renewable energy (solar PV or HW)

# What is a Super ESCO & why creating one

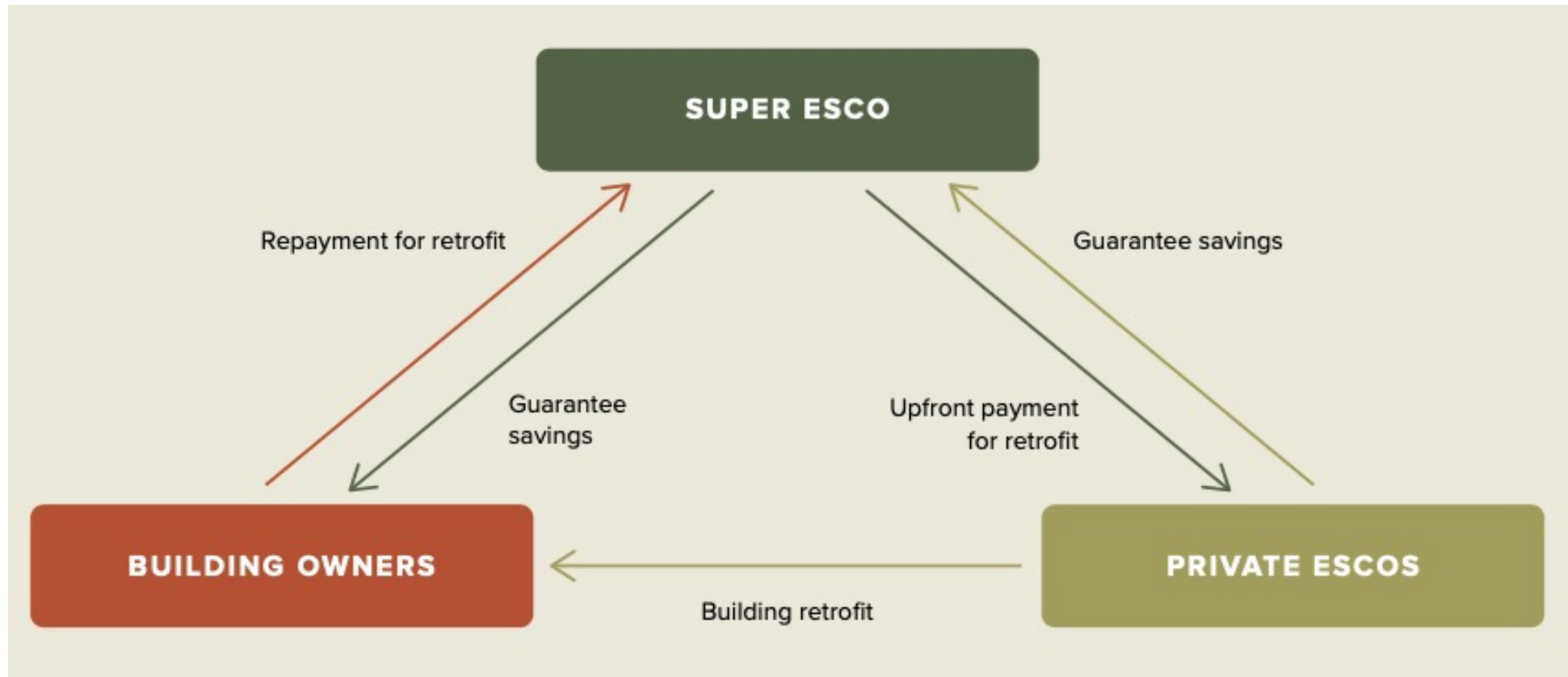
- A specific dedicated organization (often set up as an independent company) created and funded by a government (local or federal) in order to manage a retrofit programme for its public-sector buildings to save energy
- Often part of a government strategy to rationalize energy demand, such as a Demand Side Management (DSM) strategy
- Has specific goals and KPIs linked to the savings objectives of the DSM strategy. A Super ESCO defines its own strategies to improve the energy efficiency of public-sector buildings and can also contribute to improving efficiency of the private-sector buildings

# What is a Super ESCO & why creating one

The main roles of a Super ESCO in the public sector are to:

- Elaborate a strategic plan to address the DSM target it was given
- Realise energy audits of public buildings to identify energy savings opportunities
- Organize the procurement for retrofitting public buildings through ESCOs
- Manage the execution of the ESCO's projects
- Finance or organize the financing of these projects
- Verify the energy savings realized and ensure that the ESCOs are fulfilling their promises

# What is a Super ESCO & why creating one



# Example of Super ESCO – EESL in India



- Established in 2009
- Owned by the Indian government under the Ministry of Power as a JV between NTPC Limited, Power Finance Corporation, REC Limited and POWERGRID
- EESL focuses on solution-driven innovation with no subsidy or capital expenditure (CAPEX) for the client using a Pay-As-You-Save (PAYS) model
- EESL is a Super ESCO that has not used private ESCOs to develop its model
- Great success in LED lighting with the UJALA programme

# Example of Super ESCO – Etihad ESCO in UAE



- Established in 2013
- Owned by the Dubai Government through the Dubai Electricity and Water Authority (DEWA)
- Focusing on retrofitting 30,000 buildings to save 1.7TWh of electricity and 5.6 billion imperial gallons of water by 2030
- A government directive is helping its work with public sector entities
- Initiated the ESCO market in the UAE thanks to its projects
- Relying on third-party financing, notably the Dubai Green Fund, for its projects
- As of September 2020, it carried out 22 projects, resulting in the retrofitting of 7,763 buildings and generating savings of 307GWh of electricity and 289 million imperial gallons of water.



# Example of Super ESCO – Tarshid in Saudi Arabia



- Established in 2017
- Owned by the Public Investment Fund of Saudi Arabia
- Focus on retrofitting public sector buildings across Saudi Arabia using private ESCOs to execute the work
- Capitalised with USD500 million to fund its projects
- A royal decree is mandating public sector entities to contract with Tarshid on an exclusive basis
- Tarshid executed a street-lighting replacement program for 2.5million existing street-lights
- Mid-2020, Tarshid announced having achieved its first terawatt-hour reduction in energy consumption

# Example of Super ESCO – ADES in UAE



- Established in 2020
- Abu Dhabi Government through TAQA & ADQ
- Focus on retrofitting public sector buildings in the emirate of Abu Dhabi using private ESCOs to execute the work
- ADES is funding projects to allow its clients not to have to pay anything to retrofit their buildings
- ADES has announced projects for the Ministry of Education for 200 schools, SEHA for around 50 hospitals & clinics, the UAE University and the Department of Culture and Tourism

# Example of Super ESCO – SOFIAC in Canada



- Established in 2021
- Privately owned through Econoler and Fondation
- Focus on retrofitting private sector buildings in Quebec using private ESCOs to execute the work. Savings are covering the cost of projects.
- Has recently raised 200million \$ to finance its projects through Banque de l'Infrastructure du Canada, Fiera Private Debt and Fondation
- Recently announced retrofit projects for a large private School, and the airports of Montreal

# How to ensure Super ESCO success

- Mandate the use of the Super ESCO by public entities
- Provide exclusivity for the Super ESCO
- Develop an ESCO framework
  - ESCO accreditation or licensing scheme
  - Standard ESCO contracts and dispute resolution mechanism
  - Measurement & Verification protocol
  - Government to government contracts
  - Funding

# Super ESCOs are not always positive for ESCOs

- Cherry picking approach vs. system approach
- Becoming a public ESCO competing against the private ESCOs and executing the work by itself and not through ESCOs
- Diversifying in other markets and loosing focus in home market
- Focusing too much on profitability and not on maximizing energy savings

# Conclusion

- Super ESCOs are a powerful tool to accelerate the deployment of energy efficiency projects for government and private sectors
- To be successful in the public sector a Super ESCO will require a proper regulatory framework
- A strong funding mechanism associated with the Super ESCO is required to ensure client interest
- A Super ESCO will contribute to create jobs through the work it generates with the private ESCOs