



Training Workshop | Mauritius

Basics on ESCOs in Buildings

And how to link with energy audit results

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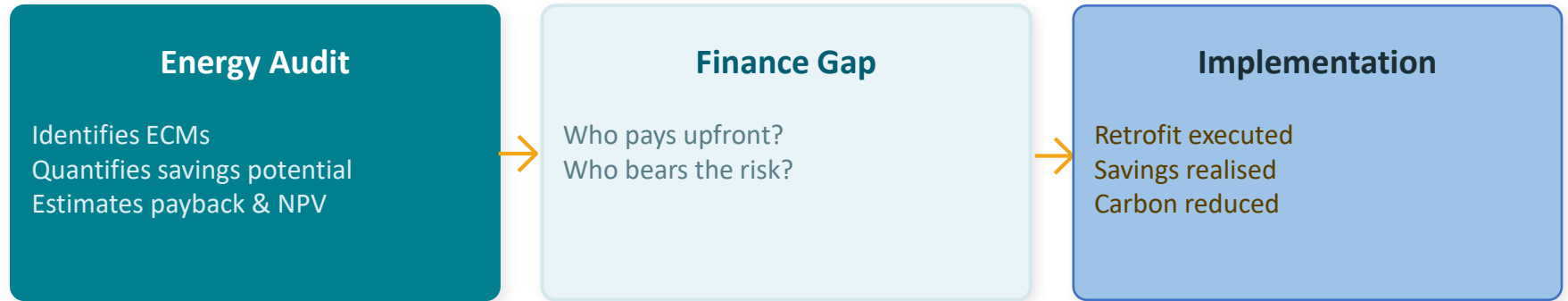
Day 2 · 1:35 – 2:05 PM



Introduction

Financial mechanisms to support the implementation of energy efficiency measures in buildings, and the role of ESCOs

Audit Identifies the Opportunity – Finance Delivers It



Why financing energy audits and retrofits is hard:

High upfront cost

Retrofits require capital today; savings are distributed over years

Perceived risk

Lenders unfamiliar with energy savings as collateral; no track record

Small deal size

Individual building projects too small for institutional investors; high transaction costs

The Financing Toolkit – Four Main Categories

01 Debt Instruments

- Commercial bank loan (project or corporate)
- Green bonds / sustainability bonds
- On-bill / on-meter financing

02 Public & Concessional Finance

- DFI credit lines (AfDB, EIB, KfW, AFD), *typically channeled through local banks*
- Government funds (e.g., revolving)
- Concessional loans (below-market rate)
- ODA grants for project development

03 De-risking Instruments

- Partial credit guarantees
- First-loss / junior equity tranches
- Technical assistance grants (audit costs)
- Political risk insurance
- Energy efficiency or energy savings insurance

04 Performance-Based Structures

- ESCOs are the delivery (and potentially financing) vehicle for Energy performance contracting (EPC)
- Pay-for-performance programmes
- Outcome-based DFI lending
- Results-based climate finance (RBCF)

ESCOs operationalise Category 04;
Categories 01–03 provide the financing they draw on

Matching the Mechanism to the Context

Building / Market Context	Example Mechanism(s)	Example Finance Actor
Single building, creditworthy owner	Corporate loan + TA grant for audit	Commercial bank
Portfolio of public buildings	Government fund or DFI credit line + PCG	DFI + government
SME / smaller commercial buildings	On-bill financing + TA grant + EPC	Utility / ESCO
SIDS / LDCs (limited local finance)	Blended: concessional DFI + PCG + TA grant	DFI + ODA
Large-scale programme / aggregated	Green / sustainability bond + first-loss tranche	Capital markets

Three things to take away

1

The audit unlocks the project. Finance delivers it. Neither works without the other.

2

No single mechanism fits all contexts — the right structure depends on market maturity, building type, and who bears the risk.

3

Public finance's job is de-risking, not financing. Small amounts of concessional capital and guarantees can unlock large amounts of commercial lending.



Basics on ESCOs in Buildings

And how to link with energy audit results

What is an ESCO?

An **Energy Service Company (ESCO)** is a commercial business that provides comprehensive energy solutions (including design, installation, and financing) to improve a facility's energy efficiency and reduce ongoing operational costs. ESCOs assume the financial risk of a project, recovering their costs through the measured energy savings generated.

ESCO Role

- Designs the technical solution
- Manages implementation
- Guarantees energy savings
- Often operates & maintains assets

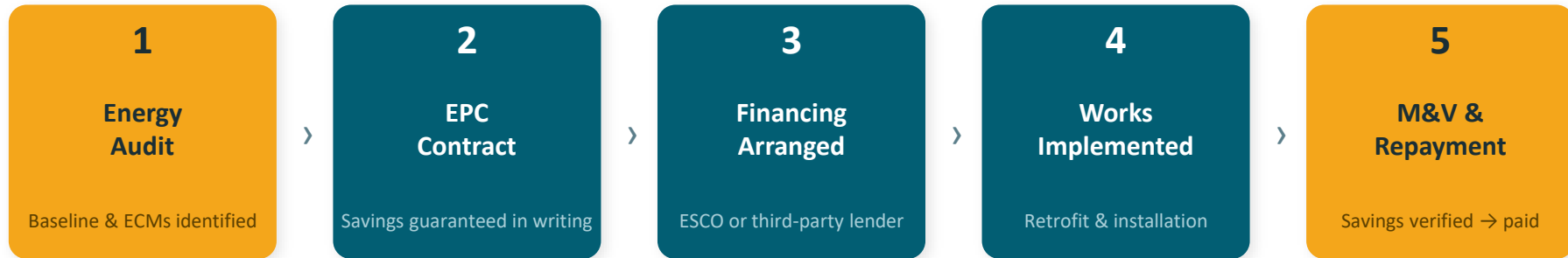
Client Role

- Building or facility owner
- Provides access and metered data
- Repays from verified savings
- Keeps all benefits post-contract

The Key Difference

- ESCO typically bears the performance risk
- Payment = verified savings only
- Incentives fully aligned

How EPC Works — The Project Lifecycle



Audit = foundation of entire chain

Guaranteed Savings EPC

ESCO guarantees minimum savings. Client secures own financing. ESCO bears performance risk only.

Puts the financial burden on the client

Shared Savings EPC

ESCO arranges financing and splits a share of actual savings with the client over the contract term.

Puts the financial burden on the ESCO

Why Audit Quality is the Decisive Variable

What an ESCO needs from the audit

- A credible, defensible consumption baseline
- Savings estimates accurate to $\pm 10\text{--}15\%$ per ECM
- At least 12 months of metered data
- An M&V approach specified for each measure
- Technical risk flagged and quantified
- Legal/ownership information (metering, tenancy)

What stops an ESCO engaging

- Lack of transparency on data and/or methodology
 - Missing or partial baseline data
 - Savings estimates methodology
- No M&V plan — ESCO must develop it from scratch
- Unclear metering boundaries
- Split incentives not identified (landlord/tenant)
- Short lease terms or unclear signing authority

From Energy Audit to ESCO Project: The Direct Link

Audit output

Verified baseline (12+ months metered data)



ECMs with savings estimates $\pm 10\text{--}15\%$ accuracy



IPMVP Option specified per ECM (A / B / C / D)



Technical risk assessment per measure



Legal & tenancy information; metering ownership



What this enables for the ESCO

Credible guarantee - ESCO can price savings with confidence

Investment-grade project pipeline; lender due diligence package

M&V plan ready - saves weeks of ESCO transaction costs

Risk allocation in the EPC contract; insurance and financing terms

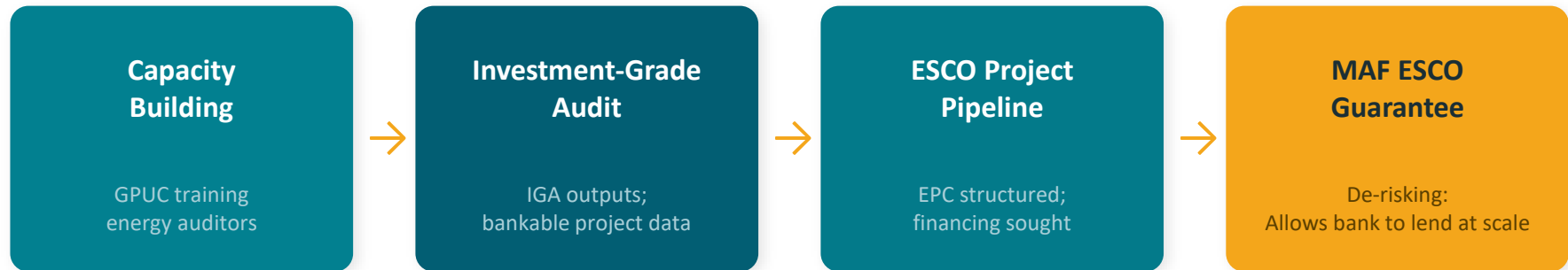
Non-technical barriers identified early - deal does not collapse in due diligence

04 | The Investment-Grade Audit (IGA)

Investment-Grade Audit (IGA): an energy audit developed to the standard required for an ESCO or lender to structure a performance contract and secure financing -- without significant additional due diligence.

Audit aspect	Standard audit	Investment-Grade Audit
Savings accuracy	Rough order of magnitude ($\pm 30\text{--}50\%$)	$\pm 10\text{--}15\%$ per ECM
Baseline	12 months preferred; not always achieved	12 months minimum; calibrated & weather-normalised
M&V plan	Rarely included	IPMVP Option stated per ECM
ECM bundling	Listed individually	Packaged for ESCO project economics
Legal/tenure	Not typically addressed	Identified and documented
Bankable for ESCO?	Not necessarily	Allows bankability assessment

04 | From Audit to ESCO Project — Mauritius



This training (GPUC) → auditors produce bankable outputs → ESCOs develop EPC projects → MAF Guarantee unlocks commercial lending → **verified energy savings at scale.**

- UNEP-CCC supported development of the MAF ESCO Guarantee — a partial credit guarantee reducing commercial bank exposure to ESCO project risk
- Energy audits under GPUC feed directly into the ESCO project pipeline the MAF Guarantee is designed to unlock
- Proof-of-concept for the full blended finance + ESCO chain in a Small Island Developing State — replicable across the region
- GEF project to finance level 3 energy audits in Mauritius

Practical checklist

1

Target 12 months of metered data

If sub-metering is absent, recommend its installation as ECM #0 — before anything else.

2

State IPMVP Options in every report

Options A, B, C, D — specify which applies to each ECM. One paragraph. Saves the ESCO weeks.

3

Include NPV and simple payback per ECM

Not just kWh saved. Give the financial framing an ESCO or lender can use directly.

4

Bundle ECMs as a package

Short-payback measures (lighting, BMS) cross-subsidise longer-payback ones (HVAC, envelope). Structure your recommendations this way.

5

Document legal and tenure information

Who owns the meters? Who can sign a 10-year contract? Identify split incentives. Flag them explicitly.

6

Make the finance connection

Introduce the building owner to ESCO actors and local guarantee programmes. Don't leave finance as someone else's problem.

Key messages

A good energy audit is the fundamental starting point of an ESCO project.

- ESCOs can only guarantee what they can measure — your baseline is their guarantee
- Every item on an IGA checklist is something you already produce — just to a higher standard
- The audit-to-finance chain is real: this training → bankable audits → ESCO pipeline → MAF Guarantee → commercial lending



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