Technical Guidelines for Procurement of Main Energy Conservation Measures (ECMs) Technologies in Mauritius buildings

Dr. Zhuolun Chen

Senior Advisor of Energy Efficiency & Green Finance

LEED AP, CMVP, CFA&CFA-Sustainable Investment

2026.6.10 Webinar 'From Energy Audits to Action: Advancing Energy Efficiency in Buildings in Mauritius'

UN environment programme | copenhagen climate centre

UN environment programme

The Macro View

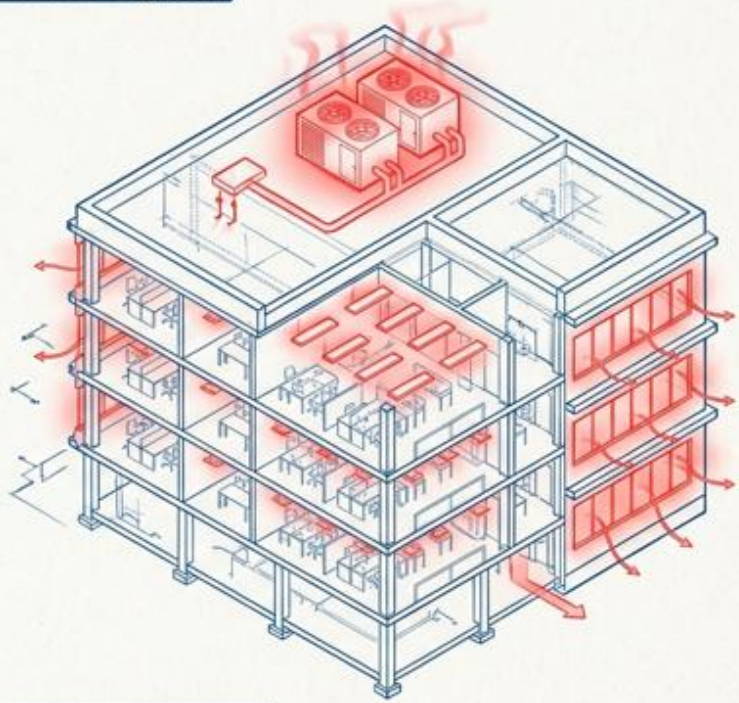
The Strategic Necessity

Mauritius faces structural import dependence and rapidly rising cooling demands due to a tropical climate. Energy efficiency is a macroeconomic necessity.

The GPUC Mission

Translating the national 10% economy-wide energy efficiency target into localized, evidence-based building retrofits.

The Micro Diagnostic



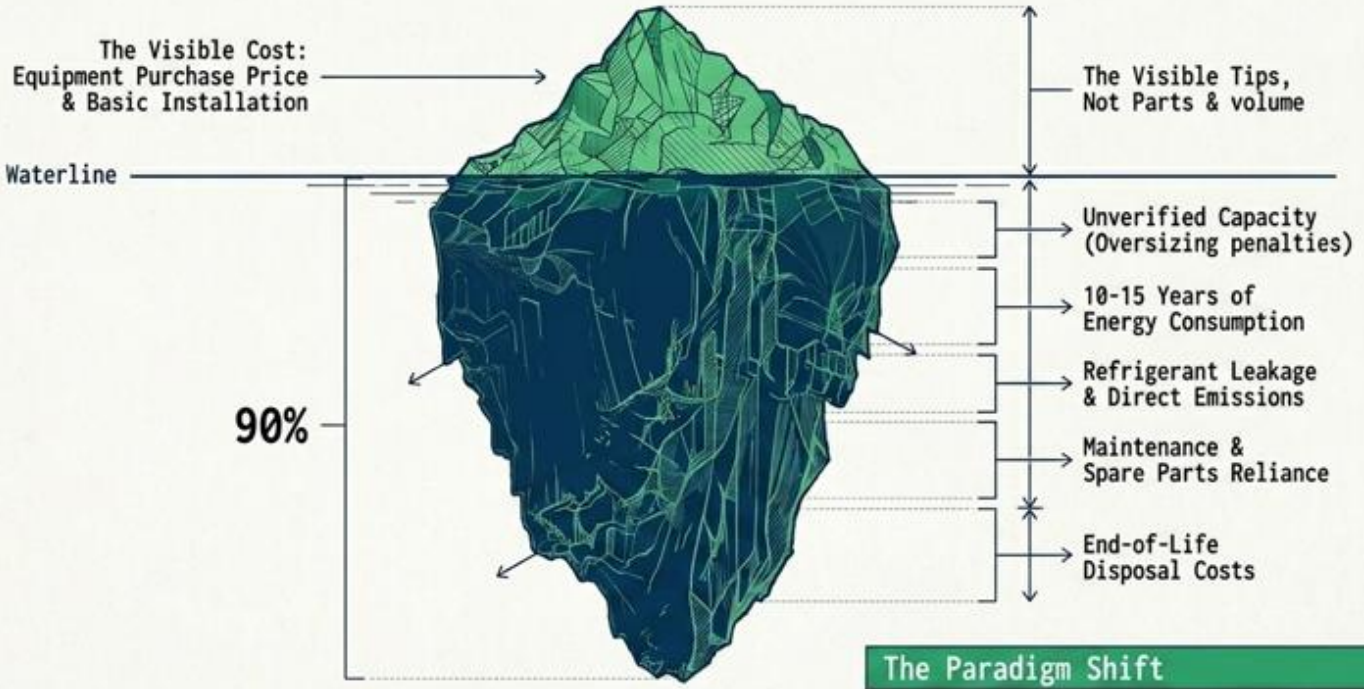
The Diagnostic Reality

A review of public building audits revealed a critical gap: savings estimates relied on broad heuristics rather than measured baselines, leading to failures in troar economicony translating recommendations into bankable procurement.

UN environment programme | copenhagen climate centre

The Flaw in Like-for-Like Replacement

The Performance, Not Parts Iceberg



The Paradigm Shift

Action means shifting from buying equipment lists based on lowest first-price, to procuring verified energy service outcomes evaluated on Life-Cycle Cost (LCC).

UN environment programme | copenhagen climate centre

CORE ARGUMENT

Buy Verified Energy Performance

The tender should define outcomes, minimum performance, and verification — not simply list equipment to replace.

The guideline translates public-building energy audit findings into practical procurement requirements for Mauritius public schools, hospitals, and offices.

LED lighting
Lumen-based replacement and controls

Efficient AC/HVAC
Right-sized cooling and seasonal metrics

Refrigeration
Energy performance plus storage reliability

Source: Technical guidelines for public procurement of selected ECM technologies in Mauritius, 2026.

TENDER ARCHITECTURE

Five Questions Shape a Strong Tender

A robust ECM tender links the required public service, acceptable technology, value-for-money method, verification protocol, and performance-risk allocation.

Service

What illumination, cooling comfort, storage temperature, temperature, schedule, and user user constraint must the building building receive?

Equipment

What efficiency, safety, refrigerant, controls, durability, warranty, and maintainability thresholds apply?

Value

How will evaluated cost include include purchase, energy, maintenance, replacement, spare parts, and disposal?

Verification

What baseline, commissioning, commissioning, acceptance testing, as-built records, and M&V plan are required?

Risk

Who carries savings, operation, maintenance, and service-level risk under supply-and-install or EPC/ESCO?

Practical implication: disclose these requirements in the bidding documents so all bidders compete against the same technical and economic logic and economic logic

The Four Pillars of Performance-Based Procurement

1. Define Service Outcome

Specify the actual need (e.g., lux levels for classrooms, stable vaccine temperatures) rather than just requesting hardware.

2. Specify Performance

Mandate minimum technical efficiency, refrigerant limits, safety standards, and maintainability to ensure equivalent high quality.

3. Evaluate Life-Cycle Cost

Utilize Mauritius law, which explicitly allows evaluating total cost of ownership (purchase, energy, maintenance, disposal).

4. Require Verification

Mandate commissioning, M&V plans, and acceptance testing linked to payment milestones—ensuring proven savings.

PROCUREMENT PATHWAY

From Audit Finding to Operation

The practical route is staged: prepare evidence, procure against disclosed criteria, commission the commission the installed solution, then monitor and archive performance records.

STAGE 01

Prepare

- Identify ECMs from audit findings and and site constraints.
- Compile baseline data: CEB bills, equipment inventory, operating hours, occupancy, and anomalies.
- Confirm budget or financing route before tender drafting.

STAGE 02

Procure

- Select the model: supply-only, supply-supply-and-install, design-supply-install-install-commission, or EPC/ESCO.
- Issue specifications, bidder evidence, evidence, life-cycle cost method, and and M&V provisions in bidding documents.
- Evaluate bids using disclosed technical, technical, economic, and risk criteria. criteria.

STAGE 03

Install & Commission Commission

- Plan works to avoid disruption to hospitals, examinations, and critical public services.
- Verify delivery, installation quality, controls, safety, and functional performance.
- Receive commissioning report, as-built built register, O&M manuals, and user user training record.

STAGE 04

Monitor

Track performance using proportionate M&V and acceptance tests.

Apply savings reconciliation, service-service-level checks, and change-control control where relevant.

Archive procurement, commissioning, commissioning, disposal, and performance records for accountability. accountability.

For Mauritius public bodies, the pathway should align technical decisions with procurement roles, approved bidding documents, award procedures, acceptance, procedures, acceptance, and record-keeping.

The 12-Step Mauritian Procurement Pathway

Identify & Consolidate

Identify ECM from audit. Committee of Needs standardizes requirements across schools/hospii-pitals and confirms funding.

Prepare & Approve

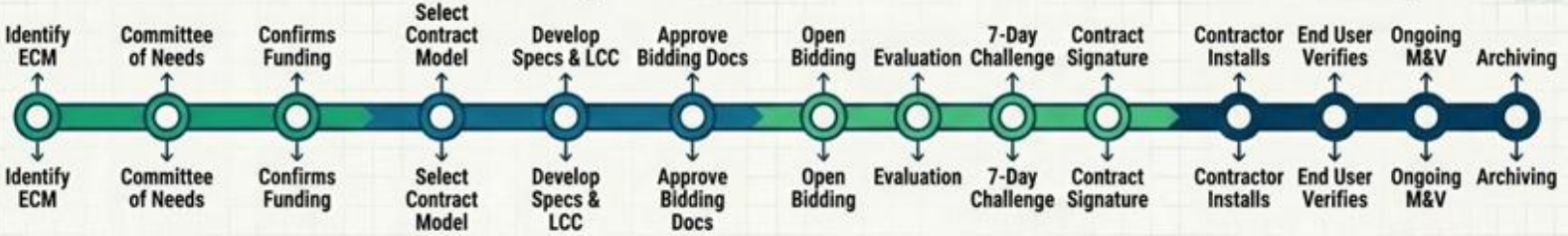
Select contract model. Develop specs and Life-Cycle Cost (LCC) criteria. Accounting Officer or Central Procurement Board (CPB) approves bidding documents.

Bid & Award

Open advertised bidding. Evaluation committee assesses LCC. Observe the Section 40 7-day challenge period.

Verify & Close Out

Contractor installs and commissions. End User verifies performance against baseline. Ongoing M&V reporting and archiving.



Identify & Consolidate

Identify ECM from audit. Committee of Needs standardizes requirements across schools/hospitals and confirms funding.

Prepare & Approve

Select contract model. Develop specs and Life-Cycle Cost (LCC) criteria. Accounting Officer or Central Procurement Board (CPB) approves bidding documents.

Bid & Award

Open advertised bidding. Evaluation committee assesses LCC. Observe the Section 40 7-day challenge period. Contract signature.

Verify & Close Out

Contractor installs and commissions. End User verifies performance against baseline. Ongoing M&V reporting and archiving.

PROCUREMENT MODEL CHOICE

Choose the Right Procurement Model

The contract model should match project size, technical complexity, measurement confidence, and the confidence, and the degree of performance risk the public body wants to transfer.

LOWEST COMPLEXITY

Supply-only

Suitable use

Small batches of lamps, plug-in appliances, or simple replacements.

Evaluation emphasis

Technical compliance and life-cycle cost.

Main risk

Installation quality and savings verification remain weak.

STANDARD RETROFIT

Supply-and-install

Suitable use

LED retrofits, split AC replacement, or one-building refrigeration upgrades.

Evaluation emphasis

Installation quality, commissioning, warranty, and after-sales service.

Main risk

Performance depends on post-installation operation.

SYSTEM PERFORMANCE

Design–supply–install–commission

Suitable use

HVAC upgrades, lighting controls, hospital refrigeration, or multi-building portfolios.

Evaluation emphasis

System performance, commissioning, training, and O&M documentation.

Main risk

Requires stronger technical evaluation capacity.

PERFORMANCE RISK TRANSFER

EPC / ESCO

Suitable use

Bundled ECMs where savings can repay investment or support service payments.

Evaluation emphasis

NPV, guaranteed savings, M&V, O&M scope, financing, and risk allocation.

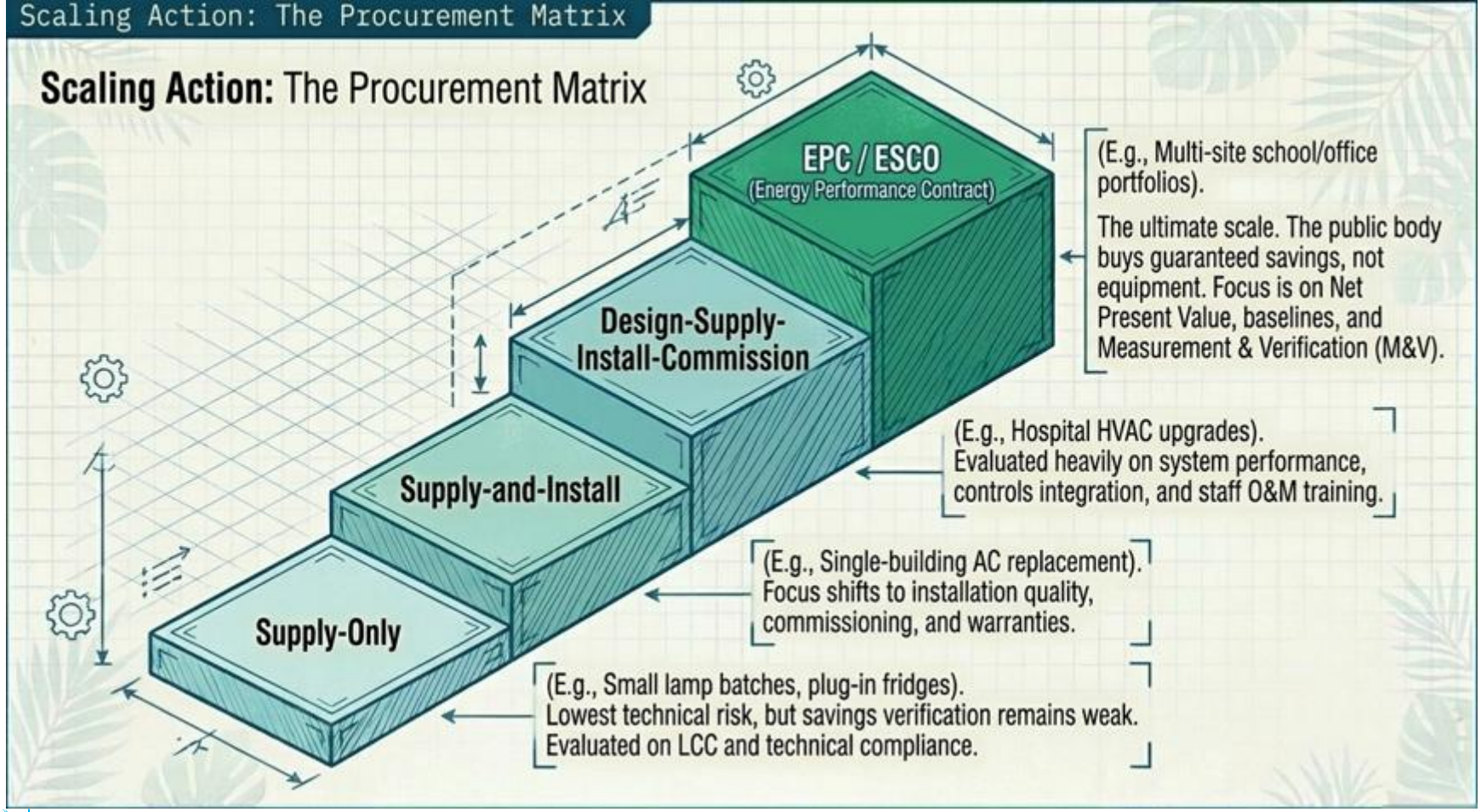
Main risk

Needs robust baseline and contract management.

UN environ program

As complexity increases, the tender must become more precise on baselines, commissioning, M&V, O&M responsibilities, responsibilities, and change-control rules.

EQUIPMENT PURCHASE TO VERIFIED SERVICE


Scaling Action: The Procurement Matrix
EPC / ESCO
(Energy Performance Contract)
(E.g., Multi-site school/office portfolios).
The ultimate scale. The public body buys guaranteed savings, not equipment. Focus is on Net Present Value, baselines, and Measurement & Verification (M&V).
Design-Supply-Install-Commission
Supply-and-Install
(E.g., Hospital HVAC upgrades).
Evaluated heavily on system performance, controls integration, and staff O&M training.
Supply-Only
(E.g., Single-building AC replacement).
Focus shifts to installation quality, commissioning, and warranties.
(E.g., Small lamp batches, plug-in fridges).
Lowest technical risk, but savings verification remains weak.
Evaluated on LCC and technical compliance.

COMMON TENDER SCHEDULE

Comparable Bids Need Common Common Requirements

Cross-cutting requirements make every bidder submit evidence against the same baseline, baseline, performance, acceptance, and operational-continuity logic.

Baseline data

Require CEB bills where available, equipment inventory, operating hours, occupancy, space use, and site-specific anomalies.

Purpose: trace savings to measured conditions.

Bidder evidence

Collect datasheets, certificates, test reports, product labels, warranties, warranties, installation methods, O&M manuals, and training plans. plans.

Purpose: compare equivalent technical quality.

Acceptance

Require delivery inspection, functional testing, commissioning report, report, as-built register, and an M&V plan proportionate to project size. project size.

Purpose: verify installed performance.

Service continuity

Plan works around hospital operations, school examination periods, and periods, and critical office services; evaluate disruption management. management.

Purpose: protect public service delivery.

A national ECM technical schedule can reduce ambiguity, improve bid comparability, and lower the risk of the risk of overstated savings.

STANDARDIZE FIRST
THEN PROCURE

PRE-PROCUREMENT EVIDENCE

Prepare Evidence Before Tendering

Savings claims are credible only when the tender starts from documented baselines, equipment inventories, operating assumptions, and required bidder evidence.

Baseline and inventory

- Collect 24 months of CEB bills where available.
- Prepare an equipment register with type, quantity, quantity, capacity, wattage, age, and condition.
- Document operating hours, schedules, space use, use, occupancy, and abnormal conditions.
- Record existing controls, maintenance issues, and user and user complaints.

Site and service constraints

- Define service outcomes: lux, comfort temperature, storage temperature, and continuity needs.
- Flag hospital critical areas, school examination periods, and essential office operations.
- Capture installation access, electrical conditions, roof exposure, façade solar gain, and drainage constraints.
- Identify disposal obligations for lamps, refrigerants, refrigerants, compressors, and electronic boards. boards.

Bidder documentation

- Datasheets, certificates, test reports, labels, and refrigerant declarations.
- Installation methodology, commissioning plan, M&V approach, and disruption plan.
- Warranty certificates, spare-parts commitments, service response times, and technician qualifications.
- O&M manuals, training plan, and end-of-life handling handling plan.

Pre-procurement evidence is the bridge between an audit recommendation and a tender that can be evaluated, evaluated, commissioned, and verified.

EVIDENCE FIRST
SPECIFICATION SECOND

Blueprint 1: LED Lighting Systems

Key Technical Thresholds (U4E Aligned)

- **Efficacy:** Target 150 lm/W for standard 60-600 lm ranges.
- **Quality:** CRI ≥80 (higher for clinical); Max 6,000 K CCT.
- **Durability:** Minimum 20,000 hours L70/B50 lifetime; 4-5 year warranty.

Application Specifics

- **Schools/Offices:** Mandate daylight dimming and occupancy sensors where technically feasible.
- **Hospitals:** Prioritize visual comfort (flicker limits PstLM ≤1.0), maintenance access, and continuity of service during installation.

LED: Specify Lighting Service Service

LED tenders should require verified illuminance, lighting quality, controls, warranty, maintainability, maintainability, and disposal — with bidders competing on delivered service and life-cycle value. cycle value.

WEAK TENDER FRAMING

“Replace existing watts”

Watt-for-watt replacement can preserve poor layouts, over-lighting, glare, weak controls, and uncertain savings.

- ✕ Existing fixture capacity becomes the default benchmark. benchmark.
- ✕ Bid comparison focuses on lamp price and nominal wattage. wattage.
- ✕ Post-installation lux levels and controls may remain unverified.

RECOMMENDED PROCUREMENT FRAMING

“Deliver required lighting service”

Require lumen-based replacement and lighting calculations showing compliance with required illuminance illuminance and uniformity while reducing installed power.

Lighting calculations

Classrooms, offices, wards, corridors, laboratories, exterior areas.

System efficacy

Rank bids on lumens per watt and lighting power density.

Visual quality

CRI, colour temperature, flicker, glare, and user comfort.

Controls

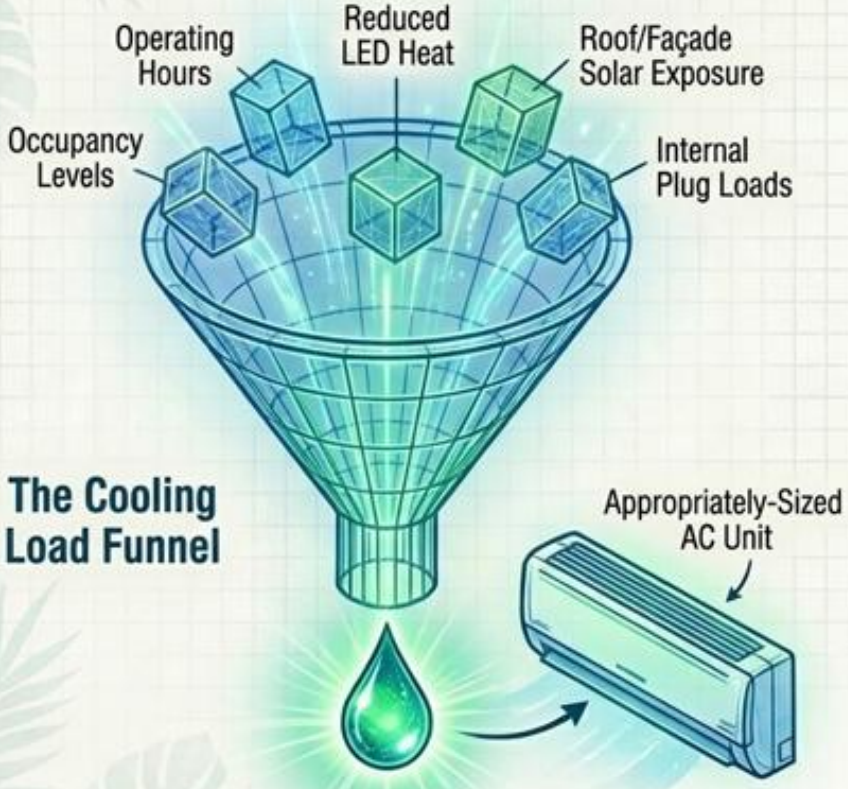
Occupancy sensing and daylight dimming where technically feasible.

Minimum LED procurement schedule

PASS/FAIL + SCORED

Efficacy	Quality	Reliability	Controls	Warranty	Disposal
Use U4E-aligned or best practical market tier; verify by datasheet/test report.	CRI ≥80 for typical indoor spaces; appropriate CCT by use.	Declared lifetime, lumen maintenance, driver quality, and power factor.	Occupancy/presence control and daylight dimming where feasible.	Clear replacement obligations, service response, and maintainable luminaires.	Safe collection and disposal of fluorescent and mercury-containing lamps.

The Right-Sizing Requirement: Never assume existing capacity is correct. Bidders must justify replacement capacity.



Minimum Tender Specifications

- **Efficiency:** Evaluate using Seasonal Performance Metrics (CSPF/SEER), not single-point EER. Require inverter/variable-speed compressors.
- **Refrigerants:** Mandate ODP = 0. Maximum GWP ≤750 (GWP ≤150 awarded where available).
- **Operations:** Require lockable setpoint controls (e.g., 25–26°C), leakage testing, and a defined spare parts commitment (7 years).

AC/HVAC: Right-Size Cooling Cooling Demand

Cooling procurement in Mauritius should verify actual room-level demand, compare seasonal performance, and lock in controls, refrigerant quality, commissioning, and maintenance obligations.

Cooling-load sense-check

- Room area, ceiling height, windows, façade façade orientation, and solar exposure
- Occupancy, operating hours, timetable variation, and public-service constraints
- Internal loads from equipment, plug loads, lighting, laboratories, and server rooms
- Roof exposure, especially for upper floors in tropical conditions
- Ventilation, infiltration, door opening patterns, patterns, and changed room functions
- Interaction with LED retrofit, shading, reflective reflective roofs, insulation, and solar-control film control film

Do not copy existing capacity automatically

Like-for-like replacement is acceptable only only when the bidder justifies that existing existing capacity still matches the service service requirement.

Procurement service outcome

Maintain agreed indoor temperature during occupied hours, with authorized setpoint control and documented exceptions for clinical or operational requirements.

Seasonal efficiency

Use CSPF, SEER, IEER, IPLV, or equivalent metrics where available; avoid single-point EER as the only basis.

Inverter / variable speed

Prefer variable-speed systems where occupancy, cooling load, and part-load operation vary materially.

Controls and setpoints

Require programmable schedules, authorized setpoint limits, timers, and occupancy control where relevant.

Refrigerants and leakage

Require ODP = 0, low-GWP options where feasible, qualified installation, pressure testing, leak testing, and charge records.

Commissioning and O&M

Verify refrigerant charge, airflow, drainage, controls, electrical checks, training, warranty, and spare-parts availability.

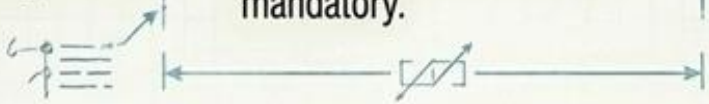
Evaluation should reward life-cycle cost, verified seasonal performance, right-sizing evidence, installation quality, and maintenance capacity. maintenance capacity.

Blueprint 3: Refrigeration Classification

Procurement Directive: Separate comfort refrigeration from process-critical medical cooling. Oversizing directly inflates energy baselines.

Fit-for-Purpose Spectrum

Standard Domestic	Commercial / Kitchen	Critical Medical
☑ Focus on consolidation of inefficient units in offices & schools.	☑ Requires precise volume right-sizing.	☑ Hospitals (Clinical & Cold Chain).
☑ Target highest U4E energy labels.	☑ Focus on durable gaskets and smart controls.	☑ Temperature reliability overrides pure energy-saving operation.
☑ Mandate ODP = 0 and GWP ≤20 for foam and refrigerants.	☑ End-of-life environmentally sound decommissioning mandatory.	☑ Tenders must specify: Alarms, temperature logging, lockable doors, and backup holdover provisions.



Efficient Refrigeration

Procurement must first classify the refrigeration refrigeration service, then specify energy performance and reliability requirements.

For hospitals, **temperature compliance overrides energy-energy-saving operation**. Critical medical refrigeration should not be purchased through a generic lowest-appliance tender.

Energy efficiency is essential, but for vaccines, medicines, laboratory samples, or specimens, service continuity is a minimum procurement requirement.

Decision logic for tender specifications

Classify the appliance before setting criteria

Domestic, commercial/professional, laboratory-grade, medical, cold-room, or vending-type equipment use different performance tests and risk controls.

General-purpose units

Right-size volume to kitchens, canteens, staff areas, areas, offices, and pantry needs.

Require certified annual or daily energy consumption and suitable tropical/high-ambient climatic class.

Consolidate multiple inefficient small units where operationally practical.

Hospital-critical units

Separate pharmacy, laboratory, vaccine, medicine, blood, blood, specimen, and food-service refrigeration.

Specify temperature stability, digital monitoring, alarms, logging, locks, and service-response obligations.

Require commissioning tests for temperature range, alarm function, and operational continuity.

Energy evidence

Energy label, test report, or certified annual consumption.

Climate suitability

Tropical or appropriate high-ambient climatic class for Mauritius.

Service support

Repair manuals, spare parts, qualified service contacts, and warranty.

End-of-life

Take-back, refrigerant recovery, recycling, and disposal certificate.

ECM Strategic Matrix: Synthesizing the Blueprints

	LED Lighting	Efficient AC / HVAC	Refrigeration
Primary Efficiency Metric	System Efficacy (lm/W)	Seasonal Performance (CSPF/SEER)	Certified Annual Consumption (kWh/yr)
Core Procurement Shift	Watt-to-Lumen Replacement	Right-sizing vs Like-for-Like	Fit-for-Purpose Classification
Critical Building Pitfall	Glare & flicker in clinical spaces	Oversizing and ignoring part-load efficiency	Treating medical cold-chain like domestic storage
M&V Complexity	Low (Retrofit-isolation easy)	High (Weather/occupancy normalization required)	Medium (Stable for medical; requires metering for commercial)

APPLICATION-SPECIFIC PROCUREMENT

Tailor Requirements by Building Type

The same ECM category has different service risks in schools, hospitals, and offices; procurement specifications should reflect those operational differences.

Public schools

LIGHTING	Prioritize classrooms, computer rooms, laboratories, corridors, exterior security lighting, glare control, and robust fittings.
COOLING	Focus on computer rooms, labs, libraries, and administration; manage setpoints and holiday/timetable variation.
COLD CHAIN	Right-size kitchen and canteen refrigeration; consolidate multiple inefficient small units where where practical.
DELIVERY RISK	Schedule installation outside teaching and examination periods.

Hospitals

LIGHTING	Separate wards, consultation rooms, labs, pharmacies, corridors, waiting areas, and exterior exterior safety lighting.
COOLING	Distinguish offices, wards, pharmacies, laboratories, laboratories, medical storage, waiting areas, and and critical spaces.
COLD CHAIN	Specify alarms, logging, stability, locks, service service response, and continuity for medicines, medicines, vaccines, and samples.
DELIVERY RISK	Protect clinical continuity, backup-power compatibility, maintenance access, and infection-infection-control constraints.

Public offices

LIGHTING	Address open-plan areas, meeting rooms, enclosed enclosed offices, corridors, archives, reception, and reception, and exterior lighting.
COOLING	Emphasize right-sizing, zoning, meeting-room room controls, part-load efficiency, and maintainability.
COLD CHAIN	Use efficient, right-sized pantry refrigerators and and avoid accumulation of small inefficient units. units.
DELIVERY RISK	Maintain critical administrative services and phase phase works around peak public-service periods. periods.

Procurement quality improves when technical thresholds are adapted to the building's public-service function and function and operational risk.

ONE TECHNOLOGY
DIFFERENT RISKS

EVALUATION FRAMEWORK

Reward Life-Cycle Value

ECM procurement should keep mandatory compliance as a gate, then evaluate total cost, delivery quality, delivery quality, and performance risk according to the selected contract model.

Pass/fail gate before scoring

Reject bids that fail minimum safety, safety, efficiency, refrigerant, warranty, warranty, service, or documentation documentation requirements.

- Technical compliance must be non-negotiable.
- Life-cycle cost should be defined before before bidding.
- Performance risk receives higher weight weight under EPC/ESCO.

EVALUATION COMPONENT	SUPPLY-AND-INSTALL		EPC / ESCO	
Mandatory technical compliance	Pass/fail	Minimum safety, efficiency, service, warranty	Pass/fail	Plus stronger capacity and M&V checks
Life-cycle cost / net present cost	35–45%	Energy, maintenance, replacement, disposal	20–30%	Still material, but balanced balanced with savings guarantee
Guaranteed savings / performance	10–20%	Useful for larger supply-and-install projects	25–35%	Core basis for EPC value and and risk transfer
Technical quality and implementation	20–30%	Design, installation, commissioning, disruption plan	20–25%	Implementation method, method, staffing, service continuity
O&M, warranty, spare parts	15–20%	Local service, response time, warranty coverage	15–20%	Performance-period maintenance obligations
Financing terms, if applicable	0–10%	Only where financing is part of offer	10–15%	Financing cost, payment profile, risk allocation

Under Mauritius procurement logic, the “lowest evaluated responsive bid” can include life-cycle cost and performance risk performance risk when the methodology is disclosed in the bidding documents.

EVALUATE VALUE NOT FIRST COST

Use EPC/ESCO Selectively

EPC/ESCO is appropriate when project scale justifies transaction cost, savings can be measured be measured credibly, and the public body wants to transfer technical performance risk. performance risk.

When the model fits

Use EPC/ESCO for larger buildings or portfolios portfolios where verified savings, service quality, and risk allocation can be contractually contractually managed.

- Bundle schools, offices, or hospital buildings to buildings to reach sufficient contract value.
- Separate critical hospital areas where service service continuity or clinical requirements dominate.
- Require investment-grade audit inputs and a a clear baseline before savings guarantees.
- Use guaranteed-savings or shared-savings models according to financing and credit-risk allocation.

Match M&V to the technology

CREDIBLE SAVINGS REQUIRE FIT-FOR-PURPOSE METHODS METHODS

LED lighting

RETROFIT ISOLATION

Lighting savings are generally easier to isolate when fixture wattage and runtime are verified.

Document fixture type, wattage, quantity, controls, space use, and operating schedule.

Verify pre/post wattage and representative illuminance.

Confirm controls functionality and user training.

AC/HVAC

WEATHER-NORMALIZED OR METERED

Cooling savings are affected by weather, weather, occupancy, setpoints, internal loads, loads, and envelope conditions.

Use 24 months of CEB bills where available plus plus inventory, schedules, and weather variables. variables.

Use whole-building regression, retrofit isolation, or calibrated simulation as complexity requires.

Define comfort service levels and change-control rules.

Refrigeration

CERTIFIED USE OR PLUG METERING

Plug-load savings can often be isolated, while while critical medical storage needs service-service-level protection.

Record unit type, volume, function, location, location, operating conditions, and energy consumption.

Use certified annual consumption or short-term metering where conditions are stable.

Prioritize temperature compliance for medicine, vaccine, and laboratory storage.

Baseline	Guarantee	M&V plan	O&M	Change control
Inventory, bills, schedules, assumptions.	Annual kWh savings and service outputs.	Method, data, uncertainty, reconciliation.	Filters, seals, controls, refrigerant, faults.	Space use, hours, setpoints, exceptional events.

UN environ program

The **EPC / ESCO** Risk Transfer Paradigm

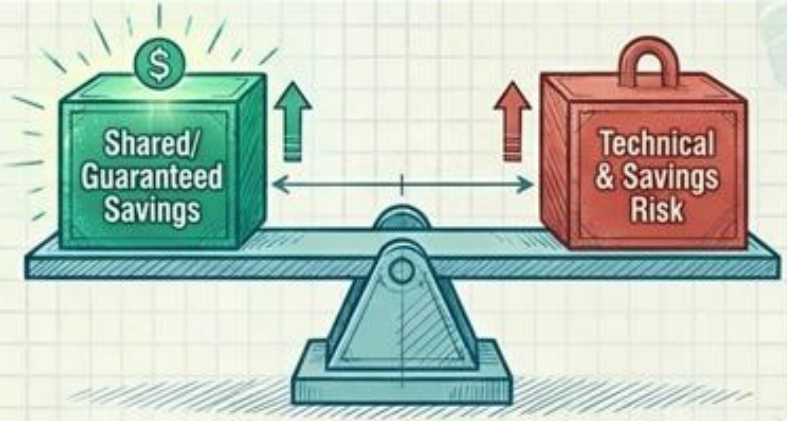
The Requirement: To make this work, the tender must establish an ironclad energy baseline using 24 months of CEB bills and precise operating schedules.

State 1: Traditional Procurement

Guaranteed Savings Model

Public body/government finances the project; ESCO guarantees a minimum savings threshold and compensates for shortfalls.

State 2: EPC Procurement



Shared Savings Model

ESCO finances the project and carries the credit risk; savings are split at an agreed percentage.

POST-AWARD GOVERNANCE

Manage Performance After After Award

Energy savings are protected after contract signature through commissioning, acceptance, M&V, O&M reporting, change control, and documented disposal.

Commissioning

Verify that equipment, controls, installation quality, and user settings meet the owner's requirements and tender specifications.

Acceptance testing

Confirm illuminance, cooling performance, drainage, alarms, temperature logs, and other technology-specific acceptance criteria.

M&V and reconciliation

Use proportionate M&V: simple functional checks checks for small works and formal baseline/savings reconciliation for EPC/ESCO. EPC/ESCO.

O&M reporting

Track preventive maintenance, failures, response response times, spare parts, refrigerant charge, charge, filters, seals, controls, and sensors.

Change control

Document operating-hour changes, space-use changes, setpoint overrides, exceptional events, and public-body-controlled risks.

Records and disposal

Archive as-built registers, training logs, warranty certificates, disposal certificates, and performance reports for accountability.

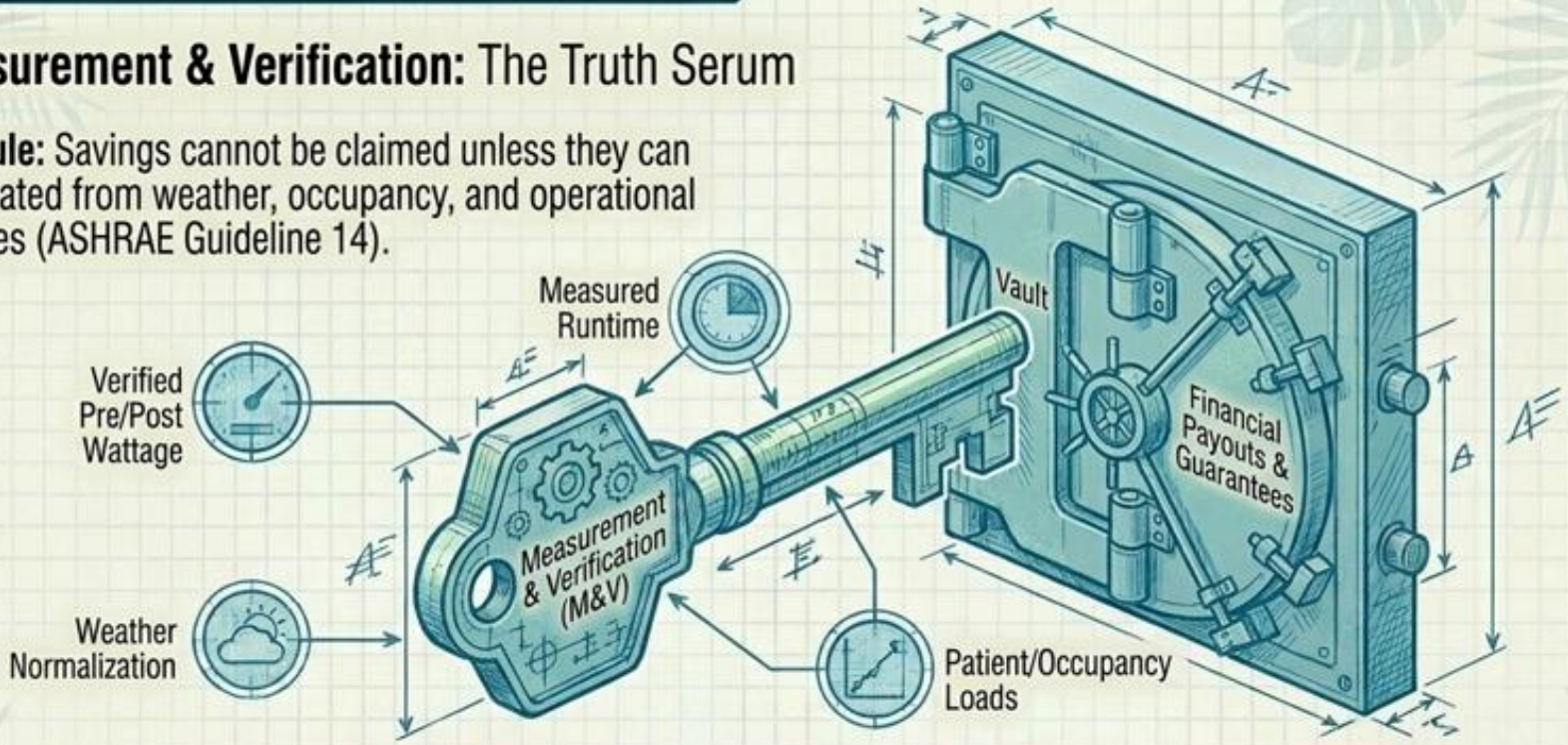
UN environment programme | copenhagen climate centre

For EPC/ESCO, contract management is the mechanism that turns a savings guarantee into verified performance and performance and manageable public-sector risk.

CONTRACT SIGNATURE IS THE MIDPOINT

Measurement & Verification: The Truth Serum

The Rule: Savings cannot be claimed unless they can be isolated from weather, occupancy, and operational changes (ASHRAE Guideline 14).



Change Control is Critical

If a public office adds night-shifts or a hospital changes setpoints, the M&V baseline must be formally adjusted. M&V protects both the buyer and the ESCO.

IMPLEMENTATION PRIORITIES

Standardize, Pilot, Then Then Scale

Mauritius can turn audit recommendations into recommendations into repeatable public procurement by standardizing requirements requirements first and testing delivery through through a manageable pilot.

The practical objective is to help public bodies buy buy verified performance with lower ambiguity, ambiguity, stronger comparability, and clearer accountability during the performance period.

Five-step roadmap for public ECM procurement

01

Issue a national national ECM technical schedule

Append standard specifications, evidence requirements, LCC templates, commissioning checklists, M&V provisions, warranty, and disposal obligations to public tenders.

02

Make life-cycle cost the default

Keep first cost visible, visible, while evaluating energy, maintenance, replacement, spare parts, and end-of-life life costs over the analysis period.

03

Scale commissioning and M&V to risk

Use functional tests for for small projects and formal baselines, savings savings guarantees, annual reconciliation, and and quality assurance for for EPC/ESCO.

04

Create a technical adviser adviser function function

Support hospitals, large HVAC tenders, tenders, multi-site EPCs, and critical refrigeration where public entities need specialist procurement procurement input.

05

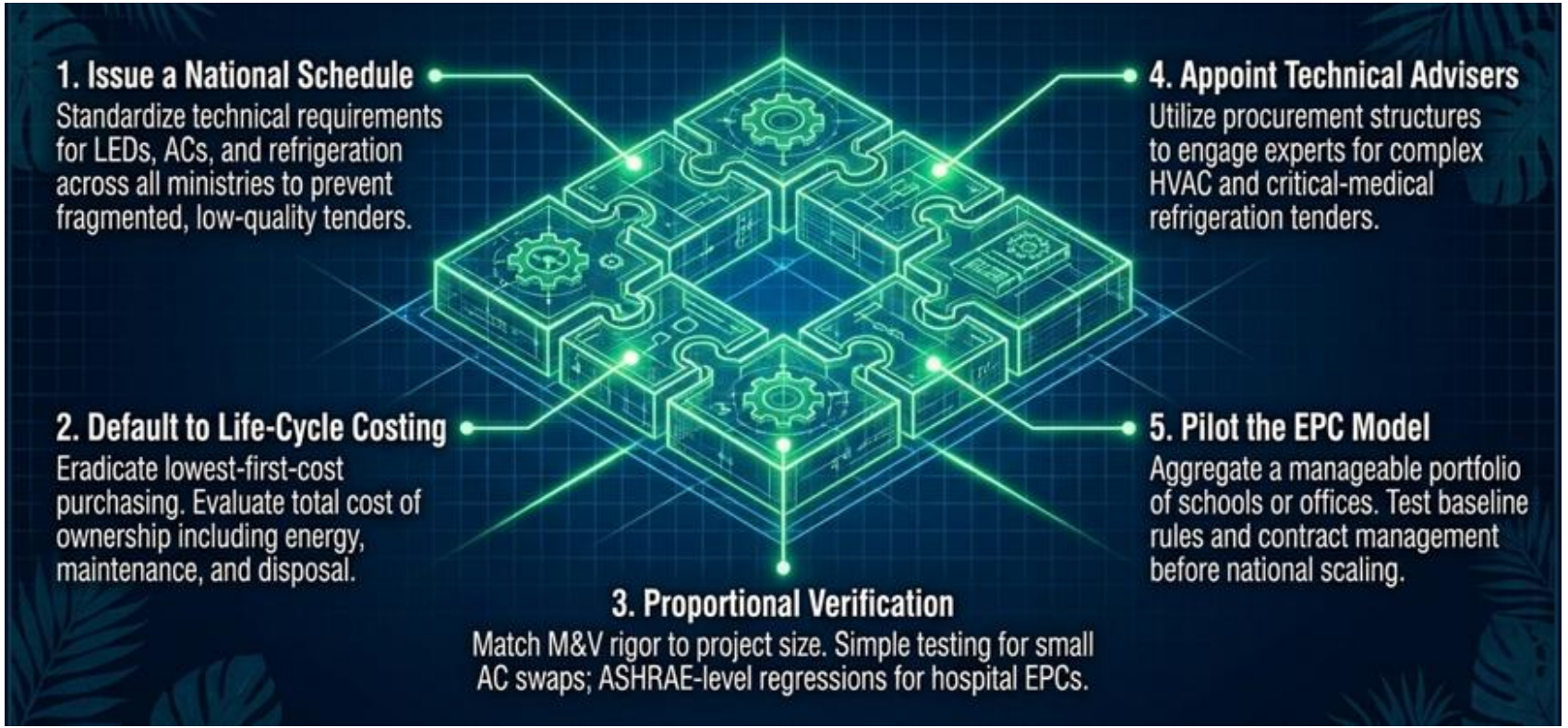
Pilot bundled EPC procurement

Start with a manageable portfolio portfolio of schools, offices, or non-critical critical hospital buildings; test baselines, M&V templates, clauses, and contract management before before scaling.

Scaling should follow evidence: first standardize procurement tools, then validate them validate them through a pilot, then expand with stronger institutional confidence. confidence.

FROM AUDIT TO ACTION

Five golden rules for implementing ECM technologies in the Mauritius buildings



Thank you very much!

Dr. Zhuolun Chen

email： zhuolun.chen@un.org

Linked in

UN environment programme | copenhagen climate centre