

Eskom Green

SAPVIA O&M WORKING GROUP LAUNCH WEBINAR

Driving Excellence in Solar PV O&M

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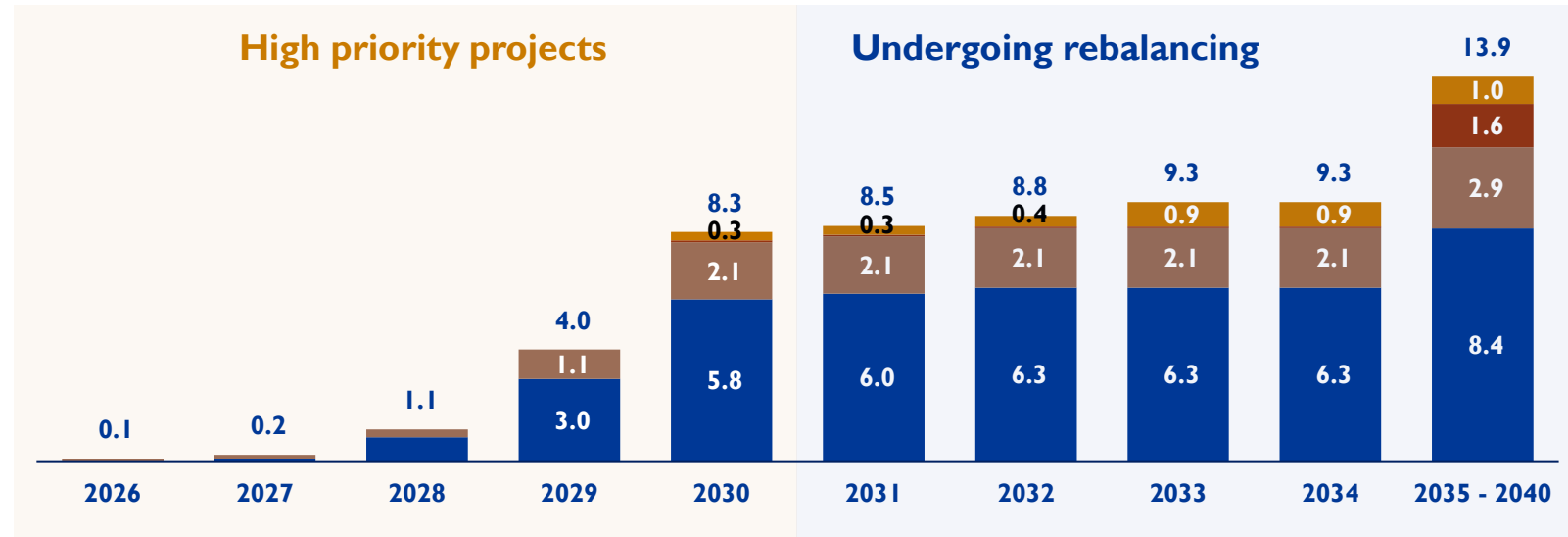
Eskom Green Overview



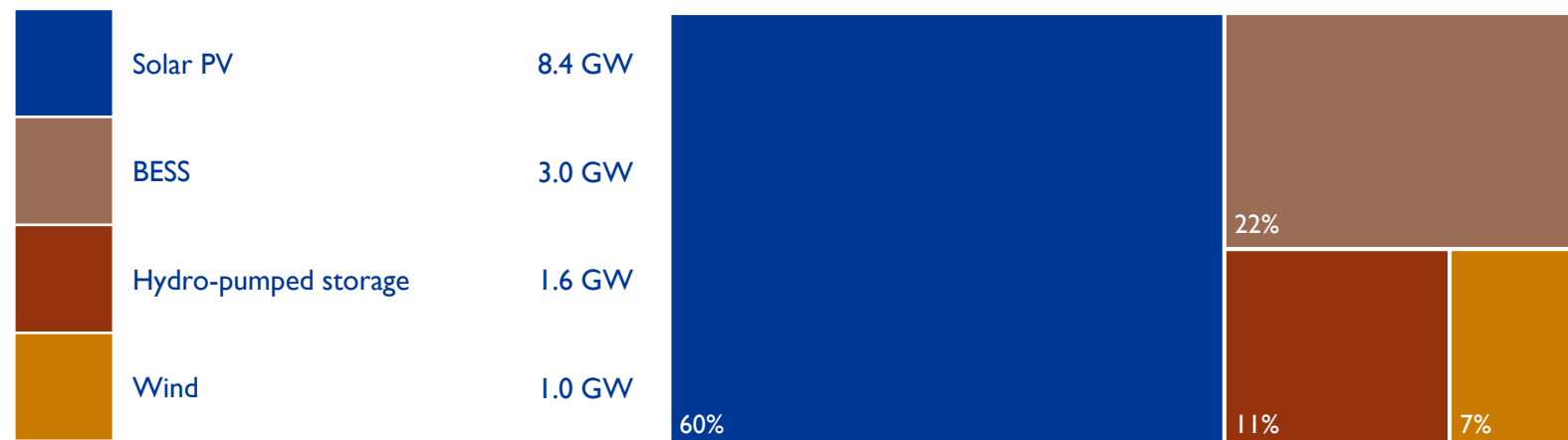
Eskom Green is building on Eskom's renewable energy legacy with a focus to address challenges from the past and build for the future



Eskom Green is scaling rapidly to a ~14GW multi-technology renewable portfolio



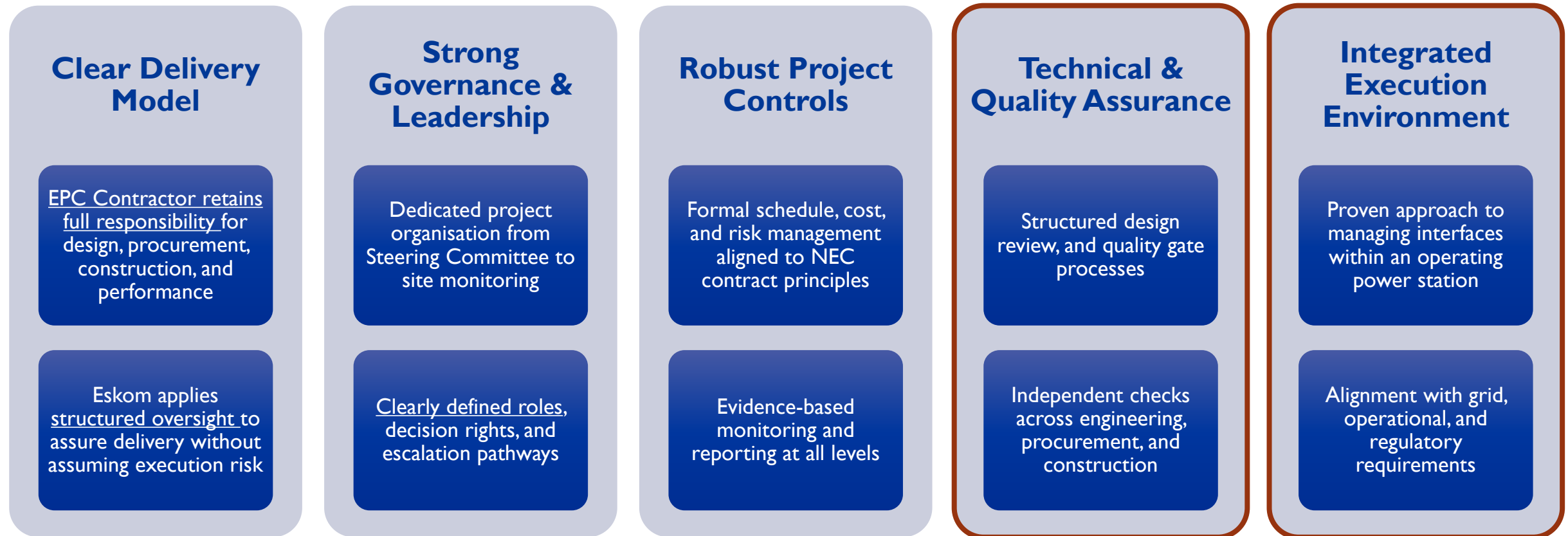
Cumulative project pipeline (GW, dates shown as estimated commercial operations date)



- **Diversified project pipeline**, comprising primarily solar PV and wind projects for generation (c. 9.4GW), with the remaining c.3.6GW from BESS and hydro-pumped storage
- **Portfolio rebalancing & expansion** is actively being pursued (by technology & geography) through:
 - Eskom owned land prospecting
 - Greenfields acquisitions
 - Late stage developments acquisitions
 - Operational assets acquisitions

Execution model decisions directly shape long-term O&M outcomes

A **defined execution framework** enables disciplined delivery of the Renewable Projects with controlled risk, clear accountability, and strong governance.



These execution decisions directly define long-term O&M outcomes — they will influence how the broader industry approaches O&M

O&M Strategic Principles & Operating Model





Standardisation opportunity across IPPs, utilities, OEMs



Reducing lifecycle cost of renewables in SA

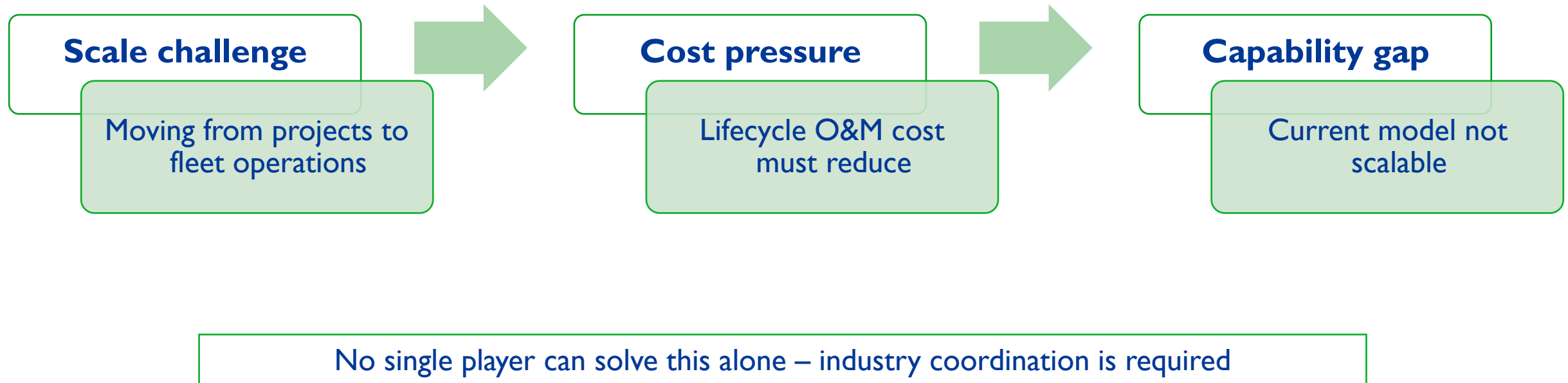


Addressing OEM dependency collectively



Creating local O&M capability ecosystem

South Africa is Entering a Multi-GW Renewables Scale Phase – O&M Must Evolve Now otherwise we risk locking into a high-cost, OEM-dependent O&M model that will not scale to a multi-GW fleet



A Future-ready O&M model must be...



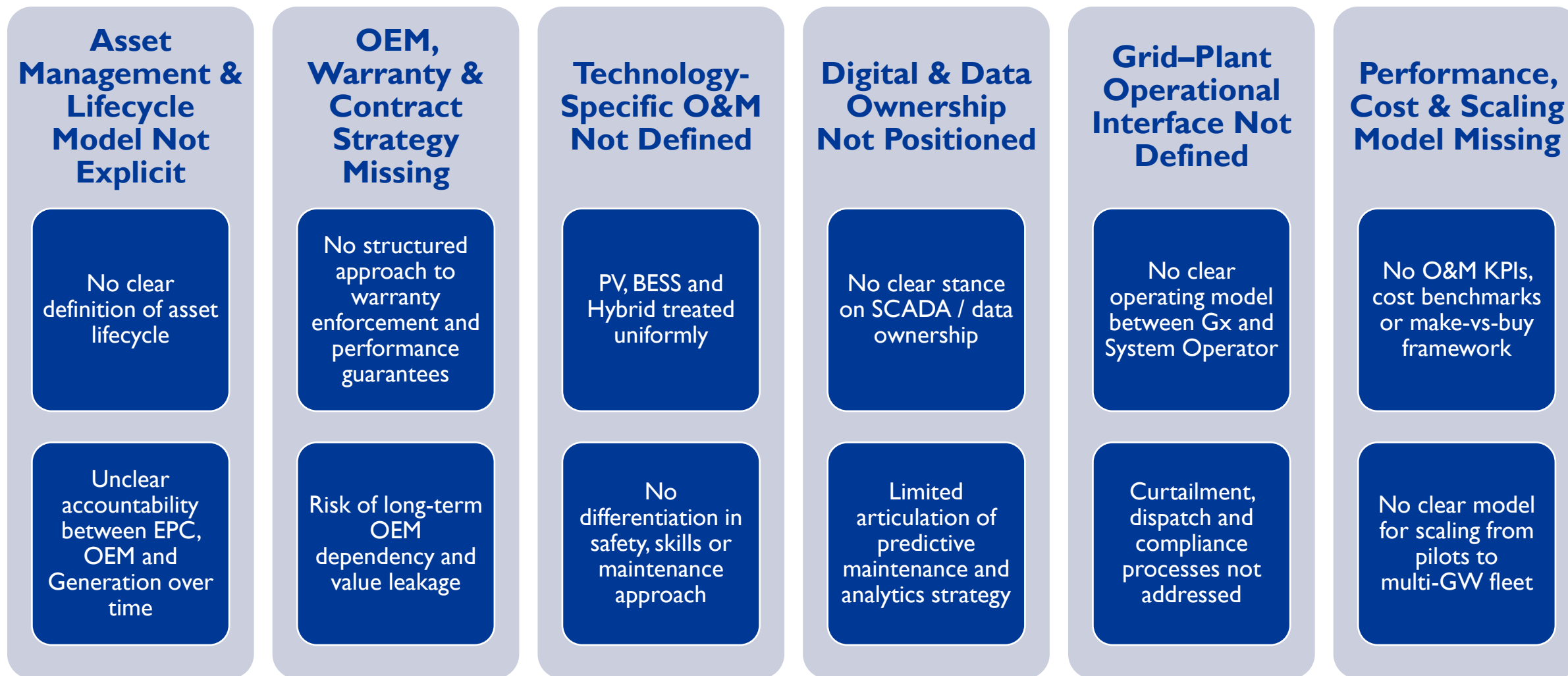
Safety-led operations

Lifecycle asset management

Lean, digital-first O&M

Scalability and standardisation

Skills transfer and localisation



Without addressing these gaps, there is a risk of fragmented O&M models, high OEM dependency, and inability to scale efficiently to a multi-GW renewable fleet. To address these gaps, the following strategic choices are required



Partnering where it adds value

Shift from OEM-led O&M to an owner-led O&M with selective OEM support
LTSA exit strategy
Performance-based contracts
Warranty enforcement model



In-sourcing critical O&M capability

Establish owner-led operating and maintenance teams to ensure cost control, skills transfer and long-term sustainability.



Digital-first O&M model

Leverage plant data, monitoring systems and analytics to drive availability, predict failures and optimise maintenance interventions.



Designing for scale from inception

Standardise processes, systems and organisational structures so the O&M model can scale from hundreds of MW to multiple GW without exponential cost growth.



Commercial & Contracting Strategy

Phased OEM reliance model
Warranty-to-operations transition model
Standardised O&M contracting frameworks
Performance-based contracts



Higher availability and energy yield

Consistent operating standards and proactive maintenance drive higher energy delivery to the grid.



Structurally lower lifecycle O&M cost

Reduced reliance on long-term OEM O&M contracts and improved maintenance planning lower lifecycle O&M costs.



Sustainable skills and capability development

Build renewable-specific operational skills, supporting workforce transition and long-term asset ownership.



Localisation and Just Energy Transition alignment

In-house capability, supplier development and skills transfer support broader JET and industrialisation objectives.

PEOPLE

Resourcing, Skills and Change Management

Workforce, Competency & Culture Shift (Beyond Skills Audit)

Community & Stakeholder Management (Integration with JET Objectives)

PLANT

Technology-Specific O&M (PV ≠ BESS ≠ Hybrid)

Grid Operations & Dispatch Interface

Spares, Logistics & Localisation Strategy

PROCESSES

Asset Management & Lifecycle

OEM, Warranty & Contract Management

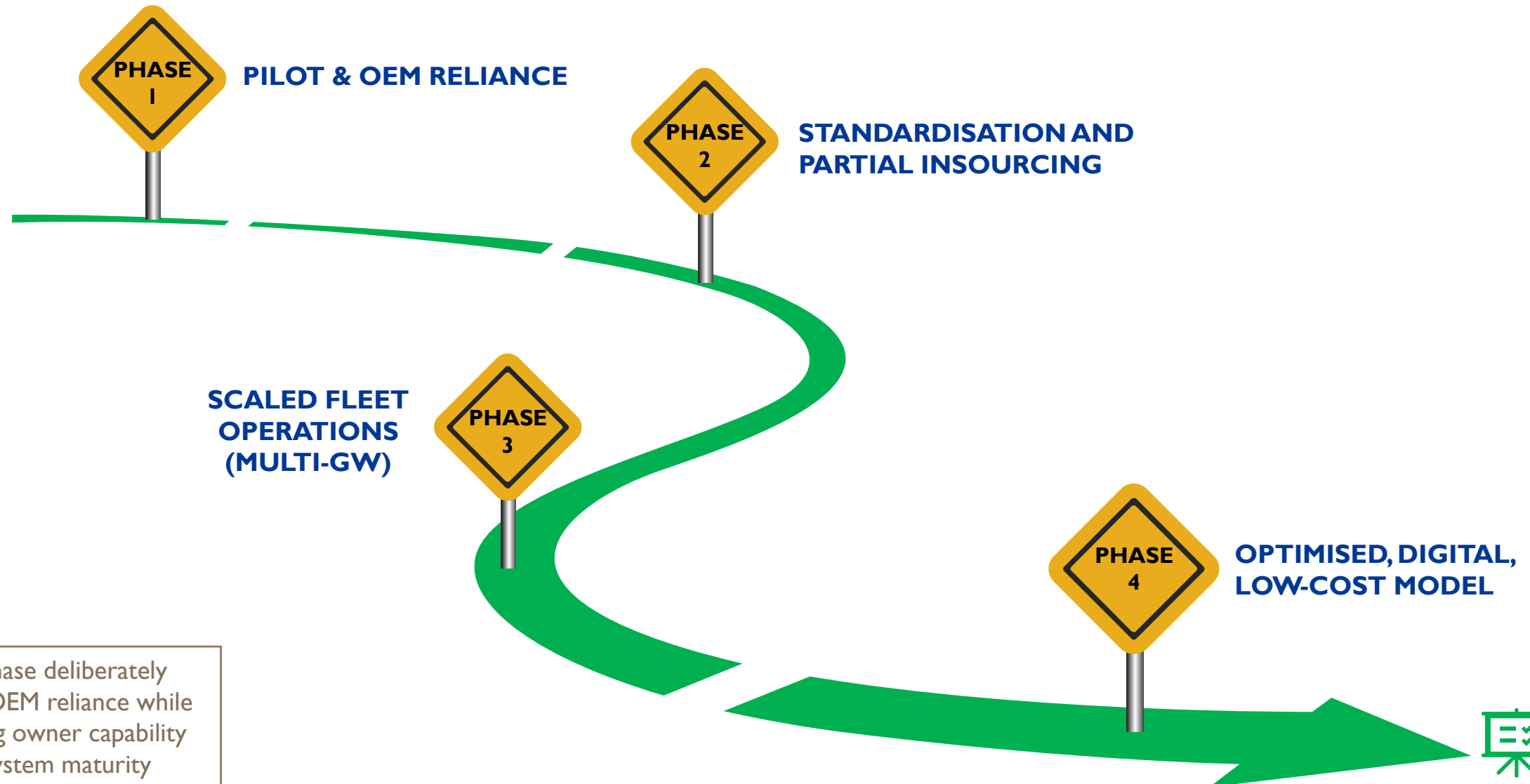
Financial & Performance Management in Operations

Digital O&M, Data Ownership & Analytics Strategy

SHEQ and Environmental Operations Strategy

Scalability & Portfolio View

Proposed O&M Capability Build Roadmap



In Closing



Delivering Scalable, Cost-Effective Renewable O&M Requires Coordinated Industry Action

Key focus areas to drive excellence in Solar PV O&M

1. Define asset ownership across lifecycle
2. Establish design base early (configuration & data foundation)
3. Build capability ahead of project COD
4. Standardise O&M across portfolio
5. Enable decentralised execution with central governance

SAPVIA O&M Working Group Focus

- ✓ Standardisation of O&M frameworks
- ✓ OEM engagement & contract norms
- ✓ Data & digital interoperability
- ✓ Skills & localisation roadmap
- ✓ Benchmarking cost & performance

The South African renewables sector must now move from project-based delivery to coordinated, fleet-scale O&M execution — this requires shared standards, aligned contracting models, and collective capability build



“During a green transformation what was true yesterday or even today will not be true tomorrow... the challenge is to stay ahead and open to new change possibilities”

Orsted Case Study



Thank you