EECA 2024 EnMS STARTER PACK

C8 · ACTION PLAN & ESM REGISTER

Action Plan & ESM Register

From audit findings to a costed, owned, measured programme — companion to the ESM Register (xlsx)

GP46 para. 6 requires an action plan built from the gap review, with technical strategies, timelines and estimated savings, financial prioritisation, and named roles and resources; para. 7 requires its implementation to be documented, non-conformance handled, and every ESM measured and verified against an M&V plan. This companion explains each field of the xlsx register and sets the operating rhythm.

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DRAFT FOR ADAPTATION — this template is not regulatory advice. Prepared with reference to GP/ST/No.46/2024 (Pind. 1/2026) (Guidelines on Energy Management System), the Energy Efficiency and Conservation Act 2024 [Act 861] and the Energy Efficiency and Conservation Regulations 2024 [P.U.(A) 466/2024]; sources last verified 18 July 2026. Adapt every field to your organisation before use. Only Suruhanjaya Tenaga can determine compliance with the Act.

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1 Where the plan comes from (GP46 para. 6.0(a))

The action plan is not a wish list — it is the closure of a measured gap. Three inputs feed it:

- The EnMS self-evaluation and assessment findings (C10, C1) — organisational gaps: missing procedures, training, data, governance.
- Technical assessments and energy audit findings — the engineering opportunity list, with the registered energy auditor's savings estimates. The REM makes reference to the audit report's ESM list when proposing the action plan (GP47 para. 3(f)(i)).
- The gap between current performance and the targets set in C6 — the quantum the plan must close.

2 The register fields — and how to fill them

Field (xlsx column)	What goes in it
ESM ID / description	One measure per row, described so a newcomer could find it on site. Category and type follow the GP45 classification (see Section 4) so the register maps straight into the EE&C report.
Category / Type	Category: Operation, System or Equipment (GP45 para. 4.1.9.4). Type: chiller/ACMV, compressor, fan, lighting, motor, pump, boiler, thermal oil heater, furnace, heater, dryer, burner, heat exchanger, passive design, awareness programme, energy monitoring system, process, cogeneration/trigeneration, etc. (GP45 para. 4.1.9.5).
Status	Proposed ▮ In Progress ▮ Completed (or Rejected, with reason) — the GP45 List-of-ESM statuses, so annual reporting is a filter, not a rewrite.
Estimated savings (GJ/yr and RM/yr)	From the audit or engineering estimate; state the basis. Once implemented, the M&V result supersedes the estimate — keep both.
Investment cost (RM)	Capex + implementation cost. For no-cost operational measures enter 0 — they still carry savings and still get M&V.
SPP / NPV / IRR	SPP = investment ÷ yearly savings cost (GP45 Equation 3) — the register computes it. Add NPV/IRR for board-level measures; record the discount rate used.
Owner / resources	A named person, internal or external (consultant, contractor, vendor), plus the cost and human-resource estimate — GP46 para. 6.0(c).
Timeline	Start and completion dates. GP46 contemplates targets achievable within three years of establishment (para. 5.3.2) — sequence the plan accordingly.
M&V plan	Per ESM: the approach (e.g. IPMVP Option A/B/C/D), the measurement boundary, the baseline adjustment basis, and where the M&V records live. GP46 para. 7.6 requires the plan, the data and the savings analysis to be documented and archived.
Verified savings	The M&V result once measured — the number the management review and the EE&C report carry.

3 Operating rhythm

Cadence	Action
Monthly	Owners update status and progress notes; REM updates M&V data for completed ESMs

Cadence	Action
Each Committee meeting (▒4/yr)	Review the register: slippage, blockers, savings vs estimate; approve new ESMs; record decisions in the minutes (C3)
Non-conformance	Where an implemented measure underperforms or a procedure is not followed, raise a corrective action row (register sheet 2) — GP46 para. 7.5 requires procedures for non-conformance and corrective and preventive action
Annually	Close the reporting year: Completed ESMs ▒ the EE&C report Summary of Implemented ESM (C12); revise targets and re-prioritise — GP46 para. 4.3(b)(ix)

4 Design and procurement measures

GP46 embeds efficiency into the policy commitment on energy-efficient products in new projects, retrofitted and renovated facilities where economically feasible (para. 4.4.1(d)). Operationalise it with two standing rows in the register: (1) a design-review rule — energy performance is a stated criterion in every new project and renovation design review; (2) a procurement rule — energy-consuming equipment above RM[threshold] requires a lifecycle-energy comparison before purchase. Both rows carry an owner and get reviewed like any other ESM.

5 The M&V discipline — why it is not optional

Every ringgit of claimed savings that cannot be shown against a measured baseline is a credibility risk — with your board before it is with the Commission. GP46 para. 7.6 requires M&V per ESM; the EE&C report carries yearly savings figures per implemented measure (GP45 para. 4.1.9.3). The defensible way to produce those figures is a recognised protocol: Innovast delivers M&V to IPMVP as standard, selects the option (A/B/C/D) per measure, and archives the plan-data-analysis chain GP46 asks for.

> **From register to guaranteed savings.** Where the register shows a deep retrofit worth doing, Innovast can structure it as an Energy Performance Contract — implementation financed from verified savings, performance risk on us, IPMVP M&V for the term. And InnoSense keeps the whole register measured continuously. **eeca2024.my · anslem@innovast.asia**

The complete Starter Pack

This document is one of thirteen working documents in the EECA 2024 EnMS Starter Pack — together they stand up an energy management system that follows GP/ST/No.46/2024 (Pind. 1/2026) and the statutory duties of Act 861.

Code	Document	Use it to
C0	Pack Guide & Compliance Clock	Orient the team; diarise the statutory deadlines
C1	EECA EnMS Gap Assessment Checklist	Score your current position (Yes / Partial / No) against every GP46 element and statutory duty; get a readiness band
C2	Energy Management Policy Template	Draft the policy with the four GP46-mandatory commitments built in
C3	Committee & Governance Kit	Appoint the management representative; constitute the Committee; run and minute the meetings and the annual management review
C4	Legal & Obligations Register	Hold every Act 861 / EECR duty with citation, deadline, penalty, owner and status — the legal-compliance evaluation GP46 para. 8.2(g) expects
C5	REM Appointment Checklist	Choose internal vs external appointment; respect the tiering and the caps; manage the three-year window
C6	EnPI / EEI Worksheet (sector-selectable)	Establish the baseline and indicator — SEC path for industry, BEI path for buildings
C7	Energy Data Collection Plan + 12-Month Consumption Tracker (xlsx)	Plan and record the twelve months of consumption, generation and variable data GP46 requires
C8	**Action Plan & ESM Register (docx + xlsx)**	Turn audit findings into a prioritised, costed, owned action plan with M&V per ESM **(this document)**
C9	Communication, Awareness & Training Plan	Discharge GP46 para. 7.7–7.9 — communication matrix, motivation strategy, training programme
C10	EnMS Self-Evaluation Matrix (xlsx)	Run the GP46 para. 5.2.3(a) maturity self-evaluation at Committee formation and periodically after
C11	Work Procedure & Log Sheet Starters	Seed the operational controls — chiller plant and lighting examples to adapt
C12	EE&C Report Skeleton	Assemble the annual report content in the GP45 structure before entering it in the Commission's online system

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