EECA 2024 EnMS STARTER PACK

C7 · DATA COLLECTION PLAN

Energy Data Collection Plan

What to collect, from where, how often, and who owns it — companion to the 12-Month Consumption Tracker (xlsx)

GP46 para. 5.2.4(b) defines four data streams for the EnMS: the equipment and process inventory, energy consumption data (at least twelve consecutive months, utility bills at minimum), on-site generation data, and the variable data that drives consumption. This plan assigns each stream a source, frequency and owner; the accompanying xlsx tracker is where the numbers land.

DOCUMENT NO.	REV	ISSUE DATE	PREPARED BY	APPROVED BY
INV-ENMS-C7	1.0	29 July 2026	Innovast Sdn Bhd	Anslem Lim, CEO

Rev 1.0 · issued 29 July 2026 · regulatory sources last verified 18 July 2026.

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.

Innovast Sdn Bhd

Registered Energy Service Company (ESCO) · ESCO Reg. No. ESCO 327(2023)/76/2024
Company Reg. No. 202201012221 (1457918-M) · Registered with Suruhanjaya Tenaga (Energy Commission Malaysia)
www.innovast.asia · anslem@innovast.asia · +60 12 355 6214

1 The four data streams (GP46 para. 5.2.4(b))

Stream	What	Minimum standard	Lands in
1 · Inventory	Operation systems, mechanical and electrical services, production processes and equipment	One controlled list, reviewed annually	Tracker — "SEU & Inventory" sheet
2 · Consumption	All energy and energy resources purchased from suppliers (First and Second Schedule of the Act), in the billed units	12 consecutive months of the most recent data, from utility bills; submetering for individual SEUs where available	Tracker — "Consumption" sheet
3 · Generation	Energy generated on-site: electricity (kWh), chilled water (RTh), steam (tonnes), other forms	Monthly totals per generated stream	Tracker — "Generation" sheet
4 · Variable data	Operating hours, production volume, weather (e.g. cooling degree days), occupancy — whatever moves your consumption	Monthly values, same periods as consumption	Tracker — "Variable Data" sheet

2 Source map — fill in and keep current

Data item	Source (account no. / meter / system)	Frequency	Owner	Cross-check
Electricity (TNB or licensee)		Monthly bill		Meter reading vs bill
Natural gas / LPG / fuels		Monthly bill / delivery notes		Delivery quantity vs invoice
Purchased chilled water / steam (if any)		Monthly bill		
On-site solar PV generation		Inverter / monitoring portal, monthly		Export vs import records
Other on-site generation (genset, boiler steam)		Log sheets, monthly totals		Fuel input records
Production output per product (industry)		ERP / production report, monthly		POE allocation basis
Operating hours / shifts / shutdown days		Operations calendar, monthly		
Occupancy / rooms sold / beds / footfall (buildings)		FM or front-office system, monthly		
GFA and area schedule (buildings)		As-built drawings — once, then on change		GP45 GFA exclusions applied

3 Rules that keep the dataset defensible

- **Billed units in, conversions referenced out.** Record each fuel in the unit your supplier bills (kWh, GJ, tonnes, m^3, MMBtu). The Commission's online system converts to GJ automatically at reporting time (GP45 para. 4.1.5.2); for your own GJ totals, apply the conversion coefficients of GP/ST/No.44/2024 (Pind. 1/2026) Appendix A, current revision — do not hand-copy coefficient tables into spreadsheets that will outlive the revision.
- **Scheduled vs non-scheduled fuels.** The Act's definitions of energy and energy resources are the Second and First Schedules of Act 861 (electricity, chilled water, steam, hot water; natural gas, LPG constituents, coal, biomass, biogas, biodiesel, solar, etc.). Fuels outside the Schedules — diesel or fuel oil for gensets, for example — are not part of the statutory consumption totals: track them on a separate row for management purposes and keep them out of threshold and EE&C-report arithmetic.
- **Twelve consecutive months, no gaps.** A missing month breaks the baseline and the EE&C report dataset alike. If a bill is missing, chase the supplier copy — do not interpolate silently; if estimation is unavoidable, mark the cell and note the basis.
- **The REM verifies against source documents.** GP47 para. 3(e): reported data is compared with actual utility bills and invoices, and cross-examined against maintenance records, equipment specifications and audit reports. Keep the bill PDFs filed by month next to the tracker.
- **SEU submetering is the upgrade path.** Utility bills are the floor, not the ceiling. Where an SEU justifies it, submeter it — that is what turns POE from an audit estimate into measurement, and what InnoSense automates.

4 Ownership and cadence

When	Who	Does
Monthly, by the [10th]	Data owner(s) per Section 2	Enter the month's bills, generation and variable data into the tracker; file source documents
Monthly, by the [15th]	REM	Verify entries against bills; update EnPI/EEI; flag anomalies to the Committee
Quarterly (each Committee meeting)	Committee	Review consumption vs baseline and target; review data gaps and estimation flags
Annually	REM + Committee	Close the 12-month dataset for the EE&C report (C12); revisit this plan and the inventory

This plan is a manual system. InnoSense replaces the monthly typing with metered data, continuous EnPI tracking and an always-current EE&C dataset. Register interest at **eeca2024.my**.

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 **(this document)**
C8	Action Plan & ESM Register (docx + xlsx)	Turn audit findings into a prioritised, costed, owned action plan with M&V per ESM
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

Get the complete pack, free: eeca2024.my/enms-pack · anslem@innovast.asia · +60 12 355 6214