



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.

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DRAFT FOR ADAPTATION — this template is not regulatory advice. Prepared with reference to GP/ST/No.46/2024 (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

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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, m³, 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 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 eeeca2024.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 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