EECA 2024 EnMS STARTER PACK

C11 · OPERATIONAL CONTROLS

Work Procedure & Log Sheet Starters

Two worked operational-control sets — chiller plant and lighting — to adapt, then replicate for your other significant energy uses

GP46 para. 7.3(b) requires work procedures that control energy use in operation — how to run process and equipment to the operational criteria, and how to adjust control parameters to optimise energy use — with maintenance schedules incorporated and measuring equipment calibrated (para. 7.4), and procedures for non-conformance and corrective action (para. 7.5). These two starters show the shape; your Committee approves the adapted versions (para. 4.3(b)(vi)).

DOCUMENT NO.	REV	ISSUE DATE	PREPARED BY	APPROVED BY
INV-ENMS-C11	1.0	29 July 2026	Innovast Sdn Bhd	Anslem Lim, CEO

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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.

Innovast Sdn Bhd

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1 How to use these starters

- Adapt the set-points, ranges and frequencies to your plant and manufacturer data — the values below are placeholders in [brackets], not recommendations.
- Route every adapted procedure through the Committee for checking and approval (GP46 para. 4.3(b)(vi)); version and date each one.
- Replicate the pattern for your other SEUs — compressed air, boilers, process lines, AHUs — one procedure and one log sheet per SEU.

2 Starter A — Chiller plant operating procedure

WORK PROCEDURE — CHILLER PLANT ENERGY-EFFICIENT OPERATION

Doc no. / rev:		Approved by (Committee):	
Effective date:		Owner:	

1. Purpose. Operate the chiller plant to meet cooling demand at the lowest practical energy input, within manufacturer limits and comfort/process requirements.

2. Operating criteria. Chilled water supply set-point [°C]; condenser water supply [°C] or approach [K]; sequencing order [lead/lag by efficiency]; minimum part-load per machine [%]; plant enable/disable schedule [times/days].

3. Start-up. Confirm condenser water flow and tower status ▮ start CHW/CDW pumps per sequence ▮ enable lead chiller ▮ verify stable evaporator/condenser pressures within [range] ▮ release to auto sequencing.

4. Efficiency adjustments. Raise CHW set-point by [0.5°C] steps when all served zones satisfied; reset condenser water per wet-bulb where the control system allows; stage chillers to keep each machine within its efficient load band [%–%]; investigate any approach temperature above [K] (fouling indicator).

5. Monitoring. Record the log sheet (Section 3) each shift; compute plant efficiency [kW/RT] daily; alert the REM when efficiency exceeds [target + margin] for [2] consecutive days.

6. Maintenance and calibration. Tube cleaning per [schedule]; tower water treatment per [schedule]; BTU meter, temperature and power sensors calibrated per the calibration plan [frequency] — GP46 para. 7.4(b).

7. Non-conformance. Operation outside criteria for more than [duration], or efficiency beyond [threshold]: raise a corrective action in the ESM register (C8 sheet 2), notify the REM, record cause and closure — GP46 para. 7.5.

Starter A — Chiller plant log sheet (per shift)

Time	CHWS / CHWR (°C)	CDWS / CDWR (°C)	Chillers running & load (%)	Plant power (kW)	Cooling load (RT)	kW/RT	Operator

3 Starter B — Lighting operating procedure

WORK PROCEDURE — LIGHTING ENERGY-EFFICIENT OPERATION

Doc no. / rev:		Approved by (Committee):	
Effective date:		Owner:	

1. Purpose. Provide required illuminance where and when needed, and nothing beyond it.

2. Operating criteria. Illuminance targets by area [lux, per MS 1525 / task requirement]; switching schedule by zone [times]; daylight zones on photocell/manual policy; after-hours lighting restricted to [zones].

3. Daily operation. Zone switching per schedule; sweep check at [time] for areas lit without occupancy; record exceptions in the log.

4. Adjustments. Re-zone or re-schedule where occupancy patterns change; delamp or dim over-lit areas found by the [annual] lux survey; specify [LED/efficiency class] on all replacements — link to the procurement rule in C8 para. 4.

5. Maintenance. Cleaning and group relamping per [schedule]; failed-lamp reporting via the feedback channel (C9); lux meter calibration per plan.

6. Non-conformance. Repeated after-hours burn or schedule override: corrective action per C8 sheet 2.

Starter B — Lighting log sheet (weekly)

Week of	Zone	Schedule kept (Y/N)	After-hours exceptions (hrs)	Failed lamps reported / replaced	Lux spot-check (area / value)	Checked by

4 Replicating the pattern

Every SEU procedure answers the same six questions: what are the operating criteria; how do we start and run to them; what adjustments optimise energy; what do we log and how often; what maintenance and calibration keep the measurements honest; and what happens on non-conformance. If a procedure cannot answer all six, it is not yet an operational control.

Innovast's audit practice covers chiller plants, compressed air, boilers and process systems — we draft SEU-specific procedures with the measured set-points filled in, not bracketed. **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
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 **(this document)**
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