

E2F – Energy Efficient Technologies

Canonical: <https://northmoregordon.com/grants-and-programs/singapore-e2f-energy-efficient/>

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Funding program archive

This page preserves a dated funding-program record and links it to current project-planning guidance.

Publication date: the source publication date.

Status note: This archive does not confirm that applications are open, funds remain available or the earlier eligibility and co-funding settings still apply. Verify the current administrator page and guidelines.

What this article reported

The purpose is to encourage manufacturing companies, including SMEs, to invest in energy efficient equipment or technologies.

NG has Certified, independent qualified personnel for Measurement and Verification.

Purpose

To encourage manufacturing companies, including SMEs, to invest in energy efficient equipment or technologies.

Key eligibility criteria

The applicant must:

be a Singapore-registered owner or operator of an existing or proposed industrial facility that is or will be sited in Singapore;

be recognised under the "Singapore Standard Industrial Classification (SSIC) 2015" as undertaking manufacturing activities; and

have a group annual sales turnover of not more than S\$500 million.

Technologies supported

The proposed energy efficiency project must meet the following criteria:

The project must involve installation and use of energy efficient equipment or technologies with a proven track record of energy savings in an industrial facility.

The project must result in measurable and verifiable energy savings (see requirements on measurement and verification below).

The project must not have commenced before the application is approved.

The project shall be completed within 36 months from the approval of grant.

Projects that reduce cost, but do not demonstrate measurable and verifiable energy savings are not eligible.

Technologies NOT supported

Examples of ineligible projects include, but are not limited to:

Power Conditioning Project

Power factor correction

Lighting voltage regulation

Harmonic current reduction

Transient voltage protection

Installation of voltage- and power-reducing equipment

Black Box Solutions

Software or hardware devices (e.g. magnetic treatment of fuel) whose functioning cannot be explained by applying mainstream engineering knowledge and theories and where the efficiency improvement is not and/or cannot be established by objective measurement

Other Projects

Load-shifting/load-management measures

Measures that are not permanently installed (plug-in equipment)

Projects to repair or maintain existing equipment

Metering not directly associated with an eligible project

Projects that result in negative environmental or health effects

Solar PV

Funding amount

Up to 50% of the qualifying costs.

Measurement and Verification is required

A Measurement and Verification (M&V;) Plan stating the method to measure, verify and compute energy savings, and the results from baseline measurement shall be in accordance with the International Performance Measurement & Verification Protocol or other equivalent international guidelines and codes. The M&V; Plan should be endorsed by an independent qualified personnel (refer to M&V; FAQ) and the company, and submitted to the NEA before the dismantling of existing equipment and/or systems.

An M&V; Report stating the post-implementation measurement results and endorsed by the same qualified personnel is required to be submitted after completion of the project.

Both the baseline measurement and post-implementation measurement shall be witnessed by both the independent qualified personnel, and NEA's project officer. The measurement data shall be secured by the independent qualified personnel, who shall also report to NEA on how the data was secured.

M&V; is not required for projects involving the following equipment:

Motors rated with energy performance of IE4 or better

Air-conditioners that are rated four ticks or better under NEA's Mandatory Energy Labelling Scheme.

LED lights with at least 100 lumens/watt (without lighting controls)

Companies should consult NEA on the M&V; requirements for energy efficiency improvement projects.

Qualifying Costs

Manpower;

Equipment or technology; and

Professional services.

Singapore GST is excluded.

What's Included

NG will create a base case energy profile for the planned project, and help you identify a range of opportunities to reduce energy consumption when in operation.

Application form

Review project

Assess eligibility

Application form for NEA

Detailed M&V; Approach

Proposal for the required scope of works

M&V; Plan

Endorsement of M&V; Plan by Qualified Endorser

Baseline and Operating measurements

Energy balance

Sub-metering plan

Baseline measurements

Operating period measurements

Calculate savings

Endorsement and sign off by Qualified Endorse

Reporting for government

Measurement and verification report

Final report for client and NEA

How to use this information now

Before relying on a grant, confirm the current round, applicant and project eligibility, eligible expenditure, co-contribution, assessment process, closing date and evidence obligations. Build the technical case so the project remains understandable with grant support shown separately.

Separate source-reported facts from forecasts, targets and commentary. For a current project, retain the official source, version, effective date, assumptions and decision record in the evidence file.

Related guidance

Carbon advisory

Energy audits

Measurement and verification

Solar PV

Current articles and guidance

Contact Northmore Gordon

What is the E2F grant and what is its purpose?

E2F (Energy Efficient Technologies) is a Singapore program administered by the National Environment Agency (NEA) designed to encourage manufacturing companies, including SMEs, to invest in energy efficient equipment or technologies. The grant provides up to 50% funding of qualifying costs, which include manpower, equipment or technology, and professional services (excluding Singapore GST). To be eligible, applicants must be Singapore-registered owners or operators of existing or proposed industrial facilities, be classified under SSIC 2015 as undertaking manufacturing activities, and have a group annual sales turnover not exceeding S\$500 million.

What project criteria must be met for E2F eligibility?

E2F-supported projects must involve installation and use of energy efficient equipment or technologies with a proven track record of energy savings in an industrial facility. The project must result in measurable and verifiable energy savings, must not have commenced before grant approval, and must be completed within 36 months from approval. Critically, projects that reduce cost alone without demonstrating measurable and verifiable energy savings are ineligible. This measurement requirement distinguishes genuinely efficient upgrades from maintenance or operational changes that happen to lower expenses.

What project types are specifically excluded from E2F funding?

Ineligible projects include Power Conditioning Projects (power factor correction, harmonic reduction, voltage regulation); Black Box Solutions (devices whose efficiency improvements cannot be objectively measured using mainstream engineering knowledge); and Other Projects such as load-shifting measures, non-permanently installed equipment, repair or maintenance of existing equipment, metering not directly associated with an eligible project, projects with negative environmental or health effects, and Solar PV. This exclusion list protects grant funding by targeting only technologies with transparent, verifiable efficiency gains.

What are the Measurement and Verification requirements for E2F projects?

Projects require an M&V; Plan following the International Performance Measurement & Verification Protocol or equivalent guidelines, endorsed by independent qualified personnel and the company, submitted before dismantling existing equipment. An M&V; Report with post-implementation results, endorsed by the same qualified personnel, must be submitted after project completion. Both baseline and post-implementation measurements must be witnessed by the independent qualified personnel and NEA's project officer, with data security procedures documented and reported to NEA. Certain equipment (four-tick air-conditioners, high-efficiency LED lights) are exempt from M&V; requirements.

How does the M&V; process establish credible energy savings for E2F projects?

The M&V; process creates an auditable baseline energy profile before project implementation, then measures post-implementation performance against that baseline using agreed methodologies. Independent qualified personnel and NEA project officers witness measurements to ensure objectivity. This structured approach distinguishes actual, verifiable energy reductions from estimated savings or cost reductions achieved through other means. For projects where measurement is complex or multiple

systems interact, this rigorous approach protects both the grant administrator and the applicant by establishing transparent, defensible savings figures that support investment decisions and compliance.

What services does Northmore Gordon provide to support E2F grant applications?

We employ certified independent qualified personnel for Measurement and Verification and offer comprehensive support across the E2F lifecycle: creating a base case energy profile, identifying energy reduction opportunities, preparing and submitting the NEA application form, developing detailed M&V; approaches (proposal, M&V; Plan, endorsement), conducting baseline and operating measurements with sub-metering planning and savings calculations, and producing M&V; reports and final reporting for both client and NEA. This end-to-end support addresses the technical and administrative complexity that can otherwise delay or jeopardise grant approval and compliance.

How do E2F projects relate to broader mandatory energy-management obligations for Singapore industrial facilities?

Singapore industrial facilities governed by the Energy Conservation Act must register with NEA, appoint an energy manager, report annual energy use, and develop energy-efficiency improvement plans. The registration threshold is 54 TJ energy consumption in at least two of the preceding three calendar years. E2F grants support one pathway for meeting the requirement to demonstrate energy-efficiency improvements. Understanding whether a facility is subject to mandatory obligations helps prioritise which opportunities matter most and ensures that E2F projects align with broader compliance and strategic energy-management obligations.

What common barriers prevent E2F applications and how can they be addressed?

Common barriers include uncertainty about whether a project will generate measurable energy savings (leading to rejected applications), underestimating the complexity of baseline measurement and M&V; planning (causing schedule delays), misunderstanding which equipment types qualify (e.g., confusing power-conditioning or black-box solutions with eligible technologies), and incomplete project scoping before application. We address these by validating project eligibility early through energy audits and feasibility assessment, developing detailed M&V; plans before application, clearly identifying qualifying equipment and savings mechanisms, and preparing a complete project brief. This proactive approach reduces approval risk and accelerates grant funding.

Why is distinguishing estimated from measured energy savings important for E2F projects?

E2F requires measurable and verifiable energy savings, not forecasts or theoretical reductions. Applicants must record baseline and post-implementation measurements witnessed by independent qualified personnel and NEA project officers. If an application relies on supplier estimates without a plan to verify actual performance, it will be rejected or held pending measurement evidence. This distinction matters operationally because equipment sometimes performs differently in real conditions than manufacturers predict. By separating the engineering estimate from measured proof, E2F ensures grant funding supports genuine, realised efficiency improvements rather than promising technologies that underdeliver in practice.

How should project scope and timeline be managed to maintain E2F eligibility?

E2F projects must not commence before grant approval and must be completed within 36 months of approval. Applicants must carefully record the chronology of any prior studies, quotes, or partial work to establish that meaningful project commencement has not occurred. The timeline includes baseline measurement (which should occur before equipment is dismantled), implementation, post-implementation measurement, and M&V; report submission. Managing this sequence requires coordination between operations, project management, measurement personnel and NEA. We assist by establishing measurement plans at the scoping stage, ensuring baseline data can be captured before work begins, and coordinating the M&V; report timeline to prevent approval or compliance delays.

