

IEU - Northmore Gordon

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Details:

Home › Glossary › IEU

IEU

IEU stands for Industrial Equipment Upgrades. This term describes improvements to industrial facility equipment and systems, a core service area where we combine engineering assessment with implementation and ongoing performance support. IEU projects typically target boilers, refrigeration systems, compressed-air equipment, or other major industrial plant to improve energy efficiency and operational performance.

Related guidance

Carbon advisory

Scope 1, 2 and 3 emissions

Certificates

Government schemes

Certificate trading

Measurement and verification

What does IEU stand for?

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How do Industrial Equipment Upgrades relate to Northmore Gordon's broader energy optimisation services?

Industrial Equipment Upgrades are a key component of our energy optimisation capability, which serves industrial facilities alongside commercial buildings and utilities. Our six-stage delivery approach—Assess, Build the Case, Capture Value, Deliver, Procure and Perform—provides a structured pathway for equipment upgrade projects. Equipment upgrades typically follow energy audits and feasibility studies to ensure technical viability and commercial alignment with organisational investment criteria.

What types of equipment does Northmore Gordon typically assess for upgrade projects?

Our knowledge library and service offerings address several major equipment categories: boilers and process-heat systems, refrigeration and cooling equipment, compressed-air systems, HVAC and chiller units, and pumping and distribution systems in water utilities. Each equipment type requires assessment of operating duty, load profiles, maintenance history, and interactions with connected systems. Our guidance emphasises understanding how one equipment change affects other parts of the facility before finalising upgrade design and investment.

Why is measurement planning important before implementing an Industrial Equipment Upgrade?

Measurement planning before equipment upgrade is critical to establishing a credible baseline and enabling verification of energy savings after implementation. Our measurement and verification services include project-boundary selection, baseline modelling, and savings calculation. Early measurement planning—ideally during the feasibility stage—ensures appropriate data collection points exist, allows adjustments for operating variables to be documented, and supports scheme eligibility and funding-pathway assessment. Two electricity bills alone cannot establish what changed as a result of the upgrade.

How can funding schemes support Industrial Equipment Upgrade projects?

Industrial equipment upgrades may be eligible for support through different schemes depending on jurisdiction and activity type. In New South Wales, the Energy Savings Scheme creates certificates from eligible activities. In Victoria, VEU projects may generate Victorian Energy Efficiency Certificates. ACCU schemes may apply to projects meeting carbon-abatement criteria. Our funding-pathway assessment service helps identify applicable schemes, verify eligibility conditions and evidence requirements, and address commercial terms. Funding should be assessed separately from the operating merits of the upgrade itself.

What evidence must be prepared before committing to an Industrial Equipment Upgrade?

A project brief describing the decision, site location, existing equipment details, proposed intervention, operating constraints and available data supports proportionate scoping. Key evidence includes energy bills and interval data, equipment specifications and age, production or operating records, any existing studies or quotes, and the project status (idea, study, purchase, installation or commissioning). If certificate schemes are being considered, the chronology of earlier commitments matters: some schemes require registration before equipment installation commences. Our guidance emphasises distinguishing estimates from measured information and flagging data gaps early.

How does equipment interaction affect Industrial Equipment Upgrade assessment?

Equipment in industrial facilities often interact: reducing a cooling load can change the required capacity and economics of replacement heating systems, and shutting down one process may affect demand served by shared compressed-air or chilled-water networks. Our feasibility and investment-case development processes account for these interactions to ensure that proposed upgrades are evaluated under representative operating conditions. Our audit guidance specifically emphasises investigation of major subsystems and their operating context before finalising design recommendations or savings estimates.

What role does ongoing performance management play after an Industrial Equipment Upgrade is installed?

Our six-stage delivery approach includes a final Perform stage addressing reporting, energy management, performance reviews and ongoing monitoring. After equipment installation and commissioning, documented measurement establishes actual performance against the baseline, team briefing ensures operational protocols are understood, and regular performance reviews detect anomalies or degradation. Energy management systems provide a structured framework for tracking performance, maintaining an opportunity register and investigating unexpected changes. This closing-the-loop practice distinguishes forecast savings from verified operational results and informs future facility decisions.

How should Industrial Equipment Upgrade investment cases address uncertainty and alternatives?

Our investment-case guidance recommends presenting the project with and without conditional funding to show resilience. The business case should state operating requirements, energy savings, maintenance benefits, certificate proceeds and capital costs as separate line items using consistent

assumptions. Simple payback and other return metrics should acknowledge underlying uncertainties: production volumes, energy prices, capital costs and conditional support may all vary. Management should understand what could change the decision outcome. This transparent approach supports more robust capital allocation than treating every estimate as certain.