



EXEED Certified Program Excellence in Energy Efficient Design



What is **EXEED**

EXEED (Excellence in Energy Efficient Design) provides a new framework for energy efficient design management for both new investments and upgrades to existing assets. EXEED will independently certify assets using this framework that optimises energy performance and energy management capability. The EXEED process puts energy management firmly on the design agenda, commencing and integrating the energy management discipline at the earliest stages of design.

Why EXEED

Using EXEED, lifecycle energy consumption and related carbon emissions can be addressed at the design stage of new investments or upgrades to existing assets. The greatest potential for energy saving with the best return on investment can be implemented, escaping the lock-in effect of poorer performance. Energy performance will then be continuously improved from a lower baseline during operation.

What assets can benefit

EXEED is applicable to any sector, any organisation, and any project. It can be applied for use in any industrial site, new, modified or renovated facilities, buildings, equipment, systems and processes. Projects can be of any scale or complexity.

Such projects can include:

- Greenfield design
- Brownfield design (repurpose)
- Energy upgrade to existing asset - re-engineering and retrospective commissionina
- Major renovation of existing asset

Who benefits

EXEED is an exciting and effective new program for incentivising, rewarding and facilitating energy efficiency in businesses. Owners and operators are primed for optimum energy performance, enabling them to create continuous savings. By providing independent certification and quality assurance, the scheme will help investors to identify projects with valuable green credentials and lower financial risks. EXEED challenges management norms, offering service suppliers an innovative approach to boosting the quality and profitability of their services. Ultimately EXEED is a valuable instrument in helping to build market capacity and propel Ireland to the forefront of efficient energy management.

Benefits of **EXEED**

Transfers valuable knowledge and information for better energy management

Propels Ireland to the forefront of energy efficient design 🔗 addresses lifecycle energy and carbon costs

EXEED **Certified Distinctions**

EXEED offers three distinctions of certification providing levels of certainty and assurance of sustained energy savings.

This certifies the asset as designed, constructed, commissioned and operational, and handed over to the owner/operator.

The requirement for this certification is based primarily on Irish Standard I.S.399:2014 Clause 8 – Operation.

This certificate has a life span of five years, unless the asset progresses to EXEED Verified or EXEED Managed.



This certifies the asset against measured and verified energy performance with quantified avoided energy consumption substantiated.

The additional requirement for this certification is based on International Standard ISO 50015:2014.

This certificate has a life span of three years, unless the asset is re-certified to EXEED Verified or progresses to EXEED Managed.





This certifies the asset at full operational conditions. It incorporates the requirements of energy management and continual improvement of energy performance.

The additional requirement for this certification is based on ISO 50001.

This certificate remains valid providing ISO 50001 Certification is maintained.

The **EXEED** process explained



- REPORTING COMMUNICATION LINES

EXEED Managed

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Energy Management

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DELIVERABLES

• Asset within scope and boundary of an ISO 50001 Energy Management System

KEY REQUIREMENTS

- Conduct Energy Review using the Energy Balance Study, Energy Saving Register and Measurement and Verification data
- Continual improvement of energy performance

Starting point

The best time to invest in energy efficient design is at the earliest possible stage, whether applied to new design projects or existing assets.

EXEED applied to New Design Projects



EXEED applied to **Existing Assets**



Addressing typical barriers to **EXEED**

It will add extra engineering cost

Yes, but it's proven to lower capital and running costs so you will get excellent return on investment

It will extend the project schedule we can't deliver late

You can plan EXEED to run in parallel with the traditional design process - starting from the current design state. No delay typically results from implementing EXEED unless the business case allows

Corporate Guidelines dictate minimum engineering requirements

It can be difficult to change these within the constraints of a design project. Use EXEED to change Corporate Specification for the next project

We are already investing in the most efficient utilities

End-use requirements and the energy service challenge is where the big opportunities exist

We are already delivering best practice!

EXEED goes beyond current design practices to deliver optimum energy efficient design and it will drive new innovation and new best practice

To find out more about EXEED and how you can benefit, visit www.seai.ie/EXEED

We use a checklist system to ensure energy efficiency is incorporated into design

Checklists tend to address systems in isolation rather than holistically

We expect that our own engineering contractor will deliver an energy efficient design

Unless engineering contractors are required to meet specific and measurable targets in relation to energy efficient design, it is likely that the optimum energy saving solution will not be delivered

We apply a 'copy and paste' approach to reduce cost, schedule and risk

If we keep doing what we're doing, we're going to keep getting what we're getting!

Where's the proof?

Numerous businesses have successfully implemented energy efficient design. See www.seai.ie/EXEED



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