



NSAI

ANNUAL REPORT 2022

NSAI TECHNICAL COMMITTEE
NSAI/TC 59 – ENERGY
MANAGEMENT & ENERGY
SAVINGS

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1 Committee Chair

Mr Ian Boylan is the Chair of this National Mirror Committee. He is a former Senior Electrical Engineer with the Irish Naval Service and worked as an Energy Services Manager for an Irish Energy Management Consultancy. He is a Chartered Engineer and a member of the Institute of Engineers of Ireland, founder president of the Association of Energy Engineers (Irish Chapter).

2 Introduction

NSAI TC 59 Energy Management & Energy Savings mirrors the work of the ISO Standards Technical Committee of [ISO/TC 301](#) and the European Technical Committee of [CEN/CENELEC/JTC 14](#), both provide globally recognized standards for managing energy over time and for calculating and reporting energy savings. Energy savings represent an essential component of meeting climate goals, and energy management enables organizations across all sectors to realize on-going energy consumption reductions.



Standards contribute greatly to urgently addressing global emissions

3 Scope of TC

The scope of this Committee includes standardization in the field of energy management for improved energy performance and energy savings calculations.

The National Committee will participate in the development of International Standards at an ISO level and at a European level in a Joint Technical Committee between CEN and CENELEC.

The International Standards published by ISO may be adopted as European Standards. NSAI will adopt European Standards as Irish Standards.

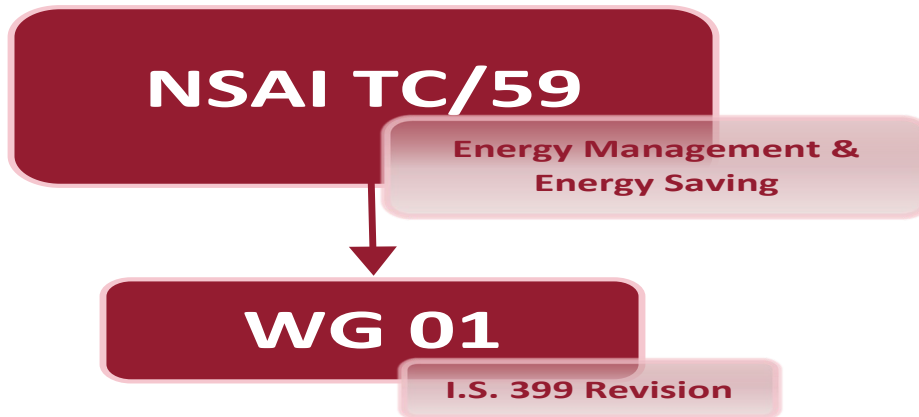
The committee mirrors the following committees:

Committee Name	Committee Title
ISO/TC 301	Energy management and energy savings
ISO/TC 301/WG 1	Energy management
ISO/TC 301/WG 2	Metrics and measurement internal to the organization
ISO/TC 301/WG 16	Zero Net Energy
CEN/CLC/JTC 14	Energy management and energy efficiency in the framework of energy transition

4 Structure and Membership

4.1 Structure

The Figure below illustrates the structure of the National Committee:



4.2 Members

The list below are the members for the year 2022:

Organisation	Role
NSAI	Secretary
NSAI	Secretary Support
NSAI	Secretary Support
NSAI	Secretary Support
Target Energy	Chairman
VIEDGE	Committee member
Zero Carbon	Committee member
Energy Conservation Options	Committee member
Sustineo	Committee member
Fingal County Council	Committee member
Frontline Energy	Committee member
ESB	Committee member
GEN Europe	Committee member
Dandelion	Committee member
Authentic	Committee member
Optien	Committee member
Sustainable Energy Authority of Ireland	Committee member
SEMO	Committee member
GridBeyond	Committee member
Energy Solutions	Committee member
OCSC	Committee member
Munster Technological University	Committee member
International Energy Research Centre, UCC	Committee member
Grid Beyond	Committee member

5 Summary of 2022 Activities

5.1 National

5.1.1 Meetings

The meetings were conducted via web-conferencing bearing in mind the COVID-19 Pandemic, as well as to reduce the burden and environmental impact of travel for members.

Committee members attended the following national meetings as follows:

Meeting No.	Date	Minutes Reference No
1	23 rd February 2022	N 88
2	25 th March 2022	N 84
3	20 th May 2022	N 94
4	01 st September 2021	N 103
5	16 th November 2022	N 119

5.1.2 National Work

In 2021 this Committee revised I.S. 399:2014 *Energy efficient design management – Requirements with guidance for use*, with the publication of I.S. 399:2021 in November 2021. I.S. 399:2021 sets out a systematic approach for the consideration of energy consumption and CO2 emissions through a design development process of capital projects.

Throughout 2022 the Committee promoted this standard and ran a successful social media campaign across NSAI's social media platforms.

All of the ISO/TC 301 and CEN/CENELEC/JTC 14 Standards that are adopted/produced as European Standards will be published as Irish Standards.

5.2 International/Regional

5.2.1 Meetings

Committee members attended international meetings as follows:

Committee Name	Location	Date	No. of Attendees
ISO/TC 301	Online	24 th June 2022	2
ISO/TC 301	Online	29 th June 2022	2
CEN/CENELEC JTC 14	Online	28 th April 2022	0
CEN/CENELEC JTC 14	Online	24 th Nov 2022	0

5.2.2 International/Regional Work

Ireland is committed to following and inputting into the development of International and European Standards. The National Committee reviews, comments and votes on each of the public comment drafts circulated by ISO/TC 301 & CEN/CENELEC/JTC 14.

Ireland has six experts participating in the Working Groups that are drafting Standards at an International level, while at a European level it has four experts contributing to these Working Groups that are drafting Standards.

5.2.3 International/Regional Standards Reviewed

ISO/DIS 50006 (Ed 2), *Energy management systems – Evaluating energy performance using energy baselines and energy performance indicators*

ISO/DPAS 50010, *Energy management and energy savings – Guidance for net zero energy in operations using an ISO 50001 energy management system*

FprEN 17669, *Energy Performance Contracts - Minimum requirements*

ISO/NP 5471, *Energy management system – Measurement of energy management progress*

ISO/FDIS 50005, *Energy management systems – Guidelines for a phased implementation*

ISO/CD 50002-1, *Energy audits – Requirements with guidance for use – Part 1: General requirements*

ISO/CD 50002-2, *Energy audits – Requirements with guidance for use – Part 2: Buildings*

ISO/CD 50002-3, *Energy audits – Requirements with guidance for use – Part 3: Processes*

5.2.4 International/Regional Voting Results

The Committee voted on 10 out of the 26 international ballots in 2022.

5.3 Regulatory Development/Update

The standards revised and produced by this Technical Committee are significant to the European Green Deal COM (2019) 640 final, the EU is increasing its climate ambition and aims at becoming the first climate-neutral continent by 2050. The European Commission is looking to revise the Energy Efficiency Directive (EU) 2018/2002, together with other EU energy and climate rules, to ensure that the new 2030 target of reducing greenhouse gas emission by at least 55%.

6 Irish Publications/Reviews

6.1 Publications

This National Committee has produced I.S. 393:2005, *Energy management systems – Requirements with guidance for use* and I.S. 399:2014, *Energy efficient design management – Requirements with guidance*.

The Committee has published a revised of I.S. 399 in November 2021. I.S. 399:2021, *Energy efficient design – Requirements with guidance for use* sets out a systematic approach to the consideration of energy consumption and CO2 emissions through a design development process of capital projects. This revised Standard is more applicable and valuable to smaller organisations including SMEs, making the application of the principles of energy efficient design a project specific application rather than as a management system standard.

6.2 Reviews

ISO/TC 301 and CEN/CENELEC JTC 14 (committees involved in standardization in the field of energy management and energy savings) have agreed not to duplicate work. Only in

circumstances where the other organization is not interested, or the European Commission submits a Standardization request to CEN will a standard will be developed “alone” by CEN.

7 Work programme for 2023 onwards

7.1 ISO/TC 301

Organizations are increasingly motivated to improve energy management due to a range of internal and external factors. Internal factors include cost minimization/profit maximization, the need for better data on financial and environmental performance, meeting sustainability targets or improving competitiveness. External factors include regulatory requirements, supply chain considerations, responsibility to shareholders, energy security and reliability, or financial incentives for energy or environmental improvement.

Therefore ISO/TC 301 is producing the following standards to support industry in achieving their energy improvement goals:

ISO/CD 50002-1, *Energy audits – Requirements with guidance for use – Part 1: General requirements*

ISO/CD 50002-2, *Energy audits – Requirements with guidance for use – Part 2: Buildings*

ISO/CD 50002-3, *Energy audits – Requirements with guidance for use – Part 3: Processes*

ISO/FDIS 50006, *Energy management systems – Evaluating energy performance using energy baselines and energy performance indicators*

ISO/AWI 50010, *Energy management and energy savings - Guidance for zero net energy in operations*

ISO/DTS 50011, *Energy management system –Measurement of energy management progress.*

7.2 CEN/CLC/JTC 14 – Energy management and energy efficiency in the framework of energy transition

CEN/CLC/JTC 14 is involved in standardization in the field of energy management within the energy transition framework in close coordination with CEN/CENELEC sectorial strategy which supports the European Green Deal COM (2019) 640 final and the Energy Efficiency Directive (EU) 2018/2002.

The following standards are being produced by CEN/CLC/JTC 14 to help support these actions:

prEN 16325, *Guarantees of Origin for electricity, gaseous hydrocarbons, and hydrogen, and heating & cooling*

8 Additional Information

NSAI is supportive of the Government's Climate Action Plan and had undertaken the commitment to publish an Irish Standard I.S.399, in support of the Government's Climate Action Plan 2021.

I.S.399:2021- Energy efficient design – Requirements with guidance for use, will enable organisations apply a systematic approach to Energy Efficient Design throughout the various steps of design, construction, and commissioning of investment projects. This action was listed as action 162 in the [Climate Action Plan 2021 Annex of Actions](#).