ANNUAL REPORT 2021

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

Contents

1 Chairman's Statement

Mr Ian Boylan is the Chairman 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 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

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.

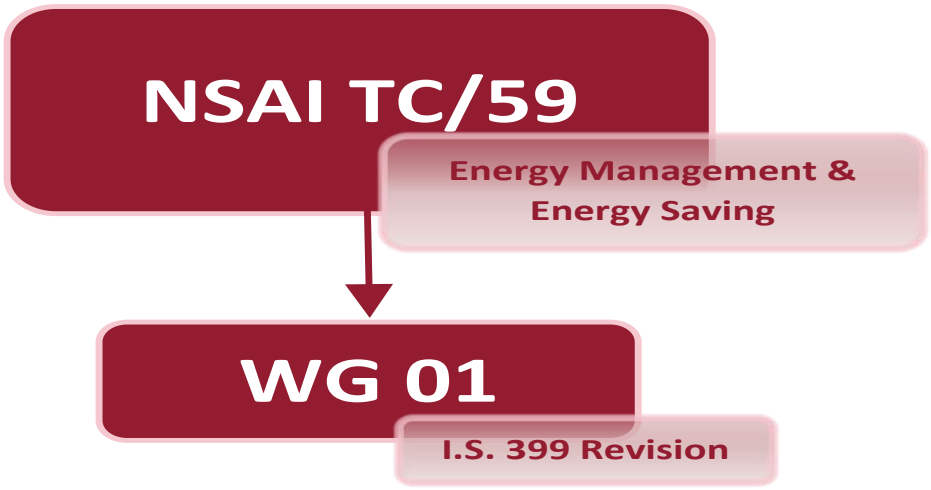
The committee mirrors the following committees:

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 2021:

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	Committee member
Frontline Energy	Committee member
ESB	Committee member
Cork Institute of Technology	Committee member
GEN Europe	Committee member
Dandelion	Committee member
Authentic	Committee member
Optien	Committee member
SEAI	Committee member
SEMO	Committee member
GridBeyond	Committee member
Energy Solutions	Committee member
SEAI	Committee member
OCSC	Committee member
MTU	Committee member

5 Summary of 2021 Activities

5.1 National

5.1.1 Meetings

The meetings were conducted via web-conferencing due to the restrictions caused by Covid-19. Committee members attended the following national meetings as follows:

Meeting No.	Date	Minutes Reference No
1	29th January 2021	N 57
2	30th April 2021	N 65
3	14th May 2021	N 67
4	03rd September 2021	N 75
5	21st September 2021	N 78
6	01st December 2021	N 80

5.1.2 National Work

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 to the consideration of energy consumption and CO2 emissions through a design development process of capital projects. 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	25th June 2021	2
ISO/TC 301	Online	02nd July 2021	1
CEN/CENELEC JTC 14	Online	20th May 2021	0
CEN/CENELEC JTC 14	Online	20th July 2021	0
CEN/CENELEC JTC 14	Online	24th Nov 2021	0

Due to COVID-19 the meetings were conducted via web-conferencing facilities.

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/FDIS 50003, *Energy management systems — Requirements for bodies providing audit and certification of energy management systems*

ISO/50006.3, *Energy management systems — Evaluating Energy Performance using Energy Baselines and Energy Performance Indicators*

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

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

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

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

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

5.2.4 International/Regional Voting Results

The Committee voted on nineteen out of the twenty-five international ballots in 2021.

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 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.* I.S. 399 is currently being revised by the Committee and will go out for Public Consultation early February 2021.

6.2 Reviews

ISO/TC 301 and CEN/CENELEC JTC 14 have agreed not to duplicate work. Only in case the other organization is not interested, or the European Commission submits a Standardization request to CEN the standard will be developed “alone”. The Committees are involved in standardization in the field of energy management and energy savings.

7 Work programme for 2022 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 are producing the following standards to support industry in achieving their energy improvement goals.

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

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

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

ISO/DIS 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/CD 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 16247-1, *Energy audits - Part 1: General requirements*

prEN 16247-2, *Energy audits - Part 2: Buildings*

prEN 16247-3, *Energy audits - Part 3: Processes*

prEN 16247-4, *Energy audits - Part 4: Transport*

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

prEN 17669, *Energy Performance Contracting - Minimum requirements*

prEN ISO 50005, *Energy management systems - Guidelines for a phased implementation (ISO 50005:2021)*

8 Additional Information

Ireland's invitation to host the 8th Plenary meeting of ISO/TC 301 from the 20th to the 24th of June 2022 has been accepted. Over seventy of the world's experts on Energy Management Systems are expected to attend this event, subject to the Government's and ISO's COVID guidelines.

NSAI is supportive of the Government's Climate Action Policy and had undertaken the commitment to publish an Irish Standard, in support of the Government's Climate Action Plan 2021. IS: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 is listed as action 162 in the Climate Action Plan 2021 Annex of Actions.