



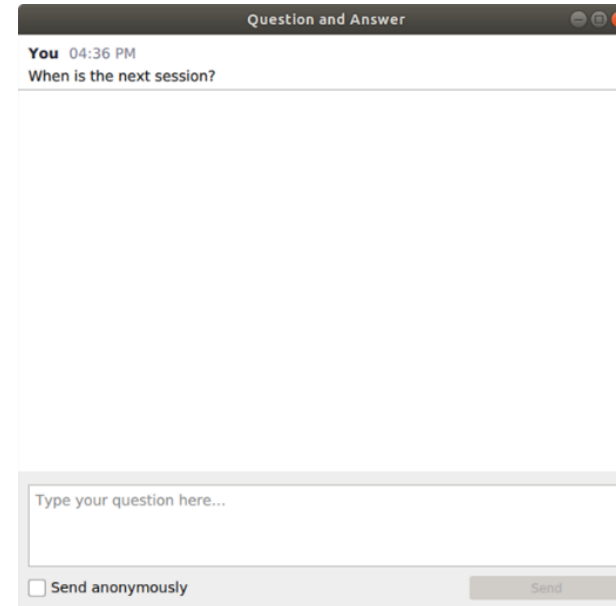
Webinar 'Powering a Sustainable Future: The Role of Standards in Clean Energy'

World Standards Day 2026 | SDG 7 'Affordable & Clean Energy'
12 October 2026



Get the most out of the webinar today

- ✓ You are muted
- ✓ Use the Q&A panel to submit your questions



The screenshot shows a 'Question and Answer' window. At the top, it says 'You 04:36 PM' followed by the question 'When is the next session?'. Below this is a large empty text area for typing a question. At the bottom, there is a text input field with the placeholder 'Type your question here...', a checkbox labeled 'Send anonymously', and a 'Send' button.

- ✓ Talk about us with #training4standards #Standards4all
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Speakers



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Agenda

Time	Session	Speaker
14:00–14:05	Welcome, housekeeping and introduction to World Standards Day 2026 and SDG 7: Affordable and Clean Energy	Ana Alfredo, CEN-CENELEC
14:05–14:15	The role of standards in supporting clean energy, the environment and consumers	Ana Alfredo, CEN-CENELEC
14:15–14:30	Ecodesign and Energy Labelling for consumer products: the consumer perspective	Isabel Lopez-Neira, ANEC
14:30–14:45	Energy Management Systems standards: the environmental perspective	Valeria Botta, ECOS
14:45–14:55	Q&A and discussion	All speakers
14:55–15:00	Closing remarks	Ana Alfredo, CEN-CENELEC



The role of standards in supporting clean energy, the environment and consumers

Ana Alfredo, CEN-CENELEC



CEN and CENELEC at a glance

Europe's recognized organizations for developing voluntary standards



European Committee for Standardization

Brings together national standardization bodies and develops standards across a broad range of products, materials, services and processes.



CONSTRUCTION



CONSUMER



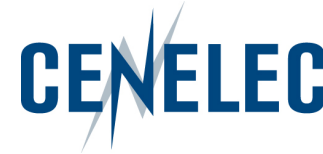
FOOD AND
AGRICULTURE



SERVICES



MINING AND
METALS



European Committee for Electrotechnical Standardization

Brings together national electrotechnical committees and develops standards for electrical and electrotechnical technologies.



LIGHTING EQUIPMENT
AND ELECTRIC LAMPS



LOW VOLTAGE
ELECTRICAL EQUIPMENT
AND INSTALLATIONS



ELECTRIC EQUIPMENT
AND TRANSFORMERS



INSULATED WIRE
AND CABLE

**34 countries • Consensus-based expertise • Support for the Single Market,
Innovation, Safety and Sustainability**

Standards: the invisible infrastructure of clean energy

Turning shared ambitions into solutions that work safely, reliably and at scale

INTEROPERABILITY

Connect technologies, systems and markets so solutions can work together.

PERFORMANCE

Provide common methods to assess energy efficiency, quality and reliability.

TRUST

Support safety, transparent information and confidence for users and investors.

SCALABILITY

Help innovations move from pilots to wider deployment and cross-border markets.

Standards translate policy goals and technical knowledge into common rules for implementation.

They complement legislation and help make the energy transition practical.

Why different voices matter

Clean-energy standards affect products, buildings, infrastructure, markets and daily choices

- **Technical experts** Performance & interoperability
- **Consumers & users** Safety, usability & clear information
- **Environmental voices** Energy, resources & lifecycle impacts
- **SMEs & industry** Feasibility, innovation & market uptake
- **Public authorities** Policy objectives & public interest

BETTER OUTCOMES

Technically robust
Usable and accessible
Implementable
Responsive to public-interest needs

Inclusive participation connects technical excellence with real-world impact



From representation to meaningful influence

Civil society contributes most effectively when engagement starts early and continues throughout the process



Key enablers: Early access • Clear participation routes • Capacity building • Feedback on contributions

Practical support turns formal openness into effective participation



From SDG 7 ambition to real-world outcomes

Affordable, reliable, sustainable, modern energy depends on technical, market and societal conditions working together

How standards support the transition towards SDG 7



Standards connect innovation and public policy with consumer needs, environmental goals & practical implementation

Continue the conversation...

Reach out to Ana Alfredo
aalfredo@cencenelec.eu

CEN-CENELEC www.cencenelec.eu

Explore [Environment and Sustainability](#)

Discover [Energy and Utilities](#)



Energy efficiency of products & buildings

The consumer perspective

Isabel Lopez-Neira, ANEC



ANEC – The European Consumer Voice in standardisation

For over 30 years, ANEC

- Represents the collective consumer interest in standardisation
- Works in a ‘continuum’: standardisation – related legislation and policy - compliance



Raising standards for consumers



ANEC – The European Consumer Voice in standardisation



Child Safety



Sustainability



Accessibility



Digital Society



Energy & Ecodesign



Services



Traffic & Mobility

**Members in up to 34 countries
(mirroring CEN-CENELEC)**

170 experts

**Active at European & international
standardisation level**

**>275 Technical Committees (CEN,
CENELEC & ETSI)
> 35 (ISO & IEC)**



Energy efficiency for a clean transition

A clean energy transition must have energy efficiency at the core.

Cleaner energy sources + efficiency to reduce energy demand and lower costs for consumers.



Energy efficient products

Ecodesign & Energy Labelling

Setting minimum energy efficiency requirements for products to enter the EU market

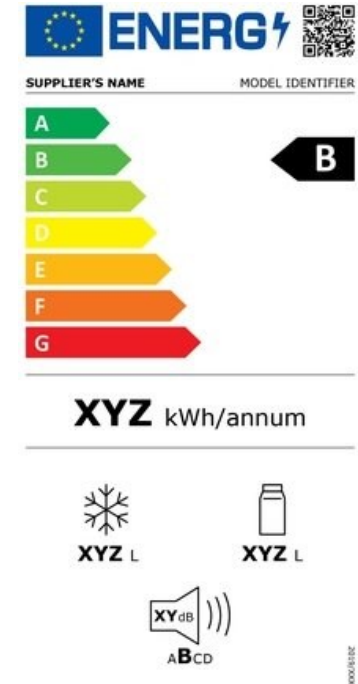
Improving products by design, providing consumers information and savings in their energy bill.

ECODESIGN REQUIREMENTS
minimum threshold for entering the EU market



ENERGY LABELLING REQUIREMENTS
Informing consumer choice

SUSTAINABLE
PRODUCTS
4 LIFE ←



Ecodesign & Energy Labelling

The role of standards

Harmonised standards help implement EU Ecodesign rules through testing and measurement methods and provide presumption of conformity



Ecodesign & Energy Labelling

The role of standards

SUSTAINABLE
PRODUCTS
4 LIFE ←



- Representative, reliable testing
- Reducing risks of circumvention



Representative testing methods to ensure they reflect consumer behaviour e.g. luminance testing



Developing methodology for the declaration of the Energy Efficiency Index of smartphones



Specifying testing conditions on performance and energy efficiency of washing programmes



Energy efficient buildings

Standards for a robust methodology

Energy Performance Certificates (EPCs) provide consumers with information on the energy efficiency of their homes.

The testing methodologies are underpinned by standards.

Energy Performance Certificates (EPCs) that work for consumers



30 YEARS
ANEC
Raising standards for consumers

Why it matters to consumers

Consumers need more reliable Energy Performance Certificates (EPCs) to make informed decisions about their homes, and help move towards more energy efficient, healthy and sustainable buildings.

With the latest Energy Performance of Buildings Directive (EPBD)¹, we welcome that the EU introduces new requirements to lower greenhouse emissions² from buildings, with EPCs at the core. ANEC puts forward recommendations for EU policymakers, Member States, and standardisers as they implement the Directive, as well as for future revisions of the legislation.



Smart living
EPC



ANEC
Raising standards for consumers

POSITION PAPER

ANEC Position Paper on the EU Affordable Housing Plan
Contribution to the EC Call for evidence
on the Housing Simplification Package



Standards for everyone, by everyone

Standards shaping the clean energy transition must be inclusive, accessible, trusted and responsive to the needs of society.

Consumer participation is part of producing a better standard.

Because the energy transition is for everyone, the standards that underpin it must be standards for everyone, by everyone.



Want to know more?

Reach out to Isabel Lopez-Neira
ilo@anec.eu

ANEC's website <https://anec.eu/>

ANEC activities on [Ecodesign and Energy Labelling & Sustainability](#)



Energy Management Systems standards

The environmental perspective

Valeria Botta, ECOS



ECOS – Environmental Coalition on Standards

is an international NGO with a network of members and experts advocating for environmentally friendly technical standards, policies, and laws.



In a nutshell



What is energy management?

Energy management is the organisation of energy flows by a central system.
Important to manage the electricity consumption of **large loads**

A “behind-the-meter” energy management system (EMS) ensures that

- **solar energy** is used in the building where it is produced
- devices such as a **home battery, electric vehicle or a heat pump** draw energy when your own solar energy is available, or prices are low
- a battery provides electricity when **few renewables** are available, or when prices are higher
- devices do not use too much electricity **at the same time**

- ...



The importance of energy management

Energy management is important to make the energy transition a success

- To move away from fossil fuels, we need to **transition to renewable energy**
- In addition to building more grids we need to **make use of the available grid capacity**
- By **aligning** energy demand with renewable energy supply, energy management is a **key tool for demand-side flexibility** and the energy transition



Standardising energy management

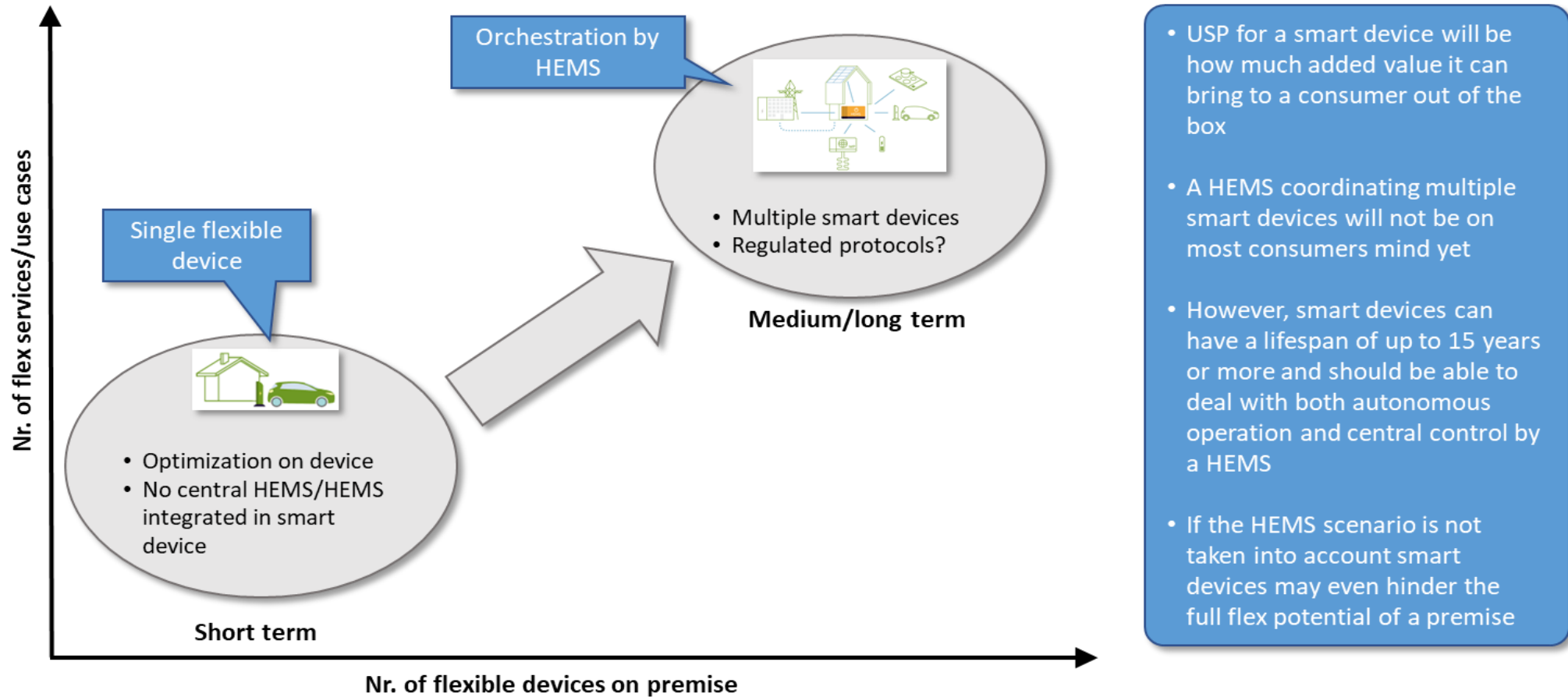
To ensure energy management can align energy demand with renewable energy supply, an **energy management system (EMS)** needs to be able to speak to **all devices**

We need **device orchestration**

To do it right, we need **standardisation**



The importance of device orchestration



Standardising energy management

Standardisation can deliver **interoperability** between the EMS and the device

- Avoiding **proprietary solutions**
- Avoiding **vendor lock-in**

An important energy management standard is **EN 50491-12-2 (IEC 63402 series)**, also called **S2**

Developed under European Standardisation Request M/490 on smart grids in CLC TC205/WG18

Under discussion in IEC SC23K WG3



S2 - A key energy management standard

Software updates happen in the EMS, instead of the device.
Therefore S2

- Provides **future-proof** energy management
- Ensures flexibility during the **entire lifetime** of the device
- Remains open to **innovation**
- **Device agnostic**: can work with *all* devices



S2 - A key energy management standard

S2 brings benefits for

- **Electricity system operators:** congestion management
- **Energy Service Providers & Energy Communities:** optimize for dynamic tariffs or optimization within community
- **Manufacturers of Energy Smart Appliances:** full control over how much flexibility is being exposed
- **EMS developers:** freedom to develop new optimization strategies for orchestration of Energy Smart Appliances



More information

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www.ecostandard.org

<http://s2standard.org/>



Powering a sustainable future is a shared effort

AFFORDABLE

For consumers and
communities

RELIABLE

Across technologies
and systems

SUSTAINABLE

Throughout the
lifecycle

INCLUSIVE

Of the interests
affected

When technical expertise is combined with consumer and environmental perspectives, standards become a powerful tool for delivering a clean, affordable and sustainable energy future for all

Your feedback is important to us.

- ✓ Please take a moment to reply our feedback poll.
- ✓ Thank you!



