

DRAFT BUSINESS PLAN

CEN/CLC JTC 14

Energy management end energy efficiency in the framework of energy transition

1. BUSINESS ENVIRONMENT OF CEN/CLC JTC 14

Improving energy efficiency is of growing importance to the EU. In 2007 EU leaders set a target to cut the annual energy consumption of the Union by 20% by 2020.

In November 2016, the Commission presented the 'Clean Energy for all Europeans' package of proposals with the aim of bringing EU energy legislation into line with the new 2030 climate and energy targets.

Energy efficiency measures and energy management are increasingly recognised a key framework toward energy transition. They are not only cutting greenhouse gas emissions, achieving a sustainable demand and supply balance, improving security of supply and reducing import bills, but also promoting the EU's competitiveness. In the revised directive, the Commission proposes an ambitious 30% energy efficiency target by 2030.

The International Energy Agency estimates that approximately \$53 trillion in investment will be needed in the future, to achieve the emissions reductions agreed to, as part of the 2016 Paris agreement on climate change. The agreement calls for \$100 billion in investment per year, over the first 5 years.

On 30 November 2016 the European Commission presented a package of measures to keep the European Union competitive as the clean energy transition changes global energy markets. The Commission wants the EU to lead the clean energy transition, not only adapt to it. For this reason, the EU has committed to cut CO₂ emissions by at least 40% by 2030 while modernising the EU's economy and delivering on jobs and growth for all European citizens. The proposals have three main goals: putting energy efficiency first, achieving global leadership in renewable energies and providing a fair deal for consumers.

The scenarios of the Energy Roadmap to 2030 and 2050 explores route toward decarbonization of the energy systems, and this will require new technologies, networks, competence capacity building and best practices, disseminated by a platform of performance and management standards.

Moreover, during the 48th Annual Meeting of the World Economic Forum in Davos 2018, among other the following statement on the future of energy has been adopted:

"Heat, light and mobility are the essential building blocks of human progress. The global energy system of the future will be influenced by changes tied to urbanization, shifts in high-growth energy demand from developed to less-developed countries, increased use of natural gas and renewables for power generation, the declining cost of renewable technologies, and innovation that impacts the energy system in the form of digitalization, automation and artificial intelligence. Global energy use is generally shifting from fossil-fuel to non-fossil resources, though there are competing visions of

future energy systems. While no single vision can be exact, we can identify what is driving change, and possible outcomes.

This strengthens the concept that Energy Transition is an area of utmost interest from a standardisation point of view.

In addition, one of the key recommendation of the High Level Expert Group on sustainable financing calls for the introduction of an official European Standard for Green Bonds built around an EU Sustainability Taxonomy.

Within this framework JTC14 will strive to develop and maintain standards that enable all kind of organizations (Large ad SMEs, private and Public Admin)

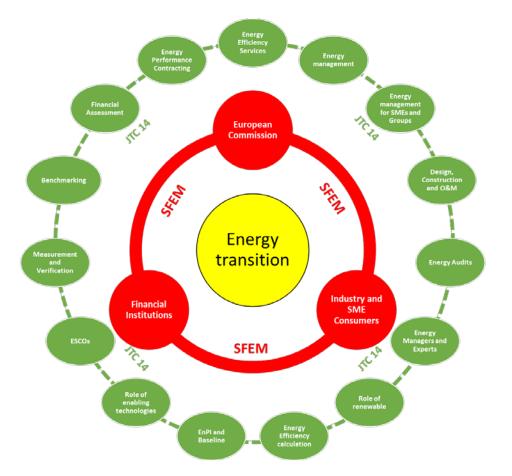
- to efficiently manage energy and to improve their energy performance,
- to derisk energy efficiency improvement measures in a systematic and consistent way to benefit enduser and

• to assist private financial institutions to increase confidence in energy efficiency improvement measures to unlock sustainable finance

in the context of energy transition.

The following figure represents the reference scenario and the scope for JTC 14. Supporting the central objective of Energy Transition defined by SFEM, JCT14 will develop standards according to the needs and priorities of the targeted stakeholders namely EU, Financial Institutions, SME and Industry&Consumers.

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Standards will improve the ability of organizations to manage the whole process for energy efficiency project implementation, end to end, from origination to measurement and verification of the benefits, establishing the ground for energy management (macro level), best practices adoption and innovative technology and services (micro level).

JTC 14 new standards development will embed the energy transition needs towards lower carbon fossil fuels use, the synergic use of renewable resources and the social, environmental benefits of energy efficiency improvement.

JTC 14 supports the capacity building in energy efficiency and energy management, striving to link and harmonize standards with financial institutions' due diligence, underwriting procedures and Eurostat recording requirements in Governamental accounts, to reduce cost compared to a process of self certification while improving adoption of best practices.

This will require a holistic approach to energy efficiency and energy management in developing standards to support improved quality of energy and financial services, allowing the whole supply chains actors to benefit from comprehensive expertise and experience.

This will be possible under the strategic coordination of CEN/CLC SFEM and thanks to liaisons that will be activated with other standardization Technical Bodies (for example CEN/TC 371, ISO TC 301, CEN/CLC JTC 15, CEN/CLC JTC 6, CEN-CENELEC-ETSI Smart Grid Coordination Group,

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CENELEC TC 64). For the same reasons a link with other key organisations like, for example, EEFIG¹, EASME², SIF³, European Mortgages Federation, Investor Confidence Project, Cooper Allinace will be activated.

2. BENEFITS EXPECTED FROM THE WORK OF CEN/CLC JTC 14

Considering the business environment described in the previous paragraph, JTC 14 work programme intends:

- to ensure that energy efficiency measures deliver affordable/competitive energy costs for homes, businesses, PA, and industries;
- to lower greenhouse gas emissions, pollution, and fossil fuel dependence through an efficient use of energy and RES;
- to foster sustainable financial conditions and to lower financial risk for energy efficiency measures implementation addressing the value of energy management, energy audits, energy saving, energy performance contracting, project management, energy measurements and monitoring:
- to ensure the adoption of sustainable energy efficiency and performance measures for SME.

3. PARTICIPATION TO CEN/CLC JTC 14

All CEN-CENELEC national members are entitled to nominate delegates to CEN/CLC JTC 14 and experts to its Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. *To participate in the activities of this CEN/CLC JTC, please contact the national standards organization in your country.*

The main stakeholders of CEN/CLC JTC 14 activity are SFEM, European Commission, Financial Institutions, Enterprises of different scale with particular attention to SMEs (including energy efficiency and performace service providers), Consumers,.

At the launch of JTC 14, the following EU countries have already joined it: Belgium, Croatia, Cyprus, Denmark, Finland, France, Germany, Ireland, Italy, Hungary, Lithuania, Netherlands, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, United Kingdom.

4. OBJECTIVES OF CEN/CLC JTC 14 AND STRATEGIES FOR THEIR ACHIEVEMENT

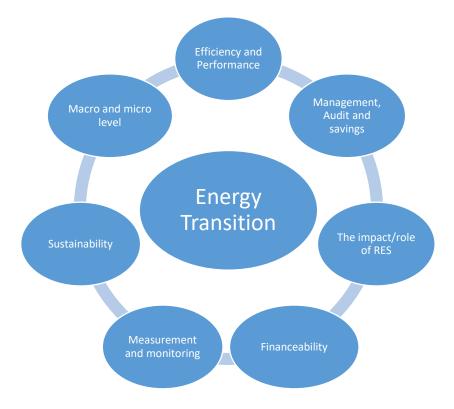
4.1 Defined objectives

As better detailed above, the main pillar of JTC 14 activitiy is the need to give a technical support to Energy Transition approach adopted by EC and according to SFEM strategy, through an intensive standardization work.

¹ EEFIG - Energy Efficiency Financial Institutions Group. <u>www.eefig.com</u>

² EASME - Executive Agency for SMEs. https://ec.europa.eu/easme/en

³ SIF – Sustainable Investment Forum Europe. http://europe.sustainableinvestmentforum.org/



From this point of view the keywords that have been considered in order to identify and prioritize the work of JTC 14 are:

For this reason, the scope of JTC 14 is the following:

Standardization in the field of energy management within the energy transition framework in close coordination with CEN/CLC sectorial strategy including, but not limited to, subjects such as:

- Energy management systems
- Energy audits
- Energy efficiency and energy performance improvement
- Energy and savings calculation methodologies
- Energy efficiency improvement financing (For example: Valuation of Energy Related Investments, Energy Performance Contracting minimum requirements, etc.)
- Energy services providers
- Energy measurement and monitoring
- Role of enabling technologies and RES within the energy management and energy efficiency framework

Taking into account the horizontal role of JTC 14 and in order to avoid overlap with scopes of other TCs, the following fields are excluded from the scope:

- Specific technologies or systems activities within the scope of other CEN, CENELEC or Joint CEN/CENELEC TCs,
- Environmental issues.

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4.2 Identified strategies to achieve CEN/CLC JTC 14 objectives

The achievement of the mentioned ambitious goals will be possible if the the mentioned priorities are transferred into the following set of activities:

- to revise and integrate the available standards on energy audit, measurement and monitoring in order to make more clear the contribution that this kind of tools could give to de risk energy efficiency project, generate value for multiple benetis of energy efficiency and supporting energy transition;
- to produce provision and specific tools to SMEs;
- to integrate the current set of standards with new tools in the economic field (due diligence, underwriting procedures, financial reporting schemes (Eurostat and Basilea) in order to fo reduce transactiion cost and foster energy efficiency financeability;
- to monitor ISO/TC 301 activities on "energy management and related services" and on "energy efficiency and saving calculations" to promote, when not inconsistent with EC policies, a wide approach to energy efficiency and performance measures,
- to liaise with CEN/CLC JTC 15 "Energy measurement plan for organisations" to assure a complementary action between energy management and energy measurement, till the envisaged merging of both the scopes.

As a consequence, the achievement of these prioritized objectives is possible thanks to the following structure that is established in a first phase:

- WG 1 Energy audits
- WG 4 Energy financial aspects

In a second phase, provided that needs of new standards on "energy management and related services" and on "energy efficiency and saving calculations" become more evident, the following new WG could be established:

- WG 2 Energy management and related services
- WG 3 Energy efficiency and saving calculation
- WG 5 Energy measurement and monitoring

To better manage the wide scope of JTC 14, a Vice Chair and a Chairs Advisory Group (CAG) have been established to have a permanent group of people monitoring EC policy, SFEM strategy and outputs, market needs. CAG will periodically meet.

All these activities require the need to have a strong connection with other standardization committees or strategic bodies, thus several liaisons will be activated.

Liaison officers will be committed to attend meetings and to periodically report to JTC 14 in plenary meeting and to CAG.

The main reference board, whose strategic coordination is mandatory for JTC 14, is CEN/CLC SFEM. Other several liaisons will be activated with standardization Technical Bodies (for example CEN/TC 371, ISO TC 301, CEN/CLC JTC 15, CEN/CLC JTC 6, CEN-CENELEC-ETSI Smart Grid Coordination Group, CENELEC TC 64).

Moreover liaisons with key European Organisations involved in the energy management and in the energy transition process will be welcomed (for example: for example, EEFIG, EASME, SIF, European Mortgages Federation, Investor Confidence Project, Cooper Allinace).

A specific attention will be paid for the liaison with ISO/TC 301. The adoption of Vienna Agreement will be considered as preferential path whereas the ISO work could be fostered also towards EC needs. This approach has already been adopted for the revision of ISO 50001, for example, and other work-items could be processed with the same path. But EC needs will be mainly taken into account and their compatibility with ISO proposals will be checked on a case by case approach with the goal to recognize EC as the main stakeholder of JTC 14.

4.3 Environmental aspects

Environmental aspects are considered as far as energy efficiency measures are concerned. Energy performance and efficiency affect environmental issues only indirectly, but in any case, a strong commitment will be adopted in JTC 14 in order to avoid that any environmental consequence can arise from energy efficiency measures and actions.

From this point of view at least once per year this issue will be addressed during a plenary meeting and CEN Guide n. 4 will be takent into account at the starting meeting for each work item of JTC 14 work programme.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF CEN/CLC JTC 14 WORK PROGRAMME

Despite the great interest that EC and EU market pointed out on energy efficiency and its sustainability as part of energy transition, the general lack of resources that affects the most of EU countries could have negative consequences on JTC 14. Up to now the skill of people already attending energy efficiency technical bodies is completely adequate, but the main constraint that could reduce JTC 14 activities and delay it work programme is the lack of resources for expertise. This could mainly affect the sutainability of specific work items even if strongly requested by JTC 14 stakeholders.

Another important constraint is the "time". The standardization process is still too long to satisfy correctly the needs of a market running faster and faster. This could lower the appeal of CEN/CLC deliverables against faster paths and actions directly performed by CE and its technical supporting organizations.