Exchange of experience to improve significantly energy efficiency in industry sector

Background paper on the Concept Note and Terms of Reference for the Task Force on Industrial Energy Efficiency in the United Nations Economic Commission for Europe (ECE) Region for 2019–2020¹

Note by the secretariat

I. Background information

1. The industry sector is today responsible for about one-third of the global final energy consumption and CO₂ emissions. This sector is expected to continue to grow rapidly in order to contribute to the expected 88 percent of the global economy growth by 2050.

2. While economically viable energy efficiency actions have the potential to deliver up to 30 percent of industry energy consumption reductions, even specifically designed policies have not managed to overcome many of the everyday barriers that continue to restrict widespread energy efficiency implementation. Among the main reasons for this situation are the quite common communication gaps between policy makers and policy end users (the

¹ This background paper has been prepared by the ECE secretariat and the Bureau of the Group of Experts on Energy Efficiency.
companies). Similar communication gaps are also key barriers within the companies themselves, specifically between corporate management and production level personnel.

3. A key reason for such communication gaps is the simple fact that energy efficiency still remains a topic that is often appreciated as climate change necessity but otherwise as not overly relevant to the everyday operations of a company. The common misperception is that energy efficiency is just a “savings tool” and not a “tool” that increases performance, production and productivity of the industry.

4. However, there is strong evidence that the industry is nonetheless interested to tackle the challenge of achieving the full potential offered by energy efficiency. Over 60 experts from 16 countries and 25 major international and national companies, as well as representatives from international organizations, financial institutions, and non-governmental organizations attended the ECE workshop “Policy Maker Meets the Engineer”2 held in January 2017 in Geneva. The workshop clearly demonstrated strong interest of the industry representatives to have more direct connection to policy makers and learn more about the business case for energy efficiency. Subsequent ECE workshops “Creating the Business Case for Energy Efficiency: Engaging Governments with Industry”3 in June 2017 in Astana in the framework of the Eighth International Forum on Energy for Sustainable Development and “Best practices in selected economic sectors to improve energy efficiency”4 in October 2017 in Geneva in the framework of the fourth session of the Group of Experts on Energy Efficiency confirmed the existing gaps and outlined possible solutions to improving the situation.

5. The outcomes of these events are also very much in line with the recent GEF-7 replenishment programming directions report5 in which a clear message was given on the need for the private sector to play an essential role in helping to achieve a transformational change of energy systems to support sustainable development in GEF’s recipient countries. During GEF-7, one of the major tasks for energy efficiency improvement is to remove fossil fuel subsidies.

6. Looking closer at the communication gap issue, it is noticeable that, while a considerable number of excellent energy efficiency initiatives are currently in operation to assist companies, the industry sector remains often distant from, if not simply confused by, all the various support programmes and targets being offered to them. In effect, energy efficiency is not necessarily perceived by companies as difficult but rather as complicated. Taking this perception into account, it can be seen how within many companies the management structure will commonly have quite different views on what energy efficiency means, and subsequently energy efficiency often becomes a side issue rather than a key element of everyday operations. A recent ECE publication “Overcoming Barriers to Investing in Energy Efficiency”6 indicates that one of the major barriers to investments in industrial energy efficiency is low priority of energy efficiency as it is not part of core business. A particular advantage of the ECE, through its strong links to its member States, is the possibility to raise awareness among companies that the main business benefit to them from implemented energy efficiency measures is improved production performance, quality, and competitiveness.

7. Accordingly, the Group of Experts on Energy Efficiency would like to propose establishing a Task Force on Industrial Energy Efficiency (IEE Task Force) that will have the primary mission to provide industry with a clear and understandable overview of non-

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2 http://www.unece.org/index.php?id=45630
3 http://www.unece.org/index.php?id=46079
4 http://www.unece.org/index.php?id=45694
5 https://www.thegef.org/events/gef-7-replenishment
6 http://www.unece.org/index.php?id=47698
governmental and intergovernmental energy efficiency initiatives in order to help companies decide which are most suited to help them pursue energy efficiency on their own accord for business orientated reasons. The principle of the IEE Task Force will be to work with energy efficiency experts to develop a strong and unified platform that will act as a neutral intermediary between energy efficiency initiatives, industry and policy makers. The IEE Task Force will not necessarily concentrate on specific industry sectors and company types but rather focus on working with sample companies to improve the overall engagement process between all the aforementioned stakeholders and help upscale existing initiative efforts. The experience gained through the IEE Task Force will also importantly be used to support the development of government policies in ECE member States that respond better to the need for support of the business case for industrial energy efficiency to further increase implementation rates.

II. Approach

A. Overview

8. Energy efficiency overall is commonly misunderstood. Put simply, it is a means to an end, not an end in itself. In effect, energy efficiency should not be considered as a stand-alone solution, nor should it be considered solely within the context of achieving climate change goals, rather it should be seen as a way to help improve the overall performance of companies’ operations.

9. As a result, the IEE Task Force proposes to work on improving implementation of industrial energy efficiency by working with experts to consider two main aspects of the topic with industry particularly in mind:

   (a) What industrial energy efficiency really means, how it fits into the overall sustainable energy picture and what are its non-energy business orientated benefits;

   (b) How companies can use existing industrial energy efficiency solutions and support structures to achieve all the energy and non-energy benefits applicable to their specific business model.

10. By taking this approach with industry, the IEE Task Force will also have a second output in terms of guidance for improved industrial energy efficiency policy design that takes into account the reality of market constraints for businesses. Overall, such an approach increases the likelihood that both voluntary and mandatory policies will be fully implemented and that they will be viewed as a support to industry rather than a burden.

B. Methodology

11. The IEE Task Force will have the intention to develop a neutral IEE expert platform to better link non-governmental and intergovernmental industrial energy efficiency initiatives, the industry and the policy makers. The platform will provide a source of guidance and advice on energy efficiency and a way for companies to learn about and connect with related initiatives most suited to their business model. It will also provide insights on the way policies are being currently developed to promote energy efficiency within industry, and in turn act as a de facto “forum” where the industry will have open talks with the policy makers in order to help structure the policies to be better adapted to normal business environments.

12. This IEE expert platform will be developed based on the following:
1. Developing a unified and independent voice on industrial energy efficiency
   (a) The IEE Task Force can be used to bring together industrial energy efficiency experts in order to develop a unified voice on industrial energy efficiency and what role IEE can play within a company’s business model and in the energy sector in general. The list of topics includes but is not limited to: connection with renewable energy; energy productivity; and multiple benefits of energy efficiency that are aligned with classic operational models and the business case rather than just climate change obligations;
   (b) The IEE Task Force will provide constructive critique and assessment of existing and planned industrial energy efficiency and related sustainable energy initiatives.

2. Engaging actively with all key IEE stakeholders
   (a) The IEE Task Force will develop strong relationships with the main non-governmental and intergovernmental industrial energy efficiency initiatives, companies, industry associations, and policy makers. These will include such initiatives as target setting and ratings (e.g. EP100, Global Reporting Initiative (GRI), etc.), training and support (e.g. United Nations International Development Organization (UNIDO) Industrial Energy Efficiency Programme, International Energy Agency (IEA), etc.), supply chain (e.g. Carbon Disclosure Project (CDP), Executive Agency for Small and Medium-sized Enterprises (EASME), etc.), business organizations (e.g. We Mean Business, World Business Council on Sustainable Development (WBCSD), etc.), and other international organizations (e.g. Alliance to Save Energy, United Nations Environment Programme (UNEP), etc.);
   (b) Based on the cross-stakeholder engagement, the IEE Task Force platform will be used to develop stronger linkages between the different types of IEE stakeholders and thereby also address the perception of energy efficiency as a complicated issue rather than an advantage for overall industry productivity.
Annex

Terms of Reference for the Task Force on Industrial Energy Efficiency in the ECE Region for 2019–2020

I. Background

1. The Task Force on Industrial Energy Efficiency (IEE Task Force) is established by the Committee on Sustainable Energy at its twenty-seventh session on 26-28 September 2018. The mandate of the IEE Task Force is for the period of 2019-2020 with a possibility of extension.

II. Reporting

2. The IEE Task Force will report to its parent body, Committee on Sustainable Energy, and to the Group of Experts on Energy Efficiency.

III. Objectives

3. The IEE Task Force has the following key objectives:

A. Provide a platform for industrial energy efficiency experts

4. This platform will enable experts to come together and develop a unified voice on industrial energy efficiency, which will deliver constructive critique and assessment of existing and planned industrial energy efficiency and related sustainable energy initiatives.

B. Bring together energy efficiency information resources for companies

5. Such a resource will help companies navigate the wide and often complex range of national and global industrial energy efficiency and related sustainable energy initiatives (ongoing and planned), and thereby increase their active engagement with specific initiatives in a manner most appropriate to their needs and business models.

6. The overall goal of the IEE Task Force is to bring together experts to assess and harmonize the information produced by key national and international industrial energy efficiency and related sustainable energy initiatives, in order to better assist companies to achieve higher levels of energy efficiency as part of their everyday operations. The idea behind this approach is to reduce the perceived complexity of industrial energy efficiency by companies and help them make best use of existing resources for support and advice on energy efficiency, that in many cases they can be unaware of.

7. The IEE Task Force will focus its attention on consolidating outputs from various initiatives and policies, while also enabling better linkage and collaboration between the different organizations who lead them. An underlining driver of the IEE Task Force is to ensure that the industrial energy efficiency policy development and policy end use aspects are considered together. As a result, a key output of the IEE Task Force, in addition to the objectives detailed above, will be to provide information that can be used to improve industrial energy efficiency policy development processes within individual countries.
8. The IEE Task Force is guided by recommendations and decisions of the Committee on Sustainable Energy and its subsidiary body Group of Experts on Energy Efficiency and will facilitate the ECE’s support towards the achievement of the targets set by international agreements, such as the 2030 Agenda for Sustainable Development, in particular Sustainable Development Goal 7 (SDG7) on affordable, reliable, sustainable and modern energy, and the Paris Climate Agreement, as well as the Sustainable Energy for All (SEforALL) Initiative of the UN Secretary-General. These initiatives stress the importance of energy efficiency to ensure energy security, mitigate greenhouse gas (GHG) emissions, and ensure access to affordable, reliable, sustainable and modern energy for all.

IV. Planned activities and outputs

9. To achieve its objectives, the IEE Task Force will undertake the following activities:

A. Development of IEE expert platform

(a) Establish a network of industrial energy efficiency experts from UNECE member states, relevant organizations (e.g. United Nations International Development Organization (UNIDO), ClimateWorks, International Energy Agency (IEA), We Mean Business, Energy Efficiency Financial Institutions Group (EEFIG), Copenhagen Centre on Energy Efficiency, etc.), business community, and academia;

(b) Actively encourage increased engagement between the organizations leading industrial energy efficiency initiatives to promote improved collaboration between them when communicating to the industry sector.

B. Energy efficiency resources for companies

(a) Through the IEE expert platform bring together energy efficiency resources, in particular information related to industry orientated initiatives, that will provide targeted support and guidance to companies. A focus will be on improving access to existing information rather than developing new resources;

(b) Actively encourage direct engagement between companies and the organizations leading industrial energy efficiency initiatives to increase awareness of existing means of support and guidance specifically targeted at companies.

10. The IEE Task Force will deliver, in particular, the following outputs:

(a) An IEE expert platform with a database of experts specialized in industrial energy efficiency;

(b) Mapping of industrial energy efficiency resources relevant to companies and an overview of industrial energy efficiency and their associated lead organizations;

(c) A roadmap for future ECE activities on industrial energy efficiency-

11. All of the above-mentioned activities and outputs are subject to regular consultations with the Committee on Sustainable Energy, the Group of Experts on Energy Efficiency, partner organizations, donors and members of the IEE Task Force and might be subject to adaptations.
V. Funding

12. The activities of the IEE Task Force are supported by in-kind contributions and extra-budgetary funds. The listed activities will be implemented depending upon the availability of funds.

VI. Timetable

13. The mandate of the IEE Task Force will cover the period of 2019-2020 with a possibility of extension.

VII. Methods of work

14. The IEE Task Force is expected, subject to availability of funds, to have two to four face-to-face meetings during its mandate. The IEE Task Force will also actively work via various means of electronic communications between meetings. Donors are invited to provide voluntary contributions to support its work.

VIII. Membership

15. The IEE Task Force will be open to all ECE member States. Other UN Member States are also welcome to participate. The IEE Task Force comprises experts from the Committee on Sustainable Energy, the Group of Experts on Energy Efficiency, other ECE bodies, international organizations (e.g. UNIDO, IEA, EEFIG, etc.), non-governmental organizations (NGOs) and business associations (e.g. Carbon Disclosure Project (CDP), World Business Council on Sustainable Development (WBCSD), We Mean Business, ClimateWorks, etc.), business community (e.g. industry associations, individual companies), and academia (e.g. Fraunhofer Institute, EEP - Institute for Energy Efficiency in Production, University of Geneva, etc.). Technical experts on industrial energy efficiency will be in particular invited to support the work of the task force by actively contributing their expertise, collaborating with each other and participating in its meetings and activities.

IX. Secretariat support

16. The IEE Task Force will have the Chair elected at an annual session of the Group of Experts on Energy Efficiency for the period of two years. The secretariat of the Committee on Sustainable Energy and its Group of Experts on Energy Efficiency will service the IEE Task Force. This will include:

(a) Servicing the IEE Task Force meetings (with interpretation and translation where possible), including the preparation of meeting agendas and reports;

(b) Preparing background documents and studies for the IEE Task Force at its request;

(c) Arranging for financial support for members of the IEE Task Force from ECE member States, so that they can participate in its meetings.

17. Provision of the secretariat support is dependent on the availability of additional resources as described in Section V.