

Workshop *Policy Maker Meets the Engineer*
 Geneva, 18 January 2017
 UNECE Group of Experts on Energy Efficiency

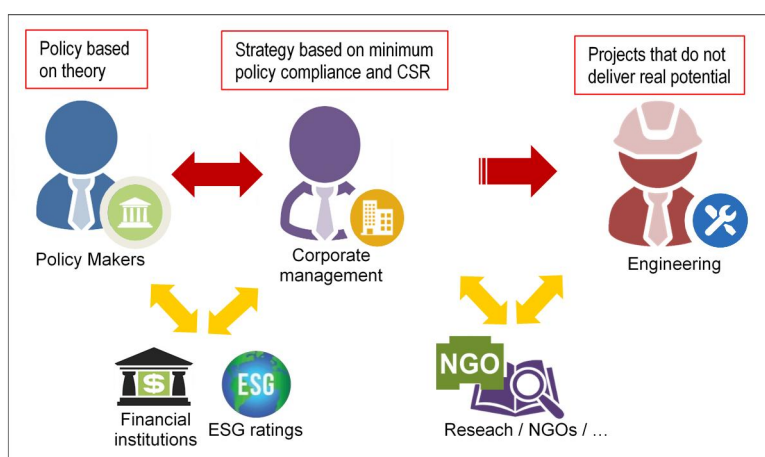
Summary Report

The *Policy Maker Meets the Engineer* workshop was organized by the United Nations Economic Commission for Europe (UNECE) under the auspices of the Committee on Sustainable Energy and its Group of Experts on Energy Efficiency (GEEE). The development of the workshop was initiated and supported by Mr. Hannes Mac Nulty, BG Consulting Engineers, Vice Chair of the GEEE. Organization of the workshop was supported and approved by the third session of the GEEE in Baku on 18-19 October 2016.

1. Background Information

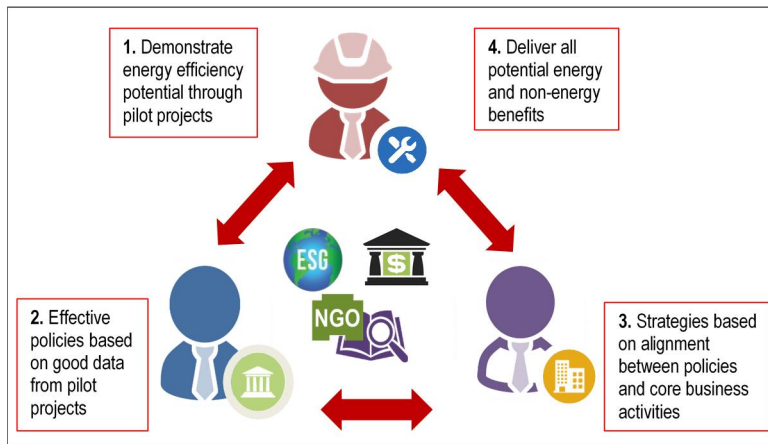
A common challenge today facing widespread uptake of industrial energy efficiency is the communication gap between the people who develop energy efficiency policies and the engineers who have to implement projects driven by these same policies. As a result, there often exists a situation where, despite the best intentions, even targeted and financially well supported policies are unable to deliver on the full potential offered by industrial energy efficiency.

The workshop *Policy Maker Meets the Engineer* was initiated to consider a new approach to how policy could be better and more efficiently developed by overcoming this communication gap between policy makers and policy end users. By bringing together different sets of stakeholders, with a particular focus on connecting the policy makers directly with both engineers and corporate management, the workshop had an objective to test the potential for such an engagement process and also to understand how best to develop it as a concrete and long term initiative.



Common form of engagement between policy makers and industry:

A variety of different stakeholders fulfill different roles of engagement between policy development and project implementation, resulting in a policy's end user - the engineer - being the person least consulted.



Proposed new approach to overcoming the communication gap:

The underlying principle is how to develop effective government policies and corporate strategies by engaging with a policy's end user - the engineer - from the beginning of the process.

2. Summary of the meeting

The *Policy Maker Meets the Engineer* workshop was attended by 60 experts from 16 countries and 25 major international and national companies, as well as the Copenhagen Centre on Energy Efficiency, International Energy Charter, International Labour Organization (ILO), Organization for Security and Cooperation in Europe (OSCE), and United Nations Industrial Development Organization (UNIDO), academia, financial institutions and NGOs.

The workshop included plenary and break-out sessions. Plenary sessions provided viewpoints from several companies implementing energy efficiency projects and from various organizations and national policy makers involved in policy development. These viewpoints provided the basis for the group break-out sessions, where the focus was on direct interaction between engineers and policy makers.

Opening Session

Mr. Scott Foster, Director, UNECE Sustainable Energy Division and Mr. Aleksandar Dukovski, Director, Energy Agency of the Republic of Macedonia (the former Yugoslav Republic of Macedonia), Chair of GEEE opened the workshop and welcomed the participants explaining the role this topic can play in promoting the Sustainable Development Goal on energy (SDG7) and in implementation of the work programmes of the Committee on Sustainable Energy and its Group of Experts on Energy Efficiency. Mr. Hannes Mac Nulty, Development Manager, BG Consulting Engineers, Vice Chair of GEEE outlined the objectives of the workshop and its expected outcomes.

Session 1 (Moderator - Mr. Hannes Mac Nulty)

Mr. Peter Jaggy of Nestle (Switzerland), Mr. Zlatko Gjurchinoski of Vardar Dolomit (the former Yugoslav Republic of Macedonia), Mr. Bernard Mathieu of LafargeHolcim (Switzerland), and Mr. Johann Prammer of Voestalpine (Austria) presented their views on implementing energy efficiency projects and measures in their companies and major obstacles to improving energy and resource efficiency. Some of the specific internal obstacles identified by the speakers included:

- Lack of good methodology to accurately measure energy savings achieved through energy efficiency projects.
- Capital expenditure (CAPEX) budgets being mostly assigned to core business projects and not to energy efficiency specific projects.

Another key message conveyed by the companies was the need to often consider energy sources (such as waste-to-energy and renewable energy), energy saving, and CO₂ emission reductions as separate topics depending on a particular industrial activity.

Session 2 (Moderator - Mr. Scott Foster)

This plenary session included presentations from representatives of financial sector, governments, research institutions, and international organizations on the role of policies in providing the environment favourable for industrial energy efficiency. Mr. Alexandre Rothlin of Energy Efficiency Fund at SUSI Partners, Ms. Rashila Kerai of RobecoSAM, Mr. Günter Bramböck of EVN AG (Austria), Mr. Aleksandar Dukovski, Director of Energy Agency of the Republic of Macedonia, Mr. William McLaughlin, a UNIDO expert, and Ms. Marina Santoro of Lucerne University of Applied Sciences and Arts offered their views on the role of different types of policy actions in providing the environment favourable for industrial energy efficiency. Some of the key obstacles deterring the realization of industrial energy efficiency's full potential were identified by the speakers as follows:

- Energy efficiency is not considered part of the core business even though it can impact positively on many different operational activities
- Lack of a comprehensive method to consider the carbon footprint, and thereby the related carbon price, over the full lifecycle of a product
- The length of time required to assess the success of implemented energy efficiency policy and the lack of relevant knowledge by policy makers
- Using specific energy consumption as a performance indicator can distort the real performance of an implemented project

Group break-out sessions and general discussion

The group break-out sessions had the objective to see how well the engineers and policy makers, as well as other stakeholders, could engage with each other to produce specific recommendations on how to improve energy efficiency policy. The workshop participants were divided into four groups to brainstorm and ultimately agree upon two of the most pressing obstacles that companies face when implementing energy efficiency projects and try to outline workable solutions for them.

After the break-out sessions, the group leaders Mr. William McLaughlin (UNIDO), Mr. Bernard Mathieu (LafargeHolcim), Mr. Helge Schramm (Danfoss) and Mr. Al-Karim Govindji (UK Carbon Trust) presented their respective group's results. This was followed by a general discussion. The workshop participants were then asked to vote for one obstacle, which they considered of the highest priority among those identified by the groups. The result of this vote was the prioritisation of three key obstacles in the following order:

1. Knowledge obstacles:

Lack of ability to identify and assess energy efficiency projects, which is linked to a lack of training and awareness of energy efficiency technologies, ways to measure energy savings and the multiple benefits energy efficiency can provide.

Examples of solutions proposed for this obstacle:

- Targeted education of policy makers
- Creation of specific networks on energy efficiency (Business to Business, Business to Government and Business to Consumer) to incentivize transparency, information sharing, databases, etc.
- Standardized measurement methods for energy and resource savings and multiple benefits

2. Energy pricing and market obstacles:

Importance was attributed to the issue of energy pricing and a functioning energy market. Without the correct price signals, designing and implementing energy efficiency measures in companies is difficult.

Examples of solutions proposed for this obstacle:

- Carbon pricing
- Target improvement of energy inefficient plants through specific taxation measures
- Effective enforcement mechanisms
- Use of sustainability pricing mechanisms rather than direct subsidies to incentivize sustainable energy sources

3. Policy obstacles:

Inadequate policies that lack drivers, incentives, predictability, and consistency. This obstacle is closely linked to obstacle 1 and results from insufficient communication between policy makers and the project implementers within industrial companies. Due to the linkages between obstacle 1 and 3, the proposed solutions are in some cases also similar for both obstacles.

Examples of solutions proposed for this obstacle:

- Long-term legislative and policy framework based on consensus
- Target setting on CO2 reduction/energy efficiency
- Education of policy makers
- Strong and skilled government agencies
- Industry network

The results of the discussions at the four break-out sessions are presented in the Annex to this report.

Closing Session

Mr. Aleksandar Dukovski, Chair of the GEEE, Mr. Hannes Mac Nulty, Vice Chair of the GEEE, Mr. Marco Matteini, Industrial Development Officer, UNIDO, Mr. Tim Farrell, Senior Advisor, Copenhagen Centre on Energy Efficiency, Vice Chair of the GEEE, and Mr. Oleg Dziubinski, Energy Efficiency Programme Manager, UNECE led the discussions at the closing session of the workshop. The workshop participants agreed that this event should be viewed as a starting phase for stronger engagement between policy makers, engineers and corporate management on significantly improving energy efficiency in industry.

3. Workshop outcomes and follow-up activities

Direct outcomes

The Policy Maker Meets the Engineer workshop served the purpose of testing how beneficial direct engagement between policy makers and engineers could be. The break-out sessions used the task of developing outline solutions for the most pressing obstacles as a basis for this form of engagement. Barriers to industrial energy efficiency is a well-researched topic. However the direct engagement format resulted not only in an agreement on the most significant obstacles but also in the collaborative development of solutions by a group that included all relevant stakeholders.

Overall the response from the participants was very positive, with the different stakeholders being very interested to learn more how the "other" side thought about the subject of industrial energy efficiency. This evidence was confirmed by the results of a short post-workshop survey answered by 20 participants. All 20 respondents agreed or fully agreed with the approach the workshop took on

trying to both improve industrial energy efficiency policy and accelerate industrial energy efficiency implementation. 19 of the 20 respondents voiced their interest in participating in follow-up activities on this topic.

One of the key conclusions is that the underlying principle of promoting and facilitating pragmatic and constructive engagement between policy makers and policy end users - the engineers - is a worthwhile and important way to drive actions that will improve industrial energy efficiency uptake.

Proposed follow-up activities

In order to build upon the approach of the *Policy Maker Meets the Engineer* workshop and ensure that decisive actions are achieved through this form of engagement process, a number of follow-up initiatives have been proposed using the Group of Experts on Energy Efficiency as a platform for such activities. UNIDO, Copenhagen Centre on Energy Efficiency, and UNECE have voiced their readiness to cooperate in providing support to implement them at the international level. The following initiatives have been proposed:

- The second international workshop *Policy Maker Meets the Engineer* in the framework of the *Eighth International Forum on Energy for Sustainable Development* in Astana, Kazakhstan in June 2017.

The solutions proposed for the prioritized obstacles, as identified by the first workshop's participants, will be further developed in order to present them as policy recommendations to the national policy makers at the second workshop in Astana.
- Similar workshops at the national level in selected countries (Belarus, Kazakhstan, the former Yugoslav Republic of Macedonia, and Ukraine were mentioned as potential pilot countries).

These workshops will aim to develop policy recommendations directly for the particular country through an engagement process involving the respective national governments and companies operating in these countries.
- International workshop on benchmarking to be held by UNIDO in May-June 2017 in Vienna.

Participants of the *Policy Maker Meets the Engineer* workshop will be invited to take part in this workshop, with a particular focus on engaging companies in helping to develop specific recommendations on international benchmarking.
- Establishment of a UNIDO-led international working group *Efficiency First in Industry*.

The purpose of this working group would be to work directly with companies on cross-sectoral energy efficiency and related energy topics.

All workshop materials and presentations are available on the website:

<http://www.unece.org/index.php?id=44310#/>