



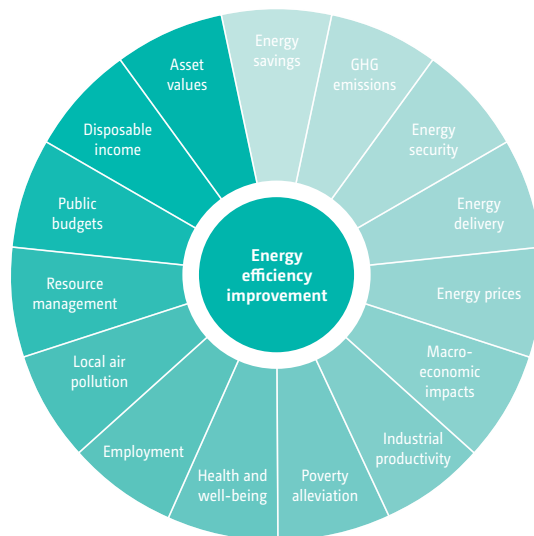
EXECUTIVE SUMMARY FOR INTERNATIONAL ORGANIZATIONS

Industrial Energy and Material Efficiency in Emission- Intensive Sectors

Accounting for over one third of global final energy consumption, the worldwide industrial sector consumes more energy than any other end-use sector. Various energy and material efficiency measures can reduce energy consumption and related greenhouse gas emissions significantly, thereby also offering great cost saving potential and a number of environmental and social co-benefits, such as reduced air pollution and improved working conditions. Despite the high potential for industrial energy efficiency, a number of challenges and unaddressed needs remain, among which lack of awareness of energy efficiency potential, limited access to financing and the need for capacity-building are the prime ones.

ROLE OF INTERNATIONAL ORGANIZATIONS

Many international organizations that are active in the field of energy have highlighted the importance of industrial energy efficiency and have established dedicated networks and initiatives. International organizations play a crucial role in fostering energy efficiency in industry, as they work across borders. They can therefore contribute significantly to the worldwide exchange of knowledge and best practices, such as the ISO 50001 standard for energy management, addressing the lack of awareness and the need for capacity-building. Through the initiation and support of international collaboration projects, moreover, international organizations and initiatives can facilitate technology development and transfer, thereby facilitating access to energy-efficient technologies for developing countries.



Multiple benefits of energy efficiency
Source: OECD/IEA 2014

Barrier	Possible actions by international organizations	
Lack of awareness/motivation	Information and demonstration	<ul style="list-style-type: none"> • Sharing of best practices • Demonstration projects
Lack of technical know-how	Capacity-building	<ul style="list-style-type: none"> • Professional training • Aid in implementation
Structural barriers	Policy support	<ul style="list-style-type: none"> • Institutional creation • Strategic planning
Limited access to technology	Research and development	<ul style="list-style-type: none"> • Research programmes • Pilot projects • Technology transfer

POSSIBLE OPTIONS FOR ACTION

There are multiple ways for international organizations to contribute to **awareness-raising** among industry actors, policymakers and financing institutions worldwide. Through the creation of online platforms or policy databases they can share best practices to inform about the feasibility and benefits of energy efficiency projects in industry. They may for example encourage the uptake of ISO 50001 as an international best practice in energy management.

Many organizations already foster the introduction of energy management systems and the provision of accompanying **capacity-building** in order to drive the technology innovation and competitiveness of companies. Capacity-building can be offered in the form of technical training, workshops, study tours or technology demonstration projects, or as technical assistance accompanying other programmes.

Another area in which international organizations' actions can make a large impact is in providing **policy support**. They can assist in designing and implementing energy efficiency policies for industry. This may include the definition of common targets and strategies, regulatory

standards, certification schemes and the provision of policy assistance through online training, etc. An example is the Clean Energy Solutions Center, an initiative implemented under the Clean Energy Ministerial to support governments in designing and adopting energy efficiency policies. Through the provision of policy support, a sustainable effect on the policy framework and thus the progress of industrial energy efficiency can be attained.

Engaging in collaborative **research and development programmes**, international organizations can contribute to implementing pilot projects and testing new business models, and to developing and promoting innovative solutions to enhance energy efficiency.

Although international organizations are well positioned to facilitate **technology development and transfer**, this has played a minor role in their activities so far. Further action is needed to initiate transnational cooperation and to strengthen cooperative action on technology development and transfer.

For more information, please read the [TEC Brief on energy and material efficiency in emission-intensive sectors](#)