



Overcoming Barriers to Investing in Energy Efficiency

Economic Aspects of the Energy Efficiency of EU countries
Nizhny Novgorod, 9-10 July 2019

Oleg Dzioubinski
Regional Adviser
Sustainable Energy Division



Overcoming Barriers to Investing in Industrial Energy Efficiency



ENERGY

Joint research project by UNECE and Copenhagen Centre on Energy Efficiency

Main topics addressed:

- ✓ Identifying barriers that prevent energy efficiency investments from occurring such as political, regulatory, economic and social ones
- ✓ Defining successful policies and actions that help overcome barriers to financing energy efficiency in the context of achieving sustainable development and climate goals
- ✓ Recommending ways to increase the financial flows for energy efficiency
- ✓ Mapping the roles of stakeholders such as governments, financial institutions, businesses and project developers in promoting and implementing energy efficiency investments

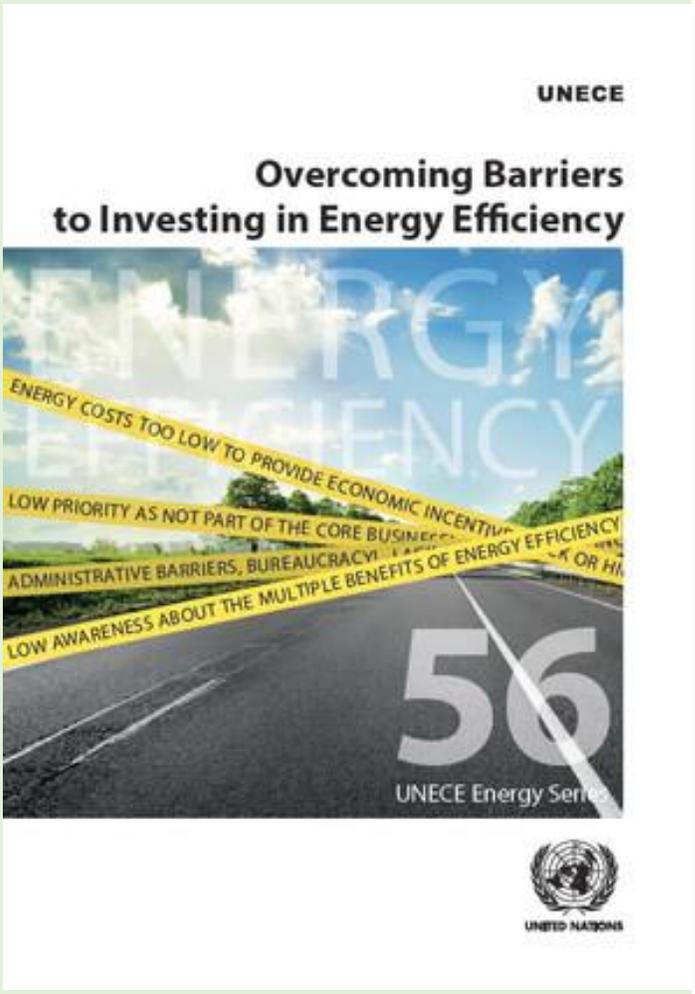
Survey conducted in January-February 2017

Publication website



ENERGY

<https://www.unece.org/index.php?id=47698>



Overall scope

ENERGY



Number of responses

✓ GLOBAL	339 from 85 countries
✓ UNECE	230 from 47 countries
✓ EU W	129 from 23 countries
✓ EE C CA RF	64 from 12 countries
✓ SEE	23 from 5 countries

List of countries with eight or more responses



ENERGY

- **North America:** Canada, United States
- **Western Europe:** Croatia, Germany, Switzerland, United Kingdom
- **Eastern Europe:** Belarus, Ukraine
- **The Caucasus:** Armenia, Azerbaijan
- **Central Asia:** Kazakhstan
- **South-East Europe:** Albania, the former Yugoslav Republic of Macedonia
- **Countries outside UNECE region:** Brazil, Colombia, India, Mexico, South Africa

Investment opportunities and actual investments



ENERGY

	Are there investment opportunities for energy efficiency in your country? On a scale from 1 (very few) to 5 (very many)	What level of investment in energy efficiency does your country receive? On a scale from 1 (no/very little investments) to 5 (high level of investments)
GLOBAL	3.99	2.74
Brazil	3.90	2.50
India	4.00	2.67
South Africa	4.75	2.63
United States	4.62	3.38
Germany	4.54	3.60
The former Yugoslav Republic of Macedonia	2.88	2.00

Investment opportunities and actual investments



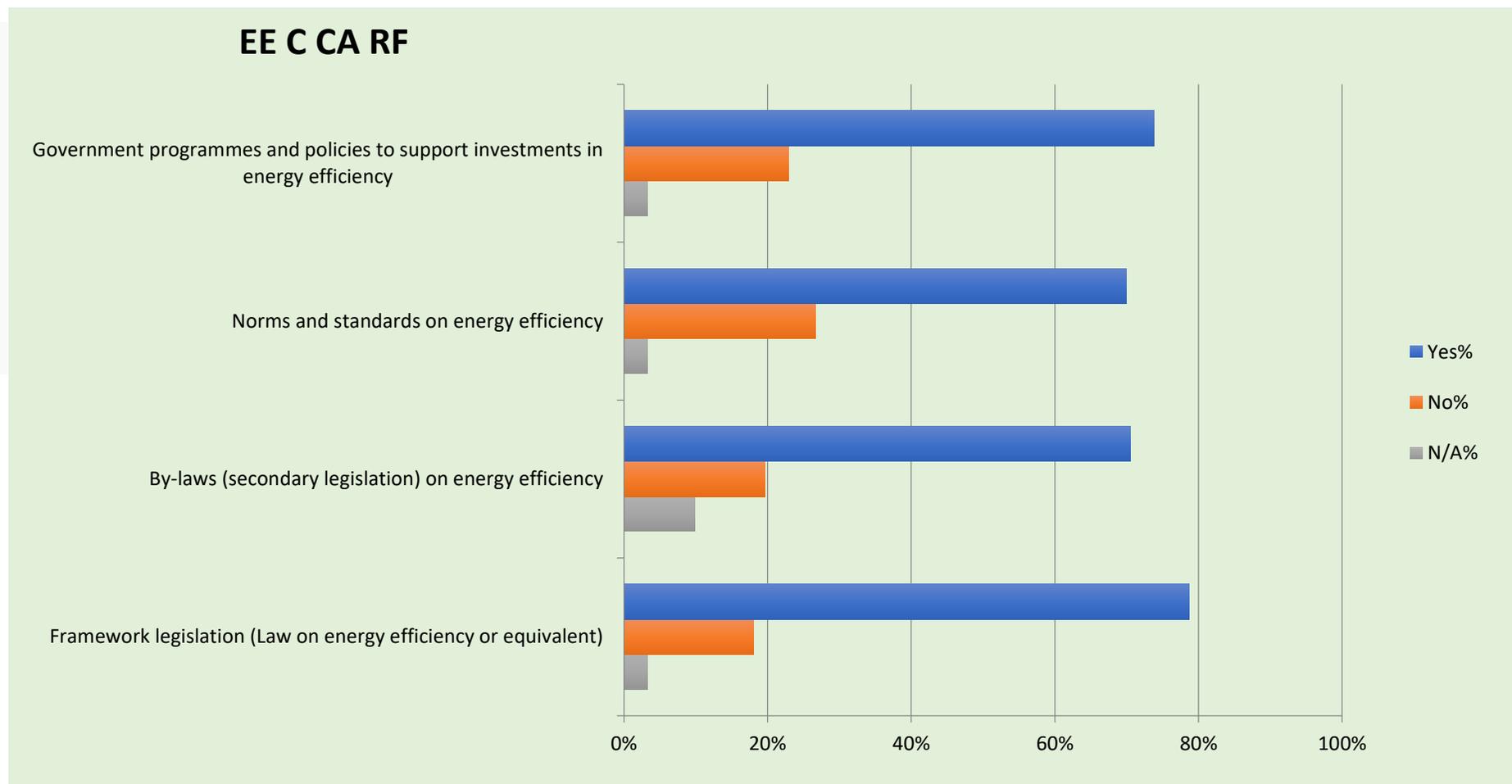
ENERGY

	Are there investment opportunities for energy efficiency in your country? On a scale from 1 (very few) to 5 (very many)	What level of investment in energy efficiency does your country receive? On a scale from 1 (no/very little investments) to 5 (high level of investments)
UNECE region	3.99	2.83
EE C CA RF	3.75	2.50
EU W	4.30	3.15
Armenia	4.00	2.50
Azerbaijan	3.13	2.57
Belarus	3.38	2.63
Georgia	2.80	2.50
Ukraine	4.00	2.00

Does your country have the following legislation, programmes and policies to support investments in energy efficiency?



ENERGY



Effectiveness of the regulatory framework



ENERGY

Countries	Support for investments in energy efficiency by the regulatory framework in your country from 1 (very little support) to 5 (very strong support)	Existence of regulatory framework to support investments in energy efficiency (average of positive responses on four types of legislation), percent
Armenia	2.63	78.5
Azerbaijan	2.38	36
Belarus	3.13	97
Kazakhstan	3.00	84.5
Ukraine	2.55	91
Germany	4.00	94
India	2.78	77.8
The former Yugoslav Republic of Macedonia	2.00	50

Selected conclusions on the status of EE financing and barriers to investing in EE



ENERGY

Globally and in the UNECE region, there is a high or reasonably **high potential for energy efficiency investments.**

Most countries in the UNECE region **have framework legislation for energy efficiency** and many have other supporting legislation, programmes and policies.

Financial environment is not viewed as **very favourable** for investments in energy efficiency.

Generally, the **price of energy** provides some but often insufficient **incentive** for improving energy efficiency.

Selected conclusions on the status of EE financing and barriers to investing in EE (cont.)



ENERGY

Low awareness about the multiple benefits of energy efficiency projects is viewed as the **main barrier** to increasing investment and financing flows to energy efficiency projects.

Tax incentives and **low-interest loans** for energy efficiency projects are viewed as the **most important factors** that can lead to increasing energy efficiency project investment viability in particular countries. They are followed by **stricter energy efficiency standards; training and awareness programmes; improved legislation; and de-risking of investments** through Government support programmes.

Selected recommendations for overcoming barriers to investing in EE



ENERGY

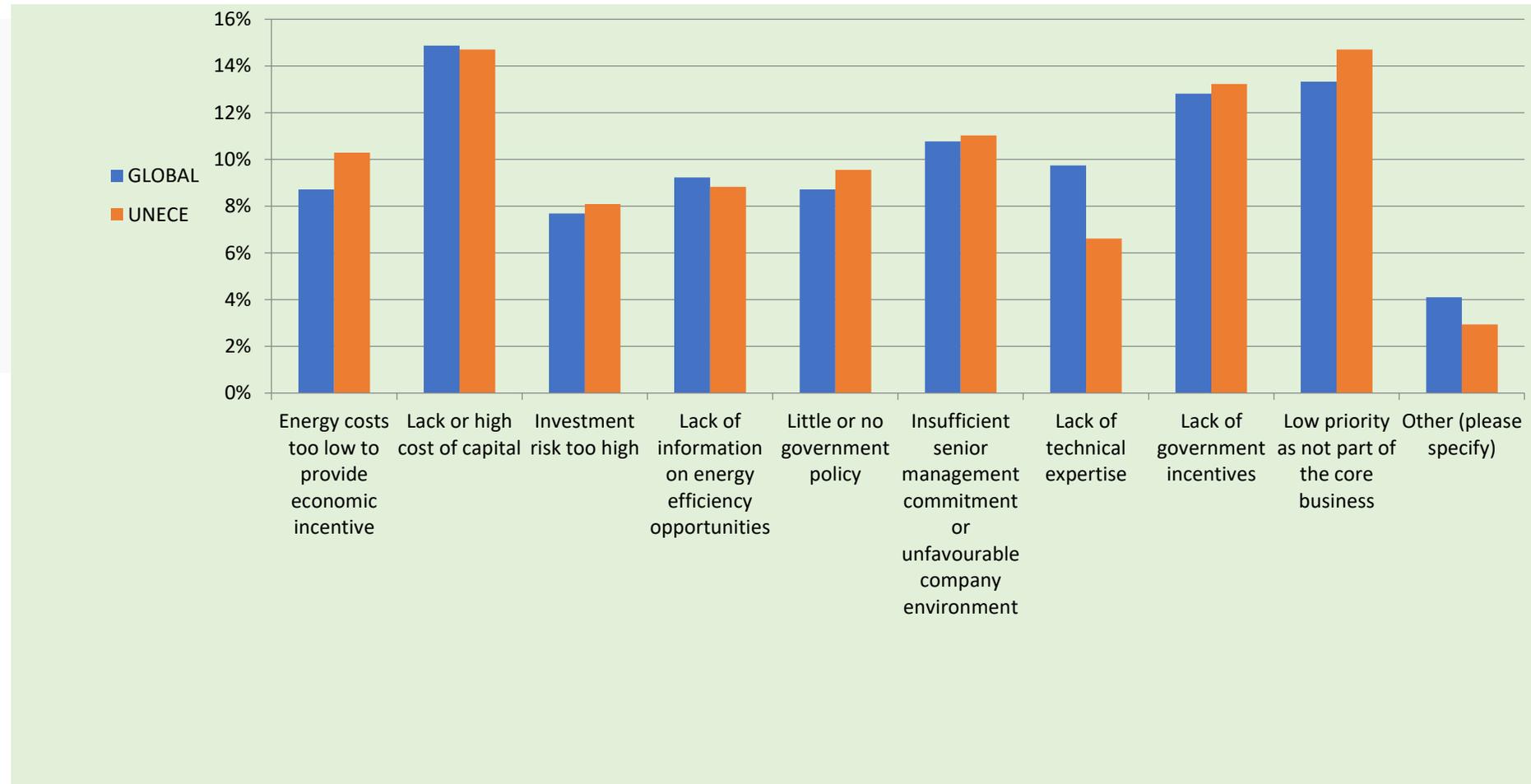
Raising awareness about the multiple benefits of energy efficiency projects can be recommended as one of the most effective measures to increase investment and financing flows to energy efficiency projects.

In the short and medium term, particularly in the countries with economies in transition, **tax incentives** and **low-interest loans for energy efficiency projects** should be considered as the most appropriate ways to increasing energy efficiency project investment viability.

What are the main barriers that your company faces when considering investment in industrial energy efficiency?



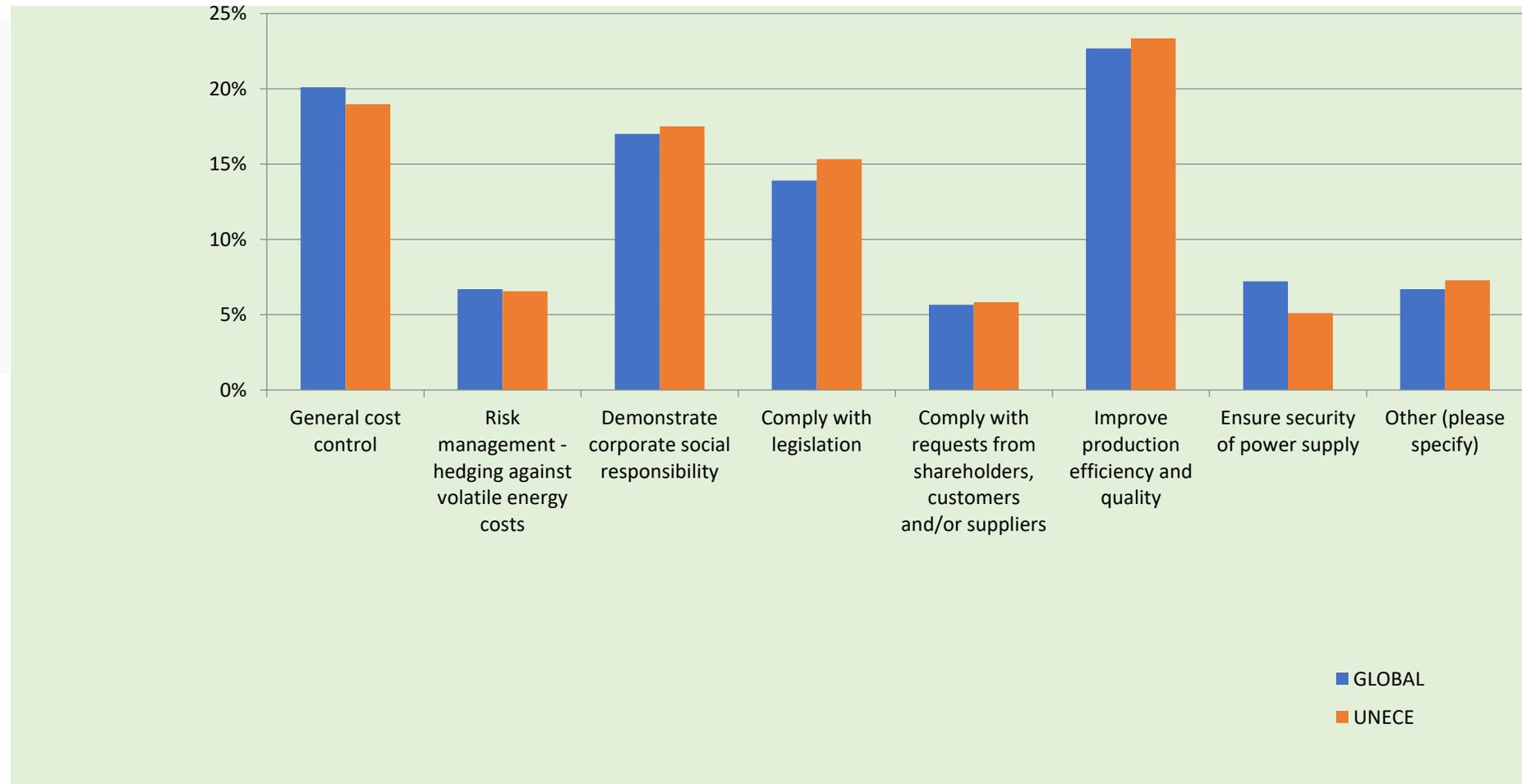
ENERGY



What are the main business benefits to your company from implemented energy efficiency measures?



ENERGY



Selected conclusions on the status of EE financing and barriers to investing in industrial EE



ENERGY

A majority of companies **have** either internal or compliance driven **energy efficiency/energy intensity goal**. Energy efficiency decisions in companies are often made by the same people as core business decisions.

Low priority of energy efficiency as it is **not part of the core business** is one of the main **barriers** faced by a company when considering investment in industrial energy efficiency. The other two significant barriers are **lack or high cost of capital** and **lack of government incentives**.

Selected conclusions on the status of EE financing and barriers to investing in industrial EE



ENERGY

About half of companies have some kind of **energy management system (EnMS)** but no more than one-fifth has EnMS that is ISO 50001 certified.

Almost all companies implement some measures or projects to improve energy efficiency. Most common measures to improve energy efficiency are implemented to **enhance energy efficiency of buildings** and to **improve energy efficiency of plant and equipment**.

As the **main business benefits** from implemented energy efficiency measures, companies consider **improved production efficiency and quality**, followed by **general cost control**, **demonstration of corporate social responsibility**, and **compliance with legislation**.

Selected recommendations for overcoming barriers to investing in industrial EE



ENERGY

Governments should consider creating incentives for companies for improving energy efficiency through appropriate policies.

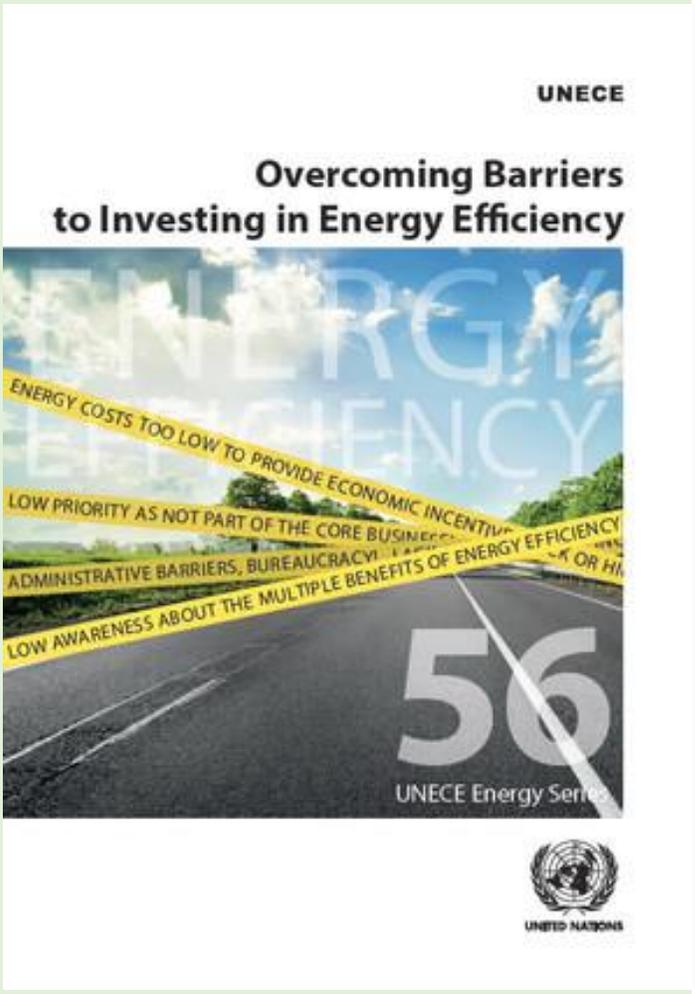
Companies should consider implementation of energy efficiency measures as those that improve production efficiency and quality, lower cost of production, help demonstrate corporate social responsibility and comply with legislation, and thus ultimately have a positive impact on the core business.

Publication website



ENERGY

<https://www.unece.org/index.php?id=47698>





Thank you!

Oleg Dzioubinski
Regional Adviser, SED
UNECE
oleg.dzioubinski@un.org