The International Energy Agency’s Policy Pathway on Energy Efficiency in SMEs – A Global Perspective

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Outline – 5 key questions

1. Why is energy efficiency improvement in SMEs important?
2. Why are government and industry-led programmes necessary?
3. What is currently happening?
4. How can we develop and improve energy efficiency programmes for SMEs?
Why is energy efficiency improvement in industrial SMEs important?
Industry consumes around one third of global energy each year.

Potential energy savings 26 Exajoules per year by 2030 – equivalent to the current annual electricity consumption of the United States and China combined.

SMEs account for around 30% of total industrial energy consumption.
An ECONOMIC perspective

SMEs are the engine of economic growth and development around the world

→ Innovation

→ Employment

→ Economic growth
Accelerate energy efficiency in SMEs

A virtuous cycle of benefits

↓ Costs
↑ Productivity
↑ Product quality
Manage supply disruptions

↑ Competitiveness
↑ Growth
↑ Employment

Individual SMEs

↓ Energy demand
↓ Pollution (local and GHGs)
↑ Economic growth
↑ Employment

Economy
Why are government and industry led programmes necessary?
Navigating SMEs through barriers

- Improved energy efficiency in SMEs
- Finance Barriers
- Information Barriers
- Skill Barriers

Current energy performance of SMEs
Navigating SMEs through barriers

- Information Barriers
- Finance Barriers
- Skill Barriers

Current energy performance of SMEs

Improved energy efficiency in SMEs
What is currently happening?
SME energy efficiency programmes around the world – some examples

The Turkish Sustainable Energy Financing Facility

The Indian Bureau of Energy Efficiency

The Australian Capital Territory Government

The European Apparel and Textile Federation
Australian Energy Efficiency Information Grants Programme

- Funding to deliver practical, tailored energy efficiency information to SMEs
- Actively encourage applicants to form partnerships when submitting proposals
  - Industry associations
  - Technical experts and energy consultants
  - Educational institutions
- Range of industry sectors including:
  - Food processing
  - Wineries
  - Foundries
Sustainable Energy Financing Facilities (SEFF)

- European Bank for Reconstruction and Development first established in 2004
- Combines project funding with technical support and capacity building measures
- Motivates **banks** by showing energy efficiency is profitable, can build client relationships and help meet regulatory requirements
- Motivates **SMEs** by providing technical support to identify and measure potential energy efficiency projects
- Works with **policy makers** through policy dialogue to establish the framework conditions that support ongoing improvement
How can we develop and improve energy efficiency programmes for SMEs?
Strategies for success

1. Understand the barriers and needs of your SME target group
2. Focus on multiple benefits – not just energy savings
3. Build stakeholder partnerships
4. Combine measures
5. Leverage existing policies & programmes
6. Make it easy for SMEs to access assistance

Accelerating energy efficiency in industrial SMEs
1. Understand the specific needs of the SME target group

• SMEs are diverse:
  • Activities and their related energy consumption
  • Market drivers
  • Geographic locations
  • Supply issues

• Carefully assess the particular barriers and needs of the organisations that are to be targeted by a particular programme and design measures accordingly
2. Focus on multiple benefits – not just energy savings

• Example:
  • Glassware company involved in Ikea’s supply chain energy efficiency programme
  • **Output** of one product increased from 900 to 1,050 pieces and the **quality** rate increased from 75 to 80 percent
  • **Output** for another product output increased from 1,200 to 1,350 pieces which reduced the **product cost** by 12.5%.
  • The initiative **reduced greenhouse gas emissions** by 35% between 2009 and 2010

Source: Quantifying non-energy benefits of a carbon reduction initiative for a glassware company (Willoughby et al. 2011)
3. Build stakeholder partnerships

- Individual organisations acting alone are limited in their ability to influence energy use in the large number of heterogeneous SMEs.
4. Use a combination of measures

- Barriers to energy efficiency improvement in SMEs are significant, interconnected and persistent. Therefore, an integrated approach to programme design is essential.
5. Leverage existing policies and programmes

- SME energy efficiency programmes can promote and partner with other programmes to deliver enhanced outcomes for SMEs.
6. Make it easy for SMEs to access assistance
What is your perspective?

1. What **challenges** do you face in progressing energy efficiency?

2. What kind of policies and programme **measures** are needed to progress energy efficiency in SMEs?
What is your perspective?

1. What *challenges* do you face in progressing energy efficiency?

2. What kinds of policies and programme *measures* are needed to progress energy efficiency in SMEs?
References

• Slide 4 – An Energy Perspective

• Slides 12-18