# 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?

### An ENERGY perspective

- 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

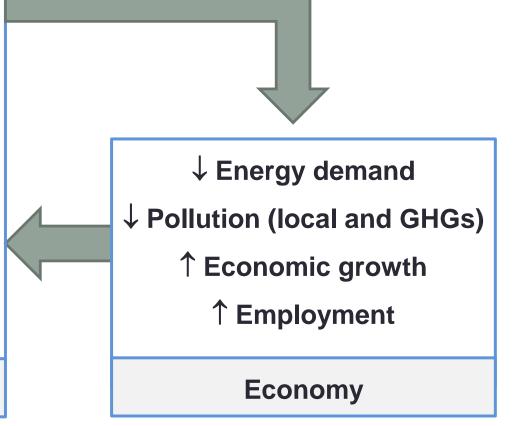
Manage supply disruptions

**↑ Competitiveness** 

**↑** Growth

**↑ Employment** 

**Individual SMEs** 



## Why are government and industry led programmes necessary?

### Navigating SMEs through barriers

Finance Barriers

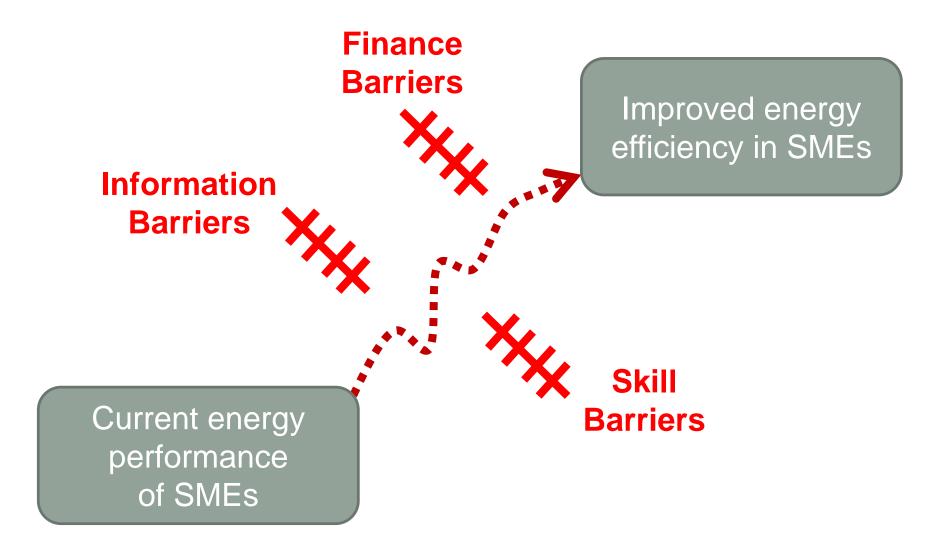
Information
Barriers

Improved energy efficiency in SMEs

Current energy performance of SMEs



### Navigating SMEs through barriers



### What is currently happening?

## SME energy efficiency programmes around the world – some examples



The Indian Bureau of Energy Efficiency



The Turkish Sustainable Energy Financing Facility



The Australian Capital Territory
Government



The European Apparel and Textile Federation

## Australian Energy Efficiency Information Grants Programme

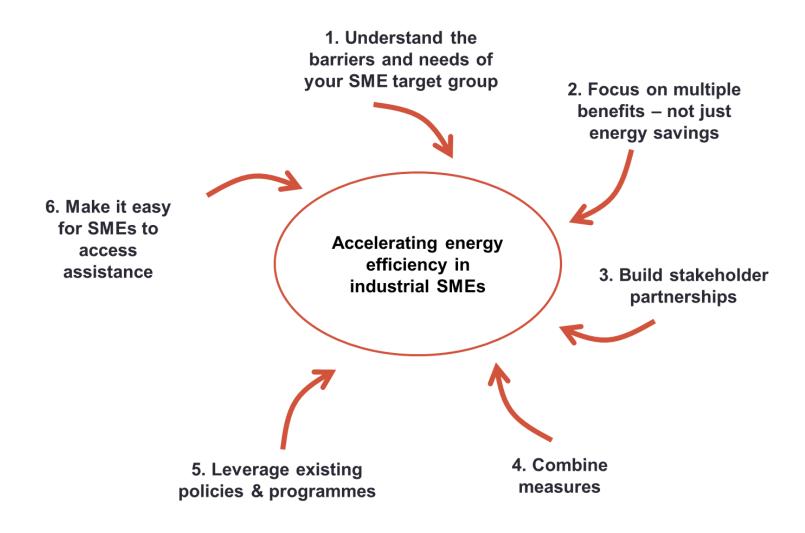
- Funding to deliver practical, tailored energy efficiency information to SMEs
- Actively encourage applicants to form partnerships when submitting proposals
  - Industry associations
  - Technical experts and energy consultants
  - Educational institutions
- Range of industry sectors including:
  - 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 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

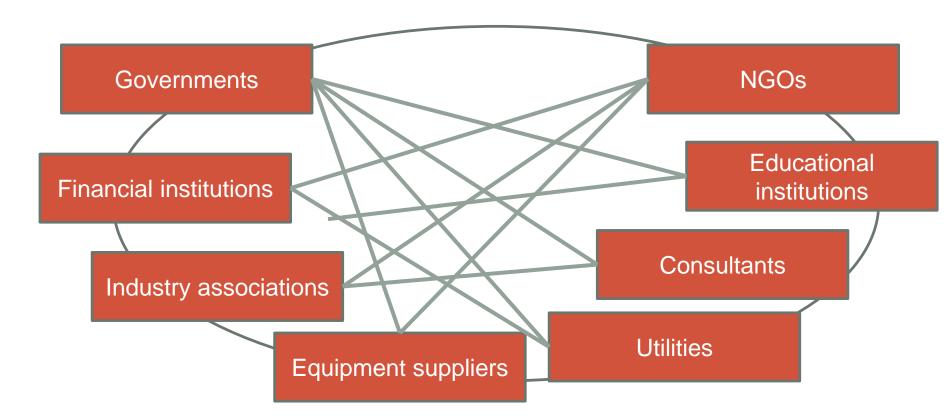
#### Example:

- 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)

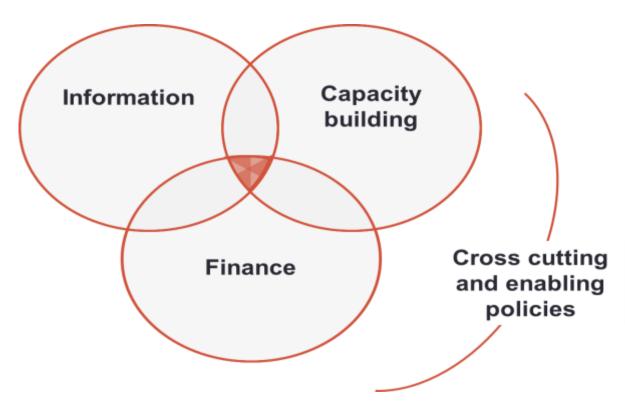
### 3. Build stakeholder partnerships

 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
  - International Energy Agency 2011. <u>25 Energy Efficiency Policy Recommendations</u>.
     2011 Update.
  - Jollands, N., Waide, P., Ellis, M., Onoda, T., Laustsen, J., Tanaka, K., T'Serclaes, P.d., Barnsley, I., Bradley, R. & Meier, A. 2010, <u>'The 25 IEA energy efficiency policy recommendations to the G8 Gleneagles Plan of Action</u>', *Energy Policy*, vol. 38, no. 11, pp. 6409 18.
- Slides 12-18
  - adapted from Crittenden 2014, Presentation at the <u>Accelerating energy efficiency in industrial SMEs</u> expert workshop at the International Energy Agency, Paris on 27 November 2014.