Energy efficiency - a key factor in global competitiveness

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www.energiesparverband.at
promotes energy efficiency and renewable energy

provides services to households, businesses & municipalities

develops & implements policies & manages programmes

The Energy Agency of Upper Austria
OÖ Energiesparverband

[Image of a group of people]

[Logo of OÖ Energiesparverband]
Business location

The framework conditions for businesses and their economic development opportunities
"Location factors" for business development

Source: TU Wien, Department für Raumentwicklung, Infrastruktur- und Umweltplanung
Economic facts Upper Austria

1,437,251 inhabitants

629,129 employed persons

39,308 EUR gross domestic product per capita 2013

26.1% share of Austria's industrial output

5,432 new companies founded

24.8% share of Austria's total export

1,738,000,000 EUR R&D expenditure 2013
Energy production and consumption
Upper Austria

Gross domestic energy consumption by energy source

- Coal: 24%
- Gas: 19%
- Oil: 25%
- Renewables: 32%
- Biomass: 16%
- Hydro: 11%
- Other renewables: 5%

Sectoral final energy consumption

- Transport: 29%
- Private households: 21%
- Services: 7%
- Other manufacturing industries: 26%
- Iron, steel, chemical industries: 17%
Why should businesses be interested in energy efficiency?

- saving costs
- security of supply
- competitiveness
- innovation
- sustainability
Energy (efficiency) as a "location factor"?

Energy as a location factor is not only about:
energy infrastructure, energy prices and energy supply security

but also about
• increasing the competitiveness of all domestic companies by decreasing their energy costs
• increasing the offer of energy efficiency products and services (and export them)

How?
• ambitious energy policies framework
• concrete instruments and measures
Carrots, sticks and tambourines
### Upper Austria's policies for competitive businesses

#### "sticks"
- **Regulatory measures**
  - Stringent & progressive requirements for building envelopes (heating & cooling)
  - Emission & efficiency standards for installations
  - Mandatory energy management for large businesses

#### "carrots"
- **Financial measures**
  - Attractive investment grants for energy efficiency measures & renewable heating
  - Contracting programme
  - Regional R & D program, pilot projects

#### "tambourines"
- **Information & training**
  - Energy advice
  - Training programmes
  - Publications, campaigns & competitions
  - CTC - Sustainable energy business network

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**Policy Packages**
- Stimulate demand
- Support supply

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[Logo: OBERÖSTERREICH]
Example "sticks"
Requirements for building cooling

Cooling demand for non-residential buildings:
new buildings: maximum 1 kWh/m³
renovation: maximum 2 kWh/m³

Example office building

1,000 m², 10 kWh/m³ cooling demand = 5,000 €/m² cooling costs p.a.,
at 2 kWh/m³: reduction by 80% = 4,000 €/a
Examples "carrots"
Energy subsidies for businesses

• energy efficiency and renewable energy subsidies for businesses: national and regional programmes since many years
• new attractive programme in Upper Austria since 1 March 2017
• example area: thermal building renovation, heat recovery and use of industrial heat, process optimisation, efficient lighting,
• up to 50 % funding!

Example optimisation lighting: costs 50,000 €, funding 21,750 €
Example optimisation compressed air: costs 138,000 €, funding 65,000 €
Examples "carrots"
Energy technology programme Upper Austria

• funding programme for the development of new energy efficiency and renewable technologies, solutions and products (RD&D)
• funding up to 60% of the costs
• 140 project funded with over 70 Million € costs
• resulting in many new products from Upper Austria, available on the domestic market and also for export!
Example "tambourine"
Systematic information offer for energy managers in companies

- targeted development and dissemination of information materials
- information events (e.g. Innovation Fora)
- energy advice for companies (up to 6 consultants days, 75 % subsidy)
- training programmes in the "Energy Acadmy"
- active promotion of funding programmes
Energy intensity
Gross domestic consumption per GDP

Source: IEA, 2012
Development of the specific energy consumption
Upper Austria

Energy policy target:
Energy intensity improvement 2% per year
Thank you for your attention!

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