Energy efficiency - a key factor in global competitiveness



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The Energy Agency of Upper Austria OÖ Energiesparverband

promotes
energy
efficiency and
renewable
energy

provides
services to
households,
businesses &
municipalities

develops & implements policies & manages programmes







Business location

The framework conditions for businesses and their economic development opportunities

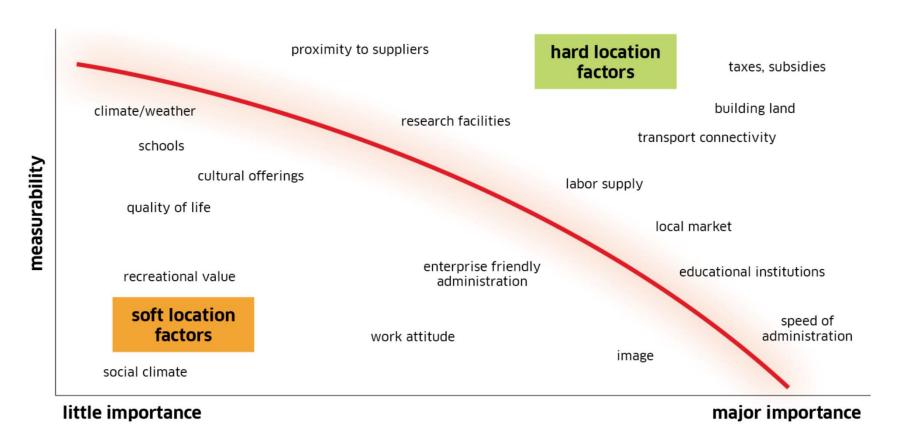








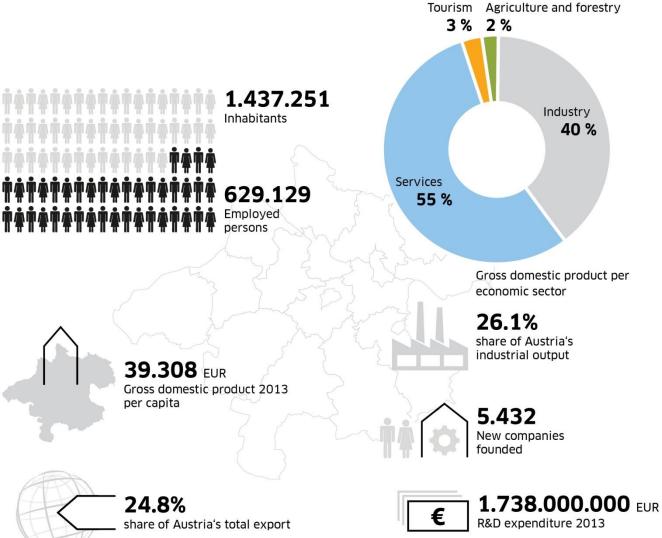
"Location factors" for business development







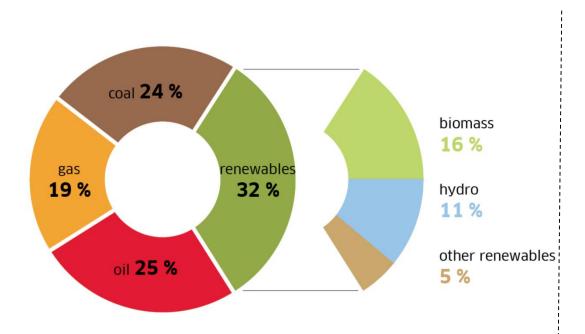
Ecomomic facts Upper Austria



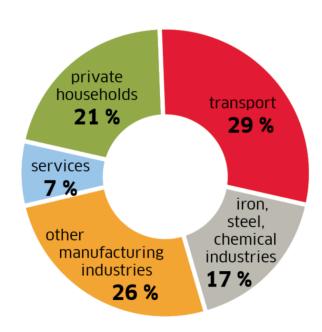




Energy production and consumption Upper Austria



Gross domestic energy consumption by energy source



Sectoral final energy consumption





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



Stimulate demand

Policy Packages



support supply







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 €

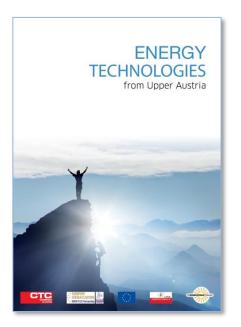






Examples "carrots" Energy technology programme Upper Austria

- 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

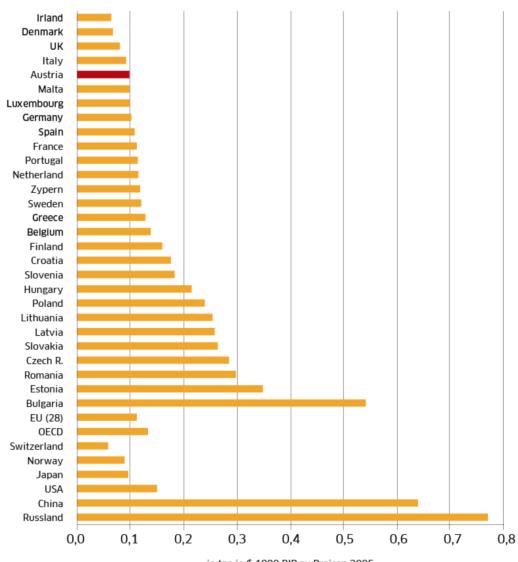
- targeted development and dissemination of information materials
- information events (e.g. Innovation Fora)
- energy advice for companies (up to 6 consultants days, 75 % subsidy)
- training programmes in the "Energy Acadmy"
- active promotion of funding programmes







Energy intensityGross domestic consumption per GDP

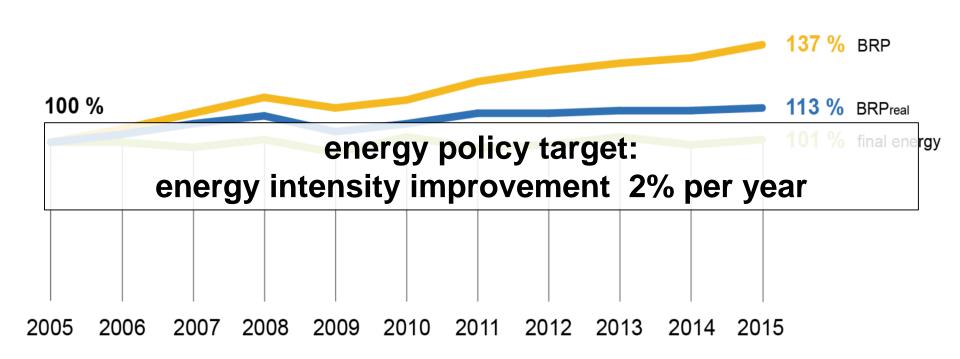






Source: IEA, 2012 in toe je \$ 1000 BIP zu Preisen 2005

Development of the specific energy consumption Upper Austria











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