

Energy efficiency for greater competitiveness
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2 Sustainable Energy and businesses

- The complexity of the field of energy and power industry
- Energy user and / or provider of sustainable energy solutions
- EU - EUR 1 billion per day for oil and 140 billion per year
- SLO at least EUR 2 billion for the import of motor fuels
 - independence
 - certainty
 - competitiveness
- Local, renewable energy - sustainable solutions.

3 Doing more with less energy

- Energy efficacy
- 2500 L of fuel oil in the heating season = ca 2500 EUR - average Slovenian 1-family house
- Energy Efficient house approx. 300 L of heating oil = 300 EUR
- Energy-Efficient Vehicle - 4-5 L / 100 km = 7.5 EUR / 100 km compared to 8-10 L / 100 km = 15 EUR / 100 km
 - CNG vehicles 400 km for 20 EUR or 100 for € 1.5

4 Opportunity for Economic Development

- Saving money and spending it for other purposes - every year each person in the EU spends 700 EUR for the import of oil and its derivatives
- Competitiveness of Slovenian production - 1,7 TWh per year for the production of aluminum = 1,700,000,000 kWh - raising the price of 1 cent = 17,000,000 million per year

- Energy Efficient production could reduce costs per unit of up to 40% and thereby increase competitiveness
- The operation in the area of energy efficiency is always linked with the development and improvement of process.

5 "Hidden" effects of EE

- Many new or improved products and services and, of course, the associated new jobs.
- Research and development on energy efficiency of greater importance (new or improved devices, sensors, information and communication technologies, transport systems, ..).

Source: www.carriewebber.net

6 "Hidden" effects of EE

- Improvements in terms of life and work, less illness and thus less sick leave - working efficacy, and less for health costs.
- The social aspect - less costs for heating (particularly important for marginalized groups)

7 EE Impact on businesses

- Investing and thinking on energy efficacy has an impact on costs, the quality of the product, lower maintenance costs, it can be included in the marketing of the company, improving working conditions ..
- Companies are also becoming less dependent on energy supplies and their prices.
- Energy efficient buildings and systems increase their value.

8 The impact of EE in enterprises

- By comparing the energy consumption not only new possibilities are shown but also learning about new markets, channels, systems, ...
- Minimum dependency on price fluctuations and energy supply.
- Companies with energy efficiency update their processes and systems and are becoming more productive and competitive. This results not only in energy savings but directs the company to the strategic growth.
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9 The Company

- Energetics is developing rapidly
- Lack of time and staff
- Working on the market
- The economic crisis

10 Energy management in the company

- Reduction of costs and security of supply
- Energy management in own company

- Tracing energy use, costs, CO₂ emissions
- Purchase of energy-efficient appliances and machinery for the implementation of activities
- Energy Efficient Labour Organization (transport)
- Do I understand the concept of CO₂? Do I use it for my own publicity or perhaps, I believe that this is not it?

11 Energy Management

- An overview of the use of energy - resources, users, monitoring use
- An overview of the energy costs
- Energy costs share in the overall costs scheme
- Reducing the final costs and energy use
- Reducing CO₂ emissions
- Reduction of energy dependency or a single type of energy
- Buy electricity and other energy

12 Benefits

- More savings (savings ranging between 5 and 25%)
- Lower production costs (up to 3% due to monitoring)
- Better preventive maintenance
- higher product quality
- Acceleration of losses remedy
- It is very important when concluding contracts for the supply of energy.

13 Comparing or "benchmarking"

- When comparing energy indicators (benchmarking) specific values of work processes, products or services are determined, comparing them with competitive better companies or at least with an average of the industry.
- Energy indicators are an expression of the energy efficiency, that is a need for energy owing to the reference value.

14 Why?

Every company wants:

- energy certainty and independence (constant power supply)
- energy competitiveness,
- not harmful activity for the environment,
- quality living and working conditions at a reasonable cost
- to be prepared for legislative obligations (EU, SI, local communities)

15 Standards EN 16001, 50001

- They ensure the control of the energy management system to have a maximum possibility of reducing energy consumption and costs.
- The company or organization demonstrates that it understands the importance of EE and RES and environmental protection, as well as the profitability and cost reduction.
- Impact on the awareness of employees that the organization is decided to reduce energy consumption, which will lead to new approaches towards energy savings.

16 Renewable energy sources

- Greater efficacy is a priority
- Not every source is for every user
- Dependence on the spatial placement
- Availability of the infrastructure (network, inlets, delivery ..)
- Environmental constraints (air emissions, water use, soil ..)
- Cultural protection restrictions
- Lifestyle and work of the user.

17 Sustainable transportation

- Energy-efficient transport system (buses, bicycles, walking, then energy-efficient cars)
- Alternative sources of energy in transport:
 - Electrical vehicles, solar energy, energy storage
 - Compressed natural gas, biogas
 - Hydrogen – mixture with natural gas - challenges of the future.

18 "Green" Marketing in the field of energy

- EU promotes ecologically appropriate products and services
- The market is expanding and demand still exceeds supply
- Abroad, in addition to products, efficient energy services are emerging (tourism, skiing, transport, ..)

19 Opportunities and challenges

- Are my services, products energy efficient?
- Do you know their CO₂ emissions?
- Let's include this in our advertising!

20 Green public procurement

- Considering energy efficiency, facilities and equipment
- Considering reduction of emissions of greenhouse gases (CO₂) and other hazardous substances
- Taking into account local products due to charges resulting from transport
- Considering environmental benefits before financial - such as wood biomass

21 Information and education

- key activity for achieving success.
- individual can impact on energy consumption and, consequently, on investment.
- With small activities in the distant time period large savings can be shown.

22 Thank you for your attention!