



IMPROVEMENT OF ENERGY EFFICIENCY IN TURKEY
"CLOSING EVENT"

ENERGY EFFICIENCY IN TURKISH INDUSTRY

Situation, challenges, new ways for action.

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CURRENT SITUATION OF TURKISH INDUSTRY



I. Current Situation of Turkish Industry

II. EE in Turkey & New EE Law

III. What EIE learn thanks to the Twinning & New Challenges

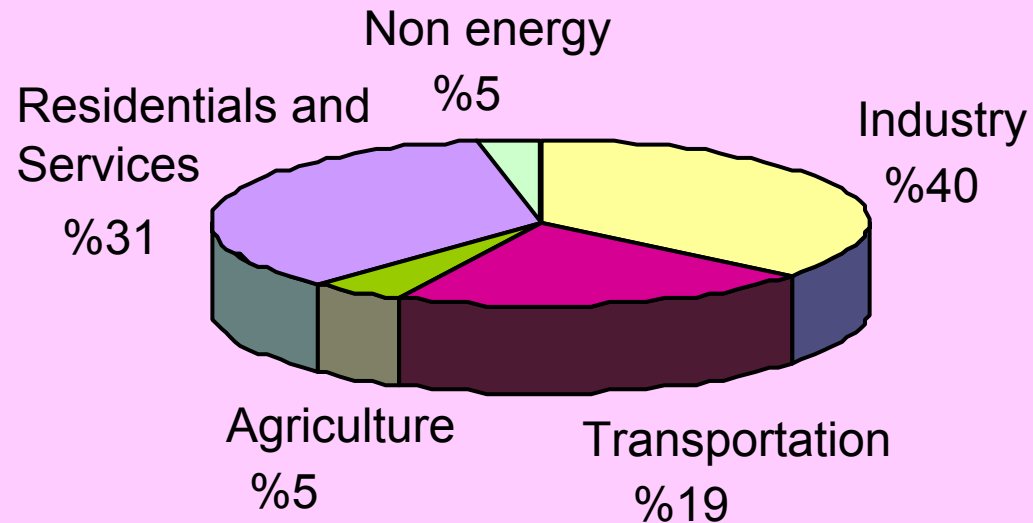
- Industrial sector has the biggest share with 40% in total consumption in 2006 (31MTOE) and it is estimated that energy consumption will increase 2.5 times until 2020.



CURRENT SITUATION OF TURKISH INDUSTRY



Sectoral Final Energy Consumption (2006)



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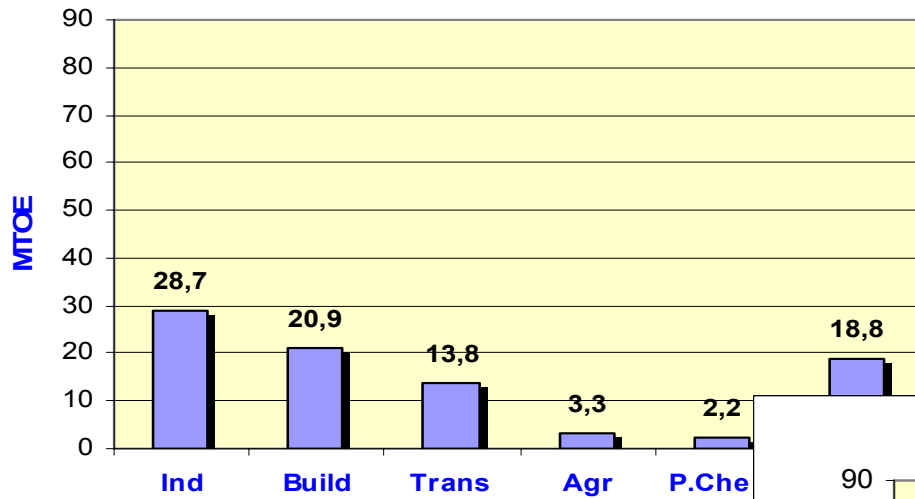
[III. What EIE learn thanks to the Twinning & New Challenges](#)



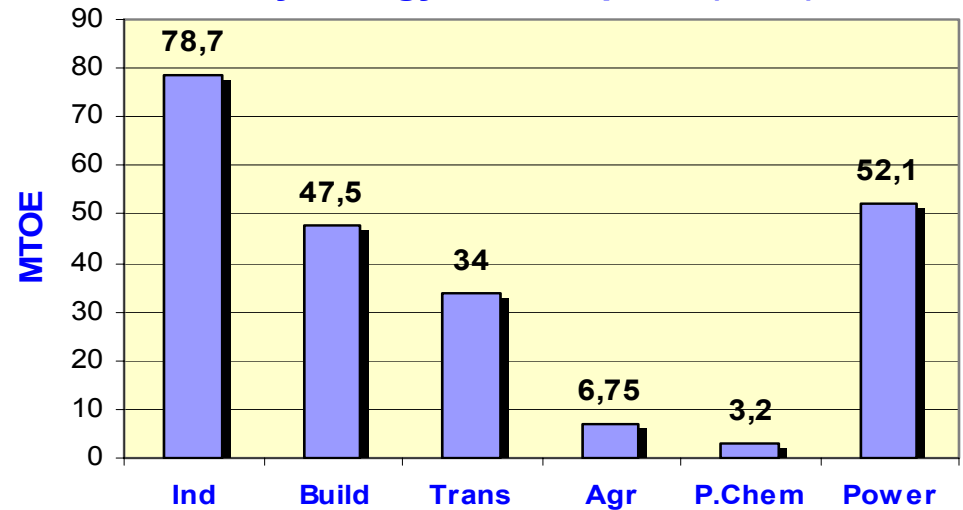
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Primary Energy Consumption (2004)



Primary Energy Consumption (2020)





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- Turkish industrial sector is energy intensive with the subsectors such as iron, steel, cement, ceramic and glass which represent 57% energy consumption in the sector and they have 20-55 % energy cost in the total cost.
- Saving Potential is more than 20% in industrial sector.



Why Energy Efficiency in Turkish Industry

- It could significantly contribute to the realization of national targets on energy efficiency.
- Increase the competitiveness of industry by decreasing energy expenses.
- Lower the dependence of the country from energy imports.
- It would help the country achieving the environmental obligations and better preparing Turkish companies to comply with possible future obligations within the EU.

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EE IN TURKEY & NEW EE LAW



It was a long way up today

- Studies on energy efficiency mainly in industry and renewable started in the beginning of 1980's with the assignment of EIE for these tasks. EIE has established its own EE team having necessary equipment under international projects conducted with UNIDO, World Bank, JICA, EU.

Energy Efficiency Studies (Awareness, training, audit, policy)

UNIDO

Worldbank.
I-II

JICA I

Energy Conservation Project / JICA

Third Country Training
Project / JICA

Projects in the scope of EU

Energy Efficiency Strategy/EU

Twinning Project / France-Netherland

1981

1990

1995

2000

2001

2002

2003

2004

2005



EE IN TURKEY & NEW EE LAW



Energy Audits : totally more than 100 factories have been audited

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EE IN TURKEY & NEW EE LAW



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Energy Manager Training : more than 1000 energy managers participated in the Courses and about 800 are certificated under Regulation on “Improvement Energy Efficiency in Industrial Establishments” issued in 11 November 1995.



It was a long way up today

- Carrying out contests among the industrial plants on project or plant bases regarding energy efficiency and organising energy efficiency seminars, workshops at national and international level.
- Energy Efficiency Strategy has been adopted in 2004.
- **“Energy Efficiency Law n°5627”** has been enforced on 2nd May of 2007.

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What is new introduced by the Energy Efficiency Law into the Turkish Industry

- Supporting EE Projects
- Voluntary Agreements
- Implementing Energy Management comprehensively
- Monitoring
- Prevention of inefficient equipment in the market
- Supporting SMEs
- Giving priority to supporting EE R&D Projects



WHAT EIE LEARN THANKS TO THE TWINNING & NEW CHALLENGES



Experiences from the Netherlands and France

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- Not only regulation but also incentive and support to motivate the industry.
- It has been already proved for 15 years, Long Term Agreement (LTA) is a successful tool between government and private sector to increase energy efficiency in the scope of environmental policy in Netherlands.
- Energy efficiency audits are vital for French industry to improve energy efficiency and increase energy saving.
- Good communication among the parties is essential and even is the most important part of EE programs. Awareness and training are also essential.
- Trustable Administrative Body (such as ADEME and SenterNovem) act as a bridge between government and private sector.
- Continuous support from government. All activities such as energy audits, trainings, awareness campaign, consultancy services are made by consultants and are subsidized by ADEME and SenterNovem.



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New Challenges

- **To create a new atmosphere for Turkish industry by Voluntary Agreement (VA) and Audit Programs. At the legal basis, secondary legislation including the VA program and energy audits is under preparation and expected to be issued before May 2008.**
- **To create market for EE services and to support consultancy companies.**
- **To promote audits (including financial support)**
- **To standartize audits**
- **To strength EIE capacities by improving human and financial resources.** (New disciplines, more budgets and re-structuring EIE for the new works delegated by EE Law. SenterNovem has the annual budget of 8M € and approx. 50 staff for only LTAs and ADEME has the budget of 232 M€ in 2006 and 850 staff in total)



WHAT EIE LEARN THANKS TO THE TWINNING & NEW CHALLENGES



New Challenges

- **To integrate Energy Efficiency Programs in other policies such as environmental, re-structure of industry etc. in order to be more effective .**
- **To introduce new concepts in Energy Efficiency Programs such as Energy Potential Scan, Product Life Cycle, Carbon Bilan etc.**
- **To be more involved in EE of Industrial Associations.** (These kind of associations have big power to negotiate with government on the behalf of their members)
- **To improve good communication and cooperation with the all stakeholders**
- **To allocate more budget for R&D projects for energy efficiency and to disseminate the results** which is very important to create an atmosphere of improvement.

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WHAT EIE LEARN THANKS TO THE TWINNING & NEW CHALLENGES



For Close Future 2008

- **Voluntary Agreements, including audits, which seem to be a good tool for achieving Energy Efficiency improvement from the experiences, is a new program for Turkey and it will be presented to the relevant parties in January 2008.**
- **In the scope of bilateral cooperation with the Netherlands a pilot project of Voluntary Agreements will be initiated and it will be a good start for this program and capacity building of EIE.**
- **In the same period, communication will be started with Consultancy Companies to promote EE Market and training.**

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For Close Future 2008

- **EiE has already training program for Energy Managers in industry. Additionally special training programs for Consultancy Companies will be developed as soon as possible in order to transfer EiE's knowledge and experiences on energy management and audits.**
- **Conducting the negotiations for the Voluntary Agreements**
- **Developing program of training, audit and awareness in order to improve energy efficiency for SMEs to be supported under EE Law.**
- **Bilateral cooperation with ADEME and SenterNovem for getting the results of studies initiated by Twining Project.**

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Thank you for your attention !

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