Third meeting of the project
"Monitoring of EU and national energy efficiency targets" (ODYSSEE-MURE 2010)
Warsaw, 6-7 October 2011

Large Industry Energy Network

Sustainable Energy Authority of Ireland

Network Overview (1)

- The Large Industry Energy Network (LIEN) is a voluntary network, facilitated by Sustainable Energy Authority of Ireland (SEAI)
  - Companies working to maintain strong energy management and environmental protection practices.
- When they join the LIEN, companies make a commitment to:
  - Develop a management programme for energy use
  - Set up and review energy targets
  - Undertake an annual energy audit
  - Produce annual statement-of-energy accounts

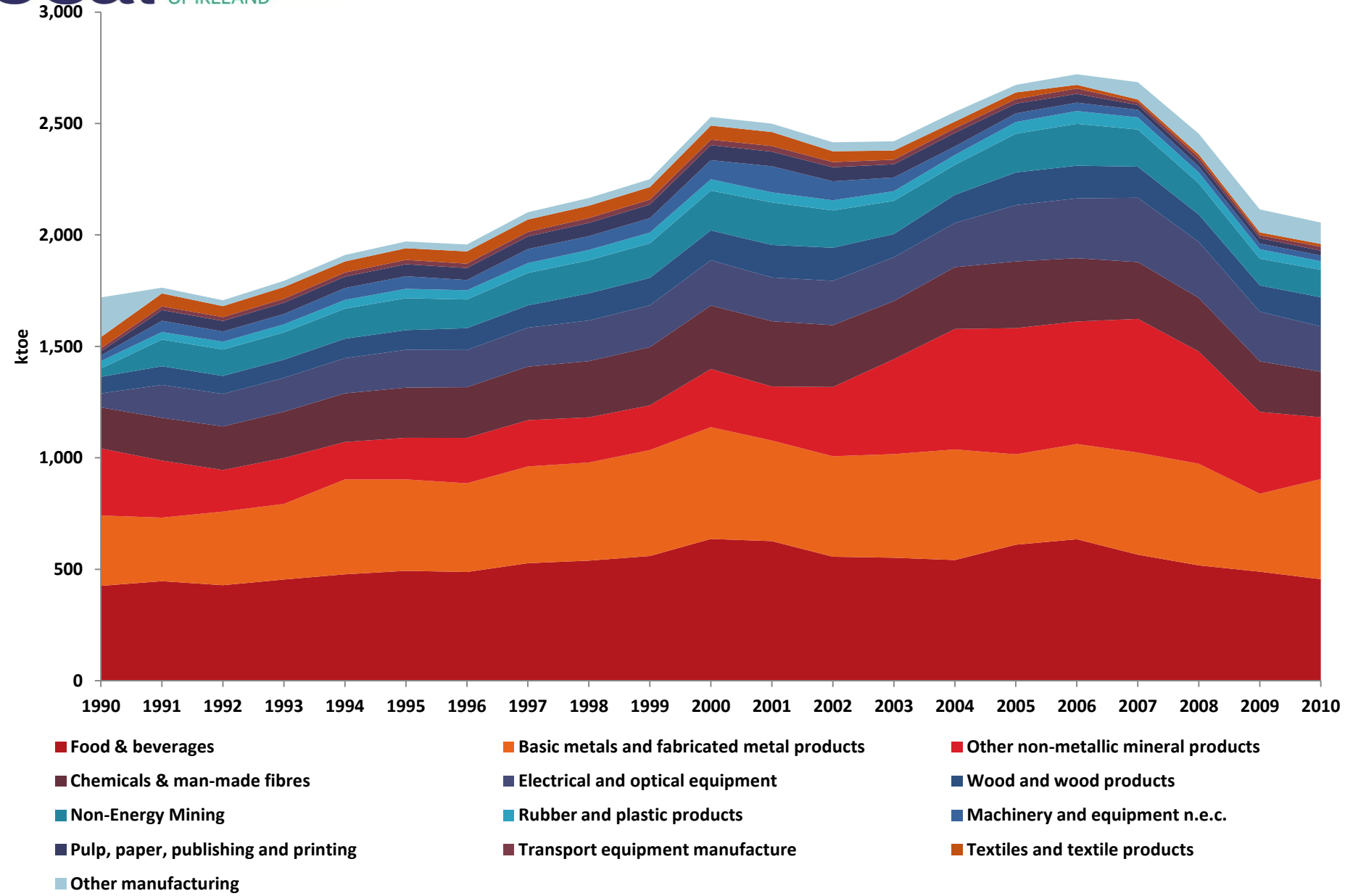
Network Overview (2)

- Membership of the LIEN is open to organisations who are part of the Energy Agreements programme and/or those who have annual energy spend in excess of €1 million.
- Workshops, seminars and site visits are organised throughout the year for LIEN members.
  - This provides a forum where members learn from energy experts and other specialists, as well as from fellow energy managers.
  - Members thus benefit from the experience of their peers and their mutual interactions. This can save valuable research time and help to ensure that investments are made in the most appropriate areas to maximise returns.

Network Overview (3)

- 135 companies that are members of the LIEN (established 1995)
- 59 are LIEN-only members, 76 are Energy Agreement
- The Energy Agreements Programme (EAP) is a subset of the LIEN and was launched in May 2006. (initially based on IS 393)
  - It supports businesses implementing advanced energy management systems through the framework of EN 16001, the European Energy Management Standard.
  - The programme is aimed at the largest energy users who are committed to a strategic and systematic approach to continuous improvement of energy management.
- EAP members represent 94 independent sites committed to EN 16001 energy management system certification.

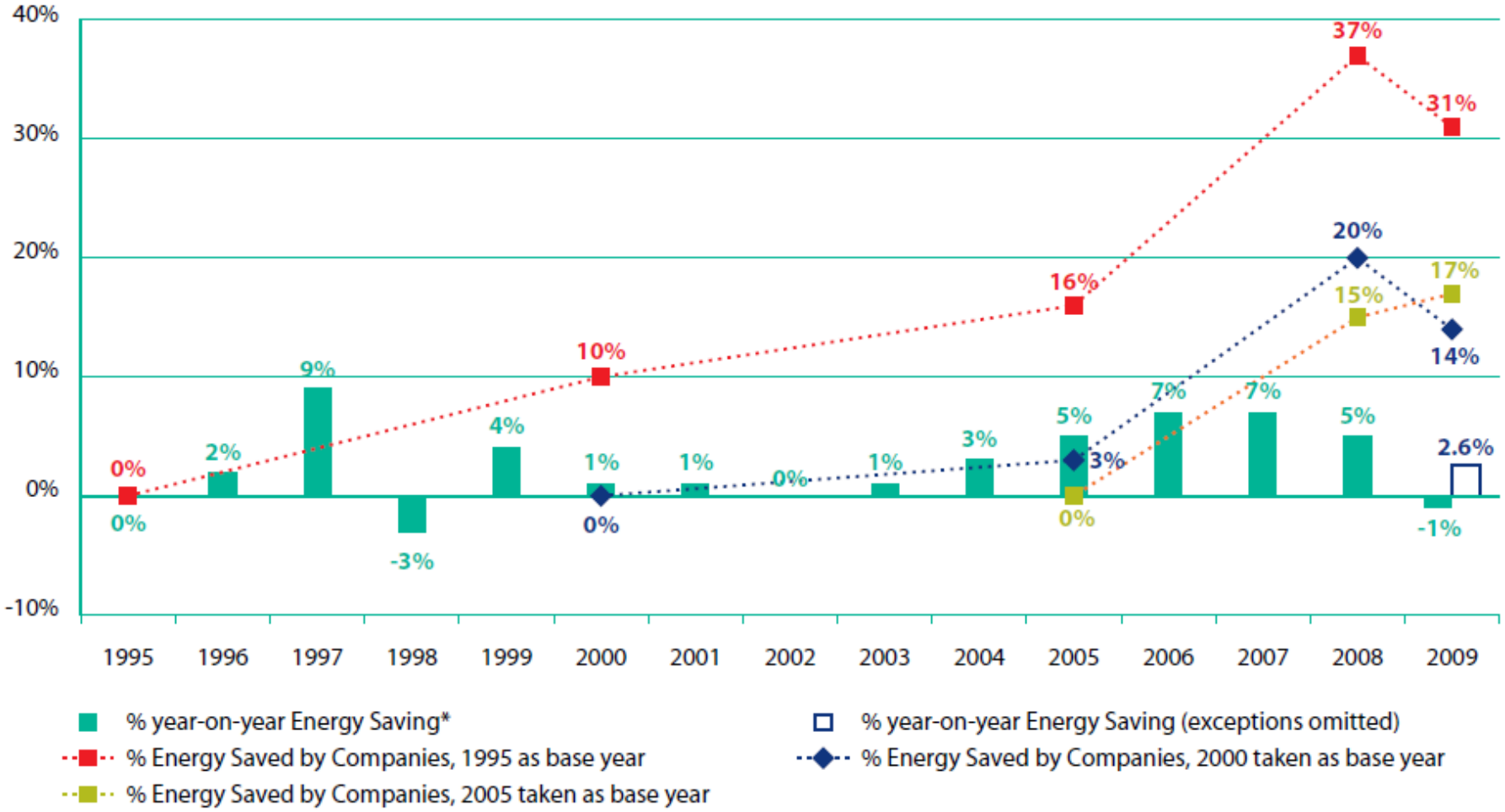
Energy in industry in Ireland



LIEN savings calculations

- Energy-efficiency change is calculated using energy intensity calculations and is the relative improvement or loss in energy intensity from one year to the next.
- The energy saving is calculated by subtracting the actual energy consumed in the reporting year from the energy that would have been consumed to produce the same level of output using the previous year's energy intensity.
- This calculation is completed for each company, and the saving or loss is then totalled to calculate the overall LIEN energy saving or loss. This 'top down' energy-saving calculation is substantiated by sample 'bottom up' data collected through the LIEN questionnaire.

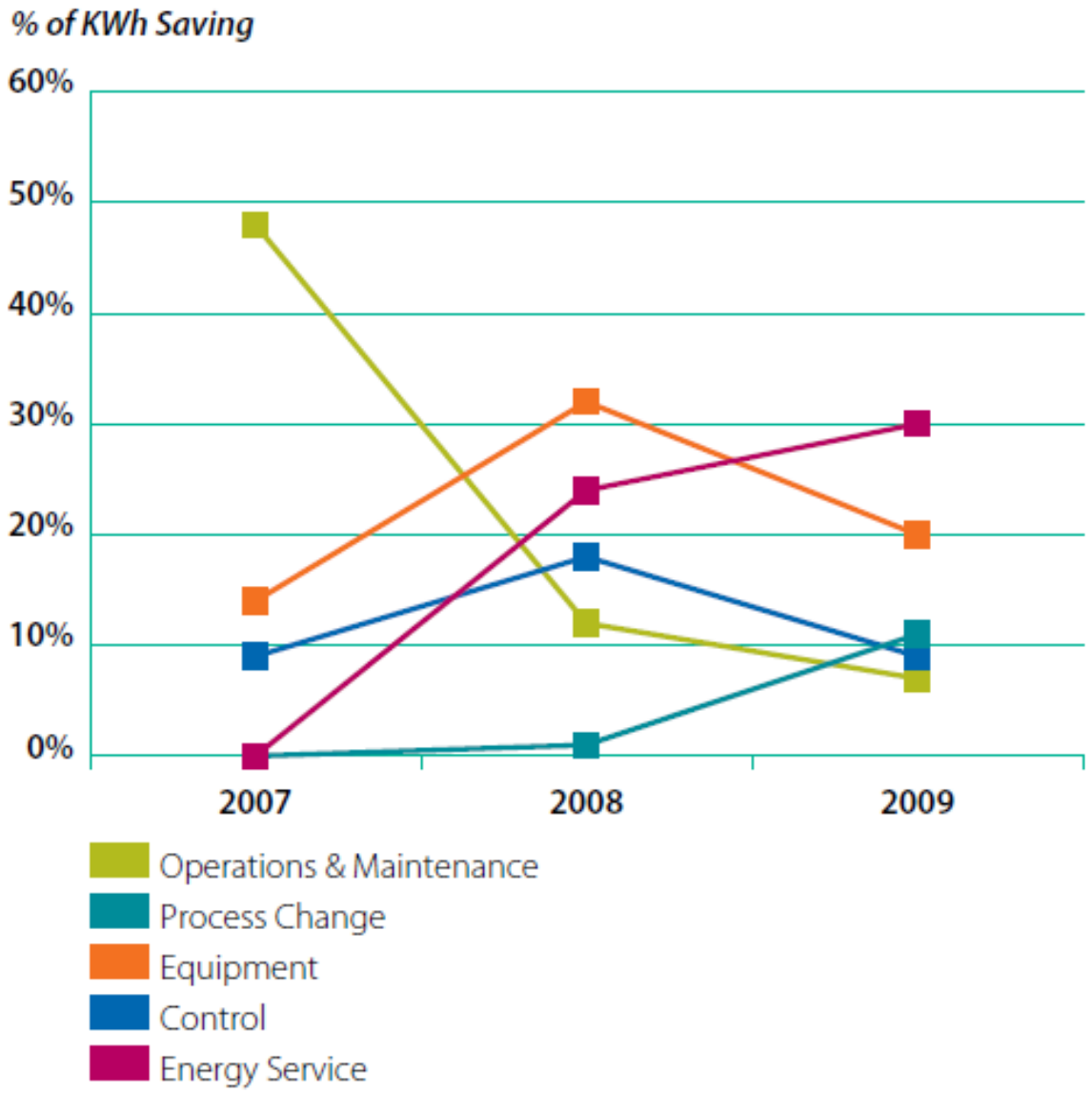
Results of LIEN



Results 2009 Summary

- On an individual basis, the average member recorded a 2% improvement in energy efficiency.
- When the notable exceptions are excluded from the full analysis, an improvement of 2.6% in energy efficiency is reported for the network.
- The Food & Drink sector realised savings of 1% with an output activity reduction of 5%.
- The PharmaChem sector realised savings of 6% with a net 0% change in production output.
- Companies with an Energy Management System (EnMS) have indicated that 67% of the savings were driven through by the EnMS process.

Source of LIEN savings



Conclusion

- Analysis of LIEN activity indicates that the structured Energy Management System leads to deeper energy service and process changes.
- Long-term LIEN members have achieved, on average, a 2% year-to-year energy-efficiency improvement over a 14-year period of data collection.
- Despite production output changes that generally negatively affect overall energy intensity, some sectors are still maintaining efficiency gains achieved in previous years.

Questions

Thank you for listening.

For more information go to:

http://www.seai.ie/Your_Business/Large_Energy_Users/LIEN/