



TEKNILLINEN KORKEAKOULU

---

# EMA in Finnish Daily Consumer Goods Trade

---

Anna Kumpulainen & Tuula Pohjola

Environmental and Quality Management  
Helsinki University of Technology (TKK)



# Agenda

- Problem Formulation
- Research Setting
- Findings
- Conclusions
- Summary



# Problem Formulation

How to manage energy and waste issues better in daily consumer goods trade in Finland?

- Objectives:
  - Defining the sector-wide minimum level for energy and waste management
  - Collecting reliable quantitative information on energy and waste at daily consumer goods business in Finland

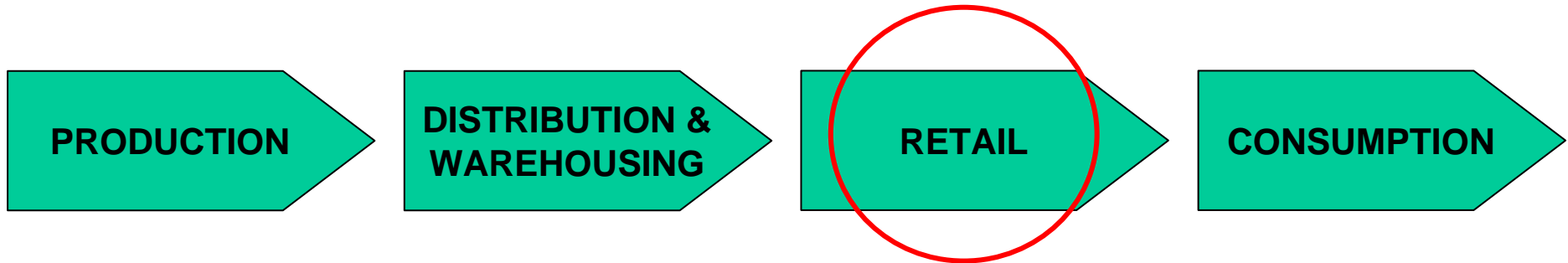


# Research Setting (1/3)

- Finnish Grocery Trade Association as a project client
  - 4 main daily consumer goods trade chains & 1 wholesale company at the steering group
  - Benefits for the “umbrella organisation”, trade chains and individual stores + for Finnish authorities
- Regulative push
  - Energy services directive (2006/32/EY) & the Finnish energy saving agreement
  - New regulations for waste & recycling
- Project duration 2007



# Research Setting (2/3)



- Limitations

- Energy (electricity and heat), water & waste
- Only retail → logistics excluded
- Finnish Grocery Trade Association's members (over 90 % of total sales)



# Research Setting (3/3)

- **Methods**
  - Literature review, benchmarking, expert interviews & SG meetings (plan)
  - SG workshop (do)
  - Case studies (check)
  - SG meetings and workshops, external ICT partner (act)



# Findings (1/2)

- Various challenges
  - Lacking information collection and usage culture
  - Comparisons challenging
  - Numerous actors
  - Changing regulations and legislation
  - No Internet connections...



# Findings (2/2)

- Planned metrics
  - Electricity (kWh)
  - Heat (kWh or kWh eq.)
  - Water (m<sup>3</sup>)
  - Waste components (t, % of the total)
  - Recycling rate (%)
- Electricity and water will be proportioned to area (m<sup>2</sup>), heat to volume (m<sup>3</sup>), and waste to sales (€)





# Conclusions

- Challenging project but good cooperation
- Minimum level defined at this stage
  - Common “interface” for the chains
  - Guideline can later set numerical objectives, and be widened to other processes
  - Information system can be later deepened and/or widened



# Summary

- Varying practices at different stores / chains
- Pressure from legislation
- Guideline & information collection system
- Next steps: 9 case studies in summer 2007

*Ideas welcome to / more information from:*

Anna Kumpulainen, [anna.kumpulainen@tkk.fi](mailto:anna.kumpulainen@tkk.fi)