Danish Energy Agency

Energy Efficiency Finance

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Regional conference on Financing
Energy Efficiency in Nordic countries
19 may, 2017

Energy Efficiency in Denmark

De-coupling energy consumption and economic growth

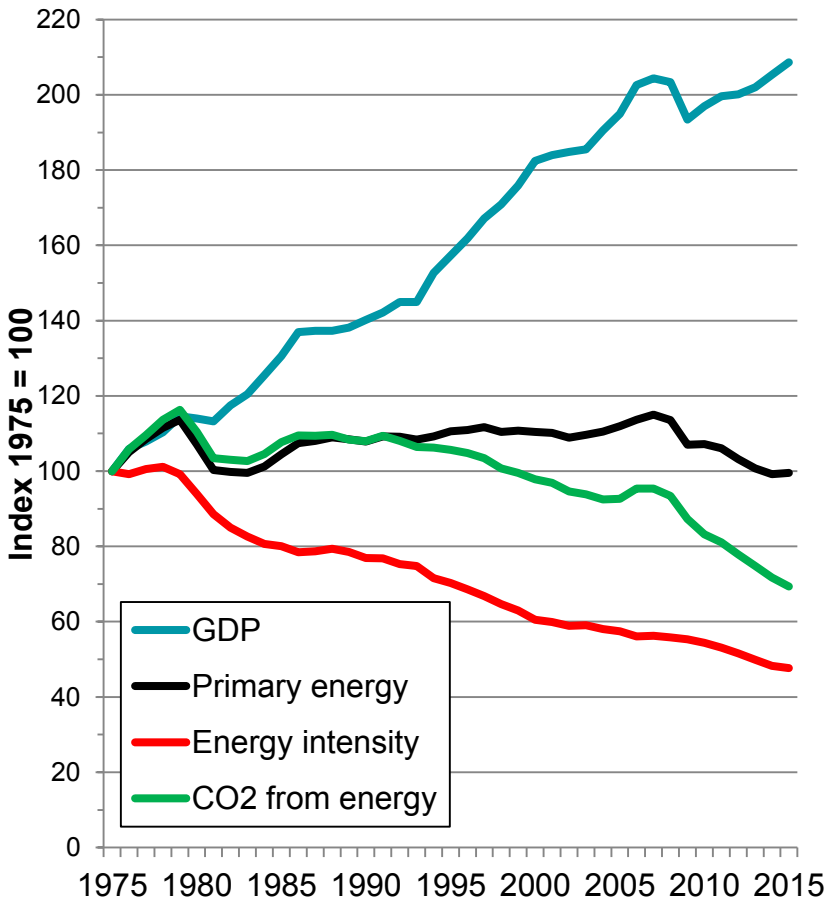
- Also under the economic crises from 2008

Strong EE improvements

- End-use EE
- More efficient energy supply

Less carbon intensity the last 20 years

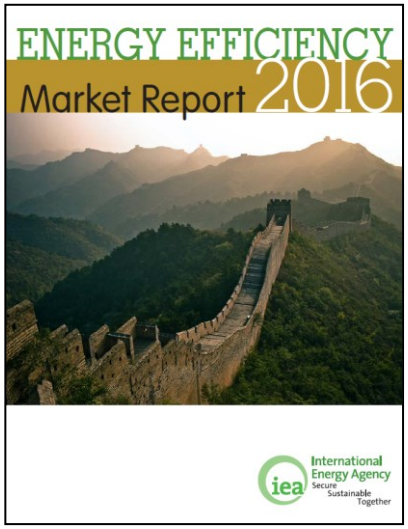
- The share of renewables has increased



Drivers and barriers for EE

IEA Energy Efficiency Market Report 2016:

- "Public policy has been the key driver of efficiency improvements
  - But much more is possible and much more is needed"



Barriers and market failures:

- Imperfect information
- Principal-Agent problems
- Not economic rational behavior
- Financing?

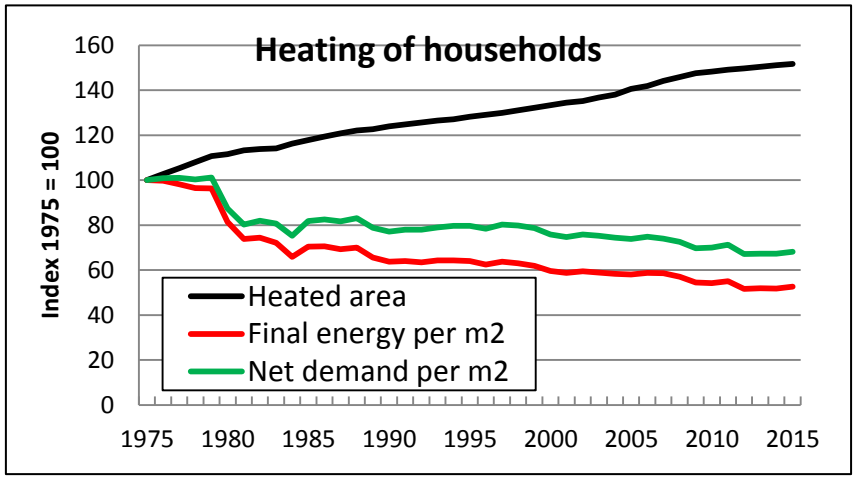
Existing buildings

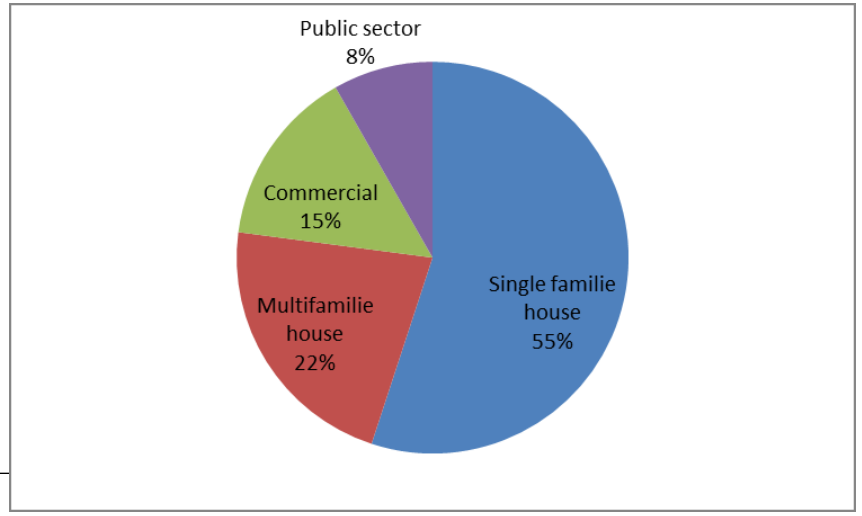
Consumption is reduced

- But still a cost-effective potential
- More has to be done
- Long-term perspective is needed

Is financing the main barrier?

- Most of the owners of buildings can easily get a cheap loan!
- But they don't invest in EE
- And financing is a problems for some segments

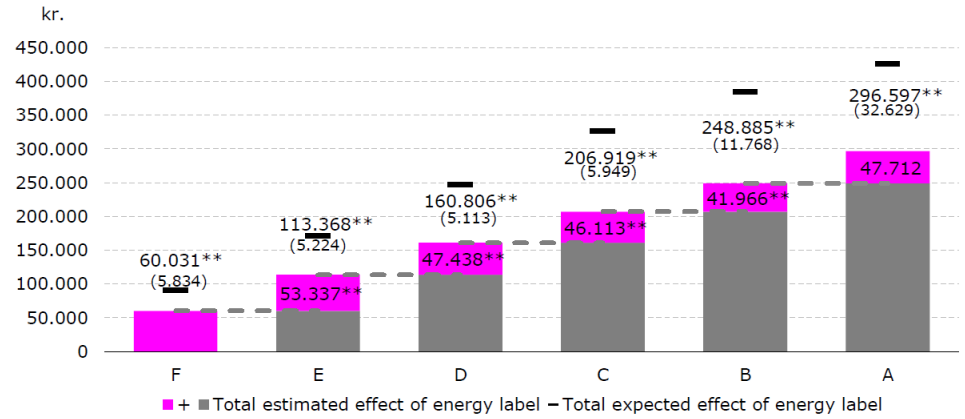




Increase the investments in EE

- Overcome the non-rational behavior
  - The owner?
  - The credit institutions?
- Improving EE increase the value
- Make it easier and reduce the risk
- Alternative financing for some segments

Figure 11 RE model estimates of price increase related to energy labels

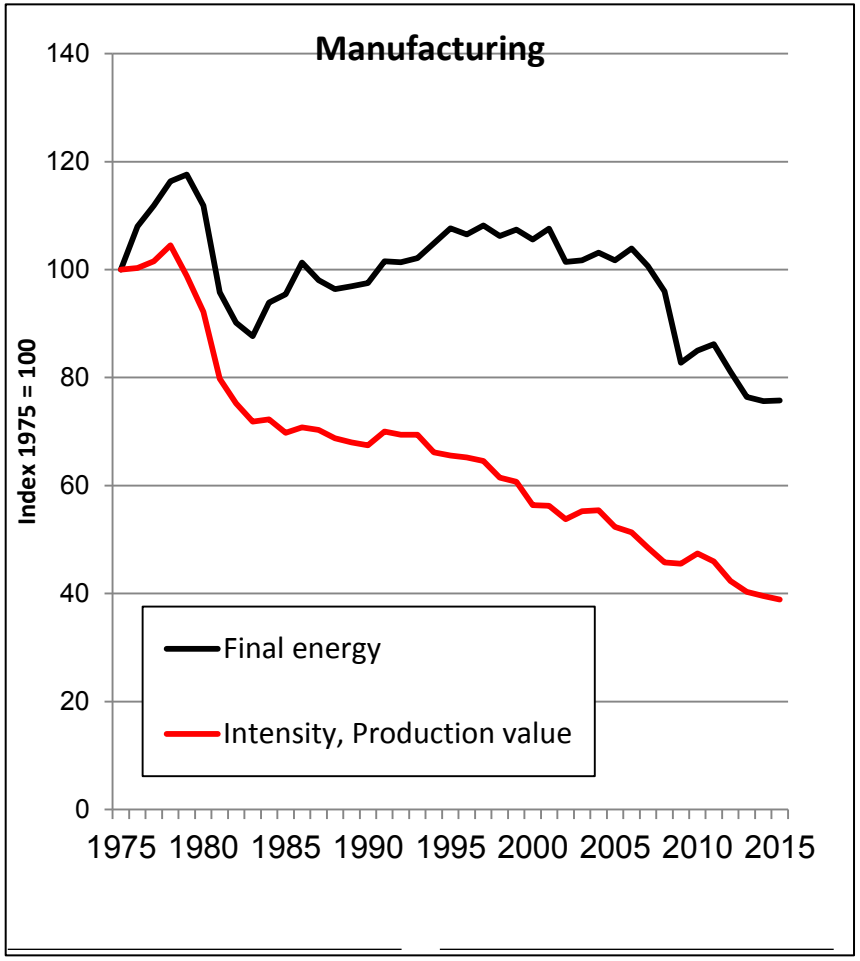


Note: The results relate to a house of 100 sq. m. All effects are measured relative to a G-labelled house. The numbers in parentheses are standards errors. ** indicates that the estimate is significant on a 1 % significance level. The model uses 99.686 observations (sales) from 92.232 houses.

Source: Copenhagen Economics

Industry

- Strong EE improvements
  - Continue the trend
- Find the project and show the business case
  - Short pay-back period
  - High interest rate
- SME's?



Summary

- Investment in EE has to be increased
- Capital is available
- The owners of buildings and companies shall be convinced
- The credit institutions can play a role

- Thank you for your attention
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