



INTERNATIONAL
ENERGY
PROGRAM
EVALUATION
CONFERENCE

Policy Instruments for Energy Efficiency in Buildings

Experiences and Lessons from the Nordic Countries

Bernadett Kiss

Kes McCormick, Lena Neij, Luis Mundaca

*IEPEC, Session 6
9 June 2010*



Outline

- Background of the study
- Objectives
- Findings: policy inventory in the Nordic countries
- Discussion
- Concluding remarks



Background

- EU - building sector - 35% of total energy use
- Savings potential of cost effective measures - 20% by 2020
- Cost effective investments in energy efficiency ... have not been made
- Wide range of policy instruments
- Historic experience and learning from the Nordic countries:
 - e.g. building codes, subsidies, labels and declarations, information campaigns and energy taxes



Objective

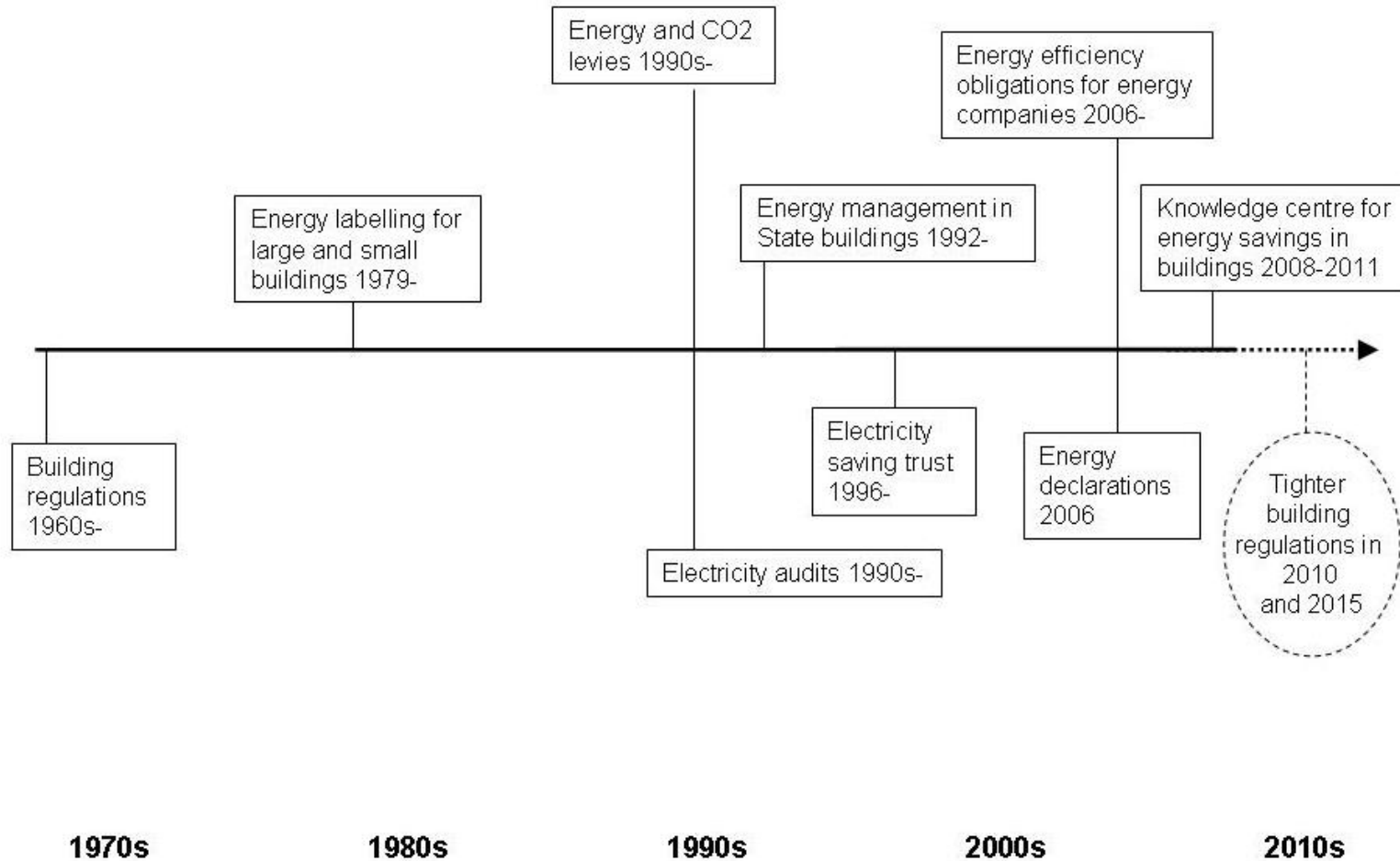
- describe experiences of different policy instruments from each of the Nordic countries
- discuss how to advance the important learning processes related to these instruments

What experience do we have in the different Nordic countries
– in implementing and evaluating policy instruments?

- meta-analysis
 - inventory of *policy instruments* for energy efficiency
 - and their *evaluations*
 - overview of *institutional*
 - and *organisational* structures



Denmark



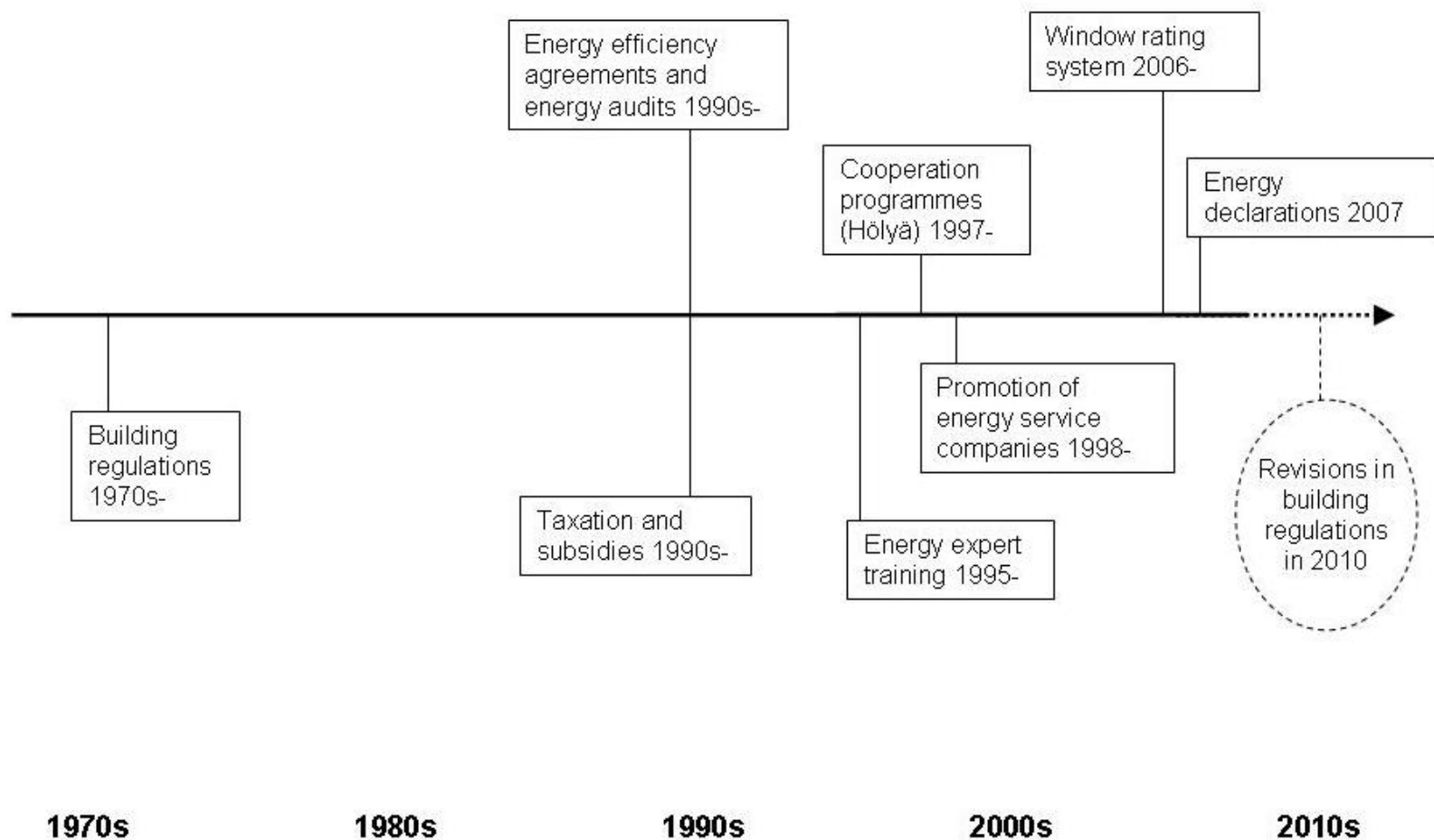


Denmark

- Long commitment to building regulations
 - several evaluations
 - the requirements are not always met
- Energy labelling of buildings since 1979
 - obligatory, but not enforced
 - costly consulting
- Electricity Saving Trust - promoting energy efficiency
- Knowledge Centre for Energy Savings in Buildings



Finland



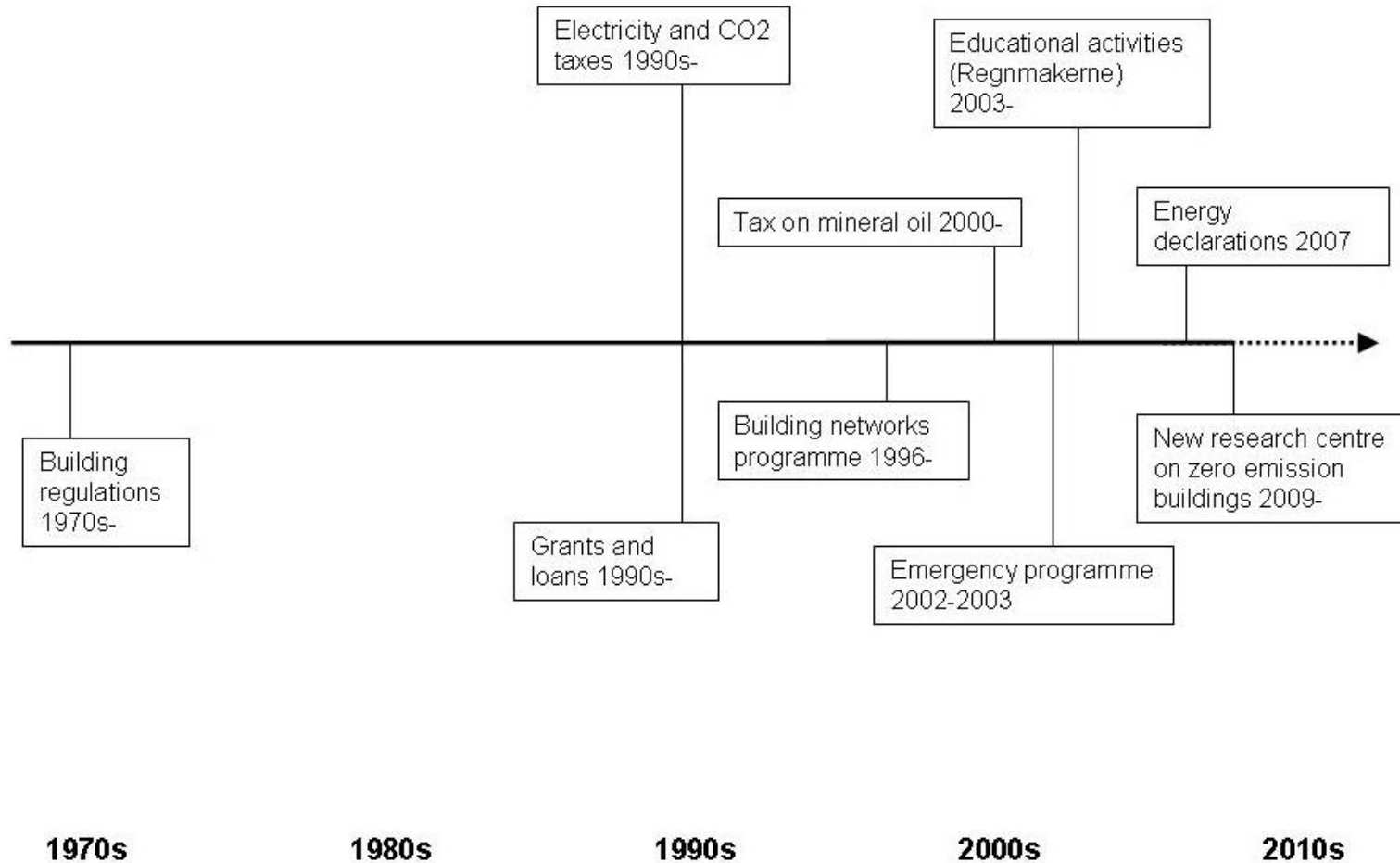


Finland

- Long tradition on voluntary energy efficiency agreements
 - analysis on energy consumption and energy savings potential
 - action plan on implementing cost-effective efficiency measures
 - hurdles in the system, difficult to achieve challenging targets (lack of personnel and economic resources, baseline, “split” responsibilities)
- Energy audits
 - access to subsidies
 - training of auditors, co-operation and dialogue with stakeholders, interlink policy instruments, flexible and competent implementing agency, long-term political support, systematic and thorough monitoring
- Good experience of “learning by doing”



Norway



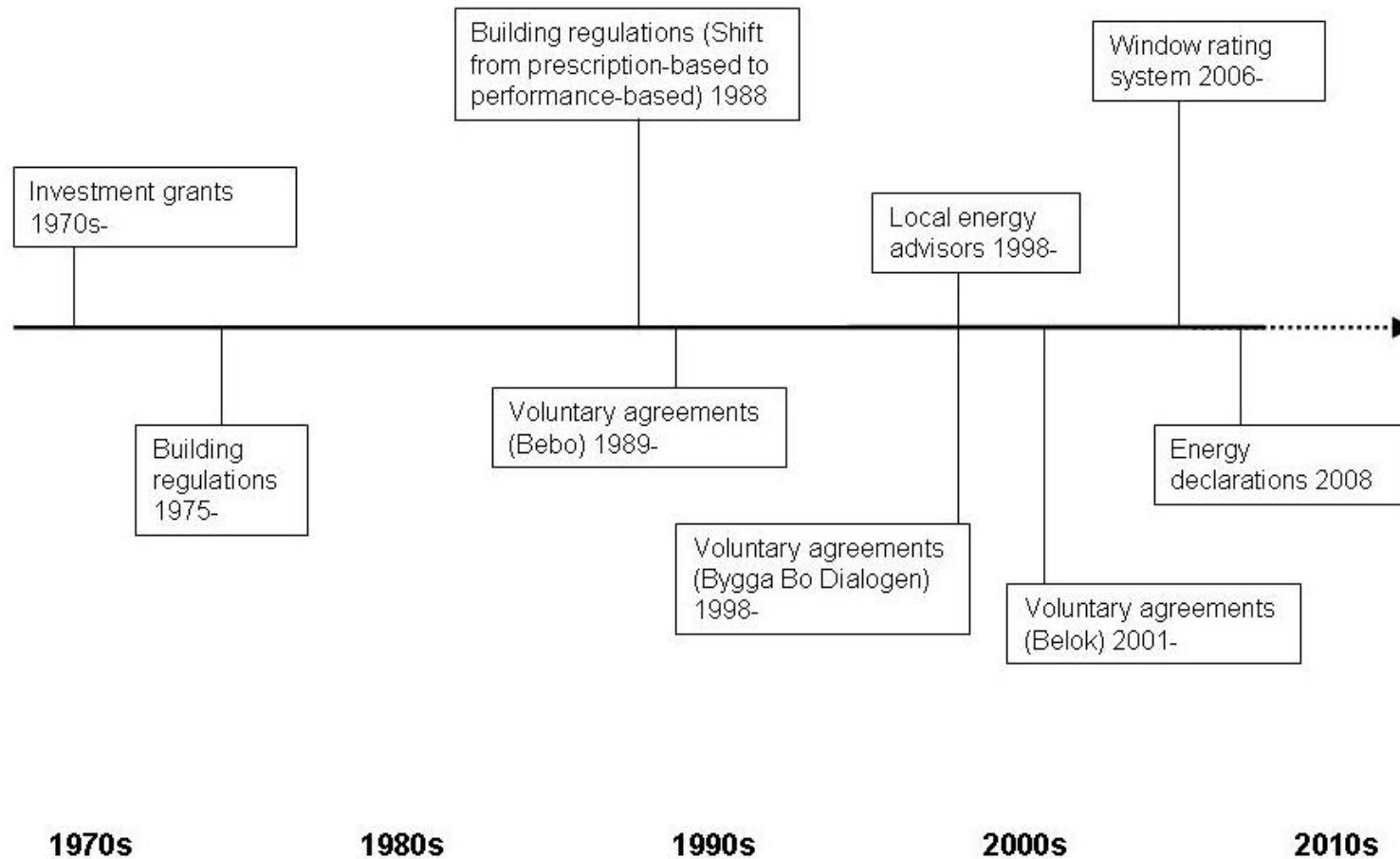


Norway

- Limited spread of energy efficiency policy efforts
- Large emphasis of financial measures
- Relevant information measure: building networks.
 - improved knowledge will result in energy efficiency investments,
 - cyclic tasks will ensure continuous focus on energy use
- Lack of research and development investments
- Lack of leadership in the public sector



Sweden





Sweden

- Excessive use of grants, loans and subsidies
 - limited periods of time
 - rarely evaluated, never in a strategic manner
- Building codes have a long history
 - revised on several occasions over time
 - has not been accompanied with strategic evaluation plans
- Technology procurement
 - 56 new energy efficient technologies have been introduced
- No central responsibility for energy efficiency
 - weak coordination
 - dispersed research activities



Concluding remarks

- Denmark is leading the way on implementing policy instruments, which are long-term, strategic, innovative and well-supported by the organisational structure.
- Energy efficiency often lacks influential organisations to “drive” efforts forwards – both in terms of information, training and networking, and a concerted research and innovation effort.
- There is often no strategic approach to evaluations in the Nordic countries with a focus on how to improve learning.



Concluding remarks

- Strategic policy evaluations are a vital part of efforts on energy efficiency and buildings.
- For policy instruments to be designed and implemented successfully – resulting in the desired impacts – a long term strategy is required that provides clear signals to actors in the building sector.
- Evaluations should be integrated into policy instruments to provide continuous feedback.
- A combination of methods is important. Modelling and scenario methods should be complemented with other types of methods to validate results and recommendations. There is also a need for better statistical data to undertake thorough and comprehensive evaluations.