

# The Swedish Energy Agency:

*... that energy must be available at competitive prices and that energy generation must make the least possible impact on people and the environment.*

*In simple words, a smarter use of energy.*



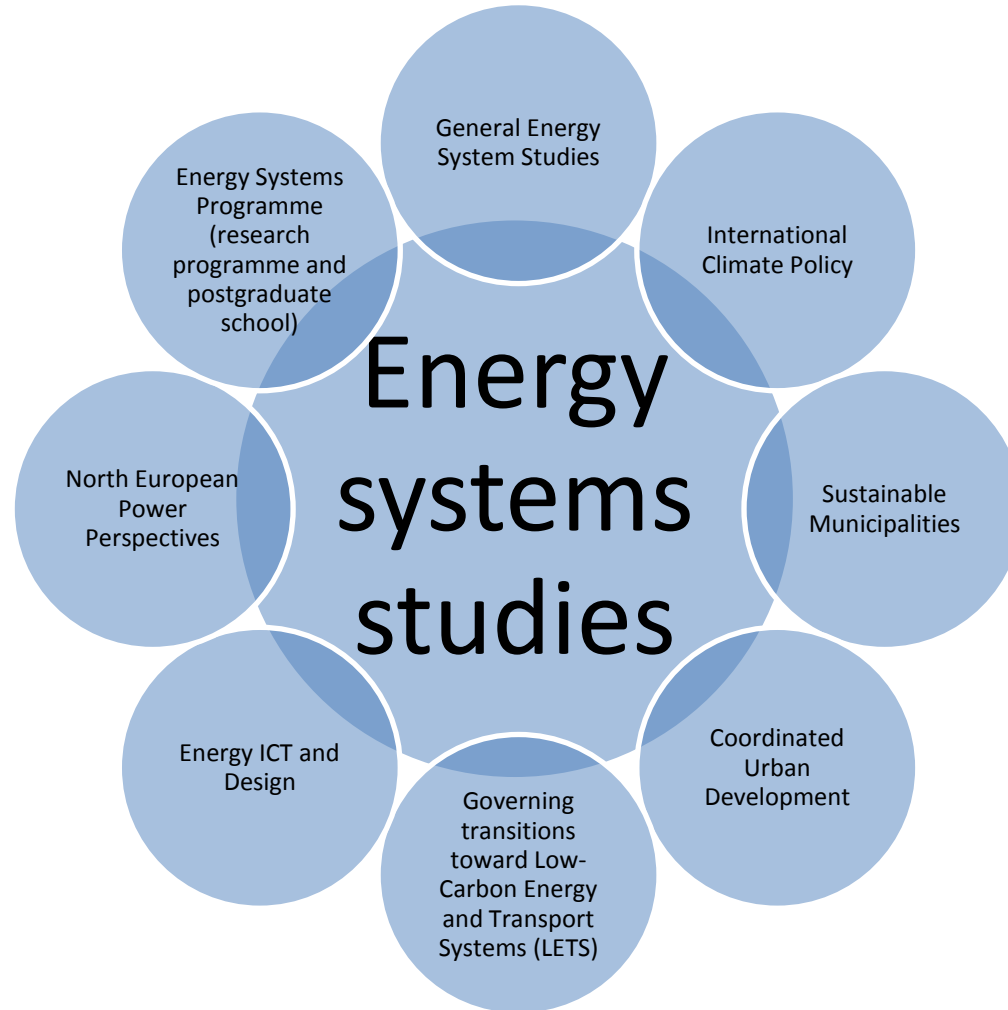
# The winter biker . A campaign to promote completely new habits, hitherto almost unknown



# The core problem?

- *"...energy efficiency advice was often so general that households had difficulties relating to it. They could not grasp what it would actually mean for their energy consumption if they implemented such advice. That is why it was only when such advice was combined, for example, with the installation of a meter that measured the actual reduction in energy use, that households realized the practical implications of, for example, advice to turn off the lights systematically"*
- **Jenny Palm (2011)** "Energy efficiency in households : policy, implementation and everyday activities" p. 35, Nova Science Publishers

# Energy systems studies is one of six thematic areas of R & D



# Energy System Studies - examples of research initiatives

## *Energy Systems Programme*

- An interdisciplinary research school
- develop new knowledge that enables long-term growth in the direction of sustainable and resource-efficient energy systems.
- Technical knowledge must be combined with social science insights into the environment in which the technology is being incorporated.
- The Energy Systems Programme celebrated its 15 year anniversary last year.
- So far, 55 PhD theses published.

## *General Energy System Studies (GESS)*

- A research programme: focus on research projects that attempt to explain how the energy system works and how it impacts on and is affected by people, technology, economics and the environment.
- Research on energy policy and energy-policy control instruments, especially the cost-efficiency and appropriateness of the control instruments.
- Research on the energy markets and the operators on the energy markets, and the changes in technology.

# Example on how to promote energy efficiency among school children and teachers

- Energy efficiency behaviour among teachers and pupils in Helsingborg.
- 3500 pupils and their teachers are involved!

(supported by the Swedish Energy Agency)



# Swedish policy mix

**Table 1** Main groups of policy instruments with some examples

Administrative	Economic	Information	Research
Regulations	Taxes	Information	Research
Limit values (emissions)	Subsidies, grants	Advisory services	Development
Long-term agreements	Emissions trading scheme	Training	Commercialization
Environmental classification	Certificate trading		Procurement
Requirements for types of fuel and energy efficiency	Sureties		Demonstration

(Energy in Sweden: 2011)





**Gathering of municipal and regional climate and energy advisors 2011. There are appr. 300 such advisors active around Sweden providing people and businesses with neutral and objective information on i.a. energy efficiency.**



# Examples of networks to support energy efficiency

## ***BEBO and BELOK***

- Networks to support energy efficiency projects in cooperation with actors in the building sector.

## ***The Sustainable Municipality***

- The Swedish Energy Agency's programme for a Sustainable Municipality is cooperation between the Agency and some of the country's municipalities.



## **Ringdansen, Norrköping.**

**This suburb with an unfavourable reputation was thoroughly renovated in 1999-2003. It is now known for energy efficiency with e.g. rents based on individual metering. The social structure of residents remains broadly the same as before. So called climate hosts give advice to the residents on environmental issues.**

# Congestion Charge

- Sweden introduced a congestion charge levied on most vehicles entering and exiting central Stockholm since 2007 and a congestion charge will be introduced in Gothenburg starting 1 January 2013.
- Exemptions to this pricing system applied until 1 August 2012 to vehicles run completely or partly on electricity or a gas other than liquefied petroleum gas (LPG), or on a fuel blend that predominantly comprises alcohol.

# Kids walk to school...

*Remember when children walked and rode bicycles everywhere: to school, their friends' houses, the park, or the store?*

*And parents seldom feared for their safety?*





# A part of the solution?

- *"The reluctance of homeowners and other types of residents to spend money on energy-saving measures, even though they are profitable, can be explained in terms of the lost symbol capital, i.e., that the investment is invisible to friends and neighbors./.../Energy-savings measures that can be marketed as luxury items are more likely to be implemented."*
- **Jenny Palm (2011)** "Energy efficiency in households : policy, implementation and everyday activities" p. 35, Nova Science Publishers