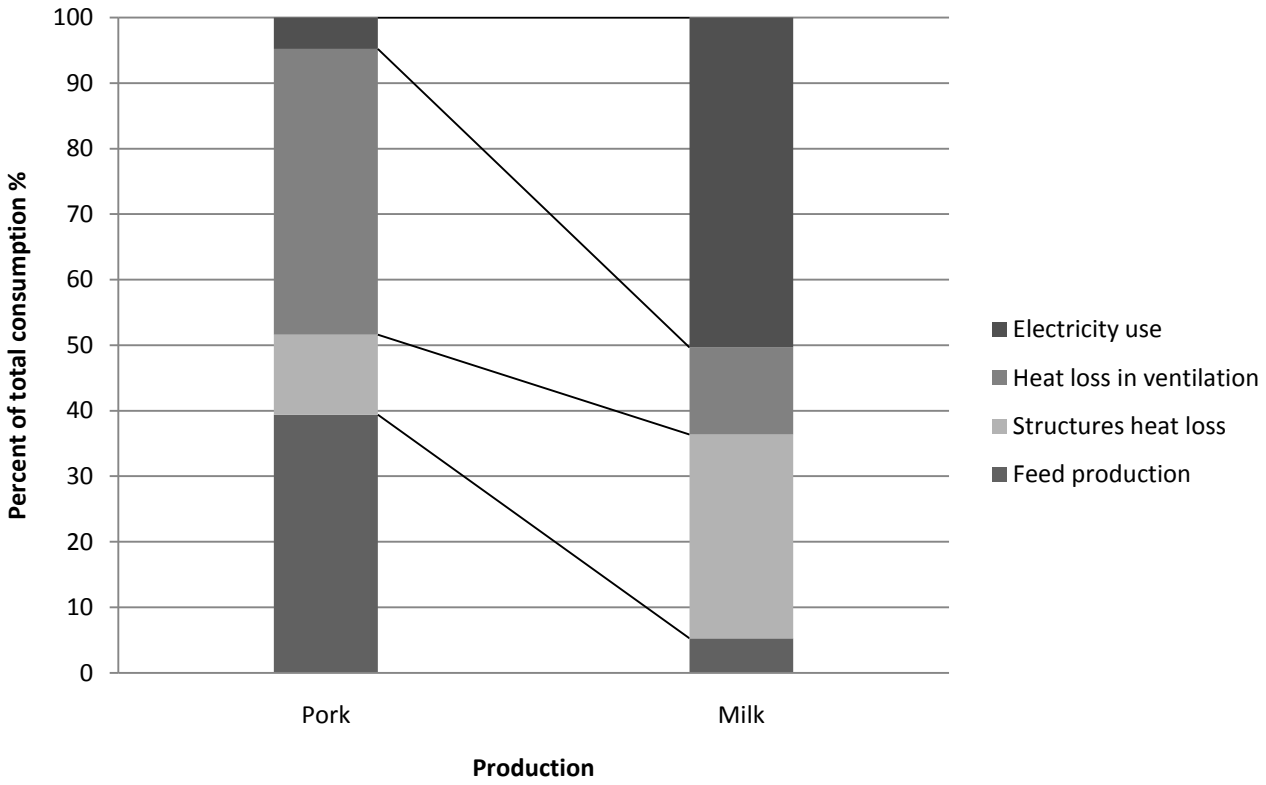
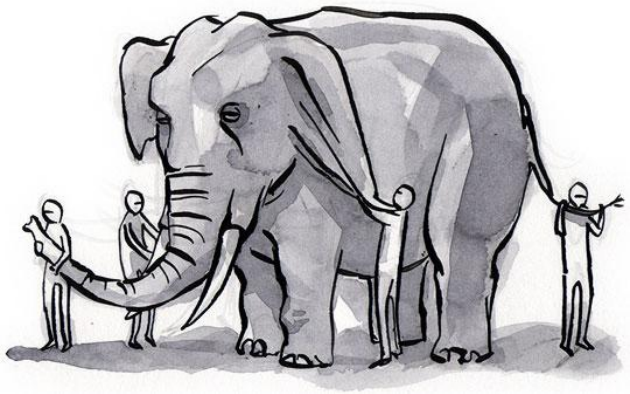
Energy saving strategies and possibilities

Energy consumption



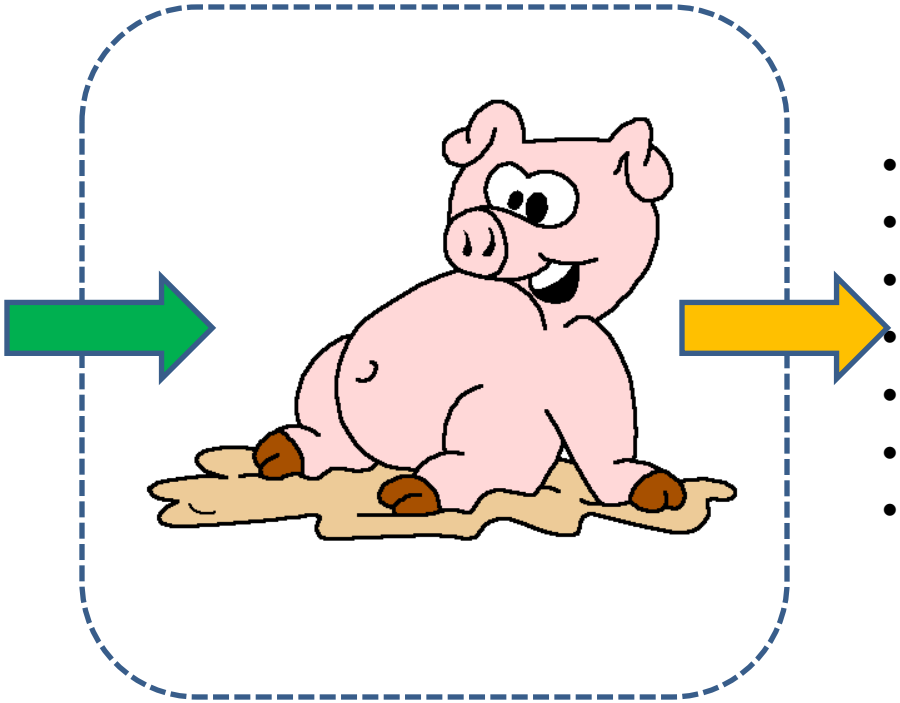
Strategy

- We should concentrate on largest parts first
- First energy consumption figures are availble after 1,5 years
  - With these figures we can compare the farms together and with figure found from literature
  - We should then concentrate on large consumption figures
- The farmer is mostly interested in economical improvements!
- We are interested in energy efficiency and emissions!



Energy use

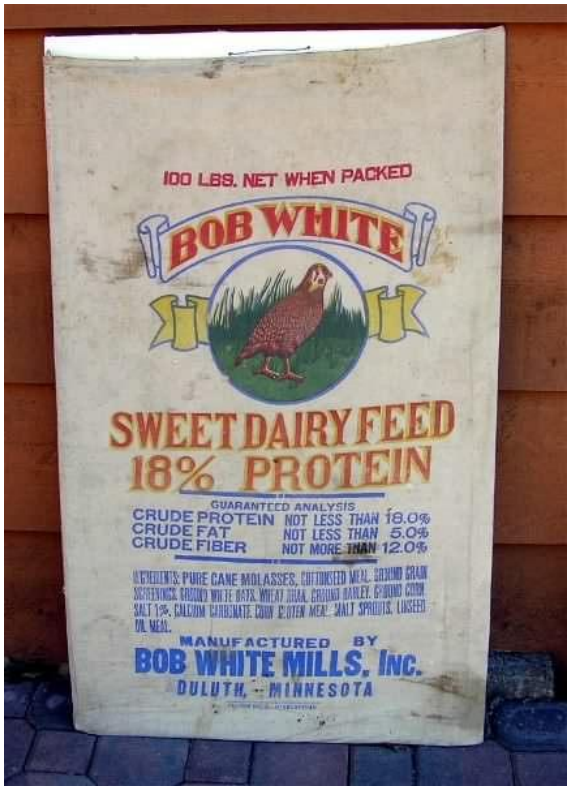
- Feed
- Water
- Concentrates
- Shelter
  - Heat
- Care
  - Ventilation
  - Illumination



- Meat
- Fat
- Bones
- Skin
- Manure
- Heat
- Water

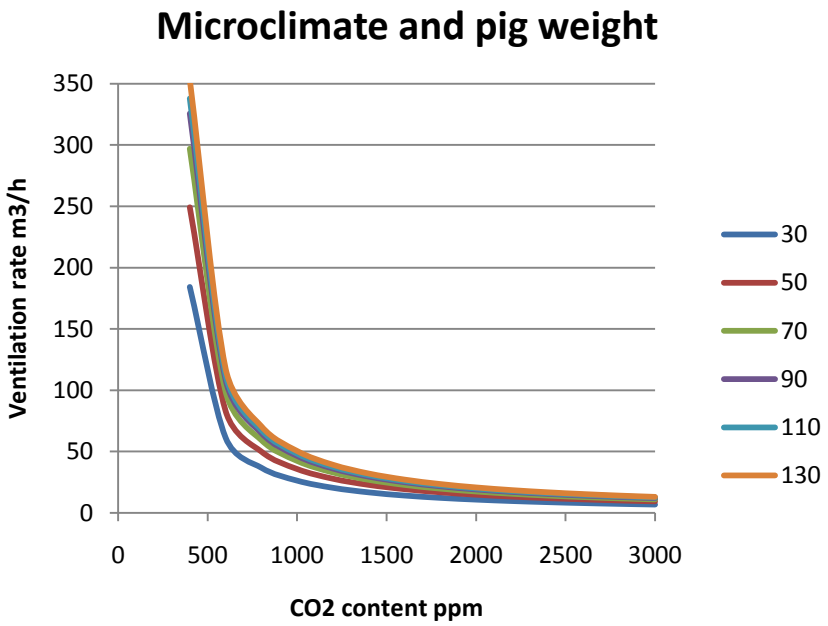
Feed

- Feed material is in many cases mostly produced on own farm
- Plant production methods are suitable for this
  - Fertilizers
  - Drying
  - Working methods
- For concentrates only the amount and then feeding strategies can be analyzed



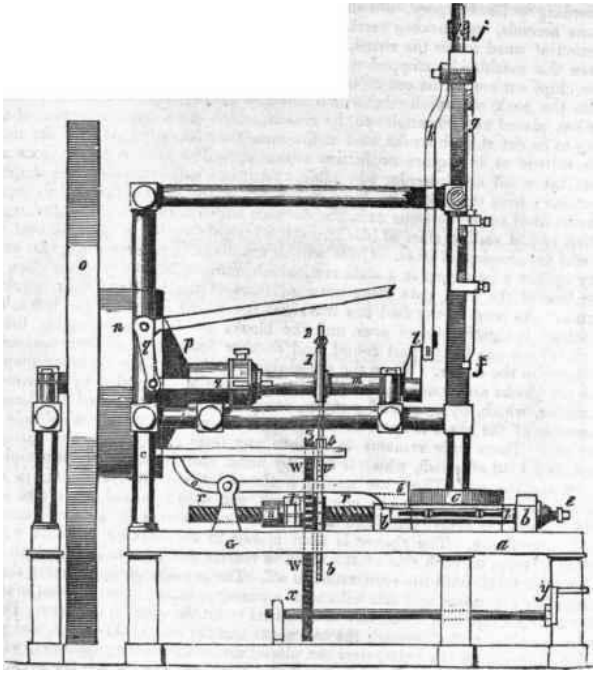
Buildings

- Good insulation
- Controlled ventilation
  - good microclimate with minimum losses
- Heat control and recovery



Machinery etc

- Reasons for high machinery energy consumption should be clarified
- Illumination timing could be improved
- Water and especially hot water usage could be improved



This material has been produced in ENPOS project. ENPOS is acronym for ***Energy Positive Farm***.

The project partners are
• University of Helsinki, department of Agricultural Sciences – Agrotechnology
• MTT Agrifood Research Finland - Agricultural Engineering
• Estonian University of Life Sciences

Project home page is at http://enpos.weebly.com/

The project is financed by the EU Central Baltic IV A Programme 2007-2013

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