First things first
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How we identified the affected processes in LCAfood, and why it is important
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• Background
• Methodology
• Example: cheese
• Conclusions
Background
Two debates 5 years ago:

1. Average data – which average?

2. How to deal with multiple output?

=> New approach: market-based LCA
Methodology
Key-questions to identify affected processes

• Is the supplying market increasing or decreasing, and are any of the supplying technologies constrained?

• Which technology is most likely to be affected by a small change in demand?
Example: cheese
The production of cheese

Cheese production

milk

cream

whey
Physical flow of milk in the dairy

- Agriculture
  - Dairies
    - Drinking milk
    - Cheese
    - Youghurt etc.
    - Milk powder
The process affected by demand for milk?

Quotas

Agriculture

Dairies

Decreased production of drinking milk ??

Increased production of cheese

Decreased production of youghurt etc. ??

Decreased production of milk powder ??
The process affected by demand for milk!

Agriculture

Dairies

Quotas

Increased production of cheese

Decreased production of milk powder!
Processes affected by consumption of cheese

- Cheese production
  - milk
    - Milk powder production
  - cream
    - Butter production
    - Whey powder production
      - Animal feed
        - Cultivation of grain
Cheese or ham on your sandwich?

Global warming potential (kg CO2-eqv.)

- Cheese, present market
- Ham
- Cheese, no quotas

Comparative bar chart showing the global warming potential of cheese and ham.
Conclusions
Green consumers

• Eat cheese & drop the ham

• Until the quota system is stopped
• Market-based system-delimitation
  - reflects actual change
  - possible
  - info about markets necessary
  - higher explanatory power
  - can change conclusions
Read more at
www.lcafood.dk