LCA Forum, Lausanne, Switzerland
June 21st 2011

Secondary databases on agri-food products

Finding the optimum level of detail

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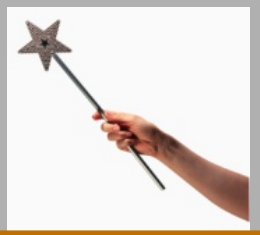
carbonostics
cost + carbon + nutrition

Research agri-food LCA

1.135678
(kg CO_2e/kg)

Agri-food business LCA



Magic numbers

~ 1
(kg CO_2e/kg)

- Appropriate level of detail
- Non-expert use
- Massive use (product labeling, etc)

Objective

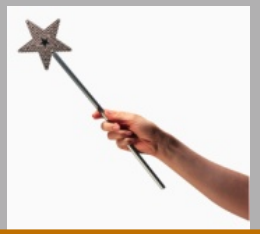
carbonostics
cost + carbon + nutrition

Developed by: bluehorseassociates
metrics for sustainable business

Statistical analysis of the Carbonostics database

- 1,500 pre-recorded final LCIA results for CO_2e emissions
- ADEME, CleanMetrics, CLM, the Danish LCA Food Database, DEFRA, ecoinvent, ESU, etc
- Peer-reviewed and validated by Thomas Kagi at the Swiss NGO MyClimate

Agri-food business LCA



Magic numbers

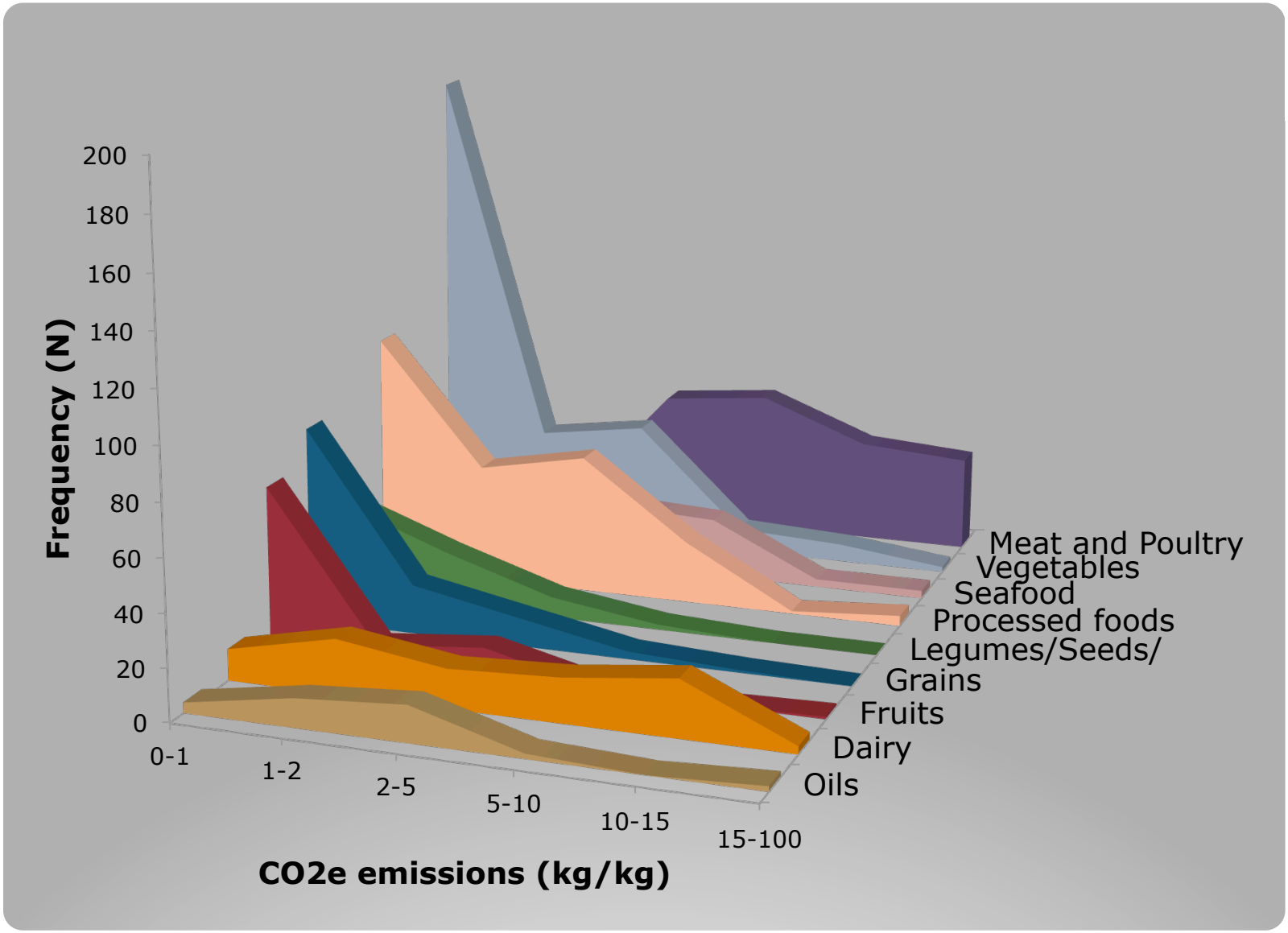
~ 1
(kg CO_2e/kg)

To find them we need:

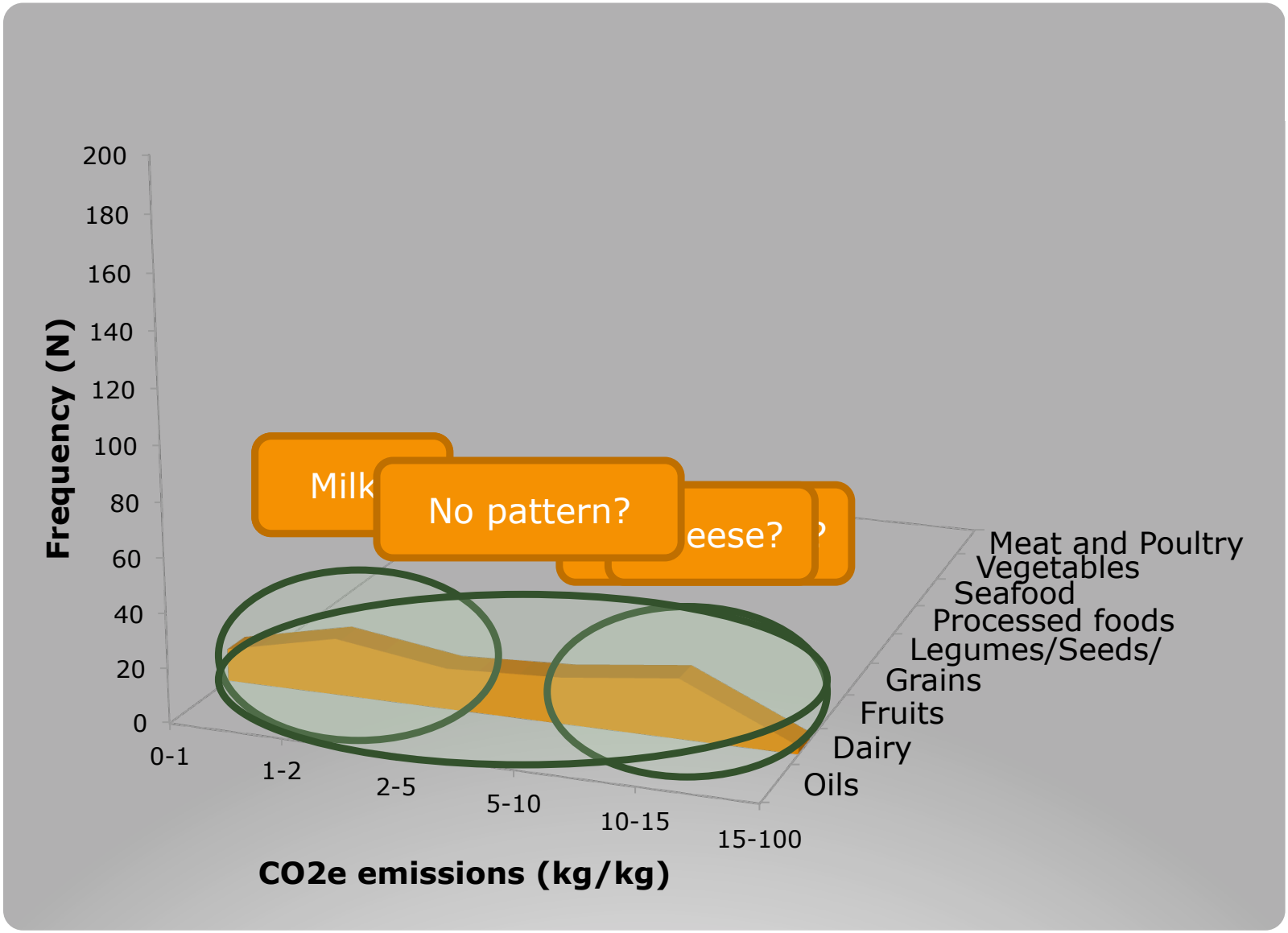
- Large enough database
- Many representative sources

$N \nearrow \Rightarrow \varepsilon \searrow$

Objective

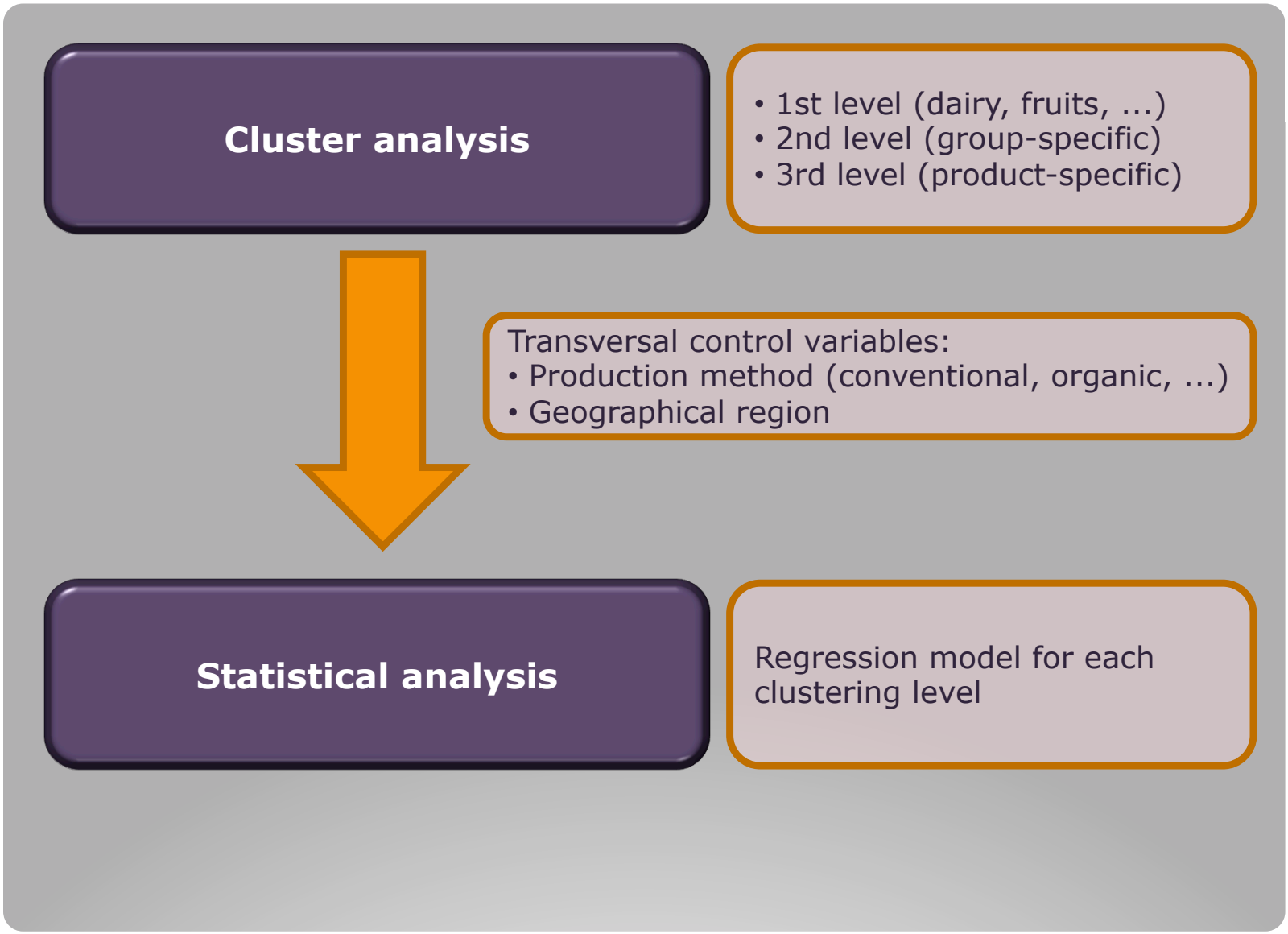


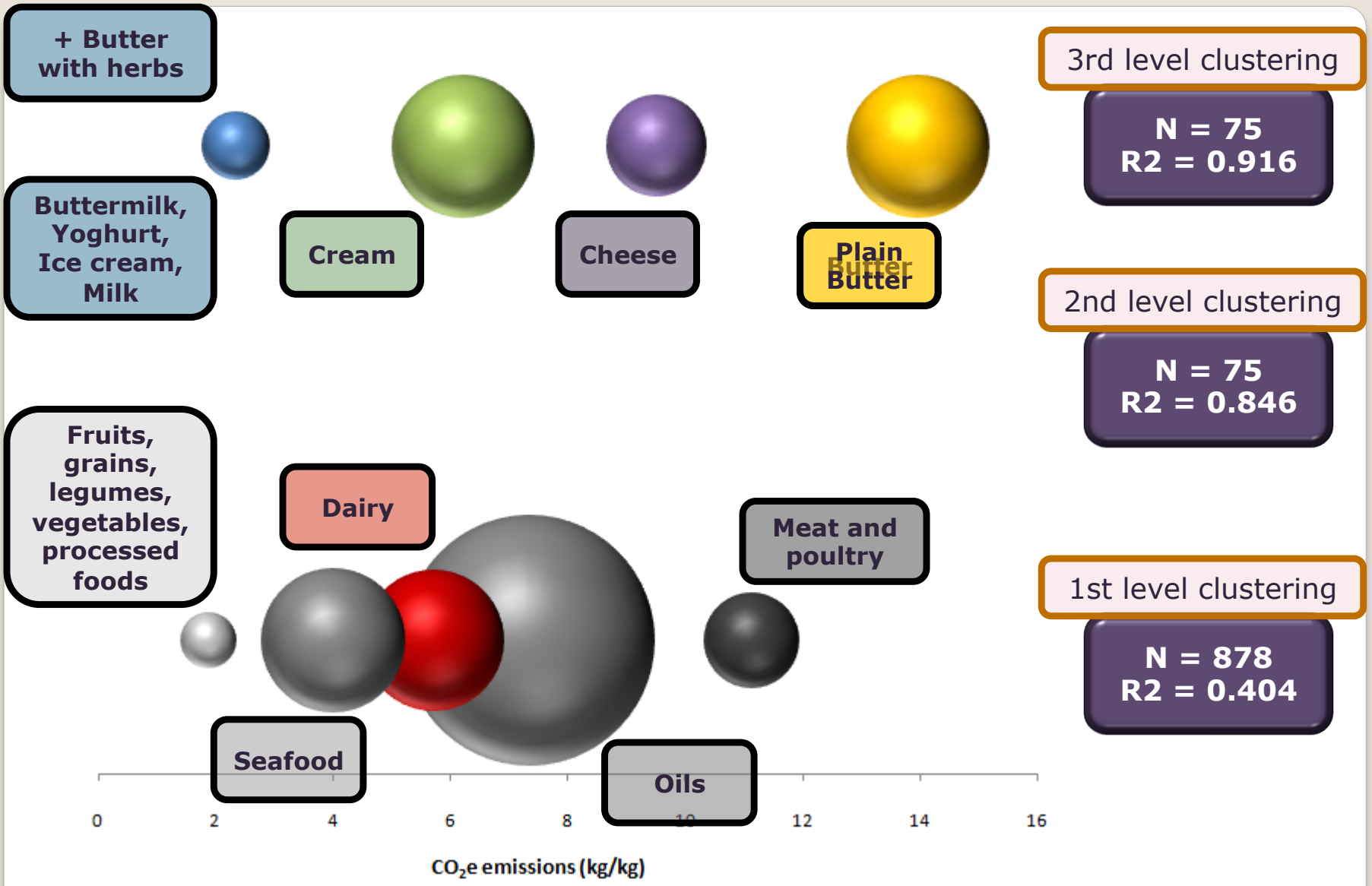
Available data



Breaking down the impacts

Methodology





Results (conventional, Europe)

- Even though the agricultural stage is particularly hard to grasp in just one number per variant, there is significant clustering for most crops
- There is enough adequate data to find reliable representative averages for most product types (and thus for product category).

Conclusions

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Thank you!

Questions? Comments? Let's chat!

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