

ONE TWO WE

A programme for environmentally friendly
canteen meals

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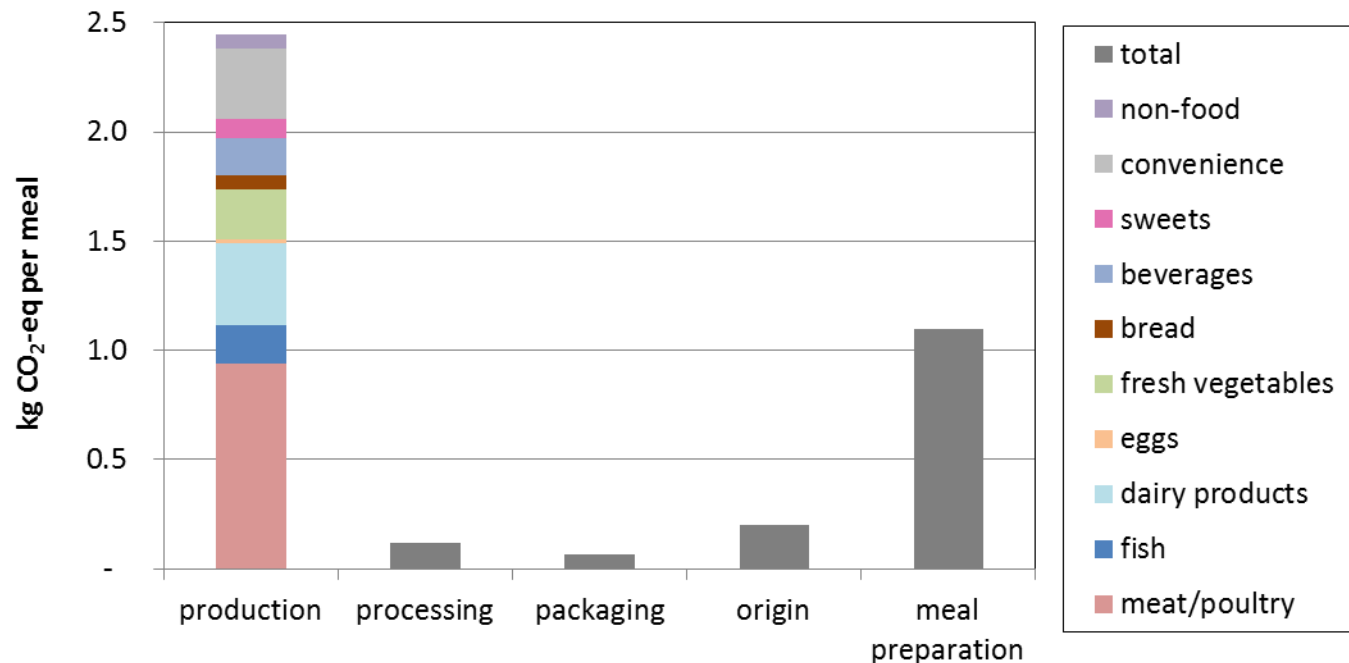


6th international conference on Life Cycle Management
Gothenburg, August 2013

LCA of meal preparation in canteens

Inventory of all food purchases worth more than 150 Mio. CHF

GWP of all food purchases by Swiss canteen operator SV Group



- Production of food much more important than preparation
- Animal products dominate the results

Improvement Options: Season calendar

kg CO2-eq per kg good		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Broccoli	CH-Lorry	n.a.	n.a.	n.a.	n.a.	0.6	0.6	0.6	0.6	0.6	0.6	0.6	n.a.
	ES-Lorry	7.2	7.2	0.9	0.9	0.9	n.a.	n.a.	n.a.	n.a.	n.a.	0.9	7.2
	IT-Lorry	7.1	7.1	0.7	0.7	0.7	n.a.	n.a.	n.a.	n.a.	n.a.	0.7	7.1
Broccoli deep frozen	CH-Lorry	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Green asparagus	CH-Lorry	n.a.	n.a.	n.a.	1.5	1.5	1.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	ES-Lorry	n.a.	n.a.	n.a.	1.7	1.7	1.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	PE-Air	12.8	12.8	n.a.	n.a.	n.a.	n.a.	12.8	12.8	12.8	12.8	12.8	12.8
	US-Flug	n.a.	9.7	9.7	9.7	9.7	9.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Assessment of global warming potential

Season calendar to assess monthly routes

Main difference: heating greenhouse and air freight

➤ Several measures for reducing the carbon footprint

Congratulations to our customer SV Group winning the Zurich climate prize 2013

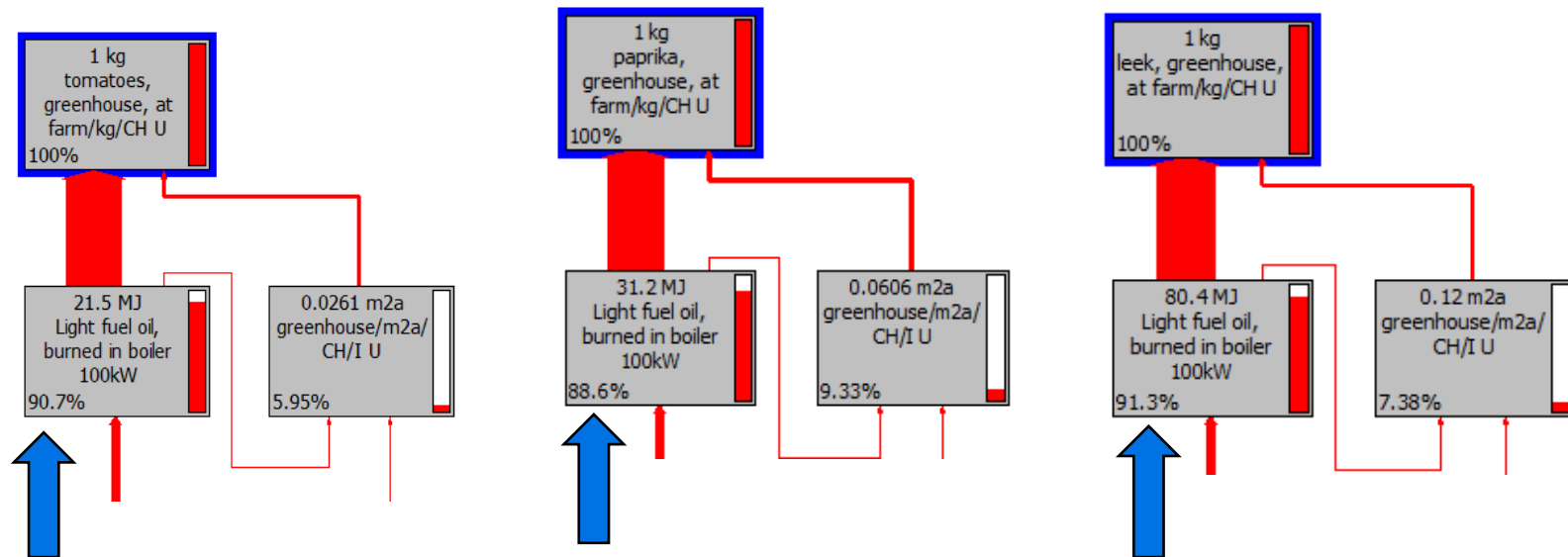
Further information at our poster or:

<http://www.esu-services.ch/projects/lcafood/onetwowe/>

Thank you very much for
your attention

Cultivation in heated greenhouses

State of the art



Average 90% of GHG emissions

Heating modelled with light fuel oil

Independent from product cultivated and region

Cultivation in heated greenhouses

Knowledge gap - Improvement

Fuel use?

➔ Questionnaire to producers, statistics

Heating energy requirement?

➔ Estimate heating energy requirement

- sowing period
- growing period,
- minimal temperature
- yield

