

The *ecological footprint* of your breakfast

At the request of *Green Capital*, the University of Sydney's Integrated Sustainability Analysis (ISA) Group has calculated the "footprint" of the food in your breakfast*. So whilst you are happily tucking into:

Freshly Squeezed Orange Juice
Freshly Sliced Seasonal Fruit Platter
Bakery Basket of Croissants and Danish Pastries
Selection of Muffins, Preserves and Butter
Grilled Sourdough, Scrambled Farm Eggs, Prosciutto & Caramelised Onion
Coffee/Tea and Herbal Infusions

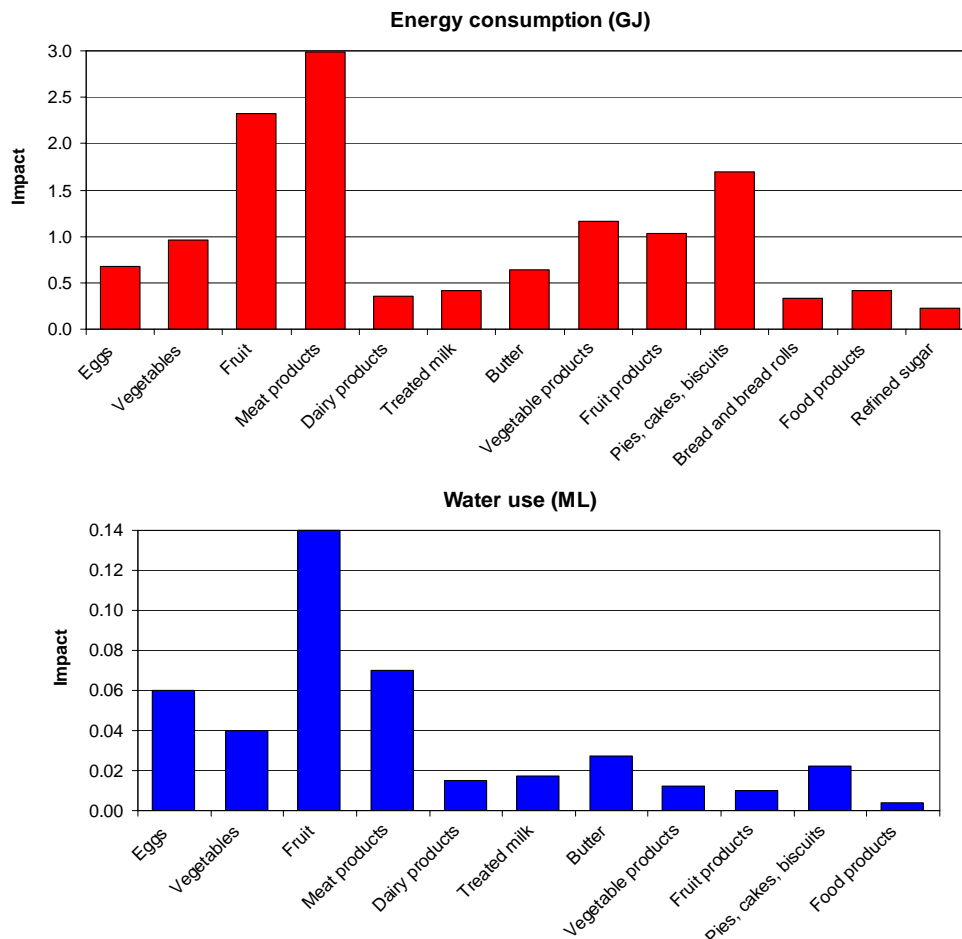
consider these overall impacts

13 GJ of primary energy consumed
 420 000 litres of water use
 4.5 tonnes of CO₂-e GHG emissions

leading to an ecological footprint of

4.2 hectares, or 6 football fields.

What are the main sources of these impacts?



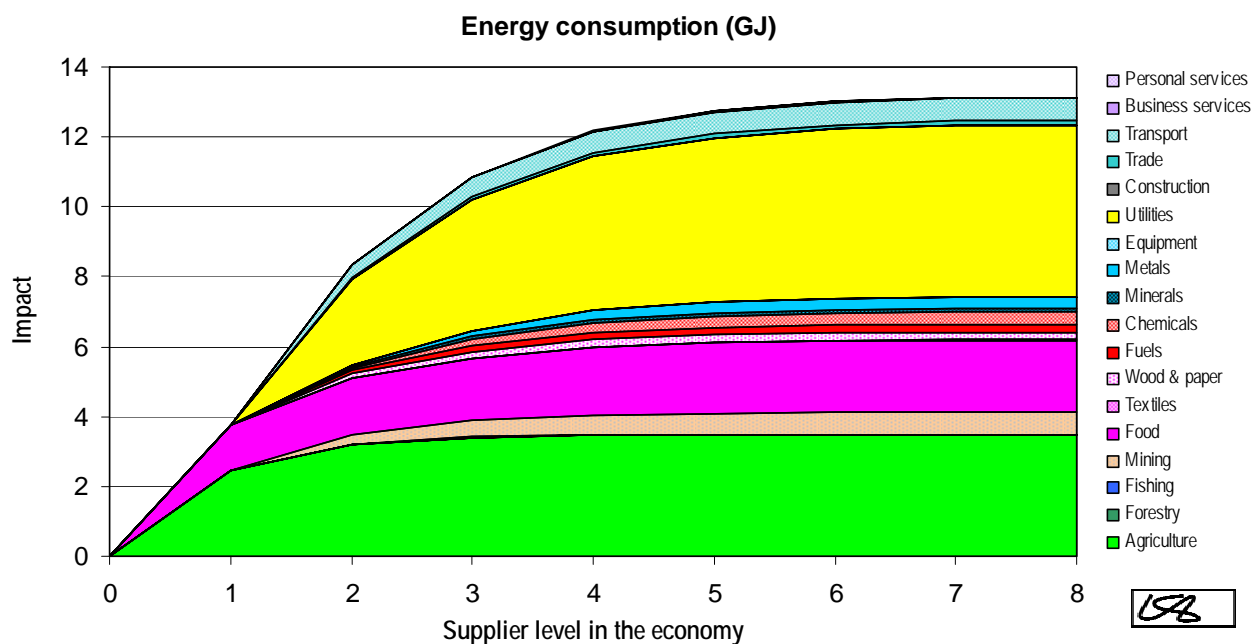
The prominence of the prosciutto!!

As the two charts on the previous page show, the sources of impacts in the energy and water use indicators are quite varied. However, for the other two indicators:

meat products comprise 65% of greenhouse gas emissions, and 86% of the total ecological footprint.

The food supply chain is long and complex

As an example, the graph below shows a further breakdown of the energy required to produce the food, but this time it reveals the upstream impacts in the full supply chain.



About ISA at the University of Sydney

We conduct leading-edge research and develop applications for environmental and broader sustainability issues, bringing together expertise in environmental science, economics, technology, and social science. The framework used to analyse the food impacts presented here was also the basis of the landmark report *Balancing Act: a triple bottom line analysis of the Australian economy* (in collaboration with CSIRO).

The same framework can be used to calculate comprehensive triple bottom line impacts of organisations, products and projects. This capability is about to be released commercially as **BottomLine³** by our software partner Dipolar Pty Ltd in May 2006.

For further information

Dr Christopher Dey (ph 02 9351 5979)

c.dey@physics.usyd.edu.au

Dr Manfred Lenzen (ph 02 9351 5985)

m.lenzen@physics.usyd.edu.au

ISA, School of Physics, A28, The University of Sydney NSW 2006

ISA's TBL & sustainability reporting software

www.bottomline3.com

* **Assumptions:** full chain impacts are calculated for Australian production of the food only (amounts are estimated by the hotel chef for 250 guests). Additional impacts would occur due to preparation, cooking, serving etc.

