

SUGAR

Developing city priorities with regard to the carbon footprints of goods

*Simon Hayes, Barcelona
Brussels, 5th May*

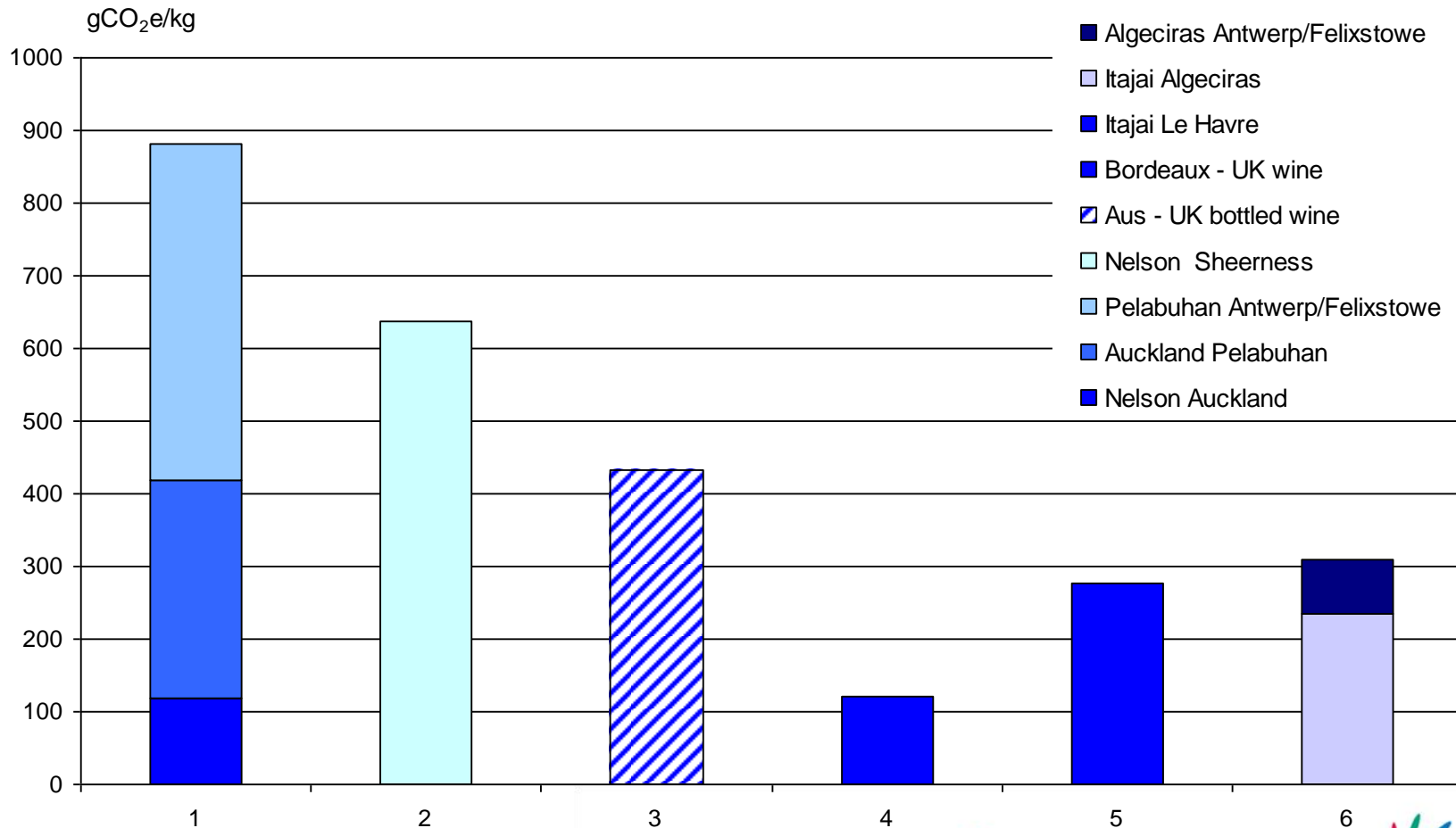
The TtT session **FEEDBACK** form

Please complete this form by the end of today,

& hand it to Isabel Moretó / Simon Hayes

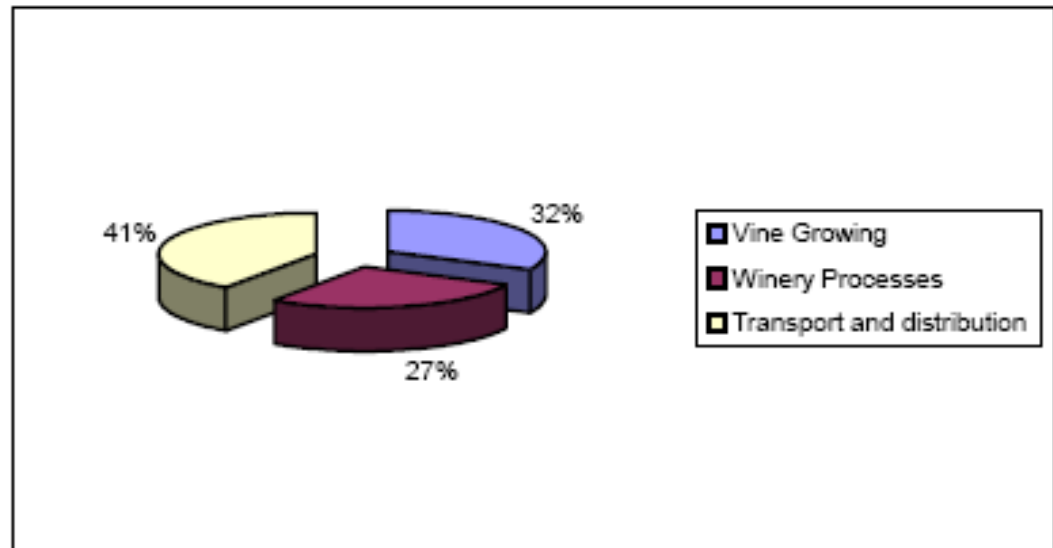
We'll ask you for it tomorrow... THANKS!

Apples, bottled wine & furniture



Other bottled wine case studies: CIRCE/Zara (I)

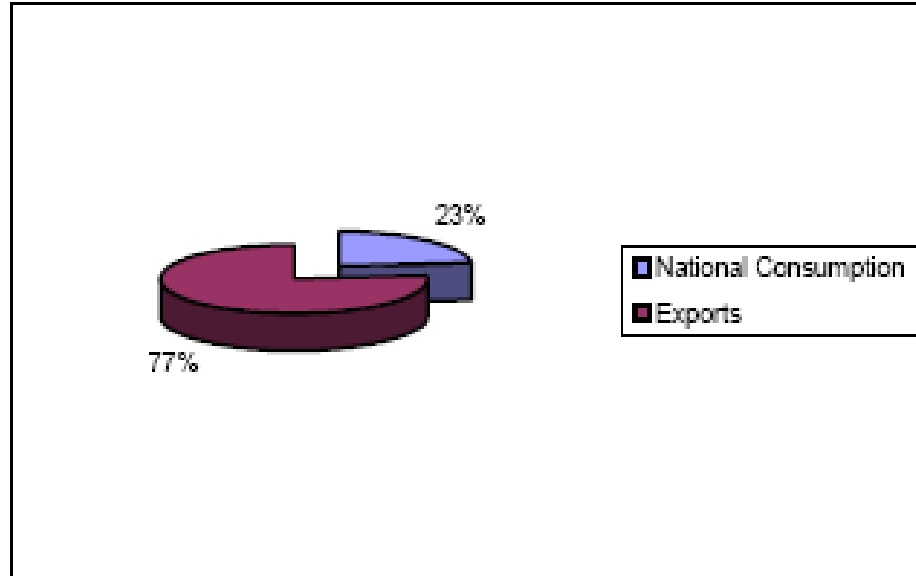
LCA (Life Cycle Assessment) studies of wine production and distribution^[1] indicate that the transportation stage is most critical (more than the winery process) when making efforts to optimise resources & impacts.



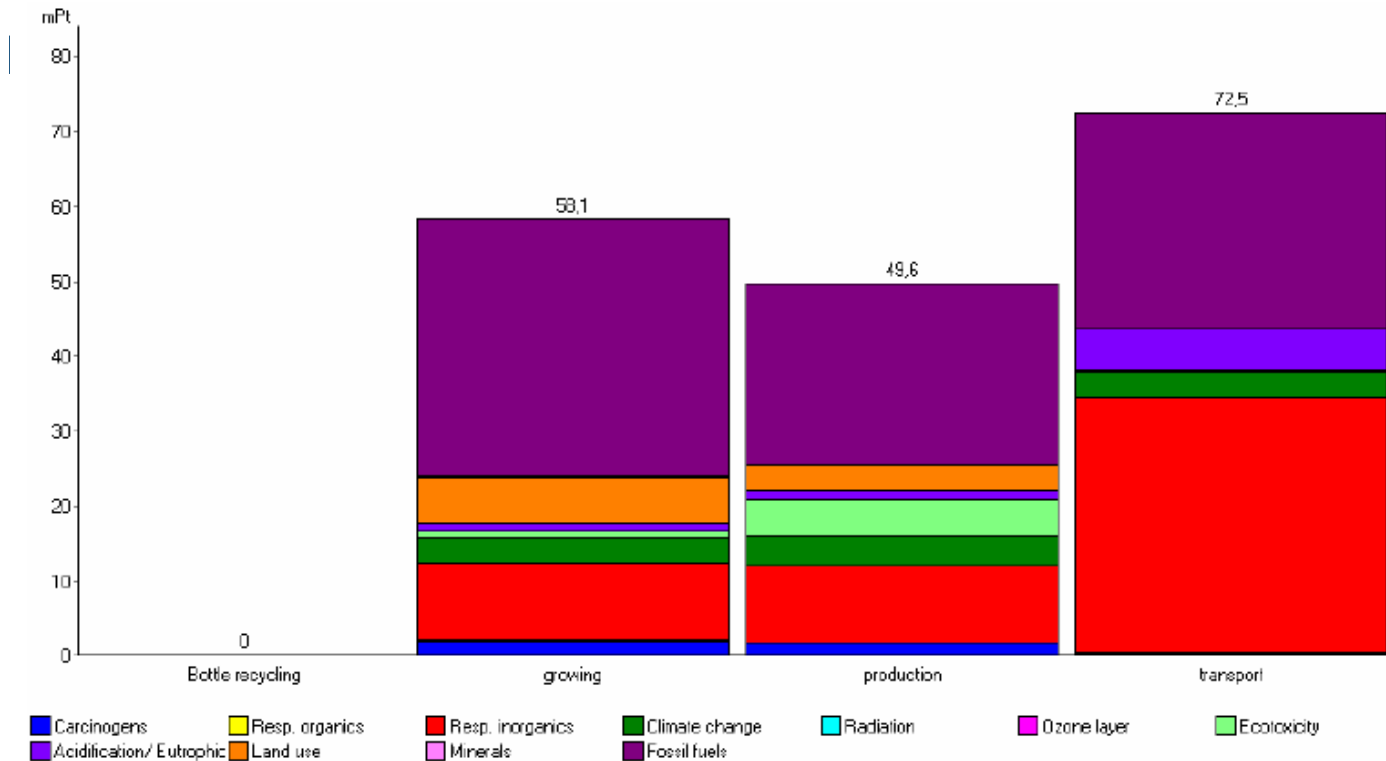
Aranda, A. et al. "Economic & Environmental Analysis of the Wine Bottle Production in Spain by means of Life Cycle Assessment", CIRCE Foundation / University of Zarazoga.

Other case studies: CIRCE/Zara (II)

- Case of Spanish product with 68% national consumption & **32% export** (mainly EU by road, undisclosed % to Americas by sea)
- Exports **generate 77%** of overall environmental impact



Other case studies: CIRCE/Zara (III)



LCA helps identify goods with transport-based impact, points to options for overall impact optimization

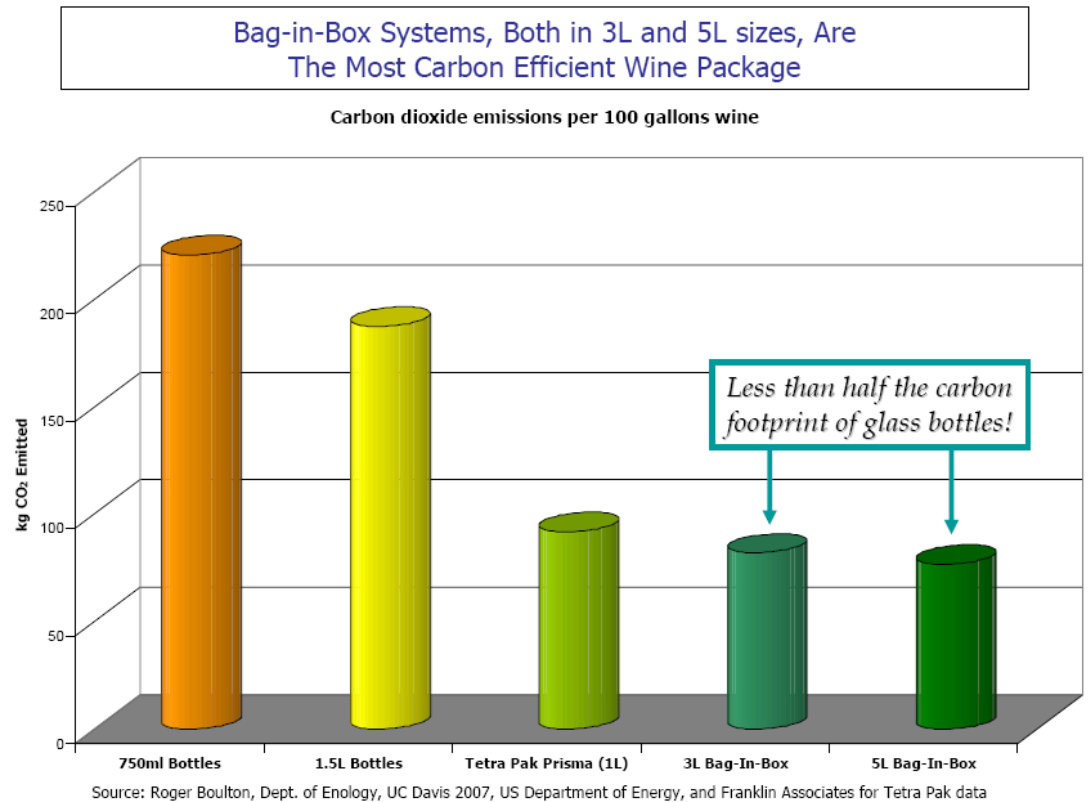
<http://www.betterwinesbetterworld.com/>

Californian wine -> NY

comparing bottle v. box







55% less carbon emission

85% less landfill.



Wine distribution carbon impacts by city (I)

http://en.wikipedia.org/wiki/List_of_countries_by_alcohol_consumption

			City Population 15+	Consumption l / mth	equivalent n° of 75cl bottles / mth	carbon rate EU import gCO2/kg	carbon rate import from beyond EU
 country	 total	 wine					
 Paris, France	13.66	8.14	1,878,882	1.274.508	1.699.344	90	433
 London, United Kingdom	13.37	3.53	5,806,714	1.708.142	2.277.523	120	433
 Barcelona, Spain	11.62	3.59	1,433,207	428.767	571.689	60	433

Population data:


- <http://www.statistics.gov.uk/census2001/pyramids/pages/h.asp>
- <http://w3.bcn.es/V01/Serveis/Noticies/V01NoticiesLlistatNoticiesCtl/>
- http://www.cartesfrance.fr/carte-france-ville/population_75056_Paris.html

Carbon rates inspired by estimates from Oakdene Hollins case study

Wine distribution carbon impacts by city (II)

London shares – Oakdene Hollins presentation

Paris & Barcelona: guesstimates

	50% EU market share	60% EU market share	70% EU market share	80% EU market share	90% EU market share
 City	tons per mth	tons per mth	tons per mth	tons per mth	tons per mth
Paris, France				269.516	211.228
London, United Kingdom	629.735	558.449	487.162	415.876	344.589
Barcelona, Spain				76.949	55.625

London's wine carbon print might be >2x that of CITY of Paris, 8x that of CITY of Barcelona

current estimate for 3 cities

976.200

possible impact of local wine promotion

754.016

22,76%

What (heavy) goods come from / go far beyond your city?

Choose three...

- Are any of them common to other cities?
 - » What are their main LCA impacts?
 - What strategies might best reduce carbon impacts?