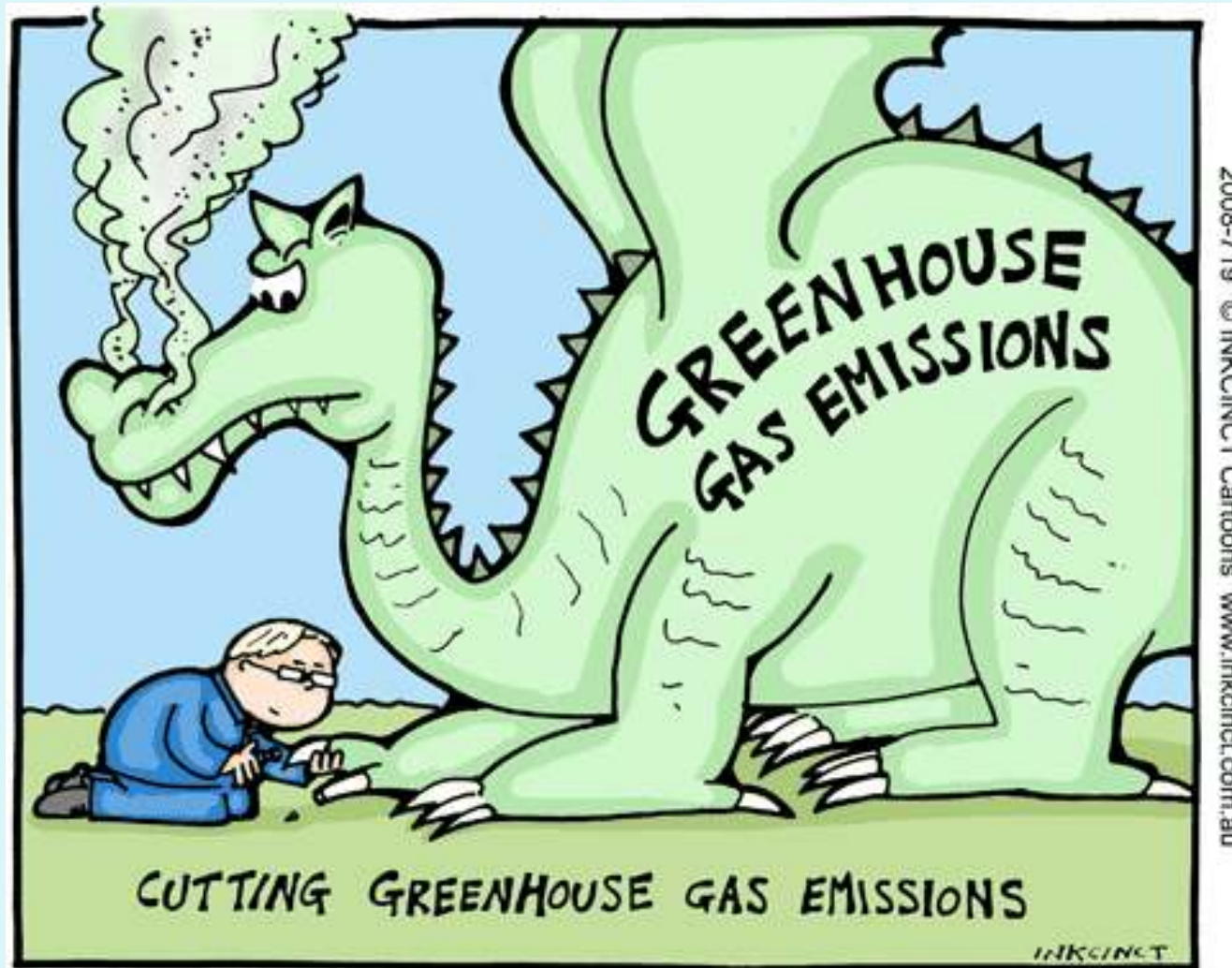




CARBON MANAGEMENT

IN LOBSTER FISHERIES

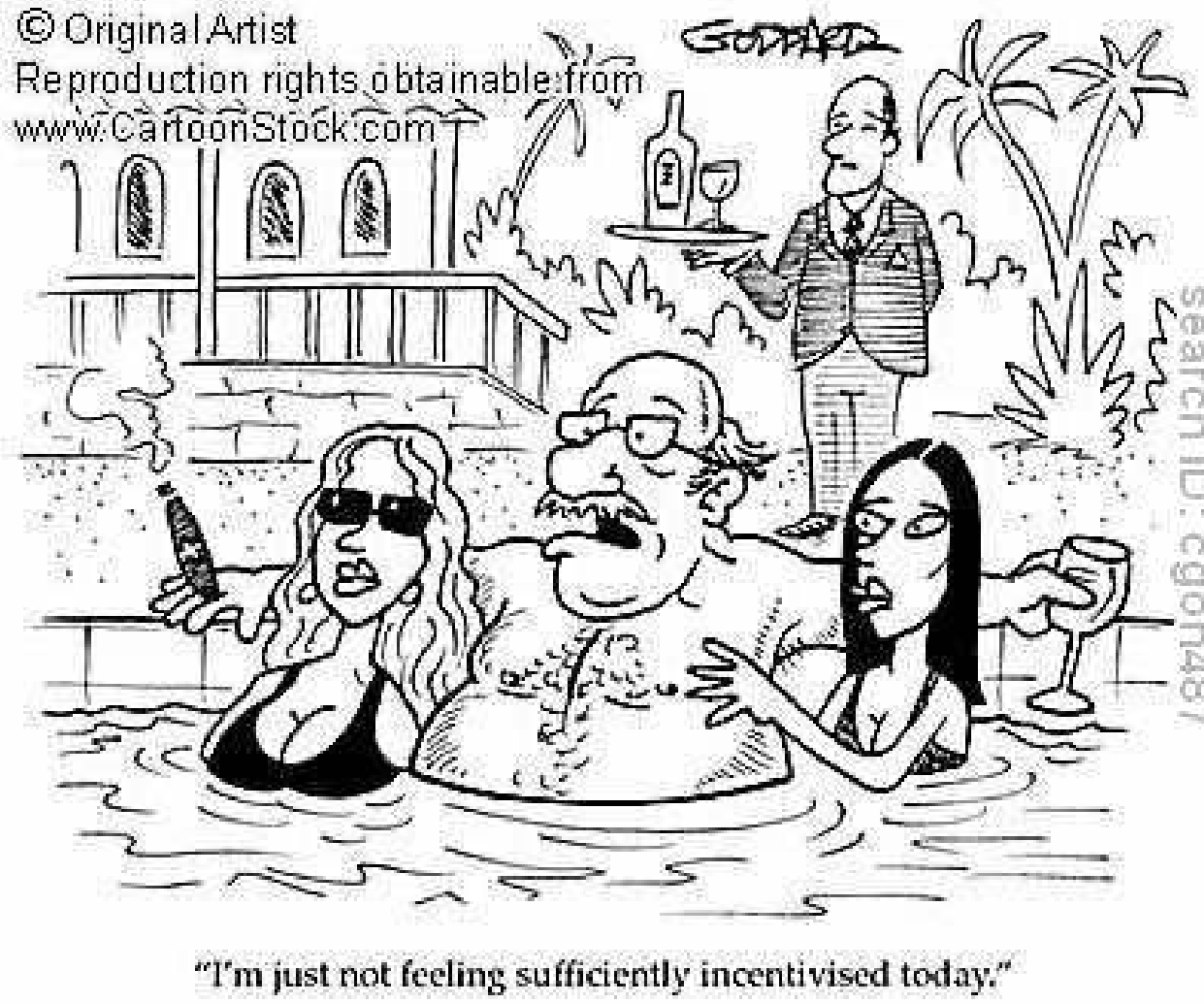
Does Carbon Management matter?



Impacts on lobster fisheries?

- Emissions trading scheme will put a 'price' on carbon emissions – through fuel costs
- Think of the consumer! Consumer response likely to be a bigger factor than ETS issues
- Consumer response will be dependent on whether rock lobster is seen as a 'commodity' or a 'luxury good' in the market
- Therefore, carbon emissions is NOT just a cost issue - impact is likely BOTH on costs AND prices!

LOBSTERS? A LUXURY FOOD?



Rock lobster has many of the attributes of a 'luxury good'

Various research has shown rock lobster:

- 'Special occasion' purchase, not a staple
- Seen as a 'status' good - luxury good demand is more influenced by perceptions of exclusivity, brand image...and social issues
- Lobster consumers are generally in the highest income levels
- Most consumption is in restaurants etc and not in the home
- China is fastest growing luxury goods market. 1% of global sales in 2000, 12% in 2005, 29% in 2015
- Already promoted as luxury good (e.g. southern RL)

CONSUMER ETHICS & CARBON

© Original Artist
Reproduction rights obtainable from
www.CartoonStock.com



"Happy birthday, dear —
it's a carbon offset!"

Downside of being a 'luxury good'

- More concern about 'social' and ethical issues such as sustainability and carbon footprint in purchasing decision (e.g. up-market 'whole-food' stores in US)
- Market for 'environmentally friendly' luxury goods is increasing rapidly, and is currently over \$500 billion
- Increased labelling requirements to satisfy need for consumer information
- Most importantly – better linkage needed between producer and end consumer to provide information

Carbon Emissions in Lobster fisheries

- ‘Carbon’ emissions is a shorthand notation for a range of greenhouse gas emissions that contribute to global warming
- For example, methane is 25 times more potent as a greenhouse gas than carbon dioxide so 40Kg of methane is counted as ‘1 ton of carbon emissions’
- Currently not measured in RL fishery
- However, studies in other fisheries show that most (75-90%) of carbon emissions comes from fuel usage

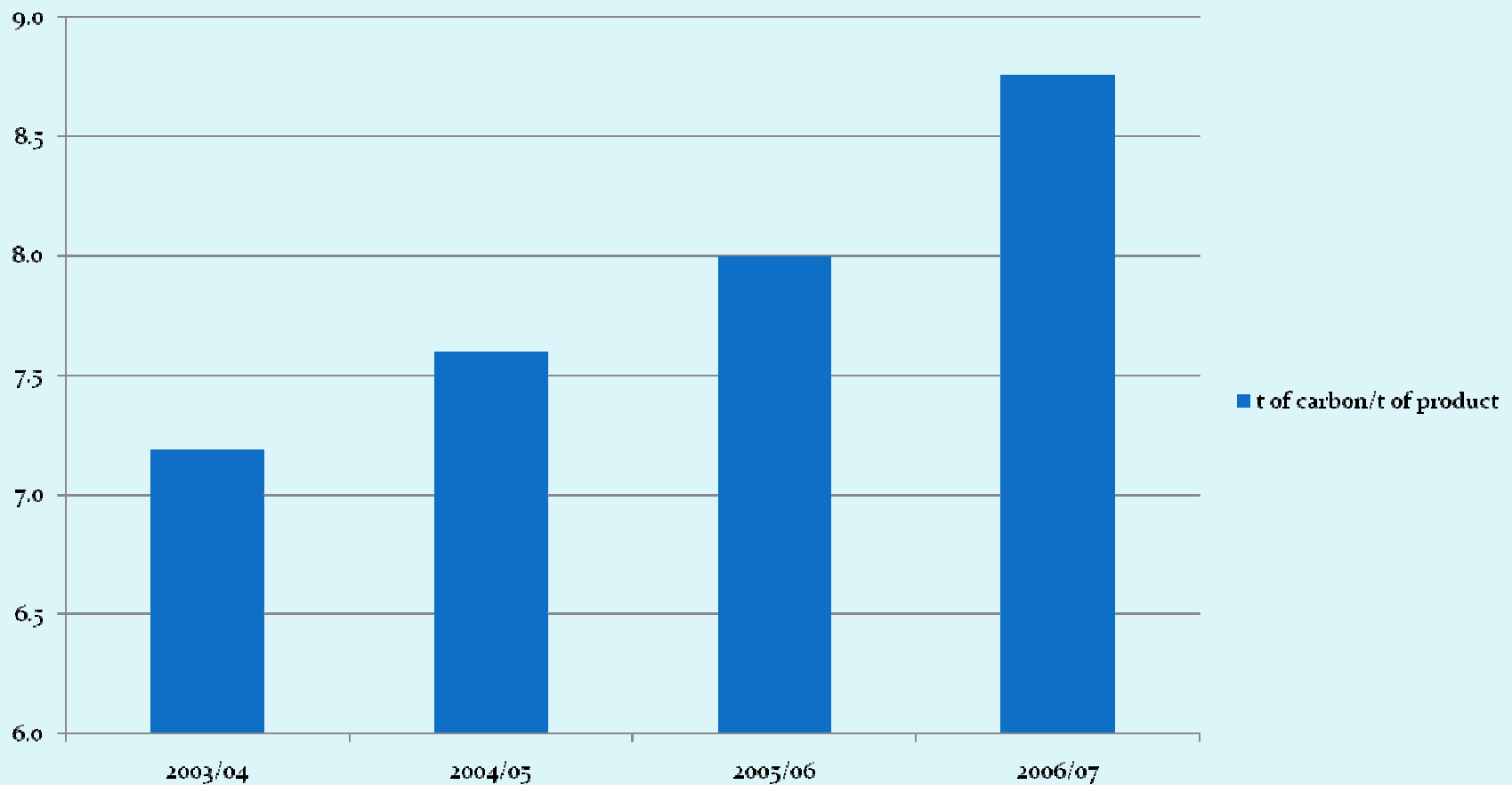
Every activity produces carbon emissions.....

- Even rare and endangered species.....
- <http://www.toilette-humor.com/cartoon.html>

Carbon Emissions in rock lobster fisheries

- Not a lot of information - but can estimate carbon emissions from fuel usage
- BUT THIS IS ONLY FOR CATCHING – DOES NOT TAKE INTO ACCOUNT TRANSPORT ETC TO CONSUMER!!
- In Western Australia, fishers produced 75,100t of carbon emissions in 2007/08 to catch 8,580t of lobsters, an average of 8.76t per ton of product.
- In South Australia, 8.03t of carbon emissions were produced for ton of product
- In SA, the input managed part of the fishery produced about 3x the carbon emissions/Kg of product than quota managed part

BUT...the trend is more carbon emissions/T of product



How lobster fisheries compare:

Industry/fishery	T Carbon per T of product
Western rock lobster (06/07)	8.76 T
Southern rock lobster (06/07)	8.03 T
European lobster (2004)	20.2 T
Spencer Gulf prawn (06/07)	4.69 T
Scottish demersal trawl (2004)	4.14 T
European cod (2004)	1.20 T
Canadian salmon (gillnet) (2004)	3.14 T
NZ dairy (05/06)	1.14 T
NZ lamb(05/06)	0.69 T

CARBON OFFSETS....

- Choices are to reduce carbon emissions or offset emissions



Conclusions and Implications

- Rock lobster/lobster fisheries generally are high carbon emitters
- This is likely to be a major problem for prices if your product is positioned in the 'luxury goods' market
- Choices are to reduce emissions or offset emissions
- Good news is that carbon emissions in lobster fisheries = fuel use.
- Reducing carbon therefore reduces fuel use (and costs)
- But, there is a need for carbon measurement and management