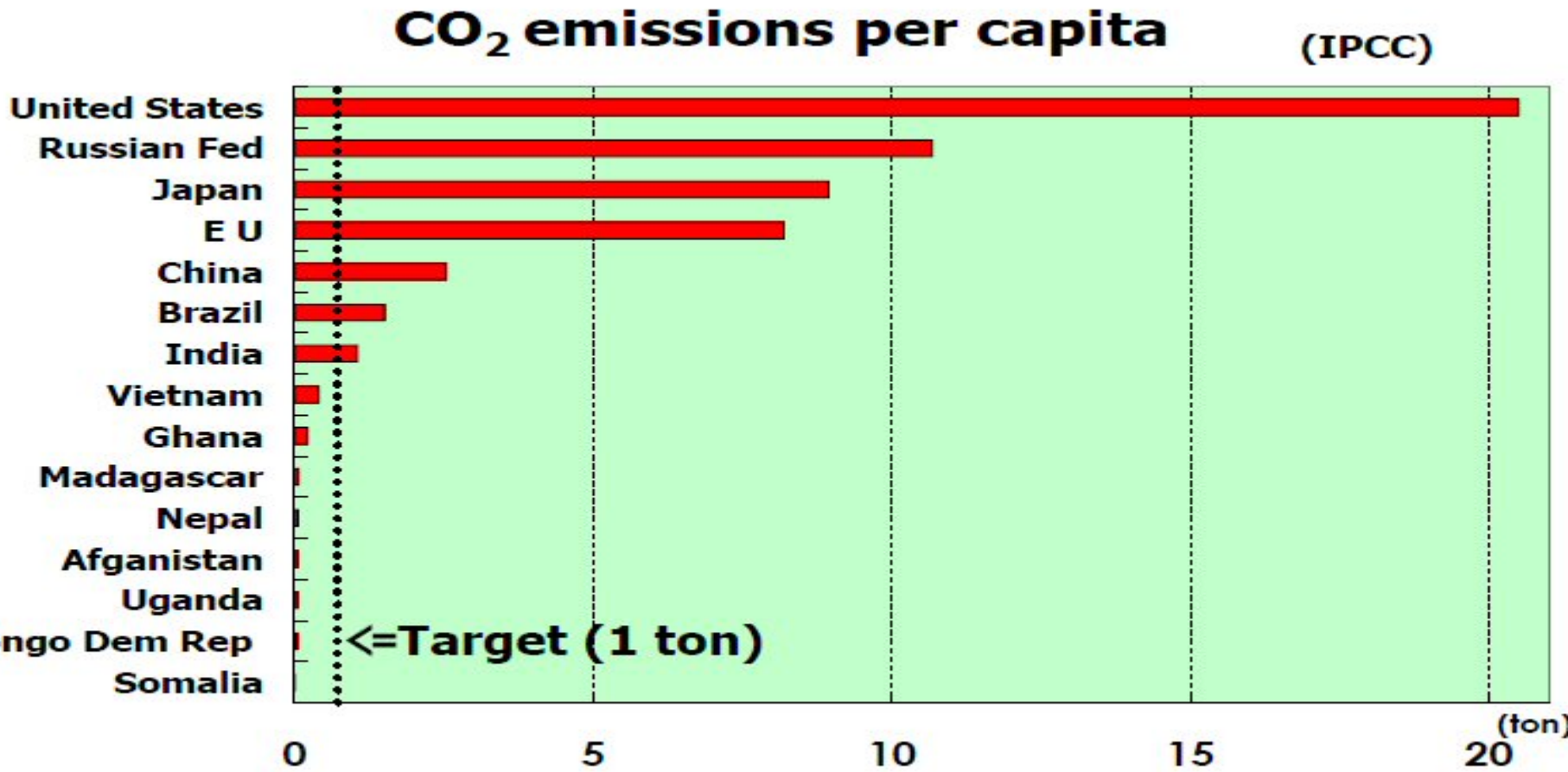


Cap and Share: an effective alternative to carbon taxation

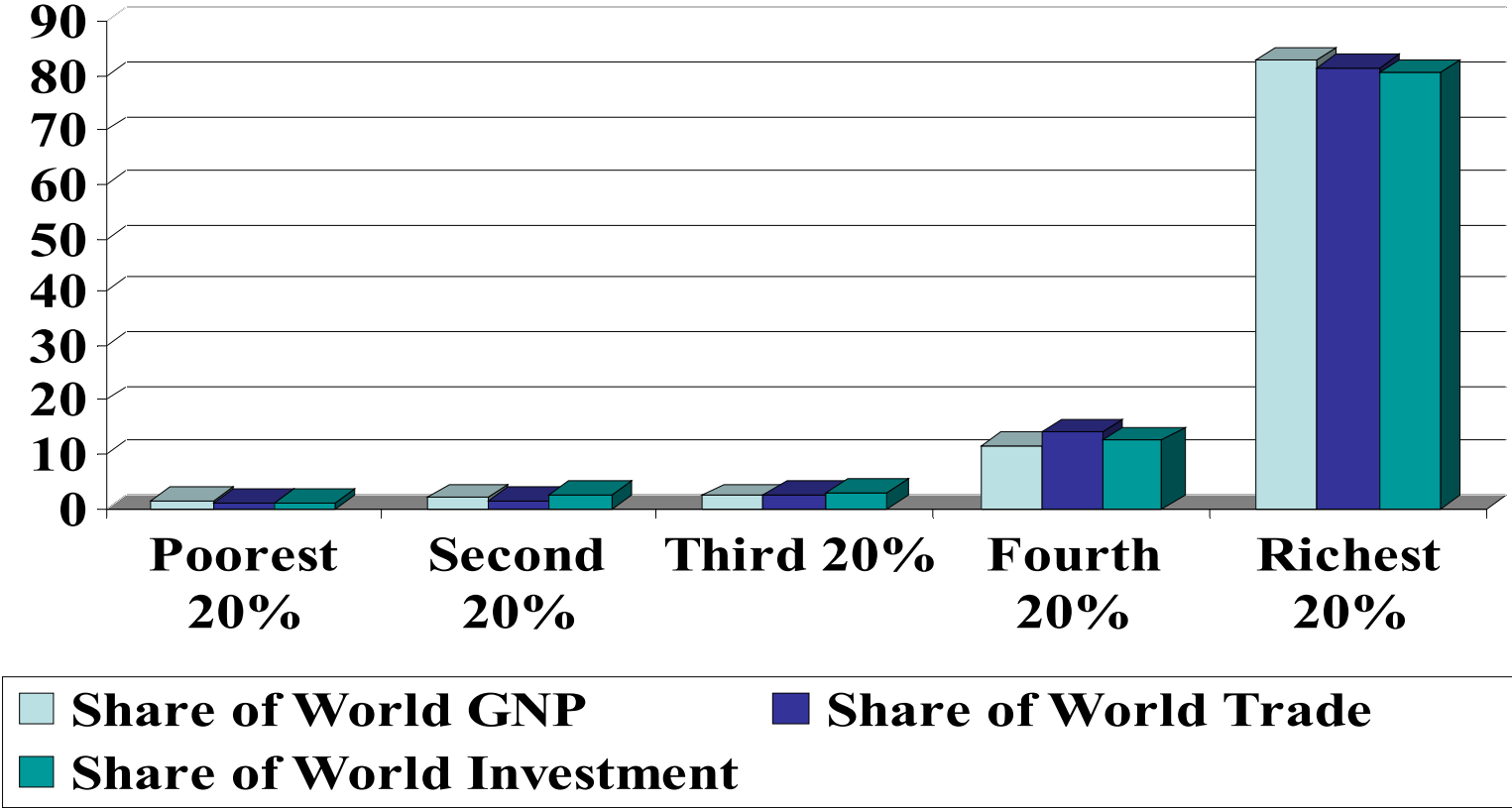
Nicola Creighton
Feasta

The Foundation for the Economics of Sustainability, Dublin

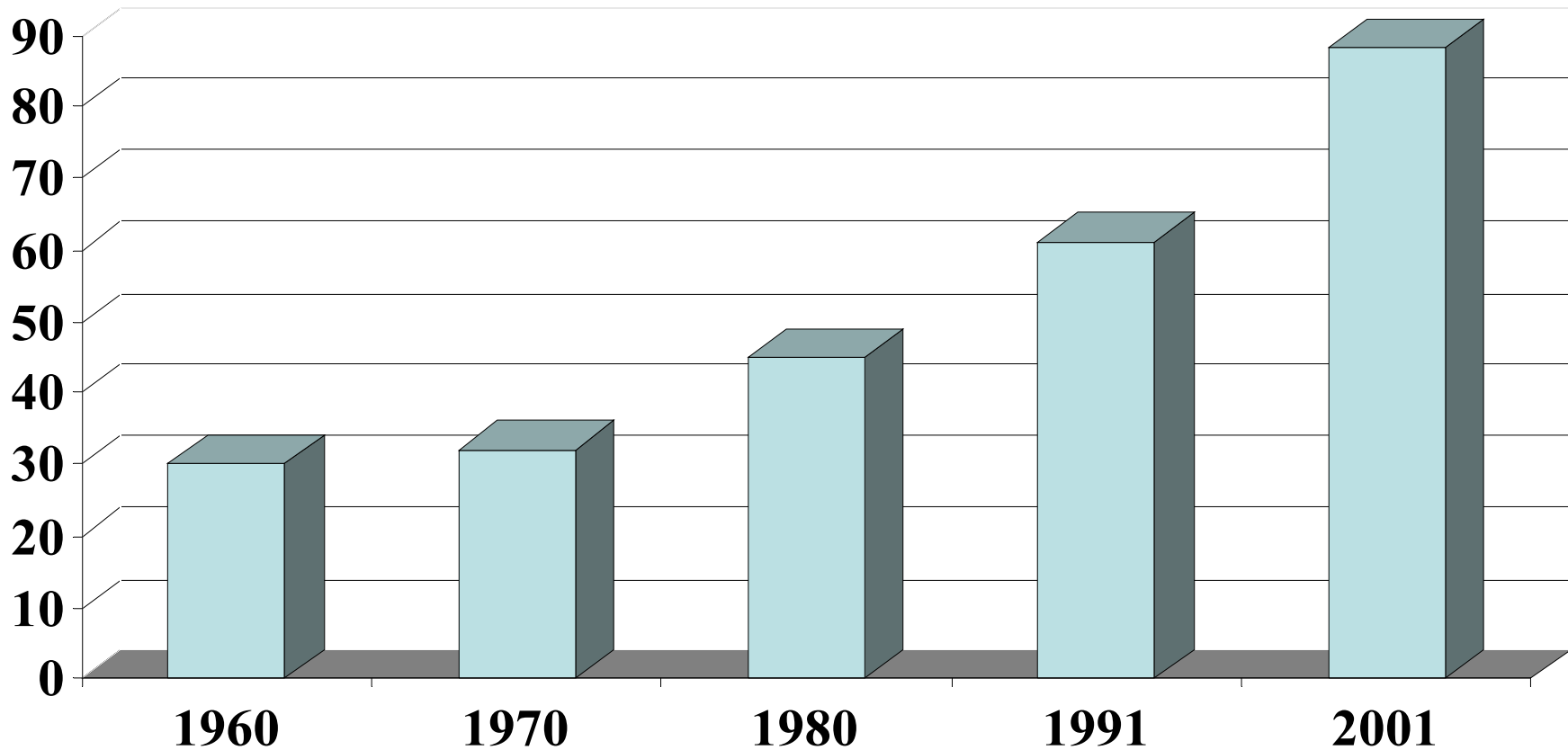
The starting point for any emissions reduction proposal: the major inequality



The richest 20% of countries have captured most of the world's income

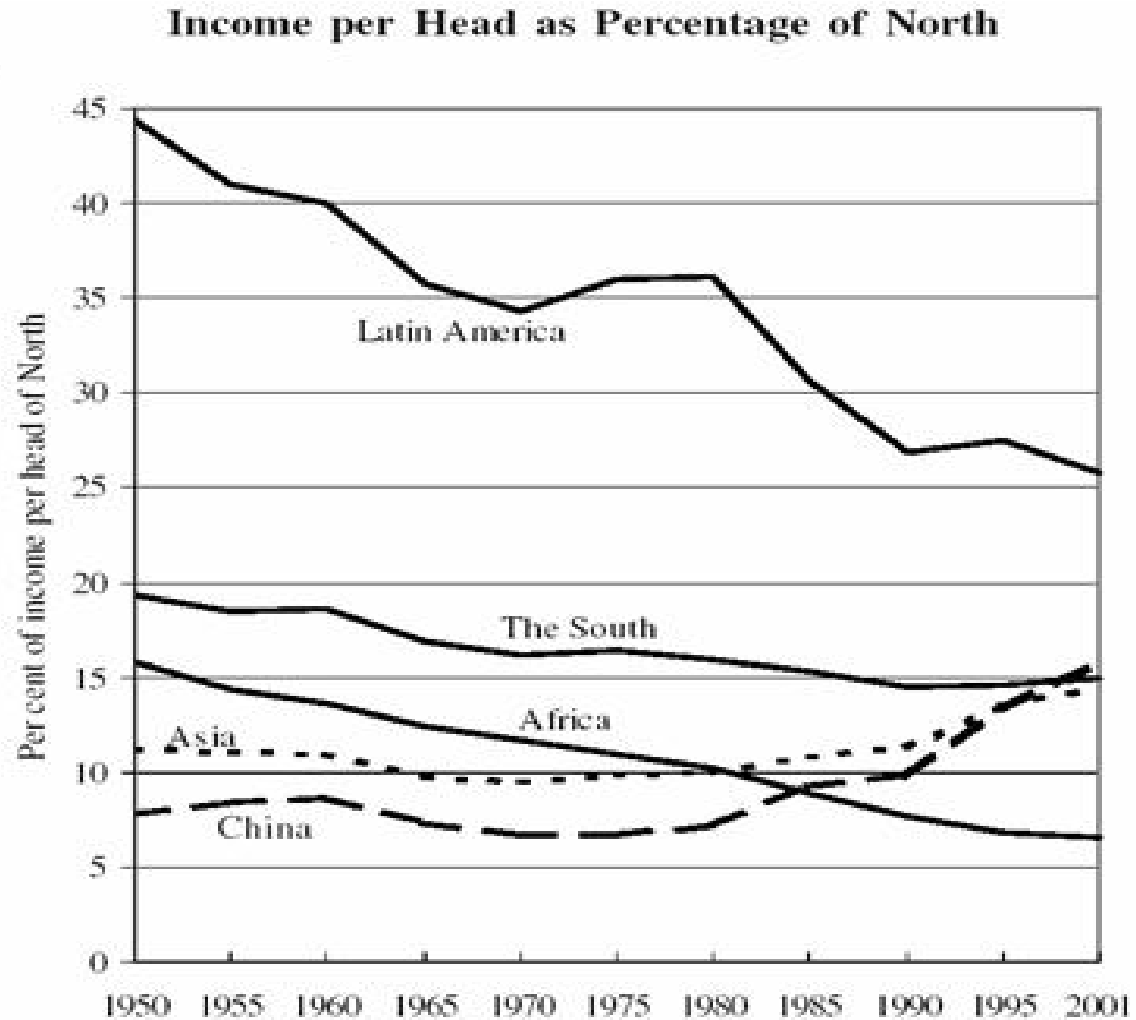


The gap between rich countries and poor countries has tripled since 1970



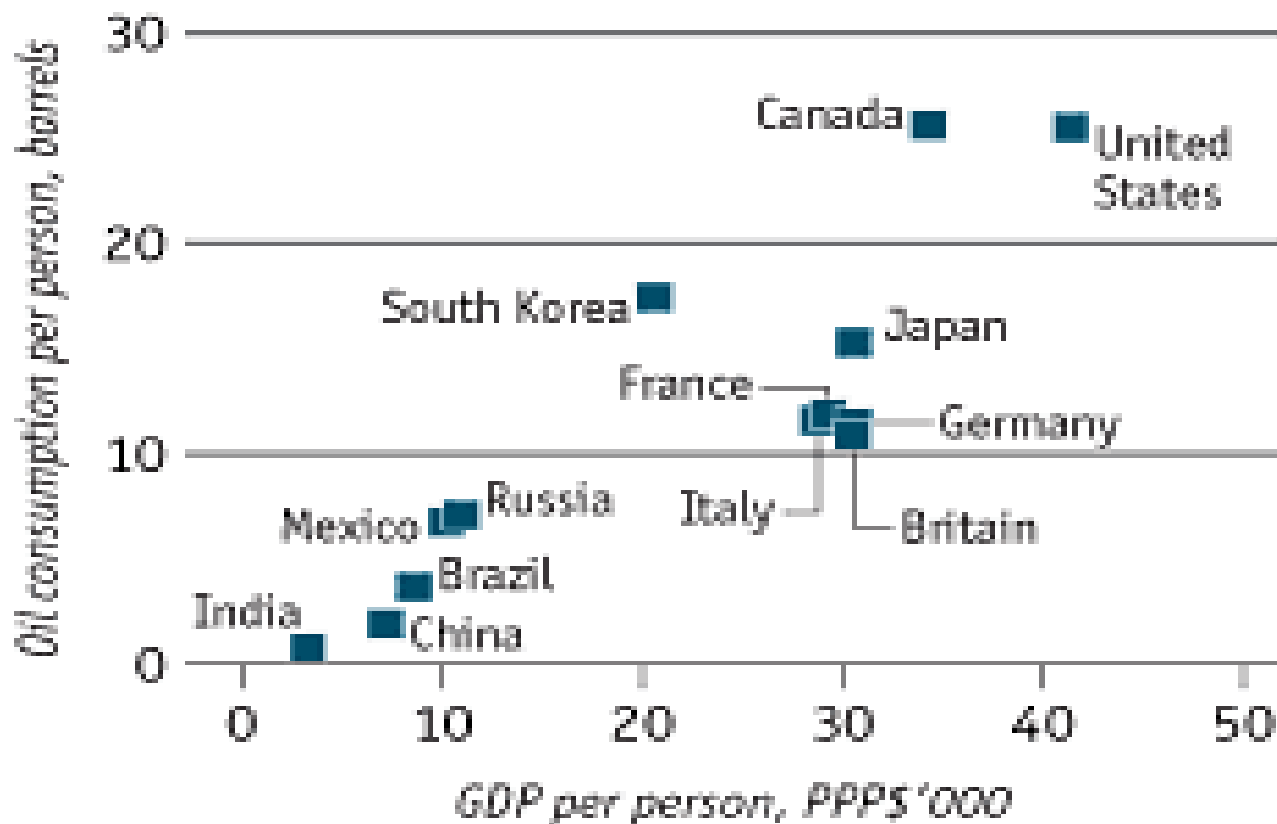
Ratio of Richest to Poorest Nation

Increasing international inequality



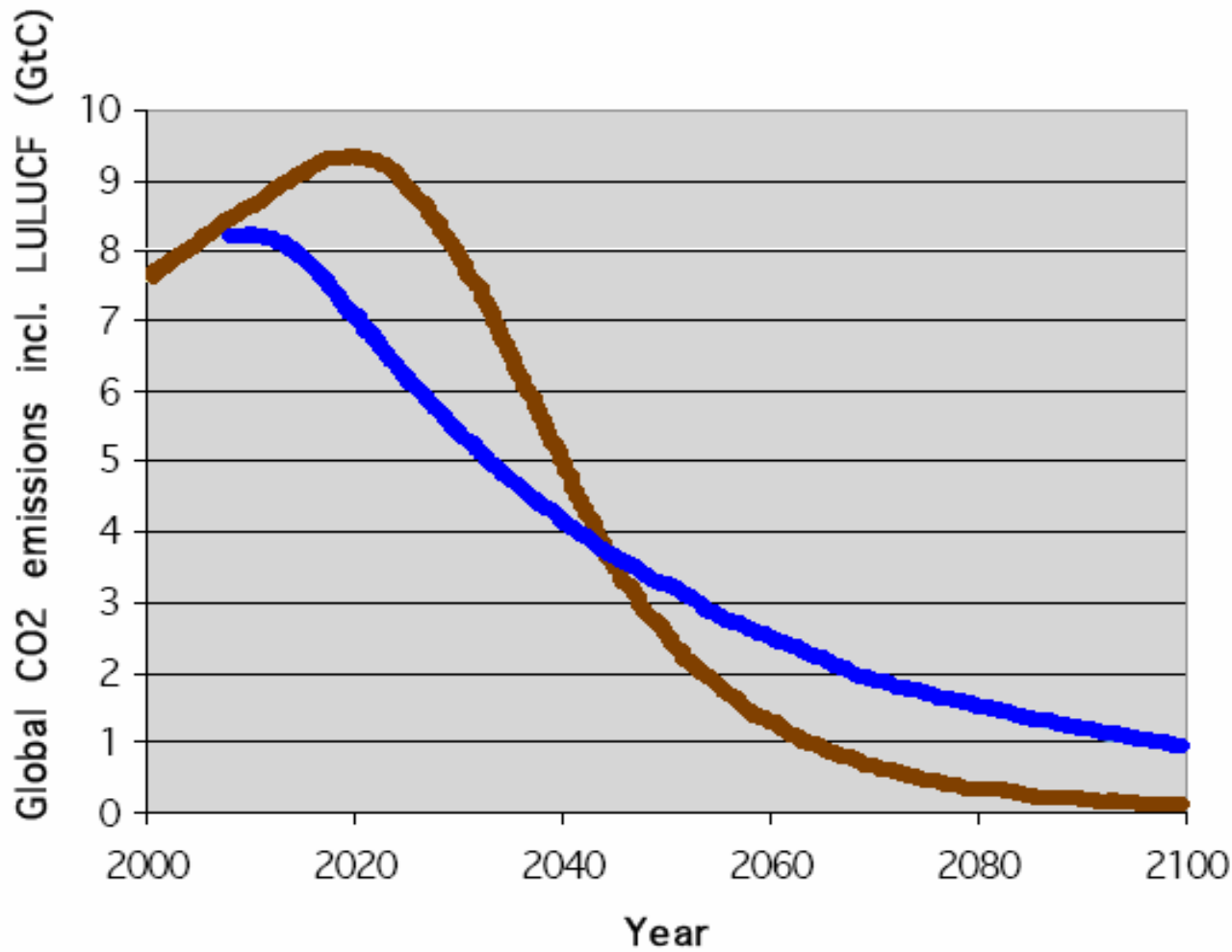
The poor sip, the rich guzzle

Oil consumption and GDP per person, 2005



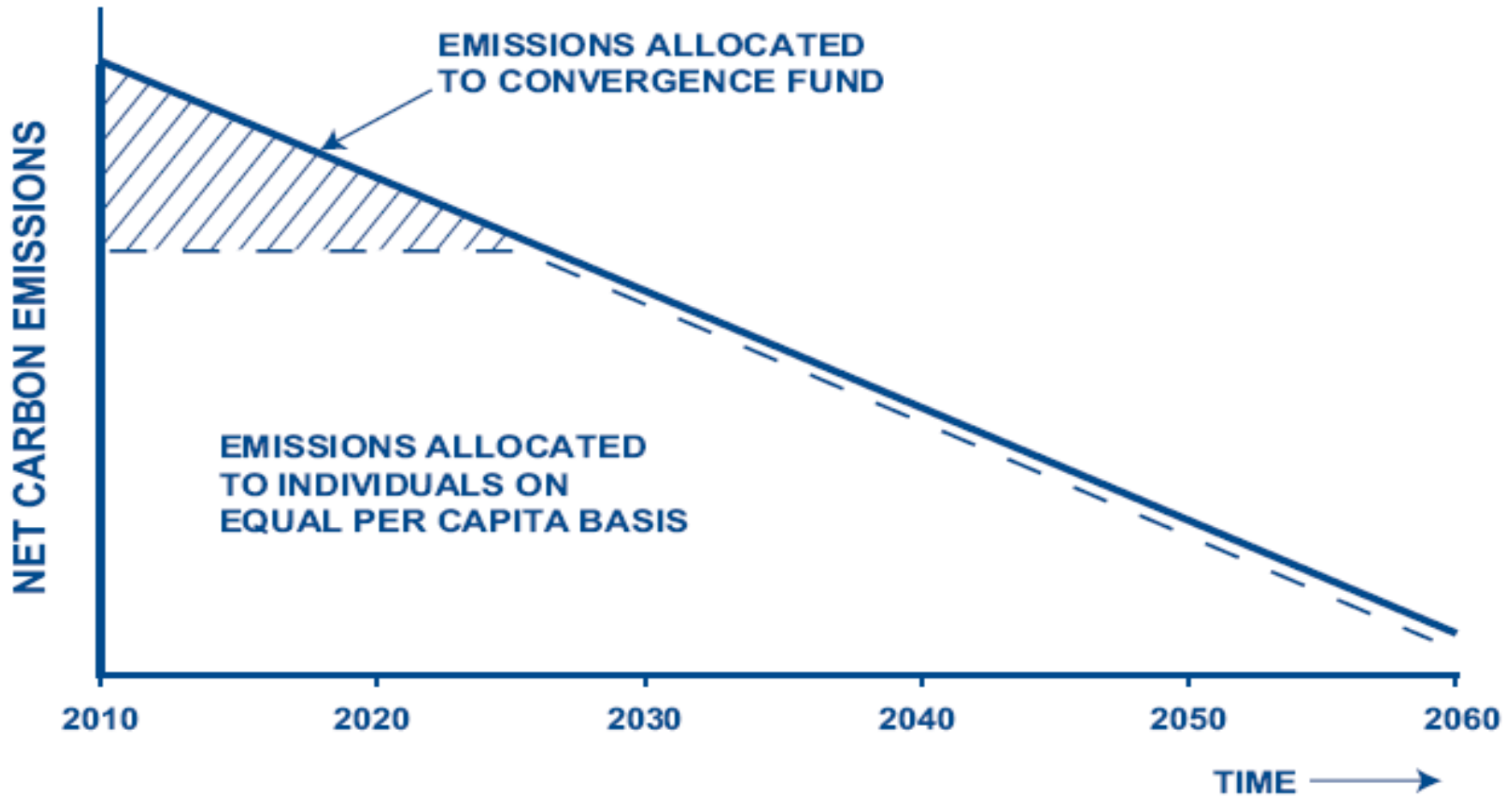
Sources: IMF; BP; UN

How emissions need to decline to meet a 400ppm target

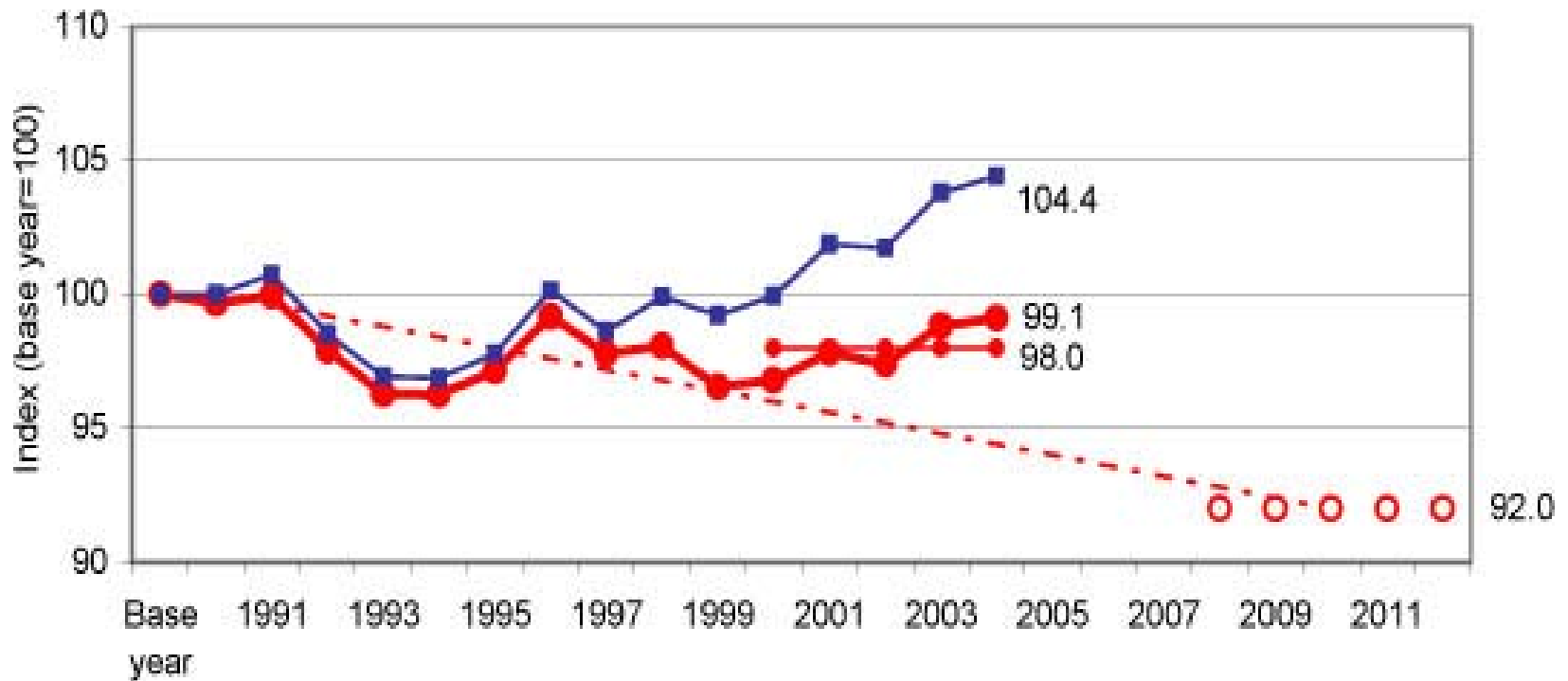


- Peak 2010, max decline 2.6%
- Peak 2020, max decline 6.7%

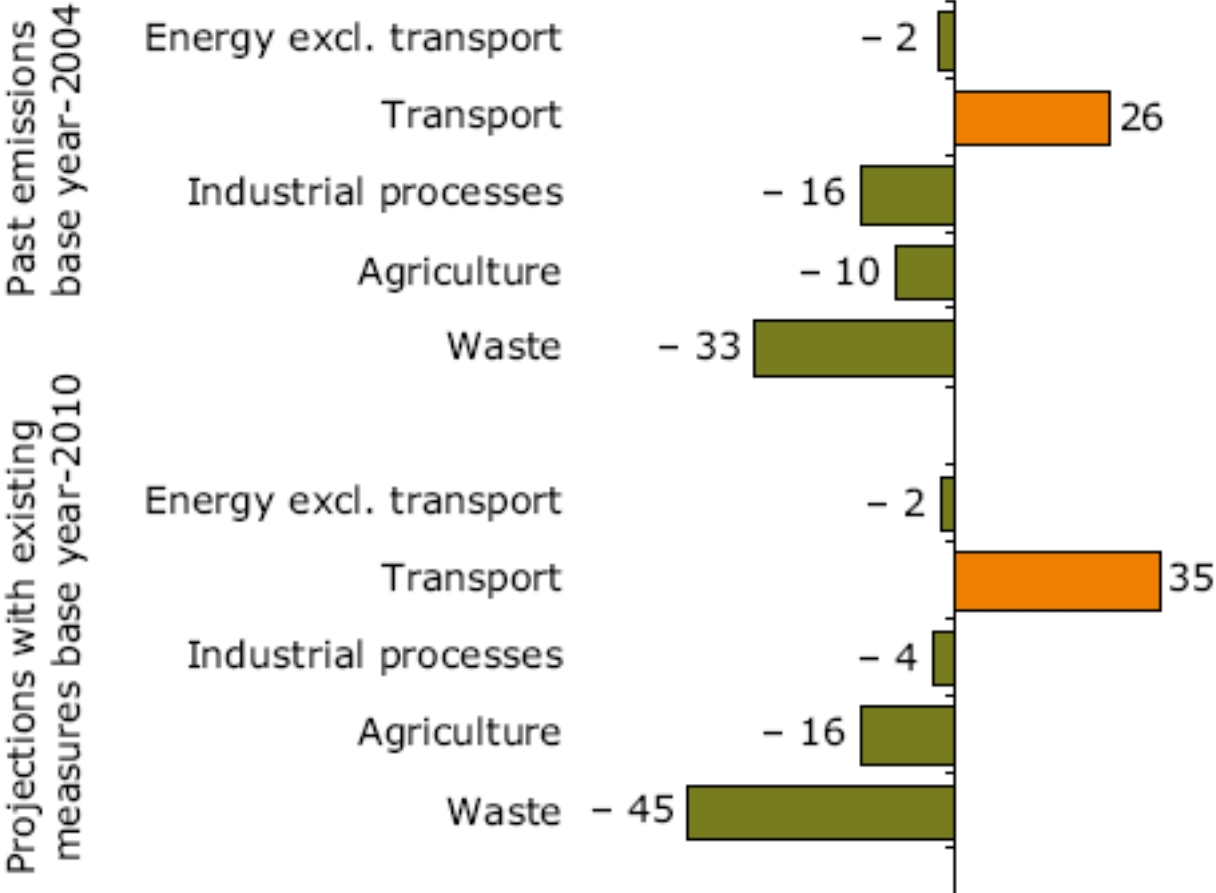
Features of a global cap and share scheme



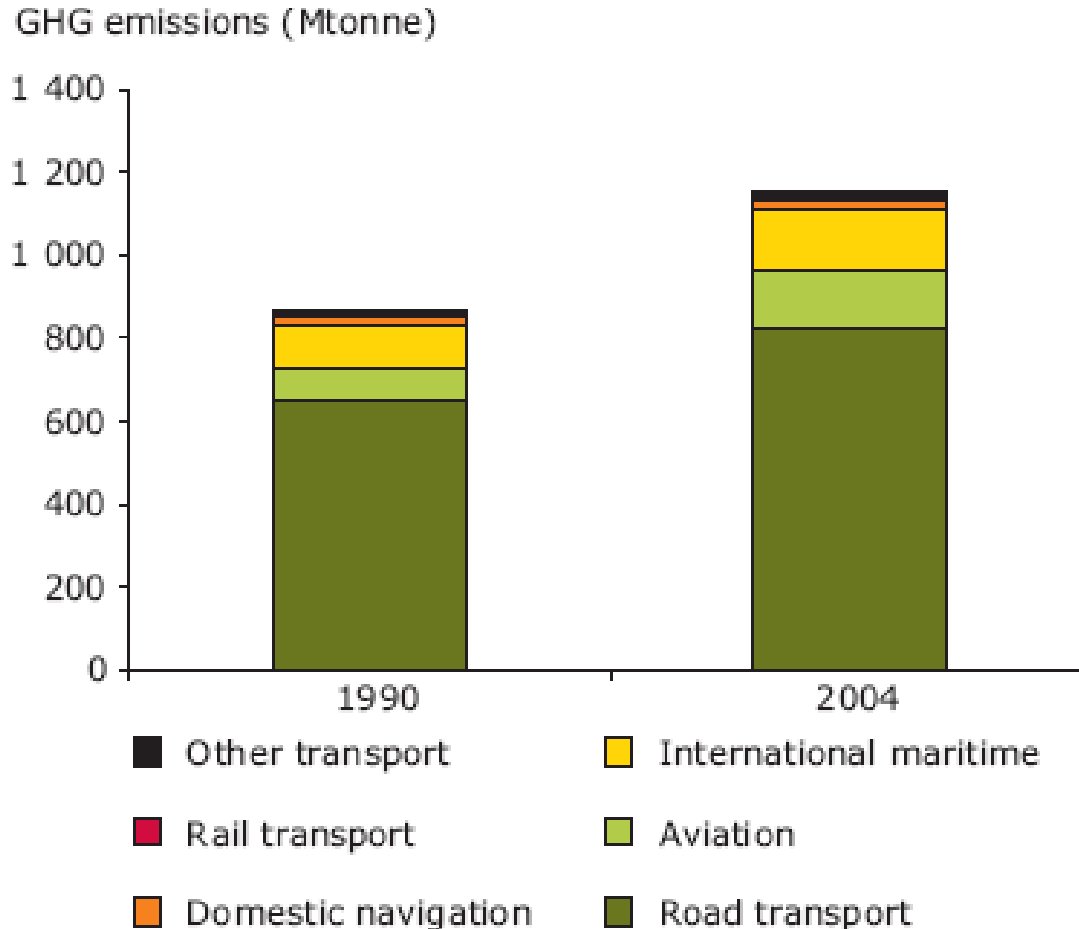
Total EU-15 greenhouse gas emissions in relation to the Kyoto target



Changes in EU-15 greenhouse gas emissions by sector between 1990 and 2004



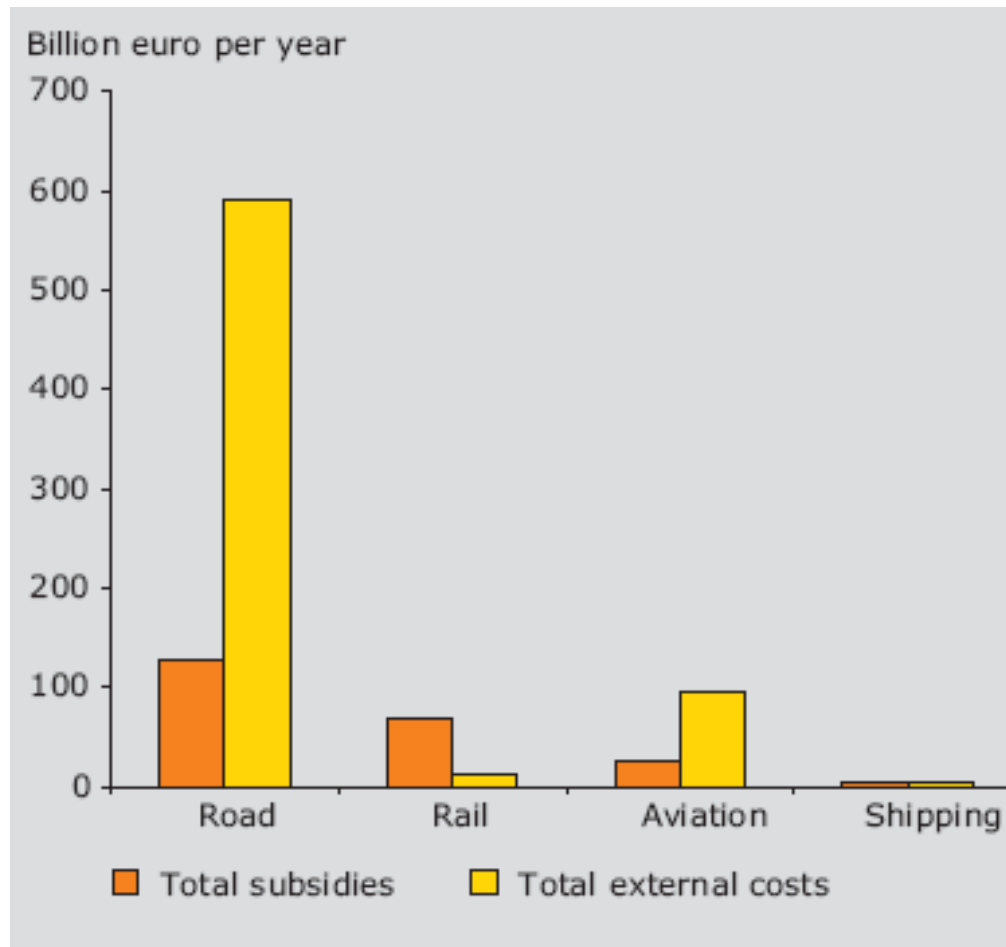
Road transport responsible for biggest growth in emissions



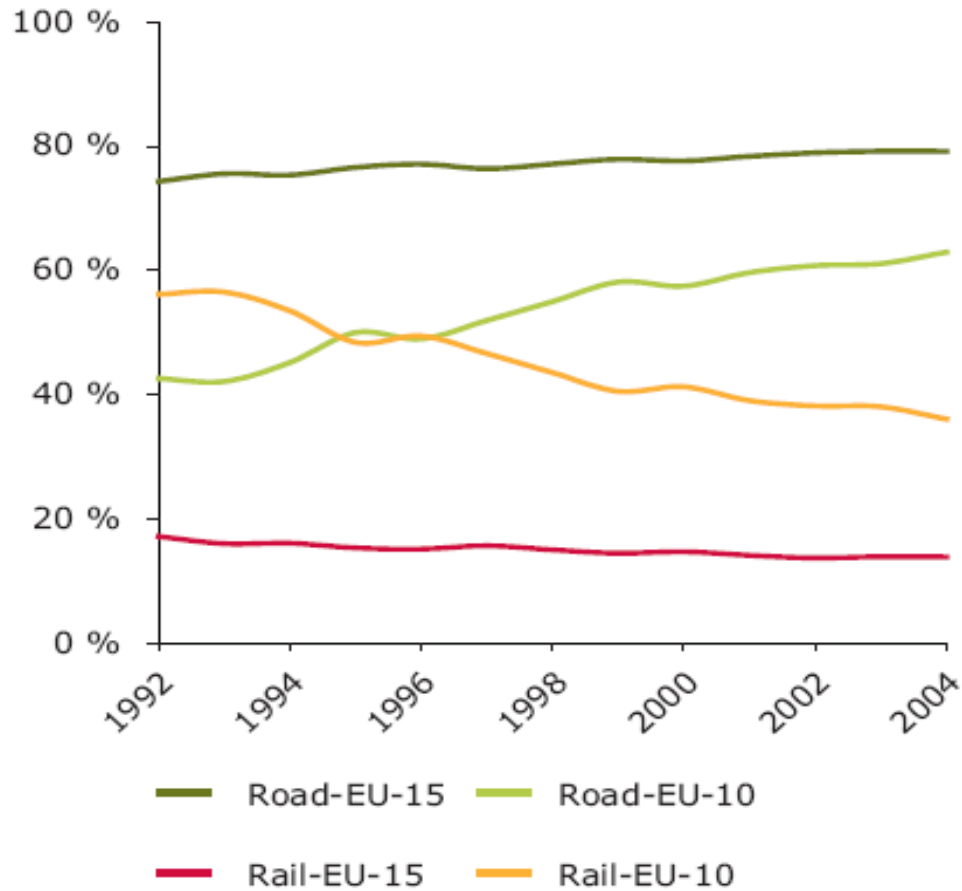
Change in EU-15 transport emissions, 1990-2004, by mode

Source	Change 1990-2004 ktonnes	Increase or decrease
Aviation	5,825	33%
Road total	163,703	26%
Road diesel	210,321	79%
Road petrol	-45,637	-13%
Road LPG	-1,481	-20%
Rail	-1,928	-23%
Water	1,728	9%
Total	169,328	24.8%

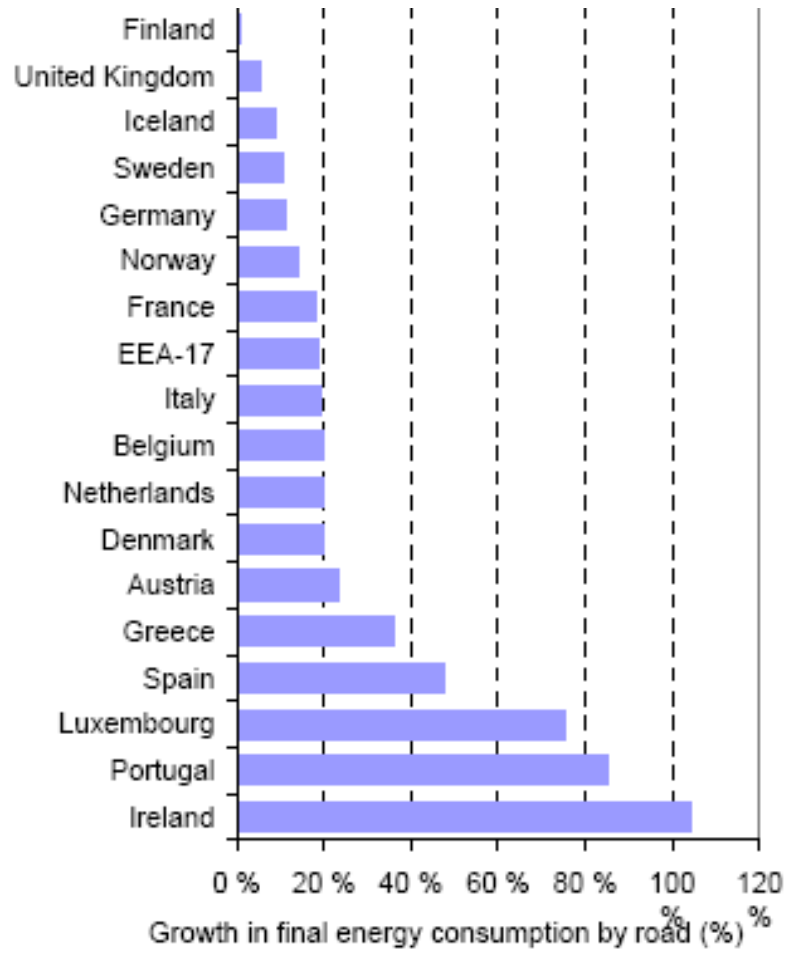
The environment gives the biggest subsidy to road use



EU travellers shift from rail to road

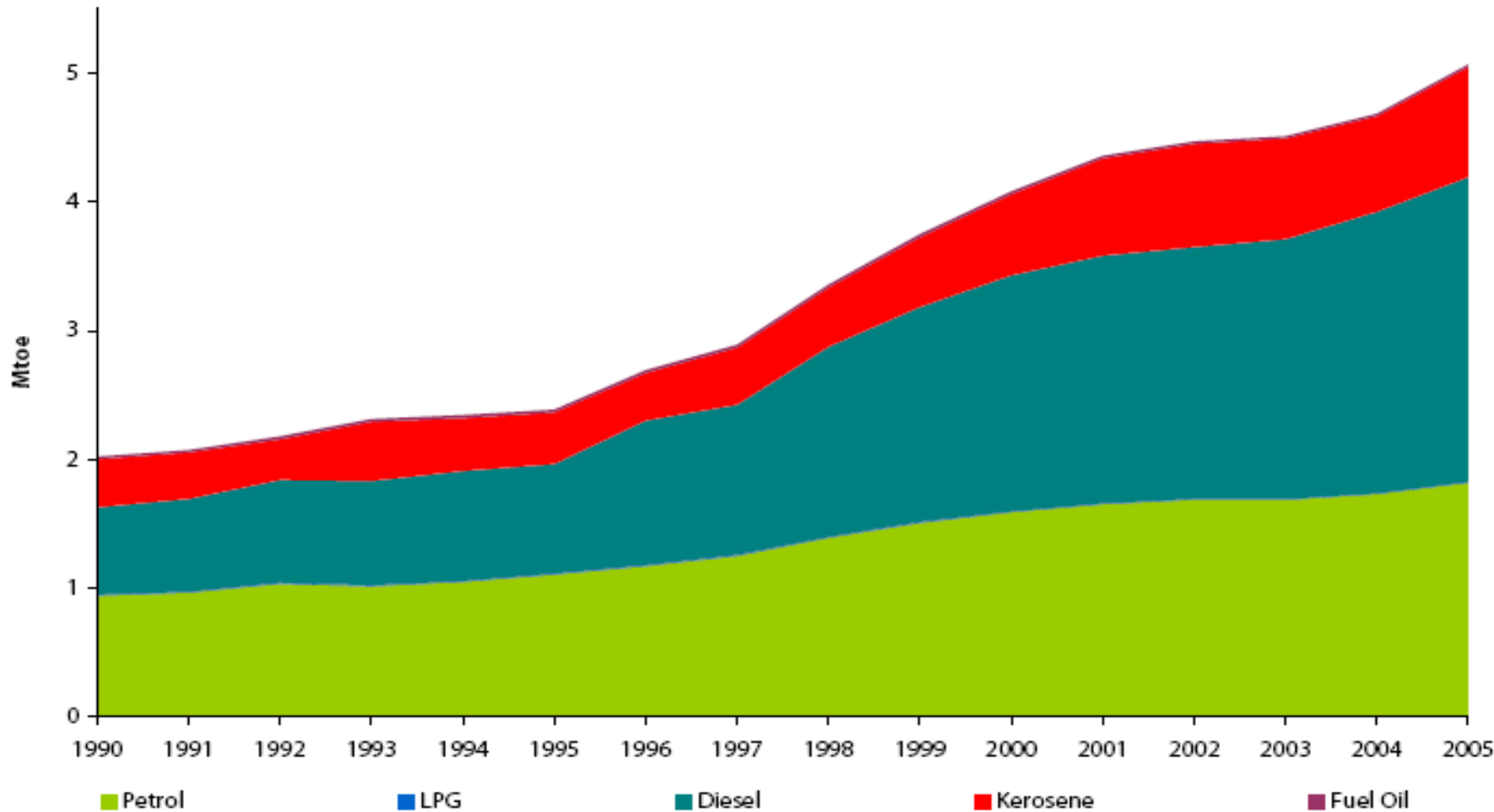


Growth in energy consumption by road between 1990 and 2000



Source: IEA, 2003.

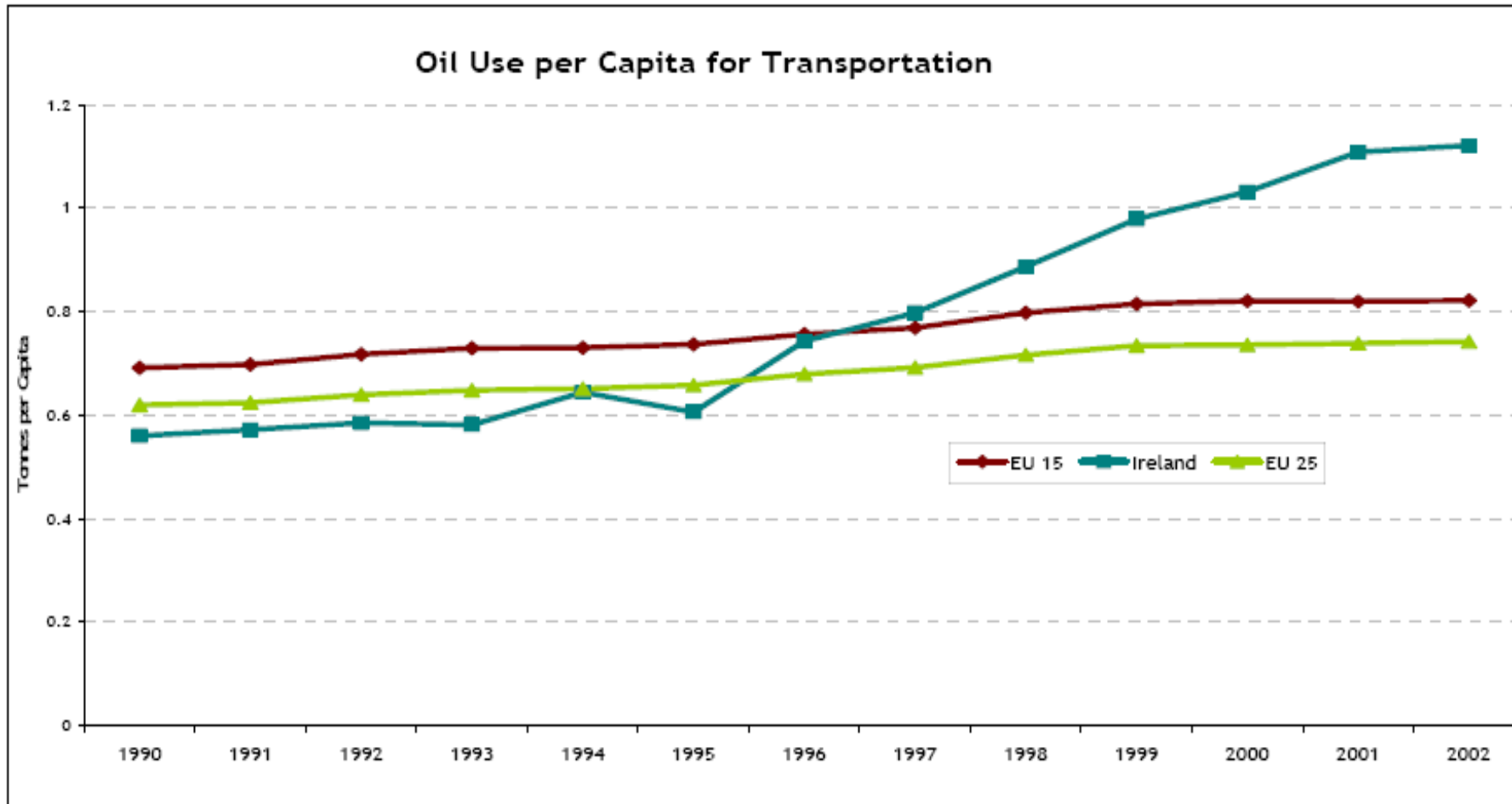
The growth of transport fuel use in Ireland since 1990



Comparison of growth in oil use between sectors

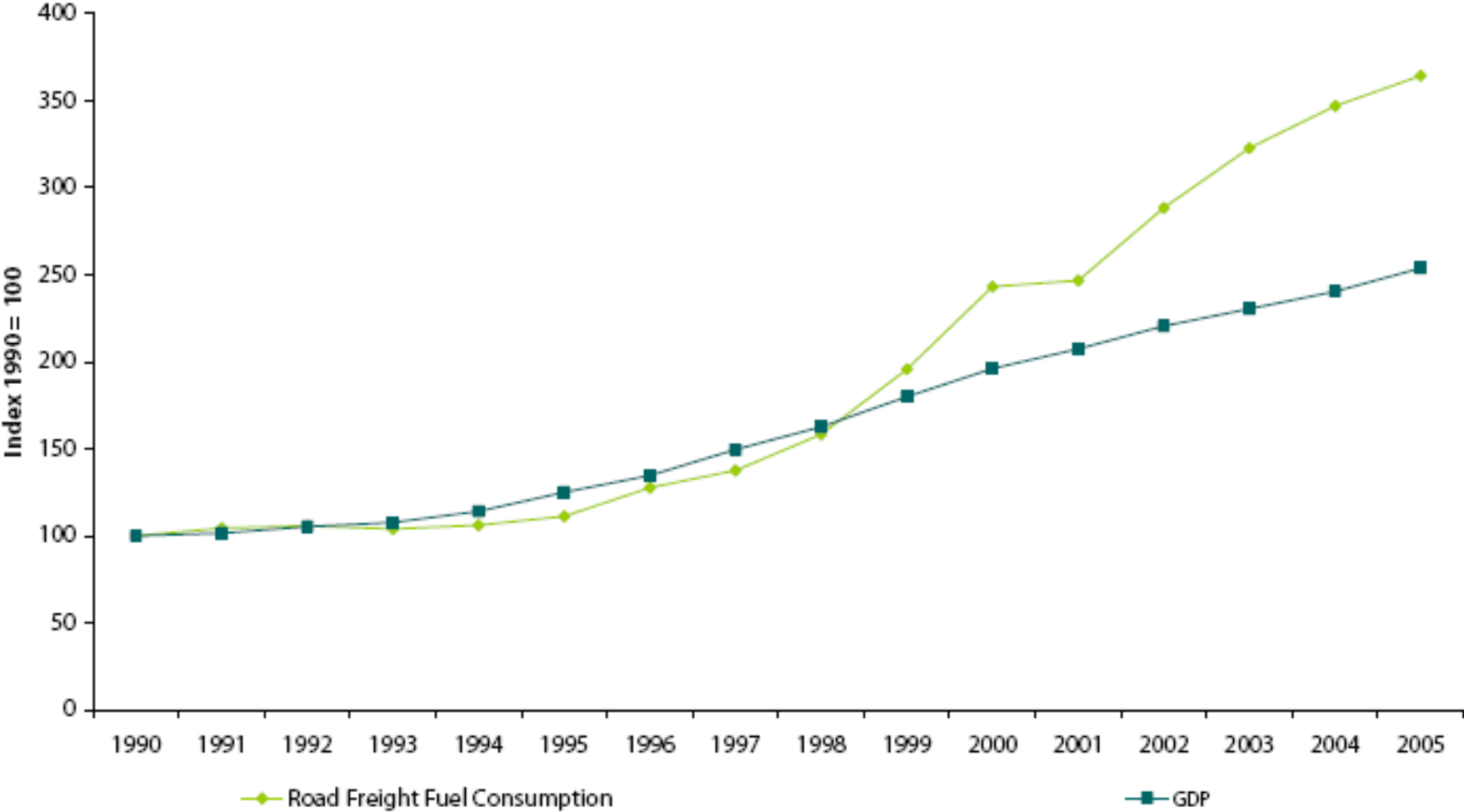
	Growth %
	1990 – '05
<i>Industry</i>	39.0
<i>Transport</i>	150.9
<i>Residential</i>	27.1
<i>Commercial /Public</i>	83.1
<i>Agriculture</i>	29.0
Total	72.2

How Ireland's oil use in transportation compares per person with other EU countries

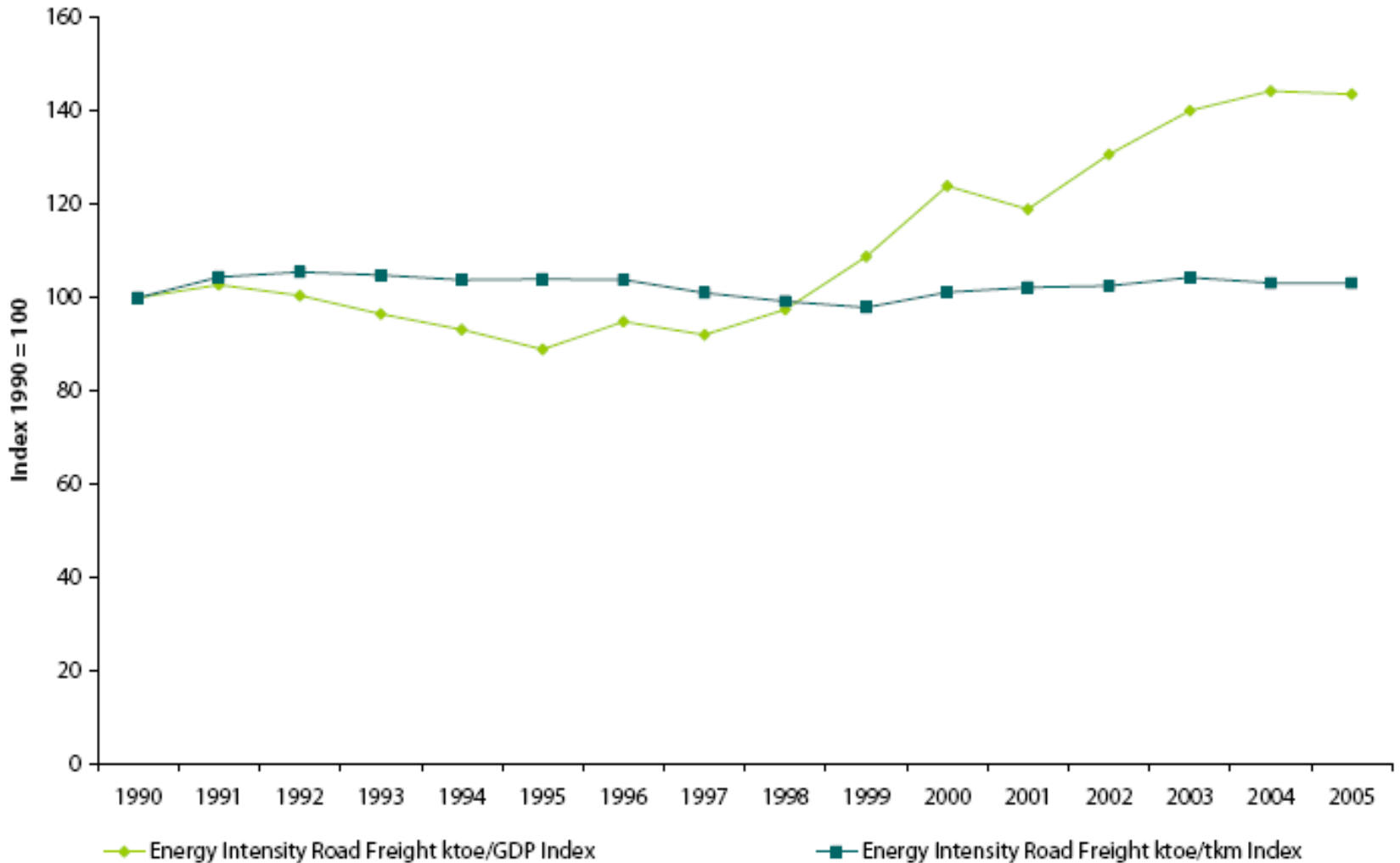


Source: Amárach Consulting, EU Energy & Transport Figures 2004

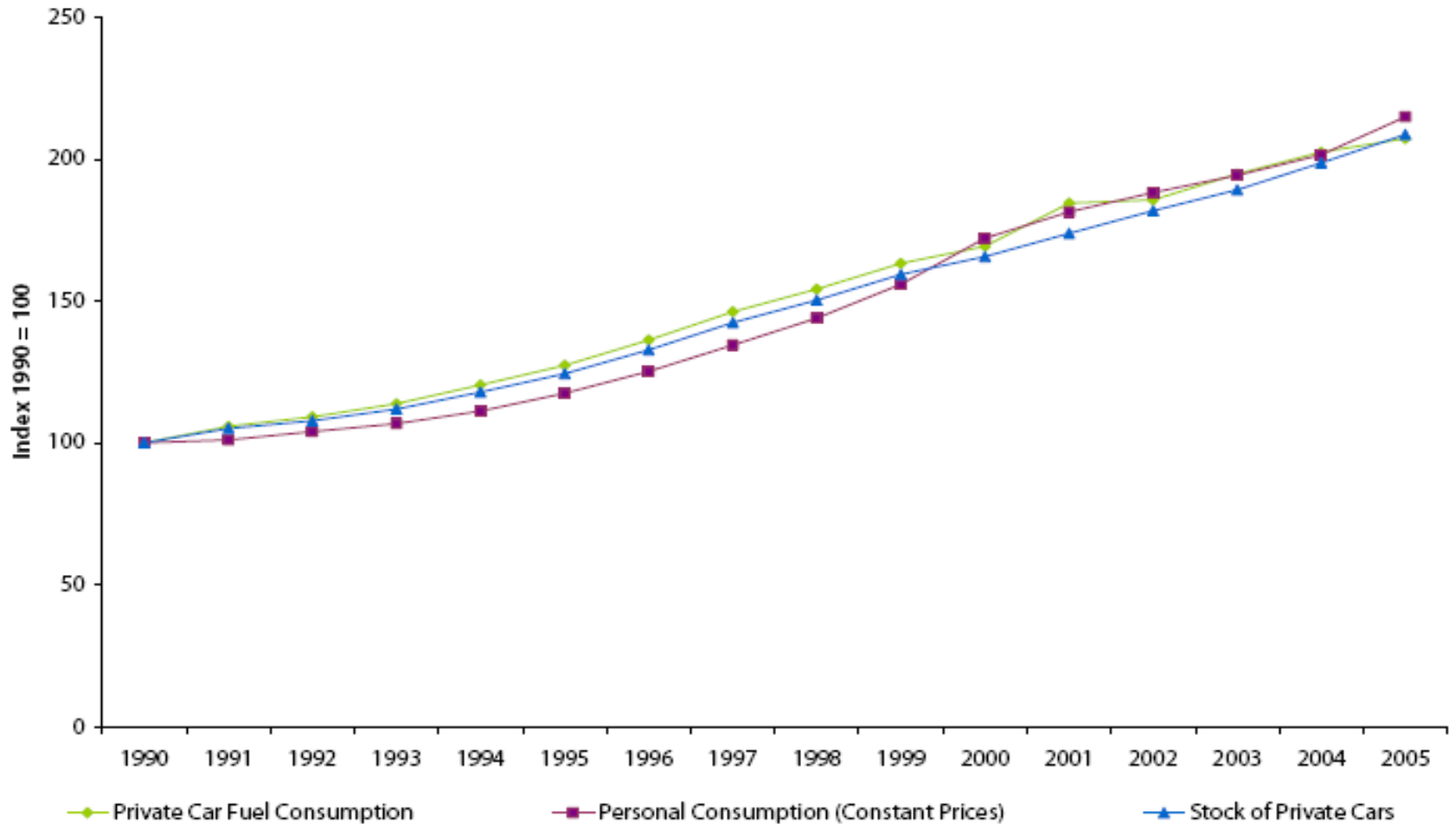
Road freight fuel consumption has broken its link with GDP growth



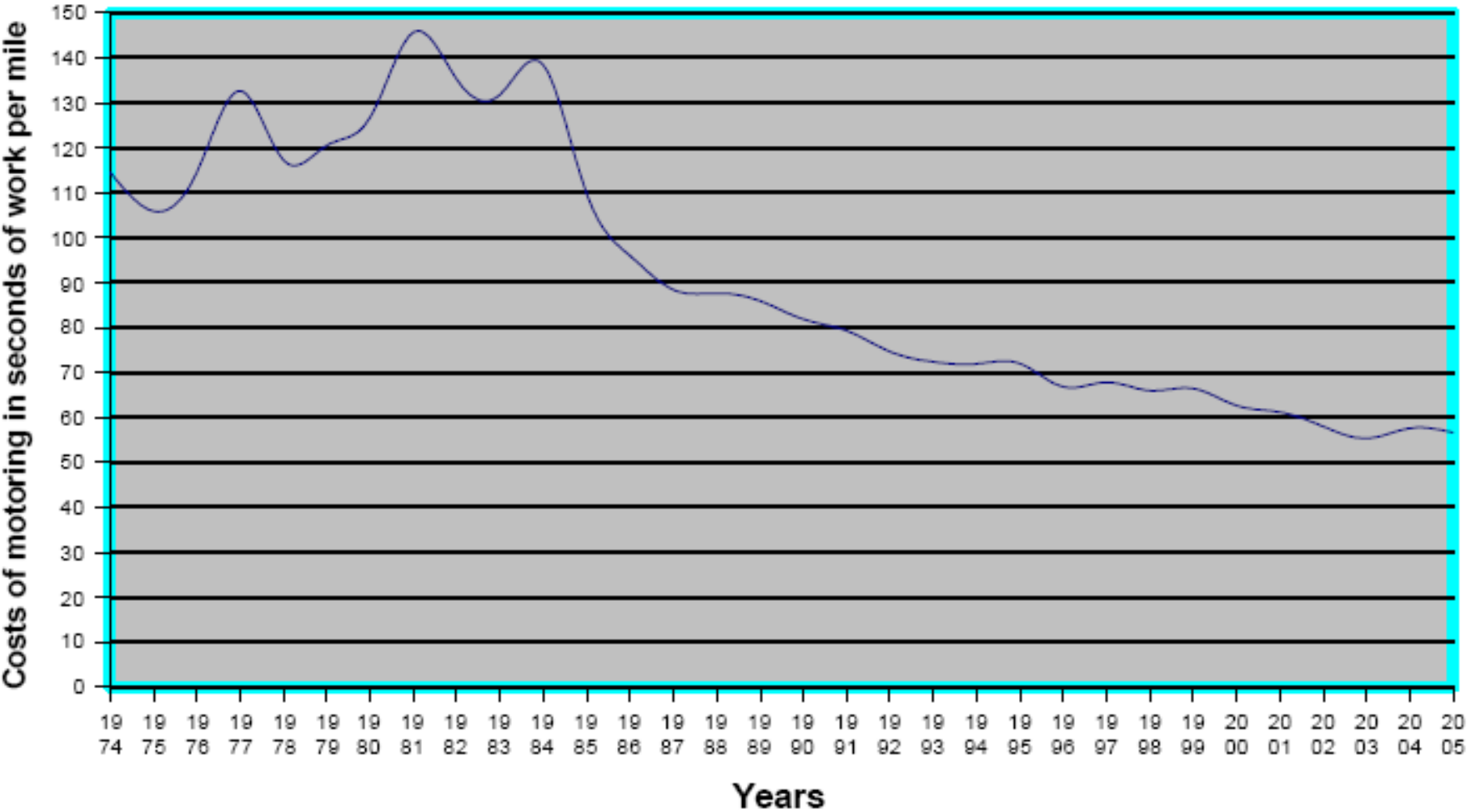
No improvement in energy efficiency of road freight



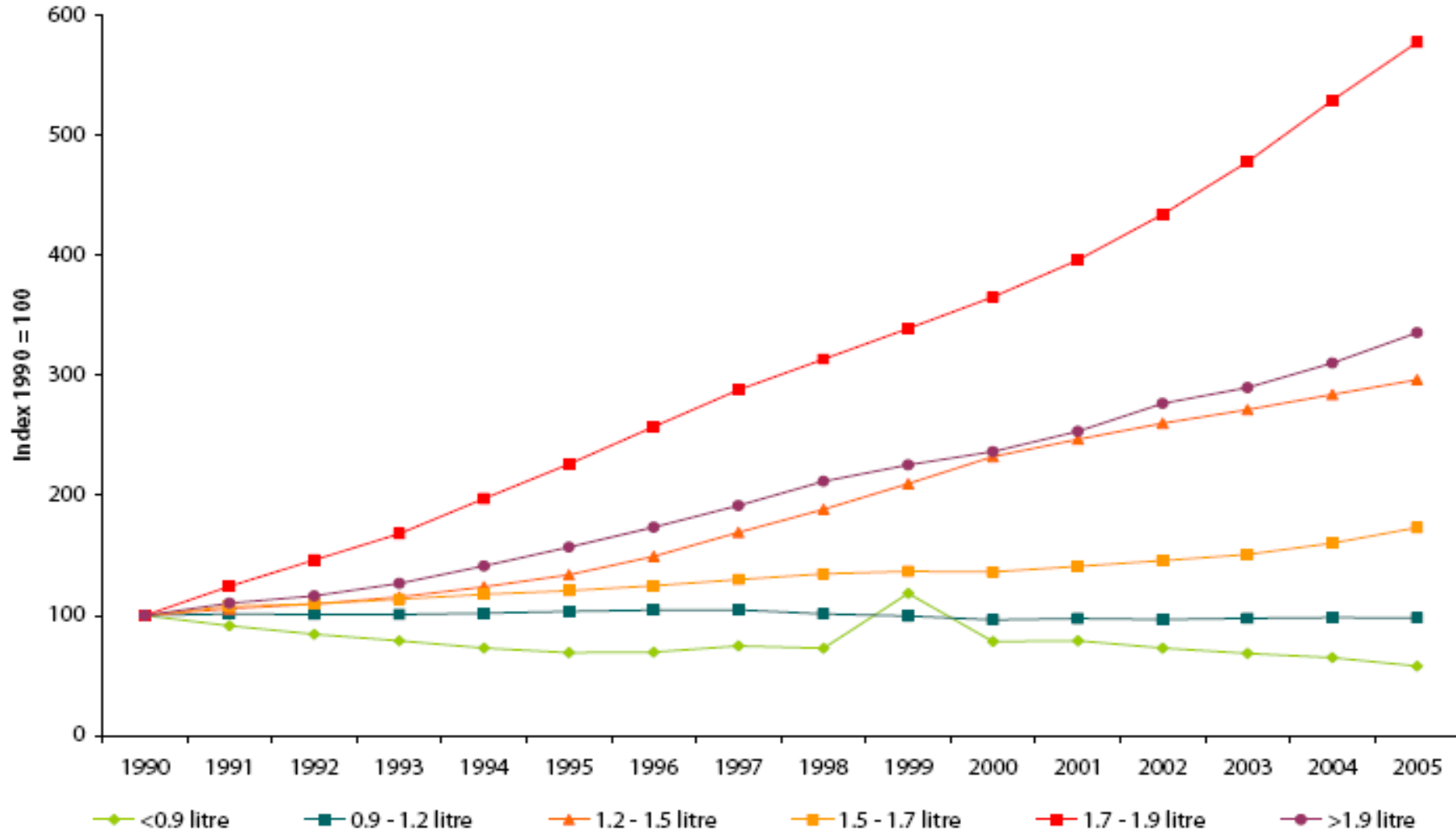
Private car fuel consumption has grown in step with people's incomes



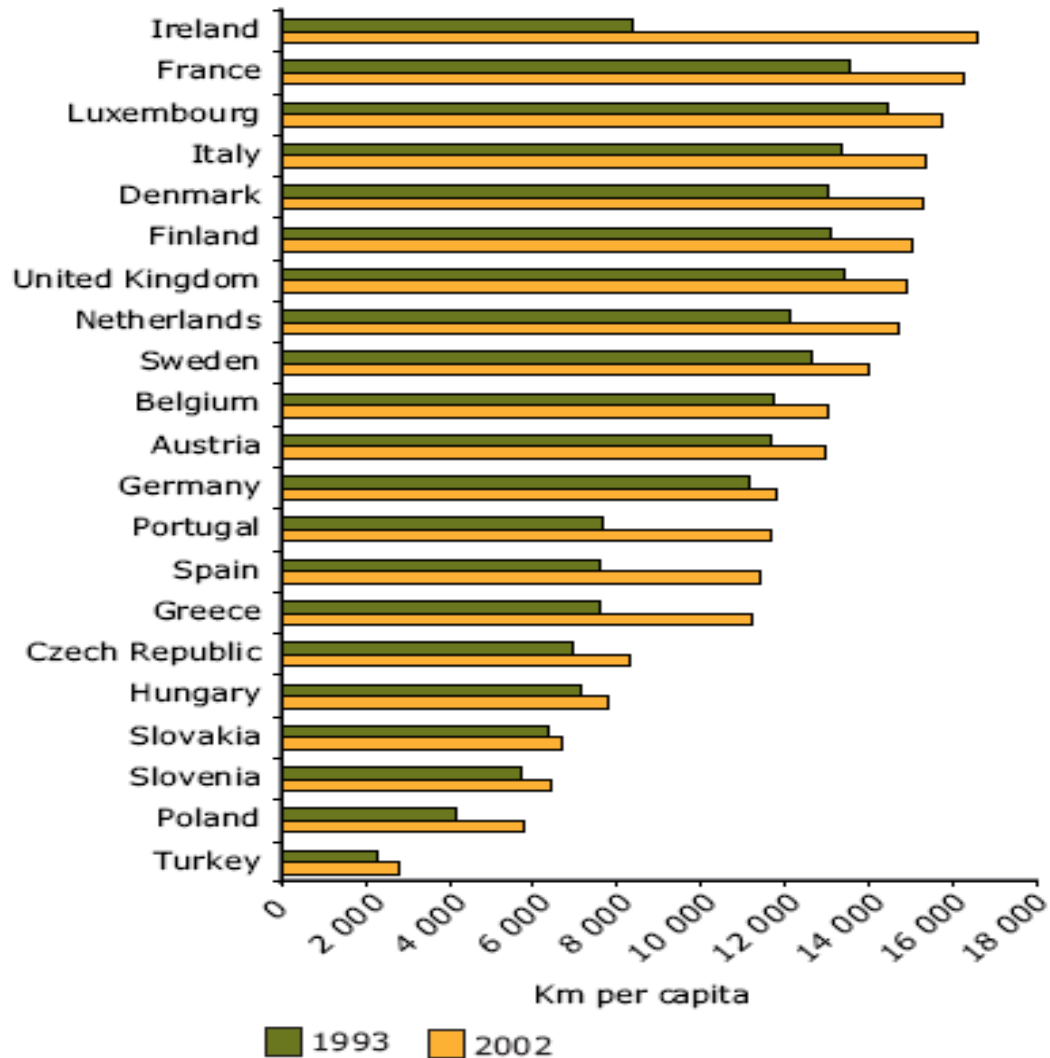
Real cost of motoring now half its 1970s and 80s level



Growth in proportion of bigger-engined cars



Ireland is the most car-dependent European economy

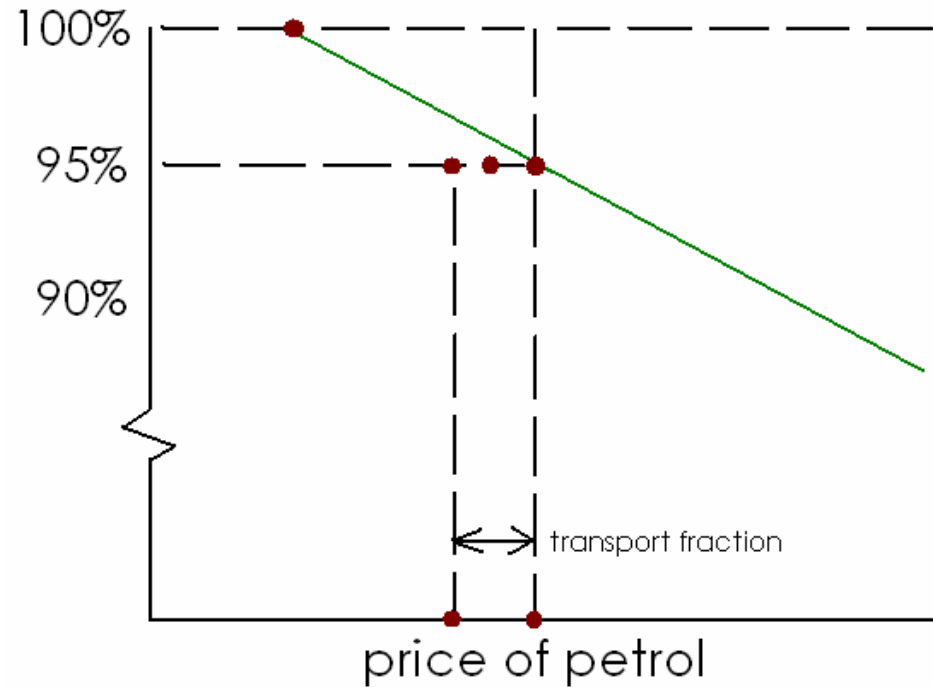


Inelasticity of fuel price and demand for driving in Ireland

If a carbon tax is set low,
it will fail to achieve reductions

If it is set high, it will be met with
widespread opposition

It would have to be continually
adjusted relative to oil prices
and economic conditions



How a personal emissions entitlement might look

1234567890

EUROPEAN UNION EMISSIONS TRADING SCHEME

10.5 tonnes CO²

If this emissions entitlement certificate is presented at a bank or post office before the expiry date printed below, it can be exchanged for the buying price of the weight of emissions shown above on the day it is presented.

Please take a passport, driving license or some other form of photographic identification with you when you go to cash your entitlement.

EXPIRY DATE: July 31st, 2009

Any entitlement certificates not presented before their expiry date will reduce the EU's total emissions for the year.

Mr. John Tyndall



**Emissions
Entitlement
2008**

1234567890



The Irish Climate
Protection Trust

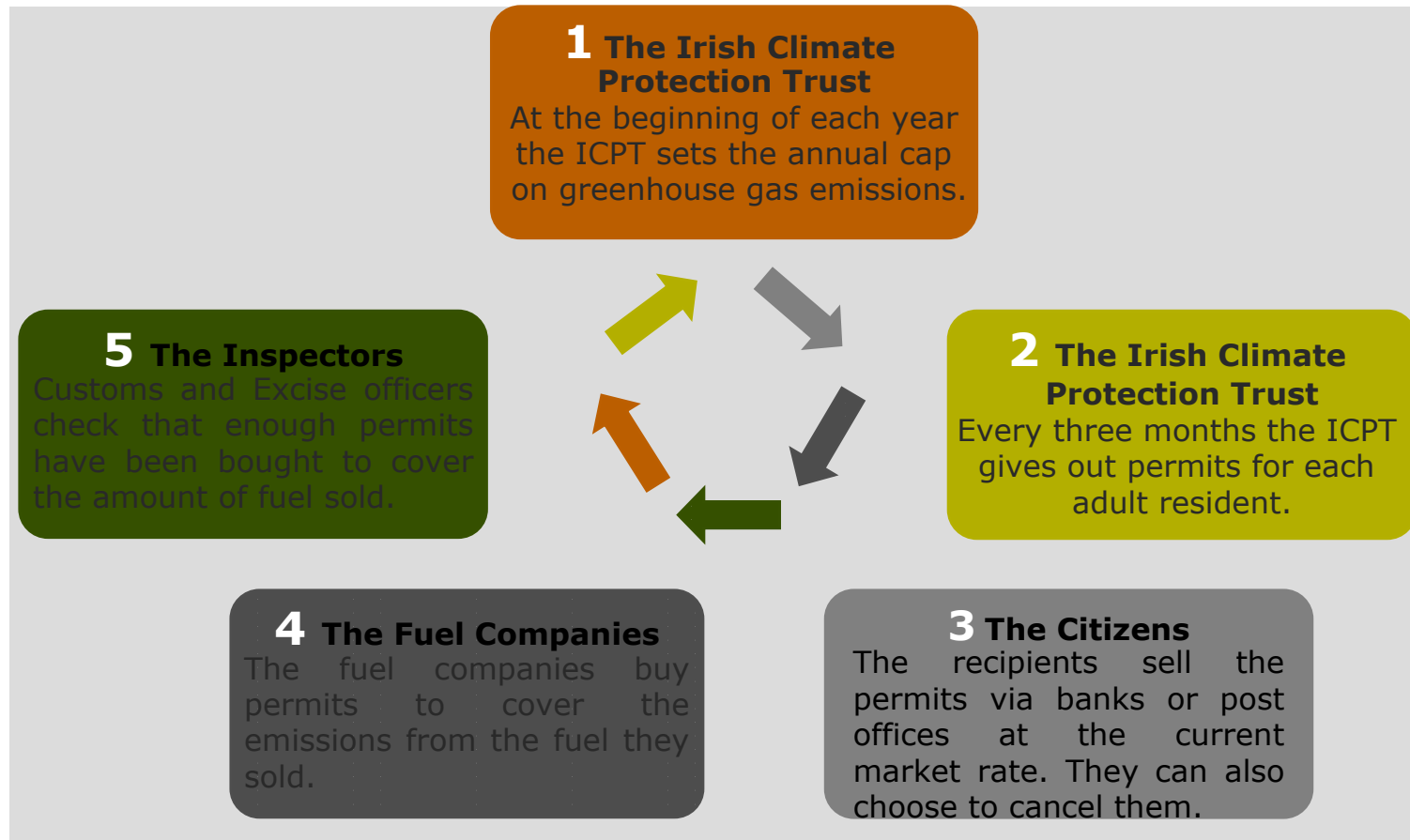
Fossil fuel supply authorisation permits

Empowering
people to limit
climate change

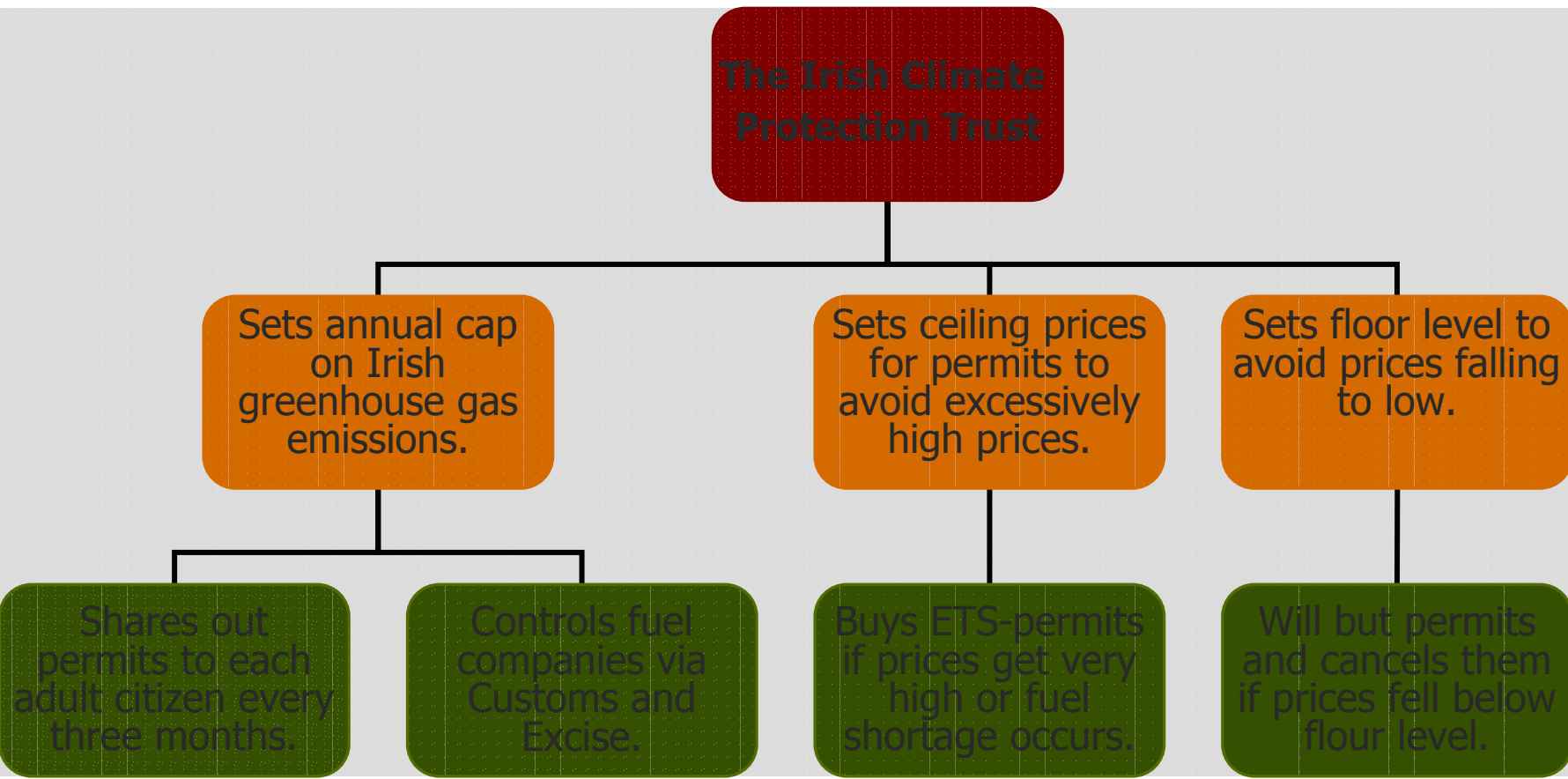


This booklet contains your 2008
permits which you can
sell or destroy

The CAP & SHARE flow chart



The Irish Climate Protection Trust



Advantages of Cap & Share 1

	Cap and Share	Excise duty/carbon tax	Congestion charge
Political acceptability	High	Low	Low
Achieves emissions target?	Yes	Uncertain	No

Advantages of CAP & SHARE 2

- Guarantees the emissions target can be met
- Would be seen as fair and therefore acceptable - protects the less well off
- Adjusts automatically to oil price and economic conditions
- Easy to implement - based on the electoral register
- Avoids the need for special tax breaks for biofuels
- Scheme could be extended to cover heating oils and gas
- Tests an alternative to ETS that if successful, could be extended worldwide post Kyoto

Contact

Web. www.capandshare.org

www.feasta.org

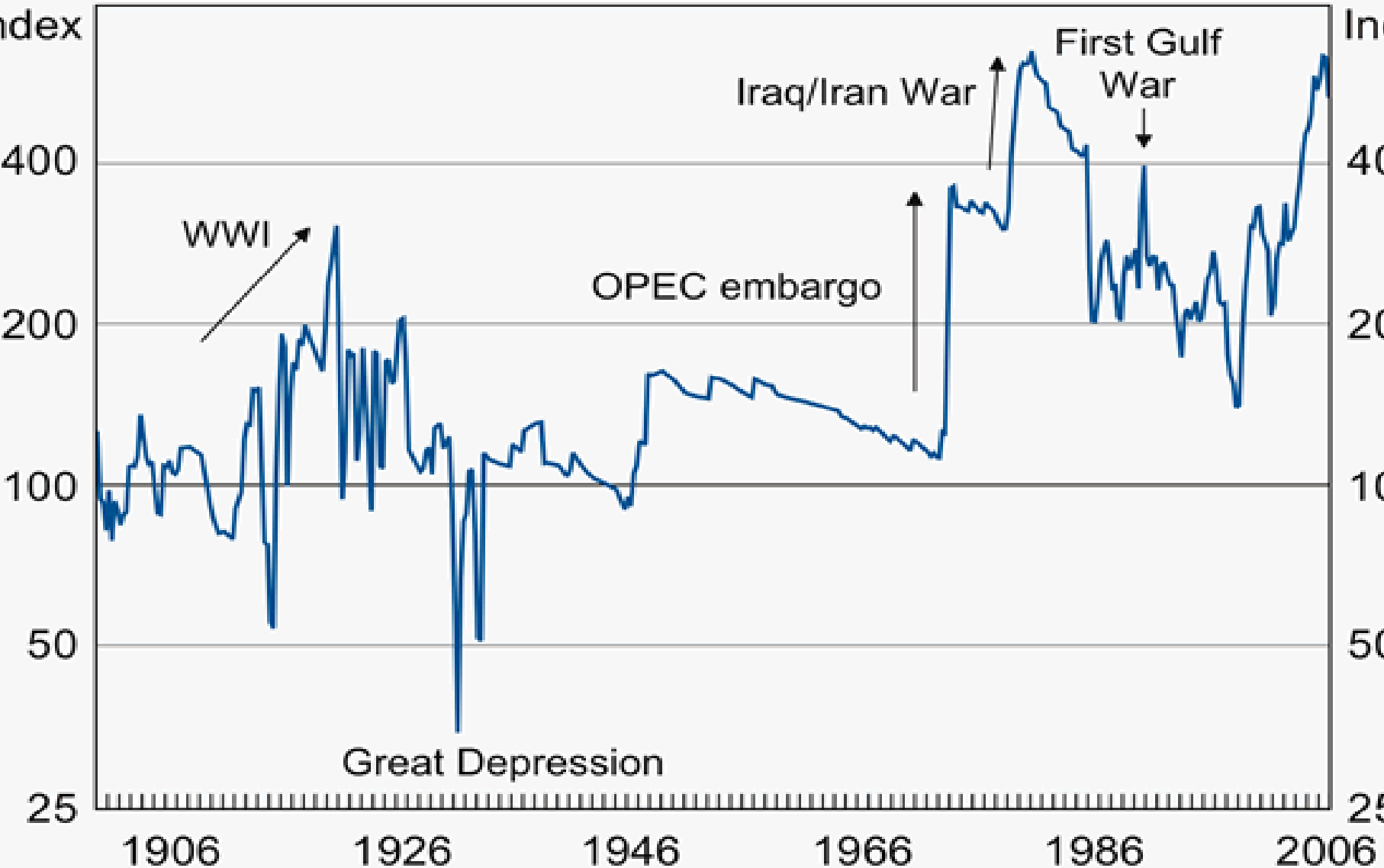
Email. feasta@gmail.com

Comparison between C&S and DTQs

- www.essex.ac.uk/eccc/Presentations/Starkey.ppt (Richard Starkey, Tyndall Centre for Climate Change Research)

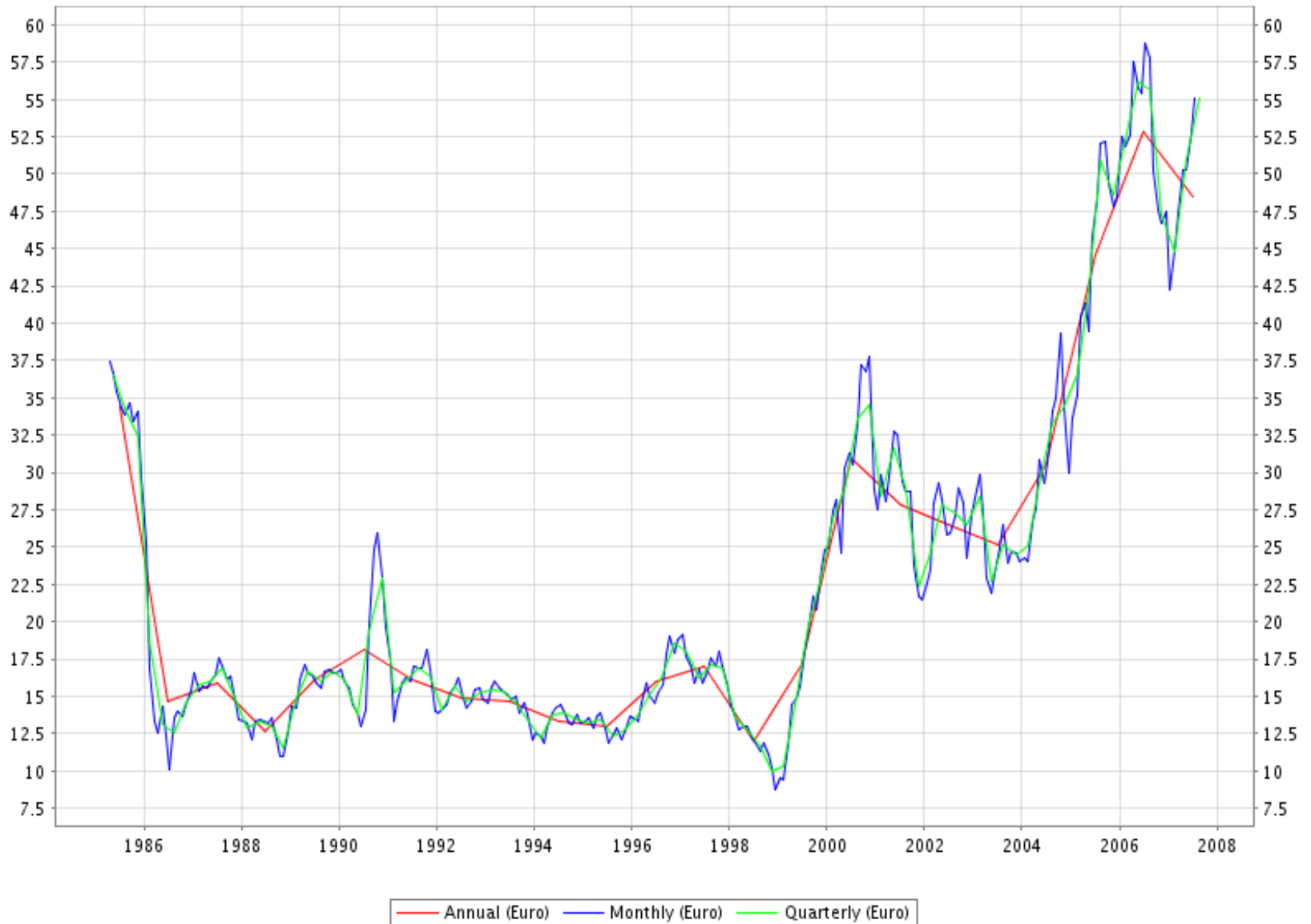
Real Oil Price

1900 = 100, log scale, US GDP deflator



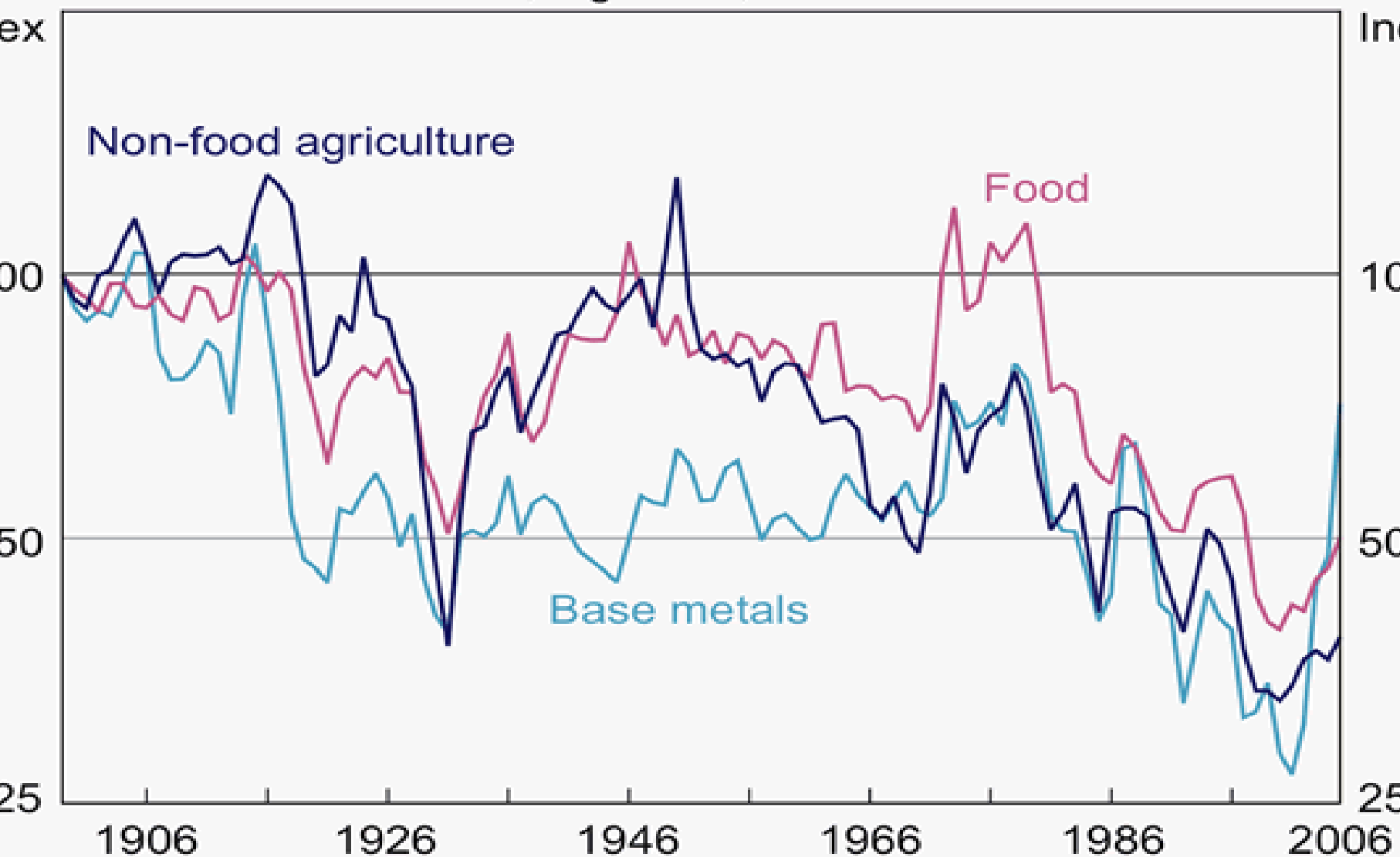
Source: Global Financial Data

The price of oil in euros



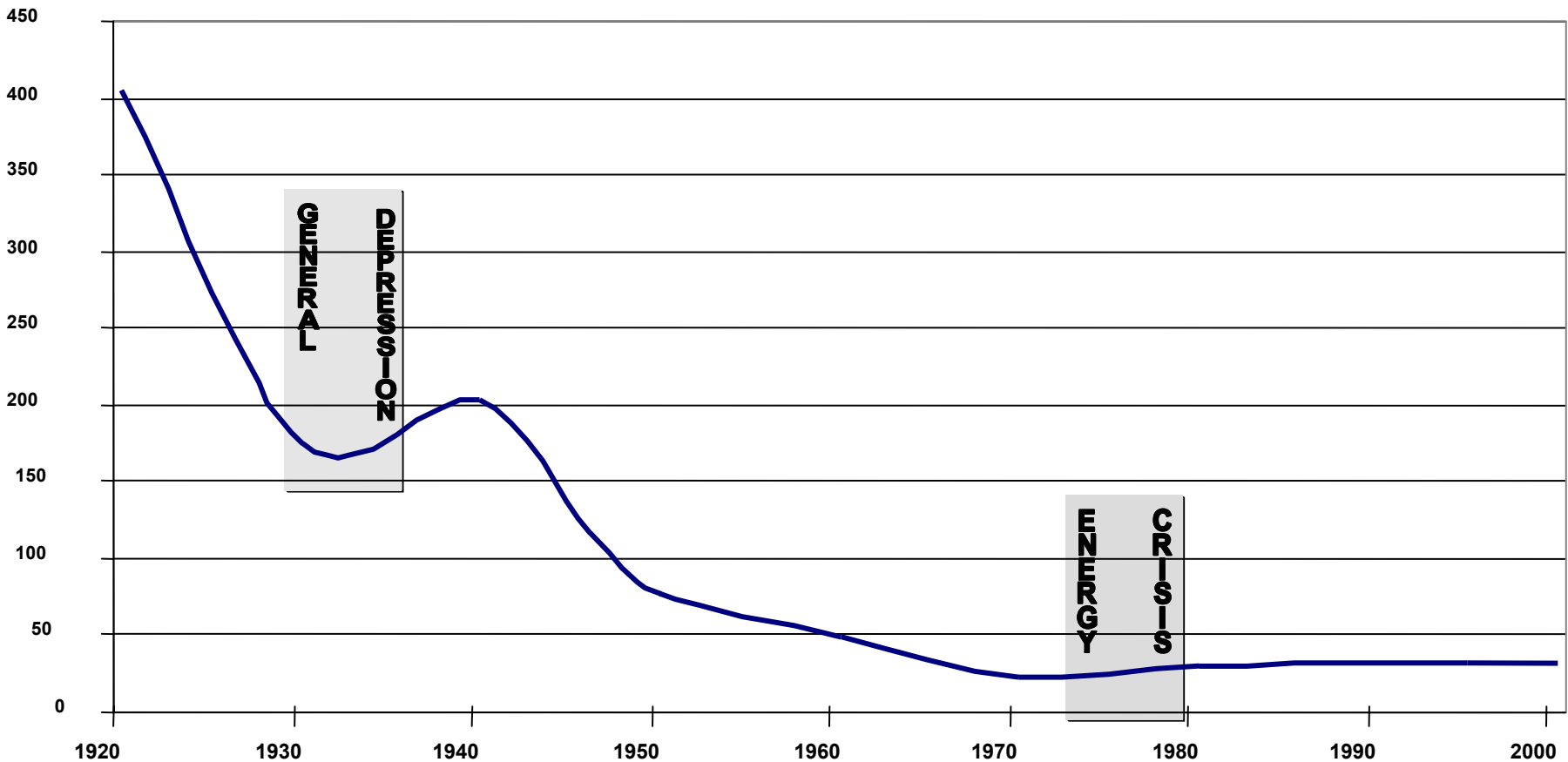
Real Prices by Commodity Type

1900 = 100, log scale, US GDP deflator



Sources: Global Financial Data; Grilli and Yang (1988); IMF; Pfaffenzeller et al (2007)

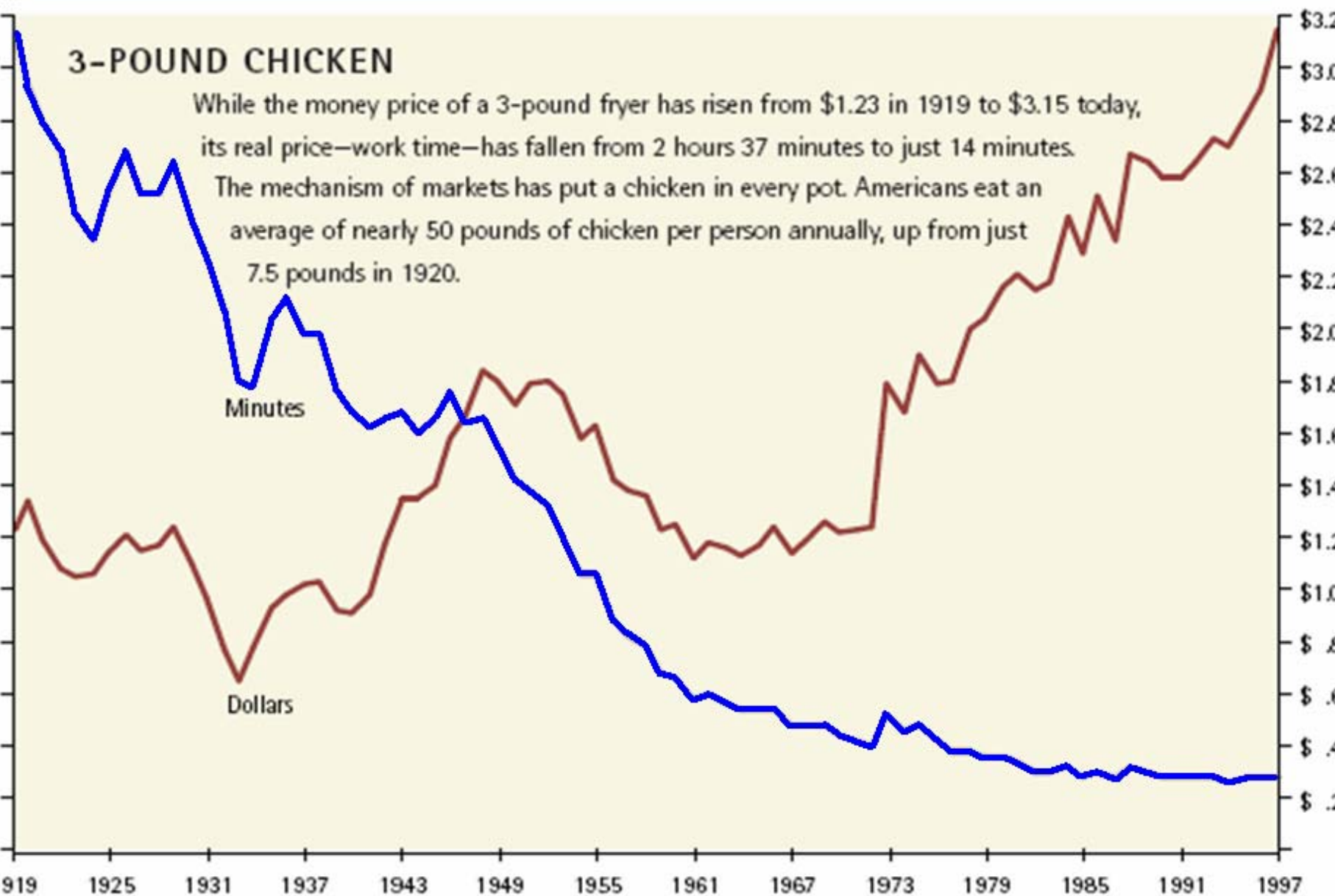
Number of seconds of work required to earn the money to buy a unit of electricity



3-POUND CHICKEN

While the money price of a 3-pound fryer has risen from \$1.23 in 1919 to \$3.15 today, its real price—work time—has fallen from 2 hours 37 minutes to just 14 minutes.

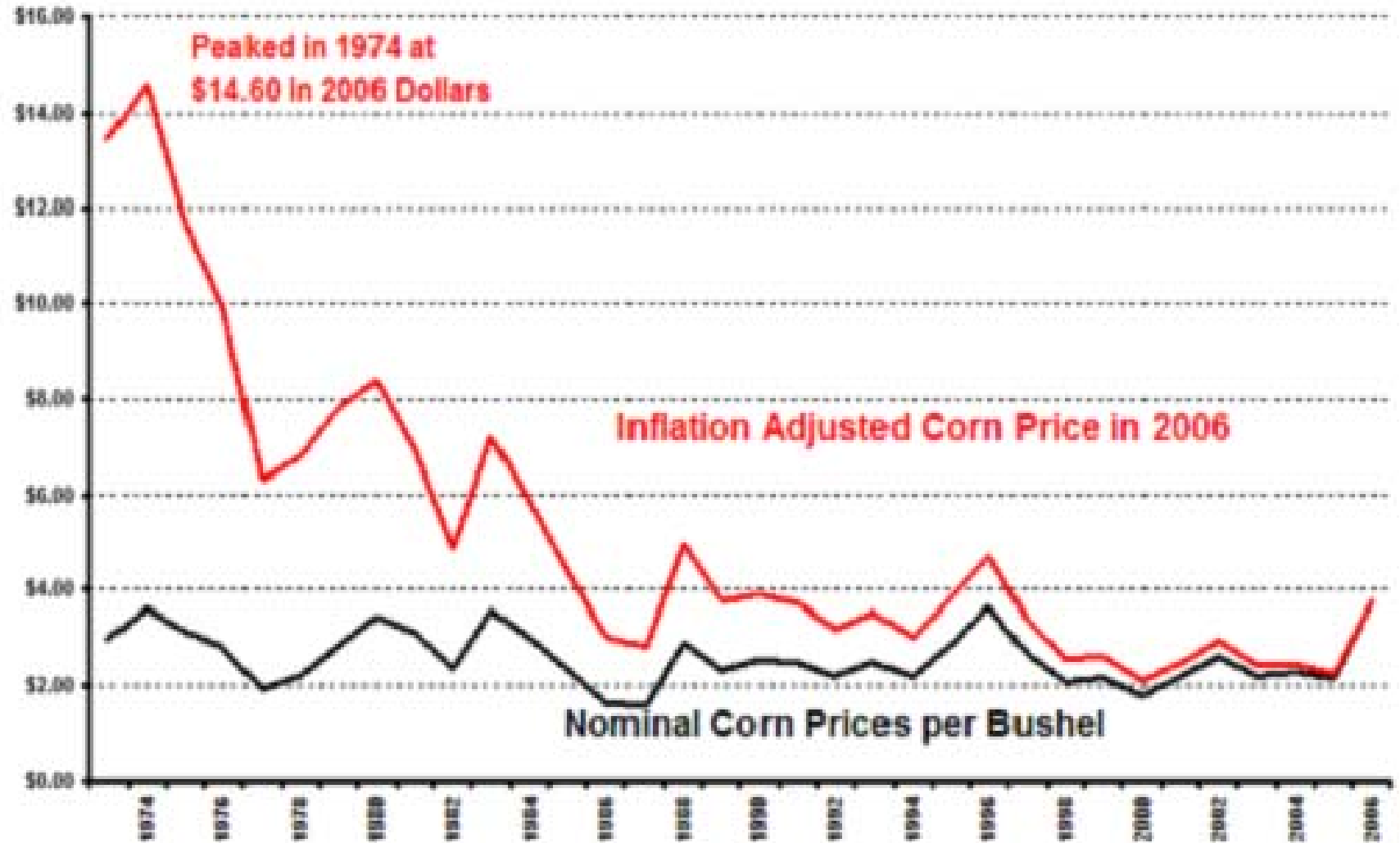
The mechanism of markets has put a chicken in every pot. Americans eat an average of nearly 50 pounds of chicken per person annually, up from just 7.5 pounds in 1920.



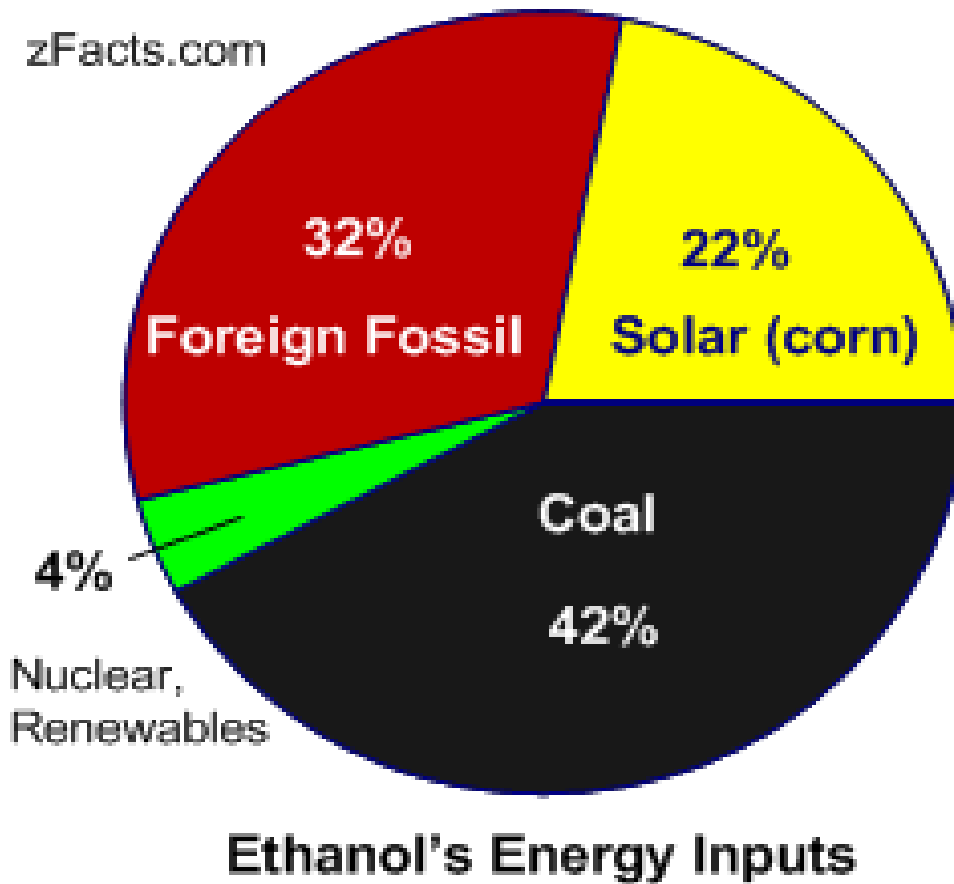
Wheat to oil price ratio

Year	Bushel wheat (dollars)	Barrel of oil (dollars)	Bushel per barrel (ratio)
1950	1.89	1,71	1
1960	1.58	1.85	1
1970	1.49	1.79	1
1975	4.06	11.45	3
1980	4.70	35.71	8
1990	3.69	22.90	6
1995	4.82	17.20	4
2000	3.10	28.23	9
2005	3.90	52.00	13

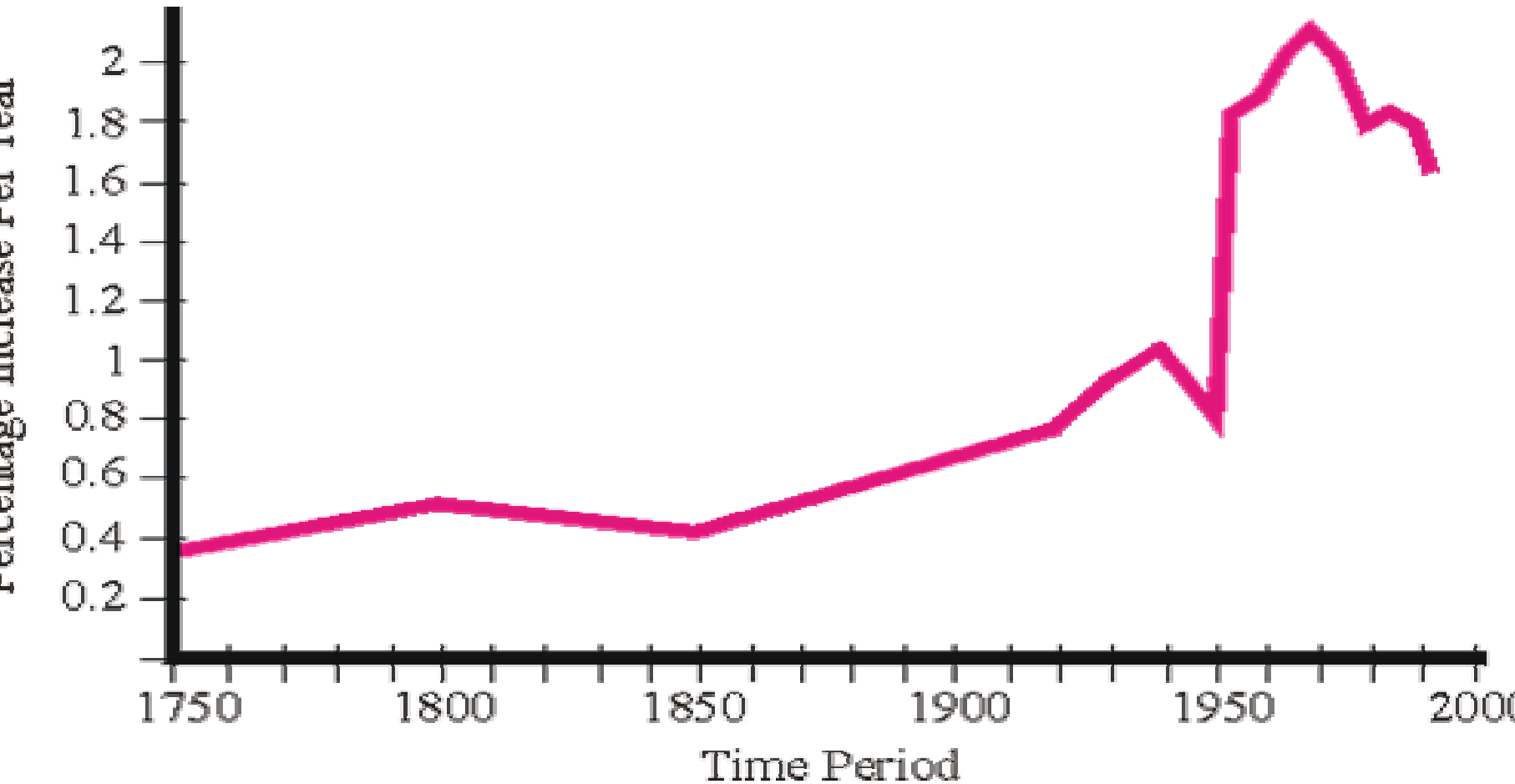
Inflation-adjusted maize prices in the U.S. 1973-2006

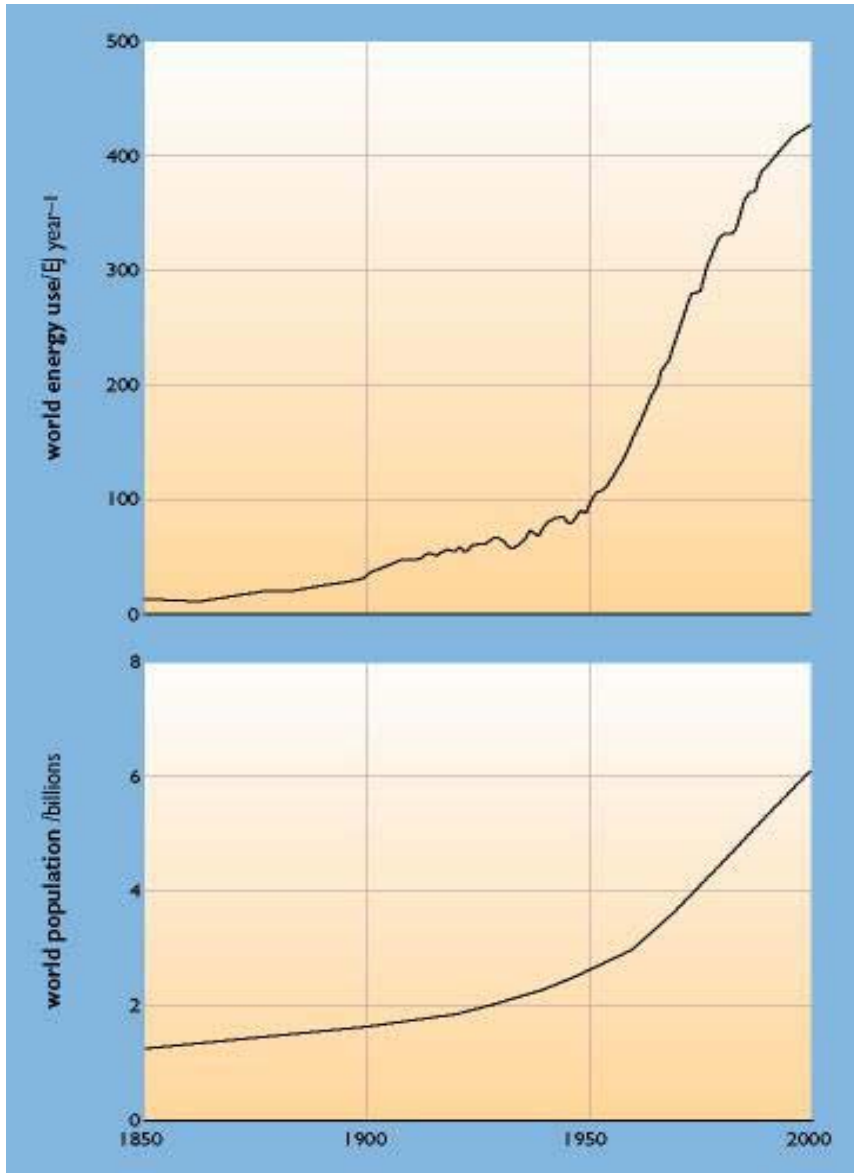


Tax-driven competition: making ethanol from maize in the U.S. could increase emissions



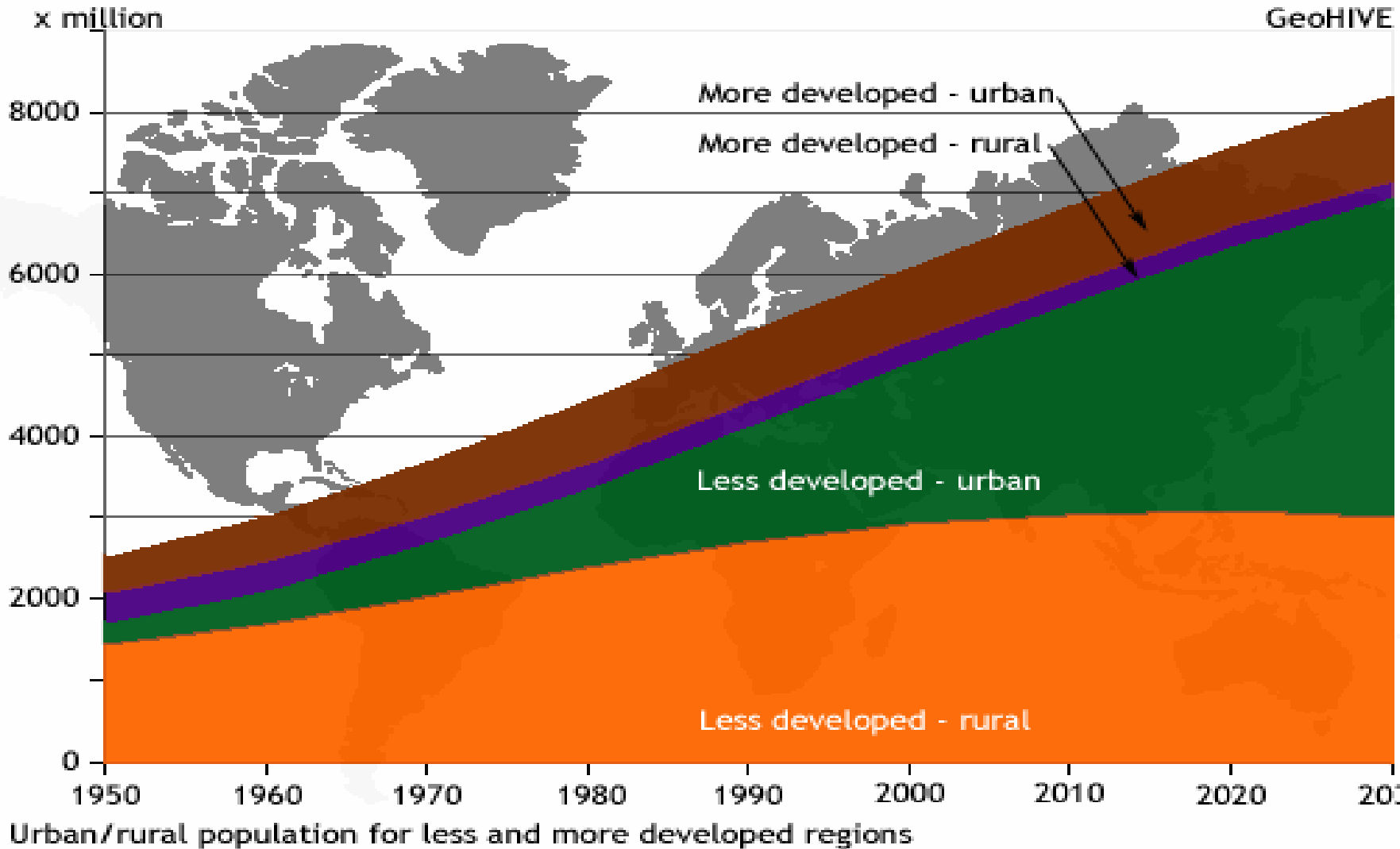
The sudden jump in the rate of growth of the human population



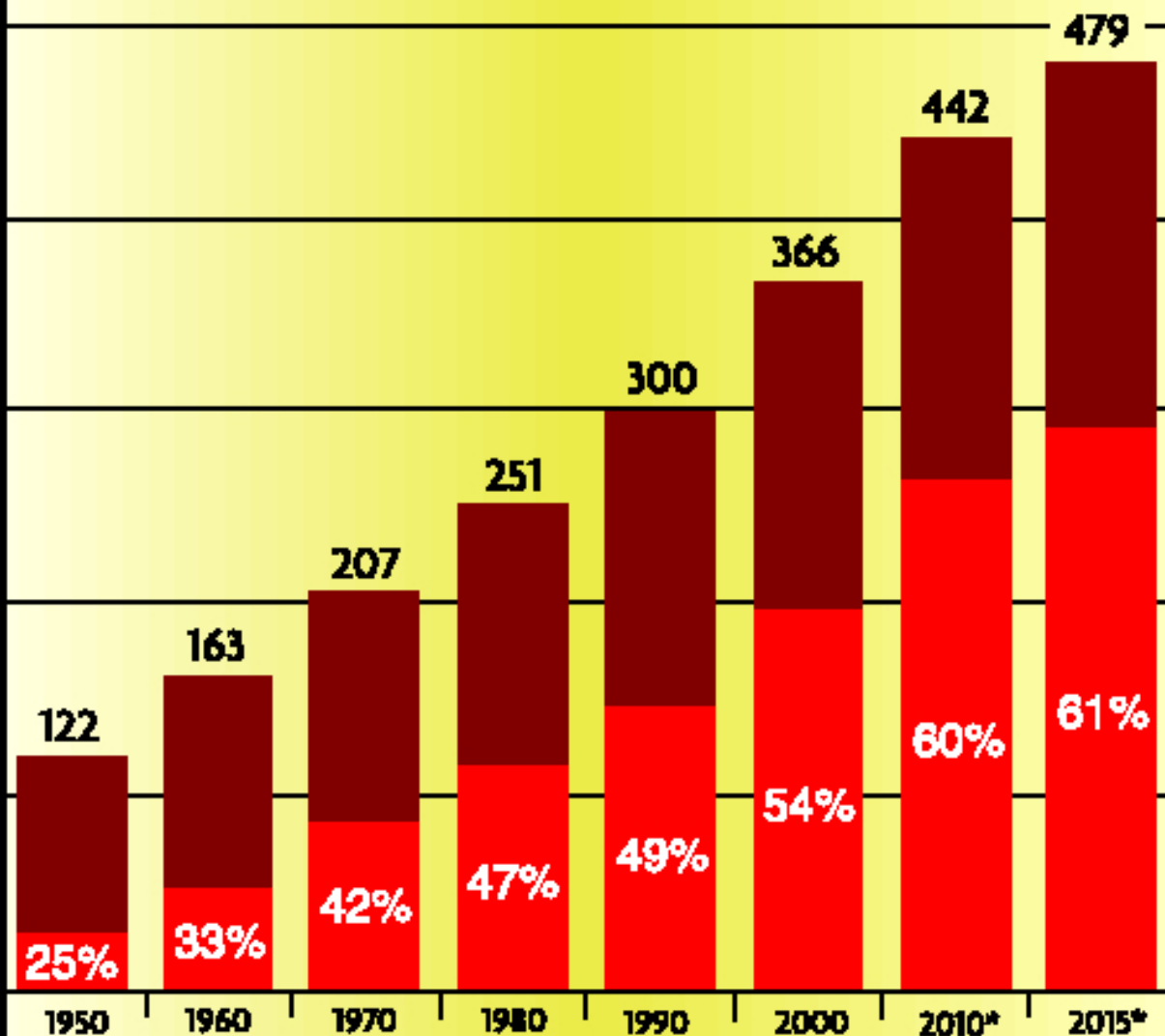


World energy use and
population growth

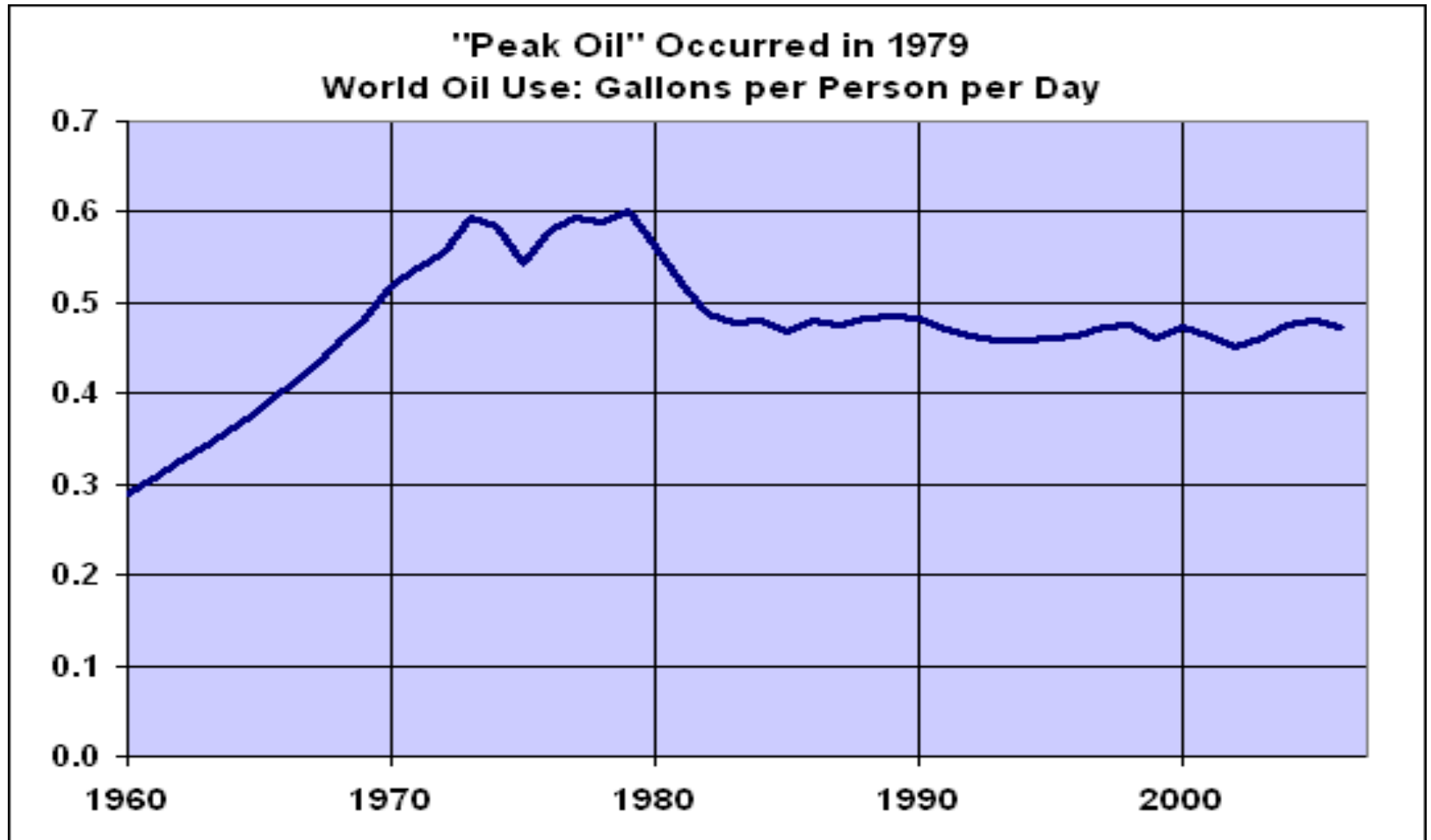
Rapid global urbanisation



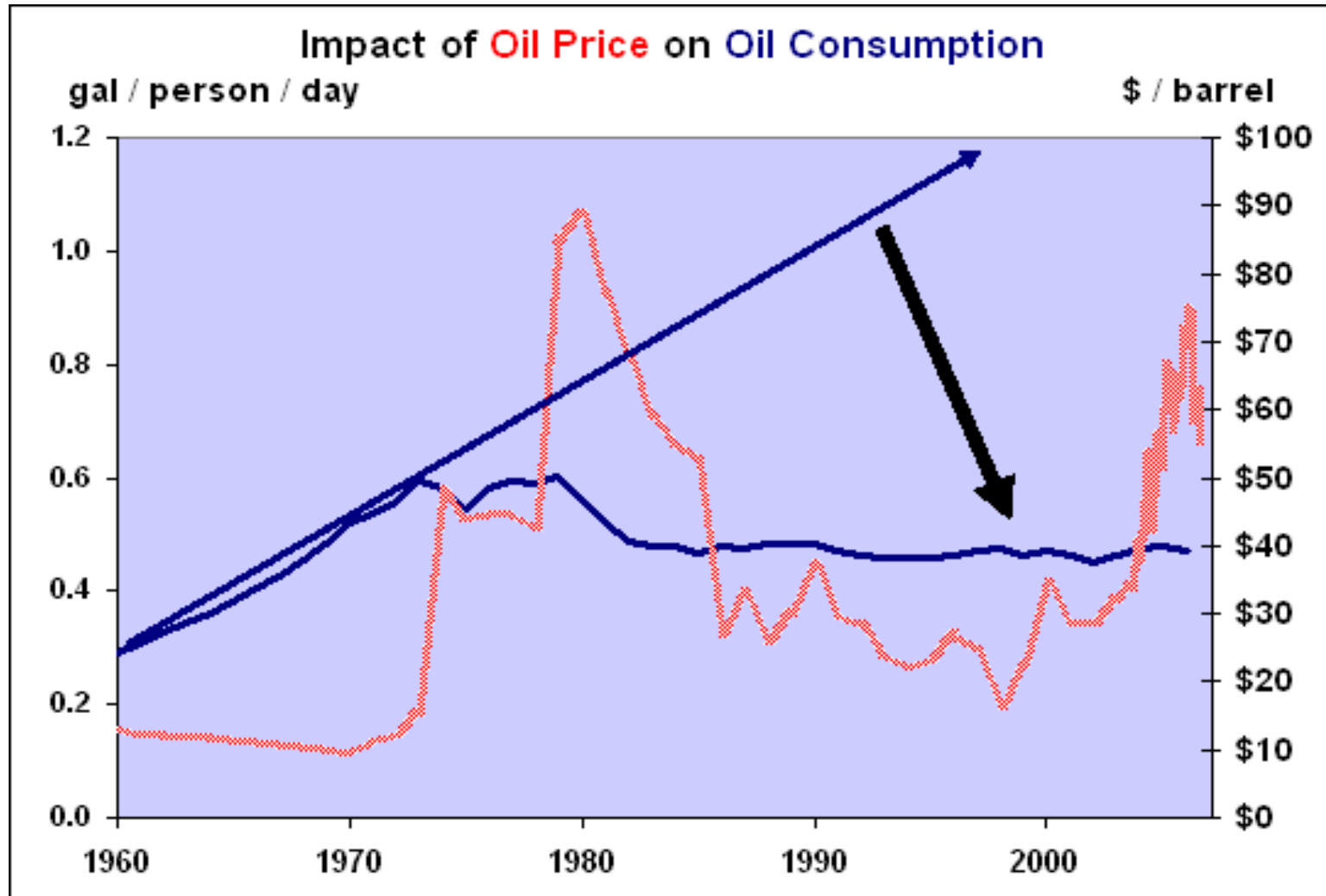
Combined population of the world's 30 largest cities,
in millions (with percentage in Asia).



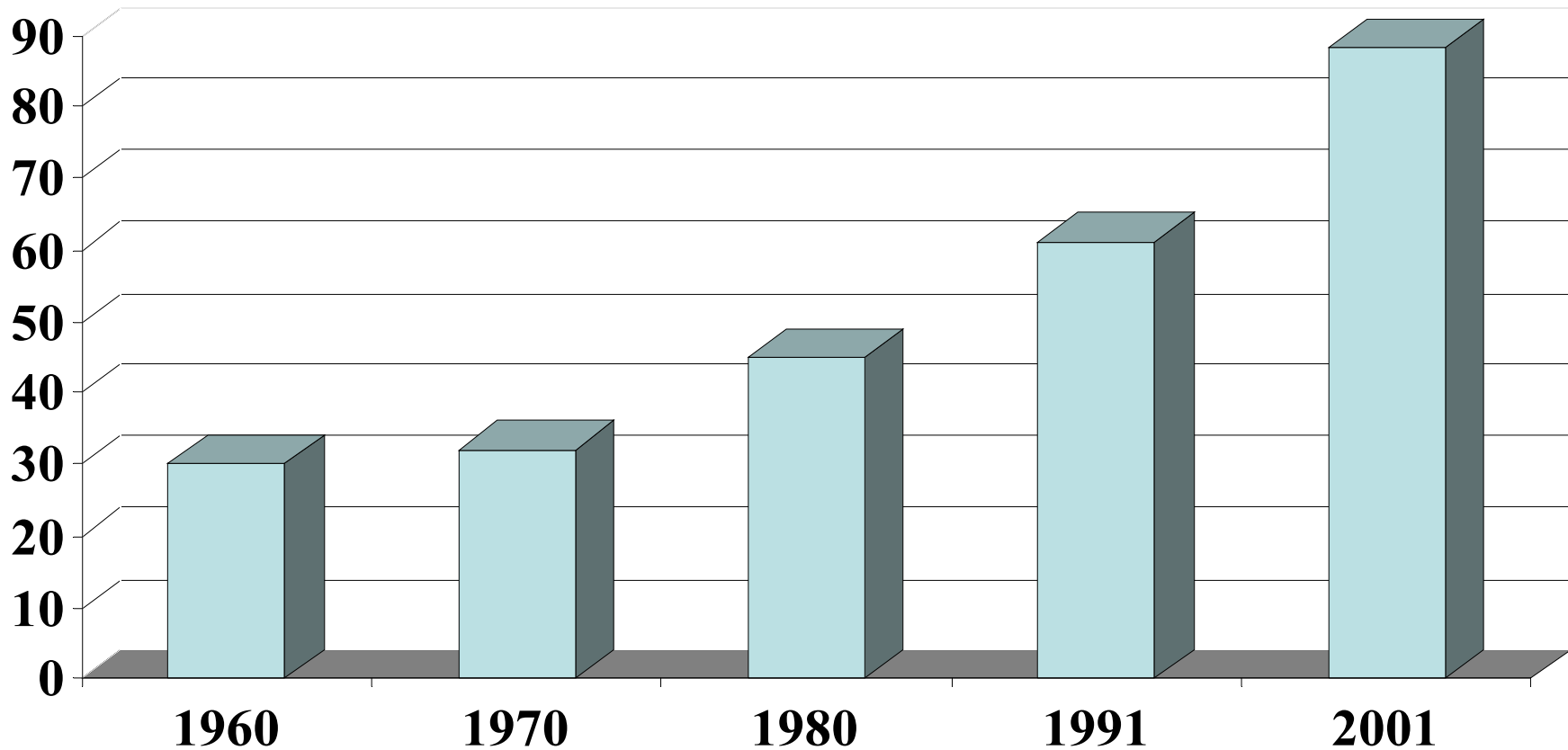
Oil use per person on the planet is already falling



Sharp price increases in the past halted the upward trend



The gap between rich countries and poor countries has tripled since 1970



Ratio of Richest to Poorest Nation

December 2006

Tsurf(°C) Anomaly vs 1951-1980

.8

