



House of Commons
All Party Parliamentary Group on Peak Oil
& The Lean Economy Connection

TEQs

Tradable Energy Quotas

A Policy Framework
For Peak Oil And Climate Change

David Fleming and Shaun Chamberlin

Tradable Energy Quotas

A fairer and more
effective
alternative to
carbon pricing?

Beth Stratford

What I will cover:

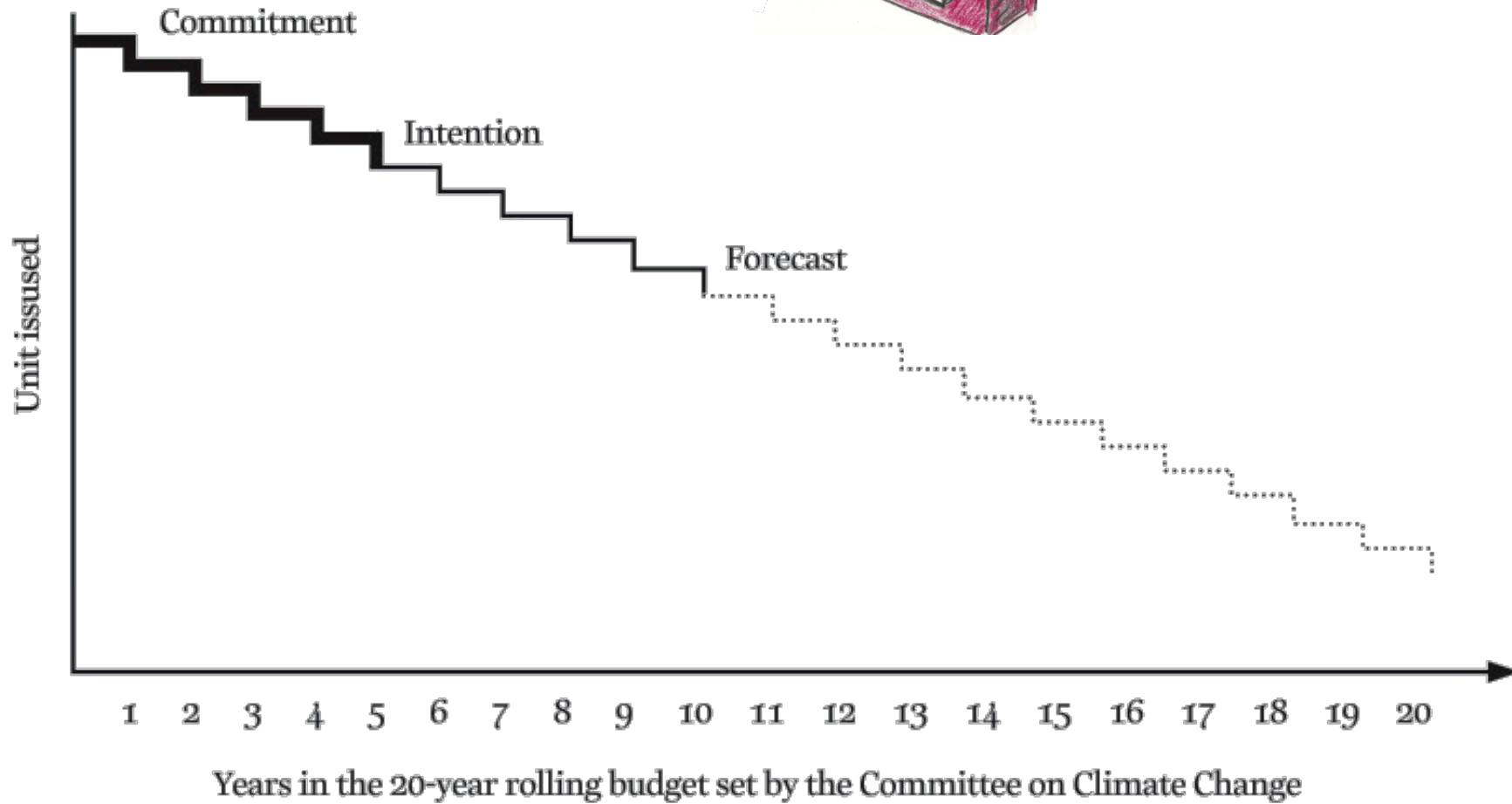
- Some shortcomings of carbon pricing approach
- Introduction to Tradable Energy Quotas
- More effective at motivating behaviour change?
- Perceived as more fair?
- If time: political history and cost considerations



The trouble with carbon pricing



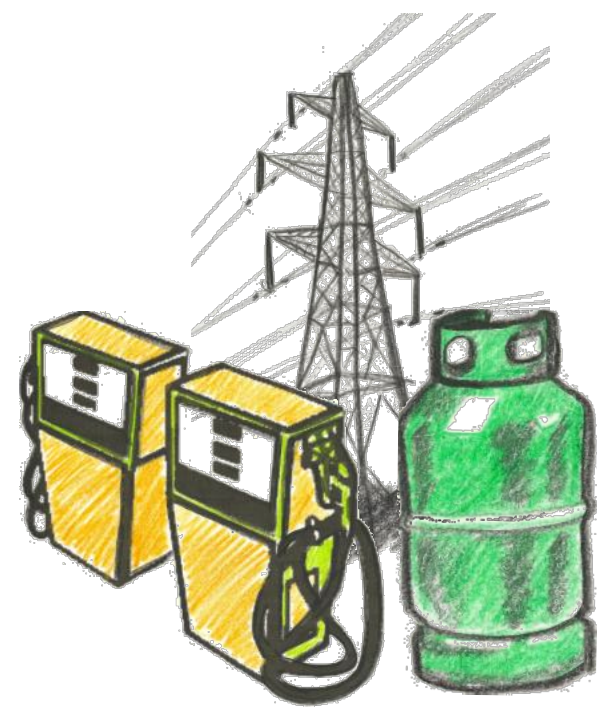
- Failing to deliver on the kind of scale we need
- Conflict with goal reducing fuel poverty
- Doesn't distinguish between luxury and essential
- Doesn't embed long term perspective
- **Relies on extrinsic motivation** (for problems with systems of financial incentives/disincentives see e.g. Bowles, 2007; Crompton, 2010; Kohn, 1999; Pink, 2011)





•60% Tender

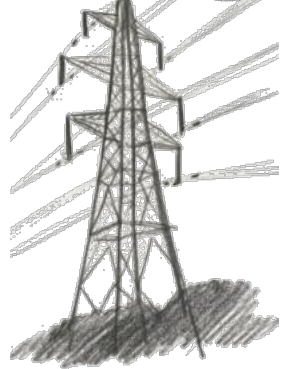
•40% Entitlement **FREE!**



Carbon Rating (based on life cycle emissions)



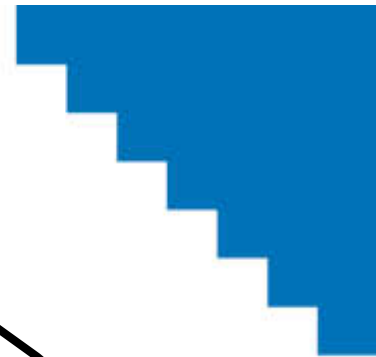
• 2.5 kg CO₂ / litre



• 0.43 kg CO₂ / kWh



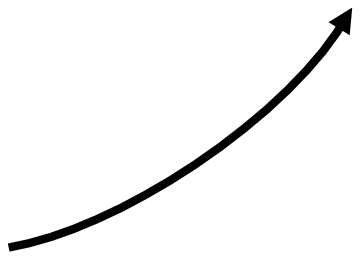
• 2.2 kg CO₂ / m³



•60% Tender

•40% Entitlement

FREE!



TEQs: more effective than carbon pricing at reducing demand?

Advocates argue 'yes' because TEQs:

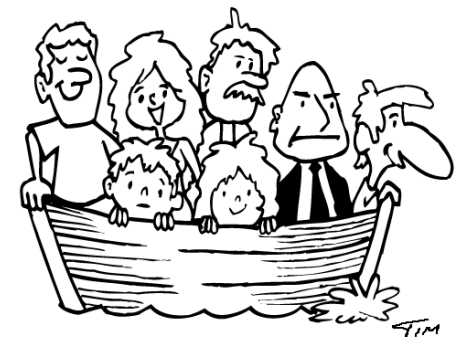
- embed a long term perspective
- clearly demarcate a 'normal' or 'appropriate' level of personal emission (and improve carbon literacy)

- generate sense of common purpose:

eliminates the free rider

facilitates 'conditional cooperation'

puts pressure upon those not 'pulling their weight'



Intrinsic vs extrinsic motivation?



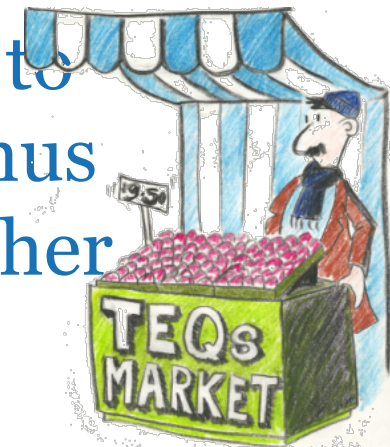
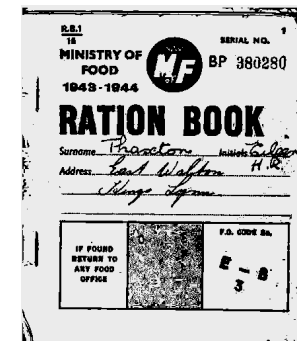
Advocates argue that TEQs would engage our *intrinsic* motivation

But if the scheme is not considered fair and legitimate, it could be experienced/interpreted in the same way as other extrinsic rewards and punishments, conveying the notion that “it is acceptable to pollute, provided you pay for it” (Frey and Stutzer, 2006)

Would the system be considered fair?

Advocates argue yes because:

- TEQs guarantees equitable entitlements to 'essential' energy, while retaining flexibility for individuals to choose
- Lower income households which tend to use less energy can sell their surplus. Thus the scheme is more progressive than either a carbon tax or an upstream cap system (Ekin and Dresner, 2004; Thumin and White, 2008)



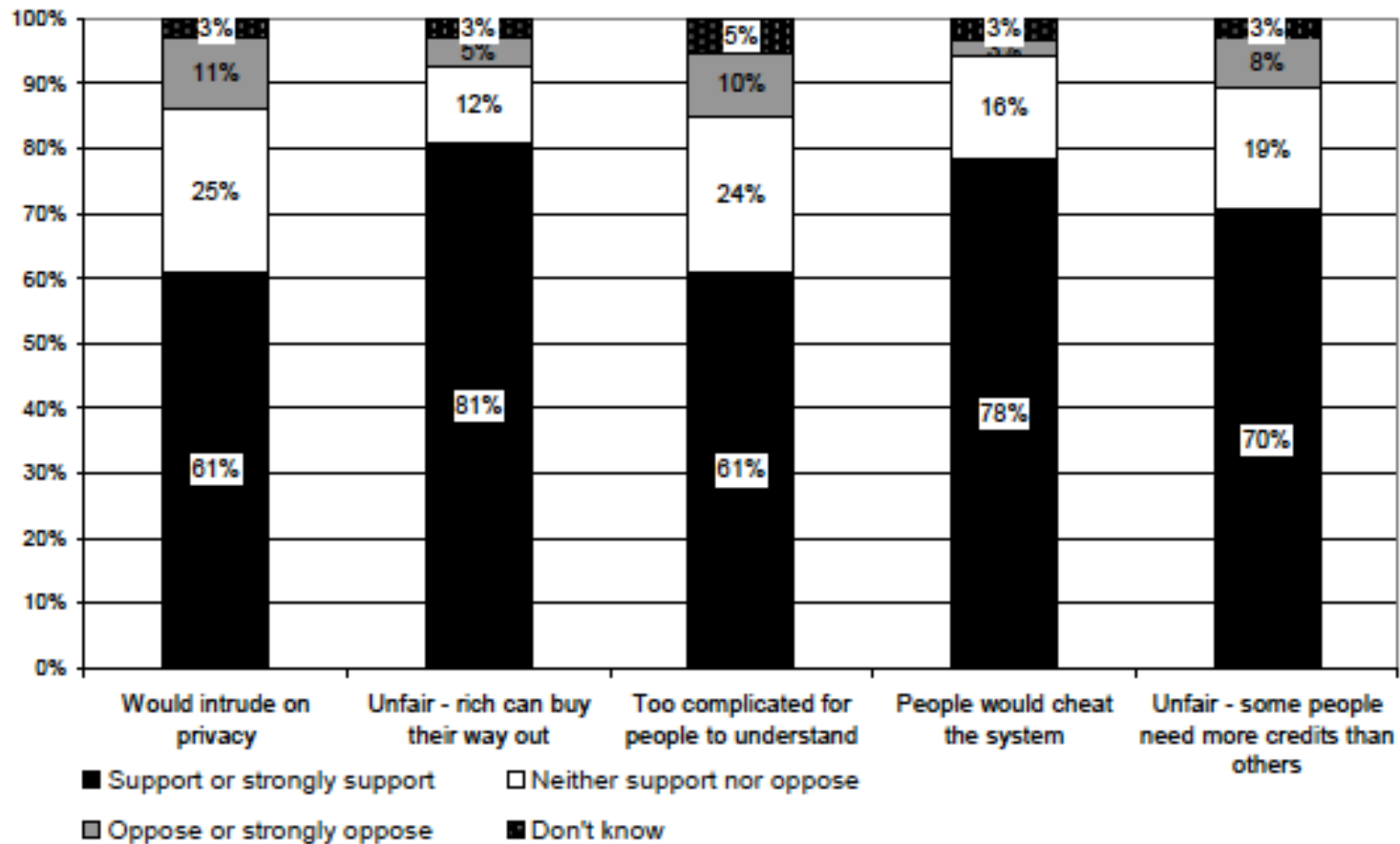
Distribution of carbon emissions by income decile



Source: Centre for Sustainable Energy

TEQs: public perception

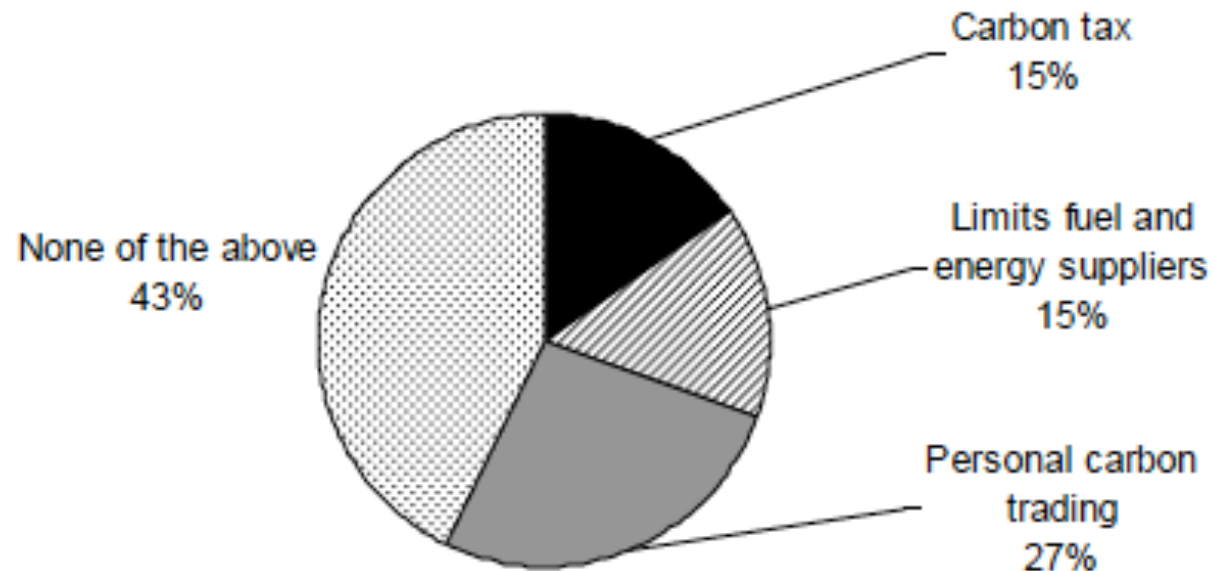
Arguments against introducing PCT



Source: IPPR (Bird et al., 2008)

TEQs: public perception

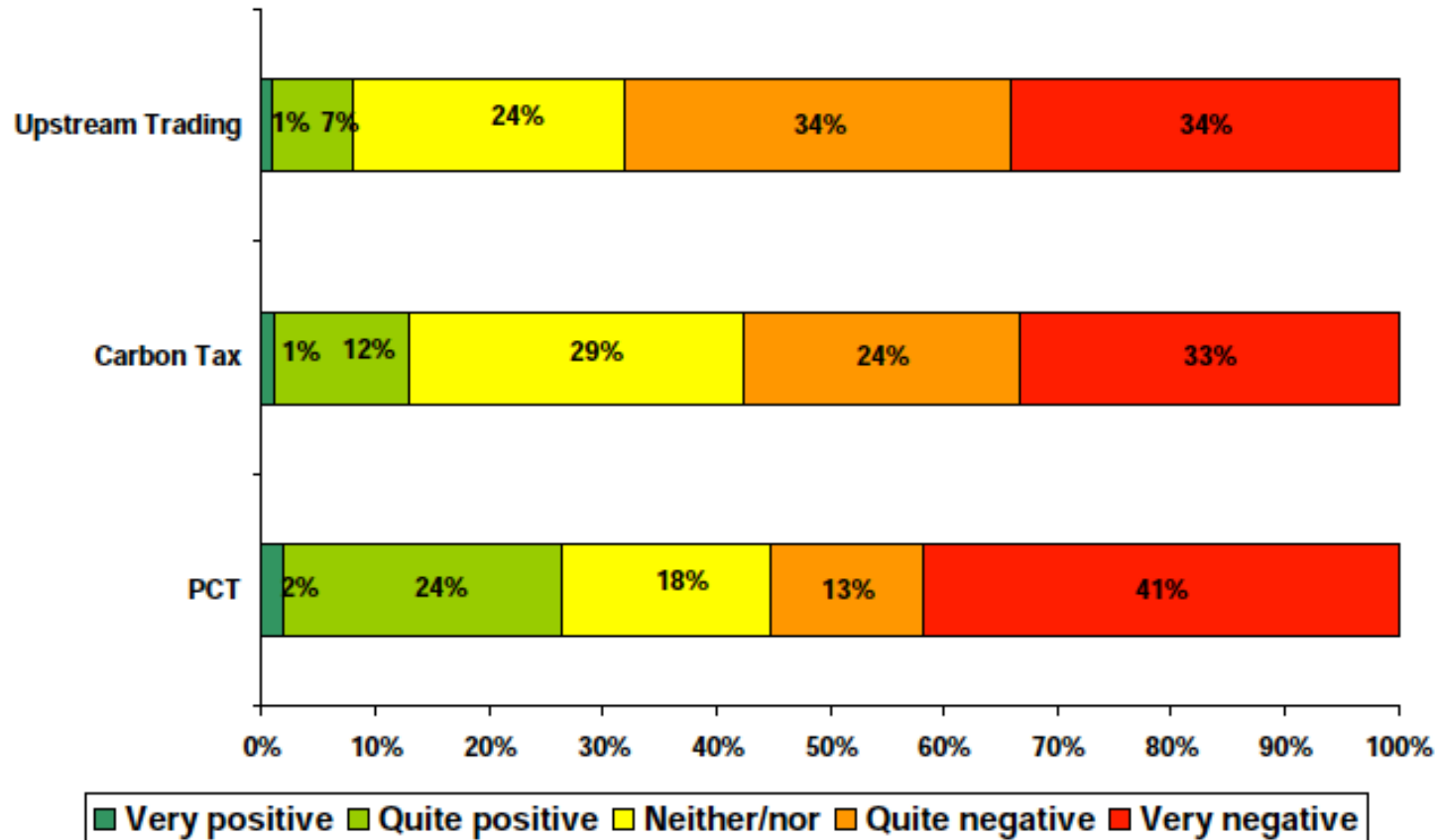
You have seen three different types of action to reduce carbon dioxide emissions. If one was going to be introduced, which one would you prefer (please select one)?



Source: IPPR (Bird et al., 2008)

TEQs: public perception

How do you feel about each of the carbon reduction schemes discussed today?



Base: 92

Source: Defra (Owen et al., 2008)

Brief History



First published 1996

Ten Minute Rule Bill 2004

Government funded research 2006

Pre-feasibility study 2008

APPGOPO report 2011

Expressions of interest from successive Labour Secretaries of State for the Environment, and from senior Conservative politicians.

Defra's Pre-feasibility study



“while personal carbon trading remains a potentially important way to engage individuals, and there are no insurmountable technical obstacles to its introduction, it would nonetheless seem that it is an idea currently ahead of its time in terms of its public acceptability and the technology to bring down the cost”

TEQs: costs



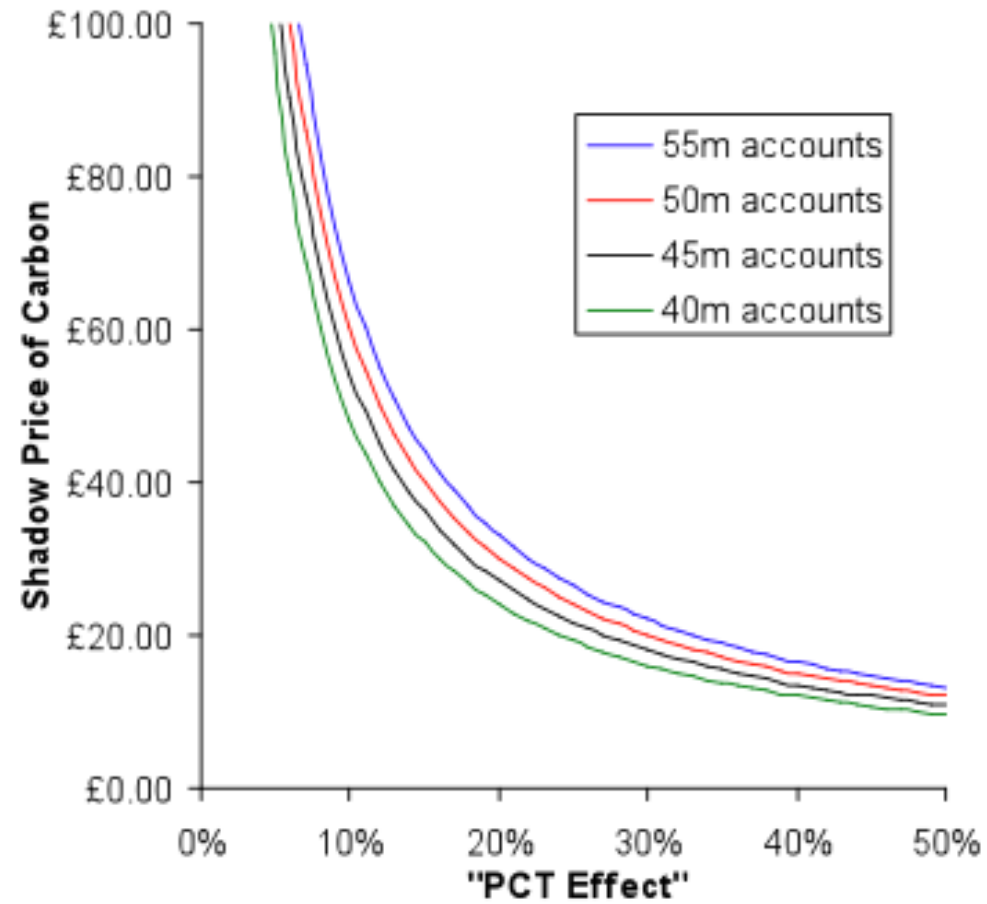
Defra's CBA concluded that costs outweighed benefits

- Shadow Price of Carbon of £30/tCO₂
- IPPR estimate costs that are almost half
- Overlooked a number of benefits (inc. rationing)
(Scheme mis-specified)

TEQs: costs



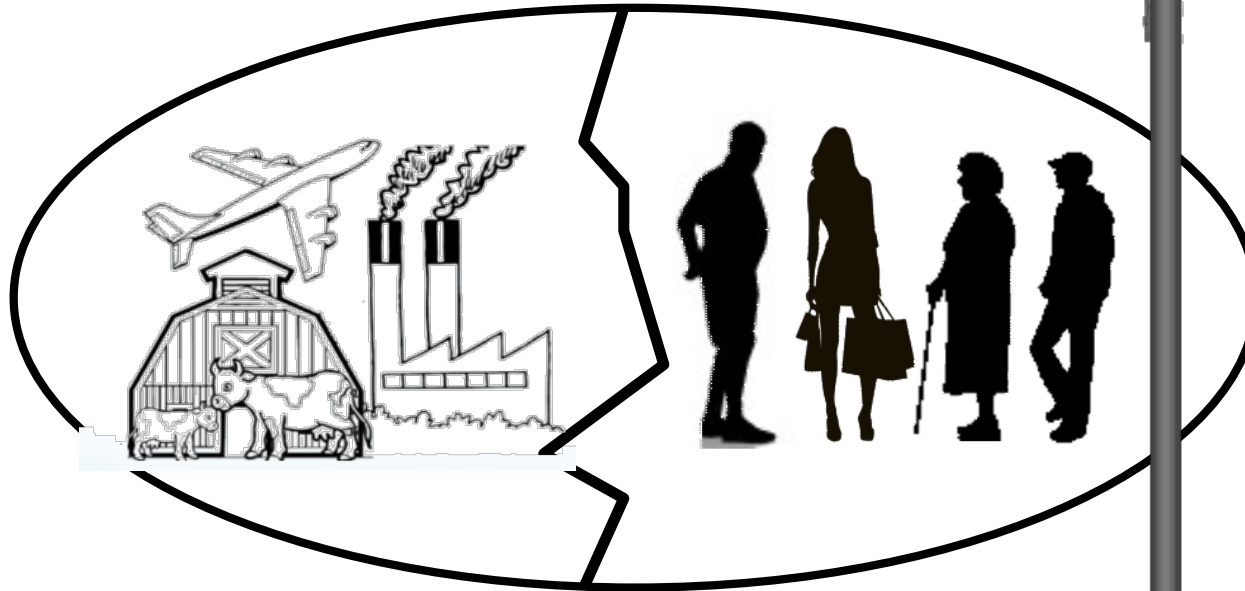
Cost effective space for central costs



TEQs: policy space

£

£



TEQS: For & Against

Because of the guaranteed free equal entitlements the system is much fairer and more progressive than taxes or an upstream cap. Certainly fairer than doing nothing!

Potential to motivate rapid behaviour and attitude change (encouraging long term perspective, creating a tangible sense of one's 'fair' share, and a sense of 'common purpose')

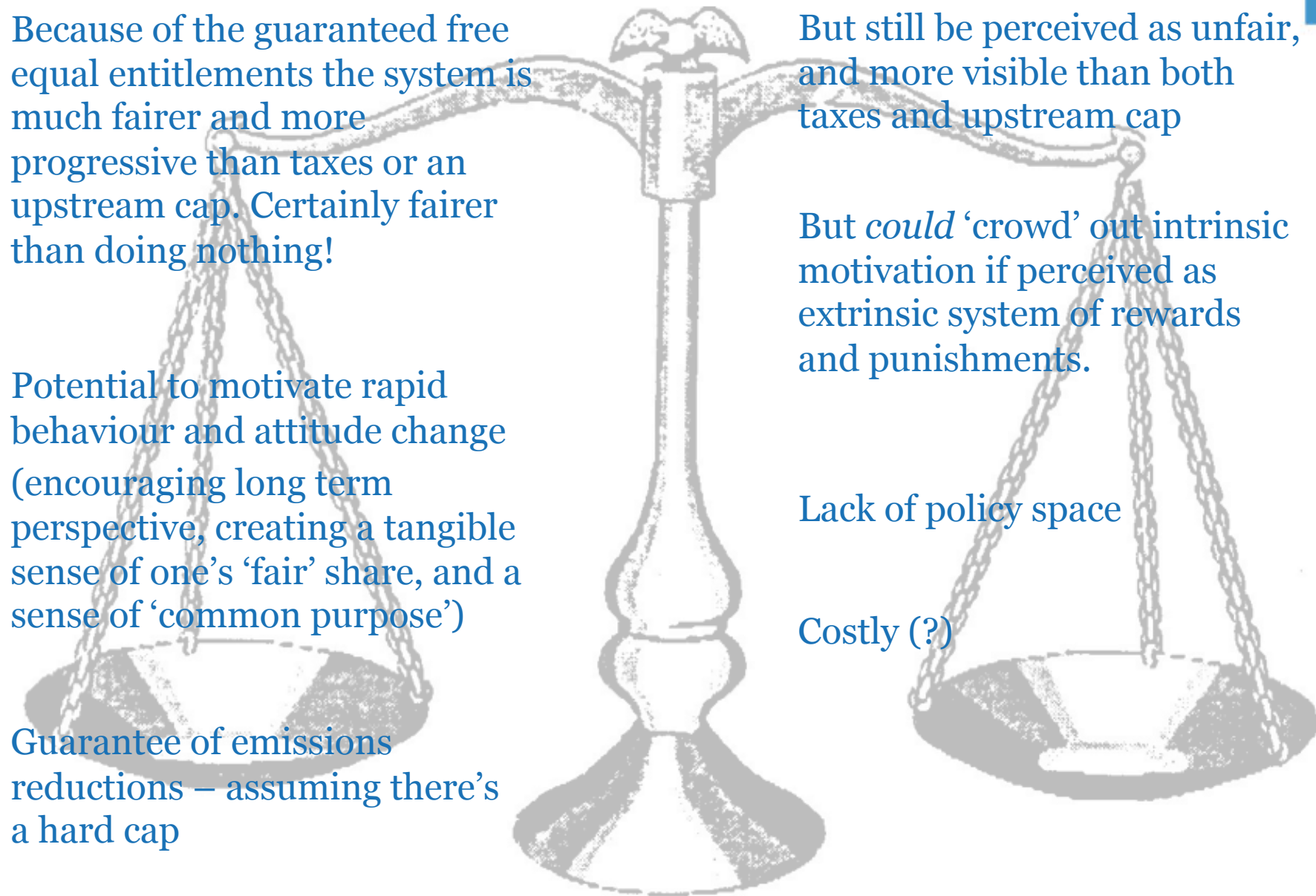
Guarantee of emissions reductions – assuming there's a hard cap

But still be perceived as unfair, and more visible than both taxes and upstream cap

But *could* 'crowd' out intrinsic motivation if perceived as extrinsic system of rewards and punishments.

Lack of policy space

Costly (?)





More info:
www.teqs.net