

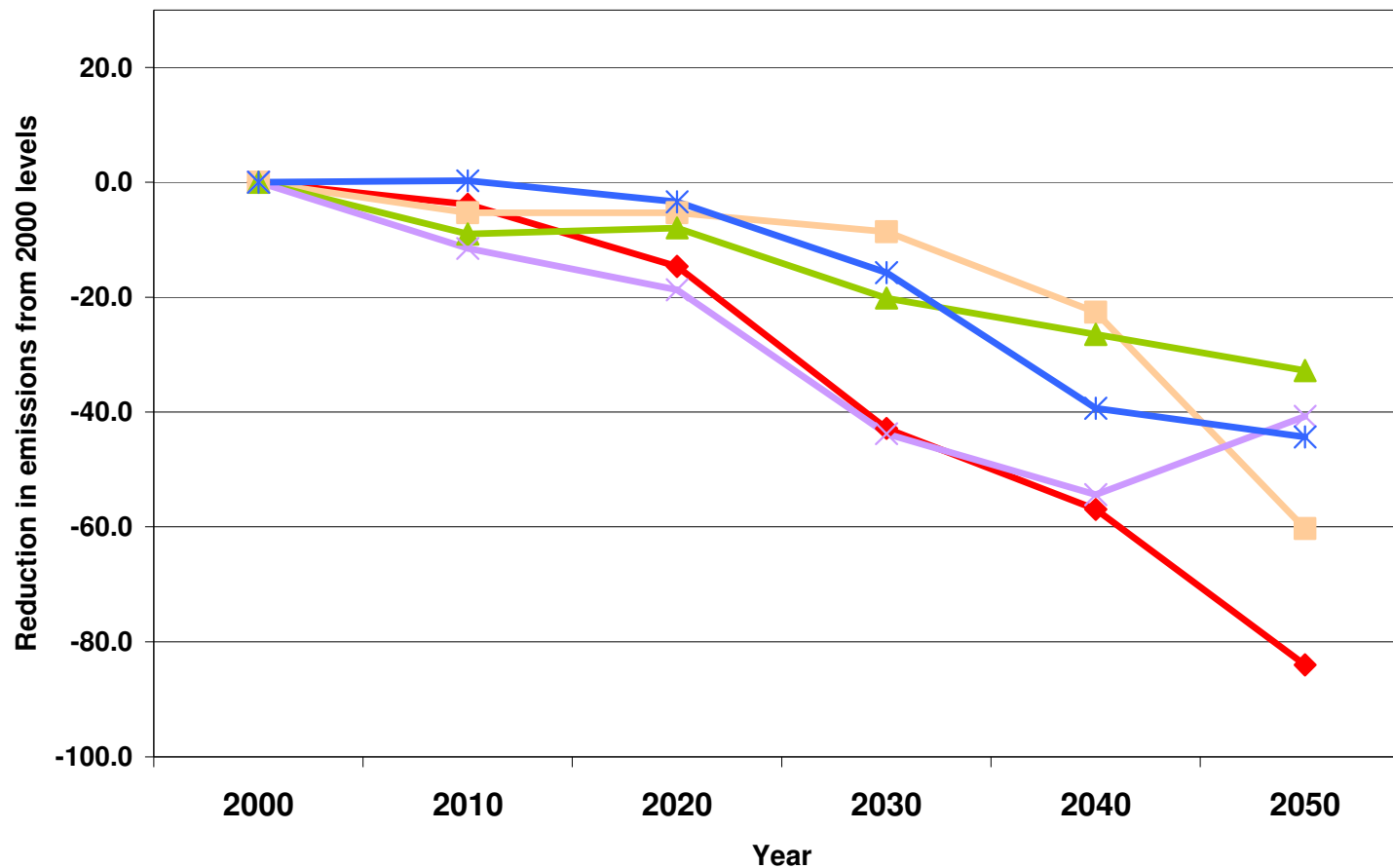
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Chair
Climate Change Working Group

To establish transport's role as part of wider efforts across the economy to deliver the most cost-effective carbon reductions consistent with the Government's 2050 aspiration.

Transport and carbon emissions so far

- total UK emissions down since 1990 - but transport up
- transport in 2004 (incl international) = 32% UK total (52.7 MtC) – largest single sector (end user)
- road transport = c 93% all transport emissions (33MtC) – cars making up 54%.
- Freight = growing but question mark over total contribution (NB vans)
- international air = currently small share but fastest growth (123% since 1990)

Cost-effective carbon reductions by sector to 2050 (DTI, 2007, Energy White Paper)



◆ Energy Sector ■ Industry ▲ Residential × Services * Transport

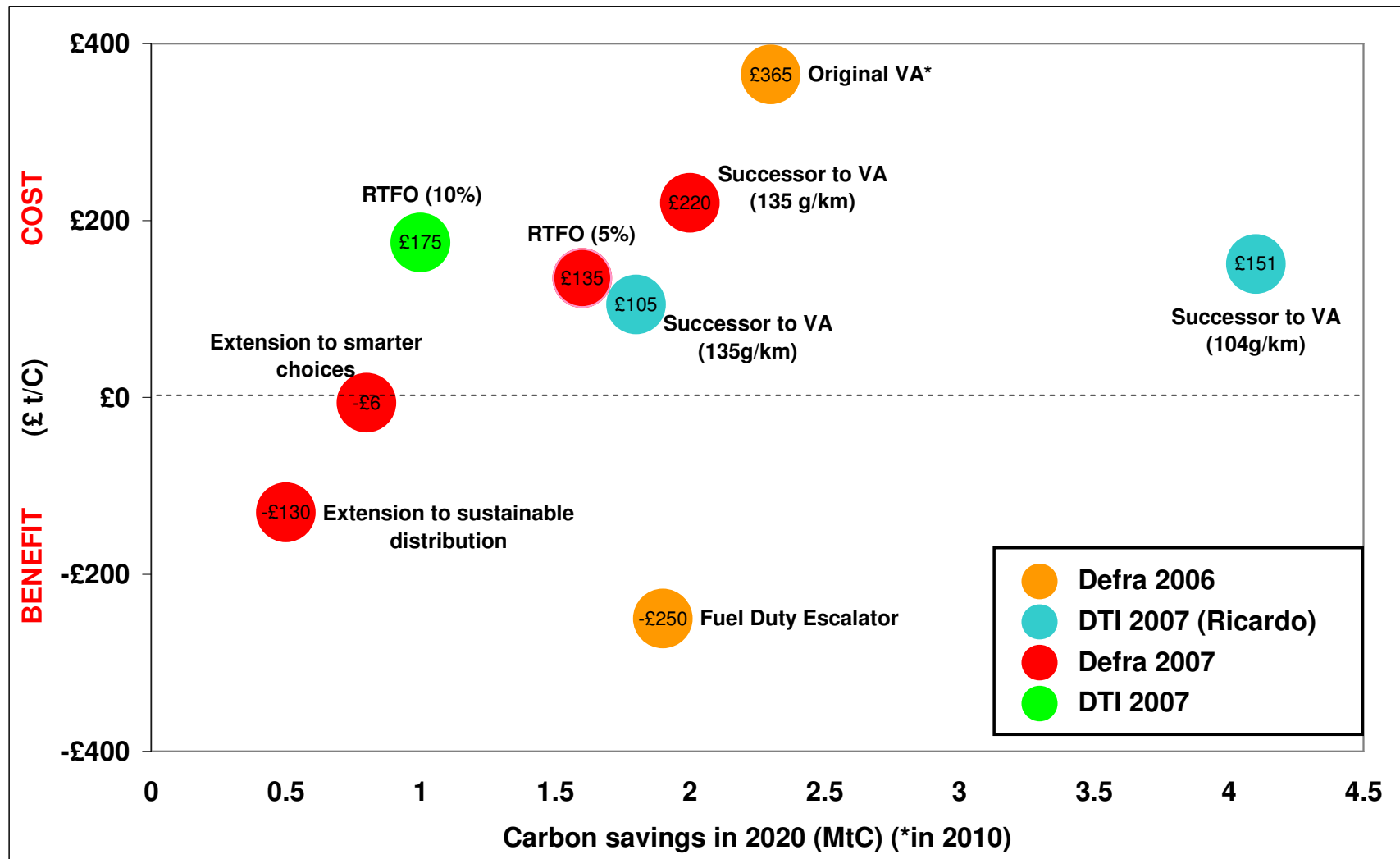
Projected transport carbon emissions

- Impact of Govt policies: domestic transport emissions stabilise at 2005 levels by 2020 – but treat with care:
 - international aviation/shipping not included, new assumptions e.g. flatter car traffic growth, etc
- Govt scenarios for all economy to 2050: transport's role becomes more significant after 2020 – but treat with care:
 - focused on technology rather than behaviour, international aviation/shipping not included
- mixed evidence on cost-effectiveness of transport measures – but NB eg smart measures + packages

Observations on Cost Effectiveness

- Transport element of CCP reliant on relatively expensive technology-based carbon abatement opportunities
- Question marks over ability of major elements to deliver reductions (e.g. VA, RTFO)
- Behavioural change cost-effective, but difficult to implement. NB Rebound effect - importance of “locking in” benefits of technology development.
- The role of international transport is unclear

Comparative Cost Data (CCP Policies)



CfIT Approach

- Focus on period to 2020
- Aim to improve deliverability, cost-effectiveness and carbon benefit of existing programme
- Five packages of measures
- More emphasis on behaviour change to 'lock in' the benefits from technological developments
- CfIT proposals could increase carbon savings by 71% vs existing programme

Recommendation One: Vehicle Efficiency

- Adopt mandatory new car CO₂ target - complemented by supporting measures
 - 100g CO₂/km by 2020
 - VED differential
 - Company Car Tax
 - Labelling
 - Public procurement
 - Gear Shift Indicator & Tyre Pressure Monitoring System
 - Improvements to vehicle test cycle
- » CO₂ saving by 2020 = 2.4 MtC

Recommendations Two and Three: Behaviour

- Reinforce driver behaviour
 - Stable, sustained fuel prices
 - Eco-driving
 - 70mph speed limit adherence
 - Intensive application of Smarter Choices
 - Workplace/school travel plans
 - Car clubs, car sharing
 - Information & marketing
 - Teleworking / teleconferencing
 - Public transport
- » CO2 saving by 2020 = 2 MtC

Recommendation Four: Sustainable Distribution

- Secure savings from freight industry through technological, purchasing and operational changes
 - Higher uptake of freight best practice programme
 - Incentives to buy lower carbon/alternatively powered vehicles (VED)
 - Reduction in light van emission – via technology developments
 - Improvements in energy efficiency, vehicle utilisation and modal shift
- » CO2 saving by 2020 = 2.7 MtC

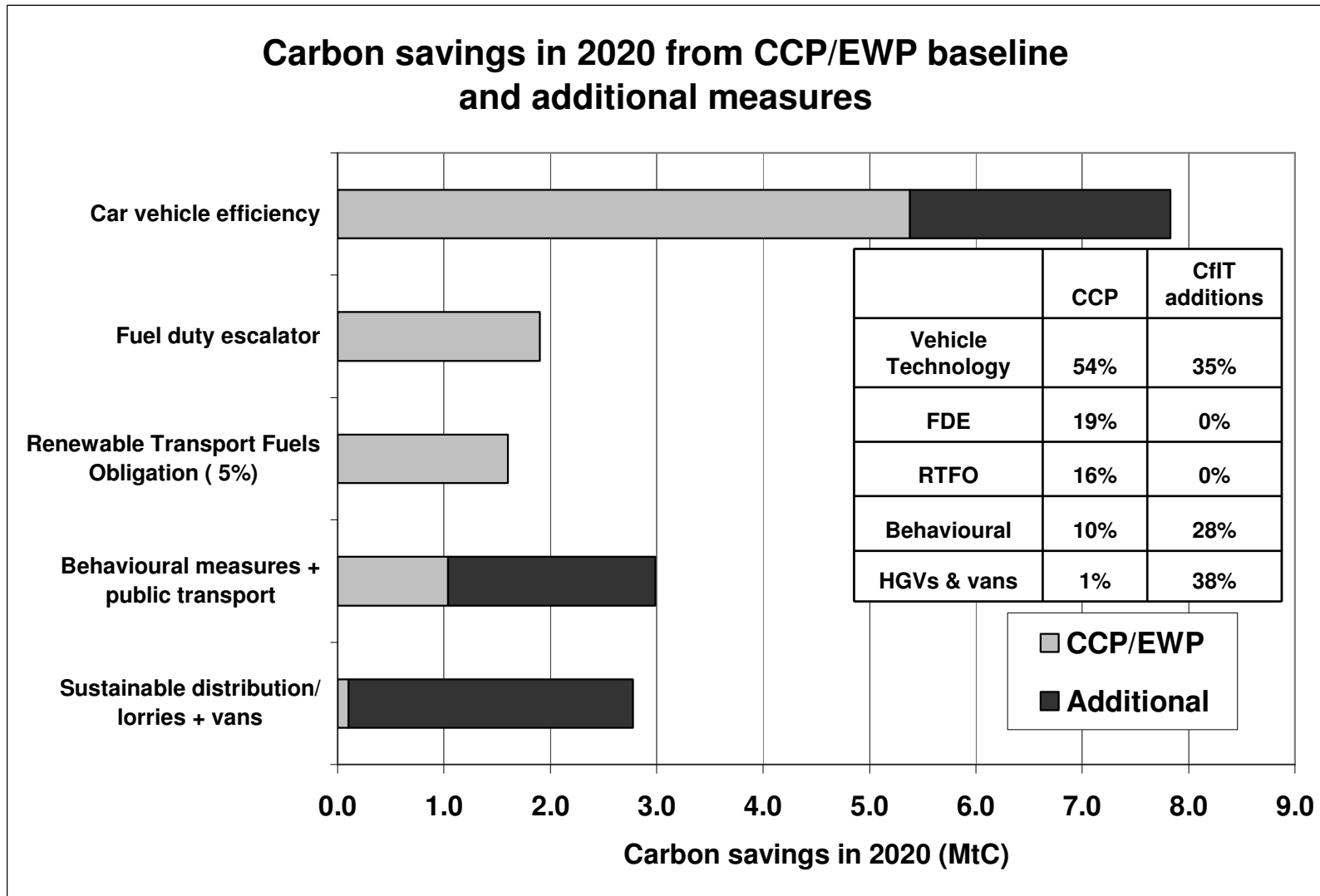
Recommendation Five: Aviation

- Secure inclusion of aviation in EU ETS + consider range of other options to reduce emissions
 - Support EUETS commitment
 - Consider replacing APD with an emissions charge in future
 - Link other charges (eg air navigation and infrastructure) to CO₂ and NO_x emissions

Emissions savings in 2020

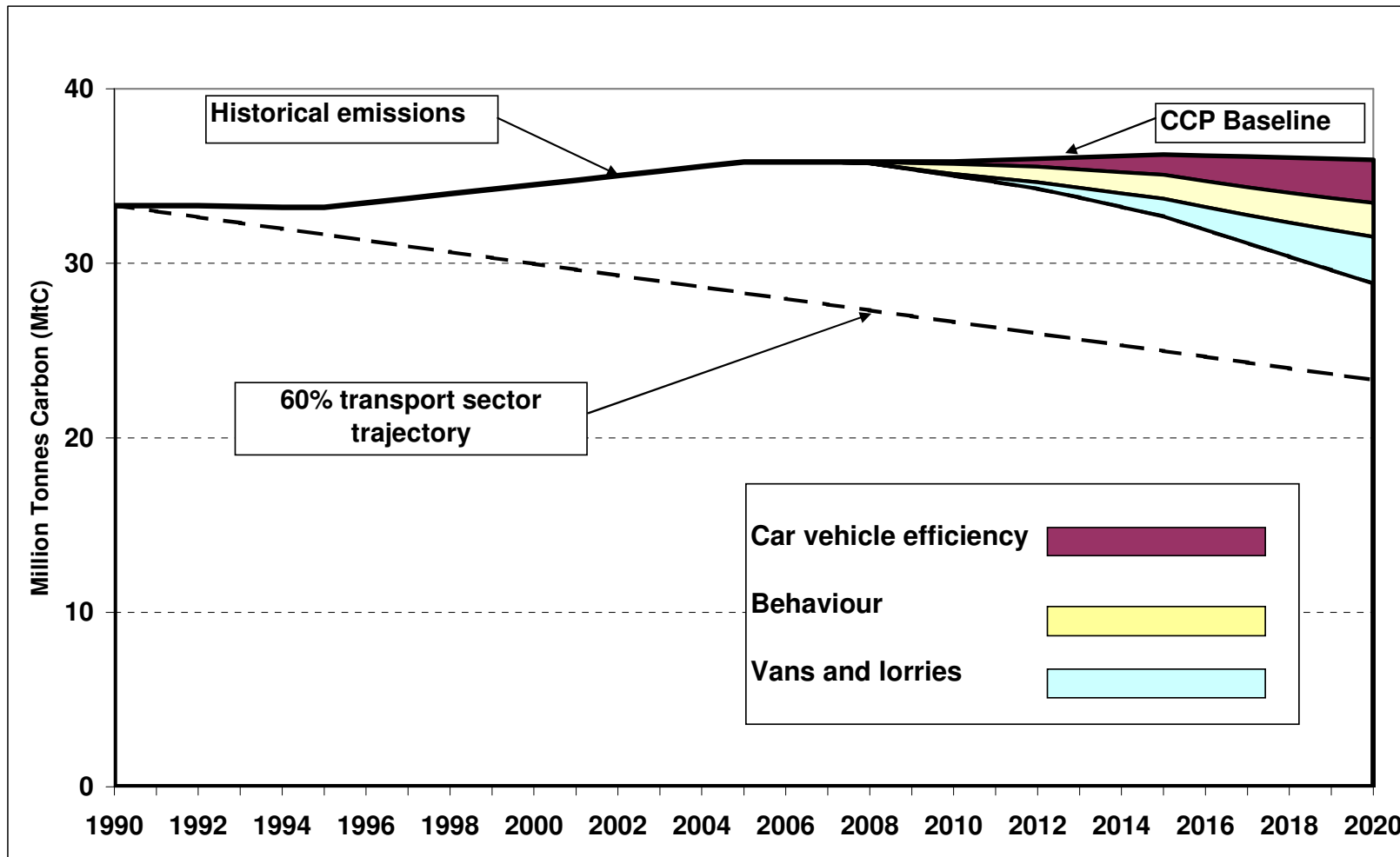
CCP/EWP baseline and additional measures proposed by CfIT

Carbon savings in 2020 from CCP/EWP baseline and additional measures



Emissions savings to 2020

CCP/EWP and additional measures proposed by CfIT



Conclusion

- DfT response to Stern/Eddington, Climate Change Bill
- Road transport potentially a major area of carbon abatement – cars, lorries, vans
- No easy options – technology or behaviour
- Knowledge gaps need to be filled eg vans
- Preparing for the longer term (post 2020) eg technology pathways, road pricing, land-use planning, trading