

Transitioning to a carbon free car stock

John FitzGerald, 14th October 2021

Steps in the transition

- High prices for cars means more second-hand cars
 - When will there be second hand EVs?
 - May slow uptake
- EU Regulation on standards
- Infrastructure
- Taxes and subsidies
 - Priority is shifting those driving long distances

EU Regulation

- Driving innovation by manufacturers
- US experience shows that regulations have been successful
 - Obama era regulations: substantial reduction in emissions at low cost
 - Consumers greatly underestimate potential savings in fuel costs
 - Regulations save consumers money they had not anticipated
- EU similar approach
 - Driving manufacturers to sell more EVs and less fossil fuel cars
 - Changes relative profitability
- Better if EU transitions at similar rate
 - Market power: if need to have much bigger share of EVs than other countries: manufacturers may be able to charge higher margin
 - Standards on charging infrastructure and tolling?

Infrastructure

- Range of EVs increasing
- By c. 2025 EVs may be same price as fossil fuel cars before tax
- However, infrastructure essential to charge EVs
- Ireland may be easier than some other countries
 - Bigger rural population
 - Smaller share in apartments
 - More households with own front garden
 - Hence, easier to charge at home

Taxes and Subsidies - 1

- Estimated Revenue 2015, € million

Excise	2900
Motor vehicle duties	1100
VAT	670
Total	4670

- Total revenue c. 2.9% of National Income in 2015
- Most of this revenue will disappear when transport decarbonised

Taxes and Subsidies - 2

- Need a tax system that will drive decarbonisation and bring in revenue
 - Needs to incentivise rapid shift to EVs
 - State cannot afford large subsidies – needs the money elsewhere
- Need a tax system that will survive decarbonisation
 - Need to bring in c. 3% of national income from transport
- Why tax transport?
 - To pay for necessary infrastructure – roads
 - To drive decarbonisation and pollution reduction
 - To manage congestion

Taxes and Subsidies – 3

- Very demanding target for emissions reduction by 2030 of 51%
 - Target for transport to be determined
- Need to move away from purely having carrots (subsidies)
 - Increase taxes on purchase of fossil fuel cars
- Past experience shows big response to changes in cost of ownership
 - Example of diesel cars – taxes work
- Transition to new regime over a number of years – begin now
- To avoid having to scrap fossil fuel cars early, need major increase in EV share of sales by 2025

Taxes and Subsidies - 4

- Alternative tax regimes for EV world
- Can tax distance travelled (Department of Finance suggestion)
 - Pays for infrastructure
 - However not well aligned to the costs of congestion
 - Likely favour urban over rural motorists in costs
 - Likely disadvantage for urban motorists in travel times (congestion)
- Charge more for congestion as well as some charge for distance
 - Example, rural motorist travelling from Belmullet to Castlebar in an EV
 - No emissions, limited impact on infrastructure and no congestion

Taxes and Subsidies - 5

- Making cities liveable
- Challenge to get people where they want to go quickly
- Currently rationing access to scarce urban road-space by exhaustion
- Alternative model: charge for access so as to reduce congestion
 - Then try to speed up traffic especially buses
- Timing of introduction?
 - When there is a major step up in public transport
 - e.g. BusConnect or Metro

Conclusion

- Need to drive transition
 - More stick and less carrot
- Need a tax regime for transport for a decarbonised world
 - Favour congestion over distance charging
- Need to begin transition of tax regime today