Is small always beautiful or is bigger better?

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Overview

- Policy Context
- Factors impacting on deliverability
- Suggested scale of approach to decarbonisation
- Conclusions

Policy Context

- Unnatural pace, scale and technology mix required by national and international targets
- Credit crunch
  - Impact on economics and incentives
- Funding
  - volume and cost of capital required
- Cost
  - Minimise burden on consumers/tax payers
- Desire to attract new entrants
- Localism

Delivery

- Prioritise solutions that:
  - Deliver the necessary quantum and pace
  - Give the biggest ‘bang for the buck’
- Distinguish between traded and non-traded sector
- Be prepared to compromise on multiple policy drivers – especially if timescales are to be met

Other factors for consideration

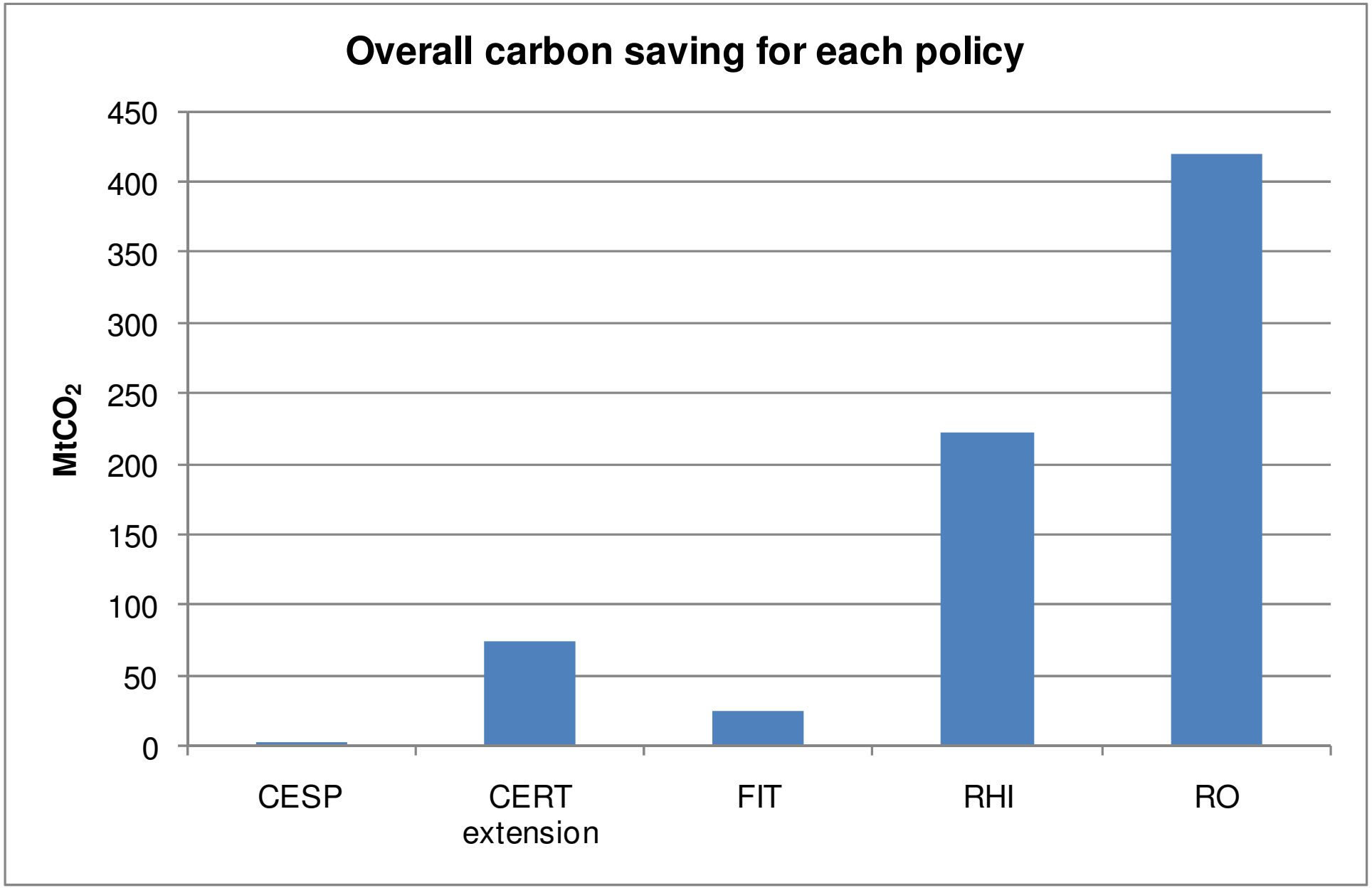
- Financing issues
  - Up front capital
  - Equity investment for development and construction
- Potential motivators
  - Symbol on the roof
  - Board room attention and competition
  - Fiscal incentives/disincentives
  - Regulation and standards
- Economic rationality of decision makers?

Communication

- How many must be influenced, and how easy is it to reach and convince them
- Obligations on large players are attractive, but
  - Impacts on smaller players?
  - Impacts on new entrants?
- Local and individual action sound great but
  - Voluntary action from the masses is hard to achieve
  - Cost of making it happen often not assessed
  - Unintended political consequences

Suggested approach in three distinct areas

- Energy Efficiency and Heat
  - Both particularly important since the bulk of savings are additional, ie in the non-traded sector
- Electricity
  - Particularly important since it will become a major source of decarbonisation in the heat and transport sectors


Overall carbon saving for each policy
450
400
350
300
250
200
150
100
50
0
MtCO2
CESP
CERT extension
FIT
RHI
RO

Cost, delivery and scale

	Typical cost (£/tCO_2 saved)	Cost ratios large : small	Delivery volumes large : small
Energy Efficeincy	- 48 (CERT)	1 : 0.5 – 1	30 : 70
Heat	65 (RHI)	1 : 3 - 4	85 : 15
Electricity	400 (FiT) 100 (RO)	1 : 5 - 10	99 : 1

Conclusions

- Public and political priorities do not always reflect economic rationality, which should be:
  - Non-traded sector
  - Heat and energy efficiency with significant small scale and local deployment
  - Larger scale electricity solutions
- More focus is needed on finding the right balance of carrots and sticks to make small and community scale activities work
- At the small scale, automate – don't rely on people doing the right things