Carbon Pricing

2. Different Approaches
Both approaches:
• Put a price on carbon and so incentivise widespread emissions reductions
• Mean emitters will find it profitable to reduce emissions if this costs less than the price
• Better than not pricing carbon
A price floor from a tax

Tax added to ETS price, so never falls below the level of the tax

A floor price from a top-up fee

A fee of the floor minus the price of allowances is charged when the price of allowances falls below the floor

- e.g. floor price = $30/t
- Allowance price = $25/t
- Top up fee = $5/t

If the allowance price is $30 or above, no top up fee is charged
Green dashed lines show a hypothetical pure tax and pure ETS for comparison
Intensity Based System:
cap varies with industrial output or other measures

Baseline and credit system:
Allowances granted if emissions are below a baseline, but must be purchased if emissions are above a baseline
Advantages of cap and trade
- Firm limits on quantities
- Consistent with international policy architecture
- Strategic signal
- Capture ethical choices

But: prices are low and volatile and no incentive to go beyond cap

Advantages of a tax
- Stable signals to investors
- Can be adjusted over time
- Prices may be higher
- Simple to administer

But: does not guarantee targets will be met

Hybrid system can combine advantages of both
Conclusions

• Advantages and drawbacks to taxes and cap and trade

• Cap-and-trade with price floors and ceilings captures many of the advantages of both

• Floor price needs to be at an adequate level