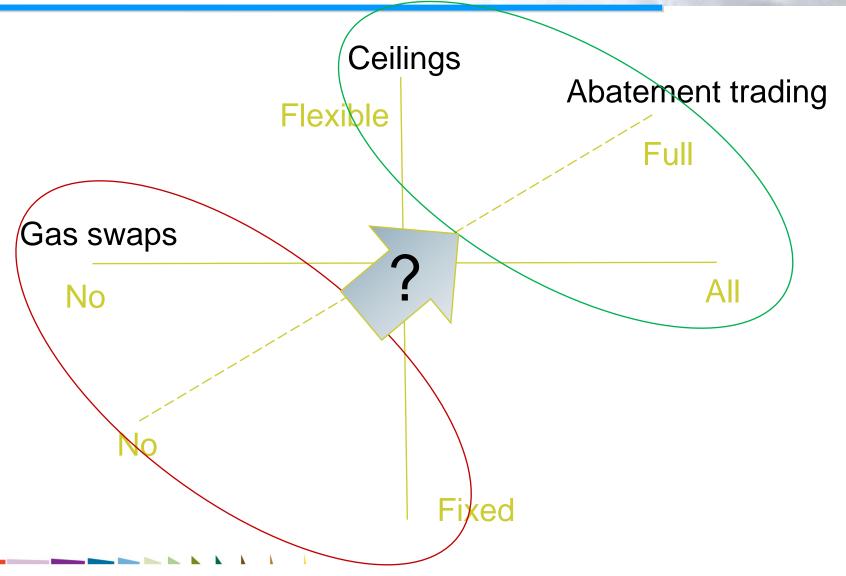
Netherlands Environmental Assessment Agency

Towards Flexible Air Quality Regulation? Comments on Andrew Kelly

TFIAM workshop October 6th, 2009

Herman Vollebergh

Flexibility: discussion on 3 dimensions



Flexibility: current approach EU

- Ceilings
 - NEC limits on emissions at country level
 - IPPC regulation of sources
 - Local air quality standards
- Gas swaps
 - Not possible under NEC
 - Not allowed under Air quality bubble
- Abatement trading
 - Top down cost effective standards setting
 - No 'bottom-up' trading
 - Exceptions: Dutch NOx

Flexmex: options evaluated

- List of options complete?
 - Missing e.g. no NEC; only IPPC to control local air quality
 - Flexible multi-gas tradeable permit system
 - ???
- What is the best option?
 - See scheme p.10: not yet convincing!
 - Ranking requires CBA of different Flexmex options:
 - i) is $B_i > C_i$?
 - ii) for what option is (B_i C_i) largest?
- What is on the table in this flex case?

Flexibility: cba of flex options

- Potential benefits
 - Abatement cost savings
 - Dynamics (US SO₂-tdp triggers reliability techniques)
 - Could account for local differences, scientific uncertainties, etc
- Potential cost
 - Health risks (local 'hot spots')
 - Ecological risks (tipping points)
 - Transaction costs (complexity)
- Complication: interaction with ETS ('s?)
- First shot: where is flexibility precisely located?

Flexmex: where flexibility?

	Ceilings	Gas swaps	Abatement
Bubble IT	No	No	Yes
Sectoral IT	No	No	Partly
Sectoral EE	Partly?	No	No
Split Amb T	Yes	No	No
Nat Offset T	No (overall)	Yes	No
Relative Em T	Yes	No	Yes
Temporal All Flex	Temporally	No	No
Effect Cancel Inv	No	No	If linked to effect
Compliance Test F	Perhaps	Perhaps	No