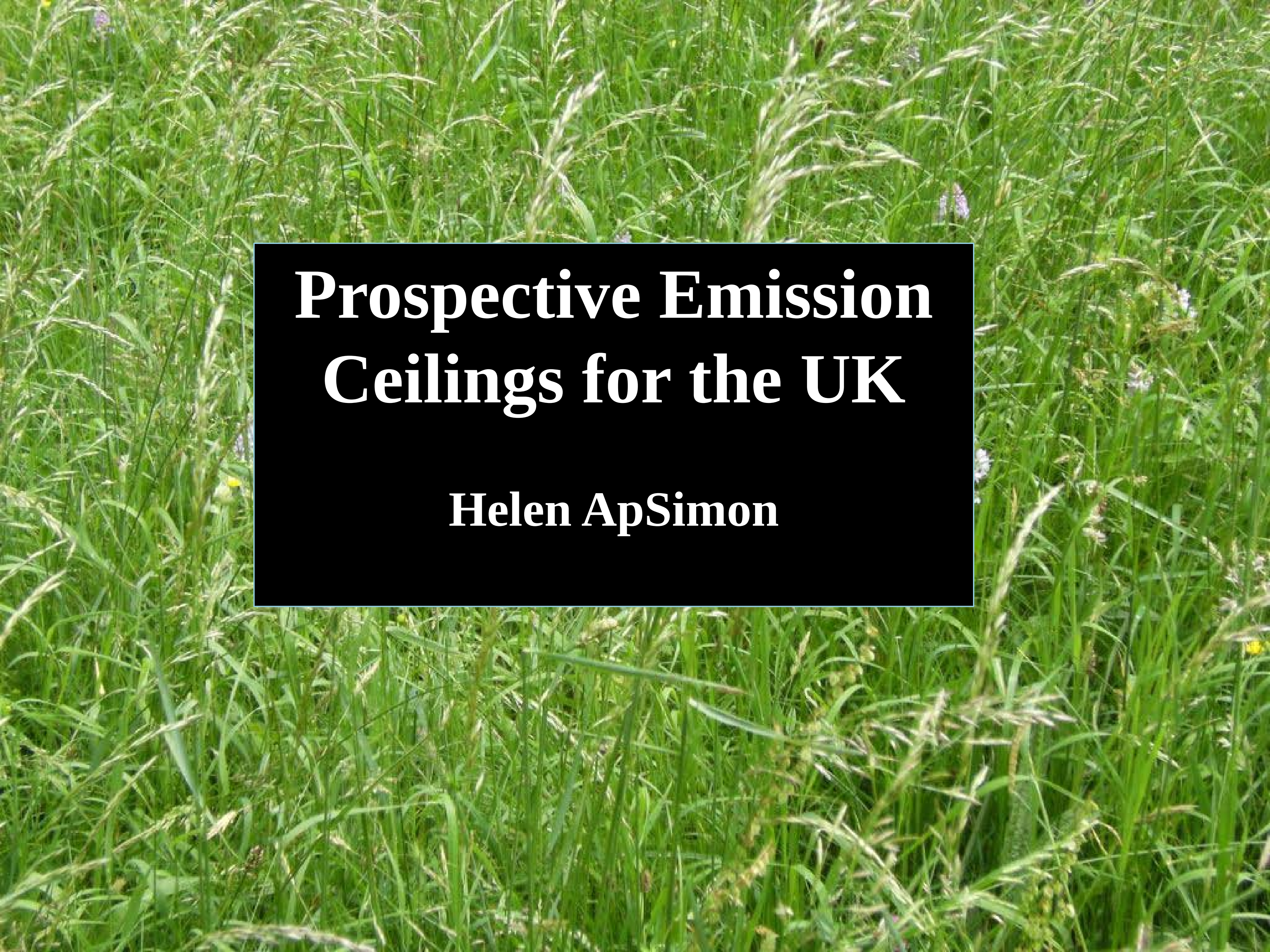


Prospective Emission Ceilings for the UK

Helen ApSimon

Bilaterals with IIASA-> understanding differences in inventories when "national scenario" submitted

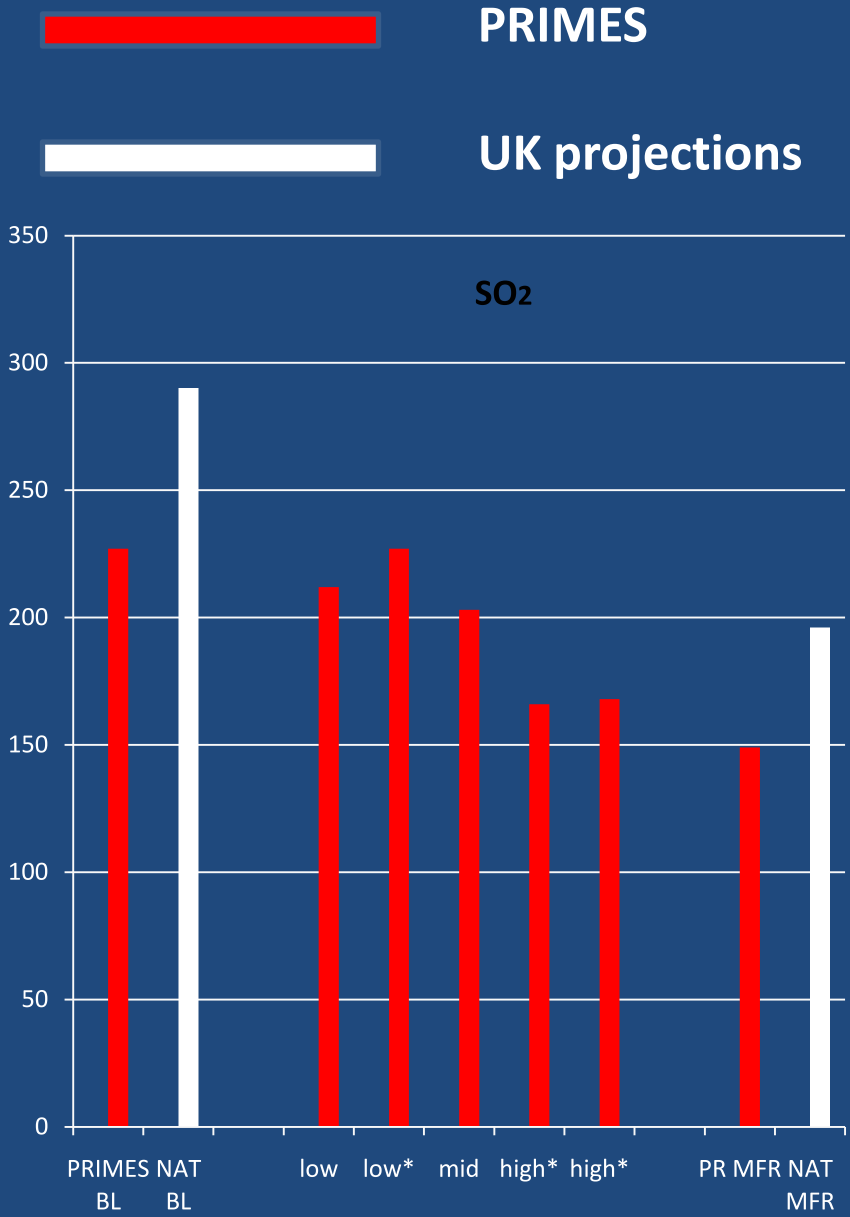
Since then new energy projections (and some "what ifs" looking beyond 2020).

Also new agricultural projections in pipeline

ENTEC study abatement measures and costs; very wide range of measures inc. some very speculative: under discussion

Broader perspective than technical feasibility.

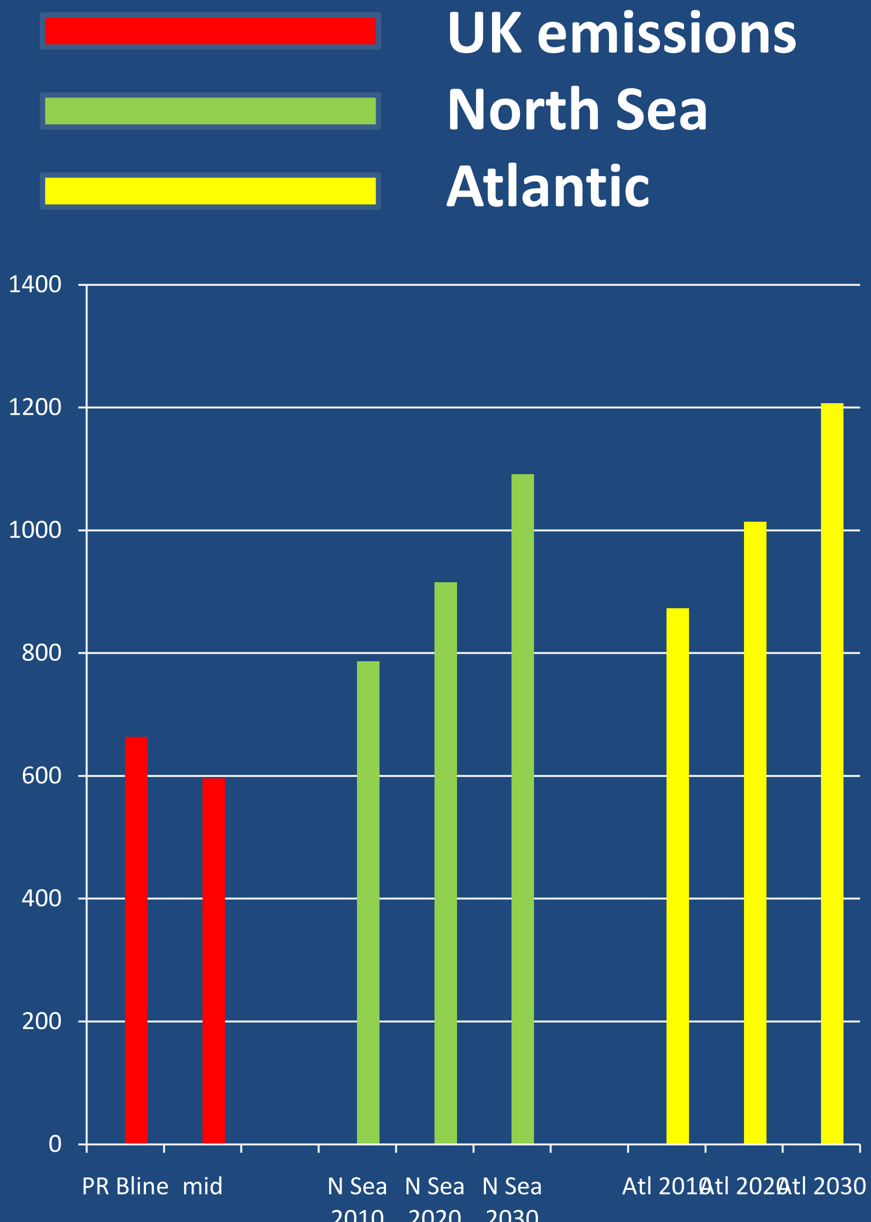
SO_2



Very sensitive to energy projections: UK energy projections differ from PRIMES

GAINS measures to mid scenario: process emission control stages 1-3 (e.g. cement) + low S fuels

NOx:



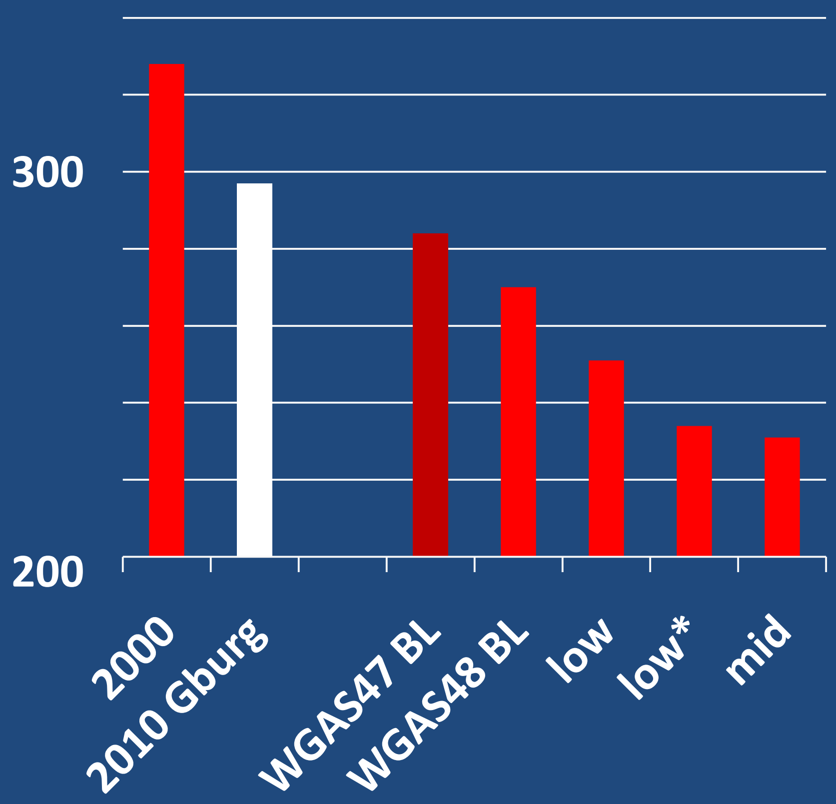
Similar sensitivities to SO2 re projections

+ ?s re future road transport emissions
(NB experience re 2010 ceilings)

Further reduction 67 kt NOx to mid scenario (at cost ~ 55Meuro/y) v. increases in shipping emissions from N Sea and Atlantic ?

NH_3

1. Applicability limits of measures crucial- revisions sent to IIASA

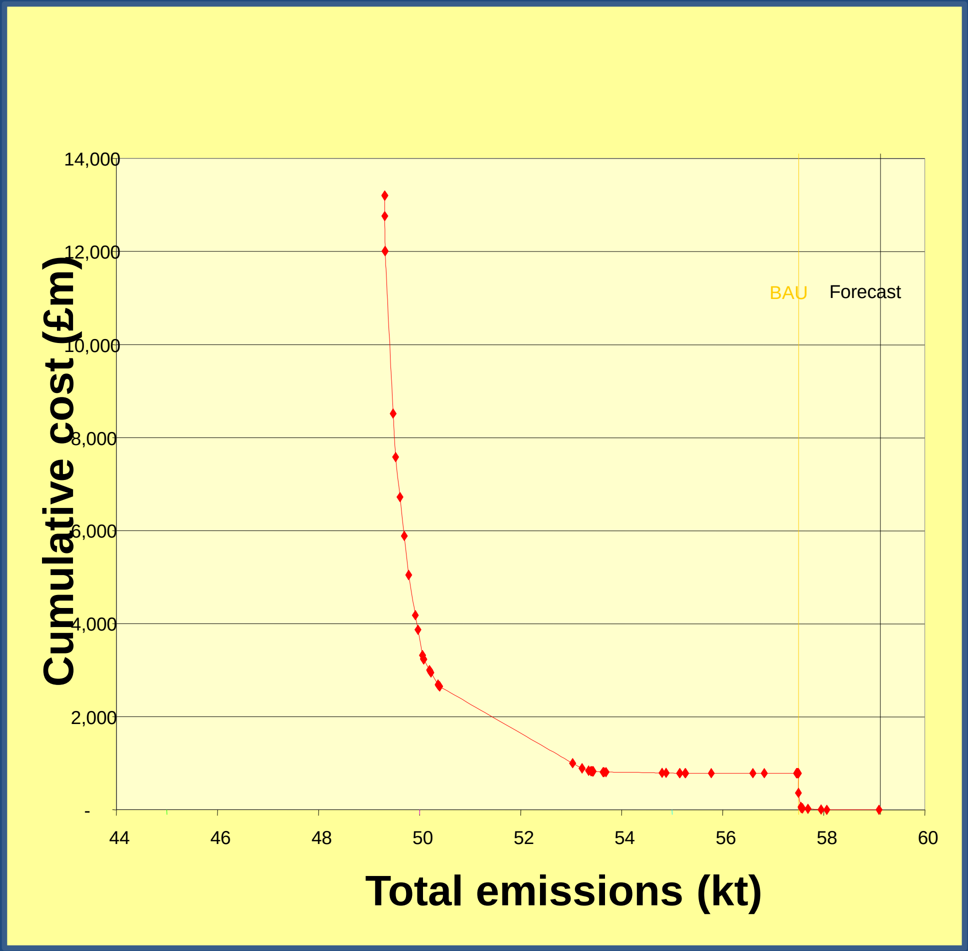


2. GAINS revised baseline (69 M euro/y) has lower emissions & measures not in CLE for 2020. *(IIASA explanation COB)*

3. Contribution from urea

4. ? New sources beyond 2020- e.g. CCS post capture?

$PM_{2.5}$



Cost curve from ENTEC

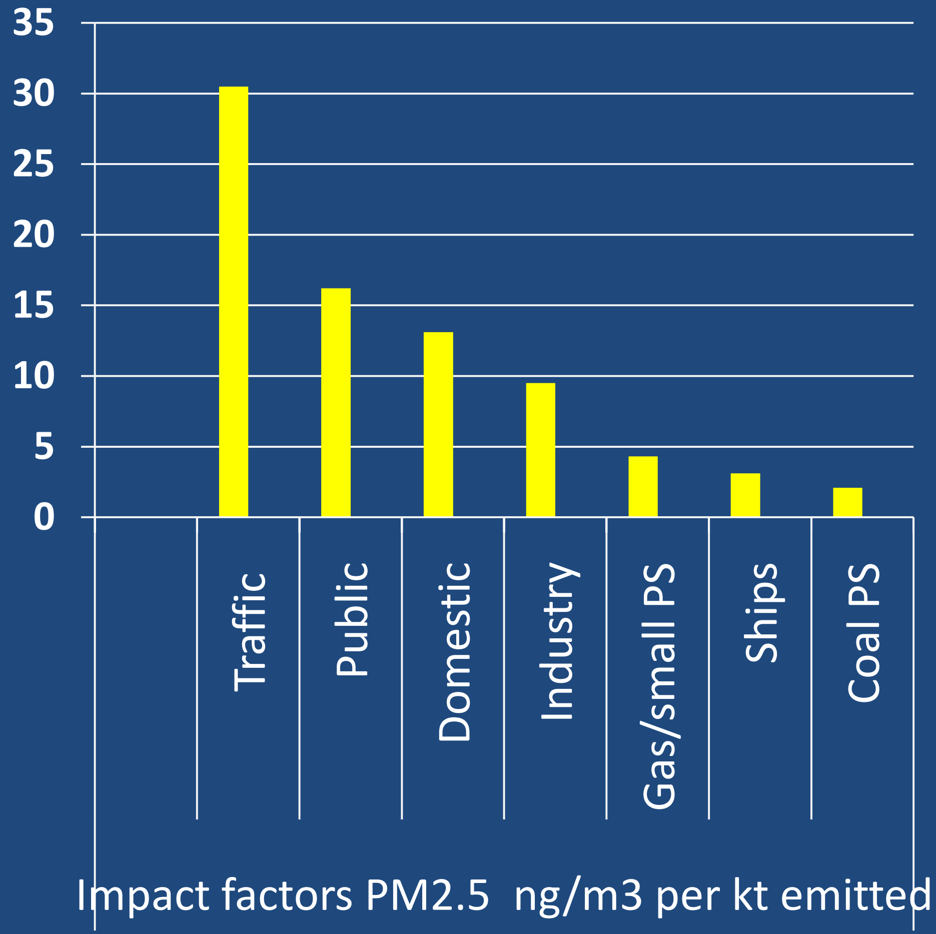
GAINS: 2 kt reduction to 51 Kt for mid-scenario

ENTEC measures -> v. difficult to reduce <50 kt

BUT also NAEI very different from GAINS inventory e.g.
GAINS has 5 kt from BBQs/meat frying - i.e sources not included in the NAEI.

OTHER NATIONAL CONSIDERATIONS

Relative contributions to population exposure per kt from different types of source



Health and ecosystem benefits can differ substantially from GAINS estimates

Other factors:

ease of implementation /enforcement

Uncertainties re effectiveness

Behavioural change