

SPECIFIC QUESTIONS ADDRESSED TO STAKEHOLDERS IN IIASA PRESENTATION (IIASA-TSAP-SEG3-baseline.pdf)

1. Is the description of the key assumptions on the drivers of emissions comprehensive and appropriate?

For the year 2020 it is important when calculating power sector emissions that the GAINS model builds in the best possible information on the potential choices of power plant operators under the Industrial Emissions Directive. EURELECTRIC members will seek to work with national administrations to identify the most appropriate assumptions to be made here.

2. How could alternative/more recent scenarios on future development be incorporated within the given time schedule?

The track record of energy and emission projections is not strong. It is essential in our view that a sufficiently broad range of baseline scenarios is assessed as input to the EU review of Air Policy. Although policy baselines for air quality legislation should be based on full implementation of climate change policies, the potential for policy failure should be recognised in modelling scenarios and alternative scenarios developed to avoid the risk of setting unattainable air quality targets. In particular we consider that 'high emission' and 'RES/GHG policy failure' scenarios are essential as an input to the policy development process. Without consideration of these scenarios which lead to higher emissions in future years, the risk of non-compliance with emission ceilings is increased for Member States.

3. Is the methodology for estimating future emissions and emission reduction potentials adequate?

Detailed review of the way in which power plant are represented in the GAINS model by EURELECTRIC members has identified a number of discrepancies. The implication of these discrepancies is that future emissions, and the costs of emission reductions, may be incorrectly calculated for the power sector by the GAINS model. We have informed IIASA about the results of our analysis, and we hope to arrange a bipartite meeting to discuss how the necessary modifications may be made.

4. Does the Maximum Technically Feasible Reduction scenario adequately characterise the technological options for pollution abatement in terms of (a) reduction achieved, (b) cost, (c) timing of introduction and (d) effective penetration?

Please see our response to question 3. There are discrepancies in the GAINS model which need to be corrected to ensure improved characterisation of cost and emission reduction achieved.

5. Does the Maximum Control Efforts scenario adequately characterise the options for structural changes and their air pollution implications?

We are concerned that this scenario includes measures which are outside the scope of the EU review of air policy to influence. For this reason, while it represents a theoretically interesting view on what might happen in the future, it should not be given equal significance to the Maximum Technically Feasible Reduction scenario in the development of air policies.

6. Are the major uncertainties in the assessment adequately identified and integrate into the sensitivity analysis?

In addition to the need for a comprehensive assessment of the uncertainties and potential systematic biases in the energy and emission projections, there are significant uncertainties in the process of relating air quality and deposition to environmental effects. In view of the dominant role of health effects in impact assessments we urge that time is allocated to the assessment of uncertainties in this area in particular.

As the standards for particulate matter (PM) move to lower concentrations, and in particular as national exposure reduction targets lead to reductions in PM_{2.5} concentrations below limit and target values, it is increasingly important to understand which fractions of PM are responsible for the reported health effects. Current legislation, in accordance with current WHO guidelines, assumes that all components of PM are equally harmful to human health, although epidemiological evidence suggests that primary emissions from traffic are the main causal agent for air pollution health effects in urban areas and, from a toxicological viewpoint, it is difficult to explain why ambient concentrations of secondary sulphates and nitrates would be harmful to human health.

Future PM standards should be aimed at reducing the more toxic components of PM, rather than total PM concentrations regardless of composition. Treating all PM components as equally harmful reduces the effectiveness of emission reduction policies and may result in costly emissions abatement which has little or no benefit to health. While we await the conclusions of the REVIHAAP project we are concerned that insufficient advice may be provided by health experts to policy makers to allow this targeting of efforts.

Even if WHO will not provide updated advice here, the sensitivity of conclusions to the assumption that secondary inorganic aerosols are of lower toxicity should be examined.