



Statement of ISEE and ISEE Europe Chapter  
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Air pollution, especially particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), significantly increases mortality, and has adverse effects on respiratory, cardiovascular, reproductive and child health. Currently, more than 400,000 deaths each year are attributed to air pollution in the EU. In the 2005 global update of the Air Quality Guidelines, the World Health Organization (WHO) set a guideline for fine particulate matter (PM<sub>2.5</sub>) in air of 10 µg/m<sup>3</sup> as an annual average. More than 80% of the urban population in the WHO European Region (including the European Union, EU) still lives in cities with levels of PM exceeding these WHO Air Quality Guidelines. Pollution from PM creates a substantial burden of disease, reducing life expectancy by almost 9 months on average in Europe (REVIHAAP, WHO 2013). Reduction of air pollution levels has been shown to increase life expectancy in North America, where levels are generally much lower than in the EU (Pope et al. NEJM 2009).

Harmful air pollutants are not only caused by direct emissions, but also by emissions of gaseous precursors that will then react with each other and form secondary particles and ozone. The EU Directive of 2008 on ambient air quality and cleaner air for Europe explicitly states that the “emissions of harmful air pollutants should be avoided, prevented or reduced and appropriate objectives set for ambient air quality taking into account relevant World Health Organization standards, guidelines and programmes”. To effectively reduce harmful air pollutants, all sources of emissions have to be taken into account, including those that produce precursors of particles, such as ammonia.

In the light of the upcoming legislation on National Emission Ceilings for the European Union, ISEE and the ISEE Europe Chapter, the scientific organization of environmental epidemiologists, urges the European Parliament and the European Commission and Council of Ministers to adopt regulations for a reduction of National Emission Ceilings including all sources of primary and secondary particles and ozone, and for a tighter control of air pollution concentrations with the goal to achieve better air quality and improved health across Europe, taking into account WHO recommendations.

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