

Annex I

List of potential elements that could inform the scope and content of the review of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone

A. Legally required elements

Article 10, including:

- (a) Obligations in relation to calculated and internationally optimized allocations of emission reductions;
- (b) The adequacy of the obligations and the progress made towards achievement of the objective of the present Protocol;
- (c) Evaluation of the mitigation measures for black carbon emissions;
- (d) Evaluation of ammonia control measures and consideration of the need to revise annex IX to the Protocol.

B. Elements in the existing Protocol

- (a) Sufficiency and effectiveness of obligations with respect to acidification, eutrophication and ozone precursors, including further emission requirements to meet the objectives of the Protocol;
- (b) Current flexibilities, including deadlines and timescales;
- (c) Black carbon reporting;
- (d) Sufficiency and effectiveness of obligations with respect to particulate matter, including further emission requirements to meet the objectives of the Protocol and strengthened measures, in particular for residential solid fuel combustion.

C. Elements meant to address gaps

- (a) Appropriate steps towards reducing emissions of black carbon, ozone precursors not yet addressed, such as methane, and emissions from shipping (with due consideration for International Maritime Organization policies and measures);
- (b) Further flexibilities [, for example, revised deadlines,] and new approaches [, for example, possibly considering step-wise ratification,] in order to [overcome barriers and] facilitate ratification and implementation by [Parties that have not yet ratified the Protocol, including] countries in Eastern Europe, the Caucasus and Central Asia;
- (c) An integrated approach to addressing air pollution through a multi-pollutant, multi-effect approach, which includes potential interaction with climate change, the nitrogen cycle and biodiversity and can achieve multiple goals and benefits and avoid potential unintended consequences of proposed actions for other environmental problems.

D. Scientific and technical inputs

- (a) Quality and consistency of inventories, and in particular black carbon emissions inventories, and condensables in particulate matter, including emissions factors;
- (b) Definition of black carbon;

- (c) Additional types of non-forested terrestrial ecosystems for monitoring and modelling the effects of air pollution;
- (d) Update of critical loads for the analysis of the effectiveness of policies;
- (e) Effects of air pollution on biodiversity as a basis for critical levels/loads calculations;
- (f) Metrics for assessing ozone damages to crops and ecosystems and interactions with other pollutants and climate change;
- (g) Accounting for linkages with climate change and land use in effects indicators;
- (h) Analysis of costs and benefits, including costs of inaction;
- (i) Further input from the Task Force on Hemispheric Transport of Air Pollution on ozone and ozone precursors and particulate matter, including in response to questions proposed by the Working Group on Strategies and Review and recommended control strategies for further modelling by the Task Force;
- (j) Definition of human health impact metrics;
- (k) Trend analysis in emissions/concentrations/depositions/impacts at the multi-scale dimension, and consideration of impact of international policies on trends;
- (l) Ways to address barriers to implementation, including for existing sources.