

Decision 2019/13

Revised mandate for the Centre for Integrated Assessment Modelling

The Executive Body,

Recalling the provisions of article 9 and other relevant provisions of the Convention on Long-range Transboundary Air Pollution,

Recalling also the provisions of the Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP Protocol),

Recalling further its decision 1999/2 concerning the structure and organization of work, whereby it established the Centre for Integrated Assessment Modelling (ECE/EB.AIR/68, annex III),

Noting that the Centre for Integrated Assessment Modelling has been providing scientific support in the development of cost-effective emission control strategies and Protocols under the Convention,

Recognizing the Centre's contribution to the scientific assessment of past trends and current status in air pollution throughout the United Nations Economic Commission for Europe (ECE) region and to the evaluation of the implementation of the Protocols to the Convention,

Acknowledging the support provided by the Centre for Integrated Assessment Modelling to the Parties to the Convention and EMEP, among other things, through the following actions:

- (a) Contributing to the improvement of the scientific understanding of the processes that control European air pollution levels through the development and regular updating of the Greenhouse Gas Air Pollution Interactions and Synergies (GAINS) model – a modelling tool for advanced integrated assessment of climate change and air pollution;
- (b) Contributing to the elaboration of assessment reports and trend analyses of air pollution concentrations and deposition in the EMEP domain over the past 40 years;
- (c) Incorporating the results of the Meteorological Synthesizing Centre-West atmospheric dispersion model and the latest information on critical loads and ozone fluxes into the GAINS model;
- (d) Cooperating with the Task Force on Health to maintain the health impact assessment in the GAINS model in line with latest scientific findings;
- (e) Conducting analyses of the likely future health and ecosystems impacts resulting from the current trends in energy use, agricultural activities and industrial production, considering the effects of the already agreed emission control measures;
- (f) Exploring the cost-effectiveness of further emission controls, in view of their impacts on human health and ecosystems.

Recognizing the need to update the mandate of the Centre for Integrated Assessment Modelling to ensure its consistency with the provisions of the amended Protocols to the Convention, and to take into account the findings and strategic priorities as set out in the following documents:

- (a) The long-term strategy for the Convention on Long-range Transboundary Air Pollution for 2020–2030 and beyond (decision 2018/5, annex);
- (b) The 2016 scientific assessment of the Convention;¹

¹ See Rob Maas and Peringe Grennfelt, eds., *Towards Cleaner Air: Scientific Assessment Report 2016* (Oslo, 2016) and United States Environmental Protection Agency and Environment and Climate Change Canada, *Towards Cleaner Air: Scientific Assessment Report 2016 – North America* (2016).

(c) The policy response to the 2016 scientific assessment of the Convention (ECE/EB.AIR/WG.5/2017/3 and Corr.1 and ECE/EB.AIR/2017/4).

Noting that the annual costs of the centres cooperating within EMEP for the activities appearing in the work programme of the Steering Body of EMEP are covered in accordance with the EMEP Protocol, from contributions by the Parties to the Convention on the basis of the annual EMEP budget approved by the Executive Body upon the recommendation of the Steering Body to EMEP:

1. *Notes with appreciation* the hosting of the Centre for Integrated Assessment Modelling by the International Institute for Applied Systems Analysis,
2. *Adopts* the revised mandate of the Centre for Integrated Assessment Modelling as contained in the annex to the present decision, which includes the key objectives and functions of the Centre to be carried out on an ongoing basis, whereas additional activities and specific tasks and associated deliverables to be carried out in a shorter time frame will be included in the biennial workplans for the implementation of the Convention;
3. *Decides* that the Centre is responsible for communicating with national experts, for maintaining an up-to-date web page that includes information on its work, and for other organizational arrangements in accordance with the biennial workplan;
4. *Decides* that the Centre is responsible for carrying out the work assigned to it in the biennial workplans approved by the Executive Body, and reporting thereon, as well as for keeping other relevant bodies apprised of its work.

Annex

Revised mandate for the Centre for Integrated Assessment Modelling

1. The Centre for Integrated Assessment Modelling will continue to provide scientific support to the Convention on the development of cost-effective emission control strategies that protect human health and vegetation from the adverse effects of air pollution. The Centre will continue to develop an integrated assessment modelling tool for scientific assessment of past and future trends in air pollution throughout the ECE region.
2. The Centre reports on its activities and deliverables to the Steering Body to EMEP.
3. The functions of the Centre are to:
 - (a) Maintain, develop further and harmonize common methods and tools for the scientific assessment of cost-effective emission control strategies and to explore the distributions of costs and benefits across Parties;
 - (b) Maintain the GAINS model as a “state-of-the-art” tool for Convention analyses, integrate information from the various scientific bodies under EMEP and the Working Group on Effects in the GAINS model and organize ex post analyses by these scientific bodies;
 - (c) Improve methodologies and understanding of processes, parametrizations and linkages to climate, biodiversity and vegetation impacts;
 - (d) Enhance the modelling of multiscale air quality management approaches, from the urban to the hemispheric scale;
 - (e) Update the GAINS databases on energy and agricultural statistics, activity projections, emission inventories, emission control options and their costs, taking into account the latest national and international data sources, and consult with experts from Parties on these data;
 - (f) Facilitate the use of the GAINS model by Parties, for example, by providing online access to the model and its databases and providing training courses for GAINS model users;
 - (g) Provide support to and facilitate the involvement of Parties in Eastern Europe, the Caucasus and Central Asia, for example, through model training courses, support on the use of GAINS model data and tools and, to the extent funding allows, national versions of

the GAINS model; assess future scenarios and the cost-effectiveness of abatement strategies upon request by the Working Group on Strategies and Review;

(h) Perform model simulations to trace progress towards emission controls under the existing Protocols and support the design of new or revised Protocols, when necessary;

(i) Closely collaborate with:

(i) The Task Force on Emission Inventories and Projections and the Centre on Emission Inventories and Projections to improve emission estimates and projections;

(ii) The Meteorological Synthesizing Centre-West and the Task Force on Measurements and Modelling to use the latest version of the EMEP model for source-receptor relationships and the development of a methodology to assess local exposure;

(iii) The Task Force on Health and the International Cooperative Programme on Modelling and Mapping of Critical Levels and Loads and Air Pollution Effects, Risks and Trends to use the latest findings on exposure response relationships and impacts on biodiversity;

(iv) The Task Force on Hemispheric Transport of Air Pollution to assess cost-effective abatement strategies at the hemispheric scale.

(j) Exchange information with the Arctic Monitoring and Assessment Programme, the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants, the Organization for Economic Cooperation and Development, the United Nations Environment Programme (UNEP), the World Health Organization and the World Bank Group to encourage cost-effective strategies for health and ecosystems at a global scale. Cooperate with: the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants on short-lived climate pollutants; UNEP on hemispheric and global emission scenarios; the European Commission on in-depth analyses for the member States of the European Union; the Arctic Council and the Arctic Monitoring and Assessment Programme on modelling pollution controls that benefit the Arctic and the modelling of short-lived climate pollutant impacts; and the Baltic Marine Environment Protection Commission and the Commission for the Protection of the Marine Environment of the North-East Atlantic on the modelling of emissions from shipping;

(k) Carry out other tasks assigned to it by the EMEP Steering Body and the Executive Body.