



Distr.: General  
28 March 2019

Original: English



**United Nations  
Environment Assembly of the  
United Nations Environment  
Programme**

United Nations Environment Assembly of the  
United Nations Environment Programme  
Fourth session  
Nairobi, 11–15 March 2019

**Resolution adopted by the United Nations Environment  
Assembly on 15 March 2019**

**4/14. Sustainable nitrogen management**

*The United Nations Environment Assembly,*

*Recognizing* the multiple pollution threats resulting from anthropogenic reactive nitrogen, with adverse effects on the terrestrial, freshwater and marine environments, and to air pollution and greenhouse gas emissions, while acknowledging the benefits of nitrogen use for food and energy production,

*Recognizing also* that global crop production and food security are dependent on nutrients, including nitrogen and phosphorus resource use,

*Noting* that nitrogen use across the global economy is extremely inefficient, with over 80 per cent of anthropogenic reactive nitrogen lost to the environment,<sup>1</sup> leading to water, soil and air pollution that threatens human health and well-being and ecosystem services and contributes to climate change, as a result of increases in greenhouse gas emissions and stratospheric ozone depletion,

*Recognizing* the action already taken by countries as part of their national action plans and intergovernmental agreements related to water quality, air quality, climate and biodiversity,

*Acknowledging* that in many countries existing policies related to reactive nitrogen are fragmented and incoherent,

*Realizing* that intersectorally incoherent approaches to the global nitrogen cycle are resulting in unquantified trade-offs between different forms of nitrogen pollution and contributing to barriers to the adoption of policies for cleaner water, cleaner air, climate change mitigation and adaptation, and biodiversity protection,

*Noting* the initiatives of the Global Partnership on Nutrient Management and the recent establishment of the International Nitrogen Management System as a science support system for policy development across the nitrogen cycle, including work with regional groups and actors to allow regional perspectives to be developed in a global context, and acknowledging the work done in the

<sup>1</sup> M. A. Sutton and others, *Our Nutrient World: The Challenge to Produce More Food and Energy with Less Pollution* (Centre for Ecology and Hydrology, Edinburgh, on behalf of the Global Partnership on Nutrient Management and the International Nitrogen Initiative, 2013).

framework of the Convention on Long-range Transboundary Air Pollution and its Task Force on Reactive Nitrogen,

*Noting also* the initiative taken by the South Asia Cooperative Environment Programme and the International Nitrogen Management System, during deliberations among stakeholders in Malé in September 2017, that focuses on the South Asian seas, towards the development of a globally coherent approach for sustainable nitrogen management,

*Calls on* the Executive Director of the United Nations Environment Programme to:

(a) *Consider* the options for facilitating improved coordination of policies across the global nitrogen cycle at the national, regional and global levels, including consideration of the case for establishing an intergovernmental mechanism for coordination of nitrogen policies, based primarily on existing networks and platforms, and consideration of the case for developing an integrated nitrogen policy, which could enhance recognition of the need for common action across multiple policy domains;

(b) *Support*, in close collaboration with relevant United Nations bodies, including the Food and Agriculture Organization of the United Nations and, as appropriate, multilateral environmental agreements, exploration of the options for better management of the global nitrogen cycle and how they could help to achieve the Sustainable Development Goals, including the sharing of assessment methodologies, best practice, guidance documents and emerging technologies for recovery and recycling of nitrogen and similar nutrients;

(c) *Coordinate* existing platforms for assessment of the multiple environmental, food and health benefits of possible goals for improved nitrogen management, while ensuring coordinated management of relevant data to allow development of an integrated and sustainable nitrogen management approach and identify current information gaps, including in quantifying the net economic benefits for food and energy production; freshwater, coastal and marine environmental quality; air quality; greenhouse gas mitigation; and stratospheric ozone depletion mitigation, all underpinned by the development of reference values;

(d) *Facilitate*, with relevant United Nations bodies, including the Food and Agriculture Organization of the United Nations and, as appropriate, multilateral environmental agreements, the provision of appropriate training and capacity for policymakers and practitioners to develop widespread understanding and awareness of nitrogen cycling and opportunities for action;

(e) *Support* Member States by, where appropriate, sharing existing information and knowledge in the development of an evidence-based and intersectorally coherent approach to domestic decision-making to promote sustainable nitrogen management, where appropriate;

(f) *Report* to the United Nations Environment Assembly at its sixth session on the progress achieved in the implementation of the present resolution.