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23 October 2019

Dear Mr Guterres,

## Global action on nitrogen is essential to tackle the current environmental crisis

As representatives of the global scientific community, we draw your attention to the global nitrogen challenge facing humanity. If we want to beat climate change, air pollution, water pollution, biodiversity loss, soil degradation and stratospheric ozone depletion, then a new focus on nitrogen will be vital.

The present environmental crisis is much more than a carbon problem. Nitrogen is almost everywhere relevant across the Sustainable Development Goals, but is currently invisible. Nitrogen poses a threat to the health of humans, animals and plants, and to livelihoods globally. It has many forms: ammonia and nitrogen dioxide are dangerous air pollutants, nitrate is devastating ecosystems in our rivers, seas and soils, and nitrous oxide is a greenhouse gas 300 times more powerful than carbon dioxide. The current lack of policy coherency risks nitrogen trade-offs, while failing to harvest synergies at local, regional and global scales.

Nitrogen is not just *another* problem, but must be part of the solution. Sustainable nitrogen management would help prevent millions of premature deaths, help ensure food security, and simultaneously help protect wildlife and the ozone layer. Globally, nitrogen losses from crop, meat and dairy production, transport, energy and wastewater represent a massive resource waste of \$200 billion annually. An ambitious goal to 'Halve Nitrogen Waste' from all sources globally by 2030 would save \$100 billion per year, while mobilizing innovation to beat pollution globally. We are committed to support work on this goal. We now call on UN Member States to wake up to the challenge.

We welcome the planned launch of the UN Environment Programme 'Sustainable Nitrogen Campaign' on 23-24 October under the leadership of H.E. President Sirisena of Sri Lanka as a contribution to United Nations Day 2019. We ask you to raise the nitrogen challenge with world leaders, building awareness of both the urgent need and the opportunity.

Yours sincerely,

Prof. Mark A. Sutton

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Director, GEF UNEP International Nitrogen Management System (INMS)

Director, UKRI GCRF South Asian Nitrogen Hub

Co-chair, UNECE Task Force on Reactive Nitrogen (TFRN)

co-signed by 197 scientists, experts & others from 44 countries – please see attached list.

cc. H.E. Maithripala Sirisena, President and holder of the environment portfolio, Sri Lanka Inger Andersen, Executive Director of the United Nations Environment Programme

This letter is available publicly in electronic form at:

http://www.inms.international/INMS-letter-to-UNSecretary-General

The letter includes signatories from the following 44 countries: Afghanistan, Argentina, Australia, Austria, Bangladesh, Belgium, Bosnia and Herzegovina, Brazil, Canada, Chile, China, Costa Rica, Croatia, Denmark, Finland, France, Germany, Greece, Hungary, India, Italy, Japan, Lithuania, Maldives, Moldova, Morocco, Nepal, The Netherlands, Nigeria, Norway, Pakistan, Portugal, Romania, Russia, Slovenia, Spain, Sri Lanka, Sweden, Switzerland, Uganda, UK, Ukraine, USA, Uzbekistan

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ENDS.