Press Release No. 04/2011

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Umwelt Bundes Amt ()) Für Mensch und Umwelt

Nitrogen – vital nutrient, hazardous pollutant

UBA publishes new brochure entitled *Stickstoff - Zuviel des Guten?* [Nitrogen - too much of a good thing?]

There two different faces of nitrogen: on one hand, as a basic component of nature it is an essential nutrient, but it is a pollutant hazardous to human and ecosystems on the other. The main source of so-called reactive nitrogen emissions to all environmental media is agriculture, which accounts for more than 50 percent. However, emissions from transport, industry and energy production as well as waste water each add about another 15 percent. In its new brochure entitled *Stickstoff - Zuviel des Guten? [Nitrogen - too much of a good thing?]*, the Federal Environment Agency (UBA) introduces the various effects of nitrogen, identifies major sources, and points out ways to reduce harmful nitrogen release.

Nitrogen plays a significant role in agriculture. Its presence determines crop yield. The application of nitrogenous fertilisers is thus common practice in farming. Yet as useful as reactive nitrogen on fields is, it can also do damage in other areas. Reactive nitrogen compounds pose a threat to human health (nitrogen oxides), deteriorate the quality of our groundwater (nitrate), and also accelerate global warming (nitrous oxide). Together they lead to acidification and over-fertilisation of pristine eco-systems, resulting in a loss of biological diversity (ammonia). Furthermore, they also speed up the dilapidation of buildings.

UBA President Jochen Flasbarth comments, "Too little progress has been made in reducing nitrogen inputs by the agricultural industry. We must now resort to broader measures to minimise the associated hazards posed to the environment and health. The long-term goal must be to close regional material cycles."

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The Federal Environment Agency is presenting its new *Stickstoff - Zuviel des Guten?* brochure at International Green Week in Berlin, the fair for food, agriculture, and horticulture.

The *Stickstoff - Zuviel des Guten?* brochure (in German) is available for free download at http://www.uba.de/uba-info-medien-e/4058.html.

Further information and links: Integrated Strategy for the Reduction of Nitrogen Emissions UBA brochure: "Water Protection in Cooperation with Agriculture" More information on agriculture and the food industry More information on reactive nitrogen in the environment

Dessau-Roßlau, 26 January 2011