

Contribution of the Waste Management to the Nitrogen-Metabolism



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Project ABASG II - N

Using the nutrient nitrogen as example, the ABASG II - N project investigates the extent of meeting the goals of the Austrian Waste Management Law (AWG) in terms of the nutrient utilisation.

The project has been commissioned by the Ministry for Agriculture, Forests, Environment and Water Management.

Goal

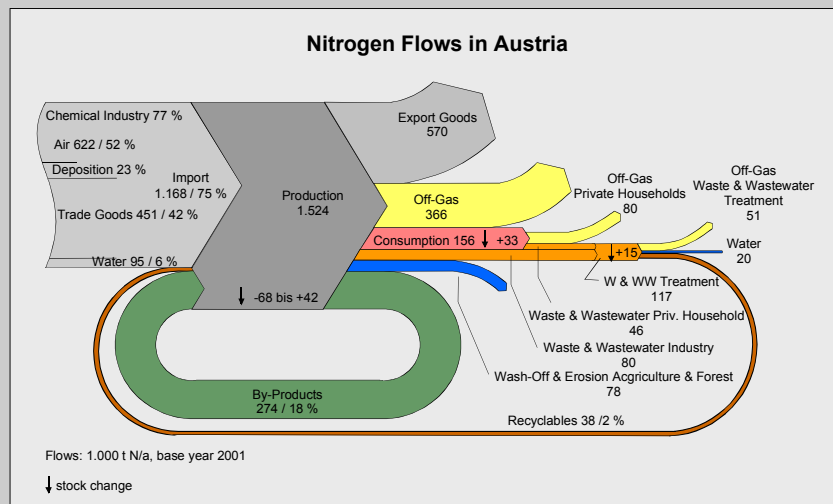
The project goal is to estimate if the nitrogen resources available in goods or waste are optimally utilised. By means of a nitrogen balance of Austria, the resource potential of solid waste and other not utilised goods is assessed.

The contribution of the waste management to the nitrogen metabolism is investigated as to meeting the goals of the Austrian Waste Management Law (AWG).

Results and Conclusions

The annual nitrogen-turnover in Austria for 2001 amounted to ca. 1.5 Mio. t N. Of this, 33 % were exported over various products. 40 % were emitted into the environment. Approximately 25 % were managed in a cycle as by-products. The nitrogen stock in the anthroposphere is growing.

The stock building of N-containing products is to be monitored. This refers at first to soil and water, within a larger extent is however valid also for stocks in the anthroposphere. The best suitable last sink for molecular nitrogen is the air.



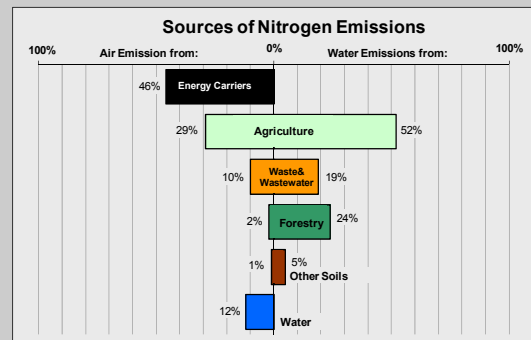
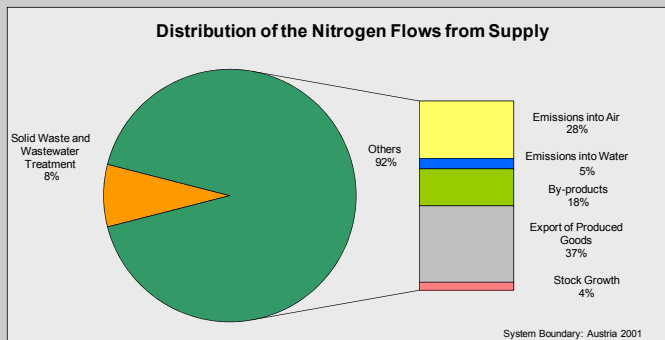
Role of the Waste Management

- The contribution of the waste management to the nitrogen metabolism is with its 5 % of it low.
- Related to nitrogen, the waste management meets the AWG's goals inasmuch as facilities for thermal treatment are equipped for nitrogen removal, and material recovery corresponds to need and provisions of law.

Nitrogen Flows into Environment

40 % of the nitrogen input flows are emitted into the environment. Thus, the nitrogen metabolism of the Austrian economy proves, in terms of the AWG's goals, a greater optimisation potential than the waste management.

Agriculture proves a more important filter role than waste management. Measures aiming at a higher efficiency are thus to be set primarily in the sectors of agriculture and of energy carriers.



RRMMMAAA

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