

# Citizen dialogue on policy instruments for the reduction of reactive nitrogen

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## Abstract

In order to develop an effective strategy for nitrogen mitigation, a holistic and integrative approach is needed that includes mitigation measures from all fields. The German federal administrations thus work on an action programme for integrated nitrogen mitigation, which will include measures and instruments for the reduction of reactive nitrogen. This is accompanied by a citizen dialogue, that creates awareness of this problem and generates stimuli to the political discussion. ZebraLog conducted the dialogue together with adelphi on behalf of the government agencies. Here, the process and the results of this deliberative process are depicted.

Keywords: mitigation measures, policy instruments, public participation

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## 1. Introduction

From September 2019 to February 2020 zebraLog and adelphi conducted a dialogue with citizens on nitrogen on behalf of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the German Environment Agency.

## 2. Process and participants

Between September 21<sup>st</sup> and October, 12<sup>th</sup> 2019 4 regional conferences in 4 German cities (Stuttgart, Oldenburg, Weimar, Duisburg) were conducted. Each conference focussed on a specific field of action, i.e. mobility, agriculture, consumption, industry and freight transport.

In total around 17.000 people were invited from random samples within the four respective regions. 202 persons registered themselves for the conferences. However, eventually only 110 participated (no show rate of 45,5 %).

The composition of the participants regarding socio-demographic data in a nutshell: slightly more men than women, the majority was older than 50 years (18-29 years:

19%; 30-49 years: 32%; 50+: 50%), well educated and held a general political interest. More than 75% stated that they have already read about nitrogen and would like to learn more about it (based on statement at registration).

Each regional conference was structured as follows

- introduction into the topic of reactive nitrogen with a particular focus on the field of action
- collection of ideas for mitigation in small groups
- capture of ideas on prepared profiles

The next step of participation was the conference of delegates, it was held on October 25<sup>th</sup> and October 26<sup>th</sup> in Kassel. From every regional conference six volunteers were sent as delegates to Kassel.

The delegates selected and merged the most important measures and developed them further to policy instruments. These results were finally given to an online assessment, which was open to all participants of the regional conferences from November 25<sup>th</sup> to December 9<sup>th</sup>. The measures were accompanied by scientific statements on the impact, made by the project partner adelphi. 45 people participated in the online assessment, they made 436

assessments in total and commented 88 times regarding the importance of the implementation of the respective measure.

Finally, all results were aggregated in a citizens report to the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, which was handed over on February 12th 2020.

### 3. Measures to reduce nitrogen emissions

Tab. 1: Title and rating of policy measures from the citizen's dialogue

Name of measure	Average rating
Improvement of the line management of the public transport	*****
Tax for nitrogen budget per holding	
Relocation of freight transport from road to rail	
Federal law to expand the usable area per livestock to mitigate nitrogen	
Tariff for public transport: 1€ per day (as in Vienna)	*****
Information on environmental impacts of value chains	
Modernisation of industrial plants and facilities of energy supply	
Modernisation of marine engines in inland navigation	
Congestion charge	
Analytical control of total nitrogen emissions on agricultural land for fertilisation planning	
Modification of subsidies for freight transport	***
Car-free sunday in cities	
Increase the value-added tax to increase the price of meat	
Introduction of a label for a transparent account of nitrogen emissions during the production of products	
Consultant for an economical and environmentally friendly crop rotation	
Reduction of factory farming through subsidies on species-appropriate farming	

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