

# The Nitric Acid Climate Action Group (NACAG)

## Paving the Way for the Sustainable Transformation of the Nitric Acid Sector

In an effort to boost climate action and incentivise the realisation of low-cost emission reduction potentials, the German Government has launched the Nitric Acid Climate Action Group (NACAG). NACAG's objective is to incentivise the installation and operation of effective nitrous oxide (N<sub>2</sub>O) abatement technology in every nitric acid production plant worldwide. In this way, NACAG aims to promote the climate-friendly transformation of the global nitric acid sector.



### Nitrous oxide emissions

Nitrous oxide is a potent greenhouse gas (GHG) and ozone-depleting substance. Its global warming potential (GWP) is 273 times that of carbon dioxide (CO<sub>2</sub>). One of the primary sources of N<sub>2</sub>O emissions is the production of nitric acid, which is predominantly used for manufacturing nitrogen-based fertilisers. There are more than 500 nitric acid production plants in around 70 countries worldwide. In many cases, the N<sub>2</sub>O emissions are released unabatedly into the atmosphere.

However, N<sub>2</sub>O emissions from nitric acid production can be reduced relatively easily and at a low cost compared to other greenhouse gas abatement options. Abatement costs range US\$1-3 t/CO<sub>2</sub>eq per ton of CO<sub>2</sub>eq, depending on the employed abatement technology and technical plant characteristics.

### NACAG's Approach

NACAG helps partner countries to overcome initial structural and investments barriers by providing them with financial and technical assistance in exchange for the political commitment for the long-term climate-friendly transformation of the nitric acid sector. The initiative provides technical and political support to all partner countries and financially supports countries with valid ODA status that need economic assistance to procure respective abatement technologies.

NACAG's Technical Support Unit advises partner governments on policy instruments for mitigating N<sub>2</sub>O emissions in the nitric acid sector and its integration of the sector into the Nationally Determined Contributions (NDCs) of the Paris Agreement. Furthermore, NACAG offers financial support to purchase and install state-of-the-art N<sub>2</sub>O mitigation and monitoring technology in eligible production facilities, fully covering these costs. For plant operators to qualify for this funding, the government of the respective country must sign a political commitment – Statement of Undertaking (SoU) - to ensure the continuation of the mitigation activities under their own responsibility in the future.

## A global action group

By transferring the responsibility for the mitigation activities to the partner countries as well as leaving the resulting emission reductions for use within the national mitigation strategy, NACAG aims to ensure the climate-friendly transformation of the global nitric acid sector. This approach corresponds to the spirit of the Paris Agreement, which assigns responsibility for emission reduction efforts to all countries while acknowledging the principle of common but differentiated responsibilities.

Its global approach ensures the creation of a level-playing field over time for all stakeholders and thus reduces negative economic impacts and at the same time supports plant operators adapting to changing international market conditions such as implied by a possible carbon border adjustment mechanism.



All interested partners, including governments, plant operators and donors, are welcome to join this global action group and, in doing so, contribute to sustainable climate change mitigation.

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International Climate Initiative (IKI) of the German Federal Ministry of Economy and Climate Protection (BMWK). Mexico, Thailand, Georgia, Uzbekistan, Tunisia, Zimbabwe, Argentina, Peru, Colombia and Jordan have signed the Statement of Undertaking (SoU) and through this committed to the long-term climate-friendly nitric acid production. Another six countries have joined the Action Group by signing the NACAG Declaration, admitting to the idea and the goals of NACAG and are considering signing the SoU as a next step.



Global overview of nitric acid producing countries  
Number of nitric acid plants worldwide: approx. 500

For more information please visit our website [www.nitricacidaction.org](http://www.nitricacidaction.org) or write an e-mail to [contact@nitricacidaction.org](mailto:contact@nitricacidaction.org)

**NACAG** Nitric Acid  
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