

Reducing N₂O emissions to mitigate global warming

Project Information

Why this Project?

As we become more reliant on food value chains, we are using more fertilisers in the agriculture sector for food production. Food value chains need to become more sustainable.

There is a need to find ways, technologies and projects that support climate neutrality, which brings up the importance of reducing the environmental impact of fertiliser production



Why this Project?



According to the United States Environmental Protection Agency (US EPA), Nitrous Oxide (N₂O) has a Global Warming Potential 273 times that of carbon dioxide (CO₂) - N₂O is more potent than CO₂.

This project presents a comprehensive solution to promote sustainable fertiliser production and reduce annual N₂O emissions, which is a much more damaging greenhouse gas compared to CO₂



United Nations
Climate Change Conference

Bonn, Germany

This project is part of the Clean Development Mechanism of the United Nations Framework Convention on Climate Change and has been authorised under article 12 of the Kyoto Protocol.



We are extremely proud to support this project. This project supports the installation of a secondary catalyst in the ammonia reactors of one of the two nitric acid production units at a fertilizer plant in India.

The project activity would help in the catalytic reduction of N_2O emissions, which is an undesirable and unavoidable by-product of the nitric acid production process. N_2O is a potent greenhouse gas with very high global-warming potential.

As such, this project is mainly supported by agriculture and horticulture organisations, which we know some of your recurring emissions come from the use of fertilizers.

Introduction



Aim of this project

This project is located in Western India.

This project has the protection of the environment at its core and aims to reduce N₂O emissions in Nitric Acid plants by installing secondary catalysts to react with N₂O and result into harmless N₂ formation, and thus reduces emission of GHG into atmosphere

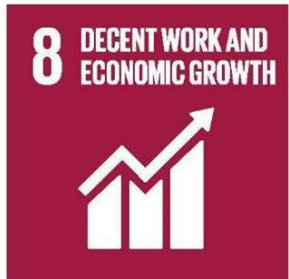
Main Objective

Transferring of technology for N₂O abatement by providing the necessary momentum to other similar industries to come up with such project activities in their plants.

This project contributes to the sustainable development of the region and country by facilitating and catalysing sustainable operations, thereby creating economic, social and environmental value.

The strategic objectives identified by the project include improved management of natural resources in the vicinity of the project activity, increased rural incomes, reduced vulnerability and empowerment of the vulnerable sections of society.

Social and Economic benefits



This project led to creation of employment during construction and commissioning of the technology measure, which is crucial for economic growth and social stability.

This project has also contributed to the capacity building and empowerment of local communities in Maharashtra by involving them in project activities and building infrastructure to support the project.

The development of this project improves micro-economic efficiency of the sector by introducing new technologies and transferring technological knowledge.

Environmental benefits



The activities linked to this project have only positive impact on the environment. This project results in GHG emission reductions through abatement of N₂O from the stack of nitric acid plant by converting harmful N₂O to harmless N₂. This project thus contributes to the to climate change action by reducing GHG emissions.



Contact us



Website

www.onecarbonworld.com



Email:

hello@onecarbonworld.com

Visit our website for more:

