



## SUSTAINABLE & ENVIRONMENT-FRIENDLY INDUSTRIAL PRODUCTION

### SITUATION

Growth in the industrial sector is one of the key aspects that affect the development of a country. The government of India has a vision to enhance the manufacturing sector's contribution to the Gross Domestic Product to 25 percent and to create 100 million jobs over the course of a decade. Currently, there are nearly 3,000 designated industrial zones in India, some of which are very large, such as the industrial corridors, investment regions, and manufacturing zones.

The risks associated with industrial development include increasing pollution levels, overuse of natural resources, and increasing amounts of waste and waste water leading to the endangerment of ecosystems. In 2009, the Central Pollution Control Board declared 150 river stretches and 43 industrial areas as critically polluted. Pollution caused by hazardous substances from industry (such as waste, wastewater, and emissions) and the overuse of natural resources puts sustainable development at considerable risk.

The Indian government has made a clear commitment towards industrial growth and protection of the environment. Also the private sector is increasingly interested in adopting modern processing techniques for clean and resource efficient industrial production.

### Objective

The objective of the Sustainable & Environment-Friendly Industrial Production project is to support the Indian public and private stakeholders in jointly implementing strategies for efficient, environment-friendly, and climate-friendly industrial development.

### APPROACH

The Sustainable & Environment-Friendly Industrial Production is a joint project with the Ministry of Environment, Forest and Climate Change (MoEFCC) within the framework of the Indo-German Technical Cooperation. The project works on mitigating selected

environmental problems of national importance, with focus on industrial waste water and solid waste management. The project aims at demonstrating solutions on reducing acute environmental pollution and improving resource efficiency in industrial production for which technical solutions and business and management models can be showcased with positive results and direct impact on improving the environmental conditions at the selected sites. Further on, the cases can serve as models to be replicated nationwide subsequently.

The project activities are grouped into the following three areas:

- environment-oriented modernisation of three industrial areas (showcasing solutions),
- establishing appropriate framework conditions at the national and state levels, and
- knowledge management and dissemination.

The project activities are focused to waste water conveyance, treatment, recycle and reuse, waste management, monitoring, process modification in individual industries etc. These will be complemented by training and skills development and by setting up of a virtual platform that offers exchange of best practice technologies.

At the central and state level, the project will support the creation of an enabling framework by suggesting measures on new policies, plans, and support programmes to prevent and reduce pollution and improve resource efficiency in industrial zones.

The project will include and engage actors such as industry associations, operators of industrial sites and companies, and relevant entities at the central and state level at various stages. Slowly but steadily, women are emerging as the change-makers in the context of environment-friendly behavior change. Hence the project will create practical women-oriented examples of management and planning for sustainable industrial zones.

States selected for this project are Uttarakhand, Gujarat, and Delhi.

## EXPECTED ACHIEVEMENTS

The project is expected to provide a demonstration of the possible means and ways to make industrial development efficient, environment-friendly, and climate-change-resilient.

The project aims to achieve the following results:

- Decrease in pollution by an average of 20 percent in the surroundings of three industrial sites.
- Launch of development programmes and promotional guidelines that aim at increasing resource efficiency and reducing pollution in selected states.
- Launch of two additional compulsory central government policies, plans and/or programmes, and measures to prevent and reduce pollution as well as improve resource efficiency in industrial zones.
- Adoption of best practices through technology and management methods for an efficient, environment- and climate-friendly industrial development in 10 industrial zones.
- Provision of two additional practical examples regarding management and planning methods of sustainable industrial zones that support women.



Raghu Babu Nukala  
Project Director  
Sustainable & Environment-Friendly  
Industrial Production  
Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH  
Ground Floor, B-5/1, Safdarjung Enclave,  
New Delhi-110029  
E: nukala.raghu@giz.de  
T: +91 11 4949 5353  
F: +91 11 4949 5391  
W: www.giz.de/india

Registered offices Bonn and Eschborn:  
Friedrich-Ebert-Allee 36 + 40  
53113 Bonn, Germany  
Phone: +49 228 44 60-0  
Fax: +49 228 44 60-17 66  
Dag-Hammarskjöld-Weg 1-5  
65760 Eschborn, Germany  
Email: info@giz.de  
Phone: +49 61 96 79-0  
Fax: +49 61 96 79-11 15  
Internet: www.giz.de

<b>Project Name</b>	Sustainable & Environment-Friendly Industrial Production
<b>Commissioned by</b>	Federal Ministry for Economic Cooperation and Development (BMZ), Government of Germany
<b>Lead Executing Agency</b>	Ministry of Environment, Forest & Climate Change (MoEFCC), Government of India
<b>Lead Implementing Agency</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
<b>Duration</b>	06/2015 - 05/2018
<b>Budget</b>	EUR 6.5 million
<b>Webpage</b>	www.giz.de