

# CDM Projects under Manufacturing Industry in India

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## **Abstract**

India has actively participated in Clean Development Mechanism (CDM) projects emerging as a global leader in implementing these initiatives to address climate change and promote sustainable development. India's CDM portfolio is extensive, covering diverse sectors and regions. Manufacturing industries are among the sectors with registered clean Development Mechanism projects in India. According to India's Designated National Authority (NCDMA). There are 243 CDM projects have been registered under manufacturing industry/sector in India as on Nov 2015. industrialized states Gujarat, Maharashtra have the largest number of CDM projects from manufacturing sector. Distribution of these projects in other states are satisfactory, but in north-east states only Arunachal Pradesh has a single CDM project. According to NCDMA there are more than 65 million of CERs have been issued up to 2012 from the manufacturing sector projects.

## **Introduction:**

Contribution of industries in the development of a country is very crucial. Over the past decades, manufacturing sector has faced major changes as rapid globalization has shifted a significant proportion of manufacturing capacity from developed to emerging economies which has resulted in new markets and new competitors.

In India manufacturing has emerged as one of the high growth sectors. Prime Minister of India, Shri Narendra Modi, had launched the 'Make in India' program to place India on the world map as a manufacturing hub and give global recognition to the Indian economy. India is expected to become the 5<sup>th</sup> largest manufacturing country in the world by the end of year 2020.

Process of product manufacturing creates huge amount of GHGs which is the only cause of global warming. Problem of India has to curb GHGs from this sector at a moment when this sector and economy both are growing at higher rate. Here CDM plays a crucial role. CDM projects have the potential to bring manufacturing sector to a less emitted industry from high emitted industry, while industries have self aware and taking effort to be emission-efficient.

## **Manufacturing Sector and GHG emission**

Manufacturing is the process of transforming basic materials or component (Iron & steel, metals, petroleum, crude, leather, wood, coal, natural chemicals, plastic & rubber etc) into finished products that can be sold in the marketplace. Every physical product that we buy in a store, mall or purchase online is manufactured.

Manufacturing industries are those that emerge in the transformation of goods or substances (primary and intermediate commodities) into new products (final products). There are several massive manufacturing industries in India including metal, machinery, plastic rubber, textiles, leather, food, beverage, tobacco, paper, jewelry, oil and coal, computer & electronics, transformation, furniture and other. The manufacturing

process can be physical, chemical or mechanical. Manufacturers have plants, mills, factories, heavy machineries which are used in the process of manufacturing.

These machineries, mills have run by fuel combustion which emitted huge quantity of GHG. Even every process of manufacturing products have emitted lot of GHGs.

According to a national estimate done by GHG platform India, the overall GHG emission from the manufacturing industry between 2005 to 2013 has almost doubled from 315 million tones to 623 million tones

Estimate also depicts that energy use has remained the biggest contributor to the emission, which almost 70% of emission contributed by the Iron & Steel industry.

### **Potential of CDM Projects in Manufacturing Sector**

Manufacturing process creates value addition in materials (input) by forming them in new and useful shape. In the formation process these industries have emitted huge amount of GHG which is the only cause of global warming. Concern for India is to have curb GHG emission from this sector while there is lackness of capital and emission efficient technology. This problem has creates a base for potential of CDM in this sector. By CDM these manufacturing industries can get better technology from developed countries who participate in CDM project. CDM help these industries to make their manufacturing process less GHG emitted. Therefore, potential of CDM in this sector is large as this sector itself.

### **Current Status of CDM projects under Manufacturing Sector in India**

According to India's Designated National Authority (NCDMA) there are 243 CDM projects have been registered under manufacturing industry/sector in India as on Nov 2015.

State wise distribution of these projects is not equal. Table VI.5 presents top 10 states having large number of CDM projects in this sector.

Table VI.5

Top 10 states having CDM Projects in Manufacturing Sector

State	No. of Projects in manufacturing sector
Gujarat	41
Maharashtra	27
Andhra Pradesh	22
Multi State	21
West Bengal	19
Uttar Pradesh	16
Tamil Nadu	16
Rajasthan	15
Orissa	13
Chattisgarh	12

Source: [www.ncdma.in](http://www.ncdma.in)

According to data, industrialized states Gujarat, Maharashtra have the largest number of CDM projects from manufacturing sector. Distribution of these projects in other states are satisfactory, but in north-east states

only Arunachal Pradesh has a single CDM project. According to NCDMA there are more than 65 million of CERs have been issued up to 2012 from the manufacturing sector projects.

### **Concluding Remark:**

India is going to be a manufacturing hub on world map. India is expected to become the 5<sup>th</sup> largest manufacturing country in the world by the end of the year 2020. With the growth of this sector, GHG emission from this sector have also grown. Here its become necessary to curb GHG emission from this sector.

Here CDM plays a crucial role in providing an opportunity to developing nations as like India to host CDM projects in this sector and make their manufacturing process emission-efficient. As on Nov, 2015 there are already 243 CDM projects have been registered. Still this sector has high potential for CDM.

### **References**

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