India GHG Program
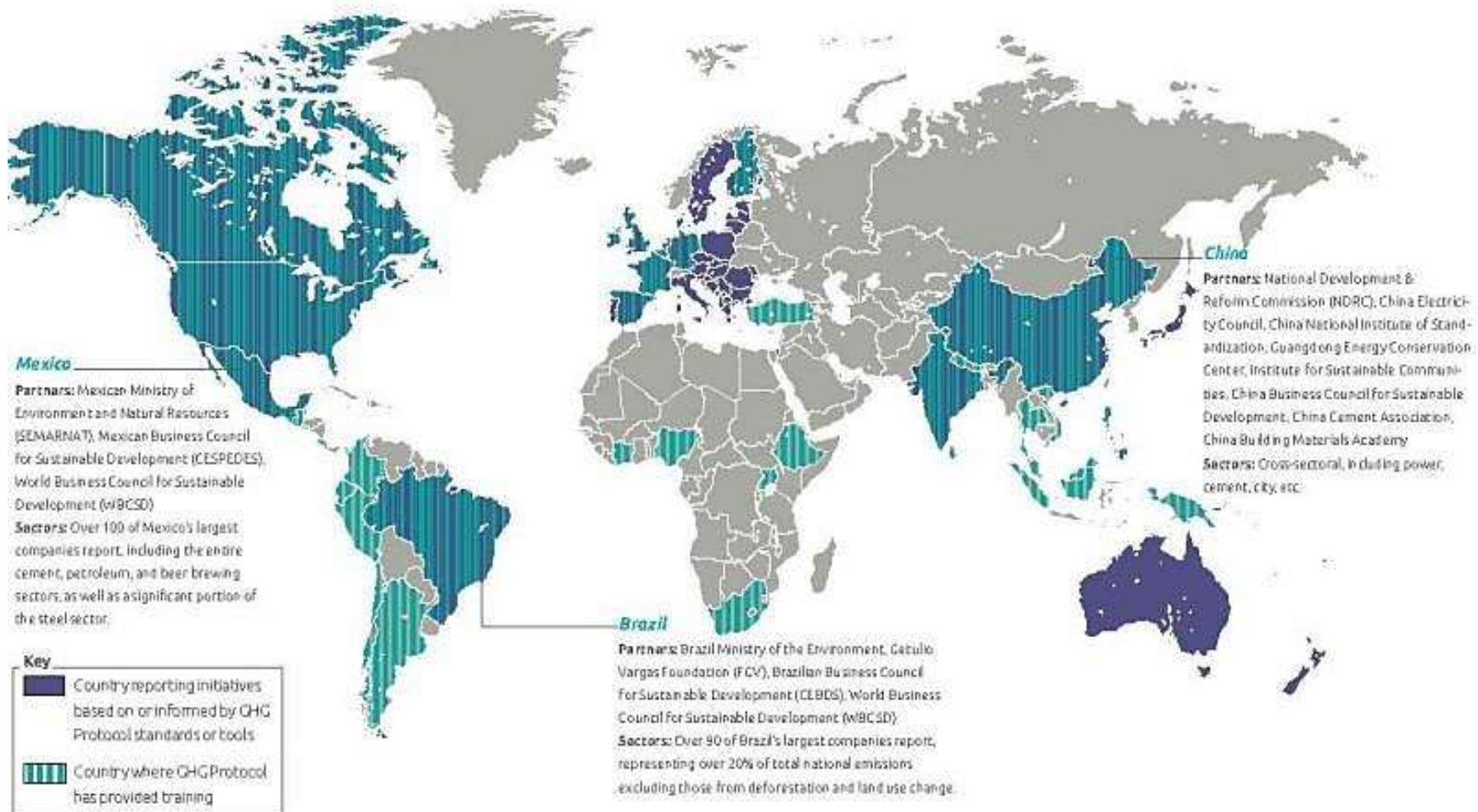
- ✓ Current Landscape
- ✓ Why Regional GHG programs?
- ✓ Objectives
- ✓ Pillars
- ✓ Member Companies
- ✓ The progress so far
- ✓ Why India GHG Program?
- ✓ Contact

http://www.ghgprotocol.org/training-capacity-building

Figure [3] GHG Protocol International Initiatives

Mexico

Partners: Mexican Ministry of Environment and Natural Resources (SEMARNAT), Mexican Business Council for Sustainable Development (CESPEDES), World Business Council for Sustainable Development (WBCSD)

Sectors: Over 100 of Mexico's largest companies report, including the entire cement, petroleum, and beer brewing sectors, as well as a significant portion of the steel sector.

China

Partners: National Development & Reform Commission (NDRC), China Electricity Council, China National Institute of Standardization, Guangdong Energy Conservation Center, Institute for Sustainable Communities, China Business Council for Sustainable Development, China Cement Association, China Building Materials Academy

Sectors: Cross-sectoral, including power, cement, city, etc.

Brazil

Partners: Brazil Ministry of the Environment, Getulio Vargas Foundation (FGV), Brazilian Business Council for Sustainable Development (CEBDS), World Business Council for Sustainable Development (WBCSD)

Sectors: Over 90 of Brazil's largest companies report, representing over 20% of total national emissions excluding those from deforestation and land use change.

Key

Country reporting initiatives based on or informed by GHG Protocol standards or tools

Country where GHG Protocol has provided training

Mexico & Brazil

Launched in 2006 with Partners

- Mexican Ministry of Environment & Natural Resources
- Mexican BCSD / WBCSD

More than 120 active members, out of which 15 were founding member companies.

The program therefore accounts for around 80% of the total industrial emissions

Launched in 2008 with Partners

- Brazilian Ministry of Environment
- Getulio Vargas Foundation (FGV)
- Brazilian BCSD / WBCSD

More than 116 active members, including 90 of the largest companies in Brazil

These comprise of 20% of the total GHG Emissions excluding deforestation and land-use change.

USA & Malaysia

Launched in 2007
- US EPA Climate Leaders Program
- The Climate Registry

The Climate Registry launched in 2007 has about 430 active members and is the largest voluntary program globally

Mainly initiated out of California and regional alliances on a voluntary basis

Launched in Dec 2013 as MYCarbon

- Ministry of Natural Resources & Environment
- UNDP

10 companies as pilot testers, and founding members
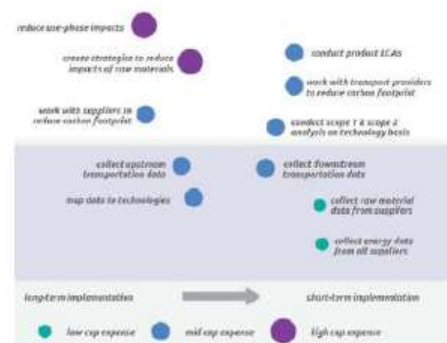
Goal to reduce GHG Intensity per GDP by 40% compared to 2005 levels

INDIA GHG PROGRAM

Promoting profitable, sustainable

Common Challenges / Issues..

Lack of Training & Capacity Building

Lack of availability of Benchmarks, Emission Factor data etc.

Lack of access to Business Solutions

High cost of doing Inventories, Assurance, Reporting etc.

Engagement during policy development

Thereby Need for Collaborative Programs

Objectives of other select GHG Programs

PROGRAM OBJECTIVES[a]	AUSTRALIA	CALIFORNIA	CANADA	EUROPEAN UNION	FRANCE	JAPAN	UNITED KINGDOM	UNITED STATES
Support GHG management and mitigation	X	X		X	X	X	X	X
Improve data quality and consistency	X	X	X	X			X	X
Inform existing and future policies, market mechanisms, and national inventories	X	X	X	X	X	X	X	X
Provide information to stakeholders	X	X	X		X	X	X	X

[a] It is possible that the programs are also implicitly supporting other objectives.

Source: Compiled from respective program websites by interpreting and synthesizing stated program objectives and from information obtained through program staff interviews.

To promote profitable, sustainable and competitive businesses;
- ✓ By building institutional capabilities
- ✓ Supporting uptake of standardized tools/standards and guidelines for measuring and managing GHG emissions
- ✓ Supporting training & development towards creation of a certified pool of GHG Practitioners
- ✓ Serve as an interactive platform to facilitate peer level discussions, sharing of best practices/case studies etc.

The India GHG Program therefore aims to establish a robust and effective institutional set-up providing access to
- ✓ Internationally recognized and locally relevant GHG measurement and accounting tools, guidelines, etc.
- ✓ Customized training and capacity building programs / workshops
- ✓ Relevant industry specific best practices, benchmarking data and analytics
- ✓ Expertise on appropriate goal setting and voluntary targets
- ✓ Business solutions to facilitate GHG emission reductions

INDIA
GHG
PROGRAM
Promoting profitable, sustainable
and competitive businesses.

India GHG Program

Program Pillars – Working with Non-state actors
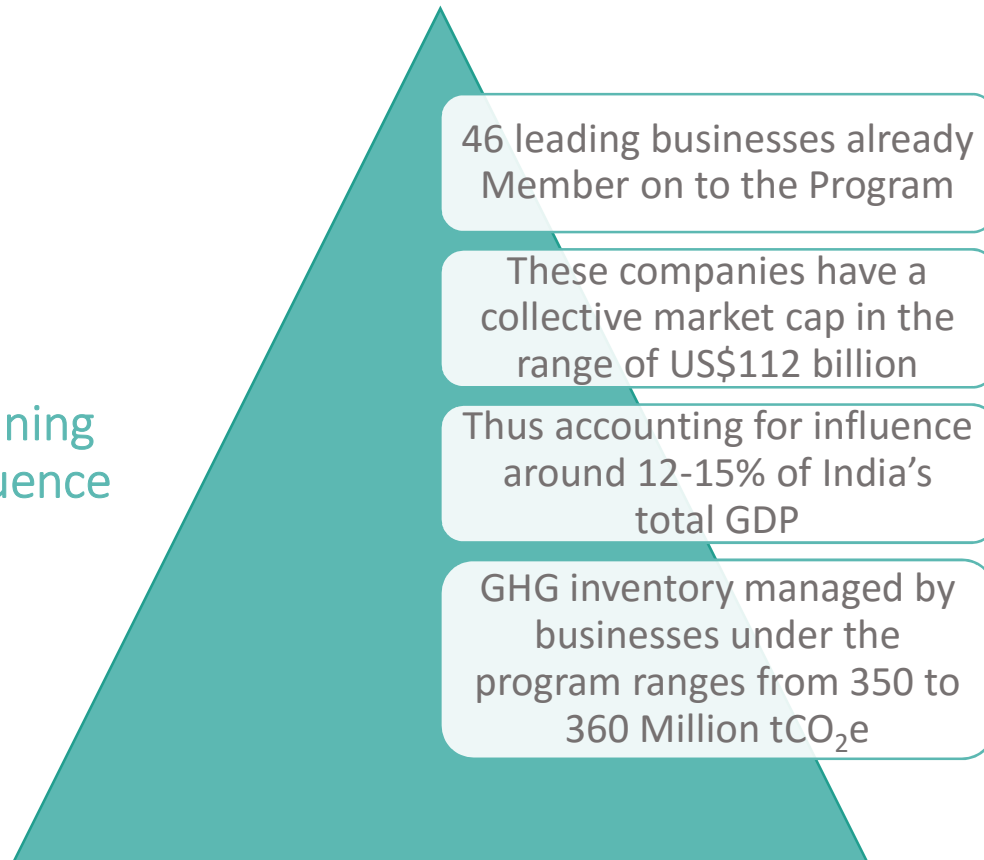
| Trainings and Capacity Building | Sectoral Tools and Guidance development | Benchmarking Peer Interactions Best Practices | Policy Dialogue |

Member Companies

Gaining influence

46 leading businesses already Member on to the Program

These companies have a collective market cap in the range of US$112 billion

Thus accounting for influence around 12-15% of India's total GDP

GHG inventory managed by businesses under the program ranges from 350 to 360 Million tCO_2e

These include

- *India's largest power company*
- Largest Airline in the country
- *Group companies from India's most respected business houses*
- India's renowned IT Company
- *Largest engineering & infrastructure company*
- Responsible Bank

Ideal base with diversified & distributed representation

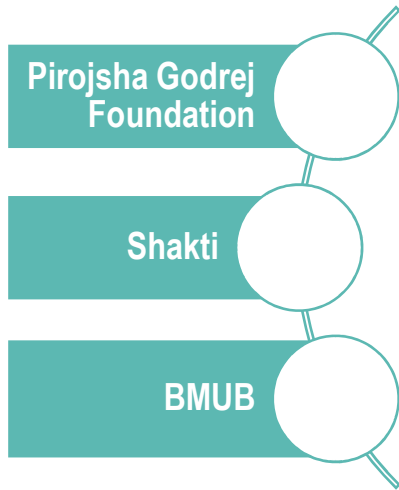Select Member Companies

Initiatives by Member Organizations

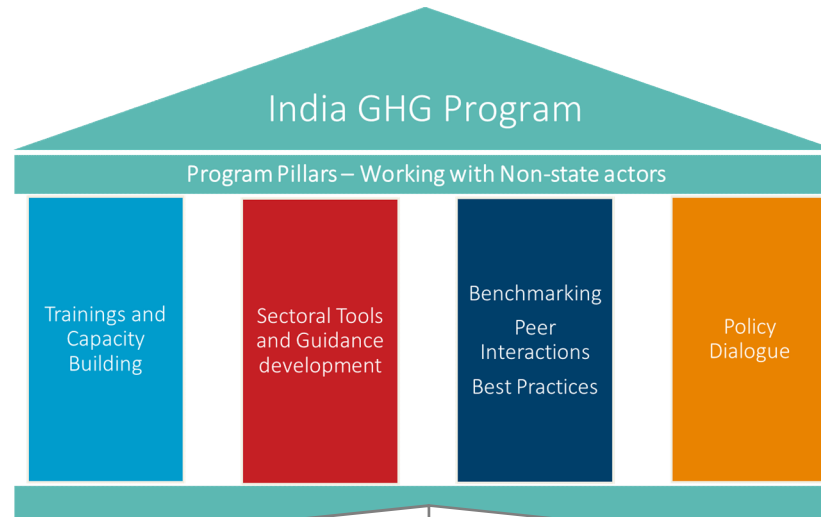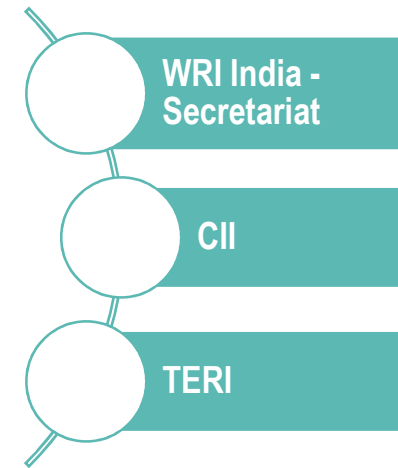|	Strategy	Energy Efficiency	Renewable Energy	Emission Reduction
Hindustan Construction Company	Green Investment			
Infosys	Procure 100% of electricity demand from Renewable sources	Reduce emissions from operations by 5.6% by 2018 through renewable energy consumption and decreases in energy consumption Reduce emissions intensity of operations by 55.4% per employee by 2018 through renewable energy consumption and decreases in energy consumption		
Indian Railways	Emission reduction	Increase efficiency		Reduce emissions by 50% by 2030, and by 75% by 2050
Godrej and Boyce Mfg. Co. Ltd – Motors division	Carbon Neutrality	Reduce emissions from direct operations by 10% Reduce emissions from purchased electricity by 20%		

Initiatives by Member Organizations

	Strategy	Energy Efficiency	Renewable Energy	Emission Reduction
Shree Cement Ltd	Emission reduction	through increased energy efficiency		Reduce operational CO_2e emissions intensity by 3% per unit of production from 2012 to 2015
GAIL	Emission reduction & Renewable Power	Reduce operational CO_2e emissions intensity by 42% per unit of revenue from 2010 to 2020 through solar power systems and increased energy efficiency and conservation		
UltraTech Cement	Emission reduction	Reduce direct CO_2e emissions intensity by 2.96% per tonne of product from 2010 to 2016 through waste heat recovery systems and biomass fuels		
Tata Chemicals	Emission reduction	through increased energy efficiency and conservation		Reduce CO_2e emissions intensity across entire value chain by 20% per tonne of product from 2008 to 2020

The Progress thus far

INDIA GHG PROGRAM
Promoting profitable, sustainable and competitive businesses.

Program Funders

Pirojsha Godrej Foundation

Shakti

BMUB

Program Promoters

WRI India - Secretariat

CII

TERI

India GHG Program

Program Pillars – Working with Non-state actors

Trainings and Capacity Building

Sectoral Tools and Guidance development

Benchmarking Peer Interactions Best Practices

Policy Dialogue

- ✓ Trained 300+ professionals
- ✓ Developed evaluation module

Developed
- ✓ SME Tool
- ✓ Power Tool
- ✓ Freight Tool
- ✓ Scope 3 Tool for buildings

Published
- ✓ Aviation Best practices manual
- ✓ India specific transport emission factors – Air, Rail & Road

- ✓ Launched Scope 2 Guidance in India

Sectoral Working groups
- ✓ Oil & Gas
- ✓ Chlor-Alkali
- ✓ Power
- ✓ Buildings
- ✓ Heavy Engineering

Policy Roundtables
- ✓ Mobilizing Climate Finance

Nationally Recognized

2) The Indian industry has also participated in voluntary carbon disclosure programmes whereby they report their carbon management strategy and GHG emissions. Latest Report by **Carbon Disclosure Project, India** indicates a reduction of 165 million metric tonnes of CO_2 equivalent by Indian industries. "**India GHG Programme**" is another voluntary programme to support development of India-specific emission factors and for corporates to measure their carbon footprints.

3) Indian industry has undertaken many initiatives to reduce their water consumption. A study of 100 companies over a 5 year period covering 12 sectors indicate that the Indian companies on an average have been reducing their specific water consumption by 2.8 to 3 % per year. A few companies have achieved 'water positive' status.

http://www4.unfccc.int/submissions/INDC/Published%20Documents/India/1/INDIA%20INDC%20TO%20UNFCCC.pdf

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(4) **GreenCo Rating System** is first of its kind in the world which assesses companies on their environmental performance across 10 different parameters to help them develop a roadmap to improve further.

(5) **New Ventures India (NVI)** is an initiative to support cleantech entrepreneurs in developing their business plans and access finance and markets.

6.3 Forest Policies, Afforestation and Forest Conservation

India is recognized as a mega biodiversity country, accounting for 7-8% of the recorded species, in just 2.4% of global land area, while supporting 17.5% of human population and the world's largest livestock population. The forest cover in India has increased from 14% in 1950-51 to 21.23% in 2010-11. This is a remarkable conservation achievement in the context of the following national circumstances:

High population density and low per capita forest area: India is a large developing country with a population density of 382/km². Even more significantly, the forest area is only 0.06 ha/capita, compared to world average of 0.62 ha/capita.

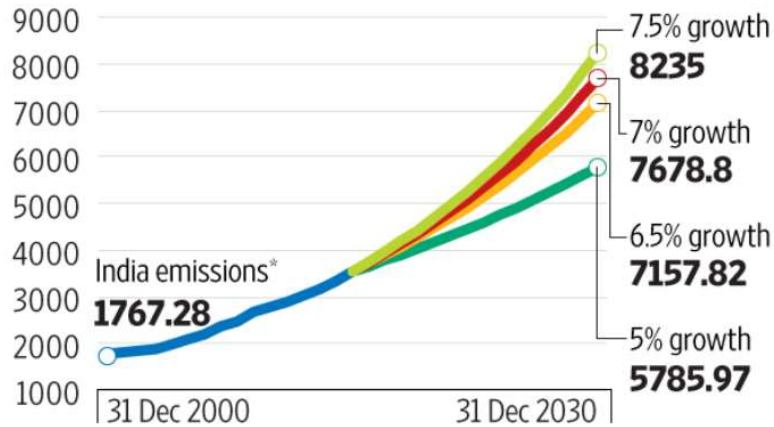**High dependence of population on forests:** In India, nearly 196,000 villages are located in the forests or

profit on **Corporate Social Responsibility (CSR)** activities

(2) The Indian industry has also participated in voluntary carbon disclosure programmes whereby the industries report their carbon management strategy and GHG emissions. Latest Report by Carbon Disclosure

Project, India indicates a reduction of 165 million metric tonnes of CO_2 equivalent by Indian industries. "**India GHG Programme**" is another voluntary programme to support development of India-specific emission factors and for corporates to measure their carbon footprints.

India's INDC and first Biennial update report recognises India GHG Program

http://unfccc.int/resource/docs/natc/indbur1.pdf

Why Programme for Non-state actors

Decoupling Emissions from Growth

INDIA: EXPECTED EMISSIONS
(with 35% reduction in emission intensity by 2030)

- 7.5% growth **8235**
- 7% growth **7678.8**
- 6.5% growth **7157.82**
- 5% growth **5785.97**

India emissions* **1767.28**

31 Dec 2000 — 31 Dec 2030

*Total Green House Gas (GHG) emissions excluding land-use change and forestry (MtCO2e)
The various GDP growth assumptions are a constant annual average for 2016-30

Source: IMF, World Resources Institute (WRI) and Mint calculations

Integral to the INDC Elements

80% India's total emissions come in from Energy & Industrial sectors – both being key areas of Business.

40% India's total installed power generation capacity with the private sector.

Corporate Stewardship on Low Carbon Measures

INDIA GHG PROGRAM
Promoting profitable, sustainable
and competitive businesses.

Increasingly Businesses in India have been scaling-up action towards low carbon operations and growth.

120+
Businesses formally measuring their emissions based on GHG Protocol

40+
Large Businesses having emission reduction targets exceeding 35% reductions

14+
Businesses working on an internal carbon price

On an average, the Indian Industry reduces ~ 150-165 million tCO_2e per year compared to business as usual

60+
Businesses formally reporting their annual GHG emissions to CDP

8+
Large Businesses incorporated Science Based Targets to drive ambitious ER

10+
Businesses working increasing >50% RE in the energy mix

Corporate Stewardship on Low Carbon Measures

Collaborative initiatives and partnerships across key industrial sectors have resulted in unprecedented efficiencies and likely are the most competitive, efficient and low-intensity benchmarks for the world.

Cement	Aviation	Iron & Steel

- What support does your organization need to grow on low carbon pathway?

- Working with supply chain to improve Scope 3 emissions inventory

- Sector specific work

- Does your target align with Science based target?

- Is your organization contemplating Internal Carbon Pricing?

- Domestic Carbon Market for India

Thank You

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