



# Carbon Transparency Initiative

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ClimateWorks  
FOUNDATION











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# Carbon Transparency Initiative

## Trends & Forecasts

## Leading Indicators

## Open & Transparent

The Carbon Transparency Initiative is a project of the ClimateWorks Foundation that highlights progress toward a low-carbon future. Greenhouse gas emissions trends are available on this website.



ClimateWorks Tracker: Data Portals and Visualizations



A photograph of several large solar panels tilted at an angle, mounted on a field of tall grass and wildflowers. The sky is a deep blue with some light clouds. The text is overlaid on the upper left portion of the image.

It's not enough to just  
**create a website**  
and make information transparent.

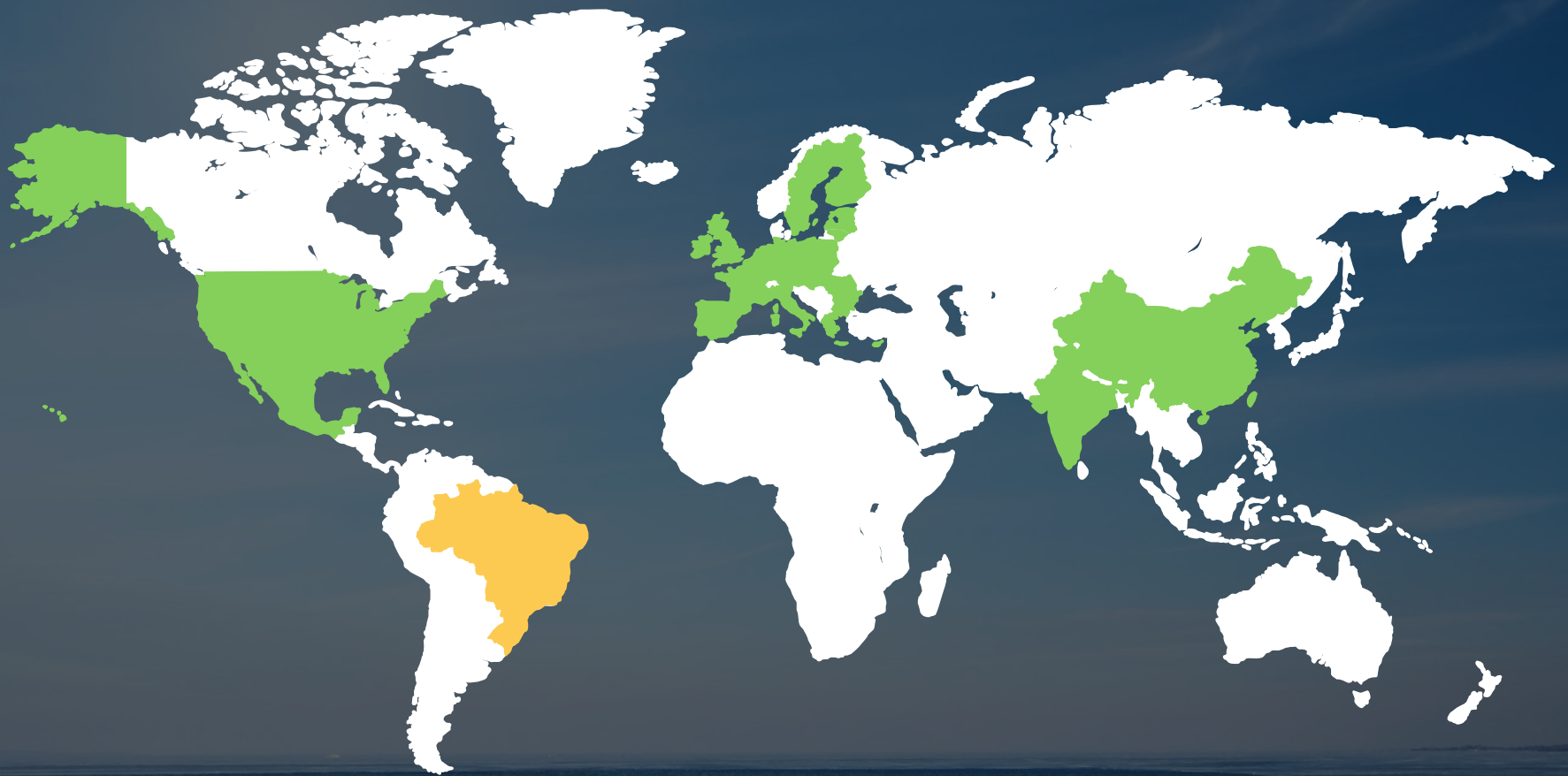
**we need collaboration**  
to make information actionable  
and to drive ambition and change.

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**INFORMATION**

COLLABORATION

ACTION





**INFORMATION**

COLLABORATION

ACTION



power



oil and gas



transport



buildings




industry



agriculture  
and waste





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# Trends & Forecasts

## Leading Indicators

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ClimateWorks Tracker: Data Portals and Visualizations

[DOWNLOAD DATA](#)[CHART FEEDBACK](#)

## Regions

Explore economy-wide emissions projections and sectoral emissions breakdowns for any of five geographies (China, the European Union, India, Mexico, or the United States). Infographics show the range of emissions trajectories based on the



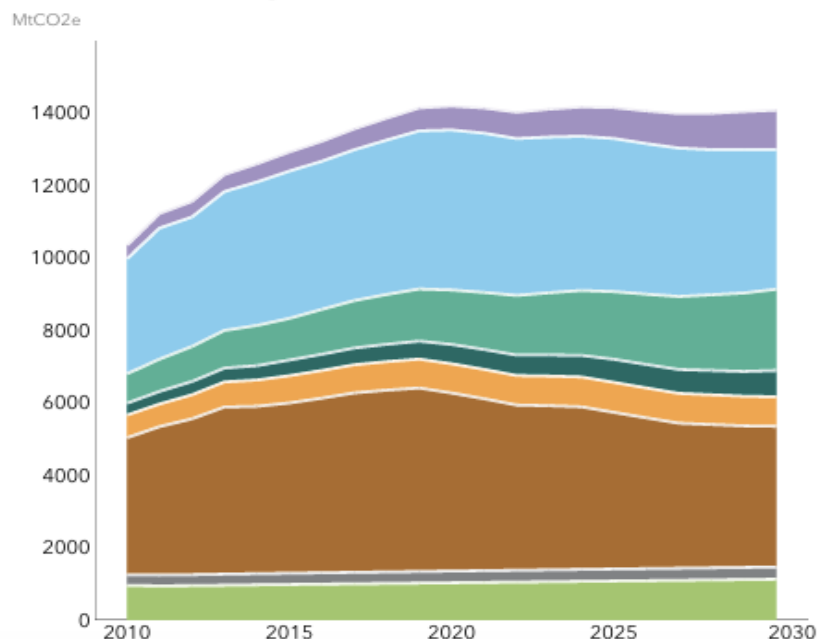
All

- Aviation & Marine
- Power
- Transport
- Oil & Gas
- Buildings
- Industry
- Waste
- Agriculture

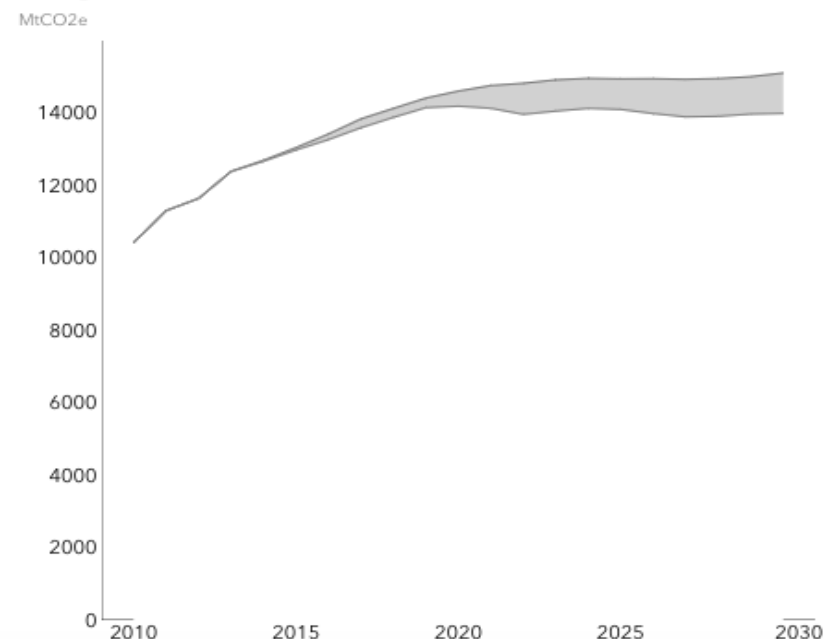
### Narrative

Overall: Between 2005 and 2020, China's emissions are forecast to nearly double with increases of 7 gigatons of carbon dioxide equivalent or 4.6% per year. Primarily as a result of reduced activity in the cement and steel industries, the country's total emissions are expected to reach a plateau by 2020 with no projected increases thereafter. On a sectoral basis, Transportation (including upstream Oil & Gas Sector) emissions are expected to continue to rise rapidly through 2030 with increases in passenger mobility and freight delivery, while direct industrial emissions are expected to fall with decreasing activity, and Power Sector emissions will decrease due to

### GHG Emissions by Sector: China



### Range of Overall Emissions: China





DOWNLOAD DATA

CHART FEEDBACK

## Sectors

To construct emissions inventories for each geography, the CTI methodology uses a bottom-up approach, evaluating **activity metrics** and their associated emissions intensity metrics. The product of activities and **emissions intensity metrics** results in estimates of sub-sector emissions, which are aggregated to arrive at total emissions for the sector.



All

+ Aviation & Marine

- Power

Oil

Natural Gas

Coal

Nuclear

Hydro

Geothermal

Biomass

Wind

Solar

- Transport

Freight

Public Transit

2 and 3-Wheeled Vehicles

Light Duty Vehicles

+ Oil & Gas

+ Buildings

+ Industry

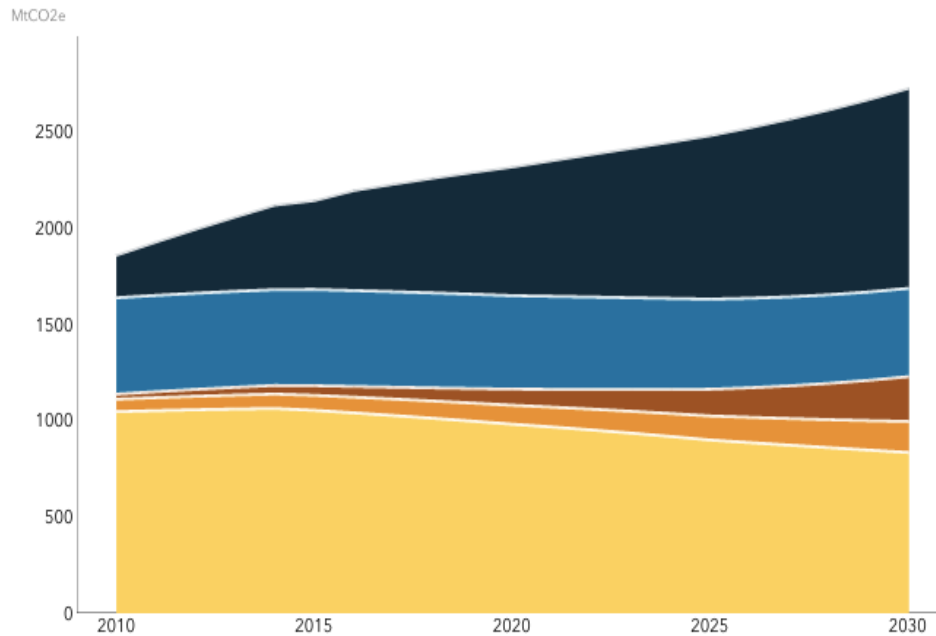
+ Waste

+ Agriculture

### Narrative

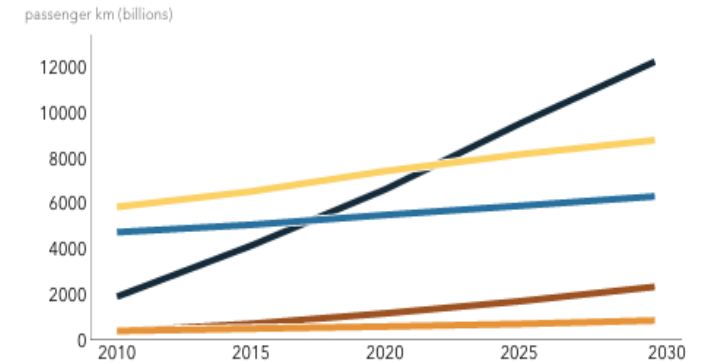
Light Duty Vehicles: Emissions from light-duty vehicles (LDVs) are the product of activities in terms of passenger kilometers—the total distanced traveled by all passengers in a year. Intensity is the emissions associated with a kilometer of travel in this mode of transport. LDV vehicle kilometers and their associated emissions intensity—another common metric for LDV emissions—is in the metrics dashboard.

### Transport Sector GHG Emissions: Light Duty Vehicles, All CTI Regions

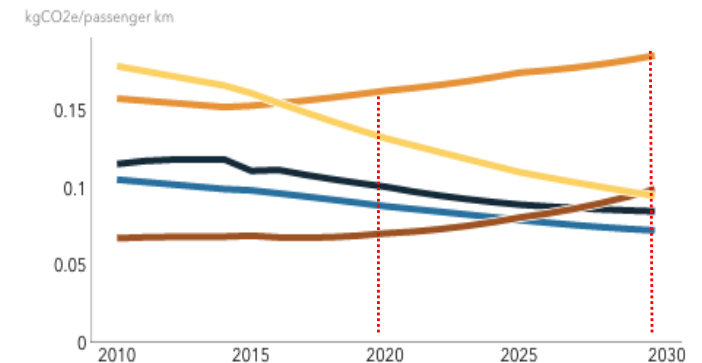


Legend: China EU-28 India Mexico US

### Activity Metric: Light-duty vehicle (LDV) passenger ...



### Intensity Metric: GHG emissions intensity of LDVs

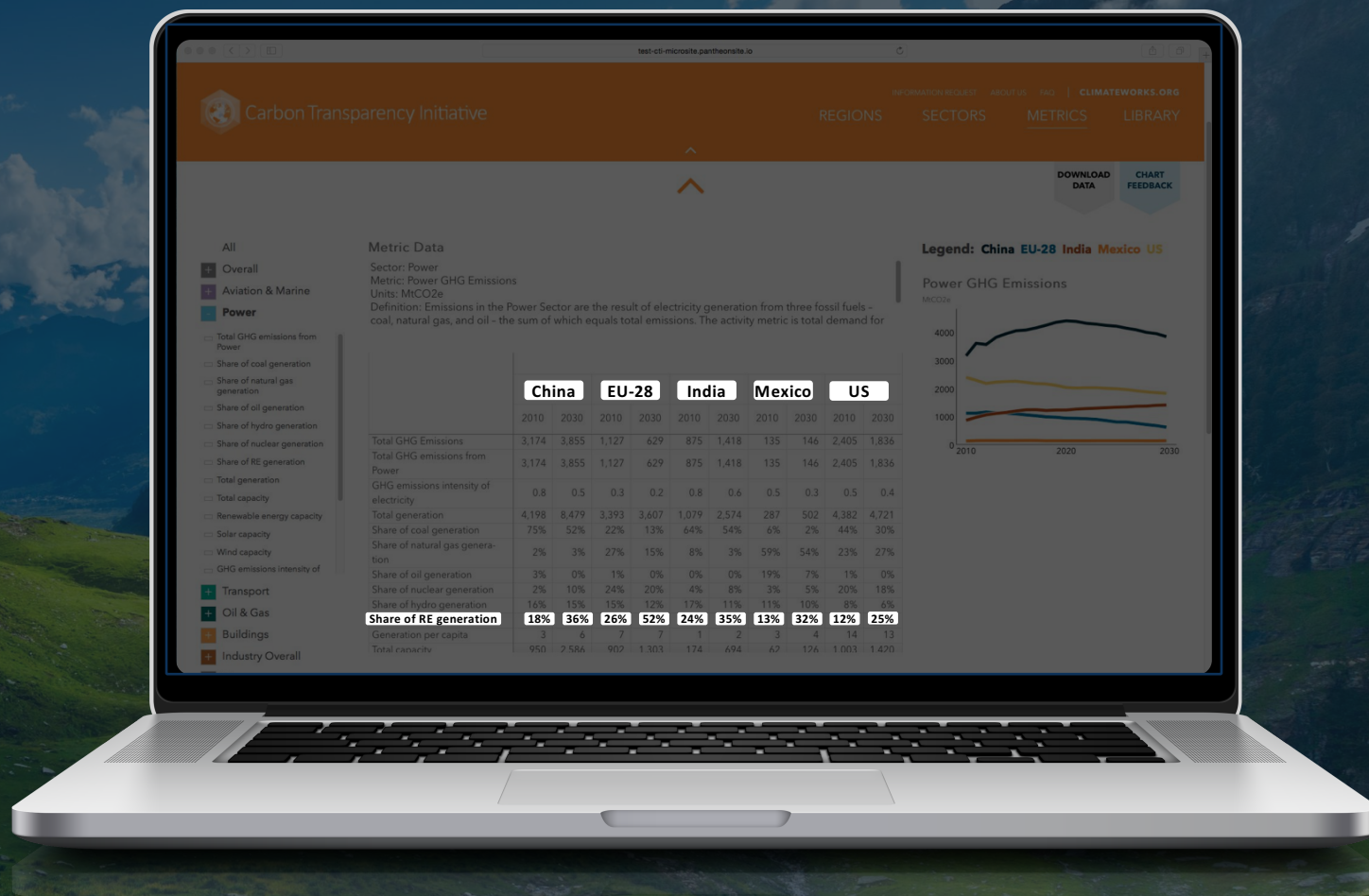




# METRICS

Explore over 130 metrics at all levels and across all geographies

*How does the US compare in renewables share of electricity compared to other countries?*



## INFORMATION

## COLLABORATION

## ACTION

**Bloomberg**  
NEW ENERGY FINANCE

**CEA** CALIFORNIA  
ENVIRONMENTAL  
ASSOCIATES

**CLIMATE**  
ANALYTICS

**ECOFYS**  
sustainable energy for everyone

**icct**  
THE INTERNATIONAL COUNCIL  
ON CLEAN TRANSPORTATION

**iea** International  
Energy Agency

**BERKELEY LAB**  
Lawrence Berkeley National Laboratory

**McKinsey&Company**

**NEW**  
**CLIMATE**  
INSTITUTE

**SEI** STOCKHOLM  
ENVIRONMENT  
INSTITUTE

**iCS**  
instituto  
CLIMA e SOCIEDADE

**SEEG**  
Brasil

**European**  
**Climate Foundation**



INFORMATION

COLLABORATION

**ACTION**

IDENTIFY  
NEW  
STRATEGIES

INFORM  
PARTNERS

SERVE  
CLIMATE  
COMMUNITY

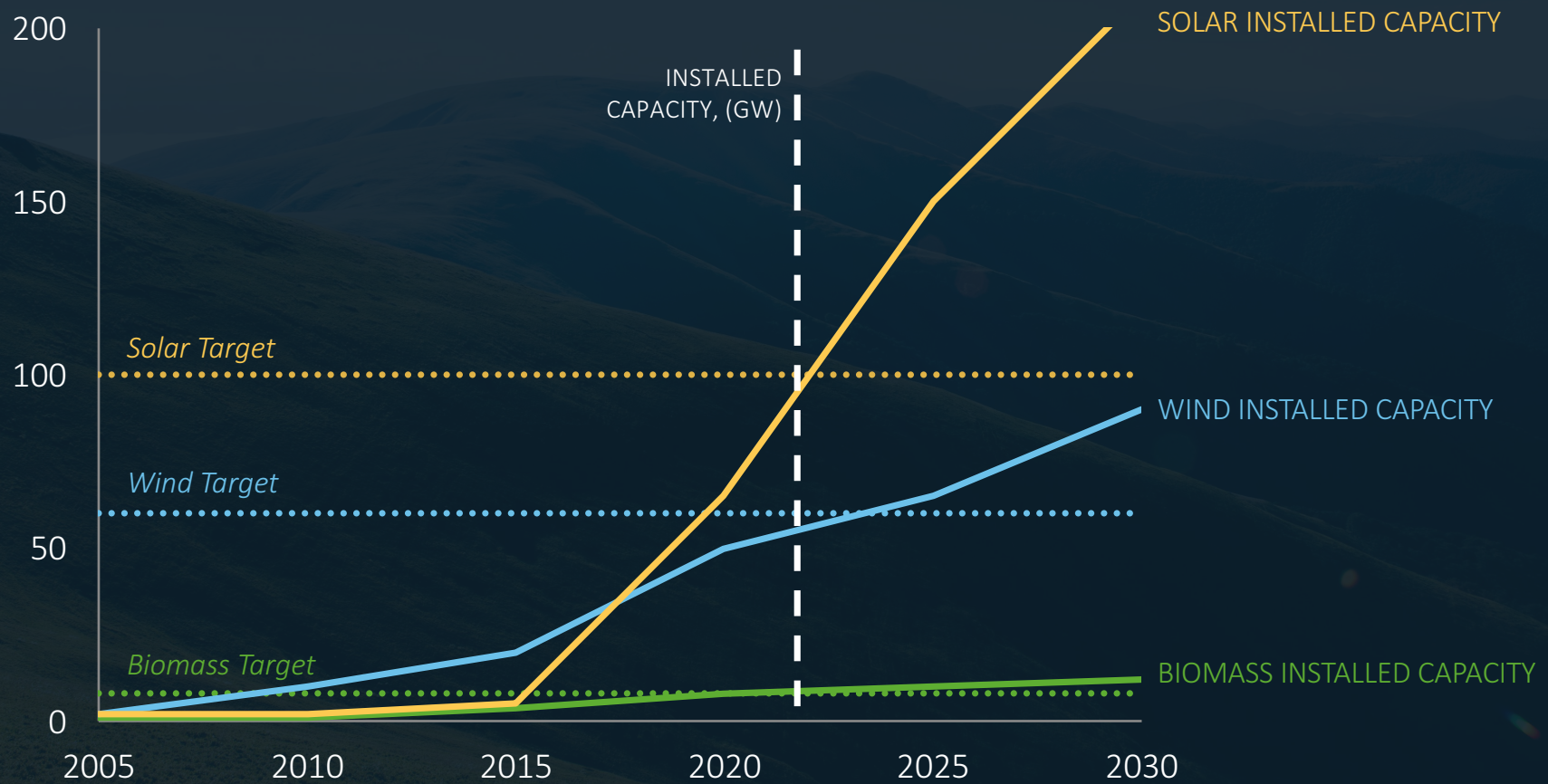


INFORMATION

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**ACTION**

## India's Renewable Energy Targets

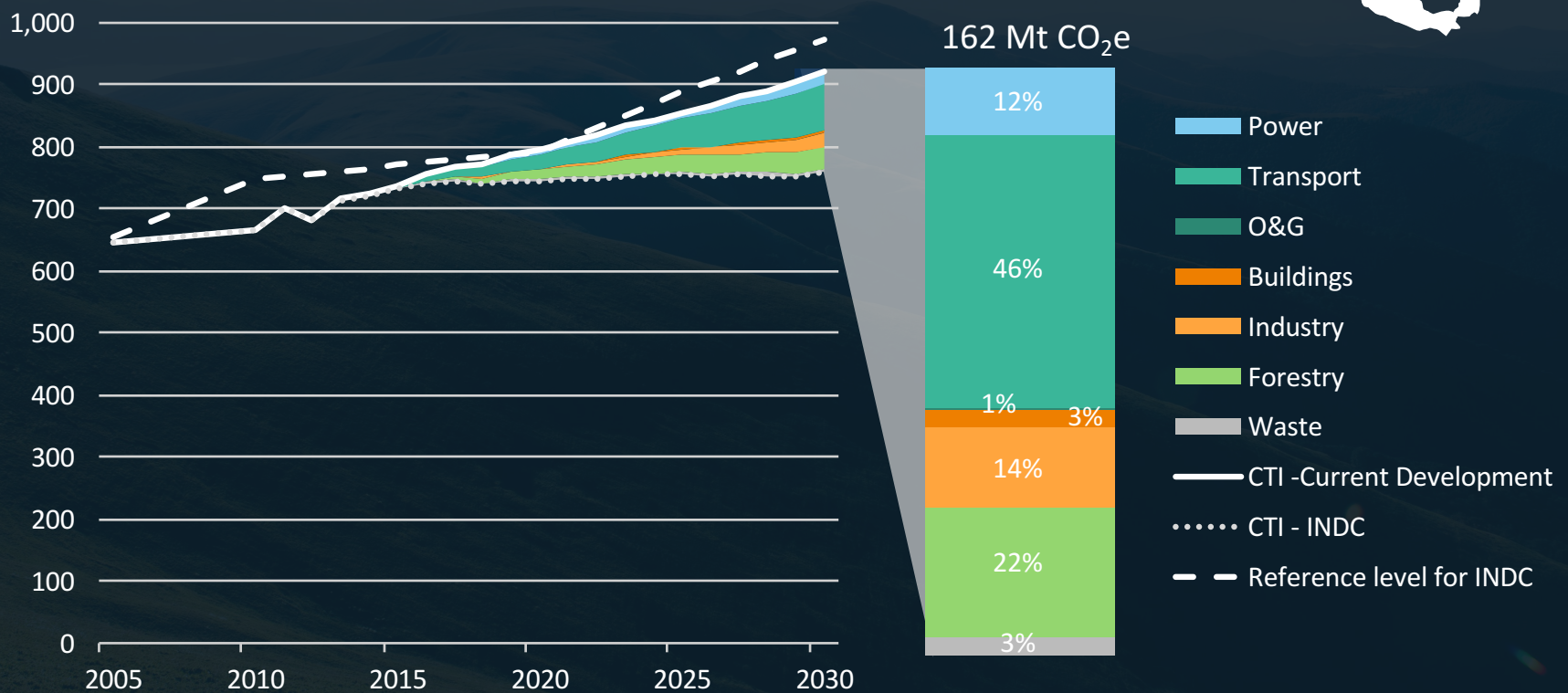


INFORMATION

COLLABORATION

ACTION

CTI – Mexico INDC Scenario: sector reductions (Mt CO<sub>2</sub>e)





# What's coming next year...





# What next?

Explore the ClimateWorks Tracker site.

[www.climateworkstracker.org](http://www.climateworkstracker.org)

Cite or benchmark against data from the ClimateWorks Tracker

Consider ways you might want to use the models, data or methodology in your own work.

Provide feedback – [cti@climateworks.org](mailto:cti@climateworks.org)