



Managing Carbon Emissions through Market Based Solutions: Carbon Trading

OffsetGo: Building a Net Zero Puducherry

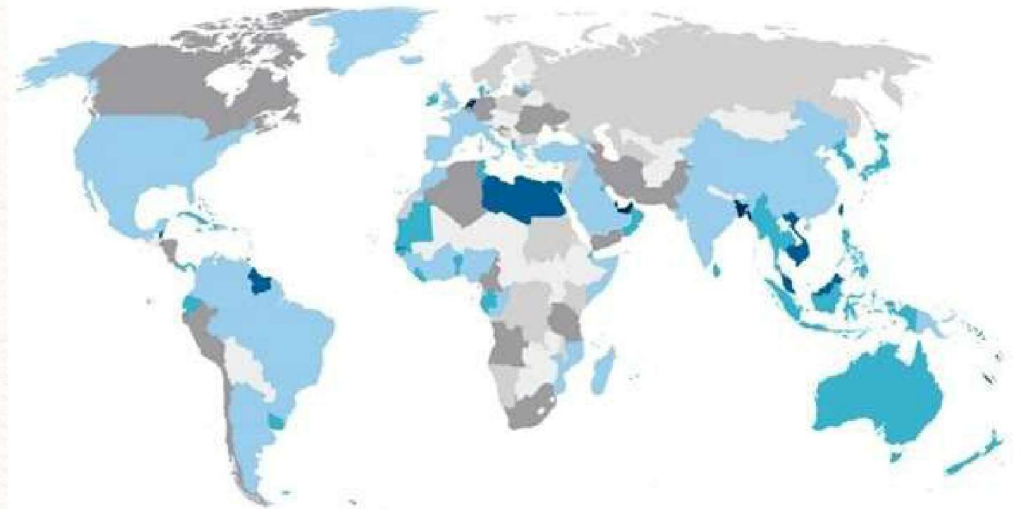
How fast is the Climate Changing?



- The surface temperature has risen about 2.12 F due to rising CO2 emissions.
- Greenland loses around 279 billion tons of ice, Antarctica loses about 148 billion tons of ice annually.
- Global sea level rose about 20 centimeters in the last century, which is double that of the last century and accelerating slightly every year.
- In 2018, there were 14 extreme-weather events that resulted in more than \$1 billion in damages.
- The average number of people exposed to heatwaves has increased by 125 million since the beginning of the century.

Percentage of national populations who live in places that will be drowned by a rise in long-term sea levels – even if global warming is held at 2C

0% 0.1-5 5-10 10-25 25-50 50-75 75-100

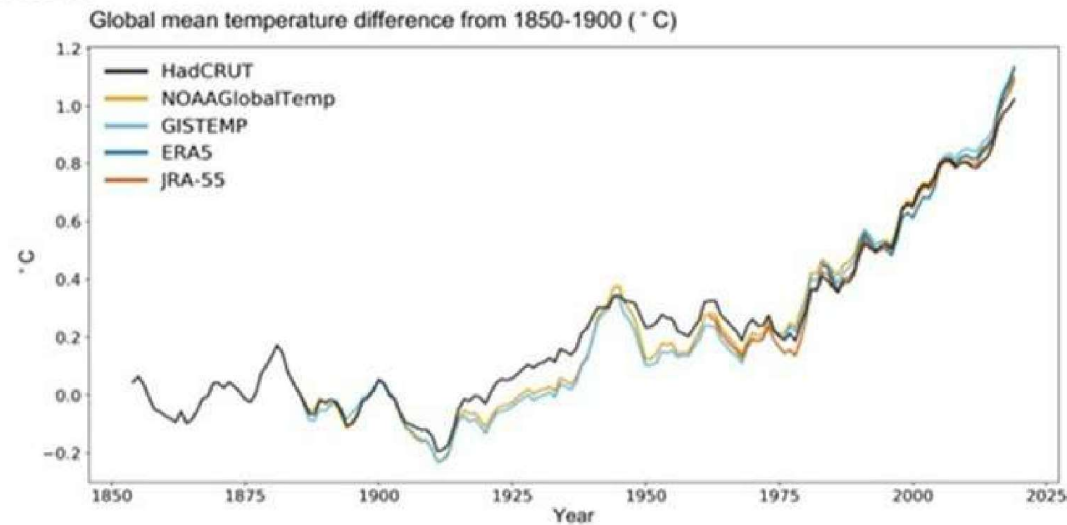


Guardian graphic

Source: Nature Climate Change

Carbon & Climate

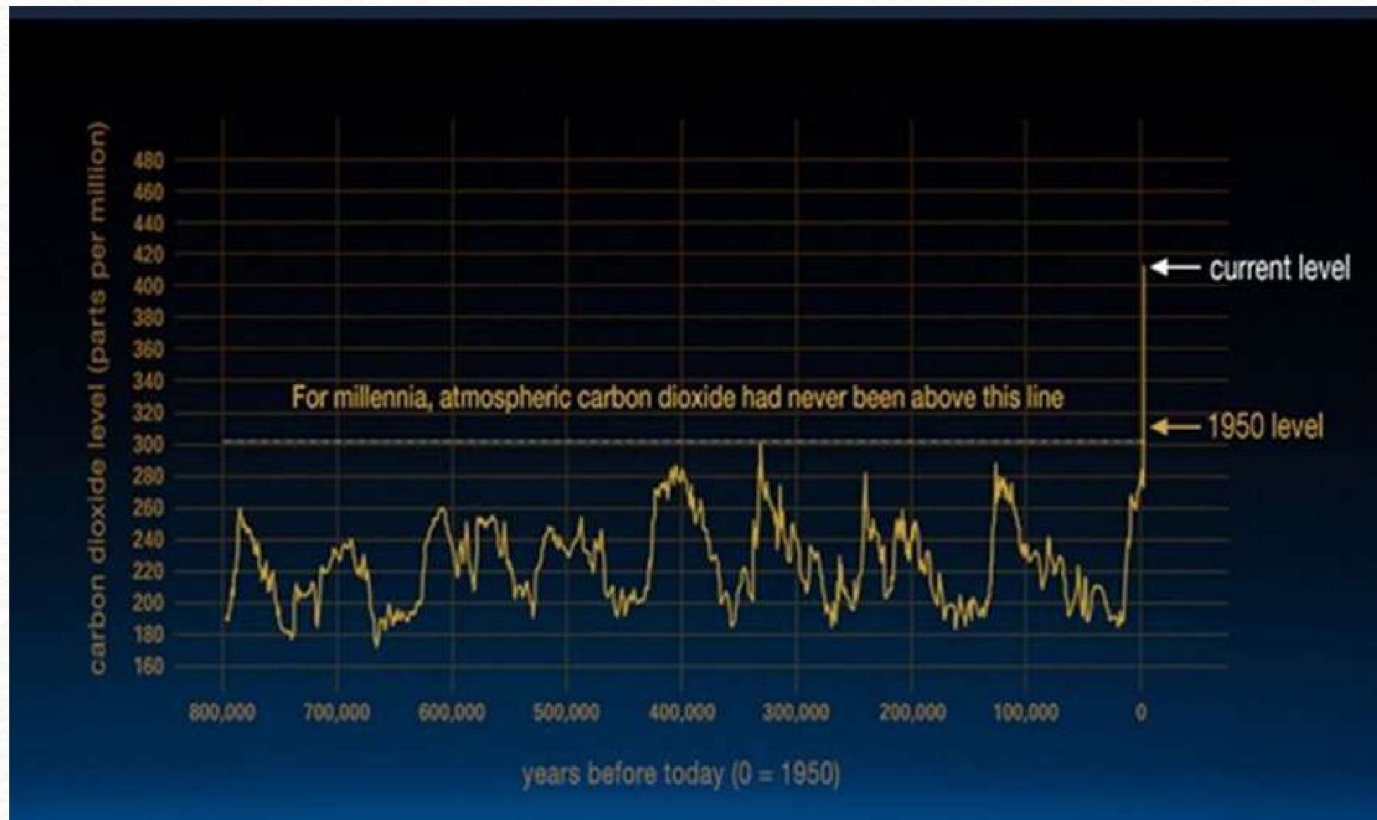
Met Office



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Five-year running average of global temperature anomalies (relative to pre-industrial) from 1854 to 2019 for five data sets: HadCRUT.4.6.0.0, NOAAGlobalTemp v5, GISTEMP v4, ERA5, and JRA-55. Data for 2019 to June

Carbon & Climate



What does this mean for India?



- **7000 KM LONG COASTLINE**

Sea Level rise- Puducherry, Mumbai, Goa and 12 other major cities

- **EXTREME WEATHER EVENTS**

Amphan- \$12 Bn

- **\$ 35 TN LOSS IN 50 YEARS**

- **DECLINING AGRICULTURE PRODUCTIVITY**

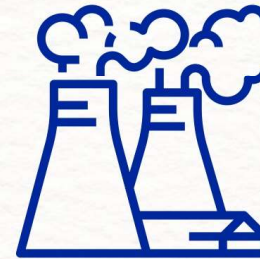
- **REFUGEE CRISIS**

From neighbouring countries

What is different about India?



1	USA	15.52
2	China	7.38
3	India	1.91



India is the
3rd largest emitter
of GHGs globally

Top GHG emitting countries

\$11 Tn in 50 years can be gained by exporting
decarbonization from India



Carbon Trading



Carbon trading is simply the buying and selling, either the right to produce carbon dioxide emissions or the Credit generated by saving current or future Emissions, so that people, countries, or companies who use a lot of fuel and electricity can buy rights from those that do not use so much.

Equal & Equitable

Even though Emissions vary, the consequences of the Climate Emergency is common and mitigation measures need to recognize the developed and developing country divide

Responsible

Creates a roadmap for the Reduction of Future Emissions without compromising on economical growth

Constructive

Creates an Eco-system for Climate Mitigation as an alternative and profitable strategy rather than just compliance adherence

Sustainable

Market Based Mitigation measures are built on existing infrastructure (Technological and Commercial) and carry the capacity to assimilate future innovations to engender its own growth.

History of Carbon Trading



Kyoto Protocol



UN Clean Development Mechanism

1997: Negotiators from every country in the world agree on a deal to cut the world's greenhouse gas emissions

Paris Agreement



Nationally Determined Contributions

Dec 2015: global framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C.

Cop 26, Glasgow



Sustainable Development Mechanism

2021: Integrating Voluntary markets into CDM and creation of SDM

Current Trends



Current Global
average price

\$5



4500%

rise of price of
Carbon credits

projected by 2050



occurs annually

- 1 in every 8 people is already living under an ETS in force
- 8% global GHG emissions are covered by an ETS
- Corporate carbon-neutral pledges fuelled a record transaction volume of at least 104 MtCO₂e in 2019, which is an increase of 6 percent over 2018.
- Voluntary Carbon Markets reached a record size of \$1 Bn in 2020

Where does India stand?



India was one of the few countries that reduced its emissions more than the target set under its NDC in Paris



Net Zero Goal 2070



Bureau of Energy Efficiency (BEE)
policy of Cap and Trade



Integrating VCM in National
Cap and Trade

But....



\$ 10 Bn worth carbon credits still remain unsold in India

Indian credits get 30 cents as compared to the Global average of \$5 per credit.

What is India's problem?



Transparency

Lack of Awareness



Lack of Technical
Infrastructure

No Quality
parameters

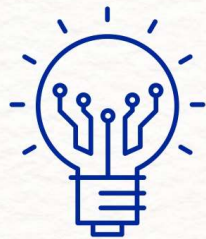


West- based
Crediting

Heavy reliance
on Renewables



What can India gain by robust Carbon Trading?



Lets take Puducherry's example

Biomining of Legacy waste
Plastic, E-waste recycling
Restoration of Wetlands
Mangrove Conservation
Sea grass sequestration
Renewable Energy Production
Sustainable Agriculture

What is OffsetGo?



How does it work?



OffsetGo and Govt. of Puducherry



Building a Net-Zero Puducherry

- **Mitigate:** To have a detailed assessment of Puducherry's GHG Emissions- Volume, Pattern, division, distribution, segmentation, contribution, comparison, etc., and develop and apply a Carbon Policy based on this data to identify sources and their alternatives to bring down the native emission value to a minimum.
- **Offset:** To mitigate Puducherry's impact on the environment in real-time by investing in Indian offsetting projects of categories selected to further Puducherry's economic, social, and natural welfare and resources as well as provide a boost to the rest of the country for shifting to greener technologies



Sectors we'll engage



Waste



pollution



agriculture



water



power generation



industry



infrastructure



forestry



**welfare schemes and
state expenditure**



**biodiversity and
indigenous species**

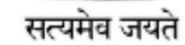
Human Impact



- Life Expectancy Increase
- Creating Employment in Green Industries
- Mitigation of sources outside Puducherry
- Cleaner Sea bodies
- Engendering Innovation
- Lower Extreme Weather phenomena
- Water Table Recharge
- National Rejuvenation
- Beautification
- Lower Income Disparity
- Migration Mitigation
- Pollution-free



"Saving Tomorrow Today"



For more information- visit: www.offsetgo.earth
or write to
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