Net Zero Roadmap for Banking Organizations

14th October 2023

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Agenda for today's Presentation

Background

1. Basics of Climate Change
2. Global treaties/agreements
3. Definition of Net Zero
4. India's climate change targets

Carbon Markets

1. Offset Market
2. ETS
3. India Carbon Market

Net Zero for Organizations

1. Corporate accounting of GHG Emissions
2. GHG Protocol, GHG Program
3. Banking Sector Value chain & scope wise emissions linkage
4. How banks can achieve Net Zero
5. Actions by few major Indian banks
6. Way forward

What Is Climate Change?

- Climate change refers to long-term shifts in temperatures and weather patterns. Such shifts can be natural, due to changes in the sun's activity or large volcanic eruptions.

- But since the 1800s(industrial revolution), human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas.

Source- un.org

- Burning fossil fuels generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures.
- Main GH gases - Carbon dioxide and Methane
- Major GHG Contributors- Energy, industry, transport, buildings, agriculture and land use.

Source- un.org

Consequences of Climate Change

- Already we are 1.1°C warmer than it was in the late 1800s (before the industrial revolution).

- 1.1°C temperature rise is not a big deal. Why so worry ??

- Climate change doesn't mean only warmer temperatures

- The consequences include
  - flooding
  - melting polar ice
  - catastrophic storm
  - declining biodiversity
  - intense droughts
  - water scarcity
  - severe fires
  - rising sea levels

Source- un.org

India's exposure to climate change

- India is highly vulnerable to the impacts of climate change
- Long coastline
- Majority of population with low income
- Agriculture dependency
- Dependence on Himalayan rivers

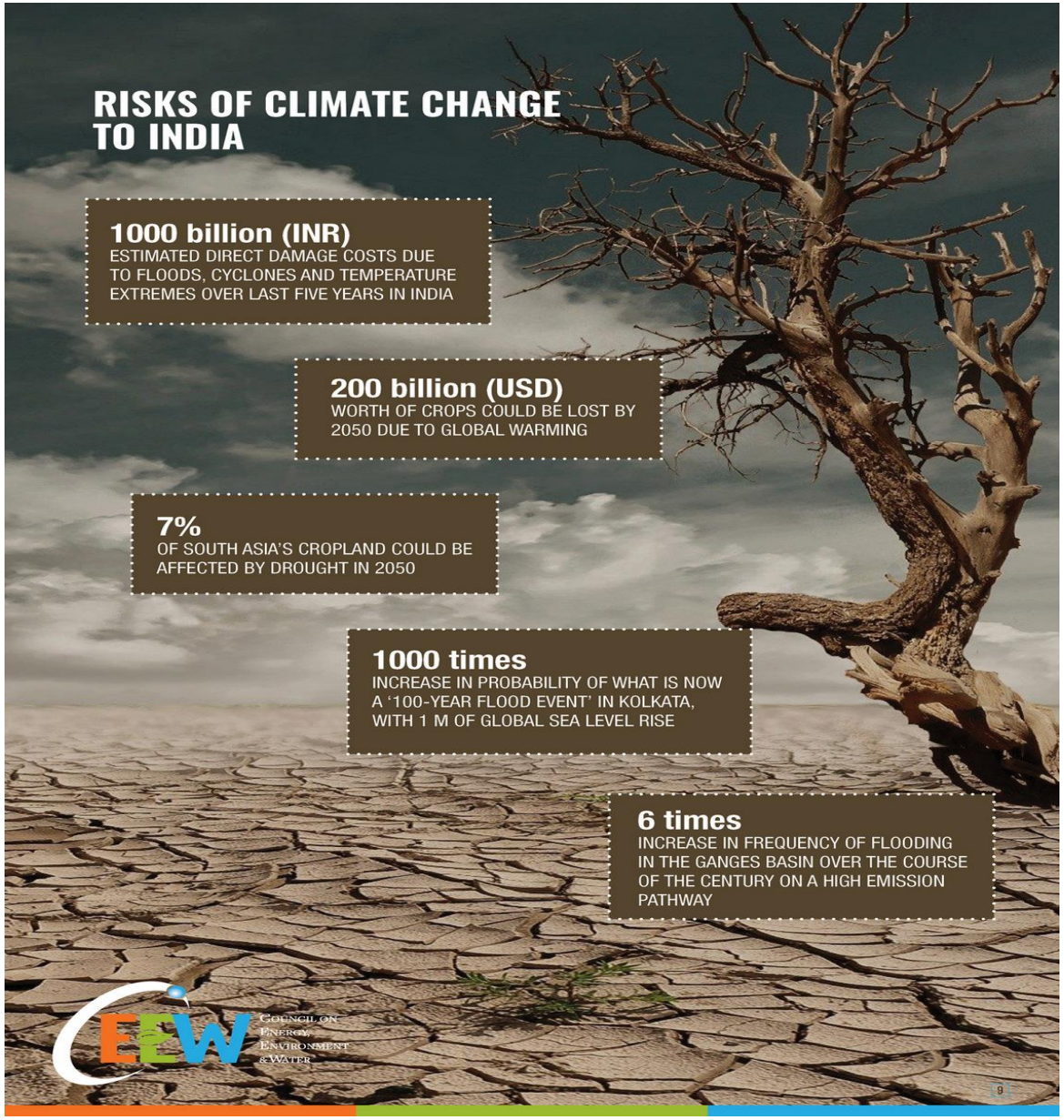
Source- CEEW,2016

PTI

New Delhi, October 10

Climate change could expose up to 2.2 billion people in India's Indus Valley and Pakistan to many hours of heat that surpasses human tolerance, by the end of the century, according to a new study.

The study, published in the journal Proceedings of the National Academy of Sciences (PNAS), found that if global temperatures increase by 1 degree Celsius (C) or more than current levels, each year billions of people will be exposed to heat and humidity so extreme they will be unable to naturally cool themselves.



Source- tribuneindia.com & CEEW-2016

The economics of climate change

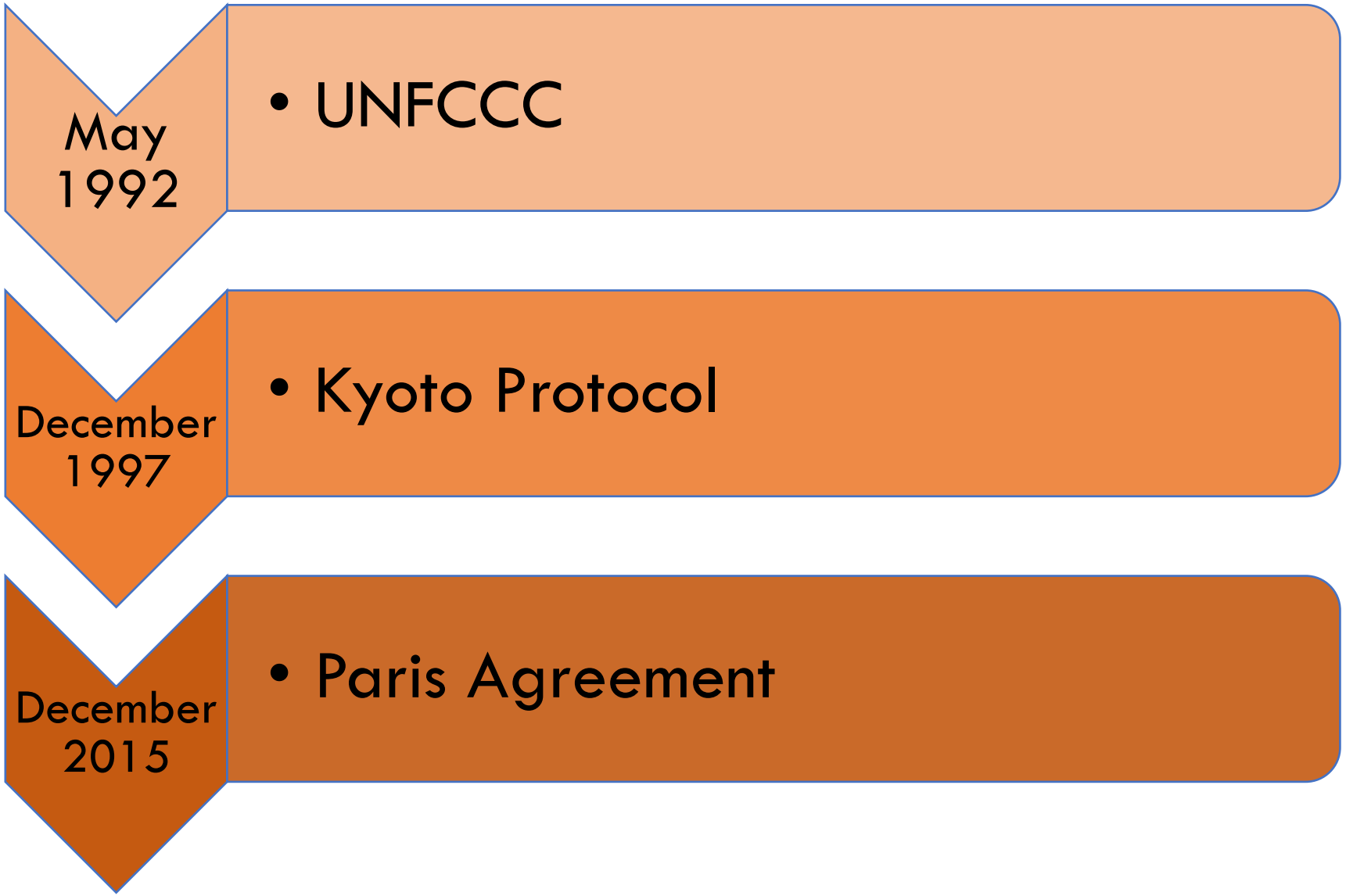
	Excludable	Non-Excludable
Rival	Private goods	Common Property Resource
Non-Rival	Club Goods	Public Goods

- What kind of good is Air pollution?
- What is Global Warming ?

Global treaties/Agreements

United Nations
Climate Change

Timeline of major climate change agreements/conventions



United Nations Framework Convention on Climate Change (UNFCCC)

- UNFCCC, an international environmental treaty adopted in May 1992, succeeds IPCC (Intergovernmental Panel on Climate Change)
- Entered into force on 21 March 1994.
- Today, it has near-universal membership (198 countries). The 198 countries that have ratified the Convention are called "Parties to the Convention".
- Parent treaty to 1997 Kyoto Protocol and 2015 Paris Agreement.
- Objective- "**stabilize greenhouse gas concentrations** in the atmosphere at a level that will prevent dangerous human interference with the climate system, in a **time frame** which allows ecosystems to adapt naturally and enables **sustainable development**".

 Source- unfccc.int

United Nations Framework Convention on Climate Change

- Annex I (developed countries) and non-Annex I parties
- Sets non-binding limits on GHG emissions for individual countries
- Puts the onus on developed countries to lead the way.
  - The idea is that, as they are the source of most past and current greenhouse gas emissions, industrialized countries are expected to do the most to cut emissions on home ground
- Common But Differentiated Responsibility

 Source- unfccc.int

Kyoto Protocol

- Adopted on 11 December 1997
- Entered into force on 16 February 2005

- Legally binds developed countries, and places a heavier burden on them under the principle of “common but differentiated responsibility and respective capabilities”,

- Commitment periods from 2008-2012 and 2013-2020

- The protocol offers market based mechanisms to binding countries to meet their targets
    - International Emission Trading
    - Joint Implementation
    - Clean Development Mechanism

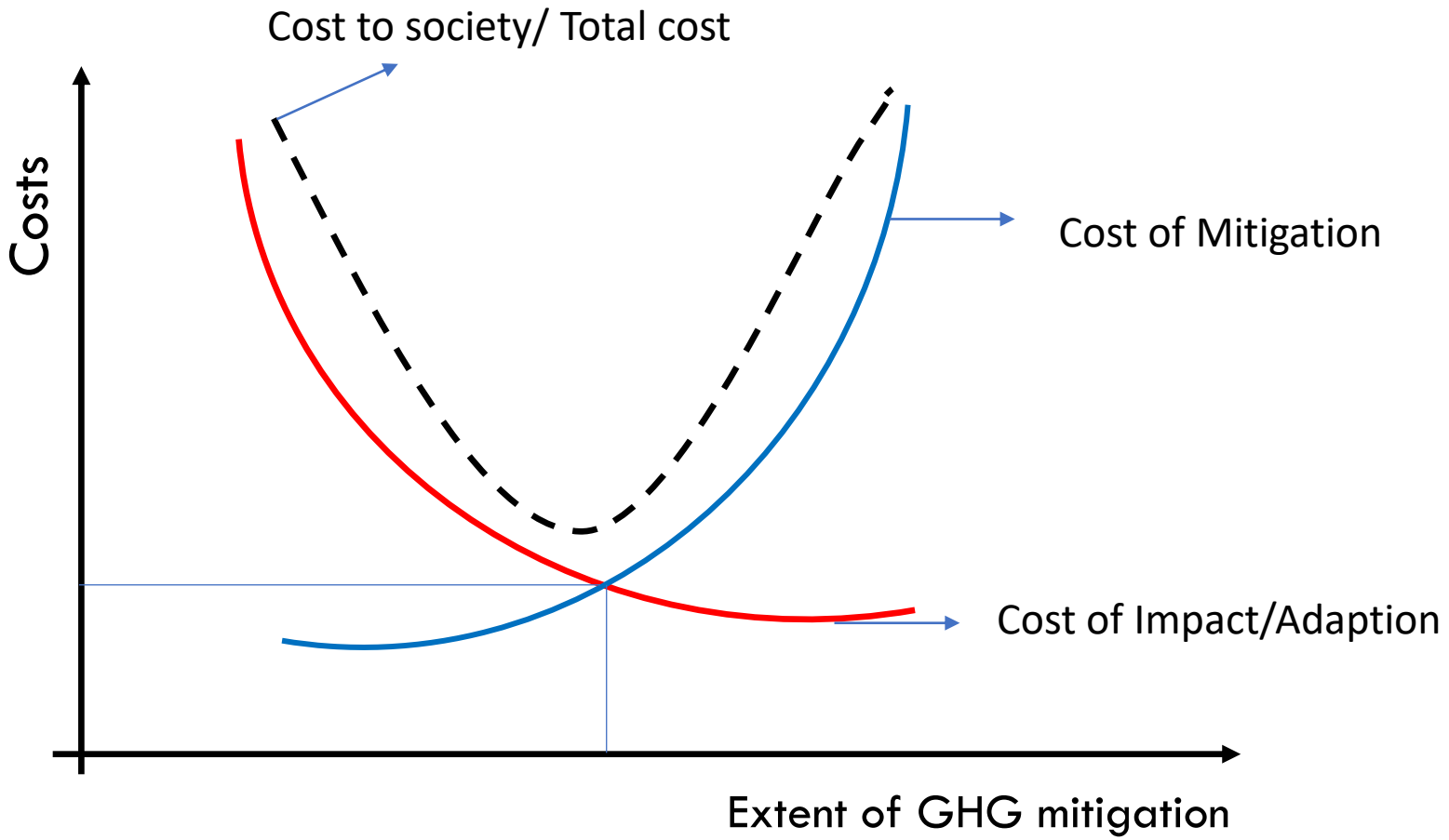
 Source- unfccc.in

Paris Agreement

- The Paris Agreement is a legally binding international treaty on climate change.
- Adopted on 12 December 2015
- Entered into force on 4 November 2016
- Fundamental goal – "To hold the increase in the global average temperature to well below 2°C above pre-industrial levels" and pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels.'
- Bottom up approach
- Based on national circumstances and capabilities
- Nationally Determined Contributions (NDCs)- Every five years.

 Source- unfccc.int

Economics of 1.5°C




NET
ZERO

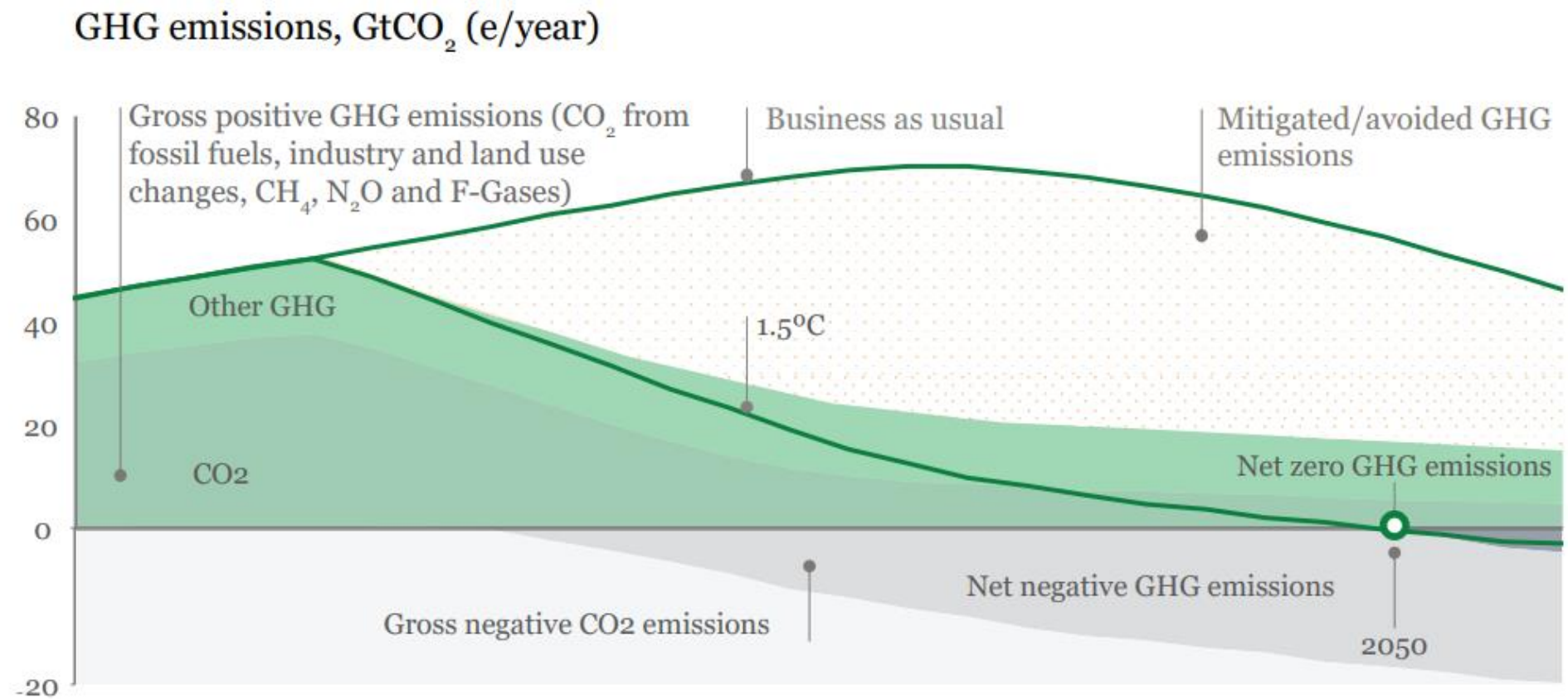
IPCC Special report on 1.5° C, 2018

- In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO2 emissions decline by about 45% from 2010 levels by 2030 (40–60% interquartile range), reaching net zero around 2050 (2045–2055 interquartile range).

- "**Net zero** emissions are achieved when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period."

- Other terms - carbon neutrality, GHG neutrality, net-zero carbon

Source- IPCC,2018



Source: UNEP Mercator Research Institute on Global Commons and Climate Change (MCC), IPCC

India's actions towards Climate Change

October-2015-Submitted Intended NDCs

1. To put forward and further propagate a **healthy and sustainable way of living** based on traditions and values of conservation and moderation.
2. To adopt a **climate friendly and a cleaner path** than the one followed hitherto by others at corresponding level of economic development.
3. To reduce the emissions intensity of its GDP by **33 to 35 percent** by 2030 from 2005 level.
4. To achieve about **40 percent** cumulative electric power installed capacity from non fossil fuel based energy resources by 2030
5. To create an **additional carbon sink of 2.5 to 3 billion tonnes of CO2** equivalent through additional forest and tree cover by 2030.
6. To **better adapt** to climate change by enhancing investments in development programmes in sectors vulnerable to climate change.
7. To mobilize **domestic and new & additional funds** from developed countries…
8. To **build capacities,** create domestic framework and international architecture…

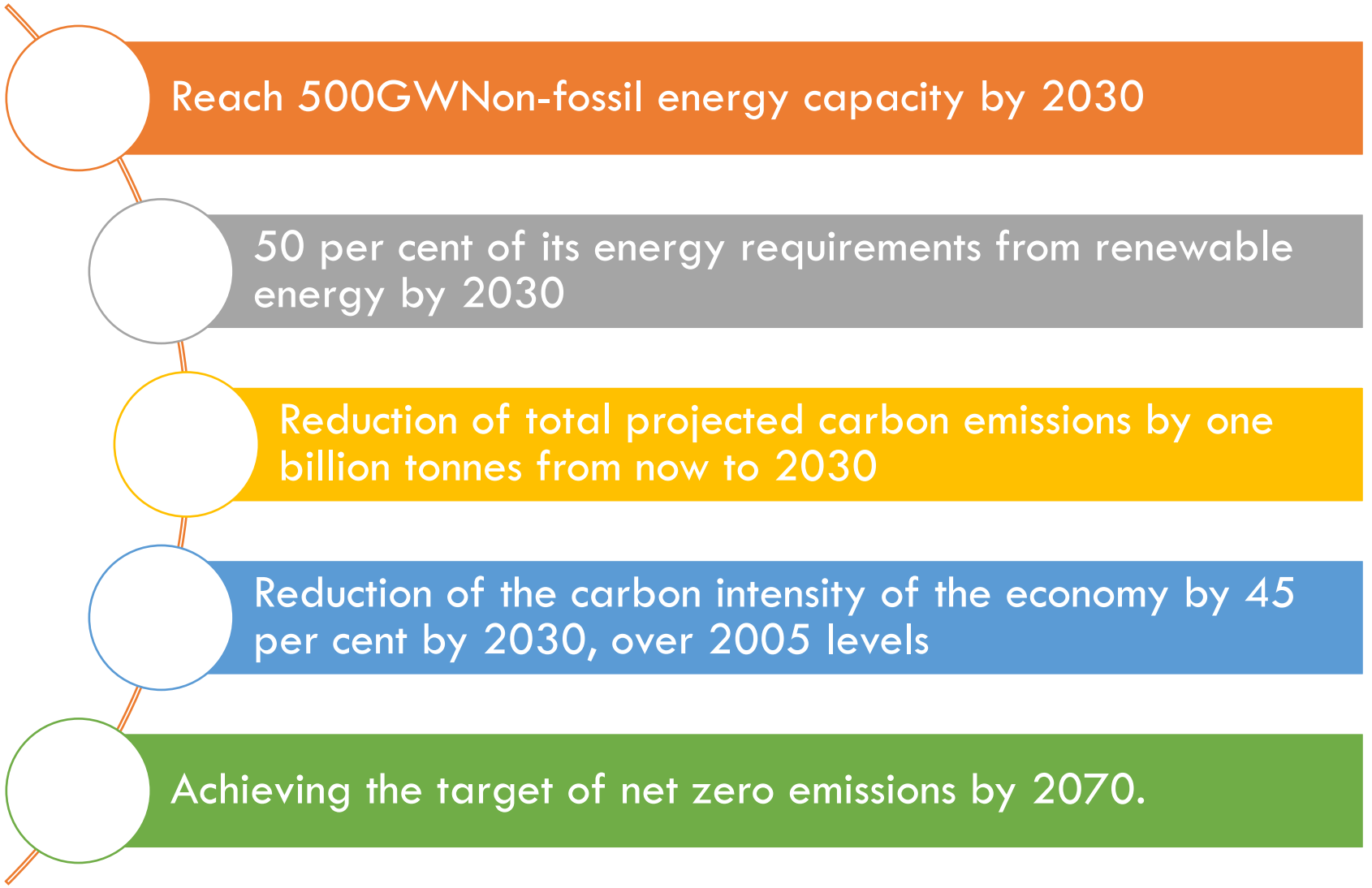
August-2022 Submitted updated NDCs

1. To put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation, including through a mass movement for **'LIFE'– 'Lifestyle for Environment'** as a key to combating climate change

2. To reduce Emissions Intensity of its GDP by **45 percent** by 2030, from 2005 level

3. To achieve about **50 percent** cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030

India's Panchamrit presented at COP26, Glassgow- November 2021



India's Climate Policy Ambitions

- In recent history, India has started playing an increasingly active role in international climate discussions

- Partly driven by India's own vulnerability, by a sense of opportunity, and by a desire to demonstrate leadership in global climate discourse e.g. ISA

- Traditionally, climate ambition was demonstrated through a target to reduce India's emissions intensity of GDP

- National Action Plan on Climate Change (NAPCC) unveiled in 2008, as well as State action plans adopted by states in later stages

National Action Plan on Climate Change

- National Solar Mission
- National Mission on Enhanced Energy Efficiency
- National Mission on Sustainable Habitat,
- National Water Mission
- National Mission for Sustaining the Himalayan Eco-system
- National Mission for a Green India
- National Mission for Sustainable Agriculture
- National Mission on Strategic Knowledge for Climate Change

CARBON MARKETS

Carbon Markets

Carbon markets are markets where a tonne of carbon dioxide equivalent (CO_2e) is commodified as a tradeable unit either

- As a verified emission reduction/removal credit (offset) issued in an Offset (project-based) system

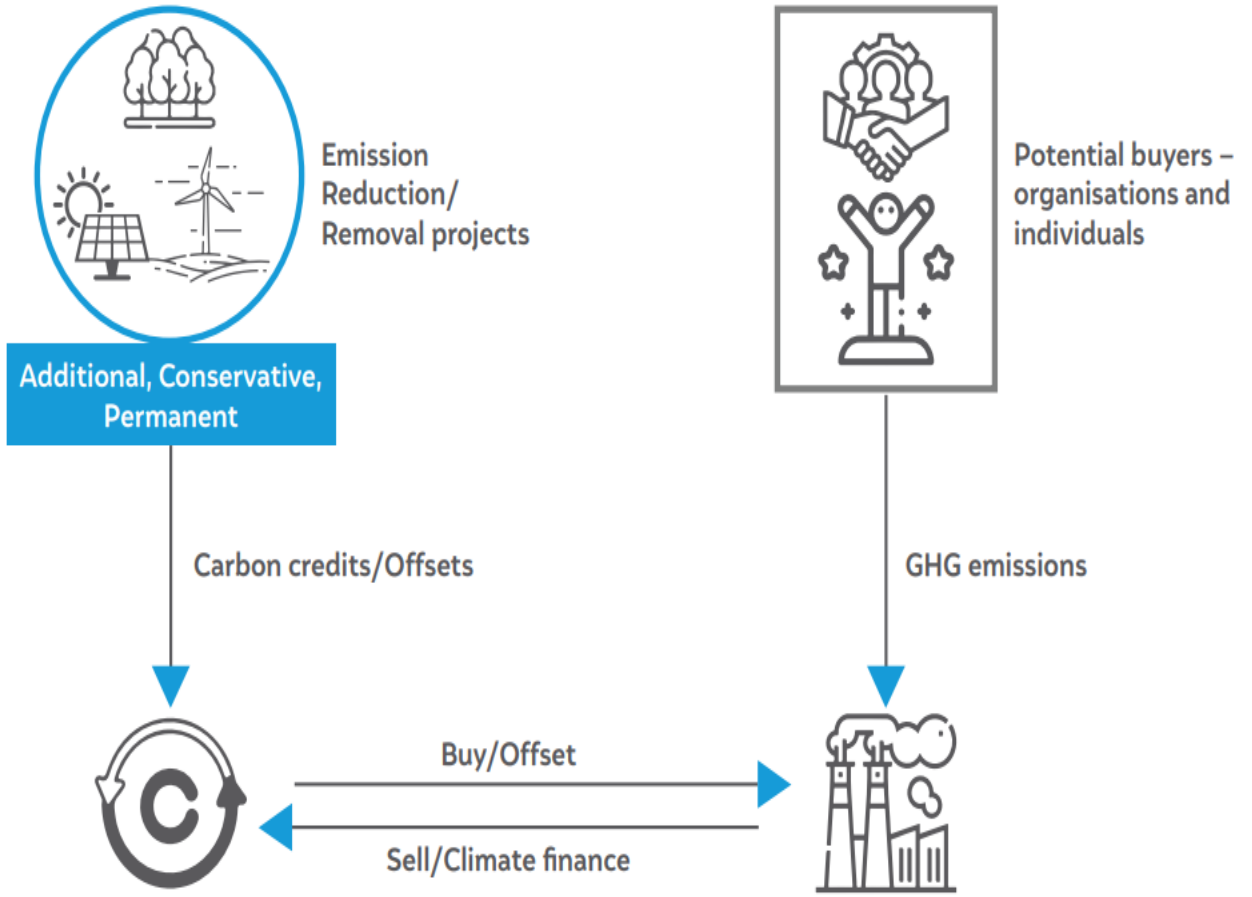
(or)

- As an emission allowance issued in an ETS system – Cap and Trade

Source- Understanding Carbon Markets-Nishtha Singh and Vaibhav Chaturvedi, CEEW 2023.

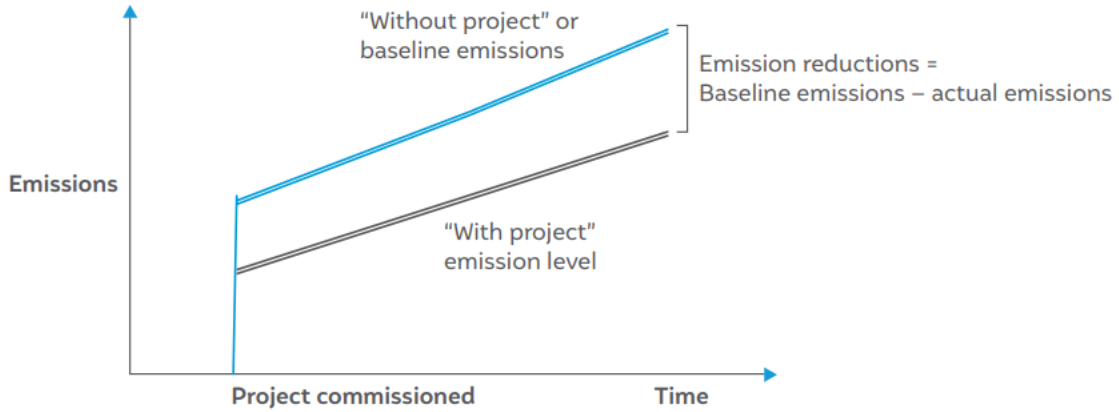
Offset (Project-based approach)

- The offset approach, also known as the baseline-and credit system, is a project-based mechanism where emission reduction is measured in reference to a baseline scenario.
- "**Credits**" are generated after verification of Emission reductions.
- Note- Assumption is that emissions will be higher if the proposed project does not materialize .



Source- Understanding Carbon Markets-Nishtha Singh and Vaibhav Chaturvedi, CEEW 2023.

Figure 2 Calculation of emission reduction for generation of credits



Source: Bayon, Hawn, and Hamilton, 2007.

The cost of wind-based power generation was very high in India in 2005. Any wind-based power project was not financially viable given that power buyers would prefer cheaper coal-based power.

Offset credits from the Clean Development Mechanism (CDM) market helped such wind-power projects achieve financial viability. The baseline for any such wind based project was a coal-power project that would have come in , if financial support through carbon markets was not available.

Carbon credits, in principle, are used to offset hard-to-abate emissions; therefore, they should be used as a "balancing act" after an organization has undertaken all feasible measures to reduce its Scope 1, Scope 2 and Scope 3 emissions.

Source- Understanding Carbon Markets-Nishtha Singh and Vaibhav Chaturvedi, CEEW 2023.

	With out Offset mechanism (Rs/unit)	With Offset mechanism (Rs/unit)
Cost of fossil fuel based power	6	6
Cost of renewable power	10	10
Revenue from credits generated	0	5
Net cost of renewable power	10	5
Competitive power	**Fossil fuel based**	**Renewable power**

Note – The prices are taken randomly to explain the concept. May not represent actual prices

Compliance vs Voluntary Offset mechanisam

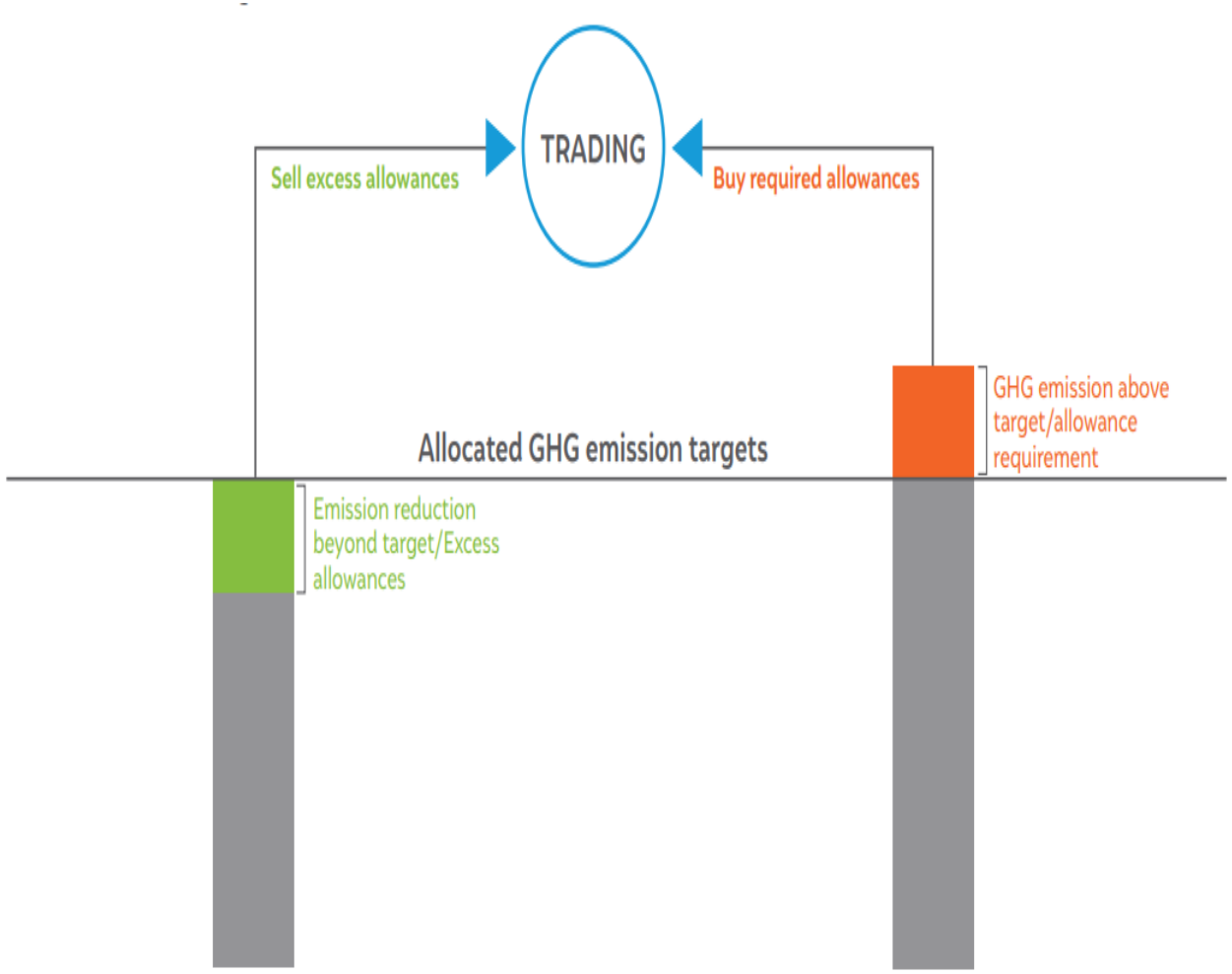
	Compliance	Voluntary
Emission reduction is driven by	Regulation	Company-level voluntary obligations to demonstrate low-carbon and sustainability-related actions to shareholders
Approval and Verification	Extensive regulatory architecture Governments, UN etc.	private companies Gold standard, Verra etc

Source- Understanding Carbon Markets-Nishtha Singh and Vaibhav Chaturvedi, CEEW 2023.

Emission Trading Scheme (ETS)

ETS is a quantity-based instrument where a regulator outlines the maximum level of GHG emission (cap) for a specified group of entities (for example, companies, countries or facilities).

The cap is then divided into a distinct number of emission allowances and distributed (ideally through an auction process) over the entities to be regulated under the ETS



Source- Understanding Carbon Markets-Nishtha Singh and Vaibhav Chaturvedi, CEEW 2023.

Various ETS markets around globe

S No	ETS Market	% of emissions covered by ETS
1	EU ETS	45% of GHG Emissions
2	Korean ETS	73% of GHG Emissions
3	California Cap and Trade	
4	China National ETS	
5	India Domestic ETS	Around 50% of CO2 Emissions

Source- Understanding Carbon Markets-Nishtha Singh and Vaibhav Chaturvedi, CEEW 2023.

Carbon Market in India

The Government of India has passed an amendment to the Energy Conservation Act, 2001, which leads to establishment of a carbon credit market in India (The Energy Conservation (Amendment) Bill, 2022). The amendment provides a legal framework for a carbon market with the objective of incentivizing actions for emission reduction.

Tradeable Units – Carbon Credit Certificates

MINISTRY OF POWER

NOTIFICATION

New Delhi, the 28th June, 2023

S.O. 2825(E).—In exercise of the powers conferred by clause (w) of section 14 of the Energy Conservation Act, 2001 (52 of 2001) the Central Government, in consultation with the Bureau, hereby specifies the following Scheme, namely:-

1. Short title and commencement. – (1) This Scheme may be called the Carbon Credit Trading Scheme, 2023.

(2) It shall come into force on the date of its publication in the Official Gazette.

2. Definitions.- (1) In this Scheme, unless the context otherwise requires,-

(a) **"Act"** means the Energy Conservation Act, 2001 (52 of 2001);

(b) **"accredited carbon verification agency"** means an agency accredited by the Bureau to carry out verification activities under the carbon credit trading scheme;

(c) **"carbon credit"** means a value assigned to a reduction or removal or avoidance of greenhouse gas emissions achieved and is equivalent to one ton of carbon dioxide equivalent (tCO_2e);

(d) **"carbon credit certificate"** shall have the same meaning as assigned to it in clause (da) of section 2 of the Act;

(e) **"carbon credit trading scheme"** shall have the same meaning as assigned to it in clause (db) of section 2 of the Act;

Carbon Credit Trading Scheme, 2023

Traded units	Carbon Credit Certificates
1 Carbon Credit	1 ton of CO_2 equivalent
Regulator	Central Electricity Regulatory Commission (CERC)
Administrator	Bureau of Energy Efficiency (BEE)
Registry	Grid Controller of India Limited
Trading	Power Exchanges

Proposed phase wise approach for creation of VCM in India

	Phase-1 (Short term)	Phase-2 (Medium Term)	Phase-3 (Long Term)
Objective	Increase demand in the VCM	Increase supply in the VCM	Progress toward a Cap & Trade system
Steps to be taken	• Escerts and RECs to Indian Carbon Credits • SBTi and CDP compliant companies to participate in the VCM • Allowing SDAs as participants • Inclusion of Airlines to participate	• Incorporating project-based registration (based on globally accepted principals)	• In the third phase, the program would evolve to an emissions-based cap and trade system wherein sectors and withing sectors specific companies are earmarked for only a specific amount of emissions

Source- BEE,2022.

Net Zero planning at Company Level

Corporate GHG Accounting & Reporting

- GHG Protocol establishes comprehensive global standardized frameworks to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions

- Developed by World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD)

- GHG Protocol works with governments, industry associations, NGOs, businesses and other organizations

- The GHG Protocol "Corporate Accounting and Reporting Standard" provides requirements and guidance for companies and other organizations preparing a corporate-level GHG emissions inventory.

Source- https://ghgprotocol.org

Types of Emissions

Scope-1	Scope-2	Scope-3
• Direct Emissions	• Indirect emissions from Energy Use	• Supply chain

Source- https://ghgprotocol.org

India GHG Program

- The India GHG Program launched in 2013 and led by WRI India, Confederation of India Industry (CII) and The Energy and Resources Institute (TERI) is an industry-led voluntary framework to measure and manage greenhouse gas emissions.

- The programme builds comprehensive measurement and management strategies to reduce emissions and drive more profitable, competitive and sustainable businesses and organizations in India

Source- https://indiaghgp.org

Role of Banks in Energy Transition

- The financial sector has a critical role to play in supporting the economy to reach the goal of Net Zero economy by 2050. It is estimated that at least $3-5 trillion of additional investment will be needed each year, for the next 30 years, in order to finance the transition.(BCG-Climate Finance Markets and the Real Economy report, December 2020.)

- Beyond being responsible for emissions related to their own operational footprint, banks can act as climate partners to individuals, corporations and governments, providing and channeling the finance needed to invest in sustainable business models

How banks can achieve Net Zero

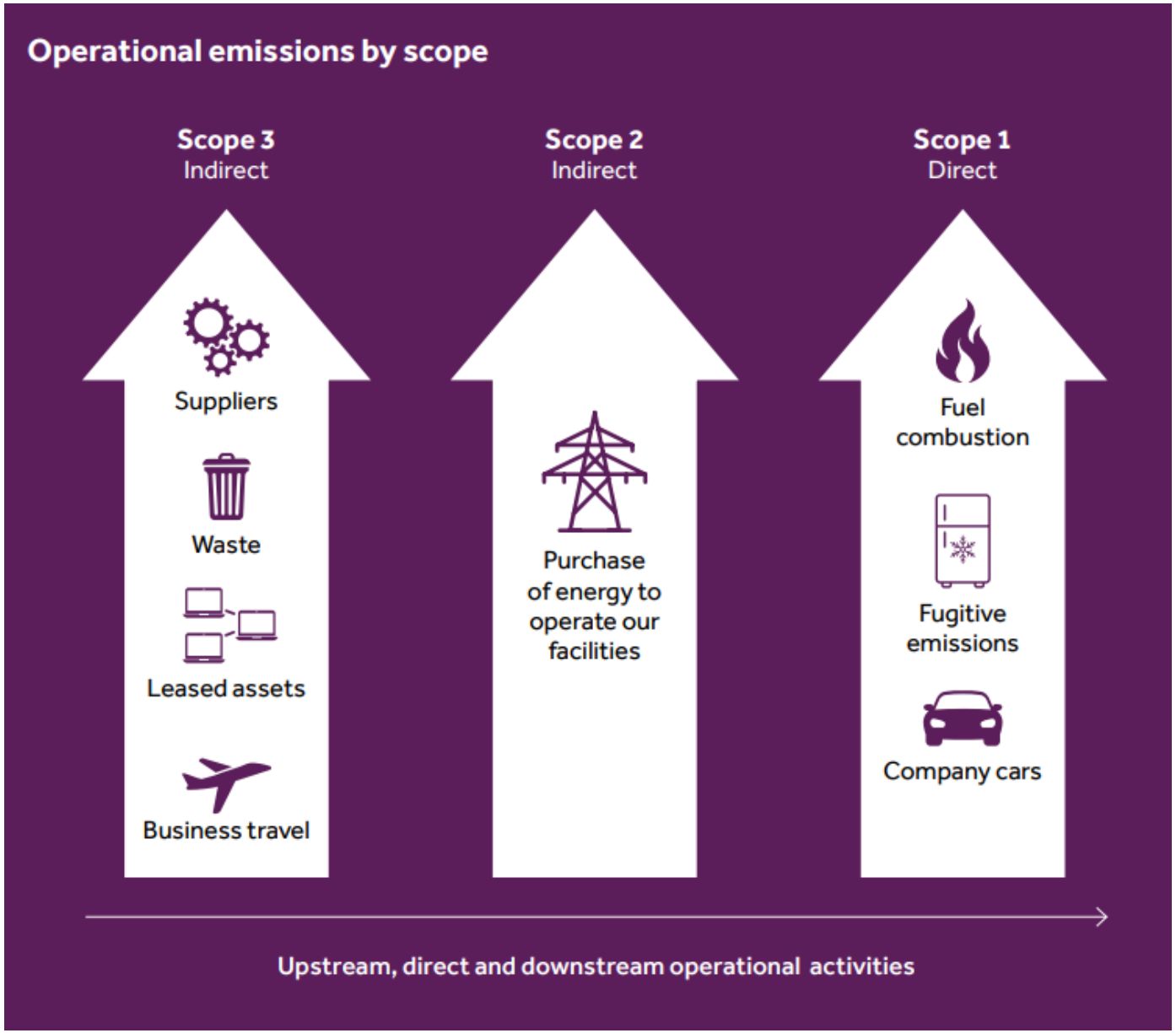
In order to achieve Net Zero, banks should address upstream, direct and down stream activities and stake holders.

Up Stream	Own operations	Down Stream
• Suppliers for Products & Services (Furniture, Computers, Acs, Paper, Cloud computing etc) • Leased Assets	• Energy Use • Own Vehicles • Fugitive Emissions • Business Travel • Waste	• Emissions from clients

Pathways to Net Zero

- Energy Efficiency
- Transition to Renewable Energy
- Energy Conservation
- Electrification of end use
- Engaging with stakeholders (Suppliers, Contractors etc) to reduce their emissions etc
- Memberships (Net Zero Banking Alliance, UN Environment Program Finance Initiative, GHG Program, SBTi etc

Emissions from own operations and Suppliers – Scope wise



Scope-3(Category-15) – Financed Emissions

- This category includes scope 3 emissions associated with the reporting company's investments in the reporting year.

- Category 15 is designed primarily for private financial institutions (e.g., commercial banks), but is also relevant to public financial institutions (e.g., multilateral development banks, export credit agencies) and other entities with investments not included in scope 1 and scope 2.

- The GHG emissions associated with financial institutions' investing, lending and underwriting activities are on average over **700 times higher** than their direct emissions. (Source- CDP,2021)

- Scope 3 (category 15) is an urgent priority, because the emissions banks finance represent **more than 95**% of the total emissions for which an average bank is responsible (Source- Accenture)

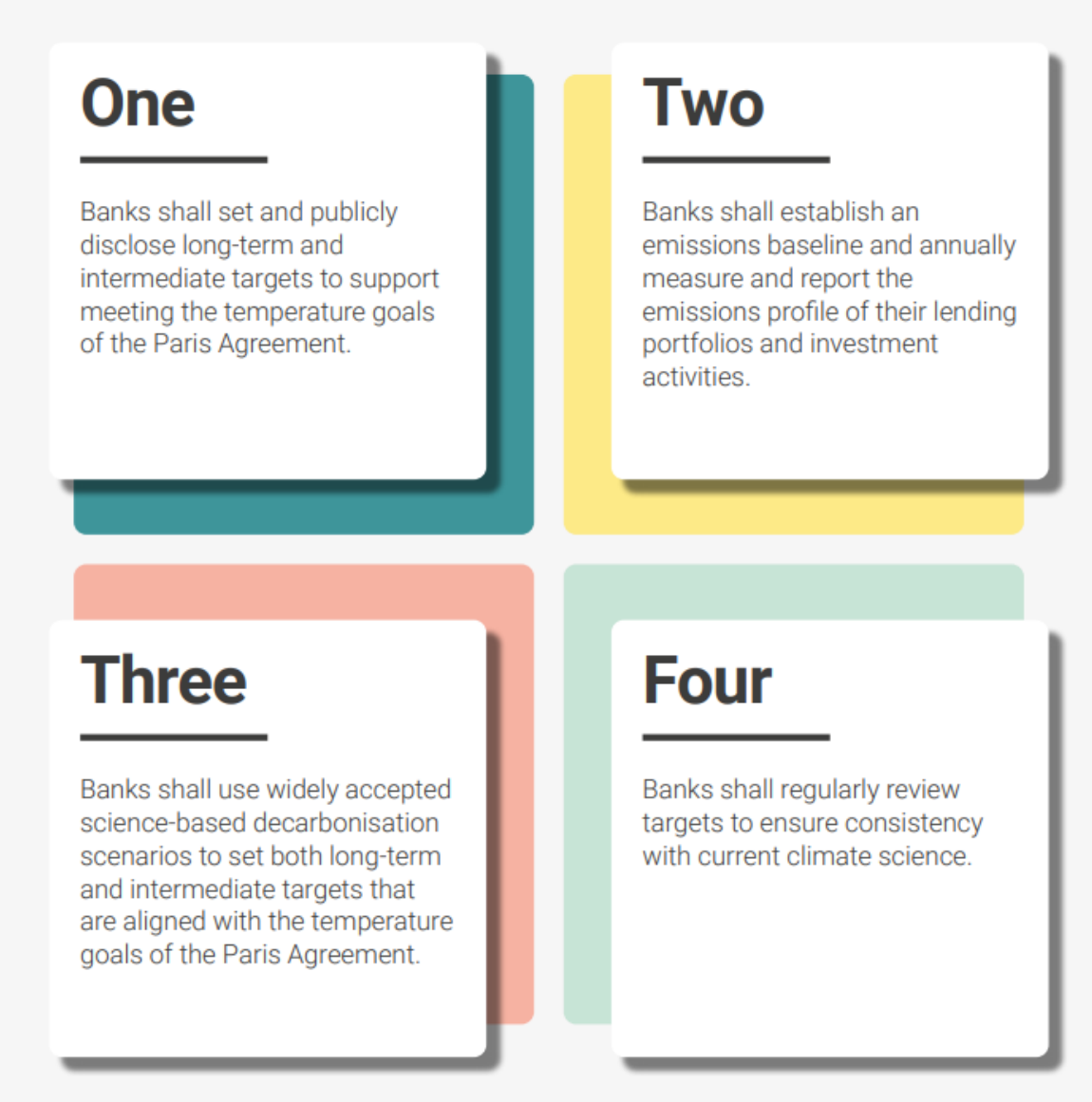
Source- https://ghgprotocol.org

Table [15.1] Accounting for emissions from investments (required) (continued)

Financial investment/ service	*Description*	*GHG accounting approach (required)*
Debt investments (with known use of proceeds)	Corporate debt holdings held in the reporting company's portfolio, including corporate debt instruments (such as bonds or convertible bonds prior to conversion) or commercial loans, **with known use of proceeds** (i.e., where the use of proceeds is identified as going to a particular project, such as to build a specific power plant)	For each year during the term of the investment, companies should account for *proportional scope 1 and scope 2 emissions* of *relevant projects** that occur in the reporting year in scope 3, category 15 (Investments). In addition, if the reporting company is an initial sponsor or lender of a project: Also account for the *total projected lifetime scope 1 and scope 2 emissions* of *relevant projects** financed during the reporting year and report those emissions separately from scope 3.
Project finance	Long-term financing of projects (e.g., infrastructure and industrial projects) by the reporting company as either an equity investor (sponsor) or debt investor (financier)	

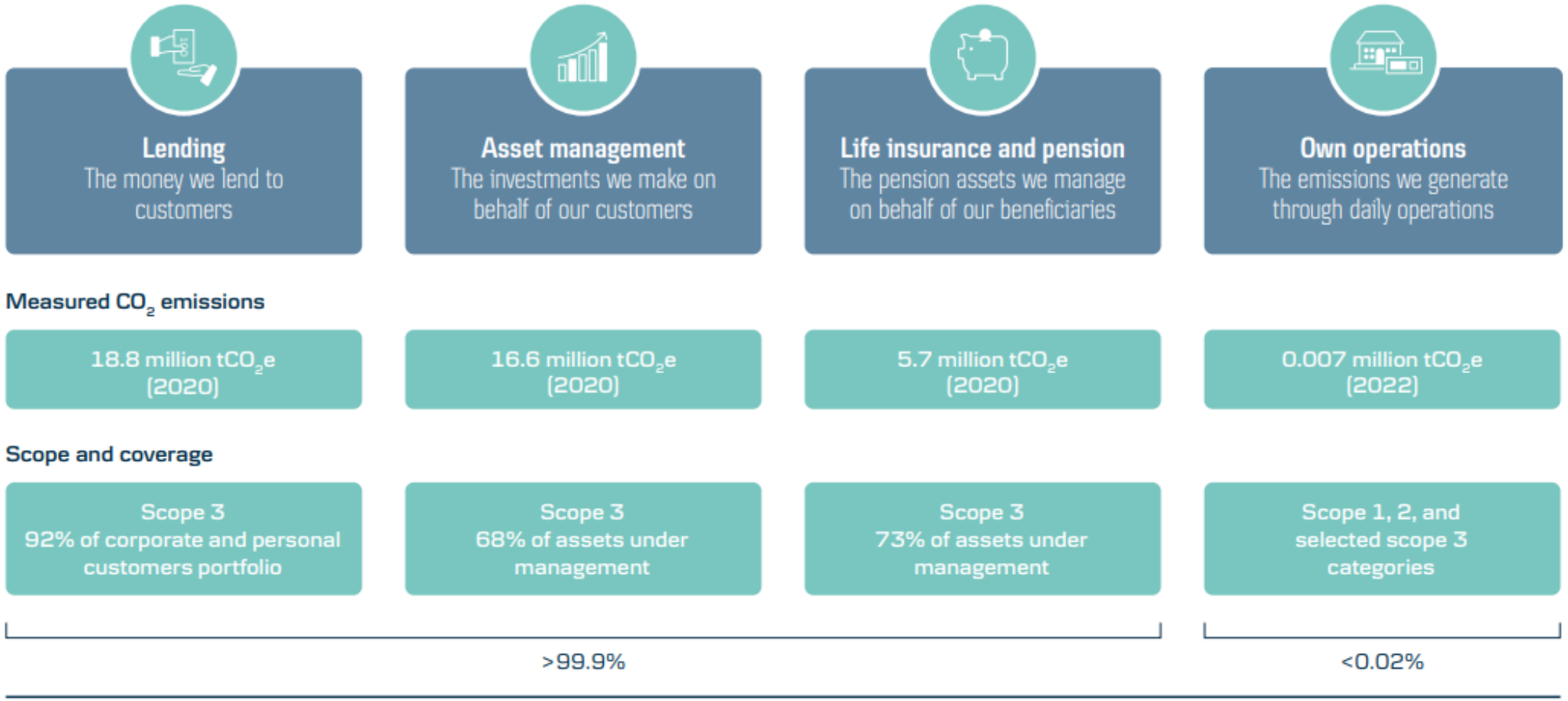
Source- https://ghgprotocol.org

Guidelines for Climate Target Setting for Banks – Scope -3(Category-15)



Source-UNEP Finance Inititative,2021

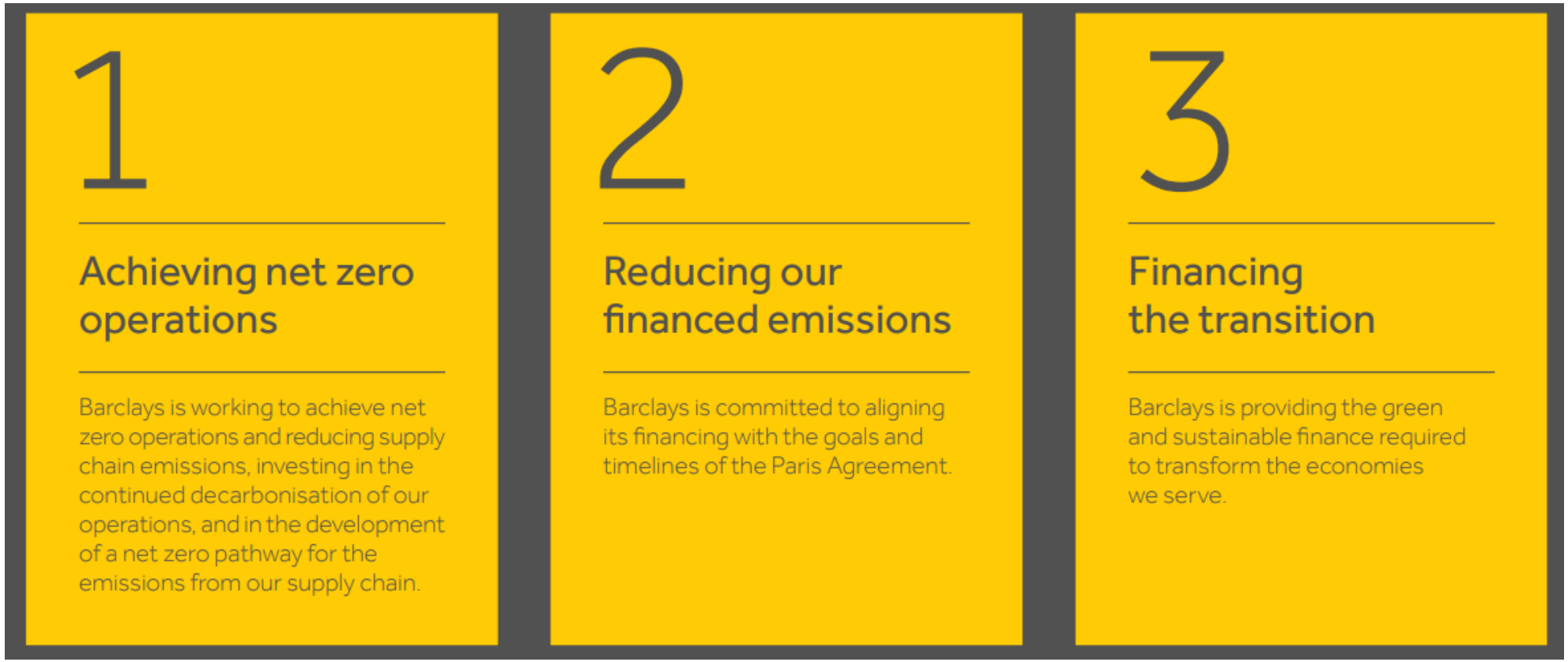
Figure 1.1: Danske Bank impact areas and its measured CO_2e emissions



Climate Change Targets by few major Banks

- **HSBC** - We aim to achieve net zero in our operations and supply chain by 2030 and in our financing portfolio by 2050.
- **Barclays** - We set out an ambition to become net zero by 2050, across all of our direct and indirect emissions, and we committed to align all of our financing activities with the goals and timelines of the Paris Agreement.
- **Standard Chattered** - We're committed to reaching net zero carbon emissions in our own operations by 2025 and in our financing activity by 2050.
- **SBI** - It is the Bank's aspiration to achieve a state of Carbon Neutrality in the long run in a phased manner. Bank shall explore the possible means to reduce the carbon footprint of **its operations** to achieve the voluntarily envisioned goal of achieving Carbon Neutrality by 2030.
- **Axis Bank** - Set a target to decrease the emissions intensity from our Scope 1 and Scope 2 emissions (per FTE) by 5% Y-o-Y.

Barclays



Source- Barclays climate strategy targets and progress, 2022

Barclays - short- and long-term approach to achieve net zero operations and reduce supply chain emissions

Year	Approach	2021 Performance
2025	Power all our operations with 100% renewable electricity	94%
	Reduce Scope 1 and 2 GHG emissions by 90% (market-based)	86%
	70% of our vendors, by addressable spend, to have science-based GHG emissions reduction targets in place	52%
	Transition all UK company cars to electric vehicles (EV)	27%
2030	Transition the rest of our global fleet to EV or ultra-low emissions vehicles (ULEV) where EVs are not viable	10%
	Reduce Scope 1 and 2 GHG emissions by 50% (location-based)	33%
2035	Reduce energy intensity by 70% across key campuses	21%
	Generate 10% on-site renewable electricity across key campuses	0.1%
	Divert 90% of waste from the landfill, incineration and the environment across key campuses	46%
	Improve water efficiency across key campuses	89% of water recycled in Pune

Source- Barclays climate strategy targets and progress, 2022

Barclays - Reducing Financed Emissions

New targets to reduce our financed emissions

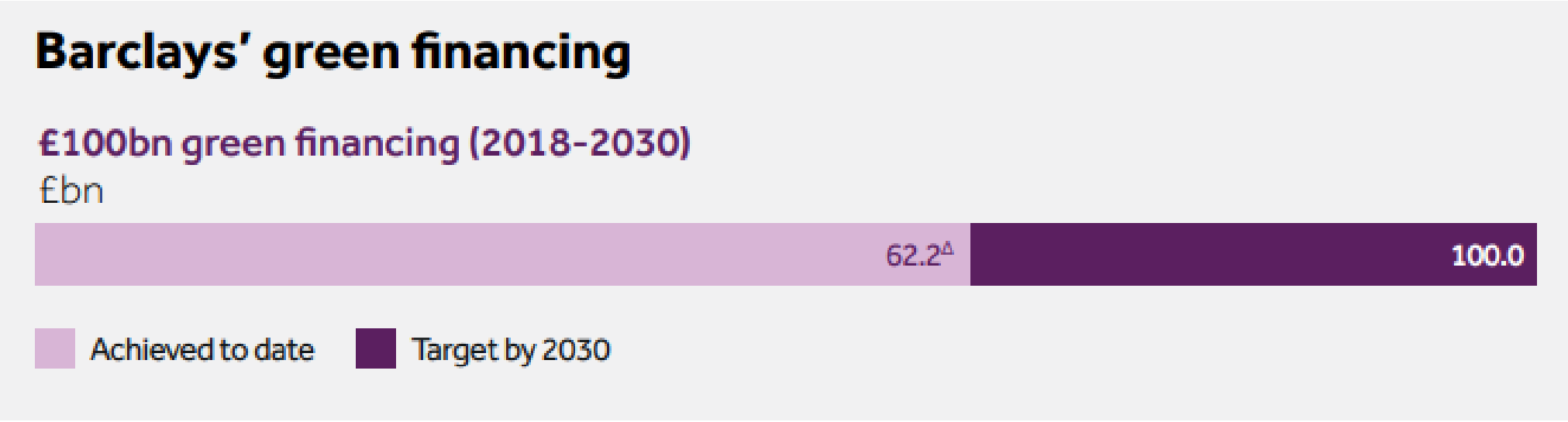
In 2022, we are setting new 2030 targets for four high-emitting sectors: Energy, Power, Cement and Steel.

- **Energy** -40% in absolute CO_2e emissions (2020 emissions baseline of 78.5 $MtCO_2e$). This target includes an update in our methodology, to include methane emissions alongside CO_2
- **Power** -50% to -69% in CO_2 intensity (2020 baseline of 320 $kgCO_2/MWh$)
- **Cement** -20% to -26% in CO_2e intensity (2021 baseline of 0.620 $MtCO_2e/Mt$)
- **Steel** -20% to -40% in CO_2e intensity (2021 baseline of 1.926 $MtCO_2e/Mt$)

Source- Barclays climate strategy targets and progress, 2022

Barclays - Financing the Transition

In 2018 we set a target to facilitate £100 billion of financing specifically focused on green activities by 2030



Source- Barclays climate strategy targets and progress, 2022

State Bank of India

- **SUSTAINABILITY –** One of the core values

- **ACHIEVE CLIMATE NEUTRALITY BY 2030**

- The Bank's **Climate Change Risk Management Policy** and **ESG financing framework** is effectively guiding the Bank's low-carbon transition.

- The Bank's Corporate Centre Sustainability Committee (CCSC) supports climate change adaptation and mitigation, with oversight on various green initiatives that aid in carbon emission reduction and sequestration.

- The Board also gets apprised on a quarterly basis through green environmental report which includes information about various green initiatives taken by the Bank analyzing various environmental and social indicators, including climate change

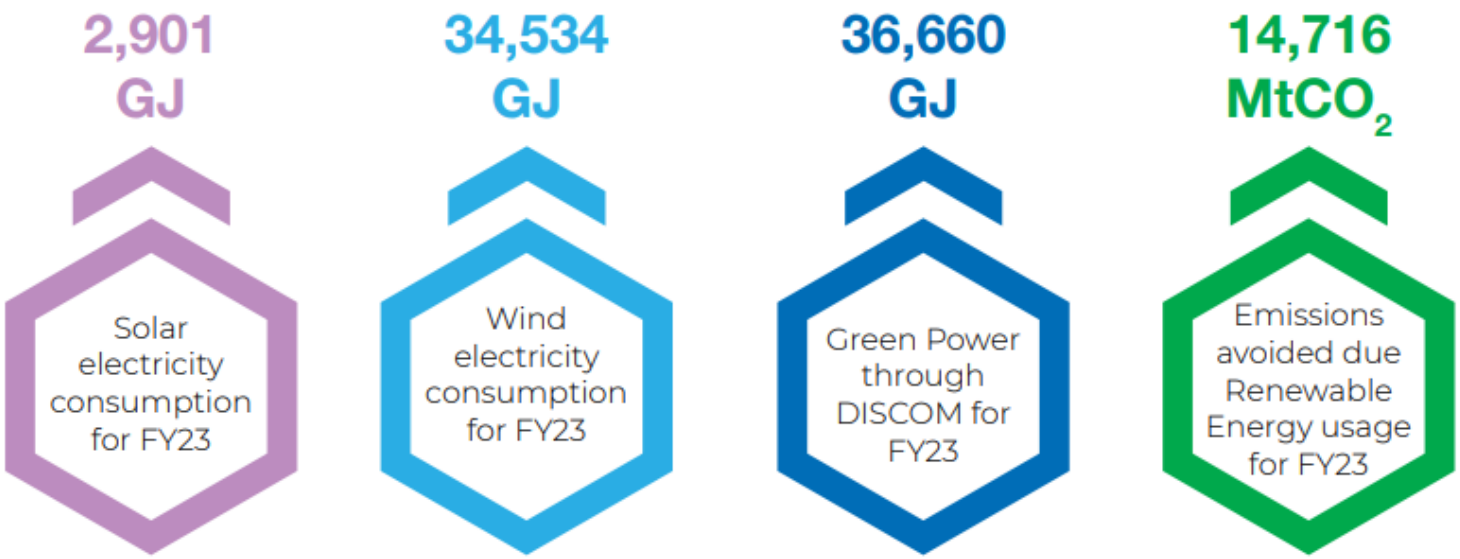
- Mitigation majorly through
  - **Energy Conservation** - Currently, 32 of the Bank's premises have been certified by the Indian Green Building Council (IGBC) under various categories such as Platinum, Gold, and Silver
  - **Clean Energy Transition –** 14716 $MTCO_2$ of emissions avoided due to RE use.

Source- SBI Sustainability Report 2022-23 & SBI Sustainability and Business Responsibility (BR) Policy Issue Date: August'22

State Bank of India

Break-up of the total energy consumed from renewable and non-renewable sources (GJ) in FY23

From renewable sources	
Total electricity consumption	74,094
Total fuel consumption	0
Total energy consumed from renewable sources	74,094
From non-renewable sources	
Total electricity consumption	34,26,973
Total fuel consumption	8,38,093
Total energy consumed from non-renewable sources	42,65,066



Source- SBI Sustainability Report 2022-23

Specific initiatives or used innovative technology or solutions to improve resource efficiency, or reduce impact due to emissions / effluent discharge / waste generated

Sr. No	Initiative undertaken	Details of the initiative	Outcome of the initiative
1.	Intelligent Power Management (IPM+) implementation	The Bank uses its IPM+ utility software on office desktops across India which helps in 'green computing' and achieve a strong return on investment through IT operating cost reduction.	Total energy saving of 13.41 GWh and GHG emissions avoided by 13,413.4 $MtCO_2e$.
2.	Energy conservation	The Bank's physical servers were mitigated to a centralized, secure, and virtual location.	Saved energy used to cool over 25,000+ servers as of 31st March 2023
3.	Paper saving driven by YONO in FY23	The Bank's flagship mobile application has been a key driver in digital journey leading to paper savings through various processes	Avoided 445 MT of paper waste and 503.62 $MtCO_2e$ of GHG emissions*.
4.	Sewage Treatment Plant (STP)	The Bank's STP facilities pan India treat wastewater generated in large establishments.	27 STPs, present at large establishments of the Bank pan India, recycle the wastewater generated by these establishments
5.	E-waste recycling	The Bank ensures that electronic waste generated by its operations or activities, is disposed-off properly as per the e-waste policy.	57% e-waste has been recycled in FY23
6.	Rooftop instalment & Solar power back-up ATMs	To utilize solar power, the Bank is actively undertaking implementation of solar roof top installations at offices, branches, and ATMs. As on 31st March 2023, the total capacity of solar installations at 644 of the Bank's branches and administrative offices is 15,903 kWp.	Total emissions avoided as a result of solar rooftop installations is 576 $MtCO_2e$**.
7.	Power through wind	The Bank owns 10 windmills with an installed capacity of 15 MW for captive use and is generating power for four of its locations.	About 6,859 $MtCO_2e$ avoided on account of procurement of wind power through open access**.
8.	Green power through DISCOM	The Bank is procuring green power through open access , DISCOMs, by paying a premium 'Green Tariff' for six of its locations.	About 7,281 $MtCO_2e$** were avoided on account of procurement of 10183 MWh of green power procurement during FY23.

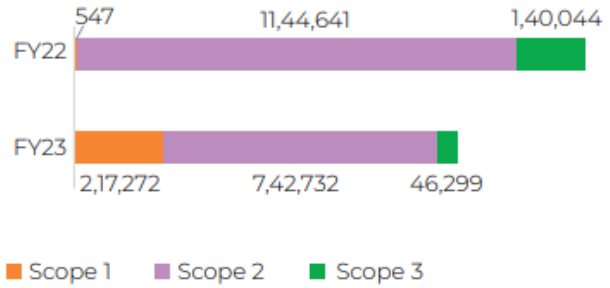
Source- SBI Sustainability Report 2022-23

SBI - Scope wise emissions

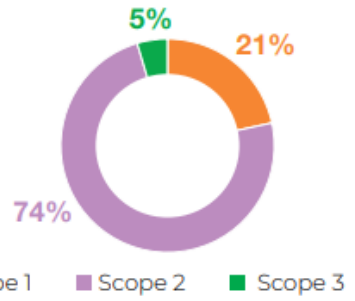
Scope-1 Emissions	Scope-2 Emissions	Scope-3 Emissions
FY22 • Only company owned vehicles **FY23** • Company owned vehicles • refrigerant leaks (HVAC) • diesel usage in company-owned DG sets • use of fire extinguishers	**FY22** • Purchased electricity **FY23** • Electricity consumption through grid and • Diesel usage in third-party/leased DG sets	**FY22** • DG Set • work-related travel via rental car, bus, rail and air and • paper waste **FY23** • work-related travel via rental car, bus, rail and air and • paper waste

Source- SBI Sustainability Report 2022-23

Total GHG Emissions (tCO_2)



Total GHG Emissions (tCO_2e), FY23



Greenhouse gas emissions: Scope 1, Scope 2 and Scope 3 emissions

Parameter	Unit	FY23	FY22	FY21
Total Scope 1 emissions	$MtCO_2e$	2,17,272*	547**	553**
Total Scope 2 emissions	$MtCO_2e$	7,42,732#	11,44,641	11,69,146
Total Scope 1 and Scope 2 emissions per INR crore^	$MtCO_2e$/INR crore	2.60	3.62	3.81
Total Scope 1 and Scope 2 emission intensity	$MtCO_2e$/FTE	4.07	4.69	4.76
Total Scope 3	$MtCO_2e$	46,299	1,40,044	1,35,811
Total Scope 3 emissions per INR crore^	$MtCO_2e$/INR crore	0.13	0.44	0.44
Total Scope 3 emission intensity	$MtCO_2e$/FTE	0.20	0.57	0.55

*Data point includes Fire-extinguishers, owned DG Sets and HVACs
**Data point does not include Fire-extinguishers, DG Sets and HVACs
#Data point includes electricity consumed through third-party/leased DG Sets
^reference to 'total income' in Financial Capital

Emissions	Emissions sources in FY 23	Emissions sources in FY 22
Scope 1	Company owned vehicles, Owned DG sets*, HVAC and F.E	Company owned vehicles
Scope 2	Electricity consumed through third-party/ leased DG sets* and Purchased electricity**	Purchased electricity
Scope 3	Business travel*** and paper waste	DG sets, Business travel and paper waste

Source- SBI Sustainability Report 2022-23

Carbon Neutrality Strategy

To achieve its carbon neutrality target, the Bank is in the process of implementing an integrated actionable strategy roadmap to help guide its transition towards carbon neutrality. It is built around three main pillars:

Promoting sustainable practices on the demand side

Reducing the Bank's carbon footprint on the supply side

Retiring carbon offsets for the residual emissions

The Bank is in the process of developing an implementation roadmap with interim targets and a financial plan based on an assessment of availability, readiness level, potential effectiveness, feasibility, commercial viability of technology and RE procurement instruments, as well as current regulations, and operational requirements of different location categories.

Source- SBI Sustainability Report 2022-23

Axis Bank

- Set a target to decrease the emissions intensity from our Scope 1 and Scope 2 emissions (per FTE) by 5% y-o-y.
- Have been communicating environmental performance to the CDP since 2015. In its latest response to CDP, for 2022, the Bank scored C

1. Details of total energy consumption (in Joules or multiples) and energy intensity, in the following format:

Parameter	FY 2023	*FY 2022
Total electricity consumption (A)	894.19	745.30
Total fuel consumption (B)	99.74	157.16
Energy consumption through other sources (C)	11.49	13.97
Total energy consumption (A+B+C)	1005.42	916.43
Energy intensity per rupee of turnover (Total energy consumption / turnover in rupees)	988.96 (J/Rupee)	1109.51 (J/Rupee)
Energy intensity (optional) – the relevant metric may be selected by the entity	10.96 (GJ/FTE)	10.68 (GJ/FTE)

*The figures are updated after the assurance of the Sustainability Report fiscal 2022.

Source- Axis Bank, Business Responsibility & Sustainability Report 2022-23

Axis Bank

7. Does the entity have any project related to reducing Green House Gas emission? If Yes, then provide details.

We are committed to investing in digital solutions and multi-pronged energy-conserving initiatives to further our commitment to achieving greater environmental efficiency in our operations. Key initiatives include:

- Implementation of Solar energy projects across select Axis Bank branches and offices, aggregating ~ 2 MW which helped save ~2590 tCO2e of carbon emissions in fiscal 2023.
- Axis Bank has started procuring solar power of ~1 MW (3.50 Lakhs units p.a.) under Power Purchase Agreement (PPA) Model from fiscal 2020 for Bank's Data Centre in Bengaluru. The Bank has consumed 35.40 lac units of electricity for its Data Centre, alone in fiscal 2023, which helped save ~2870 tCO2e of carbon emissions.
- In fiscal 2023, the implementation of CEMS in 600 branches helped save 40.02 lac units of electricity, which resulted in saving ~3250 tCO2e of carbon emissions.
- Existing conventional light fittings replaced with LED bulbs in ~908 branches PAN India which saved around 31.91 lacs units of electricity and saved around 2520 tCO2e of carbon emissions.
- Maintenance of unity power factor through APFC panels in auto mode for optimum use of power at Axis House Mumbai and Axis House Noida.
- Installation of motion sensors for workstations and common area lighting at Axis House, Mumbai and Regional Office Bengaluru. The Bank shall introduce sensors in additional locations.

Source- Axis Bank, Business Responsibility & Sustainability Report 2022-23

Scope wise emissions

6. Provide details of greenhouse gas emissions (Scope 1 and Scope 2 emissions) & its intensity, in the following format:

Parameter	Unit	FY 2023	*FY 2022
Total Scope 1 emissions (Break-up of the GHG into CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, if available)	Metric tonnes of CO2 equivalent	7436.11 (tCO2e) Break-up of above GHG figure into CO2- 7,390.65 (Tons) CH4,- 29.12 (tCO2e) N20 – 16.34(tCO2e) Refrigerants – 2003.44 (tCO2e)	11717.34 (tCO2e) Break-up of above GHG figure into CO2- 11645.70 (Tons) CH4,- 45.89 (tCO2e) N20 - 25.74(tCO2e) Refrigerants - 2131.97 (tCO2e)
Total Scope 2 emissions (Break-up of the GHG into CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, if available)	Metric of CO2 equivalent	2,01,192.57	1,63,552
Total Scope 1 and Scope 2 emissions per rupee of turnover		0.21 g CO2e/ Rupee	0.22 g CO2e/ Rupee
Total Scope 1 and Scope 2 emission intensity (optional) – the relevant metric may be selected by the entity		2.30 (per FTE)	2.07 (per FTE)

*The figures are updated after the assurance of the Sustainability Report FY 2022.

4. Please provide details of total Scope 3 emissions & its intensity, in the following format:

Parameter	Unit	FY 2023	*FY 2022
Total Scope 3 emissions (Break-up of the GHG into CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, if available)	Metric tonnes of CO2 equivalent	54,745.69	46,482.91
Total Scope 3 emissions per rupee of turnover		0.054 g CO2e/ Rupee	0.056 g CO2e/ Rupee
Total Scope 3 emission intensity (optional) – the relevant metric may be selected by the entity		0.60	0.54

*The figures are updated after the assurance of the Sustainability Report fiscal 2022.

Source- Axis Bank, Business Responsibility & Sustainability Report 2022-23

6. If the entity has undertaken any specific initiatives or used innovative technology or solutions to improve resource efficiency, or reduce impact due to emissions / effluent discharge / waste generated, please provide details of the same as well as outcome of such initiatives, as per the following format:

Sr. No.	Initiative undertaken	Details of the initiative (Web-link, if any, may be provided along-with summary)	Outcome the initiative
1	Adoption of centralised Energy Management System (CEMS) initiative	The details of this initiative shall be published in the Bank's sustainability report for fiscal 2023.	In fiscal 2023, the implementation of CEMS in 600 branches helped save 40.02 lac units of electricity, which resulted in saving ~3,250 tCO_2e of carbon emissions.

Source- Axis Bank, Business Responsibility & Sustainability Report 2022-23

Carbon Disclosure Project

- Active since 2012, CDP India has evolved to become one of the most effective disclosure platforms.
- Currently, 120+ Indian companies and 14 Indian cities choose to analyze their climate risks and opportunities through CDP India.
- Additionally, CDP India also helps stakeholders in the decarbonization journey through Supply Chain Engagement, Science-Based Targets (SBT) and Internal Carbon Pricing (ICP).

S No	Bank Name	Score (2022)
1	State Bank of India	B
2	Punjab National Bank	F
3	Union Bank of India	F
4	Canara Bank	F
5	Axis Bank	C
6	ICICI Bank	C

Source- cdp.net

Way Forward

Banking Sector plays a substantial role in global energy transition

- Banking organizations should include, measure and report scope-1,2 & 3 emissions as per globally accepted standards (GHG Protocol)
- Adequate strategies to be framed to reduce Financing Emissions (Scope-3, Cat-15) while handholding entities in their transition
- Capacity building to be done to auditors and employees – Related to Sustainability and Energy Transition
- All players of the supply chain should be engaged in this process

Any Questions


Make Net Zero a Reality
THANK YOU