



GOVERNMENT OF INDIA
MINISTRY OF POWER



Indian Carbon Market

An Overview



Bureau of Energy Efficiency

INDIAN
Carb·n
MA₹KET

India's Climate Action Commitments

India's submitted its updated Nationally Determined Contributions (NDCs)* in August 2022



To **reduce the Emissions Intensity** of its Gross Domestic Product (GDP) by **45 percent** by 2030, from 2005 level.



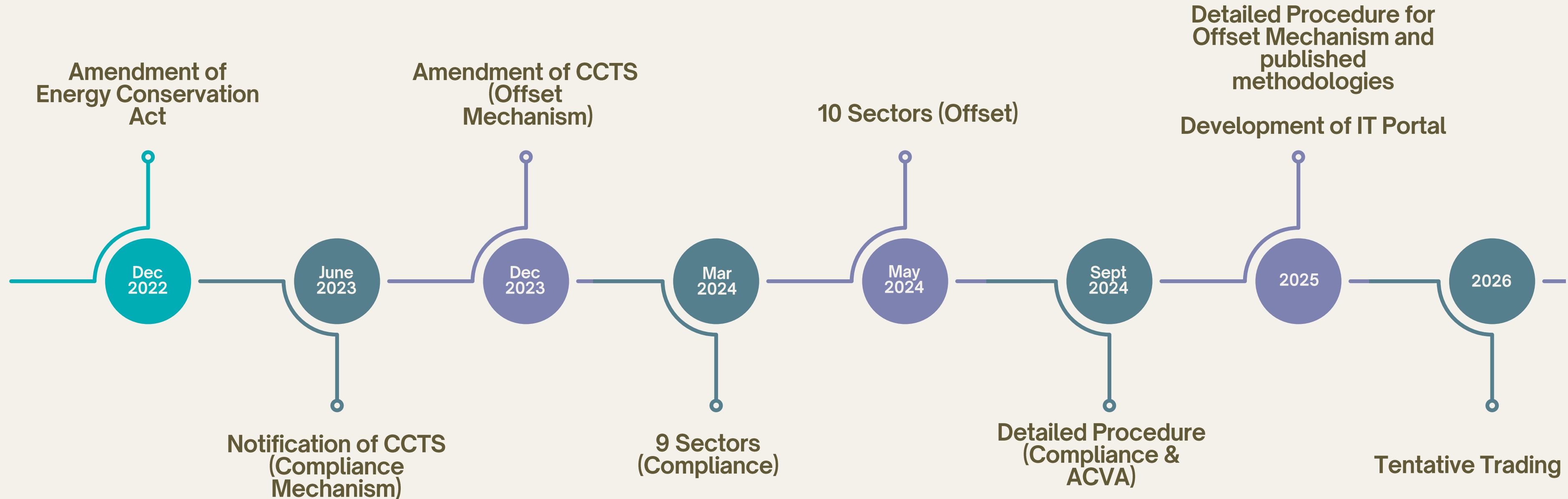
To achieve about **50 percent cumulative electric power** installed capacity from non-fossil fuel-based energy resources by 2030



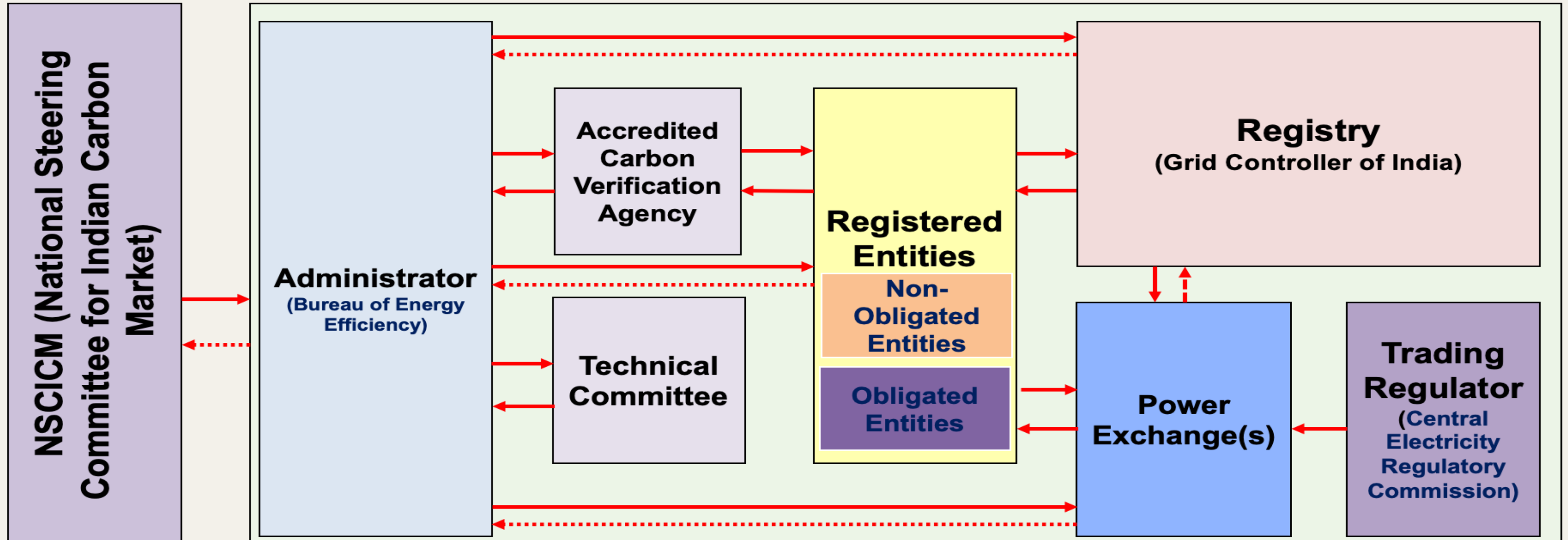
To put forward and further propagate a **healthy and sustainable way of living** based on traditions and values of conservation and moderation, including through a mass movement for '**LIFE**'– '**Lifestyle for Environment**' as a key to combating climate change.

* The rest five contributions both - qualitative and quantitative remains same as India's Intended NDCs as submitted in October 2015

Implementation Timeline




Institutional Framework



NSC-ICM Governance

Chairpersons



Ministry of Environment,
Forest and Climate Change
(MoEFCC)

सत्यमेव जयते



विद्युत मंत्रालय
MINISTRY OF
POWER

सत्यमेव जयते

Members



नवीन एवं
नवीकरणीय ऊर्जा मंत्रालय
MINISTRY OF
**NEW AND
RENEWABLE ENERGY**

सत्यमेव जयते



पेट्रोलियम एवं
प्राकृतिक गैस मंत्रालय
MINISTRY OF
**PETROLEUM AND
NATURAL GAS**

सत्यमेव जयते



कोयला मंत्रालय
MINISTRY OF
COAL

सत्यमेव जयते



इस्पात मंत्रालय
MINISTRY OF
STEEL

सत्यमेव जयते



रसायन एवं
उर्वरक मंत्रालय
MINISTRY OF
**CHEMICALS
AND FERTILIZERS**

सत्यमेव जयते



कृषि एवं किसान
कल्याण मंत्रालय
MINISTRY OF
**AGRICULTURE AND
FARMERS WELFARE**

सत्यमेव जयते



वित्त मंत्रालय
MINISTRY OF
FINANCE

सत्यमेव जयते



NITI Aayog

सत्यमेव जयते



नागर विमानन मंत्रालय
MINISTRY OF CIVIL AVIATION

सत्यमेव जयते



पत्तन,पोत परिवहन और जलमार्ग मंत्रालय
MINISTRY OF PORTS, SHIPPING AND WATERWAYS
GOVERNMENT OF INDIA

सत्यमेव जयते





ग्रिड-इंडिया
GRID-INDIA



Government of
Maharashtra





Co-opted
Members



Confederation of Indian Industry





Co-opted experts
Shri Upendra Tripathy
Shri R R Rashmi as experts

Mechanisms

COMPLIANCE
MECHANISM

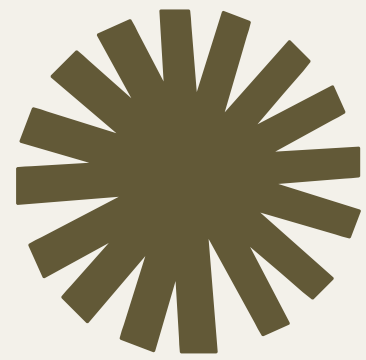
OFFSET
MECHANISM

Compliance Mechanism

“**compliance mechanism**” means a mechanism under this Scheme where the **obligated entities** shall comply with the **greenhouse gas emission norms** as notified by the Central Government;



Compliance Mechanism

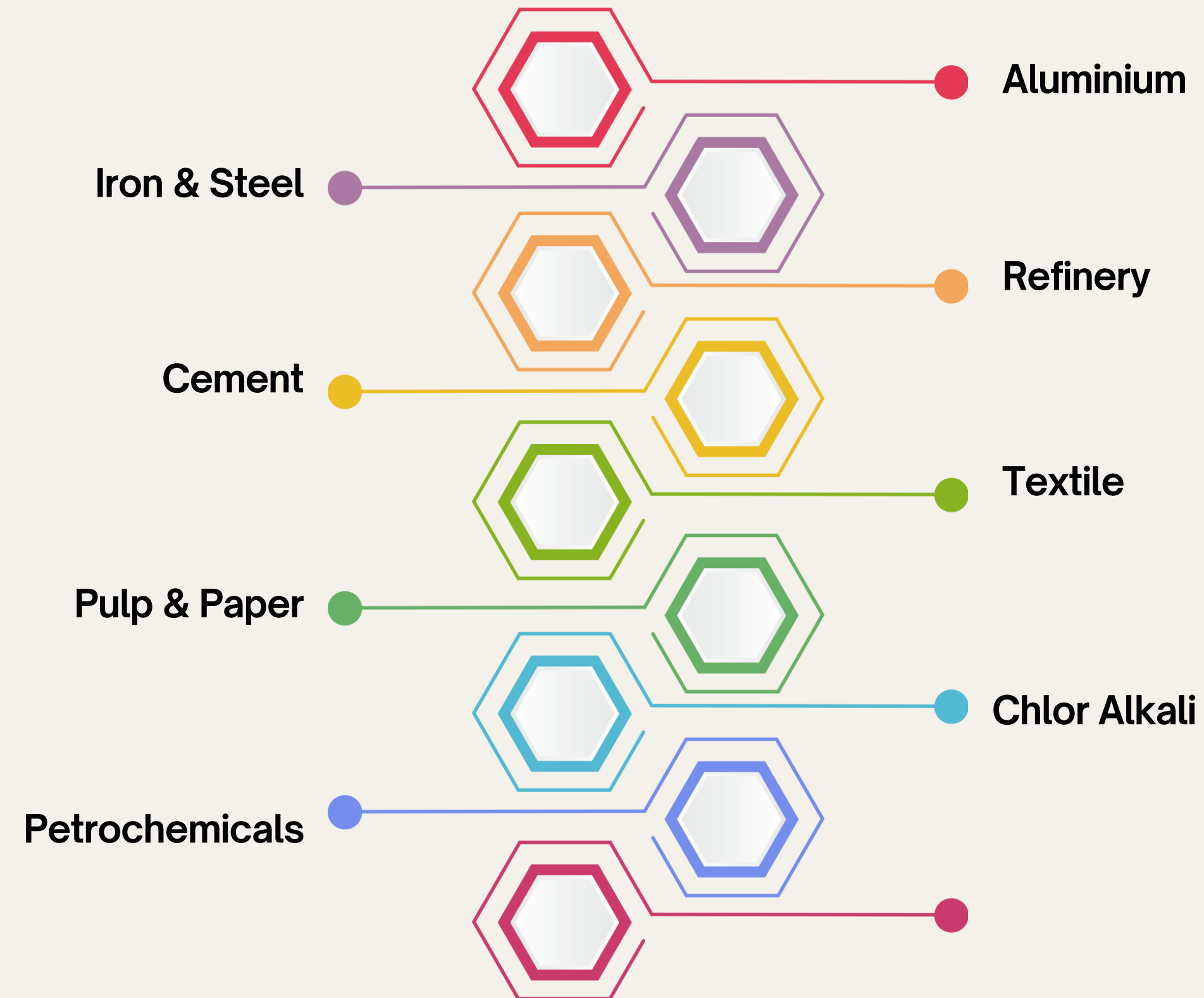


GHG Targets

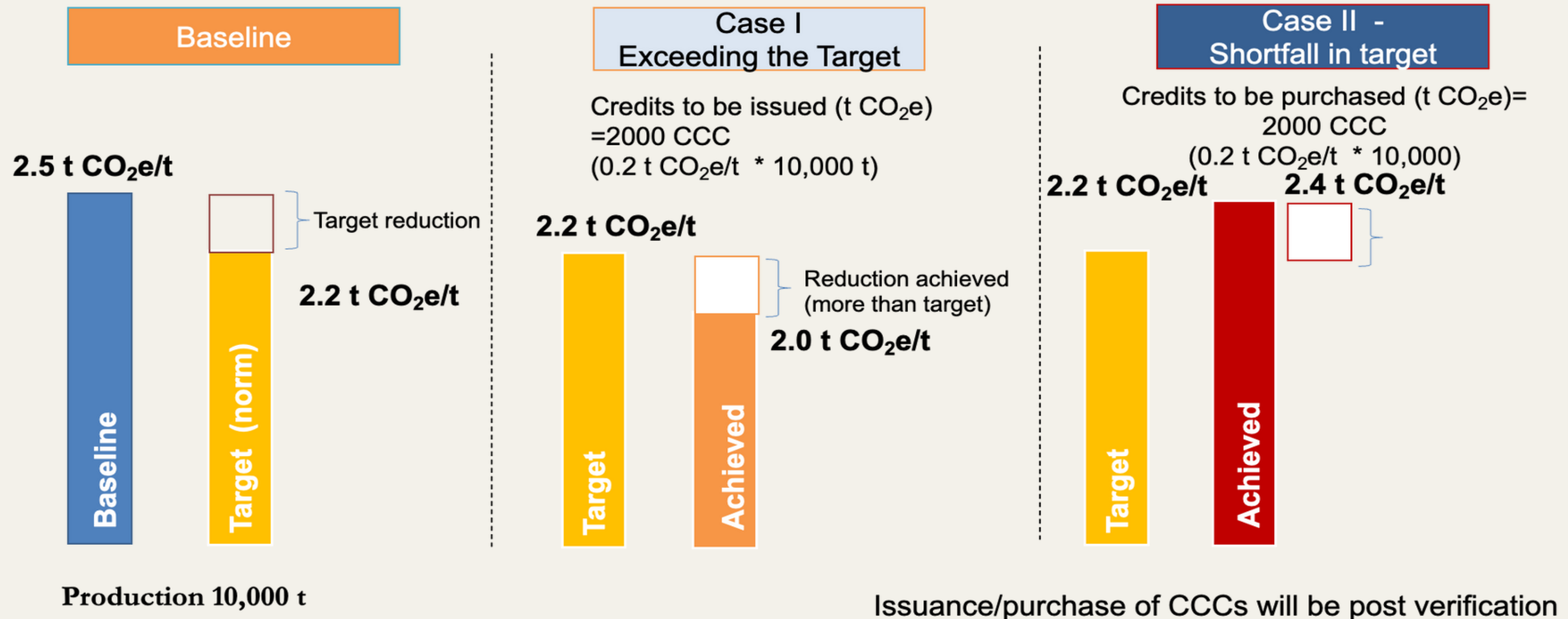
Obligated Entities



Sectors Covered



Trading Mechanism

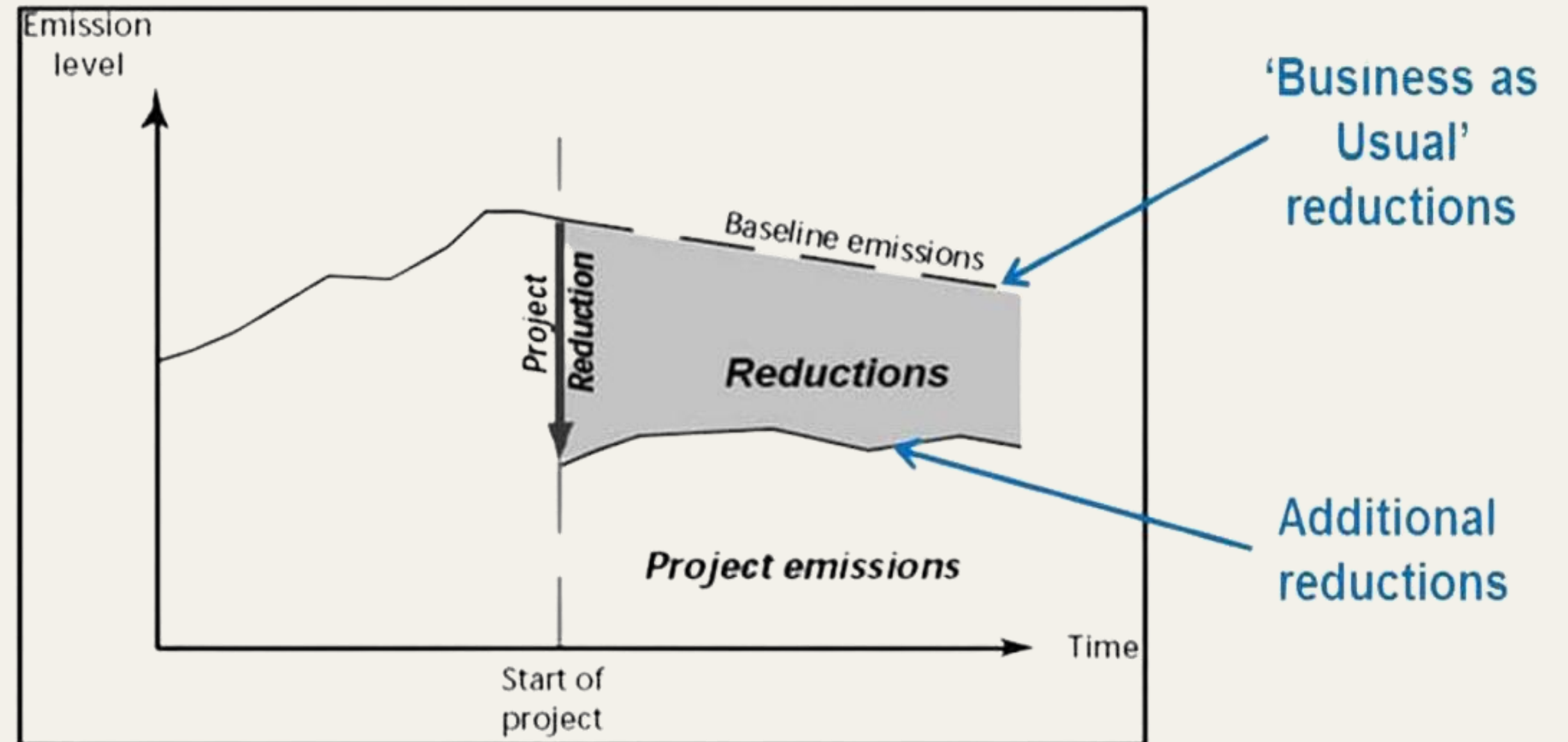


Offset Mechanism

$$\text{Emission Reduction} = \text{Baseline Emissions} - \text{Project Emission}$$

=

Carbon Credits
(1 t CO₂ reduction)



Offset Mechanism

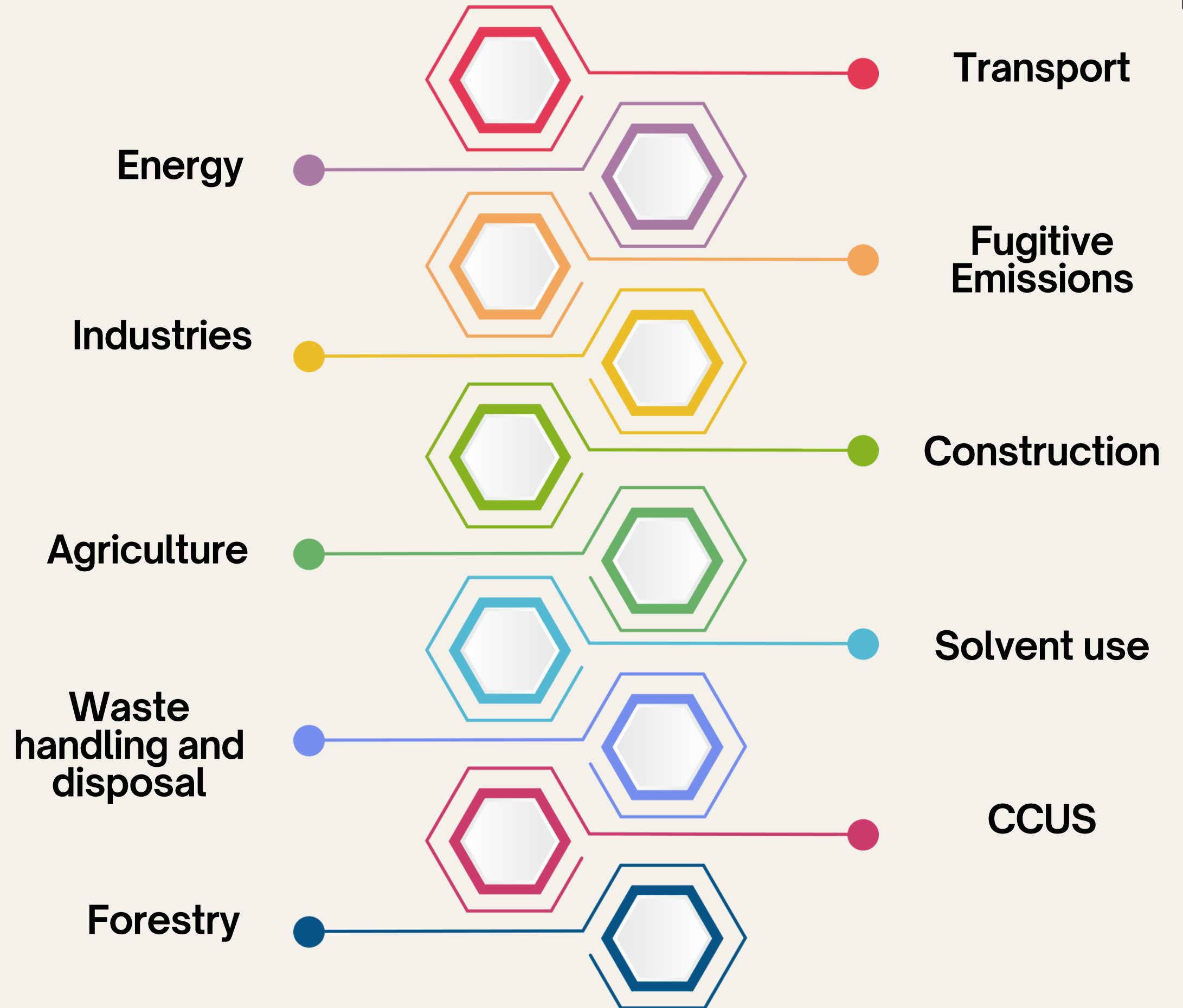


Methodology

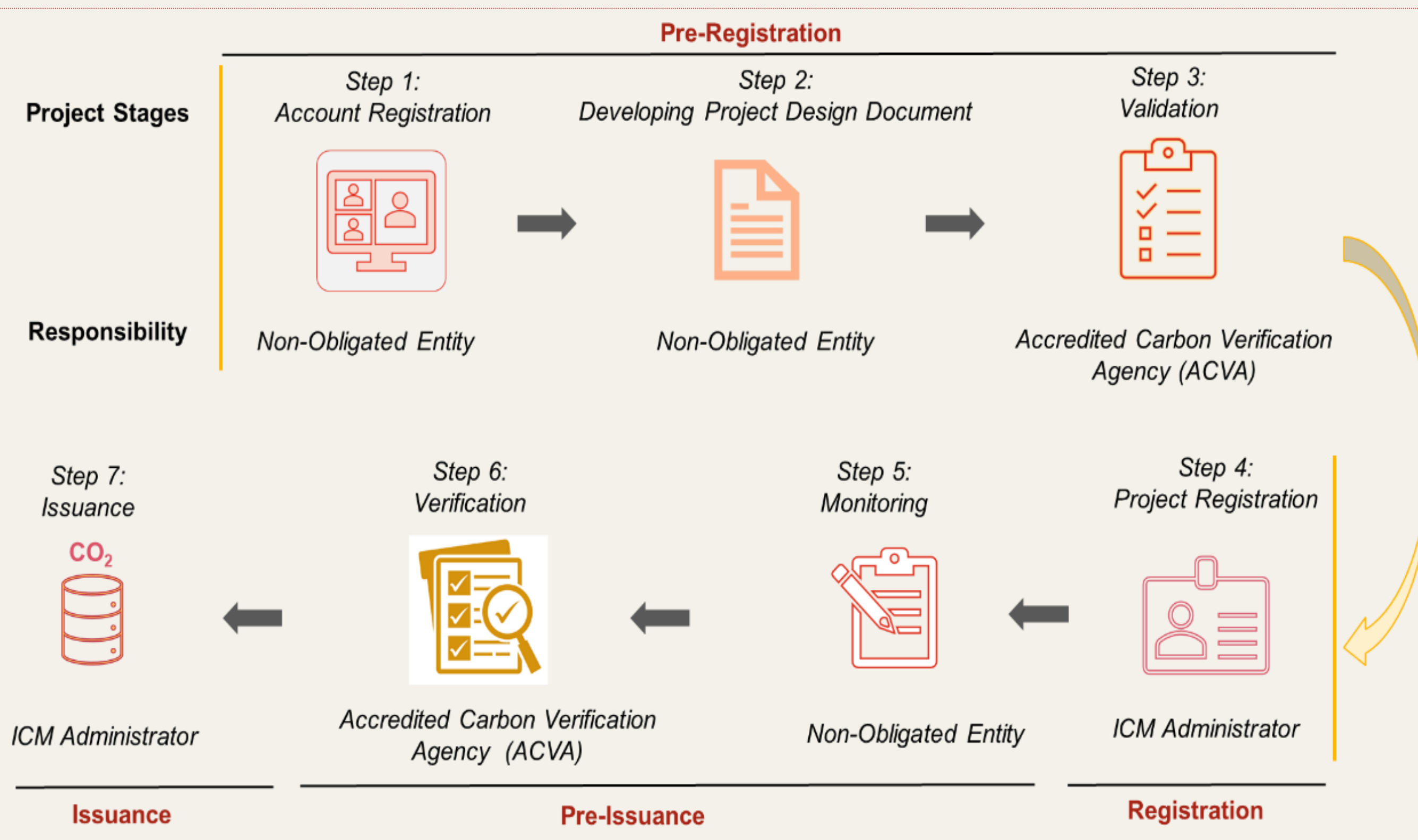


*Non- Obligated
Entities*

Sectors Covered



Project Cycle Overview



Step 1: Any Entity can register their account on ICM portal

Step 2: Only Indian entities are eligible for project development and submission

Step 3: Third party i.e., ACVA to perform validation

Step 4: Administrator will register the project based on the approval of the Technical Committee

Step 5: Monitoring Report to be submitted by Non-obligated entity

Step 6: ACVA other than ACVA who perform validation to carry out Verification

Step 7: CCCs issuance by Administrator based on the recommendation of NSC-ICM and approval of Central Government

Published Methodologies

S. No	Methodology	Sector	Methodology Name
1.	BM EN01.001	Energy	Grid-connected electricity generation from renewable sources
2.	BM EN01.002		Hydrogen production from electrolysis of water
3.	BM IN02.001	Industries	Energy efficiency and fuel switching measures for industrial facilities
4.	BM IN02.002		Hydrogen production using methane extracted from biogas
5.	BM WA03.001	Waste Handling and Disposal	Landfill methane recovery
6.	BM WA03.002		Flaring or use of landfill gas
7.	BM AG04.001	Agriculture	Methane recovery from livestock and manure management at households and small farms
8.	BM FR05.001	Forestry	Afforestation and reforestation of degraded mangrove habitats
9.	BM FR05.002		Afforestation and reforestation of lands except wetlands

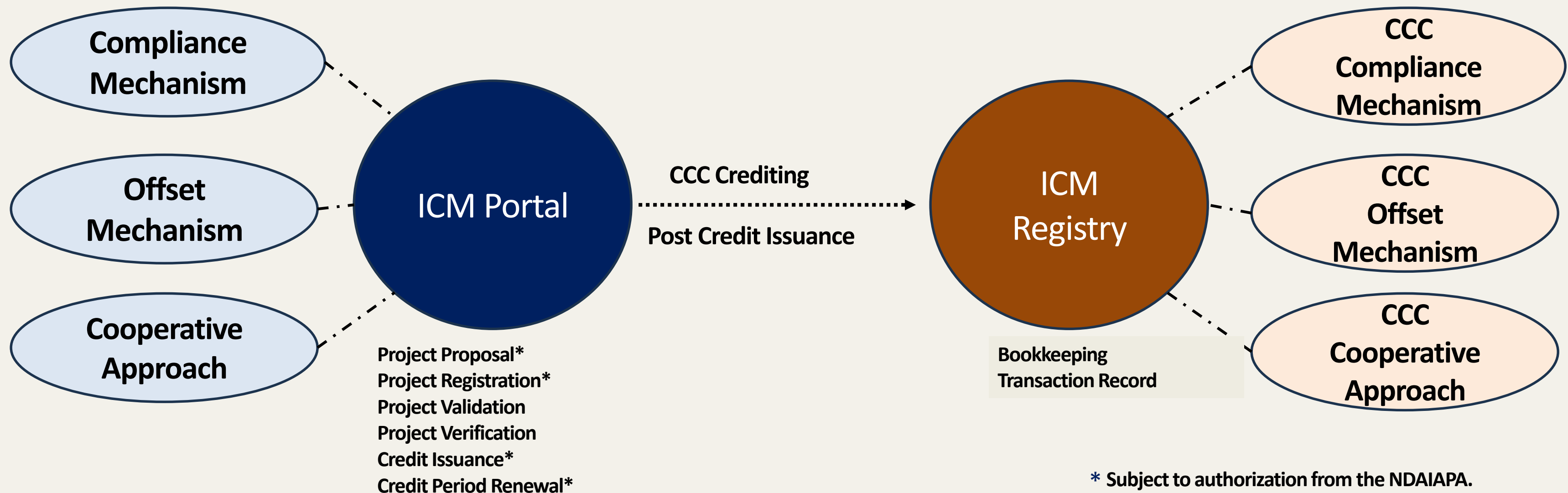
Methodologies Under Development – 13

S. No	Sector	New Methodology
1.	Agriculture	Production & Use of Biofuels
2.		Bio Char
3.		Agricultural land management
4.		Methane emission reduction from rice
5.		Sustainable grass land management
6.	Transport	Modal Shift including waterways
7.		Electric Vehicles
8.		Mass rapid transit (passenger)
9.		Electricity supply for ships
10.	Industries	Use of Biomass for Heat & Power
11.	Energy	Cookstoves
12.		Compressed Bio-Gas
13.	CCUS	Carbon Capture and Storage

Digital Infrastructure

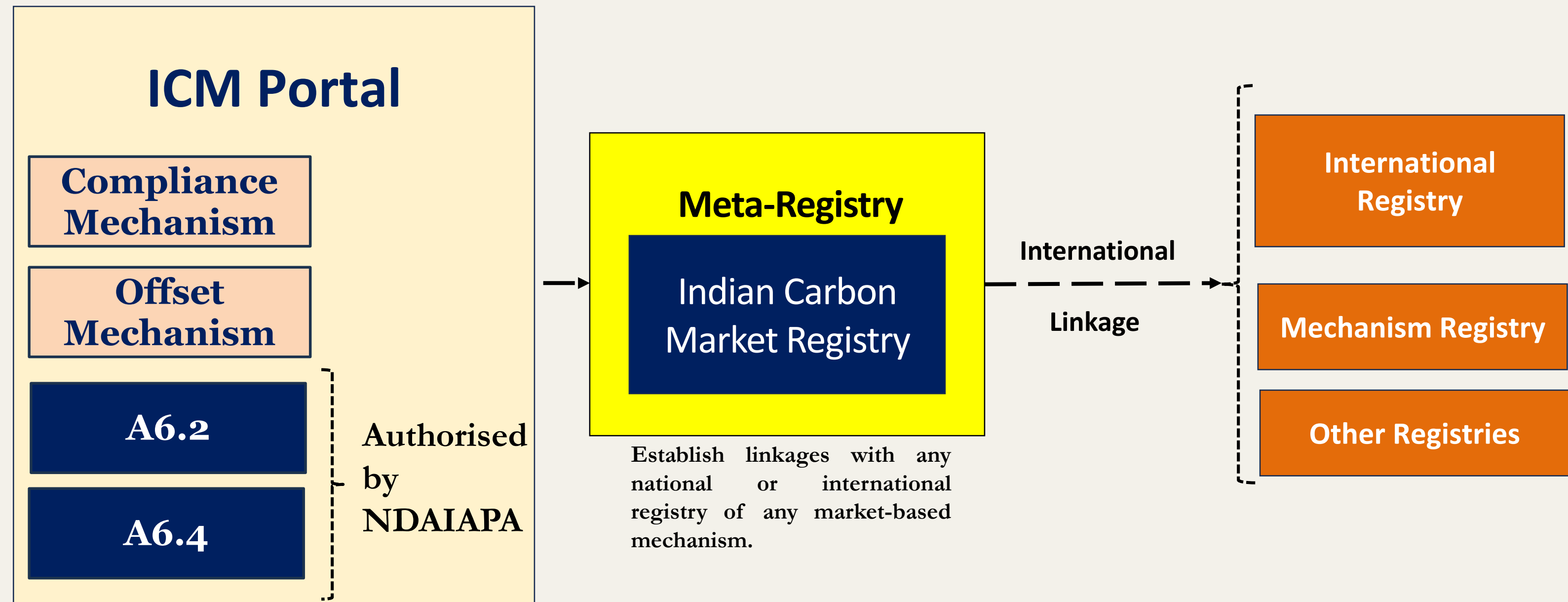
Bureau has to **develop and maintain the information technology infrastructure** required for Indian carbon market.

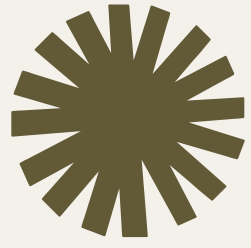
The platform will consist of **two major components**, namely **ICM Portal** and **ICM Registry**.



establishing the linkages with any national or international registry of any market-based mechanism.

Registry Interoperability
record external transfers using a distributed ledger technology.





Thank You

For Your Attention
