

## ESG

### India

NIFTY-50: 23,265

June 12, 2024

### Global carbon pricing trends 2023: Needs more ambition

Amid the energy crisis and economic stagnation, 2023 was a year of gradual progress in the uptake of global carbon pricing instruments (CPI). Multi-dimensional efforts are being undertaken worldwide to promote these instruments' uptake and improve prices to meet the 2°C goal, especially in mid-income countries. The final bill for the rollout of the Indian carbon market is approved, and the finer details are awaited. We believe that companies enabling/transitioning to a lower carbon footprint will benefit from this.

#### Coverage of CPIs continues to rise but needs more ambition

CPIs continued to inch up to 75 in FY2024 (FY2023: 73), covering 24% of global GHG emissions (FY2023: 23%) (see Exhibits 1-2). This is further expected to increase in the near term by 4.5%, with: (1) large middle-income countries such as Brazil, India and Turkey making notable strides toward CPI implementation (see Exhibit 3); (2) the progress of sector-specific multilateral initiatives for international aviation and shipping; and (3) the implementation of the EU Carbon Border Adjustment Mechanism (CBAM; see Exhibit 4). However, its uptake needs more ambition and larger scale of action to achieve the COP26 goal of covering 60% of global GHG emissions by 2030. CPIs remain instrumental in reaching the global climate goal. Globally, 88 countries have so far committed to achieving the net-zero target, while 54 countries are considering this step (see Exhibits 5-6).

#### Higher CPI prices needed to meet 2°C goal

CPI revenues increased in CY2023 to US\$104 bn (CY2022: US\$95 bn), driven by high allowance prices and a temporary shift in some German ETS revenues from 2022 to 2023 (see Exhibit 7). CPI prices saw mixed developments as most instruments witnessed price increases in nominal terms; however, ten ETSS, covering ~5% of global emissions, saw price declines. This included significant price declines in large, long-standing ETSS in the EU, New Zealand, Korea and the UK (see Exhibit 8), which may lead to a decline in global carbon pricing revenues in 2024. CPI prices need to increase significantly to meet the 2°C goal (see Exhibit 9). Currently, less than 1% of GHG emissions are covered by the minimum recommended price range of USD63 per t/Co2e.

#### Weak demand from voluntary markets drags carbon credit issuances

Carbon credit issuance volumes fell for the second-consecutive year by ~9% yoy, mainly driven by: 1) a delay in the issuance applications due to the associated costs, resulting from a lackluster market demand environment and prices; and 2) a potential shift in investment/demand away from traditional projects (see Exhibit 10). Currently, voluntary carbon markets (VCM) account for ~90% of the total demand for carbon credits (see Exhibit 11). However, lingering credibility concerns in VCM underscore the pressing need for creating a minimum global benchmark for high-quality carbon credits. In order to address this, the Integrity Council for the Voluntary Carbon Market (ICVCM) has finalized its Core Carbon Principles (CCPs) and initiated assessments of crediting programs and methodologies covering 850 mn credits via its assessment framework. The first CCP-labeled credits expected to hit the market by 3QCY24.

#### Quick Numbers

75 CPIs are in operation globally; they cover 24% of global GHG emissions

88 countries have committed to the 'net-zero' carbon emissions target so far

96 listed Indian companies use science-based targets to reduce their carbon footprints

[Full sector coverage on KINSITE](#)

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**New demand from compliance markets to provide some support**

Compliance carbon markets (CCM) are also building up new demand for the future by: 1) 11 new jurisdictions, including India, currently considering carbon crediting mechanisms (see Exhibit 12) and 2) the launch of multilateral initiatives such as CBAM, CORSIA and IMO (see Exhibits 13). We note that India has already approved The Energy Conservation (Amendment) Bill, 2022, which empowers the government to roll out the Indian Carbon Market (ICM). The with finer details on its rules and regulations are expected to be announced soon.

**Capital goods companies in renewable and energy efficiency space to benefit from roll out of ICM**

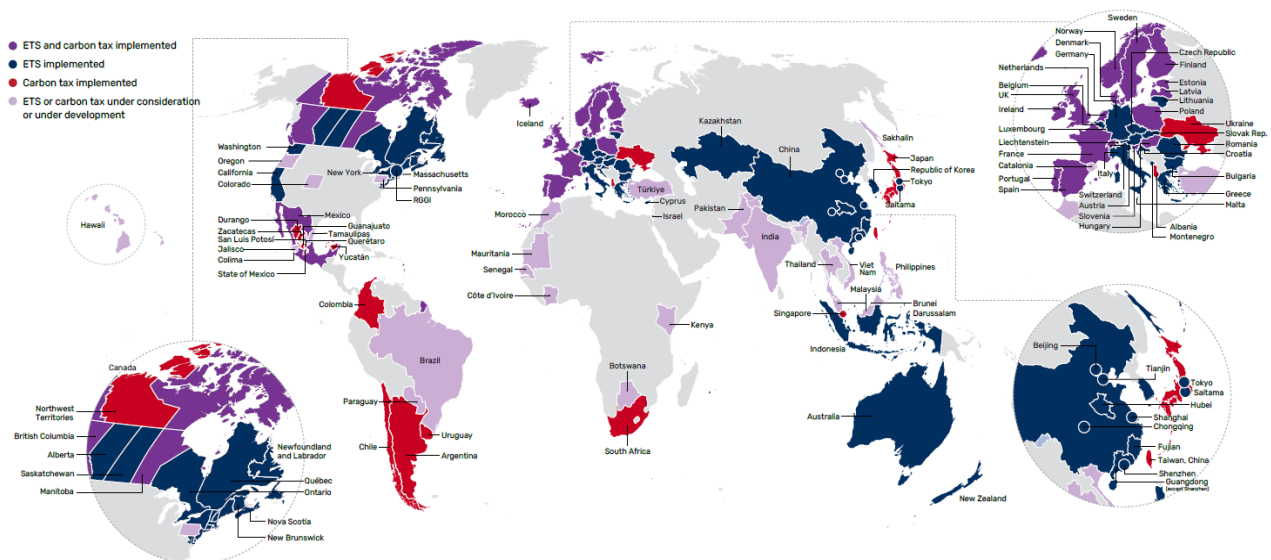
The implementation of ICM will incentivize the low-carbon action by internalizing the cost of GHG emissions. Renewable energy and improving the energy efficiency of industries and buildings are the big themes in reducing GHG emissions. Capital goods companies such as ABB, Siemens, Thermax, L&T, Cummins, KEC and KPTL present in the renewable and energy efficiency value chain are already witnessing increased green order inflows over the past few years. Moreover, companies managing their emissions efficiently in carbon-intensive sectors such as power, metals and cement would also reap the fruits of their ongoing efforts to transition toward low-carbon footprint. Players such as JSW Energy, JSW Steel, Tata Steel and Dalmia Bharat in the current scenario could gain at the cost of others (see Exhibits 14-16).

**Indian companies upping their game to transition toward lower carbon footprint**

Several Indian companies have already upped their game by taking proactive steps to reduce their carbon footprints. Among the Nifty-50, 28 companies have set up goals/targets to achieve net-zero/carbon neutrality, with specific timelines (see Exhibit 17). Further, 312 companies (including 96 listed companies) have committed to science-based targets (see Exhibit 18) to reduce carbon emissions. The top-5 sectors that have adopted science-based targets- chemicals, pharmaceuticals and life sciences, software and services, construction materials and automobiles and components- comprise ~57% of total companies (see Exhibit 19).

**75 carbon pricing instruments are operational across the world**

Exhibit 1: The implementation status of CPI in different territories across the globe, April 2024



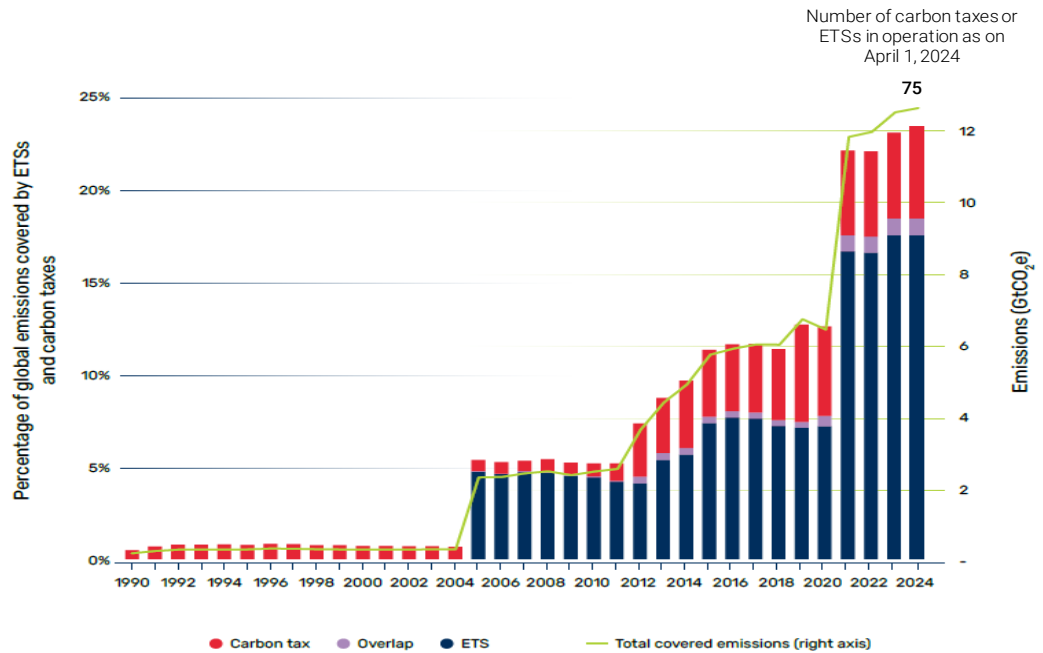
**Notes:**

- (a) Instruments "under development" are where a government is actively working toward the implementation of a carbon pricing instrument and this has been formally confirmed by official government sources. This includes, for example, where a mandate has been established, but regulated entities do not yet face compliance obligations.
- (b) If a government has announced its intention to work toward the implementation of a carbon pricing instrument and official government sources formally confirm that intention, the instrument is "under consideration."
- (c) For those countries with multiple instruments that have both "under development" or "under consideration" and "implemented" instruments, the map will show the status of the latter. The status of instruments in subnational jurisdictions is also reflected in the map.

Source: The World Bank, Kotak Institutional Equities

**24% of global GHG emissions covered by carbon pricing instruments**

**Exhibit 2: Share of global GHG emissions covered by CPI, March fiscal year-ends, 2000-24**



Source: The World Bank, Kotak Institutional Equities

**Carbon pricing gained momentum in middle-income countries in the past year**

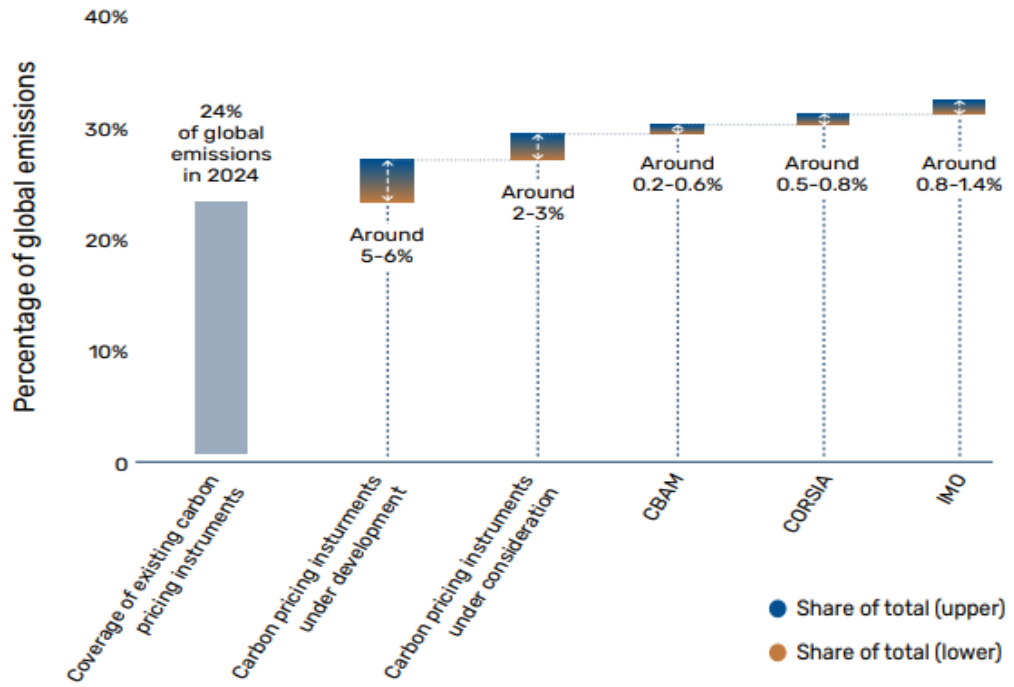
**Exhibit 3: New ETSs announced/being considered by select middle income countries, March fiscal year end, 2024**

Country	Comment
Argentina	<ul style="list-style-type: none"> <li>Considering the establishment of an ETS for the energy sector</li> <li>The initiative was first considered as part of an omnibus law, which introduced a broader package of economic reform measures.</li> </ul>
Brazil	Legislation that would create an ETS with a pilot phase toward the end of the decade is under consideration by Brazil's Congresso Nacional
India	<ul style="list-style-type: none"> <li>Adopted the legal basis for a carbon market (including an ETS) in 2022, and it established the institutional framework for the system over the past year, outlining roles and responsibilities of the different governing authorities</li> <li>The intensity-based ETS will build on an existing scheme for energy efficiency in emission-intensive industrial sectors, with the potential to evolve into a compliance carbon market</li> </ul>
Indonesia	Launched its ETS for coal-fired power plants in the beginning of 2023
Latin America	Efforts for other ETSs in Latin America are also underway, including in Chile and Colombia
Turkey	<ul style="list-style-type: none"> <li>Announced at COP28 that it plans to launch the two-year pilot phase of its ETS for the energy and industry sectors in October 2024 once the enabling legislation is in effect</li> <li>Market operations are due to commence early in 2025</li> </ul>

Source: The World Bank, Kotak Institutional Equities

**CORSIA and the IMO carbon pricing efforts represent around 1.8% of global GHG emissions on an average**

Exhibit 4: Indicative estimates of the potential GHG emissions covered by different carbon pricing instruments and international initiatives



Notes:

- (a) The upper bounds of the estimates are presented as blurred colors.
- (b) All emissions data are based on GHG emissions from the Emissions Database for Global Atmospheric Research (EDGAR version 8.0, <https://edgar.jrc.ec.europa.eu/>), or are from domestic inventories in the case of subnational jurisdictions.

Source: The World Bank, Kotak Institutional Equities

**88 countries have committed to 'net-zero' emissions; 6 countries have already achieved**

Exhibit 5: Countries which have achieved or committed by law/declaration/pledge/policy document to achieve net-zero carbon emissions, target year

Achieved			
Bhutan		Suriname	
Benin		Gabon	
Comoros		Guyana	
In law/declaration/pledge/policy document			
Country	Year	Country	Year
Andorra	2050	Liberia	2050
Antigua and Barbuda	2040	Lithuania	2050
Argentina	2050	Luxembourg	2050
Armenia	2050	Malaysia	2050
Australia	2050	Maldives	2030
Austria	2040	Malta	2050
Bahrain	2060	Marshall Islands	2050
Barbados	2030	Micronesia	2050
Belize	2050	Monaco	2050
Brazil	2050	Namibia	2050
Cambodia	2050	Nepal	2045
Canada	2050	New Zealand	2050
Cape Verde	2050	Nigeria	2060
Chile	2050	Oman	2050
China	2060	Panama	2050
Colombia	2050	Papua New Guinea	2050
Costa Rica	2050	Peru	2050
Croatia	2050	Portugal	2050
Cyprus	2050	Romania	2050
Denmark	2045	Russian Federation	2060
Dominica	2030	Saudi Arabia	2060
Ecuador	2050	Singapore	2050
Estonia	2050	Slovakia	2050
Ethiopia	2050	Slovenia	2050
European Union	2050	Solomon islands	2050
Fiji	2050	South Africa	2050
Finland	2035	South Korea	2050
France	2050	Spain	2050
Georgia	2050	Sri Lanka	2050
Germany	2045	Sweden	2045
Ghana	2070	Switzerland	2050
Greece	2050	Thailand	2065
Haiti	2050	The Gambia	2050
Hungary	2050	Tonga	2050
Iceland	2040	Tunisia	2050
India	2070	Turkiye	2053
Ireland	2050	Tuvalu	2050
Italy	2050	Ukraine	2060
Japan	2050	United Arab Emirates	2050
Kazakhstan	2060	United Kingdom	2050
Kuwait	2060	Uruguay	2050
Laos	2050	USA	2050
Latvia	2050	Vanuatu	2050
Lebanon	2050	Vietnam	2050

Source: Energy and Climate Intelligence Unit, Kotak Institutional Equities

**54 countries deliberating to achieve net-zero carbon emissions**

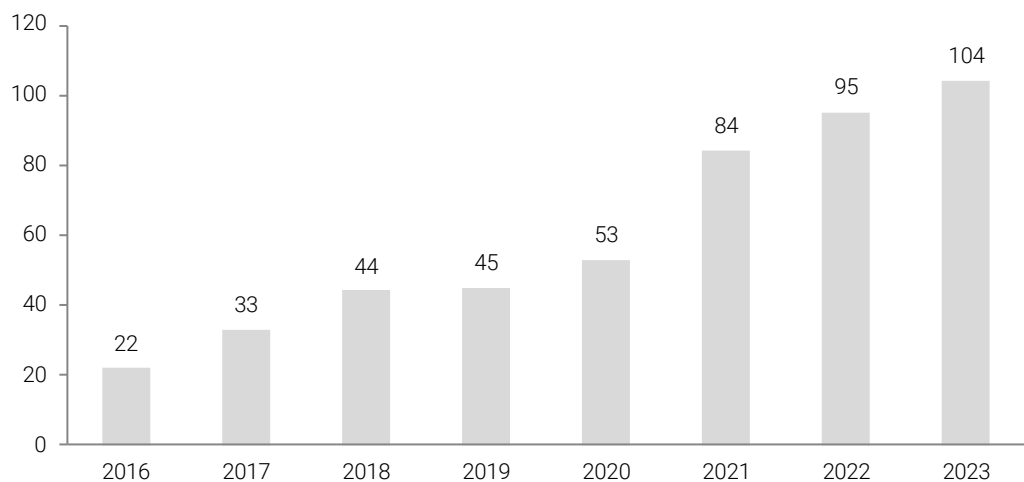
**Exhibit 6: Countries with net-zero carbon emissions target under discussion and tentative target year**

Country	Year	Country	Year
Afghanistan	2050	Myanmar	2050
Angola	2050	Nauru	2050
Bangladesh	2050	Nicaragua	2050
Belgium	2050	Niger	2050
Bulgaria	2050	Niue	2050
Burkina Faso	2050	Pakistan	2050
Burundi	2050	Palau	2050
Central African Republic	2050	Rwanda	2050
Chad	2050	Saint Kitts and Nevis	2050
Dem. Rep. Congo	2050	Saint Lucia	2050
Djibouti	2050	Saint Vincent and the Grenadines	2050
Dominican Republic	2050	Samoa	2050
Eritrea	2050	Sao Tome and Principe	2050
Grenada	2050	Senegal	2050
Guinea	2050	Seychelles	2050
Guinea-Bissau	2050	Sierra Leone	2050
Indonesia	2060	Somalia	2050
Israel	2050	South Sudan	2050
Kiribati	2050	Sudan	2050
Kyrgyzstan	2050	Tanzania	2050
Lesotho	2050	The Bahamas	2050
Madagascar	2050	Timor-Leste	2050
Malawi	2050	Togo	2050
Mali	2050	Trinidad and Tobago	2050
Mauritania	2030	Uganda	2050
Mauritius	2050	Yemen	2050
Mozambique	2050	Zambia	2050

Source: Energy and Climate Intelligence Unit, Kotak Institutional Equities

**Government revenue from carbon pricing grew significantly over past few years**

**Exhibit 7: Government revenue from carbon pricing across the world, calendar year-ends, 2016-23 (US\$ bn)**



Source: The World Bank, Kotak Institutional Equities

**Most of the ETSs witnessed price increases while prices of EU and Korea ETS fell significantly**

Exhibit 8: Carbon price evolution in selected ETS, March fiscal year-ends, 2018-24 (US\$/tCO<sub>2</sub>e)



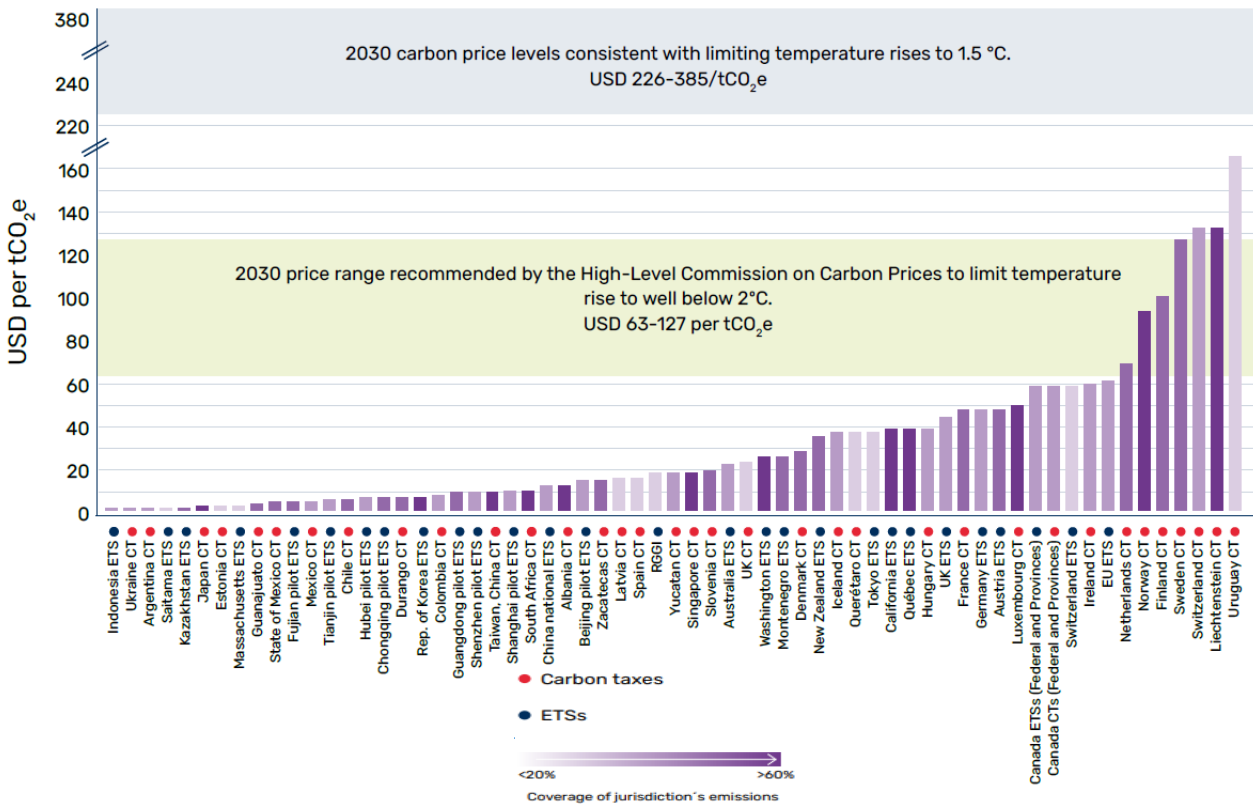
Notes:

(a) The drivers for the price reductions experienced during 2023 varied across jurisdictions. In the EU, economic stagnation and reduced consumption of fossil energy in the aftermath of the energy price crisis contributed to reducing industrial and power sector emissions, putting downward pressure on EU ETS prices. In New Zealand, a key driver was market expectations caused by uncertainty surrounding the potential for excess allowances in the coming years, which saw prices fall.

Source: The World Bank, Kotak Institutional Equities

**Less than 1% of global GHG emissions have carbon price at/above the recommended range to reach goals under Paris Agreement**

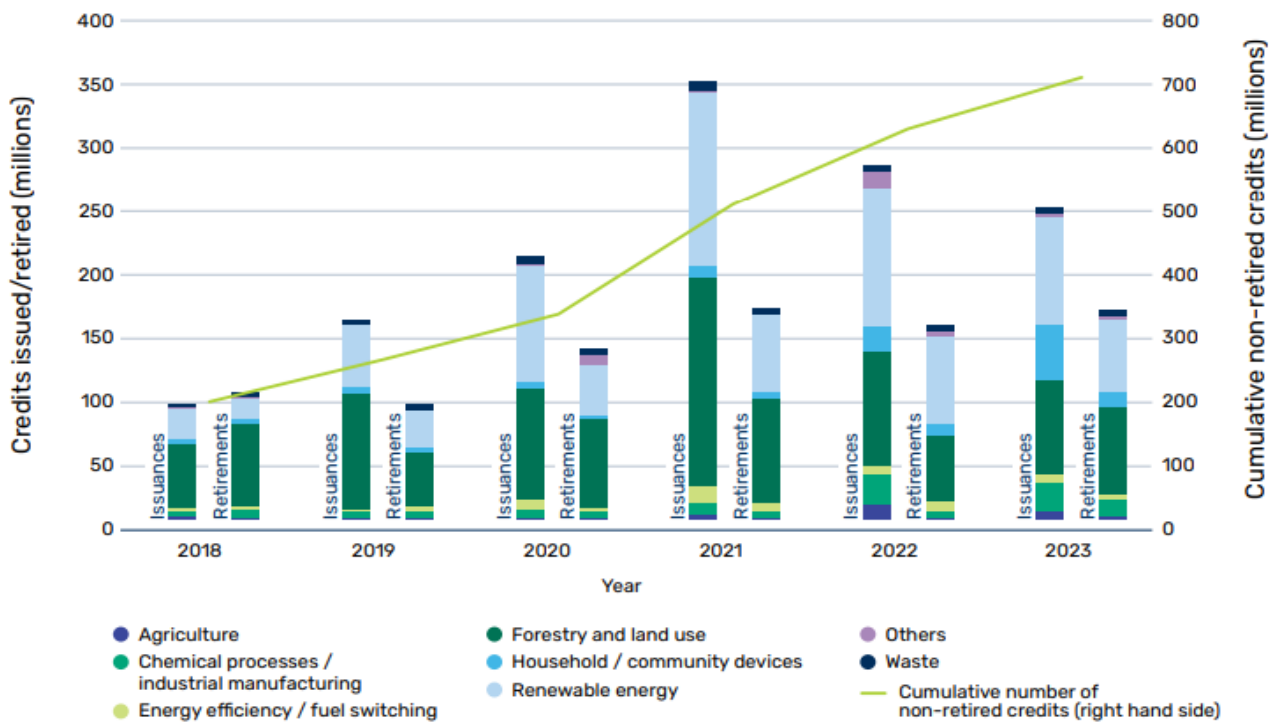
Exhibit 9: Prices and coverage across ETS and Carbon taxes, April 2024



Source: The World Bank, Kotak Institutional Equities

**Renewable energy and forestry and land use—two largest project categories—faced ~50% decrease in issuances yoy**

**Exhibit 10: Issuances and retirements by project category in independent crediting mechanisms, March fiscal year ends, 2018-23**

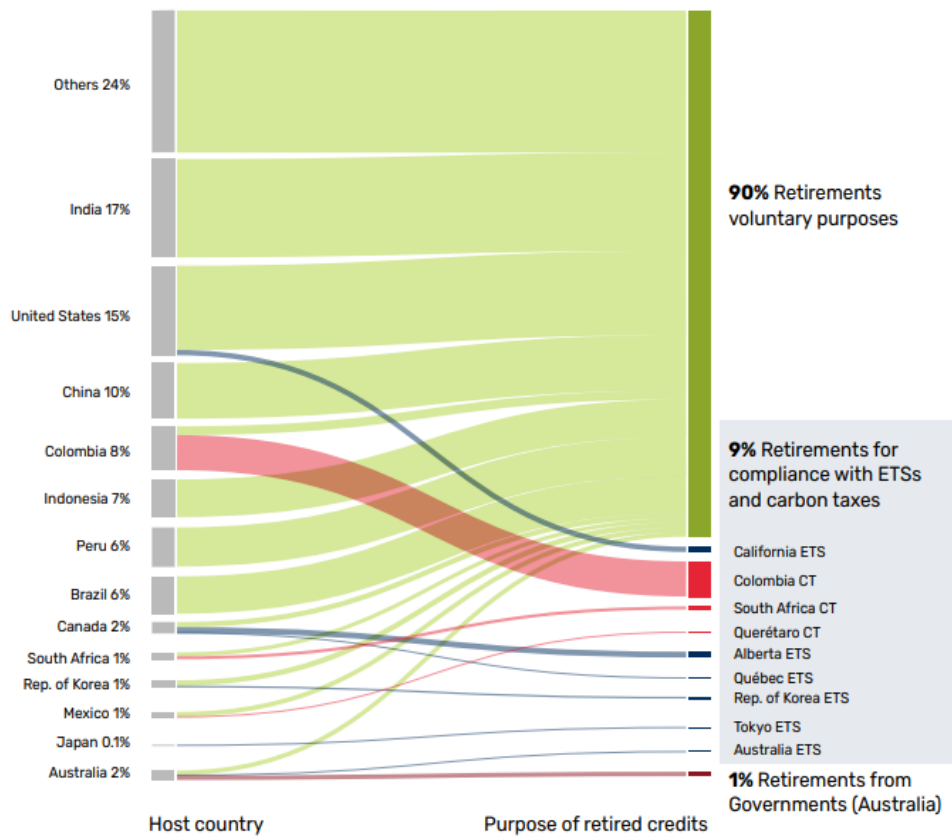


Source: Kotak Institutional Equities



**Voluntary demand continues to dominate the overall demand for carbon credits**

**Exhibit 11: Indicative allocation of retirements by host country to major markets, Calendar year-end, 2023**



**Notes:**

- (a) This figure illustrates the volume of retired credits in 2023, showing the country of issuance of retired credits on the left-hand side and the purpose for the retirement—either voluntary or for compliance—on the right. It is important to note that registries typically do not track the purpose of retirement.
- (b) Government officials provided 2023 compliance retirement data for Alberta, Australia, California, Colombia, Québec, Republic of Korea, South Africa, and Tokyo. Québec CaT, 2023 compliance retirements may not reflect full compliance demand due to triennial compliance cycles. For Colombia, the number of voluntary retirements was established in proportion with the compliance-voluntary ratio from Cercabono. For the Republic of Korea all credits are assumed to originate from domestic projects. For Queretaro, retirements as indicated in government’s press release.
- (c) The overall share of retirements for compliance purposes could be higher, as, for example, the volume of credits retired under China’s GHG voluntary emission reduction program for the Chinese Pilots in 2023 is not available

Source: The World Bank, Kotak Institutional Equities

**New carbon crediting mechanisms are witnessing an uptake in many economies globally**

**Exhibit 12: Select governmental carbon crediting mechanisms recently launched/to be launched, April 2024**

Country	Comment
Brazil	The February 2024 draft ETS bill set out a framework for the acceptance of carbon credits to meet compliance obligations through a "gatekeeping" model that, if approved, will rely on existing crediting mechanisms
Chile	<ul style="list-style-type: none"> <li>• In September 2023, Chile launched a crediting mechanism to allow companies to reduce carbon tax liabilities using credits from specified methodologies under the Clean Development Mechanism (CDM), Verified Carbon Standard (VCS), and Gold Standard</li> <li>• In March 2024, Chile officially approved the first eight renewable energy projects under these standards</li> </ul>
China	After a six-year suspension, China has relaunched project registrations under its China Certified Emissions Reduction Scheme, providing a supply of credits that companies can potentially use to offset a share of their compliance obligations under the China's national ETS and the pilot ETSs of Beijing, Chongqing, Fujian, Guangdong, Hubei, Shanghai, Shenzhen, and Tianjin
EU	<ul style="list-style-type: none"> <li>• The EU Carbon Removals Certification Framework, which is focused on stimulating carbon removals through robust and standardized certification of removal credits, was adopted by the European Parliament in April 2024, and awaits adoption by the European Council</li> <li>• The legislation only allows removal credits to contribute toward European climate objectives, excluding them from use towards third countries' NDCs and international compliance schemes such as CORSIA</li> </ul>
India	Revised its carbon pricing plans, simultaneously advancing a baseline-and-credit ETS and a national crediting mechanism
Thailand	<ul style="list-style-type: none"> <li>• Thailand's domestic crediting mechanism, the Thailand Voluntary Emission Reduction Scheme (T-VER) has upgraded its standard to Premium T-VER to promote alignment with international standards, attracting interest from international buyers</li> <li>• It is also considering the development of a carbon tax or ETS, which could allow the use of T-VER credits to offset compliance requirements</li> </ul>
Vietnam	Government aims to establish a crediting mechanism focused on the solid waste and transport sectors to support its ETS commencing in 2028 with provisions allowing for participation under Article 6 of the Paris Agreement

Source: The World Bank, Kotak Institutional Equities

**Sector-specific multilateral initiatives for carbon pricing are witnessing noteworthy growth**

**Exhibit 13: Brief description of prominent emerging multilateral carbon pricing initiatives**

Initiative	Description
Carbon Border Adjustment Mechanism (CBAM)	<ul style="list-style-type: none"> <li>• The transitional phase of the EU CBAM started in October 2023, requiring EU importers to report the embedded emissions of products including specified imports of iron and steel, aluminum, hydrogen, fertilizers, cement, and electricity</li> <li>• The European Commission has highlighted the potential to expand the CBAM to other industrial products in Article 30 of the CBAM Regulation</li> <li>• Payments will be required from 2026, which has spurred governments to consider implementing carbon pricing to reduce potential CBAM costs</li> <li>• Australia, Canada and Japan are also weighing the implementation of their own domestic border carbon adjustments.</li> </ul>
Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)	<ul style="list-style-type: none"> <li>• CORSIA led by the International Civil Aviation Organization (ICAO) uses a baseline-and-offset approach that requires airlines to buy carbon credits to offset emissions above their baseline</li> <li>• The pilot phase concluded in early 2024, beginning the first (voluntary) phase, and a compliance phase will begin in 2027</li> </ul>
International Maritime Organization (IMO)	<ul style="list-style-type: none"> <li>• In July 2023, IMO adopted a revised strategy to reduce GHG emissions from international shipping that includes the development of a GHG emissions pricing instrument</li> <li>• It is intended to enter into force by 2027</li> </ul>

Source: The World Bank, Kotak Institutional Equities

**JSW Energy followed by Tata Power have least GHG emission intensity**

Exhibit 14: GHG emission intensity of select power companies, March fiscal year-ends, 2017-23 (tCO2e/MWh)

	2017	2018	2019	2020	2021	2022	2023
Adani Power	DNA	DNA	DNA	DNA	0.85	0.85	0.85
JSW Energy	DNA	DNA	0.78	0.76	0.68	0.68	0.69
NTPC	0.88	0.87	0.88	0.87	0.84	0.84	0.84
Tata Power	DNA	DNA	0.71	0.70	0.69	0.79	0.74

Source: Companies, Kotak Institutional Equities

**JSW Steel and Tata Steel has the least emission intensity**

Exhibit 15: GHG emission intensity of select metal companies, March fiscal year-ends, 2017-23 (t/tcs)

	2017	2018	2019	2020	2021	2022	2023
Hindalco - Aluminium	20.6	20.0	20.1	19.8	19.7	19.7	19.3
Hindalco - Copper	3.1	2.9	3.5	3.5	3.3	2.6	2.4
Hindustan Zinc	DNA	DNA	5.4	5.4	5.2	5.0	4.4
Jindal Steel and Power	DNA	DNA	DNA	2.6	2.6	2.7	2.6
JSW Steel	DNA	2.6	2.8	2.5	2.5	2.5	2.4
SAIL	2.6	2.6	2.6	2.5	2.6	2.8	2.8
Tata Steel	DNA	DNA	DNA	DNA	DNA	2.4	2.4
Tata Steel - Jamshedpur	2.3	2.3	2.3	2.3	2.3	DNA	DNA
Tata Steel - Kalinganagar	3.1	2.7	2.5	2.5	2.4	DNA	DNA
Vedanta	DNA	DNA	DNA	DNA	DNA	DNA	6.2

Notes:

- (a) GHG emission intensity data for NALCO and NMDC is not available.
- (b) The GHG emission intensity varies according to the metal produced; hence, data of Hindalco and Vedanta is not comparable with steel manufacturers.
- (c) For Hindalco, Hindustan Zinc and Vedanta, emission intensity is measured in tCO2/MT

Source: Companies, Kotak Institutional Equities

**Dalmia Bharat has least GHG emission intensity**

Exhibit 16: GHG emission intensity of select cement companies, March fiscal year-ends, 2017-23 (kg/t of cementitious material)

	2017	2018	2019	2020	2021	2022	2023
ACC	547	528	506	512	493	488	466
Ambuja	543	550	530	531	531	529	513
Dalmia	DNA	537	546	536	492	489	463
Shree	555	553	555	554	533	530	521
UltraTech	632	626	619	614	597	582	557

Notes:

- (a) ACC and Ambuja used to follow calendar year for reporting; hence, for them, FY2022 represents CY2021 and similarly for earlier years. They have changed to fiscal year-based reporting from 2023.

Source: Companies, Kotak Institutional Equities

**28 companies among Nifty-50 have set up targets to achieve net-zero/carbon neutrality**

**Exhibit 17: List of Nifty-50 companies that have committed to achieve net zero/carbon neutrality**

S. No.	Company	S. No.	Company
1	Adani Ports	15	JSW Steel
2	Bharti Airtel	16	L&T
3	BPCL	17	LTIM
4	Cipla	18	M&M
5	Coal India	19	ONGC
6	Eicher Motors	20	Powergrid
7	Grasim	21	Reliance
8	HCLT	22	State Bank of India
9	HDFC Bank	23	Tata Consumer
10	Hero MotoCorp	24	Tata Motors
11	Hindalco	25	TCS
12	Hindustan Unilever	26	Tech Mahindra
13	Infosys	27	Ultratech
14	ITC	28	Wipro

Source: Companies, Kotak Institutional Equities

**96 listed companies have set/committed to science-based targets to reduce carbon emissions**

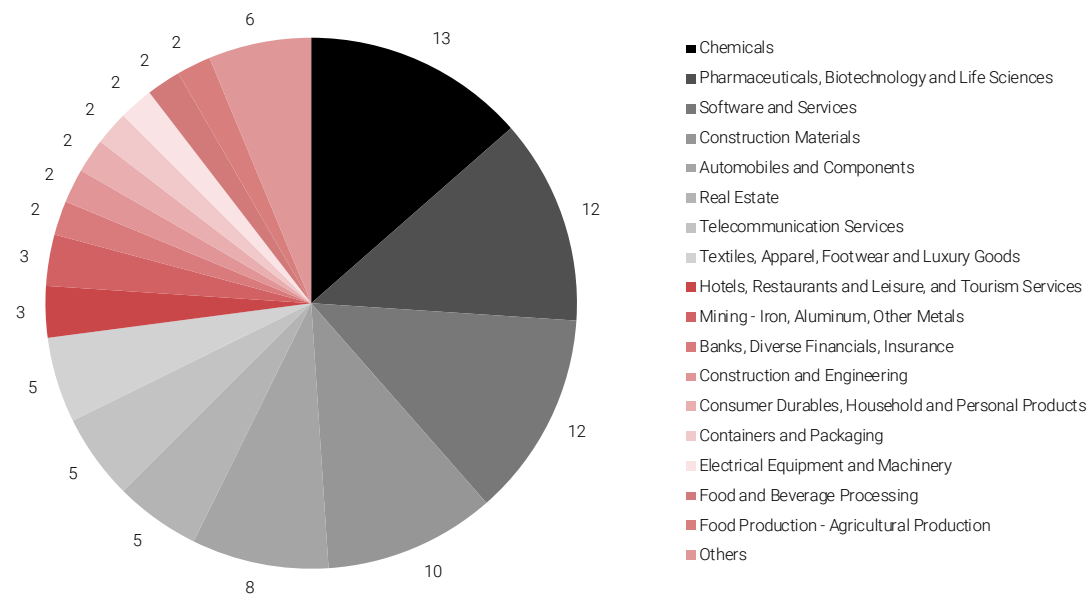
**Exhibit 18: Listed companies that have either set target or committed to 'science-based target' to limit carbon emissions, May 2024**

Approved 1.5° C					
S. No.	Company Name	Sector	S. No.	Company Name	Sector
1	Bharat Forge	Automobiles and Components	12	Mahindra & Mahindra Financial Services	Banks, Diverse Financials, Insurance
2	Bharti Airtel	Telecommunication Services	13	Mahindra EPC Irrigation	Food Production - Agricultural Production
3	Caprihans India	Containers and Packaging	14	Mahindra Holidays and Resorts India	Hotels, Restaurants and Leisure
4	Godrej Properties	Real Estate	15	Mahindra Lifespaces Developers	Real Estate
5	HCL Technologies	Software and Services	16	Mahindra Logistics	Air Freight Transportation and Logistics
6	Hindustan Zinc	Mining - Iron, Aluminum, Other Metals	17	Reliance Jio Infocomm	Telecommunication Services
7	JK Tyre & Industries	Automobiles and Components	18	Swaraj Engines	Automobiles and Components
8	JM Baxi Ports & Logistics	Water Transportation - Ports and Services	19	Tata Communications	Telecommunication Services
9	Kansai Nerolac Paints	Chemicals	20	The Tata Power Company	Electric Utilities and Independent Power Producers and Energy Traders (including fossil, alternative and nuclear energy)
10	L&T Technology Services	Software and Services	21	Wipro	Software and Services
11	Macrotech Developers	Real Estate			
Approved well below 2° C					
S. No.	Company Name	Sector	S. No.	Company Name	Sector
22	ACC	Construction Materials	29	Infosys	Software and Services
23	Ambuja Cement	Construction Materials	30	J.K. Cement	Construction Materials
24	Dalmia Bharat	Construction Materials	31	Mahindra & Mahindra	Automobiles and Components
25	Dr. Reddy's Laboratories	Pharmaceuticals, Biotechnology and Life	32	Tata Chemicals	Chemicals
26	Glenmark Pharmaceuticals	Pharmaceuticals, Biotechnology and Life	33	UltraTech Cement	Construction Materials
27	Godrej Agrovet	Food Production - Agricultural Production	34	UPL	Chemicals
28	Indo Count	Textiles, Apparel, Footwear and Luxury Goods			
Approved 2° C					
S. No.	Company Name	Sector	S. No.	Company Name	Sector
35	Shree Cement	Construction Materials	36	Tech Mahindra	Software and Services
Committed					
S. No.	Company Name	Sector	S. No.	Company Name	Sector
37	Aarti Industries	Chemicals	67	JSW Cement	Construction Materials
38	Aarti Pharmalabs	Pharmaceuticals, Biotechnology and Life Sciences	68	Larsen & Toubro Infotech	Software and Services
39	Aditya Birla Fashion and Retail	Textiles, Apparel, Footwear and Luxury Goods	69	Laurus Labs	Pharmaceuticals, Biotechnology and Life Sciences
40	Apar Industries	Electrical Equipment and Machinery	70	Mastek UK	Software and Services
41	APL Apollo Tubes	Mining - Iron, Aluminum, Other Metals	71	Neuland Laboratories	Pharmaceuticals, Biotechnology and Life Sciences
42	Apollo Tyres	Automobiles and Components	72	NOCIL	Chemicals
43	Ashok Leyland	Electrical Equipment and Machinery	73	Orchid Pharma	Pharmaceuticals, Biotechnology and Life Sciences
44	Brigade enterprises	Real Estate	74	PDS	Textiles, Apparel, Footwear and Luxury Goods
45	Brookfield India Real Estate Trust	Real Estate	75	Persistent Systems	Software and Services
46	Coffee day beverages	Food and Beverage Processing	76	Piramal Pharma	Pharmaceuticals, Biotechnology and Life Sciences
47	Dabur India	Consumer Durables, Household and Personal Products	77	Privi Speciality Chemicals	Chemicals
48	Divi's Laboratories	Pharmaceuticals, Biotechnology and Life Sciences	78	Quess Corp	Professional Services
49	Elecon Engineering	Construction and Engineering	79	Sagar Cements	Construction Materials
50	EPL	Containers and Packaging	80	Sansera Engineering	Automobiles and Components
51	Faze Three	Textiles, Apparel, Footwear and Luxury Goods	81	Sterlite Technologies	Telecommunication Services
52	Foseco India	Chemicals	82	Sudarshan Chemical Industries	Chemicals
53	Galaxy Surfactants	Chemicals	83	Suven Pharmaceuticals	Pharmaceuticals, Biotechnology and Life Sciences
54	Godrej Consumer Products	Consumer Durables, Household and Personal Products	84	Syngene International	Pharmaceuticals, Biotechnology and Life Sciences
55	Godrej Industries	Chemicals	85	Tata Consultancy Services	Software and Services
56	Granules India	Pharmaceuticals, Biotechnology and Life Sciences	86	Tata Motors	Automobiles and Components
57	Graphite India	Chemicals	87	The Supreme Industries	Building Products
58	Himadri Speciality Chemical	Chemicals	88	Trident	Textiles, Apparel, Footwear and Luxury Goods
59	Indian Hotels Company	Hotels, Restaurants and Leisure, and Tourism Services	89	TVS Motor Company	Automobiles and Components
60	Indigo Paints	Chemicals	90	Udaipur Cement Works	Construction Materials
61	Indus Towers	Telecommunication Services	91	Updater services	Trading Companies and Distributors, and Commercial Services and Supplies
62	InfoBeans Technologies	Software and Services	92	Varun Beverages	Food and Beverage Processing
63	IOL chemicals and pharmaceuticals	Pharmaceuticals, Biotechnology and Life Sciences	93	Yatra Online	Hotels, Restaurants and Leisure, and Tourism Services
64	IRB Infrastructure Developers	Construction and Engineering	94	YES Bank	Banks, Diverse Financials, Insurance
65	Jindal Stainless	Mining - Iron, Aluminum, Other Metals	95	Zensar Technologies	Software and Services
66	JK Lakshmi Cement	Construction Materials	96	Zomato	Software and Services

Source: Science-Based targets, Kotak Institutional Equities

**Several companies in carbon-intensive sectors in India are adopting science-based targets**

**Exhibit 19: Sector-wise share of companies committed to science-based targets for emission reduction in India, May 2024 (%)**



**Notes:**

(a) Other sectors include Air Freight Transportation and Logistics, Building Products, Electric Utilities and Independent Power Producers and Energy Traders (including fossil, alternative and nuclear energy), Professional Services, Trading Companies and Distributors, and Commercial Services and Supplies and Water Transportation - Ports and Services

Source: Science-Based targets, Kotak Institutional Equities

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**ADD.** We expect this stock to deliver 5-15% returns over the next 12 months.

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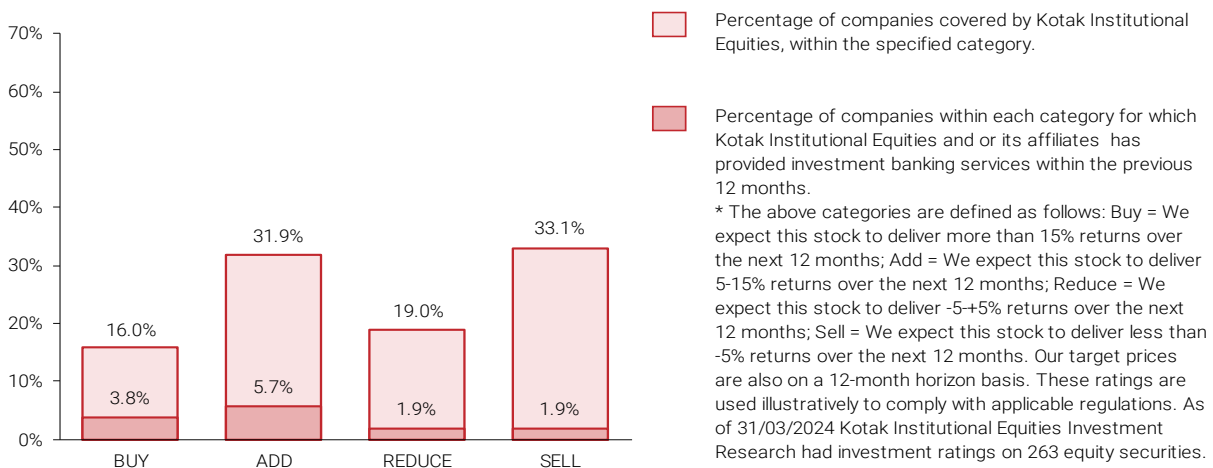
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Kotak Institutional Equities Research coverage universe



Source: Kotak Institutional Equities

As of March 31, 2024

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