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CHALLENGES AND OPPORTUNITIES *for*

Implementing Voluntary Climate Action in the Indian Private Sector

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Registered offices
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Global Carbon Markets
GIZ Office New Delhi
A2/18, Safdarjung Enclave
New Delhi 110 029 India
T: +91 11 4949 5353
F: + 91 11 4949 5391
E: info@giz.de
I: www.giz.de/india

Confederation of Indian Industry
The Mantosh Sondhi Centre
23, Institutional Area, Lodi Road, New
Delhi - 110 003 (India)
T: 011- 40028879
I: www.cii.in

Responsible
Kundan Burnwal, Senior Advisor, Climate Change and Circular Economy, GIZ India
Email: kundan.burnwal@giz.de

Authors
Kundan Burnwal, Senior Advisor, Climate Change and Circular Economy, GIZ India
Saurab Babu, Junior Technical Expert, Climate Change and Circular Economy, GIZ India
Jai Kumar Gaurav, Senior Advisor, Climate Change and Circular Economy, GIZ India
Pravir Deshmukh, Counsellor, CII-ITC Centre of Excellence for Sustainable Development
Shourjomay Chattopadhyay, Associate Counsellor, CII-ITC Centre of Excellence for Sustainable Development

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Challenges and Opportunities for Implementing Voluntary Climate Action in the Indian Private Sector

Introduction

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Catastrophic climate change is inevitable unless drastic steps are taken to reduce the GHG footprint at scale across countries. By the end of the 21st century, Earth's global average temperature is projected to rise by 4°C[1] compared to pre-industrial levels if mitigation efforts are not scaled up. The Global Climate Risk Index 2021[2] ranks India among the top ten countries most vulnerable to climate change. India is already experiencing severe impacts of climate change and these impacts are projected to increase in the future. For example, India recorded the highest deaths due to climate change-related disasters in 2018, ranking fifth in the Global Climate Risk Index 2020[3]. Ambitious climate action from all actors is the need of the hour.

National governments across the world have introduced policies, projects, and mechanisms to limit GHG emissions. At present companies, cities, financial institutions and more than 130 countries have committed to reducing emissions to net-zero. Of the 191 Parties to the Paris Agreement, more than 150 have so far submitted new or updated national targets. At the Conference of Parties in Glasgow, Scotland (CoP26), several Parties also adopted voluntary commitments and targets, which included:

- 120 countries, representing about 90% of the world's forests, pledged to halt and reverse deforestation by 2030
- More than 100 countries signed the methane pledge to cut emissions of this GHG by 2030, led by the United States and the European Union
- More than 40 countries – including major coal-users such as Poland, Viet Nam, and Chile – agreed to shift away from coal, one of the biggest generators of CO2 emissions
- More than 100 national governments, cities, states, and major car companies signed the Glasgow Declaration on Zero-Emission Cars and Vans (Green Transport) to end the sale of internal combustion engines by 2035 in leading markets, and by 2040 worldwide
- 13 nations committed to ending the sale of fossil fuel-powered heavy-duty vehicles by 2040

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Carbon pricing initiatives are a key driver of global climate action. Country governments and sub-national governments are establishing regional, national, and subnational carbon pricing initiatives, which includes emissions trading, carbon taxes, setting efficiency standards, and removing fossil fuel subsidies. At present 65 carbon pricing initiatives have been implemented covering 45 National Jurisdictions and 34 Subnational Jurisdictions. Based on a 2021 analysis, these initiatives covered 1.65 GtCO2e, representing 21.5% of global GHG emissions.

For the private sector, climate change poses significant threats. Risks include physical damages (assets might be damaged or destroyed due to climate change-induced extreme events), supply chain disruptions, policy/regulatory changes, and shifting consumer demands, among others. Investors are also increasingly demanding climate disclosures on climate action from their companies to measure the investment risk due to climate change impacts.

Therefore, businesses are integrating climate risk in capital allocation, future investment decisions, developments of new products/services, etc. to build a resilient business. **Apart from mandatory regulations they are subject to, several private sector players are leading the way through Voluntary Climate Action (VCA).** For example, at COP26, nearly 500 global financial services firms controlling assets worth $130 trillion – some 40% of the world's financial assets – committed to aligning their financial activities towards a 2050 net-zero trajectory[4]. Due to their financial bandwidth and a greater appetite for innovation, businesses are key players in reducing GHG emissions and supporting India to achieve its commitments under the Paris Agreement by complementing government-led strategies.

At COP26, nearly 500 global financial services firms controlling assets worth $130 trillion – Some 40% of the world's financial assets – Committed to aligning their financial activities towards a 2050 net-zero trajectory.

Recognising their role in global and Indian climate action, Confederation of Indian Industry (CII) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH undertook a two-day consultation with 40 Indian businesses to document the challenges and opportunities that leading Indian private sector players face in adopting VCA tools in business operations. The assignment was part of the Global Carbon Market project, implemented by GIZ on behalf of the German Federal Ministry for Economic Affairs and Climate Action (BMWK). Leading from the consultation, this paper:

- Documents the present status of VCA in India by the private sector, with a key focus on Voluntary Carbon Markets (VCM), and Internal Carbon Pricing (ICP)
- Documents challenges and opportunities created by adopting VCA tools
- Identifies recommendations to increase the adoption of VCA tools, particularly VCM and ICP in India

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Voluntary Climate Action (VCA) through target setting and disclosures

The bucket of actions under VCA can take many forms. It includes setting voluntary targets, voluntary disclosures, participation in the VCM and adopting carbon pricing within business operations, called ICP. The popular umbrellas under target setting and disclosures include the Science-Based Targets initiative (SBTi), Renewable Energy 100 (RE100), EV100, the Climate Disclosure Project (CDP), and the Task Force on Climate-Related Disclosures (TCFD) where the Indian private sector is strongly represented.

At present about 1,274 global businesses, out of which 61 are Indian, are leading the zero-carbon transition by setting emissions reduction targets through the SBTi. SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The objective of SBTi is to drive ambitious climate action in the private sector by enabling companies to set science-based emissions reduction targets.

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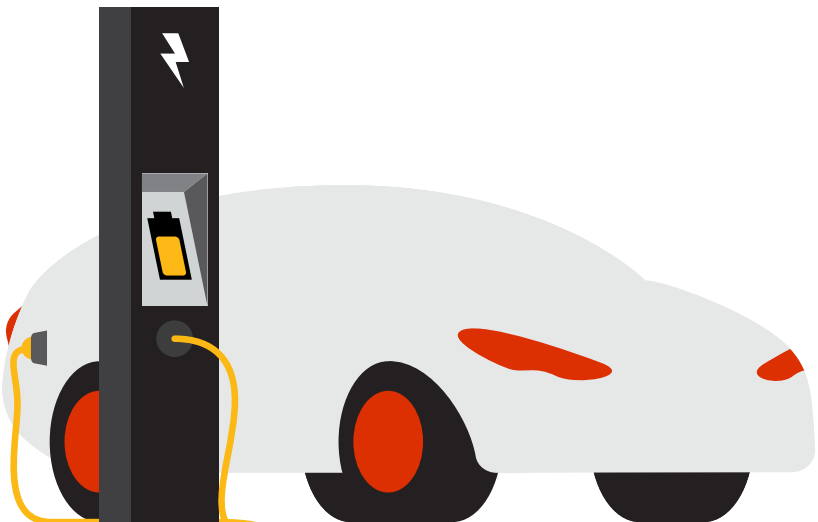

Under the RE100[5] global initiative, 100 of the world's most influential businesses have committed to 100% renewable electricity. Led by the Climate Group and in partnership with CDP, its mission is to accelerate change towards zero-carbon grids at scale. Globally over 340 companies have made a commitment to go '100% renewable'. Out of these, 47 companies have Indian operations (seven businesses headquartered in India and more than 40 international companies have a presence in India).

EV100[6] is a global initiative bringing together forward-looking companies committed to accelerating the transition to EVs and making electric transport the new normal by 2030. At present 121 global businesses and eleven Indian businesses have made a commitment to switch their fleets to EVs and/or install charging for staff and/or customers by 2030.

The CDP is one of the pioneers in tracking and encouraging climate and environmental disclosures. It is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. In 2021, 88 Indian companies disclosed information across three themes of the CDP – Climate Change, Water Security

and Forests. This was a 28% increase in disclosures compared to 2020. In addition, 179 Indian companies responded through CDP's Supply Chain programme to their corporate buyers ensuring more transparency and accountability in operations[7].

The TCFD was established by the Financial Stability Board (FSB) to develop recommendations for more effective climate-related disclosures that could promote more informed investment, credit, and insurance underwriting decisions. TCFD's 2021 status report recognised 2,616 organisations, including financial institutions, as Supporters of the TCFD recommendations. 54 Indian entities currently support the TCFD recommendations, and the number is expected to grow.

The Indian Government is also promoting private sector engagement in climate action. The Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India, developed an India CEO Forum on Climate Change, in November 2020, to "forge long-standing and sustainable partnership between the Government and private sector". Twenty-four industry leaders committed to this Declaration of Private Sector on Climate Change endorsed by MoEFCC[8].

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Voluntary Carbon Markets (VCM)

Carbon offset projects reduce GHG emissions or remove GHG from the atmosphere. The VCM allows carbon emitters to offset their unavoidable emissions by purchasing carbon credits from such carbon offset projects. Companies can participate in the VCM either individually or as part of an industry-wide scheme. Voluntary carbon credits are significantly more fluid, unrestrained by boundaries set by nation-states or political unions. They also have the potential to be accessed by every sector of the economy instead of a limited number of industries[9].

The end of 2020 marks a fundamental change in the global governance of GHG emissions through carbon markets, with the shift from the Kyoto Protocol era to that of the Paris Agreement. This also has implications for the future role and the feasible models of the VCM. Currently, the VCM is relatively small with a demand of around 95 million tonnes of CO2e per year, representing 0.2% of the global GHG emissions. As businesses are taking a leadership role in adopting net-zero commitments along with the Parties to the Paris Agreement, the demand and support for decarbonisation through VCM is expected to increase significantly in this decade.

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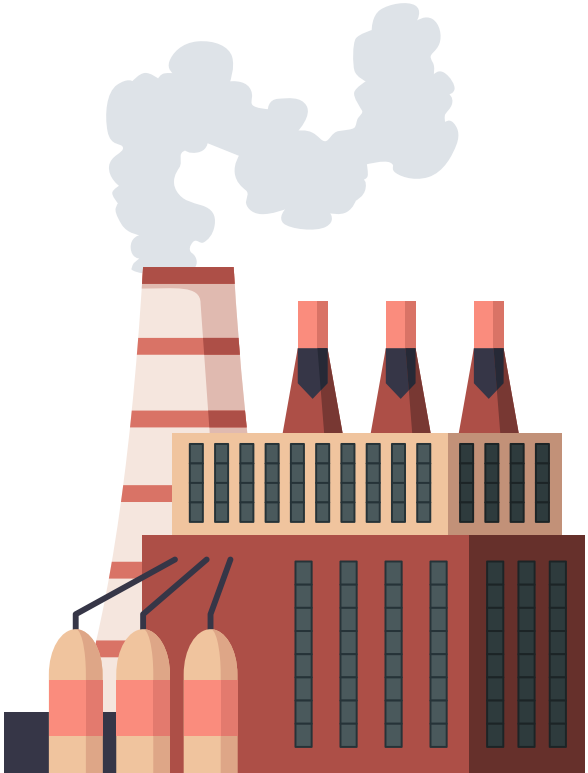

Most demand for carbon credits on the voluntary market comes from the private sector, particularly multinational companies that have "net-zero" and "carbon neutral" corporate climate commitments. The broader uptick in climate change awareness, appreciation of the urgency of the climate challenge and the responsibility for action beyond just national governments seem to have played a strong role in enhancing recent engagement in the VCM. The total value of transactions in the VCM hit $1 billion in 2021 for the first time in its history, according to the Ecosystem Marketplace.

In India, the VCM participation as a buyer is still relatively low, given that only leading companies have committed to achieving net zero-emission. However, Indian entities like renewable energy companies, start-ups, Micro, Small and Medium-sized Enterprises (MSMEs), and non-profit organisations working on forest restorations, improved cookstove and sustainable agriculture are leading the way as carbon offset sellers in the VCM. India currently has the largest portfolio of VCM projects in the world. Verra VCS and Gold Standard are the most prominent VCM registries for Indian projects and are also part of the National Climate Solutions Alliance. As of 19 January 2022, there

are 921 projects from India under Verra VCS and Gold Standard. Conservative estimates suggest that there is a potential to generate 132.60 million and 17.4 million emission reductions from projects registered under these standards over the next decade[10]. World Economic Forum (WEF) and World Business Council for Sustainable Development (WBCSD) are providing guidance for VCM project development. In addition, several private consultancies have emerged that specialise in carbon market project development.

The VCM potential in India is still underexploited. The challenges for its adoption and scale-up as highlighted by the private sector participants of the two-day consultation organised by CII and GIZ India are as below:

Challenge 1:
Clarity on the future of VCM after the Article 6 rules have been finalised in COP26

Under the Paris Agreement, all countries must formulate climate targets or actions in the form of nationally determined contributions (NDCs). This new context poses important challenges for voluntary offsetting in the future and how voluntary purchasing and retirement of carbon credits fit into this new global framework.

In particular, the new context of the Paris Agreement raised the question of how to avoid double counting of emission reductions. At COP26, double counting issues have been avoided by adopting strong guidelines in a process called corresponding adjustments (CA). The rules state that even VCM credits will be subject to CA if the host country authorises the transfer of these credits overseas as emission reductions. In response, leading VCM registries are contemplating introducing two types of credits: authorised/adjusted credits (eligible to be claimed as emission reductions) and unauthorised/non-adjusted credits, which may be claimed for other sustainable development benefits[11].

The prerogative for authorisation of credits as well as the application of CA to VCM credits lies with the host country. The private sector is eagerly waiting for clarity on how the national government plans to allow VCM to function under this paradigm. There are several ways in which VCM can continue to function. For example[12],:

- companies seeking higher ambition can carry on participating in the VCM, once an accounting mechanism for CA is set up by the VCM registries or by the country.
- given that CA must be applied for credits transferred outside the country and cannot be counted towards our own NDC, the government can decide if specific sectors/measures will contribute towards the NDC, allowing international credit transfers from other sectors/measures through the VCM.
- the Government could consider allowing VCM credits to be traded only within India, removing the need for CA, or VCM credits may be sold overseas without CA, where the buyer claims to have contributed to emission reductions in India or claims sustainable development benefits attached to the credit.

Clarity on the functioning of VCM in India's Article 6 strategy will enable a clear path for private sector investments into VCM projects that cut emissions on a big scale.

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COP26 has also given a clear direction to the transition from Clean Development Mechanism (CDM) to Article 6.4 mechanism. It allows for the transfer of certified emission reductions (CERs), a type of carbon credit issued by the CDM, to Article 6.4 mechanism provided they originated from projects registered after 2013. Conservative estimates suggest that 97.94 million CERs will be eligible to be traded as pre-2020 emission reductions[13]. Further, existing projects may transfer from CDM to Article 6.4 mechanism contingent on meeting the criteria set by the UN Supervisory Body, send in a request to UNFCCC for transfer by 2023 and get the host country's approval by 2025. Registered and active CDM projects have the potential to generate 33.83 million CERs between 2021 and 2030; a potential revenue of USD 8.1 million if the prices remain constant[14]. The private sector is awaiting clarity on the process for the transfer of projects from CDM to Article 6.4 mechanism.

Challenge 2:
Environmental Integrity

To facilitate global decarbonisation there is a need for a large, transparent, verifiable, and robust voluntary market developed by both current and future market actors to ensure that this market can cater to the needs of its participants without compromising the integrity of decarbonisation. It is fundamental that offsetting is done through high-integrity carbon avoidance/reduction and carbon dioxide removal/sequestration projects such that their compensation leads to genuine carbon emissions reductions and environmental benefits.[15] Another issue is minimising carbon leakage (the shifting of production or investment to areas outside the cap resulting in an increase in global emissions) or compensatory increase in other greenhouse gases not covered by the programme are also important to ensuring environmental credibility and thus the value of reductions from the market.[16] Currently, while there is a lot of focus on environmental integrity, ensuring that the same is achieved on the ground is of concern for both sellers and buyers in the Indian private sector.

Challenge 3:
Lack of best practice guidance

Even though India boasts of the largest portfolio of VCM projects (combining projects from all of popular VCM standards by number of projects registered), the space is still dispersed enough to make knowledge sharing challenging. In particular, guidance on how to access carbon markets, how to develop carbon offset projects, identifying and reaching out to relevant actors like project developers, intermediaries, and buyers is keenly sought from all private sector actors. Due to the Indian Government's thrust to boost green MSMEs and green start-ups, many such enterprises have cropped up across the country. These actors are keen to tap VCM, especially if carbon credit revenue makes business sense for their endeavour.

Internal Carbon Pricing

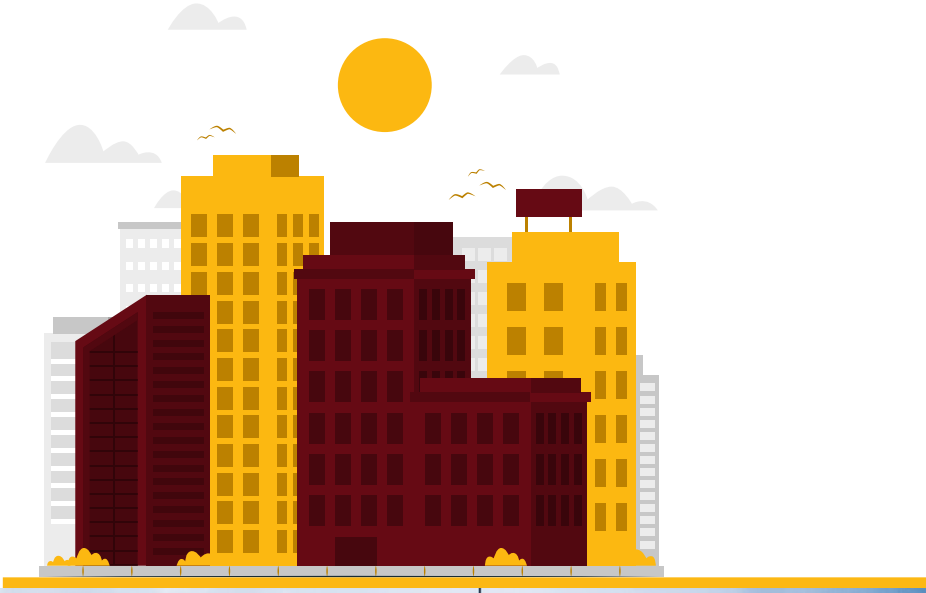
An ICP is a value that businesses voluntarily set on their GHG emissions, to internalise the economic cost of GHG emissions[17]. Increasingly, companies across sectors and geographies are using an ICP as one of the tools to reduce carbon emissions from business operations, mitigate climate-related business risks, and identify opportunities in the transition to a low-carbon economy. ICP is generally found in the following forms,

- Internal carbon fee: a monetary value on each tonne of carbon emissions is charged to business subsidiaries or units. Proceeds from the fee create a dedicated revenue stream to fund the business's emissions reduction efforts.

- Shadow price: a theoretical price on carbon that is added into investment decisions to help support long-term business planning and investment strategies. This helps a business prioritise low-carbon investments and prepare for future regulation that would impact their bottom line directly if their operations were carbon-intensive.

- Implicit price: based on how much a business spends to reduce greenhouse gas emissions and/or the cost of complying with government regulations. For some businesses, an implicit carbon price can set a benchmark before formally launching an internal carbon pricing programme.[18] The implicit price may then be used as a shadow price, or to calculate the financial implication of a low-carbon transition for budgetary considerations.

A CDP survey reports that globally, nearly half of the world's 500 biggest companies by market capitalisation are putting a price on carbon or planning to do so in the near future.



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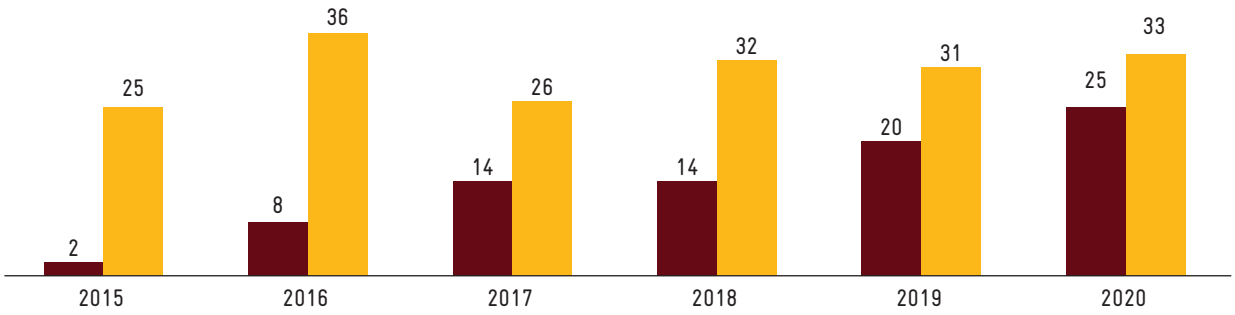

Figure 1: ICP trend in India from 2015 to 2020

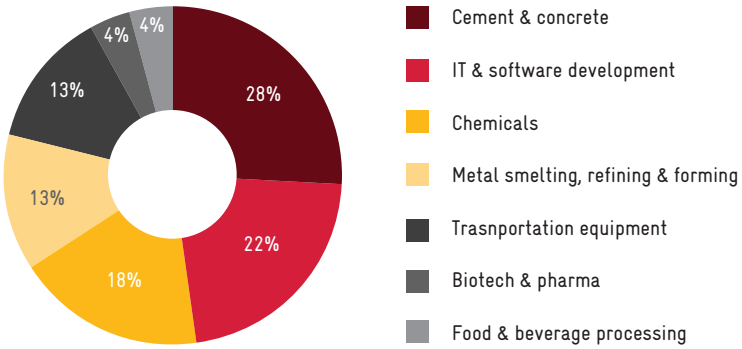

Figure 2: Types of businesses in India that have adopted ICP

In India, the number of businesses using ICP has grown between 2015 and 2020 from 2 to 25.

A CDP survey reports that globally, nearly half of the world's 500 biggest companies by market capitalisation are putting a price on carbon or planning to do so in the near future.[19] In India, the number of businesses using ICP has grown between 2015 and 2020 from two to 25. Another 33 businesses in India have indicated the will to implement ICP by 2022 (refer to Figure 1). A sectoral analysis of the data finds that one-in-two companies in India that have declared an ICP are from the cement & concrete or IT & software development sector (refer to Figure 2).[20]

An ICP provides an incentive or added reason to reallocate resources toward low-carbon over high-carbon activities. Applying a carbon cost to investment decisions supports a better return on investment, thus creating a clear business case. While the type of carbon price and implementation method might vary across stakeholders; factors that dominate the business case for carbon pricing are that:

1. a robust carbon pricing system plays an important role in driving GHG reductions,
2. carbon pricing will complement climate policies for sustained and successful emission reduction,
3. carbon prices help to make informed decisions and incentivise low-cost abatement options,
4. ICP will be a useful preparatory tool for future government climate policies, and
5. investors are increasingly demanding comprehensive climate disclosure, including the financial risks of climate change[21].

Three-out-of-four businesses in India are either using shadow price (52%) or implicit price (26%) (refer to Figure 3). This is in line with the trend of companies from the cement and IT sectors committing to the SBTi and moving towards aligning emissions in line with 1.5-degree. In this context, an ICP can be used effectively as a tool to mitigate climate risks and build internal capacity and measure progress. The ICP value declared by businesses in India ranges from INR 315/tCO2 to INR 7,786/tCO2[22].

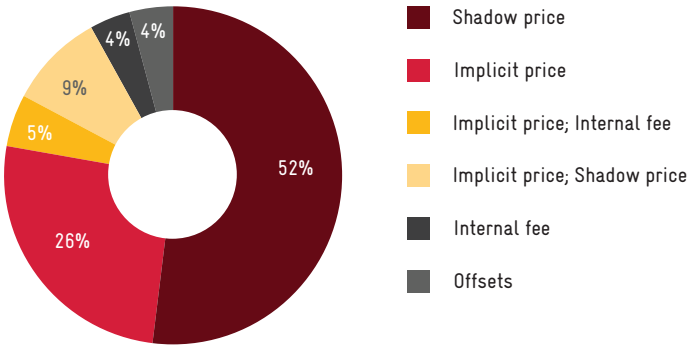

Figure 3: Types of ICP used by Indian companies

The consultation with Indian private sector participants highlighted the following challenges in adopting ICP:

Challenge 1:
How to 'narrow down' the methodology for deciding an ICP?

It is observed that the method and purpose to adopt internal carbon prices are organisation specific, i.e., there is a large variance in ICP's price level and application for businesses operating in the same industry. Many businesses have expressed a lack of clarity on what is the precise process for deciding on an ICP. Businesses need to consider several factors such as readiness to implement carbon pricing, the impact of carbon price when mandatory regulation is implemented and designing ICP to create a positive feedback loop and drives increased ambition, among others.

Challenge 2:
Robust policy and regulatory direction

India does not have an explicit carbon price, however, an implicit price on carbon is present through policies such as the Perform, Achieve, and Trade (PAT) Scheme[23], the Renewable Purchase Obligations (RPOs)[24], fuel taxes and coal cess. A clear policy direction from the Government of India, especially post the commitments at COP26, will provide clear investment certainty for businesses over longer periods of time and drive the adoption of ICP.


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Challenge 3:
Lack of understanding on ICP among stakeholders

Implementation of voluntary mechanisms such as ICP requires a cross-cutting understanding across several stakeholders and departments, both internal and external to organisations. Further, after deciding on an ICP, capacity-building is required for stakeholders to understand how to use an ICP to make business/investment decisions. Capacities to communicate the need and relevance of ICP for business operations is lacking. Further, participants highlighted that there is no clear strategy to communicate the concept of ICP with internal departments like finance, procurement, business development, as well as top management in order to get a buy-in from the organisation. ICP initiatives currently active in the country have been driven by a top-down approach which has made communication and adoption relatively easy. However, not all organisations have top management that is proactively pursuing climate action. In organisations where top management needs to be educated on the concept of ICP, the lack of capacities and communication strategy is a major bottleneck in ICP adoption and implementation.

Conclusion and Way Forward

Climate change is real and considering India's vulnerability there is an urgent need to accelerate climate action by all actors. At the COP26, India has given strong and ambitious mid-term and long-term commitments which will drive climate action in the country. Indian businesses are eager to support India in achieving these commitments. This is evident by the fact that 24 industry leaders committed to the Indian Government's Declaration of Private Sector on Climate Change endorsed by MoEFCC. Private players are also recognising the risk of climate change on their businesses and are looking to voluntarily drive the low-carbon transition. However, they also require support to drive this transition. Based on the two-day consultation with the private sector players and the documented challenges, the following actions are recommended to accelerate climate action in the Indian private sector through VCA, particularly using VCM and ICP:

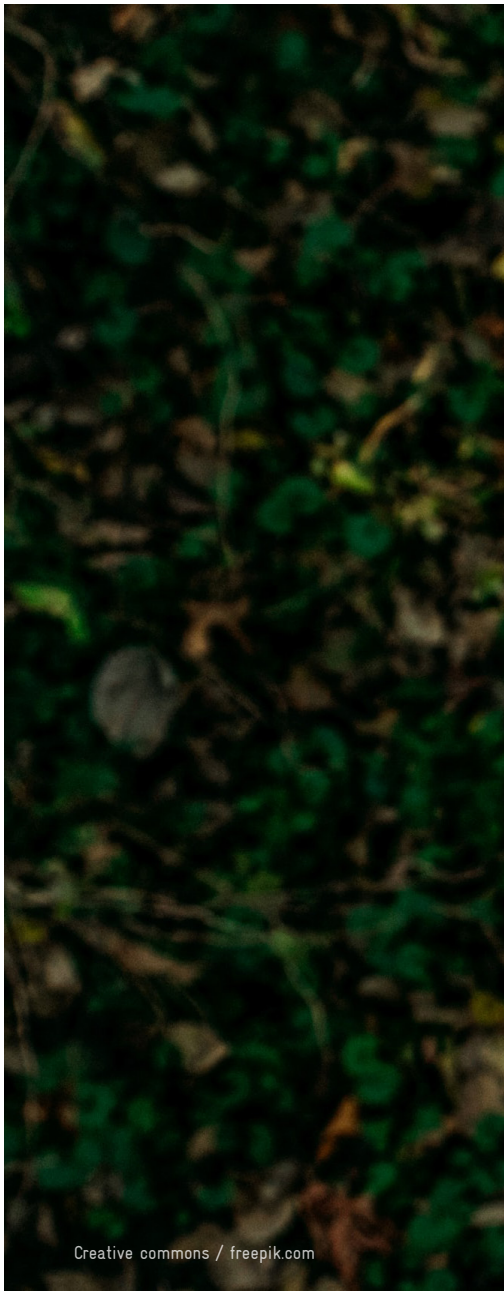
- VCM will play an important role in financing the funding gap for research and development for low-carbon technologies and the scale-up of nature-based solutions for climate change risk mitigation and adaptation. With this consideration in mind, developing a regulatory framework for future market-based mechanisms will enable much better participation from Indian businesses, and also accelerate the low-carbon transition.

- The private sector is eagerly waiting for clarity on the role of VCM and voluntary carbon credits in India's Article 6 strategy. Clarity on this issue is further essential given that India, under the Bureau of Energy Efficiency (BEE), is considering developing a National Carbon Market that is likely to subsume existing market mechanisms like PAT scheme and Renewable Energy Certificates (REC). Engagement of the private sector in the development of this National Carbon Market as well as the national strategy on the operationalisation of Article 6 will ensure that the concerns and suggestions of the Indian private sector are adequately addressed.

- Capacities to develop ICP within organisations need to be enhanced. This may be achieved through dedicated training workshops, facilitating engagement of interested organisations with expert agencies or other organisations that developed ICP previously. Facilitating peer learning will especially be key in the greater adoption of ICP.

- The organisations that participated in the consultation highlighted the need to understand how to communicate ICP with stakeholders, particularly internal stakeholders in different departments like finance, business development, etc. Therefore, it is recommended that dedicated consultations be held with organisations that successfully adopted ICP within their organisation and compile best practices on a communication strategy that may be used for internal communication on the concept and use-case for ICP.

- While case studies and primers on ICP adoption in India and the world exist[25], a detailed compendium on how different ICP approaches were developed and



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adopted by leading Indian private sector players is absent in the literature today. Such a compendium, highlighting the entire journey of the organisation in the adoption of ICP will be of great value to others interested in the VCA tool.

- Different industrial sectors, especially hard-to-abate sectors, are in the process of developing sectoral road maps for climate action along with a financial mechanism for climate transition. VCA tools like target setting, disclosures, participation in VCM, and adoption of ICP can help achieve such transitions. Sectoral knowledge sharing on the use of VCA tools and their role in the low-carbon transition of the sector will add value to this roadmap development process.

- Developing pathways for India's mid-term targets for 2030 and long-term target of net zero by 2070 in consultation with businesses and stakeholders will enable their participation in achieving these commitments.

Addressing these recommendations is expected to increase private sector participation in India's climate journey through greater VCA.

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Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

A2/18, Safdarjung Enclave
New Delhi, 110029, India

T: + 91 11 49495353
E: info@giz.de
W: www.giz.de/India

Confederation of Indian Industry

The Mantosh Sondhi Centre
23, Institutional Area, Lodi Road,
New Delhi - 110 003 (India)
T: 011- 40028879
I: www.cii.in