

PIONEERING GOOD GROWTH IN INDIA

Five years of Vikaasa
and beyond



Vikaasa
WITH **xynteo**

“ सह नाववतु। सह नौ भुनक्तु। सह वीर्यं करवावहै।
तेजस्वनिावधीतमस्तु। मा वद्विषावहै॥ ”

May we work together, with great energy,
May our strength be united,
May our knowledge shine forth,
May we never hate one another.

Taittiriya Upanishad

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ABOUT THIS BOOK

THE CALL FOR GOOD GROWTH – growth that is inclusive, resilient, and works with nature and not against it – swells with ever more urgency and insistence.

For India, the race towards progress and prosperity must strike the balance between three needs – economic growth, environmental regeneration, and human development. While the country has boldly committed to the Sustainable Development Goals set by the United Nations, the path is fraught with hurdles, and achieving them will require dedicated effort from all sections of society.

Business, we believe, has a special responsibility, and indeed, a special ability, to make meaningful, positive impacts to address complex environmental and social issues. And so was born Vikaasa – a coalition of progressive global and Indian organisations working together to tackle the most intractable systemic challenges.

This book shares the innovatory partnerships, unorthodox solutions, and inclusive new business models that have emerged from Vikaasa's work, and the triumphs and learnings from our journey thus far. Spanning critical sectors including construction, cold chain logistics, sustainable mining, healthcare, and waste management, our proof points are anchored in systems thinking, collaboration, and progressive leadership.

As we head towards a climate-positive, socially inclusive and economically equitable India, envisioned as *Amrit Kaal* for all its citizens, we invite you to join us, through these pages, in celebrating Vikaasa's journey in channelling the power of collaboration.



ABOUT VIKAASA

Vikaasa is a coalition of purpose-driven, forward-leaning organisations, collaborating to accelerate India’s progress on the UN Sustainable Development Goals by designing, incubating and piloting new growth models, enabling scale and creating material impact.

The coalition was launched in March 2017, by then President of India, Late Shri Pranab Mukherjee. The name Vikaasa (*progress*) embodies the true spirit of progress for India.

“ This coalition (Vikaasa) is a welcome response and the need of the hour. ”

Shri PRANAB MUKHERJEE
13th President of India



Our coalition partners over the years include



FOREWORDS



India stands poised at a watershed moment in its evolution. A globally recognised talent base, technology prowess, vast natural resources, and economic stability together offer a rich opportunity to push the frontiers of global sustainable development. It is time to design innovative policies and new-age solutions that embrace diversity and inclusivity.

We need a new kind of leadership to achieve new growth in India and turn the country into a landscape of opportunities. For us at Vikaasa, India's G20 theme of 'One Earth, One Family, One Future' resonates perfectly with our mission of developing new growth models, enabling scale and empowering people. Collaborations hold the potential to address complex threats and challenges residing in the larger ecosystem and create opportunities for people, communities, societies, and the nation to prosper in sustainable ways.

As a partnership of businesses, committed to the sustainable development of India and its people, Vikaasa has seen an eventful and rewarding five-year journey charted through challenging times. I am particularly happy of the sustainable impact Vikaasa is demonstrating on ground - be it driving behaviour change amongst the children, our changemakers of the future, for responsible behaviour towards waste, or revitalising a traditional art by creating livelihood opportunities within mining communities.

I look forward to driving further our mission of promoting people and planet positive development.

Warm personal regards,

RAJASHREE BIRLA

Chairperson, Aditya Birla Centre for
Community Initiatives and Rural Development

Chairperson, Vikaasa Advisory Board, India

“

Success, I believe, happens when good people, with good intentions, work together for the greater good. This is my vision of, and for, Vikaasa.”

The vision of India in the future fills me with optimism and pride. With young and vibrant talent, robust resources, sound governance, deep democratic values and a diverse yet unified populace, India is poised to become one of the leading economies in the world. It is upon us to make this India's century by ensuring that we harness this great potential to address some of the most pressing needs of our people and our planet. We have the opportunity, the exigency, and the human capital to craft a new path for inclusive, sustainable growth.

This heady mix makes it an exciting time for India. As a proud Indian, it is heartening to witness our nation step up and steer the world towards planet and people positive growth. India's ascendency to the G20 presidency provides a rich window of opportunity to create global confluence.

Landscape partnerships with a collaborative approach and systemic thinking have the potential to create islands of excellence, generate innovative ideas and accelerate good growth. Vikaasa's results from its five-year journey thus far are proof of this. I see our mission to offer our support to the national endeavour to achieve the greater good, for many, unfolding and coming to life.

I applaud Vikaasa coalition's team for their hard work, dedication and relentless focus as they continue to develop innovative solutions for some of India's most complex challenges.

We invite you to retrace with us our exciting journey through this book.

Best wishes to you all.

SANJIV MEHTA

CEO and Managing Director
Hindustan Unilever Limited

Chair, Vikaasa Executive Committee



“

As India's growth story of becoming a global powerhouse begins to unfold, it presents us with an incredible opportunity to make this growth good, one that is inclusive and equitable for our planet, climate, and the communities.”





GROWING FORWARD, TOGETHER

Greetings from Vikaasa!

I am delighted to present this book, *Pioneering Good Growth in India: Five Years of Vikaasa and Beyond*, which chronicles our genesis and evolution, our accomplishments thus far, and our aspirations for the future. This seems a good moment in our journey to commemorate our excitement, our success, and our conviction in the power of collaboration.

I am incredibly grateful to the Executive Committee, Advisory Board and Catalysts of Vikaasa for their continued guidance and leadership, in supporting us to build compelling interventions across our priority areas that are making significant contributions to our nation's ambitions.

In this book, we share Vikaasa's learnings on the power of collaboration to develop new growth models that are sustainable, future-fit and capable of delivering transformative impact. We do so by sharing stories of impact across each of our chosen focus tracks - Waste to Value, Sustainable Mining, Healthcare and Energise.

The stories captured here are only a snapshot; the new kind of leadership emerging from this purpose-driven coalition of forward-leaning organisations has resulted in over 50 projects in these impact areas. The courage and commitment of our Vikaasa partners is slowly but steadily leading to systemic changes needed for a future India.

The promising start of the Vikaasa story instills us with confidence that we will match our ambitions and harness more opportunities in the pursuit of good growth.

With warm wishes,

VIPUL KUMAR

Director – Vikaasa
Senior Partner, Xynteo



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COLLABORATING FOR GOOD GROWTH



“
I can do things you cannot,
you can do things I cannot.
Together, we can do
something wonderful.”
MOTHER TERESA



COLLABORATION: THE FORCE MULTIPLIER OF IMPACT

Business as usual is no longer an option.

Traditional wisdom says that developing solutions in silos gives businesses an edge to stay ahead. But for any organisation wanting to tackle the largest issues facing the world today, collaboration is indeed the competitive advantage. The collective creativity that emerges from the confluence of diverse thinkers and perspectives is what makes collaboration so potent.

Collaboration is inherently dynamic, experimental, and inclusive. This is why it is so critical for triggering changes in the systems we share with others, and for delivering value not only to partners, but also to customers and communities. For successful systemic change we require all kinds of stakeholders, from

scientists to activists, businesspeople to artists, policymakers and consumers to work together to find unconventional solutions.

In the prevailing global landscape fraught with complex, interwoven challenges, collaboration can generate creative solutions that are greater than the sum of each actor's individual efforts. It can ignite new combinations of knowledge, resources and technologies that break the boundaries of industry, government, and civil society.

When collaboration is done right, each organisation involved can become more innovative, chart new growth paths, and create wealth that is more widespread and more sustainable. This is the conviction that has led each of our partners to join the Vikaasa coalition.



“
Collaboration is, paradoxically, the ultimate competitive advantage to address the mega global challenges of environment and inequity. It is encouraging to see Vikaasa paving the way for future-fit collaborations to tackle systemic challenges.”

HARRY BREKELMANS
Projects & Technology Director, Shell

WHY INDIA? WHY NOW?



“
The respect that India has earned on the world stage has resulted in new opportunities as well as new responsibilities.”

Smt DROUPADI MURMU

President of India
Republic Day Speech, 2023



“
Sustainable development of one-sixth of humanity will be of great consequence to the world and our beautiful planet. It will be a world of fewer challenges and greater hope; and, more confident of its success.”

Shri NARENDRA MODI

Prime Minister of India
UN Sustainable Development Summit, 2015

‘ LEAVE NO ONE BEHIND ’

The principle of universality stresses that true human development, in all its dimensions, must include all people, everywhere, and should have the participation of everyone, especially the most vulnerable and marginalised.

Vikaasa’s member organisations believe that businesses have a pivotal role to play in overcoming the huge challenges facing India and the world – not just in driving innovation, but in guaranteeing that the benefits of progress are shared broadly. To deliver lasting change, companies need to think differently about growth, and create new models that benefit the many, work with nature, and create long-term prosperity. United in this common aspiration with our coalition partners, we help organisations create and apply innovative business models needed for a better future.



PARTNERS AND IMPACT TRACKS

The Vikaasa coalition is powered by Xynteo, and members have included Hindalco, Baker Hughes, Cyient, Hindustan Unilever Limited, Shell India, State Bank of India, Tata Trusts, Technip Energies and WPP.

Vikaasa focuses on four thematic areas, or Impact Tracks:



Energise

Led by Shell and Technip Energies, the Energise track focuses on spurring business-led, large-scale, systemic change to accelerate the adoption of more sustainable energy sources and energy-efficient solutions, all in support of the country's energy transition.



Healthcare

Led by Cyient, projects within this track work to democratise access to healthcare technologies, leveraging the power of partnerships to ensure high-quality healthcare solutions reach people across India.



Waste to Value

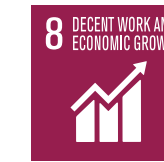
Led by Hindustan Unilever, Waste to Value aims to transform the way Indian businesses think about packaging waste by establishing sustainable end-to-end waste management models with a strong focus on circularity.



Sustainable Mining

Led by Hindalco, this track seeks to develop a future-fit business model for the mining sector that supports both social and environmental imperatives while also meeting resource demands for India's continued growth.

7 United Nations Sustainable Development Goals



3 Ambitions



1
Enable clean energy and waste management solutions



2
Accelerate innovative business models for the SDGs



3
Promote human potential development

3 Goals

Develop 10 innovative and scalable opportunities across:

- 500,000 tonnes of alternate fuels produced to replace traditional fuels.
- 5 million tonnes GHG emissions reduced.
- 2 million tonnes plastic waste diverted from landfills.

Enable commercialisation of 30 sustainable technologies by:

- Incubating or accelerating over 100 technologies.
- Supporting 30 partnerships for catalytic impact, ecosystem building, and scaling.

Reach 100 million people via:

- Increasing awareness about responsible waste management, health and hygiene, and livelihood opportunities for 90 million people.
- Access to affordable healthcare solutions for 10 million people.
- New job creation and employment resilience for 500,000 people.



As an organization, we continually strive to build our future through sustainable and ethical business practices. Our partnership with Vikaasa is focused on a collaborative approach to build a greener, smarter, and stronger tomorrow.

SATISH PAI
Managing Director, Hindalco



Vikaasa has brought together likeminded partners across India's healthcare ecosystem who are enabling the delivery of affordable, technology-driven healthcare solutions that have the potential to create large-scale impact.

NJ JOSEPH
Chief Strategy Officer, Cyient



Collaborations are critical to innovate new systems across the energy transition domains, and technology will be at the core when addressing the human-nature conflict at scale.

BHASKAR PATEL
Senior Vice President Sustainable Fuels
Chemicals & Circularity, Technip Energies



Sustainability and community engagement has been a core focus for us. In partnership with Vikaasa, we envision to lead in more collaborative and socially responsible ways of doing business.

ASKARAN AGARWALA
Head, Birla Group Trusts and Special Community Project
Aditya Birla Group



I think it is a great idea that the best companies in India are using their talent, knowledge, and resources to address some of the social challenges in the country.

SURESH PRABHU
Former Union Minister, Government of India



When you work with community and you get solutions by listening, the solutions which come up are very different. They not only solve the problem, they make you proud.

CHETNA SINHA
Founder of Mann Deshi Bank



Public Private Partnerships (PPPs) are not a new concept. Unfortunately, the last P - Partnership - is almost always missing. Forging true partnerships will make an immense difference.

NASSER MUNJEE
Chairperson, Aga Khan Rural Support Programme (India)



When organisations consciously invest in collaborations such as Vikaasa, an equitable, future-fit model of growth can be achieved.

CVL SRINIVAS
Country Manganer, WPP India



IMPACT STORIES



“

Vikaasa is a unique experiment, yielding transformative outcomes across the critical sectors of energy, waste, health and livelihoods. Deep commitments from the leadership of the partner organisations and their willingness to think beyond have been the driving force behind it.”

JONAH GRUNSELL

Managing Partner, Xynteo



ISLANDS OF EXCELLENCE

Exemplars of Systems Change



Waste No More takes a community-driven approach to financially sustainable plastic circularity

India generates 9.5 million tonnes of plastic waste annually, of which 40%¹ is left unattended, causing land, air, and water pollution. Many types of plastics that end up in landfills or waterways can be recycled and given a second life, but for this to happen a number of systemic, infrastructural, and technological barriers must first be addressed. These include challenges with dry waste segregation at source, which lead to both low quantity and low quality of dry waste; lack of a robust collection infrastructure; and a shortage of flexible financing models to develop enterprises that can cater to last mile waste collection, processing, and recycling.

Our 'Waste No More' Programme, designed in collaboration with Hindustan Unilever and SBI Foundation, and aligned to support the Government's Swachh Bharat Mission Urban 2.0, takes a systems approach to plastic circularity. The collaborative model focuses on building 'Islands of Excellence' at the zonal (ward) level by strengthening the waste management infrastructure, integrating the informal sector, educating and empowering communities and children, and informing policy to improve the broader ecosystem.

The first Islands of Excellence pilot started in partnership with Dalmia Polypro in March 2020 at a municipal ward in the heart of Mumbai with the establishment of a material recovery facility to collect and sort incoming dry waste. We forged connections with the informal waste picker sector to create a unified supply chain, and our awareness campaigns on responsible waste management helped galvanise community members to play their part. To date, the project has diverted 2,100 metric tonnes (MT) of dry waste and 1,100 MT of plastic waste from landfills and waterways; and helped integrate more than 100 *safai saathis* (rag pickers) into the formal sector.

The Waste No More model is seeing organic replication across Maharashtra, with keen interest and invitation from municipal authorities for a public-private partnership to overcome one of the biggest challenges faced by our cities. Our Waste No More Islands of Excellence have been replicated in other wards in Mumbai as well as in Aurangabad. These Islands of Excellence together hold the potential to responsibly manage 10,000 MT of dry waste and 6,000 MT of plastics waste annually. This upscaling will create hygienic and sustainable livelihood opportunities for over 500 *safai saathis* and educate and empower one million people.

Our ultimate objective is to divert 2 million tonnes of plastics waste from landfills and waterways and to increase awareness of responsible waste management, health, and hygiene for 90 million people.

“

The Waste No More project is an innovative, decentralised, first-of-its-kind, collaborative sustainable business model approach that tackles challenges at all levels of waste management. The unique co-investment model is self-sustaining and financially viable.

LALIT MOHAN

President & COO, SBI Foundation

Waste No More started as a pilot in a ward in Mumbai and has over the years has become a playbook for communities and governments in handling dry waste effectively and move towards plastics circularity.”

PRASHANTH VENKATESH

Marketing Director, Brand Unilever & Sustainability, Unilever

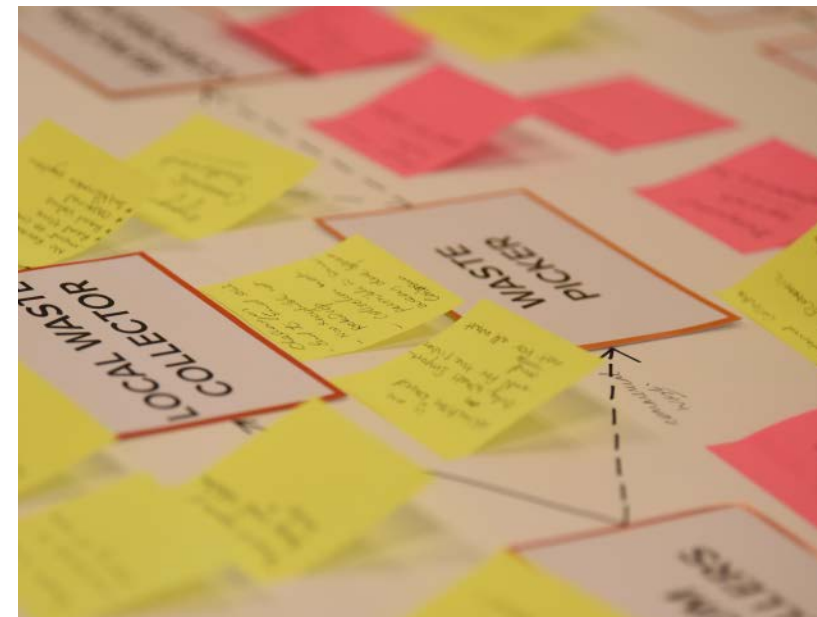


“

Earlier the money in my pocket depended on the kind of day I was having. But now I have a stable income and get paid fairly for my hard work. My family is well fed, and their health is no longer a concern.”

ASHA SABLE

Safai Saathi, Waste No More



ENGAGING YOUNG CHANGEMAKERS TO RETHINK WASTE



An interactive curriculum spurring behaviour change in children, to spark responsible waste management community-wide

For any systemic change to last, establishing new frameworks or improving infrastructure is not enough. It is also essential to raise awareness, foster new behaviour, and instil new mindsets. In the case of waste management, a robust collecting and sorting infrastructure can only be effective with meaningful buy-in from the community it serves.

To empower children as changemakers in their communities, our teams from Vikaasa and Hindustan Unilever, working with educators and behaviour change experts, have developed an interactive curriculum for responsible waste management.

The Waste No More programme includes in-class activities and easy-to-learn games that encourage children and their families to become responsible consumers. The programme employs an interactive curriculum infused with behavioural change nudges to educate children, and thus communities, on the importance of waste segregation, disposal, and recycling. The curriculum has been applied in immersion programmes in public schools across Nashik, Kolhapur and Mumbai, engaging over 80,000 students and 1,500 teachers to date.

Early evaluations in the schools have demonstrated an increase in conversations about waste management and a greater affinity for taking action – not only amongst children, but also amongst teachers and family members.

Ongoing partnerships with the Governments of Haryana and Rajasthan SCERT (State Council of Educational Research and Training) to expand the Waste No More programme underscore the pilot programme's resounding success. WNM is currently accessible on NCERT's PM e-Vidya channels and will soon be accessible via NCERT textbooks nationwide.

The vision of this scalable model is to advance the mission of Swachh Bharat by making giant strides in managing plastic waste at a community level. Through this programme, we hope to raise a generation of informed consumers who will make conscious, sustainable choices and transform societal mindsets about waste and accountability.

“

We believe in tackling the issue of waste management across the value chain through the principle of reduce, reuse, recycle and recover. We see children as powerful drivers of behavioural change at home and in the communities.”

PRASAD PRADHAN

Head Corporate Communications, Hindustan Unilever

PROGRAMME IMPACT

222,000+ views

on DIKSHA app, rolled out across schools under the Government of Maharashtra

19 Lakh+ views

of tele series broadcast on DD National Channels in Bihar, Kerala, Maharashtra and Tamil Nadu

100,000+ views

on Waste No More YouTube channel

27 Lakh+

people reached online through our podcast series and social media



Join the adventures of Plasto and his friends!



“

While the students are learning, we are seeing that the teachers are also taking an active interest in waste management. It has started a conversation in homes and promoted actions in schools. Schools are taking their dustbins and other waste infrastructure more seriously.”

Smt SUNITA JADHAV

Education Officer, Kolhapur



Banana (केळ)



TOWARDS RESILIENT AND RESPONSIBLE MINING



The Sustainable Mining Charter is an effort to develop a holistic framework to hasten the shift from compliance-focused to sustainability-focused mining operations

Critical to the economic and social development of India, the mining sector represents around 2.4% of the country's GDP and provides direct and indirect employment opportunities to over million people². But with the sector's robust growth has also come increased scrutiny of mining's impact on the environment and local communities. As India's metals and mining sector plays an increasingly prominent role in driving the nation's economic growth, a balance between growth and its long-term implications must be achieved.

Hindalco, a metals powerhouse, joined hands with Vikaasa to explore possible ways to achieve a joint vision: to create a resilient, responsible, and reliable future for mining in India.

We developed the Sustainable Mining Charter (SMC), to foster a future-ready mining industry. Producing the Charter involved an in-depth participatory process that included secondary research and reviews, expert consultations, and collaborative workshops to create new ideas and validate existing approaches with stakeholders from a range of disciplines.

The framework that emerged from this process is based on the fundamental principles of environmental stewardship, social performance, leadership, and strong governance mechanisms, covering seven thematic areas (see graphic).

Since the Charter's launch in 2021, we have conducted training and orientation workshops to help over 250 teams absorb and operationalise the guidelines. We have also trained 32 SMC Champions to implement these guidelines within individual Hindalco mine sites, enabling each of the mines to embark on its own sustainability journey by establishing a baseline, setting sustainability goals, and identifying initial interventions.

Hindalco is currently implementing the SMC at all its mines across the states of Jharkhand, Chhattisgarh, and Odisha. The guidelines go well beyond statutory requirements and can serve as a model for any extractive mining company across the world. We expect these efforts to transform the Indian extractive mining industry and for the SMC to emerge as a force for good growth, creating value for businesses, the environment and communities.



“ The Sustainable Mining Charter outlines the aspirational end-state for seven thematic areas and aims to act as the North Star for teams, while also challenging them to innovate. The Charter provides actionable frameworks across the mining lifecycle to guide actions, identify challenges and propose risk mitigation strategies.

R K GUPTA
Head of Mines and Minerals, Hindalco

For us at Hindalco, growth ties in with sustainability. Through our Sustainable Mining Charter, we are trying to transform mining to become a force for adding value to our business, the environment and the communities we work with. ”

DEBASHIS GHOSH
Adviser to MD, Hindalco

REVITALISING A TRADITIONAL ARTFORM

A project to rejuvenate Kosa silk is creating sustainable livelihoods for the local artisan communities in Raigarh, a mining region in Chhattisgarh state

Producing Kosa silk is a remarkably painstaking process, with a typical Kosa saree taking anywhere from 5 to 25 days to weave- an exclusive 'handloom' in its true sense. The Kosa cluster in Raigarh has the distinction of being one of the few in India that encompasses the entire value chain – from extracting the silk to reeling and weaving. However, constraints across the value chain, such as inadequate market linkages, inability to realise fair prices and unstable income of the artisans, have pushed the community to seek alternative means of livelihood.

This project stemmed from Vikaasa partner Hindalco's objective to support the local communities where it operates. Hindalco established the social enterprise 'Kosala Livelihood and Social Foundation' through Vikaasa in January 2021, along with a first-of-its-kind training centre at Gare Palma coal mines in Chhattisgarh, India. The enterprise initiated a series of interventions to strengthen the entire Kosa silk value chain – training and capacity building, establishing footholds in new and premium markets, strengthening infrastructure, and developing the ecosystem.



We collaborated with design and fashion experts to work with weavers to create contemporary designs that did not compromise on traditional weaving techniques, culminating in the launch of the brand Kosala – comprising handwoven merchandise made from authentic Kosa silk.

Since 2021, multiple collections launched under the Kosala brand have earned total revenues upwards of USD 120,000 (INR 10.0 million). In 2021 alone, 110 beneficiaries earned an income of USD 13,000 (INR 1.06 million) from the project. The initiative has a five-year target to scale to 1,500 artisans, with a focus on tribal Indians and women, and to double weavers' incomes.

“

As we all work towards positioning Kosala as a premium, sustainable and ethical fashion brand in domestic and global markets, what's even more heartening is to see the supple silk, a fading heritage, now getting a new lease of life. ”

ANOMA BASU

Head of Sustainable Mining, Hindalco





“

Kosala has helped us with reeling-related training, which, in turn, helped me generate additional income for the family without impacting my day-to-day work.

GAYATRI DEVI

Artisan, Chhattisgarh

Our traditional artforms and skills that have been passed down from generations deserve to be celebrated and recognised. Kosala, through its work, has been able to keep the legacy of our forefathers alive.”

SANTOSH DEWANGAN

Artisan, Chhattisgarh



Kosala at a glance
@kosala_official

FAST-TRACKING INDIGENOUS INNOVATIONS IN HEALTHCARE



Project Tej is expediting time-to-market for life-saving healthcare innovations by connecting tech start-ups with a dynamic network of testbeds

The WHO estimates that India imports over 75%³ of its medical devices. Unfortunately, technologies developed in the US and Europe may be less suitable for the Indian market for a variety of reasons, whether behavioural, infrastructural, commercial, or clinical. Indigenous healthcare start-ups developing cutting-edge technologies can help achieve more with less, but they require robust validation and testing in clinical and real-world settings. Doing so can prove complex, time-consuming, and expensive.

To tackle these challenges, Vikaasa, Cyient and Research and Innovation Circle of Hyderabad (RICH) partnered with the Government of Telangana to launch Project Tej in 2020, with the blessing of Shri K T Rama Rao, Minister for IT & Industry, Government of Telangana. Three critical components of the project include clinical validation, industry mentorship, and market access for innovative healthcare technologies. Project Tej brings together key partners from across the healthcare innovation ecosystem to accelerate these processes.

Coordinating with 13 hospitals in Karnataka, Tamil Nadu, and Telangana, Project Tej is building an organised network of credible testbeds. By fostering linkages with these hospitals for clinical validation and real-world evidence generation, start-ups have been

able to test their technologies in a variety of settings. Examples include real-time triaging in ambulances, usability of cardiac screening devices in a chain of urban primary health centres, and tele-monitoring of high-risk pregnancies.

Going forward, we intend to continue expanding to establish India's largest network of test beds. The vision is to have 4-6 clusters running in and around Delhi NCR, Mumbai and Pune, Bengaluru, Chennai, and Hyderabad, with each cluster having at least five testbeds.

“ Project Tej team has helped CareMother and other startups like ours find strategic partners for pilots, research, and sales. What makes them unique is that they beyond making connections and ensure the partnerships are actioned.”

SHANTANU PATHAK
Co-Founder, CareNX

“ Project Tej is helping companies with access to real-world clinical settings to test and commercialise their technologies. We hope this creates an encouraging environment for local start-ups to bring their products to the market.”

DR B V R MOHAN REDDY
Founder and Executive Chairman, Cyient





DECARBONISING COLD CHAIN 'REEFERS'



Piloting thermal energy technology for refrigerated trucks to lower emissions and reduce waste in India

Cold chain logistics is a critical lynchpin that connects producers and consumers of perishable goods and temperature-sensitive products. In India, insufficient cold storage and transport solutions result in 35-40% of agricultural produce going to waste annually and a food loss related footprint of ~65 million tonnes⁴ of CO₂ equivalent. India's cold chain logistics rely on fossil fuels, which make the existing reefer (refrigeration) vehicle options carbon intensive.

During our Energise New Ideas Lab in 2019, a select group of senior business leaders from our partner organisations came together with innovators, sector experts and policymakers to explore potential solutions in the refrigeration value chain. As an output to this Lab, Shell and Xynteo jointly agreed to explore the possibility of decarbonising the cold supply chain that also reduces wastage and urban air-pollution, while generating business value from last mile delivery and logistics of the cold chain ecosystem.

Our team set out to evaluate solutions with consideration to market opportunity, technology readiness, and climate impact by adopting a phased approach to understand the full value chain. We narrowed the scope further to explore the use of Phase Change Materials (PCM) in cold chain logistics (reefers). PCM, a thermal energy storage technology, can replace diesel used for refrigeration in reefers, and is ideal for last mile delivery in short haul trucks 8-14 feet in size. When combined with electro-mobility, this has further potential to deliver the energy transition goal for the cold chain ecosystem.

A business case was developed to pilot the technology via a partnership between Shell and Pluss Advanced Technologies, a materials company with a wide range of PCM solutions for cooling and heating. The pilot evaluated a range of integrated solutions including telematics to monitor the performance of PCM and fuel consumption, and a smart energy meter to evaluate energy use associated with PCM usage in reefers.

“ Shell supports energy transition and decarbonisation across sectors with innovative solutions. Collaborations with industry partners in Vikasaa, a business-led coalition powered by Xynteo, has created an opportunity to decarbonise cold chain infrastructure. ”

NITIN PRASAD
Chairman
Shell Group of Companies in India

Under Vikasaa, diverse players across the value chain came together - from fleet operators to large FMCG companies to small bakeries. Powered by the encouraging breakthrough in adoption of the new technology, the pilot has showcased positive results for commercial savings and decarbonisation potential from use of the PCM technology.

Based on six months' (October 2021-March 2022) monitoring and data analysis of the PCM trucks in comparison with conventional diesel based reefers, the pilot demonstrated the following impact:

11-24%	Net operational cost savings for 8 hours of operation, compared to diesel
13-15%	Potential CO ₂ emission reduction for 8 hours of operation, by replacing diesel with PCM charged with grid electricity
8-10 hrs	Performance of PCM for refrigeration backup

The pilot results have given confidence and credibility to the technology and its application. A roadmap to scale and commercialise PCM solutions has provided the basis for a long-term partnership between Shell and Pluss Advanced Technologies. As this project and partnership go forward, we will continue exploring viable solutions across the full cold chain ecosystem to reduce waste and carbon footprint in India.

“ Lack of cold chain infrastructure in India and developing countries is a cause of concern, and the existing infrastructure being unsustainable is a bigger one. Adopting PCM technology can solve both these challenges. ”

SAMIT JAIN
Managing Director
Pluss Advanced Technologies



AT THE FRONTIER OF THE ENERGY TRANSITION



Accelerating the journey towards Net Zero through transformative partnerships and integrated approaches

India, on the path to Net Zero by 2070, has set ambitious targets to reach 500GW of renewable energy generation and meet 50 per cent of its energy requirements through renewable energy by 2030. The India Green Hydrogen Mission is also paving the path for a minimum of 5 million tons of green hydrogen by 2030. Further, the India Carbon Capture Utilisation and Storage (CCUS) roadmap has identified pathways for decarbonisation of hard to abate sectors including India's large potential for storage of carbon di-oxide within different geological formations across the country.

As we stand today, growth in India cannot be disassociated with the use of coal, perhaps not until about 2040. To responsibly balance growth and meet demand while powering the energy transition and meeting decarbonisation targets, we need to:

- Increase use of low-carbon and zero-carbon energy and feedstock
- Reduce emissions at source and increase capture of emissions
- Improve waste circularity

With Technip Energies and other key stakeholders in the ecosystem, we have explored R&D and industrial opportunities for net-zero pathways including polymer circularity and sustainable chemistry, CCUS and green hydrogen.

Our work in Plastic Pyrolysis has included stakeholders across FMCG companies, waste generators and innovative technology companies. Through a partnership with Unilever and Technip Energies we have supported in evaluation of various chemical recycling and plastic pyrolysis technologies and helped Unilever in identifying techno-commercially viable solutions that can fast-track their plastic circularity agenda.

Our focus on CCUS aims to accelerate the emission reduction pathways across hard-to-abate sectors such as oil and gas, iron and steel, cement and power, and identify feasible applications for the captured CO₂. Engagements with major mining and oil and gas conglomerates in India are exploring business cases for CO₂ utilisation, highlighting the need for capital and incentives to catalyse adoption of CCUS technologies.



Technology and innovation should be at the epicentre of low-carbon growth, and jointly with the Vikaasa coalition we are excited to accelerate cutting-edge innovations and bring our global expertise to support India's national clean energy and decarbonisation ambitions.

ARNAUD PIETON

CEO, Technip Energies

Over the last three years, our teams have also worked to accelerate the green hydrogen ecosystem, which has the potential to be a game changer and a pre-requisite for the energy transition and decarbonisation targets set globally and in India. However, challenges such as technology maturity, cost economics, and proven business models are hindering mass adoption of green hydrogen. A partnership with a leading Indian renewable energy player was signed with Technip Energies to assess the engineering and techno-commercial inputs needed to set up viable green hydrogen projects including downstream units in India.

Working with SED Fund, Technip Energies and other partners, Vikaasa will be launching Energy Leap, a clean energy technology accelerator focusing on innovation and commercialisation of solutions across the end-to-end clean hydrogen value-chain. Energy Leap will strive to uncover new technology solutions, scale cost-efficient clean hydrogen production and consumption, and support high-potential hydrogen start-ups to mature and scale.

With Technip Energies, we embarked on a challenging yet an important goal to support industries' transition towards decarbonisation and net-zero commitments and will continue to support a sustainable planet positive growth.



For an impactful stride in decarbonising India's energy sector, it is imperative to have the collective might of leadership and organisational commitments supported by technology and innovation. Vikaasa is enabling organisations to think beyond traditional ethos and act collaboratively for the larger good.

DAVENDRA KUMAR

Managing Director, Technip Energies, India

Our journey over the last five years has only emphasised the importance of collaboration between stakeholders, sectors and geographies, with a strong intent to accelerate "action". We are very optimistic about the positive and scalable change we can bring in the clean energy ecosystem.

AMAN TANDON

Corporate Strategy & Market Analysis, Technip Energies



Build Ahead

WITH **xynteo**



A business-led coalition to accelerate adoption of low-carbon building materials and support India in achieving its net-zero targets

India is the world's second largest cement producer, and its cement sector is also one of the most energy-efficient globally⁵. This is largely due to a strong commitment of industry players to improve energy efficiency measures and utilise new processes and materials, including the use of by-products from other sectors such as fly ash and slag. However, these measures alone will not be enough to meet India's climate targets, given the national pledge to reduce carbon intensity by 45% by 2030⁶.

As India accelerates its race to net zero emissions, the country's construction industry will need to step up efforts towards emission reduction across the value chain. A robust decarbonisation strategy for the built environment will depend on collective and collaborative action.

In response to this cross-sectoral need, we launched the Build Ahead coalition in August 2022 in partnership with Godrej Construction, JLL, JSW Cement, Lodha, SED Fund and Shell India. This multi-stakeholder coalition is designed to accelerate decarbonisation at every link of the construction value chain. Build Ahead is driving the conscious commitment to decarbonise India's construction industry by engaging its leadership, aligning priorities, generating increased awareness and creating the required impetus to actualise green construction for meaningful climate action.

Build Ahead focuses on four key activities to spur the industry towards net zero:

- Creating opportunities to build and strengthen alliances within and beyond the Indian construction sector to enable increased use of low carbon building materials
- Supporting first movers and de-risking investments in adopting and scaling innovative decarbonisation technologies and low-carbon building materials
- Offering a platform for forward-leaning organisations to work together across the construction value chain
- Developing a shared narrative around the Indian cement and construction sectors' continued interests in decarbonisation by showcasing the impact of collaborative action

“

At Godrej Construction, we are keen to learn from the global best sustainability practices adopted by leading organisations and share our knowledge as part of the Build Ahead coalition. The coalition will help us accelerate our industry's journey towards net zero built environments.

ANUP MATHEW

Senior Vice President & Business Head, Godrej Construction

In JSW Cement's effort to accelerate our progress on the decarbonisation journey, we are excited to join Xynteo's Build Ahead coalition and work with other business leaders who also share the goal of a carbon-neutral future.

PARTH JINDAL

Managing Director, JSW Cement

The abatement of embodied carbon needs a coordinated effort by the key stakeholders in the ecosystem. Build Ahead is a valuable step in that direction, and it resonates with our ongoing decarbonisation efforts.

AUN ABDULLAH

ESG Lead, Lodha

Build Ahead will create a platform for systemic collaboration and action geared towards accelerating the adoption of low carbon building materials, and to scale existing efforts of decarbonising industrial sectors.”

VIKAS MEHTA

Executive Director, SED Fund



A step towards controlling their carbon footprint

Major construction and cement players have joined hands with Xynteo for its Build Ahead Coalition to accelerate India's decarbonisation efforts

Xynteo, a purpose-driven advisory firm, has launched the Build Ahead Coalition, a business-led alliance bringing together key industry majors – JLL, Godrej Construction, Lodha, JSW Cement, SED Fund and Shell India. Build Ahead aims to bring together multiple stakeholders from the construction value chain in India. Partners include producers, consumers, financiers and technology providers who can accelerate the use of low-carbon building materials to support India in achieving its net-zero targets by 2070. Commenting on the announcement, Sandeep Sethi, MD, Work Dynamics West Asia, JLL, said: "We are extremely proud to be a part of Build Ahead to help support the transition towards India achieving a low-carbon future. With the coalition, through collaboration with other partners, we will be able to significantly reduce the built environment's carbon footprint and support the Prime Minister's pledge of net-zero emissions for India by 2070." The coalition will pursue three key goals: 1. Enhance the adoption of low-carbon building materials through increased awareness, defining application-based standards and developing common definitions of low-carbon materials. 2. Improving access to new decarbonisation technologies and finance needed to enable manufacturers of building materials to reduce emissions from the production of these building materials. 3. Advocating policies to support increased procurement and production of low carbon building materials. Vipul Kumar, MD, Xynteo India, said: "Today, the world faces an unprecedented climate crisis, necessitating urgent action to limit global warming compared to pre-industrial levels. The cement and concrete sectors are critical parts of the construction value chain and contribute significantly to the built environment's carbon footprint. Through Build Ahead, we aim to accelerate decarbonisation across the construction value chain towards net-zero emissions and encourage collaboration between industry players to create measurable impact and support the country toward its climate change goals." **Becoming energy efficient** Over recent years, the Indian cement sector has made significant progress in reducing carbon emissions and has become one of the most energy-efficient cement sectors in the world. Yet, the mounting climate change crisis necessitates further efforts to reduce global warming to below two degrees Celsius, including emissions from cement, concrete, steel and other building materials, as well as emissions that arise from the design, use and end-of-life phases of the construction and infrastructure sectors. To achieve net-zero goals, the value chain must commit to adopting low-zero-carbon building materials. Build Ahead endeavours to reduce embodied emissions by accelerating the demand for low-carbon building materials. To achieve this vision, forward-leaning business leaders in the Build Ahead Coalition will work together to support first movers and de-risk investments. This will help scale innovative decarbonisation technologies and low-carbon building materials by facilitating better access to diverse sources of enabling finance. Commenting on the launch, Nitin Prasad, chairman of Shell companies in India, said: "The Build Ahead Coalition aligns with Shell's 'Powering Progress' strategy. As one of the coalition's founding members, we hope to work with and assist partners in exploring low- and zero-carbon technologies. We aim to accelerate the construction value chain towards net-zero emissions by fostering collaboration and thought leadership."



LOOKING AHEAD



“
Winning is not the only
right thing.
Winning it properly is.”

BRETT LEE

Australian former international cricketer,
speaking at Xynteo Exchange 2019



BUILDING ON THE FOUNDATION

The Vikaasa impact stories shared in this book, together with many more collaborative projects, have been conceptualised, incubated, developed and implemented through a multi-step, stage-gate process. In dedicated project teams, Xynteo team members work alongside collaborators from partner companies, called Catalysts, to jointly lead the project cycle from idea facilitation through to fund sourcing, piloting, and identifying scale-up opportunities for wider reach.

Over these past five years, our cross-company teams have learnt many valuable lessons. Seeing each project through to impact is a complex undertaking, involving stakeholders beyond project teams including funders, implementing organisations, government, intermediaries, and technical experts. We have learned through successes and setbacks what effective partnerships require, and we have identified four 'Cs' that are essential for success.

“Project Tej’s journey - which began as idea from one of our All-Partner workshops and has now been successfully implemented with partners across the ecosystem, including industry, government, foundations, startups, and hospitals - is a testimony to the power of partnerships.”

PAVAN SANNUTI

General Manager, Corporate Strategy, Cyient

Our 4 Cs of Collaboration

1. Commitment to collaborate

Working through the complexity of collaboration and making progress towards ambitious goals requires investment of time, imagination, and persistence. This needs to be supported by adequate funding, and by engaging with partners that truly share a common mission and agree on a common strategy for driving impact.

2. Clarity and consistent communication

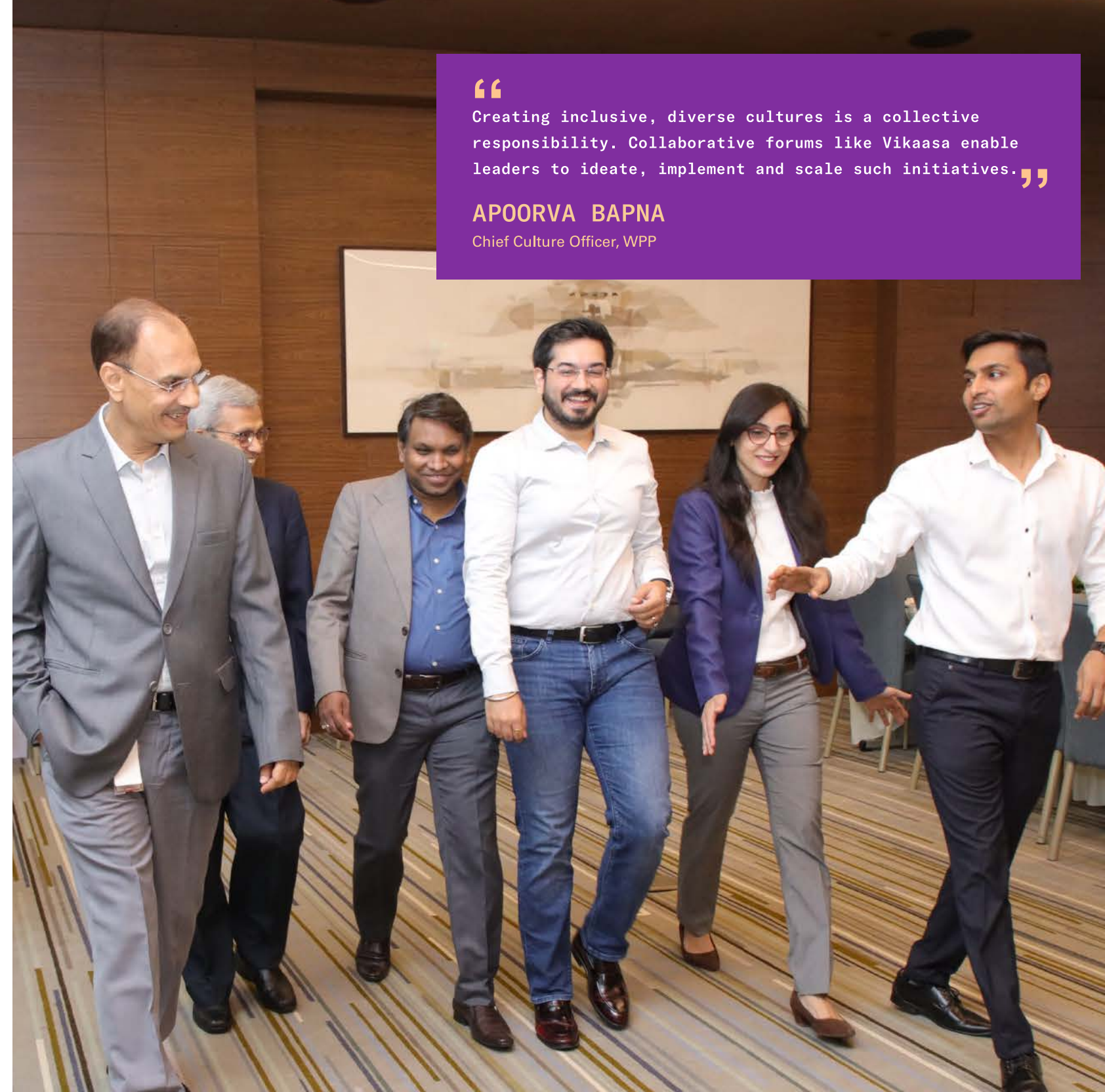
Clarity emerges when there are regular, consistent conversations on roles and responsibilities, and transparency around each other’s progress and challenges. Such open, candid engagement minimises the potential for surprising setbacks and counteracts the tendencies of people and/ or organisations to push their own agendas or retreat into silos.

3. Course correction

As an initiative moves from concept to design to execution, some things will go as planned, and some will not. Continuously tracking progress and results gives every partner early signals on what needs to change, helping us learn, react, and improve.

4. Culture to collaborate

The culture of the participating organisations plays a vital role in making multi-partner projects succeed. Creating that culture starts at the top, with leadership based on accountability and trust. Collaborative leaders engender confidence between team members and set a standard for each partner to follow.



“

Creating inclusive, diverse cultures is a collective responsibility. Collaborative forums like Vikaasa enable leaders to ideate, implement and scale such initiatives.”

APOORVA BAPNA

Chief Culture Officer, WPP

THE NEXT FIVE YEARS

Vikaasa was once a bold idea, and it is now a thriving, pioneering coalition of companies from across industries and geographies.

Our five-year-young journey pursuing good growth for India has been marked by lessons aplenty, but triumphs too. Building stronger foundations with each new learning, our coalition partners are driving change through over 50 projects (of which more than 30 are up and running), steered by a spirited community of more than 60 Vikaasa Catalyts. We have launched several new business models, embedded with systems thinking, to ensure these paradigms are commercially viable, and with compelling proof points across our defined impact areas.

Vikaasa's development pipeline includes ambitious plans to support over 30 partnerships, generate awareness for 90 million people, ensure healthcare for 10 million people and employment for 500,000 people.

We continue to commit ourselves, as responsible and responsive corporate citizens, to helping India find solutions to the societal and environmental problems that are too big, too expensive, and too complex to tackle alone.

Hope and confidence, in equal measure, are the beacons for our continuing mission to support planet-positive, human-centric, good growth.

Three Strategic Goalposts

India and the world are changing, and so must we as leaders and as companies. Looking ahead, we have identified three strategic goalposts to scale impact and cultivate good growth for India, as well as for Vikaasa's partners:

I. Accelerate technology:

Foster an ecosystem to incubate, develop and scale critical technologies, especially to support the transition for hard-to-abate sectors.

II. Unlock funding for impact:

There exists abundant capital for investment, but to access it projects need to obtain:

- Incubation capital for proof of concepts
- Catalytic/risk financing or viability gap funding for scale

III. Build compelling narratives:

Support our other strategy priorities with a narrative that connects them with leading voices and showcases our proof points to galvanise support.



In our endeavour to become the leading Indian business conglomerate - we have the dual responsibility of contributing to India's growth as well as sustainability goals. Our partnership with Vikaasa helps us to do so in collaboration with other stakeholders.

SAMIR AGARWAL

Vice President, Chairman's Office, Aditya Birla Group



As the world attempts to build an energy mix that is net carbon neutral, collaboration is no longer a choice, but an imperative. Coalitions are key to bringing together diverse points of view and expertise to foster action-oriented collaboration.

ALESSANDRO BRESCIANI

Senior Vice President, Climate Technology Solutions, Baker Hughes



By working with key stakeholders in the value chain through Vikaasa, we aim to enable the circular economy and generate benefits for all strata of society.

SANJAY PRAKASH

MD, SBI Foundation



Vikaasa is an inspiration for work in India, Europe and beyond. The collaborative approach is critical to implement the G20 and B20 programs and the energy transition at scale. My hope is to see the power of Vikaasa bringing transformative change in India and around the world.

Dr OSVALD BJELLAND

Founder, Xynteo



The benefits of innovative medical technology breakthroughs can truly be realised by bringing them to those most in need, which is the core objective of the MedTechConnect platform we helped establish through Vikaasa.

KRISHNA BODANAPU

Managing Director & CEO, Cyient



India has immense potential and opportunity to lead the way in creating future-fit, sustainable and equitable growth models. Partnerships like Vikaasa can enable business leaders to develop, test and scale such models.

THORHILD WIDVEY

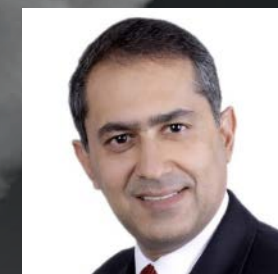
Vice Chairperson of the Board, Xynteo



We are much more accountable towards having a purpose today than in the past, and we have to live those values. Collective action from Vikaasa has resulted in sustainable projects which, at scale, will make a difference for India and beyond.

THIERRY PILENKO

Founder, P6 Technologies



India has the opportunity now to ensure that the next phase of construction follows a low carbon pathway. Through the Build Ahead coalition, we are proud to work with other partners to reduce the carbon footprint of the built environment.

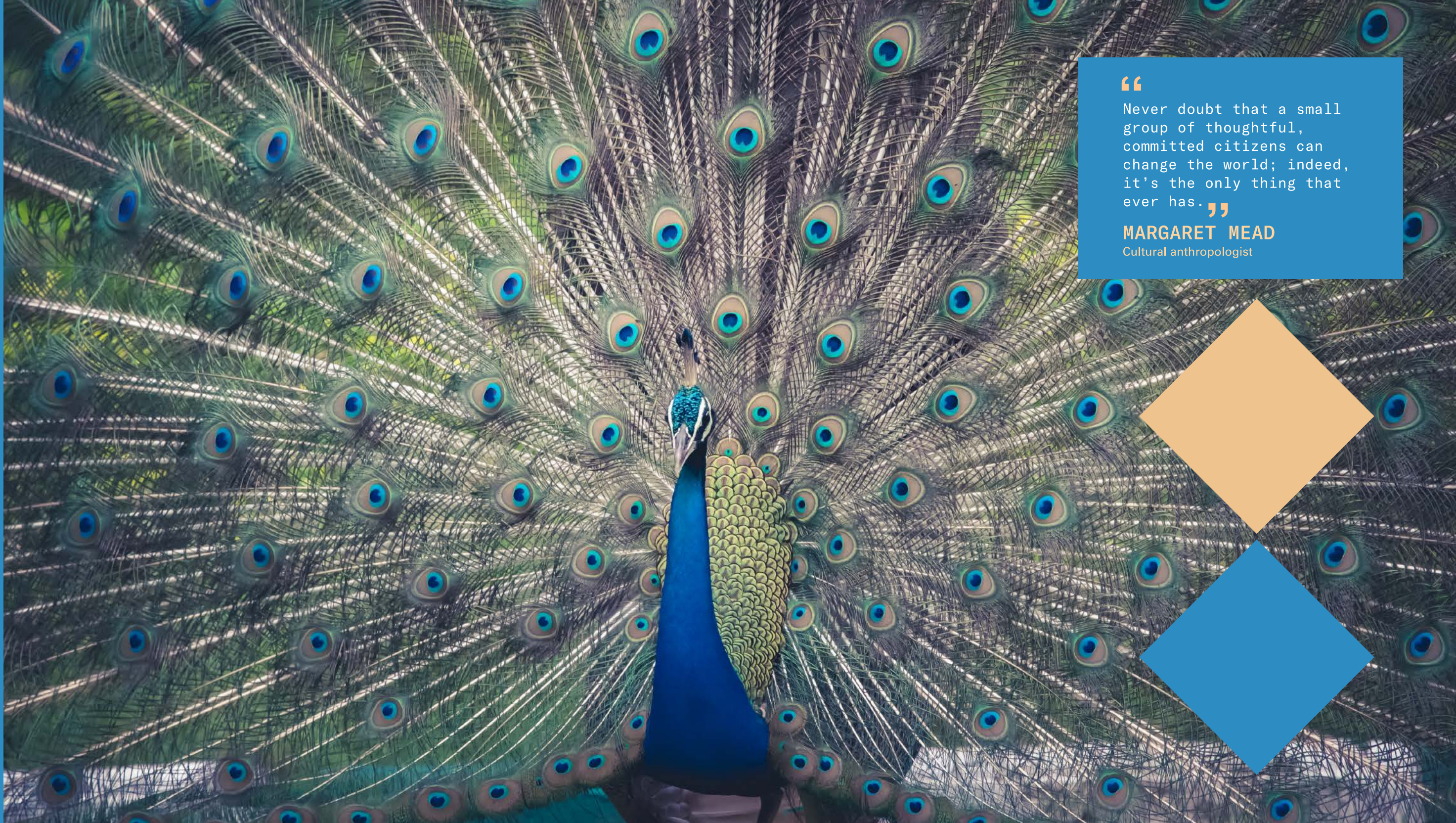
SANDEEP SETHI

Division President, JLL Work Dynamics





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“

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.”

MARGARET MEAD

Cultural anthropologist



OUR SINCERE GRATITUDE TO



ABHISHEK PODURI
Former Head
South Zone Operations
Tata Trusts



ADITYA TRIPATHI
Chief Operating Officer
Cold Love Ice Cream



AJAY MATHUR
Director General
International Solar Alliance



NITIN PRASAD
Chairman
Shell companies in India



NJ JOSEPH
SVP & Chief Strategy Officer
Cyient



OSVALD BJELLAND
Founder
Xynteo



ALESSANDRO BRESCIANI
Climate Technology Solutions
Baker Hughes
Senior Vice President



ANUP MATHEW
Sr. Vice President & Business Head
Godrej Construction



ARNAUD PIETON
CEO
Technip Energies



PARTH JINDAL
Managing Director
JSW Cement



PER HEGGENES
CEO
IKEA Foundation



PRADEEP BANERJEE
Former Executive Director, VP
Supply Chain
Hindustan Unilever



ASHISH BHANDARI
Former Vice President
Baker Hughes



ASKARAN AGARWALA
Head, Birla Group Trusts and
Special Community Project
Aditya Birla Group



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Founder and Chief Operating Officer
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SANJIV MEHTA
CEO & Managing Director
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Executive Director - Supply Chain
& Head of Supply Chain South Asia
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VIKAS MEHTA
Executive Director
SED Fund

OUR IMPACT AND CONTINUED GROWTH WOULD NOT HAVE BEEN POSSIBLE WITHOUT

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ABHIJEET PANDEY	APARNA MANGLA	DEEKSHA GAUTAM	IFFAT SIDDIQUI
ABHISHEK JHA	APOORVA BAPNA	DEEKSHA VATS	JAYESH BARVE
ABHISHEK SEMWAL	APRATIM PARIHAR	DHANRAJ B	JIKUL PUROHIT
ADAM SAVITZ	APURVA MATHUR	DIPESH BHATIA	JIVLEEN KAUR
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AJAY RAVINDRAN	ASHIMA SEHGAL	DIVYANG WAGHELA	KALYAN MANGALAPALLI
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ANINDYA CHOWDHURY	CHETNA SHARMA	GAUTAM DEY	LALIT MOHAN
ANKUR AMOL	CHIEL SEINEN	GEETANJALI VATS	PRAMOD UNDE
ANKUR ANMOL	CHIRAG PAREKH	GIPSY SIDDHANTA	LATIKA TANEJA
ANOMA BASU	DAFYDD ELIS	GIRIDHAR BHAT	LYNETTE TAN
ANSHUL SALIAN	DATTAKIRAN JAGU	GUIDO KUIPER	MADHAVI PUROHIT

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MADHURIMA DAS	PRASUN PANDEY	SANJAY HARLALKA	SUBRATA BASU
MANISH MARATHE	PRATHAMESH EKAWDE	SANJAY PRAKASH	SUMBUL MASHHADI
MANJULA KALYANASUNDARAM	PRAVEEN PALAKHEEZIL	SANYA CHAWLA	SUMEET SONI
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OSHIN KATULKAR	RHEA SUVARNA	SHRUTI ANGIRAS	VIPUL JAIN
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PRAJAK CHAKRABORTY	SAI SIDDHARTH	SONAL MISHRA	ZAIN HAK
PRASAD PRADHAN	SAMRIDDH DASGUPTA	SRIDHAR K V	ZAINAB KAKAL
PRASHANT KOHLI	SANDEEP KOTHAWADE	SRIRAM VARMA	ZINNIA SHEORAN
PRASHANTH VARANASI		STEVE CHANDLER	

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INDIAN STEEL ASSOCIATION		PRAESIDEO	THE ENERGY AND RESOURCES INSTITUTE(TERI)
INNODI WATER TECHNOLOGIES	MAHARASHTRA STATE COUNCIL OF EDUCATIONAL RESERCH AND TRANING (MSCERT)	PRIMETALS TECHNOLOGY	THE CLIMATE GROUP
INNOVATION AND AYUSHMAN BHARAT	MUNICIPAL CORPORATION OF GREATER MUMBAI (MCGM)	PROMETHEAN ENERGY	THE ROCKEFELLER FOUNDATION
INSTITUTE FOR SUSTAINABLE COMMUNITIES	NAREDCO (NATIONAL REAL ESTATE DEVELOPMENT COUNCIL)	RAP - THE REGULATORY ASSISTANCE PROJECT	THERMAX
INVEST INDIA	NATIONAL HEALTH AUTHORITY (NHA)	REFEX GROUP	TRASHCON
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We believe that business is a force for good when leaders think long term, work with, not against nature, and use their influence and resources for the many, not the few. For us, this is good growth.

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