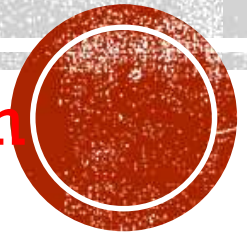


TRANSITION TOWARDS NET ZERO

Mother Earth has been given to us in trust so we can live comfortably and pass it on to our children..



AGENDA

Client Engagement: Assessing Needs and Readiness for Transition to Net Zero.

Understanding client motivations: Regulatory pressures, market demand, cost-saving opportunities

Evaluating clients' challenges for the transition: Hard-to-Abate Sectors & Stranded Assets.

Types of clients (Corporate, SME, Consumer): Their journey towards net zero.

How do net-zero policies impact various sectors like energy, manufacturing, transportation, and finance?

Net Zero journey: How to identify barriers and opportunities in client relationships.

Assessing client readiness and willingness for the transition. Key questions to ask during client meetings.



"We are the first generation to feel the effect of the climate change and the last generation who can do something about it" –

Barack Obama.



**NET ZERO IS THE
WAY FORWARD
FOR PROGRESS**

With every passing day, the banks are emerging as central players to initiate the paradigm shift to NET ZERO.



WHAT IS NET ZERO?

- **Balance of Emissions:** Net zero refers to a state where the amount of greenhouse gases (GHGs) released into the atmosphere is balanced by the amount removed.
- **Reduction First:** Achieving net zero primarily requires significant reductions in GHG emissions from all sectors.
- **Carbon Removal:** Any remaining unavoidable emissions are counteracted by actively removing carbon dioxide (CO₂) from the atmosphere.
- **All GHGs Matter:** While often associated with carbon dioxide, a comprehensive net-zero target includes all greenhouse gases like methane and nitrous oxide.



KEY ASPECTS OF NET ZERO

- **Global Goal:** Net zero by around 2050 is the internationally agreed-upon target to limit global warming to 1.5°C, as the Paris Agreement outlines.
- **Not Zero Emissions:** It's crucial to understand that net zero doesn't mean zero emissions, but rather a balance between emissions and removals.
- **Various Approaches:** Carbon removal can be achieved through natural solutions like reforestation, soil carbon sequestration, and technological solutions like direct air capture.
- **Urgent Action Needed:** Reaching net zero demands rapid and widespread changes in energy production, transportation, industry, and land use



WHAT IS THE TRANSITION TOWARDS NET ZERO?

Understanding the Transition to Net Zero

- **Systemic Change:** The transition towards net zero involves a fundamental shift across all sectors of the economy and society. It's not just about incremental improvements.
- **Decarbonization Focus:** The primary goal is to drastically reduce greenhouse gas emissions, moving away from fossil fuels towards cleaner energy sources and sustainable practices.
- **Phased Approach:** This transition is a multi-stage process with interim targets and timelines to ensure steady progress towards the ultimate net-zero goal.
- **Technological Innovation:** The development and deployment of new technologies, such as renewable energy, energy storage, and carbon capture, are crucial to this transition.



KEY ELEMENTS OF TRANSITION

- **Policy and Regulation:** Strong government policies, incentives, and regulations are essential to drive investment and behavioural changes needed for the transition.
- **Financial Mobilisation:** Significant public and private investment is required to fund clean technologies, infrastructure development, and deployment.
- **Just Transition:** It's vital to ensure a "just transition" that considers the social and economic impacts on workers and communities dependent on high-emitting industries.
- **Global Collaboration:** Achieving a global net-zero future necessitates international cooperation, knowledge sharing, and financial support, particularly for developing nations.



MUTUAL COOPERATION A MUST FOR NET ZERO



Story: Paradise story



WHY IS A TRANSITION NECESSARY?

- **Mitigating Climate Change:** The primary driver is to halt and reverse the dangerous impacts of climate change, such as rising global temperatures, extreme weather events (heatwaves, floods, droughts), and sea-level rise. These changes threaten ecosystems, infrastructure, and human lives.
- **Stabilising the Planet:** Achieving net-zero emissions is the point at which the concentration of greenhouse gases in the atmosphere stabilises, preventing further warming.
- **Protecting Biodiversity:** Climate change is a major driver of biodiversity loss. By transitioning to net zero, we can reduce the pressures on ecosystems and species, helping to prevent extinctions.
- **Reducing Air Pollution:** Burning fossil fuels releases greenhouse gases and harmful air pollutants.

Transitioning to cleaner energy sources dramatically improves air quality, leading to significant public health benefits and reduced healthcare costs.



SOCIO ECONOMIC BENEFITS OF NET ZERO TRANSITION

Ensuring Long-Term Economic Stability: Net-zero pathways lead to new industries, green jobs, and innovation, fostering sustainable economic growth and energy independence.

Enhancing Energy Security: Reliance on fossil fuels can expose nations to volatile global markets and geopolitical risks. Transitioning to domestically available renewable energy sources enhances energy security.

Improving Public Health: Air from fossil fuel use leads to respiratory and cardiovascular illnesses; Net Zero saves lives and reduces the burden on healthcare systems.

Creating a More Equitable Future: Climate change disproportionately affects vulnerable populations.

A just transition to net zero aims to create a fairer society by ensuring that the benefits of the green economy are shared and that no one is left behind in the shift away from high-carbon industries.



BANKS ARE A CRUCIAL VEHICLE OF THE NET-ZERO JOURNEY

- Banks play a crucial and multifaceted role in the transition towards net zero.
- Their involvement spans from financing green initiatives to managing climate-related financial risks.
- Banks are central to achieving net zero by directing financial flows towards sustainable activities and safeguarding against the economic risks of climate change.
- India's banking sector is committed to aligning its lending and investment portfolios with net-zero emissions by 2070



HOW ARE BANKS RELATED TO NET ZERO?

- **Financing Green Projects:** Banks provide crucial capital for deploying clean technologies and sustainable projects. This includes lending to solar, wind, green buildings, and electric vehicles.
- **Developing Green Financial Products:** Banks offer green financial products, such as green bonds, sustainability-linked loans, and mortgages, to incentivise environmentally friendly activities.
- **Supporting Businesses' Transition:** Banks engage with their corporate clients to finance their transition plans towards net zero, which involves funding cleaner technologies.
- **Mobilising Private Capital:** Banks ' marketing of green financial products helps attract investors focused on environmental, social, and governance (ESG) factors.



THE ROLE OF BANKS IN TRANSITION

- **Assessing Physical Risks:** Banks assess and manage the financial risks posed by the physical impacts of climate change, such as floods and storms, which can damage assets and disrupt businesses, leading to loan defaults.
- **Evaluating Transition Risks:** Banks face risks associated with the shift to a low-carbon economy. Assets and businesses reliant on fossil fuels may become stranded or devalued as policies and technologies change, impacting loan portfolios.
- **Integrating Climate Risk into Risk Management:** Banks are developing methodologies to incorporate climate-related risks into risk assessment processes, including stress testing loan portfolios against climate scenarios.
- **Disclosing Climate-Related Financial Information:** Regulatory bodies expect banks to transparently disclose exposure to climate-related risks and their strategies for managing them, often following frameworks like the Task Force on Climate-related Financial Disclosures (TCFD)



NET ZERO: REGULATORY PRESSURE & MARKET DEMAND

- **Regulatory Pressure Intensifies:** Governments are implementing regulations to achieve international climate goals, including carbon taxes and emissions trading schemes. Banks transitioning to net zero mitigate future compliance costs and avoid penalties.
- **Surging Market Demand for Sustainability:** Consumers, investors, and business partners are demanding environmentally friendly products and services and supporting organisations with strong environmental credentials.
- **Embracing net zero** enhances brand reputation, attracts environmentally conscious customers, and improves market access.
- **Investor Scrutiny and ESG Integration:** Investors increasingly integrate ESG factors into investment decisions. Failure to address climate risks leads to divestment and negatively impacts valuation.
- **Supply Chain Requirements:** Large corporations committed to net zero expect their suppliers to reduce their emissions. Organisations that fail to meet these expectations risk losing significant contracts and being excluded from future supply chains.

Adopting net-zero strategies can ensure continued access to key markets and partnerships.



NET ZERO: COST SAVING OPPORTUNITIES

- **Energy Efficiency and Reduced Operating Costs:** Transitioning to net zero involves optimising energy consumption in buildings and processes through efficient technologies. These measures directly translate into lower energy bills and operating costs.
- **Resource Optimisation and Waste Reduction:** A focus on sustainability drives organisations to reduce waste generation and embrace circular economy principles. This leads to cost savings in material procurement and waste management.
- **Innovation and Technological Advancement:** Pursuing net zero spurs innovation in processes, products, and services, leading to cost-effective solutions and long-term competitive advantages.
- **Insurance Benefits:** Organisations lower insurance premiums by proactively reducing their carbon footprint.

A commitment to net zero is a sign of good risk management, which can lead to more favourable insurance terms.



TRANSITION CHALLENGES IN HARD-TO-ABATE SECTORS

Navigating the net-zero transition for customers in hard-to-abate sectors presents unique challenges for banks. These sectors, characterised by high energy intensity and reliance on carbon-intensive processes, require tailored approaches. :

- **High Upfront Costs and Long Payback Periods:** Decarbonization technologies in carbon capture, green hydrogen, and advanced biofuels involve capital expenditure with uncertain or long-term returns. Banks can offer specialised financing solutions with longer tenors and blended finance options.
- **Technological Uncertainty and Maturity:** Many net-zero technologies for hard-to-abate sectors are still in the research, development, or early deployment phases. Banks can fund pilot projects, R&D initiatives, and feasibility studies to help customers de-risk technology adoption and scale-up.
- **Lack of Clear Decarbonization Pathways:** Banks can provide sector-specific knowledge, facilitate peer-to-peer learning, and connect customers with technical experts to develop tailored decarbonisation strategies.



HANDLING HARD-TO-ABATE ASSETS

- **Develop Tailored Financial Products:** Banks should provide bonds, sustainability-linked loans and green project finance for the hard-to-abate sectors.
- **Provide Technical Assistance and Expertise:** Banks can assist clients on emissions measurement, target setting, technology assessment, and developing credible transition plans aligned with net-zero pathways.
- **Facilitate Collaboration and Knowledge Sharing:** Banks can convene industry workshops, forums, and partnerships to foster collaboration among their clients in hard-to-abate sectors.
- **Engage with Policymakers and Advocate for Supportive Policies:** Banks can actively engage with regulatory bodies to advocate for policies that support the net-zero transition in hard-to-abate sectors.

By proactively implementing targeted strategies, banks can become crucial partners in enabling customers in hard-to-abate sectors to navigate the complexities of the net-zero transition and contribute to a sustainable future.



STRANDED ASSETS

Stranded assets have suffered from unanticipated write-downs, devaluations, or conversion to liabilities. This typically occurs because of changes in the external environment that reduce or eliminate the asset's economic viability.

In the context of the net-zero transition, stranded assets are often **carbon-intensive assets** like fossil fuel reserves, coal-fired power plants, inefficient buildings, and vehicles relying on internal combustion engines that risk losing value due to:

- **Policy and Regulation:** Governments are implementing stricter climate policies like carbon taxes, emissions standards, and fossil fuel phase-outs.
- **Technological Advancements:** The decreasing costs of clean technologies like renewable energy, electric vehicles, and energy storage.
- **Market Shifts:** Changing consumer preferences, favouring sustainable options.
- **Physical Climate Impacts:** Damage from extreme weather events makes certain assets unusable or increases operating costs.



MITIGATING CUSTOMER CHALLENGES ON STRANDED ASSETS

- **De-risking and Future-Proofing:** Transitioning away from carbon-intensive assets reduces exposure to future regulatory risks, market shifts, and the potential for sudden devaluation.
- **Unlocking New Revenue Streams:** The net-zero transition creates new markets and demands for sustainable products and services. Customers can generate new revenue streams by pivoting their business models and investing in green technologies.
- **Improving Competitiveness and Attracting Investment:** Organisations committed to net zero are attractive partners, suppliers, and investments. By embracing the transition, customers attract ESG-focused investors and green financing options with favourable terms.
- **Reducing Operating Costs and Enhancing Efficiency:** Implementing net-zero strategies improves energy efficiency, optimises resource use, and adopts circular economy principles. These measures reduce operating costs, making the business profitable in the long run.

For bank customers facing the challenge of stranded assets, **net zero is not just about environmental responsibility, but a strategic pathway to risk mitigation, long-term value creation, and enhanced competitiveness in a rapidly changing world.**

Banks can play a crucial role in supporting this transition through tailored financing, advisory services, and facilitating access to green solutions.



BE YOUR OWN MESSIAH...



JOURNEY OF INDIAN CORPORATE CLIENTS TOWARDS NET ZERO

- Indian corporate clients' journey towards net zero is shaped by the country's unique economic landscape, developmental priorities, and evolving regulatory environment.
- By proactively embracing this transition, Indian companies can contribute to global climate goals and enhance their resilience, competitiveness, and long-term value creation.
- It requires a long-term vision, strategic planning, consistent effort, and collaboration across industries, government, and financial institutions.

The journey towards net zero is a marathon, not a sprint.



KEY STEPS IN THE NET-ZERO JOURNEY FOR INDIAN CORPORATES

- **Baseline Assessment and Target Setting:** The first crucial step is accurately measuring current greenhouse gas emissions (Scope 1, 2, and ideally Scope 3). Based on this, companies should set achievable targets aligned with a 1.5°C pathway.
- **Developing Decarbonization Strategies:** Introduce energy efficiency improvements, transition to renewable energy, adopt cleaner production processes, explore carbon capture technologies and optimise supply chains.
- **Investment in Clean Technologies and Infrastructure:** Decarbonisation strategies require significant capital investment, including green bonds, sustainability-linked loans, and public-private partnerships.
- **Transparency and Reporting:** Robust monitoring and the adoption of globally recognised reporting frameworks, such as CDP and TCFD, will enhance transparency and accountability.



CHALLENGES FOR BANKS

- **Addressing Hard-to-Abate Sectors:** India has significant heavy industries. Decarbonising steel, cement, and chemicals will require focused R&D and technology transfer. Collaboration across the value chain will be crucial.
- **Engaging the Supply Chain (Scope 3 Emissions):** Many corporations' emissions are contained within their supply chains. Therefore, engaging with suppliers to set their reduction targets and promote sustainable sourcing practices will be essential.
- **Building Internal Capacity and Expertise:** The net-zero transition requires new skills and knowledge, so investment in training and building internal capacity in areas like carbon accounting and sustainability strategy is necessary.
- **Leveraging Government Incentives:** Government subsidies and policy initiatives aimed at promoting green technologies and sustainable practices can significantly reduce the transition's financial burden.



ACTUALISING NET ZERO: THE ROLE OF BANKS AND FINANCIAL INSTITUTIONS

- **Providing Green Finance:** Banks are crucial in delivering tailored financial products and services to support corporate net-zero journeys, including green loans, for renewable energy and clean technology projects.
- **Offering Advisory Services:** Banks can provide expertise in sustainability strategy development, carbon accounting, and connecting clients with relevant technology providers.
- **Engaging with Clients on Transition Plans:** It is essential to actively engage with corporate clients to understand their transition plans and offer solutions.
- **Promoting Sustainable Finance Ecosystem:** Banks can contribute to building a robust sustainable finance ecosystem in India by supporting the development of green taxonomies.



JOURNEY OF INDIAN MSME CLIENTS TOWARDS NET ZERO

- **Diverse Landscape & Limited Resources:** India's Micro, Small, and Medium Enterprises (MSME) sector is vast and diverse, ranging from manufacturing to services. Many operate with limited financial and human resources, challenging large-scale sustainability investments.
- **Focus on Growth & Survival:** Many MSMEs' primary focus is on business growth, profitability, and navigating competitive markets. Sustainability initiatives may be perceived as secondary or costly.
- **Informal Sector Dominance:** A significant portion of the MSME sector operates informally, which can pose challenges for data collection, awareness campaigns, and the implementation of standardised sustainability practices.
- **Varying Levels of Awareness & Capacity:** Awareness and technical capacity regarding net-zero concepts and implementation strategies vary widely across the MSME sector. Targeted awareness programs and capacity-building initiatives are crucial.



MSME: NEED TO SPREAD NET-ZERO AWARENESS

- **Awareness and Education:** Conduct outreach programs and workshops for MSMEs to raise awareness about the benefits of net zero.
- **Simplified Reporting Frameworks:** Develop simplified reporting frameworks that are less burdensome for MSMEs while providing valuable data on their progress.
- **Value Chain Engagement:** Encourage larger corporate clients to engage with their MSME suppliers on sustainability initiatives.
- **Partnerships & Ecosystem Building:** Collaborate with government agencies and industry associations to create a supportive ecosystem for MSME net-zero adoption.



FOSTERING GREEN IN RETAIL CLIENTS

- **Raising Awareness & Education:** Banks can empower consumers through educational campaigns highlighting the environmental impact of their purchasing decisions and the benefits of sustainable consumption. This includes information on eco-labels, sustainable products, and the lifecycle impact of goods.
- **Promoting Green Financial Products:** Offer financial incentives and products encouraging sustainable choices, such as green loans for energy-efficient appliances or electric vehicles.
- **Supporting Sustainable Retailers:** Partner with retailers committed to net-zero practices, creating a marketplace that makes it easier for consumers to support sustainable businesses.
- **Facilitating Circular Economy Practices:** Encourage consumers to participate in circular economy initiatives, such as promoting product repair, reuse, and recycling programs.. Banks can also finance repairable goods.



HOW DO NET-ZERO POLICIES AFFECT THE ENERGY SECTOR

- **Shift Towards Renewables:** Net-zero policies mandate a deployment of renewable energy sources (solar, wind, hydro) to decarbonise power generation, leading to significant investments in grid modernisation.
- **Phasing Out Fossil Fuels:** These policies necessitate a gradual phase-out of fossil fuels (coal, oil, natural gas) in electricity generation, heating, transportation, and industrial processes, which will impact investments.
- **Electrification of End-Use Sectors:** Achieving net zero requires electrifying various sectors, such as transportation (EVs), heating (heat pumps), and industry.
- **Emergence of New Energy Vectors:** Net-zero pathways involve deploying new energy carriers, such as green hydrogen and sustainable biofuels, to decarbonize and provide energy storage solutions.



HOW DO NET-ZERO POLICIES AFFECT THE MANUFACTURING SECTOR?

- **Decarbonisation of Production Processes:** Net-zero policies necessitate a shift away from fossil fuels in manufacturing, driving the adoption of renewable energy for on-site power and the electrification of machinery.
- **Embracing Circular Economy Principles:** Policies will incentivise resource efficiency, waste reduction, and the design of products for durability, reuse, and recycling, fostering a transition towards circular manufacturing models.
- **Carbon Border Adjustment Mechanisms (CBAM):** To prevent carbon leakage, policies like CBAM may impose tariffs on carbon-intensive imports
- **Innovation in Materials and Processes:** Use of low-carbon materials, sustainable manufacturing technologies, and carbon capture, utilisation, and storage solutions for industrial applications.



HOW DO NET-ZERO POLICIES AFFECT THE TRANSPORT SECTOR?

- **Electrification of Vehicles:** Net-zero policies promote the adoption of electric vehicles (EVS) across passenger cars, buses, trucks, and two-wheelers through incentives, charging infrastructure development, and potentially phasing out internal combustion engine vehicles.
- **Investment in Public and Active Transport:** Policies fund the expansion of public transportation systems, such as electric rail, metro, and buses and promote active mobility options like cycling and walking through infrastructure development.
- **Sustainable Aviation and Shipping:** Achieving net zero requires significant advancements and adoption of sustainable aviation fuels, green hydrogen-based fuels, and other low-emission technologies for air and maritime transport



HOW DO NET-ZERO POLICIES AFFECT THE BANKING SECTOR?

- **Green Finance Mobilisation:** Net-zero policies create demand for green financing. Banks can offer various sustainable financial products, including green loans, bonds, sustainability-linked loans, and project finance for renewable energy and clean technology projects.
- **New Business Models and Services:** The transition opens up opportunities for banks to offer new advisory services related to sustainability strategy, carbon accounting, circular economy and climate adaptation.
- **Enhanced Reputation and Investor Appeal:** Aligning with net-zero goals enhances a bank's reputation, attracts environmentally and socially conscious investors, and improves their ESG ratings, potentially leading to a lower cost of capital.
- **Risk Management Leadership:** Banks can ensure long-term stability and resilience by proactively assessing and managing climate-related physical and transition risks.



CHALLENGES FOR BANKS

- **Managing Transition Risks:** Net-zero policies lead to declining carbon-intensive industries, creating potential credit risks for banks with significant exposure to these sectors. Banks need to actively manage these transition risks by engaging with clients, assessing their transition plans, and potentially diversifying their portfolios.
- **Developing Climate Expertise and Data Capabilities:** Banks must invest in building internal expertise and robust data capabilities to accurately assess climate risks and opportunities.
- **Navigating Evolving Regulations and Standards:** The regulatory landscape for sustainable finance is rapidly evolving. Banks must stay informed and adapt their risk management frameworks accordingly.
- **Ensuring a Just Transition:** Banks can help ensure a just transition by supporting affected workers and communities as the economy shifts. This may involve financing retraining programs and supporting investments in new, green industries in these regions.



NET ZERO JOURNEY: HOW TO IDENTIFY BARRIERS AND OPPORTUNITIES IN CLIENT RELATIONSHIPS

- **Barrier: Varying Levels of Awareness & Commitment:** Clients will have diverse understandings of net zero and varying levels of commitment.
- **Opportunity:** Education and awareness initiatives can position the bank as a trusted advisor, building stronger relationships and identifying clients ready for early adoption.
- **Barrier: Financial Constraints & ROI Uncertainty:** Implementing net-zero solutions often requires upfront investment with uncertain or long-term returns, especially for SMEs.
- **Opportunity:** Tailored green financing products, demonstrating clear cost savings and long-term value, and exploring blended finance options can overcome financial hurdles and create new lending opportunities.
- **Barrier: Data Gaps & Reporting Challenges:** Clients may lack the data and expertise to measure and report their emissions accurately.
- **Opportunity:** Offering support in carbon accounting, providing simplified reporting frameworks, and connecting clients with relevant tools and expertise can strengthen engagement and identify data-driven financing needs.
- **Barrier: Sector-Specific Hurdles & Technological Uncertainty:** Hard-to-abate sectors face unique technological and economic challenges.
- **Opportunity:** Developing sector-specific expertise, facilitating knowledge sharing, and financing pilot projects for innovative solutions can position the bank as a key partner in their transition..



UNDERSTANDING CLIENT COMMITMENT FOR EFFECTIVE ENGAGEMENT

- **Awareness & Understanding:** Gauge the client's current knowledge of net-zero concepts and assess their understanding of relevant regulations.
- **Strategic Alignment:** Evaluate how sustainability and emissions reduction are integrated into their business strategy and risk management frameworks.
- **Existing Initiatives & Data Maturity:** Identify existing sustainability initiatives, data collection processes for emissions, and reporting mechanisms.
- **Financial Capacity & Investment Appetite:** Assess the client's financial health and ability to invest in net-zero transition technologies.
- **Leadership Commitment & Governance:** Evaluate the level of leadership commitment and the integration of sustainability considerations into corporate governance structures.
- **Engagement:** Gauge the client's openness to engaging with the bank on a net-zero journey, sharing data, and collaborating on developing transition plans and financing solutions.

Relationship manager discussions, sustainability questionnaires, data requests, and engagement with key stakeholders can provide valuable insights into client readiness for appropriate financial solutions.





- Gandhi Ji travelled in the third class in trains during the Independence Struggle.
- During one journey, he saw an old man coughing in the front berth of the train.
- The person was spitting after coughing and soiling the compartment floor.
- Gandhi Ji took the sick man's sputum in his hand and cleaned his hands in the washroom to maintain cleanliness.
- Watching this, the accomplice of the sick man also behaved accordingly to maintain cleanliness.

Father of the Nation, Mahatma Gandhi, is also the Father of ESG in India...

