The Energy and Resources Institute
Creating Innovative Solutions for a Sustainable Future

Industry Charter for Near ZERO Emission by 2050

Institutional Building Blocks for Financing Supply-Chain Decarbonization

TERI Expert Group
on
Financing LT-LEDS
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30th June, 2025.

Call to Action #1

Call to Action #2

Call to Action #4

Call to Action #3

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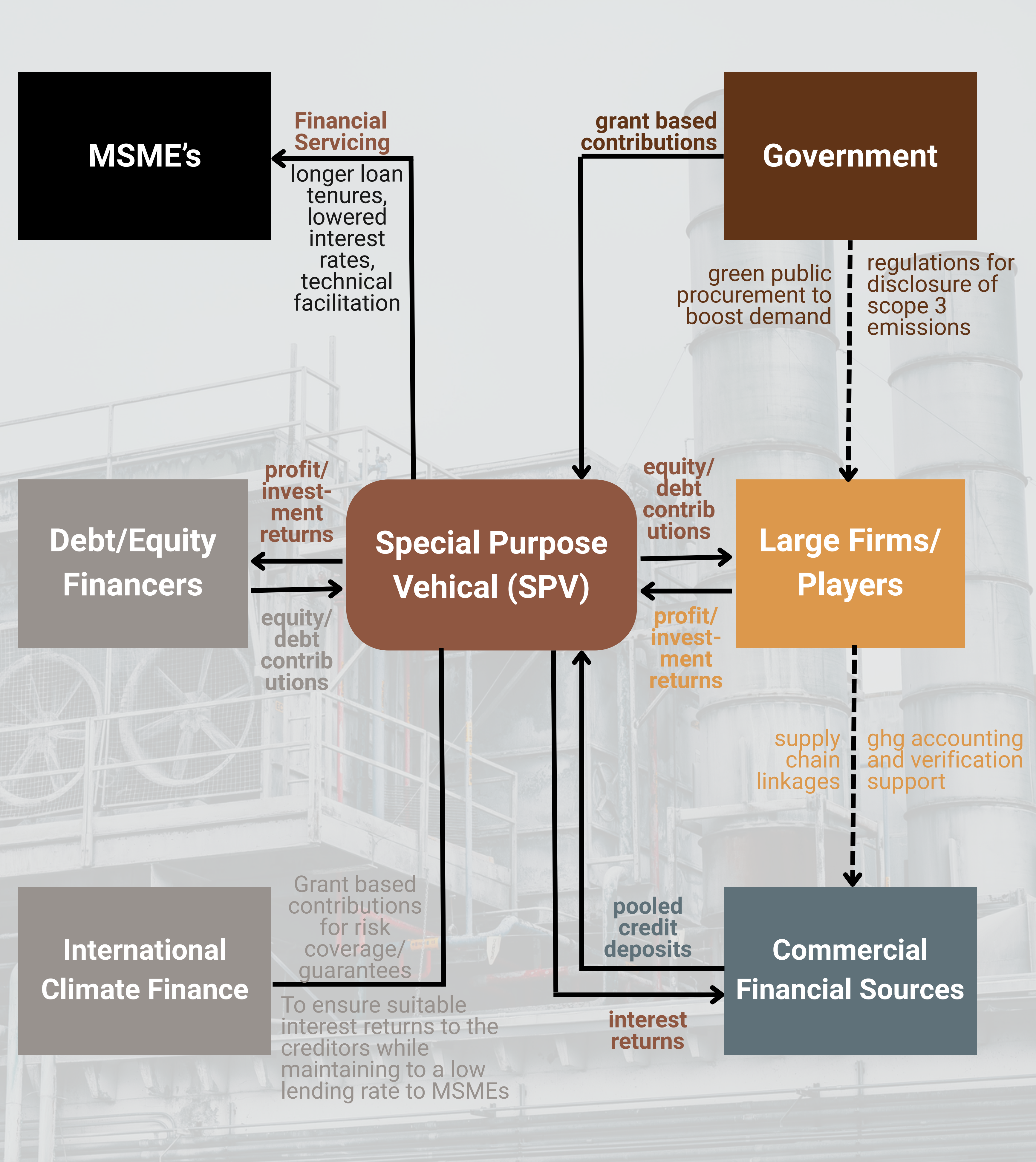
Call to Action #1: Establish a Joint Venture SPV to Finance MSME Greening



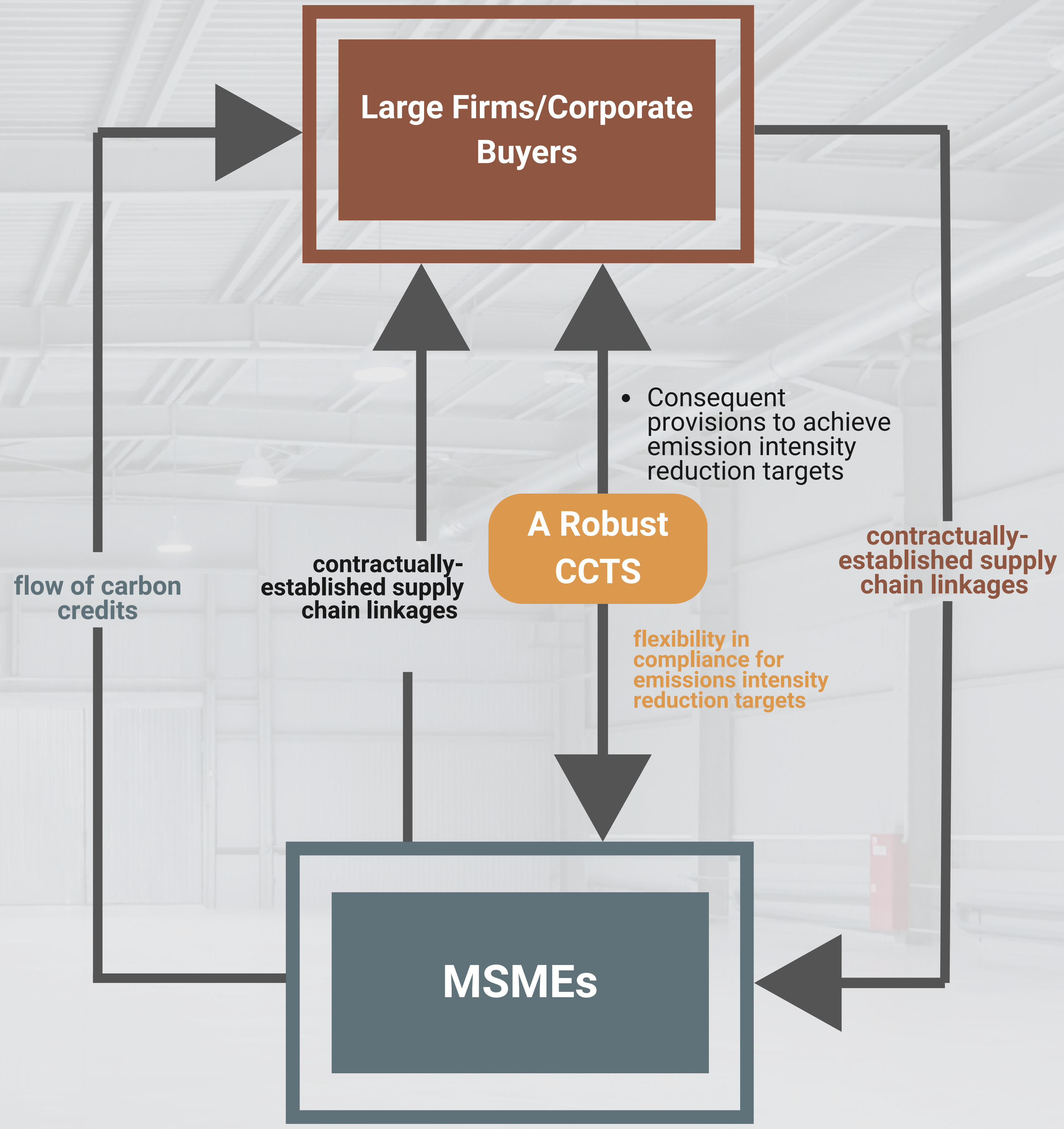
Recommendations

1. **Establish a Joint Venture SPV** - Create a Special Purpose Vehicle (SPV) with participation from the government, large firms/players, and commercial finance sources to pool credit deposits and extend affordable, long-tenure supply-chain financing for MSMEs.
2. **Mobilize Debt/Equity Financing** – Encourage large firms and debt/equity financiers to invest in the SPV, leveraging regulatory pressures (e.g., Scope 3 emissions disclosure) and long-term supply chain decarbonization goals.
3. **Leverage Government & International Climate Finance** – Grant-based support from the Government, and international climate finance as a guarantee to attract diverse funding and reduce lending risks for MSMEs.
4. **Offer Flexible Financing Solutions** – The SPV should introduce buyer-side financing (e.g., reverse factoring) and supplier-side financing (e.g., invoice financing) to improve working capital access for MSMEs, reducing transaction costs.

Key Barriers to Address

1. **Creditworthiness-related issues –** MSMEs face limited access to green financing due to perceived high credit risks by traditional lenders.
2. **High transaction costs –** Smaller loan sizes and due diligence for MSMEs increase financing costs, discouraging commercial lenders.
3. **Risk perception against MSMEs –** Financial institutions hesitate to offer long-tenure, low-interest loans due to uncertainties in MSME repayment capacity.
4. **Awareness gaps –** MSMEs lack knowledge about green financing options and their benefits, slowing adoption.
5. **Policy clarity –** Unclear regulations on green financing and scope 3 emissions deter large firms and financiers from actively supporting MSME decarbonization.

Call to Action #2: Integrate A Supply-chain-linked Model for Financing Decarbonization



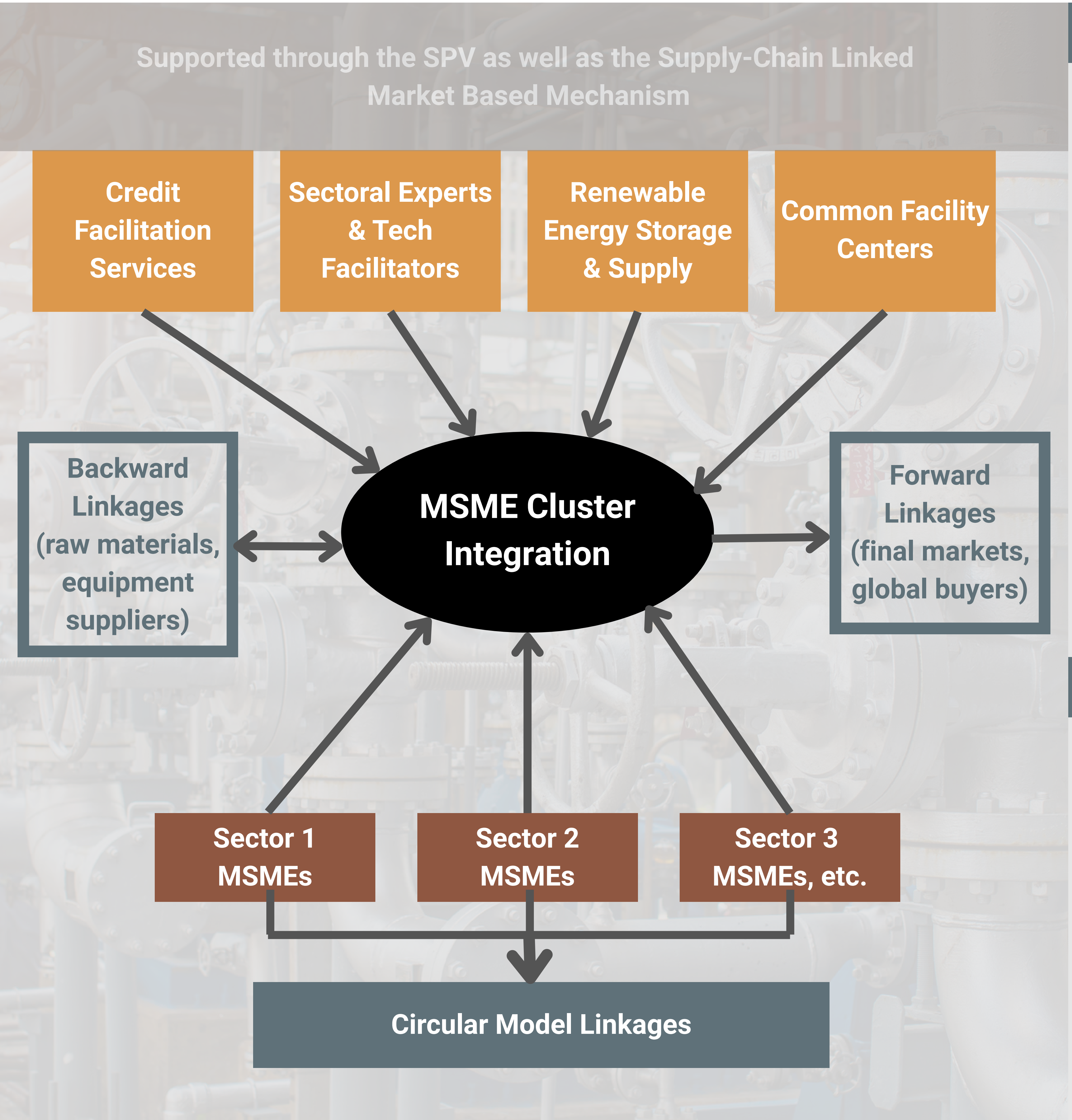
Recommendations

1. **Leverage Supply Chains for Decarbonization** - Create a supply-chain-linked financing model where large firms/corporate buyers support MSMEs in decarbonization, using existing supply chain relationships.
2. **Enable Flexible Compliance Regulations** - Allow large firms to meet emissions targets (under a robust CCTS) through Scope 1 or Scope 3 reductions, incentivizing them to decarbonize their MSME suppliers.
3. **Incentivize Large Firms with Carbon Credits** - Provide carbon credits to corporate buyers for financing MSME decarbonization, offsetting their own compliance requirements while cutting supply chain emissions.
4. **Lower Capex Barriers for MSMEs** - Since decarbonization tech for large firms is costly or underdeveloped, redirect investments toward MSMEs, enabling greener supply chains at lower costs.
5. **Support Hard-to-Abate Sectors** - Flexible regulations can encourage large firms in high-emission sectors to fund MSME suppliers' green transitions, earning carbon credits while meeting long-term compliance goals.

Key Barriers to Address

1. **High transaction costs –** Complex and costly processes hinder MSMEs from engaging in supply-chain-linked decarbonization financing.
2. **Upfront cost of low-carbon technologies –** MSMEs lack capital to invest in green technologies, requiring corporate buyers or carbon credit incentives to bridge the gap.
3. **Creditworthiness-related issues –** MSMEs often struggle to secure financing due to perceived risks, necessitating alternative models like supply-chain-linked carbon credits.
4. **Awareness gaps –** Many MSMEs and corporates are unaware of flexible compliance options and carbon credit benefits under supply-chain decarbonization.

Call to Action #3: Promote a Cluster-Based Approach for Integrated Green Transition



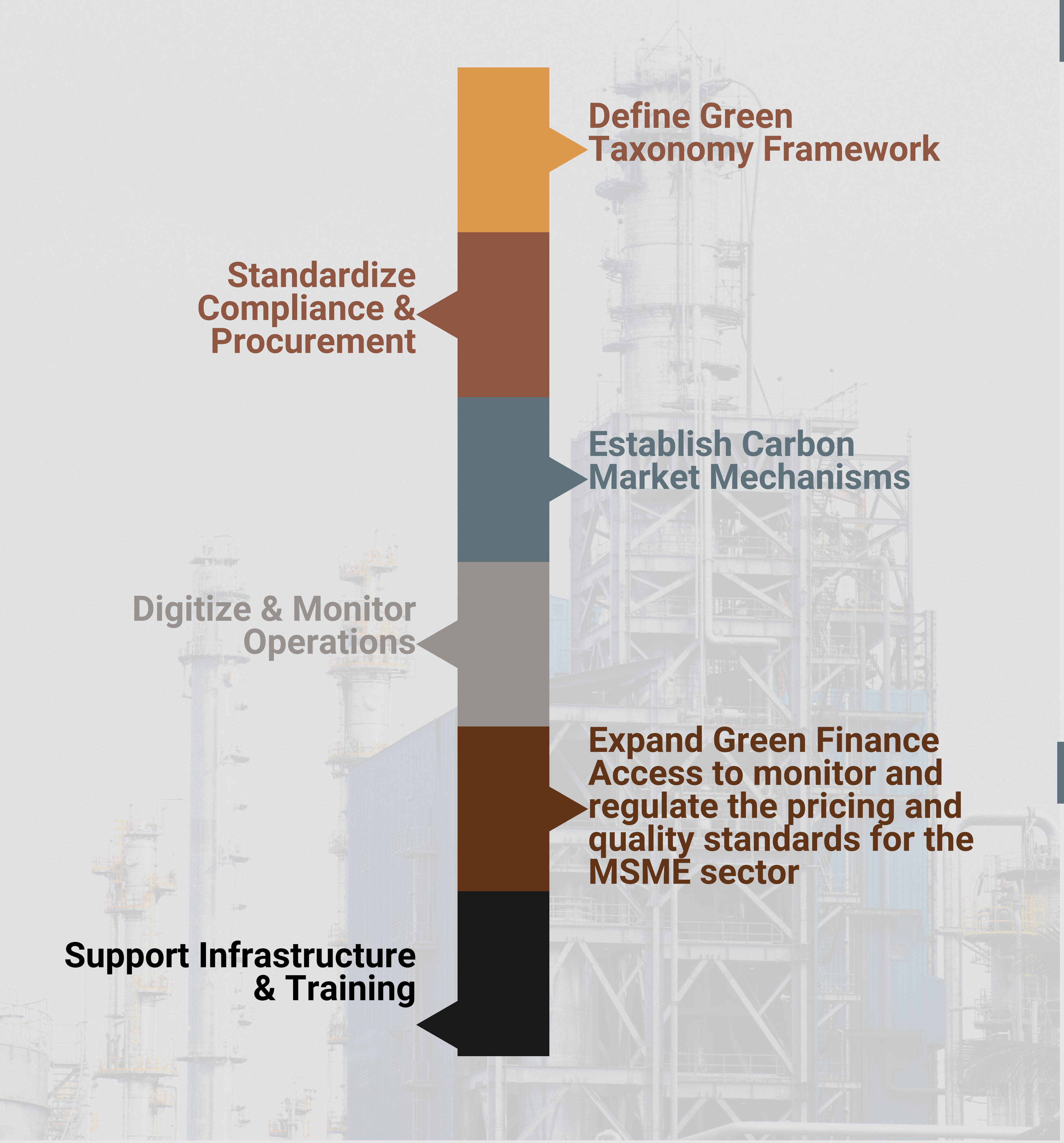
Recommendations

1. **Promote MSME Cluster Integration** - Decisive mapping and interventions enabling access to credit facilitation services and working capital loans via securitization.
2. **Leverage Sectoral Experts and Tech Facilitators** - Helps drive uptake of clean technologies, renewable energy storage and supply, and circular model linkages within clusters via programmatic partnerships and performance-based mechanisms.
3. **Establish Common Facility Centers** - Integrate quality management systems, waste management, digitization, and financial management portals, boosting sustainable economic performance.
4. **Strengthen Forward and Backward Linkages** - Enable buyer-side and supplier-side financing (e.g., SPV models) and fostering information sharing, handholding support, and tech-driven RD&D programs.
5. **Develop Large-Scale Revolving Funds** - Provide financial pipelines for clusters, supporting renewable energy adoption, training for sustainable product designs, and circular economy initiatives.

Key Barriers to Address

1. **Creditworthiness-related issues** - Many MSMEs lack formal credit histories or collateral, making it difficult to secure loans for working capital or clean technology adoption.
2. **High transaction costs** - Fragmented MSME operations increase due diligence and financing costs, discouraging lenders and slowing cluster-based interventions.
3. **Awareness gaps** - MSMEs often lack knowledge of financing options (e.g., securitization, buyer-supplier financing) and clean technologies, hindering uptake and integration into clusters.

Call to Action #4 : Regulatory Clarity and Standardization across Green Finance and Compliance Mechanisms



Recommendations

1. **Define Green Taxonomy Framework** - Develop a comprehensive green taxonomy, establish compliance parameters, set standards for raw material procurement and quality management systems.
2. **Standardize Compliance and Procurement** - Include Scope 3 emissions in target compliances for large players to drive decarbonization across supply chains and promote sustainable product design with environmental norms.
3. Establish Carbon Market Mechanisms - Develop a carbon market with pricing, credits, and taxes while increasing renewable energy integration to incentivize decarbonization.
4. Digitize and Monitor Operations - Enhance digitization through AI tools, cloud monitoring, and digital platforms to improve efficiency and transparency in green initiatives.
5. Expand Green Finance Access - Broaden RBI's priority sector lending, establish niche NBFCs/VCFs, and create a green market facility to monitor and regulate pricing and quality standards for the MSME sector, backed by support infrastructure and training for financial institutions.

Recommendations

1. **Low Creditworthiness of MSMEs –** Limited access to financing due to perceived high risk, hindering investments.
2. **Awareness Gap –** MSMEs lack knowledge about green policies, technologies, and financial incentives, slowing adoption.
3. **Lacking Policy Clarity –** Unclear regulations, inconsistent standards, and undefined compliance frameworks create uncertainty for businesses.
4. **Upfront Cost of Technologies –** High initial investment in green solutions discourages MSMEs despite long-term benefits.