Integrating trade and small business considerations into Nationally Determined Contributions (NDCs)

A guide for policymakers

About the paper

This document examines the role of micro, small and medium-sized enterprises (MSMEs) and international trade in the context of Nationally Determined Contributions (NDCs). It highlights the importance of integrating MSME considerations into NDCs, as they represent a significant part of the global economy, are important local actors, and have significant potential to contribute to climate change mitigation and adaptation, fostering a just transition.

Based on original insights into the nexus of trade, climate and small business, the document provides guidelines for policy makers on how to engage small business and trade stakeholders in the development and implementation of NDCs, addressing specific challenges and opportunities.

The document begins by exploring the importance of MSMEs in the context of NDCs. It highlights their contribution to socio-economic and environmental fundamentals and the rationale for their inclusion in climate action. Next, it delves into the links between international trade and NDCs, highlighting the potential of trade to "amplify" MSME activity and promote MSME-led climate action.

Building on these foundations, it presents principles for the good development of NDCs or related measures, methods to promote the application of these principles, and steps for stakeholder mapping, NDC design and planning, capacity building, and financing. Options for engagement are outlined and recommendations developed with a focus on success factors, challenges and risks of failure.

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Foreword

[IN DEVELOPMENT]

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Acronyms

Unless otherwise specified, all references to dollars ($) are to United States dollars, and all references to tonnes are to metric tonnes. Percentages may not add up to 100% due to rounding.

BSOs	business support organizations
CDP	Carbon Disclosure Project
CIEL	Center for International Environmental Law
CSOs	civil society organisations
ECAs	export credit agencies
EU	European Union
FTAs	free trade agreement
GHG	greenhouse gas
GVCs	global value chains
IEA	International Energy Agency
WTO IFD	WTO´s Investment Facilitation for Development Agreement
IFC	International Finance Corporation
ILO	International Labour Organization
ITC	International Trade Centre
KIIs	key informant interviews
LDC	least developed country
MEA	multilateral environmental agreement
M&E	Monitoring and evaluation
MSMEs	micro, small and medium-sized enterprises
NAFTA	North American Free Trade Agreement
NAPs	National Adaptation Plans
NDCs	Nationally Determined Contributions
NTMs	non-tariff measures
OECD	Organisation for Economic Cooperation and Development
PPPs	public private partnerships
RECP	resource efficiency and circular production
R&D	research and development
SECO	Swiss State Secretariat for Economic Affairs
SIDA	Swedish International Development Cooperation Agency
SMEs	subject matter experts
SPS	sanitary and phytosanitary
TISN	trade and investment support network
TrPMs	trade-related policy measures
UNCTAD	United Nations Conference on Trade and Development
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
USMCA	United States-Mexico-Canada Agreement
VSS	voluntary sustainability standards
WTO	World Trade Organization

Executive summary

The urgent need to tackle climate change requires collective action from governments, businesses, and civil society. Commitments made by countries under the Paris Agreement, known as NDCs, are key to achieving global climate goals. The upcoming round of submissions (NDC 3.0) presents a critical opportunity to raise ambition and stay on track to meet the Agreement's long-term goals of limiting global warming to well below 1.5 degrees. One way to do this is to integrate new, less conventional perspectives into climate action.

A viable option is to integrate small business and trade considerations into NDCs. This has the potential to improve coherence between economic and climate policies and generate important synergies between economic growth and the sustainability transition. As drivers of innovation, employment and growth, MSMEs are the backbone of many economies and represent the majority of businesses globally. At the same time, they are also among the most vulnerable actors to climate change and collectively contribute to a high share of global emissions. Their inclusion in climate strategies is therefore critical to achieving ambitious climate goals. Yet, despite their importance, MSMEs have often been overlooked in climate policy discussions and rarely targeted as a distinct group.

This guide aims to provide policymakers with guidance on how to better integrate small business and trade considerations into NDCs, particularly in the context of the upcoming NDC 3.0 submissions. It highlights the key role that MSMEs and trade can play in accelerating climate action while promoting inclusion and resilience, particularly in developing countries.

Chapter 1 emphasizes the importance of inclusive climate action and the role of MSMEs and trade in promoting a just transition. It introduces the concept of NDCs and their role in climate action while providing insight into the state of play. NDCs are voluntary pledges made by countries to reduce their greenhouse gas (GHG) emissions and adapt to the impacts of climate change. To achieve the ambitious goals of the Paris Agreement, countries are required to prepare, communicate, and maintain successive NDCs that reflect their highest possible ambition. Despite some progress, current actions fall short of the ambition needed to meet the Agreement's temperature targets, build resilience, and mobilize sufficient finance.

Chapter 2 explores the multifaceted role of MSMEs in the context of NDCs. MSMEs account for about 90 per cent of all businesses and contribute significantly to value added, trade, and investment. MSMEs in sectors such as agriculture and fisheries often employ a large portion of the population. They are the main source of income for many households and vulnerable groups, such as women and youth, and are therefore key drivers of inclusiveness. While disproportionately vulnerable to the impacts of climate change (weather extremes, slow onset events), MSMEs also responsible for 40 to 60 per cent of GHG emissions. However, they have unique characteristics, such as adaptability, knowledge of and networks in the local context, that make them essential allies in climate change mitigation and adaptation.

Chapter 3 examines the nexus between trade and climate change, highlighting the role of trade as an "amplifier" of MSME activity and a key driver of mitigation and adaptation. Trade provides MSMEs with access to markets, technologies, and resources, enabling them to expand their operations and improve their competitiveness. It also facilitates the diffusion of low-carbon technologies, such as renewable energy, promotes sustainable business practices, and strengthens supply chain resilience. As a result, integrating trade into NDCs can not only unlock climate action at the bottom of the pyramid but also promote policy coherence, attract green investment, and enhance country reputation.

Chapter 4 provides practical guidance for policymakers on how to effectively integrate MSME and trade considerations into NDC 3.0, presenting principles for developing MSME-inclusive and trade-conscious NDCs, methods for promoting the application of these principles, and steps for successful policy development. It emphasizes the need to design NDCs and underlying trade-related policy measures (TrPMs) in a way that minimizes regulatory and economic costs by considering the specificities and challenges of small businesses.

Based on ITC's experience in trade strategy development, seven key principles are outlined to ensure effective integration of MSMEs and trade in developing countries´ NDCs. These range from stakeholder diversity to measurability and capacity building orientation. From participatory needs assessments to early

consultations and communications involving MSMEs and business support organizations (BSOs), various methods are available to support the development of inclusive and effective NDCs.

Five key steps for developing NDCs with small businesses at their core are presented and discussed: Strategic considerations, Stakeholder and policy mapping, NDC design and planning, Implementation, Monitoring and Evaluation. Lead agencies such as the local ministry of environment can follow these steps for an effective NDC process, the success of which is determined by the interplay of certain factors. The most important enablers, which are also discussed in depth, are Governance, Finance, and Capacity building and platforms.

Chapter 5 focuses on strategies for NDC implementation, discussing success factors, implementation challenges, and risks of failure. The chapter stresses the importance of well-functioning institutional mechanisms, adequate human and financial resources, and early stakeholder engagement and coordination for effective NDC implementation. The role of monitoring and evaluation in tracking progress, ensuring accountability, and promoting institutional learning through feedback is also highlighted, with a focus on tracking MSME contributions to climate action.

Chapter 6 concludes by emphasizing ITC's role in supporting developing countries in the preparation and implementation of MSME-inclusive and trade-sensitive NDCs. Drawing on its unique expertise and experience as the small business agency of the United, ITC offers a range of technical support services, including the provision of trade and market intelligence, facilitation of stakeholder dialogue and capacity building for MSMEs and BSOs.

NDC 3.0 offers an unprecedented opportunity to reimagine climate action by integrating unconventional, yet critical, perspectives, thereby harnessing the power of MSMEs and trade. By fully integrating these elements, countries can unlock a sustainable, inclusive, and climate-resilient future. This report provides a roadmap for policymakers to achieve this integration, ensuring that future NDCs not only contribute to global climate goals but also drive economic growth and resilience.

Chapter 1
Introduction

What are NDCs?

NDCs are voluntary commitments made by countries under the Paris Agreement to reduce their GHG emissions and adapt to the impacts of climate change. They represent a bottom-up approach, where each country defines its own climate actions based on its specific circumstances and capabilities. To achieve its ambitious goals, the Paris Agreement requires countries to prepare, communicate and maintain successive NDCs that reflect their highest possible ambition. Countries are requested to submit updated NDCs every five years, with each submission demonstrating a progression beyond the previous submission.[1] NDCs are developed nationally through collective policy dialogue, involving national stakeholders such as government agencies, businesses, and civil society.

A first Global Stocktake under the Paris Agreement was conducted in 2023 to assess collective progress towards the Agreement's long-term goals of limiting global warming to well below 1.5 degrees Celsius compared to pre-industrial levels. The Global Stocktake found that, despite some progress, current actions fall short of the ambition needed to meet the Agreement's temperature targets, build resilience, and mobilize sufficient finance (UNFCCC, 2023a). To bridge the ambition gap, countries are expected to strengthen their climate commitments through revised or updated NDCs, often referred to as NDC 3.0, which are due for submission in February 2025.[2]

NDC 3.0 and the call for inclusive climate action

NDC 3.0 offer countries the possibility to strengthen their climate action plans, for example by integrating less conventional perspectives and stakeholders that have strong potential for climate action but were only indirectly considered in previous submissions. These include youth, vulnerable groups and women (ILO, 2024a, 2023; UNDP, 2023, 2019; OHCHR and CIEL, 2022). Engaging these groups would allow maximizing the social and economic opportunities of climate action, while minimizing and carefully managing its challenges (ILO, 2023).

Due to their strong potential for climate action, their contributions socio-economic development and inclusiveness, trading MSMEs top the list of stakeholders deserving further consideration.[3] Indeed, MSMEs are not only drivers of local economic growth, but also key contributors to the green transition, especially in developing economies (see more in Chapter 2). For its part, trade can facilitate the diffusion of low-carbon technologies and provide MSMEs with access to markets for green products. Trade-related policy measures (TrPMs), ranging from financial support for businesses to import tariffs and bans, can support MSME-led adaptation and mitigation by creating a conducive policy environment.

While being vital to fostering innovation, resource efficiency, and sustainability, MSMEs have often been overlooked in climate policy. Too often, the "private sector" is seen as a homogenous entity, without recognizing the specific contributions and challenges of MSMEs and multinational enterprises (MNEs). In NDCs, the links between climate action and small businesses are mainly indirect, with adaptation and mitigation measures often targeting sectors where MSMEs play a significant role (e.g. agriculture) without explicitly addressing MSMEs as a distinct group (UNFCCC, 2023b). This oversight neglects the potential of

[1] More information on the NDC process and related country obligations can be found on the website of the United Nations Framework Convention on Climate Change (UNFCCC): https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs

[2] More information on NDC 3.0, including resources for better filing, can be found on the website of the NDC 3.0 Navigator: https://ndcnavigator.org/

[3] Smallholders, indigenous peoples and local communities frequently arrange themselves in different organizational forms, including associations, cooperatives and ethnic groups that can perform as MSMEs. Additionally, local entrepreneurs also contribute as small businesses. These organisations encompass a wide range of functions and cannot be overlooked when targeting MSMEs (ITC, 2024 forthcoming a).

MSMEs to contribute to inclusive and equitable climate action, through their innovative capacity, agility, and close ties to local communities.

The NDC 3.0 presents a significant opportunity to address this gap and better integrate MSMEs and trade linkages in national climate commitments. In this regard, integrating MSME and trade considerations into NDCs can create synergies between climate action and economic growth while enhancing policy coherence. Recognizing MSMEs as distinct actors with unique needs and capabilities in the NDC 3.0 will enable the development of targeted measures that empower them to effectively contribute to climate goals.

However, policy makers might face challenges in integrating MSMEs and trade into NDCs. These include limited awareness of the importance of MSMEs and trade in climate action, lack of targeted policies and measures and capacity constraints within MSMEs and government agencies. At the same time, small business stakeholders such as chambers of commerce may lack a sound understanding of climate policy making and the business case for sustainability, and thus be unable to successfully participate in NDC development. In this context, there is a need for sound policy guidance and insights into less conventional views and innovative approaches to climate policy making.

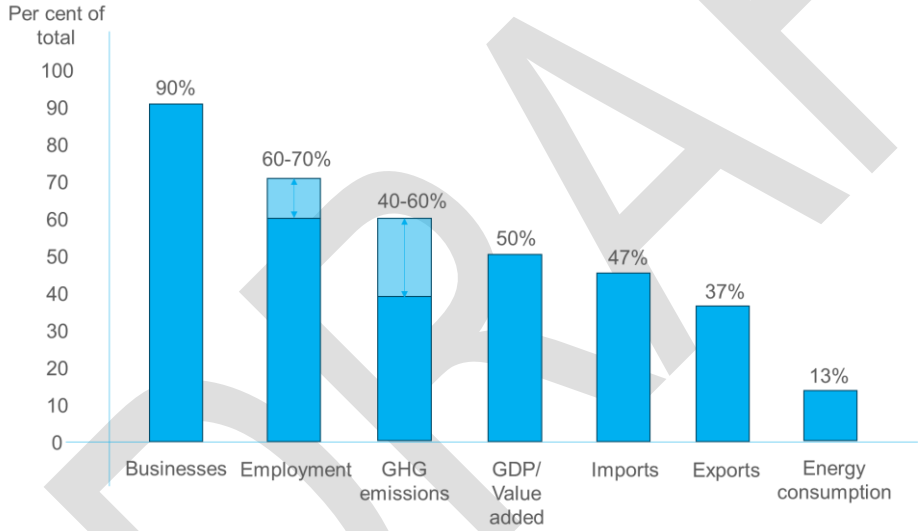
This guide aims to provide policymakers with practical guidance on how to effectively integrate MSME and trade considerations into their NDC 3.0 submissions, enabling them to leverage the strengths of both trade and MSMEs while addressing their specific challenges. It begins by highlighting the socio-economic and environmental contributions of MSMEs and the rationale for their inclusion in climate action. It also explores the linkages between trade and NDCs, highlighting the potential of trade to scale up MSME activities and promote climate action at the bottom of the pyramid. Building on these foundations, it presents principles for MSME-conscious NDC development, methods for promoting their application, and steps for successful stakeholder engagement, from design and planning to implementation.

Chapter 2
The rationale for including MSMEs in NDCs

MSMEs as a catalyst for sustainable socio-economic development

Micro, small and medium-sized enterprises (MSMEs)[4] make up the majority of businesses and contribute significantly to value creation, employment and trade (Figure 1). Globally, they are estimated to account for about 90 per cent of firms, 60 to 70 per cent of employment and 50 per cent of gross domestic product (GDP) (ITC, 2023a; United Nations Chronicle, 2023). While their productivity is only half that of large companies, and even lower in emerging markets, MSMEs generate half of the value added in the global economy (McKinsey Global Institute, 2024). Their contribution to socio-economic development is particularly high in developing countries. In fact, despite low integration into supply chains in technology-intensive sectors, MSMEs in commodity sectors such as agriculture and fisheries often employ a large portion of the population and are the primary source of income for many households.

Figure 1 Contribution of MSMEs to key economic and environmental variables



Source: ITC analysis based on McKinsey Global Institute (2024), Eurostat (2023), ITC (2023a), United Nations Chronicle (2023), OECD (2023), European Commission (2022), WTO (2022), Meng et al. (2018), IEA (2015) and expert knowledge.

Note: The analysis is based on data from various sources which may use different definitions of MSMEs. Export and import shares only include intra-EU27 and extra EU27 trade in goods by enterprises incorporated in the European Union (EU). The share of GHG emissions is an ITC estimate based on figures for OECD countries, EU27 countries and China provided, respectively, by OECD (2023), European Commission (2022) and Meng et al. (2018).

In developing countries, the contribution of MSMEs to indigenous innovation and entrepreneurship is also well documented. Climate and sustainability are emerging drivers. Despite strong sectoral differences, research finds a positive relationship between climate change and MSME innovation performance as firms innovate and invest in green technologies due to increased climate risk (Alam et al., 2022). MSMEs also innovate in response to new opportunities in sustainable markets, such as those for environmental goods.

[4] ITC classifies enterprises according to the number of full-time employees: micro (0 to 4 employees), small (5 to 19 employees), medium (20 to 99 employees) and large (100 or more employees). MSMEs are therefore enterprises with less than 100 employees (ITC, 2021a). It should be noted, however, that there is no internationally accepted definition of an MSME. The term covers a wide range of definitions, which vary according to country, geographical region, level of development and business culture, and are based on different criteria (e.g. turnover, number of employees, etc.). Even within countries, definitions may vary or be non-existent (ITC, 2022a).

This is the case of the booming seaweed sector, where small businesses thrive at different stages of the supply chain in both food and material applications (UNCTAD, 2024).

In this way, MSMEs play a critical role in driving economic growth and poverty reduction, providing sustainable livelihoods and contributing to the inclusion of local communities and vulnerable groups around the world.

MSME vulnerability and contribution to climate change

Climate change is a primary concern for business today. Higher temperatures, as well as the biophysical changes they trigger, such as fluctuating weather patterns and extreme weather events, threaten firms' operations across a broad range of sectors, including those heavily dependent on international trade, such as agriculture and tourism (WTO, 2022).

Yet the impacts of climate change on businesses tend to follow an inequitable path. Overall, MSMEs tend to be more vulnerable than their larger counterparts to the direct impacts of climate change. According to a 2023 analysis by ITC in 13 Francophone African countries, for example, more than two-thirds (68%) of businesses surveyed perceived climate change-related events as a threat to their business (ITC, 2023b). In emerging markets, 66% of MSMEs reported having already been affected by climate change (ILO, 2024a).

Worryingly, small businesses are also more likely to face challenges to prepare for and adapt to climate change. While three-quarters (76%) of large firms in ITC's sample of Francophone African businesses reported having invested in at least one measure to cope with environmental changes, only about one-third (35%) of MSMEs had made such an investment over the past three years (ITC, 2023b). Small enterprises run by women and youth people tend to struggle more with adaptation, having relatively fewer resources, alternatives and information with which to adapt (ITC, 2021a). The lack of a conducive and enabling policy environment also undermines the adaptive capacity of MSMEs in multiple locations.

In addition to technical vulnerabilities, MSMEs are also highly exposed to the social impacts of climate change. For example, forced displacement, disruption of labour markets and damage to infrastructure following extreme weather events such as tropical storms can exacerbate existing inequalities and further marginalise vulnerable communities (USAID, 2021). In the absence of systemic resilience building, including social safety nets, early warning systems and recovery programmes, these impacts can limit the ability of MSMEs and smallholders to adapt and recover. This is particularly true for MSMEs operating in the informal sector who have limited access to these resources (World Resources Institute, 2013)

MSMEs also contribute significantly to global emissions, for example through energy consumption (Figure 1). While GHG emissions attributable to MSMEs vary across geographies due to the diversity in size, sector, and operational practices, their contribution is significant and ranges between 40 and 60 per cent (OECD, 2023; European Commission, 2022; Meng et al., 2018). Though MSMEs are not individually large carbon emitters, the collective share they hold in local and national economies means that achieving net-zero targets will require sizeable climate action on the part of small business as well (WTO, 2022). Energy consumption is an illustrative case in point. While MSMEs consume modest amounts of energy individually, collectively they are estimated to account for 13% of global energy demand and cannot be overlooked when designing energy efficiency measures (IEA, 2015).

MSMEs also participate extensively in global value chains (GVCs) as suppliers of raw materials and semi-finished goods or as service providers to MNEs. Interestingly, indirect emissions from suppliers, including transport and disposal of end-of-life products ("Scope 3"), are the main source of emissions attributed to MNEs, and are estimated to account for an average of 75% of emissions across all sectors (CDP, 2022). In this context, MSMEs also have a critical role to play in the decarbonisation of supply chains, helping MNEs to meet regulatory requirements and stakeholder expectations for meaningful climate action.

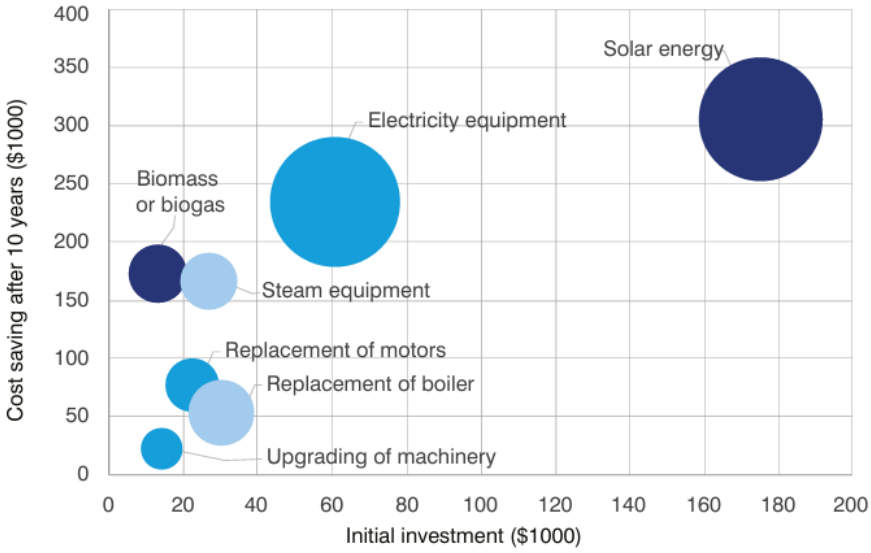
The lack of policies specifically tackling MSME needs in integrating emissions reductions is a contributing factor to MSMEs being unable to adapt their value chains. At the same time, public support may be limited. More than half of MSMEs (52%) cite a lack of policies or government-sponsored benefits as a barrier to climate action, and only about 15% of respondents have been offered financial incentives to start or accelerate their emissions reductions (SME Climate Hub, 2024).

The benefits of mainstreaming MSME perspectives in NDCs

MSMEs have unique characteristics that make them powerful allies in climate action. In addition to the flexibility and streamlined operational structures that come with their relatively small size, they can usually count on a strong knowledge of and proximity to the local context. This is the case for agribusinesses and farmers in the agri-food sector, who have practical knowledge of market trends (e.g. certified products) and the impact of climate hazards (ITC, 2021b). In addition, their agility and ability to adapt to change make them well placed to deal with sudden conjunctural changes, such as shifting demand and supply shocks in a changing climate. For the same reason, MSMEs can also be adept at meeting new regulatory requirements, including new climate regulations in export markets. MSMEs drive business dynamism globally and can enhance sector competitiveness in an era of change (McKinsey Global Institute, 2024).

MSMEs can play a critical role in both climate change mitigation and adaptation. If certain constraints are removed, MSMEs can make a significant contribution to the deployment of mitigation solutions. For example, they can invest in energy- and resource-efficient equipment and switch to renewable energy sources, directly contributing to emissions reduction while achieving cost savings (Figure 2). This is frequently the case for exporting MSMEs in low-skilled and energy-intensive sectors such as textiles (Box 1). At the aggregate level, lowering the carbon footprint of MSMEs participating to supply chains can create a snowball effect, reducing the overall footprint of highly polluting GVCs (Wilser, 2022; Jimenez, 2022)

Figure 2 Emission reductions and cost savings from resource efficiency measures by MSMEs



Source: ITC (2021) based on ITC interventions with beneficiary MSMEs

Note: The size of the bubble corresponds to the CO2-equivalent emission reduction of each measure. Figures are averages based on 202 resource efficiency measures selected for implementation by 56 companies in Ethiopia, Jordan, Kenya, Peru and Vietnam. Dark blue indicates measures related to renewable energy, light blue to thermal energy, medium blue to other measures. Selected categories shown.

Box 1 MSME-led climate change mitigation: Emissions reduction and resource efficiency in Morocco

Interlinge, a Moroccan textiles company operating in a historically important sector, faces challenges common to many businesses in the industry. These include high electricity consumption to power machinery and significant water use for production processes and plant maintenance. Given Morocco's pressing water shortage and the global imperative to reduce carbon emissions, addressing these issues is critical to Interlinge's sustainability.

[picture]

With the support of ITC (see Note to box), Interlinge developed a comprehensive strategy to improve its resource efficiency and reduce its carbon footprint. This strategy included a combination of internal measures and external partnerships. Through targeted initiatives, the company achieved notable outcomes, including direct and indirect emission reductions (e.g. from reduced energy consumption and waste to landfill, respectively), as well as cost savings:

- Energy efficiency: By investing in energy-efficient technologies such as LED lighting and electrical monitoring systems, Interlinge reduced its annual electricity consumption by almost 20%. These measures not only lowered operating costs but also contributed to greener production processes.
- Renewable energy: More recently, the company has made significant investments in solar energy. By harnessing the power of solar panels, it has been able to source nearly 50% of its electricity from renewable sources, further reducing its carbon footprint.
- Waste reduction and recycling: The company established a dedicated waste management system, segregating waste by type and implementing recovery processes. This resulted in a significant reduction in waste disposal, and the creation of new revenue streams through the sale of recyclable materials and zero-waste and reusable items, including washable make-up remover wipes.
- Water conservation: The introduction of water-saving devices such as aerators and flow restrictors has reduced annual water consumption by one third. This achievement is particularly significant in a region facing water scarcity.

Source: ITC (2024) and Interlinge´s website

Note: Support was provided through Phase I of the GTEX/MENATEX program, funded by the Swiss State Secretariat for Economic Affairs (SECO) and the Swedish International Development Cooperation Agency (SIDA). As part of this program, the ITC Trade and Environment Programme deployed a coaching component to assist MSMEs in adopting Resource Efficiency and Circular Production (RECP) practices.

By making full use of local knowledge and networks, they can help make economic sectors more resilient to climate hazards through sound adaptation measures. This is the case of horticultural supply chains in Pakistan, where MSMEs are adopting basic adaptation measures even in the face of significant resource constraints (e.g. capital, knowledge) (Box 2). By participating in supply chains, MSMEs can also enable sustainable business practices at scale, for example by supporting the responsible sourcing efforts of lead firms (e.g. traceability).

Box 2 MSME-led climate change adaptation: Crop diversification and water conservation in Pakistan

Pakistan, one of the countries hardest hit by climate change, has suffered from severe droughts and floods in recent years. Irregular weather patterns and a dry climate create significant vulnerabilities for businesses, particularly in the agrifood sector. The Balochistan region, where temperatures have risen and water tables have fallen, is a prime example. In the 60-kilometer radius of Burg Pusht village in the district of Musakhel Teshil Kingri, for instance, farmers report that water can only be found 1,240 feet underground.

Ahmed Khan Buzdar, a livestock farmer in Balochistan, faced severe challenges due to these changing conditions. Severe droughts in 2010 led to the death of most of his livestock due to a prolonged shortage of fodder. To adapt, Ahmed diversified his business by planting an olive orchard. Olives are a drought-tolerant crop that can thrive in hot, arid climates, surviving temperatures up to 50 degrees Celsius. Ahmed also implemented water conservation measures, such as constructing a small dam to collect rainwater during the monsoon season. Additionally, he extracted water through drilling a tube well.

[picture]

By adopting these strategies, Ahmed successfully adapted his farm to the changing climate. His olive orchard flourished, growing to over 2,000 plants and producing olive oil that is sold to homeopathic companies, processors, and consumers in Pakistan. By establishing Burg Olive Oil Products, he reduced his reliance on livestock, which had been particularly vulnerable to drought, and secured a stable source of income. This strategy also integrated the two businesses well, as remaining livestock could eat olive leaves that came from pruning the trees.

As part of the Growth for Rural Advancement and Sustainable Progress (GRASP) programme, the EU's flagship initiative in Pakistan implemented by the ITC, Ahmed also learned innovative farming techniques. He participated in a stakeholder workshop and a demonstration visit, where he was exposed to innovations developed by local research institutes.

Source: ITC project evidence (link)

Against this backdrop, the benefits of including MSME perspectives in NDCs are manifold. In addition to enabling climate action at the bottom of the pyramid, adequately reflecting the priorities of small businesses in NDC processes provides policymakers with a unique opportunity to promote inclusiveness, fairness and equity of climate policymaking (see more in Chapter 4). By doing so, they can ensure that climate policies are representative of the wider economy and protect those who often bear the greatest costs of climate change, such as farmers and agribusinesses. Engaging MSMEs will also drive the inclusion of vulnerable groups that are typically part of their workforce. These include youth, who have not been meaningfully engaged in NDC processes despite their key role in accelerating climate action (UNDP, 2023). From this perspective, MSME-inclusive NDCs can contribute to a Just Transition, ensuring that the costs and benefits of climate action are shared equitably among all actors of the economy (ILO, 2024b).[5]

An MSME-inclusive approach to NDC development can also have positive spillover effects on non-climate policy areas that are critical to climate action, such as trade. As a result of mainstreaming MSME considerations into NDCs, TrPMs that are functional for achieving their goals, such as carbon taxes, can also be designed with MSMEs in mind and be more inclusive and effective. These measures will leverage the unique strengths of MSMEs, such as adaptability and dynamism, while addressing their structural challenges, such as limited scale and access to finance, to better achieve climate goals. As compliance with these measures typically requires targeted investments, MSME-friendly NDCs and TrPMs will also promote green growth and multi-stakeholder cooperation at the bottom of the pyramid. Under the right circumstances, the inclusion of MSME voices in NDC processes can also foster a sense of ownership and commitment among small businesses, making them more likely to support climate action.

[5] A Just Transition involves "maximizing the social and economic opportunities of climate and environmental action, including an enabling environment for sustainable enterprises, while minimizing and carefully managing challenges. It should be based on effective social dialogue, respect for fundamental principles and rights at work, and be in accordance with international labour standards. Stakeholder engagement is also important." (ILO, 2023).

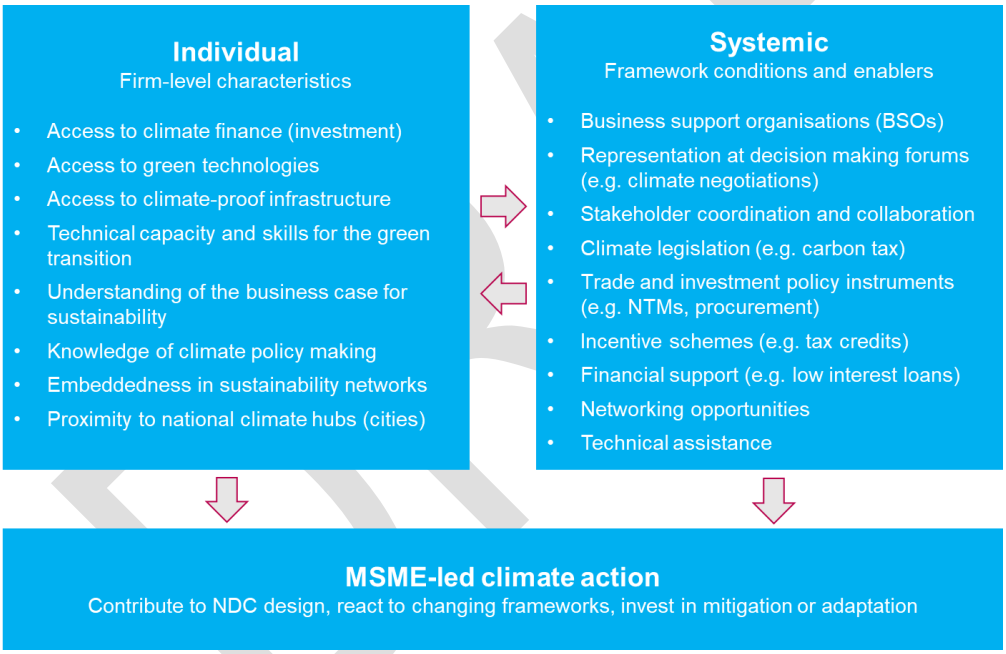
Challenges and opportunities for MSME participation in NDC processes

MSMEs face both individual and systemic challenges that can hinder their participation in NDC processes (Figure 3). The first mostly encompass firm-level characteristics. They tend to be most prominent in developing countries and include limited access to finance and technology, low technical capacity, lack of awareness of the financial benefits of sustainability and a poor knowledge of climate policy. Global survey data corroborates this statement, showing that lack of skills and knowledge (29% of respondents) and lack of finance (52% of respondents) are the main barriers cited by small businesses for not acting on climate change. Over 70% of MSMEs say they need external finance to do this (SME Climate Hub, 2024).

This leads to a second set of challenges, which relate to specific frameworks and enablers for green MSME development. For example, ecosystem actors who typically represent MSMEs in decision making forums, such as business support organizations (BSOs), may only be partially aware of the importance of NDCs and be reluctant to engage in climate policy making. A lack of coordination and collaboration between these actors may also hinder the inclusion of MSMEs in this agenda. At the same time, trade and investment policy instruments, ranging from tariffs and non-tariff measures (NTMs) to public procurement and investment facilitation, may only partially address the specificities of MSME (ITC, 2024 mimeo).

Challenges at the individual level can be exacerbated by systemic barriers and translate into a limited ability of MSMEs to participate in NDC processes, i.e. to contribute to the design of NDCs, respond to changing frameworks (e.g. climate change legislation) and invest in climate action.

Figure 3 Challenges for MSME participation in NDC processes



Source: Author analysis

At the same time, there are certain opportunities associated with MSME participation in NDC processes. Recent ITC research has shown how the implementation of climate change adaptation and mitigation measures can enable small businesses to increase their resilience and promote agile operations, reduce operational costs and increase productivity, and expand or maintain access to markets (ITC, 2021a). For instance, by adopting low-carbon production processes and using resources more efficiently, MSMEs can lower input costs, reduce waste, and increase productivity. These efforts can lead to significant environmental and financial gains, including reduction of CO2 emissions and cost savings.

In addition, new market opportunities may open for MSMEs because of improved competitiveness and reputation following their participation in NDC processes (e.g. input into NDC design, climate investments). In fact, the majority of MSMEs cite enhanced reputation (62% of respondents), differentiation from

competitors (53% of respondents) and the ability to retain or attract new customers (37% and 30% of respondents, respectively) as benefits of taking climate action. Over half of them (52%) are motivated to act by cost savings and return on investment (SME Climate Hub, 2024).

MSMEs that embrace climate action would also be better placed to meet sustainability-related requirements, which are becoming increasingly stringent in major export markets such as the EU.[6] These requirements typically include elements of sustainability due diligence in the extended supply chain, such as human rights and environmental risk management, which are relevant in the NDC context and can contribute to a Just Transition in supply chains. Collectively, MSMEs can also gain the ability to influence policy decisions in respective industries.

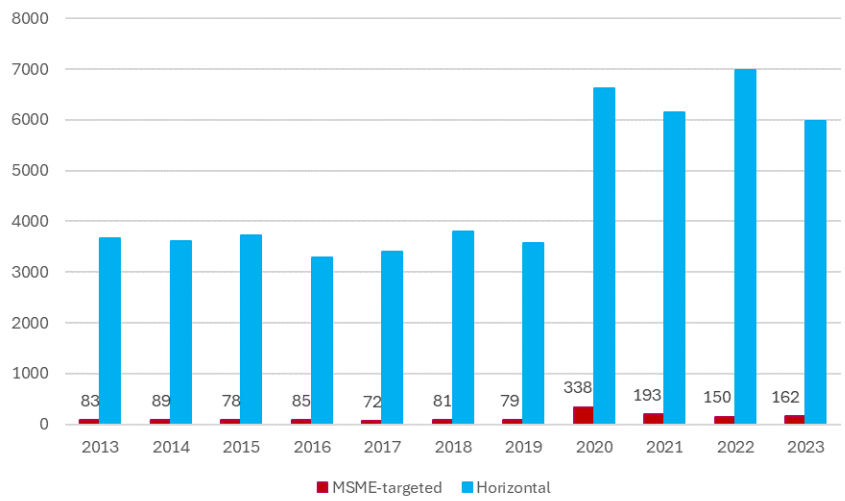
State of play on MSME inclusion in NDCs

Due to the prominent space they take in the global economy and their unique characteristics, MSMEs are amongst the main recipients of economic and environmental policies. These include a wide range of TrPMs, from financial support to companies (e.g. grants, loans) to taxes to import tariffs and bans, which are increasingly aligned with climate objectives.

While MSMEs have received increasing regulatory attention in recent years, only a minority of these measures are specifically targeted at MSMEs. Global data show that MSME-focused measures have been increasing over time. With an average annual growth rate of 7% between 2013 and 2023, compared to 5% for other measures, MSME-targeted measures reached an all-time high in 2020 - the year of the outbreak of the Covid19 pandemic (Figure 4a and 4b). In that year, MSME-targeted measures increased fourfold, possibly reflecting a desire by governments to support the smallest and most vulnerable businesses. However, over the same period, the number of measures with exclusive eligibility for MSMEs has remained relatively low, fluctuating between 2 and 5 per cent of all measures (Figure 4c). This means that, despite their specificities, MSMEs are mostly eligible for support for or subject to measures targeted at the wider economy.

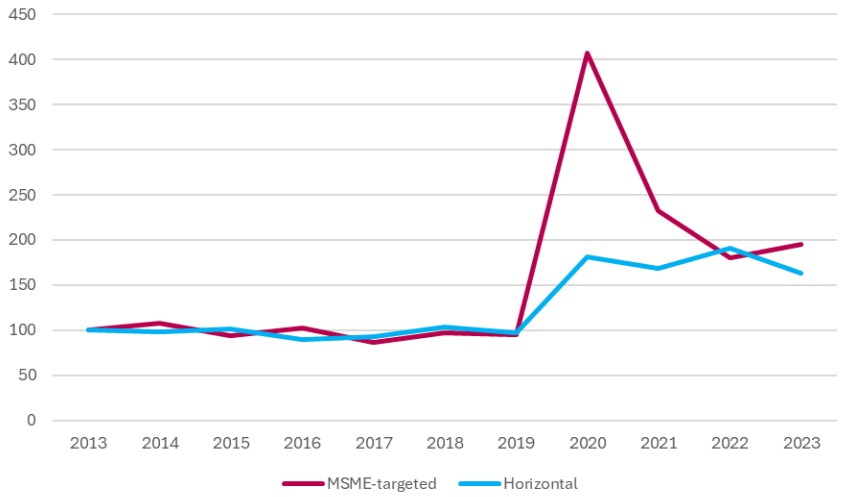
Figure 4 Trade-related policy measures (s) implemented worldwide, MSME-targeted vs. horizontal (2013-23)

a. Measures count

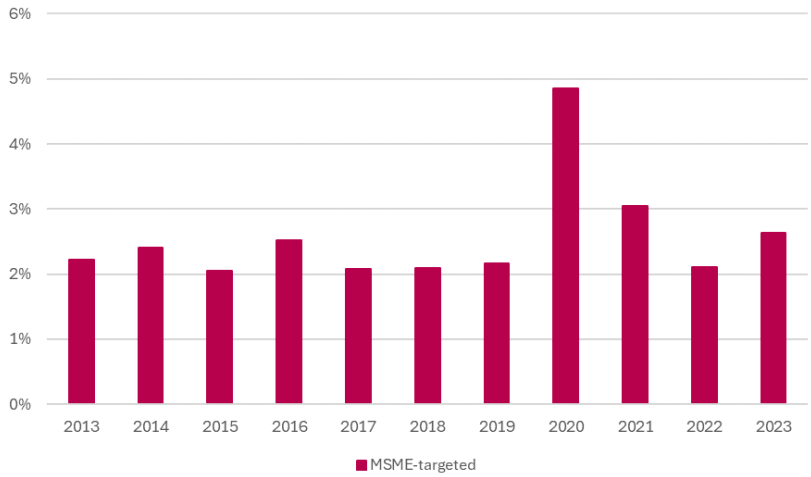


[6] Sustainability requirements for market access are becoming increasingly common. They can be found in a variety of forums, including national or regional measures implemented by key exporters or trading blocs (e.g. EU regulations), free trade agreements (FTAs) (e.g. the Australia-New Zealand-ASEAN FTA), investment treaties (e.g. bilateral), and investment facilitation agreements (e.g. WTO´s Investment Facilitation for Development (IFD) Agreement).

b. Indexed (base year 2013 = 100)



c. Per cent share of total



Source: ITC analysis based on data Global Trade Alert (2024). Accessed October 2024: link

Note: Analyzed TrPMs cover a wide range of state interventions, including trade regulations, industrial policy instruments and other financial incentives implemented at the national, subnational and multilateral levels

A similar situation can be observed when reviewing NDC texts and programmatic documents submitted to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) by the signatories of the Paris Agreement. While comprehensive analysis is not available, limited data and expert opinions suggest that many countries only partially integrate MSMEs into their NDCs and National Adaptation Plans (NAPs). When included, MSMEs are often only mentioned in relation to specific sectors, such as agriculture and tourism, and are rarely treated as a distinct category. However, both NDCs and NAPs contain measures aimed at enhancing their productive capacity, such as technology transfer and climate-resilient infrastructure development. These measures indirectly benefit MSMEs, creating an indirect link between small businesses and climate action.

In developing countries, where MSMEs and smallholders form a significant part of the economic landscape, their involvement in NDC planning and implementation is critical for successful climate action. In their NDCs, these countries tend to abundantly feature smallholders (e.g. farmers and artisanal fishers), while MSMEs are less prominently covered. Out of 60 countries analysed, only 26 explicitly cover MSMEs through “focalized measures”. The analysis also reveals that most NDCs referenced consultations with associations representing smallholders and MSMEs (UNCTAD, 2025 forthcoming a).

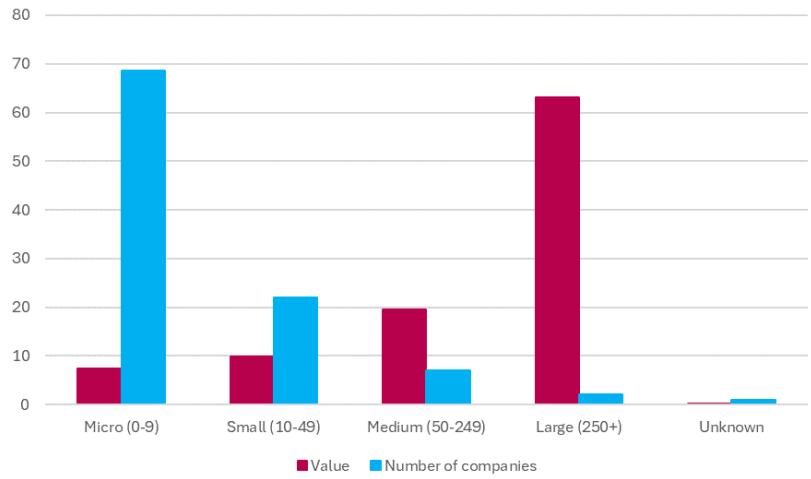
Chapter 3
Key considerations for addressing trade in NDCs

International trade as an amplifier of MSME activity

Throughout history, free trade has contributed to inclusive and sustainable economic growth around the world. It promotes economic growth by increasing market access, competition and specialisation, while allowing countries to exploit their comparative advantages - importing goods and services they cannot produce efficiently and exporting what they produce best. Under the right circumstances, this leads to greater efficiency and lower prices for consumers, as well as important economic benefits such as increased productivity and economic diversification (amidst the risk of exacerbating inequalities). Trade provides access to international markets, allowing companies to expand their reach and scale up their operations.

Although often treated separately in policy forums, trade and MSMEs are intrinsically linked. It is possible to think of trade as a vehicle or amplifier of MSME activity, and of MSMEs as its undisputed protagonists. Indeed, MSMEs often rely on international trade as a platform for accessing new markets (e.g. foreign sales), exploring cost efficiencies (e.g. sourcing inputs) and adopting more efficient and sustainable production methods (e.g. technology adoption). This is reflected in the data on trade in goods by enterprise size, which shows that enterprises with less than 250 employees make up about 40% of exports by value and represent the quasi totality of exporting firms (98%) (Figure 5). While large companies still account for the lion share of exports by value, MSMEs play an important role as brokers and intermediaries at different levels of the supply chain, providing a wide range of goods, services and technologies that underpin well-functioning GVCs.

Figure 5 EU exports of goods by enterprise size (2022)



Source: ITC analysis based on data Eurostat (2023). Accessed October 2024: link

Note: The analysis covers intra-EU-27 and extra-EU-27 exports and is based on the EU definition of MSMEs.

By facilitating the movement of goods and services across borders, trade supports business development, enables job creation and stimulates economic growth, both directly through exports and indirectly through the multiplier effects of increased economic activity. MSMEs are at the heart of this mechanism and contribute to the market signals that guide it.

The role of trade in climate change mitigation and adaptation

Trade can be an important enabler of MSME-led adaptation and mitigation efforts. While it is not exempt from its own environmental externalities, such as direct emissions from sea transport, it is also a primary channel for the diffusion of goods, services and technologies that enable the green transition. These range from solar power equipment to waste management services that may not be available locally. This is particularly true in developing countries, where small businesses may want to overcome supply constraints and explore cost efficiencies by importing from abroad.

From this perspective, trade has proven to be particularly conducive to the diffusion of certain green goods and technologies. This is the case of material substitutes for plastics, ranging from natural fibres (e.g. paper, bamboo) to glass and aluminium. In 2022, their exports were worth around $390 billion, equivalent to 3% of global merchandise exports (UNCTAD, 2023a). Similarly, favourable market access conditions have facilitated the deployment of renewable energy technologies by providing access to affordable imports in developing countries. This is the case of Viet Nam, which has also seen its solar panel manufacturing industry flourish as part of this trend (ITC, 2024 forthcoming b).

Where cross-border buyer-supplier relationships exist, trade can also facilitate the diffusion of sustainable business practices (e.g. through corporate-led responsible sourcing programmes). Less directly, it can improve the resilience of supply chains to climate shocks by diversifying supply chains and reducing dependence on vulnerable regions.

However, these benefits can be reduced by the interaction of certain policy factors. For example, governments may impose unfavourable tariff regimes that give commodity products better market access than sustainable alternatives, thus discouraging their trade. This is the case, for example, for certain bioplastics of marine origin (e.g. seaweed-based). Although they represent a fast-growing market, they still face average import tariffs that are higher than those applied to conventional plastic polymers (UNCTAD, 2025 forthcoming b). Another example is trade in services, which play an important role in decarbonizing supply chains. For instance, the establishment and operation of renewable energy plants requires a diverse set of specialised services, such as installation and grid connection, operation and maintenance, many of which are not sufficiently available in developing countries and require supportive policies.[7]

At the same time, regulations and private standards can be particularly difficult for companies to comply with and can restrict trade. While increasingly aligned with climate objectives and used by governments to regulate inefficient markets, NTMs can impose high costs on companies and at least partially offset the environmental benefits. These include the costs of obtaining permits and certifications and have been found to disproportionately affect MSMEs and women traders in developing countries. These businesses tend to struggle the most with NTMs due to the high fixed costs, limited access to finance for initial investments and the technical complexity of the requirements (UNCTAD, 2023b).

The high degree of fragmentation and lack of harmonisation of trade rules at the global level exacerbates these problems.

Benefits and state of play of trade integration in NDCs

A good example of how trade and climate policies can be mutually reinforcing is the inclusion of environmental provisions in trade and investment agreements. These provisions have increased steadily over the past few decades, from 2 provisions in 1946 to 288 provisions in 2016, and accelerated sharply with the introduction of the North American Free Trade Agreement (NAFTA) in 1992 (Morin, Pauwelyn and Hollway, 2017).[8] Environmental provisions are not only being added to bilateral FTAs. Regional bodies such

[7] To fill this gap, measures can be taken to improve market access and national treatment of imported services. These include clean transport, waste treatment, and greening of agriculture and mining. Streamlining regulations, such as licensing procedures for energy-efficient technologies, and providing tax incentives for importing specialised services can be effective (ITC, 2024 Mimeo). Similarly, enhancing the transparency and efficiency of investment regulations is crucial to attract the necessary financial capital and technological skills. This can be achieved, for example, by drawing upon the WTO IFD Agreement, which can help attract foreign capital (ITC, 2024, mimeo).

[8] It should be noted that the NAFTA has been superseded by the United States-Mexico-Canada Agreement (USMCA), which entered into force on July 1, 2020. More information can be found on the website of the Office of the United States Trade Representative (link).

as the ASEAN are increasingly seeking to integrate environmental considerations into their trade rules, as is seen for instance in the ASEAN Trade in Goods Upgrade Negotiations currently underway. Similarly, preferential market access agreements, such as the EU GSP+, requires alignment with environmental conventions.

Investment chapters in trade agreements or Bilateral Investment Treaties (BITs) are also increasingly accounting for environmental protection. For instance, the 2012 U.S. Model Bilateral Investment Treaty includes specific provisions for the recognition of respective environmental laws and policies, and MEAs; and inappropriateness of encouraging investment by weakening or reducing protections afforded in domestic environmental laws (Government of the United States of America, 2012). Further, the WTO IFD Agreement – which seeks to set up a more transparent, efficient and investment-friendly business climate - includes a specific section on “Sustainable investment”.

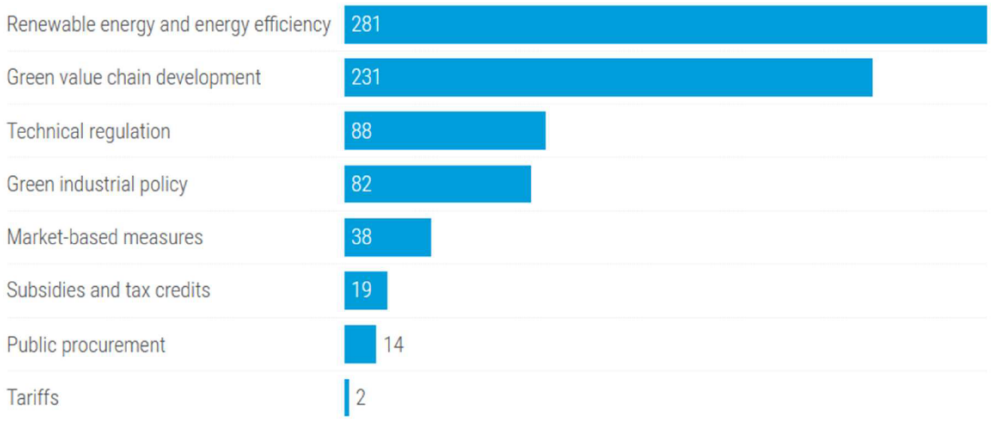
Among other things, these instruments promote regulatory harmonization and encourage the adoption of higher environmental standards among signatories in a non-discriminatory manner (Deere Birkbeck, 2021). Although these agreements may not impose explicit emission reduction obligations, they include norms that indirectly support climate action without restricting economic activity. For instance, they provide harmonized frameworks for waste management, both of which are aligned with climate objectives.

In a similar vein, mainstreaming trade and its links to MSMEs in NDCs can enhance climate policy outcomes by promoting coherence between climate and economic policies. By incorporating trade into NDCs, countries can create synergies between climate action and economic growth, ensuring that the policies do not generate conflicting incentives. Reputational effects for countries can be significant, as governments that prioritise trade and climate integration can enhance their international reputation as global green hubs and attract foreign investment. They can ensure that their climate actions are aligned with global sustainability goals and benefit from international cooperation.[9] Moreover, trade integration in NDCs can attract new investment in green industries and infrastructure as the private sector responds to new regulatory frameworks and market opportunities.

At present, trade is not comprehensively targeted by or included in NDCs as a stand-alone element. Apart from cases where it is targeted as a sector, it is rarely mentioned explicitly in NDC texts, and links to climate action are indirect. However, several countries include measures in their NDCs that could potentially affect trade. UNCTAD's 2023 analysis, which identified 680 TrPMs in the NDCs of 60 developing countries, shows that most of these measures are indirectly linked to trade and primarily have broader objectives, such as the introduction of renewable energy, energy efficiency and the development of green value chains. Technical regulations, which regulate trading activities and ensure compliance with carbon emission standards, were the most common type of direct measure identified (Figure 6). Despite these features, only 15 countries have involved governmental trade institutions, such as trade ministries, chambers or secretariats, in the formulation or implementation processes (UNCTAD, 2025 forthcoming a).

[9] It should be noted, however, that while being developed to respond to the obligations of a Multilateral Environmental Agreement (MEAs), NDCs and NAPs are essentially unilateral measures. When designing and planning NDCs and NAPs, signatories of the Paris Agreement must ensure that NDCs, NAPs and related processes are compliant with the principles of the World Trade Organization (WTO) and do not go against multilateralism. The same applies to TrPMs used to implement NDCs and NAPs.

Figure 6 Trade-related policy measures (TrPMs) included in developing country NDCs



Source: UNCTAD (2023c and 2025, forthcoming a)

Note: Measures could appear in more than one category.

Chapter 4
Guidelines for engaging MSMEs in NDC Development

Principles, methods and steps

While MSMEs are not always, and rarely explicitly, targeted by NDCs, the objectives and strategies of the NDCs tend to have a significant impact on them. These include, for example, ambitious targets for energy efficiency and decarbonisation, which may require MSMEs to challenge business-as-usual and act on new requirements. At the same time, NDC targets typically require large-scale investment and widespread private sector uptake to be met. MSME action is therefore critical for NDCs to deliver. As a result, there is an urgent need to design NDCs and related TrPMs in a way that minimises regulatory and economic costs by taking into account the specificities and challenges of MSMEs (Box 3). By taking these characteristics into account and understanding the key linkages between trade and MSMEs, policymakers can develop NDC-relevant policies and strategies that simultaneously promote MSME-led climate action and a Just Transition.

Box 3 Checklist of MSME characteristics to be considered in NDC development

1. Economic significance:

- Job creation: MSMEs are major employers, providing a substantial portion of the workforce in many countries.
- Economic growth: Their contributions to GDP/value added and overall economic development are substantial.
- Trade: They represent most trading firms, accounting for large shares of export value
- Innovation and entrepreneurship: MSMEs are often at the forefront of innovation and entrepreneurship, including in green industries (e.g. bioplastics)

2. Vulnerability and contribution to climate change:

- Direct impacts: MSMEs can be directly affected by climate change-related events such as floods, droughts, and extreme weather, leading to operational disruptions and financial losses.
- Indirect impacts: Supply chain disruptions, changes in consumer demand, and increased costs (e.g. energy) due to climate change can also impact MSMEs.
- Emissions: MSME activity accrue to GHG emissions, both directly (e.g. energy use) and indirectly (e.g. waste, Scope 3)

3. Limited resources and capacities:

- Financial constraints: MSMEs often have limited financial resources, hindering investments in climate mitigation and adaptation. This includes a lack support e.g. government incentives.
- Technical expertise: They may lack the technical knowledge and skills to implement climate-smart practices and technologies, and be unaware of the benefits of sustainability
- Institutional and regulatory barriers: Regulatory hurdles and bureaucratic procedures, including those envisaged by TrPMs (e.g. carbon taxes), can hinder MSME action and create compliance costs
- Policy gaps: Sustainability goals are not integrated into development strategies (e.g. industrial development); trade and investment policies are not aligned with climate goals, hindering MSME-led climate action

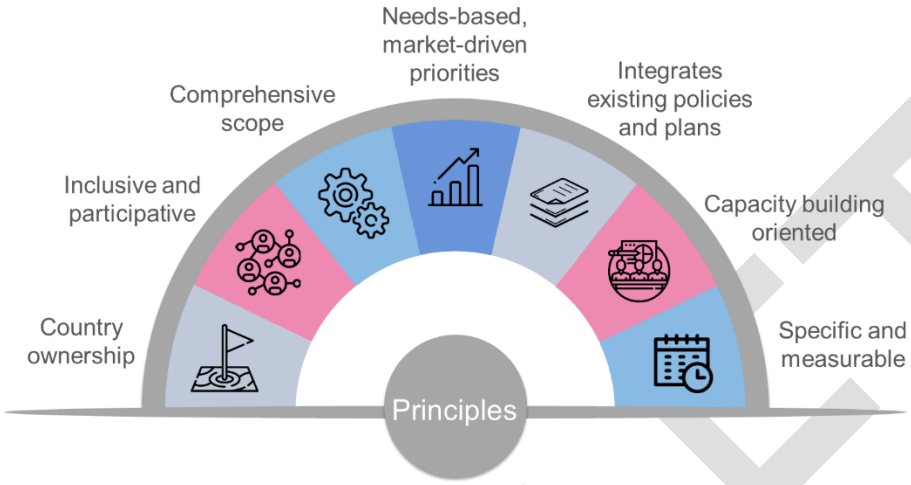
4. Unique assets for climate action:

- Scalability: MSMEs can be scaled up and replicated, leading to significant climate impact.
- Flexibility and adaptability: MSMEs tend to have agile operational structures and the ability to adapt to conjunctural changes, including climate-related ones (e.g. supply shocks, new regulations)
- Innovation: Their agility and entrepreneurial spirit can foster innovative climate solutions (e.g. bioplastics)
- Localized Impact: MSMEs often operate at the local level, relying on a strong knowledge of the local context and offering opportunities for targeted climate action and inclusiveness

Source: ITC analysis

ITC has a long track record of working closely with developing country governments to facilitate the development of trade and development strategies. Based on this experience, ITC has identified seven **principles** that ensure effective strategy development from the design to implementation. These are soft principles of good practice in policy making and can be applied in the NDC context, either when developing or updating NDC texts, TrPMs or the strategies needed to achieve them (Figure 7).

Figure 7 ITC principles of good trade strategy design



Source: ITC (2023b)

Country ownership: The process of developing a strategy is just as important as its content. Ownership is key to this process. Those who will manage, implement, and benefit from the strategy should be actively engaged in its formulation. In NDCs, this requires actively involving MSMEs and BSOs in the process, seeking their input on specific needs and challenges, and considering how trade-related measures can be integrated to support both climate action and MSME competitiveness.

Inclusiveness and participation: The NDC process should be inclusive and involve a wide range of national stakeholders, including government agencies (e.g. core and line ministries), MSMEs, BSOs, and civil society organizations (CSOs). This ensures that diverse perspectives are considered and that the NDC reflects the needs of climate and non-climate stakeholders. It should result in a roadmap agreed among stakeholders, the quality and relevance of which depends on their involvement.

Integration with existing policies and plans: The NDC should be consistent with and build on existing national policies, including both environmental and economic policies (e.g. TrPMs). This helps to avoid duplication of efforts and ensure consistency with broader government objectives. It also allows for the identification of synergies between different policies and the development of more comprehensive and effective strategies, also based on monitoring and evaluation (M&E) findings and recommendations.

Comprehensive scope: While maintaining a clear climate focus, NDC should also address cross-cutting issues that affect the competitiveness of MSMEs, including supply-side capacities, lack of finance and the quality of the business environment. It should also be aligned with broader national development objectives, such as poverty reduction, job creation and inclusiveness. In this context, stakeholders should not overlook the role of trade in addressing non-economic concerns, such as facilitating access to low-carbon technologies.

Needs-based and market-driven priorities: The NDC should be designed and planned based on both microeconomic and systemic considerations. The former relate to the specific characteristics of MSMEs, including their needs, priorities and context specificities (e.g. size, innovation activity) (Box 3). At the same time, existing and emerging capacities in the country, including market trends, investment opportunities, and export potential, as well as broader economic and social objectives, should be considered.

Capacity building orientation: Where appropriate, the NDC process should focus on strengthening the capacities of relevant stakeholders at both the institutional and market levels. This involves developing the skills and knowledge required for effective NDC implementation, monitoring and evaluation. By building or leveraging regional partnerships, capacity building should target both MSMEs and BSOs and cover adaptation, mitigation and trade aspects. Addressing financing gaps is also critical, as many stakeholders face challenges in accessing the necessary resources to invest in climate-related initiatives.

Specificity and measurability: The NDC should set clear and measurable objectives, outlining specific actions and targets that should be clearly communicated to all stakeholders. This promotes transparency and accountability, ensuring that progress can be tracked and evaluated. In addition, the NDC should include a robust monitoring and evaluation framework, including trade-related indicators to track MSME contributions and assess the impact of NDC interventions on trade performance.

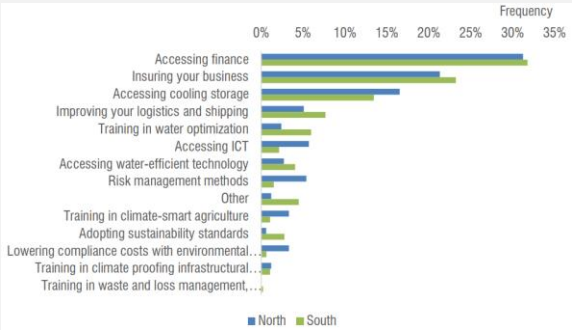
A variety of **methods** can be used to promote the application of these principles in the development of NDCs, and related processes. For example, participatory needs assessment and gap analysis, such as through focus group discussions (FGDs), can support inclusive and effective baselining by directly involving the parties most affected by raising climate ambition, such as producer associations and cooperatives. The collection and interpretation of primary data through business surveys can also provide an in-depth understanding of the policy context for MSME-led climate action, enabling evidence-based priority setting also in relation to vulnerable groups (e.g. women) (ITC, 2023c). This is particularly useful in cases where MSMEs mostly operate in remote areas and their contact with government agencies is sporadic (Box 4). Assessments can also be conducted at the policy level, for example by scanning the regulatory and institutional framework to identify gaps in trade policy that may hinder climate action.

Box 4 Agribusiness surveys: Data-driven baselining for climate change adaptation in Iraq

Affected by rising temperatures, decreasing rainfall and prolonged drought, Iraq is one of the most affected countries by climate change. Desertification and salinization of water and soils, coupled with extreme weather events, pose serious risks to agricultural productivity, particularly in the strategic tomato sector, which has great potential for reducing import dependency and building climate resilience. Degraded soil, contaminated water, and inadequate infrastructure contribute to reduced yields, plant mortality, and post-harvest losses, with significant consequences for farmers and the wider economy (ITC, 2021b).

As part of the EU-funded Strengthening the Agriculture and Agri-food Value Chain and Improving Trade Policy (SAAVI) project, ITC and partners have facilitated agribusiness surveys in the field. This involved collecting and interpreting primary data from local MSMEs, including farmers and agribusinesses, to baseline the intervention and better understand the institutional and resource constraints MSMEs face when implementing climate adaptation measures.

Changing temperatures and water scarcity were the two most cited climate risks among agribusiness MSMEs, followed by deteriorating air quality, erratic rainfall and more severe and frequent storms. While some MSMEs reported investing in measures to reduce climate risk, most of them lack the resources and technology to cope with climate stress. As a result, almost all MSMEs surveyed said they needed support to address these issues. The top 3 gaps and areas of support that businesses were interested in receiving were help with access to finance, climate insurance and access to cold chains, both in the northern and southern parts of the country (ITC 2021c).



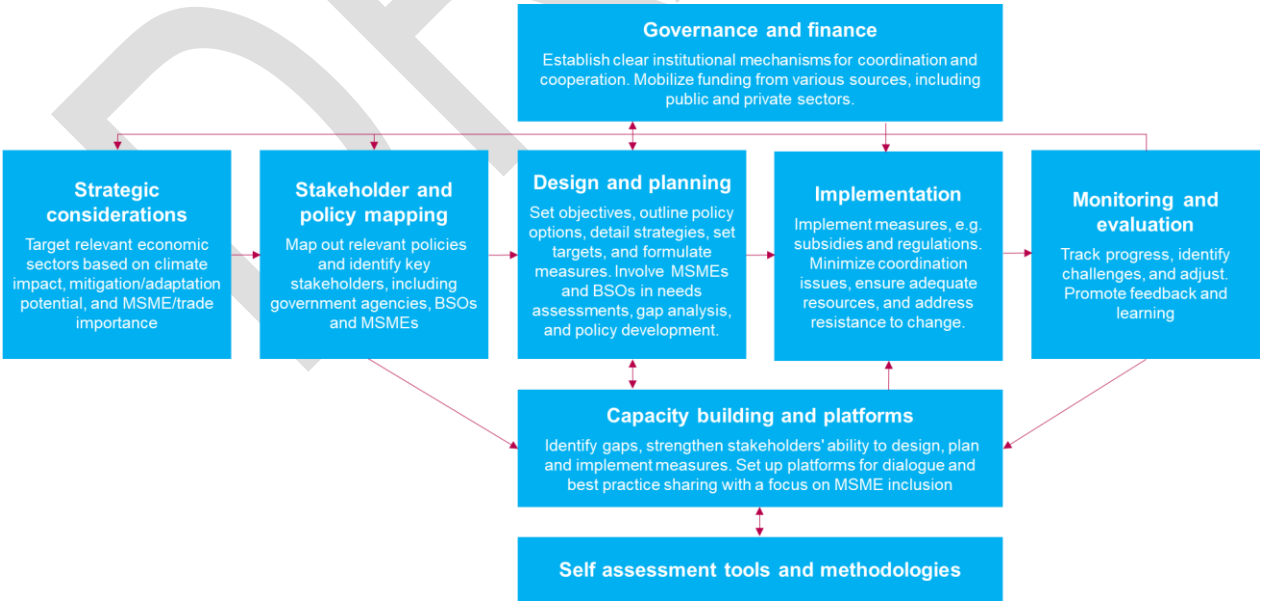
Source: ITC (2021b) and ITC (2021c)

Dialogue can also be steered, and engagement improved by raising the profile of climate policy among MSMEs and BSOs. This is particularly effective in contexts where the benefits of climate action are not obvious or the business case for sustainability is not known, such as in hard-to-abate sectors. It includes raising awareness of NDCs and communicating the objectives and targets of instrumental TrPMs through ad hoc communication campaigns. In a complementary manner, early consultations with BSOs can be organised to present plans and gauge concerns about NDC targets, helping to build trust and buy-in. Points of contact, such as one-stop shops, can also be established to address operational issues faced by small businesses

Peer-to-peer learning between different stakeholders, including central and local governments, is also important to ensure that best practices are replicated and that priorities/needs are reflected in policy planning. This is also true across countries, where policy dialogue between peer governments not only ensures the dissemination of best practices but also that policy priorities are reflected in international cooperation. The active participation of MSMEs can also be promoted by certain measures that are not specifically driven by climate motives, but which improve the business environment. These include simplifying certain rules and procedures, such as those required to register a business, which can help reducing informality and make businesses eligible for climate change support instruments (e.g. grants, loans, insurance). Multilateral processes can also be functional to achieve this objective. For example, the World Trade Organization (WTO)'s IFD Agreement aims, among other things, to increase transparency, streamline procedures and improve regulatory coherence, which can help attract the necessary investment in climate-related technologies and services.

To ensure the inclusive and effective development of NDCs, stakeholders must follow a structured process consisting of five **steps** (Figure 8). The process starts with defining the scope of action through ad-hoc intelligence and strategic considerations (e.g. priority for adaptation vs. mitigation actions, sector selection) and ends with a thorough evaluation of the whole policy package. The latter will promote policy learning at all levels through iterative feedback among stakeholders. Implementation should be supported by adequate financing and smart governance mechanisms. Capacity building and platforms for dialogue helps fill any technical and financial gaps whereas dialogue platforms support the dissemination of best practices. To ensure adequate resources and expertise and to minimize coordination issues, both capacity building and governance and finance should be adequately addressed in the design and planning. MSME and trade considerations should be integrated throughout the process to unlock the potential of NDCs to contribute to a Just Transition.

Figure 8 The five steps of MSME-conscious NDC development



Source: ITC analysis

Strategic considerations

Before mapping stakeholders, it is essential to ensure that NDCs target the most relevant economic sectors, balancing climate action with addressing the country's structural challenges. Government agencies leading the process, such as environment and finance ministries, should conduct a comprehensive assessment of the country's economic and social structures, climate vulnerabilities and emission pathways with a focus on MSMEs. This assessment should consider strategic sectors, such as energy, agriculture and manufacturing, which may have varying levels of climate impact and opportunities for mitigation or adaptation. These findings can help core ministries work together to prioritize actions - whether focusing on emissions reduction or enhancing resilience - based on a country's specific needs, emissions profile, and capacity for action.

For example, a least developed country (LDC) that is highly vulnerable to climate change but contributes minimally to global emissions should prioritize policies that strengthen resilience in sectors like agriculture, and forestry. These sectors are often critical to livelihoods and food security but are highly sensitive to climate risks such as droughts, floods, and shifting weather patterns. Enhancing adaptive capacity in these areas can safeguard economic stability and reduce climate-related risks. On the other hand, a large, industrialized economy with substantial emissions from sectors such as energy and heavy industry (e.g., steel and cement) should focus on decarbonizing its high-emission sectors. This could involve transitioning to renewable energy, improving energy efficiency in manufacturing, and promoting sustainable transportation systems.

While the motivations for targeting one sector or another are country-specific and depend on development priorities, for the reasons discussed in Chapter 2 and 3, stakeholders should prioritise, where possible, highly tradable sectors with strong MSME participation and inclusiveness potential (i.e. participation of women and vulnerable groups). By doing so, core ministries will ensure that policy action is not only climate effective but also inclusive and equitable, thus contributing to a Just Transition. Of course, the final selection will depend on other factors, such as their overall contribution to national economic output and employment. Ad hoc intelligence should be developed for sector targeting, drawing on an appropriate mix of primary data and secondary sources.

Stakeholder and policy mapping

Once certain sectors have been prioritised, stakeholder mapping helps identifying key stakeholders to be involved in NDC development. In addition to government agencies leading NDC processes (e.g. environment ministry) and traditional climate stakeholders (e.g. environmental agencies), non-climate stakeholders should be key targets. These include BSOs such as industry associations, chambers of commerce, export credit agencies (ECAs) and community-based organisations that channel the voice of small businesses, including producer associations and cooperatives. These entities typically form an interconnected network of institutions, organisations and services that support small businesses in international trade and investment - what can be defined as a Trade and Investment Support Network (TISN) (ITC, 2024 forthcoming c).

Mapping and engaging a well-functioning and cohesive TISN is critical to the success of NDCs. This will pave the way for fostering cooperation and knowledge sharing among stakeholders who are not typically involved in climate policy making but represent interests that are critical to achieving climate goals (e.g. trade, investment, etc.). At the same time, it will ensure that the needs and priorities of MSMEs are adequately considered and addressed in the design and planning of NDCs (Box 5).

Box 5 The importance of a Trade and Investment Support Network (TISN) for MSME-conscious NDC development

A well-functioning TISN is essential to promote export-led growth and sector competitiveness. This is in line with the recognition that trade can be a powerful driver of sustainable development and an engine for climate action. In fact, by promoting trade and investment, countries can simultaneously access new markets, diversify their economies and gain access to the goods, services and technologies needed for the green transition.

TISN institutions typically provide tailored support to MSMEs, enabling them to bridge financial and technical capacity gaps and participate effectively in international trade. This link is particularly relevant for NDCs, as MSMEs often face unique challenges in accessing finance, technology and markets, which can hinder their ability to contribute to climate change mitigation and adaptation efforts.

At the design and planning level, TISN institutions can help channel the voice of small businesses to the decision-making table to ensure that their needs and priorities are adequately reflected in NDCs. Input from TISN institutions can help design and plan NDC-related policies that capitalise on MSMEs' assets while minimising costs and regulatory barriers. Examples include proportional carbon taxes with revenue-based tiers, or climate technology transfer coupled with financial support to match MSMEs' absorptive capacity (e.g. small grants).

At the implementation level, a well-functioning TISN can play a crucial role in supporting MSMEs to adopt climate-friendly practices and technologies. By providing information, training and access to finance, TISNs can help MSMEs reduce their carbon footprint, improve their energy efficiency and invest in renewable energy. This can make a significant contribution to achieving NDC targets and promoting sustainable economic growth.

Source: ITC analysis based on ITC (2024, forthcoming)

Stakeholder mapping helps to understand the roles, influence and potential contributions of stakeholders to climate action, with a view to "breaking down silos" in the successive stages of the NDC process. Indeed, it is only by identifying the right stakeholders and the linkages between trade and non-trade stakeholders (e.g. environment, finance) that real dialogue and effective policy-making can take place in the development and implementation of NDCs. Stakeholder diversity is also a key principle to consider, as it ensures that strategies are comprehensive and reflect the full range of interests that serve the purpose of climate action. In this respect, the mapping can be supported by a comprehensive inventory of available policies, including support instruments and regulations, that affect the movement of goods and provision of services in sectors that are strategic for climate action. Relevant policies typically range from import tariffs to export restrictions to measures related to procurement, customs and trade facilitation (ITC, 2024 mimeo).

NDC design and planning

Policy design is concerned with identifying the key issues at stake, setting objectives and outlining viable policy options to pursue them. Planning goes a step further by detailing strategies for implementation and delivery. For NDCs, this involves identifying priority areas for mitigation and adaptation such as, respectively, energy efficiency and disaster risk reduction, setting ambitious targets in these areas (e.g. emissions reduction) and formulating policies and strategies to achieve them. The latter encompass a wide range of measures, from green public procurement to material specifications (cfr. Chapter 2 and 3), which indirectly impact climate change through trade. For example, a country aiming for 100% renewable energy may need to fund public research and development (R&D) to develop smart solar grids, offer tax incentives (e.g. rebates, credits) for the construction of wind farms and reduce tariffs on hydropower equipment.

When planning adaptation and mitigation measures, due consideration should be given to the social and economic impacts of climate change, ensuring that such measures do not exacerbate inequalities but rather contribute to reducing them. In this view, assessing and mitigating trade-related climate impacts on vulnerable groups, including youth, women, and indigenous peoples, can contribute to a Just Transition. In this regard, NDCs offer a unique opportunity to make climate action more inclusive while reducing the impact of climate change on gender equality and human rights (UNDP, 2023, 2019; OHCHR and CIEL, 2022).

Designing and planning NDCs requires different types of expertise, including policy analysis, programme management and technical knowledge from both climate and non-climate stakeholders. TISN stakeholders have different roles to play, depending on their mandates and areas of competence (Table 1). For instance,

export promotion agencies (EPAs) can advocate for NDC targets and measures that are aligned with trade policy objectives and facilitate market access for sustainable products (e.g. bioplastics). ECAs can enable effective NAP planning by offering insurance and guarantees to mitigate trade-related climate risks (e.g. shipment delays due to climate hazards). Additionally, chambers of commerce, producer associations, cooperatives, and MSMEs themselves can actively participate in consultations and policy development, representing members' interests and providing valuable feedback.

Table 1 Key contributions of TISN stakeholders to NDC design and planning

Institution	Example of contribution
Industry associations and chambers	• Represent MSME interests at decision-making tables • Support data-driven decision making, e.g. through insight into members´ readiness for climate action • Develop sector-specific roadmaps and projects • Provide capacity building for climate action, e.g. workshops, demonstrations • Develop networks and partnerships, e.g. between producer associations and government agencies
Export promotion agencies	• Advocate for trade-related policies that are aligned with climate objectives • Provide capacity building on compliance and market access, e.g. training • Provide market intelligence on business opportunities in climate markets
Export credit agencies	• Facilitate trade-led adaptation and mitigation planning through export credits, insurance, and guarantees
Universities and research centres	• Develop and commercialize low-carbon technologies, e.g. solar power kits • Transfer knowledge and expertise to MSMEs to absorb technologies • Educate non-climate stakeholders on climate issues and policies (e.g. NDCs)
Banks and microfinance institutions	• Provide MSME-friendly climate finance (e.g. low-interest loans) • Deliver financial literacy trainings
Business incubators and accelerators	• Offer technical support to early-stage green MSMEs (e.g. incubation) • Connect green startups with potential customers, suppliers and investors. • Mentorship, networking opportunities, and access to resources/shared facilities
Producer associations, cooperatives and MSMEs	• Participate in consultations (e.g. needs assessment) and policy development • Provide feedback and raise concerns in policy design and planning • Unlock innovation, trade and investment in climate action in line with NDC targets
Regulatory authorities	• Lead NDC consultations in non-climate areas enabling climate action e.g. investment, public procurement, intellectual property etc. • Lead the design and planning of policies needed to implement NDCs (e.g. TrPMs)

Source: ITC analysis

Note: The analysis is limited to TISN stakeholders relevant to small businesses and may not be exhaustive

Effective collaboration between government agencies and TISN stakeholders is essential for MSME-focused NDC design and planning. By combining the resources, expertise, and reach of governments, BSOs, and the private sector, public-private partnerships (PPPs) can improve priority setting policy choices and strategy design. For example, in developing a strategy for the adoption of energy-efficient solutions in the textile sector (e.g. LED lighting), core ministries can provide overall guidance and budget for tailored support instruments (e.g. tax incentives). BSOs, such as industry associations, can ensure that policy choices and strategies align with members´ needs (e.g. lack of finance), while facilitating adoption through dedicated

resources. This will help mobilize investment and scale up climate-smart practices by MSMEs, leading to increased climate resilience, reduced emissions, and enhanced MSME competitiveness.

Capacity building and platforms

Technical and human resource constraints often limit the successful delivery of policy objectives, especially in developing countries. This also applies to the design and planning of NDCs, where constraints may include limited access to expertise, insufficient funding and inadequate infrastructure. Therefore, the design phase should include activities to strengthen the technical and financial capacity of stakeholders to formulate, manage and implement NDCs and related measures. This would allow any capacity gaps to be addressed in advance and prevent them from becoming implementation bottlenecks. Common activities include, but are not limited to, training workshops, demonstrations, financial support and hard technical assistance (e.g. access to enabling technologies, shared facilities etc.).

In many cases, the voice of small businesses is channelled into decision-making forums through ecosystem actors, such as BSOs, which typically operate outside the climate field and may require upskilling. For instance, chambers of commerce and industry associations in hard-to-abate sectors may have a limited understanding of NDC processes and the business case for sustainability or suffer from other types of constraints. For NDCs to deliver MSME-relevant outcomes, these actors would require capacity building, including on environmental issues and climate policy to enable them to successfully engage in the process and provide the necessary support to their members. Dedicated resources, ranging from trainings to finance, can be provided by environmental agencies (e.g. ministries), universities and private training centres or, as in the case with ITC´s GreenToCompete Hubs, by international organizations (Box 6).

Box 6 Strengthening the capacity of BSOs to bridge the green finance gap: ITC´s GreenToCompete Hub in Nepal

Nepal's agribusiness sector, a major contributor to the country's economy, accounting for about a quarter of GDP, faces significant challenges that hinder its growth and sustainability, particularly for small businesses. Growing products ranging from cardamom to coffee and tea, MSMEs in the sector have historically struggled to secure adequate financing, including for the adoption of environmentally friendly production practices. Even a directive from Nepal's central bank, which requires commercial banks to provide 15% of all loans to commercial farms by the end of 2023, has not translated into better financing for agribusinesses.

To address these challenges, in 2019 ITC partnered with the Agro Enterprise Centre, the agriculture wing of the Federation of Nepalese Chambers of Commerce and Industry (FNCCI), to equip them with the knowledge and skills needed to help local MSMEs transition to sustainability. This involved setting up a GreenToCompete Hub - an innovative one-stop-shop model designed to provide MSMEs with the support they need to adopt greener practices through a local BSO. In Nepal, the Hub worked with NMB Bank to bridge the long-standing financing gap and facilitate access to climate finance.

[picture]

Through its partnership with the GreenToCompete Hub, the Agro Enterprise Centre has been able to effectively support its member MSMEs in overcoming the challenges they face. With the support of NMB Bank, the Hub enabled the Centre to mobilise NPR 120 million ($902,620) for 25 agribusinesses, demonstrating its effectiveness in facilitating access to finance. In addition, the Hub provided the Centre with the knowledge and resources to support its members in adopting greener practices and improving their climate resilience.

By providing targeted support, the GreenToCompete Hub played a crucial role in enabling Nepalese agribusinesses to become more sustainable, resilient and competitive, while at the same time equipping the local BSO base with climate skills. These in turn can be useful should the local partner be called to represent MSME interests in the development of Nepal´s NDC or related climate measures.

Source: ITC analysis

As the case presented in Box 6 shows, MSMEs and institutional actors can also face capacity barriers in accessing different sources of finance. Governments can help reduce or eliminate these barriers in several ways, including by developing and adopting national standardized criteria and green taxonomies for

determining eligibility and assessing MSMEs for climate finance (IFC, 2023). Governments can also develop simplified access models including measurement and reporting tools that can be used at the MSME level to reduce the complexity and bureaucracy associated with accessing finance. This includes supporting MSMEs in using data for reporting and assessing climate risks, for example through dedicated advisory hubs.

Stakeholder platforms and industry initiatives, both private sector-led and multi-stakeholder, can also facilitate dialogue across sectors and institutions where best practices can be replicated. Outside public forums, peer-to-peer learning on climate action can be promoted through partnerships between MSMEs and large companies. For example, responsible sourcing programmes led by multinational enterprises (MNEs) are increasingly focusing on Scope 3 emissions reductions, engaging and connecting suppliers in decarbonisation efforts. These can expose MSMEs to global best practices while fostering peer networks (e.g. suppliers). Industry initiatives can also help connect public and private actors and ensure that small business priorities are reflected in climate policy-making.

Self-assessment tools and methodologies

Toolkits and guidelines can help stakeholders integrate trade-related MSME considerations into NDCs and unlock business practices that contribute to achieving national climate goals. Where non-climate stakeholders lack the technical skills needed to engage in NDC development (cfr. Box 6), these tools can provide them with new knowledge and help fill key capacity gaps. Tools include self-assessment and diagnostic tools covering both adaptation and mitigation aspects, such as, respectively, ITC´s Climate Competitiveness Assessment Tool and the Framework for the Decarbonization of Supply Chains. They support both policy and business stakeholders in the design and planning phase by offering an impartial and comprehensive assessment of the context in which MSMEs operate (Box 7). Indeed, the knowledge generated by their use is diverse, ranging from insights into the suitability of trade-related policy frameworks for decarbonization to diagnostics on the impact of climate hazards and the adoption of low-carbon technologies (ITC, 2022b).

Box 7 ITC´s tools for trade-related adaptation and mitigation action

The low-carbon transition and the impacts of climate change pose new competitiveness challenges for firms in developing countries. Both the physical risks of climate change and transition risks pose significant threats to businesses. In many cases, particularly in developing countries, the extent of these risks (and opportunities) remains unclear or unknown to institutional stakeholders due to lack of awareness or access to information.

There is therefore an urgent need for intelligence and technical assistance to help stakeholders (e.g. BSO, companies) **build** their **climate resilience** and competitiveness, and thus successfully **adapt to a changing climate**. In this context, a thorough assessment of trade-related climate risks and opportunities can identify the actors and activities that are most threatened by climate change, as well as those with the greatest potential to benefit from resilience measures or better access to sustainable markets.

The **Climate Competitiveness Assessment Tool (CCAT)** is a methodology for the analysis of climate-related risks and opportunities in agricultural value chains. It supports policy and investor decision-making on building climate resilience and competitiveness in specific supply chains. It has been employed across 10 ITC projects in the last four years including the two largest EU-funded ITC value chain programmes in Pakistan and Iraq.

Benefits for the user are many and include a menu of priority actions for policy makers to reduce the exposure of agricultural exports to climate risk; an overview of emerging climate-related opportunities for exporters of agriculture and forest products; and pathways of climate mainstreaming for institutional actors planning interventions in agricultural value chains.

[picture]

To assist governments in developing countries design and implement trade and investment policy measures that support **emissions reduction**, ITC has developed a **Trade and Investment Policy Framework for the Decarbonisation of Value Chains**. Based on country diagnostics, it is particularly useful for charting trade-related policy pathways that contribute to decarbonisation while also aligning business practices with climate goals, such as those outlined in NDCs.

The tool provides a three-step process for developing an enabling policy framework. First, it helps identify the most relevant sectors and value chains based on economic importance, export potential, and decarbonisation feasibility. Next, it facilitates detailed mapping of policy options at each stage of the value chain, recognizing the importance of multistakeholder dialogue in policy planning. Finally, it outlines actions for implementing these options, including regulatory reforms, institutional capacity building, financing, and monitoring.

Benefits for users include guidance on choosing the right mix of trade and investment policies, such as adjusting import tariffs for climate-friendly products, supporting market access for green technologies, and encouraging investment in low-carbon industries. The tool also provides practical solutions for specific stages in the value chain, ensuring that businesses can successfully transition to climate-friendly business models while thriving in international markets.

Source: ITC analysis based on ITC (2022b) and ITC (2024, mimeo)

One-stop-shops can also play a role in mainstreaming NDC processes among businesses, both by helping small business stakeholders to engage in NDC dialogues and by helping MSMEs prepare for climate action. One-stop shops can be set up ex-novo by government agencies or BSOs involved in NDC design, or spill-over from existing focal points (e.g. investment promotion agencies, help desks). Some can provide a centralized location for a range of essential services, such as business registration and licensing, while also including sustainability-related support. Others can be dedicated solely to providing small businesses with the skills, knowledge and finance they need to go green. An example of the latter is ITC's GreenToCompete Hubs. Hosted by local BSOs at the country level, they provide integrated solutions to develop the capacity of MSMEs to implement sustainable business practices. Solutions range from coaching programmes on resource efficiency (e.g. energy use, water conservation) to one-on-one support on accessing green finance (e.g. business planning).

It should be noted, however, that one-stop-shops may face their own challenges and barriers in providing effective support to businesses. These may include limited budgets, lack of awareness, or regulatory hurdles, which make the potential for successful support context-specific.

Governance

As early as the design phase, stakeholders need to establish clear governance structures that facilitate coordination and cooperation between different actors (line ministries, BSOs and financial institutions) (see more in section 5). Indeed, a robust governance mechanism is crucial for the successful development and implementation of NDCs. It clarifies roles, optimises resource allocation, assigns responsibilities and promotes accountability and transparency within public and private actors (ITC, 2023d). To this end, a trade-sensitive mechanism for NDCs presents, at least in theory, four levels of governance: the policy level, the oversight level, the management level and the implementation level (Figure 9). This model needs to be adapted to each country and the NDC/policy under development to reflect local priorities and institutional arrangements.

Figure 9 Generic MSME-inclusive governance mechanism for NDC development

[PLACEHOLDER – FRAMEWORK IN DEVELOPMENT]

Source: Adapted from ITC (2023c)

One point that can prove particularly challenging is to ensure coordination between different government departments, particularly between those with trade and non-trade mandates. More specifically, core ministries who usually lead NDCs (e.g. environment, planning) can have different views or priorities than line ministries (e.g. finance, agriculture, industry) that are typically assigned an advisory or technical role. At a deeper level, trade policy departments may be located within line ministries (e.g. economy and finance) and find it difficult to have their interests adequately represented. Drawing on mechanisms that have proved successful in other contexts, inter-ministerial or inter-departmental committees or task forces can be established and dedicated to integrating trade and industry considerations into NDCs. Under the leadership of core ministries, these bodies should include representatives from key sectors to ensure that different perspectives are considered, and responsibilities are allocated effectively.

Finance

When designing and planning NDCs, it is crucial to accurately identify and allocate the necessary resources for implementation. Indeed, the implementation of measures that are functional for achieving NDC objectives often requires significant resources that may not be immediately available on the ground, especially in developing countries. This is why driving a sustainable and productive contribution of MSMEs to the achievement of the NDCs requires a comprehensive framework for financing, which comprises four objectives: National planning, policy and regulation, Resource mobilization, Capacity building, Prioritization and resource allocation

National planning, policy and regulation

The policy and regulatory frameworks should create an enabling environment for MSMEs access to climate finance. For centralized public resource allocation, national climate responsive planning and budgeting should incorporate input from private sector, such as from industry associations representing MSMEs and line ministries (e.g. trade, industry). NDC targets should be matched with MSME potential contribution ensuring equitable resource allocation. At the same time, central banks should adopt fiscal policies that incentivize financial institutions lending to MSMEs contributing to NDCs. National policies should require financial institutions to set, monitor and report on climate commitments and embed climate disclosure requirements for financial institutions. This includes reporting on areas that are relevant for climate action, such as fossil fuel finance and the value of climate finance going into MSMEs across different sectors.

Emerging financing models continue to evolve with the impetus of climate adaptation and mitigation. This is the case of new equity funds targeted at developing countries. Governments should review, update or develop legislative frameworks for new and alternative financing mechanisms targeting climate solutions.

At the same time, core ministries (e.g. environment) should advocate for the integration of NDC needs that may not be as obvious to agencies leading the national budgeting process, such as the finance ministry. Early engagement with these actors, for example through inclusion in governance structures such as NDC councils, can foster buy-in and ensure financial coverage throughout the process. Ideally, the NDC process would be fully financed by a single source, such as a national climate fund established as part of the budget cycle. However, this is often not the case. Indeed, NDCs may require significant financial resources that exceed national budget allocations. As a result, stakeholders need to actively seek different financing options (ITC, 2023d).

Resource mobilization

There are several sources of climate finance that governments can access and use to finance MSME-inclusive NDCs. They can explore a wide range of funding sources, including grants, loans from development finance institutions or climate funds (e.g. Global Environment Facility), and private sector investment (Table 2). This may involve engagement with a multiplicity of stakeholders, including development banks, bilateral donors, private lenders, and other international, regional, and national financial institutions.[10]

Table 2 Financing instruments for MSME-conscious NDC implementation

Type of instrument	Description	Example
Domestic public finance	Funding allocated from national budgets, and public expenditures. Funding from sovereign wealth funds and other institutional funds (e.g. pension funds)	A government allocates a portion of its annual budget to set up a NDC climate fund A government increases available domestic capital by implementing tax penalties on GHG emissions, environmental pollution and other carbon pricing mechanisms A government leverages long term sources of funds to provide patient capital for MSME investment in green technologies.
Debt financing	Loans or bonds issued by governments or private entities to raise funds	A government issues a green bond to finance climate mitigation projects needed to achieve NDC targets (e.g. rail electrification)
International climate finance	Funds provided by multilateral institutions like the Green Climate Fund, Adaptation Fund, or Global Environment Facility	The Green Climate Fund provides a grant to a cooperative to improve local farming practices and finance adaptation measures (e.g. water saving equipment)
Innovative climate finance	Mechanisms that allow entities to buy and sell carbon credits, generating revenue for climate mitigation projects.	A MSME purchases carbon credits to offset its emissions, supporting reforestation projects in another region, as requested by a lead buyer
Development assistance (multilateral and bilateral)	Financial support provided by multilateral institutions (e.g. development bank, international finance institutions (IFIs) or individual countries or governments	The World Bank provides a loan to a developing country to support the construction of climate-resilient infrastructure (e.g. ports)
Private sector investment	Capital from corporations, venture capitalists, or other private entities, channelled to beneficiaries as foreign direct investment (FDI), PPPs etc.	A private equity firm invests in an early-stage MSME or start up developing innovative climate solutions (e.g. solar energy kits).
Philanthropy	Financial awards given to organizations or individuals for specific purposes, often with no repayment obligation.	A foundation provides a grant to a non-profit organization to support adaptation initiatives in

[10] It should be noted that while there are many financial instruments and providers available, the climate finance landscape is evolving rapidly. The 29th Conference of the Parties (COP 29), to be held in Baku, Azerbaijan, from 11 to 22 November 2024, is expected to provide guidance and help clarify the available options for stakeholders needing to finance climate-related actions within and outside the scope of NDCs.

		vulnerable communities (e.g. shared storage facilities).
Public-private partnerships (PPPs)	Collaborative agreements between governments and private sectors to finance and implement projects.	A government agency partners with a private company to build and operate a wind farm.

Source: ITC analysis based on NDC 3.0 Navigator (2024), Government of Curaçao (2024) and evidence from ITC projects

Prioritization and resource allocation

Governments at different development and transition stages will have targets driven by mitigation, adaptation, or a combination of both. Targets adopted in NDCs should also be reflected in the allocation of resources and incentives to the different transition strategies.

Some climate finance providers may prioritize and be willing to fund only projects in specific sectors or regions. For instance, climate funds focused on renewable energy may not be appropriate for financing interventions tackling adaptation in agriculture or forestry. To minimize these risks, stakeholders should diversify funding sources, for example by seeking funding from multiple sources for the same projects or by incorporating financial risk management strategies in NDC planning. By combining the expertise and resources of governments and the private sector, PPPs such as between government agencies and foreign investors can also facilitate large-scale investment in climate-related projects.

Chapter 5
Strategies for NDC implementation

Success factors, implementation challenges and risks of failure

Despite the importance of design and planning, the effectiveness of NDCs in advancing national and global climate action depends on the ability to successfully implement the plans. Policy implementation is the stage where NDCs and instrumental strategies are translated into action. It involves carrying out the planned activities, monitoring progress, and adjusting as needed. Typical activities in this phase include regular meetings, targeted actions to deliver on action plans (e.g. investments, tenders etc.), disbursement and transfer of funds, implementation reviews and pilot projects to test new solutions.

At this stage, a country should be able to count on well-functioning institutional mechanisms with a satisfactory representation of non-core interests (e.g. trade, MSMEs) and adequate human and financial resource for implementation. However, ITC´s twenty years of experience in facilitating the design and execution of trade strategies shows that developing countries frequently struggle with implementation due to several challenges. These include limited coordination between stakeholders, inefficient allocation of or limited resources, resistance to change and lack of commitment in implementation. The latter occurs when stakeholders that play a critical role in implementation, such as line ministries, have not been sufficiently involved in strategy development (ITC, 2023d). A government's failure to implement its NDCs pose significant risks, both domestically and internationally (Box 8).

Box 8 Risks of failure to successfully implement NDCs

Failing to meet NDC commitments and national climate goals exposes countries to a series of significant consequences, both domestically and internationally. While the local impacts are often tangible, such as adverse environmental, social, or economic effects, other consequences can be more intangible, such as damage to reputation and credibility.

At the national level, implementation and delivery failures of NDCs can lead to a worsening of climate-related impacts. For example, repeatedly failing to reduce greenhouse gas emissions or transition to renewable energy sources can result in reduced agricultural yields, biodiversity loss, and air pollution. These consequences can have severe economic and social implications.

Internationally, countries that fail to deliver on their climate commitments risk damaging their reputation within the global climate community. This can negatively affect their trade, diplomatic relations, and ability to attract green investment. Some Multilateral Environmental Agreements (MEAs), like the Paris Agreement, also include provisions for financial penalties for countries that do not meet their NDCs.

At the aggregate level, widespread failure to deliver on the climate agenda can undermine the overall effectiveness of global efforts to combat climate change. It is essential for countries to take decisive action to implement their NDCs and achieve their national climate goals to avoid these negative consequences.

Source: ITC analysis

In general, effective implementation depends on minimising coordination issues between public, private, and development stakeholders. From this perspective, a comprehensive and inclusive design phase paves the way for better cooperation during implementation. For example, BSOs such as chambers of commerce may be reluctant to help their members comply with new emission reduction requirements, which may lead to increased costs for small businesses, if they have not been consulted on the design. To reduce these risks, arrangements that have worked well in the design and planning phase can be replicated and adapted for new purposes. For example, inter-ministerial committees or task forces established to integrate MSME considerations into NDC design can serve to create operational synergies (e.g. between BSOs and core ministries). This can help to maintain coordination and cohesion among stakeholders while enabling timely and effective action.

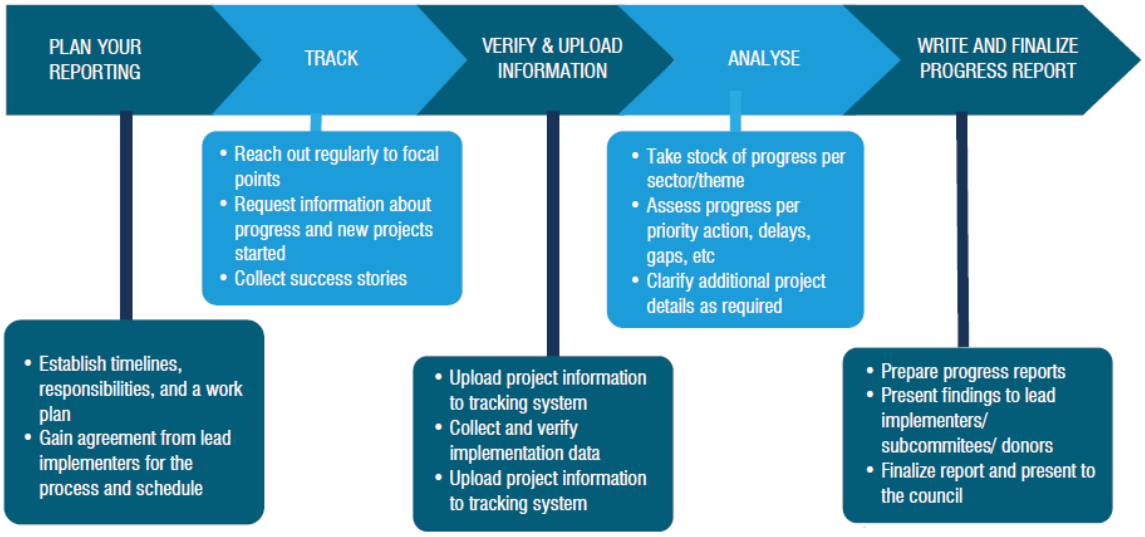
Monitoring and evaluation

M&E allows regular tracking of implementation progress. In particular, monitoring helps to understand whether the activities needed to achieve MSME-related objectives, ranging from reforms of specific policy frameworks to climate investments, are being adequately resourced and implemented on time. At the end of the NDC cycle, an independent evaluation will show whether the NDCs and the TrPMs used to implement them have achieved the expected results. It will also show whether efforts to engage MSMEs, as defined in the design and planning phase, have remained effective and contributed to national climate and development goals.

Basic activities typically carried out at the M&E stage include, but are not limited to, establishing reporting schedules and work plans, collecting data and information, calculating indicators, and producing reports. These reports that are typically used to track progress against targets and to evaluate programmes and projects at completion.

Overall, monitoring is most effective when implementing actors follow five basic steps: planning reporting, tracking progress, verifying and uploading information, analysing, writing and finalising progress reports. Where a country has established a national council, committee or task force to coordinate its NDC, progress reports should be submitted to and approved by this council, committee or task force (Figure 10). If necessary, this council or committee will also be responsible for coordinating corrective actions.

Figure 10 Steps to follow to capture progress in NDC implementation



Source: ITC (2023c)

The five steps should be underpinned by a clear and robust M&E framework in which indicators and metrics to track MSME contributions are jointly developed and endorsed by all stakeholders. For their part, stakeholders should actively contribute to this, for example by collecting data and compiling indicators as appropriate. For these efforts to be successful, expectations and desired outcomes including a basic theory of change should be defined with, or at least clearly communicated to all stakeholders (e.g. BSOs).

Core implementing partners (e.g. environment ministry) may need to invest in new capacity for tracking progress towards NDC targets. This may involve investing in new technologies (e.g. AI), hiring new staff and entering PPPs. At the same time, surveys used to assess MSMEs´ contributions to climate action at inception can be repeated periodically to track progress. Survey topics range from the adoption of low-carbon technologies to the use of climate-resilient infrastructure put in place as part of the NDC (e.g. water storage facilities in drought-prone areas).

Thorough M&E can also create useful feedback loops and foster institutional learning - a component that is particularly important for developing countries. Indeed, a trial-and-error dynamic is particularly likely in developing countries that may be relatively new to climate policy and are grappling with NDC preparation for the first time. In this context, it is important to take a concerted approach to tracking progress, involving all relevant stakeholders and planning for recurring and predictable reporting cycles. Again, the establishment of dedicated committees, units or task forces within and across relevant institutions can help improve coordination and accountability, while enabling stakeholders to incorporate lessons learned in a timely and effective manner.

Chapter 6
Conclusions

Towards an MSME-conscious NDC 3.0

This guide explores the critical connection between MSMEs, trade, and the successful pursuit of climate goals outlined in NDCs. It presents original, data-driven insights that show that MSMEs are not only key drivers of economic growth but also powerful allies in the transition to a low-carbon and climate-resilient future. It highlights the unique vulnerabilities MSMEs face due to climate change but also recognize their agility, adaptability, and understanding of local contexts, which positions them as essential agents of change. International trade, as an amplifier of MSME activity, can further enhance climate action by facilitating the diffusion of low-carbon technologies, promoting sustainable business practices, and building supply chain resilience.

However, this guide also reveals that MSMEs and their trade connections are often not explicitly addressed in NDCs. While NDCs may target sectors with high MSME presence, they often fall short of recognizing them as distinct policy recipients with specific needs and contributions. Similarly, the integration of trade into NDCs is limited, and even when TrPMs are included, they often lack an MSME-specific focus.

The successful integration of trade and small business considerations in NDCs depends, inter-alia, on seven principles drawn from ITC's experience in supporting trade strategy development. These principles range from country ownership to coherence and inclusiveness. Among other things, they emphasise the need for NDCs to reflect the diversity of interests, including socio-economic, to be aligned with existing national policies to ensure synergy and consistency, and to address cross-cutting issues such as access to finance and technology based on MSME characteristics and market signals.

To effectively address these gaps in the next round of submissions (NDC 3.0), stakeholders should prioritize strategic considerations by focusing on sectors with high MSME participation and trade potential. This targeted approach will maximize the impact of climate action on economic growth and inclusiveness.

To ensure that MSME needs and trade perspectives are adequately represented, stakeholder and policy mapping should be conducted. Based on a thorough baselining of existing policies, including regulations and support measures, this mapping should identify and engage a diverse range of stakeholders, looking beyond typical climate actors and including those within the TISN such as BSOs and producer associations. This will ensure that small business perspectives and needs are adequately represented in the NDC process

On these grounds, during NDC design and planning, policymakers should formulate policy measures that leverage MSME strengths, such as their adaptative capacity and local knowledge, while addressing their specific challenges, including limited access to finance and technology. The social and economic impacts of climate change should be considered, especially for vulnerable groups employed by MSMEs (e.g. youth, women), to ensure a just transition with a fair distribution of the costs and benefits of climate action.

Robust governance mechanisms are essential to ensure effective coordination between government agencies, TISN stakeholders, and the private sector. Being a primary determinant of successful implementation, they should be already planned for in the design phase. Equally important is ensuring adequate financial resources for NDC implementation, which can be achieved by exploring diverse funding sources, including national budgets, climate funds, and private sector investment (e.g. FDI) while reducing information asymmetries.

Finally, a robust monitoring and evaluation framework with specific indicators will help track MSME contributions to climate action and assess the impact of climate interventions on trade performance.

By adopting a holistic approach that incorporates the recommendations outlined in this guide, stakeholders can harness the full potential of MSMEs and trade to contribute to ambitious and inclusive climate action. This integrated approach will enhance policy coherence and create indispensable synergies between economic growth and climate resilience.

The role of ITC

Given the challenges faced by MSMEs and BSOs, the guide also shows that capacity building and platforms are essential for successful design, planning and implementation of NDCs. Investing in capacity building programs for both MSMEs and TISN stakeholders will improve their understanding of climate policy and provide them with the necessary skills to successfully contribute to NDCs. At the same time, platforms for dialogue and knowledge sharing can foster peer-to-peer learning and dissemination of best practices. Leveraging existing self-assessment tools can also help identify climate risks and opportunities to develop tailored adaptation strategies and identify the right decarbonization paths.

As the joint UN-WTO agency dedicated to helping small businesses from developing countries trade, ITC has a key role to play in assisting developing country stakeholders craft MSME-inclusive and trade-conscious NDCs, including in the upcoming preparation of 3.0 submissions. ITC has a dedicated offering of technical support services covering the five steps of the NDC process. Services range from providing data-driven insights for sector selection to facilitating dialogue between climate and trade stakeholders for policy development (Table 3).

Table 3 ITC´s service offering in support of NDCs

	Steps of NDC development				
ITC core services	Strategic considerations	Stakeholder and policy mapping	Design and planning	Implementation	Monitoring and evaluation
Improved MSME firm-level capacities to trade	Trainings on climate change adaptation and mitigation for MSMEs	Facilitate MSME participation in baselining exercises (e.g. FGDs)	Facilitate the collection and channelling of MSME concerns to NDC making tables	Technical and financial support for MSME climate investments	Support the identification of constraints impeding MSME-led climate action
A more supportive business ecosystem for MSMEs	Trainings on climate policy and NDCs for BSOs	Facilitate non-climate stakeholder identification by national focal points	Policy dialogues connecting climate and trade stakeholders	Technical support to BSOs to address implementation bottlenecks (e.g. MSME finance)	Support BSOs in monitoring and evaluating NDC-related activities (e.g. credit schemes)
A more conducive policy and regulatory environment for MSMEs	Identify synergies between climate and trade policies to be leveraged in NDCs	Mapping of trade-related policies that support climate action in strategic sectors	Technical assistance in the design and planning of trade-related climate measures	Facilitate well-functioning governance mechanisms for institutional coordination	Facilitate feedback loops between policy recipients (e.g. MSMEs) and policy makers
Improved business, trade and market intelligence	Insight into sector significance for growth and potential for mitigation and adaptation	Assessment of readiness of non-climate stakeholders for NDC development	Diagnostics of MSME readiness for climate action	Diagnostics of MSME contributions to climate action	Development and roll out of M&E frameworks and indicators

Source: ITC analysis

Note: The table provides examples of ITC support services and is not exhaustive. Support can be tailored to country needs.

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