Guidance Note: Transformational Change Measurement Framework

By Elizabeth Gogoi and Luca Petrarulo – AMBERO-OPM Consortium

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This Note provides guidance for understanding and measuring the progress of Mitigation Action Facility projects towards bringing about transformational change.

Transformational change is embedded in the Mitigation Action Facility's Theory of Change (ToC), and projects are the main way through which transformational change is expected to be achieved. The definition used by the Facility is: "*Transformational change is a catalytic change in systems and behaviours resulting from disruptive climate actions that enable actors to shift to carbon-neutral pathways*[1]."

Transformational change features in three different programme management tools of the Mitigation Action Facility. Firstly, the transformational change potential is a key selection criterion for projects. Secondly, during implementation, projects report on progress in supporting different aspects of transformational change using the Mandatory Core Indicators (particularly the M3 indicator)[2]. Thirdly, the Evaluation and Learning Exercises (ELEs) provide an independent assessment at the mid- and end-point of the project on to what extent there are signals or evidence of project-induced transformational change.

This document aims to establish a clear and consistent approach to defining and measuring transformational change throughout the project lifecycle. It provides guidance on how transformational change is anticipated within projects and outlines how progress can be measured, incorporating sector-specific insights wherever applicable.

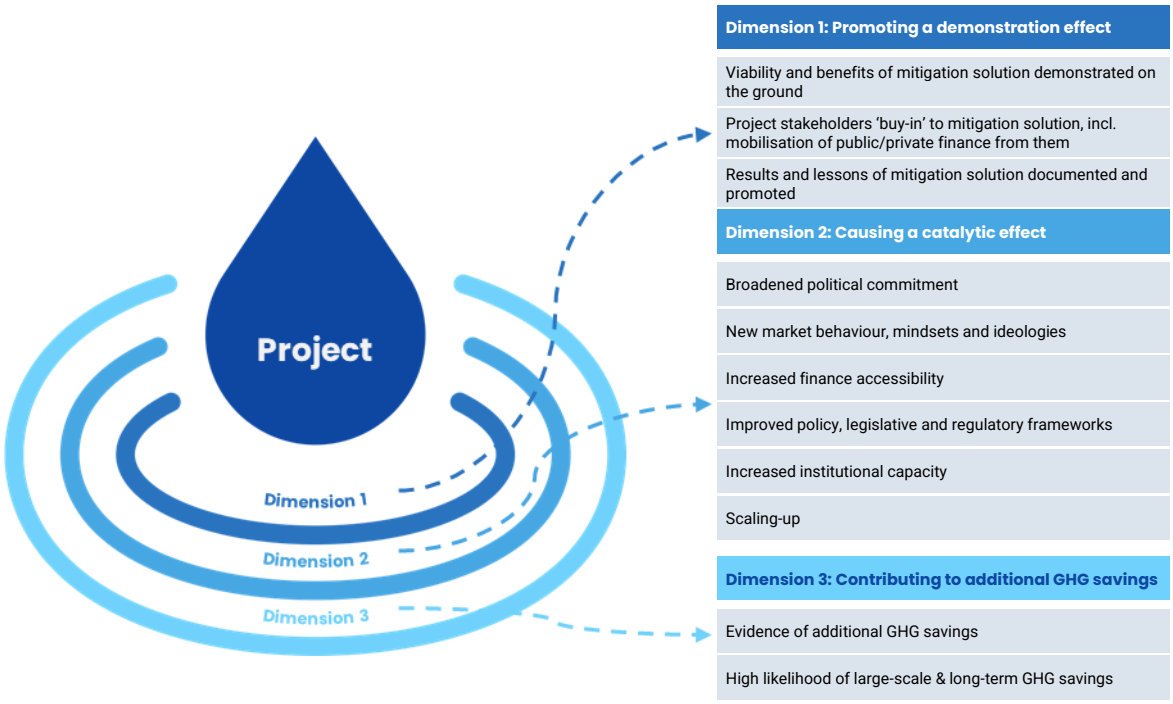
1. How can projects enable transformational change?

The Mitigation Action Facility's ToC outlines in broad terms how transformational change is expected to be achieved through its outputs and outcome. To better define and measure projects' progress in inducing transformational change, ELEs use a bespoke Transformational Change Measurement Framework (TCMF), which aligns with the Facility's ToC.

According to the TCMF, projects contribute to enabling transformational change across three key dimensions (see Figure 1): Promoting a demonstration effect; Causing a catalytic effect; and Contributing to additional greenhouse gas (GHG) emission savings.

[1] https://mitigation-action.org/wp-content/uploads/Mitigation-Action-Facility_transformational change-factsheet.pdf.
[2] https://mitigation-action.org/our-approach/monitoring-evaluation-learning/

Figure 1. Dimensions of project-induced transformational change



These dimensions interact and reinforce each other, driving transformational change through the projects. The following section describes each dimension, with examples from the Facility's three priority sectors: Energy, Transport and Industry.

Dimension 1: Promoting a demonstration effect. The most direct way in which a project contributes to transformational change is by demonstrating or proving the viability and benefits of a specific mitigation solution.

There are three main elements of the demonstration effect:

1. **Proving the viability and benefits of the mitigation solution** by the project supporting a sample of target users to adopt the solution (i.e. the project providing technical and/or financial support for the implementation of the solution). This also leads directly to GHG emission reductions.
2. **Securing buy-in from key public/private sector stakeholders for the demonstration of the solution**. These are stakeholders who have the resources and mandate to support the solution's implementation (and potentially scale it in the future). For example, their buy-in could be shown by them committing public or private finance or their political influence to support the project in demonstrating the solution.
3. **Documenting and promoting the benefits of the mitigation solution** through knowledge-sharing and communication products, reaching target users and other stakeholders.

Table 1 provides examples from the three priority sectors, illustrating how projects are promoting a demonstration effect for their respective solution.

Table 1. Sectoral examples of promoting a demonstration effect (Dimension 1)

Energy	Transport	Industry
In Mongolia, a project is aiming to demonstrate the effectiveness and scale the uptake of thermo-technical retrofitting in residential buildings, with a target of **retrofitting 375 housing blocks with these energy-efficiency measures** within the project period. This is expected to trigger **increased consumer awareness** of the financial benefits of the retrofitting technology and **strengthen the buy-in and capacity of key stakeholders** to scale up the technology.	In Cabo Verde, a project is promoting Electric Vehicles (EVs) with a target of **increasing the fleet to 600 units** (4.3% of newly registered cars) through a subsidy scheme. This is expected to secure the **buy-in** from car dealers to continue and scale the supply of EVs. The visibility of EVs on the roads and word-of-mouth **dissemination of benefits** will help establish a sustainable market for the technology.	In Mexico, a project is promoting energy efficiency practices among SMEs. With financing support and capacity building for both supply and demand of energy efficiency practices, the project expects to boost **market value for energy efficiency services and products to EUR 1.6 million**. Collaboration with sub-national governments and private sector associations is crucial to secure the necessary **buy-in** for project implementation.

Dimension 2: Causing a catalytic effect. To amplify the impact of the demonstration effect (Dimension 1), the project must trigger a virtuous catalytic effect, leading to broader, systemic change within the country or region. The Mitigation Action Facility assesses a project's potential to cause a catalytic effect through its Mandatory Core Indicator M3 (see Annex 1 for details on how to monitor M3). In the M3 methodology, the Facility identifies six possible project outcomes or 'results categories' that are considered to deliver these changes:

1. ***Broadened political commitment*** – Decision-makers or decision-making entities in the implementing country (e.g., parliament, business associations) make landmark decisions aimed at moving the country towards a carbon-neutral development pathway. Supported by the project's activities, these decisions alter the behaviour of or incentives for more individuals or institutions. These decisions could be announced in speeches of politicians, new targets or commitments, or even informal discussions and comments of key individuals. In most cases, broadened political commitment is a precursor to another result category; for example, the government may change its position on a subject and communicate this publicly before it adopts a law or policy that formally institutionalises this position.

2. ***New market behaviours, mindsets and ideologies*** – Lock-in effects or path dependencies that incentivise or firmly establish carbon-intensive, non-sustainable patterns of behaviour over a long period are broken up or avoided due to the project's activities. Alternatively, new path dependencies that incentivise or firmly establish carbon-neutral and sustainable patterns of behaviour are established due to the project's activities.

3. ***Increased finance accessibility*** – Replicable, scalable and/or long-lasting financial instruments for a carbon-neutral development pathway (e.g., technologies, business models) have been established due to the project's activities. These instruments are developed through the project but are not limited to leveraging public or private funds under the Financial Cooperation (FC) Component. Instead, their impact lies in creating lasting financial access for a wider range of actors (e.g., SMEs, smallholder farmers, households). These instruments or incentives should also be accessible to the stakeholders not directly targeted by the project, ensuring the long-term affordability and adoption of mitigation solutions across the system.

4. ***Improved policy, legislative and regulatory frameworks*** – As a result of the project's activities, climate change mitigation aspects are integrated and mainstreamed into one or more of the following: major policies, plans, strategies, or curricula of different educational institutions. In other words, the project contributed to improving the policy, legal and/or regulatory enabling environment for the large-scale deployment of the mitigation solution.

5. ***Increased institutional capacity*** – As a result of the project, an organisation, institution, or committee (e.g., a climate change authority) committed to a carbon-neutral development pathway is established or significantly strengthened and is lobbying for the changes needed to deliver this kind of development.

6. ***Scaling-up*** – Carbon-neutral, sustainable approaches or instruments (e.g., business models, market mechanisms, financing solutions) that have been tested or piloted within or independent of the project are scaled up due to the project. In line with the Mitigation Action Facility's Indicator 4.3 (see Annex 2 for details on how to monitor Indicator 4.3), the Facility identifies three distinct pathways to successful scaling:

    a. ***Geographical expansion*** – The scope of this scaling pathway pertains to expanding the geographical scope of activities by including new regions, districts, provinces, or states within the country beyond those targeted in the project proposal.

    b. ***Target group extension*** – The scope of this scaling pathway pertains to targeting a wider beneficiary group, encompassing an enlarged segment of the project's intended recipients beyond those targeted in the project proposal.

    c. ***Additional financial leverage*** – The scope of this scaling pathway pertains to targeting the additional allocation or mobilisation of funds towards measures associated with the project's intervention outcomes, including, but not limited to, carbon finance stemming from the sale of carbon credits issued for the 'scaled-up mitigation'. These funds need to be additional to those planned in the project proposal. For example, the project partners' public or private finance mobilised for the necessary work of the FC Component counts as part of the 'demonstration effect' (Dimension 1) but not as project scaling up (Dimension 2).

Table 2 provides examples of catalytic changes according to the six results categories for the three priority sectors.

Table 2. Sectoral examples of causing a catalytic effect from MAF portfolio (Dimension 2)

Systemic Change	Energy	Transport	Industry
1. Broadened political commitment	In the Chile SSRE project, the government of the Coquimbo Region has taken notice of the project's success and is designing similar schemes to direct regional funds to encourage self-supply renewable energy adoption. In general, there are clear signs that **political support for this technology has**	A project in Indonesia promoting a model for sustainable urban transport successfully **expanded political support for the concept and pilot projects from the national level to several local governments**. The local governments were supported in coordinating work, identifying gaps in	The Thai Refrigeration and Air Conditioning (RAC) project, promoting the manufacture of climate-friendly and energy-efficient cooling technologies, successfully secured a **formal commitment from the government to declare natural refrigerants with low Global Warming**

Systemic Change	Energy	Transport	Industry
	expanded from national to sub-national level.	policy and regulatory frameworks, and providing advice and guidance to ensure alignment.	**Potential as safe for use in commercial refrigeration.**
2. New market behaviour, mindsets and ideologies	In Mongolia, the Building Retrofitting project has used a wide range of communication channels to **build consumer interest in the financial benefits of building retrofitting**. They have secured 100% consent from residents of 35 shared buildings for partially-subsidised thermo-technical retrofitting, indicating a **shift in mindset** among households that were previously accustomed to receiving energy efficiency retrofitting at no cost through municipal support.	Thanks to the Cabo Verde EV project, seven car dealerships now offer EVs, reflecting early signs **of a shifting attitude and consumer preferences towards EVs.** The dealerships have invested in their EV supply chain, reflecting their new confidence in the future of the market.	In the Brazil PotencializEE project, targeted awareness campaigns, such as sector-specific technical presentations and publications, social media, newsletters, and a webpage, are **altering the mindsets of industrial SMEs regarding investment in energy efficiency measures.**
3. Increased finance accessibility	A project in Mexico promoting renewable energy and energy-efficient technologies in new housing used a subsidy and technical support to SMEs to **incentivise the construction of low-carbon housing** and encouraged financial intermediaries to continue financing such projects.	The Cabo Verde EV project set up an Electric Mobility Facility (EMF). The EMF offers grants and rebates to both public and private entities for purchasing EVs and charging stations. By 2022, this initiative had contributed to over 50% of all new EVs registered, creating a significant **new incentive in the market**.	The PotencializEE project in Brazil has contributed to **increasing the investment propensity of non-commercial banks** in industrial energy efficiency projects. For instance, the National Bank for Economic and Social Development is now willing to provide special financing conditions for technologies that meet efficiency criteria.
4. Improved policy, legislative and regulatory frameworks	A project in Tunisia promoting rooftop solar installation for households provided technical assistance for a **new government decree** updating the incentives granted by the Energy Transition Fund as well as **a Ministerial Order** for implementing the national pilot project for the equipment of middle-income families connected to the low-voltage network by solar PV systems.	In the Cabo Verde EVs project, technical assistance and engagement with the government influenced an amendment to **the General Legal Framework for Motorised Transport** enabling the registration of electric taxis. The project also contributed to the current **drafting of a decree-law** addressing EV end-of-life disposal and public charging stations.	The Colombia Domestic Refrigeration project, promoting the manufacture of climate-friendly and efficient refrigerators, contributed to **new regulations on labelling and minimum energy performance standards,** which had a significant influence on transforming production lines and product portfolios.
5. Increased institutional capacity	In Chile, the project collaborated with and assisted SMEs that supply self-supply of renewable energy technology. This	A project in Peru promoting a low-carbon transport system model helped **introduce gender equality considerations in the urban**	The Thai RAC project established eight training centres and trained 222 trainers and 159 service technicians to ensure **long-**

Systemic Change	Energy	Transport	Industry
	support **helped the SMEs develop proposals and apply for the financial incentive** offered by the Mitigation Action Facility. **Without this support, many SMEs would not have applied for the incentive.**	**transport agenda** by developing and disseminating guidelines on transport and gender equality and an anti-harassment transit protocol for the Lima-Callao Metropolitan area.	**term technical know-how for manufacturing these (and future) clean technologies.**
6. Scaling-up	In Chile, as a result of the project promoting SSRE at the national level through a financial incentive called "*Ponle Energía a tu Empresa*", the government of the Coquimbo Region is replicating (geographical expansion) a similar funding scheme under its mandate to encourage further adoption of SSRE technologies. At the time of the last evaluation, other regional governments have been considering similar actions.	In Indonesia, the MAF project SUTRI NAMA, aiming at contributing to transformational change in the urban transport sector, **mobilised additional financial resources** by signing a Memorandum of Understanding (MoU) with the newly developed INDOBUS project funded by the State Secretariat of Economic Affairs of Switzerland (SECO). Despite being different projects, the two initiatives shared goals and implementation teams (GIZ) and operated in the same pilot cities, thus enhancing each other's impact.	In Brazil, the PotencializEE project has been piloting energy efficiency measures in industrial SMEs in Sao Paulo State. The project has been so successful in demonstrating the viability of its approach that the National Service for Industrial Training (SENAI), the project's national political partner, managed to scale it up with an extra EUR 9 million **(additional financial mobilisation)** from the National Electric Energy Conservation Programme (PROCEL) to replicate it in at least 5 states **(geographical expansion)**. At the time of the last ELE, another **scale-up proposal** was being developed with the Brazilian Support Service for Micro and Small Businesses (SEBRAE) to reach 41,000 companies throughout Brazil **(target group extension)**.

Dimension 3: Contributing to additional GHG savings. As a result of contributing to Dimension 1 and Dimension 2, the project will influence *additional, large-scale and sustained GHG savings*:

- Additional: the GHG savings achieved are in addition to those achieved by the direct implementation of the project (i.e. additional to the direct and indirect emissions being targeted and reported on under Mandatory Core Indicator 1).
- Large-scale: the additional GHG savings will have a significant impact on overall GHG savings in the geography/sector.
- Sustained: there is no chance of the GHG savings being reversed.

What is the difference between contributing to 'direct' vs 'indirect' vs 'additional' GHG emissions savings?

The Mitigation Action Facility has released guidelines for projects which contain the definitions of direct and indirect GHG emission reductions[3]. Projects will contribute to both direct and indirect emission reductions as a result of the activities they deliver and the outcomes they achieve. These are different from the additional GHG emission savings referred to by Dimension 3 (see Figure 2):

- **Direct GHG emission savings** achieved by project investments and discrete investments financed or leveraged during the project's implementation period (throughout the entire lifetime of the project and for a period of 10 years after the project ends). This definition implies that the emission reductions are achieved directly as a result of the demonstration of the mitigation solutions, as included in Dimension 1. For example, direct GHG emissions saving would result from the project paying for the installation of a solar energy system in lieu of a diesel generator (i.e. the avoided emissions from burning the diesel).

- **Indirect GHG emission savings** capture those achieved beyond those related to direct investments, e.g., resulting from technical assistance. These emission reductions are indirectly linked to the results of the demonstration of the mitigation solutions. For instance, indirect GHG emission savings would be those achieved by an SME applying certain energy efficiency measures taught by the project but paid for with own funds. Indirect GHG emission savings should also be accounted for in Dimension 1.

- In contrast, **additional GHG emission savings** are not a direct result of the project's interventions, but instead, they are due to the influence of the project in terms of its demonstration and catalytic effects. Table 3 gives examples from the three sectors on how projects can contribute to additional GHG savings as a result of their demonstration and catalytic effects.

Figure 2. How different types of GHG emission savings fit with transformational change

[3] https://mitigation-action.org/wp-content/uploads/Mitigation-Action-Facility_Mitigation-Guideline_CfP23.pdf.

Table 3. Examples of progress to achieving additional GHG savings (Dimension 3)

Project description	Targeted additional GHG savings	Progress to date
In Thailand, the Thai Rice Project aimed for a shift towards low-emissions rice production in the country	900,691 tCO2e of indirect emissions savings after ten years of project completion, as a result of demonstrating the viability and benefits of low-emission production techniques with 759 rice-producing farmer groups.	While only 56,013 tCO_2e of indirect emissions savings were achieved within the lifetime of the project, there are signs that additional savings are likely in the future. The project served as a proof of concept and has obtained a Green Climate Fund (GCF) grant for geographic upscaling across 27 provinces in Thailand and an extension of additional mitigation and resilience measures.
In China, the Integrated Waste Management (IWM) project aimed for a nationwide adoption of IWM practices across cities	1,943,886 tCO_2e of indirect emissions savings after ten years of the project's completion, primarily by public officials in other cities in China, replicating the model demonstrated by the project in five cities.	The project looks likely to build on the 876,532 tCO2e of indirect emissions already achieved, as 11 additional cities signed a letter expressing interest in replicating IWM practices

2. When is transformational change expected in projects?

Transformational change is not expected within the lifetime of the project. Instead, there should be clear signs and evidence that it is likely in the mid- to long-term (e.g. 10 years). By the end of the project, Dimension 1 (demonstration effect) should be at an advanced stage, Dimension 2 (catalytic effect) at an interim stage and Dimension 3 (additional GHG savings) at an early stage. Dimensions 1 and 2 'lock in' the pathway to achieving the additional GHG savings, meaning this looks inevitable, or at least very highly likely, in the future. Table 4 below summarises what is expected at the mid- and end-point of the project.

Table 4. Expectation of project-induced transformational change stages at mid-point and end-point

Dimension	Expectation at project's mid-point	Expectation at project's end-point
1: Promoting a demonstration effect	**Interim stage:** the project has made **initial yet tangible progress in demonstrating the mitigation solution**; for instance, it shows strong buy-in from the project partners alongside evidence on the ground of the solution's applicability and effectiveness, although not at the scale expected by the end of the project.	**Advanced stage:** the concrete demonstration of the mitigation solution in the project context is in an **advanced stage,** with little doubt that it will be completed or has already been completed, and the **full** results and lessons of the solution's demonstration have been documented and disseminated.
2: Causing a catalytic effect	**Early stage:** the project has **laid the foundations for causing a catalytic effect**, for example, by engaging a broader group of stakeholders, setting up capacity-building activities, or assessing the key legislative or regulatory gaps in place for the broad uptake of the mitigation solution.	**Interim stage:** the project is **starting to cause a catalytic effect** in the project context, for example, by showing **some evidence** of shifts in market behaviour, more favourable legal and regulatory frameworks, or scaling up of the mitigation solution.

Dimension	Expectation at project's mid-point	Expectation at project's end-point
3: Contributing to additional GHG savings	**None:** the project should have prepared a clear and realistic plan for achieving such transformation, but it would be too early to expect this to have yet resulted in any additional GHG savings.	**Early stage:** the project has laid the foundations for **causing additional GHG savings**, and this may have resulted in some actual savings (but not at a large scale), but more importantly, there should be clear **evidence that points towards additional GHG** savings happening in the mid to long term.

An example of what the early, interim and advanced stages of enabling transformational change look like

A hypothetical project in the industrial sector aims to enable transformational change towards a decarbonised SME industrial sector in the country, through the adoption of a range of plant-specific clean energy, energy efficiency and decarbonisation technologies and practices for industrial processes. It is expected to demonstrate the technical viability and benefits of an ambitious approach to decarbonisation by SMEs by testing and documenting the results in a sample of industrial plants (i.e. 'the demonstration effect'). The project will engage and work with clusters and supply chains of SMEs to adjust mindsets and promote the scaling of the technologies. A revolving fund has been proposed to facilitate financing of the measures, with clusters of plants and individual plants being trained and supported to develop a business case to access the funding. Complementary public policy will provide further incentives to encourage the widespread adoption and scaling of the measures. These expected changes relate to 'causing a catalytic effect', Results Categories (RC) 2,3 and 4 respectively. As a result of these changes, the project is expected to facilitate the large-scale adoption of net-zero technology solutions by micro/small industrial plants, leading to significant additional GHG emissions savings in the medium to long term.

Table 5 below gives examples of what was seen at the mid-point and end-point of the project:

Table 5: Example of evidence of progress in a hypothetical industrial-sector project

Dimension	Evidence at the project's mid-point	Evidence at the project's end-point
1: Promoting a demonstration effect (i.e. viability and benefits of clean energy, energy efficiency and industrial processes' decarbonisation technologies and practices in small/micro industries has been proven)	**Interim stage:** The project has engaged clusters and supply chains of SME industries, which have agreed to adopt a selection of decarbonisation solutions. Technical support has been provided to identify the potential for emissions reductions and to design appropriate solutions. The deployment of decarbonisation measures is underway, with a sample already in place, and the technical and financial viability and benefits are being monitored. A revolving fund has been established with the support of the project in collaboration with a national financial institution and has begun operating in support of the demonstrative deployment of decarbonisation measures.	**Advanced stage:** The decarbonisation solutions have demonstrated the benefits for the industrial plants over multiple years, including the cost-benefits that demonstrate the financial viability of the revolving fund. The potential profits have been published and discussed within the clusters, supply chains and wider industry networks in the country, which have publicly accepted the results.

Dimension	Evidence at the project's mid-point	Evidence at the project's end-point
2: Causing a catalytic effect (i.e. industry networks and stakeholders commit to a decarbonised sector, a revolving fund catalyses the widespread adoption of the measures by industry, and the government adopts additional incentives for plants)	**Early stage:** A wider sample of industrial plants than the original one showed commitment to pilot and demonstrate their decarbonisation technologies and practices. Additional co-funding opportunities from public and private investors are identified. A working group has been convened within the government to consider the potential for decarbonisation of the SME industrial sector, although evidence from the demonstration is still required.	**Interim stage:** The government has adopted a national strategy for decarbonisation of SME industry players (i.e. improved policy, regulatory and legislative frameworks), which the industry network has publicly supported (i.e. new market behaviour), although this has yet to result in a large number of other industry players adopting the decarbonisation solutions. The revolving fund is operating and has secured a long-term mandate and public commitment for funding, with additional finance mobilised from private resources (i.e. increased finance accessibility). Another development funder is replicating the project design and partnerships to pilot the decarbonisation technologies and practices in another industry segment and part of the country (i.e. scaling up).
3: Contributing to additional GHG savings (i.e. the wider adoption of decarbonisation solutions by small and micro industries not directly targeted by the project)	**None:** The project's ToC and plan are clearly focused on how the demonstration effect and catalytic effect will, in the long term, result in a large proportion of small and micro industries adopting the decarbonisation solutions	**Early stage:** A significant number of additional industrial plants and clusters, not directly engaged by the project, accessed financing from the revolving fund to install their preferred technologies and undertake decarbonisation measures, with associated GHG emissions savings benefits.

3. How can transformational change feature in the design and monitoring of projects?

Projects are expected to align with the overarching ToC of the Mitigation Action Facility. Consequently, the project design, including the project's ToC and M&E plan, should clearly articulate how the project will contribute to transformational change. Table 6 provides generic guidance on how the transformational change dimensions can be reflected in these documents.

Transformational change in the ToC: Following the Mitigation Action Facility's guidance on developing a ToC, as outlined in the M&E Framework[4], should result in causal pathways that describe how the project will enable transformational change. The table below shows how the three dimensions of transformational change could be integrated into the project's ToC, although not all elements of dimensions 1 and 2 may be referenced in the ToC. For example, the documentation of results may not appear in the ToC itself but might be addressed in the project's knowledge management or communication strategies and reinforce underlying causal pathways

[4] https://mitigation-action.org/publications/monitoring-and-evaluation-me-framework-2024/.

Transformational change in the M&E plan: The M&E plan complements the ToC by adding performance indicators for each of the ToC elements (outputs, outcomes, etc.). It includes project-specific indicators and five Mandatory Core Indicators.

Projects use their M&E Plan to measure progress in enabling transformational change, while the ELE teams carry out independent evaluations at the mid- and end-points. Setting measurable indicators will facilitate tracking progress against the three dimensions of transformational change. Table 6 below also provides examples of indicators and the type of evidence or information that can help to measure progress.

How does Mandatory Core Indicator M3 measure transformational change?

While several Mitigation Action Facility indicators cover parts of transformational change, the M3 indicator is centred around it. This Mandatory Core Indicator looks at the "Degree to which the supported activities are likely to catalyse impacts beyond the projects (potential for scaling-up, replication and transformation)".

Following the M3 methodology described in Annex 1, by identifying the relevant targets related to the six results categories and measuring them through specific sub-indicators, projects can gather crucial evidence of their contribution to transformational change. Such evidence, which in the TCMF refers to the project's catalytic effect in Dimension 2 (see Table 6), is then used to determine the overall value of the M3 indicator.

The M3 value provides an assessment of the likelihood that the project contributes to transformational change. It is expressed on a scale from 0 to 4, from "Transformation judged unlikely" to "Clear evidence of change – transformation judged very likely". Considering that evidence of additional GHG emission savings is difficult to materialise during the project lifetime, the overall M3 value represents for the Mitigation Action Facility the best prediction of whether a project is likely to contribute to the TCMF's Dimension 3. Therefore, project teams must plan and monitor the M3 indicator carefully throughout the implementation.

Table 6. Guidelines for including transformational change dimensions in ToCs and M&E plans

Dimension		How it should feature in the project ToC	How it should feature in the project's M&E plan	Examples of indicators	Example of evidence of progress
1: Promoting a demonstration effect	**Viability and benefits of mitigation solution demonstrated on the ground**	The ToC should include **Outputs and/or Intermediate Outcomes** that reflect the scale of uptake needed to prove the solution's effectiveness across diverse contexts, delivering the anticipated economic, social, and climate benefits.	Aligns with Mandatory Core Indicators: **M1** (Direct and Indirect during project lifetime) and **M2**. **Project- and sector-specific indicators** should measure the scale of uptake needed to demonstrate the solution's viability.	**Mandatory Core Indicators** • M1: Volume of direct GHG emissions reduced during the project, up to 10 years after the project end, and for the duration of the technology lifetime • M1: Volume of indirect GHG emissions reduced during the project's lifetime • M2: Number of people directly benefiting from the project **Project- and sector- specific indicators** • # target users (e.g. cities/ companies/ consumers) adopting the mitigation solution in the pilot location • EUR equity contributions from target group • % of overall market penetrated by mitigation solution	The Brazil PotencializEE project is at the early stages of demonstrating the viability of the supply and demand of energy efficiency audits, practices and technologies by industrial SMEs. By the end of the project, they are aiming for 675 SMEs in the pilot region to be implementing the measures, resulting in over 460,000 tCO2e of GHG emission savings, which will provide the scale required to demonstrate the benefits and kick-start the scaling process.
	Results of mitigation solution documented and promoted	**The ToC should include Outputs** that focus on producing knowledge and learning materials and engaging with key stakeholders to share insights. .	**Project-specific indicators** should track the number and type of target users who should receive the documented results.	**Project-specific indicators** • # target users (or wider stakeholders) participating in results-sharing events • # target users (or wider stakeholders) expressing interest in replicating or adopting project results	In China, a project promoting an integrated waste management model demonstrated its viability in three cities. However, through knowledge sharing and training activities, a further 11 cities submitted written commitment/interest to replicate the model.
	Project stakeholders 'buy-in' to mitigation solution	**The ToC should capture Outputs and/or Intermediate Outcomes** related to the volume of finance expected to be mobilised and/or other forms of stakeholder commitment	This aligns with Mandatory Core Indicators: **M4 and M5.** **Project-specific indicators** should measure the scale of finance and/or the nature of other types of buy-in required. .	**Mandatory Core Indicators** • M4-5: volume of EUR of public finance and EUR of private finance mobilised **Project-specific indicators** • # adopted policy/financial mechanisms proposed / updated by the project • # target public and/or private stakeholders adopting a project mechanism (e.g. finance mechanism)	In India, a project promoting circular economy elements in Municipal Solid Waste Management (MSWM) set up a Risk Sharing Facility (RSF) to provide loan guarantees to MSWM operators with a focus on establishing composting, biomethanation, and refuse-derived fuel plants. Due to the successful demonstration of the viability of the financial scheme through loans from a

Dimension		How it should feature in the project ToC	How it should feature in the project's M&E plan	Examples of indicators	Example of evidence of progress
		(e.g. policy endorsements).			local development bank, the government decided to fund a similar RSF with a planned investment of EUR 75 million.
2: Causing a catalytic effect	**1. Broadened political commitment** **2. New market behaviour, mindsets and ideologies** **3. Increased finance accessibility** **4. Improved policy, legislative and regulatory frameworks** **5. Increased institutional capacity**	**The ToC should specify Intermediate Outcomes and/or Outcomes** that indicate specifically the changes needed within the enabling environment for the project to be catalytic of broader systemic change.	The TCMF Dimension 2 is aligned with the Mandatory Core Indicator **M3**. The monitoring of M3 allows the identification of evidence towards one or more of the results categories Dimension 2. Additional **sector and project-specific indicators** could also capture other key elements of systemic change required.	**Mandatory Core Indicators** • M3 – Sub-indicators for Results Categories 1-5. • M4-5: volume of EUR of public finance and EUR of private finance mobilised beyond the project duration. **Sector indicators** • New market behaviour: % of increase in credit approval for mitigation projects, e.g. for SSRE installations in SMEs. • Shift in values and ideologies: % of increase in using the mitigation solution compared to business-as-usual solution, e.g. % of increase in EV sales. Or amount of EUR of fossil-fuel subsidies redirected to renewable energy subsidies. • Increased finance accessibility: % of SMEs accessing project finance for Renewable Energy developments **Project-specific indicators** • Broadened political support: # coalitions of public and private actors established to promote the mitigation solution. • Improved policy framework: # adopted new laws/regulations supported by the project. • Increased institutional capacity: # or % of target beneficiaries with increased capacity to apply the mitigation solution, e.g. manufacturers of mitigation solution have required skills, resources and technology.	A project promoting solar rooftop systems in Tunisia has successfully influenced policy and financial measures to encourage and sustain the uptake of clean energy in middle-income households. The project significantly contributed to the drafting and promulgation of a ministerial decree for implementing the national pilot project for the equipment of middle-income families connected to the low-voltage network by solar PV systems (RC 4). A new mechanism was designed to encourage middle-income households to install Solar PV systems in their homes, i.e. PROSOL ELEC *Economique* (RC 3). In addition, it has shifted public opinion in favour of the new energy supply model using different communication channels, demonstrated by the number of enquiries from the public that the PROSOL ELEC *Economique* has received (RC 2).

Dimension		How it should feature in the project ToC	How it should feature in the project's M&E plan	Examples of indicators	Example of evidence of progress
	6. Scaling-up		Specifically, the monitoring of **MAF Indicator 4.3** requires projects to provide targets and achievements on yearly scaling efforts, which can help gather evidence for M3 **Results Category 6 – Scaling-up**.	**Mandatory Core Indicators** • M3 – Sub-indicators for Results Category 6. **MAF Indicators** • Output 4.3 Indicator: Projects' degree (in %) of scaling achievement – Examples of sub-indicators: ○ # users in additional sectors applying the mitigation solution due to project scaling ○ # cities/regions applying the mitigation solution due to project scaling ○ EUR of additional private finance mobilised due to the project scaling ○ EUR of additional finance public mobilised due to the project scaling	In Thailand, a project promoting low-carbon agriculture practices served as a proof of concept and has obtained a Green Climate Fund (GCF) grant for geographic upscaling across 27 provinces in Thailand and an extension of additional mitigation and resilience measures.
3: Contributing to additional GHG savings	**Influences additional, large-scale and sustained GHG savings**	The project's **impact** statement should describe the scale of GHG emission savings required for sector-wide decarbonisation and the total contribution of the project to these savings.	This aligns with Mandatory Core Indicators: **the overall score of M3, M1 (Indirect, beyond the project end)**. **Project-specific indicators** should measure the scale of the GHG emission savings required and the project's contribution.	**Mandatory Core Indicators** • M3: Overall M3 result, i.e. overall potential for transformational change • M1: Volume of indirect GHG emissions reduced after the project's lifetime (up to 10 years after the project end and for the duration of the technology lifetime) **Project-specific indicators** Volume of additional GHG emissions reduced because of the project's influence, for example, the contribution to a national target for sector-wide emission reductions	The China Integrated Waste Management (IWM) project has used the results from five pilot cities to scale up to a further 11, and through policy changes and increased awareness, this is expected to have a sector-wide influence on emission reductions.

4. Case studies: Progress in enabling transformational change by projects

This section presents three examples illustrating how projects are expected to enable transformational change (according to the Project Proposals) and their progress, as reported in the ELE reports. These examples showcase different pathways to achieve transformational change.

A project in Thailand promoted the manufacture of two different low-carbon technologies, with very different results for each. The project aimed to drive a sector-wide transition towards the use of climate-friendly (i.e., low Global Warming Potential (GWP)) and energy-efficient cooling technologies, focusing on two products—refrigerators and air conditioners. The project sought to remove legal, technical and financial barriers to encourage the adoption of climate-friendly and energy-efficient versions of these products. However, the outcomes varied significantly between these two technologies:

- *Refrigerators:* Several manufacturers converted their production lines to low-carbon models. In 2018, 14,600 domestic climate-friendly, energy-efficient refrigerators were sold, followed by 265,700 commercial refrigerators in 2019-2020.
- *Air-conditioners:* Despite efforts, no low-GWP air conditioning product was commercially available by the project's end. Legal restrictions, such as the prohibition of using natural refrigerants in high-rise buildings due to safety concerns, prevented progress.

The project supported 10 manufacturers of different types of technology with financial and technical skills required to adapt their product lines, trained 159 service technicians and 222 'trainers-of-trainers' and disbursed EUR 5.25 million from a Loan Fund. It provided technical assistance and knowledge support to the government, which significantly raised their awareness of the benefits and process of shifting to this technology. Although the project delivered similar outputs to both market segments and raised government awareness, it only succeeded in creating systemic change in the refrigerator market, demonstrating a widespread transition to climate-friendly technologies in that segment, but not for air conditioners.

The project's legacy has been substantial. With the remaining budget of the RAC NAMA Fund supported by the project, the Electricity Generating Authority of Thailand (EGAT) created the Cooling Innovation Fund. The fund's objective is to promote sustainable innovation and market transformation toward climate-friendly and energy-efficient cooling technologies using natural refrigerants (the same mitigation solution advocated by the Mitigation Action Facility's project). In June 2024, EGAT and GIZ signed a Memorandum of Understanding to continue cooperating in the green cooling sector in Thailand through the Green Cooling Initiative III.

In Brazil, a project is promoting industrial energy efficiency investments, focusing on small and medium-sized enterprises (SMEs) in the São Paulo region. It aims to demonstrate the viability and scale-up of the use of energy efficiency services and products (such as energy audits) by SMEs. It expects to kick-start the energy efficiency market and, within the lifetime of the project, directly support 425 SMEs to adopt such measures.

The project has already shown progress in catalytic effect, in particular:

***New market behaviour, mindsets and ideologies*:** The project has contributed to increasing the investment propensity of non-commercial banks in industrial energy efficiency projects. For instance, the National Bank for Economic and Social Development is now willing to provide special financing conditions for efficient technologies.

***Increased finance accessibility*:** The project has used targeted awareness campaigns, such as sector-specific technical presentations and publications, social media, newsletters, and a webpage to alter the mindsets of industrial SMEs regarding investment in energy efficiency measures.

***Scaling up*:** As a result of the demonstrated potential of the energy efficiency market, the National Service for Industrial Training has scaled up the provision of energy audits to an additional 1,000 SMEs in five other states, using an extra EUR 9 million mobilised from the National Electric Energy Conservation Programme.

In Cabo Verde, a project is promoting EVs by stimulating a transformational market change towards the technology. It has set itself a target of supporting the purchase of 600 new EVs to demonstrate the viability and benefits to households and public and private sector agencies. It has established an Electric Mobility Facility (EMF) that has financially supported half of the EVs procured in Cabo Verde in 2022 in collaboration with the most important car dealerships in the country. The project is also installing a nationwide network of 40 public charging stations and working with public transport operators in the country's two main cities of Praia and Mindelo to facilitate the adoption of electric buses.

In addition to infrastructure, the project also aims to improve the enabling environment for EVs to catalyse a transformational market shift towards EVs. There has been some progress in strengthening the regulatory framework. For example, the project supported the National Directorate for Road Transportation (DGRT) to amend the General Legal Framework for Motorised Transport, eliminating the minimum cubic capacity requirement for taxis and enabling the registration of electric taxis. Moreover, the project is collaborating with two technical and vocational education and training (TVET) centres for EV (mechanical shops) and charging station installation and maintenance to co-design training modules.

1 Annex 1: Indicator guidance sheet: M3 – Potential for transformational change

Mandatory Core Indicator: M3 – Degree to which the supported activities are likely to catalyse impacts beyond the projects (potential for scaling-up, replication and transformation)

Rationale

The Mitigation Action Facility defines transformational change as a catalytic change in systems and behaviours resulting from disruptive climate actions that enable actors to shift to carbon-neutral pathways. It supports transformational change that features strong national ownership and aligns with the partner countries' Nationally Determined Contributions (NDCs) and long-term strategies (LTS) that are central to meeting their Paris Agreement goals.

In the context of the Mitigation Action Facility, projects are considered conducive to sector-wide transformational change if they:

- promote a demonstration effect through manifesting the feasibility of implemented mitigation solutions, thus ensuring embeddedness in sectoral and national climate policy contexts while showing evidence of securing 'buy-in' by key stakeholders and ensuring a systematic learning approach;
- have a catalytic effect and include mechanisms for:
    - broader systemic change, thus ensuring the sustainability of impacts, local ownership and political will, private sector involvement, and the use of innovative technologies and approaches;
    - enabling a significant evolution in scope through either scaling up or replication. Replicating and/or significantly scaling up the project's demonstrated solution can occur on a national or regional level and in other sectors or locations;
- aim to deliver large-scale and sustained GHG savings.

Transformational change and its goals must contribute to long-term sectoral decarbonisation. The process must identify and address the agents of change, the innovation itself and how it fits into the framework conditions (i.e., economic, societal, and environmental). It is important that **all** components of the projects be geared towards delivering transformational change.

The working methods and approaches applied in and promoted by a project should be sustainable, which means they should, among other things, involve:

- the application of high ethical standards (that are, for example, democratic, non-discriminatory, non-corrupt, and transparent);
- the negotiation of any trade-offs between different aspects of carbon-neutral development with relevant stakeholders;

- transparent, fact-based decision-making processes;
- the entire system (i.e., take a holistic approach);
- not harming the environment and not compromising social standards and human rights.

Overall, transformational change is considered to be change that is far-reaching, structural, and fundamental in nature. The project design will determine how such change can be achieved.

To evaluate the project's potential for transformational change, the Mitigation Action Facility has identified several possible project outcomes or 'results categories' (for details, see section 3 in the table below) that are considered to deliver these changes. During the project selection process, the Mitigation Action Facility evaluates whether project-specific objectives of this kind have been chosen and, if so, how many. During project implementation, progress towards achieving this set of objectives will determine whether the interventions are likely to catalyse impacts beyond the project.

1. Indicator	The degree to which the supported activities are likely to catalyse impacts beyond the projects (potential for transformational change).
2. Results level	Outcome
3. Definitions and scope	The Mitigation Action Facility defines transformational change as a catalytic change in systems and behaviours resulting from disruptive climate actions that enable actors to shift to carbon-neutral pathways. The project is transformational if it targets and achieves outcomes that enable this shift. The targeted outcomes shall fall into one or more of the following results categories: 1. **Broadened political commitment: Decision-makers** or decision-making entities in the implementing country (e.g., parliament, business associations) **making landmark decisions** aimed at moving the country towards a carbon-neutral development pathway. Supported by the project's activities, these decisions alter the behaviour of or incentives for more individuals or institutions. 2. **New market behaviours, mindsets and ideologies: Lock-in effects or path dependencies** that incentivise or firmly establish carbon-intensive, non-sustainable patterns of behaviour over a long period **are broken up or avoided due** to the project's activities. Alternatively, new path dependencies that incentivise or firmly establish carbon-neutral and sustainable patterns of behaviour are established due to the project's activities. 3. **Increased finance accessibility:** Replicable, scalable and/or long-lasting **financial instruments** for a carbon-neutral development

	pathway (e.g., technologies, business models) have **been established** due to the project's activities. 4. **Improved policy, legislative and regulatory frameworks:** As a result of the project's activities, **climate change mitigation** aspects are **integrated and mainstreamed** into one or more of the following: major policies, plans, strategies, or curricula of different educational institutions. 5. **Increased institutional capacity:** As a result of the project, an **organisation, institution, or committee** (e.g., a climate change authority) committed to a carbon-neutral development pathway is **established or significantly strengthened** and is lobbying for the changes needed to deliver this kind of development. 6. **Scaling-up: Carbon-neutral, sustainable approaches or instruments** (e.g., business models, market mechanisms, financing solutions) that have been tested or piloted within or independent of the project **are scaled up**[5] due to the project. While there is no requirement for project teams to select a minimum number of results categories, choosing at least two out of six results categories for their M3 target definition and subsequent monitoring and reporting is recommended. Further information on transformational change at the Mitigation Action Facility is provided in the supporting concept document.
4. Unit of measurement	Transformational change is evaluated using a qualitative approach where a value from the specified matrix on a scale of 0 to 4 is selected for project targets and reporting.
5. Target setting	**Methodology for target setting** To establish the baseline for transformational change results, the Implementation Organisation should first summarise the current context within which the project will operate. Subsequently, the potential transformational change to which the project aims to contribute should be described. These descriptions will provide the project with a qualitative baseline (current context) and a qualitative target (potential transformational change) against which progress can be achieved and evaluated. Projects are required to define ex-ante annual targets for the achievement of the transformational change according to the following principles:

[5] The definition of "scaling-up" is aligned with the one of Mitigation Action Facility Indicator 4.3, i.e. it pertains to one or more of geographical expansion, target group extension, and additional financial mobilisation (see Annex 2).

- If more than one results category is selected, sub-indicators for M3 shall be introduced, and the targets shall be defined separately for the selected results categories (refer to a. Methodology for defining sub-indicator targets).
- Aggregate M3 indicator targets shall be defined based on the projected achievements of the sub-indicators (refer to b. Methodology for defining aggregate M3 targets).
- The target values for the sub-indicators and the aggregate M3 indicator shall be clearly defined for each year of the project period and for ten years after the project ends.

The M3 targets are defined as part of the M&E Plan submitted with the Project Proposals and further specified in the M&E Plan within the first three months of implementation.

a. Methodology for defining sub-indicator targets

Project teams must define annual targets for each sub-indicator according to the standard ranking levels ranging from 0 to 4 (see Table 7 below). To determine the applicable standard ranking level, project teams must define annual, context-specific milestones that would qualify the expected percentage achievement of the overall qualitative sub-indicator target. The achieved percentage of the overall target is then translated to the applicable standard ranking level (0-4) and the corresponding evaluation of the likelihood of the transformational change. The higher the achieved percentage of the targeted milestone, the higher the ranking level and overall likelihood of the transformational change.

Table 7: Standard ranking levels and likelihood interpretation

Standard ranking levels		**Perceived likelihood of transformational change**
Achievement of target judged unlikely	0	Transformation judged unlikely
Very little or no progress achieved so far (< 20 %)	1	No evidence yet available
Some progress achieved so far (20-40 %)	2	Some early evidence suggests transformation likely
Substantial progress achieved so far (41-70 %)	3	Tentative evidence of change – transformation judged likely
Target has been (almost or fully) achieved (> 70 %)	4	Clear evidence of change – transformation judged very likely

When defining a milestone, the different levels of importance and complexity, as well as the time needed to reach the milestone, should be considered. Project teams should always explain why a particular ranking has been selected, as it is essential to establish a direct causal relationship between the expected results and the project's interventions.

The expected degree of achievement of the sub-indicator shall be defined for each year. Ideally, the maximum value of 4 is achieved by the end of the project period and maintained for ten years after the project ends (see an example in Table 8).

Table 8: Example of achievement forecast

	Y1	**Y2**	**Y3**	**Y4**	**Y5**	**…**	**Y10**
Sub-indicator	Target (according to standard ranking levels)						
1. Intervention A (corresponding to Results Category 1)	1	2	2	3	4	4	4
1. Intervention B (corresponding to Results Category 2)	1	2	3	3	4	4	4

b. Methodology for defining aggregate M3 targets

The overarching target shall be determined by assigning a project-specific weight to the various sub-indicators. Project teams shall determine the weight of each sub-indicator relative to the overall targeted transformational change. Please note that the percentage weight values must add up to 100 %. If none of the sub-indicators are preferred or prioritised, an equal weight can be applied to each. An example of the target setting for Year 3, which focuses on the aggregate M3 indicator, is presented in Table 9.

Table 9: Illustrative instance of target establishment

Y3			
Sub-indicator	**Expected achievement per sub-indicator**	**Weight**	**Aggregate target of M3 for Y3**
1. Intervention A (corresponding to	2 (20 %)	60 %	2

	Results Category 1)			Expected early evidence Suggests transformation is likely in Y3 (Corresponds to 32 % (=20%*60%+50%*40%) and standard ranking level 2 in Table 1)
	2. Intervention B (corresponding to Results Category 2)	3 (50 %)	40 %	

For the example in Table 9, the overall target for the transformational change potential in Y3 would thus be "2".

6. Monitoring and reporting

Methodology for monitoring and reporting

During the project period, project teams are required to report their annual progress against the defined targets. The following aspects should be considered when doing so:

- Projects shall report on the standard ranking level achieved for the sub-indicators according to the accomplished milestones as defined when setting the targets.
- The sub-indicator achievement shall be aggregated following a similar approach as described above. The overall reported M3 value is determined by aggregating the results of the corresponding sub-indicators, considering the respective weighing, as illustrated in Table 10.

Table 10: Reporting of indicator achievements

Indicator	Weight	Reporting of achievements in year 3
Sub-indicator 1: Intervention A (corresponding to Results Category 1)	60 %	**2** (According to the achievement of the specified milestones, 20 % of the overall sub-indicator target is met, as expected. This corresponds to standard ranking level 2.)
Sub-indicator 2: Intervention B (corresponding to Results Category 2)	40 %	**2** (According to the achievement of the specified milestones, only 30 % of the overall sub-indicator target is met, contrary to the expectations of achieving 50 % when setting the targets. This corresponds to

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<tr><td></td><td></td><td>standard ranking level 2, in contrast to 3, as planned.)</td></tr>
<tr><td>Overall M3 result</td><td>100 %</td><td>Some early evidence suggests transformation is likely

(Corresponding to overall 24 % (=20%*60%+30%*40%) achievement as per the standard ranking level of sub-indicators)</td></tr>
</table>

Project teams must provide a justification of the ranking they selected to indicate the level of progress made towards achieving the target (i.e., how they concluded that the specified milestones were met and the target was achieved by the chosen percentage).

Assessing transformational change is a learning process. Therefore, the project teams should not only record evidence of transformational change but also explain why such transformation has occurred or has yet to occur and how the project is contributing or has contributed to this change. Project teams must provide an overall update on whether the project and all its components are still moving towards a carbon-neutral development pathway and whether the foreseen change is sustainable and long-term.

Reporting requirements

Project reporting requirements are defined in Section 3.6 of this M&E Framework.

When monitoring and reporting this indicator, please adhere to the guidance provided in the M&E Plan templates.</td></tr>
<tr><td>7. Data sources, data collection</td><td>The primary data sources used in results monitoring and reporting must include documentation of the achievement of the relevant project milestones. Such documentation can include but is not limited to reports, meeting minutes, and documentation of relevant political decisions. Project teams must explain why certain data has been used to justify meeting the specified target for the corresponding sub-indicators and the overall M3 indicator.</td></tr>
<tr><td>8. Quality assurance</td><td>To provide an accurate portrayal of results across the portfolio, project teams must align all project-level reporting on the M-indicators with the indicator guidance sheet. Furthermore, projects must ensure the quality of the data reported on the M-indicators. The project’s monitoring and evaluation officer, external consultants or operational staff can assume a</td></tr>
</table>

	quality-assurance function. If possible and necessary, consider cross-checking (i.e., triangulating) the evidence for accuracy and reliability. It is advisable to validate or expand on the project's progress assessment by seeking input from other project implementation stakeholders and the partner government. In the report, highlight any discrepancies that arise during the assessment process. The mid-term and final ELEs present an excellent opportunity to cross-check the evaluation of transformational change.
9. Examples	The project involves promoting the large-scale adoption of a range of clean energy, energy efficiency and decarbonisation technologies and practices in industrial processes by SMEs. The project will work with a sample of industrial plants in different locations of the project to test the cost and financial and GHG emissions savings of different decarbonisation solutions (i.e. the demonstration effect). The project will engage and work with clusters and supply chains of SMEs to adjust mindsets and promote the scaling of the solutions (Results Category (RC) 2). This includes training, workshops and exposure visits and using a variety of business-specific communication channels to disseminate the results of the demonstration projects to a much wider set of industrial plants. A revolving fund will be set up and used to facilitate financing of the measures, with clusters of plants and individual plants being trained and supported to develop a business case to access the funding (RC 3). The project's financial component will support the design and establishment of the fund, with the government committing to sustaining it in the long term. Complementary public policy will provide further incentives to encourage the widespread adoption and scaling of the measures (RC4). The project will provide technical assistance to make the case for such a policy-enabling framework and then develop the specific set of targeted incentives. As a result of these catalytic effects, the project is expected to facilitate the large-scale adoption of net-zero technology solutions by SMEs, leading to significant additional GHG emissions savings in the medium to long term. The project sets up three sub-indicators to measure these three results categories, defining the corresponding milestones for each. By Y3, the project expects to achieve the standard ranking level 4 for each outcome. It is expected that the relevant industry networks/ stakeholders have pledged commitment to participate in the initiative, and plants have agreed to adopt the solutions and monitor their performance. Deployment of the decarbonisation measures is underway in an initial sample of companies. A financial institution has formed a partnership with an industry player to manage the revolving fund, with secured financing from the

government. A working group has been convened within the government to draft policy options for the decarbonisation of the industrial sector, although evidence from the demonstration is still required. The value of 4 is recorded as a target for Y3 for the three sub-indicators. This implies that by Y3 clear evidence of change shall be observed, and transformation shall be judged very likely for the overall M3 (see Table 11).

Table 11: Example for target setting

Targets	**Weight**	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**
Sub-indicator 1: Industry clusters/ networks pledge strong support and issue targets/ strategy for decarbonisation of their sector (corresponding to Results Category 1)	20 %	1	3	4	4	4
Sub-indicator 2: Government adopts comprehensive strategy, plan, set of incentives for decarbonisation of SME industrial sector (Results Category 4)	30%	1	2	4	4	4
Sub-indicator 3: Revolving fund established (corresponding to Results Category 3)	50 %	1	2	4	4	4
Overall M3 targets	100 %	1	2	4	4	4

In Y3 of reporting, the project reports that the target for the first results category has been achieved, as the project has secured a commitment from the major industry network in two segments – textile and cement – to participate in the demonstration initiative and they have helped secured the commitment of a sufficient number of plants to pilot the solutions. An initial sample of 10 plants has already installed the solutions, and their benefits are being monitored.

However, progress in the development of the supportive policy framework has been delayed as the chairperson of the Working Group has changed due to elections and changes in the partner Ministry. Therefore, it is given a score of 2, meaning it has achieved approximately 30% of the final result expected.

The progress towards the target concerning the establishment of the revolving fund is also considered to be 30 %. Some bureaucratic hurdles remain to be resolved, which cause uncertainty regarding the operationalisation of the fund and the public co-financing contributions. Nevertheless, the project team is optimistic that it will achieve the target of the second sub-indicator by the end of the project.

Table 12: Example for reporting indicator achievements

Reporting	**Y3**
Sub-indicator 1: Industry clusters/ networks pledge strong support and issue targets/ strategy for decarbonisation of their sector (corresponding to Results Category 1)	4 (corresponding to 100 % achievement as per standard ranking levels)
Sub-indicator 2: Government adopts comprehensive strategy, plan, set of incentives for decarbonisation of small and micro industrial sector (Results Category 4)	2 (corresponding to 30 % achievement as per standard ranking levels)
Sub-indicator 3: Revolving fund established (corresponding to Results Category 3)	2 (corresponding to 30 % achievement as per standard ranking levels)
Overall M3 result	3 Tentative evidence of change – transformation judged likely (corresponding to 44 % (=100%*20%+30%*30%+30%*50%) achievement as per standard ranking levels)

As two sub-indicators have not reached their foreseen targets for Y3, the overall M3 score is 3, which indicates tentative evidence of transformational change (see Table 12). The progress with the revolving fund and policy framework shall be monitored closely in Y4 and Y5. If further bottlenecks occur and the revolving fund is not set up, the broader impact on reaching a large proportion of SME plants and the project's ability to reach the intended M3 target becomes unclear. In its annual

	report for Y3, the project shall elaborate on this risk and discuss relevant strategies for addressing it.

Annex 2: Indicator guidance sheet: Output 4.3 - Project's degree of scaling achievement

1. Indicator

Project's degree of scaling achievement

2. Indicator

Output

3. Definitions and scope

The Mitigation Action Facility has identified three distinct pathways for achieving successful scaling, each characterised by specific dimensions:

1. **Geographical expansion dimension:**
   The scope of this scaling pathway pertains to expanding the geographical scope of activities by including new regions, districts, provinces, or states within the country.

2. **Target group extension dimension:**
   This scaling extension targets a wider beneficiary group, encompassing an enlarged segment of the project's intended recipients.

3. **Financial mobilisation dimension:**
   This scaling dimension targets the additional allocation or mobilisation of funds towards measures associated with the project's intervention outcomes, including carbon finance stemming from the sale of carbon credits issued for the 'scaled-up mitigation'.

Each of these dimensions necessitates the fulfilment of the following conditions:

- **Causal link identification:** The Mitigation Action Facility can identify a causal link between project activities and measures leading to scaling impact and the desired results related to the scaling impact.

- **Additionality justification:** The scaling impact desired should be supplementary to the initial Proposal. For instance, where a project aims for augmented allocation or mobilisation of public/private funds, the new funding mobilisation or allocation must be distinct from, or supplementary to, the planned private/public leverage indications in the project proposal.

- **Tangible means of verification (MoV):** The project must offer tangible means of verification (MoV) that substantiate attaining the desired scaling impact, such as new/ revised operational plans, fresh Memorandums of Understanding (MoUs), or novel agreements; to demonstrate the scaling-up or replication of measures connected to

the project's interventions. Moreover, well-defined milestones, such as the conclusion of new agreements, the formulation of fresh operational plans, or the establishment of novel budget lines, should be discernible.

4. Unit of measurement

Assessing the extent of scaled impact employs a qualitative methodology, wherein the established annual project milestones are evaluated based on the degree of accomplishment. This evaluation encompasses a spectrum of achievement levels categorised as follows: 0 %, 25%, 50%, 75 %, and 100 %.

5. Target setting

Identification and selection of scaling dimensions

Projects are encouraged to choose at least one dimension to measure the scaling impact of project interventions. The criteria for selecting a dimension are as follows:

- The scaling results should be closely aligned with the activities and measures undertaken by the project, demonstrating a clear **causal linkage**.
- The scaling results should be **additional** to the project's **primary focus**, as presented in the Proposal. In cases where measures or activities were explicitly identified in the Proposal as endeavours to achieve scaling and align with the scaling dimensions, these can be considered for selection.
- The scaling results should be verifiable through tangible Measures of Verification (MoV) that confirm the desired scaling impact, along with defined milestones.

Target and milestone setting

While scaling and replication often unfold after a project's completion, it is still essential to integrate activities within the project's implementation that actively promote scaling efforts and demonstrate an unwavering commitment to achieving a broader impact. The initial step for each selected scaling dimension involves creating a concise and specific target description. Furthermore, annual milestones should be defined to serve as tangible markers of progress toward achieving scaling within the chosen dimension(s).

Key aspects of setting milestones:

- **Frequency and dimension:** A singular milestone is designated for each chosen dimension annually, persisting throughout the project's duration.
- **Progressive nature:** Milestones are expected to exhibit a gradual and cumulative progression, with a clear endeavour to attain scaling within the selected dimension by the culmination of project implementation.
- **Comprehensive descriptors:** Milestones possess the flexibility to incorporate both quantitative and qualitative descriptors to communicate their significance effectively.

6. Monitoring and reporting

Methodology for monitoring and reporting

The indicator, including target and milestone setting, will be defined during Implementation Phase 1, while the measurement and reporting of milestones will commence from Implementation Phase 2 and onwards.

Projects will diligently track and document their established milestones within every Annual Report. Collaboratively, in conjunction with the relevant desk officer, a decision will be reached regarding the attainment or non-attainment of the annual milestone and the degree of achievement (ranging from 0 %, 25%, 50%, 75 %, and 100 %) for each year.

Reporting requirements

When compiling reports, Implementation Organisations are expected to furnish the following details:

- Yearly scaling efforts that consist of presenting a comprehensive overview of the scaling endeavours undertaken to reach the predefined annual milestone.
- A level of achievement suggestion, i.e., a proposed level of accomplishment for each milestone, expressed according to these categories: 0 %, 25%, 50%, 75 %, and 100 %.
- Additionally, providing a justification for milestone achievement will be necessary for quality assurance. In reporting years with mid-term and final ELEs, milestone achievements are also assessed based on the results of the ELEs.

Project reporting requirements are defined in Section 3.6 of the MAF M&E Framework[6].

When monitoring and reporting this indicator, please also adhere to the guidance provided in the M&E plan templates.

7. Data sources, data collection

Major data sources for this indicator include documentation related to scaling and replication activities. This can include meeting minutes, signed MoUs, reports, studies, statistics, and other relevant materials. Implementation Organisations must justify their choice of data sources to meet the specified targets.

8. Quality assurance

To provide an accurate portrayal of results across the portfolio, the project-level reporting on indicators must be aligned with the indicator guidance sheet. Furthermore, Implementation Organisations must ensure the quality of the data reported on the indicators. A project's monitoring and evaluation officer, external consultants or operational staff can assume a

[6] https://mitigation-action.org/wp-content/uploads/Monitoring-and-Evaluation-Framework-2024.pdf.

quality-assurance function. If possible and necessary, consider cross-checking (i.e., triangulating) the evidence for accuracy and reliability.

It is advisable to validate or expand on the project's progress assessment by seeking input from other project implementation stakeholders and the partner government. In the report, highlight any discrepancies that arise during the assessment process.

9. Examples

Example 1 – Selection of dimensions

Geographical expansion:
A project initially focusing on a specific region within a country can actively engage stakeholders in other regions to expand its scope. For example, by presenting successful results to the national government, the approach could be scaled up and implemented in other states or regions across the country.

Target group extension:
A project that initially focuses on one target group, such as Small and Medium Enterprises (SMEs), could expand its efforts by engaging stakeholders from related groups, such as Micro, Small, and Medium Enterprises (MSMEs), thereby broadening the reach and impact of its activities.

Financial leverage:
A project working with a single financial entity, such as a public bank, can aim to engage additional financiers, including non-public institutions like commercial banks. By promoting its business model, the project could attract a broader group of financial stakeholders, thereby enhancing its financial leverage and expanding its impact.

Example 2 – target and milestones development

The project promotes renewable energy adoption among SMEs in two provinces of country X by establishing a concessional credit line through the national development bank. This initiative helps SMEs adopt solar PV technology. One of the project goals is to expand this financial mechanism by engaging additional financiers across the country, encouraging the creation of new credit lines to support SMEs. This approach enhances "financial leverage" and broadens the project's impact on the renewable energy sector.

Selected dimension: financial leverage
The project is scheduled to commence in January 2024 and will span five years, concluding in December 2028.

Target description: By the end of the project, key financial partners will have committed to establishing a concessional credit line to support SMEs in adopting solar PV, thereby enhancing the potential for financial leverage.

Table 13 below provides an illustrative example of how milestones can be mapped over the project's timeline.

Table 13: Example of milestones development

Year	Milestone
Year 1	Conduct a comprehensive stakeholder analysis to identify potential financial
Year 2	Engage key stakeholders to introduce the project concept and explore collaborative opportunities related to the financial mechanism.
Year 3	Build institutional capacity within potential financial partners to facilitate the establishment of a financial mechanism.
Year 4	Develop and initiate internal processes within interested financial partners to formalise the financial mechanism.
Year 5	Financial partners make a formal decision regarding the adoption of the new concessional credit line.

Example 3 – measuring and reporting scaling

Example 3 is a continuation of Example 2 above:

By the end of the first year of Implementation Phase 2 (2025), the project team, in collaboration with the designated DEO, will have agreed upon a specific percentage of milestone achievement. This will be systematically reported through the M&E plan template. Table 14 below provides an example of how the achievement level for a scaling milestone in a particular year is measured, along with a justification for the defined level of achievement.

Table 14: Example of achievement level identified by project

Year	Milestone	Achieved percentage	Justification of milestone achievement
Year 1	Conduct a comprehensive stakeholder analysis to identify potential financial partners.	75%	The project team completed the stakeholder mapping exercise. A preliminary list of potential adopters has been developed but not yet finalised.