

Mitigation Action Facility

Sustainable development co-benefits
of mitigation actions

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Sustainable development co-benefits of mitigation actions by the Mitigation Action Facility

Sustainable development co-benefits resulting from mitigation actions encompass advantageous outcomes beyond the direct scope of climate change mitigation. Substantial evidence supports the notion that such mitigation activities yield significant development co-benefits. Consequently, the Mitigation Action Facility places great emphasis both on the primary impacts of ambitious mitigation actions and on encouraging projects to identify and promote co-benefits within the context of their activities. These co-benefits catalyse the transformational change of climate actions.

This briefing paper aims to provide valuable insight into the co-benefits defined by the Mitigation Action Facility. It summarises the co-benefits reported by its project portfolio as of December 2022. Furthermore, this paper draws upon the lessons learnt from these co-benefits, highlighting their pivotal role in driving transformational change towards carbon-neutral pathways.

What are co-benefits?

While there is no universal agreement on the precise meaning of the term co-benefits, various international bodies and scientific organisations have published comparable definitions. *(Please refer to the text box for more details)*. All of them share the notion that a policy, action, or measure can yield multiple positive effects that extend beyond its primary objective, which for Mitigation Action Facility projects is climate change mitigation. **Consequently, any positive outcomes of mitigation actions, whether environmental, economic, social, political or institutional in nature, can be categorised as sustainable development co-benefits from the Mitigation Action Facility's perspective.**

Definitions of co-benefits by different bodies

- **Intergovernmental Panel on Climate Change (IPCC), 4th Assessment Report (2007):** ““Co-benefits” are the benefits of policy options implemented for various reasons at the same time, acknowledging that most policies resulting in GHG mitigation also have other, often at least equally important, rationales.”
- **Organisation for Economic Cooperation and Development (OECD) study paper “Co-benefits of Climate Change Mitigation Policies” (2009):** A potential large and diverse range of collateral benefits that can be associated with climate change mitigation policies in addition to the direct climate impact benefits.
- **World Bank analytical background paper “Assessing the Environmental Co-benefits of Climate Change Action” (2010):** The benefits for the local environment due to (mitigation/adaptation) actions targeted at addressing global climate change.
- **International Climate Initiative (IKI) (2022):** Positive social, environmental, and economic effects for the citizens of recipient countries.

Identification of co-benefits at the Mitigation Action Facility

Due to the interrelated nature of many co-benefits, it is impossible to provide a comprehensive taxonomy that encompasses all categories of co-benefits with clear distinction and independence¹. However, the Mitigation Action Facility acknowledges and monitors the co-benefits of climate actions implemented by projects in four broad categories: environmental, economic, social, and political/institutional (*please see Table 1*). ***The Mitigation Action Facility actively encourages project teams to identify and harness co-benefits as crucial drivers for transformational change, fostering increased country ownership, and ensuring long-term sustainability.***

To assist in quantifying co-benefits, the Mitigation Action Facility offers a list of examples. Using this list, each team is to report on those co-benefits that are most relevant to the specific context of their project and that it aims to achieve or contribute to through its interventions.

¹ Ürge-Vorsatz et al. *Measuring the Co-benefits of Climate Change Mitigation* (2014)

Table 1: Climate change mitigation co-benefits from the Mitigation Action Facility's M&E Plan

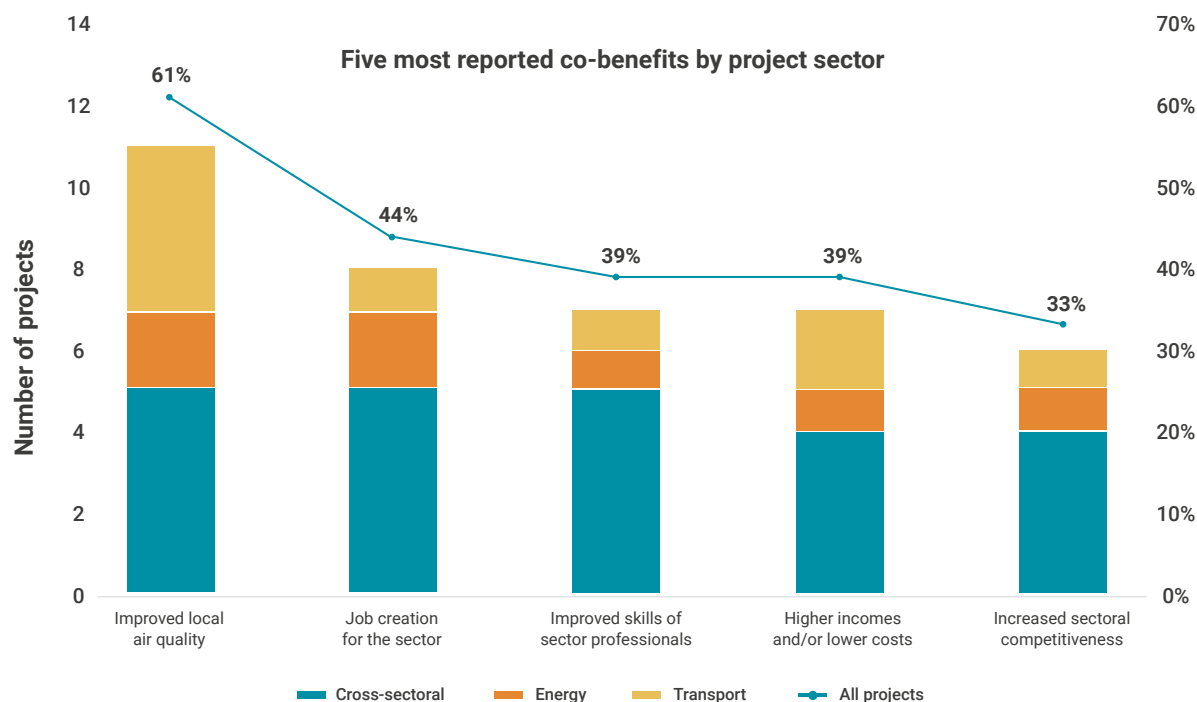
Co-benefit categories	Co-benefit sub-categories	Examples
Environmental	Improved resource quality	Less indoor/outdoor air pollution (Increased local air quality) Better water/soil quality
	Resource conservation	Soil/water conservation
	Ecosystem preservation and biodiversity protection	Support of existing ecosystem services
Economic	Economic growth	Higher incomes and/or lower costs Lower electricity consumption Higher value of goods and services produced in the sector Increased sectoral competitiveness
	Increased resource security	Enhanced food/water/energy security
	Improved efficiency of resource use	Lower consumption of water and/or other resources
	Greening the economy	Making economic activity within the project's boundaries more environmentally sustainable
	Promoting a circular economy	Fostering better reuse and recycling of resources
Social	Improved public health	Reducing respiratory diseases by lowering outdoor/indoor air pollution Reducing road accident injuries
	Job creation for the sector	Generating new jobs
	Workplace improvements	Improved skills of sector professionals and technicians Enhanced working conditions
	Comfort and living conditions	Less exposure to noise Lower traffic congestion Higher living standards
	Gender equality and social inclusion (GESI) ²	Greater access to finance for women/female entrepreneurs Provision of disability-inclusive public transport
	Raised awareness and improved behaviour	Shift to more sustainable living behaviours
	Access to and affordability of sustainable resources	Access to sustainable energy services Improved access to public transport Less expensive public transport
Political/ Institutional	Contribution to political stability	Increased citizen faith in government/authority
	Contribution to interregional or transborder cooperation	Sustainable and collaborative interregional water management

² Refer to the Gender Action Plan of the Mitigation Action Facility for further suggestions and approaches

Co-benefits reported by projects during implementation to the Mitigation Action Facility

Figure 1 depicts the five most frequently reported co-benefits of project mitigation actions. Over 60 % of the portfolio’s projects reported co-benefits that contributed to ‘increased local air quality’. This environmental co-benefit also ranked first amongst those reported by transport-related projects. The ‘Job creation for the sector’ co-benefit ranked second across the whole portfolio but was first amongst energy- and industry-sector projects.

Figure 1: Five most reported co-benefits by projects as of December 2022³



However, it is important to note that the reported frequency of specific co-benefits can vary across the different sectors. As of December 2022, the prevailing co-benefit reported by energy projects was ‘job creation for the sector’ at 56 %. On the other hand, 100 % of transport projects reported their contribution to ‘increasing local air quality’ as a co-benefit. In the case of industry projects, the top three commonly reported co-benefits were ‘job creation for the sector’, ‘improved skills for sectoral professionals’, and ‘increased sectoral competitiveness’.

³ Industry projects are included under cross-sectoral.

Figure 2: All reported co-benefits as of December 2022

Co-benefits help drive transformative change: Insights from the Mitigation Action Facility

From its experience observing the dynamic landscape of climate change mitigation efforts, the Mitigation Action Facility has learned that co-benefits can serve as potent catalysts for transformative change.

For projects focused on energy efficiency improvements, a crucial way to incentivise climate change mitigation efforts within a particular sector is to address that sector's needs. Several projects in the Mitigation Action Facility's portfolio – such as Brazil Industrial Energy Efficiency, Colombia Refrigeration, Mexico Housing, Tunisia Clean Energy in Buildings, and Thailand Refrigeration and Air Conditioning – have successfully targeted vital sectoral needs like improving the respective sector's competitiveness and enhancing its liquidity by reducing energy expenditures. They have done so by supporting interventions that address these needs while also mitigating emissions⁴. This has led to investors and end-users being more likely to invest because they perceive the impact of climate change mitigation actions as a co-impact rather than the primary objective of their investments. ***This dual benefit underscores the pivotal role of economic co-benefits in instigating transformation.*** Moreover, the approach is compelling evidence that pursuing financial gains can harmoniously align with achieving GHG reduction targets.

⁴ Refer to analysis "Financial Mechanisms in the Mitigation Action Facility's Portfolio – Analysis on Implementation and Delivery", Apr 2023

The Mexico Housing project, which concluded in 2021, vividly illustrates this multifaceted benefit framework. The endeavour demonstrated that low-carbon housing not only reduces emissions but fosters financial savings (an economic co-benefit) and enhances living comfort (a social co-benefit)⁵. The project's financial component achieved this by mobilising funding for the construction of low-carbon homes by small- and medium-sized (SME) building contractors. Furthermore, *it triggered systemic changes by propelling the low-carbon housing market, thereby leading to additional GHG emissions reduction and transformational change.*

According to the First Learning Study, conducted in December 2022, various projects within the portfolio have achieved intermediate, multi-category outcomes conducive to systemic change. *These outcomes include changes in market behaviour and financial incentives (i.e., economic co-benefits), improvements in policy frameworks, and enhanced institutional capacities (i.e., institutional co-benefits), amongst others.* Moreover, nearly all projects supported by the Mitigation Action Facility have catalysed significant shifts in broader systems and environments and have thus contributed to the refinement of policy frameworks.

Conclusion

The journey of climate change mitigation is replete with co-benefits, ranging from cleaner air to job creation and improved living standards. A co-benefit can defy being categorised as purely economic, social, environmental, or institutional. Indeed, co-benefits often span multiple categories. Some co-benefits, such as improved air quality or sector-specific job creation, are quantifiable, while others may pose measurement challenges. Sector-specific variations exist in the identified co-benefits, emphasising the need for projects to report co-benefits within their unique project contexts. Economic co-benefits, in particular, have the potential to be the driving force for transforming mitigation actions by rendering investments more appealing to investors and users alike.

The Mitigation Action Facility actively encourages projects to seize opportunities for mutual learning by exchanging insights gained from integrating co-benefits into project implementation and reporting. Various communication channels, such as publications, webinars, virtual project meetings, and global and regional workshops, facilitate this collaborative learning process.

Moreover, it is imperative to recognise and communicate not only the positive co-impacts but also the potential adverse effects of mitigation actions. This comprehensive approach ensures a thorough understanding of the overall consequences of such actions on the environment and society.

⁵ Refer to [First Learning Study](#), Dec 2022

Donor Acknowledgement

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Disclaimer

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