

Co-benefits of mitigation actions

in the Mitigation Action Facility portfolio

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Co-benefits of climate mitigation

CLIMATE MITIGATION DELIVERS BROADER IMPACT

The Mitigation Action Facility accelerates decarbonisation in priority sectors supporting efforts to limit global warming to 1.5 °C by enabling ODA-eligible countries to transition towards sustainable, carbon-neutral pathways. Through annual competitive Calls for Projects, partner countries or organisations acting on their behalf can apply for Mitigation Action Facility funding. Projects are selected through a comprehensive assessment process that prioritises ambition and feasibility. The Mitigation Action Facility provides grant-based funding to projects that combine technical assistance measures and financial support, catalysing additional public and private investment through innovative financial mechanisms. In doing so, projects not only reduce greenhouse gas (GHG) emissions but also **generate a wide range of social, economic, environmental, and institutional co-benefits that are context-specific and potentially transformative.**

Box 1 – Scope and purpose of this paper.

This paper provides insight into the co-benefits generated by the project portfolio of the Mitigation Action Facility. It summarises the co-benefits reported across the portfolio as of December 2025. Drawing on project results and lessons learnt, it illustrates how cobenefits contribute to, and in many cases accelerate, transformational change towards carbon-neutral pathways.

WHAT ARE CO-BENEFITS – AND WHY DO THEY MATTER?

A growing body of evidence demonstrates that climate mitigation actions often yield substantial positive effects beyond their primary objective of reducing GHG emissions. Although no single, universally accepted **definition of co-benefits** exists – given differences in sectoral context, project design, and national priorities – international institutions and research organisations share a broadly aligned understanding (see [Box 2](#)). At their core, **co-benefits refer to the additional positive environmental, economic, social, political, or institutional outcomes generated by a policy, action, or measure whose main purpose is climate change mitigation.**

Reflecting this understanding, the Mitigation Action Facility places strong emphasis not only on the mitigation ambition of supported projects but also on encouraging them to identify, maximise, monitor, and communicate their co-benefits (Output 5, [Theory of Change](#)). From the Mitigation Action Facility’s perspective, any **verifiable positive outcome, such as improved air quality, enhanced gender equality, and social inclusion, strengthened institutions, greater energy security, or increased green employment, falls under the co-benefits umbrella.**

Importantly, co-benefits are not merely secondary or incidental effects. When strategically harnessed, they act as a **catalyst for [transformational change](#)** by strengthening the political, economic, and social foundations needed for sustained, systemic decarbonisation. Cobenefits can enhance national ownership, broaden stakeholder support, strengthen institutional capacity, and create enabling conditions for long-term behavioural and systemic shifts. In this way, co-benefits help trigger durable transitions consistent with countries' Nationally Determined Contributions (NDCs), long-term strategies (LTS), and their broader vision for a carbon-neutral future.

Box 2 – Definition of co-benefits by selected institutions.

Definitions of co-benefits by selected institutions

- **Intergovernmental Panel on Climate Change (IPCC), Fourth 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 Co-operation and Development (OECD) study paper, “Co-benefits of Climate Change Mitigation Policies” (2009):** “A large and diverse range of collateral benefits that can be associated with climate change mitigation policies, in addition to the direct climate impacts.”
- **World Bank analytical background paper, “Assessing the Environmental Co-benefits of Climate Change Action” (2010):** “The benefits for the local environment arising from mitigation and adaptation actions targeted at addressing global climate change.”
- **International Climate Initiative (IKI) (2022):** “Positive social, environmental, and economic effects for citizens in recipient countries.”
- **UNFCCC, [Experiences in Scientific Assessment of the Co-benefits of Climate Change Policies and Actions - Mandated event \(2025\)](#):** “...climate policies offer more benefits beyond their intended emissions-reduction objectives. These secondary benefits, known as “co-benefits”, can be defined as “the positive effects that a policy or measure aimed at one objective might have on other objectives, thereby increasing the total benefits for society or the environment. [...] Climate policies, thus, have key synergies with other development frameworks including the Sustainable Development Goals (SDGs).”

HOW THE MITIGATION ACTION FACILITY TRACKS CO-BENEFITS ACROSS THE PORTFOLIO

Given the interconnected nature of co-benefits, it is neither practical nor meaningful to establish an exhaustive taxonomy with clearly defined categories. Instead, the Mitigation Action Facility identifies and monitors co-benefits emerging from project implementation across four overarching dimensions: environmental, economic, social, and political/institutional (see [Table 1](#)). These provide a coherent framework for capturing the wider positive effects arising from project interventions.

To support systematic reporting, the Mitigation Action Facility offers a non-exhaustive list of examples. Project teams are encouraged to draw on this list to identify and report those co-benefits that are most pertinent to their country context, intervention logic, and intended outcomes. This approach ensures that monitoring remains both flexible and robust, reflecting the diverse pathways through which projects contribute to transformational change.

Table 1 – Climate change mitigation co-benefits from the Mitigation Action Facility's M&E Framework.

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 and water conservation
	Ecosystem preservation and biodiversity protection	Protection 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, and energy security
	Improved efficiency of resource use	Lower consumption of water and/or other resources
	Greening the economy	More environmentally sustainable economic activity within the project boundaries
	Promoting a circular economy	Improved reuse and recycling of resources
Social	Improved public health	Reduced respiratory diseases through lower outdoor and indoor air pollution Reduced road accident injuries
	Job creation for the sector	Creation of new jobs
	Workplace improvements	Improved skills of sector professionals and technicians Enhanced working conditions
	Comfort and living conditions	Reduced exposure to noise Lower traffic congestion Higher living standards
	Gender equality and social inclusion (GESI) ¹	Greater access to finance for women/female entrepreneurs Provision of disability-inclusive public transport
	Raised awareness and improved behaviour	Shift towards more sustainable living behaviours
	Access to and affordability of sustainable resources	Access to sustainable energy services Improved access to public transport More affordable public transport
Political/ Institutional	Contribution to political stability	Increased public trust in government and public authorities
	Contribution to interregional or trans-border cooperation	Sustainable and collaborative interregional water management

¹ The Mitigation Action Facility puts a particular focus on Gender Equality and Social Inclusion (GESI) and requires projects to design, implement and monitor dedicated GESI activities. Refer to the [Gender Action Plan](#) of the Mitigation Action Facility for further information.

AT A GLANCE: HOW CO-BENEFITS ARE EVOLVING ACROSS THE PORTFOLIO

Figure 1 illustrates a steady and substantial rise in the number of co-benefits generated across the portfolio between 2018 and 2025. This upward trajectory reflects both the cumulative nature of the indicator and the growing number of projects entering implementation and beginning to generate measurable co-benefits over time. So far, past and current projects have generated 59 social co-benefits (39%), closely followed by 52 economic co-benefits (34%) and 32 environmental co-benefits (21%). Based on past learnings, the category “political/institutional co-benefits” was introduced in 2022. Given its relatively new introduction, only 9 co-benefits (6%) have been generated in the political/institutional category. Overall, the projects in the portfolio have generated a total of 152 co-benefits as of the end of the 2025 reporting year.

Portfolio trends (2018–2025)

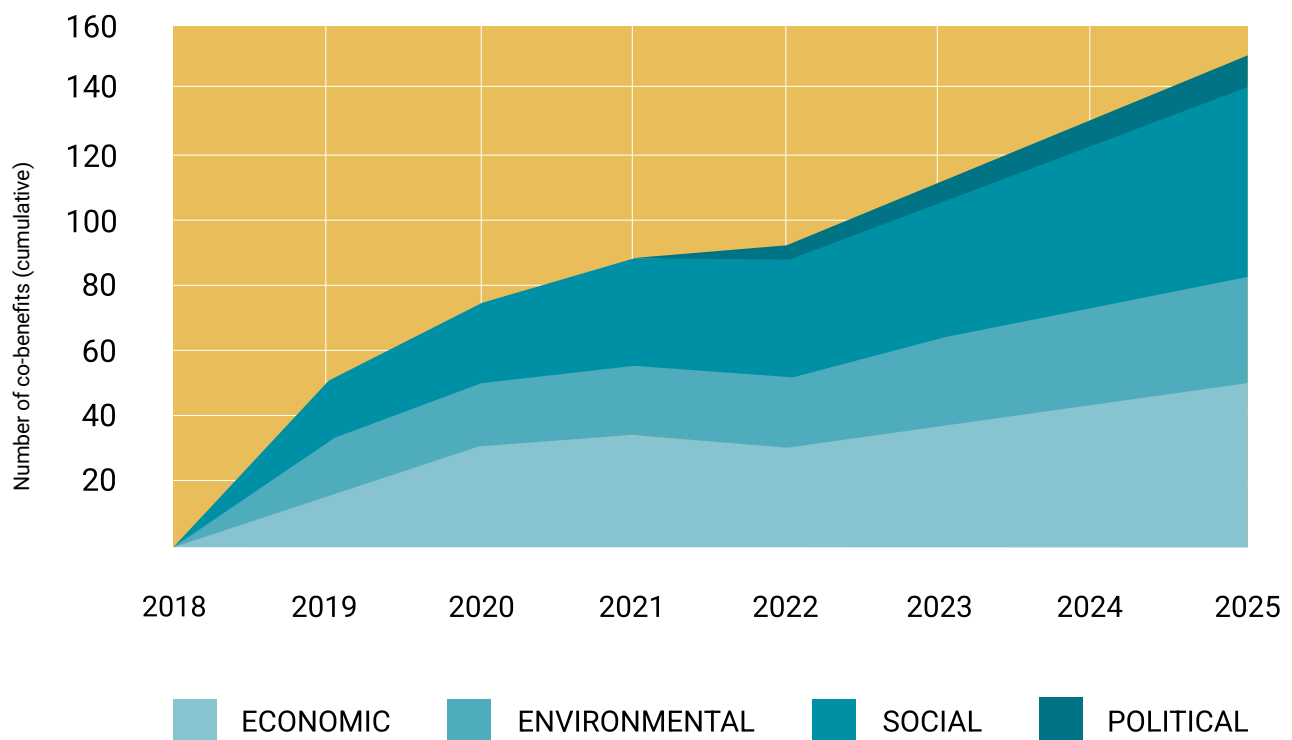


Figure 1 – Each year of implementation comes with new cumulative co-benefits.

Co-benefits by region

Regionally, most co-benefits have been generated in Latin America and the Caribbean (LAC), followed by projects in Asian and African partner countries (see [Figure 2](#)). This reflects the historically larger number of projects in LAC partner countries (11 projects in LAC, compared to 8 in Africa and 8 in Asia) particularly from early Calls for Projects. Consequently, as of 2025 many mature projects were and are from the LAC region.

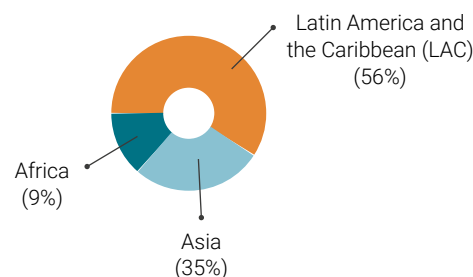


Figure 2 – Share of co-benefits from the Mitigation Action Facility portfolio by region.

WHAT THE DATA SHOWS: KEY CO-BENEFIT TRENDS BY CATEGORY

Environmental co-benefits

In 2025, **environmental co-benefits** were mostly generated by cross-sectoral projects, which accounted for 47% of recorded outcomes. These gains typically stem from the adoption of circular economy approaches that both reduce emissions and enhance resource efficiency. This pattern is consistent with 2024, when cross-sectoral projects contributed 39% of environmental co benefits, indicating continuity in how environmental benefits are realised across the portfolio.



Project examples

The [India – Waste Management project](#) drives low-carbon transformation of India’s waste sector by scaling up investment, strengthening regulations, and integrating the informal recycling sector across multiple cities. The project also promotes a **circular economy and greener growth** by supporting the development of new waste processing facilities that attract private investment. It contributes to **inclusive job creation** by [integrating informal workers](#) into formal waste management systems.

The project diverts 1,351,826 tonnes of waste from landfill to waste processing and recycling facilities, reducing land use pressures, soil contamination, and leachate-related groundwater pollution. City-level contributions to diversion include, for example, Varanasi (169,375 tonnes), Goa (125,877 tonnes), and Trichy (93,712 tonnes), collectively demonstrating substantial **resource efficiency and conservation benefits**. **Improved resource quality** is achieved through better source segregation and waste management, which reduces the need for open burning and thereby lowers air pollution. **Awareness raising** activities conducted by the project discourage open burning, while higher segregation rates and upgraded waste services reduce landfill volumes, together contributing to improved air quality.

Projects outside the waste domain also deliver environmental co-benefits. The [Guatemala – Cookstoves project](#) (energy sector) illustrates how energy efficient solutions can generate environmental, economic, and social benefits. By expanding access to improved cookstoves (ICS), stimulating demand, and strengthening enabling conditions in rural communities, the project increases the **efficiency of resource use**. The promoted ICS achieve at least 40% higher efficiency than traditional three stone fires, reducing firewood consumption, and thereby helping to limit forest degradation.

Economic co-benefits

In 2025, **economic co-benefits** were concentrated in the industry sector, which accounted for 48% of recorded outcomes. These benefits typically arose from productivity gains, reduced energy consumption, and stronger value chains – mechanisms that translate mitigation investments into competitiveness. The 2024 distribution was similar, with industry contributing 49% of economic co-benefits, underscoring the sector’s central role in cost savings and operational efficiency.

Project examples

The [Cabo Verde – Electric Vehicles project](#) supported the government in **advancing and implementing its national e-mobility strategy** to increase the share of electric vehicles (EVs) in total vehicle purchases. The expansion of e-mobility in Cabo Verde contributes to **economic growth** by strengthening the country’s positioning as a green destination and supporting new business models such as electric vehicle rental services.

The [Mexico – SME Energy Efficiency project](#) demonstrates how **market development and private capital mobilisation amplify economic impacts** by shifting from equipment replacement to system level optimisation and crowding in commercial finance, thereby deepening savings and strengthening market conditions. It delivered **economic growth** by lowering electricity consumption and raising SME profitability; in 2023, instruments such as Eco Crédito Sostenible enabled firms to cut electricity bills by up to 80% and fuel costs by 15%. The project **increased sector competitiveness** by professionalising developers and widening participation – by 2023, five commercial banks, six project developers, and one technical validator were engaged, alongside subnational partners such as Guanajuato and Jalisco.



Social co-benefits

Between 2023 and 2025, **social co-benefits** have expanded markedly, increasing by 48%. In 2024, contributions were broadly even across sectors, with energy, transport, and cross-sectoral projects each representing 26% and industry 22%. In 2025, the energy sector's share rose to 31%, reflecting advances linked to clean energy access, affordability, and occupational health. Across the portfolio, social co-benefits are exemplified by improved living conditions, job creation, and workplace improvements, with reported results from initiatives such as improved cookstoves in Guatemala, EEPBIB in Mongolia, SME support in Mexico, and transport interventions in Cabo Verde.

Project examples



To ensure equitable participation in building retrofits, the [Mongolia – Building Retrofitting project](#) piloted a **targeted inclusion measure for vulnerable households** in three panel building districts of Ulaanbaatar (November 2024–April 2025). The initiative focused on strengthening the financial resilience of low income households—who must co contribute to retrofit investments—enabling them to participate on equal terms with other residents. Thirty five participants received training, and nine benefited from mentoring on drafting small project proposals,

starting or expanding home based businesses, and applying for state grants and interest free long term loans. By improving access to income opportunities and social welfare programmes, the pilot reduces affordability barriers and facilitates the 100% household consent required for block level retrofits, thereby advancing social inclusion in the transition to healthier, more energy-efficient housing.

The [Guatemala – Cookstoves project](#) has **improved public health, comfort, and living conditions** by reducing exposure to harmful indoor air pollution for 3,891 households, particularly women who are predominantly responsible for cooking. The improved cookstoves feature more efficient combustion chambers, lowering emissions of carbon monoxide and particulate matter, improving indoor air quality. The project has also raised awareness by training 4,218 people through programmes in 106 secondary schools on climate, energy efficiency, and natural resource management, strengthening community awareness and long term behaviour change. Gender equality and social inclusion are addressed by integrating gender and indigenous perspectives into education activities, including the cultural significance of fire and improved cookstoves within the Mayan worldview.

Political and institutional co-benefits

Political and institutional co-benefits are currently harder to interpret. The category was only recently added to the monitoring framework and currently includes six recorded instances. Emerging evidence shows that projects strengthen the enabling environment in several complementary ways.



Project examples

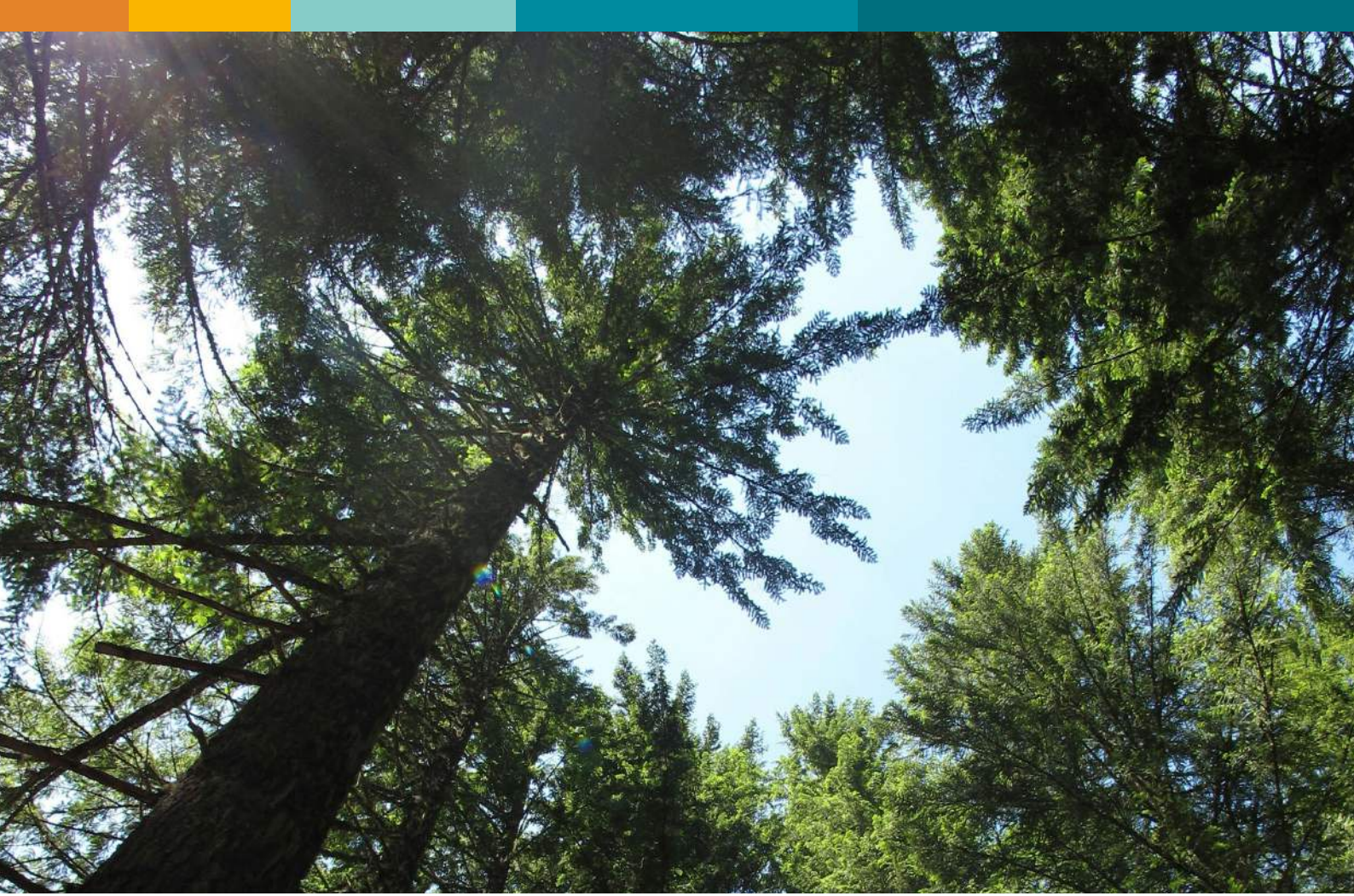
The [Mexico - SME Energy Efficiency project](#) advanced interregional cooperation by developing capacities in national and subnational institutions and facilitating the transfer and adoption of technical tools, standards and protocols, this, laying the groundwork for consistent implementation across jurisdictions. In [Cabo Verde](#), regulatory reforms enabled the deployment of electric vehicles in public transport, while transboundary cooperation, such as collaboration with Senegal, supported knowledge exchange and early market development, signalling how policy updates can be reinforced through regional learning. The [India – Waste Management project](#) fostered horizontal coordination by intensifying cooperation between the Ministry of Housing and Urban Affairs (MoHUA) and the Ministry of Environment, Forest and Climate Change (MoEFCC), demonstrating how interministerial alignment can accelerate sector reform. Together, these approaches – standards and institutional capacity, regulatory modernisation and regional peer learning, and strengthened interministerial coordination – illustrate the types of political and institutional shifts now being captured and their role in enabling scale.

UNLOCKING FUTURE CO-BENEFITS THROUGH INNOVATIVE FINANCE

Projects that recently entered implementation have planned promising and innovative co-benefits: both the [Kenya – Post-Harvesting Solar Cooling](#) and the [Rwanda – E-Mobility](#) projects plan to generate significant economic co-benefits alongside their emissions-reduction impacts. Each uses innovative financial mechanisms that expand access to capital for MSMEs, notably through guaranteed loans. On the demand side, they strengthen affordability for low-income and female-headed households through guarantees, price subsidies, and CAPEX grants. In doing so, the projects not only enhance financial inclusion for vulnerable groups but plan to demonstrate that climate mitigation and economic gains can be mutually reinforcing. They further show that entrepreneurs from disadvantaged groups can make economically viable contributions to a greener, more inclusive economy.

BEYOND EMISSIONS: CO-BENEFITS POWERING TRANSFORMATIONAL CHANGE

The portfolio shows that well designed mitigation actions deliver tangible co-benefits beyond emissions reductions by improving environmental quality, enhancing economic performance, advancing social inclusion, and strengthening institutional resilience across sectors and regions. The portfolio insights translate directly into transformational change dynamics. When strategically harnessed, co-benefits strengthen the political, economic, and social foundations for durable decarbonisation in line with NDCs and LTS. Demonstration effects prove viability and build buy-in (illustrated by waste diversion in India, SME energy savings in Mexico, household health gains in Guatemala, and early EV deployment in Cabo Verde). In turn, catalytic effects emerge by shifting markets and incentives through finance access and market development, advancing [regulatory reform and intergovernmental coordination, and embedding awareness driven behaviour change](#). While the scale and nature of these outcomes vary by context and design, the evidence indicates that co-benefits reinforce national ownership, broaden stakeholder support, and create enabling conditions for sustainable decarbonisation.



DONOR ACKNOWLEDGEMENT

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