

SUSTAINABLE IMPACT FRAMEWORK

Buildings and Cities

Sectors:

- Infrastructure and Construction
- Building Equipment & Materials

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This document is not a promotional communication. This is a methodological document aimed at explaining how Mirova takes into account sustainable development issues in the framework of the environmental, social and governance analysis of each sub-sector of activity.

An affiliate of:

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Executive Summary



Buildings and Cities

The infrastructure and, construction, building materials and equipment sector sits at the intersection of three defining global trends: accelerating urbanization, the transition to a low-carbon economy and urban resilience. Rising population growth, expanding infrastructure needs and rapid urban development are expected to drive sustained demand for buildings and materials over coming decades. At the same time, the sector remains one of the largest contributors to global greenhouse gas emissions and resource consumption, requiring profound transformation across value chains. Delivering sustainable buildings, infrastructure and cities, will depend on decarbonisation, circularity, resource efficiency and stronger policy frameworks.

**+5%
Increase in sector CO₂
emissions since 2015,
despite net-zero ambitions¹**

As the global population is projected to grow from 8.2 billion in 2024 to nearly 9.7 billion by 2050⁴, urbanisation and infrastructure needs are expected to rise significantly. The share of the world population living in cities is expected to increase from 54% in 2015 to almost 68% by 2050, representing approximately 2.7 billion additional urban dwellers, with Africa and Asia accounting for most of this growth⁵. Demand for housing, buildings and infrastructure is therefore expected to remain structurally strong, particularly in rapidly urbanising economies where mid-sized cities are likely to evolve into major urban centres. This trend creates substantial long-term opportunities across construction and building materials markets, but also raises critical sustainability challenges. If poorly managed, urban expansion could amplify climate pressures, resource depletion and environmental degradation, making sustainable construction increasingly central to achieving global development and climate objectives.

**1.18 billion
People worldwide are energy
poor and unable to
meaningfully use electricity²**

The sector already represents a significant environmental footprint; buildings and construction account for 37% of global carbon emissions¹. Despite some progress, the sector is off track to align with net zero carbon and climate resilience targets by 2050, as progress remains slow and fragmented. CO₂ emissions from the sector have risen by 5% since 2015³, far from meeting the 28% reduction required by 2030 to align with the Paris Agreement objectives. Embodied carbon associated with materials such as cement, steel and aluminium remains a major source of lifecycle emissions, representing 9% of global carbon emissions in 2024¹. Beyond climate considerations, construction activities can also generate biodiversity pressures, land-use impacts, resource depletion, waste generation and social risks across supply chains, highlighting the need for stronger environmental and social safeguards. The sector's social dimension is equally pressing: around 80% of cities worldwide lack affordable housing options for the majority of their residents, and an estimated 1.18 billion people remain energy poor — unable to heat, cool or power their homes adequately. The way buildings and infrastructure are designed, built and maintained directly determines whether they provide long-term stability and decent living conditions, or entrench existing inequalities.

**US\$1tn/year
Estimated investment
needed for green retrofits
and energy-efficient urban
infrastructure³**

Decarbonising the sector requires simultaneous progress across multiple transformation levers. Improving operational efficiency through building retrofits, electrification, renewable energy integration and energy-efficient materials remains critical, particularly in developed economies where ageing building stock creates major renovation opportunities. Building materials themselves increasingly act as enablers of decarbonisation by improving thermal performance and reducing operational energy demand throughout a building's lifetime. Circular construction approaches—including material reuse, modular construction and resource efficiency—can reduce both emissions and waste generation. Scaling low-carbon cement, decarbonised steel, recycled materials and regenerative bio-based materials sourced from sustainable forestry and agricultural systems could further reduce lifecycle emissions while creating carbon storage opportunities, while providing insulating quality and biodiversity co-benefits in the value chain. Addressing the sector's social challenges will equally require deliberate action: expanding affordable and climate-resilient housing, deploying smart building technologies to reduce energy poverty, and embedding human rights and labour standards across complex subcontracting chains. While pathways will differ across regions, the long-term direction is clear: companies able to combine decarbonisation, resilience, social responsibility and sustainable resource management are likely to be best positioned to navigate evolving regulation, investor expectations and sustainability-related risks over coming decades.



Drivers of contribution and obstruction to sustainability goals

	Activities	Practices
Positive Impact	Sustainable Activities Green Building Access to Basic Needs Climate Adaptation Infrastructure	Advanced Practices Human Capital Management: - Diversity and inclusion - Job quality Climate Biodiversity Advanced governance models
Residual ESG Risks	Harmful Activities¹ Activities Negatively Affecting Biodiversity Sensitive Areas	Risk Mitigation Climate Change Biodiversity Footprint Working Conditions Labor & Human Rights Governance of sustainability Business ethics Taxes

1. See: [Minimum standards and exclusions, Mirova](#)

The information provided reflects Mirova’s opinion/the situation as of the date of this document and is subject to change without notice. Source: Mirova.



Positive Impact

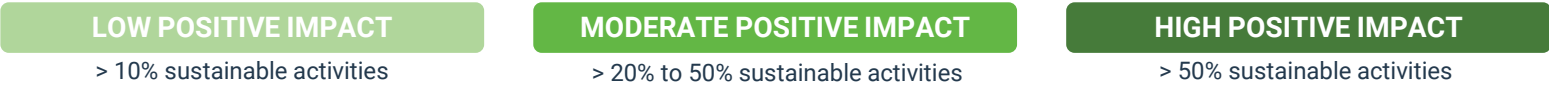


Sustainable Activities



	CONTEXT	SUSTAINABLE ACTIVITY
CLIMATE & BIODIVERSITY	Buildings and construction account for approximately 37% of global carbon emissions, while the sector has the largest material footprint of any sector, driving nearly 50% of global material extraction¹. At the same time, urbanization is expected to continue accelerating, with nearly 68% of the global population living in cities by 2050, driving sustained demand for buildings and infrastructure. Achieving climate objectives requires a profound transformation of the sector through the deployment of energy-efficient buildings, low-carbon construction materials, circular economy solutions and sustainable infrastructure. Construction and demolition activities generate close to 30% of global solid waste², highlighting the importance of resource efficiency and recycled materials. Decisions made today regarding buildings and infrastructure will have long-term implications for emissions, resource consumption, biodiversity and urban resilience. Against this backdrop, companies can generate positive environmental outcomes by providing solutions that contribute to climate change mitigation, climate adaptation, resource efficiency and biodiversity preservation. Positive contributions may arise from energy-efficiency solutions in buildings, including insulation materials, efficient equipment and building automation systems that reduce energy consumption and operational emissions throughout the building lifecycle. Companies may also contribute through the development of low-carbon construction materials, such as low-clinker cement, recycled steel and bio-based materials, which help reduce embodied carbon while providing improved insulating capabilities. Additional positive contributions may stem from renovation activities that improve the environmental performance and lifespan of existing assets, as well as from circular construction practices focused on waste reduction, recycling and material recovery. The adoption of recycled construction materials and modular design approaches can help reduce resource extraction, waste generation and associated pressures on biodiversity. Companies may further contribute through water-efficient solutions, including efficient plumbing systems, water reuse technologies and wastewater infrastructure, particularly in water-stressed regions where improvements in water efficiency can support both ecosystem preservation and long-term resilience.	Green Building <i>Advanced Building Equipment</i> Companies /projects providing solutions that enable buildings to meet industry's best standards for energy and water use, air quality, and climate adaptation (e.g. high-efficiency HVAC systems, heat pumps, smart metering, efficient equipment, insulation materials). <i>Green Materials</i> Companies /projects offering alternative construction materials that require less energy / CO2 / water / waste / natural resources compared to the standard materials such as biosourced insulation, and low carbon concrete IMPACT CRITERIA • Share of revenues derived from climate and environmental solutions (energy efficiency, circular construction, modular design). • Share of revenues derived from energy-efficiency solutions (insulation, HVAC, heat pumps, building automation, energy management systems). • Share of revenues derived from low-carbon products and materials (e.g. low-clinker cement, recycled steel, bio-based materials). • Share of recycled or secondary materials used in final products • Share of revenues from products and services contributing to water savings, water reuse and wastewater management

In this sector, the positive contribution is mainly analyzed through **revenues exposure** but not only. We complement this exposure with a **relevant impact KPIs** (ex: tons of waste avoided, the kWh of energy saved, CO2 emissions avoided etc...) to **assess the effectiveness of the solution in truly advancing environmental challenges**.



The information provided reflects Mirova’s opinion/the situation as of the date of this document and is subject to change without notice. Source: Mirova. ¹Global status report for buildings and construction 2025/2026, UN Environment Programme, ²Circular Economy on Construction and Demolition Waste: A Literature Review on Material Recovery and Production (MDPI, 2020)





CONTEXT

Access to adequate housing is one of the most fundamental social rights, yet it remains out of reach for a growing share of the global population. Around 80% of cities worldwide lack affordable housing options for the majority of their residents, and by 2030 an estimated 3bn people will require adequate housing¹. The affordability crisis disproportionately affects low-income households, migrants, young people, and the elderly, pushing them into overcrowded or substandard dwellings with limited access to employment, healthcare, and education. Beyond housing, the construction sector shapes access to essential social infrastructure – hospitals, schools, community facilities – that underpins quality of life in urban environments, positioning it as a direct lever for social inclusion.

Energy poverty – defined as the inability of households to secure adequate energy services at home – is determined as much by the thermal performance of buildings as by income levels. According to the UNDP, at least 1.18 billion people globally are energy poor and unable to meaningfully use electricity. In many cities, low-income households face a compounding burden: living in thermally inefficient buildings while spending a disproportionate share of their income on energy to compensate. Building Management Systems (BMS), which automate control over HVAC, lighting, and ventilation, can reduce energy consumption by up to 30% while improving indoor comfort – making them a concrete tool for alleviating energy precarity and reducing household operating costs.

Climate change is increasingly affecting the conditions under which people live in cities. Extreme heat, flooding, and storms threaten both the structural integrity of buildings and the health and well-being of occupants, with vulnerable populations – elderly residents, those in low-quality housing – facing the greatest exposure. People living in urban areas are particularly at risk due to the heat island effect, while health and social care facilities are also exposed to climate shocks with direct consequences for public health. Buildings and infrastructure designed or retrofitted to address these risks – through passive cooling, flood resilience, improved ventilation, and air and water quality management – represent a direct social response to the growing adaptation imperative.

In this sector, the positive contribution is mainly analyzed through **revenues exposure** but not only. We complement this exposure with a **qualitative review** of the solution's impact. KPIs to assess the level of impact generated can include among others: **number of users of the products, the share of revenues in underserved areas, the number of jobs created etc.**

Modifier les seuils si
différents pour le secteur

LOW POSITIVE IMPACT

> 10% sustainable activities

MODERATE POSITIVE IMPACT

> 20% to 50% sustainable activities

HIGH POSITIVE IMPACT

> 50% sustainable activities

SUSTAINABLE ACTIVITY

Access to basic needs

Affordable housing

Companies / projects developing infrastructures, materials and services supporting affordable, reliable and resilient housing (modular design, 3D printing)

Energy poverty mitigation

Companies/projects reducing energy poverty through the renovation of energy-inefficient homes and the deployment of energy-efficiency solutions that durably lower household energy needs and energy bills (insulation, efficient heating and cooling systems, heat pumps, ventilation)

Infrastructure / Building materials and equipment for climate adaptation

Companies/projects improving resilience to physical climate risks through adaptation infrastructure and nature-based solutions (e.g. flood protection, coastal defense, water management, climate-proofed assets).
Companies / projects providing building products and technologies that improve climate resilience (e.g. home cooling, insulation, smart grids, smart meters, and air quality management).

IMPACT CRITERIA

- Percentage of building stock or project portfolio enabling access to basic needs (eg housing for vulnerable or low-income populations, healthcare and education facilities, facilities benefiting the local community)
- Share of projects addressing energy poverty through renovation of energy-inefficient homes or measurable energy-efficiency improvements.
- Evidence of measurable outcomes for occupants, such as reduced primary energy demand, lower household energy costs, improved thermal comfort
- Share of revenues derived from climate adaptation infrastructure and services (flood protection, coastal defense, water management, resilient infrastructure, climate-proofed assets)
- Share of revenues derived from climate-resilient building products and technologies (cooling, insulation, air quality management, resilient construction systems, smart grids and smart meters)



Focus on Low-Carbon Cement



CONTEXT

Cement is the most widely used construction material worldwide and a critical enabler of urban development and infrastructure. However, cement production is also one of the largest industrial sources of greenhouse gas emissions, accounting for an estimated 7% of global CO₂ emissions. Unlike many industrial sectors, a significant share of cement emissions originates from the chemical reaction involved in clinker production (calcination) and therefore cannot be fully eliminated through electrification or renewable energy use alone. Several technological pathways can reduce the lifecycle carbon footprint of cement and concrete, including clinker substitution through supplementary cementitious materials (SCMs), the use of alternative binders, alternative fuels, energy efficiency improvements, concrete optimisation and carbon capture, utilisation and storage (CCUS). According to the IEA Net Zero Emissions Scenario, clinker-to-cement ratios must continue to decline while CCUS deployment scales significantly by 2050 to align the sector with net-zero objectives. However, not all low-carbon cement solutions deliver equivalent environmental benefits. The availability of clinker substitutes may be constrained in certain regions, while some emerging technologies remain at pilot stage. In addition, the sourcing of alternative materials, energy consumption, water use and local environmental impacts must also be assessed to ensure that carbon reductions do not create significant unintended consequences elsewhere.

POSITIVE IMPACT

SUSTAINABLE ACTIVITY	IMPACT CRITERIA
Low-Carbon Cement	- Cement carbon intensity (kg CO₂/t cementitious product) below or on a credible pathway toward best-in-class levels. - Clinker-to-cement ratio below industry average, supported by increased use of supplementary cementitious materials (SCMs). - Share of alternative fuels used above industry average. - Share of low-carbon cement and concrete products in sales above industry average. - Credible roadmap for residual emissions, including CCUS where relevant.

CONDITION FOR ELIGIBILITY

- Quantified lifecycle GHG reductions supported by verified LCAs.
- Credible and time-bound decarbonisation strategy, including quantitative targets on cement carbon intensity and clinker reduction.
- Responsible sourcing and long-term availability of SCMs and alternative raw materials, with transparency on associated environmental and supply-chain risks.
- Compliance with DNSH requirements, particularly regarding quarry management, biodiversity protection, water use, pollution prevention, waste management and circular economy principles



Focus on Low-Carbon Steel



CONTEXT

Steel is an essential material for the building and infrastructure sectors. Yet steel production remains one of the most carbon-intensive industrial activities. Conventional primary steelmaking relies predominantly on the blast furnace–basic oxygen furnace (BF-BOF) route, where coal is used both as an energy source and as a reducing agent to convert iron ore into iron. According to the World Steel Association, the sector emitted approximately 4.1 billion tonnes of CO₂e in 2024 and represents around 7–8% of global GHG emissions. On average, producing one tonne of steel generated approximately 2.18 tonnes of CO₂e across Scopes 1, 2 and 3.

“Green steel” does not refer to a single technology but to multiple complementary solutions. These include increasing the use of recycled scrap in electric arc furnaces (EAFs) powered by low-carbon electricity, deploying direct reduced iron-electric arc furnace (DRI-EAF) routes using low-carbon hydrogen, implementing carbon capture, utilisation and storage (CCUS) technologies on existing production routes, improving energy and process efficiency, and increasing material circularity through reuse, remanufacturing and recycling. Leading green steel pathways can achieve more than 90% GHG emission reductions compared with conventional BF-BOF steel production, making steel one of the industrial sectors with the highest long-term decarbonisation potential. Advances in high-strength steels and design optimisation can further reduce lifecycle emissions by lowering the amount of steel required in end-use applications.

POSITIVE IMPACT

SUSTAINABLE ACTIVITY	IMPACT CRITERIA
Low-Carbon Steel	- Steel carbon intensity (tCO₂e/t crude steel) below industry average and supported by a credible pathway toward net-zero steel production. - Share of production based on recycled scrap and electric arc furnaces (EAF) powered by low-carbon electricity, above industry average. - Share of production using breakthrough decarbonisation routes, including DRI-EAF with low-carbon hydrogen, above industry average. - Share of production covered by CCUS or other technologies enabling the abatement of residual process emissions, above industry average.

CONDITION FOR ELIGIBILITY

- Quantified lifecycle GHG reductions supported by verified LCAs.
- Credible and time-bound decarbonisation strategy, including quantitative targets for steel carbon intensity and deployment of breakthrough technologies.
- Transparent disclosure of electricity sourcing and renewable power procurement strategy.
- Responsible sourcing of iron ore, scrap and other raw materials, including management of biodiversity, water and human rights risks throughout the supply chain.
- Compliance with DNSH requirements, particularly regarding mining impacts, water use, pollution, waste management and circular economy principles.



POSITIVE IMPACT

Focus on HVAC

CONTEXT

Space cooling is becoming an increasingly important component of climate adaptation. Rising temperatures, more frequent heatwaves and continued urbanisation are driving rapid growth in cooling demand worldwide. According to the IEA, the global stock of air-conditioning units could more than triple by 2050, making cooling one of the fastest-growing sources of electricity demand. Access to cooling can generate significant social and environmental benefits by protecting human health, improving thermal comfort and increasing the resilience of buildings, hospitals, schools and critical infrastructure to climate change. However, air-conditioning illustrates the potential tension between climate adaptation and climate mitigation. While cooling technologies help reduce heat-related risks, they can simultaneously contribute to higher greenhouse gas emissions through electricity consumption, particularly in regions where power systems remain carbon intensive. Cooling systems also rely on refrigerants, some of which can have a very high global warming potential if leaked during operation or at end-of-life. To address this challenge, the Kigali Amendment to the Montreal Protocol, adopted in 2016, established a global phase-down schedule for hydrofluorocarbons (HFCs) consumption and production, accelerating the transition toward lower-Global Warming Potential (GWP) refrigerants and more climate-friendly cooling technologies. As a result, HVAC manufacturers are increasingly expected to develop equipment using alternative refrigerants while reducing leakage rates and improving lifecycle refrigerant management. In addition, conventional air-conditioning systems reject heat into the surrounding environment, potentially exacerbating the urban heat island effect and increasing cooling demand at city scale. Priority should be given to solutions that minimise energy demand and lifecycle impacts. Passive cooling strategies—including building insulation, solar shading, natural ventilation, reflective roofs, thermal inertia and green infrastructure—typically provide the most sustainable response by reducing the need for mechanical cooling. Mechanical HVAC systems become particularly relevant where passive solutions are insufficient to protect health, productivity and building resilience under increasingly severe climate conditions.

POSITIVE IMPACT

SUSTAINABLE ACTIVITY	IMPACT CRITERIA
Energy Efficiency Equipment (HVAC)	- Energy efficiency performance of cooling equipment above applicable market standards and regulatory requirements. - Share of revenues from highly efficient cooling solutions above industry average. - Share of products using low-GWP refrigerants compared with conventional refrigerants above industry average. - Reduction in refrigerant-related lifecycle emissions through lower leakage rates and improved refrigerant management.

CONDITION FOR ELIGIBILITY

- Transparent disclosure of energy-efficiency metrics and performance data across major product categories.
- Use of refrigerants aligned with the Kigali Amendment and a credible roadmap toward low-GWP alternatives.
- Robust refrigerant management practices, including leakage monitoring, recovery, recycling and end-of-life treatment.
- Compliance with DNSH requirements regarding energy use, pollution prevention, refrigerant management and waste treatment.



POSITIVE IMPACT

Sustainable Practices



		SUSTAINABLE PRACTICE	
CONTEXT		Practices/measures expected:	Impact indicators examples:
CLIMATE	The buildings and construction sector remains one of the largest contributors to global GHG emissions. While improvements in energy efficiency and cleaner energy sources have helped moderate emissions growth, progress remains insufficient to meet the 28% reduction required by 2030 to align with the Paris Agreement objectives. In 2024, operational emissions from buildings reached approximately 9.9 GtCO₂, while embodied emissions from construction materials and equipment such as cement, steel, aluminium and glass represented a further 2.1 GtCO₂. As a result, companies are increasingly expected to go beyond regulatory compliance by implementing ambitious decarbonization strategies, improving the energy and carbon performance of their operations and products, and supporting the transition towards a low-carbon built environment	Implement robust decarbonization strategy on all three scopes	• Short, medium and long term GHG reduction targets aligned with the Paris Agreement, verified by third parties, and including all relevant scopes and greenhouse gases • Comprehensive, transparent and audited climate disclosures, including climate risks exposure and avoided emissions • Decarbonisation plan including the description of key levers and sub-targets and a plan to transition away from fossil fuels • A consistent capital allocation plan, focusing mostly on green technologies • Corporate lobbying positions aligned with the Paris Agreement • Oversight of climate targets by governance bodies and executive remuneration linked to delivering targets • A track record of emission reduction
	The construction and building materials and equipment sector exerts significant pressure on natural resources and ecosystems through the extraction of raw materials, land-use change, water consumption and waste generation. The built environment accounts for almost half of global material use ⁽¹⁾, while construction and demolition activities generate substantial volumes of waste. As urbanization and infrastructure development continue to expand, companies face increasing expectations to reduce their impacts on biodiversity. Advanced practices include improving resource efficiency, increasing the use of recycled and responsibly sourced materials, reducing pressure on virgin resource extraction, managing water use and integrating nature-based solutions as early as project design such as green-blue corridor. These approaches can help mitigate ecosystem degradation while contributing to a more circular and resilient built environment.	Implement robust biodiversity strategy • Responsible sourcing of materials • Management of water, waste and pollution in the production phase • Circular design and product life extension and end-of-life management	• Issuance of double materiality assessment aligned with TNFD-LEAP identifying key pressure drivers. Availability of a biodiversity strategy, engagement with suppliers and adequate governance of nature strategy • Existing (science based) targets and plan of action to reduce key pressure drivers such as water use in water scarce areas, water pollution, wastes generation, use of hazardous chemicals, land degradation and deforestation • Disclosure of KPIs to monitor identified material pressures and improvement overtime • Disclosures on the share of projects integrating nature-based solutions (NBS), green infrastructure, and site restoration. • Share of procurement covered by biodiversity-related supplier requirements and due diligence processes.
LOW POSITIVE IMPACT		MODERATE POSITIVE IMPACT	
> Advanced practices - Medium Stake topic > Credible strategy to achieve advanced practices		> Advanced practices - High Stake issues	



POSITIVE IMPACT

Sustainable Practices



HUMAN CAPITAL

CONTEXT

Job Quality

The construction and infrastructure sector employs a very diverse workforce — engineers, project managers, skilled tradespeople, on-site manual workers, subcontractors, and facility maintenance staff — making the standardisation of job quality particularly challenging and necessitating a close examination of internal career pathways. The sector's deep reliance on multi-layered subcontracting chains, common on large infrastructure projects, complicates the monitoring of labour standards and dilutes accountability for working conditions further down the supply chain. A proactive approach to internalising workers and reducing subcontracting dependency is therefore viewed positively. Limiting mobility clauses that allow employers to reassign workers at short notice, at the expense of personal stability and career progression, is also an important measure of employment quality. Ensuring fair and transparent remuneration across all employment categories — including in countries with weaker social protections — and establishing effective mechanisms for social dialogue are further markers of responsible employment practice. Finally, the sector's rapid technological and environmental transition makes investment in upskilling — notably on digital and sustainability topics — a critical lever for both workforce resilience and long-term competitiveness.

Diversity & Inclusion

The construction and infrastructure sector is one of the least gender-diverse industries globally, with women representing approximately 10–15% of the workforce^{1,2} in most developed economies and significantly less at technical and senior levels. Structural barriers — including informal recruitment networks, a persistently male-dominated culture, and limited workplace flexibility on construction sites — continue to hinder meaningful progress. Beyond gender, the sector's reliance on migrant and low-skilled labour raises broader inclusion challenges: workers from minority backgrounds are disproportionately concentrated in the most precarious, physically demanding, and poorly remunerated roles. Ensuring that diversity and inclusion commitments extend to these groups — through equitable access to training, fair treatment across the supply chain, and explicit anti-discrimination policies — is as important as internal workforce targets. Mirova will value companies that implement concrete, measurable D&I commitments and extend them to their subcontracting base.

SUSTAINABLE PRACTICE

Practices/measures expected:

1. **Reduce subcontracting dependency and develop a proactive internalisation strategy.**
2. **Develop employees' skills recognised on the labour market and anticipate shifts driven by digitalisation and the green transition.**
3. **Ensure fair remuneration and social benefits sufficient for good living conditions across all employment categories.**

Impact indicators examples:

- Evolution of subcontractors vs. total workforce over time
- Training hours per employee and percentage of workforce trained, with specific focus on digital and sustainability topics
- Qualitative assessment of upskilling programmes, including green building and Building Information Modeling (BIM)-related curricula
- Analysis of employee, executive, and subcontractor remuneration structures
- Existence and effectiveness of employee representation and social dialogue mechanisms
- Workplace wellbeing measures: stable employment contracts, flexible working arrangements where applicable, mental health support

1. **Improve female and diverse representation, particularly at management, technical leadership, and board level.**
2. **Ensure equal opportunities and increase awareness to overcome structural inequalities across the workforce and supply chain.**
3. **Ensure adapted and flexible career options.**

- Percentage of women in the Executive Committee and in technical leadership roles; gap between female representation in the total workforce and at senior level
- Presence of a supplier diversity policy covering construction subcontractors
- Roadmap to improve recruitment of minorities and ensure unbiased hiring processes
- Gender-neutral leave policy;
- Unadjusted gender pay gap and credible targets to reach pay equality
- Development of reporting mechanisms and first-response services for victims of harassment or discrimination on construction sites

LOW POSITIVE IMPACT

- > Advanced practices - Medium Stake topic
- > Credible strategy to achieve advanced practices

MODERATE POSITIVE IMPACT

- > Advanced practices - High Stake issues



POSITIVE IMPACT

Advanced governance model

CONTEXT	ADVANCED GOVERNANCE MODEL DETAILS	
Mirova aims to promote the development of a corporate vision focused on the creation of collective value over the long term. Corporate governance should be shaped to include the interests of its key stakeholders. We believe that the creation of wealth requires a long-term perspective, which takes into account sustainability issues. Mirova encourages companies to include environmental and social issues in its purpose, and to adapt their articles of association accordingly. We feel that shareholders have a role to play in spreading this vision of what a company should be. Thus, we are promoting the development of a long-term shareholder base, the creation of governing bodies that serve all stakeholders and address CSR1 issues, the introduction of a compensation policy which is not only fair to its stakeholders, but which also promotes sustainable growth, and -increased transparency and a better quality of both financial and extra financial information, through annual audited reports covering all these issues. Advanced governance practices only foster sustainability but is not a standalone driver of impact.	Practices/measures expected	Impact indicators examples
	Commitment to long-term shared value creation	Disclose policy around shared value creation. Strive towards the model of a purpose-driven organization or/and a B-Corp organization.
	Integrate stakeholders in the decision-making process	Create a Sustainable Development Committee or sustainability representative at the board level, with regular meetings throughout the year. Sustainability items are systematically integrated into the board's agenda.
	Fair taxes & governance	Provide country-by-country reporting on tax payments.



ESG Risks



ESG RISKS

Climate & Biodiversity

CONTEXT

The construction and building materials sector is among the most carbon-intensive sectors globally. Climate risks arise both from direct operational emissions and from the broader value chain, particularly through the production of carbon-intensive materials such as cement, steel and other construction products. In addition, companies are increasingly exposed to transition risks linked to tightening climate regulations, carbon pricing mechanisms, evolving building standards and changing customer expectations. Physical climate risks, including floods, heatwaves, droughts and extreme weather events, can also disrupt construction activities, damage infrastructure assets and affect project profitability. As the sector transitions towards a net-zero economy, companies that fail to decarbonize their operations, products and supply chains may face increasing financial, operational and reputational risks.

Construction, infrastructure development and raw material extraction can generate significant pressures on biodiversity through land-use change, habitat fragmentation, resource extraction, water consumption and pollution. Infrastructure projects may affect ecosystems directly through site development and indirectly through increased pressure on surrounding natural environments. Building materials production can also contribute to biodiversity loss through quarrying, mining and other extractive activities. As regulatory frameworks and stakeholder expectations evolve, companies face increasing risks related to biodiversity impacts, particularly when operating in or sourcing from environmentally sensitive areas. Failure to adequately manage these impacts may lead to project delays, legal disputes, increased costs and reputational damage.

MINIMUM STANDARDS

Type of ESG risk:

Climate footprint

Risk assessment indicators examples:

Definition of a decarbonization strategy to reduce major sources of emissions

Calculation of GHG Emissions on all 3 scopes or ongoing evaluation

Physical climate risk exposure and resilience

PAI #1

PAI #2

PAI #3

PAI #4

PAI #5

Biodiversity footprint

Absence of assets occurring detrimental impacts in biodiversity-sensitive areas or credible mitigation plans

Management of own operations' water and waste footprints

Circularity and reduction of virgin material use

Pollution prevention and ecosystem restoration measures

Traceability of deforestation-linked commodities

Global EHS risk management framework possibly ISO certified (ISO 14001 etc.)

Restoration of quarries sites

PAI #7

PAI #8

PAI #9



Working conditions, human rights and local communities

CONTEXT	MINIMUM STANDARDS	
The construction and building sector faces significant and well-documented social risks throughout its value chain, from project development to the use phase of completed assets. Companies operating in this sector are increasingly scrutinised for their management of these issues. Construction sites are among the most hazardous working environments globally. According to Eurostat, nearly 24% of all fatal workplace accidents in the EU occur in the construction sector, which also records the highest rate of non-fatal accidents across all industries. The sector's structural reliance on subcontracting and temporary labour – combined with frequent pressure on project timelines – creates conditions in which labour law compliance is difficult to enforce. Undeclared work is particularly prevalent, and migration flows further amplify these risks, as migrant workers often lack legal protections and are disproportionately exposed to exploitation and unsafe conditions. The sector is also exposed to significant human rights risks across global supply chains, particularly in the extraction and processing of construction raw materials, where risks related to forced labour, child labour, migrant worker exploitation and inadequate working conditions may arise in regions with weak labour protections and limited regulatory oversight. Beyond site safety, large development projects can generate conflicts with local communities, including land dispossession, displacement of populations, and violations of indigenous peoples' rights.	Type of ESG risk	Risk assessment indicators examples
	Health & Safety	Frequency and severity of accidents for employees and contractors Fatality rate and implementation of corrective action plans Health and safety management system covering employees, contractors and subcontractors Training hours dedicated to health and safety Exposure to hazardous substances, silica dust, asbestos, noise and other occupational hazards Contractor and subcontractor safety performance monitoring Independent audits of construction sites and industrial facilities Lost-Time Injury Frequency Rate (LTIFR) and Total Recordable Injury Rate (TRIR)
	Human Rights & Labour Conditions	Human rights due diligence covering own operations and supply chains Supplier Code of Conduct aligned with ILO conventions and UN Guiding Principles Monitoring of forced labour, child labour and modern slavery risks Freedom of association and collective bargaining practices Wage policies and living wage commitments Violations of UNGC principles and OECD Guidelines and implementation of remediation measures
	Community & Land Rights	Existence of a community engagement policy covering projects in areas with local population presence Documented process for assessing and mitigating displacement and land rights risks prior to project development

PAI #10
PAI #11
PAI #16



Product Safety

CONTEXT

Product safety is a critical issue for construction, infrastructure, building materials and building equipment companies. Product failures can have severe consequences throughout the building lifecycle, potentially resulting in structural failures, fire incidents, building defects, health impacts or significant financial losses. Risks are particularly material for products incorporated in critical infrastructure and buildings, including cement, concrete, steel, insulation materials, façades, HVAC systems, electrical equipment, piping systems and structural components.

The long lifespan of buildings and infrastructure increases exposure to latent defects, while increasing regulatory requirements and stakeholder expectations raise the consequences of product safety failures. Historical controversies related to fire performance, hazardous substances, structural defects or equipment malfunction demonstrate the potentially significant human, environmental, legal and reputational impacts associated with inadequate product safety management..

MINIMUM STANDARDS

Type of ESG risk

Risk assessment indicators examples

Product Safety

- Robust product safety management system covering design, manufacturing, testing and post-market monitoring
- Compliance with applicable building codes, technical standards and safety regulations across all geographies
- Independent third-party testing, certification and verification of critical products
- Product traceability systems across the value chain
- Transparent disclosure of major product safety controversies and remediation measures
- Regular review and updating of product specifications to reflect evolving safety standards

Hazardous Substances

- Policies and processes to identify, assess and phase out hazardous substances in products
- Assessment and disclosure of exposure to substances of concern (e.g. PFAS, SVHCs, asbestos substitutes, formaldehyde, flame retardants)
- Testing and certification of fire performance for relevant products and building systems
- Indoor air quality considerations integrated into product design and material selection
- Procedures for installation guidance, user safety information and contractor training
- Monitoring of product performance throughout the use phase
- End-of-life management and safe disposal guidance for potentially hazardous products

PAI #10

PAI #11



CONTEXT

The built sector is exposed to significant governance risks due to the scale, complexity and geographic footprint of its operations. Large infrastructure and construction projects often involve extensive public procurement processes, permitting requirements, joint ventures, subcontracting arrangements and interactions with public authorities, increasing exposure to corruption, bribery and unethical business practices. Many companies also operate through complex value chains spanning multiple countries and suppliers, creating challenges related to transparency, oversight and accountability.

The sector is furthermore exposed to significant regulatory, litigation and reputational risks associated with product safety, environmental compliance, community impacts and project delivery failures. Effective governance systems are therefore critical to ensure adequate management of sustainability risks, ethical business conduct, stakeholder engagement and responsible allocation of capital.

MINIMUM STANDARDS

Type of ESG risk

Risk assessment indicators examples

Governance of sustainability

Existing governance structure enabling the mitigation of environmental and social risks

Unadjusted gender pay gap

Board Gender Diversity

PAI #12

PAI #13

Business Ethics & Anti-Corruption

Robust Business ethics policies covering lobbying practices, anti-corruption, anti-competitive and bribery policies

Specific controls for public procurement, tenders and government interactions

Identification of high-risk geographies and implementation of enhanced due diligence procedures for operations located in countries with elevated corruption risks.

Evidence of effective whistleblower channels and transparency around cases reported and actions implemented

Systematic training on Company's and Suppliers' Code of Conduct

Number of convictions and fines for violation of anti-corruption and anti-bribery laws

PAI #17

Tax practices

Effective tax rate vs. equal statutory tax rate

Absence of controversies or evidence of aggressive tax optimization practices

Estimated exposure to tax havens* or tax non-cooperative jurisdictions with no real activity in the country

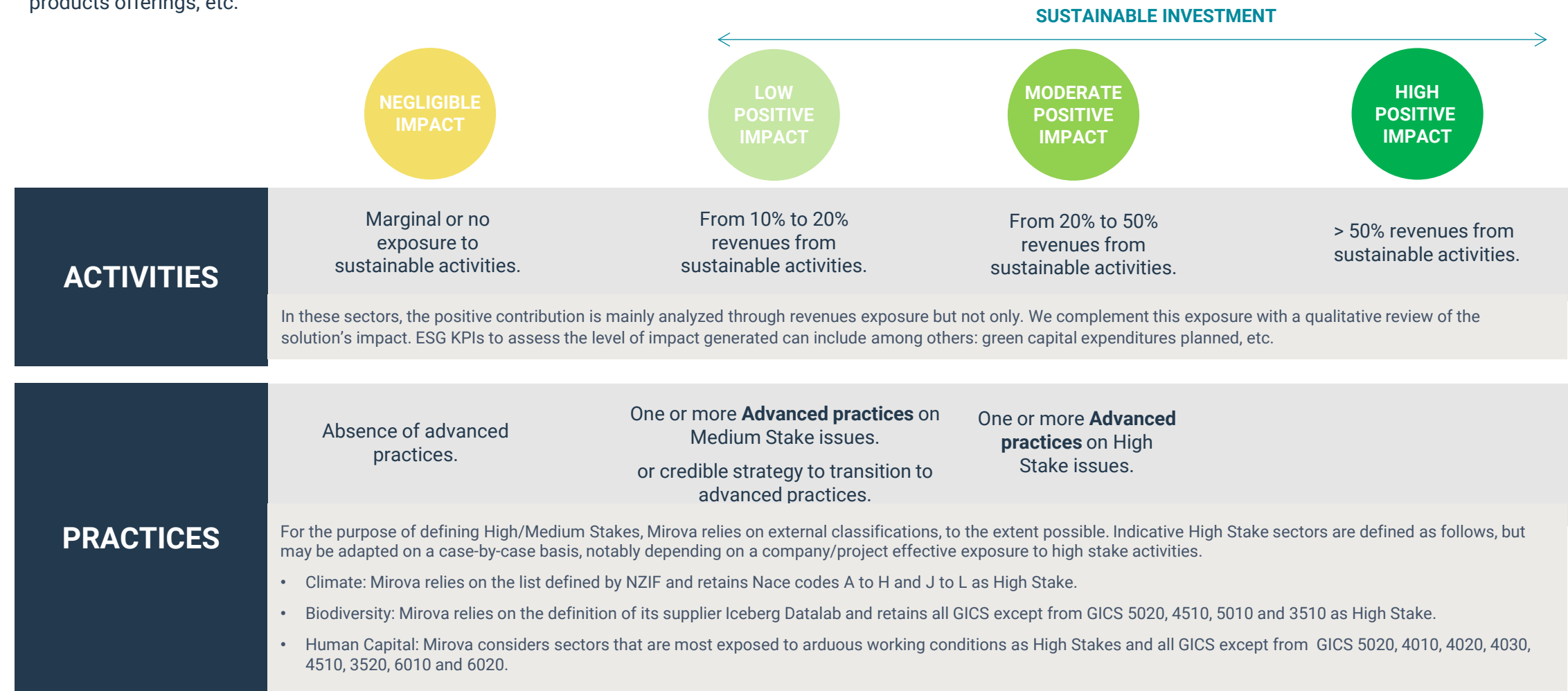
Appendices



Positive Impact

According to Mirova’s internal methodology, contribution to the SDGs can be grouped into two main categories, which are often complementary.

- The “**activities**” i.e. the products and services they offer.
- The “**practices**” i.e. the way operations can contribute to create sustainable and inclusive jobs, or by having strong commitments to net zero targets beyond their green products offerings, etc.



SECTOR INHERENT RISK LEVEL: HIGH

The Construction & Building Materials/Equipment sector is exposed to a high level of inherent ESG risk. Environmental risks stem from the sector's high GHG emissions, particularly in hard-to-abate sectors such as cement, steel and glass production, as well as its substantial consumption of energy, water and raw materials. The sector also faces increasing exposure to climate transition risks, physical climate impacts and biodiversity-related challenges linked to resource extraction, land-use change and ecosystem disturbance. Social risks are particularly material given the sector's reliance on large workforces, subcontractors and complex construction sites. Occupational health and safety, workforce management, labor practices and community impacts associated with major construction and infrastructure projects are key considerations. Governance risks are also significant due to the project-based nature of the industry and frequent interactions with public authorities, resulting in elevated exposure to corruption, bribery and business ethics concerns.

COMPANY INHERENT RISK LEVEL

A company inherent risk level may differ from the inherent risk level of the sector.

The definition of the company inherent risk level may also be determined by the specificities of the business model, the nature of the activities and their locations as well as that of their suppliers (incl. country specific risks).

MAIN ESG RISKS FACTORS

- Climate change
- Biodiversity footprint
- Resource Use, Circularity & Waste Management
- Health & Safety – Construction Phase
- Health & Safety – Use Phase
- Human Rights & Labour Conditions
- Community & Land Rights
- Business Ethics & Anti-Corruption

RESIDUAL ESG RISK LEVEL

LOW RESIDUAL RISK

Satisfactory management of the company's or project's main sustainability risks on most material issues.

MEDIUM RESIDUAL RISK

Current management in place does not fully cover all ESG risks but these are considered as moderate and current practices are deemed acceptable.

HIGH RESIDUAL RISK

Companies demonstrating significant mitigation efforts operating in sectors with industry-wide complex and unaddressed challenges - systematically under targeted engagement.

SIGNIFICANT HARM

Not eligible for investment.

SUSTAINABLE INVESTMENT

APPENDICES

Principal Adverse Impact Indicators

ADVERSE SUSTAINABILITY INDICATOR		MOST RELEVANT	THRESHOLDS / CRITERIA
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS			
Greenhouse gas emissions	1. GHG emissions	X	Systematic integration in qualitative internal analysis and systematic engagement with the largest emitters to strengthen their climate strategy
	2. Carbon Footprint	X	
	3. GHG intensity of investee companies	X	
	4. Exposure to companies active in the fossil fuel sector		Not applicable
	5. Share of non-renewable energy consumption and production	X	Systematic integration in qualitative internal analysis and systematic engagement with the largest emitters to strengthen their climate strategy
	6. Energy consumption intensity per high impact climate sector	X	
Biodiversity	7. Activities negatively affecting biodiversity sensitive areas	X	Exclusion of companies or projects significantly harming biodiversity sensitive areas.
Water	8. Emissions to water	X	Systematic integration in qualitative internal analysis and systematic engagement with relevant investee companies on this issue.
Waste	9. Hazardous waste and radioactive waste ratio	X	
INDICATORS FOR SOCIAL AND EMPLOYEE, RESPECT FOR HUMAN RIGHTS, ANTI-CORRUPTION AND ANTI-BRIBERY MATTERS			
Social and employee matters	10. Violations of UN Global Compact principles and Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises	X	Exclusion of companies violating UNGC and OECD principles and monitoring of exposure to violations as part of controversy monitoring process. Systematic integration in qualitative internal analysis.
	11. Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises	X	
	12. Unadjusted gender pay gap	X	Systematic integration in qualitative internal analysis and systematic engagement with relevant investee companies on this issue.
	13. Board Gender Diversity	X	
	14. Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)		Exclusion of companies or projects exposed to controversial weapons leads to and involved in the production of re-exportable weapons.
INDICATORS FOR SOCIAL AND EMPLOYEE, RESPECT FOR HUMAN RIGHTS, ANTI-CORRUPTION AND ANTI-BRIBERY MATTERS			
Human Rights	16. Number of identified cases of severe human rights issues and incidents	X	Systematic integration in qualitative internal analysis and monitoring of exposure to violations as part of controversy monitoring process.
Anti-corruption and anti-bribery	17. Number of convictions and number of fines for violation of anti-corruption and antibribery laws	X	

The information provided reflects Mirova's opinion/the situation as of the date of this document and is subject to change without notice. Our minimum standards policy also provides more information on thresholds for Principal Adverse Impacts Indicators : [Mirova Minimum standards](#). Source: Mirova.



Useful Resources

SFDR

- [Sustainable Finance Disclosure Regulation \(SFDR\): positioning of Mirova Funds](#)
- [Description of the principal adverse impacts on sustainability factors](#)

POLICIES AND METHODOLOGIES

- [Our approach to impact](#)
- [Our approach to impact & ESG assessment](#)
- [Minimum standards](#)
- [Voting and Engagement policies](#)
- [Transparency codes](#)



Disclaimer



MAIN RISKS

ESG Investing Risk & Methodological limits

By using ESG criteria in the investment policy, the relevant Fund's objective would in particular be to better manage sustainability risk and generate sustainable, long-term returns. ESG criteria may be generated using Mirova's proprietary models, third party models and data or a combination of both. The assessment criteria may change over time or vary depending on the sector or industry in which the relevant issuer operates. Applying ESG criteria to the investment process may lead Mirova to invest in or exclude securities for non-financial reasons, irrespective of market opportunities available. ESG data received from third parties may be incomplete, inaccurate or unavailable from time to time. As a result, there is a risk that Mirova may incorrectly assess a security or issuer, resulting in the incorrect direct or indirect inclusion or exclusion of a security in the portfolio of a Fund.

Sustainability risks

The Sub-Funds are subject to sustainability risks as defined in the Regulation 2019/2088 (article 2(22)) by environmental, social or governance event or condition that, if it occurs, could cause an actual or a potential material negative impact on the value of the investment.

Sustainability Risks are principally linked to climate-related events resulting from climate change (i.e. Physical Risks) or to the society's response to climate change (i.e. Transition Risks), which may result in unanticipated losses that could affect the Sub-Funds' investments and financial condition. Social events (e.g. inequality, inclusiveness, labour relations, investment in human capital, accident prevention, changing customer behaviour, etc.) or governance shortcomings (e.g. recurrent significant breach of international agreements, bribery issues, products quality and safety, selling practices, etc.) may also translate into Sustainability Risks. Sustainability factors consist in environmental, social and employee matters, respect for human rights, anti-corruption and anti-bribery matters (the "Sustainability Factors"). Portfolio investment process includes binding and material ESG approach to focus on well rated securities from an ESG viewpoint in order to mitigate potential impact of Sustainability Risks on portfolio return. More information on the framework related to the incorporation of Sustainability Risks is to be found in the sustainability risk management policy of the Management Company on its website.



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