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SUSTAINABLE IMPACT FRAMEWORK

ICT – Software, Media & Telecommunications

Sectors:

- Software & Services
- Telecommunication Services
- Media & Entertainment

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An affiliate of: NATIXIS INVESTMENT MANAGERS

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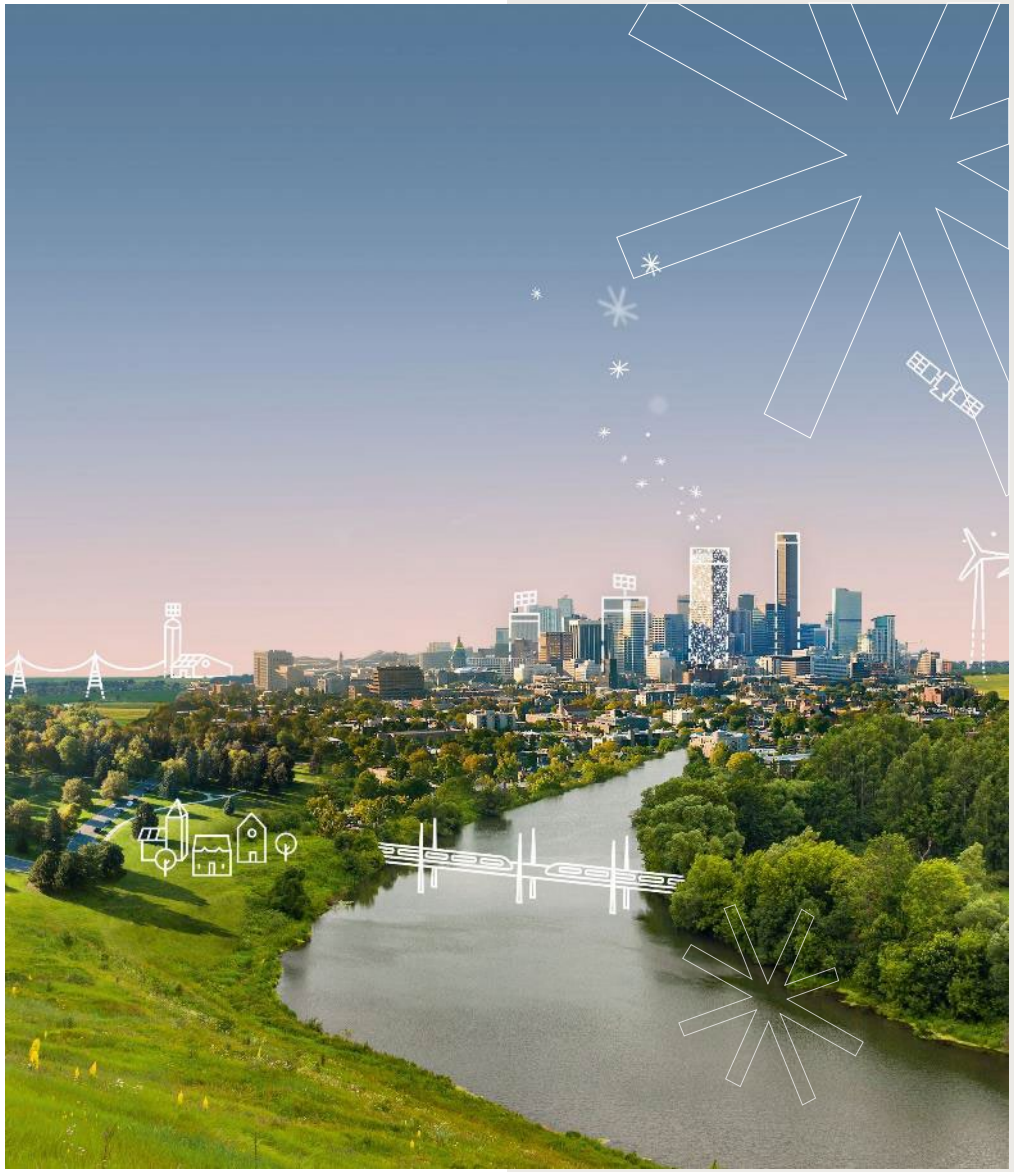
Executive Summary



ICT – Software, Media and Telecommunications

Digitalization is the source of this century's disruptions. Software and the media are increasingly ubiquitous in our daily lives, either to communicate, socialize, work or consume. Although Information and Communications Technology (ICT) present new risks for society, particularly in terms of respect for privacy, its expanding use can also be a strong vehicle for sustainable development solutions. ICTs can drive economic development and widen access to knowledge, particularly in low and lower middle-income countries. These technologies also have strong potential for developing ecological and/or social innovations, such as smart cities, smart grids, smart buildings and access to health services, all of which are tools to help us move towards sustainable development in our society.

34% of the population still lacks internet access[1].

Digitalization is the source of this century's disruptions. Whether communicating, socializing, working or consuming, software and the media are increasingly ubiquitous in our daily lives and can be a strong vehicle for sustainable development, particularly in low and lower middle-income countries. The extension of network coverage can play a major role by opening access to information, financial services, but also to remote education and health services. A World Bank study showed that a 10% increase in broadband penetration in the least favored areas involves a 1.4% increase in GDP. Hence, the correlation between economic growth and internet access remains significant.

The digital economy is responsible for **4% of total GHG emissions**[2].

The carbon footprint of the digital economy is increasing fast (+8%/year between 2014 and 2019) and today is responsible for 4% of global Greenhouse Gas emissions, which is set to increase to 9% in 2025-2030 and could triple by 2050[2]. The growing utilization of digital technology has resulted in increased data traffic, leading to more demand for computing and storage through data centers, which accounts for approximately 1.5% of the world's electricity consumption (3% by 2030e, IEA). As such, we expect companies to implement a comprehensive decarbonization strategy focused on increasing networks and data centers' efficiency, using renewable energy and offsetting residual emissions to be deemed as contributors to the climate transition.

Women account for around **36% of the workforce** in average of these sectors[3] (vs. average MSCI World is 38%).

The industry is working to recruit more women by raising awareness among female students about career opportunities in engineering and technology and providing them with the structure to enable them to climb the corporate ladder. The software, media and telecommunications sector is facing a growing number of controversies on various aspects of human capital management. Technological disruptions encourage companies to reposition their activities and thus create a favorable context for restructuring. Recurring bad practices have been revealed, mostly related to harmful corporate cultures. Many ICT companies have been the subject of serious accusations of moral and sexual harassment, poor management of complaints and even unfair dismissal, insufficient support for diversity and long working hours. Faced with these issues, companies are urged to instill a corporate culture that respects the employees' labor rights and wellbeing.

 1. ITU (International Telecommunication Union), 2022. 2. Carbon4, 2022. 3.Equileap

Drivers of contribution and obstruction to sustainability goals

	Activities	Practices
Positive Impact	**Sustainable Activities** ACCESS TO BASIC NEEDS EDUCATION AND KNOWLEDGE HEALTHCARE SAFETY INDUSTRIAL EFFICIENCY FOR CLIMATE INDUSTRIAL EFFICIENCY FOR BIODIVERSITY LOW-CARBON ENERGY SUSTAINABLE AGRICULTURE GREEN BUILDING CIRCULAR ECONOMY	**Advanced Practices** HUMAN CAPITAL MANAGEMENT: • Diversity and inclusion • Job quality CLIMATE BIODIVERSITY *Advanced governance models*
ESG Risks	**Harmful Activities*** *No frequent exposure to harmful activities*	**Risk Mitigation** CLIMATE CHANGE BIODIVERSITY FOOTPRINT DATA SECURITY AND PRIVACY PRODUCT RESPONSIBILITY WORKING CONDITIONS : LABOR RIGHTS & HEALTH AND SAFETY GOVERNANCE : • Governance of sustainability • Business ethics • Taxes

* As defined in: Minimum standards and exclusions, Mirova

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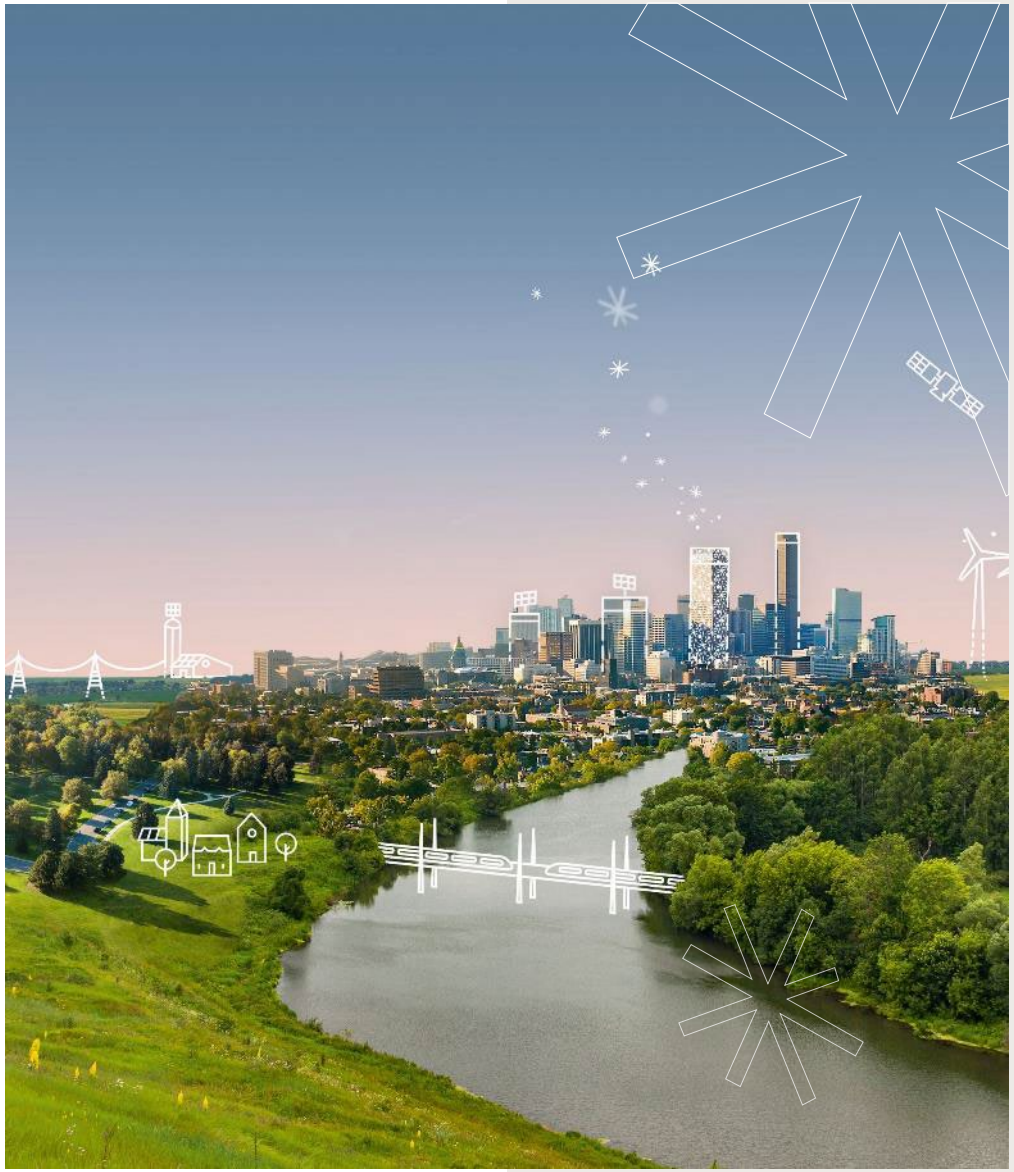
Positive Impact



Sustainable Activities

SOCIAL OPPORTUNITIES

CONTEXT	SUSTAINABLE ACTIVITY
Access to ICTs is a major economic and social development issue. Nearly 34% of the population still lacks internet access, rising to over 64% in the least developed countries (ITU[1], 2022). The extension of network coverage can play a major role, by opening access to information, but also to remote education and health services. The dissemination of cloud banking services is also a fundamental pillar to sustain the development of SMEs and support access to loans and savings. The digital divide is also an issue in mature economies, although de facto affecting a smaller population (rural areas, elderly, those with low incomes or those with disabilities).	**Access to basic needs** • Development of resilient telecommunication infrastructure/equipment and services giving access to low cost, high-speed and unbiased internet access • Development of digital/cloud banking services giving access to essential financial services
According to UNESCO, there are around 770 million adults worldwide who are illiterate (ie. 14% of the population), and two-thirds of them are women. Education is a critical tool for achieving the SDGs: it can help individuals acquire the knowledge and skills needed to participate fully in society, including understanding their rights and responsibilities, improving their health and well-being, and contributing to economic development. Education empowers individuals to make informed decisions that can positively impact the environment, promote gender equality, and reduce inequalities.	**Education & Knowledge** • Companies/projects producing/and or ensuring access to quality education products and services • Companies/projects producing and or ensuring access to affordable, quality informational content
Technology has revolutionized the way we approach health and safety challenges, providing innovative solutions that can improve the quality of life for individuals and communities. From wearable devices that monitor vital signs to telemedicine services that provide remote consultations, technology has enabled to detect and prevent health issues earlier. Furthermore, technologies such as artificial intelligence, big data, and predictive analytics can help identify safety risks and prevent accidents before they happen. In addition, technologies such as autonomous vehicles and drones can be used to improve safety in transportation and emergency response.	**Healthcare** Development of software for the medical field to support medical research, improve patient care and support continuity of care services **Safety** Development of safety software solutions in transportation and emergency response

IMPACT CRITERIA

- **Affordability** of the product
- **Quality** of the product
- **Type of targeted population**: young, low-income, elderly, disabled population, minorities, microentrepreneurs (i.e., local small businesses, minority-owned businesses, companies with social purpose)
- **Areas served**: low and lower middle-income countries, underserved rural areas
- **Absence of alternative public services**
- Promotion of **sustainable issues**

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.**

LOW POSITIVE IMPACT	MODERATE POSITIVE IMPACT	HIGH POSITIVE IMPACT
> 10% sustainable activities	> 20% to 50% sustainable activities	> 50% sustainable activities

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.1. ITU= International Telecommunication Union

Sustainable Activities

CLIMATE/BIODIVERSITY

CONTEXT	SUSTAINABLE ACTIVITY		IMPACT CRITERIA
Uses of ICTs which carry environmental benefits include the development of optimization software in the design, construction and engineering industries. This type of solution makes it possible to virtually design and test products and/or buildings and improve them before constructing, thus avoiding waste, and optimizing sustainability performance (e.g. energy consumption, aerodynamics, lightening, recyclability). Digital twin technology can be used to create virtual models of physical products. Also, it may provide simulation and response from the object/ecosystem studied, therefore useful throughout the entire life cycle of a product.	**Industrial Efficiency for Climate** • Development of design software: CAD, Digital Twin, BIM • Development of Industrial IoT /smart logistics for energy efficiency	**Industrial Efficiency for Biodiversity** • Provision of environmental and process monitoring services • Industrial IoT for waste/pollution reduction	ICTs can unlock several environmental opportunities; however, they are not easy to quantify. As such, we will pay particular attention to the efforts put in place by the company to **quantify the positive impact of its solutions on the environment through relevant impact KPIs** (ex: **tons of waste avoided, the kwH of energy saved, CO2 emissions avoided** etc.)
The deployment of intelligent flow management systems, at the crossroads of machine-to-machine communication (M2M) and big data, is a good example of how ICTs can represent an environmental opportunity. Applied on a large scale in the energy and water (smart grids), transport (optimization of freight-related travel), agriculture (reduction of inputs), building (reduction of energy consumption) and industrial processing (automation of production sites) sectors, these solutions account for most of the carbon emissions avoided via the ICT sector. In total, this reduction in global emissions could represent up to 9GtCO2e by 2030, allowing a stable level of emissions compared to 2015 (GeSI, 2019).	**Low-Carbon Energy** Companies/projects systems improving energy management	**Sustainable Agriculture** Development of softwares for precision agriculture	
	Green Building Development of software to reduce buildings' energy consumption		
The circular economy has a crucial role to play in transitioning to a more sustainable world by promoting resource efficiency, reducing waste and pollution, and reducing our reliance on finite resources. According to a report by the Ellen MacArthur Foundation, implementing circular economy principles could result in a 48% reduction in carbon emissions by 2030. Additionally, a study by the European Environmental Agency found that transitioning to a circular economy could reduce greenhouse gas emissions up to 70% by 2050.	**Circular Economy** • Development of e-commerce platforms promoting the sell of second-hand goods • Development of software to promote the circular economy • Development of digital deposit return schemes		

In this sector, the positive contribution is mainly analyzed through **revenues exposure** but not only. We complement this exposure with an analysis **of 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.**

LOW POSITIVE IMPACT	MODERATE POSITIVE IMPACT	HIGH POSITIVE IMPACT
> 10% sustainable activities	> 20% to 50% sustainable activities	> 50% sustainable activities

Advanced practices

HUMAN CAPITAL

CONTEXT	Actions/measures expected:	Impact indicators examples:
Job Quality Most ICT companies rely on highly-skilled employees, but some companies also rely on contractors or employees with lower education and riskier job conditions. In such cases, internal career paths will be analyzed more closely. However, with most employees generally having a college degree, companies will be expected to provide relevant measures to attract, develop and retain their talents. In this context, companies can develop a training policy that is tailored to the specific needs of each business unit and potentially provide certifications that will be recognized on the labor market. For this rapidly changing sector, it is also necessary to actively support workers' employability, particularly through continuous training to expand their skills and meet market needs. In the context of a sustainable transition, providing employees with the option to get sustainability related certification is also key. On average, the employee turnover in the sector is 17% for Software and Services, 15% for Media and 12% for Telecommunication Services[1]. The analysis also consider geographical and cultural difference to assess the quality of practices, notably regarding benefits and social dialogue.	• **Develop employees' skills recognized on the labor market and anticipate shifts in skills.** • **Ensure fair remuneration and social benefits sufficient for good living conditions.** • **Ensure employee satisfaction and wellbeing.**	• Training hours per employees, % of workforce trained, • Qualitative analysis of the training offering including, upskilling programs, mentorships focused on young talents, leadership development…) • Creation of internal universities / academies targeting actionable skillsets and accessible to most employees • Analysis of employees', executives' and shareholders' remunerations • Existing and effective employees' association mechanisms • Workplace wellbeing measures: flexible work arrangements, mental health support, counselling etc.
Diversity & Inclusion Overall, women represent 33% of the workforce in Software and Telecommunication companies and 43% for Media[2] (vs. 38% MSCI World) but they hold around 20% of executive roles and 25% of tech roles which has been increasing but is still behind compared to other sectors. To recruit more women, companies are raising awareness among female students about career opportunities in engineering and technology (only 19% of graduates in STEM[3] are women) and provide them with the structure to enable them to climb the corporate ladder, break the glass ceiling and achieve pay parity. Persistent gender pay-gap is also an issue in the industry. Moreover, diversity and inclusion do not only pertain to gender. A particular attention should be paid to the economic social background of employees, and their age, and inclusivity for every employee regardless of their minority profile. To do so, diversification of recruitment pools is critical to ensure equal opportunities in terms of professional development, and to raise awareness of employees and management on this subject. The analysis also consider geographical and cultural difference to assess the quality of practices, notably regarding benefits and social dialogue.	• **Improve female and diverse representation especially at management/leadership level.** • **Ensure equal opportunities and increase awareness to overcome inequalities.** • **Ensure adapted and flexible career options.**	• Percentage of women in the Executive Committees, difference between women representation in the workforce and Executive Committee, C-Suite female representation (CEO, CFO, CIO, CTO, CCO) • Wage gap or credible target to reach pay equality & unadjusted pay gap • Succession planning including at least one woman as a possible candidate for every senior position • Roadmap to improve recruitment of minorities and ensure unbiased recruitment • Gender-neutral leave policy • Provision of daycare options (affordable and/or paid by the company) and work flexibility options

LOW POSITIVE IMPACT

> Advanced practices - Medium Stake* topic

> Credible strategy to achieve advanced practices

MODERATE POSITIVE IMPACT

> Advanced practices - High Stake* issues

Advanced practices

	CONTEXT	ADVANCED PRACTICES	
		Actions/measures expected:	Impact indicators examples:
CLIMATE	The carbon footprint to this sector is lower than carbon-intensive industries although it is increasing fast. Today, the digital economy is responsible for 4% of global GHG[1] emissions, which is set to 9% in 2025-2030[2]. The majority of the carbon footprint of Software, Media and Telecommunication companies stems from the processing and storage of data through networks and data centers. Data centers alone represent 19% of the overall energy consumption of the technology sector and networks 16%[2]. Moreover, the multiplication of digital applications allowed by new powerful technologies (5G, IoT, AI…), despite efficiency gains allowed by technological advances, are leading to an increased use of networks and data centers to process and store the data, nurturing a rebound effect. As such, to contribute to sustainable development through their climate practices, we expect companies to implement a comprehensive decarbonization strategy focused on increasing networks and data centers' efficiency, using renewable energy and offsetting residual emissions to be deemed as contributors to the climate transition. Including environmental considerations to suppliers' criteria and engaging with them to reduce their own carbon footprint is essential to reduce indirect upstream GHG emissions from the value chain.	• **Implement robust decarbonization strategy on all three scopes**	• GHG emissions reduction targets on all 3 scopes, preferably aligned with the Science Based Target Initiative (SBTi) and effective reduction in emissions • Scope 1 & 2[3]: data centers and networks energy-efficiency measures, renewable energy for data centers and networks' energy sources, business trips/employees commuting, office spaces • Scope 3[4]: suppliers' emissions, sustainable procurement practices for electronic providers, energy efficient software design to reduce energy used by sold products, client's sensitization initiatives to run more efficient operations • Decreasing trend of GHG emissions on Scope 1, Scope 2 and Scope 3 emissions
BIODIVERSITY	Software, Medias and Telecommunication companies are not among industries which have significant negative impact on biodiversity pressures, but all companies have to take into consideration their impact on land, sea, pollution and species. Besides managing their own operations' water and waste stream and procurement, companies can go a step further by tackling the question of circularity. Indeed, circularity is central: if we continue with linear production techniques, worldwide demand for resources could almost triple by 2060[5] exhausting Earth's resources by more than 400%. Moreover, electronic waste is also a critical issue: as of today, 75% of electronic waste are not recycled and are illegally exported to low and lower middle-income countries.	• **Fight against programmed obsolescence and incorporate circularity from the design stage** • **Reduce and optimize packaging to release pressure from plastic pollution** • **Promote repair, reuse, refurbish and recycling**	• Product life-extension or extended warranty period compared to the market standards • Products designed with recycled materials • Efforts to ensure that the components in the devices can be repaired, reused or recycled • Share of biodegradable/recycled materials in packaging is above industry average and increasing over time • Commit to decrease the use of plastic in packaging • Reuse and recycling of electronic waste: share of electronic waste that is reused and/or recycled as a percentage of total electronic waste • Evidence of repair schemes and/or take-back programs that cover the majority of the company's scope

LOW POSITIVE IMPACT

> Advanced practices - Medium Stake* topic

> Credible strategy to achieve advanced practices

MODERATE POSITIVE IMPACT

> Advanced practices - High Stake* issues

The information provided reflects Mirova's opinion/the situation as of the date of this document and is subject to change without notice. 1. Greenhouse gases. 2. The Shift Project, 2021 3. Direct emissions created by a company's activities and Emissions from the electricity a company uses in its operations. 4. Indirect emissions from a company's supply chain, distribution, use of products, and product disposal. 5. OECD, 2018. * As defined in appendices. Source: Mirova

Advanced governance model

CONTEXT

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 CSR[1] 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.

ADVANCED GOVERNANCE MODEL DETAILS

Practices/measures expected:	Impact indicators examples:
Commitment to long-term and shared value creation	• Demonstrate how value created is shared fairly amongst company stakeholders. • Strive towards the model of a purpose-driven organization or/and a B-Corp organization.
Integration of stakeholders in the decision-making process	• Create of a Sustainable Development Committee or sustainability representative at Board-level, with regular meetings throughout the year. Sustainability items systematically integrated into the board agenda.
Fair taxes	• Provide country-by-country reporting on tax payments.

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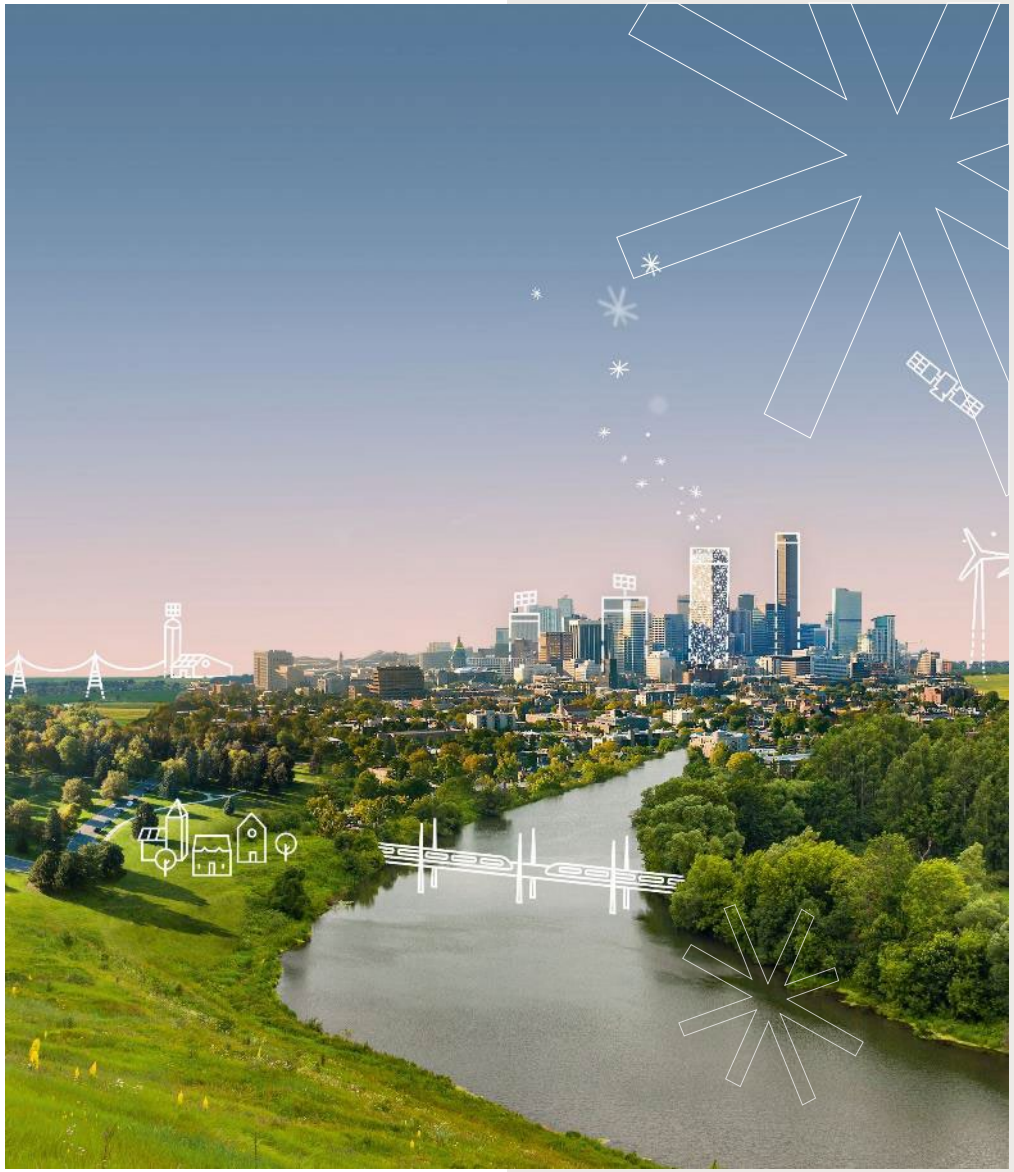
ESG Risks



Climate & Biodiversity

CONTEXT

Carbon footprint of Software, Media and Telecommunications is relatively low, as emissions mainly stem from networks and data storage in data centers. Main minimum safeguards for these companies is taking action on the energy consumption from networks and/or data centers. It is to be noted that companies should not base all of their decarbonation strategy on carbon offsets and demonstrate some actions to decrease emissions first. Companies should also take minimum eco-design initiatives and manage the climate risks from their supply-chain, notably when they procure their hardware.

In addition to minimize their own operations' waste and water footprints, Software, Media and Telecommunication companies should include minimum environmental considerations in their procurement policies. Even though they don't have a strong grip on the upstream supply-chain (raw material extraction and manufacturing), Software and Telecommunication companies can decide to procure their electronics from the best responsible actors and manage the biodiversity risks from their supply-chains. Moreover, managing properly the end-of-life of network and electronics is a minimum risk safeguard.

MINIMUM STANDARDS

Type of ESG risk:	Risk assessment indicators examples:
Climate footprint	• Definition of a decarbonization strategy to reduce major sources of emissions • Initiatives in place to reduce Scope 2 emissions from the energy efficiency of infrastructures (network, data centers) • Calculation of GHG Emissions on all 3 scopes or ongoing evaluation **PAI #1** **PAI #2** **PAI #5**
Environmental risks in the supply-chain	• Existence of a Code of Conduct for Suppliers that includes environmental considerations • Include environmental criteria to suppliers' screening for electronics procurement (i.e., favor local supplier, suppliers that offer low-carbon materials, energy-efficient products etc.) • For telecommunication companies: join a multistakeholder industry initiative and promote the development of ambitious environmental standards in the supply-chain
Biodiversity footprint	• Management of own operations' water and waste footprints • Procurement of electronics from suppliers banning harmful substances & managing their e-waste • Orientate waste to waste disposal providers that are working in compliance with applicable standards & regulations, depending on geographies, decommissioning of obsolete network facilities **PAI #8** **PAI #9**

Working conditions

CONTEXT	MINIMUM STANDARDS	
	Type of ESG risk:	Risk assessment indicators examples:
The Software, Media and Telecommunications sector is facing a growing number of controversies on various aspects of human resource management. Technological disruptions encourage companies to reposition their activities and thus create a favorable context for restructuring. Moreover, Media companies rely on content moderators that are exposed to significant psychosocial risks. Similarly, call centers, which are often operated by Telecommunication companies, expose employees to difficult working conditions both in terms of cadence and stress.	**Employees' labor rights**	• Basic measures in place for employees impacted by restructuring (financial severance, re-training, job-search assistance etc.) • Measures to promote fair working conditions and a sustained social dialogue in countries with less stringent regulations • Anonymous reporting channel to report non-ethical behaviors in the workplace • Frequency and severity of health & safety accidents (direct workers and contractors) decreasing overtime
Software, Media and Telecommunication companies mostly outsource the production of the electronic equipment they use or distribute. Even though these companies have a small grip on the electronics' equipment production chain compared to pure hardware companies or semiconductor companies (raw material extraction and manufacturing), software and telcos companies have to include minimum human rights considerations in their supply-chain practices and can decide to procure their electronics from the best responsible actors.	**Human rights in the Supply-chain**	• Existence of a Code of Conduct for Suppliers that includes human rights and labor rights considerations • Join a multistakeholder industry initiative and promote the development of ambitious environmental standards in the supply-chain (ex: Joint Audit Cooperation (JAC) for telecommunication operators, Responsible Minerals Initiative (RMI) etc.) • Implementation of a policy, audits and reports on Conflict Minerals • Violation of UNGC principles and OECD guidelines for multinational enterprises and implementation of corrective measures • Implementation of a policy to monitor compliance with UNGC principles or OECD guidelines for multinational enterprises **PAI #10** **PAI #11** **PAI #16**

Data Security & Privacy, Product Responsibility

CONTEXT	MINIMUM STANDARDS	
	Type of ESG risk:	Risk assessment indicators examples:
Due to the handling and processing of a lot of personal data, Software, Medias and Telecommunication companies have a responsibility to ensure the protection of users' data and appropriate use. For Media particularly, users' data represents a major opportunity to better understand consumer behaviors and refine their offers but also to monetize this data through targeted advertising, with a high risk of abusive use. Cybersecurity is also a major issue, as attacks on IT systems continue to grow in frequency and complexity.	**Data privacy & security**	• Implementation and certification of the information security management system (ISO 27001) • Policy on data security and privacy (type of data and sources of collection, type of use and possible sharing with third parties) • Effective mechanisms to ensure secure IT security (secure coding guidelines, identification of security vulnerabilities, One Time Password (OTP) etc.) • In the event of a human rights controversy in a country, transparency regarding the actions requested, monitoring of impacts and possible corrective actions
Software, Medias and Telecommunication companies should limit the ethical risks associated with their products, notably those related to violent content, disinformation, promotion of negative messages. Beyond the problem of reputation, certain controversies such as that of "fake news" or the promotion of extreme thinness in advertising have led some regulators to strengthen their framework. Moreover, the risk of function creep is frequent, and companies are encouraged to make strong due diligence on their customers and strengthen their control/moderation processes.	**Product responsibility**	• Existence of a systematic approach to the quality of content and platforms • Establishment of mechanisms to identify and control undesirable content • Incorporation of the concept of neutrality by design/responsible by design, i.e., avoiding bias • Commitments and practices on the social impact of children's advertising content • Development of signaling and content control tools (PEGI[1], parental control, age-gating systems) • Implement strong due diligence processes on clients

Governance

CONTEXT

The credibility and robustness of the company's sustainability strategy is supported by a comprehensive ESG governance structure and the integration of ESG criteria in the management remuneration. Moreover, business ethics is an important issue and companies must be able to prevent the risk of internal bad practice (corruption, fraud, bribery etc.). Tech companies are often exposed to competition regulation issues and price collusion. As such, it is still important that companies be transparent with regard to their lobbying practices and anti-corruption, anticompetitive and bribery policies and initiatives. The risk assessment on this subject is essentially based on a detailed analysis of companies' controversies and reactions. Because of its strong propensity to generate intellectual property-related revenue, the sector is also keen to aggressive tax optimization strategies, which makes transparent tax communication essential.

MINIMUM STANDARDS

Type of ESG risk:	Risk assessment indicators examples:
Governance of sustainability	• Existing governance structure enabling the mitigation of environmental and social risks. • Disclose breakdown of value among stakeholders, improving transparency around employee remuneration and payroll. • Integration of ambitious and binding sustainability criteria – assessed through pre-determined, quantifiable metrics– into the variable compensation of top executives. • All Board members are trained on sustainability topics • Presence of employee representatives at board level (beyond regulatory requirements). • Unadjusted gender pay gap & Board Gender Diversity. PAI #12 PAI #13
Business ethics	• Robust business ethics policies covering anti-corruption, anti-competitive and bribery policies. • Transparency about lobbying practices and objectives. • Evidence of effective whistleblower channels and transparency around cases reported and actions implemented. • Systematic training on company's and suppliers' code of conduct. 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.

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* As defined in Mirova's Minimum Standards Policy.

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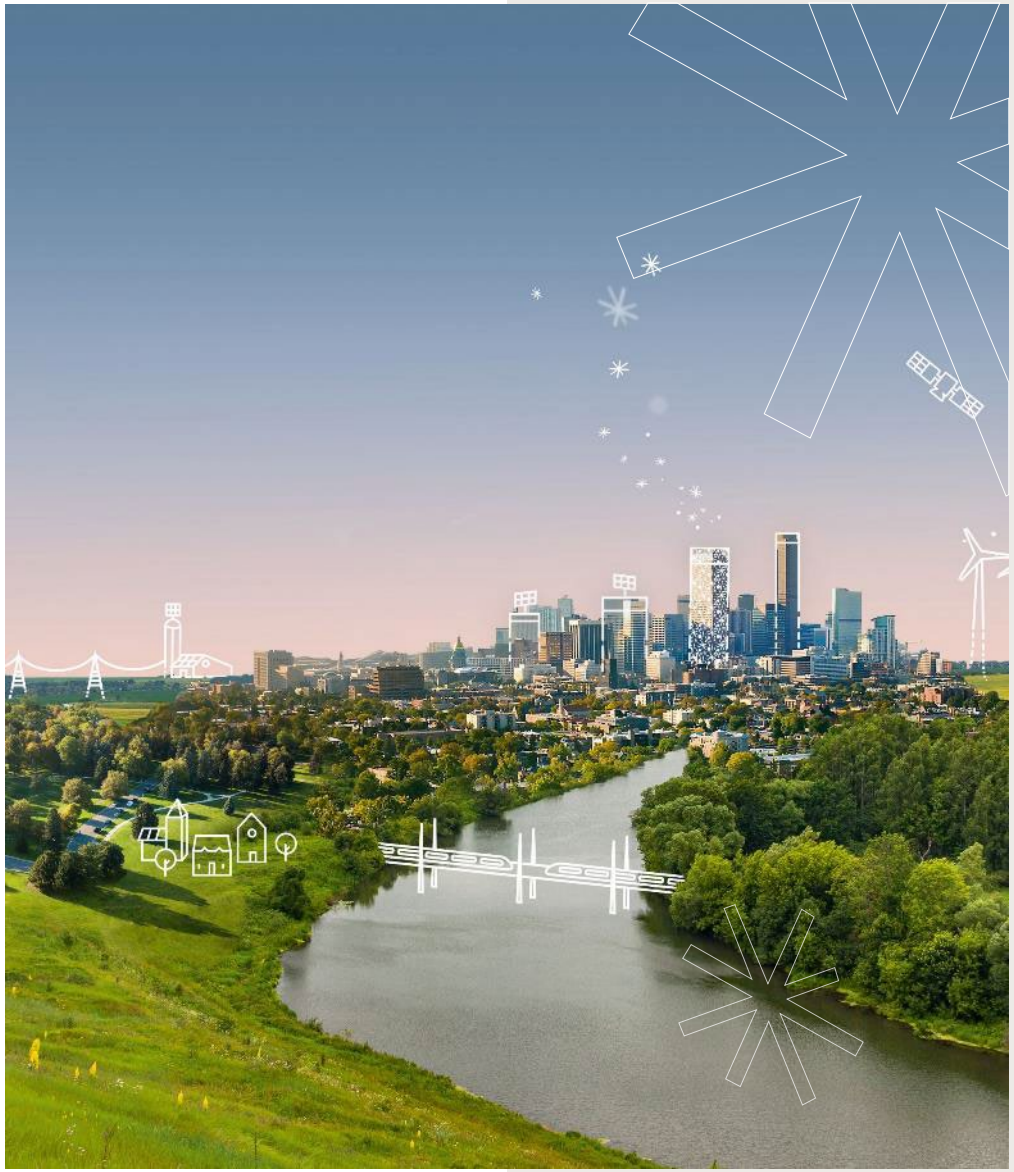
Appendices



Positive Impact

According to Mirova's internal methodology[1], 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.

ACTIVITIES	Marginal or no exposure to sustainable activities.	From 10% to 20% revenues from sustainable activities.	From 20% to 50% revenues from sustainable activities.	> 50% revenues from sustainable activities.
	In these sectors, 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. ESG KPIs to assess the level of impact generated can include among others: number of users in low and lower-middle countries, share of sales in underserved areas, number of jobs created, investment in infrastructures, KwH of energy saved by the product etc.			
PRACTICES	Absence of advanced practices.	One or more **advanced practices** on Medium Stake issues. or credible strategy to transition to advanced practices.	One or more **advanced practices** on High Stake issues.	
	For the purpose of defining High/Medium Stakes, Mirova relies on external classifications, to the extent possible. Indicative High Stake sectors are defined as follows but may be adapted on a case-by-case basis, notably depending on a company/project effective exposure to high stake activities. • Climate: Mirova relies on the list defined by NZIF and retains Nace codes A to H and J to L as High Stake. • Biodiversity: Mirova relies on the definition of its supplier Icerbeg Datalab and retains all GICS except from GICS 5020, 4510, 5010 and 3510 as High Stake. • Human Capital: Mirova considers sectors that are most exposed to arduous working conditions as High Stakes and all GICS except from GICS 5020, 4010, 4020, 4030, 4510, 3520, 6010 and 6020.			

ESG Risks

SECTOR INHERENT RISK LEVEL: LOW/MEDIUM

Software, Media and Telecommunication companies bear relatively lower inherent risks than hardware and semiconductor companies. On the environmental side, the carbon footprint of digital is increasing fast with the multiplication of applications that lead to an increased use of networks and data centers to process and store the data. Biodiversity footprint is low and companies mostly have a responsibility in managing their own operations' water and waste streams. On the social side, due to the handling and processing of a lot of personal data, companies should ensure the protection of users' data and the reliance and protection of IT systems. Media companies bear important ethical risks associated with the platforms and content they distribute (risk of biases, disinformation, violent content). The human capital risk is also an important issue to monitor for the sector: technological disruptions create a favorable context for restructuring and tech industry employees have also revealed other recurring bad practices, mostly related to harmful corporate cultures.

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

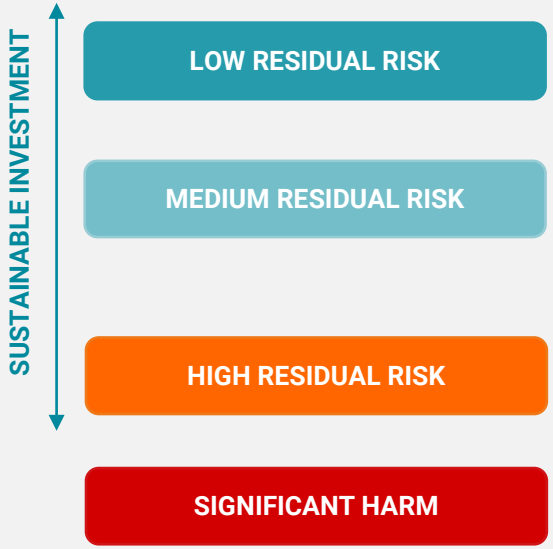
Data security and privacy
Product responsibility

Working conditions : labor rights & health and safety

Governance :

- Governance of sustainability
- Business ethics
- Taxes

RESIDUAL ESG RISK LEVEL



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

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

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

Not eligible for investment.

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 Net Zero commitments.
	2. Carbon Footprint	X	
	3. GHG intensity of investee companies		Not applicable
	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 Net Zero commitments.
	6. Energy consumption intensity per high impact climate sector		
Biodiversity	7. Activities negatively affecting biodiversity sensitive areas		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
- Temperature alignment of listed investment portfolios
- Transparency codes
- Our Taxonomy for Sustainable Solutions

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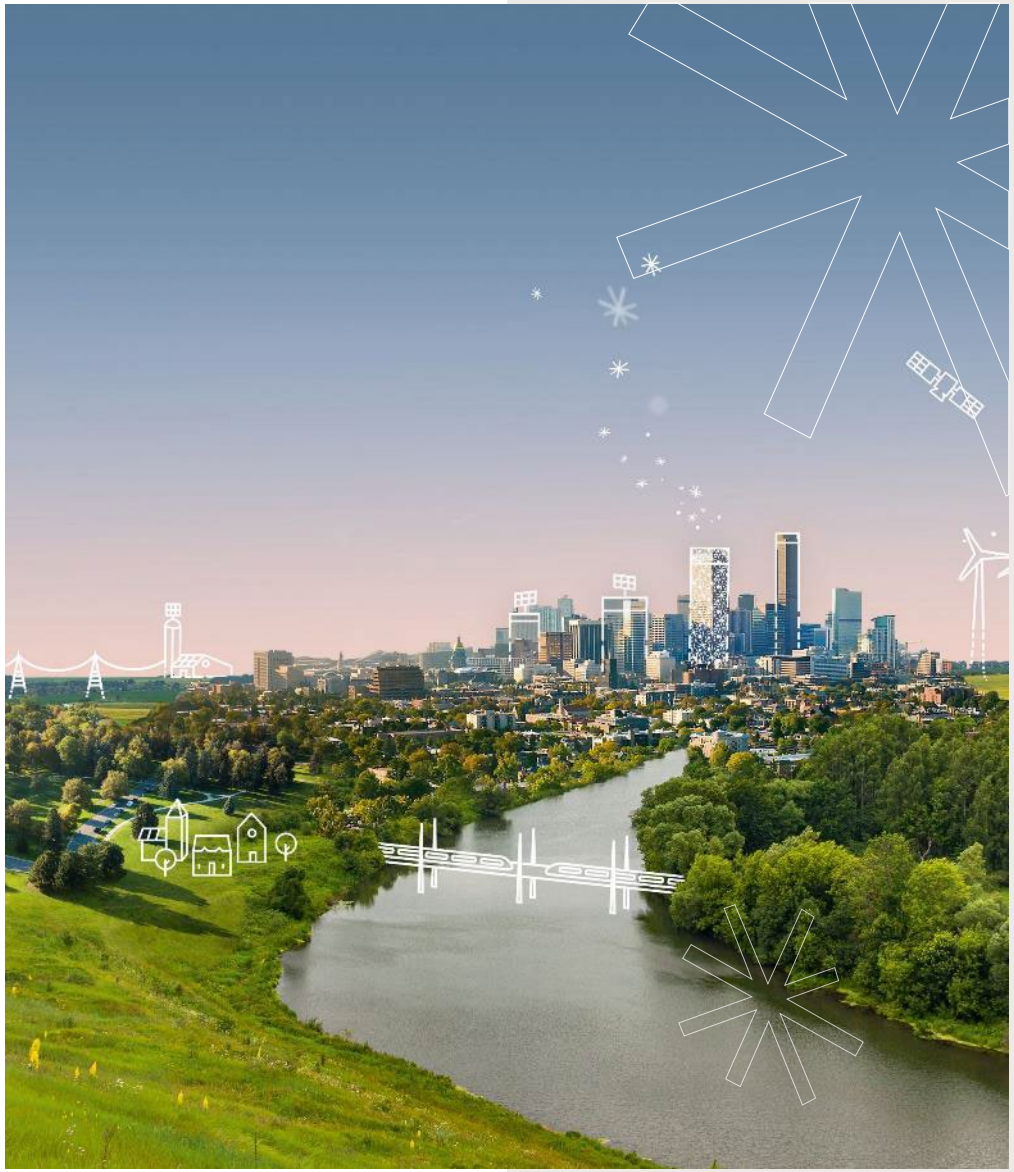

MAIN RISKS

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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