

# B(ey)ond Green

The Fixed Income Team's Quarterly Update



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## Our bond investment philosophy :

Green, social and sustainable bonds (GSSBs)<sup>1</sup> offer a highly effective tool for providing transparency and ensuring the impact of our investments. Mirova has therefore chosen to invest only in GSSBs for sovereigns, supranationals and agencies (SSAs), as measuring the impact of funds invested in conventional debt is made more complex by the overly broad scope they cover. Nonetheless, where corporate bonds are concerned, the analysts of Mirova's ESG Research team are capable of analysing and measuring impact. While GSSBs are not essential for companies whose products and solutions contribute significantly to at least one of the UN's Sustainable Development Goals (SDGs), Mirova favours these instruments to finance the transition of companies with limited positive impact.

## In a nutshell



1

**The Green Bond market resumed its expansion in 2023**, showing a 10% increase over the period, driven by **unprecedented totals in sovereign issues**. In contrast, corporate issuance continued to lag, amidst a highly volatile interest rate environment. In the coming months, the GSSB market could get a boost from the arrival of labelled bonds issued in sectors that are difficult to decarbonise, as part of transition financing efforts. Mirova considers this type of financing as crucial, provided that certain conditions are met.

2

The **credit asset class outperformed last year**, with credit spreads narrowing thanks to the resilience of the economy and investors' renewed quest for yield. **For 2024, Mirova maintains an optimistic scenario with a soft landing**. Central banks should begin to pivot and **yield curves continue to steepen** thanks to the resilience of long-term rates, attributable to the need for a decent term premium and the robustness of the economy.

3

The **chemicals sector** is often seen as difficult to reconcile with responsible investment. Yet it is a **catalyst in the value chain for accelerating the transition of other industries, as well as being a key link in the circular economy**. The sector delivered mixed financial performance in 2023 and we believe a recovery is unlikely before the second half of 2024. However, performance varies by sub-segment, as SNF, a player in speciality chemicals, demonstrated last year.

1. **GSSB (Green Social Sustainable Bonds)**: an acronym for Green Bonds, Social Bonds and Sustainable Bonds, which offer both environmental and social benefits. We will use "labelled debt" to refer to the GSSB, which we add the SLBs (bonds whose characteristics – primarily their interest rates – vary depending on whether or not the issuer meets certain ESG targets).



# Sustainable bond investments: What's new?



**Agathe Foussard, CFA**

*Portfolio Manager  
Paris*

Launched in 2008, this market, particularly that of Green Bonds, grew continuously... until 2022, when the most violent interest rate increase in 40 years brought this expansion to a halt. In 2023, issuance struggled to regain momentum. Despite two promising first quarters, the end of the year, and particularly the third quarter, proved more complex, with issuers

lacking visibility over the future path of interest rates.

So, should one conclude that 2023 was a disappointment? It is not as simple as that, since there are various factors that shed a different light on the year's performance when analysed closely.



**Lucie Vannoye, CFA**

*Credit Analyst  
London*



Sources: Bloomberg, Mirova, as of 12.31.2023



***After a slowdown in 2022, green bonds are expanding again, whilst SLBs<sup>2</sup> are down 25%.***

2. **SLBs (Sustainability-Linked Bonds):** bonds whose characteristics – primarily their interest rates – vary depending on whether or not the issuer meets certain ESG targets.

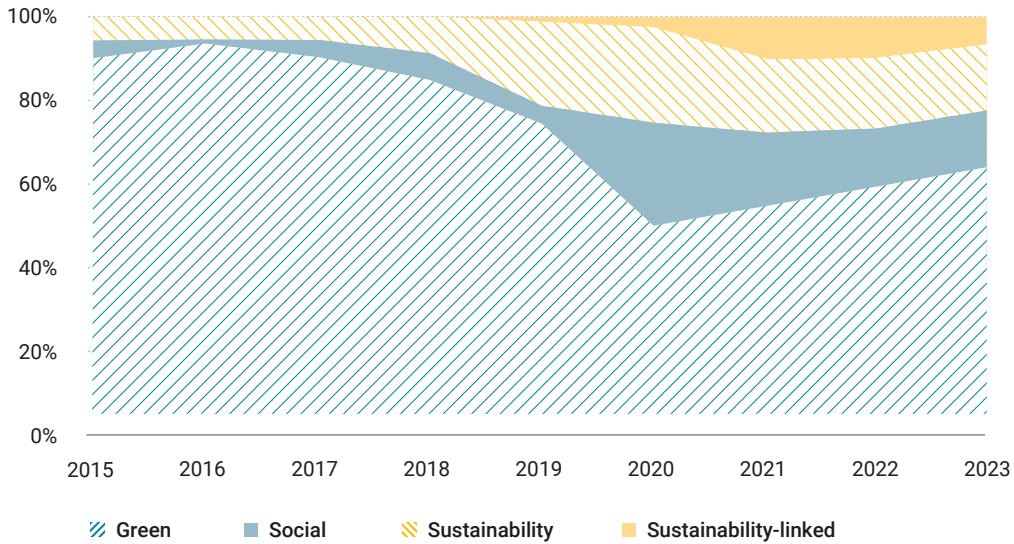


**Firstly, the green bond format is consolidating its lead.** We are delighted to see green bonds back on the rise, not only as a proportion of the total amount of labelled debt, but also in absolute terms, with a

total amount issued up by 10% compared with 2022. We attribute this increase to sovereign issuers, who, as usual, preferred the green format to others. Governments continue to abandon the social

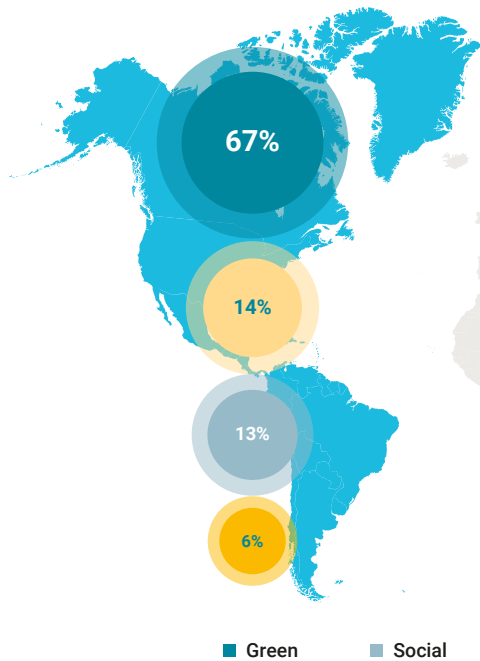
format, with Chile and Colombia the only issuers on purely social impact programmes last year.

BREAKDOWN BY TYPE AS A % OF LABELLED DEBT ISSUANCE

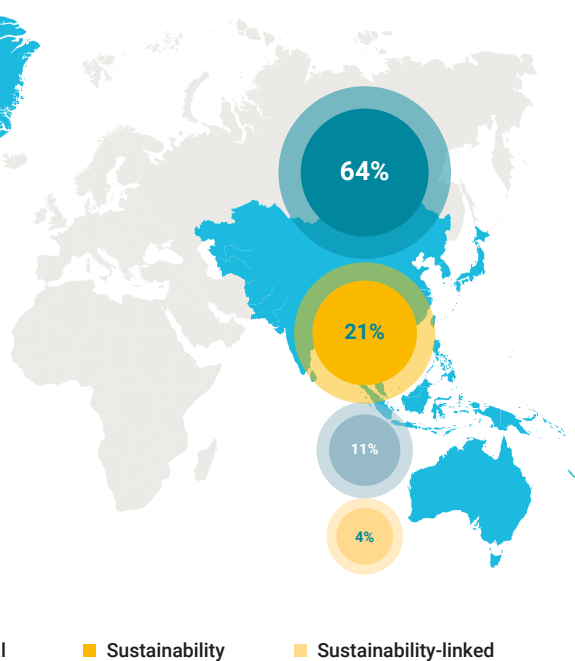


Sources: Bloomberg, Mirova, as of 12.31.2023

BREAKDOWN IN THE AMERICAS



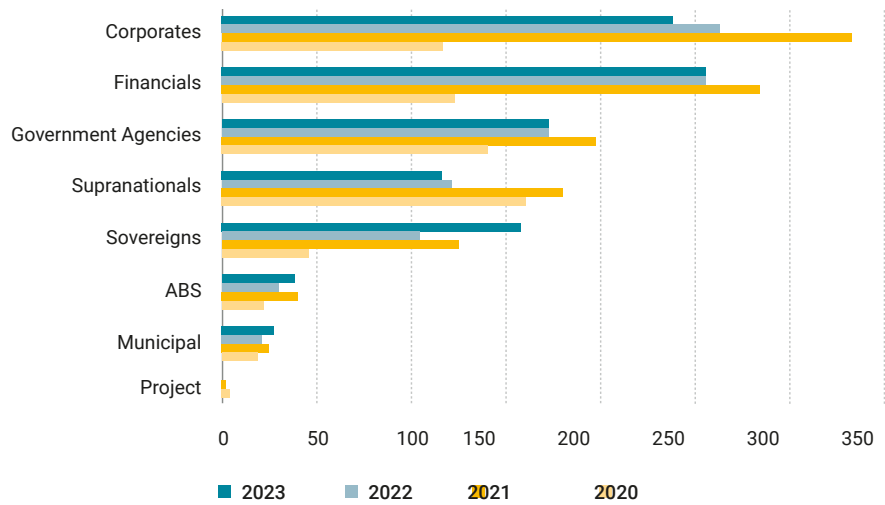
BREAKDOWN IN APAC REGION



Sources: Bloomberg, Mirova, as of 12.31.2023

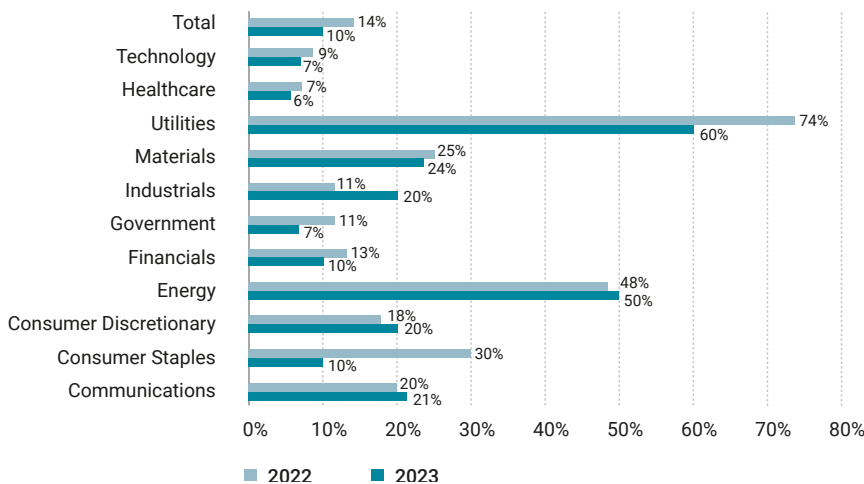
### TOTAL OF LABELLED DEBT BY TYPE OF ISSUER IN \$BN

Sovereigns were the main contributors to growth in the green bond market for 2023. They issued \$161 billion in green bonds, the highest level ever, a 50% increase on 2022.



Sources: Bloomberg, Mirova, as of 12.31.2023

### PENETRATION OF GSSB 2022/2023



Sources: Bloomberg, Mirova, as of 12.31.2023

Corporate issuers, on the other hand, disappointed as they issued 'just' \$238bn, 10% less than the previous year. They spurned sustainable formats as well as SLBs, although certain sectors with less experience of the GSSB market stood out, such as communications, consumer discretionary and industrials whose penetration rates rise.

In geographical terms, **EMEA remains the most heavily represented zone**, while the APAC region's level of issuance has remained flat for the past three years, at around \$280 billion, and the Americas

saw its issuance of labelled debt fall significantly in 2023, to \$144 billion versus \$224 billion in 2021. Turning to currencies, the euro and the US dollar, while they continue to dominate the market,

together accounted for only 63% of total issuance, compared with 80% in 2020. Meanwhile, the yuan accounted for 10% of the total in 2023.

**One last trend we are observing is the shortening of maturities.** After 2019, the Global Green Bond index saw a sharp increase in duration relative to a conventional index, following the arrival on the GSSB market of sovereign issues with maturities exceeding 20 years. However, since 2022, and the rising interest rates imposed by central banks to combat inflation, issuers that favoured very long maturities to take advantage of exceptionally low rates have had to review their strategy and seek financing on shorter or interme-

mediate maturities. This, combined with the need to accelerate energy transition and finance projects with shorter time horizons, has returned the Global Green Bond index to duration levels closer to those of a conventional universe. And lastly, insofar as rising interest rates exert mechanical downward pressure on durations, today's bond market has a lower average duration than before.



The duration of the Bloomberg MSCI Global Green Bond index was 6.8 years at end December 2023, compared with more than 8.7 years at the same time in 2021.

## Which new GSSB issuers joined the market in 2023?

**Sovereigns** were the life of the party this year, and no fewer than eight new issuers joined in 2023, mainly from emerging countries: Brazil and Cyprus issued sustainability-linked bonds, while India, Israel and Turkey opted for green issues.

Meanwhile, we listed about 120 new **corporate** issuers. Among them, a notable amount of green bonds issued by automotive firms such as Stellantis, Valeo, LG Energy Solutions and Autoliv.

Mirova's ESG Research teams particularly appreciate the green bond issued by East Japan Railway and that issued by packaging firm DS Smith, among others.

2023 also witnessed the entry of several Central European banks on the sustainable bond market, including Banca Transilvania and Bank Pekao.

New players were less common in the social bonds market, however a mention is due to the Natwest issue, in which 100% of Use of Proceeds will finance SMEs run and/or owned by women.

However, once again last year, we had to turn down any number of programmes, primarily due to unambitious decarbonisation strategies on the part of the companies issuing them. We are thinking in particular of issuers in the areas of fast-fashion, mass retail and gas utilities.

**Responsible investment opportunities have also arisen in the conventional universe.** Indeed, of the 15 or so first-time issuers we identified in 2023 in the euro universe, two-thirds were eligible for Mirova's investment universe. Among the new issuers that we have deemed as having a strong positive impact is Veralto, the Danaher spin-off set up last September, which specialises in water and food quality control systems, as well as treatment systems with a positive impact on biodiversity.



## Will the greenium soon be history?

The *greenium*, a contraction of *green* and *premium*, represents the difference in yield between a green or sustainable bond and a hypothetical conventional bond from the same issuer with the same characteristics of maturity, coupon, level of subordination, etc. This difference in yield can be interpreted as the price to be paid, or the yield foregone, for investing in a green bond. This difference in yield can be interpreted as the price to be paid, or the yield to be foregone, for investing in a green bond.

It seems to us that the greenium is simply the reflection of an imbalance between supply and demand for green and sustainable bonds, and that it is therefore narrowing as the market expands. At the end of December 2023, it stood at around 2 bps on average, though it varies from sector to sector.

Last year, we also set out to observe the impact of format on the size of order books. It appears that, on average, green bonds are slightly more oversubscribed than conventional bonds. However, the impact on new-issue premiums (NIP) seems to have been limited. We also note that in the last quarter of 2023, among fixed-rate Euro Corporate Investment Grade (IG) bonds, the largest issue premiums concerned four green bonds: Acciona Energia, H&M, FCC Servicios Medio Ambiente and Ericsson.



# The financial markets kept us on our toes in 2023

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**David Belloc, CFA**  
*Portfolio Manager/Strategist  
Paris*



**Charles Portier**  
*Portfolio Manager  
Stockholm*

**2023 was supposed to be the year of the bond markets**, stimulated by already perceptible easing of inflation in the major economies, and consequently by an anticipated end of the rate hike cycle. **But economic indicators surprised on the upside and central banks continued their monetary tightening**, still determined to fight inflation.

**It was not until mid-October that the market benefitted from the return of appetite for risk, as the main central banks eased their rhetoric**, indicating that monetary tightening would continue, albeit at a slower pace. Thus, despite an upward trend in a persistently volatile environment, rates fell sharply from October until the end of December. Decelerating inflation amplified the movement

in short rates, causing yield curves to steepen in the second half of the year.

**The credit market has benefited both from a resilience of the economy and from investors' increased search for yield**, driven by fear of missing out on historically attractive levels. Consequently, the asset class performed well, as one might expect. IG Euro spread (G-Spread)/sovereign credit spread narrowed from 167 bp to 139 bp, a trend fuelled by the contraction in swap spreads.





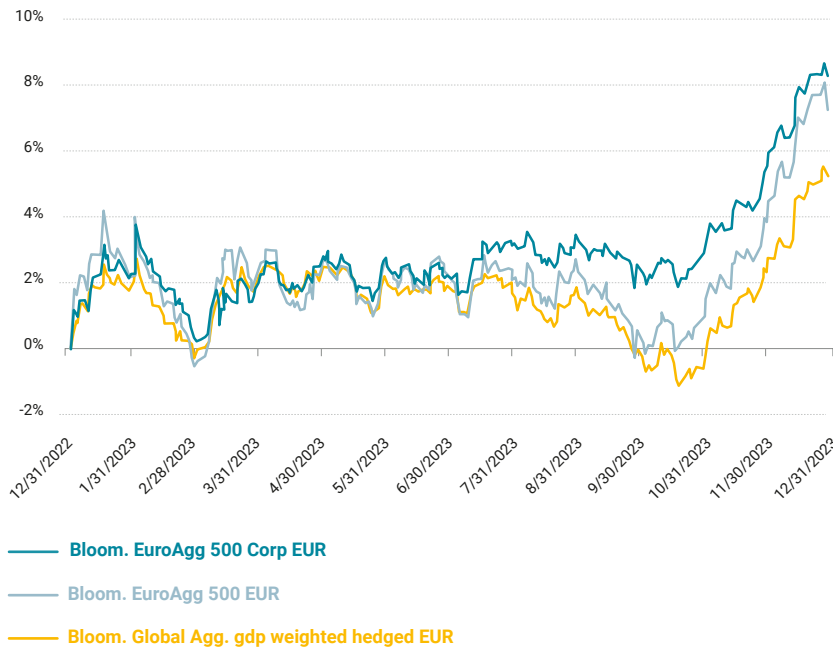
## Which strategy performed best in 2023?

Looking at our three main benchmark indices, the Global Aggregate, the Euro Aggregate 500 and the Euro Aggregate

Corporate, we can see that the latter outperformed last year, thanks in particular to the 28-basis-point narrowing in credit spreads.

The graph below compares the performance of the three indices over the past year.

TRENDS IN THE MAIN INDICES IN 2023



### ► Top performers of 2023

- Credit was the best-performing asset class in 2023, particularly the High Yield segment.
- Within IG credit, BBBs outperformance, especially financials and real estate, two sectors more heavily represented Green Bond universes.
- Among US & Euro sovereigns, Germany's 10-year was the best performer, boosting long-duration Euro strategies.

Sources: Bloomberg, Mirova, at 31/12/2023

## Taking things further, we think it worthwhile to highlight the following dynamics:

**Sovereign yield curves in euros and dollars began to steepen in the summer of 2023.** After several months of inverted curves, the steepening process initiated across the Atlantic has grown more pronounced, and we expect similar trends on the German 2y-10y curve, fuelled by central-bank rate cuts expected in the first half of the year.

**The 10-year Bund outperformed the 10-year Treasury.** The US/Euro yield spread on the 10-year segment widened from 1.30% to 1.85%, greatly favouring the Euro Aggregate index, whose duration

was longer than that of its peers, at 6.42 years compared with 4.86 years for the Global Aggregate and 4.35 years for the Euro Aggregate Corporate at the end of December.

**Credit was by far the best-performing asset class in 2023**, both in Europe and stateside, in line with our previous forecasts. In a volatile environment, European IG spreads contracted by 28bps relative to the Bund. In the United States, despite turbulence in the financial system during the first half of the year, the Goldilocks scenario pushed spreads against Treasuries down

from 1.30% to 1%, returning spread levels to those seen in late 2021.

**Real estate and financials were the most buoyant sectors.** Following a 2022 fall in the property sector and the bankruptcy of SVB, these issuers offered very attractive yields in 2023. This benefited the green bond indices, which were overweight these sectors.

# Our outlook for 2024



**Bertrand Rocher**  
Co-Head of Fixed Income  
Paris

Mirova is maintaining the optimistic scenario drawn up at the start of 2023, i.e., a soft landing combined with lower inflation levels in all Western countries, with the US economy far more resilient than Europe's. We forecast **global GDP growth of 2.5%** in 2024, including:

- At least 1.5% growth in the **United States**, where the renewal of industrial capacity and AI are fuelling **productivity gains not seen in 20 years**, maintaining growth without stimulating inflation.
- Minimum growth of 0.5% in the **EU**, where some industrialised economies could experience periods of recession, reducing their ability to cope with inflationary pressures. However, this region has the **potential to surprise positively** thanks to record household savings, EU investment drawing on NextGeneration resources, and inventory rebuilding.

- Between 4.5% and 5% growth in **China, thanks to the support of local authorities** having more resources at their disposal than the market had anticipated to ease the burden of a structurally depressed population.

This economic slowdown, without causing a recession, will prompt most central banks to pivot. However, the **impact of this pivot will be lessened by the need for a decent term premium** to accommodate the heavy debt burden in Western countries, at a time when the US federal deficit exceeds 6% of GDP.

**Economic resilience and falling interest rates bode well for risky assets**, especially as they stand to benefit from a reallocation of the large sums invested in money markets last year. The rally at the end of 2023 consumed only part of total upside potential.

When it comes to bond investment, the emphasis is always on steepening the yield curve: disinflation is driving short rates down, but economic resilience makes a free-fall in long rates unlikely.

The primary bond market will benefit from greater visibility on interest rates trajectories and lower volatility. We expect the GSSB market to expand yet again by around 5-10% compared with 2023,

also driven by the need to accelerate transition to a low-carbon world. The trends previously observed are likely to continue, with green bonds remaining the favourite of issuers, particularly sovereigns. Australia's inaugural green issue is expected this year. In terms of sectors, Utilities could be down versus last year due to an acceleration in asset sales and low refinancing needs. As for financials, we expect a slight increase in issuance volumes.

The main threat to our scenario? Any acceleration in inflation, which would prevent central banks from pivoting and consumers from spending. Growing geopolitical tensions, particularly in the Middle East, are the main driver of this risk.

► To find out more, click here:



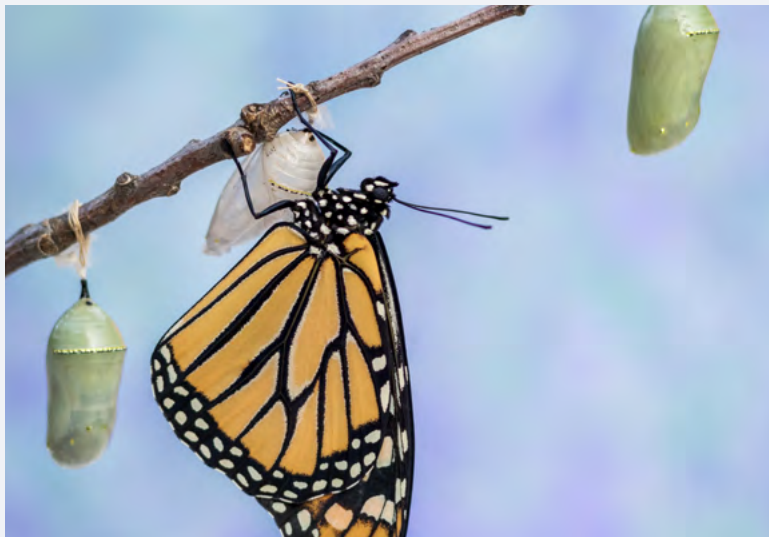
→ [Publication Market Review & Outlook](#)





## Market news by Felipe Gordillo, Senior ESG analyst

### How can the emergence of 'transition finance' boost the market for labelled bonds?



First of all, the word 'transition' must be clarified, because there is confusion about how it is used. Three definitions are commonly employed by the financial markets:

- **The 'transition of the economy'**: this involves transforming economies to bring them in line with decarbonisation objectives. In principle, all sectors and activities should be able to undertake 'transition'.

- **'Carbon-neutral transition'**: this concept refers to sectoral greenhouse gas (GHG) emissions reduction trajectories, aimed at achieving 'Net Zero' targets in line with science-based climate scenarios.
- **Transition in 'hard-to-abate' sectors** (i.e. those whose GHG emissions are the most difficult to reduce), which focuses on the development of technologies that enable

significant reductions in GHG emissions today; solutions that may prove sub-optimal in the long term because they emit GHGs or having other negative impacts on nature, like: producing ammonia or hydrogen from fossil fuels.

Over the past two years, public authorities in jurisdictions including Japan, the European Union and Singapore, as well as country groupings such as the OECD and the ASEAN Capital Markets Forum, and market players such as the ICMA Green Bonds Principles (GBP) and the Climate Bonds Initiative (CBI), have developed analytical frameworks aimed at tackling the third category, which covers the notion of **mitigating GHG emissions in the 'hard-to-abate' sectors, which have the greatest difficulty in reducing their carbon footprint.**



These initiatives make it possible to design tools or establish areas of action where debt can contribute to decarbonisation, using instruments such as green bonds or loans in particularly polluting sectors (oil, gas, chemicals, metals and mining, paper, airlines, cement and shipping). These instruments will need to be tied to trajectories that are scientifically informed and designed, as well as consistent with the Paris Agreement, and **develop innovative value chains (e.g. blue, grey or green hydrogen) to overcome technical obstacles**, such as clean energy storage, or physical constraints linked to the location of industrial sites or the use of toxic chemicals.

**Mirova considers the development of innovative value chains to be essential in the fight against global warming and the challenges posed by biodiversity loss, but only in such cases where:**

- **the risk of 'lock-in' can be mitigated** at the design stage of these projects by allocating capital for decommissioning of sub-optimal technologies that will become obsolete in a near future,
- **science-based decarbonisation trajectories** are benchmarked for companies and innovative products,
- **an effective and credible decarbonisation strategy exists within the company,**

- **assessments are carried out** to anticipate the social and governance impact and actions implemented to ensure a just transition,
- **cost-benefit analyses** compare the innovative solutions with existing technologies for industrial decarbonisation.

**Issuers from sectors that are difficult to decarbonise are still poorly represented in the labelled debt market:** in 2023, they amounted to just 3%, even though these sectors make a significant contribution to global GDP (28% in 2021 per the IMF). **Mirova believes that the development of green bonds issued by companies operating in sectors that are difficult to decarbonise offers an excellent opportunity to boost the labelled debt market and deliver on the promise of sustainable economic transformation.**



# Chemistry, the ugly duckling of ESG...



**Laure Nottet**  
Credit Analyst,  
Paris



**Hadrien Gaudin-Hamama**  
ESG & Impact Analyst,  
Paris

**The chemical industry is one of the sectors most dependent on fossil inputs, which account for fully a third of the industrial sector's CO<sub>2</sub> emissions.**

Furthermore, the sector boasts more than 350,000 toxic substances, the majority of which have not been assessed for their toxicity with respect to the environment or health, and contributes to 2 million deaths a year, while non-degrading substances pollute our ecosystems, including PFAS<sup>3</sup>, known as 'forever chemicals'.

The chemical industry is difficult to reconcile with responsible investment, especially as its products are often used in a wide range of sectors, some more virtuous than others.

But chemistry is also:

▶ **A catalyst in the value chain to accelerate the transition of other industries – the chemical industry is the source of many 'raw materials'.**

**Reducing the sector's environmental impact calls for replacing fossil inputs with bio-based raw materials, improving product circularity, reducing water consumption and pollution, and enhancing transparency about product composition.** Already, in response to toxicity

issues, many players are now doing more to assess the effects of their products on the environment and health, with a view to developing non-hazardous substitutes. In addition to emissions avoided thanks to the circular economy, most players are working to reduce their CO<sub>2</sub> emissions by improving energy efficiency, electrifying their processes, using renewable energies such as biomass, or implementing CO<sub>2</sub> capture and storage solutions (CCUS).

3. **PFAS:** these are perfluoroalkylated and polyfluoroalkylated substances, synthetic molecules that do not occur naturally in the environment and form a family of several thousand chemical compounds used in a large number of consumer products.

► **Essential to the circular economy, given that almost half (45%) of global emissions that cannot be reduced by the energy transition can be eliminated by transition to a circular economy.<sup>4</sup>**

Here, a number of solutions are deserving mention, including water treatment solutions from Ecolab, SNF and Solenis, green hydrogen solutions from Air Liquide and Linde, and natural food additives from Symrise. These are all companies in which Mirova invests and which, according to Mirova, belong to the 20% of companies in the sector – Barclays Euro Aggregate Corporate index universe – that are ESG-eligible.

Although chemical companies are particularly vulnerable to natural disasters because of their massive infrastructure, and thus have all the more incentive to fight climate change, **behavioural changes vary with regard to ease of adoption.**

They require major investment in both research and assets, particularly for commodity chemicals, which involve vast industrial complexes. In Europe, where production is becoming much less competitive due to inflation, manufacturers are investing both to diversify their supplies and to reduce their CO<sub>2</sub> emissions in order to comply with increasingly stringent regulations. In the United States, tax benefits offered under

the Inflation Reduction Act are also encouraging manufacturers to invest in this direction. However, rising interest rates could weigh on their ability to transform, although this was not felt in 2023, as most chemical companies maintained good access to finance despite a difficult year.

**To participate in this transition financing, Mirova has invested in several green bond issues in the sector, albeit only a few. We have been highly selective.**



► **The manufacture and use of chemical substances are subject to an entire body of regulations:**

- **REACH** (Registration, Evaluation and Authorisation of Chemicals) in Europe, adopted in 2007. A tightening of regulations was expected by 2022 but has been put off in the name of protecting the competitiveness of European industries.
- **TSCA** (Toxic Substances Control Act) in the United States.
- The Stockholm Convention on Persistent Organic Pollutants, signed in 2001, and the Rotterdam Convention on the Import Consent of Chemicals (1998), **ensure that the environment and health are protected across borders.**


4. Source: Ellen MacArthur Foundation, *Completing the picture: How the circular economy tackles climate change* (2019).



# ...shunned by markets in 2023

After a record performance in 2021, driven by a post-Covid rebound, the chemicals industry faced a rapid downturn from mid-2022, reflecting an economic landscape, parts of which deteriorated under the influence of the Ukraine/Russia conflict combined with other factors:

- **Inflation and rising interest rates** weighed on many markets that chemical companies depend on, such as construction, materials, consumer goods and agriculture. As a result, the entire value chain had to contend with prolonged and massive destocking by customers, further penalising volumes and resulting in capacity utilisation rates well below historical levels.
- In addition to the fall in volumes, competition has been exacerbated by **the arrival on the market of new production capacity**, particularly in Asia, where economic activity has been slow to recover but where production is more competitive and has been redirected towards exports.



**Bond issues in the sector have tended to underperform the market.** The spread of the Bloomberg Global Aggregate Chemicals index narrowed by 0.2 percentage points over 2023, compared with -0.33 percentage points for the Global Aggregate index.

Against this backdrop, it has been more difficult for Western chemical companies to pass on cost increases via prices. Yet they sorely needed to, as profitability was squeezed by the continuing high cost of raw materials (mainly fossil-based) and energy inflation, chemical manufacturers being traditionally major consumers of electricity and gas.

Many companies in the sector have had to revise their targets for 2023/2024 downwards. While an improvement was initially expected as early as mid-2023, **players now agree that the upturn is unlikely to appear before mid-2024.** The end of destocking should lead volumes to rise slightly, but there are still many uncertainties, since other end markets, such as the automotive industry, could in turn experience a slowdown in 2024. In an environment of persistently high costs, the sector's profitability is likely to improve only marginally.

## However, performance varies from one chemical sub-segment to another:

Groups operating in **industrial gases** (Air Liquide, Linde) benefit from a degree of resilience, as they have little exposure to cyclical markets while benefiting from long-term contracts with their customers.

On the other hand, **petrochemical companies**, whose business has historically been the most cyclical (commodity chemicals), have suffered most from the worsening environment (Evonik).

The resilience of **speciality chemicals players** (DSM, Ecolab, Italmatch, SNF, Symrise, Solenis) depends on their degree of specialisation. Those further down the chain offer higher value-added products, giving them greater pricing power.

# SNF: a textbook case?



## ► Recent financial results:

- 12-month period to end September 2023, sales of €4.7bn and Ebitda of €874m
- Over the first nine months of 2023, EBITDA margin increase to 19.7% from 16.5% in 2022
- Net leverage down sharply from 2.6x at end-2021 to 1.6x at end-September 2023

One of the issuers in the chemicals sector that Mirova has chosen to invest in, notably for its contribution to the circular economy, SNF recorded excellent results in 2023 despite a difficult environment.

Founded in France in 1978, SNF is the world's leading producer of polyacrylamides (PAM), water-soluble polymers. **SNF controls 56% of the world's PAM production capacity, spread across Europe, North America and Asia. The group sells its products in over 140 countries to more than 40,000 customers.**

MAPs are essential for the treatment of municipal and industrial wastewater, which accounts for around 40% of SNF's sales. SNF also produces resins used to increase the proportion of recycled fibre in paper. Other substances proposed by SNF replace toxic preservatives, such as parabens in cosmetics, or help conserve soil moisture, thus improving the resilience of agriculture to drought.

Currently rated Ba1 stable/BB+ stable, **SNF's credit indicators are in line with a rating one notch higher according to our analysis.** On the other hand, the group is not showing a strong inclination to become Investment Grade, given its ambitious investment policy.

The spread on the SNF 2029 bond we hold in our portfolio narrowed by 72 basis points over the year, clearly outperforming the sector and the market, despite an already historically tight level relative to comparable securities.

The Group has made commitments on a number of ESG aspects. It is aiming for carbon neutrality by 2050, a transition strategy that will have to be deployed ambitiously insofar as SNF's polyacrylamides may also be used to optimise the production of non-sustainable industries, such as oil and gas or minerals. The Group is also committed to reducing its water consumption, improving its management of production waste and enhancing its quest for sustainable alternatives to traditional chemistry. Of course, all this means that investment is needed to achieve improvement, Mirova will contribute as economic conditions allow, given the level of risk to which SNF is exposed.





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Non-contractual document, written in March 2024.

Mirova aims, for all its investments, to propose portfolios consistent with a climate trajectory of less than 2°C defined in the Paris Agreements of 2015, and systematically displays the carbon impact of its investments (excluding Social impact and Natural Capital funds), calculated from a proprietary methodology that may involve biases.





## ABOUT MIROVA

Mirova is a global asset management company dedicated to sustainable investing and an affiliate of Natixis Investment Managers. At the forefront of sustainable finance for over a decade, Mirova has been developing innovative investment solutions across all asset classes, aiming to combine long term value creation with positive environmental and social impact. Headquartered in Paris, Mirova offers a broad range of equity, fixed income, multi-asset, energy transition infrastructure, natural capital and private equity solutions designed for institutional investors, distribution platforms and retail investors in Europe, North America, and Asia-Pacific. Mirova and its affiliates had €29.7 billion in assets under management and €1.2 billion in assets under advisory as of December 31, 2023. Mirova is a mission-driven company, labeled B Corp\*.

*\*The reference to a ranking or a label does not prejudice the future performance of the funds or its managers*

### MIROVA

Portfolio Management Company - Anonymous Company RCS Paris No.394 648 216  
AMF Accreditation No. GP 02-014  
59, Avenue Pierre Mendès France 75013 Paris Mirova is an affiliate of Natixis Investment Managers.  
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### NATIXIS INVESTMENT MANAGERS

French Public Limited liability company  
RCS Paris n°453 952 681  
Registered Office: 59, avenue Pierre Mendès-France 75013 Paris  
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### MIROVA SUNFUNDER EAST AFRICA LIMITED

A company incorporated with limited liability in the Republic of Kenya Workify 11th Floor, Wood Avenue Plaza - P.O. BOX 59067 GPO - Nairobi  
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