

CHEMICAL INDUSTRY IS NOT YET **THE GAME** **CHANGER** IT COULD **BE**

DUTCH RESPONSIBLE INVESTOR PERSPECTIVES AND INVESTORS' ACTIVITIES FOCUSED ON THE CHEMICAL SECTOR AND NATURAL CAPITAL

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I. INTRODUCTION

Natural capital is another term for the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people. The benefits provided by natural capital include clean air, food, water, energy, shelter, medicine and the raw materials we use in the creation of products. It also provides less obvious benefits such as flood defence, climate regulation, pollination and recreation.

This exploration was part of a joint initiative to stimulate insight into the dependency and impact on natural capital and natural capital accounting for the chemical sector. To this end five parties joined forces to explore the possibility of sectoral initiatives in the agrifood, construction and chemical sectors. The parties involved were the Dutch employers' organisation VNO-NCW, the Dutch Ministry of Agriculture, Nature and Food Quality, the Royal Netherlands Institute of Chartered Accountants (NBA) and MVO Nederland.

Natural capital and relation to current programmes in the chemical sector and development guidelines for reporting

The understanding that economies and society are embedded parts of the biosphere also resonates in one of the key lessons learnt by the front-runners in the implementation of the Natural Capital Protocol¹, that the use of natural capital approaches helps to identify a company's dependencies on nature. It represents a further development of companies' strategic risk management. If not identified or handled properly, these dependencies can become a major risk for the financial performance of the company. The fact that the World Economic Forum's Global Risks Report 2018² states that six of the top eight risks for the economy are directly linked to natural capital supports this lesson.

Natural capital for the chemical sector is in itself linked to the Responsible Care and Sustainable Development action lines for 2050 of the Dutch chemical industry association VNCI, the so-called Roadmap 2050 for meeting the goals of the 2050 Climate Agreement and the SDGs. Achieving its Responsible Care ambitions for 2050 is VNCI's key contribution to realising the SDGs. The 'low carbon economy' action line has already been elaborated in the Roadmap 2050, but the other two action lines, concerning 'minimal impacts' and 'welfare and wellbeing', are less developed. Here, implementing natural capital approaches can contribute to a better understanding of a company's or sector's impact and dependency on nature and the associated risks and opportunities.³

Another possible motivation for companies to gain insight into their dependency and impact on natural capital is that their investors increasingly care about risks and possibilities related to natural capital. This research is therefore intended to shed light on the relevance of natural capital for responsible investors, both negative and positive, now and in the future.

¹ <https://naturalcapitalcoalition.org/natural-capital-protocol>

² <https://www.weforum.org/reports/the-global-risks-report-2018>

³ Source: MVO Nederland, November 2018, Strengthening the Natural Value of the Chemical Sector: Proposed Action Plan on Natural Capital and the Chemical Sector in the Netherlands

Research questions

This report discusses investor viewpoints and activities regarding natural capital, the chemical industry and their interlinkages. In order to do this, the following research questions were asked:

1. What threats and opportunities do investors see in relation to natural capital with regard to their investments?
2. What influence do (inter)national policies and market developments have on importance for / investor attention to natural capital?
3. What are investors' general viewpoints regarding the chemical industry?
4. What threats and opportunities do investors see with regard to the chemical industry and natural capital specifically?
5. To what extent are those views currently reflected in responsible investment strategies and plans?
6. What are the main obstacles to integrating those views?
7. To what extent do those strategies impact the investment decisions made with regard to the chemical industry?
8. To what extent do those strategies impact the amount of investor attention devoted to the chemical industry?
9. To what extent do those strategies provide clear incentives for the chemical industry to transform in line with investors' views around natural capital and the chemical sector.

Research approach

The research design relies mostly on qualitative methods for both data collection and analysis. Brief desk research was conducted on responsible investors' agendas in relation to the chemical sector and natural capital and 10 semi-structured expert interviews were held.

The research was conducted by Kristel Verhoef. Her background covers the intersection between sustainable development and finance. Having worked for more than ten years in responsible investment, she has gained experience of creating and implementing various responsible investment strategies, covering a broad variety of sectors and themes. She now works as an independent consultant under the name Kristel Clear Sustainable Strategies (KCSS).

Selection and overview of experts

In this research the focus is on Dutch (institutional) investors trading in the stock market⁴ and bond market⁵.

An analysis of the most important financial stakeholders in the sector was executed by Profundo. That research showed that investments made by Dutch stock and bondholders were more or less proportionally distributed: the higher the assets under management, the higher the investment in chemical companies traded on global bond and equity markets. Furthermore, no clear distinction was found between investment in various subsectors of the chemical industry. Selecting investors based on their amount of investments in the chemical industry was thus not a meaningful criterion.

It was therefore decided to select five Dutch investors of various sizes. What they have in common is a responsible investment overlay, although there are differences between the specific ambitions and interpretation of responsible investments amongst the investors interviewed.

Besides the five investors, five experts (organisations) that are known to have a great deal of experience of working with or representing investors, were interviewed. This gives the research a somewhat wider perspective than that of the investor sample.

⁴ The stock market is where investors connect to buy and sell investments — most commonly stocks, which are shares of ownership in a public company.

⁵ Bonds are units of corporate debt issued by companies and securitised as tradeable assets. A financial marketplace where debt instruments, primarily bonds, are bought and sold is called a bond market.

The following ten experts and investors were interviewed.

Table 1. Overview interviewees

Interviewees	Organisation represented
Faryda Lindemans, Responsible Investment Adrie Heinsbroek, Principal Responsible Investment	NN Invesment Partners
Thierry Oeljee, Engagement, Responsible Investment	Achmea Investment Management
Bas Jan Blom, Director ASN Investment Funds Roel Nozemans, Specialist Biodiversity	ASN Investment Funds
Peter van de Werf, Director Active Ownership	Robeco
Piet Klop, Senior Advisor Responsible Investment	PGGM
Rients Abma, Executive Director Martijn Bos, Policy Advisor Reporting and Audit	Eumedion
Angélique Laskewitz, Executive Director Xander Urbach, Project Manager Responsible Investment	VBDO
Rens van Tilburg, Director	Sustainable Finance Lab, University of Utrecht
Rita Ferreira, ESG Analyst Chemical Sector	Sustainalytics
Caroline Leenders, Senior Process Manager Sustainable Transitions	Netherlands Enterprise Agency

*APG was invited to participate, but did not respond to the invitation

*UNPRI and AEGON were invited to participate, but declined the invitation.

Limitations of this research

The main source of information for this study is the ten interviews. Although the interviewed investor organisations represent a much larger number of investors, it is still a very small subset of global bond and equity investors. The research therefore cannot be used to describe global investor behaviour in general. It should also be borne in mind that the focus has been on Dutch investors with responsible investor ambitions.

The study is merely intended to provide insight into the perspectives of investors in the chemical industry, without any claim that these reflect the true position. The answers have not been verified. Also, when respondents were asked to describe the chemical industry, no clear distinction was made between the various subsectors of the industry. Nor was any clear distinction made between regions in which the chemical companies operate. While some respondents did come up with that distinction themselves in answering the questions, it should be noted that not all answers will necessarily reflect all subsectors or companies within subsectors of the chemical industry.

As not all questions were equally relevant to all interviewees, the analyses in this research often reflect the answers by a subset of interviewees. As such, not all opinions expressed in this research necessarily reflect the opinions of all interviewees, even though the majority will.

Reading guide

The next chapters present the respondent views as well as forthcoming observations and analyses. Chapter 2 discusses investor views on natural capital in general as well as current efforts to integrate natural capital considerations into responsible investment policies and strategies. The present challenges as well as positive influencers are also described. Chapter 3 presents respondents' views on the chemical industry in general as well as the sectors' main opportunities and challenges in relation to natural capital. Chapter 4 discusses what strategies responsible investors themselves are implementing in relation to the chemical industry and what incentives those strategies provide for the chemical industry to transform. A distinction is made here between investment decisions and active ownership. Chapter 5 provides an overview of conclusions. Chapter 6 provides several recommendations and suggestions to follow up this research project.

2. INVESTORS' VIEWS ON AND ROLE IN NATURAL CAPITAL DEVELOPMENTS

This chapter discusses investors' views on natural capital in general as well as current efforts to integrate natural capital considerations into responsible investment policies and strategies. The present challenges as well as positive influencers are also described.

Natural capital part of investors' visions around long-term value creation

Awareness of the importance of natural capital has risen during the past ten years. All respondents agree that natural capital is becoming increasingly important because of megatrends like climate change, world population growth, resource scarcity and associated legislation and standards. Long-term investors and companies are responding to this.

Natural capital is part of long-term value creation

Part of the response by investors lies in redefining corporate value. While in traditional financial analyses investors only distinguish between material and non-material factors, long-term investors perceive this dual thinking as too restrictive and incomplete to respond to fundamental changes in the economy.

The direction is therefore changing, slowly but surely, towards assessing a company's value based on a more complete picture of value creation for all stakeholders, including the wider society, and their strategy to realise this.

The main influencers identified in this regard by respondents are the *International Integrated Reporting Council* with its *Integrated Reporting Framework* and the *Dutch Corporate Governance Code*. The International Framework issued by the IIRC identifies six capitals that reporting organisations may find useful as a tool for considering disclosures: financial, manufactured, intellectual, human, social and relationship, and natural capital. By taking these into account when reporting on performance, a company can draw a complete picture, linking strategy, purpose and value.

The Dutch Corporate Governance Code already introduced the term "long-term value creation" as one of its key principles in 2016. Long-term value creation considers the financial, social and environmental value of the company. In 2019, long-term value creation was one of the focus themes discussed with Dutch publicly traded companies by investor members and the secretariat of Eumedion.

Natural capital as such is part of a vision of a new economy in which it is one of the six capitals.

Natural capital as a term is neither loved nor used by the interviewed investors

Currently, however, a vision is all it is. In investors' day-to-day reality, the term natural capital is rarely used. Without a clear description and operationalisation, natural capital can mean so many different things to different people that it leads to confusion, misinterpretation and vagueness. That does not suit a sector that loves figures, measures and spreadsheets. Natural capital is seen as the complete picture of all nature-related themes, including its interconnections. It is exactly this all-inclusiveness that makes the term unpopular and seen as unusable as an unit of analysis or measurement.

Consequently, most of the time it is not natural capital as a whole, but specific, isolated environmental, social and governance (ESG) themes that attract investors' attention. That does not mean respondents fail to see or understand the interconnections between themes and the importance of having a more holistic view. It is just that a holistic view is not practical.

Natural capital themes mentioned as relevant by respondents are *climate, water scarcity, deforestation, energy efficiency, circular resource use, biodiversity, air emissions and soil recovery*.

Climate change at the top of responsible investor agendas

Climate change has risen to the top of responsible investment agendas over the last decade. The Paris Agreement, the SDGs and national climate agreements have all added to that. Initiatives specifically focused on the financial sector, like the Taskforce on Climate-related Financial Disclosures (TCFD)⁶ and work done by the Dutch central bank (DNB)⁷ have further accelerated this movement. The fast-growing number of investor members in climate-related investor networks such as the Global Investor Coalition on Climate Change (GIC)⁸ and Climate 100+ reflect the increased significance of climate change as an issue for the investor community. While about 400 investor members⁹ are included in one of the regional networks that make up the GIC, Climate Action 100+ has grown into one of the world's largest investor-led engagement initiatives, with more than 370 investor signatories and more than \$35 trillion in assets under management.

Climate change plays a crucial role within responsible investment strategies and is without doubt the most advanced theme regarding tools, methods and standardised metrics available. Responsible investors see the risks that companies in their portfolios face, both in relation to their contribution to climate change as well as to their exposure to climate changes occurring in the physical and legal environment. They actively participate in investor-led initiatives to enable financial institutions to assess and disclose greenhouse gas emissions of loans and

⁶ The FSB Task Force on Climate-related Financial Disclosures (TCFD) develops voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders.

⁷ DNB has conducted several relevant thematic reviews on climate-related risks as well as water and biodiversity risks that could affect the Dutch financial sector. These resulted in clear insights into potential impacts. In 2016, DNB established the Sustainable Finance Platform. This was set up with the objective of promoting and increasing awareness of sustainable funding in the financial sector. The platform's members can propose to establish a working group dealing with a specific theme. Seven working groups have so far been set up, of which the latest is around Biodiversity.

⁸ The GIC is a collaboration among four regional partner organisations around the world to increase investor education and engagement on climate change and climate-related policies. Launched in 2012, the coalition provides a global platform for dialogue between and among investors and world governments to accelerate low-carbon investment practices, corporate actions on climate risk and opportunities, as well as international policies that support the goals of the Paris Agreement.

The organisations that make up the coalition include the Asia Investor Group on Climate Change (AIGCC), Ceres, the Investor Group on Climate Change (IGCC), and the Institutional Investors Group on Climate Change (IIGCC). For more information see <https://globalinvestorcoalition.org/>

⁹ This is a rough estimate, as not all networks provide clear information about the number of members. In addition, some investor members might participate in the CERES network as well as in a regional network.

investments, such as the Platform Carbon Accounting Financials (PCAF).¹⁰ In this way they are working towards being able to monitor and pursue portfolio-wide, long-term risk or impact goals. Some other long-term investors are using different scenarios to better understand what the impact of climate change will be on the value of their investment. What will happen, for example, to the value of a company that produces carbon-intensive products in a carbon-pricing scenario? Investors are preparing themselves, by gaining insight into the climate risk exposure in their portfolio, increasing active ownership activities and, in some cases, divesting from companies whose activities conflict too strongly with investors' climate change ambitions.

Furthermore, to date more than 40 financial institutions have publicly committed to set emission reduction targets through the Science Based Targets initiative (SBTi) and an additional 70 reported to CDP in 2017 that they intend to set a science-based target (SBT) within the next two years.¹¹ The July 2019 commitment by the Dutch financial sector to take measures to reduce CO₂ emissions by 49 percent by 2030 can be seen as a first measurable collective impact goal that will affect many responsible investment strategies¹².

Other natural capital themes are still niche activities

When mainstream investors work on climate change, the main focus is often on carbon emissions. There is less awareness and consensus about *water, deforestation, climate adaptation and biodiversity risks and impacts*, and on ways to incorporate them into quantitative corporate assessments. An area where that is most apparent is corporate reporting.

Investors see reporting standards as a useful way for companies to get to grips with new topics and provide them with tools and guidelines for several topics and sectors. At the same time, they understand companies' frustration about the reporting burden. Currently there are a lot of conflicting measurement requirements, a wide variety of key performance indicators (KPIs) and hence a lack of comparability and consistency. Respondents believe that currently there are so many new (voluntary) standards and initiatives¹³ that in some instances they are counterproductive as they create more confusion than clarity for companies and investors alike. Instead of creating better reporting, some companies use that as an excuse not to report properly. This leads to inaction instead of action.

At the same time there are all kinds of investor front-runners, in niche as well as mainstream investment markets, investor networks and expert organisations, who are trying to establish the necessary common ground around one or more natural capital themes.

Common ground in several areas:

- On how to assess and compare companies in various sectors;
- On the necessary benchmarks around natural capital themes that will be recognised and accepted by both companies and investors;
- On quantitative metrics that can be integrated within financial analyses;
- On reporting standards;
- On assessing the risks and impacts of complete investor portfolios.

¹⁰ See <https://carbonaccountingfinancials.com/>

¹¹ Source: <https://sciencebasedtargets.org/financial-institutions/>

¹² For more information see <https://www.nvb.nl/english/50-financial-institutions-sign-up-for-climate-goals/>

¹³ Examples are the Global Reporting Initiative (GRI), the International Integrated Reporting Council, the Task Force on Climate-related Financial Disclosures (TCFD), CDP (formerly known as the Carbon Disclosure Project), the International Organisation for Standardisation and the Sustainability Accounting Standards Board (IASB).

That common ground is needed to accelerate and scale initiatives around various natural capital themes, as we have seen in the development of initiatives around climate change.

Several institutes, individually, or in collaboration with relevant (investor) members, produce supportive research, methods, guidelines and benchmarks that should help pave the way. Well-known examples of investor networks are PRI, VBDO and Eumedion. Well-known public and civil society initiatives are Chain Reaction Research, GRI, the Natural Capital Coalition, WWF, CERES, CDP and the World Resources Institute. Within those institutions the focus is increasingly on driving better alignment in the benchmarks and corporate reporting landscape.

Systemic players are expected to bring more harmonisation and normalisation

Besides better cooperation and coordination of existing initiatives, it is expected that systemic players such as the European Commission and supervisory authorities such as the Dutch central bank and the Supervisors Network for Greening the Financial System (NGFS) will bring more harmonisation and normalisation.

One of the relevant initiatives cited several times is the development of the EU Taxonomy, a set of technical screening criteria that set requirements for determining Substantial Contribution and Doing No Significant Harm (DNSH). Natural capital components that are part of the Taxonomy are *climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, waste prevention and recycling, pollution prevention and control and protection of healthy ecosystems*.

The past and present work of the Dutch central bank (DNB) and the Supervisors Network for Greening the Financial System (NGFS) is also seen as important going forward. As an independent central bank, supervisory authority and resolution authority, DNB has been at the forefront of incorporating sustainability in its supervisory practices.

The Supervisors Network for Greening the Financial System (NGFS) is a network of central banks and supervisors whose founding members come from China, France, Germany, Mexico, Singapore, Sweden and the UK, as well as the Netherlands. Over 30 countries are represented in the network. The NGFS aims to create a platform for sharing ideas and best practices in order “to manage risks and to mobilise capital for green and low-carbon investments in the broader context of environmentally sustainable development”. According to some of the respondents, the NGFS has included biodiversity as one of the important topics.

Front-runners and investor network organisations are not only expecting the systemic players to act, but are also actively supporting those organisations. They do so by providing them with relevant input based on the outcomes of their initiatives and their experiences in working with those topics. The Dutch investor association Eumedion actively lobbies for worldwide harmonisation of reporting standards. This includes legislation by the European Commission to require all EU listed companies to prepare their management report and non-financial KPIs in accordance with a single set of international, non-financial reporting standards. The aim is to make it possible for auditors to provide reasonable assurance on the non-financial information.

3. INVESTORS' VIEWS ON THE CHEMICAL INDUSTRY

This chapter presents respondent views on the chemical industry in general as well as the sector's main opportunities and challenges in relation to natural capital. It also gives some insights into what actions and strategies investors would like to see.

The global chemical sector is extremely diversified, with all kinds of products linked to food production, health care and the construction, automotive and consumer goods markets. Products range from base or commodity chemicals, plastics and plastic products, specialty and fine chemicals, agrochemicals to products of biochemistry. Each type of subsector has its own products, processes and strategies. There are many very small and specialised companies and at the same time huge diversified ones. Chemical companies can be responsive or unresponsive, well or very poorly governed, innovative or conservative, sustainable or unsustainably managed.

There are also very strong regional differences, with Dutch companies being seen as quite advanced in terms of sustainability and relatively responsive to investor requests. US companies are seen as slightly more defensive and less willing to see an investor's perspective, while Asian companies appear the least advanced in terms of sustainability, least responsive and least transparent.

Despite all those differences, respondents came up with the following generalisations when asked to share their views.

Main natural capital dependencies and risks

The industry's enormous carbon footprint is the sector's main threat in terms of natural capital. Globally, the chemical industry accounts for 10 percent of total energy demand. This high demand for energy, combined with extensive use of fossil raw materials, makes the chemical sector one of the biggest emitters on the planet. If the current growth of production continues, plastics (not including other chemicals) will make up 15 percent of global annual carbon emissions in 2050¹⁴.

This enormous carbon footprint, combined with the sector's related dependency on fossil fuels and materials, is seen by all respondents as a material risk, as it is expected that regulation around carbon is going to be ever stricter, and carbon pricing is a distinct possibility.

Other potential problematic dependencies of the chemical sector on natural capital are seen in *phosphate*, *potassium* and *water*. These are not yet seen so much as material risks, however, as they currently have only an incidental impact on the business case. Investors do expect that physical risks might become material in the long run.

Negative natural capital impacts of the chemical industry on natural capital are seen in producing, using and disposing of harmful substances, such as pesticides, insecticides, fertilisers but also per- and polyfluoroalkyl substances (PFAS) and plastic that can result in air, soil and water pollution and sometimes adverse human health effects.

These risks can materialise because of regulation, as regulation might lead to disrupted operations that require a change of production process or a switch to other materials and in some instances to substantial fines. Current examples of the latter can be seen in the company DUPONT, which is involved in various lawsuits for polluting water and creating adverse human health effects. If the companies are found guilty, the estimated costs and compensation could reach billions.

¹⁴ Source: The Chemical Industry's Contributions to Climate Change at <https://bellona.org/news/eu/2019-04-the-industrys-chemistry-with-climate-change>

Relevant regulations that currently have or will have a big effect on the chemical industry include PFAS regulations in the US, Chinese regulations on air and water pollution, phosphate regulations and the EU REACH regulation, as well as evolving regulations on pesticides and nitrogen. The expectation is that the regional differences will diminish over time and that regulation will generally become stricter.

Besides legislation risks, reputational risks are seen as very relevant to the chemical industry. This is especially true in cases where pollution leads to adverse human health effects or where the safety of installations is not seen as reliable.

Chemical sector as a link to both risks and opportunities for sustainability

The chemical sector could be seen as the raw material supplier of modern society, as it provides the raw materials for many products and processes in the automotive, agrifood, construction, textiles, health industries and many other sectors. Products range from base or commodity chemicals, plastics and plastic products, specialty and fine chemicals, agrochemicals to the products of biochemistry.

Respondents see the chemical sector as very important for development in the world as it plays an essential and connecting role in both sustainability-related risks and opportunities within society. If the chemical sector moves towards renewable raw materials, and renewable energy supply, this of course will have an enormous impact on the oil and gas sector, as both sectors are very much interlinked – both in the supply of energy and raw materials from the oil and gas sector to the chemical sector, and in the use of specific substances and processes from the chemical sector that facilitate oil and gas extraction and refining. Moving to renewable resources and developing products and processes that also will enhance the sustainability downstream, will thus have enormous impact on broad range of sectors downstream the chemical value chain.

When asked about the opportunities, it is striking how many opportunities most investors see, such as catalysts, the development of processes to produce hydrogen, all kinds of processes and products to increase energy efficiency, carbon-absorbing concrete, batteries, dashboards and coatings, as well as various forms of recycling and reuse of products in other sectors. There is a vast range of possibilities here for the chemical sector to come up with innovative solutions that result in greening of those sectors.

Without the chemical sector, many other sectors, such as the automotive industry, the agrifood industry, construction sector and the packaging industry, **cannot** become sustainable. In addition, the chemical sector could be a driving force behind many necessary transitions related to natural capital impacts or the SDGs.

Chemical sector is not the game changer investors believe it could be

However, the chemical sector is *not yet the game changer investors believe it could be*. Within the sector itself, there is too little movement in terms of greening or innovative solutions. More should be done to increase energy efficiency, switch to renewable carbon products and look for more sustainable sources of energy. The sector would also benefit from investing in the renewal of outdated installations and processes, phasing out harmful substances and embracing a more circular approach in the manufacturing process.

Although innovation is definitely taking place, the sector is not living up to its innovation potential.

Obstacles for greening and innovation within the chemical industry

Respondents see various obstacles for greening and innovation within the chemical industry. When it comes to greening its business model and processes, investors do understand that the essence of the business makes it very

difficult to change. Reducing the carbon footprint is an enormous challenge for the chemical industry, due to the current strong dependency on fossil fuels and materials. In those cases, the carbon footprint will grow when production grows.

Reducing that dependency or decreasing the sector's carbon footprint through carbon capture or carbon storage will require enormous investments as well as substantial changes in the industry value chains. Therefore, even though it is technically feasible, it is seen as very difficult.

Furthermore, in some chemical subindustries, there is a lot of old-fashioned and outdated machinery as well as processes that need replacement to be able to transform. Installations remain in service for a long time, so the risks and impacts resulting from replacement and related processes are high.

Although positive exceptions certainly exist, investors generally view the preparedness of the chemical sector to transform as inadequate. There are quite a few chemical companies (with not very diverse boards) that are reluctant to change.

Moreover, the sector is not seen as very proactive in connecting with stakeholders or putting effort into making stakeholders understand its complex challenges. When engaging with companies investors notice that they hide behind policies or consciously create a smokescreen of technical complexities to avoid an honest, constructive discussion.

In general, many natural capital considerations are seen as difficult to discuss with many chemical companies, as they are not seen as sufficiently important by those companies. In some instances investors use climate change as a means of opening the door to other relevant environmental subjects.

4. HOW RESPONSIBLE INVESTORS WORK WITH THE CHEMICAL SECTOR

Like the chemical sector, the financial sector, together with the responsible investment subsector, is extremely diverse and complex. When discussing investors' strategies, including in responsible investment, it is important to understand that those strategies can have different aims. While some strategies are aimed at improvement to reduce specific risks or improve an investor's competitive position, other strategies are specifically aimed at having a positive impact on a specified sustainability target. While those aims are often interlinked, responsible investors' activities can support both goals simultaneously, but do not necessarily have to. Aiming for impact does provide investors with a competitive advantage, as it improves investor reputation. However, the reverse does not necessarily apply. Not all responsible investor strategies lead to a transformation push or a positive impact on the real economy.

This chapter provides an overview of the main strategies that responsible investors themselves are implementing in relation to the chemical industry and discusses whether those strategies provide clear incentives for the chemical industry to transform in line with investors' views around natural capital and the chemical sector.

In general two means of influence on companies can be distinguished:

- 1) Investment decisions
- 2) Active ownership

Investments

Responsible investors include environmental, social and governance (ESG) factors in their decisions about what to invest in and the role they play as owners and creditors, based on their investment beliefs as well as their sustainability ambitions. This can lead to divestments of companies, activities or sectors based on ethical or sustainable principles, but also to more subtle differences between investments within a sector based on ESG considerations.

Related responsible investment strategies include ESG integration, exclusion-inclusion strategies and investing in opportunities.

ESG integration

Within ESG integration strategies, investors do distinguish between companies on the basis of a variety of financial and ESG factors to avoid risk or look for investment opportunities. ESG integration means the explicit consideration of ESG factors in investment decisions and portfolio construction. ESG integration is not a matter of investing or not investing, but rather a matter of how to divide the invested assets between the companies already invested in.

In each sector a selection is made of ESG factors that are most material and hence financially relevant. Natural capital dependencies in the chemical sector therefore only become relevant when the related risks influence individual companies' investment cases.

For the chemical industry ESG factors such as product quality and safety, innovation strategy (particularly in the case of fine chemicals), climate change preparedness, fuel prices and water footprint are named as factors which, combined with more traditional financial and economic metrics, lead to an aggregated view of each of the individual companies. It is expected that over time natural capital components will gain increasing priority among the factors used to assess chemical companies.

As a forward-looking approach within financial analyses cannot look further ahead than four to six years, long-term natural capital risk investors do not yet have a significant effect on present-day investment decisions within an ESG integration strategy, although there are some examples where natural capital risks have materialised and are affecting present-day financial analyses.

ESG integration cannot be considered as a means of actively allocating capital to drive necessary transitions in the chemical sector. It is merely a tool for the investor, who can use it to protect his or her assets and try to gain a competitive advantage.

Exclusion / inclusion in mainstream and sustainable funds

Portfolios are constructed on the basis of the funds' sustainability ambitions, but also investors' beliefs and the types of asset classes they invest in. Portfolio construction can focus on maximum diversification or be based specifically on certain investment beliefs and sustainability views.

Many mainstream responsible investment funds include all companies except those that systematically violate international treaties, like the UN Global Compact. In addition to mainstream responsible investment funds there are all types of competing sustainable and responsible investment funds, sometimes even within one asset manager, that pursue various levels of sustainability ambitions. What is regarded as sustainably managed can differ from one investor to another, as well as from one fund to another. This has to do with investor views, but also with different internal and external screening methodologies leading to different sustainability scores for one and the same company. Some funds have additional sustainability policies that reflect their specific focus on certain themes or sectors. A cautious development that is taking place is divestment (to some extent) from high-risk activities or products that conflict with investors' sustainability ambitions. Examples are the recent divestment from tobacco¹⁵ and fossil fuels¹⁶.

There are also best-in-class funds that focus on the most sustainably managed companies within each sector. Here ESG scores are used to distinguish between the leaders and followers within each sector. The real-world impact that comes with certain business models is often not included in those assessments. This means that chemical companies can be included in these types of sustainable funds based on their strong ESG policies and management systems, without actually having to deal with their negative real-world impacts. By contrast, other investors have a very strict idea of how a sustainable future will or should look and only include in their portfolio or funds the companies and sectors that are in line with their vision of a sustainable world.

Investing in opportunities

Investors have always wanted to invest in opportunities. What is new, however, is that responsible investors have a clear preference for investing in opportunities that lead to solutions for societal challenges. Examples are SDG equity or credit funds, but green bonds and impact investments also fall within this category.

There is a very strong desire amongst responsible investors to support companies that do well from an impact perspective or that provide solutions to societal problems. The SDGs have added to this development, as they have created a common language for a variety of important investor stakeholders, such as clients but also civil society and governments.

This is a development within responsible investment markets that could potentially have a beneficial effect on chemical companies that want to do well. Within stock markets, investors are increasingly taking proportionally higher stakes in companies that are seen as doing well. This potentially provides those companies with an investor base that is loyal, long-term and stakeholder-focused. Being included in sustainable or positive impact funds provides chemical companies with lots of positive exposure, including in the media. Providers of debt, or loans, can also be an important ally for companies that want to innovate or update outdated machinery to reduce their dependence or improve their impact on natural capital.

It is expected that in due course more collective commitments to societal impact targets, like the Dutch financial sector commitment on climate change, as well as achieving more common ground on how to define, monitor, measure and report progress around various natural capital themes, could accelerate investment in activities, projects and companies that are driving necessary transitions. The financial sector can therefore be an important ally for the chemical industry.

¹⁵ See for instance <https://www.assetnews.com/asset-owners/dutch-investors-snuff-out-tobacco>

¹⁶ See for instance <https://www.ft.com/content/4dec2ceo-dofc-11e9-99a4-b5ded7a7fe3f>

Active ownership

Most active ownership activities are focused on climate change

Next to investment decisions, the other main strategy used by investors to reduce their risks and improve their impact is active ownership, or voting and engagement. Bond and equity investors often see this strategy as their main means of influence.

Unlike divestment strategies, active ownership embraces the power of shareholder rights to gain voice and influence, either individually or collaboratively with the companies in which they are invested. Shareholder activism is on the rise in financial markets, as active managers who intend to hold a stock for a long time and passive managers who hold a stock forever have an incentive to see companies addressing the (material) ESG issues that will improve their financial performance. Within those active ownership activities investors are increasingly joining forces to boost the effectiveness and efficiency of efforts¹⁷.

There is an increasing number of natural capital-related shareholder resolutions at companies' AGMs, including in the chemical sector. Responsible investors are often supportive of those resolutions. Voting on management and shareholder resolutions gives a clear signal to the management of a company. It can put important issues on the agenda, drive corporate decisions in a more sustainable direction, hold the company to account, monitor progress made and enhance transparency.

As well as using their voting rights, shareholders can also ask questions at a company's AGM or maintain constructive dialogues during the year. Maintaining a constructive dialogue with investee companies is the main instrument responsible investors have to share their perspective and expectations on company performance.

Those conversations are often seen as a two-way street by investors, as this kind of in-depth conversation provides them with a major source of input that helps them to achieve a higher level of understanding around company and sector specifics. At the same time, while responsible investors assess and talk to many companies in various sectors, they have extensive knowledge of stakeholders' sustainability expectations as well as best practices that are implemented by various peers. This can be valuable information for chemical companies.

Most engagements with the chemical industry are focused either on climate change or product safety. The most intense and structured engagement that is currently taking place with several chemical companies is the Climate Action 100+ initiative. This is a collaborative investor initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.¹⁸ The companies include 100 'systemically important emitters', accounting for two-thirds of annual global industrial emissions, alongside more than 60 others with a significant opportunity to drive the clean energy transition. Various chemical companies such as Bayer and BASF are part of that list. This is the only existing engagement with chemical companies mentioned by respondents that is implemented in such a concentrated and structured way.

Another subject that has received plenty of attention in the investor community is the production, use and disposal of plastic. Most investor engagement activities are currently geared towards plastic users, like the packaging industry. However, there is increasing awareness amongst investors that solutions cannot be assessed in isolation and must be considered in the context of the whole plastics value chain. One of the drivers is the PRI's Plastic Investor Working Group, which consists of 29 global investors representing US\$5.9 trillion in assets. The group has focused on building an understanding of plastics from a global and holistic perspective, including how plastics fit in with the broader circular economy concept.¹⁹

Furthermore, there are several other engagement initiatives focused on the chemical industry that are initiated by individual or smaller groups of investors. Those focus predominantly on energy efficiency, renewable energy and product safety. One respondent mentions that the chemical sector is currently one of the sectors that is being considered for an engagement on biodiversity impacts, which is currently being set up.

¹⁷ Many collaborative engagements have been set up with the help of CDP, CERES, PRI, FAIRR and ICCR, amongst others.

¹⁸ For more information on this initiative see <http://www.climateaction100.org/>

¹⁹ For more information on this initiative see <https://www.unpri.org/esg-issues/environmental-issues/plastics>

In the Netherlands, investors engage annually with Dutch publicly traded chemical companies as part of a collaboration through Eumedion. In 2020 one of the two focus themes for those dialogues will be the impact of climate change and the Paris Agreement. VBDO, representing its members, engages with a small subset of chemical companies in the Netherlands, but does engage proactively with those companies around natural capital considerations.

Climate change therefore dominates the active ownership agenda with regard to chemical companies. That is not surprising, as it is the topic that also dominates most investors' agendas. The main reason given is that this topic is currently seen as the most urgent and material for the chemical sector.

Chemical sector not (yet) at the top of engaged industries

Currently, when reflecting on investor pressure on the chemical industry, various respondents mention that the chemical sector is not yet one of the principal industries in terms of investor engagement. That is remarkable as investors believe the role of the chemical industry to be crucial within efforts to green the economy. A comparison made by one of the interviewees is between Shell and BASF. While Shell receives lots of pressure from investors and other stakeholders to change, investment pressure on BASF is much more moderate, even though both companies have comparable levels of sustainability challenges.

This is not believed to be a conscious decision by investors not wanting to engage with chemical companies, but merely a result of investors with limited capacity and diversified portfolios having to prioritise. Negative screening and engagement are predominantly not the result of individual investor agenda setting; investor pressure is often focused either on companies involved in severe controversies, where investors are obligated to act and where they see most financial risks, or on companies that are most exposed to reputational risks as a result of media and civil society attention. Mostly the chemical downstream suppliers like mining companies as well as upstream customers like retail, oil and gas, pharma and food companies appear on many of the lists and thus receive more pressing and unsolicited investor attention.

In addition, when initiating thematic engagements, it is most often other sectors that are considered first by collaborative investor, network or research groups. The somewhat hidden, diverse, complex and unknown character of the chemical industry is believed to add to that.

5. CONCLUSIONS

Natural capital is part of a vision but not part of day-to-day reality

Awareness of the importance of natural capital has risen in the past ten years. All respondents agree that natural capital is becoming increasingly important because of megatrends like climate change, world population growth, resource scarcity and associated legislation and standards. Long-term investors and companies are responding to this. Natural capital is part of long-term investors' visions of the new economy, including long-term value creation. Here, natural capital is seen as one of the six capitals that make up a company's value.

The vision has not become part of investors day-to-day reality, however. Most of the time it is not natural capital as a whole, but specific, isolated environmental, social and governance (ESG) themes that attract investors' attention. That is not to say that respondents do not see or understand the interconnections between themes and the importance of a more holistic view. It is just that a holistic view is impractical.

Natural capital themes mentioned as relevant by respondents are climate, water scarcity, deforestation, energy efficiency, circular resource use, biodiversity, air emissions and soil recovery. Climate change currently plays a crucial role within most responsible investment strategies and is without doubt the most advanced in terms of tools, methods and standardised metrics available.

There is less awareness and consensus about *water, deforestation, climate adaptation and biodiversity risks and impacts*, and about ways to incorporate them into quantitative corporate assessments. An area where that is most apparent is within corporate reporting. The main reason is considered to be a lack of common ground in relation to relevant tools, metrics and standards, as well as significant data gaps.

To fill the gaps and better understand and address those risks and impacts, responsible investors are involved in a variety of internal and external (research) projects, as well as peer and multi-stakeholder collaborations around one or two natural capital themes. More advanced responsible investors are also taking various measures to reduce related risks and gain competitive advantage by adapting to changing market conditions. This includes assessing, measuring and monitoring their related risks, as well as adapting their investment decision-making process, in order to forecast and respond rapidly to materialised natural capital risks. Stewardship is used to increase investors' and companies' understanding of specific risks and opportunities and as a means to discuss investor expectations around specific natural capital themes.

Chemical sector is not yet the game changer it could be

Respondents see the chemical sector as a link to both sustainability-related risks and opportunities within society. Without the chemical sector, many other sectors like oil and gas, agrifood, automotive, construction and textiles cannot transform themselves. The main natural capital themes the sector should focus on are the industry's high carbon footprint, including its high dependency on fossil fuels and materials. The sector impact on air, soil and water quality as well as health and safety issues as a result of harmful substances are seen as the most important impacts on natural capital that need to be dealt with. Innovation, replacing outdated installations and processes, as well as adapting to a more circular approach are seen as the main strategies to deal with natural capital challenges.

Current responsible investment activities do provide ample carrots....

Innovative chemical companies can take advantage of responsible investment trends in various stages of transformation. There is a very strong desire amongst responsible investors to support companies that do well from an impact perspective or that provide solutions to societal problems. The SDGs have added to this development, as they have created a common language for a variety of important investor stakeholders, such as customers but also civil society and governments.

Proactive, sustainable chemical companies can benefit from this development by attracting an investor base that is loyal, long-term and stakeholder-focused. Furthermore, they can be included in sustainable or positive impact funds that provide chemical companies with lots of positive exposure, including in the media.

Chemical companies that need investment to replace outdated installations and processes or climate-proof their assets can find an ally in investors who want to invest in green debt products.

Furthermore, as responsible investors assess and talk to many companies in various sectors, they have extensive knowledge of stakeholders' sustainability expectations as well as best practices that are implemented by various peers. Responsible investors can therefore be an important source of information and advice for chemical companies that want to improve policies and practices.

But not so many sticks for sustainable development in the chemical sector

Sticks, in the form of divestments, are not commonly used within mainstream responsible investment, although a cautious development is taking place involving divestment from high-risk activities or products that conflict with investors' sustainability ambitions.

There is not yet a clear, strong and coherent push from institutional equity and bond markets for chemical companies to transform. There is still an abundance of capital available for chemical companies on those markets. Proportionally, the chemical industry does not receive much more or much less investment than other sectors. And nor do Dutch chemical companies. Within sustainable investment funds that do aim to provide companies with incentives through their investment decisions, a lack of consensus on what constitutes corporate sustainability sends mixed signals to the chemical sector on what is expected of them.

Current sticks take the form of (collective) investor pressure by means of active ownership, which most responsible investors see as their main means of influence.

Current engagements with the chemical industry are predominantly focused around impact on and preparation for climate change. The most intense and structured engagement that is currently taking place with several chemical companies is the Climate Action 100+ initiative, a collaborative investor initiative to ensure the world's largest corporate greenhouse gas emitters take the necessary action on climate change. Other engagements focused on the chemical industry are initiated by individual or smaller groups of investors focusing on energy efficiency, plastic, renewable energy and climate change resilience. Product safety is named as the other main subject to discuss within engagement meetings.

A remarkable point is that despite the essential role responsible investors see for the chemical industry in sustainable development of society, current engagement activities are modest compared to sectors with comparable sustainability challenges. This is not so much a conscious choice as a result of responsible investors having limited capacity and diversified portfolios. Therefore they need to prioritise. Negative screening and engagement are predominantly not the result of individual investor agenda setting. The investor pressure often focuses on companies that are involved in severe controversies (obligation to act) or on companies that are most

exposed to reputational risks as a result of media and civil society attention. Here the mining sector, retail, oil and gas, pharma and food companies require more urgent attention. Hence investors' attention is forcibly shifted to these and away from the chemical industry.

Harmonisation and focus on real-world impact will increase pressure to transform.

Responsible investment markets continue to evolve rapidly to keep pace with megatrends like climate change and incorporation of the SDGs. All kind of different players with different clients, sustainable ambition levels, asset classes and business models try to keep up in their own way. We are currently in an experimental, messy, chaotic phase in which the quantity and diversity of relevant initiatives around natural capital, but also other capitals, lead to confusion, inefficiency and frustration among companies and investors alike.

Looking forward, various respondents expect that next phase to be one in which there will be more harmonisation and standardisation of initiatives, terminology, goals and metrics used in assessing and reporting on progress by companies and investors. This change is expected to be driven by increased collaboration between investor (networks) as well as harmonisation driven by systematic players like the European Union and the Network of Greening the Financial System.

Harmonisation and normalisation are expected to lead to increased and more coherent pressure on companies, policies and investors to transform. We have seen the same with climate change considerations that within a decade have transformed from a niche topic to mainstream practice.

Furthermore, as real-world impact rises slowly but surely on responsible investors' agendas, it is plausible that active owners and asset managers will reassess some of their current fundamental choices, processes and strategies to eliminate some of the existing restrictions in their investment decision-making process.

The amount and intensity of active ownership activities focused on the chemical industry is expected to increase when more of the industry's stakeholders start to understand the essential role the chemical sector plays in greening the economy. This will not necessary lead to more direct engagements with the chemical industry. However, when sustainability challenges are considered in the context of value chains, current chemical industry customers from a variety of sectors will be asked to assess, monitor and deal with the impacts of their supply chains. This approach is already being taken in current investor engagements around deforestation, palm oil, water and recently also plastics. As a consequence the pressure from customers to transform will increase.

Furthermore, when tools and standards to assess biodiversity impact have been developed more broadly within the financial sector, it will increasingly be the focus of active ownership activities. The focus on chemical sectors and subsectors will then naturally increase.

6. RECOMMENDATIONS

The following recommendations for chemical companies and investors are made on the basis of research, observations and analysis.

For chemical companies

The main recommendation for chemical companies is not to wait but to take the carrot (i.e. risk reduction and competitive advantages) instead of the stick. If they wait for the turning point of increased regulation and capital constraints, they will be too late, as they will not have anticipated sufficiently. Furthermore, the chemical industry is seen as very technical and therefore difficult to understand. In addition, parts of the sector are currently seen as unresponsive or not open to an honest discussion of natural capital considerations. The chemical industry could therefore gain a lot from being more transparent and taking a more proactive approach in assessing and disclosing their risks and impacts relating to natural capital.

To accelerate change and use capacity effectively within the chemical sectors and subsectors, chemical companies are advised to collaborate with their peers. Joint challenges require joint solutions. VNCI and the international chemical sector organisation could take the lead in coordinating members' work around two or three natural capital themes for each subsector, as ICMM is doing for the mining sector²⁰. Relevant themes mentioned by respondents are reducing the sector's carbon footprint, climate change resilience, reducing negative biodiversity impacts and taking a circular approach. A publicly available, thorough (external) assessment of their risks and impacts relating to natural capital could provide a strong basis for dialogues with the company's stakeholders. In dialogues with chemical companies' shareholders and bondholders it is recommended to provide a clear business strategy for the coming four to six years that provides a well-founded picture of how a company is going to create value for its various stakeholders in the medium to long term, while addressing their physical, operational, legal and financial risks.

By stepping out of the shadow into the spotlight, chemical companies can let transparency work in their favour. Companies that approach their challenges and opportunities proactively will be able to own, create and tell their story on their own terms and, if they are fast enough, have a competitive advantage over their peers. For chemical companies that want to transform and innovate, it is recommended to see responsible investors as potential allies. Proactive, sustainable chemical companies can attract an investor base that is loyal, long-term and stakeholder-focused. Chemical companies that need investment to replace outdated installations and processes or climate-proof their assets can find an ally in investors that want to invest in green debt products. Furthermore, responsible investors can be an important source of information and advice for chemical companies that want to improve policies and practices.

For investors

The main recommendation for investors is to increase their understanding of the role of the chemical industry within natural capital challenges and opportunities. Sustainability risk analyses within the chemical sector value chains, like those already being conducted for various commodity chains²¹, would be very relevant to increase this understanding, as would analyses focusing specifically on real-world impacts.

²⁰ For more information on ICMM's work, see <https://www.icmm.com/en-gb/about-us>

²¹ See for example research conducted by Chain Reaction Research at <https://chainreactionresearch.com/>

Regular dialogues with and site visits to chemical companies would increase the shared understanding of specific opportunities or challenges. They would also provide a stronger incentive for chemical companies to ensure that natural capital challenges are indeed seen as relevant by the companies' shareholders.

Based on that increased understanding, investors are advised to adapt their active ownership activities geared towards the chemical industry directly as well as through chemical industry clients. When natural capital challenges and opportunities are increasingly considered in the context of value chains, current chemical industry clients from a variety of sectors will be asked by their shareholders and bondholders to assess, monitor and deal with the impacts of their supply chains, increasing the pressure on chemical companies to transform.

Furthermore, one of the conclusions of this research is that the influence potential of investment decisions within institutional bond and equity markets is barely used. Therefore, a more general recommendation for responsible equity and bond investors who want to contribute to society is to seriously assess how they can change their investment decision process to actually achieve that. The influence potential of investments decisions will never be realised without sustainability ambitions starting to affect the most fundamental investor decisions.

Harmonisation and normalisation of standards, tools and terminology is a good start, but asset owners would also benefit from considering the implications of their ESG policies and embedding impact goals within their SAA frameworks²², such that their goals and objectives are consistently and effectively implemented across their entire investment decision-making process, including capital allocation²³.

²² Asset allocation is the process of deciding where to put money to work in the market. In strategic asset allocation, the target allocations depend on several factors, such as the investor's risk tolerance, time horizon and investment objectives, and may change over time as these parameters change. For more information see <https://www.investopedia.com/terms/s/strategicassetallocation.asp>

²³ For more information see the PRI discussion paper that explores potential ways in which environmental, social and governance (ESG), or sustainability issues in general, can be embedded into strategic asset allocation (SAA) decision-making processes at <https://www.unpri.org/asset-owners/strategic-asset-allocation>

Recommended follow-up

- Additional analyses of natural capital risks and impacts within chemical sector value chains;
- Additional analyses of green investment possibilities for the chemical sector to finance innovation and transformation;
- Engagement day(s) with chemical industries, representatives of VNCI and Dutch responsible investors to discuss how to reduce the carbon and biodiversity footprint and make use of natural capital opportunities;
- Specific focused site visits to increase openness and understanding between chemical industries and investors.