NN Investment Partners Responsible Investment Viewpoint policy

December 2019 update

NN investment partners

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A transparent view on the environmental, social and governance (ESG) criteria applied to our sustainable and impact funds[1]

- Our Responsible Investment approach is a reflection of our investment beliefs, the organisation's values, relevant laws and internationally recognised standards such as the UN Global Compact and the OECD Guidelines for Multinational Enterprises.
- As a provider of socially responsible investment strategies, NN Investment Partners (NN IP) communicates its view on potentially unsustainable practices and topics that are the subject of societal debate or controversy, in the way these apply to the firm's sustainable and impact strategies.
- We recognise that these topics and practices can change over time.
- Our general approach and vision on Responsible Investment (RI) and our criteria are described in the NN IP Responsible Investing Framework. Combined with our active engagement activities, excluded business activities and controversial conduct overview, this results in the firm-wide NN Group Exclusion List, which is applicable to all NN IP strategies and funds. Both documents can be found on our **RI policies page**.
- Restrictions relate to controversial conduct of corporates and countries as well as to involvement in specific products or services, reflecting restrictions on controversial weapons and arms trade, oil sands, tobacco production and thermal coal mining.
- The following business activities are additionally restricted in NN IP's Sustainable and Impact strategies: adult entertainment, Arctic drilling, fur & specialty leather, gambling, shale oil & gas, nuclear energy and weapons. The applicable thresholds are compliant with the Belgian Febelfin Quality Standard (FQS) requirements.
- We share our view on several other material issues that might hinder the ability to reach sustainability objectives aligned with our sustainable and impact investments, as transparency is key to responsible investing.

[1]The viewpoint policy document demonstrates adherence to Belgian Febelfin Quality Standard (FQS) for sustainable and socially responsible financial products. For NN IP the Sustainable and Impact strategies are in scope, as well as the Emerging Markets Enhanced Index Sustainable Equity fund of the Sustainable Enhanced Index fund range.

NN IP's norms-based Responsible Investment criteria - Restrictions on controversial conduct and business activities

NN IP's Responsible Investment criteria are a reflection of our investment beliefs, the organisation's values, relevant laws, and internationally recognised standards such as the United Nations Global Compact and the OECD Guidelines for Multinational Enterprises (OECD Guidelines), based on which minimum requirements have been developed that must be adhered to in the investment process. The requirements fall into two main categories: controversial conduct and involvement in controversial activities.

NN IP Responsible Investment policy
The restrictions and criteria within the NN IP Responsible Investment Viewpoint policy are aligned with NN IP's Responsible Investment policy and related framework, in which the firmwide criteria and applicable restrictions are described. The policy and framework outlines the systematic incorporation of ESG risks and subsequent restrictions for all the investment strategies of NN IP. Both the policy and framework can be found on our **RI policies page**.

The additional restrictions mentioned in this Responsible Investment Viewpoint policy are relevant for all our sustainable and impact funds.

Engagement-led divestment approach
If there are strong indications that an issuer may be in violation of any of the minimum requirements, a decision needs to be taken on whether we consider this a violation of our criteria. Examples of such indications include research from external ESG research or engagement provider(s), inputs from our own (investment) staff or information from nongovernmental organisations or media sources. If we assess that a company is severely and systematically violating these standards, we will begin an engagement process in order for the company to remain eligible for investment. If after a three-year period the engagement process fails to lead to the desired changes, NN IP will consider the company ineligible for investment and will remove the company from its investment universe.

Controversial Conduct

United Nations Global Compact and OECD Guidelines for Multinational Enterprises

NN IP expects the companies it invests in to act in accordance with relevant laws and internationally recognised standards such as the UN-backed Global Compact principles and OECD Guidelines for Multinational Enterprises. Based on these internationally accepted standards and underlying principles, adherence is expected in the areas of proper governance, respecting human rights and labour rights, protecting the environment and prevention of bribery and corruption.
Restrictions that are applied:

- **Corporates**: Issuers that severely and systematically violate the UNGC principles and/or the OECD Guidelines [2]
- **Countries**: Sovereign issuers involved in severe and systematic violations of Human Rights, against which arms embargoes have been issued by the UN Security Council [3]

Controversial conduct restriction application for sustainable and impact funds
For our sustainable and impact fund range this restriction is applied by excluding the highest categories of controversy for companies and issuers via Sustainalytics' controversy level research. Issuers and companies with a level 5 controversy score (highest level of controversy) are excluded from the investment universe and investments in issuers and companies with a level 4 controversy score are discussed in the Controversy & Engagement Council.[4]

Controversial Activities

The section below sets out our norms-based RI restriction criteria in more detail, reflecting both the firm-wide restrictions anchored in the NN IP RI Framework and the additional restrictions for NN IP's sustainable and impact strategies:

Controversial Weapons

Development, production, maintenance or trade of controversial weapons

NN IP considers certain weapons to be controversial due to their disproportionate and indiscriminate impact on the civilian population. This is the case for anti-personnel landmines, cluster munitions, biological weapons, chemical weapons, depleted uranium ammunitions, and white phosphorus weapons.

We restrict on a firm-wide basis companies that are involved in activities such as production, research and development, maintenance, system integration and testing of products or services that are considered dedicated and essential for the lethal use of these type of weapons. In defining these weapons, we follow widely accepted international conventions or, where those are not available, we have developed our own criteria applying a precautionary principle.

Separate criteria have been developed for nuclear weapons in addition to the criteria above, since they have a different character from other weapon types. The ownership, production, proliferation and use of nuclear weapons are strictly regulated and monitored via the Non-Proliferation Treaty (NPT) of 1968, and if necessary sanctioned by the international community. NN IP restricts on a firm-wide basis companies that are involved in

[2] Analysis based upon Controversy Research from Sustainalytics, which reflects the severity of the violation
[3] Analysis based upon Sustainalytics' Country Screening
[4] For controversies, an exception can be made if it is approved by NN IP's ESG Committee, based upon input from NN IP's Controversy & Engagement Council

nuclear weapon activities and that: (i) are domiciled in countries that are not a signatory to the NPT, or (ii) contribute to nuclear weapons programs of non-NATO member states.

NN IP considers the trade of arms to certain countries or non-state actors as controversial, due to the high risk that these arms will be used to commit severe human rights violations or prolong conflict.

We restrict on a firm-wide basis companies that demonstrably engage in activities in making weapons, weapon systems, or related material or services available to (i) countries that are subject to a UN or EU arms embargo that is targeting the central government or (ii) non-state actors sanctioned by the UN or EU. Not in scope are companies that have such activities in relation to humanitarian missions or to (peacekeeping) military missions that have been commissioned by the international community.

Controversial Weapon restriction application for sustainable and impact funds
For our sustainable and impact fund range this restriction is applied via the Controversial Weapon Radar research, as well as Arms Trade research and Product Involvement screening of the Sustainalytics platform. In addition, we comply with the Belgian law banning any financing of companies involved in anti-personnel mines, submunition or depleted uranium via ISS Ethix screening.

We have a zero-tolerance policy on controversial weapon involvement. For companies identified as involved as described above, the threshold is currently set at 0% of revenues for all of our funds.

Weapons

In addition to the restrictions on controversial weapons and arms trade and the applied threshold for our sustainable and impact fund range, involvement in small arms and military contracting is restricted for sustainable and impact strategies because of their link with violence, crime and corruption.

Weapon restriction application for sustainable and impact funds
For our sustainable and impact fund range the weapon restriction is applied via the Product Involvement screening of the Sustainalytics platform. The applied revenue threshold in small arms and military contracting involvement is 5% of revenues from production of weapons or the supply of key and dedicated components.

Tobacco production

NN IP has concerns regarding public health as well as the economic burden that smoking places on society. We therefore restrict companies that are involved in the production of tobacco products. Producers are restricted on a firm-wide basis when tobacco products account for 50% or more of their revenues.

Tobacco restriction application for sustainable and impact funds
For our sustainable and impact fund range this restriction is applied via the Product Involvement screening of the Sustainalytics platform. Producers are currently restricted when tobacco products account for 5% or more of their revenues.

Coal mining and electricity generation

Thermal coal is predominantly used for power and heat generation. Of all fossil fuel energy sources, thermal coal generates the highest volume of greenhouse gas emissions when combusted. NN IP recognises that meeting the Paris Agreement ambition will require the world to replace fossil fuels with low-carbon energy sources. We therefore on a firm-wide basis restrict companies whose business models are dependent on the mining of thermal coal. This is defined as deriving more than 30% of their revenues from mining thermal coal.[5]

The statement on Coal describes all the steps that NN and NN IP take to address the risks and environmental concerns associated with coal. In addition to firm-wide exclusionary criteria related to thermal coal mining, an enhanced engagement strategy will be developed to intensify dialogue with utility companies that use coal as a source for electricity generation. A focus list is being developed, and clear engagement goals will be set. An important aspect will be to achieve clarity from companies around their mid- to long-term transition plans that reduce their dependence on thermal coal in favour of lower-carbon forms of energy. We analyse carbon intensity data to monitor adherence to the energy transition.[6]

We believe that the described steps in our statement on Coal will further strengthen our efforts to support the transition to a low-carbon economy. The coal statement can be found via this link: https://www.nn-group.com/Media/Article/NN-Group-establishes-coal-policy-to-accelerate-the-transition-to-a-low-carbon-economy-.htm

Coal extraction and electricity generation restriction application for sustainable and impact funds
For our sustainable and impact fund range, this restriction is applied via the Product Involvement screening of the Sustainalytics platform. The applied revenue threshold is 5% of revenues from coal extraction.

[5] Metallurgical coal or coking coal (a key raw material in steel production) is not part of this criteria.
[6] Analysis based on carbon intensity data thresholds as required in Belgian Febelfin Quality Standard – paragraph 2.2.5.6.1. Our analysis is based upon company reports and in-house analyst assessments and verification of these data.
[7] Adherence to a 2-degree scenario is analysed based on CO_2 intensity as described in the Febelfin Quality Standard requirements on page 26 and based upon the International Energy Agency's scenario, published in 2017. Our analysis is based upon company reports combined with in-house analyst assessments and verification of these data.

With regard to electricity generation, the sustainable and impact fund range will not finance electricity utilities with a carbon intensity that is not aligned with a 2-degree scenario.[7] For the sustainable and impact strategies, we include in our due diligence process the decommissioning of old power generation assets and additional investment in renewables. The sustainable and impact strategies will not finance electricity utilities constructing additional coal-based power production installations.

Conventional and unconventional oil and gas

The oil and gas sector is commonly divided into conventional and unconventional production methods. Historically, exploration and production of oil and gas has focused on sources that were relatively easy to access. This refers to conventional oil and gas: hydrocarbons that flow near the surface and can be obtained through traditional well extraction. Conventional oil and gas is liquid at atmospheric temperature and pressure conditions, and therefore flows without additional stimulation. Generally, conventional oil and gas production tends to be less expensive than unconventional methods and requires little in the way of processing before being developed into petroleum products. Consequently, according to peak oil theory, a large portion of our global conventional oil and gas supplies is already depleted, limiting the potential for future conventional extraction.[8]

To meet the increasing demand for energy, more expensive and technologically complex forms of unconventional exploitation can be used. These unconventional resources include oil sands, shale oil and gas, and Arctic drilling, which require hydraulic fracturing – or fracking – to extract. Not only do these hydrocarbons require special extraction methods, but they will also need additional processing and refining to be developed into traditional petroleum products. Unconventional oil and gas production is commonly seen as more costly, less efficient and likely to cause more environmental and societal damage compared with conventional methods. This is because the sources of unconventional oil and gas are heavier and require more complex procedures to extract and process them into usable products.

Unconventional oil & gas

NN IP recognises that unconventional oil and gas production poses additional environmental and social risks compared with conventional activities, and has therefore implemented measures accordingly. In addition to outlining these measures, we clarify below the various types of unconventional oil and gas production, and describe the corresponding risks and our stance and restriction criteria.

ESG risks in oil sands

Oil sands, also known as tar sands or crude bitumen, is a form of heavy oil found in sand and rock. Oil sands can be mined and processed to extract the oil-rich bitumen, which is then refined into oil. Canadian oil sands resources alone are estimated to be in excess of 2 trillion barrels, which is almost equivalent to the amount of recoverable conventional oil in the entire world. Resources that are currently economically and technically recoverable are estimated at 170 billion barrels, which places Canada as the country with the second-most recoverable oil reserves globally, behind Saudi Arabia. Further significant reserves can also be found in countries such as Venezuela, Russia and in the Middle East.

NN IP recognises that oil sands development poses serious environmental and social challenges. This is because the greenhouse gas emissions associated with producing fuels from oil sands are higher than those for conventional crude oil. Furthermore, the production of oil sands and its transport via pipelines generates significant human rights concerns and is a serious contributor to local environmental pollution. NN IP has assessed the engagement potential for companies in the sector and has concluded that engagement is not expected to achieve the desired results.

We therefore on a firm-wide basis restrict companies whose business models are dependent on the extraction of oil sands. This is defined as a share of oil sands higher than 30% of the total oil and gas average production in barrels of oil equivalent per day. Companies with less than 30% share of oil sands will be monitored and evaluated over a period of two years.

In addition, we also restrict on a firm-wide basis pipeline operators when involved in oil sands transportation projects that are in dispute, and when engagement is not expected to achieve the desired results.

These restrictions significantly contribute to de-risking our portfolios in terms of our carbon footprint.

ESG risks in shale oil and shale gas

Shale oil, also known as tight oil, and shale gas are types of unconventional oil and gas which are trapped in shale formations that must be hydraulically fractured to extract. Shale oil may refer to crude oil – found within shale formations – or to oil that is extracted from oil shale – a type of rock that has low permeability and which has solids that can be liquefied. Producing shale oil and gas is traditionally more expensive than conventional oil and gas, and has a more destructive impact on the environment. Water stress, the risk of land contamination, pollution, leakage of greenhouse gas emissions, safety and community impacts are among the environmental and social risks that are particularly associated with shale oil production. Simultaneously, shale gas exploration requires a large number of wells, leading to atmospheric pollution, air pollution, methane movement, a high level of noise and water contamination.[9]

As NN IP's investments may be affected by these risks, we integrate them into investment decision-making processes and active ownership practices.

[8] https://www.bakerinstitute.org/media/files/Research/15260210/EF-pub-WorldOilReserves-101911.pdf
[9] https://www.sciencedirect.com/science/article/pii/B9780128095737000081?dgcid=scitechconnect_EES_starlink

ESG risks in Arctic drilling
The Arctic Ocean is one of the most pristine and fragile places left on the planet. Native communities and wildlife that live in the Arctic depend on its unique ecosystem to survive. Moreover, the vast size, remote location and extreme weather conditions make drilling in the Arctic Ocean extremely risky. First, the process of installing drilling wells in the Arctic requires large amounts of water: the Bureau of Land Management estimates that between 8 million and 15 million gallons are consumed over about five months for drilling, development and construction of the ice roads.[10] Second, the risk of oil spills in the Arctic is substantial. The US Department of the Interior found that there is a 75% chance of a major oil spill if an oil company finds and produces oil in the Arctic. Once an oil spill has occurred, it is extremely difficult to clean up and defuse. Contact with spilled oil injures or kills marine wildlife and adversely affects the entire food system and ecosystem of the Arctic.[11] In addition to oil spills, conflicts on land rights, indigenous rights and water stress negatively impact native communities – more than 40 different ethnic groups live in the Arctic.[12] As a result, offshore drilling in the Arctic is exposed to various environmental and social risks.

As NN IP's investments may be affected by these risks, we integrate them into investment decision-making processes including ESG due diligence and active ownership practices.

Unconventional oil and gas restriction application for sustainable and impact funds
For our sustainable and impact fund range, restrictions on unconventional oil and gas are applied via the Product Involvement screening of the Sustainalytics platform. The applied revenue threshold for our sustainable and impact fund range is currently set at a maximum of 10% of revenues of combined exposure to all forms of unconventional oil (shale, oil sands and Arctic).

The sustainable and impact strategies will also not finance companies with expansion plans for unconventional oil & gas extraction.

Conventional oil and gas

As the world moves towards a sustainable economy, NN IP recognises various environmental, social and governance risks for conventional oil and gas companies. Below, we outline the most important ESG risks and how we manage them.

Environmental risks
Fossil fuels from conventional production will meet the world's rising energy demand over the short run. It is likely, however, that changing patterns of energy consumption and demand – also driven by upcoming climate regulations – will affect the long-term profitability of oil and gas companies. As major emitters of carbon emissions through their operations, services and usage of their products, these companies are particularly exposed to risks associated with the energy transition. Additionally, the physical damage that could result from global warming also poses risks. Global warming alters water cycles and exacerbates extreme weather events, which may hinder extraction methods and could disrupt our energy infrastructure. As the economic value of conventional oil and gas companies is partly determined by their fossil reserves, the energy transition poses a significant threat to the sector's overall value in terms of stranded assets. Stranded assets are generally defined as fossil fuel supplies that at some point can no longer earn an economic return as a result of a transition to a low-carbon economy.[13] 'Stranding' may be caused by regulatory factors (policy change), economic factors (carbon price or tax) or physical factors (natural disasters and weather events).

While the timeframe is debatable, it is highly probable that the rate of growth for oil is decelerating, and companies in the sector are exposed to associated risks if they do not adapt their business models. To adequately address these environmental risks, the sector must make changes in the short, medium and long term. NN IP has therefore developed engagement goals and voting guidance that we monitor and re-evaluate on a yearly basis, including:

- **Climate governance:** we expect companies to be transparent on how board members and management processes ensure adequate oversight of environmental risks in decision-making processes (may include climate-related key performance indicators, or KPIs);
- **Scenario analyses:** we encourage companies to outline strategies on future energy demand, impact of public policy measures and impact on new technologies for renewables;
- **Transparency and disclosure:** we challenge companies on integrating environmental and climate-related risks into their annual reporting, and expect them to report on – and develop targets for – their Scope 1, 2 and 3 emissions,[14] in line with the recommendations of the Task Force on Climate Related Disclosure (TCFD);
- **Public policymakers:** we support companies that actively engage with public policymakers as to how policy measures can support the accommodation of climate-related risks in their business models (may include carbon pricing, energy efficiency targets, trade associations and lobbying activities).

In line with this, NN IP recently voted in favour of a climate resolution requesting oil and gas major Royal Dutch Shell[15] to adopt carbon reduction targets in line with the Paris Agreement. Although only 5.5% of votes cast supported the resolution and it was rejected by the board, we believe it sent a strong signal to the company to take a more active role in leading the transi-

[10] https://www.greenpeace.org/usa/arctic/issues/oil-drilling/
[11] https://www.boem.gov/shell-chukchi/
[12] https://www.arcticcentre.org/EN/arcticregion/Arctic-Indigenous-Peoples
[13] https://www.carbontracker.org/terms/stranded-assets/
[14] Scope 1 emissions refer to the direct emissions from the company. Scope 2 emissions are indirect emissions stemming from the company's energy purchases. Scope 3 emissions are emissions from elsewhere in the value chain, including upstream and downstream operations.
[15] Company name mentioned for illustration purposes only.

tion to low-carbon energy sources. We were positive on Shell's December 2018 announcement that it would adopt short-term climate targets and link executive pay to its carbon ambitions. We are convinced that meeting the Paris Agreement is essential for safeguarding the long-term value of the investments we make on behalf of our clients and for achieving the United Nations Sustainable Development Goals. We will therefore remain focused on engaging with the oil and gas sector on this matter.

See our statement on the topic: https://www.nnip.com/en-INT/professional/insights/statement-investors-expectations-of-oil-and-gas-companies

Social risks
In addition to environmental risks, the sector is exposed to various human rights risks. Most issues are related to health and safety (work-related accidents, occupational health impacts and diseases) in companies' own operations and beyond (throughout the supply chain). Moreover, potential conflicts with local communities on land rights, indigenous rights and environmental impacts such as pollution and water stress, in addition to complicity in human rights violations, pose great social risks to the conventional oil and gas sector. Failing to mitigate these may result in high (operational) costs, regulatory actions and lawsuits resulting in reputational damage.

Consequently, NN IP has developed engagement goals and voting guidance that we monitor and re-evaluate annually, including:

- **Social governance:** we expect companies to commit to respecting local communities and human rights in the oil and gas supply chain, and to be transparent on how human rights risks, impacts and community relations are assessed (e.g., human rights due diligence), how respect for human rights is integrated across relevant internal functions and processes, and how performance is tracked;
- **Transparency and disclosure:** we challenge companies to improve the implementation of the UN Guiding Principles on Business and Human Rights and expect them to disclose human rights policies and processes;
- **Public policymakers:** we support companies that acknowledge their responsibility to respect human rights and local communities, and that actively engage with public policymakers on protecting against human rights violations by third parties, through appropriate policies, regulation and adjudication.

Governance risks
Corporate governance is mainly concerned with how a company is managed, including management and board quality, ownership and control, risk management and executive remuneration. In addition, it includes the alignment of the company with its stakeholders and society at large, covering business ethics, bribery, corruption and stakeholder relations. Effective corporate governance is pivotal for a company's reputation, competitiveness and profitability. Therefore, managing risks associated with corporate governance is essential in order to remain profitable and prevent reputational damage.

Considering the global nature and scale of the conventional oil and gas sector, its operations in emerging markets and the complexity of relationships with governments, suppliers and local communities, the sector is extremely vulnerable to bribery and corruption risks.[16] As a result, firms operating in this sector are among those that have incurred significant penalties for disallowed market practices. This poses significant financial risks to conventional oil and gas companies, which must be taken into account.

Engagement goals
Consequently, NN IP has developed engagement goals and voting guidance that we monitor and re-evaluate annually, including:

- **Anti-corruption compliance:** we strongly endorse companies that thoroughly address corruption risks in the oil and gas sector by developing anti-corruption compliance programs, including policies, implementation, training, audits and financial controls;
- **Corporate culture and behaviour:** we support companies in promoting a healthy culture in which high standards of ethical conduct prevail and sustainable and low-carbon initiatives are celebrated;
- **Board policies and responsibilities:** we expect boards to act in the company's best long-term interest, taking into account all relevant stakeholders within the oil and gas sector, to be transparent and to ensure there is adequate oversight;
- **Executive remuneration:** we challenge boards to align their executive remuneration with the long-term strategy of the company and link this to sustainabilityrelated KPIs (e.g., incorporate a link between the energy transition and long-term remuneration).

Conventional oil and gas restriction application for sustainable and impact funds
For our sustainable and impact fund range, restrictions on conventional oil and gas are applied via the Product Involvement screening of the Sustainalytics platform. The applied threshold for eligible conventional oil and gas companies is currently set at a minimum of 40% of their revenue from activities related to natural gas extraction or renewable energy sources. Alternatively, installed production capacity and/or actual production can be used as a measurement.[17]

Transport and refining activities are not subject to a restriction threshold. Companies involved in these activities are analysed via regular ESG due diligence and adherence to NN IP's norms-based RI criteria.

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[16] https://www.ey.com/Publication/vwLUAssets/EY-Managing-bribery-and-corruption-risk-in-the-oil-and-gas-industry/$FILE/EY-Managing-bribery-and-corruption-risk-in-the-oil-and-gas-industry.pdf
[17] Analysis based on Sustainalytics Product Involvement screening and ISS carbon data combined with view of in-house analysts. (Metrics are based on FQS paragraph 2.2.5.5.1. and footnote 70)

Nuclear energy

Nuclear power has several ESG benefits compared with other energy sources. Its low-carbon profile makes it a serious contributor to managing the reduction of CO_2 emissions. The strict oversight of nuclear energy has also made nuclear generation one of the safest methods of baseload power generation. Still, despite the benefits, nuclear power is exposed to significant ESG risks such as radiation exposure, waste management, and water usage.

ESG benefits versus risks of nuclear power

Nuclear power is the second-largest source of low-carbon electricity, with 452 operating reactors providing 2,700 TWh of electricity in 2018, or 10% of the global electricity supply. In advanced economies, nuclear has long been the largest source of low-carbon electricity, providing 18% of supply in 2018. Yet nuclear power is a highly debated topic and it is quickly losing ground. Nuclear power has avoided about 55 Gt of CO_2 emissions over the past 50 years, equal to nearly 2 years of global energy-related CO_2 emissions. In addition to a positive environmental footprint, the production of nuclear energy causes fewer accidents and incidents than the production of other forms of energy (for example, oil and gas).

Despite the positive solution that nuclear power has to offer in the debate on how to tackle climate change, there are significant ESG risks related to nuclear power.

One of the key concerns is waste management. There is an environmental impact associated with radioactive waste. Nuclear leaves a relatively small footprint of waste volume at 4.4 grams per kilowatt-hour, but this alone does not represent the high level of nuclear waste management risk. About 11% of nuclear waste is radioactive, making nuclear the only generation source with solid waste that has both radioactive and hazardous components. Fossil fuel generation produces much higher waste volume, but none that is considered radioactive or hazardous. While nuclear power plants have safely stored nuclear waste on-site since inception, the industry has failed to come up with a viable long-term solution for spent nuclear fuel. This is critical, given the long decay period (more than 1,000 years) and limited on-site storage space.

With regard to radiation from nuclear power plants, the health impact is minimal. Radiation from a nuclear power plant is negligible when compared with normal background radiation. Another negative impact of nuclear power is water usage. Nuclear plants use between 400 and 720 gallons/MWh depending on the plant. Natural gas generation uses between 100 and 370 gallons/MWh. As an example, a 1,000 MW wet-cooling nuclear power plant running at a 90% capacity factor would use roughly 7.8 million gallons of water annually. A similar natural gas combined-cycle plant with cooling towers would use approximately 2.9 million gallons annually.

NN IP monitors the ESG aspects of nuclear power

NN Investment Partners may invest in companies and governmental entities that are active in civil nuclear power generation. However, in our sustainable & impact strategies, financing the construction of additional nuclear-based power production installations by electricity utilities is restricted. Companies and countries that are exposed to nuclear power generation should be capable of meeting essential requirements regarding safety and protection of populations and the environment.

From the companies and related governments we invest in, we expect the following when it comes to nuclear power plants:

- The due diligence should cover environmental, social and safety aspects, and should be executed by an external consultant;
- On-site safety is independent from the company in charge of operating the power plant;
- Arrangements are in place to ensure radiation monitoring, both on-site and around the site;
- Protection of workers is ensured in the nuclear facility;
- Emergency programs and responses in case of major accidents are prepared by the project and adapted to local geographic specifics, especially regarding flooding risks and seismic risks;
- The power plant ensures sustainable water usage;
- A facility exists for the temporary storage of nuclear waste produced by the power plant.

We will closely follow developments and related ESG issues.

Nuclear energy restriction application for sustainable and impact funds

The sustainable and impact strategies will not finance electricity utilities constructing additional nuclear-based power production installations.

Oppressive regimes

NN IP takes a stance on oppressive regimes: we exclude sovereign issuers involved in severe and systematic violations of human rights against which arms embargoes have been issued by the UN Security Council. Furthermore, NN IP believes that the subject of oppressive regimes is not only a concern with regard to governments. In today's globalised world, it is also an issue that must be taken into account when investing in (multinational) enterprises. Companies should adhere to international norms and conventions such as the OECD Guidelines on Multinational Enterprises and the Guiding Principles on business and human rights. The NN IP Responsible Investing Framework guides how we screen the investment universe for any violations, what the criteria are for excluding violators from the investment universe and how we use our active ownership approach to create behavioural change. NN has detailed its position on these points within the Investment Guidance paper on Human Rights. The paper can be downloaded from here.

Regarding human rights violations, our position is aligned with principles 1 & 2 of the Global Compact; OECD Guidelines for Multinational Enterprises, chapter IV Human Rights; the Universal Declaration of Human Rights; the International Bill of Human Rights; International Covenant on Civil and Political Rights; International Covenant on Economic, Social and Cultural Rights; Protect, Respect and Remedy Framework: The UN

Framework for Business and Human Rights; the UN Guiding Principles on Business and Human Rights; Convention of the Rights of the Child; Convention on the Elimination of All Forms of Discrimination against Women; UN Declaration on the Rights of Indigenous People; and the ILO Declaration on Fundamental Principles and Rights at Work.

Oppressive regimes restriction application for sustainable and impact funds
We exclude sovereign issuers involved in severe and systematic violations of human rights against which arms embargoes have been issued by the UN Security Council. This restriction is applied via the Country Risk monitor of the Sustainalytics platform.

Our stance

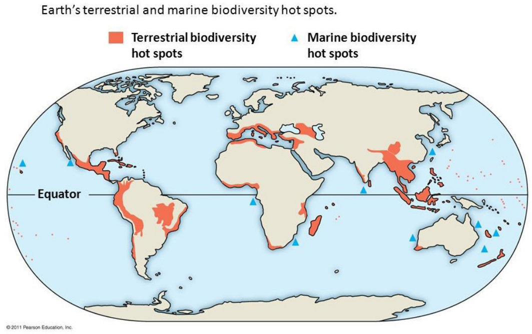
An overview of our position towards potential unsustainable practices and issues

Biodiversity

For our world to be sustainable, the protection of healthy ecosystems, including the preservation of biodiversity and forests, is crucial. This is captured in the vision of the UN Convention on Biological Diversity (CBD) that by 2050, “biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.”

Biological diversity, or biodiversity, refers to the many different species living within an ecosystem. One might think of animals, plants, bacteria, fungi, and other living organisms. It is typically expressed in the amount of species as well as the variety of ecosystems that these species create. According to the UN Convention on Biological Diversity, our planet is home to as many as 13 million species, of which 1.75 million have been named and recorded. Unfortunately, the richness of biodiversity is under severe pressure. This shrinking biodiversity poses major risks to the future of global food and agriculture and thereby to human beings themselves.

NN IP’s investments may be affected by changes in biodiversity, as companies in which NN IP is invested may face lost market access or litigation, liabilities, or reclamation costs due to operations that damage fragile ecosystems. It is important to take biodiversity into account as part of the investment analysis, considering both the impact of changes in biodiversity on (the value of) our investments (looking for business opportunities and identifying risks) and the impact of a company’s or project’s business practices on biodiversity (from a ‘do no harm’ point of view). Biodiversity is part of NN Group’s environmental guidelines and is covered in our RI Framework Policy.



Impact of a loss of biodiversity
Biodiversity and nature play an essential role in producing food, providing clean water, regulating our climate and controlling diseases. Regrettably, the pace of species population declines and extinctions has risen dramatically over the past century. Increasing global warming and intensive agriculture, fishing, and hunting have contributed to this. A 2019 report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) noted that up to 1 million plant and animal species are facing extinction due to human activity.[18] Similarly, in its 2019 study on the state of the world’s biodiversity in food and agriculture, the Food and Agriculture Organization (FAO) warned that with the biodiversity of plants cultivated for food shrinking, the global population’s health, livelihoods and environment are under severe threat.[19] The 2018 WWF Living Planet Report reached a similar conclusion, discussing biodiversity along the Planetary Boundaries concept. The very first critical issue jeopardising this balance relates to the loss of biosphere integrity (the destruction of ecosystems and biodiversity) as a result of human interference.[20]

How it affects our investment portfolio
Biodiversity loss is driven by five factors: 1) habit loss and degradation, 2) climate change, 3) pollution, 4) over-exploitation and unsustainable use, and 5) invasive non-native species that disrupt the ecosystems. This is further influenced by human population growth, increasing consumption and resource inefficiencies.[21]

[18] 2019 Global Assessment Report, www.ipbes.net/news/ipbes-global-assessment-preview.
[19] www.fao.org/state-of-biodiversity-for-food-agriculture/en.
[20] www.connect4climate.org/publication/living-planet-report-2018-aiming-higher-wwf.
[21] UN Convention on Biological Diversity, CBD.

As stated above, NN IP's investments may be affected by changes in biodiversity, as companies in which NN IP is invested may face lost market access or litigation, liabilities, or reclamation costs due to operations that damage fragile ecosystems. This could entail an adverse biodiversity impact and/or over-exploitation and depletion of natural resources.

How companies report and act on biodiversity

There are various reporting frameworks and protocols that deal with biodiversity. Reporting and signing up to these protocols is voluntary and at the discretion of individual companies. Companies falling under the EU non-financial reporting Directive (2014/95/EU) are subject to the strongest commitment. Companies have to report on environmental issues, and the European Commission has updated a supplement to the guidelines on non-financial reporting. As part of this, "companies whose business models are dependent on natural capitals threatened by climate change may need to disclose indicators related to those natural capitals (e.g., water, soil productivity or biodiversity)." [23]

For NN IP, the below-mentioned reporting standards and protocols are useful instruments for assessing how the companies in which we are invested perform on biodiversity.

a) Global Reporting Initiative (GRI) Standards

Under the GRI Standards, biodiversity reporting requirements are included in GRI Standard 304. This standard covers a) the management approach, b) operational sites in or near areas with high biodiversity value, c) significant impacts of activities, products and services on biodiversity, and d) the International Union for Conservation of Nature (IUCN) Red List species and national conservation list species with habitats in areas affected by operations.[24]

b) Integrated Reporting Framework

Natural capital is one of the six capitals of the Integrated Reporting framework (issued by the International Integrated Reporting Council, or IIRC) and resembles the importance of elements of nature (e.g., minerals, ecosystems and ecosystem processes) to human society. It includes 1) air, water, land, forests and minerals, and 2) biodiversity and ecosystem health. Another way of defining natural capital is along the biotic (living/organic) and abiotic (non-living/inorganic) dimension. As such, biodiversity would fall under biotic natural capital. We would also like to reference the Natural Capital Coalition/protocol, a broad group of international stakeholders working towards embedding natural capital thinking and assessments in the private sector.

c) The Sustainable Development Goals

Biodiversity is intimately linked with climate change and with many of the UN Sustainable Development Goals (SDGs). More specifically, there is a relationship with SDG 14 (life below water) and SDG 15 (life on land). For both SDGs, progress can be measured through the percentage of biodiversity loss avoided or reduced (and expressed in the number of species).[25]

d) SASB Standards

The Sustainability Accounting Standards Board (SASB) has suggested several accounting metrics around the disclosure topic of biodiversity impacts. This includes the percentage of proved and probable reserves in or near sites with protected conservation status or endangered species habitat, the terrestrial acreage disturbed and the percentage of impacted area restored, the area of forestland with protected conservation status, and the area of forestland in endangered species' habitat.

e) Protocols

The most relevant protocol is the Convention on Biological Diversity (the CBD), which is part of the UN Environment Programme (UNEP). We expect those companies for which biodiversity is a material issue to comply with the CBD protocols, including the Cartagena Protocol on Biosafety and the Nagoya Protocol on Access and Benefit Sharing.

What we do through dialogues, engagements and supporting initiatives

As follows from our discussion above, biodiversity does not stand alone but is linked to other topics such as animal farming, climate change and deforestation. This is also reflected in how we as NN IP engage on this topic with the companies and issuers in which we are invested, as well as the various initiatives to which we are a signatory.

NN IP is a member of **FAIRR** – the Farm Animal Investment Risk & Return initiative.[26] Biodiversity is identified by FAIRR as a high-risk factor linked to beef, dairy, poultry and pork. In its risk assessment, FAIRR specifically looks at whether a company has partnerships with NGOs to address biodiversity loss and whether there is a supplier code of conduct to address biodiversity exposure.

NN IP participates in the **PRI-Ceres Investor Initiative for Sustainable Forests**. This is a collaborative effort to establish common norms and good practices for delivering on companies' commitments related to deforestation. By combining direct and collaborative engagement initiatives, we can maximise

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[22] https://ec.europa.eu/info/publications/non-financial-reporting-guidelines_en
[23] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019XC0620(01)
[24] GRI/ GSSB, GRI 304: Biodiversity, 2016.
[25] SDG impact indicators – A guide for investors and companies. NN/ NN IP is a member of this working group which is an initiative of the Sustainable Finance Platform and chaired by DNB - the Dutch Central Bank.
[26] FAIRR aims to ensure that investors understand the risks and opportunities that relate to intensive livestock farming and poor animal welfare standards, and to support investors to assess these issues as part of their investment processes.

our impact and fulfil our duties as a responsible investor. Furthermore, NN IP is a signatory of the Statement of Support for the Cerrado Manifesto of Brazil and the PRI Investor Statement on deforestation. This reflects our commitment to halting deforestation and our intention to work with the industry, producers, governments and inhabitants to protect the valuable, biodiverse forests.

Deforestation – and biodiversity – is also linked to irresponsible growth of palm oil plantations. NN IP is a member of the Roundtable on Sustainable Palm Oil (RSPO). This organisation aims to transform markets to make sustainable palm oil the norm, and we as NN IP are playing an active role in contributing to this through our investments and engagement.

The other relevant initiative is the Equator Principles (EP), to which NN IP is a signatory. The principles provide guidance for financial institutions – including asset managers – in determining, assessing and managing environmental and social risk in project finance. This means that for all its investments related to project finance, NN IP also includes adverse effects on biodiversity in its investment analysis. One of the working groups of the Equator Principles is dedicated to biodiversity. It engages with the International Finance Corporation (IFC) regarding incorporation of biodiversity and ecosystem services into the Performance Standards and shares good practice in risk management of biodiversity issues with the EP signatories.

Water use

Our freshwater resources are of vital importance, both now and in the future, and are inextricably linked to societal and economic developments. Without adequate clean water supply, production processes come to a halt, food production is disrupted, and eventually entire societies and their economy will be negatively affected. Water resources are at risk from a wide range of developments, including global warming, population growth, water competition from growing cities, production processes, power generation and food production needs.

Water is an important resource in many production processes, and water shortages or restrictions can lead to operational, strategic and market risks that have repercussions for the value of our investments. Water stress affects several sectors in which we invest, such as the energy, materials, industries and food and beverage industries. In the food and beverage sector, for example, water is an important resource in production processes, and water stress will influence production capacity. In the energy sector, hydro and thermal energy plants may face shutdowns in water-stressed areas, as the production process requires significant amounts of water that may not be available. Water use by companies in areas afflicted by water scarcity or water stress can also threaten the company's license to operate or lead to societal disruption, which could have material negative effects. These risks require strategic and technological answers and changes in order to prevent adverse impacts.

It is increasingly important to understand how resource-intensive companies are. This is why NN Investment Partners makes use of ISS ESG data on various climate-related indicators, including water intensity. This data is based on company disclosure to CDP and is complemented by ISS Ethix data. This enriched data can enhance our assessment of water risks and performance at the company level. It provides input for our dialogue and engagement with companies and aims to improve awareness on the issue and ultimately lead to behavioural change.

Our position on water is aligned with principles 7, 8 and 9 of the Global Compact, the Rio Declaration on Environment and Development, and the CDP Supply Chain Initiative.

Death penalty

NN IP has developed norms-based Responsible Investing criteria that are a reflection of relevant laws, our organisation's values, and internationally recognised standards such as the OECD Guidelines for Multinational Enterprises. NN IP believes that the companies and sovereign issuers we invest in should clearly adhere to international norms and conventions with respect to human rights, including the death penalty.

A crucial element of our ESG due diligence process is the screening of companies involved in controversial practices. One of those practices is the production of substances that are used – particularly in the United States – to carry out the death penalty. NN IP uses Sustainalytics as an external research provider on potential involvements with the death penalty.

NN IP views issues such as the death penalty not only as ethically questionable, but also as an outright investment risk. This is because of the potential negative impact on investor perceptions of the companies in which we are invested and of NN IP itself.

Forward contracts on agricultural commodities

As a responsible investor, we are highly aware of the effect that investments in agricultural forward or futures contracts might have on commodity prices. In 2011, a report from SOMO, a Dutch non-profit research agency, concluded that excessive investments and capital inflows into the market can push up agricultural commodity prices, exacerbate volatility and increase the cost of food. Given the importance of this subject, NN IP is closely following the international debate. We continuously seek to gain a better understanding of any possible effects from our limited involvement in agricultural derivatives. We currently offer commodity derivatives solutions to institutional clients to diversify their investment risks.

Investments in forward or futures contracts on agricultural commodities do not form a major part of NN IP's business overall, and neither our sustainable nor our impact funds incorporate these investments. In general, NN IP's funds do not trade physical agricultural commodities.

Based on our RI framework, NN IP actively engages with several commodity companies. For example, NN IP is a founding member of the Platform Living Wage Financials. This multi-stakeholder platform of predominantly Dutch financial institutions engages with agricultural commodity companies,

among other sectors. NN IP is the lead member responsible for engagements with agri-food companies. Our current focus is on the cocoa supply chain. As many farmers who grow cocoa live below the poverty line, our ambition is to contribute to lifting them out of poverty. We do this by encouraging international cocoa companies to adjust their supply chains and purchasing practices in order to improve the farmers' living standards.
To move towards this objective, NN IP conducts meetings with cocoa trading companies, and we use our position as a shareholder to positively influence companies on this issue.

A further example of NN IP's active engagement with agricultural commodity companies is our membership in the Roundtable on Sustainable Palm Oil (RSPO). We regularly undertake field trips to the production countries of palm oil and engage with both palm oil producers/traders and financiers. The objective of these engagement efforts is to improve working conditions and environmental standards in the palm oil industry. We incorporate the outcomes of these engagements in our investment analysis.

Taxation

In recent years, the tax policies of (especially) multinational enterprises and (alleged) tax avoidance schemes have drawn the attention of various stakeholders, often resulting in negative publicity. As such, companies associated with tax avoidance are exposed to significant financial, legal, operational and reputational risks.

Usually, tax reporting is assigned to (in- and external) tax experts and left outside of the boardroom. However, with the growing attention paid to taxation and transparency surrounding it, it should be regarded as part of a company's corporate social responsibility strategy, as tax contributions play an important role for the communities in which companies operate.

For NN IP's sustainable investment strategies, gaining a clear understanding of a company's tax policies and its governance is integrated into our investment processes. We believe it is important that companies pay their 'fair' share of tax (to be paid where the activities take place) and that companies are transparent on their tax policies and actual payments.

NN IP supports the six principle-based guidelines drafted by VBDO (the Dutch association of sustainable investors) for good tax governance:

1. **Companies should define and communicate a clear strategy on tax governance**
2. **Taxation must be aligned with the business and should not be a profit centre by itself**
3. **Respect the spirit of the law. Tax-compliant behaviour is the norm**
4. **Know and manage tax risks**
5. **Monitor and test tax controls**
6. **Provide tax assurance**

In our engagement, we encourage companies to provide sufficient transparency to stakeholders and disclose on their policies and activities, including as they relate to tax. This could constitute a 'tax in-control' statement and/or validation by an external party. Companies must also be able to explain their tax strategy and outline the monitoring and testing of specific taxation risks. In certain sectors, we expect companies to adhere to sector initiatives, such as the Extraction Industry Transparency Initiative (EITI), which is specifically for the mining sector.
Tax transparency is one of the parameters in our governance analysis of our sustainable eligible investment universe of companies. We also analyse taxation from a governance angle on a sovereign level. In the first half of 2019, the EU published rules and guidelines on non-cooperation by countries in preventing tax havens. Companies and issuers headquartered in countries that are on the official EU sanction list are closely analysed on a case-by-case base. As guidelines for the case-by-case assessment, we use the following factors as metrics: the amount of revenues, business activity (personnel employed), a company's policy and approach to tax (disclosure), the company's tax practices versus its policy, the tax risks in a company's operations and the company's responsiveness to questions from (taxation) authorities.

Investor collaborations

In a broader sense, we believe that collaboration with other investors strengthens our message to companies we invest in. As a result, our commitment to addressing environmental, social and governance risks is demonstrated by our memberships of, among others, the UN Principles for Responsible Investment (PRI), the Institutional Investors Group on Climate Change (IIGCC), the Climate Action 100+, Carbon Disclosure Project (CDP), Investor Alliance for Human Rights, Global Impact Investing Network (GIIN), Investor Stewardship Group (ISG), the Task Force on Climate-related Financial Disclosures (TCFD) and the International Corporate Governance Network (ICGN).

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