a.s.r. asset management



Quarterly ESG Update – Q4 2022

a.s.r. asset management

Introduction

2022 has been a very eventful year if we review it in terms of ESG happenings. Last year was marked by a significantly high number of climate-related floods, hurricanes and droughts, and despite all the talking about climate change and net zero statements of companies and countries, estimates show that global carbon emissions in 2022 actually rose by 1%¹. This has mostly been caused by the (travel) recovery after the Covid-19 pandemic, but also the war in Ukraine which caused the energy crisis and has led to an increase in – most polluting - coal emissions. The remaining carbon budget to keep warming of the planet below 1.5C will be gone in 9 years, if emissions remain at current levels.

But luckily also some more positive developments took place. Maybe one of the biggest accomplishments happened on the COP 15 Biodiversity conference, where the international community agreed to protect and restore 30% of the Earth's land and water by 2030². Wealthy nations also committed to pay an estimated \$30 billion a year by 2030 to poorer countries through a new biodiversity fund. The agreement on biodiversity is comparable to the historical Paris Agreement on climate in 2015. Sustainability regulation and reporting has been implemented or is being implemented on a large scale (e.g. the SFDR and CSRD), which means businesses have to report on a variety of topics like board diversity and gender pay gap to the share of investments negatively affecting biodiversity and deforestation. All these new reporting requirements will create much more transparency and insight in the sustainable or non-sustainable activities of companies.

Clean tech, and especially electric vehicles is hitting tipping points. Almost every major car producer intends to stop making internal combustion engines within 10 to 20 years ³. The International Energy Agency accelerated its clean tech predictions and they believe fossil fuel use has peaked in the power sector and renewables will actually pass coal by 2025.

Last but not least, in December 2022 the European Union finally agreed upon the long awaited Regulation on deforestation-free products (EUDR). Companies that sell products on the EU market will be punished if they are found to have contributed towards deforestation. To read more about this particular topic we refer to the chapter 'Climate'.

Want to learn more about a.s.r.'s sustainable investing? Visit our website.

¹ https://www.weforum.org/agenda/2022/11/global-co2-emissions-fossil-fuels-hit-record-2022/

² https://cleantechnica.com/2022/12/19/nations-reach-historic-agreement-onbiodiversity-at-cop-15-conference/

³ https://hbr.org/2022/12/2022-a-tumultuous-year-in-esg-and-sustainability

In this update

Climate

Impact



- Impact Investment Naïo Technologies
 - Impact Investment Sympower

- PCAF Report November 2022
- Net zero in 2050 with or without oil and gas?
- EU Deforestation Regulation
- Carbon footprint of our investments

Active Ownership

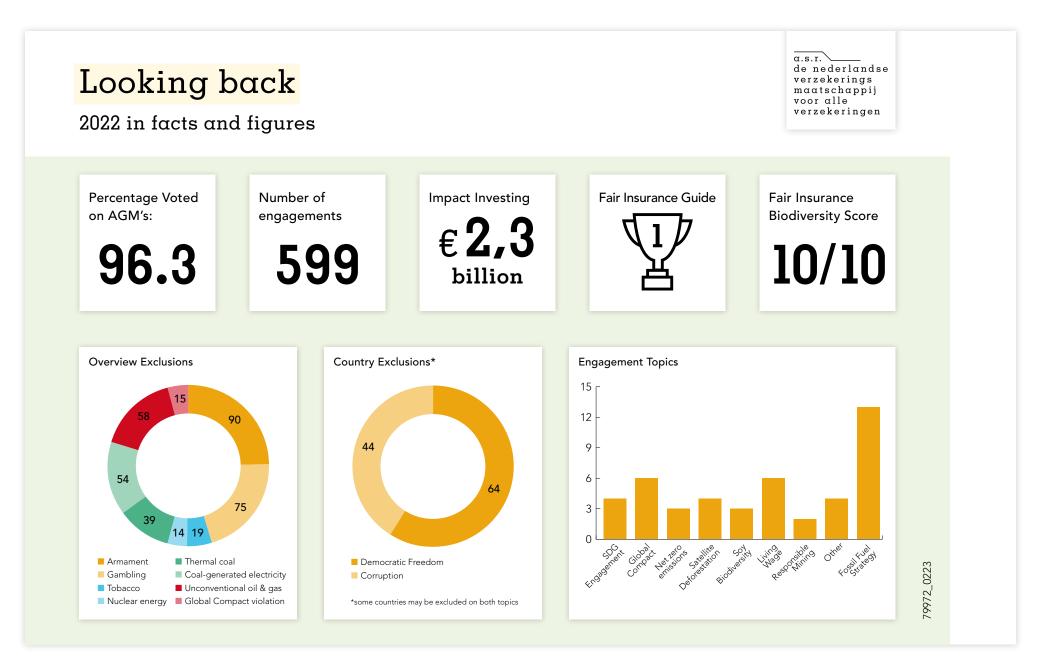


- Treaty on the Prohibition of Nuclear Weapons
- Global Biodiveristy Framework
- Statement on Oil and Gas

Other news



- New colleague



Impact

Impact Investment Naïo Technologies

Naïo Technologies, a pioneer and world leader in the production of agricultural robots has just closed a 33 million USD fundraising. The company, founded in 2011, develops, manufactures and mark These solutions tackle labour shortage, reduce physical strains, and help to reduce soil erosion and the carbon footprint of farming and herbicides use. In 2013, the first unit of Oz, the farming assistant, was sold and joined in 2018 by Ted, the first vineyard robot. In 2016, Naïo Technologies launched FIRA, the biggest global Agricultural robotics event, and three years later opened its US subsidiary company in Salinas, California, to focus on key agricultural hubs in North America. ets autonomous robots for agriculture, working closely with farmers and winegrowers ⁴.

This momentum accelerated the deployment of new robots worldwide, reaching 300 robots in operation by 2022. This year, Naïo launched two new products (Orio & Jo), addressing key customer needs. Naïo Technologies is the first manufacturer to provide a range of four robots. The company employs 70 people and trades in 20 different countries through a dealer network. Thanks to this new fundraising of €32m, Naïo Technologies will accelerate its international expansion and more than double its fleet in operation over the next two years. The investors acknowledge these results and the growth strategy as the company doubled its revenues in just one year.



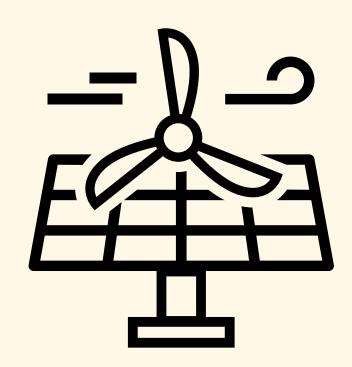
⁴ https://www.naio-technologies.com/en/news/naio-technologies-raises-33million-usd-to-accelerate-its-industrial-and-commercial-growth/

The goal of Naïo Technologies is to share its field expertise on environmental transition and regenerative agriculture challenges with farmers. Naïo builds efficient and autonomous robots and helps reduce the carbon footprint of farming activities, through its electric and lighter-weight machinery range that limits the use of pesticides in food crops. Naïo Technologies is validating the B-Corp certification and has completed a carbon footprint and product life cycle analysis of its full range of electric robots. A.s.r. invests in Naïo Technologies via the Pymwymic investments.

Impact Investment Sympower

This year Sympower secured 22 million Euro to accelerate Europe's energy transition. The mission of Sympower is to reduce reliance on oil, coal and gas power plants and allow for increased integration of renewables, thus saving large quantities of CO_2 . Sympower provides electricity grid balancing services, and as such, generates impact by reducing the use of fossil fuels and enabling more sustainable electricity sources such as wind and solar to deliver to the grid.

The electricity grid must always be in balance, i.e. demand and supply of electricity must be equal. Traditionally, this balance is provided by fossil-fuel power stations who can alter their output to meet the demand. This implies two issues for our environment: 1) it requires use of fossil fuel to do so therewith emitting CO_2 and 2) there is a limit to the flexible capacity of the fossil-fuel power plants and with the increase in wind and solar on the grid, that limit is within reach.



Sympower provides cost-effective and sustainable balancing services to the electricity grid. The Sympower software platform responds to fluctuations in the supply and demand of electricity grid in milliseconds, by regulating the consumption or generation of electrical installations across multiple industrial and commercial sectors (such as waste facilities, wood processing plants, datacenters and greenhouses), while taking care not to interrupt primary processes.

Founded in 2015, Sympower has over 100 team members and is active in nine countries, including the Netherlands, Sweden, Finland, Norway and Israel. Their customers operate in a wide range of energy-intensive industries, including paper and pulp, greenhouses and battery energy storage. a.s.r. is invested in Sympower via Rubio Impact Ventures.



Climate

PCAF Report November 2022

Addressing the emergency of climate change is more pressing than ever. The heat waves in Europe of the past summer resulted in a continental-wide drought that appears to be the worst in 500 years ⁵. This is part of a trend as the past nine years from 2013 to 2021 rank among the 10 warmest years on record globally without any expectations to discontinue ⁶. To limit global warming to 1.5C above pre-industrial levels, all sectors of society need to decarbonize and collectively reach net zero emissions by 2050. The financial sector can facilitate and drive the transition in line with the Paris Agreement.

Harmonized and transparent GHG emissions accounting is an imperative step in this direction. Measuring and disclosing GHG emissions associated with lending and investment activities of financial institutions (so-called financed emissions) is the foundation for creating transparency and accountability. It also enables financial institutions to align their portfolio with the Paris Agreement.

Regulators are asking financial institutions to provide transparency on climate-related risks and consumers are asking their banks, pension funds and insurers to contribute to sustainable development. For instance, the Financial Stability Board's Task Force on Climate-related Disclosures (TCFD) provides recommendations for more effective climate-related disclosures including measuring financed emissions with the PCAF standard ⁷.



⁵ https://ec.europa.eu/commission/presscorner/detail/en/mex_22_5123

 ⁶ https://www.climate.gov/news-features/understanding-climate/climate-changeglobal-temperature
7 https://www.fsb-tcfd.org/

Following the TCFD recommendations, TCFD became mandatory in the United Kingdom for the largest companies from April 2022 onwards and New Zealand's world-first legislation mandating climate-related disclosures in line with TCFD recommendation takes effect in 2023.

During the first few years, the Dutch PCAF participants launched multiple reports, which provided a set of common principles and proposed harmonized guidelines for loans and investments along several different asset classes, and they solicited feedback from the global financial community. These guidelines evolved into PCAF's Global GHG Accounting and Reporting Standard (the Standard)⁸. The Standard was officially reviewed and approved by the GHG Protocol to be in conformance with the requirements outlined in the Corporate Value Chain (Scope 3) Accounting and Reporting Standard, for Category 15 investment activities. The second and updated version of the PCAF Standard, following the same review and approval procedure, is expected to be later this year.

This originally Dutch partnership has evolved into a global initiative with 322 financial institutions worldwide representing over US\$80 trillion in assets at the time of writing PCAF NL continues under the wings of PCAF Global. Currently, PCAF NL consists of 27 participants representing \$3.8 trillion in total financial assets and continues to lead the implementation of GHG accounting methodologies and data improvements serving as thought leadership for the global financial industry.

This sixth report serves as an update to Dutch implementation activities such as:

- Key activities PCAF NL participants participated in
- Benefits of measuring and disclosing financed emissions
- Challenges in measuring and disclosing financed emissions
- Expected activities in the upcoming years

Net zero in 2050 with or without oil and gas?

Canada's Minister of Environment and Climate Change Steven Guilbeault recently came up with an uncomfortable statement in a time where the whole world is talking about net zero in 2050; 'it will not be possible without oil and gas' ⁹. According to the minister twenty-eight years is simply not enough to deploy enough capital to build reliable alternative sources by 2050 and the war in Ukraine shows that ignoring energy security will lead to a direct threat of national security and problems to defend democracy.

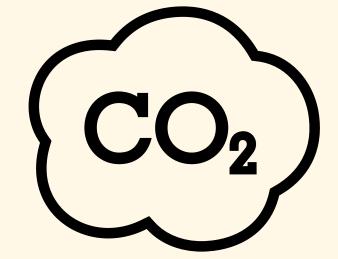
Our dependence on oil and gas has been emphasized last year, where the abrupt stop of oil and gas deliveries from Russia led to unintended consequences, for example the increasing demand for coal, which spiked GHG emissions. If nuclear and other alternatives will be excluded, we are left largely with the unreliability of solar and wind, supplemented by massive behavioral changes, which will lead to conflict and instability, so says the minister.

⁸ https://carbonaccountingfinancials.com/standard

⁹ https://energynow.ca/2022/11/commentary-an-inconvenient-truth-2050-goals-cannotbe-met-without-oil-and-gas-craig-golinowski/

The only way oil and gas can still be used - without warming the planet - is when carbon capture, utilization, and storage (CCUS) is used appropriately. There are many critics when it comes to CCUS, the costs are very high, long-term storage capacity is uncertain and the transport of CO_2 and storage can possible be dangerous. Another point often made is that the incentive to actually transform to a low-carbon economy is lost when we keep using oil and gas and offset as much as possible.

At a.s.r. we have based our carbon reduction targets on the P2 pathway ¹⁰, which includes a relative low dependence on CCS. Sequestering carbon before it enters the atmosphere is a useful technique in reducing emissions, however we do not support high emitting companies whose transition strategy is built on solely an 'end of pipe' solution. In our Fossil Fuel strategy we engage with oil and gas companies about their climate strategy and ambition to be Paris Aligned, carbon capturing remains a recurring discussion item. To read more about the progress of our Fossil Fuel Strategy we refer to the chapter 'Active Ownership'.



EU Regulation on deforestation

After years of discussions about deforestation and the responsibility we have as consumers, some big news was published in December 2022: the new deforestation law (which is part of the European Green Deal) will come into force in 2024, but a lot of detail still needs to be resolved, as it is vague in several areas. These include determining how the country risk rating will work, and how the law will interact with the Voluntary Partnership Agreements (VPAs) and Free Trade Agreements (FTAs) that the EU has signed with many forested countries. It's important to support producer countries to tackle deforestation across the whole country, rather than simply the EU supply chain ¹¹. Another important aspect of the new regulation is to support smallholders to mitigate any additional burdens the law might place on them.

The deforestation law is an attempt to side-step the sovereignty arguments that have dominated international negotiations on forest loss. Trade standards will be developed for EU imports and it will require commodity-importing companies to work out which of their sourcing areas can meet the standards of traceability and verification of zero deforestation ¹². Environmental campaigners who have made traceability their lodestar have high hopes that it will end the blame shifting between companies and governments. There are, however, grounds for caution in assuming that these huge investments in mapping will resolve the issues of accountability for deforestation.

¹² https://www.reuters.com/business/sustainable-business/comment-heres-how-eus-newrules-could-finally-turn-tide-tropical-forest-loss-2023-01-03/



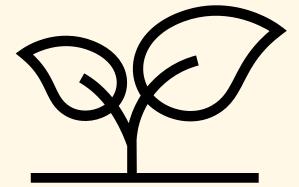
¹¹ https://www.context.news/just-transition/opinion/eu-supply-chain-law-isnt-enough-to-keep-nature-safe?

The EU regulation is being built on three pillars:

- Focus on relevant commodities and products;
- A mandatory due diligence procedure coupled with strict traceability; and
- A risk benchmarking system for countries and/or regions

It covers seven commodities and products that relate to consumption-driven deforestation. These are palm oil, cattle, soy, coffee, cacao, and timber, as well as derived products, such as beef, chocolate, furniture, charcoal, and printed paper products¹³. Mandatory due diligence provides that while no country or commodity as such will be banned from the EU single market, companies will not be allowed to sell their products in the EU or export then from the EU without a due diligence statement.

At a.s.r. we support this development. Currently we are also participating in a collective engagement procedure – along with a group of investors. In this zero deforestation engagement we are using satellite images to start dialogues with companies to address deforestation cases found by satellite detection and call for preventative measures for deforestation.



¹³ https://sdg.iisd.org/news/eu-paves-way-for-landmark-deforestation-free-productsregulation

Carbon Footprint

The a.s.r. ESG fund range includes euro sovereign bonds, euro credits, European and American equities. While already having a strict ESG policy for the overall investment process within a.s.r. asset management, these ESG funds have additional guidelines on ESG indicators.

At the end of the fourth quarter of 2022 the carbon emissions of the credit fund are still well below the benchmark. The carbon emissions per million euro showed a decrease compared to the Q3 2022 figures – while the benchmark increased.

The equity funds are optimized based on the scores that companies achieve on carbon intensity, energy transition and total ESG policy. The carbon emissions remain well below the benchmark. Both the equity funds showed a very small increase in carbon emissions per million euro because of lower enterprise values.

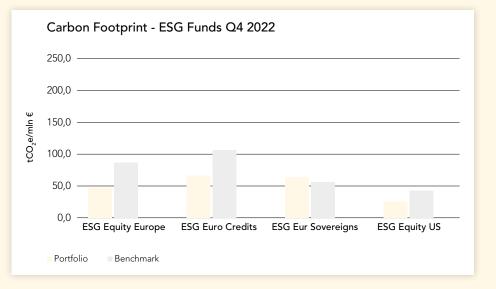


Figure: Carbon emissions for ESG equity (Europe and US), ESG Credits and Sovereigns funds at the end of December 2022. The carbon footprint is calculated on a "best effort" basis with the available and most recent data from reliable sources, including Vigeo Eiris. The results may show a changing course because the portfolio data, carbon data and market data are subject to change. The methodology for calculating the carbon footprint is in line with the PCAF methodology.

Active ownership

Statement nuclear weapons

a.s.r. signed an investor statement to State Parties on the Treaty on the Prohibition of Nuclear Weapons (TPNW). The whole world is currently facing different struggles and we believe that international cooperation is the only way to address these challenges. With the war in Ukraine the threat of nuclear weapons feels real again after threats made by president Putin.

The UN Guiding Principles on Business and Human Rights provide a mandate for business enterprises, including investors, to "Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts."

Similarly, the OECD Guidelines for Multinational Enterprises recommend that businesses carry out risk-based due diligence to avoid and address potential negative impacts associated with their operations, their supply chains and other business relationships. The human rights risks associated with nuclear weapons are severe and irremediable, and the companies producing key components for nuclear arsenals are contributing to these risks.

Additionally, the UN Principles for Responsible Investment encourage financial institutions to integrate Environmental, Social and Governance (ESG) issues into investment analysis and decision-making processes, and these are increasingly codified. There are almost 400 different policy instruments around the world which encourage or require investors to consider long-term value drivers, including factors related to ESG issues. At a.s.r. we maintain a zero tolerance policy for companies with involvement in offensive products. Manufacturers of nuclear and chemical weapons, cluster munition and other controversial weapons are excluded by our SRI policy.

Global Biodiversity Framework

We - the signatories of this statement - realize that biodiversity loss threatens our ability and the ability of future generations to live and thrive in a healthy, peaceful and prosperous world. As a result, we commit to contribute to the protection and restoration of biodiversity and ecosystems through our financing activities and investments. In support of this, we call for the adoption of an ambitious Global Biodiversity Framework (GBF) at the Biodiversity Conference to the UN Convention on Biological Diversity (COP 15) held 7 - 19 December 2022 in Montréal under the presidency of the People's Republic of China.

The signatories of this statement are calling on governments to, in addition to protecting and conserving nature, provide an agreement that creates the clarity and action to align all economic actors, including finance, to halt and reverse nature loss, and contribute to Nature-based Solutions to climate change, a fair and just transition, and other sustainable development challenges. From the viewpoint of the financial sector, a robust agreement would put in place: a clear mandate in the goals of the agreement for the alignment of financial flows; support the assessment and disclosure of nature-related impacts and dependencies; and provide clear targets and definitions to take action and support the development of a pipeline of nature-positive projects and investments.

15 Quarterly ESG update - Q4 2022

We call for coordinated action by governments to tackle climate change and halt and reverse biodiversity loss to ensure synergies are taken advantage of and trade-offs are better managed, including across National Biodiversity Strategy Actions Plans (NBSAPs) and Nationally Determined Contributions (NDCs). We also call on the support of UN entities to align portfolio target-setting for climate and biodiversity, especially in key sectors such as food and agriculture. We recognize that the ability to deliver on commitments under the Paris Climate Agreement and the GBF will depend on both public and private capital flows playing a strong and supportive role in mobilizing finance at a scale that mirrors the challenge of halting and reversing nature loss by 2030.

With a clear and robust GBF as a result of COP15, signatories of this statement are committed to working as part of a wider ecosystem of actors to ensure the framework is translated into effective actions and provides the incentives and tools to halt and reverse nature loss. As part of this, we will continue to work alongside Central Banks in understanding how to effectively address systemic nature risks and to contribute to global financial stability.

We commit to working within our own organizations to support the effective alignment of the vision proposed in the draft post-2020 GBF of "Living in harmony with Nature" by 2050; for example, through incorporating nature and biodiversity into our investment decision-making processes, seeking appropriate disclosure from investees on nature-related issues, and engaging in collaborative initiatives to further our efforts.



Statement on Oil and Gas

In October a.s.r. – together with the other members of the Dutch Climate Coalition – published a statement outlining the objectives of the Oil and Gas sector:

October 20th 2022, The Netherlands – Earlier this year, we, a group of like-minded Dutch investors, published a statement outlining the objectives that oil and gas companies should pursue to be aligned with the Paris Agreement objectives. Since that time, energy prices have increased substantially and energy security has become a critical issue. Although we believe the current energy crsis emphasises the need to diversify away from fossil fuels, we acknowledge that the path to net zero is complicated and requires a nuanced, pragmatic, yet still ambitious approach that involves both the supply- and demand-side of energy.

Although there has been commendable progress in the past few years, no oil and gas company has fully convinced us of their Paris alignment yet. Therefore, we call on oil and gas companies to prove to their investors and the wider public that their strategies will contribute to a global decline in emissions by 2030 in line with a 1.5°C warming pathway. 2 We have three recommendations to do so: Boost the availability of low-carbon solutions, explain how natural gas acts as a transition fuel, and do not use the high oil prices as a reason to increase oil investments.

1) Boost low-carbon solutions

Increased customer appetite and support from policymakers provide an opportunity to accelerate customer transition to low-carbon solutions. We stand by the need for ambitious scope 3 emissions reduction targets but acknowledge that these can only be achieved in tandem with the decarbonization of customers' businesses. Simply divesting assets and cutting production have not been proven to lead to meaningful real-world emissions reductions when fossil fuel demand is high.

Instead, we urge companies to boost the availability of low-carbon solutions and set production targets aligned with the projected low-carbon energy mix in a 1.5°C warming pathway (e.g., IEA's Net-Zero Emissions (NZE) by 2050 scenario). Coupled with comprehensive customer engagement strategies, these actions will help shift demand away from fossil fuels

2) Explain how natural gas acts as a transition fuel

Natural gas will play an important role as a transition fuel to replace coal and in solving intermittency issues with wind and solar power. However, it is still a fossil fuel and not a long-term solution. If an oil and gas company continues to invest in natural gas production capacity, it needs to substantiate how this fits within a Paris aligned pathway. Central to this is that it meets near-term demand and facilitates a transition to low-carbon alternatives. Such an explanation should show that the continued use of natural gas supports a global decline in emissions by 2030 aligned with Paris.

3) Do not use the high oil prices to increase oil production

Oil demand and supply must strongly decrease to hold the increase in the global average temperature to 1.5°C above pre-industrial levels. For example, the IEA's NZE scenario points to a reduction in oil supply from 30% of the energy mix in 2020 to just 8% by 2050.3 New oil fields run the risk of becoming stranded assets since projects have an average time from access to the first production of 5-7 years.4 We urge companies to implement targets aligned with the Paris Agreement and against using current high oil prices as a reason to ramp up oil investments. Furthermore, if oil investments are made, companies should disclose the expected cost and emissions per barrel.

To conclude, we are not yet convinced of any oil and gas company's Paris alignment. However, following our suggestions and using their own respective strategies, we are confident that it is within the capabilities of oil and gas companies to prove to us that they are actively contributing to limiting global warming to 1.5°C.

Beyond oil and gas companies Although this statement provides recommendations for oil and gas companies, we recognise that the responsibility of the energy transition does not rest solely on their shoulders. There is little chance of success without the concerted efforts of fossil fuel-consuming companies, policymakers (as urged in the latest statement by the Investor Agenda), individuals, and the financial community. Therefore, we call on all stakeholders to take responsibility, work together to fight climate change, and prove their commitment to Paris.

Other news

New colleague

Rebwar Taha joined our ESG team as a responsible investment advisor in January 2023. He has a law background and holds a PhD in sustainable investments from the Tilburg University. At a.s.r. he will focus, among other things, on the implementation of the Sustainable Finance Disclosures Regulation (SFDR) and the Taxonomy Regulation within the organization and its investments. These legislative requirements are intended to provide increased transparency around Environmental, Social and Governance (ESG) characteristics and the integration of sustainability risks at a product and entity level via pre-contractual documentation disclosures, website disclosures, and periodic reporting.

More information?

Contact us at: raquel.criado.larrea@asr.nl marjolein.meulensteen@asr.nl mies.ligtenberg@asr.nl jos.gijsbers@asr.nl paul.van.der.weijden@asr.nl rebwar.taha@asr.nl

Disclaimer

This presentation was compiled by ASR Vermogensbeheer N.V. (hereafter ASR Vermogensbeheer). ASR Vermogensbeheer is subject to supervision by the Netherlands Authority for the Financial Markets (AFM) and holds a licence to act as manager for investment institutions under Section 2:65 of the Financial Supervision Act (Wet op het financieel toezicht). Under the licence, ASR Vermogensbeheer is authorised to provide the following investment services: managing individual assets, providing investment advice and receiving and forwarding orders relating to financial instruments. ASR Vermogensbeheer is listed in the register referred to in Section 1:107 of the Financial Supervision Act.

The contents of this presentation are based on information sources which are deemed reliable. However, ASR Vermogensbeheer makes no warranties or representations of any kind (express or implied) concerning the accuracy, completeness and currency of the information provided. The information provided is solely indicative and is subject to change. Forecasts do not constitute a reliable indicator of future results. No rights can be derived from the contents of this presentation, including any calculated values and results shown. The value of your investments can fluctuate. Past performance is no guarantee of future results.

All copyrights and other information in this presentation belong to ASR Vermogensbeheer. The information is only intended for the use of certain recipients and is confidential.

The information provided in this presentation does not constitute an offer, investment advice or a financial service. Nor is the information intended to induce any person or any authority to buy or sell any financial products, including units of participation in investment funds or to purchase any service from ASR Vermogensbeheer, nor is it intended to serve as a basis for an investment decision.

For the applicable conditions and risks relating to the ASR Vermogensbeheer investment funds stated in this presentation, please refer to the prospectuses, fund conditions and essential investor information (EBI) of these funds. Copies of these documents and the annual reports are available on, where all information relating to ASR Vermogensbeheer can be viewed.



α.s.r. Archimedeslaan 10 3584 BA Utrecht www.asrvermogensbeheer.nl

ASR Vermogensbeheer N.V. - KvK 30227237 Utrecht