

a.s.r. Positioning Paper on Climate Change and Energy Transition

Q3 2017

Why this paper?

Protection of the environment and efforts to limit the impacts of climate change are of the utmost importance to preserve our planet for future generations. The Paris Agreement in December 2015 was signed by 196 countries who confirmed its commitment to a safe and stable climate, in which the increase in temperature should be limited to well below 2 degrees and preferably to below 1.5 degrees Celsius. This Agreement provided a milestone achievement to propel the issue of climate change in the social, political and financial agenda's worldwide, especially over the past two years.

a.s.r. is aware of the importance and the responsibility expected from our roles as insurance company, asset owner, asset manager and real estate manager. For a.s.r. climate change is a direct risk to our business, both on our liabilities -the claims we pay out- and on our assets -the value of our investments-. But, as complex as climate risks may be, it only represents half the story. Climate change also presents unprecedented opportunities for action.

Of course, the precise balance of investment risks and opportunities will partly depend on future climate scenarios (like the agreed 25% reduction of CO2 emissions in the Netherlands along the 14% target for energy production out of renewable sources in 2020, the ban for coal-fired power stations as of 2025 or the potential carbon pricing), and what investment decisions will be made to help mitigate the problem (like shifting the demand in the portfolios towards specific areas as clean energy, energy efficiency, clean tech, but also choosing those companies which are best positioned to profit from these changes, the winners of the future).

a.s.r. is a long term investor and therefore well positioned to send the right signals to the investment community and to specific invested companies both for its own account and for its third party clients. As a signatory of the UN Global Compact and the Paris Pledge for Action, a.s.r. pursues efforts to limit global warming to 1.5°C and has analyzed and identified relevant risks for the investment portfolio, such as stranded assets and changing business models in the mining and energy sectors and the opportunities that arise. In February 2017 a.s.r. published a research paper to analyze the impact of the 'carbon bubble' and the consequences for a.s.r. investment portfolio.

With this Climate Positioning Paper, a.s.r. aims to provide a follow up to the work already done and increase the transparency about the current policy and positioning, the actions taken and those initiatives in which a.s.r. is participating to mitigate the climate change and contribute to the required energy transition.

a.s.r. will continue measuring periodically and evaluating the results of these efforts with the final goal to support the energy transition and contribute to limit the temperature rise to 1.5 degrees Celsius. Furthermore we will explore opportunities and improvements to further reduce the carbon footprint of the a.s.r. investment portfolio and hopefully this will result on the long term to a zero emission investment portfolio. The exact reduction goals on yearly basis will be determined and made public as result of the periodical analysis.

a.s.r., an insurance company

a.s.r. Nederland seeks to be a leader in sustainable business practices in the Dutch financial sector, which is in keeping with its role in society. a.s.r. sustainability policy has defined five focus areas, being by alphabetic order: (1) insurance, (2) investment, (3) people, (4) planet and (5) society.

The domain (4) planet explicitly seeks to be a good steward of nature and the environment by preventing waste and limiting negative impacts from its operations. To achieve this, a.s.r. works with an environmental management system. One aspect of this is the efficient use of resources, energy and water from a.s.r. operations. Furthermore, a.s.r. is actively getting to grips with waste management, mobility, energy reduction and carbon emissions. Detailed information can be found in a.s.r. corporate website (<http://asrnl.com/sustainable-business/planet>), including a.s.r. carbon footprint (Scope 1 and 2).

Also in the other domains as (1) insurance, (3) people and (5) society, a.s.r. takes environment into account where possible, for instance by developing new insurance products which are designed to stimulate our clients to choose sustainable and/or circular repair centers, or which include coverage for sustainable innovations (1 insurance). The a.s.r. school challenge creates awareness about sustainability among schoolchildren, 750 children participated in the program in the 2017 edition (5 society) and employees are stimulated to work from home at least 30% of the time and travel with sustainable forms of transport in order to lower carbon emissions. A.s.r. works on reducing the use of fossil fuel for business travel with 5% per year and sets a cap on carbon emissions for lease cars (3 People).

In the investment domain (4) a.s.r. has clearly taken efforts towards limiting the global warming. This domain comprises both the Real Estate Investment Management and the Group Asset Management division. Real Estate Asset Investment has targets to make its portfolio more sustainable for example by improving the energy indices of the residential portfolio and sustainable refurbishing of the retail property and offices. Please refer to the a.s.r. Real Estate website for further information (<https://asrreim.com/about-us/csr>).

In this paper we elaborate further on the Environmental and Climate policy and implementation from the Group Asset Management division.

A relevant framework for reporting – the SDGs agenda

As the Paris Agreement, the Sustainable Development Goals (SDGs) agenda for 2030 was published in 2015, sharing in both pledges a number of objectives. The objectives outlined in the Paris Agreement are comprised in a number of SDGs, among which the SDG 7 (Affordable and clean energy) and SDG 13 (Climate Action). At the same time, the SDG structure shows implicitly that the goals depend on each other: climate mitigation and adaptation are also essential to eradicate poverty and share prosperity, two other central aspects of the 2030 Agenda.



During the past months a.s.r. participated actively in the SDG impact indicators working group within the DNB Platform for Duurzame Financiering (Sustainable Financing) to determine a select set of SDG indicators that can be used to track and compare sustainable development investments

a.s.r. would contribute where possible to advance the SDG's, with special focus on those targeting environmental benefits, as SDG 7 and SDG 13. We intend to use the SDGs through this document as

it is considered a common language which facilitates the recognition of a.s.r. positive contribution to the 2030 agenda including, where possible, impact metrics which help to increase transparency and monitor the progress for the coming years.

a.s.r. Sustainable Responsible Investment (SRI) policy regarding Environment

The basis framework for a.s.r. environmental considerations are outlined in the a.s.r. SRI policy. The first comprehensive SRI policy was agreed at Executive Board level at a.s.r in 2007 and has been extended over time to capture the progress of the market and changes in the society, so ASR Nederland became a signatory of the UN GC in 2011. As result, the GAM ESG comité approved in July 2016 the further expansion of a.s.r. exclusion policy to companies that commit severe environmental breaches and those who derive 30% or more of their revenues from coal.

Since 2016, a.s.r. has integrated Climate change and Energy transition as an explicit theme/driver within its strategic asset allocation. As a consequence of that, there has been budget allocated to various asset classes where a.s.r. intends to increase its positive impact on these issues.

a.s.r. SRI policy recognizes different implementation instruments taking into account the possibilities per asset class. Hereby it is important to address both the “mitigation” and the “adaptation” dimensions of climate change. Here below we provide an overview of instruments within the a.s.r. investment portfolio and its developments with regards to the Climate and Environmental theme:

- Companies' positive Screening by their relative Environmental (+Social +Governance) score:

a.s.r. favours companies excelling on ESG policy and implementation. This classification starts from a relative, sector-wise ranking for six domains of analysis, Environment, including climate change, being a prominent one. This positive assessment involves seeking to invest in companies perceived to be providing positive net environmental benefits. The analysis includes: risk management related to its environmental impact, incorporation of environmental issues as the atmospheric emissions into the company strategy and the overall life cycle of products and services.



- Companies' Engagement on environmental and climate issues:

a.s.r. is aware of the role it can play in promoting environmental protection awareness amongst its stakeholders, including those companies involved in controversial environmental practices within our investment universe. To do that, a.s.r. takes ownership as an active shareholder and exercises its voting rights with due care in accordance with the a.s.r. voting policy, which includes the a.s.r. SRI policy. Additionally, a.s.r. distinguishes 3 types of Engagement, for which environment has played a specific role in the past couple of years:

- Engagement for Influencing: a.s.r. engages in a dialogue with company management to discuss concerns on environmental and climate change and other related issues.

a.s.r. may carry out this dialogue both directly and via the partnership with Robeco.

During 2016 and 2017 a.s.r. engaged directly regarding climate issues with Royal Dutch Shell to discuss their plans about the energy transition, next to environmental and human rights breaches in the Niger Delta. This company is still excluded from a.s.r. investment portfolio. Similar discussions were held with ENI and a.s.r. closed the dialogue in 2016. Because of insufficient engagement results, a.s.r. sold its positions both from the equity and credit



portfolios. In the second half of 2017 there will start a dialogue to engage with Daimler AG regarding the CO2 car emissions and related governance issues. Via the partnership with Robeco, a.s.r. participated in the engagement with BHP Billiton and Glencore (on environment and human rights), and 3 companies in the automotive industry (Volkswagen, Ford and BMW) to reduce CO2 emissions and promote the transition to energy responsible products.

- Engagement for monitoring: a.s.r. engages directly in a dialogue with companies or service providers to play a role in helping the global transition to a low carbon economy. The objective is to gather commitment from and throughout the investment chain to encourage our external asset managers and providers to include ESG metrics in their investment analysis, across asset classes and regions, and to encourage actively these parties to increase transparency and report on their environmental performance. During 2016 and 2017 a.s.r. engaged among others with AXA Investment Management, Black Rock, State Street, Royal Bank of Canada, and VigeoEiris. A.s.r. also signed the PRI statement to promote ESG analysis among Credit rating agencies and the PRI investor statement for engagement collaboration on deforestation, in the cattle supply chains, which will be followed by subsequent engagements on soy and timber/pulp and paper.
- Public Engagement: This concerns a.s.r. initiatives to enhance ESG (best) practices or to put specific ESG issues on the agenda of policymakers, government, regulatory bodies and/or sector organizations. This was materialized in the previous years with the signing of the Paris Pledge for Action in 2015 and the participation in various sector initiatives as for example the Platform Carbon Accounting Financials where a.s.r. is part of the sounding board. Within this type of engagement, a.s.r. collaborates additionally in academic studies and research papers out of our belief that this is important to increasing awareness about the potential long-term risks related to the production and consumption of coal at current levels and encouraging investors to fully consider the long-term benefits of low carbon portfolios. Examples about this include studies coordinated by the University of Utrecht or the VBDO.

- Companies exclusions:

In the case of systematic and/or severe breaches or when a.s.r. does not achieve adequate improvement in a constructive dialogue, it can exclude a company from its investment portfolio.



Since 2016 a.s.r. excludes companies who derive more than 30% of their revenues from coal or lignite. As a responsible investor and active steward of our clients' assets, a.s.r. strongly believe that divesting from coal can help to de-risk portfolios over the long term by decreasing exposure to assets that are likely to become 'stranded' in the future as the world moves to be in line with the +2°C or even preferably to the +1.5°C scenario. The a.s.r. list of excluded companies due to coal involvement is published at a.s.r. website. Hereby a.s.r. makes a firm statement to the market and incentivizes policies and practices to shift towards the energy transition.

In 2017 a.s.r. SRI policy has developed along the same line to exclude companies involved for more than 30% in Tar Sand or Shale Oil. This exclusion shall be implemented during the second half of 2017 for a.s.r. investment portfolios, both for own accounts and third party assets.

- Impact Investing via private and public markets:

Both via listed and private markets, a.s.r. invests since 2006 in enterprises which contribute positively to a predefined objective addressing societal or environmental issues in a measurable way. This was done traditionally via private equity funds with a specific solutions for waste recycling, clean tech, and renewable energy as for example Glennmont Renewable Energy, Robeco Clean Tech, Social Impact Ventures.. For new commitments a.s.r. asks consistently to report on the impact performance (such as CO2 avoided



emissions) which, where possible, would be linked to the managers remuneration. In July 2017, a.s.r. participated in the public placement of the Triodos Vastgoed Fund, the first European sustainable real estate fund to achieve a zero emission SDG 11 (Environmental and spatial quality) and 13 (From zero emission to zero energy): this fund aims to improve buildings by applying LED lighting, insulation, solar panels, heat/cold storage, electric charging infrastructure, sedum roofs, bicycle stalling and showers, energy consumption monitoring and energy efficiency performance contracts. Renewable energy within the private loans is since 2016 also included in a.s.r. investment portfolio.

For European insurance companies is this however not the only way to invest. a.s.r. makes use of other impact investing instruments in the public market such as Green Bonds. Via this way a.s.r. showcases its commitment to financing new and existing projects with environmental benefits. In 2017 a.s.r. GAM investment committee approved to tripled a.s.r. exposure to Green Bonds (€ 150 m), which was realized in H1 2017. For 2018 a.s.r. has included green bonds as a preferred option, where possible in combination with other portfolio limits and financial criteria.

- **Countries SRI policy extended to capture Environmental criteria**

a.s.r. SRI policy for countries was conceived to assess the country perceived corruption (Governance criteria) and its respect for Democratic Freedoms (Social criteria). Bringing in climate factors could allow for a more well-rounded perspective on sovereign risk for investment decisions. At the same time, a.s.r. perceives the SDG's as a good framework to assess the governments positive contribution to a broad range of sustainable themes, which will be used as best-in-class criteria. Therefore a.s.r. has expanded its SRI country policy to include the following criteria:

- The Environmental Performance Index (EPI), introduced by a cooperation of institutions (Yale and Columbia universities, two foundations and the World Economic Forum), which ranks countries' performance on high-priority environmental issues in two areas: protection of ecosystems and protection of human health. Within these two policy objectives the EPI scores national performance in nine issue areas comprised of more than 20 indicators, including climate and energy criteria which are based on the trends of the country carbon intensity and CO2 emissions. Poor scoring countries (below 50) will be excluded from a.s.r. portfolio due to its environmental policies/implementation
- The SDG Index, produced by the Sustainable Development Solutions Network (SDSN) and the Bertelsmann Stiftung, which assesses where each country stands with regard to achieving the SDG 2030 Agenda throughout 99 indicators.



To integrate a best-in-class country policy, the weighted average score of a.s.r. sovereign portfolio will be positioned within the first quartile of the SDG Index.

The list of countries according to this expanded policy shall be publicly available in a.s.r. corporate website.

Additionally, for the new a.s.r. ESG sovereign bond fund with a best-in-class ESG character, a.s.r. committed to have a higher weight on green bonds than the relevant benchmark.

a.s.r. Carbon footprint of the investment portfolio

a.s.r. started measuring the carbon footprint of a carve out of its investments in 2016, both for own account and third party assets, according to the GHG Protocol. In February 2017 a.s.r. provided a first indication to the DNB as requested for its research on climate risks, highlighting the importance to develop a comparable methodology and reporting for the sector. Since June 2017 a.s.r. is measuring the carbon footprint for the total companies portfolio (both equity and credits, own account and third party assets). This measurement will be periodically implemented and expanded with the final goal to measure the carbon footprint (and energy transition) for the entire investment portfolio in an aggregated manner.



a.s.r. is also member of the PCAF (Platform Carbon Accounting Financials) as part of the Sounding Board which has the same objective. While recognizing that climate-related financial reporting is still evolving, a.s.r. endorses the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), which aims to facilitate this energy transition by improving global transparency over climate-related reporting.

Acknowledgement of the shortcomings of a developing methodology

a.s.r. carbon foot-printing work is a useful tool to understand high carbon holdings. While broad asset-class level figures are not unequivocal, a breakdown into sub-sectors shows highly different levels of carbon intensity per industry. However, shortcomings remain: there's no consistent global carbon measurement framework for balanced investment portfolios, Carbon data coverage can be incomplete for the Scope 3 of companies and certain asset classes. It may also not be the right metric for target-setting purposes since carbon data (scope 1 and 2) is a snapshot of current emissions, but is not forward-looking. It highlights today's carbon emitters, but not tomorrow's low carbon solutions providers, the winners of the future. a.s.r. aims to address partly these shortcomings with the E(SG) company assessments as these include an analysis of climate strategies and not only footprint.

The data included in this report is a best effort indication of the Carbon Footprint of a.s.r. investment portfolio for the following asset classes and according to the following methodology and assumptions, and taking into account the recommendations of the PCAF current methodology:

- Absolute emissions are expressed in carbon dioxide equivalents: CO₂
- Relative emissions are expressed in carbon dioxide equivalents per million Euro invested: CO₂/M€
- Prudence; showing scope 1, 2 and 3 separately to ensure comparability, avoid overstating performance and provide transparency on potential areas of double counting.
- The carbon data provider is VigeoEiris. The emissions used in this assessment are taken either from CDP, other company's reported data or VigeoEiris estimations via a proprietary regression model based on two main factors: the nature of the company's activities and the size of the company. Regarding Scope 3, the comparability, coverage, transparency and reliability of the data is insufficient. As reflected in the table, a.s.r. AuM with available Scope 3 data is therefore lower than for Scope 1 and 2 measurement.

a.s.r. carbon footprint can be measured as the proportion of a.s.r. investments relative to the Market Capitalization, Enterprise Value or Total Assets of a company. Market capitalization is included in the PCAF progress report as it provides an indication of the 'ownership' of the companies' carbon emissions. However it's either only applicable to a very limited part of the portfolio (equities) or it creates double counting when including the credits portfolio. Enterprise Value avoids the issue of double counting among asset classes, however we encountered more information gaps than by the Total Assets ratio. Therefore, to be most transparent, the table below shows the a.s.r. carbon footprint relative to the Total Assets of that companies, both as absolute emissions and as relative emissions per million Euro. Of course the major part of the carbon footprint will be caused by a small proportion of the analysed AuM (about 7%) in the energy-related sectors, including Energy, Utilities, Multiutilities, Conventional Electricity, Integrated Oil & gas, Exploration & production, General mining and Gas distribution, according to the Merrill Lynch classification. This amounts to 616.580 t CO2 eq. which is 45,3% of the a.s.r. carbon footprint Scope 1+2.

Total Carbon Footprint:

$$\sum(\text{M€ invested} / \text{Total Assets}) * \text{CarbonFootprint} = \text{t CO2eq.}$$



Carbon footprint per M€ invested:

$$\sum(\text{M€ invested} / \text{Total Assets}) * \text{CarbonFootprint} / \text{Total portfolio investment} = \text{t CO2eq/M€}$$

	Scope 1 + 2	Scope 3*
a.s.r. corporates AuM per 30-6-2017 (Equity and Credits) (M€)	14.231	11.667
a.s.r. Total Carbon Footprint (t CO2 eq.)	1.360.466	2.667.869
a.s.r. Carbon footprint per M€ invested (t CO2 eq.)	95,60	228,66

*Lower AuM due to lack of available data for Scope 3

Conclusion and next steps

a.s.r. will continue measuring periodically and evaluating the results of these efforts with the final goal to support the energy transition and contribute to limit the temperature rise to 1.5 grades Celsius. Furthermore we will explore opportunities and improvements to further reduce the carbon footprint of the a.s.r. investment portfolio which hopefully will result on the long term to a zero emission investment portfolio. The exact reduction goals on yearly basis will be determined and made public as result of the periodical analysis.

a.s.r. welcomes the feedback from stakeholders on this paper and invites parties to cooperate constructively in the development of metrics and solutions to achieve these goals.