

Making sense of it all



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1. About This Report

The aim of this report is to provide clients and stakeholders with a clear, comprehensive overview of Aegon Asset Management's approach to Responsible Investment.

With the use of case studies and interviews, alongside descriptions of processes, updates and data, we aim to provide a rounded view of our activities in 2017. Also through a number of 'next steps' text boxes, we will set our agenda and ambitions for the coming years.



3. Foreword, Sarah Russell

Dear Reader,

We are at one with #GlobalShapers

The World Economic Forum's 2017 Global Shapers Survey represents the voice of more than 31,000 millennials from 186 countries and territories. For the third consecutive year, almost half declared "climate change/destruction of nature" as their greatest concern. Aegon shares these concerns and has developed its own commitments and actions toward tackling climate change, as well as society and the environment at large.

In 2015, we signed the Paris Pledge in support of the Paris Climate Agreement. We are also actively engaging with companies on climate issues and have established a working group to put in place the recommendations of the Financial Stability Board's (FSB) Taskforce on Climate-related Financial Disclosure (TCFD). Importantly, we combine dialogue with action – we continue to look for clean energy investment opportunities.

We applaud the respondents to the Global Shapers Survey who also said they are willing to change their lifestyle to protect the environment.

Responsible Investment as part of a Responsible Business

In last year's report, I described my own experience of climate change – the catastrophe of bushfires. They are not started by climate change, but their ferocity and devastation are certainly fuelled by conditions linked to climate change. I remember, as a child, seeing my mother standing on the roof of our home, garden hose in hand, and filling gutters with water as a defence against the fire's imminent threat. She would have appreciated the #GlobalShapers' concerns and commitment to action – before it's too late.

At Aegon, responsible investment and dealing with climate change are part of a broader approach to responsible business. For us, responsible business means helping our customers achieve a life time of financial security and well-being. So that we can be a trusted partner for those in pursuit of both prosperous and healthy lives.

There is more wisdom my mother could share with young people today. In the early 1970s, she dragged me to the shareholders' meeting of a small tin mine located in Tasmania. There was a proposed takeover by a large multinational, which she did not want. For retirement systems to be effective, individuals must understand the personal role they play in building up their own financial security, including the markets, products and tools that are available to them.

For my parents, it meant an active interest in equity markets and the stocks in which they were invested, property, an aversion to debt, and investing to support retirement, health insurance and life insurance.

So what is the message for our clients, especially younger people?

Consider that a monthly investment of USD 100 over the next 50 years will yield less than half what it would have done over the past 40 years, given today's market levels¹. In other words, millennials will have their work cut out just to match the living standards in retirement currently enjoyed by their parents- and many of them do not yet have a pension or savings plan.

And the message from Baby Boomers?

Despite the benefit of higher historic market returns on savings in the past, our research shows that America has a health and savings crisis. Baby Boomers have shared their concerns with us: some find they still simply can't afford to retire, they have a lack of faith in social security and they are worried about the high cost of healthcare in old age.

Sharing knowledge, investing wisely, caring for our society

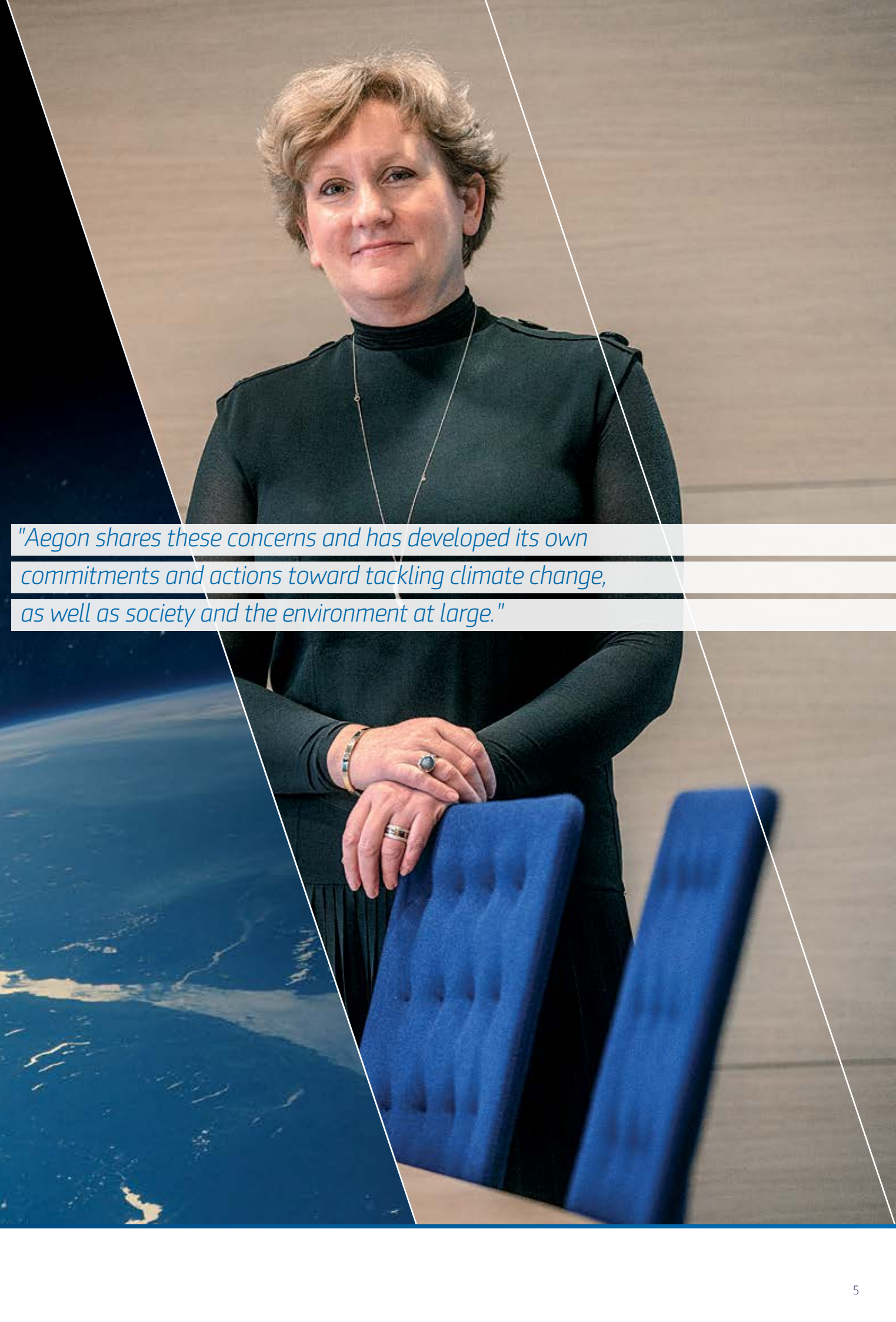
At Aegon, responsible business is about investing in and building retirement readiness and healthy aging – healthy aging supported by a healthy environment. It's also about sharing our knowledge and expertise.

Creating this knowledge means developing a deep understanding of our customers' needs and requirements. Sharing this knowledge and use our investing responsibly and wisely means caring for our society.

We are proud of the stories we're sharing with you in this year's Responsible Investment Report.

And our message to millennials is: ensure you take the time to invest the same passion you have for the environment into securing your own financial security. And, if you haven't done so already, start today.

¹ Calculations based on indicative balanced mandate, comparing historic performance and current yield curves.



"Aegon shares these concerns and has developed its own commitments and actions toward tackling climate change, as well as society and the environment at large."

3. The Future of Responsible Investment at Aegon Asset Management

In recent years, there has been growing willingness across the financial industry to embrace sustainability. However, we have yet to see significant shifts in the way that investments are made. Global challenges, as summarized in the UN Sustainable Development Goals (SDGs), remain and the expectations that investors will contribute to solving them are higher than ever. At Aegon Asset Management, we are committed to contribute, but we realize that many of the tools at our disposal – ESG² integration, engagement, impact investment – are imperfect and require further work to be truly effective. We also realize this is something no investor, no single player, can achieve on its own: to have real impact, we need to join forces globally.

At Aegon Asset Management, we're already doing so. We're active participants in the Cambridge Institute for Sustainability Leadership (CISL) Investment Leaders Group, looking for ways for investors to collaborate on sustainability matters. With other investors we're supporting research by the Newsweek Vantage organization into "The Future of ESG Investing". We've also been active supporters of the Impact Management Project initiated by Bridges Ventures that we believe will set a new industry standard for impact investing.

We are also committed to further developing the responsible investment "toolbox", by continuing to rigorously implement our Responsible Investment (RI) Framework and the lessons we've learnt.

In ESG integration, we've found the "ESG Next" approach (see below), to be very useful; we're looking to apply it across more of our asset classes and investment teams.

In engagement, we've had good results by focusing on just a few themes and sectors, working collaboratively with other investors and industry representatives. We'll also be further developing this approach in the months ahead.

In impact investment, we can make a significant contribution by sharing our expertise, enabling investors with different risk-return profiles to invest and encouraging new flows of capital to areas where it is most needed. We also want to dig deeper into how the UN's SDGs can be used as a tool to guide, and report on, investments.



Given the increasing importance clients place on these topics, we also recognize the need to have the appropriate capacity, capabilities and tools to incorporate these factors into our investment processes.

Finally, we have a role in the wider industry debate. Joining task forces, leading industry associations and cross-border collaborations such as the CISL Investment Leaders' Group, and speaking with government representatives, to share lessons from our responsible investment work, is essential to helping develop a policy environment conducive to more sustainable financial markets.

Therefore we strongly endorse the "new way of working together" – proposed by the European Commission – to help find projects and solutions that improve people's well-being and bring about a more equitable, sustainable world.

Roelie van Wijk-Russchen
Global Head of Responsible Business and Public Affairs

Harald Walkate
Global Head of Responsible Investment






"We strongly endorse the "new way of working together" proposed by the European Commission- to help find projects and solutions that improve people's well-being and bring about a more equitable, sustainable world."

² ESG refers to Environmental, Social and Governance. These are shortened to ESG throughout this report.

4. History

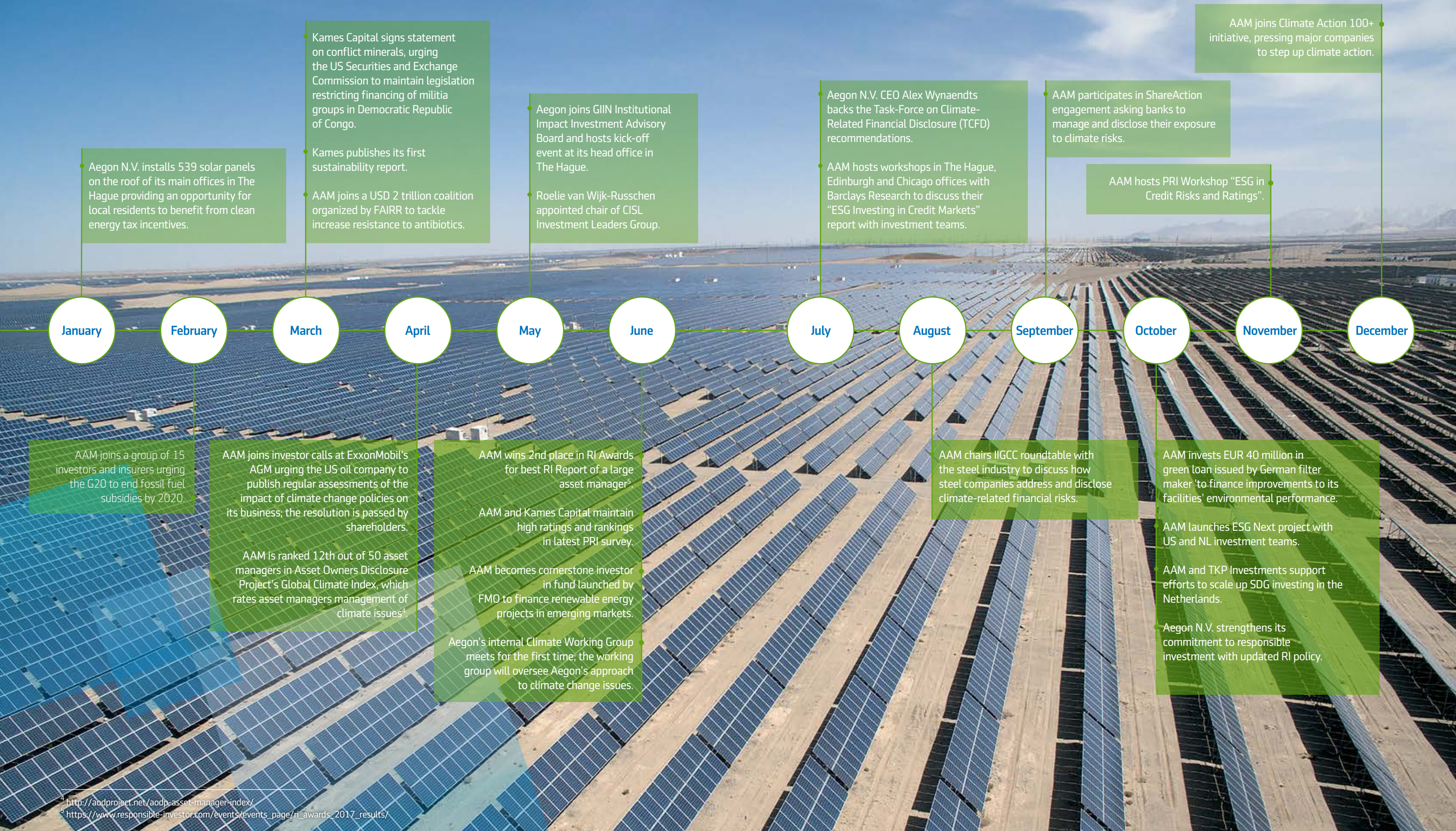
- 1989** Kames Capital launches their first Ethical Fund
- 2004** TKP Investments launches first SRI fund
- 2007** Aegon the Netherlands establishes RI committee and publishes first RI policy
- 2010** AAM develops RI framework
- 2011** Aegon N.V. publishes global RI policy and establishes global RI committee
AAM becomes signatory to the PRI
- 2012** AAM selects ESG research provider to support ESG integration
AAM joins GRESB
- 2013** AAM makes ESG training mandatory for all investment staff and appoints "ESG Officers" in all AAM units
Aegon N.V. joins the GIIN
- 2014** AAM conducts carbon footprint analysis on fixed income portfolios
- 2015** AAM integrates ESG ratings into investment research "tear sheets"
Aegon N.V. revamps RI governance
AAM makes climate change a key priority and invests in renewable energy
- 2016** AAM makes RI a 2020 strategic initiative
AAM makes first micro-finance investments

5. Headline Numbers in 2017

	335	Aegon Asset Management engaged with 335 companies.
	1,236	Aegon Asset Management cast votes at 1,236 shareholder meetings.
	8.1 billion	Aegon Impact Investments totaled EUR 8.1 billion.
	82%	82% of eligible Aegon Asset Management employees completed ESG training ³ .
	4.2 billion	Aegon Asset Management had EUR 4.2 billion AuM in SRI funds.

³ All investment staff is eligible. Generally, investment staff includes portfolio managers and analysts, and other directly involved in investment research and decision-making.

6. Highlights 2017



⁴ <http://aodproject.net/aodp-asset-manager-index/>

⁵ https://www.responsible-investor.com/events/events_page/ri_awards_2017_results/

7. About Aegon Asset Management

Aegon Asset Management is a global, active investment manager. We use our investment management expertise to help people achieve a lifetime of financial security, with a focus on excellence, trust and partnership.

We're entrusted with EUR 318 billion worldwide

Investors worldwide trust Aegon Asset Management to manage approximately EUR 318 billion on their behalf. In the UK, Continental Europe, North America and Asia, Aegon Asset Management's specialist teams provide investment solutions across asset classes.

Clients benefit from our international capabilities and local knowledge

Clients benefit from our international research capabilities and in-depth local knowledge. In the UK, we operate as Kames Capital and in the Netherlands, our multi-manager investment team operates as TKP Investments. Aegon Asset Management is part of the Aegon Group, one of the world's leading financial services organizations, providing life insurance, pensions and asset

management. Aegon N.V. is the ultimate parent company of the Aegon Group.

A trusted partner for the long-term

We work with a range of clients in an effort to help them achieve their long-term investment goals. Our focus is on excellence, working to consistently deliver the performance, service and solutions our clients seek. We believe in strong governance, transparency and clear accountability to our clients.

A heritage of successful investment

Through the Aegon Group our heritage stretches back to 1844, meaning we understand the importance of long-term relationships, robust risk management and sustainable outperformance. A long and successful history of partnership with our proprietary insurance accounts has enabled us to establish experienced investment teams, a solid asset base and long-term track records.



Aegon Asset Management North America
Location: Cedar Rapids, Baltimore, Chicago
AuM: EUR 105 billion*

Aegon Asset Management NL
Location: The Hague
AuM: EUR 66 billion*

Aegon Asset Management CEE
Location: Budapest
AuM: EUR 2 billion*

Aegon Spain
Location: Madrid
AuM: EUR 2 billion



Kames Capital
Location: Edinburgh, London
AuM: EUR 50 billion*



TKP Investments
Location: Groningen
AuM: EUR 24 billion

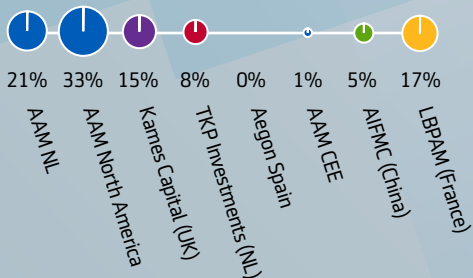


AIFMC
Location: Shanghai
AuM: EUR 15 billion

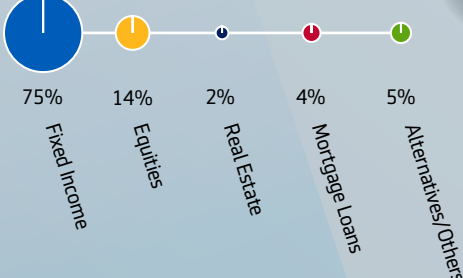


La Banque Postale Asset Management
Location: Paris
AuM: EUR 54 billion

Assets under Management by location: EUR 318 billion



Assets under Management by asset class: EUR 318 billion



* All assets under management stated are as of December 31, 2017. Assets under management for Aegon Asset Management group companies include the advisory services performed by various affiliates or their investment advisory business units and joint ventures. Aegon Asset Management comprises of the following global entities: Aegon AM US, Aegon Real Assets US, Kames Capital plc., Aegon Asset Management Asia Ltd., Aegon Asset Management Central and Eastern Europe, Aegon Asset Management Pan-Europe B.V., Aegon Spain, Aegon Industrial Fund Management Co. Ltd. Aegon Investment Management B.V., La Banque Postale Asset Management S.A., Pelargos Capital B.V., Saemor Capital B.V. and TKP Investments B.V. Assets under management stated for AIFMC and LBPAM are total assets under management (49% and 25% respectively may be attributed to Aegon Asset Management).

8. Our Approach to Responsible Investment

At Aegon Asset Management, we provide clients with investment products that offer the best possible long-term returns, consistent with their individual risk profiles and requirements. Our clients include: Aegon companies for their proprietary assets, Aegon companies' institutional and retail clients, and our own third party clients, which include pension funds, insurers and, in some markets, retail clients.

Meeting client's needs

Aegon Asset Management manages investments according to clients' objectives. While we generally believe that active, responsible and engaged investment management can provide opportunities to add value, our clients in different countries may have differing views on specific environmental and social themes. In addition, ESG factors may be interpreted differently depending on specific investment cases. Not all clients have social or environmental goals as part of their mandates. As a result, we take a client-centric approach to Responsible Investment (RI).

Responsible Investment policy and governance

We believe that RI is an integral part of our business. For this reason, we place our policy and governance at the center of our RI framework. This framework was established in 2010; the following year, we became a PRI signatory⁶ and set up our Global Responsible Investment Committee.

Responsibility for implementing our framework lies with our portfolio managers, research analysts, legal professionals, risk managers and compliance experts. These professionals are supported by a centrally organized, dedicated global RI team.

Investment analysis

Integrating ESG factors into our investment analysis is a key part of our RI framework. It also supports our Active Ownership and Targeted Investment activities, as applicable to the business units. We apply ESG integration across all accounts, regardless of the type of client, because we believe that ESG integration can provide opportunities to enhance investment performance for all clients. Moreover, ESG integration cannot be applied to some clients, and not others, as investment processes are too interconnected. Research teams, for example, generate tear-sheets⁷ for all portfolio managers – both those managing Aegon portfolios and those managing investments for third-party clients.

Targeted investments

Aegon Asset Management manages a broad spectrum of RI solutions, including impact investments and socially responsible investments (SRI). 'Impact investments' – include investments intended to achieve social or environmental outcomes in addition to financial returns. Our impact investment activities are undertaken mostly on behalf of our affiliated Aegon insurance company clients. However, we see increasing interest from third-party clients, in particular in areas such as affordable housing and clean energy. Many clients also see impact investing as a way of contributing directly to the UN's SDGs.

For SRI strategies, our approach is driven by our clients. If we see client interest in products that have a more pronounced approach to RI, for example, products that screen out certain categories of investments, or by focusing on the best performers in each sector, we look to leverage our ESG expertise and track record with SRI strategies⁸.

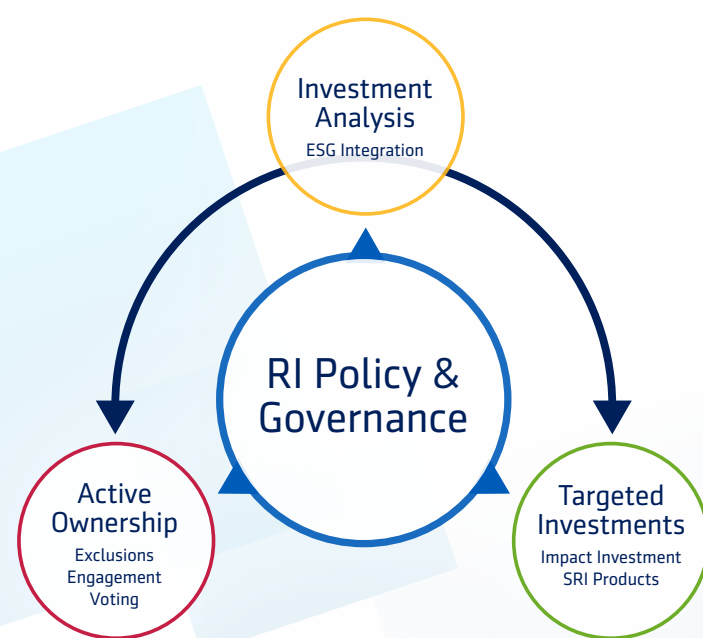
Active ownership

Aegon Asset Management is an active owner. We engage with companies we invest in and vote at shareholder meetings. We may also exclude certain types of investment altogether. For exclusions, we follow universally accepted principles as far as possible. In most countries, our proprietary exclusions apply to Aegon general account assets, in line with best practices. With external clients, we will apply similar exclusions to their mandates at their request. In the Netherlands, our exclusion list applies to all investments, regardless of client type.

A key strategic priority in 2017

In 2016, our Management Board identified RI as one of its key 2020 strategic initiatives. To support this, we introduced two important projects last year. The first - ESG Next - examines ways of extending ESG integration. The second will determine to what extent our external asset managers are applying RI principles. During the year, we also formalized the Aegon Climate Working Group, which will help identify and monitor climate related business risk. Finally, we looked at new clean energy investment opportunities for the Aegon Group.

These initiatives have allowed us to make significant steps in integrating and understanding ESG concepts as part of our investments. We are already thinking ahead, beyond 2020, to ensure that we remain at the forefront of the sustainable finance movement.



⁶ Aegon Asset Management companies, excluding partnerships, became signatories to the PRI in 2011. Kames Capital, also a member of Aegon Asset Management, became a standalone signatory to PRI in 2008.

⁷ Investment analysis summaries that include ESG ratings and data.

⁸ SRI strategies are managed by Kames Capital, TKPI, AAM Central & Eastern Europe and by our joint-venture partners AIFMC and LBPAM.

9. Policy and Governance

Aegon N.V., the parent company of Aegon Asset Management, adopted its first global RI Policy in 2011⁹. The policy is guided by international frameworks, including the UN Global Compact, the OECD Principles of Corporate Governance, and the Principles for Responsible Investment (PRI). It sets out how these frameworks should be applied both by Aegon companies as asset owners and by Aegon Asset Management as investment manager. The policy offers three tools for implementation: ESG integration, targeted investments and active ownership (exclusions, engagement and voting).

Last year we decided to update the policy - to ensure it remains aligned with new insights in RI, and to reflect our views on climate change and impact investment. The new policy was published in October 2017. An interview on the process to update the policy may be found below.

Implementation of the RI Policy is overseen by two committees:

The RI Strategy Committee (RISC)

This Committee determines Aegon N.V.'s overall strategic approach to RI. The committee is chaired by an Aegon N.V. Management Board member and includes representatives from Aegon N.V., Aegon insurance companies and Aegon Asset Management. This helps ensure consistency across the group. The committee meets three to four times a year.

The RI Technical Committee (RITC)

The RITC oversees implementation of our RI policy and governance. This includes ESG integration, engagement and voting. Members of the committee include RI staff, portfolio managers, research analysts and risk managers from across Aegon Asset Management businesses. The committee meets five to six times a year and advises both the Management Board of Aegon Asset Management and other Aegon boards and committees on RI matters.

⁹ Aegon N.V. is the ultimate parent company of Aegon Asset Management. Aegon N.V. adopted its RI policy in 2011. The policy outlines the responsible investing framework for Aegon companies, including Aegon Asset Management. The extent to which Aegon's RI policy is applied to clients' mandates may vary depending on the client type and region.

Aegon N.V. RI Policy Update

Last year, Aegon N.V.'s Head of Strategy & Sustainability, Marc van Weede, worked to update Aegon's RI policy. Marc was supported by the RI team at Aegon Asset Management, and by Daan Spaargaren, a sustainability consultant. Marc and Daan told us about the process to update Aegon's RI policy and where they see sustainable development going over the coming years.

Marc, could you tell us about Aegon's decision to update the RI policy?

Marc: The world has changed significantly since we put in place our first RI policy. Society's standards and expectations are much higher now. We decided to involve Daan because we also wanted an outside perspective to help us in the process.

What is new about the policy?

Daan: The new policy goes much deeper than the last one. There is a stronger focus on how sustainability issues should be taken into account when making investment decisions. We also clarified the scope of the policy. Aegon has a very complex international structure with different kinds of investments and different types of clients. For Aegon's stakeholders, it can be difficult to understand how RI principles apply across this structure. Defining this clearly was very important.

Marc: We also put a stronger focus on governance. We wanted the asset owners - the insurance and pension companies in the Group - to have a stronger say. We've also been working to ensure third party clients are more involved in RI issues. Generally, the new policy aligns well with the Aegon Group's overall responsible business approach.

How did you approach this process, developing a policy for a multinational company with headquarters in the Netherlands?

Daan: I obviously looked at what other international insurance companies and asset managers are doing. I also interviewed people directly involved in Aegon's RI initiatives - for example, the members of the RI Strategy Committee. Initially, some people felt that "if it ain't broke, don't fix it", but the discussions were helpful in getting agreement that the policy should be updated, and how. The discussions also showed that the policy needs to allow units, to a certain degree, to tailor the RI approach to their own businesses and clients. After all, there are many cultural sensitivities and Aegon's approach needs to reflect local norms and standards. Aegon's HQ is in the Netherlands, and naturally that plays into the discussions. But Aegon's largest market is the US, so you can't ignore the American view... and of course, Aegon has clients in some twenty other countries as well.

I also found it interesting to learn that different stakeholders have different priorities. For example, the legal team wanted to make sure that Aegon could really live up to everything the company said in its policy. And that Aegon acts in the same way it wants other companies to act - "practice what you preach". That stands out to me because I think that is exactly right for an asset manager. You have to keep your promises and work with your clients. We're also seeing regulations on these issues starting to tighten, so it's important that you really deliver on your policy.

Marc: As an illustration, perhaps - we have consensus on ESG integration and engagement, which are the two main elements of our RI approach. With exclusions, there is a difference. The US and UK are often very cautious, especially with third party clients. In the Netherlands, there's more acceptance of exclusion. We listen to everyone concerned and then we set out our priorities. The policy we've created gives us the flexibility to do this.

Last year, Aegon started using the UN Sustainable Development Goals (SDGs) as a framework for responsible business. What steps have you taken in 2017 and how are they reflected in the policy?

Marc: We have referenced the SDGs in the policy, but we recognize there's more work to do. It's hard to find assets that have a clear SDG link we can invest in. This is partly because of the capital rules we operate under. But also because our general account asset base is shrinking, and that's where we have most control over where we invest.

Infrastructure, with activities like wind and solar, is a promising market, but it is very sought-after so there is a lot of competition, and that drives down returns.

Daan: Looking forward, the SDGs will continue to dominate the discussion in RI. For me, they're more useful as a tool for engagement. Right now, sectors like industrials, energy, and agriculture are all misaligned with the SDGs. If we want to transition to a sustainable economy, we'll have to work closely with these sectors. Big investors have a role to play - they can influence multinationals and governments.

"Aegon N.V. decided to exclude tobacco this year because it didn't fit with our focus on financial security and well-being. We say we want our customers to enjoy long, healthy lives. Investing in tobacco just isn't compatible with that."

What about NGOs, did they influence Aegon's thinking?

Marc: We are starting to see a new style of NGO emerging, whose principal objective is to work with investors, which has been very effective. In the past, there has been tension between the NGOs' agenda, which is often more activist, and Aegon and its clients' interests. Most of the time, we want the same outcome - we just have a different way of achieving it. It is essential for Aegon to establish its own views and ambitions. A policy is not sustainable and won't work if you formulate goals that are not strongly supported and aligned with the company culture.

Can you give an example?

Marc: In the health sector, we were approached by NGO's wanting to work with investors on tobacco. Aegon N.V. decided to exclude tobacco this year because it didn't fit with our focus on financial security and well-being. We say we want our customers to enjoy long, healthy lives. Investing in tobacco just isn't compatible with that. This is a good example of NGOs and investors working in different ways toward the same objective. However, it goes too far to say that everyone should do this. It is for each individual investor to make this trade-off, keeping in mind that they are allocating funds for their ultimate beneficiaries.

Do you think we are on the right path to a more sustainable future, at Aegon and beyond?

Daan: I think so. Clearly we're at a crossroads. Like Aegon, many businesses and investors are getting on board with the global sustainability agenda - and that's what is needed to create change.

Marc: I agree, and I believe you have to look first at what you can influence. We had a discussion recently with the Aegon N.V. Supervisory Board. They said: for us, responsible business is about making the lives of our 26 million customers better. As a large insurance and pension company, and as a large investor, we're very well positioned to impact the lives of our clients, and to contribute to a more sustainable future for our planet. With our products and services and our approach to RI, that's what we're trying to do.

10. Investment Analysis

ESG integration means taking ESG factors into account in investment analysis and decision-making. We believe ESG integration improves our risk management and investment capabilities. Our investment professionals are required to complete ESG training. They learn how to identify investment risks and opportunities related to ESG performance.

Overview of investment analysis

Since 2011, we have taken several steps to incorporate ESG factors into our internal investment processes. The first real impulse in this area was the decision to source data from a leading ESG research provider. In 2013, we introduced the requirement that members of investment teams complete ESG training. This was to ensure portfolio managers and analysts are in a position to incorporate ESG considerations in our investments. In 2015, we completed the process to automatically include ESG ratings data in investment analysis summaries, called tear sheets, generated by the Global Credit Research team. Finally, we continue to work with 'ESG officers', portfolio managers or analysts in different units who lead ESG integration work in their local team.

ESG training

In 2013, we mandated ESG training for all portfolio managers and research analysts. Those who are eligible take an online program offered by the PRI Academy. This program covers the use of sustainability data in fundamental analysis and security selection. Training gives our teams a better understanding of ESG factors and how to apply them to specific investments. In addition to the PRI Academy program, our ESG data provider offers regular webinars and sector conference calls. We intend to increase the amount of ESG-related training provided to portfolio managers and research analysts.

By the end 2017, 82% of eligible portfolio managers and analysts had completed the training¹⁰.



¹⁰ All Aegon Asset Management staff with investment research and decision-making responsibilities are eligible. In practice this means effectively all portfolio managers and analysts are eligible.

ESG Next

Last year, we launched the ESG Next program. The aim of the program was to organize 'deep-dive' sessions – where RI specialists work intensively with individual investment teams, getting to know investment processes from the inside. ESG Next began with two pilot projects, the first involving the High Yield team in the US, and the second the Rates & Money Markets team in The Hague.

In addition to portfolio managers and analysts, we also involved colleagues from portfolio risk management, sales & marketing, and communications. This gave us a complete overview of our clients' preferences in terms of ESG, and helped determine how ESG factors are currently taken into account in our processes, and how this is communicated to external stakeholders.

We spoke to our colleagues about the importance of ESG Next and how the project could help them integrate ESG more effectively into their daily investment decisions. Our findings are reflected in the interviews on the following pages.

Barclays Research workshops – The Hague, Edinburgh, Chicago

The PRI Academy training provides a good introduction to ESG, but we are always looking for opportunities to expand our knowledge with new, more advanced insights. Last year, we organized workshops at our main offices (The Hague, Edinburgh and Chicago) with Lev Dynkin and Albert Desclée from Barclays Research. They had recently published a paper – ESG Investing in Credit Markets¹¹ – showing that a positive tilt toward ESG factors leads to a small, but steady, performance advantage, and that this effect is strongest when applied to governance. With the workshops we were able to discuss in greater detail how results would vary according to different ESG data sources or credit quality. We also looked at the need for ESG factors to be incorporated in mainstream credit ratings.

Jennifer Moore, Director of US Credit Research in Cedar Rapids, said of the workshop: "I think this was a good step in our journey to better integrate ESG considerations into our processes. The fact that the Barclays team does mainstream quantitative portfolio analysis, and does not only focus on ESG, provided an interesting perspective and gave their research a lot of credibility with my colleagues."

¹¹ <https://www.investmentbank.barclays.com/content/dam/barclaysmicrosites/ibpublic/documents/our-insights/esg/barclays-sustainable-investing-and-bond-returns-3.6mb.pdf>

ESG Integration

Case Study: ESG integration in a chemical company

During our ESG Next meetings, we discussed a chemical company where we had two ESG concerns. First, we were worried about potential environmental and health problems caused by a chemical compound known as perfluorooctanoic acid (PFOA), which the company used to manufacture its flagship product. PFOA production led to contamination in areas near production facilities. PFOA exposure was found to be associated with increases in certain illnesses, including kidney and testicular cancer. These risks were flagged by our ESG process. Additionally, our research highlighted possible legal liabilities as a result of PFOA use. These liabilities, we concluded, might adversely affect the company's financial position and, ultimately, its ability to service its debt.

Second, our analysis raised governance concerns. The company was set up to pay a disproportionately large dividend to its former parent company. This magnified our concerns over the company's ability to handle debt service and legal liabilities.

Following our initial assessment, ongoing ESG monitoring revealed a number of legal outcomes related to adverse health conditions caused by PFOA contamination. This additional information, combined with our prior analysis, aided us in quantifying the potential economic impact of the company's manufacturing process.

Case Study: ESG risk on corporate ratings

Each industry has its ESG issues. In some cases, ESG risk is simply part of investing in that industry. It's important to understand these risks before taking decisions. In the US, we're invested in a provider of student loans. Concerns had been raised over this company's financial products – as well as access to loans and its HR practices. Lawsuits had been filed by US government agencies, including the Consumer Financial Protection Bureau; these lawsuits involved potentially costly fines or legal settlements.

From our analysis, however, we found the company had a reasonable defense. It was compliant with federal law and requirements governing debt collection programs. It also had better quality performance than its peers. It seemed to us the

charges against it were politically motivated, at least in part. With student finance, product design and contracts are determined mainly by the US government. The company could reduce risk – but couldn't eliminate it altogether. As an investor, we simply had to accept that.

Case Study: ESG risks in Sovereigns

We examined a Middle-Eastern country for possible inclusion in our emerging markets portfolio. As part of this, we looked at a number of environmental, economic and political issues. These included:

- The impact of increased global renewable energy output on the country's economy and ability to repay debt (the country is highly dependent on crude oil exports).
- The effect of regional conflict on consumer spending (particularly the possibility that consumer spending will begin to increase current fighting decreases).
- The weakness in governance and public institutions (and the impact of governance changes on credit performance);

in this respect, we were encouraged by the government's recent agreement with the International Monetary Fund and commitment to political engagement.

Incorporating these factors enhanced our understanding of the risks related to investing in this country, and were an influence on our portfolio decisions.

ESG Next – Sovereigns

Phil Torres, Global Co-Head of Emerging Markets and Director of Emerging Markets Research, was involved in the ESG Next project, for the Rates & Money Markets team in the Netherlands¹².

Phil, does ESG add value in sovereign investing?

In my view, there are two reasons to incorporate ESG. Either to create a positive impact or because it leads to better investment decisions. We know there's a correlation between ESG and sovereign ratings. But we can't yet use ESG to predict spreads or defaults, which is primarily what we're interested in.

Is ESG already part of your process?

It is. In one sense, ESG is nothing new. When it comes to sovereigns, ESG focused investors talk about GDP, the rule of law, openness, competitiveness etc. These were already part of our credit analysis. They're also part of agency rating exercises and we see some correlations there. The problem is that correlation isn't the same as cause and effect, so that is something we need to understand better.

"We need much more evidence on the effects ESG activities are having in sovereign investments."

This leaves us with two questions before we can take ESG any further. First, analysts and portfolio managers must know what issues to focus on. For example, do they focus on the risk of war, or water degradation? Which one is the relevant indicator? Which one drives credit spreads? Or defaults? The second question, of course, is how do you then implement this?

And the question of creating positive impact through ESG?

Wouldn't that be great if you could solve the world's problems through investments! As someone who is concerned about social and environmental issues myself that is certainly something I would like to see. However, we need much more evidence on the effects ESG activities are having in sovereign investments. You also have to ask yourself the question – if, because of ESG, you end up investing in certain countries, or not investing in other countries, how much are you changing on the ground? I don't know the answer, but the shift in capital will need to be much more extensive before we really see significant change.

¹² Phil recently published the paper "The Integral Role of ESG Factors in Emerging Markets Investing," which can be found on our website www.aegonassetmanagement.com

ESG Next – US High Yield

Jennifer Moore is Director of US Credit Research and James Rich is a portfolio manager and the Head of US Restructuring, providing research-based advice on lower-quality credits. The RI team worked primarily with Jennifer and James in determining who to involve and how to set up ESG Next for the US High Yield team.

How is ESG incorporated in the investment process at Aegon Asset Management US?

James: To us, ESG is just good credit research. We look at things like new environmental regulations or union disputes and how they might impact business fundamentals. We've been doing that for years and don't believe that we need specific ESG analysts to address these issues. We just need traditional credit analysts who understand ESG.

Tell us about ESG Next. How did it add to what you were already doing?

Jennifer: ESG Next was really about formalizing the ESG integration process and making sure everything is happening in detail at the portfolio level. The project allowed us to focus on a specific asset class, to work through case studies and live examples together, and extend the knowledge we have to other parts of the organization.

James: We are a research-based organization, so our research teams spend a lot of time digging into the detail. Over the past several years, there has been a tremendous amount of new data and research on ESG. ESG Next allowed us to really analyze that new information and make it digestible for our research analysts and portfolio managers.

What asset class did you focus on, and who was involved in the project?

Jennifer: We looked at high yield corporate debt investments. We brought in people from across the investment team: research analysts, portfolio managers, and the RI team. Bringing in the marketing and risk management teams was also important to get broader organizational awareness and build our overall knowledge on the topic.

Which case studies did you look at, and what did you learn from them?

Jennifer: We looked at a number of case studies. We went through the ESG reports for these companies – and separated out what was material and what was just “noise”. Not all ESG factors are equal. You need to understand what's really fundamental to the issuer's industry. Some industries, of course, carry more ESG risks than others. For example, we analyzed ESG issues at an airline that initially looked quite concerning. However, after sifting through the issues and comparing the airline with companies in other industries, we realized that much of the risk just comes with investing in that particular industry.

James: It was good to see our analysts were already familiar with ESG issues and had a good understanding of the dynamics, even if sometimes it wasn't labeled an “ESG” issue. A big value-add of these sessions was that portfolio managers got better insight into the methodology of our ESG data provider. Portfolio managers are more removed from the detailed research process. They don't normally log on to the ESG platform – they rely on information provided by the analyst. We had some interesting discussions about the impact of ESG issues. And analysts learned what kind of information portfolio managers are really looking for and how they use this in investment decisions.


How do you think ESG Next has further honed the team's ESG expertise?

Jennifer: The project hasn't really changed how we look at these issues, but it has strengthened our understanding, and made us realize that what we're doing is important. We just need to communicate that more clearly to clients and other stakeholders.

Also, in ESG discussions, there's a lot of focus on the E and S factors, but we find that often G is often more important. Governance factors tell us more about items such as the underlying legal structures at a company, management representation and the potential for fraud. These are all key to understanding a company's profile. We have a lot of experience in assessing companies' governance, however it can also be challenging to quantify E and S issues in financial terms. That doesn't mean they're less important to a company, but from an ESG integration point of view these issues can be very gray in nature and difficult to define.

So, what will come next from ESG Next?

James: We have a number of follow-up items we're currently working on. First, we need to communicate our views on ESG integration better – both to current and prospective clients. In addition, we're also improving upon our efforts in 2015 and are updating the format of our credit tear-sheets to better reflect what we are doing to integrate ESG factors into our research process. In the new format, for example, analysts will indicate their agreement with the assessment of the data provider and if they do not agree, provide their thoughts behind the difference in opinion. They will also note the magnitude to which ESG factors impact the creditworthiness of the company as well as if they feel engagement with the company would be beneficial. This will also allow the research and RI teams to work more closely together.



"In ESG discussions, there's a lot of focus on the E and S factors, but we find that often G is often more important."



"If there is a big ESG issue, you'll generally find that there is also a ton of other issues, and then it's hard to argue that we decided not to go forward due solely to ESG considerations."

Emanuele Fanelli

Monitoring ESG in External Managers

Last year we carried out a review of our external managers and their alignment with the Aegon Group RI policy. The review provided insights into how managers address RI and integrate ESG into their investment and active ownership practices. TPG, a leading global private investment manager, stood out for its commitment to RI. Jon Skaggs, Head of Private Equity and Mezzanine at Aegon USA and Emanuele Fanelli, Manager Responsible Investment, spoke about their approach with Beth Lowery, Senior Advisor for Environment and Sustainability at TPG.

Can you summarize TPG's RI journey and how you integrate ESG?

Beth: RI has always been fundamental to our investment approach. It wasn't always called RI, but since the start we've had a strong commitment to due diligence and engagement. Over time, our approach has become more systematic. We formalized a program to look at how ESG could add value. We have also gradually moved from a 'risk mitigation' approach, where we looked more at negative impacts, to understanding how we can create positive impact.

In this area, what are the biggest challenges and opportunities for you at the moment as a private equity manager?

Beth: One of the biggest challenges for us is figuring out what our priorities are- in other words, which ESG issues are most relevant for each company. This isn't easy; we have a very extensive and diverse portfolio. Data collection for ESG issues is still emerging, and ESG themes are always changing. Right now, climate change is a very important, high profile issue, but its relevance depends on the specific sector or industry. In the US, many people are also talking about immigration issues, especially with the repeal of DACA¹³. And, of course, sexual harassment claims have recently come to the table. We try to remove the politics, and focus on the business aspects of these issues in our work with companies, to define a risk, or a value creation factor. Actually, many of the challenges also turn into opportunities. For example, often we'll have discussions about environmental issues from a risk point of view, but we also realize that reducing waste and energy use can result in cost reductions and can add to a company's bottom line.

How do you draw a line between something you can improve and something you just want to get out of?

Beth: Usually, the more ESG issues a company has, the more time we spend on them. I can't think of many cases where ESG has driven a "no-investment" decision. If there is a big ESG issue, you'll generally find that there is also a ton of other issues, and then it's hard to argue that we decided not to go forward due solely to ESG considerations. We review all the early warning memos to make sure ESG issues are covered and to see if there's a possibility for improvement. Once we invest, we establish three to five initiatives that will help the company drive value.

Both ESG integration and private equity are about creating long-term value. How do you see the concept of "creating impact through sustainability and ESG" evolving over the next ten years?

Beth: There is still a lot to do on integration. We're now in the phase of focused engagement. Societal issues will keep changing and portfolio companies are starting to address them. Our philosophy is to meet companies where they are and then move them further along on their path to a more sustainable approach.

TPG makes investments for a large number of investors. How do you accommodate for different views on RI and ESG?

Beth: While Limited Partners have differing points of emphasis and inquiry, most understand that focusing on ESG is sound business practice. We encourage dialogue with our LPs so we can understand what issues are important to them. We're also very transparent- we detail all our practices in our PRI and our TPG GES Reports¹⁴.

¹³ DACA is the Deferred Action for Childhood Arrivals. DACA would allow certain illegal immigrants to remain in the US if brought to a country as a child.

¹⁴ https://www.tpg.com/sites/default/files/2017-07/2017%20GES%20Report_FINAL.pdf

Long Term Investing

Niels Hermes is Professor of International Finance at the Faculty of Economics and Business of the University of Groningen. In 2017, he published a research report about investment time horizons at Dutch listed companies¹⁵. Jaap van der Geest is a portfolio manager at TKP Investments who was involved in the launch of a fund with a focus on long term investing in 2017.

Niels, can you tell us about the background to your research and what the objectives were?

Niels: Our research looked at company managers' time horizons, whether they were shorter- or longer- term oriented. We also studied what determined these time horizons, and the outcomes they produced. What we found was that companies that had shareholders with longer-term horizons, like insurers and pension funds, were also more long-term oriented. This may be expected. More surprisingly, we found no clear connection between company managers' time horizons and outcomes like whether the firm manages earnings, invests more or less in R&D, and so forth. This doesn't necessarily mean that these connections don't exist; they just didn't show up in the research. The question about time horizons is very context-specific. It depends on the industry, on the history of the company, on the macro-economic situation, even on the specific stage of the business cycle. If there is an economic crisis, companies go into survival mode, focusing on shorter-term concerns. When markets are booming, they're more likely to look at the long term.

Jaap, you developed a strategy based on a long-term investment. Do you feel that other investors may not be as long-term-oriented as they should be?

Jaap: Each investor has its own style. Short-term oriented managers often base their decision-making on economic factors like GDP growth or changes in oil prices. They also tend to be very focused on their position relative to index weightings, as well as market sentiment and momentum. In fact, these elements can override other factors that may be more relevant in the longer term. In some cases, their-performance may be good, but on balance it is not the best way to invest because these investment decisions are partly based on variables where prediction accuracy is low.

And what makes your strategy a "long-term" strategy specifically?

Jaap: At TKP Investments, we invest through external managers. Some are long-term oriented, others are more short-term. What distinguishes our strategy is that we own companies, we don't trade in them. So, instead of basing our decisions on factors like GDP growth, index weighting, and specific market developments,

we invest in companies that appear to have strong, 5-10 year business strategies. When you know you will be holding a company for a longer period of time, ESG factors also become more important. You need to ask: will society still find this company relevant and valuable in ten years' time? We also removed the usual performance fee. Instead, we put a target on external managers' five-year performance, which rewards successful long-term strategies. Of course, progress may not be a straight line. However, we expect managers to stay true to their investment philosophy.

While having a long-term focus is generally a good thing, many investors often argue that the long term is not more than a series of short terms. Also, that investors have a responsibility to monitor companies and management and hold companies accountable when they don't meet expectations. What's your view?

Niels: The idea that the long-term is a series of short-terms is a bit simplistic. You don't win a marathon by doing ten four-kilometer sprints. If you are pursuing long-term performance, you really need to build a strategy around it, both as an investor and as a company manager.

That said, short-term monitoring by investors is important – it's a key part of corporate governance. The main challenge for company management is that there are stakeholders with different interests and it is up to the management to align these interests over the long term. Ultimately the key thing is: what is the company's focus? What is it really aiming for? It's the responsibility of management to send clear signals – "here's what we want to achieve". If you buy into that story as an investor you should, to some extent trust, the management. However, not all investors are the same. Some might be in it for a longer period and will want to have a voice in governance. Others may be looking for an earlier exit and if that fits with their investment strategy that is fine, they're not so interested in having a voice. This kind of diversity in investors and companies is part of what makes financial markets work.

Jaap: Clearly, short-term investors are trying to achieve a good return within a confined timeframe. We have all heard the

"The idea that the long term is a series of short terms is a bit simplistic. You don't win a marathon by doing ten four kilometer sprints."



¹⁵ The research was commissioned by Dutch investor platform Eumedion. Harald Walkate, Global Head of Responsible Investment at Aegon Asset Management was Chairman of the Eumedion research committee at the time

80/20 theory that would hold that 20% of the stocks generate 80% of the return. A lot of managers try to time their trades by looking at the economy and at quarterly figures, which can create very volatile investment behavior. So yes, short-term developments are important and companies need monitoring, but you have to work out whether these developments affect your long-term investment case.

Company managers' remuneration schemes are key in aligning management, investors and other stakeholders behind long term goals. Do you agree, and what recommendations do you have for non-executives who decide on these schemes?

Niels: You have to ask yourself to what extent you should use non-financial criteria in setting your remuneration strategy. It sounds right, but does it really work? Research on this topic is emerging, but it is not clear yet where this is going. Even if you look at health & safety, product recalls etc. – to what extent can management manipulate those things? I'm not sure that we've developed good enough metrics yet to hold managers to account for non-financial outcomes.

Jaap: Incentives should be based on how successfully a management team allocates its capital. Managers often receive shares in the company. We prefer this to bonus schemes that are asymmetrical, where you get rewarded for the upside, but not punished for the downside.

Niels: I agree. You need time to see the real effect of managers' actions. By the time that happens, they may be long gone. Ideally, you should wait much longer before paying out bonuses - either that or have a claw-back.

Niels' research shows that, in the Netherlands at least, it doesn't make much difference whether companies are short-term or long-term oriented. Are we putting too much emphasis on time horizons?

Niels: Yes, the time horizons is just one aspect. We shouldn't generalize. For some companies, for example, investing in R&D is a wonderful thing, but for others it may not make sense. Generalization also does not make sense with respect to investors. Take hedge funds – some might say they are the ultimate short-term investors. Actually, if they come in, shake up management, put the company on a better course, that could be a very good thing, depending on how well managed the company is. Instead of asking whether a company is long-term oriented, you could ask - what does it mean to be a well-managed company?

Jaap: For us, a well-managed company is one with a management team that focuses on opportunities, with healthy returns on capital, rather than growth per se. At the same time, we want to see a balance in stakeholder interests – that is what underpins long-term success.

Niels: What we haven't discussed is the effect of protective measures, like anti-takeover defenses. Studies show these can be both positive and negative. In our study, we found that these protective measures may give managers more independence and help shield them from external short-term pressures. We'd like to do the study again in a wider European context – to see if you get the same results outside the Netherlands. Do time horizons really matter? – The jury's still out.

PRI's ESG Credit Ratings Initiative

In 2017, RI Manager Emanuele Fanelli and Principles for Responsible Investment (PRI) Senior Consultant Carmen Nuzzo hosted the kick-off event for a series of roundtables that the PRI organized as part of the ESG Credit Ratings Initiative. Emanuele caught up with Carmen later to hear how the initiative is shaping up and her plans for the future.

Carmen, could you tell us a bit about the initiative and how it came about?

The PRI launched the initiative in response to a survey conducted in 2015, looking at how organizations use credit rating agency (CRA) services and the extent to which they thought agencies were already incorporating ESG factors in their methodologies. Our findings showed that most respondents thought that ESG factors were being captured, but it wasn't clear how.

Following the survey, we launched the ESG in Credit Ratings Statement. This is a public recognition, by CRAs and investors who sign the document, stating why it's important to be more transparent and systematic about integrating ESG factors in credit assessments

And what was the state of play?

On the investor side, ESG consideration is still in its early stages, but there's growing interest. Communication is also an issue. CRAs have produced a lot of research and notes to explain their methodologies, but there's still confusion among investors.

What key changes have CRAs implemented in relation to ESG during the last year?

Over the past couple of years, we have seen important changes. CRAs have started to publish more notes related to ESG factors, making them more explicit. There has been an increase in the number of publications on ESG both at a sectoral and thematic level. More importantly, new dedicated teams have been created, focusing on ESG integration or sustainable finance. Credit analysts now have more insightful resources to produce their research and we are beginning to see more rating upgrades and downgrades as a result of E and S factors, as well as G.

Last year, you held several workshops around the world, with both CRAs and investors present. Could you tell us about the key lessons learnt?

We wanted to test whether the findings of our initiative's first report were valid at industry level. The workshops were instrumental in doing that. Aegon Asset Management hosted the inaugural workshop, and helped the PRI shape the survey we used to frame discussions. We wanted to target the ultimate users of rating agencies, so the events were aimed at practitioners, both portfolio managers and credit analysts. ESG specialists could join only if they brought their investment

counterparts. It was a nice way to put CRAs and investors around one table to talk about the challenges and what investors wanted to see more of.

Investors were eager to learn how to put ESG into practice. They recognize that the G, which has always featured in traditional credit risk analysis, is more material than the S and the E. Investors are trying to make ESG analysis more quantitative, but in many areas they lack standardized data. More advanced investors – including Aegon Asset Management – have started to produce proprietary indicators to spot opportunities and manage downside risks.

How do fixed income investors view ESG third party ratings in comparison with credit ratings?

There is a lot of confusion in the market around what it means to incorporate ESG in traditional credit ratings. CRAs measure the relative creditworthiness of a bond or of its issuer, whereas ESG ratings measure how well a bond or an equity issuer performs based on ESG metrics. The two are distinct, but not mutually exclusive, and investors should be using both with different lenses.

What are the next steps in the ESG Credit Ratings Initiative and where do you hope it will eventually lead to?

Our second report focuses on the challenges of incorporating ESG factors into credit risk analysis. After publishing this the PRI will conduct another round of events in Asia, and a third and final report will be out in the fall. The final report will feature solutions that emerged during the roundtables and recommendations for the future. The aim is to dig deeper at the sector level and, within fixed income to assess different asset classes - like high yield, financials and non-financials - to make ESG integration more practical.

Eventually, we hope this will become a “baked-in” approach, for rating agencies to be as explicit as possible and embed this in their analysis, as opposed to simply producing an add-on sector product that would compete with what other service providers are already doing.

For me, it is really exciting to see how quickly the area is growing and that investors are really thirsty for knowledge, but changes won't happen overnight. What is missing at the moment is the link between the increased ability of CRAs and investors to appreciate ESG issues and the effect of these new skills on capital allocation.



GRESB



René Rijk, Real Estate Portfolio Manager at TKP Investments, has been leading Aegon Asset Management's work on the Global Real Estate Sustainability Benchmark (GRESB) since we first joined in 2012.

"When we first started with the GRESB in 2012, we were trying to get to grips with the survey. Since then, we've focused more on data quality and ESG, which allows us to measure the real impact of our ESG initiatives as well as to manage ESG risks and engage with investment managers in an effort to drive stronger sustainability practices. Today, we are starting to see properties become more sustainable because of it."

"One of our investment managers in the US provides a good example. The manager in question has been very successful in implementing sustainability elements and achieving a high GRESB score and has now started to look for even more innovative solutions. One of this company's properties started a pilot project in an office building to see how battery storage can smooth out energy spending. The battery facility saves power during periods of low demand and releases it during peaks. As a result, the building saves on energy charges during peak hours. The project is still in a pilot stage, but shows what's happening generally in real estate. As the economy transitions to more renewable sources, battery storage will be key to regulating the intermittency of wind and solar energy. This is just the kind of forward-thinking we want to see in the managers we work with – we think it makes sense economically, and helps sustainability."

ESG Investing at Saemor Capital

Saemor Capital was founded in 2008 with the backing of the Aegon Group, as shareholder and cornerstone investor. The company currently manages a market-neutral strategy (AuM EUR 450 million euro), investing in European equity markets. We spoke with Sven Bouman, founding partner of Saemor, about responsible investment.

Sven, is there really scope for responsible investment as part of an alternative investment strategy like Saemor's?

Yes, absolutely. ESG factors are important in determining whether a company or industry is sustainable for the future. They should be on the minds of all investors, regardless of their style or objectives. Furthermore, many of our strategies are based on trends or theories about the behavior of other investors. So, it's also important to us because other people are looking at it, and our business model is based in part on what other people are doing.

How can you look at such qualitative issues when you invest systematically?

At Saemor, we do take a very quantitative approach to investment, but there is also much more ESG data available to us than ten years ago. However unfortunately, there is no consensus on what constitutes "good" or "bad". When we look at the data, we see companies that are very "good" in some areas, and very "bad" in others. Company ratings also differ depending on the data provider – sometimes they're totally uncorrelated. We have to think carefully about how we use the data and determine at what stage in our investment process it should be applied. This can depend on things like predictive power, the nature of the data, and how markets react to the data.

What do you mean by predictive power?

Our model tries to predict which companies will perform well and which will perform poorly. To be included in this model, factors must help us predict future stock returns. In some ways we think ESG data fits well with a systematic process. But signals we extract from ESG data can be quite weak. For example, you could say that having diversity on the board is a sign of good governance and may be expected to bring superior returns. However, there are many attractive companies with non-diverse boards and unattractive companies with diverse boards. So, diversity on its own is not enough.

Since our inception, we've placed a lot of emphasis on "quality" factors when selecting companies. This helps direct us to sustainable, high-quality companies – companies that have a conservative balance sheet, have made money over the years and are growing their business. These companies are often ESG frontrunners. So, we can add board-diversity to a longer list of features that we look at to determine whether a company is well-managed and, taken together with other metrics, board diversity may have predictive power. In other words, governance metrics help us define quality.

And what about the nature of the data?

As with all datasets, you have to look at how ESG data is collected and processed. In most cases, this is not market data collected regularly or in real-time. Most is either self-reported by companies or is the result of surveys filled out by those companies. Data may change only once a year. For smaller companies or those in less-developed economies, it may be totally outdated, or even just "proxied" – filled in by the data provider, but not actually looking at the company in question. This means the data needs to be analyzed and cleaned before used in modeling.

Saemor's investments are mostly short-to-medium term investments. We have an average holding period of four months. This means that, for many of our investments, ESG data will not change during the holding period. However, by looking at longer-term trends, we get a feel for where the company is headed and whether it considers sustainability worth paying attention to. ESG "improvement" is often more important than a company's absolute rating.

What did you mean by market reaction to ESG data?

The most obvious market reaction for ESG is in risk management. A corporate scandal – for example, the VW emissions case in 2015 – may severely impact a company's share price. These market reactions tend to be rapid and extreme. They don't fit easily into the behavior of "normal" markets that our model seeks to predict. There is evidence that ESG data can help us to predict these kinds of events. We can red-flag companies with heightened ESG risk in the short-to-medium term. We can then either reduce our exposure or completely exclude them from investment. All this is integrated into our portfolio optimization process and dealt with like any other kind of risk.

Where do you see ESG investing going next?

New data is becoming available all the time, helping us pinpoint aspects of ESG that are currently less well defined. That is interesting for us, with our more quantitative approach.

Also, people outside the world of investing are becoming more interested in these subjects. Younger generations are placing more importance on sustainability and they will expect us to pay more attention to these issues.

11. Targeted Investments

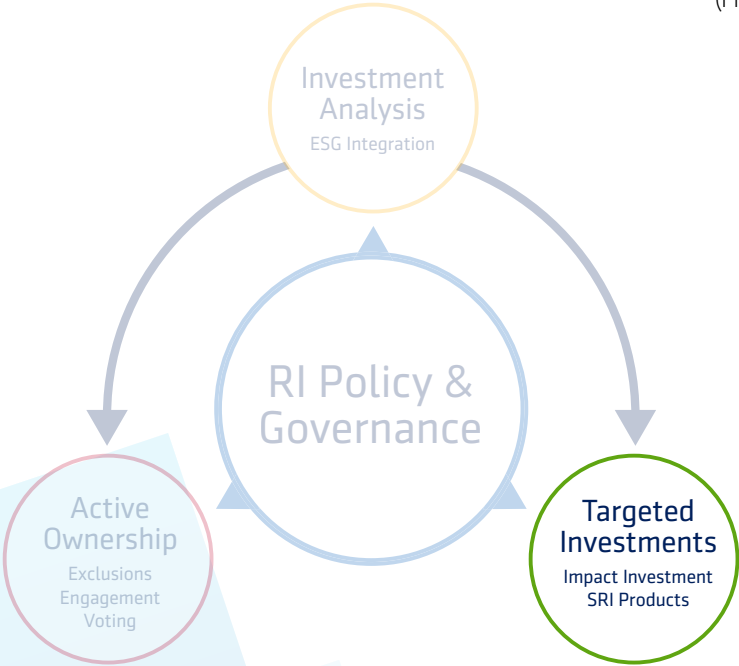
Aegon Asset Management defines targeted investments as investment opportunities that have explicit social and environmental goals in addition to financial ones. Our targeted investments include both impact investments and Socially Responsible Investment (SRI) funds.

Impact investments


These include direct or indirect investments in businesses, organizations and projects that meet our existing risk and return requirements, but also create a measurable social or environmental impact. We have impact investments in affordable housing and care homes for the elderly, renewable energy, sustainable timber, micro-finance, development banks and green bonds.

SRI funds

SRI funds offer investment strategies for clients that often revolve around exclusions for a specific ESG issue or combination of ESG issues (for example, companies with poor environmental or human rights records, or that are active in the arms or tobacco industries may be excluded from investment). Aegon Asset Management currently offers SRI funds in the UK, the Netherlands and Hungary. Our joint venture partners LBPAM (France) and AIFMC (China) also offer SRI funds.



Impact Investments:

	4.8 bn	Affordable housing In 2017, our US affordable housing investments provided financing commitments for just over 7,700 living units and 9,300 first year jobs ¹⁶ .
 	436 m	Renewable Energy Investment in clean power, which reduces impact of energy use on the environment. US solar tax credit sites collectively produced enough energy in 2017 to provide the yearly electricity use of 31,000 homes ¹⁷ .
	325 m	Care homes Specialized accommodation and assisted living for the elderly in the US, UK, and Netherlands.
	1.8 bn	International Development Banks Development banks support job creation and poverty relief in developing countries.
 	226 m	Green bonds Funding for environment and climate-related projects around the world.
	131 m	Student loans and sports facilities Support for US Federal Family Education Loan Program which helps millions of low and middle-income Americans get to university.
 	138 m	Green residential mortgage-backed securities Securities include residences that emit approximately 14% less CO2 a year than traditional housing.
 	74 m	Micro-finance Our investments have helped an estimated 1.7 million underserved people borrow money and 1.5 million open savings accounts ¹⁸ .
	9 m	Sustainable timber Investment in more than 430,000 acres of sustainable timberland, helping take approximately 367,000 metric tons of CO2 a year out of the atmosphere ¹⁹ .

The UN Sustainable Development Goals are:
1 No poverty 2 No hunger 3 Good health & well-being
4 Quality education 5 Gender equality 6 Clean water and sanitation
7 Affordable and clean energy 8 Decent work and economic growth
9 Industry, innovation and infrastructure 10 Reduced inequalities
11 Sustainable cities and communities 12 Responsible consumption and production
13 Climate action 14 Life below water 15 Life on land
16 Peace, justice and strong institutions 17 Partnership for the goals

SRI Funds

Aegon Asset Management has a combined EUR 4.2 billion in its SRI funds.



UK
Several “ethical” strategies in equities and fixed income



NL
Strategies based on an SRI index



Hungary
Climate change-themed equity strategy



China
SRI and green strategies

¹⁶ The metrics were developed using “The Local Economic Impact of Typical Housing Developments, National Association of Homebuilders, Washington, D.C.,(2010).
¹⁷ The metrics were developed using U.S. EPA Greenhouse Equivalencies Calculator <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>
¹⁸ Impact metrics gathered from annual fund impact reports.
¹⁹ The metrics were developed using U.S. EPA Greenhouse Equivalencies Calculator <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

Impact Investment at Aegon Asset Management

We've been active in impact investment for many years now. In fact, in some areas such as affordable housing and renewable energy we were investing long before the term "impact investment" became popular.

In 2014, we carried out a project to look at this area in more detail and to increase awareness of impact investing within the company. We set up initiatives to encourage colleagues investing in different asset classes to think about the impact of their investments and to see if more positive impact investments could be made (a good example was the 2017 clean energy project, see page 52).

More awareness, more integration

These initiatives led to more investments in existing asset classes, but also to new types of impact investment, such as micro-finance and green bonds. We also increasingly integrated the "impact" concept into processes and product development. With these efforts, we increased our total impact investments by EUR 900 million in 2017.

Looking for new ways to contribute to impact investment

Our priority is to ensure that our clients' assets are well managed. For many, that means that liabilities on their balance sheet are matched; this is a key driver of the investment requirements set out in their mandates to us. We also have regulatory requirements to comply with. Taken together, this means that our first job is to evaluate investments from a risk-return perspective. Finding further impact investment opportunities that take these restrictions into account can be a challenge. In that sense, we recognize that we are close to the limits of what we can do in impact investment with our current asset base. We see other institutional investors struggling with similar challenges. Overall, we believe this is impeding the impact investment market from reaching the scale required to address current global challenges in a meaningful way.

Consequently, we feel our best contribution at this stage is to share our insights and expertise – so that new investment vehicles can be created in ways that accommodate institutional investors.

We also want to contribute to initiatives aimed at either removing current barriers or creating price signals that will allow more impact investments to be made. A good example is our recent work to clarify, for micro-finance funds, the type of "lookthrough" reporting used by insurance companies to comply with Solvency II requirements. Other examples are our cooperation with Dutch development bank FMO in establishing a strategy focused on renewable energy in emerging markets, and our membership of the GIIN Initiative for Institutional Impact Investment (see box text).

Sustainable Development Goal (SDG) impact Indicators

We are active participants in the Sustainable Finance Platform chaired by the Dutch Central Bank (DNB). In late 2016, we helped develop the platform's initial recommendations report 'Building Highways to SDG Investing'. In 2017, TKP Investments was part of a working group to develop a set of impact indicators that could be used to increase investment in the SDGs. The full methodology can be found in the document SDG Impact Indicators: A guide for investors and companies.

Clean energy investments

In 2017, Aegon launched a project to identify additional clean energy investment opportunities. The project is expected to lead to further investments in the coming years. In 2017, we also worked with FMO and Climate Fund Managers on a fund that will finance renewable energy in developing markets (see below).

The Impact Management Project

Over the past year, we've been involved in the Impact Management Project, spearheaded by Bridges Ventures. The aim is to develop an agreed convention for how we talk about, measure and manage impact. The model covers five dimensions: what, how much, who, contribution and risk. Ultimately, the model will help investors determine the best ways of optimizing impact.

The Global Impact Investment Network (GIIN) Initiative for Institutional Impact Investment

In 2017, Aegon N.V. joined the advisory board of the GIIN Initiative for Institutional Impact Investment²⁰. The initiative's aim is to increase the amount of institutional capital allocated to impact investments²¹. As members of the advisory board, we're working to remove bottlenecks for institutions active in or entering the impact investment market. Aegon Asset Management hosted the initiative's kick-off event in May 2017.

²⁰ Aegon N.V. is a member of the Global Impact Investing Network (GIIN). Most of the GIIN related activities are carried out by the RI team at Aegon Asset Management.

²¹ Aegon's approach to impact investing has been documented in case study that can be used by other investors looking to structure and develop an impact investment approach the case study is published online and can be found here.

Sustainable Development Goals (SDGs)

The UN Sustainable Development Goals are a set of 17 ambitious goals that aim to eliminate poverty, tackle climate change, and fight inequality over the coming twelve years. Since their launch in September 2015, the colorful, numbered matrix has provided a framework for investors, governments and businesses. The challenge now lies in how it should be applied.

The UN has provided guidance as to what constitutes a contribution towards each SDG, but what that means in terms of assessing investments is not always clear. Companies, of course, have both positive and negative impacts. For example, a drug company may contribute to global health by reducing mortality while simultaneously contributing to the opioid epidemic. An oil company's business model may not immediately seem "sustainable", but can make large contributions to "decent work and economic growth" (SDG # 8). Determining a company's overall contribution to the SDGs is challenged by the lack of relevant data – few companies have thought about how their business contributes to the SDGs, let alone have reported on it.

Where does this leave us in supporting the SDG agenda and using our investment activities to contribute to the long-term interests of businesses and the global economy?

At a minimum, our investments in areas such as renewable energy, micro-finance, and affordable housing can be directly linked to the various goals (see page 35), and this is a good starting point. However, we recognize that successfully implementing the SDG agenda requires more than mapping how investments relate to SDGs; it requires steering capital towards other investments (while meeting applicable investment requirements), and in many cases also requires developing new investable activities, companies and projects. This makes SDG 17, "Partnership for the Goals", perhaps the most important one. Without intensive collaboration between governments, the private sector, and civil society, we will be left with few solutions that contribute in a meaningful way to sustainable development.

Since 2016, Aegon Asset Management has also participated in initiatives aimed at integrating the SDGs into the finance sector. As part of the DNB's Sustainable Finance Platform, we helped develop a set of recommendations in 'Building Highways to SDG Investing'. Following this initiative, TKP Investments took part in a working group to develop impact indicators for measuring the contribution of assets to the SDGs. The indicators focus on 'absolute positive impact, using a definition from the Impact Reporting and Investment Standards (IRIS)'. The goal is to significantly increase investments and funding for the SDGs.

The full methodology can be found in SDG Impact Indicators: A guide for investors and companies. Finally, Aegon Asset Management has been an active contributor to the "Impact Management Project" facilitated by Bridges Ventures which has helped shape large investors' thinking on impact investment and impact measurement.

Roelie van Wijk-Russchen, Global Head of Responsible Business & Public Affairs at Aegon Asset Management was recently appointed as chair of The Cambridge Institute for Sustainable Leadership (CISL) Investment Leaders' Group. The group is currently developing a methodology to calculate a fund's impact across environmental and social themes linked to the SDGs. The aim is to develop impact metrics that are easy to understand, yet scientifically robust. The project combines insights from asset owners and managers, scientific studies from Cambridge University and input from participating companies.



sustainabledevelopment.un.org

The Impact of Micro-Finance

Aegon Asset Management has been investing in micro-finance for a number of years. Despite being known as a prime example of impact investment, it is difficult to establish precisely which positive social outcomes micro-finance leads to. Micro-finance has given millions of people access to lending – an impressive “output”. But does that also lead to good “outcomes” across the board?

For example, does it allow micro-finance clients to escape poverty or achieve a higher standard of living? Does it affect crime, health or education levels? These things are difficult to measure, and are barely documented. On the other hand, there is a lot of anecdotal evidence that micro-finance can have a significant positive impact on individuals’ lives. We are always looking to gain new insights into the impact of micro-finance and, in the course of 2017, we had opportunities to learn more.

First, our colleague Anton Kramer, portfolio manager at TKP Investments, spoke with Niels Hermes, who has published numerous papers on micro-finance²². (Niels is also featured in the interview on Long Term Investing on page 28). Second, we continued to collect more ‘anecdota’ from real life case studies. Some of our findings are presented here.

Micro-finance not a silver bullet

In our conversation with Niels Hermes, Professor of Economics and Business at Groningen University, he observes that originally, in the 1990s, many people saw micro-finance as a panacea, the way to alleviate poverty. “Many people thought of it as a silver bullet,” says Niels. The assumption was that providing very small loans to the poor would eventually allow them to generate stable incomes, manage their money, and in turn stimulate positive development at a macro level, like improving education and health. But, says Niels, “this was mostly based on anecdotal evidence and when people started digging into this, they realized it’s difficult to demonstrate the real impact”. Niels notes that while the number of micro-finance institutions has grown rapidly over the past several years, and a large number of poor people have been able to take out loans, researchers have struggled to capture whether micro-finance has truly had a positive overall impact on economic and social development.

In his interview, Niels refers to a 2014 study that looked at the impact of micro-finance²³ and says that “on a country level, we do see that micro-finance can have a small positive impact on inequality. But it is very difficult to get data and measure exactly what the causality is.” Niels says that, in some instances

micro-finance has also been shown to have a negative impact—for example, by increasing income inequality (where women are exploited), over-indebtedness or reliance on child labor. We also reviewed the book Poor Economics²⁴, whose authors delve in to the question, does micro-credit work? – (“work” meaning, does it transform people’s lives?). They come to similar conclusions. “Unfortunately” they write, “until very recently, there was in fact very little evidence either way” and what was presented as evidence by supporters “turned out to be case studies, often produced by the MFIs (micro-finance institutions, the banks that provides loans) themselves”.

The authors also relate the story of a small scale evaluation program they were involved in, noting, “there was clear evidence that micro-finance was working. People in the neighborhoods served (by the micro-finance institutions that was being studied) were more likely to have started a business... and were actually consuming less, tightening their belts to make the most of the new opportunity. On the other hand there was no sign of a radical transformation”. They add there was no evidence that women felt more empowered, that there was more spending on education and health, or that more children were enrolled in private schools. They also note that, where an impact could be observed, the result was “not dramatic”.

Contrast this with the story of Roshaneh Zafar, who established the Kashf Foundation in Pakistan in 1996. Her goal was to give women in her country access to a better life. Kashf received financing from one of the projects supported by Aegon investments and since then has provided financial products and services to more than 1.7 million clients. Kashf was one of the first to open urban markets in Punjab and is the first and only organization to offer a female-centric health insurance product in Pakistan. “We provide financial products and services to low-income women, essentially those running home-based businesses” explains Roshaneh. “Most earn between USD 3 and USD 5 a day, and they don’t keep cash flow statements or balance sheets.”

"Micro-finance can make a positive contribution to improving the living conditions of the poor, but whether this contribution is positive and significant depends on the type of conditions as well as on the context."



Credit: Kashf Foundation

²² Luminita Postelnicu and Niels Hermes, “Microfinance Performance and the Role of Informal Institutions: A Cross-country Analysis”, Journal of Business Ethics, 2016, pp. 1-19; Niels Hermes, Robert Lensink and Aljar Meesters, “Outreach and Efficiency of Microfinance Institutions”, World Development, 39, 6, 2011, pp. 938-948; Niels Hermes and Robert Lensink, “The Empirics of Microfinance: What Do We Know?” Economic Journal, 117, 1, 2007, pp. F1-F10.

²³ Hermes, Niels, “Does Microfinance Reduce Income Inequality?” Applied Economics, 46, 9, 2014, pp. 1021-1034/17

²⁴ Abhijit Banerjee and Esther Duflo. 2011. Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty.

Kashf's approach is very much focused on creating solutions, which has given rise to working with schools. "When a woman earns more, she puts her children into private schools because the quality is perceived to be better than in public schools. So we developed a low-cost private school product. When we did our research, we discovered that finance was not the only need. The schools needed support with management training, book-keeping, planning, rosters for attendance, and teacher training." Kashf decided to collaborate with one of Pakistan's largest private school networks, which designed a special train-the-trainer program for teachers.

"When I set up Kashf's first strategic plan we expected to reach 1,000 women by 2003, but by 2003 we had actually reached 60,000 women. Our success has been phenomenal, and there are so many client stories I can share. On the other hand, when I think about women in my country and read the local papers, we still have a long way to go."

So, based on anecdotal evidence, micro-finance appears to have true impact, though according to economists who have attempted to measure the impact, the result is "not dramatic". Also, they note that if there is correlation it is not clear "which way the causality goes". To supporters of micro-finance this may sound negative. Still, the Poor Economics authors note that "as economists, we were quite pleased with the results", given that "the main objective of micro-finance seems to have been achieved – it was not miraculous but it was working". Observing that more studies are needed they conclude by saying that "in our minds, micro-credit has earned its rightful place as one of the key instruments in the fight against poverty."

Niels agrees: "Based on current academic knowledge, micro-finance can make a positive contribution to improving the living conditions of the poor, but whether this contribution is positive and significant depends on the type of conditions as well as on the context. Investing in micro-finance is something institutional investors should continue to do. After all, micro-finance also offers diversification benefits, which has potential financial advantages. In addition, by investing in micro-finance you send a clear signal that you also care about social goals."

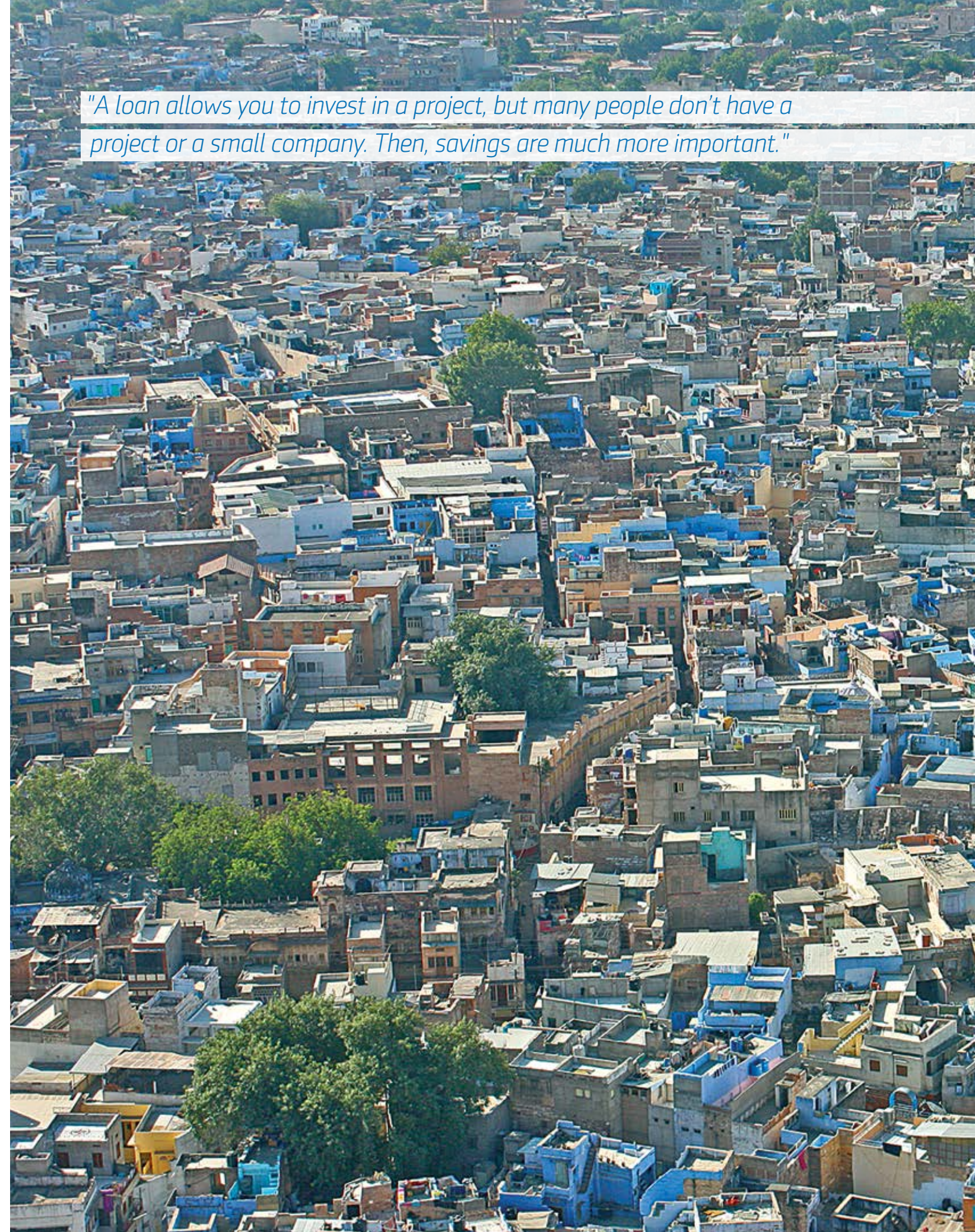
Next steps in micro-finance

In terms of next steps in micro-finance research, Niels is studying how governance of micro-finance institutions affects outcomes. "It's interesting," he says, "western companies have improved their governance structures in response to corporate scandals and under pressure from financial markets and regulations. And recently, they have focused more on corporate social responsibility, and social issues. With micro-finance institutions it's the opposite – they were already focusing on social issues but we need to now get them better organized from a governance perspective. This is where my two areas of interest come together."

The Poor Economics authors point out that originally it was hoped micro-finance would be a stepping stone for larger businesses, but that – though micro-finance has its benefits – it does not appear to be a good instrument to fund larger firms. They say that "finding ways to finance medium-scale enterprises is the next big challenge for finance in developing countries".

Niels also believes that the design of micro-finance products could be improved to better cater to the needs of the poor. Until recently, micro-finance institutions mostly offered their clients loans, where – as we now know – it's hard to demonstrate concrete social benefits. In contrast, there is evidence that access to savings accounts helps improve living standards more. Niels says: "A loan allows you to invest in a project, but many people don't have a project or a small company. Then, savings are much more important. Starting to save is extremely difficult. Not because income is low but because income is unstable and uncertain. Also, people tend to procrastinate – they delay saving because there are other, more enjoyable, ways to spend your money. This is where product design comes in. Niels would like so-called "nudges" to be used more, referring to the concept popularized by the economist Richard Thaler, who recently won the Nobel Prize. Niels says: "Micro-finance institutions could use nudges to help people start to save. For example, a bank in the Philippines offers savings accounts. If a client wants to buy a motorcycle, she can open a savings account to save for this. When coming to the bank to open the account, she has to bring a picture of the motorcycle. The bank official will then make a jigsaw puzzle out of this picture. Then, each time the client comes to the bank to make a deposit, she gets a piece of the puzzle. The idea is that becoming a regular saver will bring the motor cycle within reach, which encourages the client to keep on saving. This has been shown to be effective in increasing savings among the poor."

"A loan allows you to invest in a project, but many people don't have a project or a small company. Then, savings are much more important."



Housing Debt Strategy

Over the past 30 years, Aegon Real Assets, an Aegon group entity specializing in providing a broad range of real asset strategies, has developed extensive expertise in tax credit equity syndication, commercial mortgage lending and loan servicing. Last year, the investment team decided to develop a debt strategy in affordable housing. “We are well-positioned to offer this type of investment vehicle,” explains Andy Crain, Director of Real Estate Distribution & Client Management at Aegon Real Assets. “We are one of the few institutionally backed affordable housing debt managers in the space, and this will be the first time we have a meaningful debt-side impact investment.”

Aegon Real Assets underwrote the permanent mortgages and partnered with one of the largest affordable housing lenders to provide underwriting for the construction loan. According to Andy Crain, “we had interest from a number of life insurance companies and banks. These types of investors have been involved in affordable housing so they tend to understand the program and market very well. Historically, low income housing tax credit investments have provided attractive returns. Further, foreclosure rates have been low over the past 15-plus years,

Managing and processing the loans touches nearly every part of Aegon Real Assets – from origination to loan maturity. “While it is too early to say whether the strategy will spur further development in affordable housing, it would be great if it could help create efficiencies in the market,” Andy notes.

Aegon Real Assets manages more than USD 3.7 billion in tax credit equity investments for its affiliate and non-affiliated clients as of April 2018. Aegon Real Assets has been investing in affordable housing, primarily through the Low Income Housing Tax Credit (LIHTC) program. Its new strategy offers debt capital to affordable housing.

US Workforce Housing

In the US, we’re helping to fund affordable housing for key workers - police officers, nurses, teachers and those working in services and agriculture. Because these individuals are typically paid a modest, but steady wage, they often don’t meet the income requirements for ‘affordable housing’. Yet, for these people it’s also often difficult to find housing close to their place of employment. So, for this group of residents there is what is now referred to as “workforce housing”. In 2017, Aegon Real Assets began investing in this category. Rental rates for these units are attractive to middle income renters²⁵ or renters who are unable to produce a down payment or afford a monthly mortgage, taxes and insurance payments on a house. Blaine Shaffer, Vice-President Community Investment Tax credit, Aegon Real Assets, told us about their approach.

What is your role in these investments?

Our team at Aegon Real Assets worked together with a multiple joint venture partners, to help locate, upgrade, and finance suitable properties. Because of demand, we have a real shortage of affordable housing in the US. For us, workforce housing offers insulation from market shifts and economic downturns. Investors find this risk-reward profile very attractive, especially when compared with new construction or class A multi-family opportunities.

What has this led to?

So far, Aegon Real Assets has committed to eight deals and USD 119 million in equity, USD 87 million of which was closed in 2017 and another USD 32 million early this year. We intend to do more, we already have a pipeline of properties for 2018. Following the close of each investment, our team works alongside our joint venture partners in monitoring and managing the rehabilitation stage of each asset as well as overseeing ongoing operations in an effort to maximize value. As part of our commitment to impact and pursuing value, the team also plans to gather more data on the resident profiles and the social impacts of providing this kind of housing.

²⁵Typically from 60%- 120% of average area median income.

New Types of Investment Vehicles

In July 2017, Aegon Asset Management made an investment in Climate Investor One (CIO), a financing facility proposed by Dutch development bank FMO, Climate Fund Managers and Phoenix Infraworks to provide “end-to-end” financing for renewable energy projects in developing markets. We spoke with Andrew Johnstone, CEO of Climate Fund Manager, a joint venture between FMO and Pheonix Infraworks and the manager of CIO, and Hendrik Tuch, Head of Rates & Money Markets at Aegon Asset Management, about their work and how Aegon Asset Management got involved in the project.

Andrew, could you tell us how the process to launch CIO came about?

Andrew: CIO is a “blended finance” solution. It blends public and private capital. It uses public sector funding to mobilize private sector financing to create a positive impact on the environment and local communities in emerging markets. The idea came out of a think-tank set up by the US and UK governments looking to mobilize capital for the Sustainable Development Goals (SDGs).

So, how much is invested in the projects today and what sort of impact is it generating?

Andrew: In June 2017, we closed the first USD 412 million. This was followed by a second close in December, bringing the total to USD 475 million. In terms of projects, currently we have six under development in Vietnam, Nigeria, the Philippines, Tanzania, Morocco, and Ethiopia across the technology mix. At project level, CIO has real impact, providing low-income communities with jobs and energy, which also helps improve welfare, health, and education in a country. We also create impact at the finance level, connecting different kinds of investors that otherwise wouldn't be able to invest in this kind of project. And there's impact on climate change, by providing solutions to avoid greenhouse gas emissions.

What does CIO bring that other similar projects do not?

Andrew: The difference is in the way investors can participate. We set up three tranches that allow donors, commercial, and fixed-income investors to secure investments at various stages of a project's lifecycle. This helps different types of investors' risk and return requirements. By investing at an early stage, we act as a co-developer.

Hendrik, how did you get involved in the process, and what was your role?

Hendrik: About two years ago, Andrew came to me to ask what was needed to fit the fund to institutional investors investment needs. Initially I didn't have big expectations, but that changed when Andrew told us their story. CIO pushed all the right buttons: it would provide electricity and clean energy to regions where today there is a lack of access to energy. That whet my appetite and was the starting point for about half a year of going back and forth with CIO. Determining exactly what requirements we had and tailoring the strategy to those requirements was an intensive process.

Andrew, how did you experience working together with Hendrik?

Andrew: To be honest, I think Hendrik understates the importance of the role he played in the establishment of CIO. Aegon Asset Management's support from those early days was very material, as it gave a focus to the concept design process that we went through, and because of Aegon Asset Management's large distribution network it has a deep understanding of what investors are looking for.


What excites you most about CIO and where do you think the impact investment market is heading?

Hendrik: For me, it is exciting to see clients' awareness growing that they can have a positive impact through their investments. I also enjoyed the enthusiasm that the CIO team brought to this project. The trend is definitely here to stay. In twenty years, balance sheets of institutional investors will look completely different to how they look now, and CIO will have been an important step along the way.

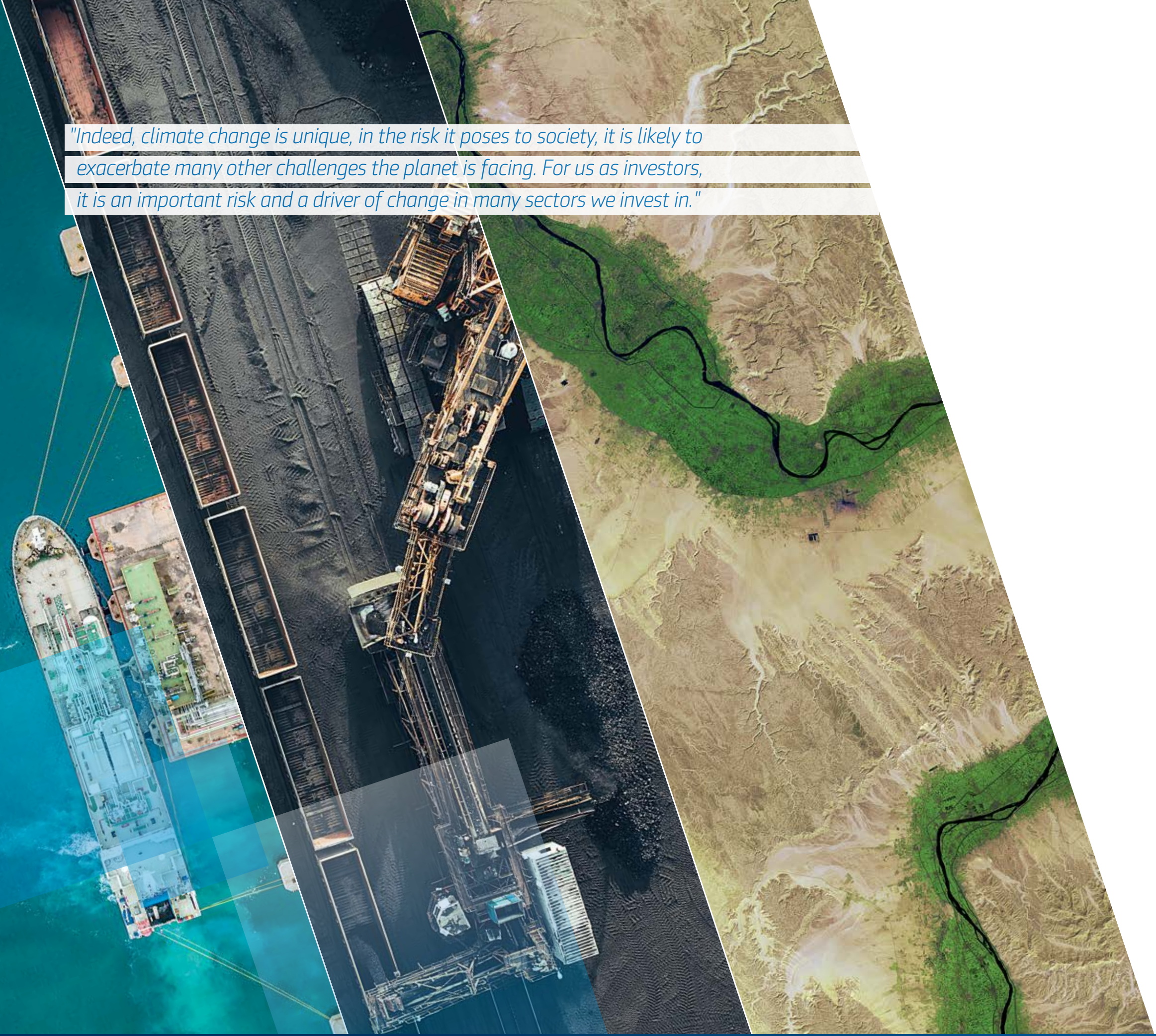
Andrew: Doing investments with a purpose is very exciting. For the past 15 years, I have been investing in infrastructure for commercial and development reasons, but now that I'm doing it to address climate change, it connects me much more with what we need to do and the excitement is contagious. I also really enjoy the start-up nature of it, creating new jobs and working with bright young talent who are excited about what they do – it is really stimulating. And doing something new is always fun – connecting the dots, talking to people like Hendrik to see what they are doing and how we can assist. To answer your question about where impact investment is headed – there is a strong need for capital to work together in a more collaborative way than it is at the moment.

What's next for CIO? Is there a “Climate Investor Two” on the horizon?

Andrew: We see CIO as being the first of a series of climate related investment financing projects. We plan to focus next on the themes of water, agriculture and forestry, oceans and resilient cities. The public sector is already working on mobilizing capital and we are working on ways we can blend this with institutional private sector capital in a sustainable manner that can deliver the multiplier effect. We would love the current CIO investor community to be part of this journey and collectively to grow this community as we go.



"The public sector is already working on mobilizing capital and we are working on ways we can blend this with institutional private sector capital in a sustainable manner that can deliver the multiplier effect."



"Indeed, climate change is unique, in the risk it poses to society, it is likely to exacerbate many other challenges the planet is facing. For us as investors, it is an important risk and a driver of change in many sectors we invest in."

12. Climate Change

Climate change has been the key ESG focus area for us over the past several years. As a responsible business, significant asset owner, and asset manager (also on behalf of third-party clients), we have a role to play: first, to help fund lower-carbon assets; second to understand and manage climate-related investment risk; and third, to be active in the public debate about how to tackle climate change and use our influence to achieve meaningful change.

In discussions about Responsible Investment (RI), climate change-related investment risk or opportunities are usually the most important examples mentioned. Indeed, climate change is unique, in the risk it poses to society, it is likely to exacerbate many other challenges the planet is facing. For us as investors, it is an important risk and a driver of change in many sectors we invest in.

Assessing the clean energy market

Last year, Aegon Asset Management conducted a clean energy project to learn more about the market for renewable and clean energy and explore future investment opportunities.

The Climate Working Group (CWG)

Our CWG was set up at the beginning of 2017. The CWG is a sub-committee of the RI Strategy Committee (RISC) and comprises representatives from different functions across the Aegon Group, including investment portfolio risk management, operational risk management, investment analysis, investor relations & reporting, regulatory affairs and responsible investment. The group meets regularly to evaluate new climate insights, climate risk measurement tools and methodologies, and developments in government and international public policy, and recommends further action where necessary. The Financial Stability Board's (FSB) Task-force on Climate-related Financial Disclosures (TCFD) was the key topic on the CWG agenda this year. The CWG formulated a response to the recommendations and identified potential risks that may impact our business in the coming years.

Engaging with industry players

We also expanded our engagement activities, focusing on sectors like industrials, automotive, and oil & gas, which have the most significant impact on climate change and where we have considerable exposure. This included co-authoring with the Institutional Investor Group on Climate Change (IIGCC) a set of investor engagement recommendations to address challenges in the steel industry, which currently accounts for 6% of global greenhouse gas emissions.

Playing a role in public policy

Our impact on the climate debate is perhaps strongest outside of what we do through our balance sheet and investments. In 2017, Aegon N.V. CEO Alex Wynaendts strengthened Aegon's commitment to tackle climate change by backing the TCFD recommendations, signaling that our company has become an active participant in this public debate. We also took part in consultations on policy initiatives regarding climate change and sustainable financial markets.

More details on these initiatives and our engagement activities can be found below and in the Active Ownership section in this report.

Recommendations from the Task-Force on Climate-related Financial Disclosures (TCFD)

In terms of climate change, the publication of the TCFD recommendations was the major development of 2017. The recommendations are structured around four themes: governance, strategy, risk management, and metrics & targets. In the CWG, we worked to assess where Aegon – as a listed company and asset owner and manager – was already living up to the recommendations and where we needed to undertake additional action.

Based on experiences and insights from our own work, we feel the recommendations are well-balanced; they recognize that many uncertainties remain, and that tools to identify climate risks are imperfect, but that incorporating climate change into mainstream risk management and reporting will bring much-needed transparency and clarity on these issues.

As part of our work, we carried out a group-level risk assessment to identify climate-related risks for our business. Tiemen Nales, Senior Risk Manager at Aegon N.V. and member of the CWG, did most of the work on this assessment. "We found that certainly there are risks. However, based on our work so far, we feel that in the short-to-medium term the risks to our business are modest."

"What is difficult about this issue is that we all know the threat from climate change is real, and we know the direction we must

go as society. Most of us, personally, feel strongly about this – we would like to take action. However, as risk managers we need to identify the things that may – or may not – happen, and that will impact our business, in the next month, next year, or ten years from now. And then we try to put a number on that – less than EUR 5 million? More than EUR 50 million? With the information we have right now on climate change and the energy transition that is exceedingly difficult."

Tiemen says: "Information is key. We need companies to think this through. And the scenario analyses proposed by TCFD will force companies to do that, and share the findings with financial markets. It's going to be very hard work and will take years to develop. But it will help improve our accuracy in identifying these timeframes and financial impacts."

Next steps in climate change:

The CWG is now starting to consider how to approach scenario analysis, which is a key element in the TCFD recommendations. In line with these recommendations, we are first focusing on qualitative scenario analysis. We're also evaluating data tools to improve our understanding of specific investment risks. Finally, working with investor relations and the Aegon Disclosure Working Group we want to further integrate climate issues into Aegon's overall financial and risk reporting.

Governance

Disclose the organization's governance around climate-related risks and opportunities.

Recommended Disclosures

a) Describe the board's oversight of climate-related risks and opportunities.

The CWG is the primary body responsible for assessing and monitoring climate-related risks. The CWG is a working group of the RISC which is chaired by an Aegon N.V. Management Board member. Climate risks that are assessed as material by the CWG and RISC are presented to Aegon's Chief Risk Officer and Management Board through the Aegon N.V.'s quarterly risk management dashboard.

b) Describe management's role in assessing and managing climate-related risks and opportunities.

Following a. above, the Management Board may decide on management action.

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.

Recommended Disclosures

a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

Working with Aegon's Operational Risk function, the CWG has identified a number of climate related risks that the business is exposed to: regulatory, strategic, physical, investment, or underwriting risks. Each risk is evaluated on potential financial and reputational impact, as well as its likelihood and timeframe in which it may develop.

- In the short to medium term:
- Reputational risks: these identified as most likely to emerge, though with modest financial impact.
 - We also face risk from significant government action or U-turns in public policy.
 - Investments risks: governments may decide to severely restrict certain industries or energy uses in response to natural catastrophes. This risk carries considerable financial impact. We are currently working on more sophisticated assessments and continue to monitor investment risk as it emerges and ensure our investment professionals have the knowledge and ability to address them.

- In the long-term:
- Underwriting and physical damage: this could result in significant financial risk for our insurance business.

In terms of business opportunities, we continue to investigate the market for clean energy investments and want to contribute to making these projects investable.

b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

Climate-related risks will now be included and discussed annually in Aegon's risk dashboard and disclosures included in regular financial reporting. We are still assessing how this will impact the organization's businesses, strategy, and financial planning.

c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

We are still in the process of assessing our organizations resilience to different climate scenarios.

Risk Management

Disclose how the organization identifies, assesses, and manages climate-related risks.

Recommended Disclosures

a) Describe the organization's processes for identifying and assessing climate-related risks.

Climate-related risks and opportunities are discussed primarily in the CWG. For investment risk: portfolio managers and analysts incorporate ESG data in investment decisions; this includes climate change-related issues. In addition, we organize occasional sessions on material ESG topics to raise awareness among portfolio managers etc, often featuring external expert speakers. Last year, these included conference calls with Carbon Tracker, workshops with credit rating agencies, and meetings with sell-side brokers

b) Describe the organization's processes for managing climate-related risks.

Climate-related risks and opportunities are first discussed in the CWG. If a risk appears material, the CWG can develop a mitigation plan and present it to the RISC for implementation.

c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

We are still assessing how climate-related- risks can best be integrated into the organization's overall risk management processes. As a first step, we have included members from Aegon Operational Risk Management and Investment Portfolio Risk Management in the CWG.

Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate- related risks and opportunities where such information is material.

Recommended Disclosures

a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

We explored a number of metrics to assess investment risk, including carbon footprinting. We believe the metrics and tools to assess climate risk are still in their infancy. We continue to look at a number of data providers and methodologies to see how we can better account for climate risks in our portfolios.

b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

In 2016 Aegon N.V. became carbon neutral. Please see page 86 of the Aegon Annual Review for data on our environmental performance and emissions.

c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

We have yet to set targets to manage climate-related risks; this also depends on our ability to better measure and manage risks, as discussed on this page. On the opportunity side, following our clean energy project, we are evaluating the possibility of setting targets for investments in clean energy.

The format of this reporting follows Recommendations and Supporting Recommended Disclosures as specified in the TCFD Final Report, Figure 4.

Clean Energy Project

Henk Eggens is the Global Chief Investment Strategist for Aegon Asset Management.

Hans Schut is an independent consultant, engaged by Aegon Asset Management in 2017 to support the review of clean energy investment opportunities.

Can you tell us about the clean energy project and what prompted you to organize it?

Henk: Climate change is the major challenge of our times. For us, as an asset management company, we can help in supporting the development of cleaner energy. However, we have to recognize that energy markets are changing and that this will affect the businesses we invest in. This project was about understanding that process and identifying new opportunities.

What was needed to set up a project like this?

Henk: For a number of reasons investment opportunities that also meet our investment criteria are limited in this space. So, to make the initiative work, it was important to have involvement from across Aegon Asset Management. We included representatives from the US, the UK and the Netherlands. We had a series of conference calls where we ran through different clean energy topics – wind, solar, hydro, geothermal, etc. It became clear that many of our colleagues had already looked into these things, and also showed serious interest in doing more. We had discussions with external parties who have expertise in this area and we may look into possible partnerships with them. This would be a good way for us to learn more about the market. It's also more cost-efficient than hiring an entire team. If we want seriously to scale this up, though, we will have to develop further internal expertise as well.

Why has it been so difficult for investors to enter the clean energy market?

Hans: Well, it really depends on the assets you are investing in. It's not difficult to invest in listed companies, but investing directly in large scale projects can be challenging. These investments often have higher costs because they require sector-specific expertise. You need detailed understanding of the underlying economics. You also need to assess the investment risks. Take wind energy. At face value, it seems simple: you have a windmill, the wind blows, you generate electricity, you make money. But there are hundreds of questions to think about. Will the wind blow in that location, at that height? What kind of turbines are you using? How long will they last? What if they fail, is there a guarantee? How long will it take to replace? What is the cost of downtime? What if there is no wind? Is there still cash flow to cover the debt obligations? What kind of return does that generate for us and for our clients? These are all things you need to think about before you put money into a project. Also, keep in mind the market is competitive, with many parties bidding on these kinds of assets, so having a network is important. – You need to build relationships with utilities, with independent power producers. Once you know them, you get access to more investment opportunities.

What are some of the clean energy categories that you looked at?

Hans: The biggest trend at the moment is offshore wind, where the risks are higher but the returns are also generally better than on land. Solar is also maturing very rapidly. Prices have fallen over the past two years and we are now starting to see wind and solar competing with fossil fuels, especially if you take into account the overall costs to society. We also looked at biomass, geothermal, and heat and energy storage, because the energy transition will require a large amount of district heating and hot and cold storage. This could lead to a huge investment opportunity.

What do you look at when deciding whether to invest in these types of assets?

Henk: When we invest on behalf of insurance companies, we have certain requirements we need to follow, including Solvency II. With Solvency II, longer maturity investments are not ideal. In clean energy, that's obviously a challenge. Regardless of the investment goals, we need to be sure that the risks are limited and manageable. We also need to look at cash flows to meet return hurdle requirements, and understand the structure of each investment. Renewable energy assets are self-liquidating, so the risk and return aspects can be very different. Scale is also important – we prefer to do a small number of larger investments than have a very large portfolio of small investments. Finally, we look carefully at the teams that manage these assets. How professional are they? What is the internal governance? Do they have solid risk management in place?

What role do governments have in this energy transition?

Hans: There are a few big trends at the moment. Government subsidies for renewables are starting to decrease as the cost of technologies falls and carbon pricing is picking up. Right now, we don't know if governments will live up to their Paris Agreement commitments. Personally, I believe carbon pricing is the best way to get the transition from fossil to clean energy. The challenge is getting it implemented globally to be effective.

Henk: I agree. If we really want to solve this problem we need to look at it globally. In the Netherlands, we can do our best, but it will only be a drop in the bucket if we don't have countries like China on board. China has almost 1.4 billion people and a developing middle class - they all want to share in the growing prosperity and that includes access to energy. Who are we to deny them that? The issue is figuring out how we can address these problems on a global scale, when of course we don't have a global government.

What are your next steps in clean energy?

Hans: The next step is to determine how we can leverage all the expertise and insights from this project. This is a relatively new area, and it may need more resources – at a time when there are competing priorities.

Henk: This is the year we have to pull this all together - harvesting time, you could say. We learnt a lot with this project. But we did this for a reason, which was to build up our presence in this market. Climate change is not going away and new technologies are emerging rapidly, so we do not want to stay on the sidelines.

"The biggest trend at the moment is offshore wind, where the risks are higher but the returns are also generally better than on land. Solar is also maturing very rapidly."

13. Active Ownership

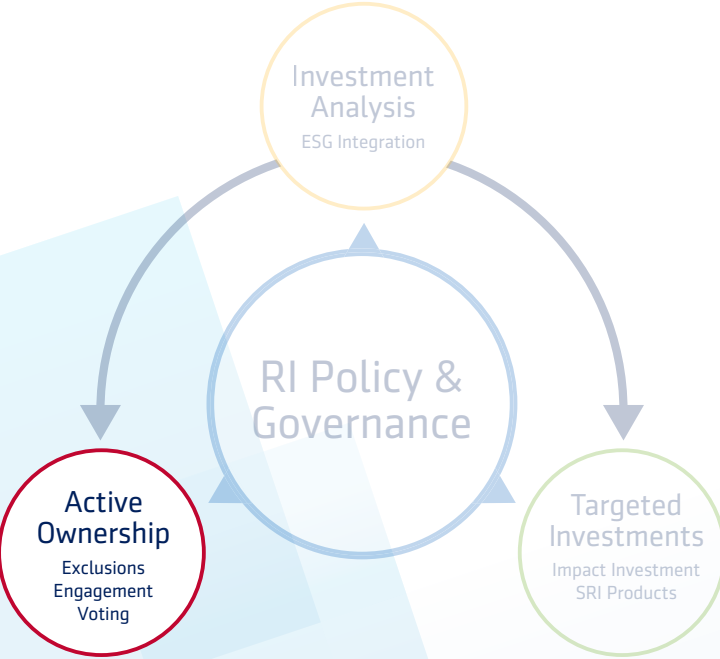
As an active owner, Aegon Asset Management aims to promote the long-term success of companies in which we invest on behalf of our clients.

We believe it is in the best interests of our clients that we monitor companies' ESG performance and activities, vote on the shares that we manage, and engage with companies on issues like strategy, risk and corporate governance. Our active ownership activities include:

Engagement:
This involves dialogue with companies on ESG issues to better understand how they manage risks and comply with the standards set out in our Responsible Investment (RI) policies.

Voting:
We have the right to vote at shareholder meetings of companies in which we have an equity investment. We vote to promote good ESG practices, strong corporate performance and stable returns for our clients.

Exclusions:
Aegon Asset Management excludes companies that do not comply with certain standards set out in our RI policies or if directed to do so by clients.



Engagement

We believe engagement is an effective strategy to mitigate ESG risk. Engagement involves using our ownership position to make sure companies are aligned with our RI policies.

While it is difficult to measure the direct impact of individual engagements, academic research shows that strong investor stewardship can positively affect ESG performance and influence corporate decision-making. Engagement works in several ways. It helps identify new risks and issues important to shareholders. It shows how other companies and sectors manage risk, and how investors perceive a company's strategy. Generally, we believe engagement is more effective than excluding companies from investment.

We see three basic reasons for engagement:

Policy-based engagement
We engage with companies that fail to comply with our RI policies. For the most part, this means companies that are non-compliant with the UN Global Compact, as determined by our ESG research provider. In 2017, we held engagements with 29 companies on human rights, environmental, governance, and labor issues.

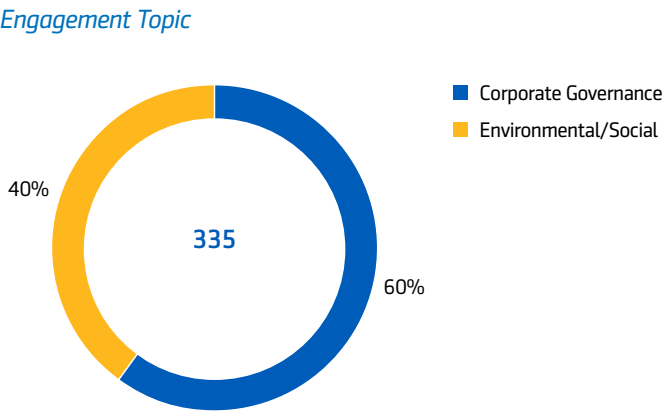
Financial risk-based engagement
These engagements focus on companies where an ESG factor or factors may pose a material financial risk. Usually, these engagements are recommended by analysts after analyzing ESG ratings and performance, or by the RI team, who may, in consultation with the relevant portfolio manager or analyst, highlight companies with a particularly poor ESG performance.

Thematic engagement
We also engage with companies on specific issues that we consider strategic. To do so, we take part in workshops, research projects and collaborative platforms. We consult with academics, NGOs and industry groups and partnerships such as the Institutional Investors Group on Climate Change (IIGCC), the Principles for Responsible Investment (PRI), Eumedion, Farm Animal Investment Risk & Return (FAIRR), Ceres and ShareAction. This year we participated in a number of engagements to help support efforts on climate change.

With all engagement, our goal is to deepen our understanding of ESG issues and improve the performance of companies in which we invest.

²⁶ E.g. George Serafeim, Investors as Stewards of the Commons? Harvard Business School Accounting & Management Unit Working Paper, August 2017

Engagement in 2017
In 2017, Aegon Asset Management engaged with 335 companies. Of these engagements, 40% related to environmental and social issues, up from 30% the previous year, due to our increasing participation in thematic engagements. The remaining engagements related to corporate governance issues.



Next steps in engagement:

Going forward, we would like to put more emphasis on what has been called "pre-competitive collaboration²⁶". This involves small groups of long-term institutional investors working together to achieve positive social impact. Engagement is usually focused on industries where there is a high degree of common ownership. Our work with the steel industry, the PRI and credit rating agencies (see pages 58 and 31) provides examples of this, and is a good basis for further initiatives.

Engagement at Aegon Asset Management

Adrienne Hill-Strathy and Roger Wildeboer Schut from the Responsible Investment tell us about engagement at Aegon Asset Management and its role in encouraging sustainable development.

Could you tell us how you see engagement at Aegon Asset Management?

Adrienne: We see engagement as having both a risk management and advocacy function. When we engage, we're looking at how ESG issues might affect a company's value and also making sure our RI policies are fully and properly implemented.

On the risk side, we work with portfolio managers and analysts to understand what sustainability issues might be relevant financially and how these issues fit into a commercial context. From an advocacy perspective, we often work with other investors, through groups like the IIGCC or PRI, which helps increase our technical capacity and understanding of the issues.

Is engagement making a difference in managing investment risks or in encouraging companies to be more sustainable?

Roger: So far, we have yet to find any material connection between sustainability and financial performance. Why some ESG benchmarks should outperform hasn't been investigated very well. But engagement can help investors better understand and manage investment risk. Having the dialogue and seeing first-hand how companies act, who they are represented by, how they deal with ESG issues, gives much better insight than looking at ratings on a sheet of paper. That said, to be really useful, engagement needs to be a much more developed corporate function. Private equity is a good illustration. Not every pension fund or insurance company can invest exactly like a private equity firm, but that hands-on approach to working with and influencing management shows how effective it can be.

Adrienne: In terms of encouraging companies to be more sustainable, I certainly believe engagement can have a positive influence – for example, with climate change. While we don't know exactly how we will transition to a two-degree world, we do need to be aware of increasing climate risks, and here the devil is in the detail. Understanding the impacts of emissions and potential regulations in different industries is specialized work. Bear in mind that some of what companies say or do seems to be, in part, for show. But to tackle climate change, you've got to be honest about where the problems are and whether companies are able to respond. We've been pushing companies recently to publish more of their climate planning and to be more transparent on their climate disclosures, and many have promised to do so.

What do you find most challenging about engagement?

Adrienne: Some people have a very simplistic view of engagement. You define a goal. You send a letter to a company. If they change, you check the box. If not, you exclude them. But in my experience, these issues are highly complex. Many issues cannot be solved at the company level, and need to be addressed at industry level. If you really want change, you need a pretty sophisticated understanding of how, say, the steel industry works, to be able to sit at the table with people who have been working in this industry their whole lives.

Where do you see engagement going over the coming years?

Roger: I see a couple of trends. People are becoming more and more professional. "Engagement Manager" is becoming a corporate function just like investment analyst or risk manager. Investors understand that, if they want change, they need a deep understanding of the issues and they need to be prepared for long, hard work. Second, the UNs Sustainable Development Goals are becoming increasingly relevant in engagement. They provide a useful counterpoint to ESG ratings, which can be seen as rather negative. Finally, more investors agree that we need to work together at industry level – not only with other investors, but with companies, advocacy groups and other stakeholders. George Serafeim at Harvard suggests that investors can be "stewards of the commons"²⁷. That's a good way to look at it. We have the power and influence, and stewardship is something that comes naturally to long-term investors like Aegon Asset Management.



"We've been pushing companies recently to publish more of their climate planning and to be more transparent on their climate disclosures, and many have promised to do so."

²⁷ E.g. George Serafeim, Investors as Stewards of the Commons? Harvard Business School Accounting & Management Unit Working Paper, August 2017

Climate-Related Financial Risk in the Steel Industry

Steel is one of the most widely used materials in modern society, providing the foundation for buildings, vehicles, and products like refrigerators and washing machines. But the process of making steel is also incredibly energy-intensive. Energy use constitutes 20% to 40% of the cost of steel production. And around half of that energy still comes from coal. Tackling climate change depends on our ability to transform industries like steel, so they use fewer resources and are more energy efficient, but are still able to meet the needs of a growing global population.

In August 2017, we took part in a TCFD roundtable, hosted by the IIGCC, to discuss the steel sector's ability to address and disclose climate-related financial risks. The roundtable included a number of investors, as well as industry representatives such as Arcelor Mittal and rating agencies like Moody's.

Two main challenges were highlighted in our discussion. The first lies in the inherently energy-intensive nature of the industry. While energy efficiency has improved over the past several years, innovative technologies such as Carbon Capture & Storage and carbon utilization are needed to make further reductions. A number of pilot projects are currently underway, but these need to be scaled and developed at a much faster rate if the industry is to meet its energy use targets.

The second is about putting in place an effective carbon tax. Demand for steel won't decrease unless the tax is international; the tax needs to be part of international agreements and regulations. One option discussed was a carbon border tax – in effect, a carbon price on steel imports. Some steel companies for instance have already come out in favor of a border tax.

The roundtable kicked off a process to develop an IIGCC "Investor Expectations" that Aegon Asset Management co-authored throughout the year. The document will be published in 2018 and will pave the way for further engagements with the global steel industry.

FAIRR - Antibiotic Resistance

Antibiotic resistance today presents one of the largest growing threats to global health, food security and development. It is estimated that drug-resistant infections could cause 10 million deaths and the loss of USD 100 trillion from the global economy by 2050²⁸. The overuse of antibiotics on farms to promote growth and prevent the spread of disease is the major cause of growing resistance in humans.

Given Aegon N.V.'s increasing focus on health issues, Aegon Asset Management joined a group of investors urging companies to establish comprehensive antibiotics policies; these policies would include clear timetables for phasing out routine, prophylactic use of antibiotics across livestock, seafood and poultry supply chains.

In the US, an estimated 75% of all antibiotics are being used on farm animals; in the EU, it is 70% and in the UK 45%. Regulators have already started to implement rules for both EU and US livestock producers. With further regulations and trade restrictions likely, companies failing to take action may face significant impact on their reputation and brand, threatening sales and profits.

Through FAIRR's collaborative engagement, Aegon Asset Management is using its influence as an investor to speak directly with companies, industry and policymakers. Nineteen of the twenty companies approached now have a policy or are expected to release one shortly. But more work needs to be done on developing clear best practice standards for the industry as a whole.

Investors for Opioid Accountability (IOA)

In the US, 91 opioid-related deaths occur every day. Opioid addiction poses a real threat to US business, particularly given its impact on workforce participation and productivity.

As a result, opioid manufacturers and distributors have come under pressure over possible failure to adequately disclose the addictive potential of opioids or report suspicious spikes in sales or distribution to drug enforcement authorities.

Aegon Asset Management is part of Investors for Opioid Accountability (IOA). IOA believes part of the answer is in

stronger board leadership and compensation policies that deter misconduct. It is currently asking board members at ten US companies to provide details of their response to opioid addiction. Recently, the Securities and Exchange Commission allowed resolutions on opioids to be presented at a US pharmaceutical distributor's next AGM.

²⁸ O'Neill, J. (2015), Antimicrobials in Agriculture and the Environment: Reducing Unnecessary Use and Waste, Review on Antimicrobial Resistance

Engaging with Policy Makers and Standard Setting Organizations

In 2017, we engaged with policy-makers, advocacy groups and standard-setting organizations on a number of sustainability and ESG-related initiatives.

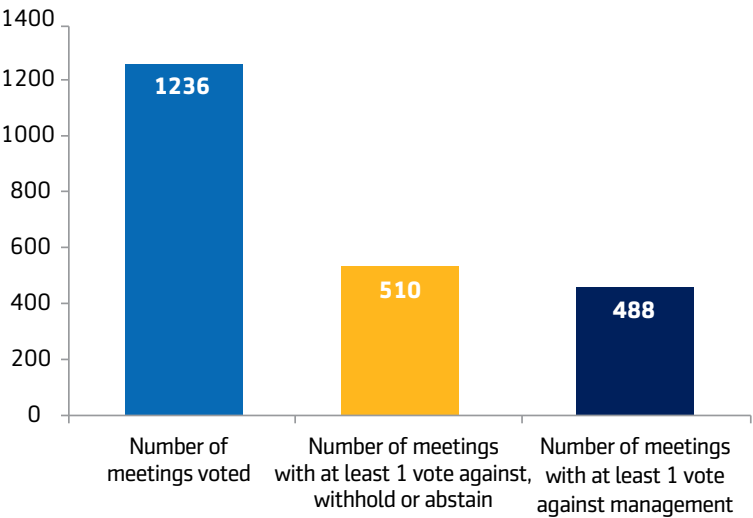
TCFD	Provided feedback on the Phase II Recommendation Report	February 2017
GIIN	Participated in the Global Impact Investment Survey	February 2017
CDP	Provided feedback for the first and second Re-imagining Disclosure Initiative.	April and September 2017
PRI	Submitted feedback on Incorporating TCFD Recommendations into the PRI.	September 2017
EU High-Level Expert Group on Sustainable Finance (HLEG)	Provided feedback on Financing a Sustainable European Economy.	September 2017
PRI	Submitted proposals and methods to strengthen accountability of PRI signatories.	September 2017
Eumedion	Provided input on the proposed Dutch Stewardship Code.	September 2017
EU (HLEG) on Sustainable Finance	Provided input to the consultation on institutional investor's and asset managers' duties regarding sustainability	December 2017
Dutch Social-Economic Council, Association of Insurers (VvV), multiple advocacy groups	On-going participant in the Sustainability covenant for Dutch insurance companies	During most of 2017

Voting

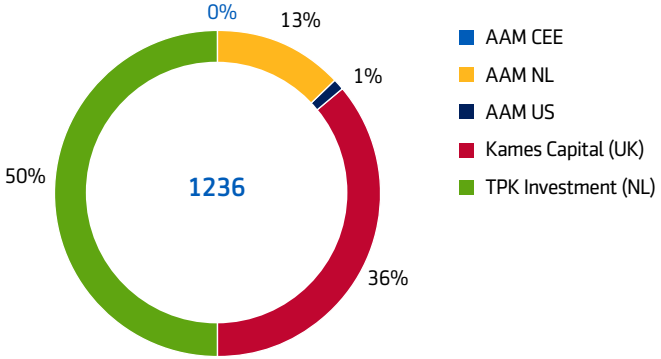
Voting is another way for us to influence the companies we invest in and promote the standards set out in our RI policies. By exercising our rights as shareholders, we can also contribute toward optimal investment returns for our clients.

Aegon's Global Voting Policy sets out company-wide principles for all Aegon units. Several of our business units have developed more detailed policies tailored to local practices and governance principles.

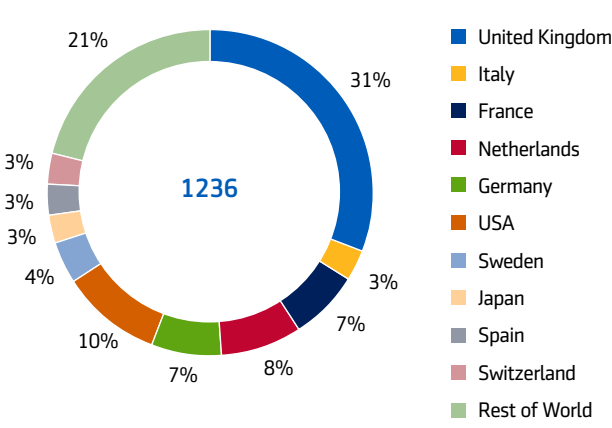
Most issues we vote on are related to corporate governance. However, with the expansion in our engagement activities, we're also voting more on issues related to health, the environment and human rights. Aegon Investment Management, Kames Capital and TKP Investments all disclose their voting records in more detail (see the Appendix page 66 for voting reports).



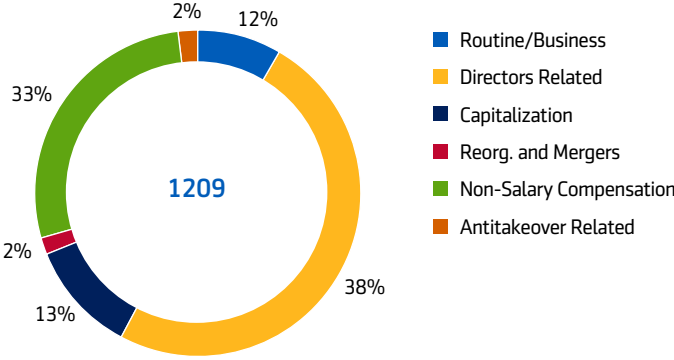
Meetings voted by AAM unit



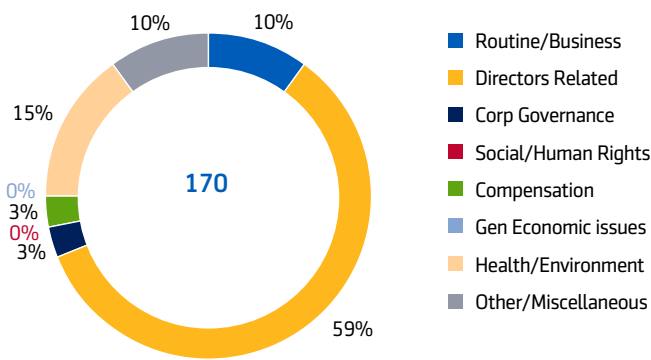
Meeting voted per country



Break-down of votes against Management Proposals



Break-down of votes on supported Shareholder Proposals



Exclusions

Aegon group entities may refrain from investing in certain companies, countries, or industries if these are involved in controversial activities that do not fit with the company's RI principles. We may also divest from or exclude companies from investment if efforts to change company behavior do not make sufficient progress. Usually, Aegon's exclusion list applies only to the company's general account assets (proprietary assets on Aegon insurance companies' balance sheets). The exception is the Netherlands where exclusions also apply to insurance-linked and third party assets, in line with standard practice.

As far as possible, we follow universally accepted standards and international treaties when deciding exclusions. Where this is also in line with investment rules and practices, we will talk with external clients about the possibility of applying these exclusions to their investments; clients may also, of course, have exclusions of their own.

On exclusions, our RI team obtains research from external ratings agencies before advising the RI Strategy Committee (RISC). Final decisions then rest with the RISC.

Currently, we exclude four categories of investment from our general account assets:

Companies associated with controversial weapons

Aegon's general account will not invest in companies that manufacture, develop, trade or maintain biological weapons, chemical weapons, anti-personnel mines, cluster bombs, munitions containing depleted uranium, or nuclear weapons involving countries outside the scope of the Non-Proliferation Treaty.

Companies involved in thermal coal mining

Aegon recognizes that poorly diversified thermal coal producers are likely to be significantly impacted by climate-related government regulation and therefore run a high risk of assets becoming stranded. Also, as coal is the most carbon intensive fossil fuel, these companies contribute disproportionately to the greenhouse gas emissions that cause climate change. Aegon excludes from investment all companies that derive more than 30% of their revenues from thermal coal production.

Companies involved in tobacco production

Last year, we decided to add companies that produce tobacco products to our exclusion list. Tobacco is linked to a number of chronic illnesses, including cancer, lung disease and cardiovascular disease. Tobacco kills around six million people each year, including 600,000 non-smokers exposed to second-hand smoke. Tobacco use also has economic consequences through higher healthcare costs, increased disability and premature death. As a business focused on improving people's health, we decided to end further investment in the industry. Over the next few years, we will run off existing fixed income investments in Aegon's general account. The total divestment represents over EUR 500 million in assets.

Countries involved in human rights breaches

Aegon invests in government bonds, and is thereby engaged in a financial relationship with sovereign governments. We incorporate ESG factors into our analysis of government bonds since social or political instability may affect the creditworthiness of a country. Aegon does not invest in government bonds or any other government debt from countries that systematically breach human rights. Countries should respect and uphold universally accepted values, such as the Universal Declaration of Human Rights. We refrain from investment in government bonds or debt of current regimes that are under human rights related UN Security Council resolutions.

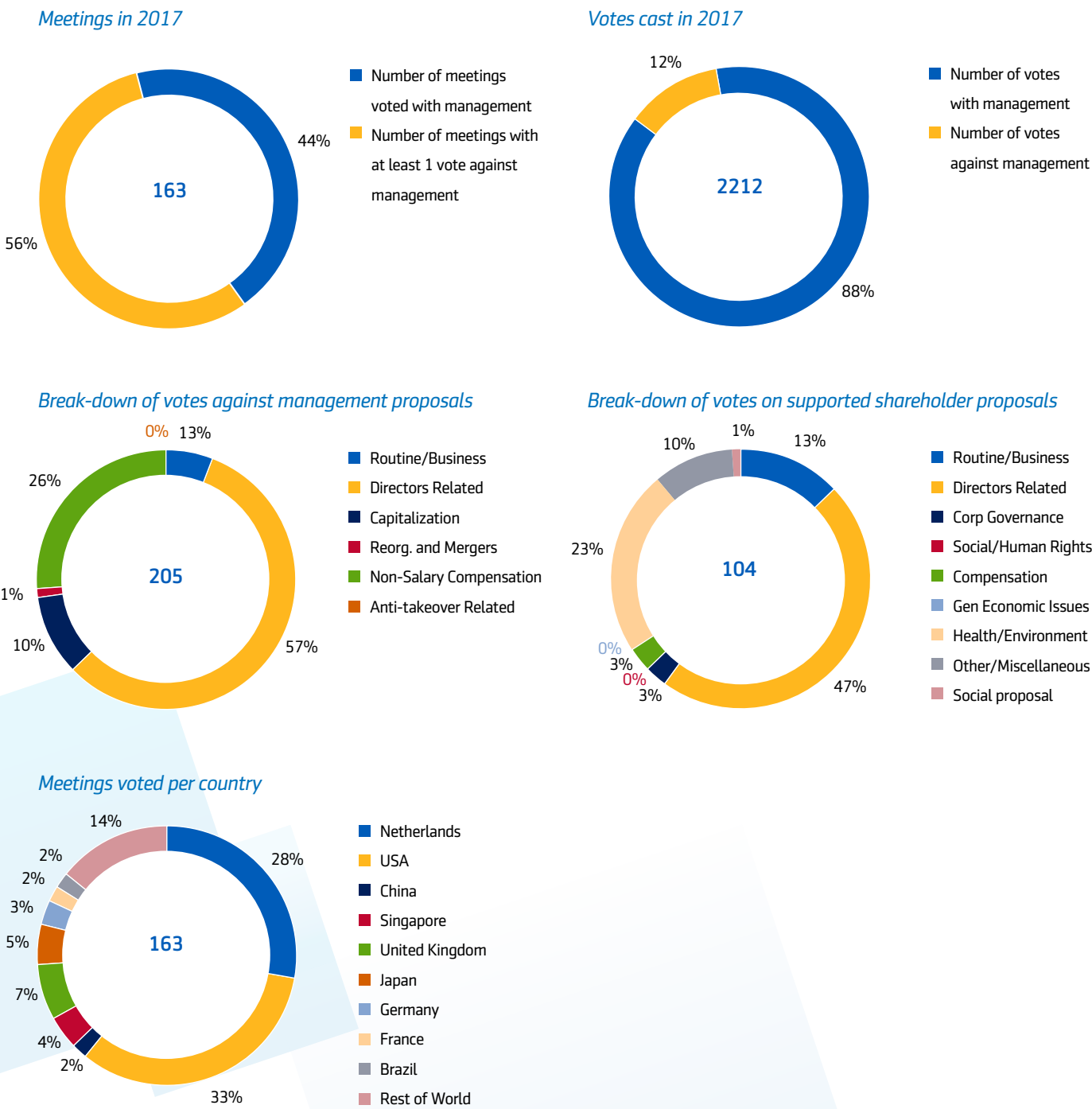
14. Appendices

Cooperation and Collaborative Bodies

Organization	Commitment	Link
UN-backed Principles for Responsible Investment (PRI)	Aegon Asset Management became a signatory to the PRI in February 2011. Kames Capital, has been a signatory since 2008. Membership commits Aegon Asset Management to the PRI's six principles for responsible investment and to reporting annually on progress towards implementing them.	unpri.org
United Nations Declaration of Human Rights	Aegon N.V.'s Human Rights Policy states that the company's "business activities are guided by the UN Declaration of Human Rights," as well as core standards of the International Labor Organization and the principles on human rights and labor standards set out in the UN Global Compact.	un.org/en/documents/udhr
International Labor Organization	Please see above	ilo.org
United Nations Global Compact	Please see above	unglobalcompact.org
CDP (formerly known as Carbon Disclosure Project)	Aegon N.V. has been a member of the CDP since 2009. CDP encourages companies to disclose their environmental impacts, giving decision-makers the data they need to change market behavior. Investors signing up to the initiative manage assets worth approximately USD 100 trillion.	cdp.net
Extractive Industries Transparency Initiative	Kames Capital is a member of the Extractive Industry Transparency Initiative, which aims to improve governance in the global oil, gas and minerals sector.	eti.org
Global Reporting Initiative	Aegon N.V. is an Organizational Stakeholder of the Global Reporting Initiative, which sets guidelines and standards for sustainability and non-financial reporting.	globalreporting.org
International Integrated Reporting Council	Aegon N.V. is currently participating in a pilot organized by the IIRC to develop guidelines for integrated reporting.	theiirc.org
Global Coalition on Aging	In 2010, Aegon N.V. became a founding member of the Global Coalition on Aging, which seeks to raise awareness of aging issues among policymakers and the general public.	globalcoalitiononaging.com
Association of British Insurers	Aegon UK collaborates closely with the Association of British Insurers. The ABI is the voice of insurance, representing the general insurance, investment and long-term savings industry. It was formed in 1985 to represent the whole of the industry and today has over 300 members, accounting for some 90% of premiums in the UK.	abi.org.uk
Dutch Association of Investors for Sustainable Development	Aegon Asset Management is a member of the Dutch Association of Investors for Sustainable Development (VBDO) which represents the interests of institutional and private investors in the Netherlands who wish to contribute to sustainable development.	vbdo.nl
Eumedion	Aegon Asset Management is an active member of Eumedion, which is a forum for corporate governance and sustainability in the Netherlands and represents institutional investors' interests in these fields.	eumedion.nl/nl
United Nations Environment Program Finance Initiative Principles for Sustainable Insurance	Aegon N.V. is a founding signatory to the UNEP-FI Principles for Sustainable Insurance (PSI) that were launched in June 2011. Signatories of the PSI strive for the integration of ESG considerations in their primary business processes and their interactions with stakeholders.	unepfi.org/ps
Global Real Estate Sustainability Benchmark	GRESB is an industry-driven organization committed to assessing the sustainability performance of real estate portfolios (public, private and direct) around the globe. Aegon and Aegon Asset Management joined GRESB in 2013.	gresb.com
Global Impact Investment Network	Aegon N.V. is a founding Network Member of the Global Impact Investing Network (GIIN). GIIN is a non-profit organization dedicated to increasing the effectiveness of impact investing.	thegiin.org
FAIRR	FAIRR is a farm animal investment risk and return initiative that aims to put factory farming on the ESG agenda. Aegon Asset Management joined FAIRR in 2016 and participates in a number of collaborative engagements.	fairr.org
Institutional Investors Group on Climate Change (IIGCC)	The IIGCC is a forum for investors to collaborate on climate change.	iigcc.org
Investment Leaders Group (ILG)	In 2017, Roelie van Wijk-Russchen, Head of Responsible Business & Public Affairs at Aegon Asset Management was appointed Chair of the ILG.	cisl.cam.ac.uk/business-action/sustainable-finance/investment-leaders-group

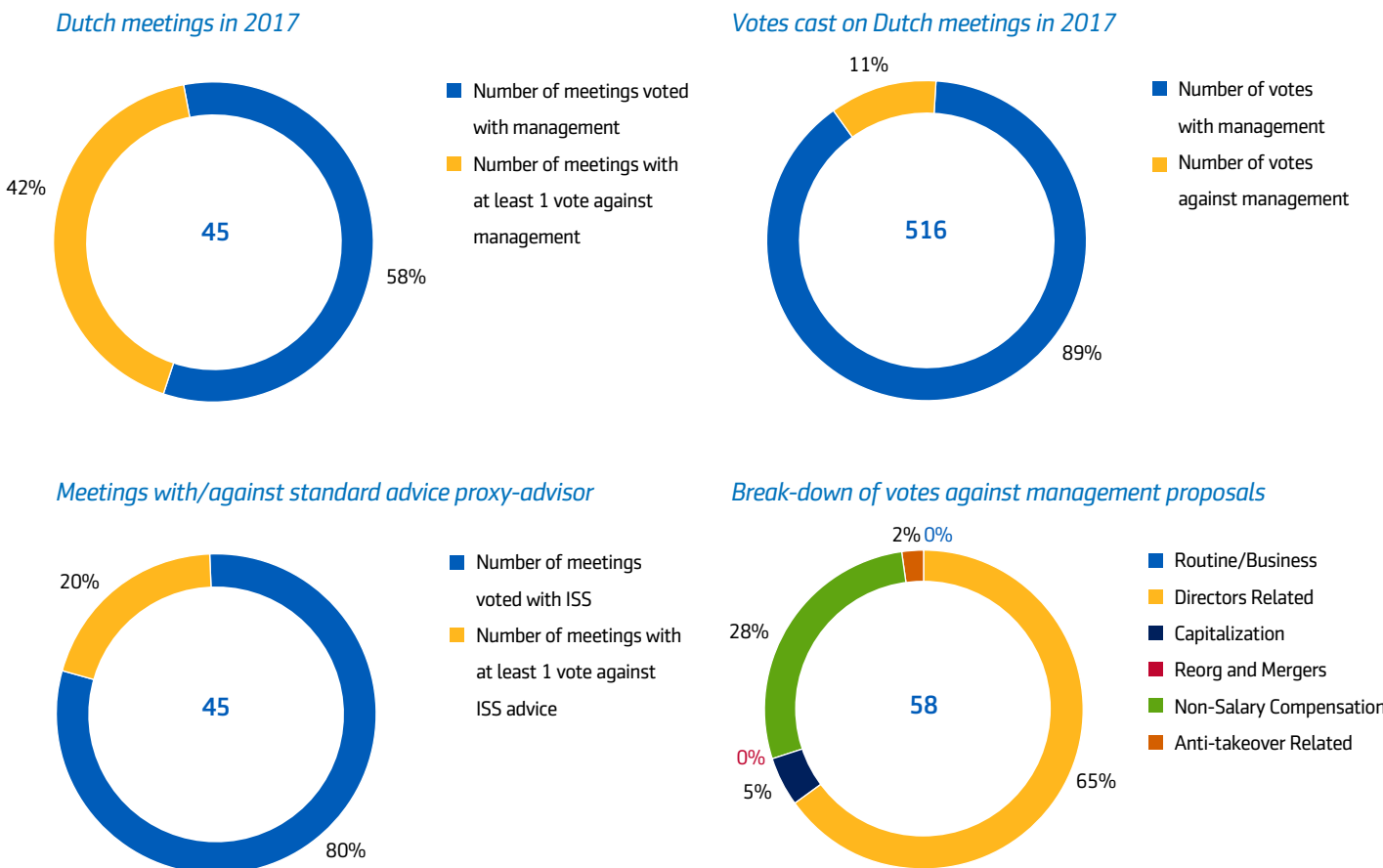
Voting Report: Aegon Asset Management NL

This appendix shows how Aegon Investment Management B.V., the Dutch Aegon Asset Management entity, voted in 2017



Aegon Asset Management NL Votes Specified for Dutch Meetings

This appendix shows how Aegon Investment Management B.V. voted in 2017



Composition of Global Responsible Investment Committees

RI Strategy Committee (RISC)

- **Mark Mullin (Chairman)**
CEO, Aegon Americas
Member Aegon N.V. Management Board
- **Marc van Weede**
Aegon N.V.
Global Head of Strategy & Sustainability
- **Joel Coleman**
Transamerica (Aegon US)
Chief Investment Officer
- **Edgar Koning**
Aegon Netherlands
Chief Investment Officer
- **Nick Dixon**
Aegon UK
Investment Director
- **Roelie van Wijk-Russchen**
Aegon Asset Management
Global Head of Strategy & Sustainability
- **Wim van der Kraats**
Aegon N.V.
Senior Vice President & Head of Risk Governance
- **Robin Boon**
Aegon N.V.
Head of Corporate Communications
- **Harald Walkate**
Aegon Asset Management
Global Head of Responsible Investment
- **Roger Wildeboer Schut**
Aegon Asset Management
Responsible Investment Manager (Committee Secretary)
- **Oldrik Wilken**
TKP Investments
Portfolio Manager and ESG Officer
- **Garry Creed**
Aegon Asset Management
Global Head of Research
- **Jeremy Thurm**
Aegon Asset Management North America
Senior Analyst and US ESG Officer
- **Jan Frederik Slijkerman**
Aegon Asset Management NL
Analyst and NL ESG Officer
- **Alfredo Raez**
Aegon Asset Management Spain
Senior Fixed Income Portfolio Manager and Spain ESG Officer
- **Thang Chu Huy**
Aegon Asset Management CEE
Portfolio Manager and ESG Officer
- **Larina Baird**
Aegon Asset Management
Portfolio Risk Management and Control
- **Edwin Downey**
AURA
VP Engineering and Environmental Services and AURA ESG Officer
- **Heike Cosse**
Aegon Asset Management
Engagement Manager
- **Emanuele Fanelli**
Aegon Asset Management
Responsible Investment Manager
- **Adrienne Hill-Strathy**
Aegon Asset Management
Responsible Investment Associate
- **Roger Wildeboer Schut**
Aegon Asset Management
Responsible Investment Manager (Committee Secretary)

RI Technical Committee (RITC)

- **Harald Walkate (Chairman)**
Aegon Asset Management
Global Head of Responsible Investment
- **Ryan Smith**
Kames Capital
Head of Corporate Governance & Ethical Research
- **Miranda Beacham**
Kames Capital
Corporate Governance Manager
- **Marianne Oomkes**
TKP Investments
Senior Account Manager and Manager Responsible Investment

Policies

Publicly available policies and other documentation	Link
Global Financial Crime Notification and Reporting Procedure	https://www.aegon.com/siteassets/governance/governance-documents/financial-control-and-complaints-procedure.pdf
Global Compliance Charter	https://www.aegon.com/contentassets/0ab8163bff4f438d8407ca197ad8fb8e/regulatory-compliance-charter-2017.pdf
Aegon N.V. Code of Conduct	https://www.aegon.com/contentassets/32afe03b18434d3ba252227eaccc8138/aegon-code-of-conduct-english-international.pdf
Aegon N.V. Human Rights Policy	https://www.aegon.com/siteassets/sustainable/aegon-human-rights-policy.pdf
Aegon N.V. Responsible Investment Policy	https://www.aegon.com/contentassets/a11467f650ae4f7087d9bdf75ab6217e/aegon-responsible-investment-policy-2018.pdf
Aegon Netherlands RI Policy (Dutch)	https://www.aegon.nl/file/53010/download?token=rChsFhQe
Kames Capital UK Responsible Investment Policy	https://www.kamescapital.com/WorkArea/DownloadAsset.aspx?id=4294967433
Aegon Netherlands Voting Policy	https://www.aegon.nl/file/14509/download?token=6ZmOSIFH
Aegon Environmental Policy	https://www.aegon.com/siteassets/sustainable/aegon-environmental-policy.pdf
Statement on Diversity and Non-discrimination	https://www.aegon.com/siteassets/governance/governance-documents/diversity-statement.pdf
Aegon Policy for Charitable Donations	https://www.aegon.com/siteassets/sustainable/aegon-donations-policy.pdf
Dividend Policy	http://www.aegon.com/en/Home/Investors/Shareholders--AGM/Dividend-Policy/#Dividend-policy
Aegon N.V. Disclosure Policy	https://www.aegon.com/siteassets/investors/share-information/aegon-disclosure-policy.pdf
Aegon N.V. Global Voting Policy	https://www.aegon.com/siteassets/sustainable/global-voting-policy.pdf
Aegon N.V. Insider Dealing Policy	https://www.aegon.com/contentassets/eda6c69053b44aa382b2f7039005ee89/insider-dealing-policy-2017.pdf

Business Unit RI and Voting Reports

AAM Unit	Link
TKP Investments	https://www.tkpinvestments.com/files/multi-manager-beleggingen/verantwoord-beleggen/tkpi-aandacht-voor-duurzaamheid-juni-2013.pdf
Kames Capital (Responsible Investment documents incl. engagement & voting)	https://www.kamescapital.com/uk_responsible.aspx
Kames Capital Sustainability Report	https://www.kamescapital.com/sustainabilityannualreport/
AAM PRI RI Transparency Report 2017	https://www.aegonassetmanagement.com/globalassets/asset-management/netherlands/about-us/documents/ri/the-pri-aegon-asset-management-ri-report-2017.pdf
Kames Capital PRI RI Transparency Report 2017	https://www.kamescapital.com/WorkArea/DownloadAsset.aspx?id=4294976656



Abbreviations

AAM	Aegon Asset Management
AuM	Assets Under Management
CDP	Carbon Disclosure Project
ESG	Environmental, Social, Governance
FAIRR	Farm Animal Investment Risk and Return
FSB	Financial Stability Board
GA	General Account
GIIN	Global Impact Investing Network
GRESB	Global Real Estate Sustainability Benchmark
HLEG	EU High Level Expert Group on Sustainable Finance
IIGCC	Institutional Investors Group on Climate Change
IRIS	Impact Reporting and Investment Standards
LBPAM	La Banque Postale Asset Management
LIHTC	Low Income Housing Tax Credit
LTI	Long-Term Investing
MFI	Micro-finance Institution
PRI	Principles for Responsible Investment
RI	Responsible Investment
RISC	Responsible Investment Strategy Committee
RITC	Responsible Investment Technical Committee
SDGs	Sustainable Development Goals
SRI	Socially Responsible Investment
TCFD	Task force on Climate-related Financial Disclosures

Responsible Investment in 10 Steps

Pension funds and other investors can develop an approach to Responsible Investment, even without large dedicated teams or budgets. Many RI activities can be performed by the pension fund board, pension fund management company, or by an external asset manager. Asset managers can contribute by advising on RI and ESG (environmental, social, governance) themes.

1. Gain an understanding of relevant RI themes through dialogue with beneficiaries and other stakeholders (employees, regulators, peers).
2. Allocate specific responsibility for RI to one board member or trustee; create an RI Committee.
3. Develop (or update) your RI policy based on the input from the beneficiaries and other stakeholders; reference internationally accepted standards like the UN Global Compact, OECD guidelines, Ruggie Framework on Human Rights.
4. Determine categories of activities that the pension fund does not want to be associated with (e.g., controversial weapons, tobacco, alcohol, countries that breach human rights). Obtain advice from your asset manager or a specialized ESG firm. Update the exclusions list once a year.
5. Ask your asset manager about their engagement dialogues on ESG with the companies they invest in on your behalf. You can also consider setting up an engagement program specifically for your fund. Specialized firms and some asset managers can provide this service.
6. Ask your asset manager whether they vote on the shares they hold for your pension fund; you can also consider setting up a proxy voting program specifically for your fund. Proxy advisory firms and some asset managers will provide this service.
7. Ask your asset manager to what extent they have incorporated ESG (environmental, social, governance) factors in their investment analysis and decision-making. Check if they are signatories to the Principles for Responsible Investment or similar standards and request a copy of relevant reporting.
8. Ask your asset manager what options there are to invest in investments that meet your risk and return criteria but also have a social or environmental 'impact' (e.g., renewable energy, micro-finance, affordable housing, green bonds). Consider investing in specific SRI (sustainable and responsible investment) funds, for example those that track a sustainable index.
9. You can cooperate with other asset owners and asset managers. Organizations like your local SIF (social investment forum) and the Principles for Responsible Investment (PRI) offer suitable platforms for cooperation.
10. Report on sustainability and RI in your annual report, describing the activities listed above. Ask your asset manager to provide input.



This 'conversation starter' was developed to be used in discussions about responsible investment with pension funds and other clients of TKP Investments and Aegon Asset Management.

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