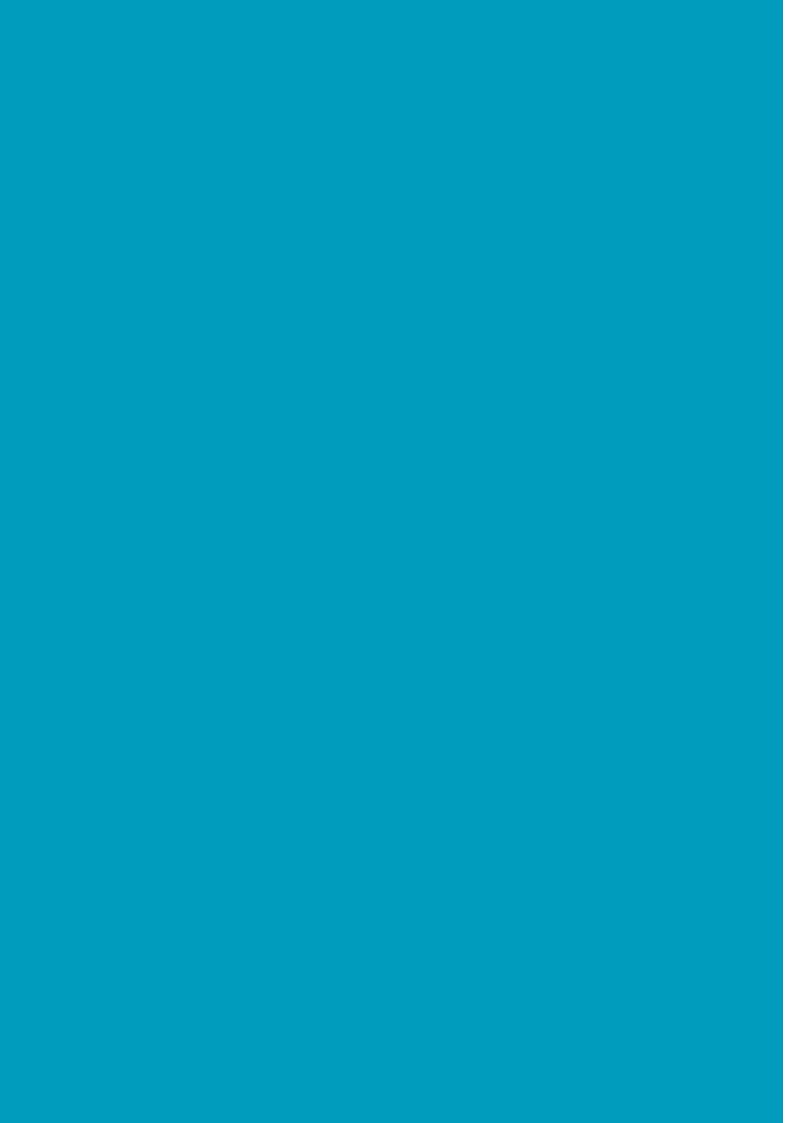
Sustainable and responsible investment 2019







Contents

For	Foreword		
Pro	gress in policy implementation	6	
	stainable and responsible investment milestones 5–2020	8	
1.	Our sustainable and responsible investment policy	10	
2.	Inclusion of investments	14	
3.	Exclusion	20	
4.	Contributing to the Sustainable Development Goals	21	
5.	Dealing with climate change	25	
6.	Human rights and working conditions	34	
7.	Good corporate governance	41	
8.	Dialogue with participants and stakeholders	44	
9.	Outlook for 2020 and beyond	47	
Ap	pendices	49	
	1. About this report	50	
	2. Addressing the risks and opportunities of climate change	55	
	3. Abbreviations	58	
	4. Assurance report by the independent auditors	59	
	5. Where are our assets invested?	62	

Foreword

At the time of publishing this sustainability report, the coronavirus crisis has the Netherlands and the world in its grip. These are unprecedented times with many uncertainties, for our participants too. The financial markets are uneasy and there is still no clarity as to a new, future-proof pension system. But there is one thing of which you can rest assured: the unremitting efforts of both ABP and our investment organization APG to invest our participants' pension money sustainably and responsibly.

In these difficult times, we keep an extra eye out for investments that can make a significant social contribution. For example, we have invested in various bonds of European institutions, the proceeds of which are used to combat the coronavirus crisis. This involves for example improving health care and support for people and businesses that have been particularly hard hit by the (partial) lockdown of the economy. We obtain a slightly higher coupon on these 'coronabonds' than on comparable bonds.

This past year was the last in the policy period 2015 – 2020 for sustainable and responsible investment. The goals we had set ourselves have all been attained, in some cases amply.

An example is the 37% decrease in the CO_2 footprint of our equity portfolio, well in excess of the 25% objective. Since 2015 we have been investing less in CO_2 -intensive sectors and opting within sectors for companies that emit relatively little CO_2 . Since the CO_2 footprint is measured on March 31, the exceptional circumstances on the financial markets due to the coronavirus crisis also played a role.

In 2015 we started assessing companies for sustainability and responsible conduct, so that we can make informed investment choices. With this inclusion policy we opted for a new approach entirely of our own. The result is that we now invest more in companies that operate sustainably and responsibly. As for companies that do not do so, we have either sold them or started to engage them. In this report you can read about the specific changes that have been made in companies, partly as a result of our efforts.

For instance the world's biggest chocolate maker, Barry Callebaut, is taking various initiatives towards having a supply chain that by 2025 will be completely free of child labor.

We have now completely integrated sustainability criteria into all investment decisions. Our investment organization APG has made great efforts to improve the quality of sustainability information and to make it accessible for our investors. We also join forces with other pension investors to establish standards and investment initiatives, such as the platform for investments in the Sustainable Development Goals.

ABP is an inextricable part of Dutch society. We are the pension fund of 2.9 million Dutch people who are active in important social sectors such as education, police and government. We are therefore keen to contribute to a sustainable and pleasantly livable Netherlands. We have subscribed to the national Climate Agreement, and signed the Commitment of the Dutch financial sector.

For investments in relatively small projects and businesses in the Netherlands that are dedicated to innovative solutions for the climate problem, ABP has set up ANET, the ABP Netherlands Energy Transition fund. At the same time we also make larger sustainable investments in the Netherlands, such as in the new Dutch wind farm Goeree-Overflakkee, the first Dutch green government bond and the green mortgage loans of Rabobank subsidiary Vista Hypotheken.



Corien Wortmann-Kool, Chair of the Board

ABP also works together with other pension funds to fulfill the Covenant for International Socially Responsible Investment. We apply our combined influence to achieving improvement with companies where there is a risk of human rights or labor rights violations.

In 2019 the Association of Investors for Sustainable Development (VBDO) declared ABP the most sustainable pension fund in the Netherlands for the second year in a row. This was a gratifying end to a policy period and an encouragement not just to build further on our experience in the new period but to step up our efforts further. Much remains to be done and not everything is successful. In this report you will also read in which areas we have achieved less progress than we had hoped and the dilemmas we come up against. We also aim to be more transparent vis-à-vis our participants and NGOs about what we ask of companies and what we do if we do not succeed in bringing about change.

In our new policy for the coming years we focus on climate change and the transition to clean energy, making more efficient use of natural resources, and the digitalization of society. We see these as three important transitions for now and the future. Surveys show that our participants share this view. We regard respect for human rights and good corporate governance as important pre-conditions.

As well as specific goals for the next five years, we also sketch out our ambition and vision for 2030 and 2050. For example our ambition for 2030 is to no longer invest directly in coal for the production of electricity without ${\rm CO}_2$ capture in OECD countries. In non-OECD countries we aim to substantially reduce this kind of investment. We are also scaling down our investments in oil sands. In 2050 we want our investment portfolio to be climate-neutral.

We are ambitious but also honest. The transitions are developing fast. Many initiatives, notably in the area of conservation of natural resources and digitalization, are new for ABP as an investor. And companies are still at the start of the transitions. In the next few years, together with APG, we will elaborate our policy and further objectives.

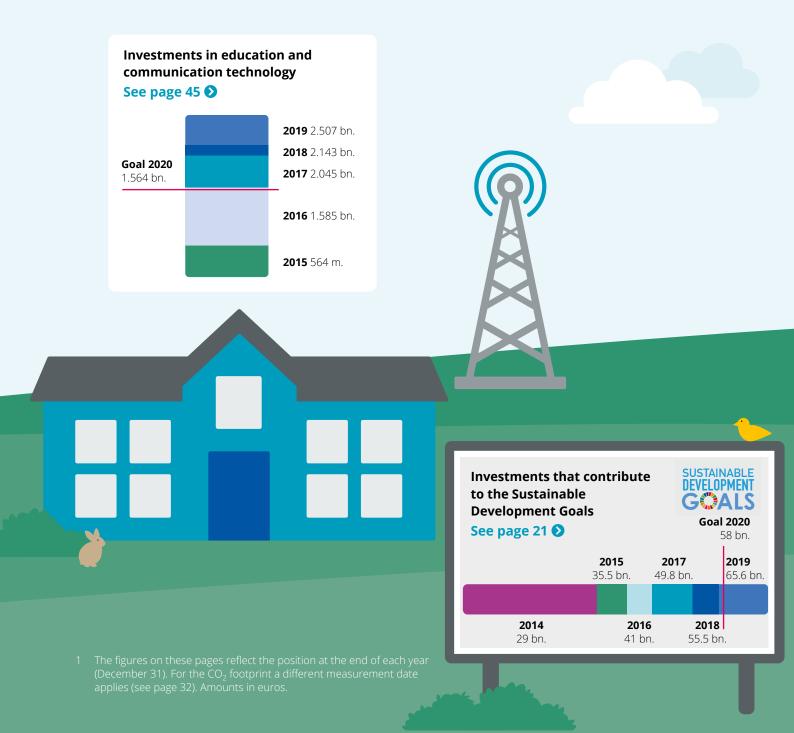
What our participants think of our policy is very important to us. We survey this every year and maintain regular contact at trade fairs and other gatherings. Our latest survey shows that 59% of our participants find it important that we invest sustainably and responsibly.

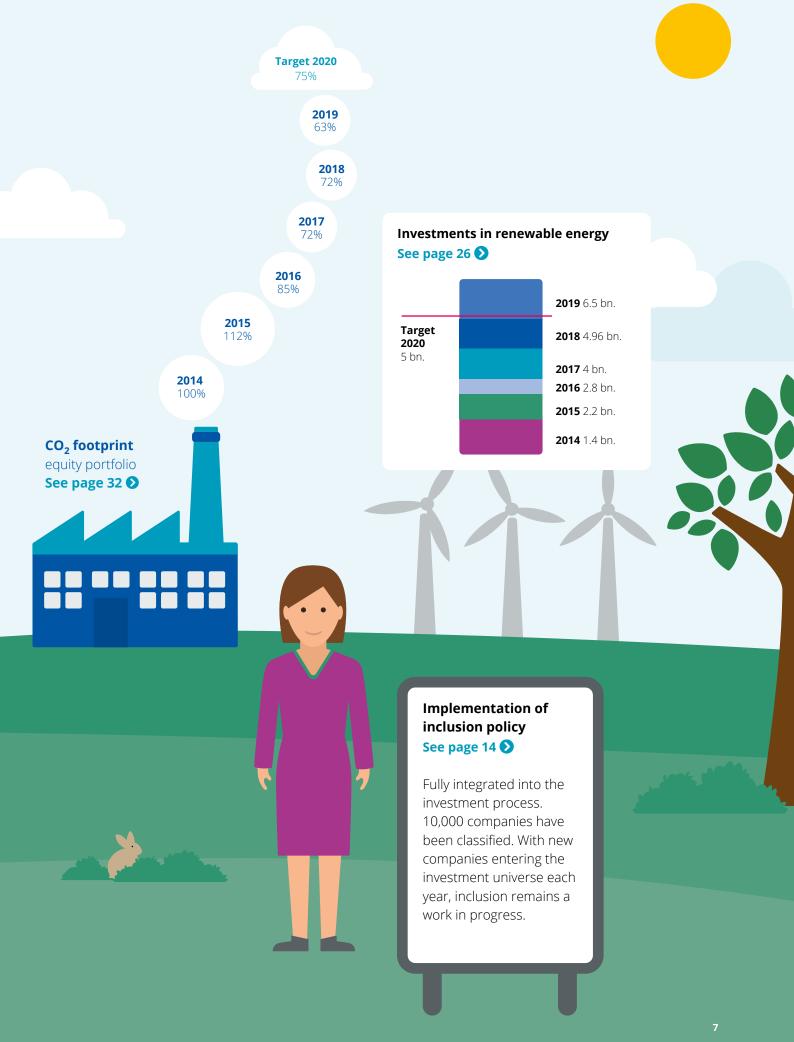
We also like to make use of the expertise and experience of others, such as employers, participants, scientists and NGOs. We do not always agree, but their input challenges us and is of incalculable value in reaching a well thought out policy. For the elaboration of our new policy we have also had various valuable meetings with our stakeholders. We thank them sincerely for this.

Corien Wortmann-Kool, Chair of the Board

Progress in policy implementation

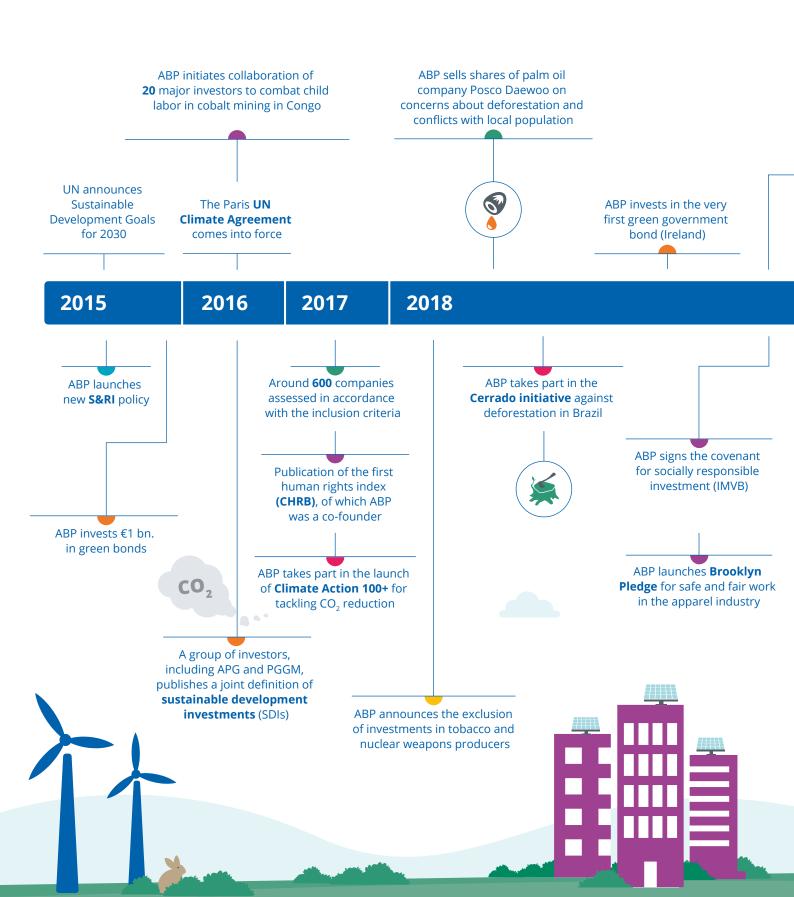
In 2019 we attained all objectives for sustainable and responsible investment that we had set ourselves for the policy period 2015–2020. For the new policy period, starting in 2020, we further refine the objectives and formulate some new ones.¹

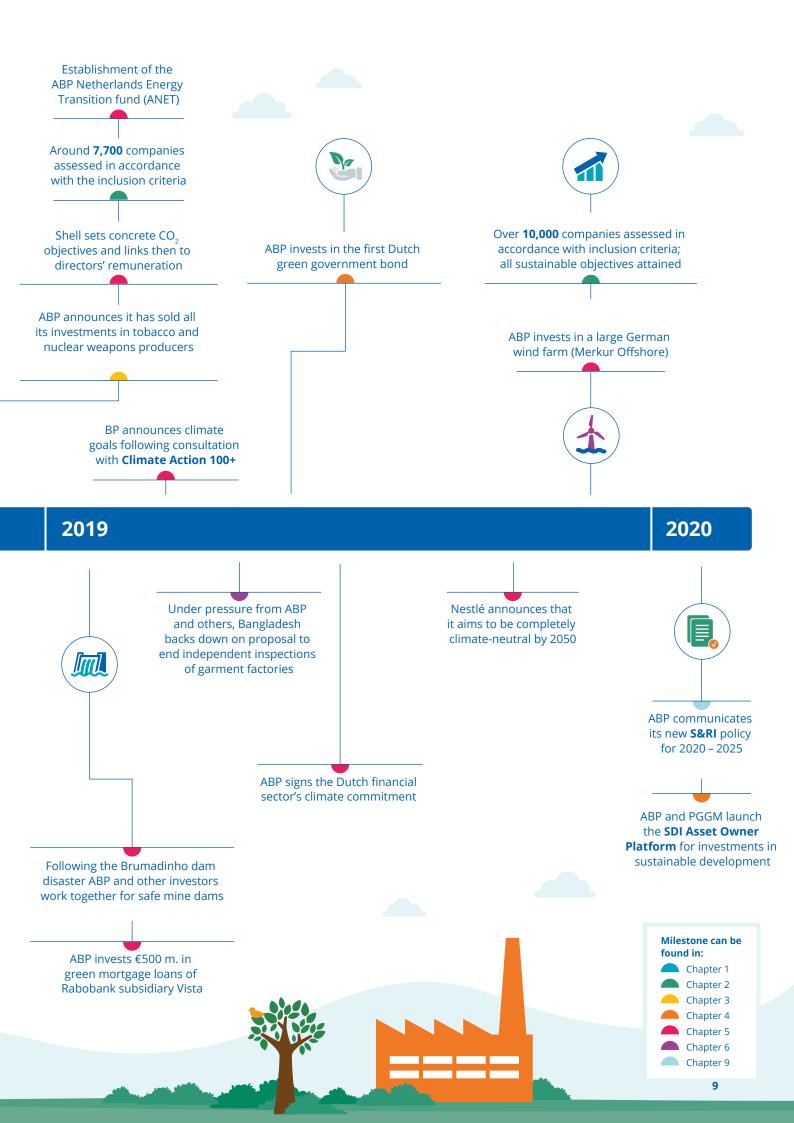




Sustainable and responsible investment milestones

2015 - 2020





1. Our sustainable and responsible investment policy

We strive to ensure a good pension for our participants. And we strive to contribute to a sustainable world in which they can enjoy that pension. The majority of our participants indicate that they find this important. Therefore in making our investments we pay attention to return, risk, costs and also to how companies deal with people, the environment and corporate governance.



A good and affordable pension is the starting point for our investment choices



With attention to people, the environment and good governance



Financial returns and sustainable and responsible investing can go hand-in-hand

Responsible investment choices

ABP wishes to invest in companies (and projects) where there is sufficient attention to people, the environment and good corporate governance (ESG; Environmental, Social and Governance). And also in companies that we expect we can persuade to make improvements. These companies remain in the portfolio if they make sufficient progress in the areas that we find important.

Taking account of people, environment and good governance has become ever more important to ABP. In 2015 we decided to fully integrate corporate social responsibility and sustainability into our investment decisions. For equities and corporate bonds this has resulted in our inclusion policy. Since then we have assessed over 10,000 companies in which we can invest through shares or bonds based on return, risk, costs and how sustainable and responsible they are. More about this in chapter 2.

Sustainability and responsibility form part of every investment choice



What are we seeking to accomplish?

Sustainability is not optional for ABP: we really want to contribute to a world that is pleasantly livable. That is why we have formulated a number of clear targets for the 2015 – 2020 policy period. Compared with January 1, 2015 we want:

- our investments that contribute to the Sustainable Development Goals to have doubled to €58 billion;
- to be investing five times as much (€5 billion) in renewable energy;
- the CO₂ footprint of our equity investments to have decreased by 25%;
- to have invested an extra €1 billion in education and communication technology.

What are the results?

On December 31, 2019 the policy period for sustainable and responsible investment 2015 – 2020 came to an end. The objectives that we had set in 2015 have all been attained. Some of them amply.

In establishing policy we look several years ahead into a world that is in a constant state of flux. That makes setting goals that are both ambitious and realistic quite a challenge. The fact that we have attained our objectives is the result above all of the informed choices we have made and the steps taken by companies in which we invest. At the same time we can see, looking back, that in attaining certain goals, such as reducing the CO₂ footprint of our equity investments, we had the wind at our backs. Because CO₂-intensive sectors have been performing relatively less well in the past few years, investing in them was also less attractive from the financial point of view. But this does not mean that all objectives were easy to attain or that we can simply increase them all for the next period. For example: the less we invest in CO₂-intensive companies, the more difficult it becomes to achieve further reductions.

We have also made progress in our thematic engagement trajectories in sectors with a high risk of involvement in human rights violations. Experience has taught us however that tackling some social ills, such as child labor

in the cocoa sector, takes time and requires efforts by all parties involved. You can read more about this in chapter 6.

Challenge: availability of information on sustainability

The availability of reliable information on sustainability is crucial for proper implementation of our policy and remains a point for attention. One of the challenges is that in the field of sustainability and responsible business practices, unequivocal definitions such as those that exist for financial terms such as 'profit' are often lacking. Investors often use different definitions for what is and is not sustainable.

We urge companies in which we invest to publish more information on sustainability. We also strive to gather data ourselves. For example we rely partly on artificial intelligence to determine which companies contribute to the Sustainable Development Goals.

An additional challenge is the multiplicity of standards prescribing how companies and investors should report on sustainability. As a result it is often hard to see the wood for the trees. Meanwhile a number of initiatives have been started to bring these standards more into line, such as the Corporate Reporting Dialogue's Better Alignment Project.

By launching our own initiatives such as the SDI Asset Owner Platform (see p. 22), and taking part in joint projects such as Climate Action 100+ (p. 28), we aim together with other investors to set the same reporting requirements for companies.

ABP once again the most sustainable pension fund

In October ABP was once again voted the Netherlands' most sustainable pension fund. In the ranking of the VBDO (Association of Investors for Sustainable Development)², ABP scored 4.6 out of a maximum possible five points. ABP headed the list in 2018 too, that time with the full five points. VBDO decided to raise the bar in 2019 because pension funds were performing better and better in the area of sustainable and responsible investment.

International Leaders' Group

There was also international praise for how ABP gives meaning to sustainable and responsible investment in its investment portfolio. In September the fund was included in the PRI (Principles for Responsible Investment) Leaders' Group 2019.3 Publication of the Leaders' Group, which numbers 47 international investors, is intended to encourage other major investors to give responsible investment an explicit place in their organization and investment portfolio.

Responsible investment and returns

Our annual participants survey shows that nearly 60% of ABP participants find it important for us to invest sustainably and responsibly, without this being to the detriment of returns (see chapter 8). The core of our policy, and of the new policy from 2020, is therefore: to obtain a good return for our participants, in a sustainable and responsible manner, at acceptable cost and with appropriate risk.

In our new policy for the period 2020 to 2025 we focus on three great transitions – climate, shortage of raw materials and digitalization – which are developing strongly (see chapter 9). For all new goals in the policy we have asked our asset manager to assess the feasibility. The goals seem feasible without consequences for the risk and return of the portfolio. However we realize that predicting the future is difficult and that we are dependent on many external factors such as market circumstances.

ABP expects lower returns of around 4% per year in the coming years. The lower expected returns are due above all to the low level of interest rates, which depresses bond yields. Investing sustainably and responsibly has no effect on low interest rates.

Just as before, we continue to keep a constant close eye on the effects of our policy on risk and return. In our annual reports and on our website we will show how we are doing in this respect and whether we need to adjust our planning.

New policy 2020-2025

In 2019, in preparation for the development of the new policy for sustainable and responsible investment, we held meetings with stakeholders and took stock of what our participants consider important. We also naturally made use of the experience gained in the past policy period. You can read more about this in chapter 9.

More about our research into the link between responsible investment and return can be found in the interview with Diane Griffioen on the page opposite.

The Principles for Responsible Investment (PRI) is an international network of over 2,300 pension funds, asset managers and companies. They work together to further develop responsible investment. They also share knowledge and insights in the area of responsible investment.



Interview with Diane Griffioen, Head of Investments with ABP

What does investing sustainably and responsibly do to returns?

Does investing with an eye to people, the environment and good corporate governance influence the risk and return of the investments? This is one of participants' most frequent questions. The answer comes from Diane Griffioen, ABP's Head of Investments.

ABP wishes to invest sustainably and responsibly. Is that good for risk and return?

"ABP is convinced that we can invest responsibly and make the investment portfolio sustainable without this being to the detriment of the risk and return profile. In other words: we expect to obtain at least the same return as if we did not invest sustainably and responsibly. At our request, in 2019 Professor Kees Koedijk of the University of Tilburg again looked into what the academic literature has to say about this. ⁴ Just as in his earlier research, Professor Koedijk concludes that the vast majority of studies show a neutral or positive effect on the risk and return of an investment portfolio."

ABP uses its influence to bring about improvements in companies. Does this also lead to better investments? "Professor Koedijk's study shows that companies' long-term financial performance improves as a result of successful engagement programs. Particularly where issues that can have major financial consequences for

the company are concerned. This dovetails with our inclusion policy: we assess all investments based on ESG criteria and go and talk to companies that still need to take steps."

Does ABP also examine the effect on its own investments?

"Where possible for the period 2015 to 2020 we examined the effect of sustainable and responsible investment on risk and return. There are no indications that the policy had a negative influence on the risk and return profile of the investments. You must bear in mind of course that we could only look back over a short period, and that with investment past results are never a guarantee for the future. But it does give cause for confidence."

So what's the next step?

"For the new policy we also looked into whether we could attain the objectives without detriment to risk and return. We're confident that with the new policy we don't have to make any concessions on this point. We're also working on a method for measuring and monitoring the influence of sustainable and responsible investment on an ongoing basis."

4 His research paper, for which more than 2,000 scientific publications were studied, can be read at https://finance-ideas.nl/esg-wetenschappelijke-literatuurstudie/ (in Dutch).

2. Inclusion of investments

An attractive return at an acceptable risk is a necessary but not a sufficient condition for ABP. We also require the companies we invest in to operate sustainably and responsibly.



The foundations have been laid, but inclusion remains a work in progress



We have assessed over 10,000 companies on our sustainability criteria



At the end of 2019 we had held improvement talks with 240 potential improvers

Invest, sell or improve

We assess all companies in which we can invest by means of shares or bonds (the investment universe) in terms of risk and return, costs and the extent to which they operate sustainably and responsibly. If a company meets our criteria and also scores more than the average for the industry concerned⁵, it is designated a 'leader'. This is a company in which we gladly invest.

Then there are companies that score well on risk, return and costs but are lagging in the area of sustainability and responsible business practices. We refer to these as 'laggards'. We can still invest in these companies, but only if we expect to be able to push them to improve. We must find the company sufficiently attractive as regards risk and return to warrant our spending time and effort on helping it to improve. We call these 'potential improvers'. We make clear what improvements we wish to see and by when. If we do not see adequate improvement, in due course we will sell our stake in the company. For such reasons in 2019, for example, we sold our interests in RESA, a gas and electricity distribution network operator in the Belgian province of Liège.

With this policy, which we call the inclusion policy, we comply with the guidelines of the OECD (Organization for Economic Cooperation and Development) for

e.g. systematically identifying ESG risks in the portfolio and exerting influence on companies to reduce these risks.

Differences among regions and sectors

For each business sector we use separate criteria. These take account of the specific risks affecting the sector. We also look at the countries and regions in which companies are active. We expect companies that are active in territories at high risk of human rights violations to have an appropriate human rights policy.

Engagement takes time and effort

At the end of 2019 there were 240 potential improvers in our investment portfolio. Improvement talks with these companies sometimes take time and effort. We do of course set objectives with associated deadlines. At the same time we aim to formulate objectives that make sense and that tackle the root causes of the problems. In our view this is the only way to really improve the situation.

Inclusion is never finished

At the end of 2019 we had assessed over 10,000 companies on our criteria. In 2015 we expected that five years later our portfolio would consist entirely of leaders and potential improvers, but in practice inclusion turns out to be still a 'work in progress'.

⁵ More precisely: if the normalized score is above the median.

⁶ An overview of companies with which we have had improvement talks and the subjects covered can be found at https://www.abp.nl/over-abp/duurzaam-en-verantwoord-beleggen/hoe-beleggen-we.aspx (in Dutch).



Mining: a broad range of ESG risks

With mining companies, we assess whether they have a good policy for controlling risks such as bribery & corruption and risks in the areas of health and safety, human rights and environment. We also look to see whether they have been involved in any incidents.

- Examples of leaders: Anglo American, Newmont Goldcorp
- Examples of potential improvers: BHP Billiton, Rio Tinto, Glencore, Vale

Vale: offer compensation to the victims of the mine disaster

After the Brumadinho dam collapse in Brazil (more about this on p. 37) we urged he owner, Vale, to take drastic measures to improve safety. Because we were not satisfied with the way the company reacted, we voted against the board's policy at the AGM. In October we received a delegation from Brazil, which included relatives of victims of the Brumadinho disaster. We want a thorough investigation to determine exactly what went wrong. It is also important for relatives to receive financial compensation from Vale.

In December Vale announced 50 measures that are intended to lead to responsible dealings by the company with people and the environment. These also include measures in the area of safety.

ABP's position is that Vale must now effectively implement these measures, and it will monitor this critically.



Pharmaceutical companies: product safety and bribery

Pharmaceutical companies are exposed to risks in such areas as product quality & safety, aggressive marketing, and bribery & corruption. An obvious example is the granting of inappropriate remuneration to doctors for prescribing certain medicines.

- Examples of leaders: Merck, Roche, Pfizer
- Examples of potential improvers: GlaxoSmith-Kline, Valeant (now Bausch Health), Anthem, Novartis

Novartis: avoid bribery and corruption

Novartis was involved in various cases of bribery between 2002 and 2015. There were also concerns about the process for clinical trials and the safety of their products. Our conversations with Novartis focused on strengthening supervision of research and production and better policy for preventing bribery and corruption.

We have had several contacts with Novartis. In the past few years the company has taken a number of measures, including the appointment of a director specifically responsible for ethics, risks and compliance with the relevant laws and regulations. The company also provides anti-bribery training for its personnel. Employees receive smaller bonuses than before and must comply with certain values and rules of conduct in order to be even considered for a bonus.



Utilities: no expansion of coal capacity

Utilities often have intensive contact with governments in the countries where they operate on account of the permits required. This entails the

coal capacity. If there are plans to do so, we bring pressure to bear to dissuade them. Instead, we

- Example of potential improver: RWE

RWE: stop the expansion of coal-fired power plants We have asked the German utility RWE to call a halt to its plans for new coal-fired power stations and fired electricity.

In April 2019 RWE announced the cancellation of plans for the BOAplus project, a 1.1 gigawatt will build no new coal-fired plants and will stick to the objectives of the German commission for the phasing out of coal. The company is busily engaged in the transition to clean energy and with the takeover of E.ON will become a major producer of renewable energy.

Banks: change of culture

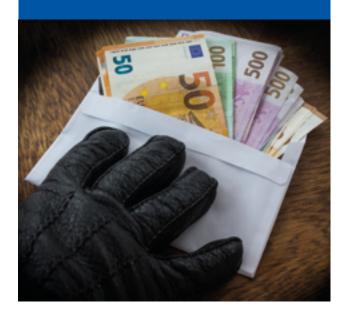
Banks are duty bound to combat money laundering, bribery, corruption and fraud. We expect among other things good whistleblower arrangements and demonstrable measures to prevent money laundering.

- Examples of leaders: Japan Post Bank, Svenska Handelsbanken, KeyCorp
- Examples of potential improvers: HSBC, Wells Fargo

Wells Fargo: accelerate changes

In 2016 Wells Fargo, one of the biggest banks in the U.S., announced that employees had sold financial products on a large scale on the basis of misleading information. They had opened accounts without their customer's consent to make the sales figures look better. The company was fined. Over 5,000 employees were fired.

Since then we have spoken with the bank several times. Wells Fargo has taken measures: four board members have been replaced, the remuneration policy has been fine-tuned and the whistleblower arrangements improved. However, we believe that much remains to be improved and the implementation of improvements needs to be speeded up. Therefore we continue to bring pressure to bear.

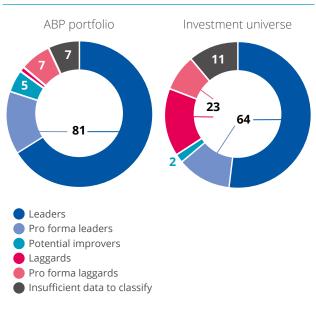


We have found that it takes more time and effort than expected to properly assess so many companies. At the same time companies are continuously changing and new companies are constantly being added. In 2019 alone more than 2,000 new companies were added to our investment universe and had to be assessed. During the year we assigned them provisional (pro forma) classifications as leaders or laggards. As a result the figures hereunder, with figures at year-end 2019, show relatively large numbers of pro forma leaders and laggards. Once the classifications have been officially established, we will determine which laggards to designate as potential improvers.

We have sold practically all officially classified laggards, except for 16 (0.4% of the number of companies in the portfolio). We also intend to sell these, but this has not yet been possible, for example due to trading restrictions.

The following figure shows the distribution of our portfolio and that of the investment universe at the end of 2019.⁷

Leaders, laggards and potential improvers ABP vs. investment universe (% of number of companies)



7 This applies to the listed equities and credit portfolios, including investments in listed real estate. Figures in this chapter refer to the APG portfolios in which ABP's investments are held.

Laggards we have sold

Zijin Mining

China's Zijin Mining is active in the exploitation of gold, copper and zinc. We have classed it as a laggard, among other things because it is involved in conflicts with local communities over alleged human rights violations and the discharge of noxious waste. We have sold our interest in the company. We will not consider re-investing in the company until we are convinced that it has improved its dealings with people and environment

Freeport-McMoRan

Mining company Freeport-McMoRan is one of the world's biggest producers of copper. It is involved in waste discharge with potentially damaging consequences for the environment. In view of these environmental and socio-economic risks we have sold our interest in Freeport-McMoRan.

Lotte Shopping

Lotte Shopping is a Korean retail company with department stores, discount shops and supermarkets. We assess the company as a laggard on account of various cases of bribery and corruption. The CEO of the parent Lotte, Shin Dong-bin, was sentenced in 2018 to two and a half years in jail for bribing a confidant of former president Park. Some months later he was conditionally freed and is now back at the company helm.

Aurobindo Pharma

Aurobindo Pharma, India, is a producer of cheap generic medicines. We have classed it as a laggard for a number of reasons, including labor rights. In 2018 the investigative television program Zembla reported on exploitation of employees and breaches of safety regulations in factories. Employees were paid less than the minimum wage and were offered no fixed contracts. According to the Indian media in the past few years at least eight employees have died in factory accidents.

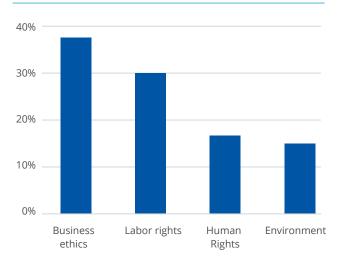
In our equity and corporate bond investments the emphasis in the past five years has been increasingly on leaders and potential improvers. At the end of 2019 the portfolio contained relatively more leaders (81%) and fewer laggards (7%) than the investment universe, which consisted of 64% leaders and 23% laggards. If instead of looking at the numbers of companies we consider the value that they represent, the portfolio is 87% composed of leaders.

What makes a company a leader or a laggard?

The criteria we have developed to classify companies are based on the principles of the UN Global Compact in the areas of human rights, labor rights, environment and business ethics. We look to see whether companies have good policies in these areas. We also check to see whether in practice they meet their commitments and whether there have been any incidents such as accidents or environmental pollution.

The figure hereunder shows the criteria based on which we have assessed companies in the investment universe as ESG laggards. For each of the four criteria we give the percentage of the total number of laggards that fell short on that criterion. The figure shows that most laggards fell short on business ethics and labor rights and a relatively smaller number on human rights and environment.

On what basis were companies assessed as ESG laggards?



The following subjects are examples of those concerned by the four criteria:

Criterion	Examples
Business ethics	Bribery & corruption, money laundering, inappropriate promotion of medicines, absence of whistleblower arrangements
Labor rights	Health and safety at work, conditions of employment
Human Rights	Relations with local communities, data privacy & security
Environment	GHG emissions, rules for waste and water consumption, expan- sion of coal capacity

Taking stock

In 2015 we started out on a large-scale operation with a clear goal before us: a sustainable, responsible investment portfolio. And in going for inclusion we opted for a new approach entirely of our own. At that time we could not predict how this would translate into the composition of the portfolio. At the same time we did not want to jeopardize our objective of an attractive return for our participants against an acceptable risk. We therefore set about it cautiously.

Five years on, it is time to take stock. In 2020 we will evaluate what the inclusion policy has brought us and where we see opportunities for improvement.

With the assessment of over 10,000 companies in which we can invest through shares or bonds, we have laid a solid basis for our sustainable and responsible investment policy. Our portfolio managers – including external managers – now take account of ESG criteria in every investment decision. For our asset manager this has been quite a change of culture.

All in all we can say that we have invested a lot in inclusion and made considerable progress; at the same time much remains to be done. In our policy for 2020 to 2025 we will sharpen existing criteria and adopt additional criteria to reflect our new objectives. You can read more about this in chapter 9.

Interview with Ann-Marie Griffith, Managing Director Credits, APG US

No vote, plenty of influence

Investing sustainably and responsibly in corporate bonds was always much less developed than in equities. But in the last few years there have been changes. ABP aims to be a leader in developing the market and improving ESG performances of companies that issue bonds, says Ann-Marie Griffith.

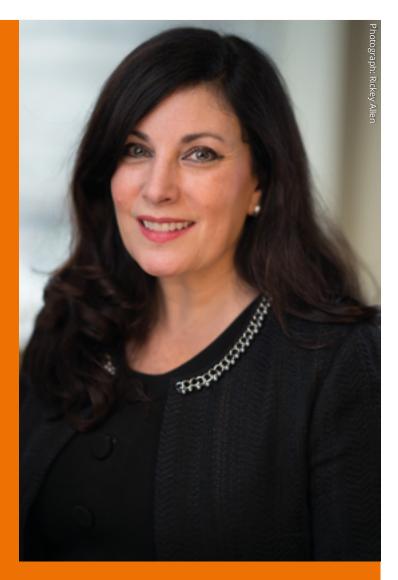
How do you exert influence as a bond investor?

"We've been pleasantly surprised by companies' attitudes to us as bondholders. Admittedly we have no voting rights, but we are seeing that companies that are open to their shareholders' opinions also listen to their bondholders. More and more companies are devoting attention to sustainability, in order to meet the requirements of stakeholders. One plus point is that as bondholders we also get to speak with smaller, unlisted companies. These are companies that stay under the radar as far as equities are concerned. We are often among the first to talk to such companies about environmental risks, for example, or safety in the workplace."

'What helps is that we have built up a name in the past few years. We are now reaping the rewards.'

What kind of cultural sensitivities did you encounter when introducing the inclusion policy?

"Here in the United States the market has been relatively slow to embrace responsible investment. Yet even here we are seeing increasing awareness on the part of companies and investors. Since we have the same expectations for U.S. as for other companies, improvement trajectories can sometimes take a bit longer here. What helps is that we have built up a name in the past few years.



We are now reaping the rewards. Companies, banks and investors recognize that we are pioneers and ask us for our views. In this way we can contribute to shaping the market."

How has the inclusion policy contributed to the investment process?

"It has strengthened our sustainability policy since we can systematically assess companies on important ESG factors. We're better equipped to determine which companies have their affairs in order and which need to improve their ESG performance."

3. Exclusion

There are companies and sovereign bonds of certain countries in which we do not wish to invest. These are listed on our exclusion list.

- Most of the companies on our exclusion list are there because of the products they make
- A few are excluded because they have breached internationally recognized agreements
- We do not invest in sovereign bonds of countries subject to a UN arms embargo



Exclusion of companies because of their products

We have developed criteria to exclude companies from investment. If a company makes products that meet the following four criteria, we will not invest in that company:

- 1. The product is harmful for people by definition.
- 2. We cannot alter this fact by exerting influence as an
- 3. There would be no negative consequences if the product no longer existed.
- 4. There is a global treaty aimed at banning this product.

We do not invest in producers of weapons that are prohibited by international treaties to which the Netherlands is a signatory. Concretely, this concerns companies that are involved in the manufacture of cluster bombs,

anti-personnel (land) mines and chemical and biological weapons. We also do not invest in tobacco companies or companies involved in producing nuclear weapons or important components of them. At the end of 2019 a total of 156 listed companies were on our exclusion list based on their products.8

Exclusion of sovereign bonds

When the UN Security Council imposes an arms embargo on a country, we no longer invest in government bonds of this country. In 2019 the arms embargo on Eritrea was lifted, after the country had signed a peace accord with Ethiopia following 20 years of armed conflict. We have removed Eritrea from our exclusion list. At the end of 2019 ten countries were on this list.

Companies that do not comply with global agreements

We want the companies in which we invest to respect the UN Global Compact principles on human rights, labor conditions, the environment and anti-corruption. Just as in 2018, three companies are on our exclusion list due to violation of these principles: the Chinese energy company PetroChina, the Japanese energy company Tokyo Electric Power Company and the US supermarket chain Walmart.

⁸ https://www.abp.nl/images/companies-excluded.pdf. External asset managers also apply our exclusion policy to non-listed companies. The non-exhaustive list that is used for this contains another 119 companies. External managers do not have to apply the exclusion policy to illiquid investments that were already in the portfolio before the introduction of the exclusion policy (or parts thereof), such as private equity, hedge funds, infrastructure, real estate and commodities. There is also an exception for index investments and ETFs (investment instruments that follow an index). We can guarantee for over 99% of the investment portfolio that there are no shares or bonds of companies that are on our exclusion list.

4. Contributing to the Sustainable Development Goals

At the end of 2019, ABP had invested 65.6 billion in companies that contribute to the Sustainable Development Goals. With this, we have attained our objective.

ABP has invested around 14% of its assets in the Sustainable Development

Goals

- A substantial part of this is sustainable real estate, which contributes to the SDG 'Sustainable cities and communities'
- We are developing a platform for investing in the SDGs together with other pension fund investors

ABP has set itself the goal of having €58 billion in investments that not only offer a good return but also contribute to the Sustainable Development Goals: These Sustainable Development Goals (SDGs) were established

in 2015 by the United Nations⁹ and are aimed at, among other things, the eradication of hunger, climate action and sustainable cities and communities.

SUSTAINABLE GALS DEVELOPMENT































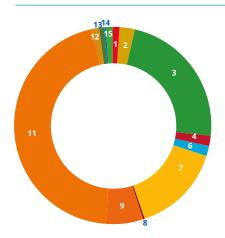






⁹ Before 2017, we defined our sustainable investments as 'High Sustainability Investments ('HSIs').
These were inspired by the predecessors of the UN Sustainable Development Goals: the Millennium Development Goals. Since 2017 we have reported on SDIs. The objective has remained the same: €58 billion invested in the SDGs in 2020.

Investments per SDG



- 1. No poverty: 793 million
- 2. Zero hunger: 1.7 billion
- 3. Good health and well-being: 15.1 billion
- 4. Ouality education: 1.3 billion
- 6. Clean water and sanitation: **1.1 billion**
- 7. Affordable and clean energy: 9.9 billion
- 8. Decent work and economic growth: 223 million
- 9. Industry, innovation and infrastructure: 4.1 billion
- 11. Sustainable cities and communities: 29.4 billion
- 12. Responsible consumption and production: 820 million
- 13. Climate action: **292 millio**n
- 14. Life below water: 52 million
- 15 Life on land: 849 million

























Together with their pension administrators, ABP and PFZW (the pension fund for employees in the health care and social work sectors) have developed a framework for assessing which companies contribute to the SDGs with their products and services. 10 We call these Sustainable Development Investments (SDIs). Just like all other investments, SDIs must meet our criteria for return, risk and costs. If a company makes a real contribution to the SDGs, we regard this as an important advantage and an extra argument for investing in that company.

A platform for sustainable pension fund investors

For ABP, it is important that the framework developed for SDIs be further shared and developed into a widely applied market standard. In September our pension administrator APG announced that it was going to develop an SDI Asset Owner Platform together with PGGM (PFZW's pension administrator). Thanks to our Al-based technology, investors gain an insight into the extent to which companies contribute to the SDGs with their products and services. In this way they can establish which investments qualify as SDIs. The platform, which works together with data-analysis company ENTIS, builds on the framework for assessing sustainable investments that APG and PGGM had previously developed.

The SDI Asset Owner Platform seeks to establish a common approach to investing in the SDGs. Institutional investors wishing to gain insight into the extent to which their investments contribute to the SDGs can make use of the platform standard. The goal is for a substantial

number of institutional investors worldwide to make use of a common definition of SDIs. In this way they will be able to address companies with a consistent message and improve their reporting. They will also be able to report in a comparable manner on how they invest in and contribute to the SDGs.



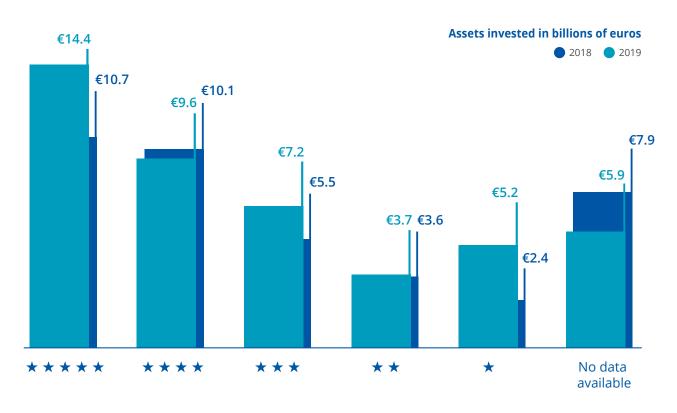
Promising technology for paraplegic patients

The private equity-held GTX Medical has developed a unique therapy for

helping people with paraplegia to move their legs again. This is done by means of an implant that electrically stimulates the damaged spinal cord. Initial results are promising; there are now eight patients who have regained the ability to walk thanks to a combination of this treatment and physiotherapy.

GTX Medical is based on the High Tech Campus in Eindhoven and at the Technical Faculty and the School of Life Sciences (EPFL) in Lausanne, Switzerland. The therapy is based on many years of research by Professor Grégoire Courtine of the EPFL.

ABP invests in GTX Medical through Inkef. This is a venture capital company that we set up in 2010 to invest in promising young enterprises in Europe.



Sustainable real estate makes the biggest contribution

The largest share of the SDIs is real estate. We have invested €24 billion¹¹ in sustainable real estate, with which we make a considerable contribution to SDG 11 – Sustainable cities and communities. Real estate qualifies as SDI if it receives four of a maximum of five stars in the annual sustainability survey of the Global Real Estate Sustainability Benchmark (GRESB). This means they are in the top 40% best performing funds.¹²

Our aim is that all our real estate investments should report to GRESB. At the moment 13% (by value) of the funds still do not.

This mainly concerns listed real estate. For our direct investments in real estate funds, we have made participation in GRESB obligatory. New investments

must also have an assessment of at least four stars within three years. The scores of funds in which we were invested in 2019 are shown in the above figure.

In 2019, GRESB also provided insight into the share of our operational real estate investments that have a sustainability certificate. At the end of 2019, this was around 20% of all square meters that were reported to GRESB. This is well above the GRESB Global Average of 15.8%.

ABP takes the lead in the market for green bonds

Our SDIs also include many green, sustainable and social bonds (hereinafter: 'green bonds'). These are bonds issued by companies and semi-government and government institutions for the funding of social and sustainability projects.

- 11 This figure concerns direct investments in real estate. The indirect investments via shares in listed real estate have not been included.
- 12 The GRESB rating indicates how sustainable a real estate company is in comparison with the other real estate companies that are assessed by GRESB. Real estate companies that belong to the highest 20% are awarded five stars. The 20% lowest scoring real estate companies receive one star. For more information: https://gresb.com/wp-content/uploads/2017/07/GRESB-RE-Scoring-Methodology.pdf



In May 2019 we invested €171 million in the Dutch government's first green bond. The government is using the proceeds to finance capital expenditure on generating sustainable energy and making homes more energy-efficient, bike racks at Utrecht Central train station, clean transport and reinforcing dikes, among other things. Thus for our participants the investment payback comes in two forms. On the one hand it contributes to a good and stable return, and on the other we also make a contribution to financing the energy transition in the Netherlands.

This green bond meets the highest standards.¹³ For green government bonds we apply the same requirements in the area of return, risk and costs as for all other investments. The return on this bond is comparable with an 'ordinary' Dutch government bond.

How has our green bond portfolio grown? 2014 - 2019



207
green bonds totaling
€7,601
million

2018	141 green bonds totaling €5,541 million
2017	102 green bonds totaling €3,485 million
2016	59 green bonds totaling €1,400 million
2015	38 green bonds totaling €800 million
2014	13 green bonds totaling €300 million

Italian energy giant Enel issues the very first SDG bond

In 2019 we invested in the first green bond to be linked directly to the

Sustainable Development Goals. The issuer, Italian energy company Enel, promises that 55% of its electricity generating capacity will come from renewable sources by the end of 2021. If the company does not achieve this, investors will receive 0.25% extra interest on their bonds. At June 30, 2019 renewable energy sources contributed 46% to Enel's capacity.

Enel's objective contributes to SDG 7 – Affordable and clean energy. Our pension administrator APG was one of the investors with which Enel discussed what specific characteristics this SDG-linked bond should comply with.

¹³ This means that it has been established what the proceeds will be used for, that clear sustainability criteria have been followed and that the government will report annually on disbursements and their effect on the environment.

5. Dealing with climate change

Climate change affects our participants' future and has consequences for our investments. For this reason we want companies we invest in to emit less ${\rm CO_2}$ and to have a strategy for the transition to a climate-neutral economy.



We invest €6.5 billion (14% of our energy investments) in renewable energy



Since 2015 the CO₂ footprint of our equity portfolio has decreased by 37%



Together with other investors we are making major CO₂ emitters more sustainable

Taking account of climate risks

ABP invests worldwide and has a highly diversified portfolio. Therefore we expect the consequences of climate change and the energy transition to have a gradual effect on our investments. However we remain watchful for any sudden, unexpected changes and are taking measures now to control climate risks in our investment portfolio. More about this in annex 2.

Climate risks in real estate

It is becoming ever more important to price in climate risks for investments in real estate. This concerns:

- · physical risks, such as flood and storm damage;
- transition risks, in other words costs that may have to be incurred in the future due to stricter rules to combat climate change.

Transition risks include for example the costs of insulation and making the energy supply sustainable, or loss of value of properties for which heavy climate-related investments are necessary. In 2019 ABP launched an initiative together with other parties enabling investors to estimate transition risks depending on the type of building and the country concerned. The analysis is carried out by the Institut für Immobilienökonomie (IIÖ) with the support of GRESB. The initiative is a further development of the Carbon Risk

Real Estate Monitor (CRREM) project, financed by the European Commission. With financing from ABP and PGGM the CRREM project is now being extended to the residential sector and major real estate markets outside the EU.

The physical consequences of climate change are highly dependent on the location of the investment. In 2019 we asked six specialist firms to assess the climate risks for one particular real estate asset. The outcomes were greatly divergent. The lesson we drew from this is that we must not rely on the figures from a single firm. We are working on a database of the physical climate risks for our worldwide investments in real estate. In doing so we are combining the information from different providers.

According to a study by the Asset Owner Disclosure Project, ¹⁴ ABP is one of the world's pension funds that best takes account of climate change in its investment policy. We see this as acknowledgment that ABP is a front-runner in the pension sector where taking account of climate risks and opportunities is concerned.

In which energy sources does ABP invest?

Our total investments in the energy sector amount to approximately €27.2 billion (2018: €25.9 billion). At the end of 2019, 14% (2018: 11%) of our energy portfolio

¹⁴ https://aodproject.net/changing-climate/. AODP publishes the Global Climate Index. This ranking shows to what extent the hundred largest pension funds take the risks of climate change into account in their investment policy. ABP ranks fourth in this list.

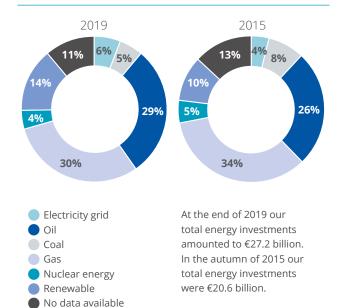
consisted of renewable energy. 15 We cannot allocate approximately 11% of our energy portfolio to an energy source because the necessary data are not available.

Within the energy portfolio the share of coal and lignite fell from 8% in 2015 to 5% at the end of 2019. In order to meet our objective for reducing the CO₂ footprint of our equity portfolio, we now invest less in shares of companies with coal-fired power stations.

If companies have plans for new coal-fired power stations, they are assessed as laggards. This means that we go and talk to these companies to dissuade them from expanding, or that we sell our shares or bonds in the company. 16

In the new policy for sustainable and responsible investment we have included the objective of scaling down our investments in coal mines. Furthermore we have expressed the ambition for 2030 of no longer investing directly in coal for the production of electricity without CO₂ capture in OECD countries.¹⁷

How are our energy investments distributed?



Investments in renewable energy

Our investments in renewable energy, such as solar and wind energy, again increased. At the end of 2019 we had invested €6.5 billion in renewable energy (1.4% of total assets invested). 18 In 2015 this was just €2.2 billion. With this, we have amply attained our objective of €5 billion of investments in renewable energy in 2020. Renewable energy is part of SDG 7 – Affordable and clean energy. More about the Sustainable Development Goals in chapter 4.

Our infrastructure investments generate 5.8 GWh (2018: 4.7 GWh) of sustainable energy for the year. Given the average annual household consumption of 3,500 KWh, these investments supply over 1.65 million (2018: 1.3 million) Dutch households with green energy. 19

- 15 Investments in renewable energy amount to €3.78 billion. This amount differs from the €6.5 billion on p. 7 due to a difference in calculation methods (see also footnote 18). When calculating the energy mix we break down the value of the company into the various energy sources and we allocate the percentages concerned to the energy sources in the mix. Part of the value of a company is thus allocated to a specific energy source. We focus here exclusively on energy, so green bonds and manufacturers of wind turbines are not included.
- 16 See also the example of RWE in chapter 2.
- 17 In 2025 we aim to no longer be invested in companies that derive more than 30% of their revenues from coal. By 2030 we aim to have also substantially reduced investments in coal in non-OECD countries.
- 18 When calculating our investments in renewable energy, we include a company only if a certain percentage of production is renewable. We also include green bonds the proceeds of which are used for renewable energy or related technology.
- 19 This includes the capacity of the Merkur wind farm, acquired in December 2019, which will supply sustainable electricity from 2020. Without Merkur, annual production is 4.9 GWh.

Mega-wind farm

Enough green energy to supply half a million households. That is the capacity of Merkur Offshore, a large wind farm in which ABP acquired a majority stake in December. The wind farm is in the German sector of the North Sea. The wind turbines cannot be seen from the shore.

The investment fits with ABP's ambition of accelerating the transition from fossil to clean energy and increasing investments in renewable energy. These wind turbines save around 480,000 metric tons of ${\rm CO_2}$ emissions. Furthermore this wind farm – one of the biggest in the world – provides stable and sustainable returns for our participants.

In 2019 ABP also took a stake in the new Dutch wind farm Goeree-Overflakkee. This project generates enough energy to supply 35,000 households with green electricity. It came about at the initiative of a number of local agriculturists.

Investing in wind energy

Wind is inexhaustible and is a clean source of energy. But is investing in wind turbines profitable? And what about the consequences for flora and fauna?

Why are wind turbines necessary?

In 2015 in Paris, the Netherlands agreed together with 194 other countries that the earth must not warm by more than 2 degrees Celsius. Therefore CO_2 emissions must be sharply reduced. That is possible only if we generate much more clean energy. We have plenty of wind in the Netherlands, and it is an efficient source of sustainable energy. In the next few years we will see many more wind turbines, both on- and off-shore: in 2023 they will supply 7 million households with green electricity.

Why does ABP invest in wind turbines?

Wind energy is a proven technique and an efficient way of generating power. By investing in wind turbines we contribute to the energy transition. Furthermore, as a pension fund we invest for the long term: investing in wind turbines (which have an average life of 25-30 years) fits well with this.

Are wind turbines dangerous for birds and fish?

You can't just build a wind farm anywhere you like in the Netherlands, or in other countries. You first have to go through a strict authorization procedure. This includes consideration of the consequences for birds, fish and soil life. And also whether the wind turbines will cause noise disturbance or spoil the view. Of course, a wind turbine will always have consequences for the environment; it is up to the government to decide whether the advantage of clean energy outweighs the drawbacks.

What about the return?

We usually make an agreement that the energy company will take a certain volume of energy at a previously agreed price for a number of years. How much energy can be generated depends on the wind. On the basis of wind measurements and historical data this can be predicted fairly accurately. Wind energy is a proven technology and we only buy wind turbines from well-known parties, so that we can make reliable estimates of maintenance costs.

Dilemma – investments in nuclear energy: Engie

ABP invests in the energy company Engie. Its subsidiary Engie-Electrabel is the owner of nuclear power plants in Doel and Tihange, Belgium. We understand people's concern about nuclear power stations in their vicinity. ABP uses its role as shareholder to continuously stress to the board of Engie the importance of safety at nuclear power plants.

In 2019, just as in previous years, we held conversations with the company about safety in Tihange and Doel. We spoke with the chairman of the Supervisory Board, received a delegation from Engie and spoke with the manager of the Doel nuclear power plant.

In our opinion Engie exercises great care as regards safety in the nuclear power plants. Furthermore the responsible business unit is under the independent oversight of the Belgian supervisor FANC (Federal Agency for Nuclear Control) and the International Atomic Energy Agency (IAEA). Engie is also a company that is heavily committed to the energy transition. In the next few years it will invest billions in more sustainable energy, and will sell or close its coal-fired plants.

Climate Action 100+

Together with more than 370 other large investors, ABP exerts pressure on 161 companies that are responsible for the most CO₂ emissions worldwide. This collaboration exists since 2017 under the name Climate Action 100+.²⁰ The investors that participate together have €32 trillion under management; it is the largest collaboration that we have ever participated in. By combining our forces, we can exert pressure effectively.

Climate Action 100+ targets companies in sectors that emit a lot of CO₂, such as transport, energy, agriculture and heavy industry. Companies are asked to provide insight into the climate risks that they face and to take measures to reduce their GHG emissions. Companies are required to formulate ambitions in line with the Paris climate objectives and to translate them into concrete, measurable targets.²¹

Within Climate Action 100+ ABP forms part of the 'core group' of investors that direct their attention above all to the major oil and gas companies. We also coordinate the dialogue with companies in the food sector and lead discussions with Unilever and Nestlé.

Nestlé: climate-neutral by 2050

In October, Nestlé announced that by 2050 it aimed to be completely climate-neutral. That means that on balance Nestlé will then no longer emit any CO₂. The food industry and the associated land use are responsible for one quarter of worldwide emissions.

Specifically, Nestlé aims to:

- develop products and packaging with a smaller CO₂ footprint;
- encourage responsible land use and reforestation;
- use 100% renewable electricity for factories, warehouses, offices and transport.

Nestlé will publish a step-by-step plan in 2020, in which specific goals for the various business units will be set.

Oil companies: Repsol and BP

In December 2019 the Spanish oil company Repsol announced ambitious climate objectives. The company aims to reduce net CO₂ emissions to zero by 2050. This concerns not just its own emissions but also those of customers such as power plants and motorists. Remaining CO₂ will be captured and stored or offset, for example by reforestation.

This past year was also one of success with oil company BP. Shareholders demanded the company set measurable goals for the short term and link them to top management's pay. In May the shareholders overwhelmingly approved a proposal submitted by Climate Action 100+ - on behalf of ABP among others. Meanwhile BP has further increased its climate ambitions. We see the commitments of Repsol and BP (and earlier Shell) as important signals to other oil companies.

CO, footprint

ABP measures how much CO₂ is emitted by the companies in which we invest and how much of it can be attributed to us. The CO₂ footprint of our equity investments has shrunk by 37% since 2015. With this, we have amply attained our objective of a 25% reduction by 2020. You can read more about this on pp. 32 and 33.

Contributing to the energy transition

Invest in the energy transition, be transparent about your CO₂ emissions and take steps to reduce them. That is the assignment that 50 Dutch financial institutions, including ABP, gave themselves in July. They did this by signing the Commitment of the financial sector. In this way the sector in effect voluntarily signs up to the national Climate Agreement.

Pension funds must show the CO₂ footprint of their investments and loans every year from 2020. For equities ABP has been doing this since 2015. Now we will also show the CO₂ impact of other investments such as bonds and real estate. By 2022 at the latest we will link these to specific climate objectives for 2030.

²⁰ www.climateaction100.org

²¹ Climate Action 100+ asks companies to provide insight into the financial risks of climate change according to the standards of the Task Force on Climate-Related Financial Disclosures (TCFD). https://www.fsb-tcfd.org

It was also agreed that the financial sector will contribute to the financing of the energy transition. At the end of 2018 we set up ANET, the ABP Netherlands Energy Transition fund, specifically intended for investments in relatively small projects and companies that are working on innovative solutions for the energy transition.²² It has not yet led to any specific investments.

One challenge is that prospects for start-ups can change quickly, for example with a change of CEO. This also influences our assessment. Furthermore ABP needs to gain experience with the new technologies that these new companies apply, and with the assessment of relatively small companies. There are however a large number of projects and businesses in the pipeline, so we expect to be able to announce the first investments in 2020.

Green mortgage loans

Helping people to make their homes sustainable in a financially attractive way: this is the idea behind the green mortgage loans of Rabobank subsidiary Vista Hypotheken. In January 2019 it became known that ABP had invested €500 million in these green housing loans.

Customers get a reduction on their mortgage loan interest if they buy a home with an "A" energy label. The reduction also applies to customers who upgrade their home to "A" during the term of the mortgage loan. So far Vista is the only Dutch lender to offer this.

ABP invests around €19 billion in mortgage loans worldwide; of which more than €4 billion in the Netherlands.

Responsible land use

Deforestation plays an important role in global warming; about 12% of all CO_2 emissions can be attributed to the felling of trees. Trees produce oxygen and absorb CO_2 from the air. In addition, greenhouse gases are emitted when forests are cut down and burned.

In September ABP, through its asset manager, joined an appeal by major investors for Brazil and Bolivia to put a stop to tree felling in the Amazon. In the last few years deforestation in this area has increased alarmingly. In the summer the region was ravaged by huge forest fires. The investors stress the importance of responsible land use for the conservation of biodiversity, food security and the attainment of the Paris climate objectives.

Deforestation also brings with it financial risks for the food companies in which we invest, in the areas of reputation and legislation and regulation for example.

Since 2018 ABP has been involved in an initiative of farmers, government and industry to stop the deforestation of the Cerrado, in Brazil. As a result of ever more intensive agriculture this savanna region is one of the world's ecosystems most under threat.²³

In 2019 ABP published a fact sheet about responsible land use.²⁴



- 22 ANET aims at investments of between €5 million and €15 million. Larger investments (up to €50 million) are possible on an occasional basis.
- 23 ABP itself also invests in land. Within the context of LANDdialogue, part of the Netherlands' development cooperation program, we contribute to research into how land is acquired. All the land for wood production in which we invest is certified. For agricultural land we make it a condition that no trees may be felled.
- 24 https://www.abp.nl/images/factsheet-verantwoord-landgebruik.pdf (in Dutch).

"ABP must become the Tesla of the pension sector"

Professor Jan Rotmans, of Erasmus University, Rotterdam, is a socially driven scientist, regarded as *the* authority in the field of climate change and sustainable transitions. And he is a 'constructively critical' ABP participant.

How engaged are you as an ABP participant?

"As far as my pension accrual is concerned, I'm a passive participant. I don't pay much attention to it. But I see myself as an activist participant when it comes to how ABP invests its participants' contributions. It's important to me for my pension fund to show leadership and to be at the forefront in the transition to a sustainable world."

What does ABP do well as a responsible investor in your view?

"It's good that ABP uses the Sustainable Development Goals as a guide and has developed a way of translating them into specific investments. This gives the goals concrete expression. I'm also happy to see that in the new policy investments in coal mines and oil sands are phased out. And lastly I applaud the fact that ABP doesn't just focus on climate but is also very much aware of other transitions such as the move to the circular economy."

On what points does ABP still show too little leadership?

"It could speed up a bit and be a little more ambitious. I can understand why ABP doesn't say that it will pull out of fossil energy tomorrow. But then mark a point on the horizon and say: 'In ten years' time we will no longer have any investments in fossil energy companies, and we are starting to work toward that goal now. We are stopping right away with investments in coal, in five years' time we will stop those in oil and in ten years' time, gas'. ABP is the biggest pension fund in the Netherlands and one of the biggest in the world. Dutch pension funds are leaders in sustainability. So if there is one pension fund that can show leadership... I'm convinced that if ABP takes this step, other major investors will follow."

But the energy transition requires efforts from all of us, not just pension funds, doesn't it?

"Sure, but that doesn't excuse anyone from taking responsibility and contributing according to his means. In the Netherlands we invite everyone to the table to arrive at a joint approach, as with the Climate Agreement. There's nothing wrong with that. But genuine transitions don't come about through mass agreements. They come about through technological breakthroughs or from one important party – like ABP – showing leadership and daring to walk in front of the troops. There must be a leader, then the followers will come automatically, followed in turn by the peloton and finally the stragglers."

Must ABP get out of fossil energy even if that costs return and is thus to the detriment of pensions?

"Pension is a long-term thing. ABP will have to develop a transition strategy for the next few years: scale down investments in fossil energy and build up investments in the new economy based on renewable raw materials. Providing ABP does this in a phased and careful way, in the longer term it will be favorable for participants, since investing in the new economy demonstrably produces less risk and more return."

As a shareholder, ABP seeks to exert influence on the companies in which it invests, including fossil energy companies. What do you think about this?

"Fossil energy companies are in a cleft stick; they're still earning their money from fossil energy, but they know that in the end they will have to switch to renewable sources of energy. It's good to talk to them about this and to seek the boundaries of what is feasible. But don't be afraid to come out and state it clearly if there's too little progress. In that case, stop talking and pull out. Applying pressure and showing leadership are also very effective ways of bringing about improvement."



For ABP it is important that the energy transition should take place equitably. How do you see this?

"I don't worry too much about jobs being lost in the fossil industry, since there will be enough replacement work in renewable energy for example. There's already a shortage of technicians for installing solar panels and heat pumps. What I do worry about is that the energy transition will lead to an exacerbation of the dichotomy since precisely those people who are already vulnerable will fall victim to climate change without having the means to adapt. The gap is growing, both within the Netherlands and between rich and poor countries. This problem is underestimated and must be given much more attention."

If you could choose an ambition or an objective for ABP, what would it be?

"For ABP to become known worldwide for the leader-ship it shows in the energy transition. We need a disruptor – like Tesla in the automotive industry – to get the pension sector moving. At the same time I hope that ABP develops a long-term vision in which the energy transition forms the basis for a circular and bio-based (based on natural materials, Ed.) economy. That's what I wish for ABP and its participants."

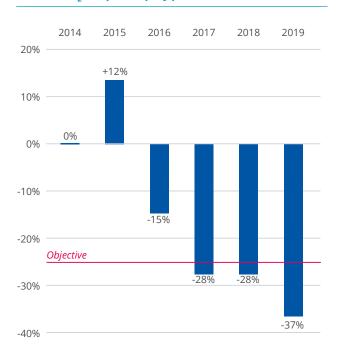
How has our CO₂ footprint evolved?

Relative CO, footprint

Since 2014 the relative CO_2 footprint of our equity portfolio has decreased by 37%. With this, our objective (25% reduction by the end of 2019) has been amply attained.

The CO_2 footprint is calculated, as in the past five years, on the basis of the portfolio composition at March 31 following the reporting year. In the first quarter of 2020 the CO_2 footprint declined sharply. As a result of the exceptional situation in the financial markets due to the coronavirus crisis, our portfolio managers invested less in sectors such as energy and industry. Since these sectors are important contributors to the amount of CO_2 in our equities portfolio, the reduction in the CO_2 footprint accelerated strongly in the first quarter.

Relative CO₂ footprint equity portfolio



The new policy includes an objective whereby the ${\rm CO_2}$ footprint of the equities portfolio in 2025 must be down by 40% relative to 2015. The reference point for this objective was an expected reduction in the ${\rm CO_2}$ footprint of 30%. The sharp fall in the first quarter of 2020 shows that the ${\rm CO_2}$ footprint is a snapshot of a particular moment and that this year it has been strongly influenced by investment choices that relate to exceptional market circumstances. In 2022 we shall establish new climate goals, in line with the national climate agreement.

For the calculation of the relative footprint, we determine what our share is in the CO_2 emissions of the companies in which we invest. We take the emissions of the companies themselves into account (scope 1) and also the emissions caused by the production of the energy that these companies purchase (scope 2). We refer to our share in the CO_2 emissions of all companies in aggregate as the absolute footprint. The relative footprint is the absolute footprint divided by the total amount invested. We correct the amount invested for fluctuations in share prices, so increases and falls in price have no effect. If we did not correct for price changes, the CO_2 footprint would have decreased by 43% since 2015.

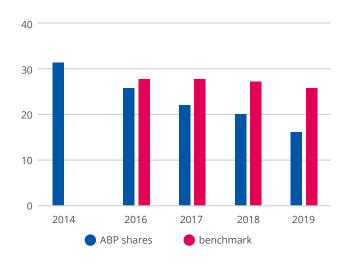
Absolute footprint compared with the benchmark

The absolute footprint of our equities portfolio fell from 31.2 million metric tons in 2014 to 17.4 million metric tons in 2019. This is a decrease of 44%. In that same period the footprint of the benchmark held more or less steady. The benchmark is the basket of investments with which we compare in order to establish what our risk and return objective is.

The conclusion is that total emissions of 'the market' remained relatively stable, while those of the companies in the ABP equities portfolio decreased sharply. The $\rm CO_2$ objective has thus led to a real change in the composition of our equities portfolio.

²⁵ The benchmark is a composite of the MSCI World and the MSCI Emerging Markets indices.

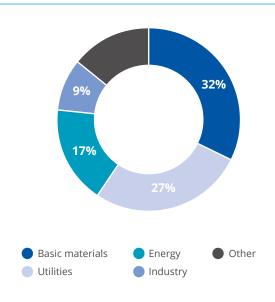
Absolute CO₂ footprint compared with the benchmark



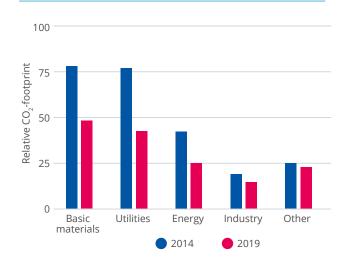
Which sectors contribute most to the CO_2 footprint?

Four sectors together account for 85% of the relative CO_2 footprint: basic materials (incl. mining), utilities (notably electricity companies), energy (incl. oil and gas companies) and industry (incl. manufacturing and airlines). The share of these sectors in invested assets fell from 27% in 2015 to 20% at the end of 2019.

Contribution of sectors to the CO₂ footprint (2019)



Development of CO₂-intensive sectors



In all sectors the relative CO_2 footprint of the equities portfolio has declined since 2014.

6. Human rights and working conditions

Respect for human rights is a pre-condition for a sustainable, better world. ABP is actively involved in initiatives for tackling and preventing abuses in vulnerable sectors and regularly talks to companies about their responsibilities.

Over half the companies in the CHRB human rights index still fall short when checked

for human rights violations

- The index helps us with responsible investment choices and in getting human rights onto corporate agendas
- Progress takes time and effort and requires cooperation among all parties involved

ABP wants companies in which it invests to respect the human rights of employees, local communities and other interested parties. This is important not only from a human point of view. A company that is involved in human rights violations also runs financial risk – fines for example. This can lead to a lower return on our investment in the company.

Our human rights policy is based on the UN Global Compact²⁶ framework. This consists of ten principles for the actions of companies in the areas of human rights, employment conditions, the environment and the fight against corruption. This includes respecting universal human rights and combating forced labor and child labor.

Human rights benchmark

In high-risk sectors, three quarters of companies' human rights performances have improved compared with a few years ago. But there is a wide gap between the small group of companies that are on the right path and the large number of companies that still do little about human rights.

That was evident from the publication of the Corporate Human Rights Benchmark (CHRB)²⁷ in November 2019. The CHRB compared the human rights performances of 195 companies in sectors with a high risk of involvement in violations: clothing, commodities, agriculture and – in 2019 for the first time – ICT. In 2017 ABP was one of the co-creators of the CHRB. At year-end 2019 ABP was invested in 182 companies that were assessed by CHRB.

Companies that perform relatively well, such as Adidas and Unilever, show that it is possible to be competitive while at the same time paying attention to human rights. On the other hand we see that more than half the companies in the sectors concerned have insufficiently effective controls to prevent involvement in human rights violations. The ranking is important in that it provides an insight into the human rights performances of the companies in which we can invest and provides a starting point with which to initiate talks with the companies.

What does ABP wish to achieve?

We aim to bring about improvements in three sub-areas: respect for human rights, safe working conditions, and stopping child labor. Since 2015 ABP has given special attention to sectors in which problems around these matters arise relatively often. We call this 'thematic

²⁶ https://www.unglobalcompact.org

²⁷ https://www.corporatebenchmark.org. The ranking takes into account, for example, wages, working hours, safety and child labor. It also takes into account how companies deal with allegations of human rights violations.

engagements'.²⁸ Hereunder we describe the actions we have taken and what we have achieved so far together with other pension funds, investors and social organizations.

Theme: fair raw materials

Particularly in countries with unstable or authoritarian regimes, the presence of natural resources and (largely foreign) exploitation companies contribute to human rights violations. These include for example encroachment on land, unsafe work, contamination of drinking water and the environment, and bribery and corruption.

In the past few years ABP has held talks with some thirty companies in the raw materials sector. We asked them among other things to develop a policy on human rights, to carry out checks in their supply chain and to put a good complaints handling system in place.

What has been achieved?

- In 2019 investors, among them ABP, and the raw materials sector agreed to work toward a worldwide safety standard and independent inspections of mine dams.²⁹
 - More about this in the interview on p. 37.
- Various companies with which we spoke have now improved the anchoring of human rights and controls on them in their governance. One example is the Russian gas company Novatek. This company has tightened procedures for reporting violations, among other actions.

One challenge is that raising the issue of human rights in 'risk countries' often comes up against political sensitivities. Also it is not always clear what is a company's responsibility and what is that of the government of the country in which the company is active. In order to make any progress, all parties must work together.

Saudi state oil company to the stock exchange

Saudi Aramco, the Saudi state oil company, was floated on the stock exchange on December 11.

Although only a small portion of the shares (1.5%) were floated, it was the biggest IPO ever. Saudi Aramco's IPO attracted much media attention. In this context the long-term outlook for the oil industry and the human rights situation in Saudi Arabia were subjects that came up frequently.

In April 2019 Saudi Aramco had announced that it wished to issue bonds, and that international investors would be allowed to subscribe. We therefore carried out an accelerated assessment on inclusion criteria (risk, return, costs and ESG). Saudi Aramco was assessed as a laggard. This was because it has no adequate human rights policy even though it is active in a region with heightened risks to human rights.

We do not believe at present that we would bring about improvements by talking to the company. ABP did not take part in the Saudi Aramco IPO and at the end of 2019 it was not invested in the company.

Theme: human rights in the ICT sector

ICT companies have a lot of personal data of their customers. If they are not careful, this can lead to data leaks and breaches of privacy or freedom of expression. We speak of 'digital rights'.

In the past few years we have focused our attention on eight companies in the ICT sector, including Facebook and Alphabet (parent of Google). Facebook came into disrepute when it emerged that the political marketing firm Cambridge Analytica had access to users' personal data. Google came up with a controversial plan to develop a search engine for China in which users' privacy would be subordinated to the strict Chinese legislation.

- 28 The following considerations played a role in the choice of these sectors:
 - · Are we invested in the sector?
 - · Is the problem serious and could it have an impact on our investments?
 - Do we expect to be able to get companies to implement improvements?
- 29 Through this Investor Mining & Tailings Safety Initiative contact has been made with 726 listed natural resource companies. https://www.churchofengland.org/investor-mining-tailings-safety-initiative.

What has been achieved?

- Facebook has explicitly referred to the protection of data privacy as a responsibility of the board. Users have also been given more control over their data.³⁰
- Alphabet announced in July 2019 that it was halting the controversial plan to develop a search engine for the Chinese market.³¹
- Equifax, which was involved in a major data breach in 2017, has taken measures to protect users' privacy and linked objectives in this area to directors' pay.

Although progress has been made, respect for digital rights remains at odds with how ICT companies earn money: by building user profiles with 'free' services and selling personalized targeted adverts. This tension is being further increased by new possibilities of gathering data, such as through 'smart' devices.

Theme: abuses in the clothing industry

Around 75 million people work in the clothing industry worldwide.³² Abuse is still common in clothing factories and workshops, in the form of unsafe working conditions and underpaid workers for example. Clothing companies generally have a large number of suppliers and compete fiercely on production costs. Consumers show limited willingness to pay for 'fair' fashion. Furthermore the fast fashion trend leads to collections changing quickly and clothing being worn for very short times.

Since 2015 ABP has held talks with ten major clothing companies about safety and decent work. We urged them to be transparent about their suppliers so that we can hold them responsible for the production chain. This also puts companies in a better position to tackle abuses by suppliers, and helps consumers make informed choices.

What has been achieved?

- The number of clothing companies that openly report on their suppliers has doubled since 2016. Seven of the ten companies with which we spoke have since published lists of suppliers.
- · For the companies with which we spoke, sustainability plays a growing role in the choice and assessment of suppliers.³³
- Companies we spoke to have reduced the number of suppliers; fewer suppliers means better control and oversight by buyers.34
- Clothing companies' scores in the CHRB human rights index have improved since it was first published in 2017.35 Three of the companies we spoke to have improved their performances: Inditex (+87%), The Gap (+30%) and Ross Stores (+10%).

Following the collapse of the Rana Plaza production complex in 2013, the Bangladesh Accord provided for independent inspections of garment factories in the country. Since then 1,600 locations have been inspected and 2.5 million people now work in safer conditions. Following a Bangladesh court decision halting the inspections, we continued to campaign for the continuation of the accord.³⁶ Under international pressure the halt to the inspections was prevented, in May 2019.

At the beginning of 2020 we published a factsheet about investing in garment companies.³⁷

Theme: safety in shipbuilding

Relatively many fatal accidents occur in shipbuilding. This is why since 2015 we have asked shipbuilders to publicly acknowledge the importance of safety and to draw up policies to prevent accidents. And to be open about their safety performance and to participate in sector initiatives to increase safety.

- 30 An example is the Off-Facebook Activity tool, with which users can determine which data other apps and websites may share with Facebook.
- 31 This project, called 'Dragonfly', was shrouded in mystery and was heavily criticized by human rights organizations and others and even by Google employees.
- 32 https://cleanclothes.org/resources/publications/factsheets/general-factsheet-garment-industry-february-2015.pdf
- 33 Hanesbrands, for example, has its suppliers evaluated by the Fair Labor Association. Suppliers that do not come up to the mark are not allowed to continue to work for the company unless they substantially improve their performances.
- 34 M&S, for example, has reduced the number of suppliers from 1,200 to 800.
- 35 ABP is invested in 47 of the 53 clothing companies assessed by CHRB in 2019.
- 36 Through its asset manager, ABP added its voice to the calls for the Bangladesh Investor Initiative in September 2018 and in February 2019 for the continuation of the Bangladesh Accord, see https://apparelinsider.com/investors-urge-for-bangladeshaccords-continuation
- 37 https://www.abp.nl/images/factsheet-kledingbedrijven-abp.pdf



Interview with Ileana van Hagen – Senior Credit Analyst, APG

Tailings dams at mines must be made safer

How can investors and mining companies see to it that tailings dams become safer? Ileana van Hagen, from our asset manager APG, explains.

What exactly are tailings dams?

"Anywhere where minerals such as iron ore are mined, there is waste. The usual way of storing waste is with a dam close to the mine. Whether such dams are safe depends on whether they have been well designed, whether the mining company sticks to the original design, and whether they're in the right place. The Brumadinho disaster shows that it doesn't always go well."

'The Brumadinho disaster shows that it doesn't always go well'

What risks do tailings dams entail?

"Tailings dams that are not well built or that are in a dangerous place, for example in an area where earth-quakes occur, can collapse or slide. This happened in Brumadinho. One of the problems is that tailings dams tend to get higher and bigger than was taken account of in the design."

What can investors like ABP do about this?

"After 'Brumadinho' a number of major investors, including ABP, set up the 'Investor Mining & Tailings Safety Initiative'. The goal is twofold: we want to know how many tailings dams there are, where they are and who the owners are. Estimates of numbers range from 4,000 to 18,000. That shows that more insight into the risks is urgently needed. We also want a worldwide, independent standard for safe tailings dams."

What has been achieved so far?

"The initiative has asked 726 listed mining companies whether they had tailings dams and if so where. Based on this information a database has been developed with information on nearly 2,000 mine dams, including already known stability problems and what impact a break or slippage can have. The Initiative has also developed an independent standard for the safe control of tailings dams. In the future use may be made of satellite images to locate mine dams and detect leakage of waste."

Particularly in Asia, where many big shipbuilders are based, there are many safety incidents. For this reason we have focused our efforts on a number of Asian shipbuilders.³⁸ A crucial element in this was the pressure exerted by four major shipping customers, one of which was Shell.³⁹ From the outset we have encouraged these customers to systematically raise safety issues with their suppliers.

What has been achieved?

- Asian shipbuilders have signed up to internationally recognized safety standards and now publish information on their safety performance. But there is still a need for more transparency.
- Major buyers are paying more attention to safety conditions when placing orders, and are reminding shipbuilders of their responsibilities. Some oil companies have developed a joint safety standard for Korean shipbuilders.

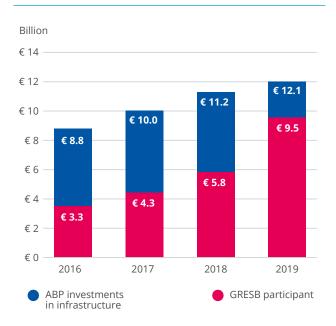
Shipbuilding is heavily dependent on trends in the global economy. There is a risk that in economic headwinds ship buyers will go in search of cheaper alternatives. In such case it is questionable whether Korean and Chinese shipbuilders will stay the course on their own initiative.

Theme: safety in infrastructure

ABP wants to be able to assess whether investments in infrastructure pay sufficient attention to safe and healthy working. This sector suffers relatively high accident and sickness rates.

In 2019, 78% of our investments in infrastructure (based on invested capital) participated in the annual assessment of GRESB Infra. ABP is one of the initiators. 40 With this, our objective of 50% participation has been amply attained.

Safety in infrastructure



GRESB Infra compares the performances of infrastructure investments in terms of safety and sustainability. For investments in new infrastructure we make participation in GRESB Infra a condition. We also use insights from GRESB Infra to engage in dialogue with companies.

³⁸ We initially concentrated on seven shipbuilders in South Korea, China and Japan. Following the restructuring of the industry in 2014-2017 we reduced this to four Korean shipbuilders, including Hyundai Heavy Industries and Samsung Heavy Industries.

³⁹ Apart from Shell the others were British Gas, BP and Total.

⁴⁰ GRESB Infra was established in 2015. https://gresb.com/infrastructure-asset-assessment/

What has been achieved?

- GRESB Infra is now the undisputed standard for evaluating the sustainability and safety of infrastructure investments. In 2019, 107 funds and 393 individual investments in 57 countries were assessed, with a total value of €471 billion.
- Our infrastructure investments perform consistently better than the GRESB Infra average.
- There is now more information available about companies' performances in the area of health and safety.⁴¹
- In 2019 we started assessing new infrastructure investments in accordance with the IFC Environmental, Health & Safety Guidelines. An advantage of these guidelines is that they take object-specific risks into account.

Although transparency about health and safety in infrastructure has increased, that does not mean that conditions have actually improved. Reliable data on this are still not sufficiently available. We are also seeing that companies are still focused mainly on employees' health and safety as opposed to that of other parties concerned.

Theme: labor conditions in cobalt mining

Cobalt is an indispensable raw material for batteries in electric vehicles and smartphones for example. Due to the growing importance of cobalt, the attention given to issues in its mining has also increased sharply in the last few years. These concern unsafe working conditions, child labor and human rights violations.

In 2016, ABP initiated a collaboration of large investors to tackle child labor in cobalt mining in Congo, where 60% of global production comes from. We focused on fifteen major electronics, auto and battery producers. We asked them to take account of where their cobalt came from, to develop a policy to limit risks and to take measures if they detected abuses.

What has been achieved?

Initially, buyers paid hardly any attention to the dark side of cobalt mining. At the companies we engaged we see that awareness and transparency have increased and the situation has improved.

- Most of the buyers we spoke to have examined their supply chains and put controls in place. Apple is a forerunner in this respect.
- Together with other companies, Samsung Electronics and battery maker Samsung SDI have set up a three-year pilot scheme at a small-scale mine in Congo to improve safety and social conditions on site. If this can be scaled up, it will have a substantial positive impact.
- Microsoft, Daimler and other companies have put programs in place to support local communities in Congo.
- Most of the companies we spoke to have since joined sector initiatives to resolve problems in the cobalt chain.

Around 20% of all cobalt in Congo comes from small-scale 'artisanal' mines. Child labor and unsafe conditions are more common in this kind of mine than in industrial-scale cobalt mining. Buyers could thus limit their risks by buying only industrial cobalt. But that is no solution; it would hit local communities hard, since they depend on artisanal mining. It is better to improve conditions in both large and small mines.

Theme: child labor in the cocoa sector

In Ghana and Côte d'Ivoire, where 70% of the world's cocoa comes from, two million children work on cocoa farms. Compelled by poverty, they help their parents on the plantations, many of which are very small. They do heavy and dangerous works, such as cutting open cocoa pods and lugging bales. To tackle this problem, we focused on five major buyers of cocoa: Barry Callebaut, Mondelēz, Nestlé, The Hershey Company and Lindt & Sprüngli. Together they supply over half of all the chocolate consumed worldwide.

⁴¹ Examples of companies that publish extensive information in this area include Brazilian construction company Celeo Redes and Norwegian hydroelectric power plant operator Småkraft.

What has been achieved?

We ask cocoa and chocolate companies to make public statements on the eradication of child labor in the supply chain, to set up programs in the local communities where cocoa is produced to detect and combat child labor, to cooperate within the sector and to publish reports on their efforts. Since 2015 the companies concerned have taken major steps.

- Barry Callebaut has set itself the goal of having a supply chain free of child labor by 2025.
- The Hershey Company intends to buy only certified cocoa in 2020.
- Nestlé and Mondelēz have put checks in place to eliminate child labor in hundreds of local communities.
- Within the CocoaAction (2014)⁴² cooperative association, the sector has developed a common approach to tackling child labor. In 2019 the sector announced an initiative, together with producer countries, to eradicate child labor.

The problems in the sector have not been resolved. In a recent report Nestlé provides insight into the deep-rooted and structural causes of child labor in cocoa farming.⁴³ Revenue is very low and whole villages are dependent on the capricious global market for cocoa. A successful approach therefore requires time and effort from all parties concerned.

ABP has asked for attention to be given to the role of education in combating child labor. Meanwhile various companies have offered help in obtaining birth certificates, which are needed for registering with a school. There are also companies that distribute school uniforms and meals.

In 2019 we published a factsheet about investing in cocoa companies.44

First case under the IMVB covenant

In 2019 the Dutch pension sector, including ABP, further shaped the covenant for International Socially Responsible Investment (IMVB). Under the covenant, a large number of Dutch pension funds concluded agreements with the government, trade unions and environmental and social organizations to prevent abuses in companies that they invest in.⁴⁵

Within the covenant a small number of pension funds, one of which is ABP, take part in the so-called 'deep track'. They will exert their combined influence to bring about improvement at six companies where there is a risk of human rights or labor rights violations.

In 2019 the first cases were established. The first case concerns a mining company that is involved in human and labor rights violation. Specifically it concerns conflicts over land titles and natural resources, environmental damage and unsafe working conditions. The second case concerns a palm oil company.

The parties to the covenant will determine a common strategy to ensure that the dialogue with the companies concerned is as effective as possible. The participating pension funds expect improvements in these specific companies to serve as examples for the entire sector. ABP was one of the pioneers and closely involved in the negotiations on the covenant, which was signed at the end of 2018.46

⁴² https://www.worldcocoafoundation.org

⁴³ https://www.nestlecocoaplan.com/themes/custom/cocoa/dist/assets/nestle-tackling-child-labor-2019.pdf

⁴⁴ https://www.abp.nl/images/factsheet-cacaobedrijven.pdf (in Dutch).

⁴⁵ The agreements laid down in the covenant are based on the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights.

⁴⁶ At the end of 2019 the 'toolbox' was published. The toolbox consists of model texts and means of communication to help the affiliated pension funds to implement the OECD guidelines. ABP already does this by means of an inclusion policy.

7. Good corporate governance

To be able to operate sustainably and responsibly, companies' governance must be in order. We therefore pay great attention to good corporate governance in the companies in which we invest.



In 2019 we voted at 4,998 shareholders' meetings on 52,899 proposals



We voted against 52% of the remuneration proposals



Important themes in 2019 were remuneration and diversity

In 2019 ABP contributed to good corporate governance by voting at thousands of AGMs. We were also in contact with 716 companies (2018: 366). These included potential improvers (see chapter 2), but also leaders with which we talked for example about possible improvements in their corporate governance.

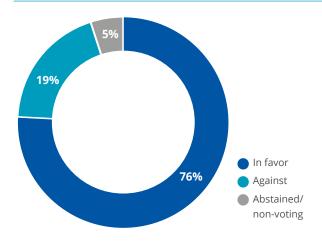
We voted on over 52,000 proposals and resolutions. We are able to participate in so many votes because we make use of a proxy voting agency for standard agenda items that do not require any special attention. This agency votes on our behalf and in line with our voting policy. With regard to proposals or companies that have our special attention, we vote ourselves.

Voting on remuneration

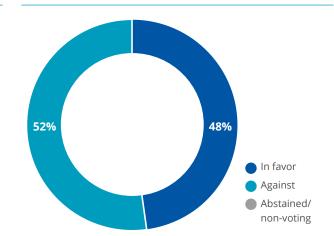
The compensation policy for directors must be in line with the general compensation policy for employees of the company. We expect companies we invest in to state clearly in their annual reports how they deal with directors' remuneration, what the objectives are and the performances that have to be achieved before any remuneration or bonus is paid.

Important reasons for voting against compensation proposals were, just as in the previous year: overly generous severance schemes, insufficient link between remuneration and performance and unclear performance criteria.

How did we vote on all 52,899 proposals?



How did we vote on 1,770 remuneration proposals?



We continue to cooperate within the Amsterdam Group. This international initiative of pension funds and administrators, with combined assets of around €1.3 trillion, holds companies to account for their remuneration policies. We believe it is important for us to continue to express our dissatisfaction about remuneration that is not in proportion to performance achieved. Particularly at a time when income inequality is increasing. In 2019 the Amsterdam Group spoke with twelve major companies. Three of them have shown improvement.

ABP itself is quite open about how it remunerates its people. Information on directors' remuneration is given in our annual report. More about this can be found in our paper on ABP's stance on remuneration of executives (in Dutch).47

CVS Health Corp: profit down, bonus up

We held discussions with CVS Health Corp, a U.S. pharmaceutical company, about the link between remuneration and performance. The chairman had received the biggest bonus in history for 2018, despite the company's poor earnings. We informed the board that we do not expect bonuses to be paid, even in part, if the company does not achieve its objectives. At the AGM we voted against the proposed remuneration policy, but were in a minority. We continue to urge the company to undertake a thorough overhaul of the remuneration policy.

ABP opposes new remuneration rules of Ahold Delhaize

In April 2019 a group of Dutch investors led by ABP, expressed their opposition to a proposal of Ahold Delhaize to change the rules for senior management's remuneration. Whereas sustainability performance had previously counted for 20% in determining remuneration, in the plan this was reduced to 15%.

Ahold Delhaize also changed the group of companies with which it compared remuneration. The inclusion in the comparison group of companies that are much bigger and operate in different markets can give rise to the impression that remuneration at Ahold Delhaize lags behind. The change in the comparison group deems to be aimed mainly at being able to increase directors' remuneration in due course.

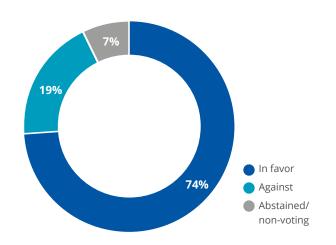
We voted against the proposed remuneration. This did not prevent the proposal from being approved by the shareholders: over 92% voted in favor.

Voting on board members

When we vote on the appointment of new board members we look whether there is a good balance between the number of executive and non-executive (supervisory) directors. In addition, the majority of non-executive directors must be independent. All directors must have the right knowledge and skills and be trained regularly.

We expect directors to stand as candidates for reappointment after four years if they wish to stay on; if they have been board members for twelve or more years, they should stand for re-election annually. At larger companies, and in particular companies in industries with a significant impact on people and the environment, we expect there to be a director responsible for sustainability issues.

How did we vote on 20,686 board members?



Diverse boards can take better decisions

Scientific research supports our view that diversity on the board leads to better decisions. ⁴⁸ Diversity can concern a balanced distribution by gender, ethnic background, education, personality and age. We ask companies to take account of this in appointing directors.

Objectives for GHG emissions

Many companies have ambitious objectives to reduce their CO_2 emissions. And yet global emissions continue to increase. To see what is really happening on the ground, not just on paper, we thoroughly scour companies' climate reports. In doing so we find companies that report substantial reductions in GHG emissions simply because they have changed their calculation methods or assumptions. In this regard we spoke to a European real estate company which had changed the assumptions for its buildings' emissions in 2018 and so been able to report a reduction. If it had used the same assumptions as before, there would have been an increase.

Prevention of money laundering at banks

In 2019 the occurrence of money laundering at banks was once again an important subject. We spoke to Credit Suisse and others about combating bribery and corruption and about measures to prevent money laundering. Codes of conduct and ethics drawn up by the bank in 2017 now play an important role in the evaluation, recruitment and promotion of personnel. Employees also receive annual training on the prevention of financial crime. We have asked Credit Suisse to publish its anti-bribery & corruption policy. The bank has promised to share the principles of this policy with us.

Exercising influence in Asia

Doing business with due attention to people, the environment and good governance is a sensitive topic in a number of Asian countries. Nevertheless we are



determined to place these issues on the agenda there too. In our inclusion policy we make the same demands of Asian companies as of all other companies. We carry out extra thorough research of our own into the companies we invest in. In China our collaboration with E Fund gives us direct access to information on these companies.

In January 2019 we spoke with Hikvision, a Chinese company that produces video surveillance equipment, about our concerns regarding the company's human rights policy. We discussed among other things the use of surveillance cameras in detention camps for Uyghurs. Since then the company has published its first sustainability report and hired a specialized American law firm to carry out an internal investigation of the human rights policy and compliance with it.

We spoke with Yili, a major Chinese producer of dairy products, about its proposed bonus scheme. We found the performance criteria for granting the bonus insufficiently ambitious and urged the company to raise the bar. The company then increased the ROE objective and announced that it was paying out 70% of the profit as a dividend.

⁴⁸ For example: Marcus Noland, Tyler Moran, Barbara Kotschwar, "Is Gender Diversity Profitable? Evidence from a Global Survey", Peterson Institute for International Economics, 2016.

8. Dialogue with participants and stakeholders

In 2019 ABP took part in more than 30 meetings about sustainability with and organized by various stakeholders. We explained how we invest sustainably and responsibly and exchanged knowledge and experience with participants, employers, scientists, NGOs and other interested parties. We used their signals and critical feedback to fine-tune our new policy for 2020-2025.



59% of our participants consider it important that ABP invests sustainably and responsibly



We have asked various organizations for their opinion of our new policy



Collaborating with other pension funds and investors increases our impact

What do our participants think is important?

A survey conducted by Motivaction in September 2019 among a representative group of 1,047 current and former participants and pensioners showed that 59% of our participants consider it important that ABP invests sustainably and responsibly. We use the results to determine what our participants consider important and what is the best way to communicate about this.

We also asked participants how they would react if sustainable and responsible investment were to turn out negative for returns and therefore for their pension. A majority of 55% thought that even then ABP must invest sustainably and responsibly. 32% was against this and 13% had no opinion or did not know. We are furthermore convinced that we can invest sustainably and responsibly without this being to the detriment of the risk and return profile. You can read more about this in chapter 1.

More support for exerting influence than for exclusion

We also asked participants what ABP should do if a company in which we invest does not operate sustainably and responsibly. 57% think that ABP should continue to invest in the company:

- 30% think that we should exert influence by talking to the company;
- 21% want us to exert influence by voting at the shareholders' meeting;
- 6% think that ABP should invest in any company that provides an attractive return, whether or not it is sustainable.

33% want us to immediately stop investing in such a company, and 11% have no opinion.

Appreciably fewer questions about sustainable and responsible investment

In 2019, we received far fewer emails and letters from our participants about sustainable and responsible investment than in the previous year. Of the total of 941 emails, 11% consisted of questions about this subject, as against 36% in 2018. By far the majority (66%) of questions were about the financial situation, with subjects such as the funding ratio, indexation and the low interest rates.

Most of the letters and emails about sustainable and responsible investment concerned the investments in the Belgian nuclear power stations Tihange and Doel through Engie, fossil fuels, the mining company Vale and controversial weapons.



Secretary of State Stientje van Veldhoven

Contacts with stakeholders

Members of the Board of Trustees and the Executive Office of ABP frequently take part in meetings with stakeholders such as participants, NGOs, employers' organizations, trade unions, academics and politicians. We asked them for their opinion of the new policy that we have introduced in 2020 and incorporated a number of ideas and wishes. One example is participants' wish, shared with us via the Accountability Body, to phase out our interests in coal and oil sands. Conversely we are also happy to share our knowledge and insights, for example with an eye to the Dutch government's climate vision.

Working on the SDGs: the circular economy

Pension funds play an important role in the transition to a circular economy. So said Stientje van Veldhoven, Secretary of State for Infrastructure and Water Management, during 'Working on the SDGs: the circular economy', a gathering organized by ABP in October 2019.

The fact that there are already some fine circular initiatives was demonstrated by one of the speakers, Thomas Rau. He designed the world's first fully re-usable building for Triodos Bank.

With their voluminous assets, pension funds such as ABP can play a key role in stimulating circular initiatives. ABP is keen to take on this role, in collaboration with the government.

Shareholder Earth

In September the chair of the Board of Trustees, Corien Wortmann-Kool, was one of the speakers at a discussion

evening organized by OneWorld, a journalists' platform committed to a fair and sustainable world. Corien spoke among other things about combating abuses in the clothing industry and took part in a discussion panel on how pension funds as major investors can accelerate the move to a sustainable economy.

Investing in participants' themes

We devote extra attention to themes that are of importance to our participants. These are safe work, education and strengthening the economic structure. We translated this into the objective of expanding our investments in education and communication technology by ≤ 1 billion, from ≤ 564 million at the end of 2015 to ≤ 1.564 billion at the end of 2019.

These investments include projects for student accommodation. In 2019 we increased our existing investments in student accommodation with new projects in the Netherlands and other European countries. We increased our stake in Scape Australia (a student accommodation company) and added a new investment for affordable student accommodation in New York to the portfolio. We also invested in the context of the Smart City Infrastructure Platform (SCIP) in the installation of a glass fiber network in Fullerton, California. This network is good for economic development and attracts new industry.

Our investments in student accommodation, education and communication technology amounted to €2.507 billion at the end of 2019. With this the objective has been comfortably attained.



Communication with participants and stakeholders

We are open about our investments and the dilemmas we come up against. In 2019 we published five new fact sheets: on investing in mining companies, pharmaceutical companies, responsible land use, cocoa companies and the circular economy. We also published a new version of our paper on how we approach remuneration of senior managers and directors (all in Dutch).⁴⁹

Working together on sustainability

By joining forces with other pension funds and investors, we actively contribute to making the financial markets more sustainable. Presenting a united front with other investors increases our influence on businesses. Together we can achieve more. A fine example is LIST Amsterdam.



Investing in affordable housing construction

Bring housing associations and major investors such as pension funds together, so that money can be made available for affordable housing construction and projects to make housing more sustainable. This is the idea behind LIST Amsterdam, an online platform for granting loans to Dutch housing associations. ABP was one of the co-creators of this initiative in February 2019.

In the next few years billions of euros will be needed for the construction of affordable housing in the Netherlands, to be able to meet the huge demand. Making existing housing sustainable also costs a lot of money. Connecting the demand for money from housing associations with the supply of capital from pension funds brings advantages for both. For the housing associations it becomes easier to raise funding with which to build more new housing and make existing housing sustainable. For pension funds the investment provides a long-term guaranteed return.⁵⁰

⁴⁹ https://www.abp.nl/over-abp/duurzaam-en-verantwoord-beleggen/ons-standpunt.aspx

⁵⁰ Loans to housing associations are guaranteed via the WSW (Waarborgfonds Sociale Woningbouw or Social Housing Guarantee Fund).

9.Outlook for 2020 and beyond

ABP aims to contribute to a climate-neutral world economy in 2050. To this end we are going to bring our investment portfolio into line with the Paris Accord and the Dutch Climate Agreement before 2030. In the new policy for sustainable and responsible investment (2020-2025) we set concrete goals in order to achieve this.



A good and affordable pension remains the starting point in the new policy



We raise the bar again: objectives are increased



Focus on three transitions that offer opportunities and entail risks

Our vision: a sustainable world

In 2050 the world will look different from now. How exactly it will look, no-one knows. But ABP does have a vision of how the world ought to look: a climate-neutral global economy, characterized by the efficient and responsible use and re-use of materials and natural resources in which digital technology contributes to sustainable solutions.

Focus on three transitions

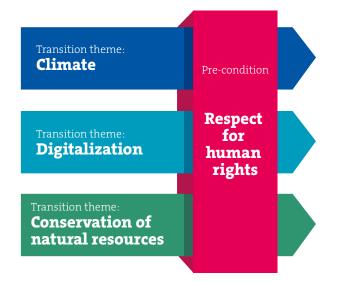
Based on this vision, we see three great transitions that will change the world in the coming years. Each of these transitions entails opportunities and risks for our investments and can contribute to a sustainable, pleasantly livable world for our participants. With our new policy for sustainable and responsible investment we aim to both further and benefit from these transitions. These are:

- · climate and energy transition;
- shortage of raw materials and use of natural resources;
- · digitalization.

We see companies' respect for human rights as a precondition for these transitions to take place equitably. In 2020 we will also take a decision on tightening up our taxation policy, reflecting the importance we attach to companies making a fair financial contribution to society.

The choice of these transitions dovetails with the SDGs which we aim to support actively with our investments. The transitions also involve themes that our participants find important. Within these transitions we focus in particular on:

- investing more in companies that perform well in these areas:
- more precisely targeted engagement trajectories with companies;
- fine-tuning of criteria for inclusion.



SUSTAINABLE GALS DEVELOPMENT



Objectives for 2025

For the coming policy period (2020-2025) ABP's objectives in the area of sustainable and responsible investment include the following:

SDIs

 20% of our assets to be invested in companies that contribute with their products and services to the SDGs.

Climate and the energy transition

- CO₂ footprint of our equity investments down by 40% relative to 2014.
- Phasing out of our investments in companies that obtain more than 30% of their revenues from coal mining and/or more than 20% of their revenues from oil sands.
- We will invest €15 billion in SDG 7 'Affordable and clean energy'.

Shortage of raw materials and use of natural resources

- We will invest more in companies with a circular business model or other innovative solutions for food shortages or the scarcity of natural resources.
- We will invest twice as much in real estate with a 'green building certificate'.

Digitalization

 We invest more in companies that contribute with their products and services to digital, sustainable solutions.

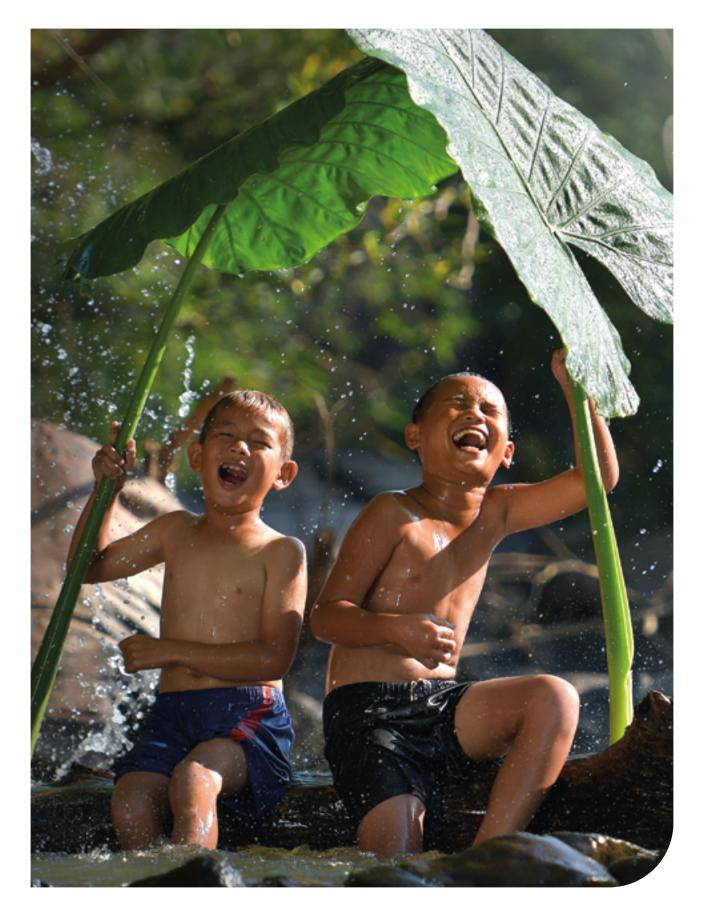
Human rights

The transitions bring new risks in the areas of human rights and labor rights. In our view the transitions can succeed only if they are also fair. For example arrangements must be made for workers in fossil industries who are at risk of losing their jobs as a result of the energy transition, such as retraining. Respect for human rights is for us a pre-condition for the transitions to take place equitably.

Ambitious ... but realistic

We do not live in a perfect world. As major investors we can play an important role. And we want to do so. In that regard we are ambitious. But we are also realistic. We want to be realistic in what we ask of companies. It takes time to clarify our expectations together with the parties involved and to improve the approach. Furthermore we realize that we cannot do everything at once and that we have to make choices. For those choices we are happy to render account – in 2020 and beyond – on our website and in our annual reports.

Appendices



1. About this report

What ABP does as a sustainable and responsible investor is relevant to our participants and other stakeholders. With this report, the Board of Trustees accounts for the activities and results in the area of sustainable and responsible investment in 2019. In choosing the subjects we take account of our stakeholders' preferences.

Materiality survey and media analysis

We have used various methods to find out which subjects our stakeholders would like to read about in the 2019 Sustainable and Responsible Investment Report:

- 1. In the participants survey, which was conducted in September 2019 for the fifth year in a row among participants, pensioners and former participants, we asked what they would like to read about in this
 - We also analyzed the letters and emails that we received in 2019 regarding sustainable and responsible investment.
- 2. In December the LexisNexis agency performed a media analysis to see how often ABP was referred to in the various Dutch media (newspapers, online news media, websites, blogs, comments, etc.) in combination with the most important topics in the field of sustainable and responsible investments.
- 3. A guestionnaire was sent to 76 external stakeholders in January 2020.⁵² This questionnaire was also filled in by members of the ABP Board of Trustees.⁵³

The results of the various surveys were compared with each other and are presented below.

1. What issues are participants interested in?

The base of support among participants for sustainable and responsible investment by ABP is large. In the 2019 participants survey, around 59% of the participants indicate that they consider it important that ABP invests sustainably and responsibly. This percentage was 64% in 2018.

'Sustainable energy', efficient use of raw materials and more re-use of waste' and 'good health care' were the three subjects to which our participants attached most importance. For sustainable energy ABP had set an objective of €5 billion in investments. This objective has been attained. Further explanations are given in chapter 5. 'Efficient use of raw materials and more re-use of waste' is one of the three themes on which ABP will concentrate in its new policy for sustainable and responsible investment. More information on this can be found in chapter 9. Good health care falls under SDG 3 - Good health and wellbeing. At the end of 2019 ABP had invested €15.1 billion in this. We discuss the SDGs in chapter 4.

Appreciably fewer questions about sustainable and responsible

In 2019 we received far fewer emails and letters about sustainable and responsible investment than in the previous year. Of the total of 941 emails, 11% consisted of questions about this subject, as against 36% in 2018. By far the majority (66%) of questions were about the financial situation, with subjects such as the funding ratio, indexation and the low interest rates.

Most of the letters and emails about sustainable and responsible investment concerned the investments in the Belgian nuclear power stations Tihange and Doel through Engie, fossil fuels, Vale and investment in arms.

⁵¹ For the study 'Sustainable and responsible investing: results' the research agency Motivaction conducted a survey among 1,047 ABP participants, pensioners and former participants.

⁵² For this questionnaire, 76 stakeholders were selected randomly from the ABP stakeholder database with representatives of employers' and employees' organizations, NGOs, companies, educational institutions, legislators and regulators, politicians, the media, asset managers and other pension funds. 16 of them sent a list of preferences back.

⁵³ This concerned 12 board members.



PENSION CUTS RETURN

2. With which topics was ABP in the media?

A media analysis by LexisNexis shows that as a sustainable and responsible investor ABP was mainly in the news (up to December 22) in connection with climate and the environment. Most of the media attention centered on investments in fossil fuels. Our investments in real estate and infrastructure were also in the news relatively frequently. The tenor of the articles was predominantly neutral (65%) to positive (29%). 6% were negative.

The word cloud provides an indication of the number of articles in which ABP was mentioned in combination with key words in the field of sustainable and responsible investment. For the sake of comparison, they also looked into how often ABP was mentioned in combination with the terms 'pension cuts' and 'return'.

3. Survey among stakeholders and ABP board members

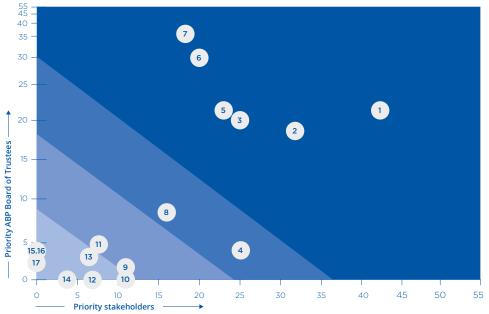
3a. What would stakeholders and board members like to read about?

The first question in the stakeholder survey that was put to the stakeholders and the individual ABP board members was:

"Please list up to five themes you would like to read about in the 2019 report in order of importance, marking the most important as 1 and the least important as 5. If you miss any themes, you can add these below."

When processing the answers, five points were allocated every time that a respondent ranked a theme first, four points were allocated for a second place, etc. The points were added up and a ranking was made. The figure 'Materiality Analysis 1' on p. 52 shows which subjects stakeholders (x-axis) and board members (y-axis) regarded as most important.

Materiality analysis 1



- Attention for sustainability and good governance in daily investment decisions
- Investments in sustainable development (Sustainable Development Goals)
- 3. Sustainability performance of the whole investment portfolio
- 4. Promoting attention for sustainability and good governance among external managers and other investors
- Examples of conscious choices in investments
 - 5. Results of SRI investment policy 2015 2020
- 7. Sustainable and responsible investing in relation to returns
- 8. Dialogue with companies
- Exerting influence via shareholders' meetings
- 10. Excluded investments
- 11. Communication with participants
- 12. Communication with NGOs
- 13. Thematic investments
- 14. Dialogue with governments and regulators
- 15. Collaborating with other investors
- Other: concrete effects in sectors inclusion policy (including examples)
- 17. Other: employee rights

The subjects that stakeholders find most important for us to report on are dealt with as follows. We illustrate the attention for sustainability and good governance in daily investment decisions with concrete examples and interviews with portfolio managers. As was the case in the previous year, there is a separate chapter (4) devoted to investing in sustainable development investments (SDIs). The sustainability performance of the whole investment portfolio is shown schematically at the beginning of the report, in the infographics under 'Progress in policy implementation'. Promoting attention to sustainability and good governance on the part of external managers and other investors is covered in chapters 2, 4 and 8.

As regards the subjects that board members find most important, the relation between responsible investment and return once again gets special attention this year, including in the form of an interview with Diane Griffioen about a survey that ABP commissioned. The results of the SRI investment policy 2015 – 2020 are shown in the infographic under 'Progress in policy implementation' and are discussed in more detail throughout the report. As already mentioned, we illustrate the attention for sustainability and good governance in daily investment decisions

with concrete examples and interviews with portfolio managers. In chapter 2 on the inclusion policy we give various examples of conscious investment choices.

3b. What issues do stakeholders and board members consider important?

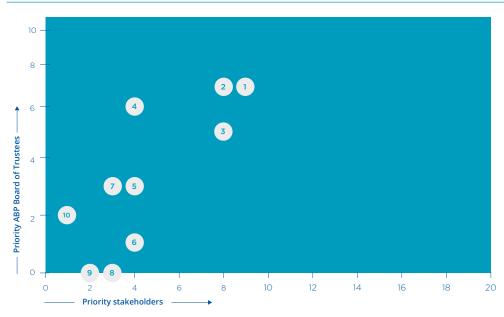
The second question that was put before stakeholders and board members was:

"ABP featured in the media in 2019 as a responsible investor in connection with various issues. This mainly concerned the following issues (ranked alphabetically).

Please check no more than three issues that you would like ABP to report on in the 2019 Sustainable and Responsible Investment Report. If you miss any issues, you can add these yourself."

The figure 'Materiality Analysis 2' shows the ten subjects in connection with which ABP appeared most in the media in 2019, as presented to the stakeholders and board members. One point was given for each time the issue was selected. The figure shows which issues stakeholders (x axis) and board members (y axis) regarded as the most important.

Materiality analysis 2



- 1. Sustainable Development Goals
- 2. Energy transition
- 3. Climate
- 4. Engagement
- 5. Human rights (incl. labor rights and children's rights)
- 6. Renewable energy
- 7. Fossil fuels
- 8. Environment
- 9. Arms
- 10. Investments in infrastructure

Attention is given in this report to all media topics in the top five of the stakeholders and of board members. The SDGs are dealt with in chapter 4, climate, energy transition, renewable energy and fossil fuels in chapter 5 and human rights in chapter 6. Examples of engagement are given throughout the report, for example in chapters 2 and 6.

Reporting guidelines

In this report, we have applied the standards of the Global Reporting Initiative (GRI) insofar as they are relevant. These standards, which are used throughout the world, are guidelines covering both the content of the report and the quality of the reporting. In addition, we use our own methodology for determining the ${\rm CO_2}$ footprint of our equity investments and our investments in Sustainable Development Goals.

The Board of Trustees decided to publish a separate sustainability report again in addition to the report of the Board of Trustees. In this way the reports for the current strategy period (2015 – 2020) remain consistent and comparable. For the new strategy period from 2020, we will determine later whether to integrate our sustainability report into the report of the Board of Trustees.

Implementation by our investment organization

The ABP Board of Trustees determines the investment policy. Various board members have specific knowledge and expertise in the field of sustainable and responsible investment. Mariette Doornekamp is a member – and since December 2019 the chair – of the Executive Board of Eumedion, which promotes the interests of institutional investors in their efforts to advance sustainability and good corporate governance among listed companies. Xander den Uyl is a board member of PRI, a global network of more than 2,300 institutional investors, banks and asset managers, who collaborate to further develop responsible investment.

Decisions on more operational matters are mandated to the Board's Investment Committee, which consists of board members and external specialists. The Board of Trustees and the committee are supported by the ABP Executive Office.

The policy is executed by APG Asset Management⁵⁴ (APG), which manages our pension assets. APG has outsourced this management partially to external managers (at the end of 2019: 29%). APG informs the Board of Trustees, through various committees, about the implementation of the policy and the progress several times a year.

Where implementation or management is mentioned in this report this is done by APG, unless stated otherwise.

Structure of the governance



Supervisory Board ABP in the ABP Annual Report 2019

"The supervisory board has spoken with the Board of Trustees about the Sustainable and Responsible Investment Policy 2020+. Topics included ABP's most important drivers to shape the Sustainable and Responsible Investment policy in this way. The Supervisory Board also questioned the Board of Trustees on experiences and lessons from past years and how these have been anchored in the newly proposed policy. With regard to the inclusion policy, the Supervisory Board is interested in making the results and the effect accessible and comprehensible."

"The Supervisory Board positively values the way in which the Board of Trustees has involved stakeholders in forming the policy, among other things in order to reach decisions on the choice of themes. The Supervisory Board also supports the increased transparency of the results and accountability. The Supervisory Board is of the opinion that the new plan has sufficient ambition and looks forward to its materialization. The Supervisory Board advises the Board of Trustees to incorporate one or two interim evaluations so that the objectives and/or the policy can be adjusted on the way to 2025."

Supervisory Board ABP in the ABP Annual Report 2019

Addressing the risks and opportunities of climate change

Climate change has huge consequences for society and the economy, and thus also for investors. ABP takes the consequences of climate change for the investment portfolio seriously. In this annex, we describe which activities ABP is undertaking to identify and manage climate risks and opportunities. In this report, we follow the framework established by the Task Force on Climate-related Financial Disclosures (TCFD).55

In this report climate change and the energy transition are not only discussed in a separate chapter, but also spread over chapters in which other themes are central. This annex describes what ABP has done in 2019, but also what we have already started in earlier years. Information about our climate policy can also be found in our report to the Principles for Responsible Investment (PRI).⁵⁶

In order to obtain insight into how fast the energy transition is proceeding, ABP has developed a climate dashboard. In this dashboard, we look at 20 indicators, such as the global demand for fossil fuels and investments in renewable energy. The dashboard gives an indication of the extent to which the world is on track to obtain the Paris objective (global warming limited to between 1.5 and 2 degrees). Measurements at the end of 2019 show that the speed of transition is still inadequate for this objective to be attained.

The climate dashboard



How have we structured our governance regarding climaterelated risks and opportunities?

As part of its responsibilities, the ABP Board of Trustees oversees climate-related risks and opportunities. For instance, the Board of Trustees and various board committees discussed the consequences for ABP as an investor several times in 2019 and presentations were organized by our investment organization.

The ABP Board Committee on investment policy decided in 2017 to add climate change to our risk framework as a separate category. In 2018 ABP asked the administrator APG to further develop this with the aim of enabling us to systematically monitor the development of climate-related risks and opportunities in the portfolio. In 2019 APG established a formal climate risk policy and added climate risk to the risk taxonomy for investments. Within APG a climate steering group has been set up, with the task of coordinating the various initiatives in this area and setting priorities for further research. The steering group consists of members from various parts of the organization: portfolio management, risk management and fiduciary management.

2. What are the actual and possible consequences of climate-related risks and opportunities for our business operations, strategy and financial planning?

We classify climate factors that could have an impact on our investments in the following manner:

55 https://www.fsb-tcfd.org/

56 https://www.unpri.org

Climate factor	Description
Policy & Regulations	The consequences of a stricter climate policy for companies and investors, for example pricing CO_2 emissions, stimulation measures for cleaner alternatives, or limitations for CO_2 -intensive industries.
Technology, Market & Reputation	The consequences of cleaner alternatives for CO ₂ -intensive production methods and products becoming available (for example, electric cars or energy efficiency). Changes in the preferences of consumers, companies and investors with regard to the products that they buy or the companies in which they wish to invest.
Physical impact	The impact of changing weather patterns, including more frequent and more intense extreme weather (such as floods) and structural changes (for example long dry spells).

Within these three categories, we distinguish in total 44 types of climate risks and opportunities. These factors can have negative consequences for our investments, such as a decrease in the value of investments in fossil fuels. However, they can also provide new investment opportunities in industries such as renewable energy, electric transportation and water management.

In order to identify such climate risks and opportunities for our portfolio, we have made use of a scenario analysis. This technique is suitable because little historical information is available. Therefore, it is better to work with constructed future scenarios and to see what consequences it would have for the portfolio if such a scenario were to become reality.

We used two scenarios for the climate analysis. One scenario leads to a global warming of 3.7 degrees because governments take too little action and green technologies develop insufficiently fast (this is referred to as the 'business as usual' scenario). The second scenario describes a world in which governments seriously work on achieving the Paris climate goals and the markets respond to this (the '2-degree scenario').

Based on these scenarios, we elaborated the climate risks and opportunities for 26 economic sectors. Together, these sectors represent over half of the value of our investment portfolio. In this case, we looked ahead to 2022, 2030 and 2040.

These scenarios show that the effects of climate change are huge and extensive in 2040. Towards 2040, the transition is gradual for a global and diversified portfolio as that of ABP. However, the transition may proceed with disruptive changes and unexpected tipping points which we must continue to monitor closely.

Before 2030, the 2-degree scenario will already see major transitions, with associated risks and opportunities, particularly in the following sectors: power plants, real estate, the cement industry, oil and gas, the aviation industry, food and consumer goods, the automotive industry, semiconductors and electrical goods, agriculture, chemicals, and the construction sector.

Sectors that are extra vulnerable, but also offer opportunities, to the physical consequences of climate change are in particular: agriculture, forestry, real estate, hydro power stations, oil and gas, food processing, road and rail transport, mining, electrical power plants, health care and the construction sector.

Besides inventorying the effects on sectors, we also took climate factors into account in the macroeconomic models that we used for our strategic investment plan. Via two scenarios ('climate pit' and 'good globalization'), we have inventoried the possible consequences for growth, inflation and other economic variables.

3. Which processes do we use for the identification, assessment and management of risks in connection with climate change?

The results of our climate scenario analysis have been recorded in a traffic lights model, which provides insight into the most important climate opportunities and risks in 2022, 2030 and 2040. We perform this analysis every two years in order to incorporate the most recent developments and insights in the scenarios.

The portfolio managers and sector specialists of the various investment categories are primarily responsible for managing climate-related risks and capitalizing on opportunities, as they have specific knowledge about how climate change can impact the investments. As part of their investment analysis and risk management, they pay attention to climate risks in the short, medium and long term. The insights from the climate scenarios can provide attention points and priorities for further research. The portfolio managers thus form the first-line function within the risk management framework.

A few examples of how our investors analyze and manage risks and opportunities:

- The portfolio managers actively monitor all relevant developments in the fields of regulations, technology and markets.
- ABP has not been investing in new coal-fired power
 plants in its infrastructure portfolio for over ten years
 and will not do so in the future. We ask coal companies
 in other portfolios to stop the expansion of coal-fired
 power plants and to develop a strategy for a transition
 to sustainable energy.
- We take financial risks into account in the calculation models, such as CO₂ prices and lower income from coal.
 For example, our investors closely monitor the costs of battery technology and the relative costs of energy sources (the 'levelized cost of electricity').
- ABP actively conducts a dialogue with companies to reduce their CO₂ emissions. One of the ways we do this is through the Climate Action 100+ collaboration.

With the climate scenario analysis, our asset manager has taken steps to further integrate climate change into the second line function for risk management as well. The traffic lights model and the dashboard with indicators are available for management teams and the risk management department at the asset manager, as well as for the ABP Board of Trustees and the Executive Office. This second line function will be further elaborated in the coming years.

4. Which indicators and targets do we use to assess and manage climaterelated risks and opportunities?

- We monitor a set of 20 indicators in order to obtain insight into the speed at which the transition is taking place. For example: demand for oil and gas, investments in renewable energy, and the number of electric cars.
- We measure the CO₂ footprint of the equity portfolio and the real estate portfolio. For the listed equities portfolio, we have set as a target a 25% reduction of our CO₂ footprint in 2020 (relative to 2014).
- We measure how much we invest in renewable energy.
 We have set as a target for 2020 that we want to have at least €5 billion invested in renewable energy.
- We measure which sources our energy-related investments use for generating energy (coal, oil, gas, nuclear or renewable).
- We measure how much we invest in companies that contribute to the Sustainable Development Goals (Sustainable Development Investments – SDIs). We have set the target that we want to have at least €58 billion invested in SDIs in 2020.

3. Abbreviations

AODP	ABP Netherlands Energy Transition fund; fund established in 2018 specifically intended for investments in relatively small projects and companies that are working on innovative solutions for the climate problem Asset Owners Disclosure Project; an organization that determines how the world's largest	GRIG	Global Responsible Investment and Gover- nance Team; APG specialists in sustainability and good governance International Corporate Governance Network, an international organization for the develop- ment of standards for good corporate gover- nance
ADC ANA	institutional investors identify the consequences of climate change.	IMVB	Internationaal Maatschappelijk Verantwoord Beleggen [International Socially Responsible
APG AM CRREM	APG Asset Management; APG's asset management company Carbon Risk Real Estate Monitor	OECD	Investment] Organization for Economic Cooperation and Development
CHRB	Corporate Human Rights Benchmark; a benchmark set up in 2017 to compare companies' human rights policies	PRI	Principles for Responsible Investing; a global association of around 2,300 pension funds, asset managers and companies that seek to
CO ₂	Carbon dioxide; the most important green- house gas	SDG	promote responsible investing Sustainable Development Goal; development
ESG	Environmental, Social and Governance; issues that are relevant to responsible investment		goal that the United Nations wants to achieve by 2030 to make the world more sustainable
ETF	Exchange traded fund; basket of investments that are traded on a stock exchange just like stocks	SDI	Sustainable Development Investment; an investment that is both financially attractive and contributes to achieving the Sustainable
GRESB	Global Real Estate Sustainability Benchmark; organization jointly founded by ABP to measure the sustainability performance of real estate funds	TCFD	Development Goals Task Force on Climate-related Financial Disclosures; working group led by Michael Bloomberg that issued a report in 2017 on how companies
GRI	Global Reporting Initiative, an international standard for sustainability reporting	VBDO	and funds could best report on climate change Vereniging van Beleggers voor Duurzame Ontwikkeling (Association of Investors for Sustainable Development)

4. Assurance report by the independent auditors

To the readers of the 'Sustainable and responsible Investment report 2019' of Stichting Pensioenfonds ABP

Our conclusion

We have reviewed the responsible investment information included in the 'Sustainable and responsible investment report 2019' (hereafter: the Report) of Stichting Pensioenfonds ABP (hereafter: 'ABP') based in Heerlen. A review is aimed at obtaining a limited level of assurance.

Based on our procedures, nothing has come to our attention that causes us to believe that the Report is not prepared, in all material respects, in accordance with the reporting criteria as included in the section 'reporting criteria' of this assurance report.

Basis for our conclusion

We have performed our review of the Report in accordance with Dutch law, including Dutch Standard 3000A 'Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie (attest-opdrachten)' (Assurance engagements other than audits or reviews of historical financial information (attestation engagements)).

Our responsibilities under this standard are further described in the section 'Our responsibilities for the review of the Report' of this assurance report.

We are independent of ABP in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands.

Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Reporting criteria

The responsible investment information needs to be read and understood together with the reporting criteria. ABP is solely responsible for selecting and applying these reporting criteria, taking into account applicable law and regulations related to reporting.

The reporting criteria used for the preparation of responsible investment information are based on the principles of the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) supplemented with internally developed reporting criteria.

Limitations to the scope of our review

The Report includes prospective information such as ambitions, strategy, plans, expectations and estimates, and risk assessments. Inherently the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the Report.

The references to external sources or websites are not part of the information itself as reviewed by us. We therefore do not provide assurance on this information.

Responsibilities of the Management of ABP for the Report

The Management of ABP is responsible for the preparation of the responsible investment information in accordance with the reporting criteria as referred to in the section 'reporting criteria' of this assurance report. The choices made by the Management of ABP regarding the scope of the Report and the reporting policy are summarized in the section 'About this report'.

The Management of ABP is also responsible for such internal control as it deems is necessary to enable the preparation of a Report that is free from material misstatement, whether due to fraud or error.

Our responsibilities for the review of the Report

Our objective is to plan and perform the review in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion.

Procedures performed to obtain a limited level of assurance are aimed to determining the plausibility of information and vary in nature and timing from, and are less in extent, than for a reasonable assurance engagement. The level of assurance obtained in review engagements with a limited level of assurance is therefore substantially less than the assurance obtained in audit engagements.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of the information in the Report. The materiality affects the nature, timing and extent of our review procedures and the evaluation of the effect of identified misstatements on our conclusion.

We apply the 'Nadere voorschriften kwaliteitssystemen' (NVKS, Regulations on quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have exercised professional judgement and have maintained professional scepticism throughout the review, in accordance with the Dutch Standard 3000A, ethical requirements and independence requirements.

Our review engagement included, among others, the following procedures:

- Performing an analysis of the external environment and obtaining an understanding of relevant themes and issues, and the characteristics of the company;
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the responsible investment information.
 This includes the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made by the Management Board;
- Obtaining an understanding of the reporting processes for the responsible investment information, including obtaining a general understanding of internal control relevant to our review;
- Identifying areas in the responsible investment information with a higher risk of misleading or unbalanced information or material misstatements, whether due to fraud or error. Designing and performing further assurance procedures aimed at determining the plausibility of the responsible investment information responsive to this risk analysis. These procedures included among others:
- Interviewing relevant staff at corporate level responsible for the responsible investment policy and results;
- Interviewing relevant staff responsible for providing the responsible investment information for, carrying out internal control procedures on, and consolidating the responsible investment information;
- Obtaining assurance information that the responsible investment information reconciles with underlying records of the company;
- Reviewing, on a limited test basis, relevant internal and external documentation.

- Evaluating the presentation, structure and content of the responsible investment information;
- To consider whether the responsible investment information as a whole, including the disclosures, reflects the purpose of the reporting criteria used.

We communicate with the Board regarding, among other matters, the planned scope and timing of the review and significant findings that we identify during our review.

Amstelveen, April 29, 2020 KPMG Accountants N.V.

Danielle Landesz Campen RA

5. Where are our assets invested?

These pages contain an overview of our 25 largest investments worldwide (at the end of December 2019, in euros) and our 10 largest investments in the Netherlands.

An overview of our 100 biggest investments can be found on abp.nl.⁵⁷ On abp.nl, you will find overviews of all our listed investments and our corporate bond portfolio.



