The ATP Group

2019 Climate

Part of ATP's responsibility

ATP's work with climate change

The interplay of climate change and investments is complex and may impact ATP's return in various ways. Climate change offers new investment opportunities, but many also lead to new types of risk. That is why ATP is considering climate in our investment decisions.

Basis

Climate change is one of the greatest challenges we face today and will have a massive impact on our society and therefore also ATP's investments in the future. We therefore want to support the transition to a green economy in Denmark and globally by being an active investor and providing capital for green projects.

Climate change has a strong impact on ATP's investments, since it has the potential to affect the long-term risk-adjusted return both positively and negatively. It is impossible to predict how climate change will affect the investment portfolio, and we therefore want to consider climate broadly in our work across our portfolio.

ATP supports the recommendations from the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) and uses them as an overall framework for verifying, challenging and developing our approach to and understanding of climate risks.

Processes

ATP applies a number of processes to ensure that climate concerns are meaningfully integrated in the investment processes. As a new initiative, we focus on mapping our exposure to extraction of fossil fuels across asset classes throughout our portfolio. Based on this mapping, we have chosen not to invest in credit and private equity funds that invest in extraction of fossil fuels.

We have integrated climate in the global equity portfolio where equity is selected based on quantitative models so that our equity selection also considers climate risks. This helps strengthen the resilience against climate risks in the equity portfolio.

During the past years, ATP has amassed a portfolio of green bonds worth almost DKK 20 billion. This is an area where we want to help develop the market for green bonds by engaging in a dialogue with the issuers of green bonds and demanding that they are transparent and report.

Activities

In 2019, we focused on the carbon intensity of the extraction activities of oil companies. Based on Stanford researcher Masnadi's estimates as to the carbon intensity of oil production in each of the world's oil-producing countries and data regarding the geographical distribution of the oil companies' production, we have created an estimate of the carbon intensity of the production of the individual oil companies.

Based on this analysis, we have divested four companies from ATP's investment universe since their carbon intensity was significantly higher than the average. We have also engaged in a dialogue with seven companies that we found were not sufficiently transparent when it came to relevant CO_2 emission figures. Three of the companies did not respond to our inquiries and have therefore also been excluded from our investment universe. In 2020, we will continue the dialogue with a number of oil companies to assess their ambitions and specific initiatives to reduce the carbon intensity from their oil extraction activities.

ATP is part of the Climate Action 100+ investor initiative, which on several occasions in 2019 managed to push the world's biggest CO_2 emitters in a greener direction.

ATP's ESG principles and climate in investments

#1

ESG as an investment belief

ATP believes that climate change has a material impact on the risk-adjusted return on our investments. Climate change engenders new investment opportunities, but also leads to a number of investment risks – both transition risks and physical risks – that can have a negative impact on ATP's investments. That is why we are considering climate when we invest in the same way as we consider other investment aspects.

#2

Strong tailored processes

Climate change can affect ATP's investments in various ways depending on the specific asset class and investment. Efficient integration is conditional on the climate work being adapted to the individual investment process. For some of ATP's investments, a quantitative approach that focuses on data is the most expedient alternative, while other processes are more suitable for a qualitative approach, such as investments in funds.

#3

Development of ATP's ESG competencies

The interplay of climate change and investments is complex and multifaceted. Investors are faced with a host of methods that can be used to calculate climate footprint, climate risks, etc. Actual integration of climate change in ATP's investments demands a persistent focus on developing our own knowledge and understanding of climate change and the possible paths of transition towards a low-emission economy. Only by doing so will we acquire the competencies that are necessary to be able to integrated climate in our investment decisions and our stewardship.

#4

Preference for capital stewardship

Climate change affects the value of many assets in ATP's portfolio. That is why we use our capital stewardship across the portfolio from our investments in listed equity, in our investments in infrastructure and real estate and as an active voice in developing the market for green bonds. We have a preference for capital stewardship, but do not want to assume any climate risks in our investments that we do not assess are compensated in terms of return.

ATP works with green transition throughout our portfolio

Climate change is one of the greatest challenges we face today and increasingly affects our society and therefore also ATP's investments. We therefore want to support the transition to a green economy in Denmark and globally by being an active investor and providing capital for green projects.

Climate change has a strong impact on our investments and the potential to affect the long-term risk-adjusted return both positively and negatively.

ATP supports the recommendations from the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) and uses them as an overall framework for verifying, challenging and developing our approach to and understanding of climate risks.

> With ATP's role in Danish society, we also want to support Denmark's high level of ambition in the climate area and thus contribute to Denmark, and the world in general, reaching the goals of the Paris Agreement.

We work with the recommendations on two fronts. Firstly, we work with the TCFD, including the supplementary guideline for asset owners to better understand ATP's own climate-related financial risks. That is why we also want to be transparent in terms of how ATP includes climate in our investment decisions.

Secondly, as a responsible investor, ATP also encourages companies that ATP invests in to work with the TCFD recommendations and climate-related financial reporting. This applies to both listed and unlisted companies.

ATP's work is based on a holistic approach to how climate change and the fight to bring them under control affect both the Danish society and the rest of the world. Integration of climate change in investment analyses and investment decisions is not confined to selected asset classes or investments in particular sectors in society. On the contrary, ATP's position is that climate change can directly or indirectly affect all of ATP's investments.

According to the United Nations Climate Panel, climate change will cause changed weather patterns and more extreme climate events such as flooding and drought. This might impact some of our activities. It is, for instance, relevant to consider potential physical risks such as flooding and storms when ATP invests in major infrastructure projects or real estate.

Climate change and the uncertainty about future legislation and technology create new conditions for how companies act. As an investor, ATP is broadly exposed to such transition risks since they can both have a wide impact, such as prices on CO_2, and affect individual sectors in the form of new technologies, changed consumer preferences and regulatory requirements and prohibitions.

The green transition gives ATP a range of new investment opportunities. This might be investments in new technologies, which will play a key role in the green transition. Accordingly, ATP expects to increase our green energy investments significantly in the coming years.

A key element of the green transition involves reducing the global reliance on fossil fuels. At the same time, we focus our capital stewardship towards:

- reducing demand for fossil fuels by generally encouraging companies to reduce their reliance on fossil fuels in their production and
- encouraging the providers of fossil fuels to reduce the climate footprint of their energy production as much as possible while also rethinking their business model in a more long-term sustainable format.

However, ATP is also aware that some companies' existing business models can become so challenged by the green transition that they might end up as stranded assets.

Four focus areas with related recommendations

The Task Force on Climate-related Financial Disclosure has been established by a string of international experts with specialist knowledge about climate and financial reporting. The expert group was established at the request of Financial Stability Board, a body under the G20 holding special responsibility for ensuring global financial stability. The TCFD highlights four areas that companies and investors should focus on when working with and reporting on climate.

Governance	Describe the board's and management's role in the work on climate-related risks.
Strategy	Describe the current and potential impacts of climate-related risks and opportunities on the company's business model.
Risk Management	Describe how the company identifies, assesses and manages climate-related risks.
Metrics & Targets	Describes the targets and metrics the company applies to assess and manage climate-related risks.

WHAT ARE CLIMATE RISKS?

Climate risks can be divided into two overall categories – transition risks and physical risks.

Transition risks are risks that originate from the transition to a green economy. This might be political initiatives that negatively impact existing business models or new technology that outcompetes existing technology. It is therefore indirect risks that arise due to political, economic and technological adjustments to climate change.

Physical risks are risks that arise as a consequence of climate change. This might be risks of flooding of buildings, changes in crop yield, drought, forest fires, etc. that directly or indirectly impact a company financially.

INVESTORS AND THE PARIS AGREEMENT

The Paris Agreement is an agreement made between countries – not investors. Under the Paris Agreement, the countries commit to keeping anthropogenic temperature increases below 2 degrees Celsius, preferably 1.5 degrees Celsius. The method for achieving this is that the countries meet every five years and present their successively more ambitious reduction plans.

There is no authoritative way of determining whether investors 'comply with' the Paris Agreement – one reason being that it would require distributing the remaining 'carbon budget' to the world's investors, which is not possible. ATP is instead working to support the Paris Agreement through stewardship and our investments in e.g. green bonds.

ATP considers climate change when selecting equities

We expect that, over time, climate change will have an impact on ATP's risk-adjusted return. We therefore want to consider climate across our asset classes, but in a way that takes the specific investment processes into account.

ATP's global equity portfolio is invested according to a quantitative factor selection strategy. This means that ATP selects equities from a universe of several thousands of companies based on tried and tested, factor-based market data analyses. Examples of tried and tested quantitative factors are momentum and low risk.

In 2017, ATP launched a project to investigate the possibilities of integrating ESG data in the quantitative factor selection strategy. ESG data are non-financial data for environment, social matters and company management.

> Not all ESG data can be used for investment purposes, but we believe that by making an effort and relating to these facts, additional value can be created for our investments,"
>
> *Christian Kjær, Head of Liquid Markets*

In the financial sector, it is well known that ESG data offer some challenges. These challenges include data quality and the fact that the individual data provider applies its own understanding of ESG, meaning that assessments of a company's ESG practice may vary across providers.

In the long run, companies with a strong management focus on climate will generate a better return to the shareholders.

Our ESG team and investment team cooperated to assess various data points with a view to finding data points with a sufficiently long history to be relevant from ATP's perspective. Ultimately, ATP found a data point from data provider MSCI which links a company's exposure to CO_2 emissions with the company's willingness to include climate risks in the company's strategy and operations.

There were a number of reasons for ATP choosing this exact data point. Firstly, ATP has previously used the data point as a vantage point for a thematic involvement with companies that scored low on the MSCI data point. In connection with the dialogue with the companies, ATP found that MSCI's assessment of the companies was in line with its own view of companies – see more in ATP's report on responsibility 2017. It is also important for ATP that the point expresses a risk-based approach, since only companies with a high exposure to climate risks are included in the data point.

ELECTRICITY PRODUCERS MUST PREPARE FOR A GREEN FUTURE

When investing in new electricity producers, ATP will enter into a dialogue with the company about strategies and plans for green transition. Electricity producers that base more than half their electricity production on coal will be divested if they do not have any plans for or wants to engage in an dialogue about transition from black to green energy.

Furthermore, the data point has a sufficiently long time history to facilitate financial analyses of the data point. ATP's financial tests have shown that inclusion of climate risks in exposed sectors does not increase the return on ATP's portfolio but results in neutral performance compared to earlier. The consequence for the portfolio has been that ATP replaced a number of companies in its portfolio that failed to adequately address their climate risks. ATP therefore expects that the integration of climate data over time will help limit ATP's future exposure to climate risks in the global listed equity portfolio.

ATP INCLUDES FOUR FACTORS IN OUR GLOBAL LIQUID EQUITY INVESTMENT STRATEGY

	Low risk	On average, equities with few price fluctuations have a high, low-risk return.
	Momentum	Equities that within a short period of time have generated a good return will also have an averagely good short-term return going forward.
	Value	Equities that are sold cheap (equities with a high risk premium) generate averagely good returns.
+	**Climate**	Companies in CO_2 emission-intensive industries where management focuses on reducing CO_2 emissions will outcompete competitors in the long run.

CALCULATION OF EMISSION SCORE

ATP has chosen a data point that assesses how a company's management relates to the risks and opportunities offered by climate change relative to how exposed the company is to CO_2 in its business.

Exposure score × **Management score** = **Emission score**

- Companies that operate in areas with strict CO_2 regulations or intensification of CO_2 regulations.
- Companies whose primary operations are CO_2-intensive based on CO_2 per sale, as estimated based on an economic input-output model.

Management's effort to reduce exposure through extensive CO_2-reducing policies and implementation. This involves, for instance, reduction targets for CO_2 emissions, energy efficiency improvements and installation of CO_2-cleaning technologies. Another option involves switching completely or partially to cleaner energy sources.

Mapping of investments in fossil fuel extraction

In 2019, ATP focused on stating investments in extraction of fossil fuels in our portfolio across asset classes. The mapping is part of our efforts to comply with the TCFD recommendations, which we have been working with since 2017.

In our experience, the general public has a special interest in our investments in fossil fuels extractions. With the mapping, we want to be as open as possible about our investments and our work to integrate climate change in our investments. We also want to be open about the choices we make on behalf of our members.

In the reports of recent years, we have dealt with the TCFD's various carbon footprint metrics in detail. As accounted for in this report, we assess that statement of carbon footprints is useful from a company perspective, but for several reasons not meaningful as a management tool for a sophisticated and diversified investment portfolio the like of ATP's.

In 2019, we therefore tried to find other avenues to applying the ideas behind the TCFD as a management tool for our overall portfolio management.

The Financial Stability Board, which helped start the work that lead to the TCFD, did so because they believed that it would engender a better understanding of 'the concentration of carbon-related assets in the financial system and the financial sector's exposure to climate-related risks.'

Based on this notion, we undertook an overall mapping of ATP's investments in carbon-related assets across ATP's portfolio in 2019. This mapping provides an overview of ATP's investments in coal winning as well as in oil and gas extraction.

In our statement, we have not distinguished between oil and gas extraction, since most companies extract both oil and gas, and since gas is often extracted in connection with oil production. Moreover, when it comes to oil and gas, we have chosen to focus on the value chain from extraction to the end user – technically called upstream, midstream and downstream – as well as companies that earn their money from delivering services to the oil industry. We have done so because most companies will often be involved in the entire value chain and not just part of it.

The statement has confirmed our previous understanding that ATP has not made any appreciable investments in companies engaged in coal winning.

Through private equity funds, ATP owns shares worth DKK 36 million in three companies that win thermal coal, which can be substituted by other forms of energy, and metallurgical coal, which is used for e.g. steel production where no other forms of energy are available. The commitments to the private equity funds were given between 2012 and 13. In the rest of the portfolio, ATP does not invest in any companies engaged in coal winning.

In stating our investments in the oil and gas sector, we have learnt that, for listed companies in particular, excellent data are available that allow a relatively detailed statement of the investments, while for unlisted companies, it is harder to state precisely how a company's activities are distributed on the value chain. Accordingly, in our statement, we have chosen rather to overestimate the investment in fossil fuels where we have not had sufficient data to assess the activities of a given company.

Based on the mapping, we have decided to no longer invest in the extraction of fossil fuels in illiquid funds where ATP does not make the investment decisions, since we do not want to be bound for long periods of time to assets that might end up as stranded assets. Investments in private equity funds and credit funds have a long investment horizon where it may take up to 15 years from an investment commitment is given until the fund has divested its assets.

INVESTMENT THROUGH EXTERNAL FUNDS

During the past years, ATP has given its commitment to a number of private equity and credit funds that invest in and lend to companies on behalf of ATP. Generally, ATP cannot divest companies in these portfolios once they have been acquired by the manager. However, as a consequence of our decision to not allow future funds to invest in fossil extraction, such investments will be eliminated from ATP's statement of financial position over the next 10-15 years.

We have decided that, in future, we will require that new investments in illiquid funds should not invest in extraction of fossil fuels

OVERVIEW OF ATP'S INVESTMENTS IN EXTRACTION OF FOSSIL FUELS

	Market value	Olie & Gas		Coal	
	DKKm	#Companies	DKKm	#Companies	DKKm
Private Equity & Credit Funds	63,589	116	2,998	3	36
Infrastructure	44,784	4	1,368	0	0
Equities	73,135	17	850	0	0
Corporate bonds	4,004	52	332	0	0

Private equity funds and credit funds: Covers investments in funds that, based on a pre-agreed framework, invests in or lends money to a number of funds. ATP cannot select the investments itself once the agreement has been concluded. In future, ATP has therefore chosen to require that new funds should not include companies that extract fossil fuels. For contractual reasons, ATP cannot publish the names of its credit portfolio, but can only provide information about the overall investments.

Infrastructure: This category covers ATP's own direct investments in infrastructure and funds that invest in infrastructure projects and companies. The four companies in the table are all companies that operate with pipelines and other midstream infrastructure.

Listed equities: The companies in the table cover a range of companies with different exposure to oil and gas. Three of the companies (Total, Eni and OMV) account for the majority of the oil and gas production in ATP's portfolio.

Corporate bonds: ATP has an externally managed portfolio of corporate bonds that invests in high-yield bonds. ATP engages in an ongoing dialogue with the external manager on the investments in fossil fuels.

*Stated as at 1 November 2019.

Requirement for transparency and reporting in green bonds

As one of Europe's biggest bond owners, we want to support the development of the market for green bonds.

We therefore increased our investments in green bonds in 2019, bringing ATP's total value of green bonds to almost DKK 20 billion.

Green bonds are characterised by the issuer of the bond using the loan to finance climate-friendly investments. A climate-friendly investment might be an investment in e.g. increased energy efficiency, hydropower and wind turbines.

ATP's green bonds must fulfil our investment requirements as well as our ESG requirements. ATP invests in green bonds with a credit quality corresponding to the bonds that ATP is already investing in. This means that it must be government bonds or bonds with similar credit characteristics. We do so since the green bonds are part of our hedging portfolio and thus also our long-term pension liabilities. We therefore also have a long-term commitment in the green bond market.

Besides high credit quality, we require, as a minimum, that the issuers meet the Green Bond Principles and ATP's ESG principles – in practice, we have developed our own standard that is stricter than the Green Bond Principles.

At the same time, ATP has chosen an approach to green bonds where we engage in a dialogue with the issuers on increasing the transparency so that investors and other stakeholders get insight into exactly which projects the bonds help finance. More specifically, we want to strengthen the quality and the volume of data from bond issuers so that investors can get detailed information about which specific green projects a given green bond has helped finance.

In our dialogue with the issuers, we focus on what in financial terms is called 'use of proceeds'. This concept covers how the proceeds from the individual bond issue are used. During the year, we have held many meetings with the issuers to understand how they report and the level of transparency in their reporting. Based on this, we use the dialogue to explain to the issuers why increased transparency is desirable to all parties.

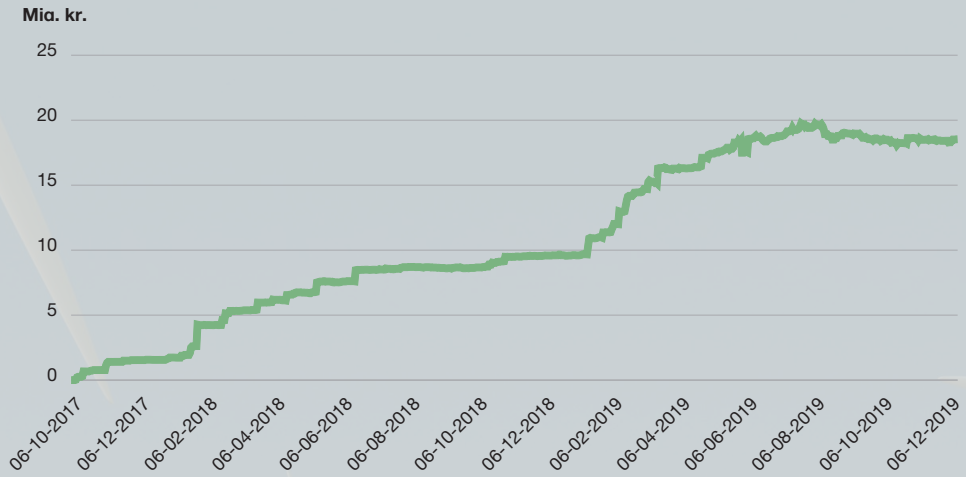
ATP constantly follows the development in the market for green bonds, including in particular the EU's work on sustainable financing and an EU standard for green bonds. In 2020, we will try to develop a metrics that is able to benchmark the green bonds of national states.

In 2019, the World Bank issued its first green bond denominated in Danish kroner, of which ATP was one of the buyers. The World Bank's green bond helps lift the financing of projects among the bank's 189 member countries.

> ATP wants to push the development of the market for green bonds. We therefore engage in a dialogue with the issuers of the bonds to ensure transparency about the projects that ATP's green bonds help finance."
>
> *Lars Dreier, Senior Portfolio Manager*

Processes

THE DEVELOPMENT IN ATP'S GREEN BONDS AS AT 31 DECEMBER



ATP expects to increase its holding of green bonds in 2020.

WHAT IS A GREEN BOND?

A green bond is a loan where the money is targeted at green projects and where the recipient is required to report on the projects. ATP has five requirements for issuers of green bonds.

1. **Use of proceeds**
   We demand to get a statement of which projects we finance through our green bonds. Here we focus on refinancing of projects as well as mapping of strategy and requirements for financing of projects from the bond issuer.

2. **Process for project evaluation and selection**
   We want to know the processes and criteria on which the projects are assessed.

3. **Financial management**
   We demand to get information about where capital from our green bonds are allocated to before they reach the green projects. At the same time, ATP wants to be able to trace the specific projects we help finance.

4. **Reporting**
   Reporting about the projects our green bonds help finance must be solid.

5. **External validation**
   The issuer of the green bond must obtain an external assessment of whether the projects comply with the Green Bond Principles.

Spotlight on CO_2 emissions from oil extraction

The world is facing a transition to a green economy, which means that the world's energy system must be transformed from being based on fossil fuels to being based on renewable energy.

A number of scenarios from the United Nations Intergovernmental Panel on Climate Change – (IPCC) and the International Energy Agency (IEA) predict significant changes in the world's energy supply if the world is to succeed in reaching the targets of the Paris Agreement on a temperature increase of less than 2 degrees Celsius, preferably close to 1.5 degrees Celsius.

The outcomes are many if investors apply both the IPCC's and the IEA's scenarios for how the world's oil consumption over the next 20-30 years might develop within the framework of the Paris Agreement.

However, it is possible to deduce two things from the scenarios: Oil will still be used in year 2050, and oil consumption will probably be much lower than today.

Oil consumption will drop over the next 20-30 years, but the world's overall energy demand will not drop at the same pace. We therefore assess that it is important to focus on both demand and supply of oil.

Companies across sectors whose businesses today rely on oil must be encouraged to find more sustainable alternatives and thus reduce their demand for oil.

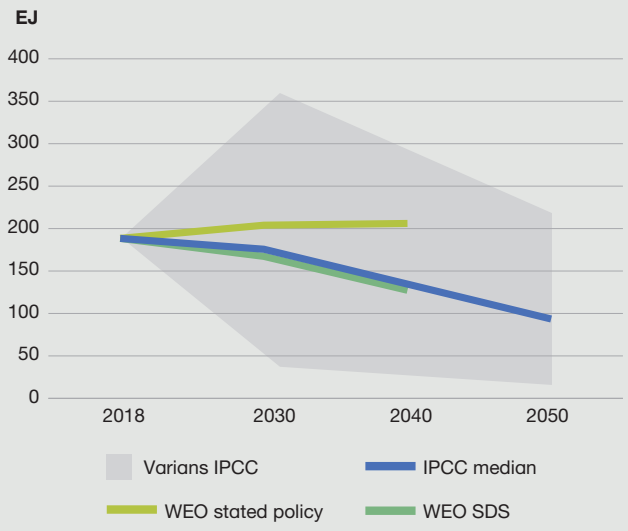
Companies whose business model now concentrates on the extraction of fossil fuels must be influenced to change

OIL CONSUMPTION IN IPCC AND WEO SCENARIOS

The chart illustrates the trend in oil consumption for the IPCC's 'migration pathway' scenarios and for the World Energy Outlook's (WEO) Stated Policy Scenario and Sustainable Development Scenario.

The blue line shows the median of 90 IPCC scenarios, which are all 1.5-degree or 1.5-degree-consistent scenarios. The grey area shows the distribution of oil consumption in IPCC's 1.5-degree scenarios – so there is a considerable outcome space for oil consumption in 2050 depending on how the world complies with the Paris Agreement.

WEO makes three scenarios in which this chart depicts two of the scenarios. Stated Policy Scenario (Blue) reflects the trend in oil consumption if all implemented and stated policies are implemented. This scenario is not a scenario under the Paris Agreement.



WEO Sustainable Development Scenario (Green), which is based on the climate-related Sustainable Development Goals, shows the trend in the primary energy need from oil if the world keeps the temperature increase below 1.8 degrees Celsius at 66% probability." According to the WEO, this scenario is compatible with the Paris Agreement.

their business model so that it becomes sustainable in the long term. Moreover, these companies must be influenced to reduce the CO_2 emissions from the extraction of fossil fuels.

The World Bank has estimated that the amount of gas burnt annually in connection with oil extraction corresponds to the annual electricity consumption in Africa.

If you look at the CO_2 footprint of oil, it can be broken down equally between indirect emissions from extraction, transport and refining of the oil and the direct emissions from the end users (companies and private individuals).

Depending on oil type and production method, the CO_2 footprint of the indirect emissions may vary considerably from 15% and, for some oil types, up to about 40% of the oil's overall CO_2 footprint.

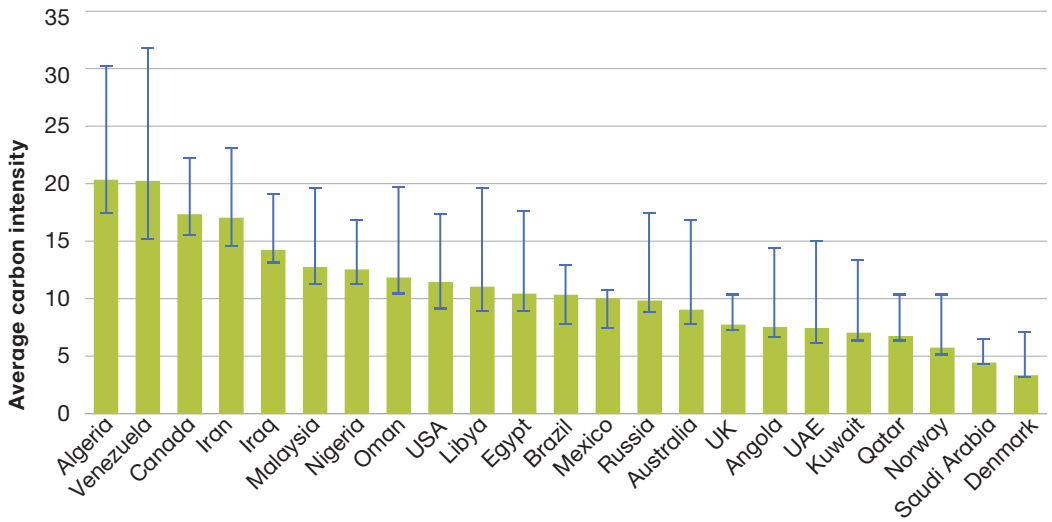
Oil is a 'commodity' where the individual end user has extreme difficulty making requirements for where the oil should be extracted and how it should be processed.

Conversely, investors that invest in the companies that extract the oil have a natural interest in the oil companies taking the work to reduce CO_2 emissions from their production seriously. As more and more countries adopt legislation to meet their obligations under the Paris Agreement, the oil companies that are not doing enough in this area are exposing themselves to a considerable risk of political regulation. That is a political regulation that will likely have a negative financial impact on the investor in such an oil company.

That is why ATP chose to focus on CO_2 emissions from oil extraction in 2019. We did so on the basis of a study by Stanford researcher Masnadi, which estimates the carbon intensity of oil production in the oil-producing countries. Countries like Algeria and Canada are high on the list due to burning of natural gas and oil sands, respectively, while oil extraction in Denmark and Norway has a low carbon intensity due to the exploitation of the natural gas over burning.

The study estimates that the world can avoid up to 18 gigatonnes of CO_2 emissions by avoiding 'flaring' (the burning of natural gas at the well) and by not extracting the most resource-intensive oil reserves like oil sands.

Indirect CO_2 emissions (gCO_2eq/MJ) from the production of oil – selected countries



Dialogue with oil companies on extraction methods and transparency

Based on the Stanford study on CO_2 emissions of oil extraction, we have made an analysis of 257 oil companies that jointly account for more than 82% of the world's total oil production. The analysis has been made to assess the carbon intensity of the individual companies' oil production. ATP only have ownership interests in a few of the 257 companies.

Based on data broken down by country that show where the individual oil companies produce or have ownership interests, we have applied data from the Stanford study to estimate the carbon intensity of extraction and production for each company. Each company has been given a weighted score for its estimated carbon intensity that reflects its geographical footprint. If a company has 60% of its production in Denmark and 40% in Mexico, the analysis will give the company a weighted carbon intensity based on Denmark's and Mexico's carbon intensity.

The analysis offers a number of interesting conclusions that we have chosen to incorporate in both our investments and our dialogue with the oil companies.

Companies with no diversification but with a strong exposure to individual countries with a high carbon intensity will be revealed by our analysis, since the company's estimated carbon intensity will equal that of the individual country. This applies primarily to Canadian producers of oil sands, which is a particularly CO_2-intensive form of extraction, since the oil has a poor quality and therefore requires extensive processing. Some academic studies even indicate that emissions from oil sands are actually higher than reported.

Against this background, we have made an investment choice of not investing in companies with an estimated high carbon intensity, since we do not believe that we are being compensated for the inherent risks. This primarily means that we do not invest in companies whose primary business is the extraction of oil sands.

The analysis also shows that a broad range of companies are placed in a large intermediate group where some companies are relatively close to each other. This group is characterised by small companies with exposure to a single country and a group of larger diversified companies that extract oil worldwide. The latter group is composed of companies that are the most prominent, global oil companies.

The last group is characterised by having a low carbon intensity, which reflects that the companies have access to high-quality oil that does not require a particularly complex refining process. That is why this group of companies is presently not part of this specific dialogue, but may be relevant for other types of dialogue.

So far, our dialogue with the intermediate group has focused on the companies being transparent about their use of flaring (burning of natural gas at the well) in connection with oil extraction, since several small oil companies do not publish any figures on flaring. During the dialogue, we identified seven companies since these portfolio companies had not published key emission data (e.g. the use of flaring in their production), which we needed for the further analysis of the companies in the intermediate group.

One company had erroneously been marked by our data provider and already reported the requested data. ATP received commitment from another of our portfolio companies that they would include the data we requested in their

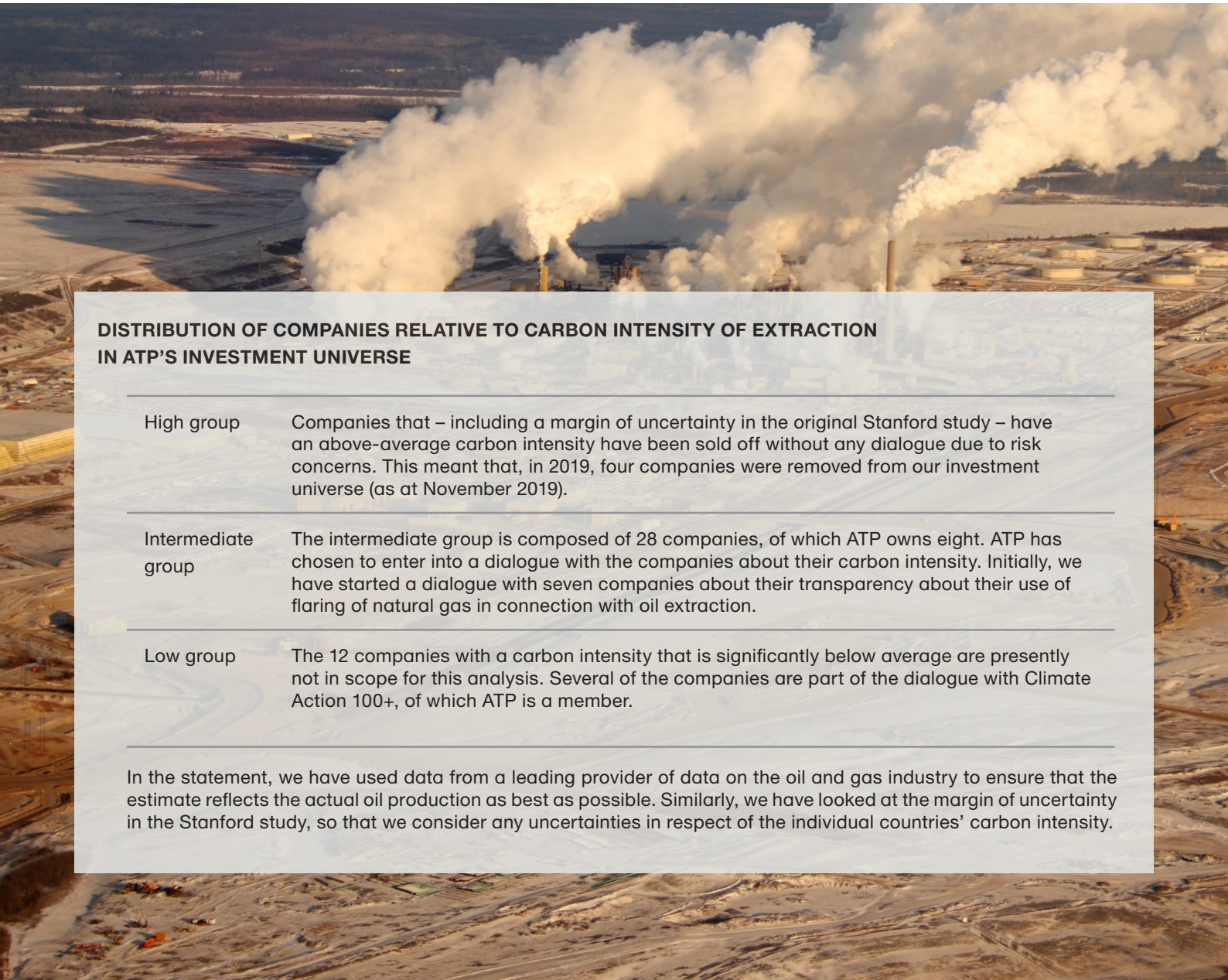
ATP IS A CLIMATE PARTNER

ATP's CEO, Bo Foged, has been invited to join the Danish government's climate partnership for the financial sector. Here, ATP will contribute to the work and share our experience on climate in our investments. ATP was also invited to participate in the climate partnership on heavy transport, where we are represented by Ulrik Dan Weuder, Head of Global Direct Investments. ATP has experience in green transition from the Spanish gas transmission company Redexis, which gears its business for the future by building service stations for gas operated cars and trucks. Read more about Redexis in our report on illiquid investments.

next report. We remain in a dialogue with two of the portfolio companies, hoping to gain greater clarity about when we can expect them to report the relevant data.

We did not succeed in establishing a dialogue with the remaining three portfolio companies, despite repeated attempts at contacting them. We therefore had to assume that the lack of response and data transparency is due to the companies' unwillingness to engage in a dialogue about the carbon intensity of their oil production. Compared with the companies high estimated carbon intensity, we decided to sell off the three companies.

During 2020, we intend to continue the analysis of and the dialogue with the remaining companies in the intermediate group.



DISTRIBUTION OF COMPANIES RELATIVE TO CARBON INTENSITY OF EXTRACTION IN ATP'S INVESTMENT UNIVERSE

High group	Companies that – including a margin of uncertainty in the original Stanford study – have an above-average carbon intensity have been sold off without any dialogue due to risk concerns. This meant that, in 2019, four companies were removed from our investment universe (as at November 2019).
Intermediate group	The intermediate group is composed of 28 companies, of which ATP owns eight. ATP has chosen to enter into a dialogue with the companies about their carbon intensity. Initially, we have started a dialogue with seven companies about their transparency about their use of flaring of natural gas in connection with oil extraction.
Low group	The 12 companies with a carbon intensity that is significantly below average are presently not in scope for this analysis. Several of the companies are part of the dialogue with Climate Action 100+, of which ATP is a member.

In the statement, we have used data from a leading provider of data on the oil and gas industry to ensure that the estimate reflects the actual oil production as best as possible. Similarly, we have looked at the margin of uncertainty in the Stanford study, so that we consider any uncertainties in respect of the individual countries' carbon intensity.

International investors in dialogue with the world's biggest CO_2 polluters

Over the past years, the global investor initiative Climate Action 100+ has put climate change on the agenda in many of the world's biggest listed companies.

ATP has been part of Climate Action 100+ since the initiative started, and since then it has grown to 373 investors from all over the world and manages a total of USD 35 billion.

The great support behind the initiative means that a number of results have been achieved across sectors.

ATP does not participate directly in all the dialogues, nor do we have ownership interest in all the companies, but we do participate in select dialogues and have stated our intention to support the overall purpose of the initiative.

Climate Action 100+ has achieved commitments from some of the world's largest CO_2 polluters to prepare strategies that focus on climate, make targets for carbon neutrality, etc.

One of the strengths of the initiative is that it focuses both on the biggest players on the supply side in the form of the largest oil, gas and coal companies but also engages in a dialogue with the companies that demand fossil fuels. In that way, the initiative gets all the way round the green transition.

In autumn 2019, Climate Action 100+ published some of its results of the dialogue with the 161 companies which make up the target group. There is still a long way to go, but the results show that cooperation can lead to results.

In ATP's report on stewardship, we report on or approach to climate-related proposals at general meetings

ATP'S USE OF CRUDE OIL FUTURES

When investing in assets, ATP must strive to maintain their real value. This is achieved by placing some of the investments in assets that are expected to increase in value in case of rapidly increasing inflation.

To this end, ATP uses a variety of investment assets and risk management instruments, including crude oil futures. In our view, a portfolio that includes crude oil futures is better able to maintain its real value than a portfolio without crude oil futures. This is because inflation is measured as price changes on a representative basket of goods, where the price of crude oil directly and indirectly affects the price of many of the goods in the basket.

When we invest in crude oil futures, the investment is always settled in cash before the future expires. ATP does not take delivery of the crude oil and therefore does not obtain physical ownership of the crude oil, nor does ATP consume oil through its use of crude oil futures. We only trade in futures with financial institutions.

In step with the green transition, which seeks to lessen the dependence of the world economy on fossil energy and thus its relevance, we regularly evaluate whether other instruments will be better suited to maintain the real value of the portfolio.

CLIMATE ACTION 100+ STATUS REPORT

Climate Action 100+ has published a status report that tells about the progress made so far by the initiative.

70%
of the companies have set out long-term emission reduction targets. Of these, 9% have made reduction targets that are in line with the goals of the Paris Agreement.

40%
of the companies have undertaken climate scenario analyses, and 30% have formally supported the TCFD recommendations.

77%
of the companies have board members who hold specific responsibility for climate.

Royal Dutch Shell, one of the six largest oil and gas companies in the world which has publicly declared its commitment to assuming a leading role in terms of climate obligations in the industry. This also includes reduction targets for scope-3 emissions, i.e. the CO_2 emission caused by the use of Shell's products.

Glencore, the world's largest exporter of thermal coal, has agreed a cap on coal production corresponding to the current level of 145 million tonnes per year.

Mærsk, the world's largest shipping company, has committed to a net CO_2 emission of zero in 2050.

Rio Tinto has turned its back on coal winning and published a TCFD report in which they commit to reviewing their assets in order to define CO_2 reduction targets.

Nestlé has committed to zero net emission by 2050. The zero net emission includes scope-3 emissions.

Volkswagen has committed to being climate neutral by 2050 and to launching just short of 70 different electrical cars by 2028.

AES Corporation has made three different scenario analyses and committed to a 70% reduction in carbon intensity by 2030.

Duke Energy Corporation has published an update of its CO_2 transition plan with a reduction of 50% in greenhouse gas emissions by 2030 and a net emission of zero by 2050.

PetroChina has developed a climate strategy and signalled that the company wants a climate strategy that meets the goals of the Paris Agreement.

Focus on the development in energy consumption in various climate scenarios

One of the basic reasonings of TCFD is that, as an investor, you must work with scenario analyses of various degrees of how climate change affects your portfolio, including a Paris scenario of 2 degrees Celsius or less.

Since 2017, ATP has been working with TCFD's recommendations, including climate scenarios. Scenario analyses are well-known for a pension company like ATP, as they are a part of our financial risk management. That is why we also consider climate scenarios as a natural element in the management of climate risks. For instance, in 2018, we made a scenario analysis of our forestry investments, just as we tested various solutions from external providers of climate scenarios.

However, we have learned three lessons in the use of climate scenarios in financial analysis.

1. Financial risk analyses are conventionally based on retrospective data and historical events, where history is used to understand future risks. Climate risks will manifest themselves in the future, meaning that data is limited and knowledge is lacking about the actual effects of climate change on investment assets.
2. Our scenario analysis of forestry assets showed that it is possible to create an understanding of first-order impacts on an asset, such as how temperature increases will affect a forest, but that predicting second-order impacts is complex, i.e. how other similar assets will develop and how other market players will react to the changes.
3. ATP has tested various external scenario tools from different providers. Our experience so far is that the tools have yet to perform at a level where they can be meaningfully included in actual investment decisions. The reason for this is that the tools are based on a number of assumptions about the future development and different data sources – in some tools it is even impossible to know which assumptions are made. ATP is therefore apprehensive at present to ascribe any significant importance to external scenario tools.

A common feature of the various climate scenario analyses is that they, to a significant extent, implicitly or explicitly, draw on the overall energy and climate analyses made primarily by the United Nations Intergovernmental Panel on Climate Change, IPCC, and the International Energy Agency, IEA.

SCENARIO ANALYSIS: PACTA

Several organisations have chosen to launch different online-based tools that allow investors to carry out climate scenario analyses. ATP is of the opinion that the analyses can be useful for when investors need to assess the robustness of their strategic plans. Scenario analyses can be based on a series of different assumptions on e.g. future technological, regulatory and economic development. In order to use the analyses to make informed investment decisions, ATP finds it important to understand the meaning and the impact of the selection and rejection of methods by the specific scenario analysis.

Unfortunately, ATP's overall experience is that several online-based tools to some extent are non-transparent when it comes to the specific selection of method, which makes it difficult to determine how we can use the information in our ongoing portfolio management.

Despite these reservations, we have chosen to publish a PACTA analysis, since some of our stakeholders expect us to publish such an analysis. In our view, PACTA comes with some methodological challenges that we have described in our report on responsibility for 2018. The PACTA analysis for 2019 is available on ATP's website.

The world's energy consumption today and in the future

What is the world's energy consumption today?
According to World Energy Outlook (WEO), 166,483 TWh (Terawatt hours) are spent worldwide. In comparison, Denmark's energy consumption in 2018 totalled 208 TWh, corresponding to 0.12% of the global energy consumption. One TWh corresponds to the annual electricity consumption of 625,000 average Danes.

Where does the energy come from?
We get 81% of our energy from fossil fuels (134,850 TWh). Renewable energy which consists of hydro (26% of RE), modern bioenergy (53% of RE) and other (solar, wind, etc) (21% of RE) accounts for 10% (16,177 TWh). We get 4% (7,211 TWh) from biomass and 5% (8,246 TWh) from nuclear power.

Where in the world is the energy consumed?
Asia and Oceania account for 42% (69,652 TWh), Europe and the Caspian region for 20% (34,122 TWh), North America for 19% (31,599 TWh), Africa and the Middle East for 11% (18,620 TWh) and Central and South America for 5% (7,676 TWh) of the total energy consumption. Besides the various regions, international shipping accounts for 3% (4,838 TWh) of the total energy consumption.

What will the world's energy consumption be in 2040?
The WEO has made three scenarios for the energy system of the future. The following is a short presentation of the development in energy consumption for two of the scenarios. One scenario (A) is based on the policy that has already been defined and is expected to be implemented, while the second scenario (P) shows how the world's future energy consumption must develop in order to meet the UN's climate goals. According to the WEO, only scenario P is compatible with the Paris Agreement.

How large will the world's total energy consumption be in 2040?
In scenario A, the world's energy consumption increases by 24% compared to today. In scenario P, the world's energy consumption falls by 7% compared to today. The difference in the energy consumption in the two scenarios corresponds to almost one third of the world's current energy consumption, which also reflects the considerable transition risk posed by climate change.

Which energy sources will the world's energy consumption come from in 2040?
In scenario A, the consumption of fossil fuels will increase by 13% (18,027 TWh) compared to today and will account for 74% of the total energy consumption. Renewable energy will increase by 125% (20,190 TWh) and account for 33% of the total energy consumption. Energy from nuclear power will increase by 28% (2,291 TWh), while energy from biomass will fall by 12% (861 TWh).

In scenario P, the consumption of fossil fuels will fall by 34% (45,613 TWh) and account for 58% of the total energy consumption. Renewable energy will increase by 215% (34,774 TWh) and account for 33% of the total energy consumption. Nuclear power will increase by 62% (5,117 TWh) and account for 9% of the total energy consumption. Energy consumption from biomass will largely be phased out.

How does the energy consumption change for the world's regions in 2040?
In scenario A, the energy consumption will increase in Asia and Oceania by 37% (25,807 TWh), Africa and the Middle East by 58% (10,734 TWh) and Central and South America by 38% (2,942 TWh). The energy consumption will fall in Europe, including the Caspian region, by 6% (2,093 TWh) and the USA by 1% (361 TWh). The energy consumption from Shipping will increase by 54% (2,593 TWh) compared to today.

In scenario P, the energy consumption will increase in Asia and Oceania by 2% (1,116 TWh), Africa and the Middle East by 11% (1,244 TWh) and Central and South America by 6% (488 TWh). The energy consumption will fall in Europe, including the Caspian region, by 22% (7,641 TWh) and the USA by 23% (7,327 TWh). The energy consumption from Shipping will increase by 3% (47 TWh) compared to today.

Carbon footprint of ATP's portfolios

As part of our work with the TCFD's recommendations, we will also be publishing CO_2 footprint calculations for 2019 using various methods. ATP reports its CO_2 footprint from three different portfolios: Nordic equities, international equities and corporate bonds. We have chosen to state the CO_2 footprint of the Nordic equity portfolio and the international equity portfolio separately, since they, in practice, are operated as two separate investment portfolios.

ATP's viewpoint is that CO_2 footprint at portfolio level as a metric to understanding the investors' climate-related financial risks is of limited use. ATP believes that companies must work to limit their CO_2 emissions. However, if investors follow the same logic and sell off companies with high CO_2 emissions, it will not necessarily contribute to a more sustainable transition. Sale of equity in a company will not result in a drop in actual CO_2 emissions, since a sale will only relocate CO_2 emissions between investors. Ultimately, it might mean that equities with a high carbon footprint are sold to investors who do not focus on transition, including reducing their CO_2 emissions.

Besides, the data quality offers significant challenges since many data are not based on reported emissions and are instead estimated by the data providers. At the same time, the data are based on historical emissions and can therefore not be used to understand the companies' current standpoint and future strategy.

Another challenge is that the companies' emissions are not distributed among their shareholders and creditors, meaning that the companies' CO_2 footprint is often double counted at portfolio level. ATP has chosen to use Enterprise Value, since this to a higher degree takes this double counting into account.

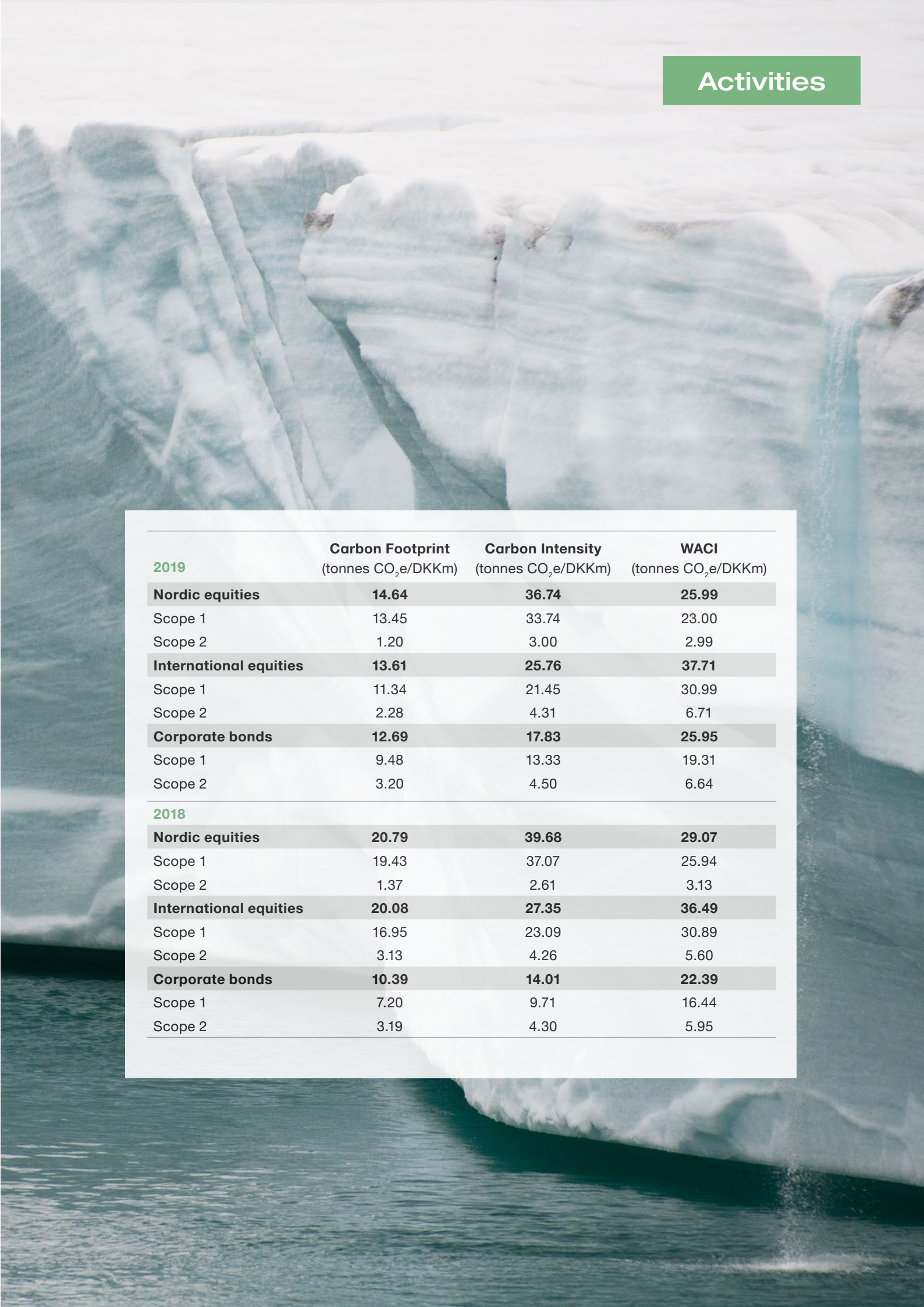
The above challenges have been described in more detail in 'Report on Responsibility 2017' and 'Report on Responsibility 2018'.

For the Nordic equities, which primarily consist of Danish companies, the CO_2 footprint shows a drop according to all three calculation methods compared with 2018. This is mainly due to the fact that ATP has sold shares in Mærsk and thus reduced its ownership interest. Due to its business model, Mærsk is one of the most CO_2-intensive companies in Denmark, meaning that buying or selling Mærsk equity will have a relatively large impact on a concentrated Danish portfolio. ATP has access to data about around 66% of the investments in Nordic equities.

For the international equity portfolios, the carbon footprint and carbon intensity have dropped compared with 2018, while there has been a small increase in WACI. Since the international equity portfolio consists of over 400 companies and has a higher replacement rate of equities, it is difficult to identify a sale of a specific equity that has had an effect on the parameters. Overall, we can see that ATP sold off 4 out of the 6 companies that contributed the most to the international equity portfolio's carbon footprint and carbon intensity at the end of 2018.

A comparison of the portfolio at the end of 2018 and the portfolio at the end of 2019 shows that the divested equity had a higher carbon footprint and carbon intensity on our international equity portfolio than the new equity we have invested in. On the other hand, WACI has increased. This is due to the fact that ATP has invested in new international equities, which, on average, have a higher CO_2 emission compared to the volume of revenue than the average of the portfolio at the end of 2018. ATP has data about almost 88% of the investments in international equity.

For ATP's corporate bonds, all three parameters have seen an increase. This is primarily due to the fact that ATP's external managers have invested in a corporate bond in the American utility company NRG Energy. The statement of corporate bonds lacks data, meaning that carbon footprint, carbon intensity and WACI can only be stated for roughly 31% of ATP's corporate bonds. Some corporate bonds might therefore have a relatively large impact on the carbon footprint of the corporate bonds. At the same time, half of the emissions have not been reported by the companies, meaning that reservations should be made for the statement of ATP's corporate bond portfolio. It should also be assumed that companies with high emissions are more willing to report due to regulation etc. than companies with low emissions.



2019	Carbon Footprint (tonnes CO_2e/DKKm)	Carbon Intensity (tonnes CO_2e/DKKm)	WACI (tonnes CO_2e/DKKm)
Nordic equities	**14.64**	**36.74**	**25.99**
Scope 1	13.45	33.74	23.00
Scope 2	1.20	3.00	2.99
International equities	**13.61**	**25.76**	**37.71**
Scope 1	11.34	21.45	30.99
Scope 2	2.28	4.31	6.71
Corporate bonds	**12.69**	**17.83**	**25.95**
Scope 1	9.48	13.33	19.31
Scope 2	3.20	4.50	6.64
2018			
Nordic equities	**20.79**	**39.68**	**29.07**
Scope 1	19.43	37.07	25.94
Scope 2	1.37	2.61	3.13
International equities	**20.08**	**27.35**	**36.49**
Scope 1	16.95	23.09	30.89
Scope 2	3.13	4.26	5.60
Corporate bonds	**10.39**	**14.01**	**22.39**
Scope 1	7.20	9.71	16.44
Scope 2	3.19	4.30	5.95

Projects financed by ATP's green bonds

ATP wants full transparency when it comes to the projects we help finance through our green bonds. Out of the green bonds that ATP has invested in, only the European Investment Bank (EIB) links the individual projects with an ISIN code, which can be used to identify a security. The list below shows the projects that ATP has invested in via our green bonds in EIB. EIB publishes how much of the project has been financed by capital from green bonds, and the size of the allocation from the individual green bond that is placed in the project.

Project N°	Project Name	Location	Sector*	Sub-sector	CAB-eligible component cost (% of total project cost)	Allocation from CAB Portfolio in 2019 H1 *(Eur m)
Eur CAB due 11/13/26						
20060086	CHINA CLIMATE CHANGE FRAMEWORK LOAN	China	RE - EE	Various RE & EE	100%	38.00
20060268	INGA POWER REHABILITATION A	DRC (Congo)	RE	Hydropower Rehabilitation	33%	0.10
20070087	BUTENDIEK OFFSHORE WIND FARM	Germany	RE	Wind Offshore	100%	39.00
20070089	WIND FARM GULF OF EL ZAYT	Egypt	RE	Wind Onshore	100%	13.00
20100228	GREATER GABBARD OFFSHORE WIND PROJECT	United Kingdom	RE	Wind Offshore	100%	126.00
20100457	Transmission Line Kafue-Livingstone	Zambia	RE	Transmission	50%	1.00
20100575	NORTH YORKSHIRE AND YORK WASTE PPP	United Kingdom	RE	Municipal Waste Incineration	50%	5.38
20100589	KHI SOLAR ONE TOWER PROJECT	South Africa	RE	Solar	100%	2.00
20100641	BPER ENERGIA RINNOVABILE FL	Italy	RE	Various RE	100%	18.00
20110002	National Grid Networks Upgrade	United Kingdom	RE	RE Transmission infrastructures	54%	293.90
20110324	WIND PARK NOORDOOSTPOLDER	Netherlands	RE	Wind Onshore	100%	5.00
20110332	Bucharest S2 Thermal Rehabilitation	Romania	EE	Energy Efficiency	100%	2.08
20110406	SREI CLIMATE CHANGE FL	India	RE - EE	Various RE & EE	100%	1.00
20110411	Netherlands Offshore Wind	Netherlands	RE	Wind Offshore	100%	96.00
20110433	TAFILA WIND FARM	Jordan	RE	Wind Onshore	100%	9.00
20110488	SW DEVON WASTE-TO-ENERGY CHP PLANT	United Kingdom	RE	CHP from Waste	60%	0.03
20110629	RTE - TRANSMISSION NETWORK UPGRADE B	France	RE	Transmission	18%	30.00
20120060	WINDLANDKRAFT WIND POWER	Austria	RE	Wind Onshore	100%	20.00
20120340	KA XU CSP PROJECT	South Africa	RE	Solar	100%	98.00
20120342	MOUNT COFFEE HYDRO GENERATION REHAB	Liberia	RE	Hydropower	100%	15.00

Project N°	Project Name	Location	Sector*	Sub-sector	CAB-eligible component cost (% of total project cost)	Allocation from CAB Portfolio in 2019 H1 *(Eur m)
20120498	BUCHAREST S1 THERMAL REHABILITATION II B	Romania	EE	Buildings	100%	23.00
20120511	TAURON ENERGY INFRASTRUCTURE	Poland	RE	Hydropower	28%	20.00
20120677	MEGALIM SOLAR THERMAL PLANT	Israel	RE	Solar	100%	34.64
20130196	IPTO TRANSMISSION I - A	Greece	RE	Transmission	50%	18.00
20130557	COMBINED HEAT AND POWER PLANT KIEL	Germany	EE	CHP from gas	100%	6.76
20140101	FABEGE NEAR ZERO ENERGY BUILDINGS	Sweden	EE	Buildings	100%	60.00
20140251	Nobelwind Offshore Wind	Belgium	RE	Wind Offshore	100%	23.16
20140600	KILPILAHTI CHP PLANT	Finland	EE	CHP production	100%	23.20
20150210	Kelag Energy Production and Networks	Austria	RE	"Wind Onshore - Hydropower"	43%	12.90
20150263	FRANCE EFFICACITE ENERGETIQUE LOGEMENT SOCIAL	France	EE	EE in Buildings	100%	249.49
20150314	BEATRICE OFFSHORE	United Kingdom	RE	Wind Offshore	100%	1.22
20150382	GALLOPER OFFSHORE WIND	United Kingdom	RE	Wind Offshore	100%	8.40
20160599	NEPAL POWER SYSTEM EXPANSION PROJECT	Nepal	RE	RE Transmission infrastructures	100%	0.77
20160642	DEGEWO WOHNUNGSBAU BERLIN	Germany	EE	EE in Buildings	32%	48.00
EUR CAB due 15/11/2032						
20120174	ONEE - PROJET EOLIEN	Morocco	RE	Wind Onshore	100%	34
20130037	LAS PAILAS GEOTHERMAL PROJECT	Costa Rica	RE	Geothermal	100%	1.7
20130366	JIJI MULEMBWE HYDROPOWER BURUNDI	Burundi	RE	Hydropower	78%	15.6
20140699	SAINSHAND ONSHORE WIND PROJECT	Mongolia	RE	Wind Onshore	100%	3.5
20150240	WINDFLOAT INNOVFIN FDP	Portugal	RE	Wind Offshore	100%	9
20150433	LIETUVOS ENERGIJA VILNIUS CHP PROJECT	Lithuania	RE & EE	CHP, biomass, Energy from Waste	100%	40
20150465	RENEWABLE ENERGY RISK SHARING FRANCE	France	RE & EE	Various RE & EE	100%	15
20150840	TRIPLA NEAR-ZERO ENERGY BUILDING PROJECT	Finland	EE	Buildings	85%	6.1
20150871	NORTHER OFFSHORE WIND	Belgium	RE	Wind Offshore	100%	13.6

Project N°	Project Name	Location	Sector*	Sub-sector	CAB-eligible component cost (% of total project cost)	Allocation from CAB Portfolio in 2019 H1 *(Eur m)
20160241	EGEA NETWORKS	Italy	EE	District heating, CHP	59%	17.7
20160289	MEXICO FIRST RENEWABLE ENERGY AUCTIONS	Mexico	RE	Solar PV	100%	46.5
20160345	TERNA RETI ELETTRICHE VII	Italy	RE	Transmission	12%	3.8
20160642	DEGEWO WOHNUNGSBAU BERLIN	Germany	EE	Buildings	32%	16
20170097	GOYA WIND PROJECT	Spain	RE	Wind Onshore	100%	21.3
20170504	OWENINNY ONSHORE WIND FARM PHASE 1	Ireland	RE	Wind Onshore	100%	14.8
20170780	WINDPARK BRUCKNEUDORF-HOEFLEIN WEST	Austria	RE	Wind Onshore	100%	3.5
20170897	NORTHWESTER 2	Belgium	RE	Wind Offshore	100%	69.6
20170917	SEAMADE NV-MERMAID & SEASTAR OFFSHORE WIND FAR	Belgium	RE	Wind Offshore	100%	8.9
20180339	SAARLB CLIMATE ACTION MBIL	Germany	RE	Various RE & EE	100%	16.8
EUR CAB due 11/13/37						
20070230	ETED Power Transmission	Dominican Republic	RE	RE Transmission infrastructures	39%	3.87
20090484	Lake Turkana Wind Power B	Kenya	RE	Wind Onshore	100%	6.35
20100203	PNESER – Renewable Energy Transmission	Nicaragua	RE	RE Transmission infrastructures	94%	9.62
20100457	Transmission Line Kafue-Livingstone	Zambia	RE	RE Transmission infrastructures	50%	1.85
20100575	NORTH YORKSHIRE AND YORK WASTE PPP	United Kingdom	RE	Municipal Waste treatment	50%	6.66
20100678	EDA Power VIII	Portugal	RE	Geothermal	43%	1.94
20110411	Netherlands Offshore Wind	Netherlands	RE	Wind Offshore	100%	40.27
20120442	France Energies Renouvelables	France	RE	Various RE	100%	2.68
20120677	MEGALIM SOLAR THERMAL PLANT	Israel	RE	Solar	100%	5.3
20130060	Santander UK Renewable Energy	United Kingdom	RE & EE	Various RE & EE	100%	175.53
20130342	Ouarzazate II (Parabolic)	Morocco	RE	Solar	100%	14.37
20130468	OUARZAZATE III (TOWER)	Morocco	RE	Solar CSP	100%	21.96
20130557	COMBINED HEAT AND POWER PLANT KIEL	Germany	EE	CHP from gas	100%	15.17
20130599	NEPAL POWER SYSTEM EXPANSION PROJECT	Nepal	RE	RE Transmission infrastructures	100%	2.11

Project N°	Project Name	Location	Sector*	Sub-sector	CAB-eligible component cost (% of total project cost)	Allocation from CAB Portfolio in 2019 H1 *(Eur m)
20130640	Nordergruende Offshore Wind	Germany	RE	Wind Offshore	100%	41.15
20140017	ENERGY EFFICIENCY ITALY FL	Italy	RE & EE	Buildings	100%	45.5
20140251	Nobelwind Offshore Wind	Belgium	RE	Wind Offshore	100%	33.06
20140445	SWM SANDBANK OFFSHORE WINDPARK	Germany	RE	Wind Offshore	100%	79.68
20140557	AANEKOSKI BIO-PRODUCT MILL	Finland	RE	CHP from renewable by-products	88%	35.2
20140600	KILPILAHTI CHP PLANT	Finland	EE	CHP	100%	15
20140628	RTE - ELECTRICITY NETWORK PROGRAMME 2015-2019	France	RE	RE Transmission infrastructures	3%	0.34
20140699	SAINSHAND ONSHORE WIND PROJECT	Mongolia	RE	Wind Offshore	100%	11.45
20150174	Komercni Banka Energy Efficiency FL - PF4EE	Czech Republic	RE&EE	–Various RE&EE	100%	60
20150314	BEATRICE OFFSHORE	United Kingdom	RE	Wind Offshore	100%	109.5
20150382	GALLOPER OFFSHORE WIND	United Kingdom	RE	Wind Offshore	100%	31.42
20150480	REYKJAVIK ENERGY GEOTHERMAL	Iceland	RE	Hydropower	65%	9.3
20150619	RENTEL OFFSHORE WIND	Belgium	RE	Wind Offshore	100%	40,86
20150689	ENERGIEPARK BRUCK ONSHORE WIND	Austria	RE	Wind Onshore	100%	0.9
20150825	HYDRO AND WIND POWER IN STYRIA	Austria	RE	Various RE& Distribution of electricity	45%	25.65
20150840	TRIPLA NEAR-ZERO ENERGY BUILDING PROJECT	Finland	EE	Buildings	85%	4.4
20150871	NORTHER OFFSHORE WIND	Belgium	RE	Wind Offshore	100%	92.51
20160151	WATER SUPPLY PROVINCE NORTH HOLLAND III	Netherlands	RE	Energy from waste	3%	0.5
20160288	VVO NEAR ZERO ENERGY BUILDINGS	Finland	EE	EE in Buildings	100%	40
20160321	GNF ELECTRICITY INFRASTRUCTURE DEVELOPMENT	Spain	RE	Wind Onshore	7%	33.12
20160448	HOUSING CORPORATION TRUDO	Netherlands	EE	EE in Buildings	66%	19.8
20160527	YES BANK (INDIA) CLIMATE ACTION FL	India	RE	Wind Onshore, Solar PV	100%	61.8
20170097	GOYA WIND PROJECT	Spain	RE	Wind Onshore	100%	14.7
20170257	TAMPERE EDUCATION INFRASTRUCTURE	Finland	EE	Buildings	6%	2.5

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20170504	OWENINNY ONSHORE WIND FARM PHASE 1	Ireland	RE	Wind Onshore	100%	1.4
20170647	CURTIS BIOMASS POWER GENERATION PLANT	Spain	RE	Biomass	100%	7.6
20170897	NORTHWESTER 2	Belgium	RE	Wind Offshore	100%	3.9
EUR CAB due 11/15/47						
20100575	NORTH YORKSHIRE AND YORK WASTE PPP	United Kingdom	RE	Energy from waste	50%	5.3
20100641	BPER ENERGIA RINNOVABILE FL	Italy	RE	Various RE	100%	17.5
20120546	BUCHAREST S4 THERMAL REHABILITATION II	Romania	EE	Buildings	100%	19.5
20120677	MEGALIM SOLAR THERMAL PLANT	Israel	RE	Solar CSP	100%	18.2
20130037	LAS PAILAS GEOTHERMAL PROJECT	Costa Rica	RE	Geothermal	100%	23.8
20130099	ESB NETWORK - RENEWABLE CONNECTION	Ireland	RE	Transmission	92%	37.8
20130468	OUARZAZATE III (TOWER)	Morocco	RE	Solar CSP	100%	3.1
20130557	COMBINED HEAT AND POWER PLANT KIEL	Germany	EE	CHP from gas	100%	10
20140216	EFFICIENT UTILITY INFRASTRUCTURE KLAGENFURT	Austria	RE & EE	District Heating	45%	11.3
20140445	SWM SANDBANK OFFSHORE WINDPARK	Germany	RE	Wind Offshore	100%	160
20140699	SAINSHAND ONSHORE WIND PROJECT	Mongolia	RE	Wind Onshore	100%	2.4
20150240	WINDFLOAT INNOVFIN FDP	Portugal	RE	Wind Offshore	100%	10
20150314	BEATRICE OFFSHORE	United Kingdom	RE	Wind Offshore	100%	15.4
20150382	GALLOPER OFFSHORE WIND	United Kingdom	RE	Wind Offshore	100%	5.1
20150433	LIETUVOS ENERGIJA VILNIUS CHP PROJECT	Lithuania	RE & EE	CHP, biomass, waste to energy	100%	20
20150580	SSE CAITHNESS MORAY POWER TRANSMISSION	United Kingdom	RE	Transmission	100%	226.2
20150619	RENTEL OFFSHORE WIND	Belgium	RE	Wind Offshore	100%	6.1
20150871	NORTHER OFFSHORE WIND	Belgium	RE	Wind Offshore	100%	56.8
20150931	INDIA SOLAR POWER	India	RE	Solar PV	100%	35.4
20160038	LEG ENERGY EFFICIENT BUILDINGS	Germany	EE	Buildings	75%	18.8
20160146	SCA OSTRAND MILL EXPANSION AND FORESTRY	Sweden	RE & EE	Biomass, Industry	77%	78.9

Project N°	Project Name	Location	Sector*	Sub-sector	CAB-eligible component cost (% of total project cost)	Allocation from CAB Portfolio in 2019 H1 *(Eur m)
20160242	VALECO - RENEWABLE ENERGY PROJECTS PORTFOLIO	France	RE	Solar PV, Wind Onshore	100%	40.5
20160318	BELGIUM COMMUNAUTE FRANCAISE RESEARCH EDUCATIO	Belgium	EE	Buildings	28%	36.4
20160448	HOUSING CORPORATION TRUDO	Netherlands	EE	Buildings	66%	26.4
20160764	BUCHAREST S6 THERMAL REHABILITATION II	Romania	EE	Buildings	100%	26.7
20160822	EL TO ZAGREB - COMBINED CYCLE POWER PLANT	Croatia	EE	CHP	100%	3.4
20160936	EDUCATION SEINE-SAINT-DENIS	France	EE	Buildings	63%	22.1
20170046	E2I RENEWABLE ENERGY	Italy	RE	Wind Onshore	100%	15.6
20170097	GOYA WIND PROJECT	Spain	RE	Wind Onshore	100%	4
20170173	SOREGIES ENERGY NETWORKS & RENEWABLE GENERATI	France	RE	Various RE, Transmission	33%	11,2
20170414	ITALIAN MEDIUM SIZED RENEWABLES FRAMEWORK LOAN	Italy	RE	Various RE	100%	22
20170466	GRENOBLE ALPES METROPOLE CLIMATE ACTION	France	RE	Biomass	29%	9
20170504	OWENINNY ONSHORE WIND FARM PHASE 1	Ireland	RE	Wind Onshore	100%	0.9
20170647	CURTIS BIOMASS POWER GENERATION PLANT	Spain	RE	Biomass	100%	2.2