ILMARINEN

CLIMATE POLICY

Approved by the ownership policy management team, updated 30th October 2017

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CLIMATE POLICY

Climate change is a major global challenge, but for many companies it can also offer unique business opportunities. Ilmarinen continuously develops its investment operations with the goal of establishing a progressive and systematic approach for taking climate change impacts into account. This helps us to reach our investment targets and take into account the limits set by the climate on the economy.

Ilmarinen's mission is to invest pension assets in a profitable and secure manner that enables us to pay out pensions well into the future. We are a long-term investor, and our obligation is to work for the benefit of our customers and pensioners. As part of realising this task, our investment decisions take into account environmental, societal and governance aspects, which could influence the financial returns of the investments. We are an active owner and we do our part to ensure that our investees take the sustainability aspects of their operations better into account as part of profitable business.

What is climate change and how can it be prevented?

Climate change is a concrete, long-term and significant threat to the future of humanity and ecological sustainability. Climate change refers to global warming that is caused by a strong growth in human-caused greenhouse gases into the atmosphere. The main cause of greenhouse gas emissions is the use of fossil fuels in energy production and traffic. Greenhouse gases are also emitted by industry, agriculture, forest fires and changes in forest and land use, to name a few. (IPCC 2014). A temperature increase of two degrees Celsius is considered to be the tipping point, after which the consequences of climate change may spiral out of control. Global temperatures have already increased by roughly one degree Celsius from pre-industrial levels, and ocean temperatures have also risen.

At the Paris Climate Conference in 2015, nearly 200 nations agreed on the target of limiting climate change to two degrees Celsius, and ideally just 1.5 degrees. Reaching the target will depend on how successfully emissions can be lowered through voluntary commitments. For businesses, reaching the target will require, for example, cleantech solutions and a reduction in the use of fossil fuels.

CLIMATE PRINCIPLES IN INVESTMENT OPERATIONS

Basic assumptions about the impacts of climate change on investments

In our view:

- Climate change will alter how the economy and certain companies operate in the coming years.
- Climate change is linked to business and investment opportunities, for instance in low-carbon technology and in mitigating and adapting to climate change.
- Climate change is a significant financial risk for investment operations that could be realised, for instance, if legislation increases companies' expenses, investors begin avoiding certain companies or sectors on the basis of estimated climate risks, and/or the concrete impacts of climate change weaken companies' operating environment.

DIRECT INVESTMENTS IN COMPANIES

Expectations we have set on our investees concerning taking climate impacts into account

We expect the companies we have a holding in to:

- report openly and clearly on the carbon footprint and other climate impacts of their operations; for listed companies, primarily through the CDP (Carbon Disclosure Project), which promotes commensurable reporting for investors,
- evaluate their strategic choices and their investments in relation to a scenario where global warming is limited to 1.5 or 2 degrees Celsius and to a situation where global warming surpasses the risk limit.

Our assessments take into consideration the company's size and business sector, which influence companies' opportunities for extensive reporting, among other things.

Active ownership and engagement

By engaging with our investee companies we can better support the transition to a low-carbon society than we could by selling individual investment objects. We engage in active dialogue with the companies we have holdings in as part of our executive management meetings and in separately organised events.

For our listed investments, we co-operate with international investors in engaging with companies through, among others, the CDP and ShareAction, which co-ordinates global engagement collaboration between investors. In addition to direct discussions, our engagement also extends to shareholder meetings, where we participate, e.g., in proposals related to climate impacts made by shareholders and by supporting the relevant and purposeful suggestions of other shareholders.

Shareholders have better opportunities for engagement with companies than debt investors through, for instance, shareholder meetings.

Integration with investment activities: Sustainability ratings (listed companies)

The climate risks and opportunities of investments have been included in Ilmarinen's sustainability ratings. We use the ratings to evaluate investees in listed investments. The ratings also include an estimate of the company's climate impacts, including:

- the climate risks of the investees and how they are managed by the investee companies
- the opportunities climate change presents for the investee companies' business

In addition to a comprehensive responsibility assessment, we also take into account the coal-dependency of operations in the sustainability ratings. We automatically give a weak sustainability rating to companies for which coal accounts for at least 30% of their net sales or energy production, in cases where at least 30% of the company's net sales comes from energy production. In this context, coal only refers to coal used for energy production (thermal coal). When assessing the net sales limit in terms of coal, we take into account the net sales from both mining and energy production. We can invest in companies that exceed the coal limit only if the company in question has a credible plan to reduce its coal use in future.

We sell the shares of individual companies if we identify immediate negative financial impacts caused by climate risks related to the company.

Integration with investment activities: Identifying opportunities (equities)

We actively seek investees whose business relates to mitigating climate change or promotes adapting to climate change. In our view, companies that come up with solutions to global challenges as part of their business activities can enjoy faster growth than the markets and thus be more attractive investments. Some examples of themes we have have considered in our investment decisions are clean water and resource efficiency.

REAL ESTATE INVESTMENTS

Holdings in real estate (leasing and maintenance)

We select our real estate investments such that they are located near good public transit connections. We reduce the negative climate impacts of our real estate by making use of, for instance energy saving measures (optimising lighting, heating, air conditioning and ventilation) and re-newable energy. We also pay attention to the selection of materials and renovate our existing properties to improve their energy efficiency. We have committed to energy efficiency agree-ments for commercial real estate and rental flats. The agreements specify the minimum energy saving targets, including for the coming years. In addition, we are applying for LEED environmental certification for some of our existing commercial real estate.

Property development

When developing commercial real estate, we require at least a LEED Gold or corresponding environmental label. The label sets strict requirements, for example, on the selection of building materials and energy efficiency. We chart the appropriate energy forms for all new construction in energy analyses and we assess the opportunities for using especially solar and geothermal energy in our properties.

FOREST INVESTMENTS

In our forest investments we require compliance with the principles of sustainable forestry. We encourage our investees to certify their forest investments in accordance with sustainable forest management standards.

FUND INVESTMENTS

We require that our asset managers take sustainability perspectives into account in their investment decisions. We furthermore encourage them to assess the climate impacts and risks of investments, to discuss climate aspects with the investee companies and also to report on the climate impacts to investors as part of the other sustainability aspects.

New categories of investment funds are emerging in the markets for funds that focus on companies that promote sustainability. Climate change and promoting resource efficiency are examples of themed fund categories. We invest in sustainability-themed funds in cases where the funds in question also fulfil Ilmarinen's other criteria for investment decisions.

Our objective is not to make capital, infrastructure and debt capital fund investments in coal companies, using the same definition of coal company as is used for listed investments. When drawing up fund contracts, we aim to rule out the investments objects of certain industries.

CLIMATE PRINCIPLES IN ENGAGEMENT WITH STAKE-HOLDERS

We actively participate in societal dialogue. Our objective is to support development that promotes climate change mitigation, adaptation to it and adopting means that are relevant in terms of legislation and exploiting business opportunities.

On a practical level, in our operations we:

- bring climate perspectives to the forefront in meetings with our various stakeholders insofar as the discussion is appropriate, for example, from the point of view of mitigating climate change and understanding the investor's climate impacts.
- participate in the activities of co-operation organisations, for example, through our membership in the Finnish Climate Leadership Council, which represents its members, for instance, in discussions with political decision-makers to support climate-related legislation.
- promote our Climate Policy by participating in any public consultations on future legislation, either directly or in discussions with the sector's interest associations.

TRANSPARENCY PRINCIPLES IN REPORTING

Openness is one of Ilmarinen's values and it also relates to reporting on the climate impacts of our investment operations. We have signed the Montreal Pledge, on the basis of which we have committed to reporting on the carbon footprint of our investments every year.

We annually publish a Sustainability Report, in which we report on the climate impacts of our investments, including the figures described in the road map.

ROAD MAP: STARTING POINT AND TARGETS 2016–2020

We continuously update our understanding of the risks related to climate change in our investment operations. We do this mainly via annual analyses, by training key personnel and by holding discussions with representatives of our investees, customers and co-operation partners.

We are committed to the following measures, in line with our Climate Policy:

1. We actively seek investees that benefit from the business opportunities brought by climate change and which also fulfil the financial criteria for investments

At the starting point in 2016, 6.0% of the annual net sales of our direct listed equity investments was generated by business linked to sustainable solutions. This is 1.0% point (22.4%) more than our benchmark index. A direct 2.9% of the annual net sales of our direct listed equity investments are related to climate change solutions (alternative energy, energy efficiency and green construction); this is approx. 0.6% points (31.8%) more than our benchmark index. We identify and choose attractive investees in which the business opportunities offered by combatting climate change combine with financially profitable business. Our target is to double the net sales focused on sustainable solutions in our equity portfolio to 12%, under the condition that the investments also meet the financial criteria.

Our objective is to grow our investments in green bonds, i.e. corporate bonds used for environmentally friendly purposes.We define green bonds as corporate bonds that are in line with the green bond principles and which have obtained a second opinion.

2. When we invest in electricity companies, we also take into account the share of renewable energy of the company's electricity production as part of an overall financial analysis

At the starting point in 2016, renewable energy made up 21.5% and coal 11.0% of the energy produced by the power companies in our direct equity investment portfolio. The corresponding figures for our corporate bonds were 16.0% and 34.7%. Our goal is to increase our share of companies whose business benefits from the opportunities that renewable energy brings in our listed investments.

3. We encourage the companies we have a holding in to report on their carbon footprint

At the starting point in 2016, 83% of our listed equities and 87% of our corporate bonds were invested in companies that reported extensively on their greenhouse gas emissions (calculated on the basis of invested capital). In our interactions, we seek to ensure that our key investees report on their carbon footprint.

4. We engage in active dialogue with our investees and our asset managers to lower the climate risks of our investments

During the comparison year 2015, we engaged in dialogue with 73 companies (17% of companies in the direct listed equity portfolio) on environmental or social issues, with climate impacts being a central theme. Our objective is to promote the transition to a low-carbon economy and to better manage the climate risks related to our investments.

5. As part of our overall risk assessment, we regularly assess whether our listed equity investments are in line with the two-degree climate change limit

At the starting point in 2016, our investments in power companies and fossil fuel producers were in line with the two-degree scenario during the 2015–2020 assessment period, but car manufacturing companies were not. The challenge of the automotive industry currently concerns all major global car manufacturers. The analysis at the moment is comprehensive for all three of these industries. Beyond those sectors, we actively monitor any new analyses that are offered. Our long-term goal is for our investments to be in line with the two-degree scenario.

6. We are reducing the greenhouse gas emissions in our real estate investments

At the 2016 starting point, our direct Finnish real estate investments had a carbon footprint of 36 kg CO_2e per square metre[1], including the greenhouse gas emissions arising from the energy consumption of the real estate portfolio (consumption of electricity, heating, water and possible district cooling). Our target is to reduce the carbon footprint of our real estate portfolio by 10 per cent by 2020 from the 2016 level, and by 20 per cent by 2025.

In reducing our carbon footprint, we make use of energy savings measures and renewable energy, among other things. Ilmarinen is joining the energy efficiency agreement for the property sector for the 2017–2025 period and is setting a savings target of 10.5% for the entire period, as well as an interim target of 7% energy savings for 2020 from the 2014 level. We use geothermal energy in several of our properties and in 2016 we introduced solar energy for the first time on one of our sites.

We conduct a lifecycle carbon footprint analysis on all of our newly built properties, on the basis of which we develop our planning solutions also for future sites.

7. We analyse the carbon footprint of our direct listed equity and corporate bond investments annually and we use it to conduct risk assessments between companies and business sectors

At the starting point in 2016, the carbon footprint of our direct equity portfolio in relation to 1 million euros of net sales of the investments was 353.8 CO_2e tonnes, i.e. 24% smaller than the benchmark index. The carbon footprint of the fixed income portfolio was 414.3 CO_2e tonnes in relation to 1 million euros of net sales of the investments. Our long-term target is to reduce the carbon footprint of our investments to the extent that it is in line with managing climate risks and supports the achievement of the financial targets we have set for the investments.

8. We intend to grow our forest investments while keeping our return targets in mind

At the starting point in 2015, Ilmarinen directly owned a total of 129,000 hectares of forest through Tornator, the Forest Company, Finsilva and forest funds. The positive net impact of the carbon sequestered by the growth of these forests was 453,821 tCO_2 in 2015[2]. The positive impact of our forest investments on the climate corresponds to approx. 20% of the negative carbon footprint of our equity, approx. 25% of that of our corporate bond and clearly more than 100% of that of our real estate investments[3]. As part of productive investment operations, our goal is to increase our forest investments and thus simultaneously increase our positive impact on the climate.

We report on our development related to these targets annually in our Sustainability Report.

Sources:

IPCC Climate Change 2014 https://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf

1 The carbon footprint has been calculated using the average emissions coefficient for electricity production in Finland reported by Statistics Finland, 180 kgCO_2e/MWh, for the previous three years (2012–2014). The emissions coefficient used for district heat production is the average for the municipality in which the real estate is located for the three previous reported years (2013–2015), which ranges between 61 and 300 kgCO_2e/MWh. District cooling was looked into only in Helsinki, where the emissions coefficient used was 65 kgCO_2e/MWh, which is the average of the emissions coefficients reported by Helen Oy in 2014 and 2015.

2 When calculating the carbon sink effect of forest investments, the small share of wood that was harvested as firewood, and which is thus no longer expected to bind carbon after 2015, was deducted from the overall forest growth.

3 The carbon sequestered by our forest investments has been compared to the absolute carbon footprint of other asset classes, which is 2,235,360 tCO_2e for direct equities, 1,787,311 tCO_2e for corporate bonds and 24,700 tCO_2e for real estate.

ATTACHMENT: CLIMATE POLICY ROAD MAP 2016–2020

Area	Starting point	Target 2020	Measures
Share of business related to sustainable solutions of the net sales of direct listed equity investments.	6.0%	12.0%	We actively seek investees that benefit from the business opportunities brought by climate change and which also fulfil the financial criteria for investments.
Share of renewable energy of the electricity production of investee power companies.	In equity investments 21.5%. In corporate bonds 16.0%.	To achieve a further increase.	In our power company investments, we look at companies that use renewable energy. We automatically give a weak sustainability rating to companies for which coal accounts for at least 30% of their net sales or energy production, in cases where at least 30% of the company's net sales comes from energy. We can invest in these companies only if they have a credible plan to reduce their coal use in future.
Investees' reporting on greenhouse gas emissions.	83% of listed equity investments and 87% of corporate bond investments reported on their greenhouse gas emissions	To retain this good level and possibly increase it.	In our interactions, we seek to ensure that our key investees report on their carbon footprint.
Dialogue with investees on environmental or social issues.	In 2015, we engaged in dialogue with 73 companies (17% of companies in the direct listed equity portfolio).	To continue active dialogue and engagement.	We engage in active dialogue with our investees and our asset managers to promote a transition to a low-carbon economy and to lower the climate risks of our investments.
Comparison of equity investments to a scenario where global warming is limited to two degrees.	Power companies and fossil fuel producers were in line with the two-degree scenario during the 2015–2020 assessment period. Car manufacturers were not.	Our long-term goal is for all our investments to be in line with the two-degree scenario.	We assess the development as part of our overall regular risk assessments. The analysis at the moment is comprehensive for three industries (electricity, fossil fuels, automotive industry). Beyond those sectors, we actively monitor any new analyses that are offered.
Greenhouse gas emissions and energy efficiency of real estate investments.	The carbon footprint of real estate investments in 2016 was 36 kg CO_2e/m2.	A 10% reduction in the carbon footprint from the 2016 level and a 20% reduction by 2025. 7% energy savings from the 2014 level. (10.5% energy savings by 2025).	We use geothermal energy in several of our properties. In 2016, we introduced solar energy for the first time on one of our sites, and we are looking into introducing it on other sites as well. We are joining the energy efficiency agreement for the property sector for the 2017–2025 period. We are improving energy efficiency by, e.g., investing in advanced automation, ventilation and lighting systems and by focussing on the appropriate use of systems. We conduct a life-cycle carbon footprint analysis for all of our new construction, on the basis of which we develop our planning solutions also for future sites.

Area	Starting point	Target 2020	Measures
Carbon footprint of equity and corporate bond investments.	The carbon footprint of the direct equity portfolio was 353.8 tCO_2e in 2016 in relation to 1 million euros of net sales generated by the investments. The carbon footprint of the corporate bond portfolio was 414.3 tCO_2e in 2016 in relation to 1 million euros of net sales generated by the investments.	The long-term goal is to reduce the carbon footprint of the investments. (The carbon footprint of the equity portfolio decreased already by 27% from 2015 to 2016).	We analyse the carbon footprint of our direct listed equity and corporate bond investments annually and we use it to conduct risk assessments between companies and business sectors.
Volume of forest investments	In 2015, the carbon sequestered as a result of Ilmarinen’s forest investments, i.e. the carbon sink effect, was 453,821 tCO_2.	To achieve a further increase.	As part of productive investment operations, our goal is to increase our forest investments and thus simultaneously increase the positive impact of our investments on the climate.