Open letter to the chairperson of the European Insurance and Occupational Pensions Authority (EIOPA) on the climate risk of infrastructure and its consequences for the solvency of pension funds and insurance companies.

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Attachment: "It's Getting Physical," EDHEC Infrastructure & Private Assets Institute Publication, August 2023

Dear Ms Hielkema,

In recent years, the European Insurance and Occupational Pensions Authority has made considerable efforts to improve the integration of climate risk into the assessment of the solvency of pensions and insurance institutions, notably with the first stress tests on the occupational pensions sector conducted in 2022 and the publication of the application guidance on how to reflect climate risk in Own Risk and Solvency Assessment (ORSA) the same year.

It is within this continuity that we wish to write to you today to alert you to the materiality of physical climate risk in unlisted infrastructure investment for institutional investors and notably insurance companies and pension funds, who correctly consider this asset class to be an important ingredient for both asset diversification and liability hedging. The research note that we are sending you today shows that the physical risks created by climate change are not limited to a distant future for investors in infrastructure, some of whom could well lose more than 50% of the value of their portfolio to physical climate risk before 2050 in the event of runaway climate change. Moreover, the average investor will also lose twice as much to extreme weather, mostly in OECD countries, compared to a low carbon scenario.

The numbers are significant: over the past two decades, institutional investors have increasingly allocated capital to private, mostly unlisted, infrastructure companies like toll roads, airports, power plants and pipelines. infraMetrics tracks a universe representing

approximately USD4.1 trillion of enterprise value and USD2.2 trillion of market capitalisation at current market prices in 25 key markets.

Many regulators and national authorities are currently encouraging pension funds to increase their investment in this attractive asset class. It should nonetheless be recognised that regarding climate risk, and notably physical climate risk, the data on the exposure and the financial materiality of this risk being realised for private assets is fairly limited.

For the first time, EDHEC has conducted an in-depth analysis of this risk for unlisted infrastructure investment.

Using a very granular database of asset-level physical risk estimates and financial data, we find that the impact of runaway Climate Change on the value of infrastructure investments before 2050 is significant. We also find that if no serious measures are taken, financial losses from physical risk (which are never zero) would be twice as high than in a low carbon scenario, for all investors.

Our research shows that the cost of physical risks within the “Current Policies” scenario represents, on average, 4.4% of the total NAV of the assets in our reference database by 2050. The average maximum loss is -27% and we see that the effect of extreme climate events is negative across all sectors, impacting the NAV of transport (-10% on average with a maximum of -97%) and the energy and water resources sector (-7% on average, with a maximum of -40%).

This considerable disparity in the potential losses due to the realisation of climate risk logically raises the question of proper investor diversification with respect to this risk, notably for insurance and pension fund investors. Unfortunately, one is obliged to observe that the level of investment concentration in infrastructure portfolios is very high at the moment. Most investors in infrastructure hold a few individual assets. Investors who hold direct stakes in infrastructure assets, be they fund managers or asset owners, usually have fewer than 20 investments. The average asset owner typically has fewer than 10 direct stakes. Given moreover that this concentration is not mitigated by the integration of climate risk in infrastructure portfolio selection or construction, it can lead to very high exposure to physical climate risk. As such, when an investor finds themselves exposed to the riskiest assets in the same portfolio, losses can mount to 27% in the orderly transition scenario and to 54% in the “Hot House” scenario.

2050 is still 30 years away and past the investment horizon of investment funds, but many are now exposed to much longer-term investments. Moreover, the next generation of funds will pick up the same assets.

Climate change risks are already material for a number of insurers and pension funds that have significant exposure to infrastructure assets even if these are located in developed economies. It should be noted that our loss estimates can be considered very conservative

in the light of the very limited impact of physical risk on the economy implied by the scenario used by the Network for Greening of the Financial System (NGFS). A 'too little, too late' scenario, by which emissions keep rising and climate change happens faster, would show a rapidly decreasing value of infrastructure assets due to their loss of future revenues, itself the result of a less active economy, mostly due to chronic heat.

This focus on the materiality of the physical risks allows climate risk to be seen not solely as the result of a public policy decision but as a reality that, without action from all stakeholders, including regulators and governments, will have a very significant impact on the value of investments.

Naturally, these observations need to have prudential consequences and, as you have undertaken, call for reinforcement of the integration of climate risk in the assessment of the solvency of insurance and pensions institutions.

We also think that EIOPA's favoured position as an advisory body to the European Commission, the European Parliament and the Council of the European Union will allow you to draw attention to the impact that a lack of climate action can have on the stability of the pensions and insurance system and on financial stability more generally at a time when institutional investors are playing an increasingly important role in the financing of infrastructure.

Yours faithfully,

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