

## Targeted response to the discussion paper “*Navigating Uncertainty in Climate Change: Promoting Preparedness and Resilience to Climate-Related Risks*” by the Office of the Superintendent of Financial Institutions (OSFI)

We appreciate the opportunity to comment on the OSFI’s discussion paper “Navigating Uncertainty in Climate Change: Promoting Preparedness and Resilience to Climate-Related Risks”. Please find below our targeted responses to questions #14 and #15, which we consider to be of major importance in addressing the financial stability risk which climate change poses to the global financial system.

### Question 14

***What are your views on the relative importance of using (1) OSFI’s capital framework, (2) supervisory review process, and (3) market discipline to promote FRFI preparedness and resilience to climate-related risks? What factors should OSFI consider when making changes to the design and approach to each of these areas?***

In order to ensure FRFI preparedness and resilience to climate-related risks, **Finance Watch wishes to emphasize the necessity for OSFI to utilise its capital framework as a matter of priority. Specifically, Pillar I capital requirements should be used for this, which corresponds to the very purpose of prudential requirements - to reflect exposure risks.** Using capital requirements is indispensable considering the following aspects i) the urgency of tackling the climate change problem and ii) the challenges associated with the development and implementation of reliable and industry-wide consistent solutions to measure climate-related financial risks.

The urgency to act is reflected by the fact that the global carbon budget will be exhausted within 10-15 years<sup>1</sup>. All new fossil fuel exploration and a significant part of production out of existing reserves are incompatible with Paris goals to limit global warming to 1.5°C. The already explored fossil fuel reserves amount to 2910 gigatonnes of CO<sub>2</sub>, whereas the calculated carbon budget of our planet is 495 gigatonnes. It has been also calculated that 84% of the explored reserves will have to be left unexploited (abandoned) in order to limit the global temperatures rise to 1.5°C; or 59 % to limit temperatures rise to 2°C correspondingly.

In case we fail to limit the temperature rise, irreversible changes of the climate will inflict significant damage to companies and entire regions, which will eventually lead to massive losses to financial institutions and create financial instability.

In this context, the traditional categorization of climate-related risks into physical, transition and liability risks misses what is by far the biggest risk coming with climate change, i.e. **disruption risk**. We define disruption risk as the fact that, in the light of the environmental and geostrategic upheavals that climate change will bring, there is no plausible scenario under which the world economy as we know it will continue to function. In all likelihood, the economy will endure, at best, a considerable slowdown and, most probably, a prolonged depression because of climate change, its structures will be redesigned,

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<sup>1</sup> Carbon budget refers to the amount of Greenhouse gas emissions, expressed as equivalent CO<sub>2</sub> emissions, compatible with a limitation of global warming at pre-industrial levels. [See Carbon Tracker Initiative.](#)

and the financial system will be shaken to its roots, if not destroyed. In a nutshell, disruption risk is the fact that climate change will disrupt human societies, which will disrupt the world economy, which will disrupt the financial system.

The world's leading regulators, supervisors and experts, including OSFI in the discussion paper itself, recognize the complexity and systemic nature of climate-related financial risks, including the significant threat that they pose to financial stability. Simultaneously they also recognize the challenges of assessing climate-related financial risks such as data availability, methodological challenges and difficulties in the mapping of transmission channels<sup>2</sup>.

The lack of prudential action so far is grounded in a paradox: policy-makers recognise the near-impossibility of modelling climate-related risks but say that they need such modelling to be done before intervening. Unfortunately, given the short time available, late action is equivalent to doing nothing. **By providing finance to and investing in fossil fuel related activities which represent over 90% of CO2 emissions, financial institutions (in particular, banks and insurance companies) are the de facto enablers of global warming. Given the destabilising effect that climate change will have on the financial system, the situation is therefore one of a doom-loop where finance enables a phenomenon that will end-up destroying it<sup>3</sup>.**

Recognizing that immediate action needs to be taken to tackle the financial stability risk of climate change, **Finance Watch's proposal is to reflect this risk in financial institutions' capital requirements. In a context of radical uncertainty where, as recognised by central banks, supervisors and academics, measuring precisely the impact of climate change on financial institutions is and will remain an illusion, capital requirements should be calibrated to reflect** basic risk management principles and ensure the internal coherence of prudential regulation, i.e. treat comparable risks in a comparable manner, which is not the case today for fossil fuel exposures (see response to question #15 for details).

**With regards to the supervisory review and market discipline measures**, we recognize their usefulness. However, **these measures have certain limitations, which prevent them from effectively addressing the financial risks related to climate change in the absence of appropriate Pillar I measures.**

**Supervisory review process (Pillar II measures) can only be effective given strong Pillar I requirements have been adopted**, as only application of "hard-coded" and thus consistent capital requirements across financial institutions can ensure their resilience and solvency in case of a financial crisis. Integrating climate-related risks into internal governance, strategy and risk management process is faced with the challenges of the lack of historical data and methodologies as well as the complexities not to say the impossibility<sup>4</sup>, associated with modelling the transmission of climate change to the financial sector. These are exactly the same challenges faced by regulators, as outlined above. In the best of cases, development and implementation of precise methods to measure climate change-related financial risks will take years, by when the planet's carbon budget will be nearly exhausted.

The other component of the supervisory review process is **climate stress tests**. Effectively, these have **amounted to scenario-based analyses looking at how financial institutions will fare in different climate change scenarios, but they have not derived conclusions regarding the solvency of institutions**. Incidentally, climate stress tests seek to assess transition risk and, for some of them, physical risk but not the risk of disruption as businesses, finance and insurance providers will respond to adverse new conditions. These second-round effects can be large, unpredictable and non-linear, as the Covid-19 crisis has shown, and are almost impossible to model.

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<sup>2</sup> Important conclusions are summarized in report of the BCBS high-level Task Force on Climate-related Financial Risks (TCFR) "[Climate-related financial risks: a survey on current initiatives](#)", April 2020.

<sup>3</sup> Finance Watch: "[Breaking the climate finance doom loop](#)", June 2020.

<sup>4</sup> Chenet, Ryan-Collins, van Lerven – IIPP, UCL – Climate-related financial policy in a world of radical uncertainty, 2019.

**Transparency measures such as climate-related disclosures cannot reduce by themselves the macro-prudential risks that fossil fuel financing causes by enabling climate change.** Increasing the transparency and the quality of extra-financial information is a necessary but not a sufficient condition for private actors to promote FRFI's preparedness and resilience to climate-related risks. This is due to the fact that existing non-financial reporting standards such as TCFD and SASB only look at financial materiality, in other words, when it comes to climate change, at the impact of climate change on companies' accounts. Contrary to non-financial reporting standards purely based on outside-in financial materiality, the EU non-financial reporting standards currently being elaborated will allow, with their double materiality logic, for a better understanding of the impact of businesses on climate change. Still, this will not be sufficient to break the vicious circle between finance and climate change, if anything because financial stability is a public good and private agents are not responsible for public good. Furthermore, as pointed out by FED Governor Lael Brainard<sup>5</sup>, *"even well-informed investors could underestimate the likelihood of large shocks related to climate change, resulting in systematic mispricing of risk. This mispricing could occur if the physical effects of climate change arrive sooner or with greater intensity than expected or investors systematically err in their expectations about the transition. Finally, vulnerabilities could result if climate risks in the aggregate are systematically correlated across participants in the economy and financial system"*.

In summary, current prudential requirements fall short of addressing climate-related financial stability risk and ensuring the resilience of financial institutions in case of crisis. **Thus, taking the right Pillar I capital requirements measures, i.e. measures hardwired in the prudential regulation itself, is indispensable**, as only Pillar I measures can allow supervisors and central banks to act on solid ground and take the measures necessary to tackle the stability risk incurred by the financial system because of climate change.

## Question 15

***Are there circumstances where it would be appropriate to factor climate-related considerations in the capital framework beyond what is already reflected in existing inputs in the absence of empirical evidence? What are the pros and cons of such an approach?***

As elaborated upon under the response to question #14, current capital requirements for financial institutions do not reflect climate-related financial risks. At the same time, financial institutions act as an enabling factor of anthropogenic climate change: by allocating capital to fossil fuel exploration, production and exploitation, finance is the principal vector making global warming possible.

**Fossil fuel exploration, production and exploitation is, by construction, the root cause of anthropogenic climate change as it is the source of CO<sub>2</sub> in the production chain.** Both micro and macro-prudential risks emerge from this situation: first, increased asset depreciation and assets becoming stranded will hit the financial sector as the economy transitions towards decarbonised energy sources to reach the Paris Agreement goals; second, global warming resulting from CO<sub>2</sub> emissions made possible by the financing of the fossil fuel sector by the financial industry will feed financial instability, not only because of the oft-debated but poorly quantified transition risk and physical risk but, most importantly, because of the massive disruption of the economy that will accompany climate change as described by the IPCC<sup>6</sup>: *"Impacts of such climate-related extremes include alteration of ecosystems, disruption of food production and water supply, damage to infrastructure and settlements, human morbidity and mortality and consequences for mental health and human well-being"*. These events will, in turn, lead to massive and abrupt devaluations of assets and collateral held by the financial institutions,

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<sup>5</sup> Governor Lael Brainard, ["Financial Stability Implications of Climate Change"](#), at "Transform Tomorrow Today" Ceres 2021 Conference, Boston, Massachusetts, March 23, 2021.

<sup>6</sup> IPCC, [Fifths Assessment Report](#).

unexpected price swings and market movements impacting the whole spectrum of financial risks (credit, market, liquidity and operational risks).

**The current status quo where fossil fuel financing is subject to the same capital requirements as other types of financing is effectively tantamount to a “fossil fuel subsidy”.** This leads to a mispricing of exposures, which in turn threatens the solvency of financial institutions going forward, as climate-related financial risks will increasingly materialize.

Basel prudential requirements, on which the OSFI’s Capital Adequacy Requirements (CAR) Guidelines are based, are designed to prevent financial instability and provide, among other things, for the possibility “to apply a 150% or higher risk weight reflecting the higher risks associated with some other assets”<sup>7</sup>. Thus, CAR should be used to reflect the undoubtedly particularly high risks associated with fossil fuel financing via an upward adjustment of the corresponding risk weights<sup>8</sup>.

Finance Watch’s proposals represent a comprehensive manner of addressing the issue:

- **Apply a risk weight of 150% (under the standardized approach) to existing fossil fuel exposures at risk of stranding. This would be consistent with the approach applied by the Basel framework for assets deemed to be particularly risky.** The 150 % risk weight is already used within CAR for certain asset types. Given the current rate of asset depreciation of fossil fuel companies (USD 145 billion in 2020) and the compelling logic of the stranded asset narrative, not doing so would contradict the risk-based approach of CAR and endanger its internal coherence (similar prudential treatment for similar levels of risk).
- Exposures to new fossil fuel exploration and production, on the other hand, create a macro-prudential risk by accelerating climate change and a larger micro-prudential risk given the near certainty that they face of becoming entirely stranded. **Applying a risk weight of 1250% to fossil fuel exposures where related to the business of exploring, extracting or exploiting new fossil fuel resources** (under the standardised approach) would make these activities entirely equity-funded. This would be an appropriate treatment for assets with the micro- and macro-prudential characteristics described above and, most importantly, would be coherent with a basic risk management principle of funding with equity extremely risky activities. A precedent for applying the 1250% risk weight already exists in CAR such as for certain equity investments in funds and certain securitisation exposures.
- **For the institutions applying the IRB approach, the above risk weights should represent the effective floor** when determining the credit RWA of fossil fuel exposures. This would be equivalent to making the standardized approach mandatory to determine capital requirements for such exposures.

The following definitions should apply for the capital requirements described above<sup>9</sup>:

- Fossil fuel exposures are defined as exposures to fossil fuel companies, activities, projects and fossil fuel power plants, which are related to the exploitation and usage of existing fossil fuel reserves.
- A fossil fuel company, activity or project is defined as a company or facility engaged in coal, oil, gas, shale gas or bituminous sand exploration, production or exploitation.
- Fossil fuel power plants are plants burning coal, oil, natural gas or shale gas to produce power.
- Fossil fuel resources are defined as coal, oil, natural gas, bituminous sand and shale gas.

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<sup>7</sup> BCBS CRE [Calculation of RWA for Credit Risk](#).

<sup>8</sup> The logic of the below proposals should be correspondingly applied to the capital adequacy requirements of the respective types of financial institutions under OSFI supervision.

<sup>9</sup> Finance Watch: [“Breaking the climate finance doom loop”](#), June 2020.

Summarizing the above, we do not see any notable cons associated with the Finance Watch's proposal, in particular given that the other options to identify and manage climate-related financial risks have fallen short to effectively and timely address the problem. In contrast, the proposal features a number of clear advantages: It recognizes the current challenges faced by regulators, supervisors and supervised entities in quantifying climate-related financial risks and takes a qualitative approach. Our proposal makes use of the available tools within the existing capital requirements standards/regulations, thus preserving their consistency. Moreover, we would like to emphasize that **the proposal is not only feasible and achievable in the current circumstances, but is also a necessary condition to restore the internal coherence of the prudential regulation**, which has been called into being in order to reflect the risks inherent in the financial institutions' business. Not taking this prudential approach **now** will effectively mean ignoring the financial stability risk of climate change.