We, leading international Non-Governmental Organisations (NGOs), think tanks, coalitions and researchers, have come together to call on central banks and financial supervisors around the world to act now as precautionary agents and utilize every available avenue to tackle the twin environmental crisis of climate change and nature loss.

Monetary policy and financial regulation instruments need to mitigate the significant financial and price instability that is caused by biodiversity loss and global warming. Both environmental crisis will continue to increase if no action is taken now. The next few years are crucial. There is no alternative but to do whatever it takes to mitigate the systemic risks posed by biodiversity and ecosystem loss. The G20 meetings and the Conferences of the Parties to the Convention on Biological Diversity (COP15) and on Climate (COP27) this year, offer great opportunities for central bankers and financial supervisors to announce their commitment and take decisive action this year. WWF will annually monitor the progress of central banks and financial supervisors via its SUSREG Tracker.

### WHAT STEPS MUST AND CAN BE TAKEN NOW

**1.5°C**

Central banks and financial regulators globally must adopt new nominal anchors for their mandates – 1.5°C and full biodiversity recovery by 2050 as well as -50% GHG emissions (baseline 2019) and nature positive by 2030.

Central banks, financial regulators and supervisors must lead by example and provide necessary clarity and forward guidance to financial markets actors by publishing their own clear and detailed transition plan (with clear quantifiable climate and biodiversity goals for 2025, 2030, and 2050 covering all central banking, financial regulation, and supervision activities). They must request all regulated financial institutions to publish yearly, detailed transition plans regarding all their investment, lending and underwriting practices.

Central bank and financial regulation time horizons must be extended to 10-30 years to ensure that short term financial flows that may have major long-term consequences for losses and instability are treated as far higher risk.

Financial institutions investing, underwriting or lending to sectors, companies or economic activities that are considered as 'always environmentally harmful' (see list at the end of the document) must face:
- Higher regulatory capital requirements
- Tighter liquidity requirements
- Capital add-ons for concentration risk if they fail to reduce their exposure urgently
- Higher systemic risk buffers according to their exposure to environmentally harmful assets and assets in particularly vulnerable regions
- Central banks and financial supervisors should jointly co-develop their own 'always environmentally harmful list' with scientific institutions and apply it to the monetary policy and financial regulation instruments to provide sufficient and significant credibility to financial institutions in their actions.

Central banks must stop investing in (e.g. through asset purchase programmes), and adapt their collateral frameworks for economic activities, companies and sub-sectors that are considered 'always environmentally harmful' and introduce a "green dual rate" - a discount interest rate on future refinancing encouraging clean energy production and energy efficiency renovations.

Central banks, financial regulators and supervisors must act as forceful stewards, and request governments to take more decisive action to tackle the twin environmental crisis (e.g. fiscal policies that support fair transition).
THE PROBLEM AND WHY CURRENT POLICIES ARE NOT ENOUGH

The Dasgupta Review points out that essentially all economic activities depend on nature. But nature is being lost at unprecedented rates, and with this loss, come serious economic impacts for society and business. Current rates of nature loss could cost the global economy $2.7 trillion annually by 2030. The world is also still on track for 2 to 3 degrees °C warming, rather than the maximum 1.5 °C of warming targeted in the Paris Agreement. Despite a range of welcome pledges and action, including at COP26, to tackle the intertwined crisis of pollution, nature loss and climate change, biodiversity decline continues at alarming rates and emissions of greenhouse gases (GHGs) continue to rise.

As an example, current agriculture practices are responsible for one third of current carbon emissions and 70% of loss of terrestrial biodiversity. At the same time, around $700 to 800B of environmentally harmful subsidies is heading in the wrong direction every year, financing the annihilation of wildlife and global heating through support for environmentally unsustainable practices including livestock management, overuse of pesticides, and soil deteriorating monocropping.

Urgent action is required to halt nature loss by 2030 and fully restore ecosystems by 2050. The world also needs to ensure GHG emissions reach net zero by 2050, peaking in 2025 and falling by about half by 2030, in order to limit warming to 1.5 degrees °C and avoid the worst impacts on people and ecosystems.

At the moment, banks, asset managers, insurers and others within the financial system are still investing in, lending to, insuring and supporting industries and sectors that cause huge economic losses and instability without penalty. There is no clear signal from financial and price stability stewards that this activity must urgently be phased down towards zero.
There are other precedents! Central banks took center stage when it came to saving our financial system and economy during the Financial Crisis 2007-2009. Since then, they have repeatedly acted under situations characterized by high uncertainty, moving swiftly, with incomplete information, using all available tools and instruments, and advocated for large interventions, rather than for small ones.

Given the magnitude of the climate, pollution and biodiversity risks that we face – many of which are already being realized in the form of increased floods, droughts, heatwaves, and fires - it makes sense to apply a similar approach. Central bankers and financial supervisors need to understand that we are already in the midst of an environmental poly-crisis that requires swift, large-scale and coordinated action. Conversely, failing to pursue active intervention in the face of environmental crisis is itself a policy choice that carries risks.

**CENTRAL BANKS AND FINANCIAL SUPERVISORS SHOULD ACT NOW AND USE EVERY AVAILABLE AVENUE TO REDUCE GREENHOUSE GAS EMISSIONS AND RECOVER BIODIVERSITY – AND STOP DISTINGUISHING BETWEEN RISKS AND IMPACTS, AS TODAY’S IMPACTS ARE TOMORROW’S RISKS.**

**A PATHWAY TO A CLIMATE SAFE AND NATURE POSITIVE GLOBAL ECONOMY**

**PHASE 0**
Plan, set, and publicly declare expectations to send the necessary signals to financial markets.

**PHASE 1**
-15% GHG emissions
Stabilize biodiversity and zero net loss

**PHASE 2**
-50% GHG emissions
More biodiversity than in 2020 (nature positive)

**PHASE 3**
Net zero CO2 emissions
Full recovery and restoration of biodiversity

*The GHG and Biodiversity related curves are linear for illustration purposes. These need to align with science based scenarios such as 1.5C aligned with no/low overshoot by 2050.

**The time intervals depicted here are focused on near term priorities. Nevertheless it is essential for financial actors to do regular continuous target setting in 5-yearly (ideally shorter) time intervals, and annual progress reporting against these targets.*

**ACTION IS WITHIN THE EXISTING MANDATES OF CENTRAL BANKS AND FINANCIAL SUPERVISORS**

There is overwhelming evidence accepted by governments globally that air, water, soil pollution and biodiversity loss will cause increasing financial losses and financial and economic instability.

These multiple environmental crises also have a huge negative impact on global supply chains and production, leading to major increases in inflation. Given that central banks and financial supervisors exist to provide financial and price stability, pre-emptive action to mitigate these risks is firmly within their mandate.

Though central banks and financial supervisors have recognised in recent years that they do have the mandate to take action on climate related financial risk, they are yet to make full use of their market shaping role to limit the negative environmental impacts generated by regulated actors, such as banks, insurance companies and asset managers. They have also so far failed to afford biodiversity and ecosystem loss the same significance as climate change, despite evidence that the two crises compound one another and require equally urgent action.
WHY DISCLOSURE IS NECESSARY BUT NOT SUFFICIENT

The steady increase in climate related financial disclosures in recent years has been a positive development, but whilst disclosure is a crucial first step, it is not sufficient to achieve change at the scale and speed required. The quality of disclosures can be poor and lack substance, and many financial institutions have yet to disclose: the European Central Bank found that only 15% of European banks publish data on the emissions they finance, despite the recommendations of the Task Force on Climate Related Financial Disclosures being in place since 2017. Nature-related financial disclosures are still a way off, with a framework yet to be agreed.

Practice shows that central banks and financial supervisors recognize that they must move beyond disclosure regimes, with the Bank for International Settlements calling less for improvements in risk modelling and more for decisive, immediate action and coordination. Furthermore, the time horizons of investors and financial institutions are also often far shorter than the timescale in which damage to the planet will cause significant financial losses and instability.

CENTRAL BANKS, FINANCIAL REGULATORS AND SUPERVISORS NEED TO LEAD BY EXAMPLE AND PROVIDE NECESSARY CLARITY AND GUIDANCE TO FINANCIAL ACTORS BY PUBLISHING THEIR OWN DETAILED TRANSITION PLANS, WITH CLEAR QUANTIFIABLE CLIMATE AND BIODIVERSITY GOALS.

JUST TRANSITION AND GEOPOLITICS

Governments, central banks and financial supervisors must work together to ensure that all of the above is delivered in a way that is consistent with a just transition. Thereby the urgent and necessary transition away from harmful activities does not disadvantage those on the lowest incomes. This would include taking into account issues relating to the current challenges posed by rising inflation and the cost of living, and the consequences for energy of Russia’s invasion in Ukraine.

REFERENCES

4. IPCC (2022). Climate Change 2022 – Mitigation of Climate Change
ALWAYS ENVIRONMENTALLY HARMFUL REFERENCE POINTS

This chart sets out the reference points for economic activities, businesses, and sectors that central banks and financial supervisors should consider as ‘Always Environmentally Harmful’, which can serve as a ‘dirty taxonomy’ for adapting monetary policy and financial regulation instruments. Central banks and financial supervisors need to choose their reference point (economic activity-, company-, or sub-sector-level) for adapting all their financial regulation and monetary policy instruments.

ALWAYS ENVIRONMENTALLY HARMFUL ECONOMIC ACTIVITIES

- Always significantly harmful economic activities based on the ‘extended taxonomy’ of the EU Platform on Sustainable Finance, and activities related to logging of primary or old growth forests, deep-sea bottom trawling, and exploiting and trading of endangered IUCN RED List species.
- Harmful economic activities that could be retrofitted to exit the harmful category, based on the ‘extended taxonomy’ of the EU Platform (e.g. truck, airplane and car manufacturers, steel and cement production, and building construction).
- Damaging activities that take place in certain geographical areas of high environmental importance. For example No-Go-Areas such as natural World Heritage Sites, Protected Areas as indicated in the Convention on Biological Diversity or Key Biodiversity Areas.

ALWAYS ENVIRONMENTALLY HARMFUL COMPANIES (BROAD)

- Companies that are expanding coal production.
- Companies that are expanding the oil and gas production.

ALWAYS ENVIRONMENTALLY HARMFUL COMPANIES (SPECIFIC)

- Constituent companies of the Carbon Underground 200 that identifies the top 100 coal and top 100 oil and gas publicly traded reserve holders globally.
- Companies that are expanding their environmentally harmful activities should systematically be considered as high environmental risk, independent of their exposure to harmful activities and their environmental targets and transitions plans.
- Thresholds for considering a company harmful, to identify those companies that are most exposed hence face the highest related financial risks (e.g. 30% of revenues from harmful activities until 2025, thermal coal max. 15% of revenue by 2025, or deforestation related activities need to be phased out by 2030).
- Exception: Harmful companies that can be exempted, based on their actions to reduce their exposure to harmful activities. The companies have set and published measurable, specific, time-bound, science-based target(s) for the environmental issues, publish five-year transition plans, and report annual progress.

HARMFUL ECONOMIC SUB SECTORS

- Oil & Gas Drilling (GICS Code: 10101010)
- Integrated Oil & Gas (GICS Code: 10102010)
- Oil & Gas Exploration & Production (GICS Code: 10102020)
- Oil & Gas Refining & Marketing (GICS Code: 10102030)
- Oil & Gas Storage & Transportation (GICS Code: 10102040)
- Coal & Consumable Fuels (GICS Code: 10102050)
- Fertilizers & Agricultural Chemicals (GICS Code: 15101030)
- Gas Utilities (GICS Code: 55102010)
- Electric Utilities (GICS Code: 55101010)
- Multi-Utilities (GICS Code: 55103010) in so far as it relates to electric and/or gas utilities (not water utilities)
- Independent Power Producers & Energy Traders (GICS Code: 55105010)
- Steel (GICS 15104050) in so far as it relates to metallurgical (coking) coal mining used for steel production (not steel production itself)
COSIGNING RESEARCHERS:
Kate Raworth (Author of Doughnut Economics/affiliation Environmental Change Institute, University of Oxford), Steve Keen (Honorary Professor, UCL & ISRS Distinguished Research Fellow), Mogens Lykketoft (Former Danish Finance Minister, Foreign Minister and Speaker of Parliament; President of the United Nations General Assembly 2015-2016), Jesper Jespersen (Professor, dr. scient adm. Roskilde Universitetet), Jakob Vestergaard (Associate Professor, Roskilde University), Louison Cahen-Fourout (Assistant professor in Economics, Roskilde University), Dirk Schoenmaker (Professor of Banking & Finance, Erasmus University Rotterdam, and Chair of CEPR Research and Policy Network on Sustainable Finance), Rick van der Ploeg (Professor of Economics University of Oxford), Rens van Tilburg (Director Sustainable Finance Lab at Utrecht University), Seraina Grünewald (Professor of European and Comparative Financial Law at the Faculty of Law, Radboud University), Jens van ’t Klooster (Assistant Professor University of Amsterdam), Dirk Bezemer (Professor of Economics of International Financial Development, University of Groningen), Jasper Blom (Research Fellow, Sheffield Political Economy Research Institute, University of Sheffield), Geoff Mann (Professor (Director Centre for Global Political Economy Simon Fraser University), Gregor Semieniuk (Assistant Research Professor Department of Economics at UMass Amherst), Josh Ryan-Collins (Associate Professor in Economics and Finance, UCL Institute for Innovation and Public Purpose), Katie Kedward (Policy Fellow Institute for Innovation and Public Purpose University College London), Yanis Dafermos (Senior Lecturer in Economics, SOAS University of London), Maria Nikolaidi (Associate Professor in Economics, University of Greenwich), Andrew Denis (PhD Fellow Emeritus Department of Economics City, University of London), Christine Cooper (Professor, Director of Research, Edinburgh University Business School), Gerhard Kling (Chair in Finance, University of Aberdeen), Andy Agathangelou (Founder, Transparency Task Force), John Barry (Professor of Green Political Economy, Queen’s University Belfast), Laurence Scialom (Professor of Economics, Paris X Nanterre), Marc Chesney (Professor University de Zurich), Sergio Rossi (Full Professor of Economics University of Fribourg, Switzerland), Philippe Thalmann (Professor of environmental economics, Ecole Polytechnique Fédérale de Lausanne EPFL), Steven Ongena (Professor, University of Zürich, Swiss Finance Institute, KU Leuven, NTNU Business School and CEPR), Marco Moretti (Senior Researcher at Swiss Federal Research Institute WSL), Stefan Brunnhuber (Trustee World Academy of arts and science (WAAS)), Joscha Wullweber (Professor of Politics/ Political Economy, Transformation and Sustainability, University of Witten/Herdecke), Dirk Ehnts (Torrens University Australia), Neil Lancaster (Senior Lecturer, De Montfort University), Simon Szreter (Professor of History and Public Policy Fellow, University of Cambridge), Sue Konzelmann (Professor of Economics, University of London), Emanuele Citera (Assistant Professor, St. Lawrence University), Jonathan Perraton (Senior Lecturer in Economics, University of Sheffield), Joerg Bibow (Professor and chair of Economics, Skidmore College), Engelbert Stockhammer (Professor of International Political Economy, Kings College London), Daniele Tori (Lecturer in Finance, The Open University), Muhammad Ali Nasir (Associate Professor in Economics, University of Leeds), Gračjan Bachurewicz (Gdansk University of Technology), Andreas Maschke (University of Leeds), Faruk Ulgen (Professor, University Grenoble Alpes), Roy Culpeper (Chair, Group of 78, Ottawa), Adam Barrett (University of Sussex), Frank van Gansbeke (Middlebury College).

COSIGNING ORGANIZATIONS:

MORE DETAILS: SEE THE ROADMAP AND TECHNICAL BACKGROUND REPORT FROM WWF