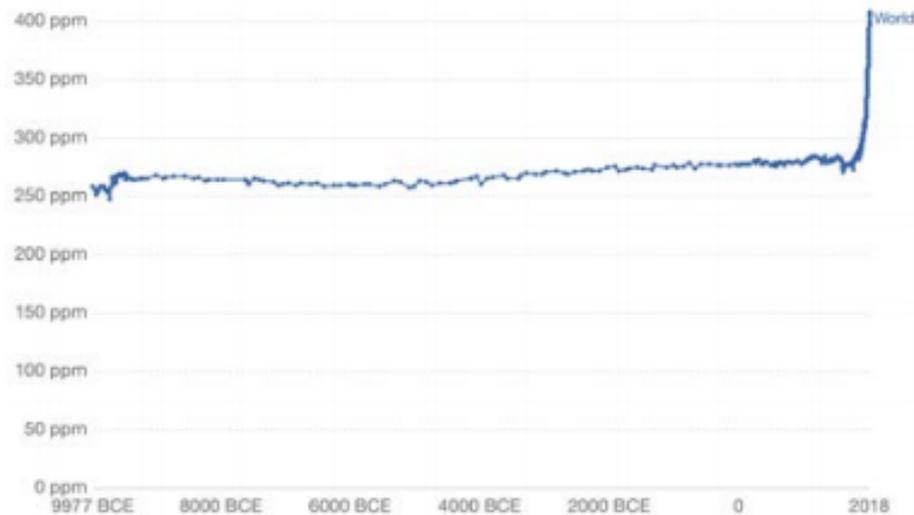




**CLIMATE-RELATED RISKS:  
WHY CENTRAL BANKS ACT?**

# CLIMATE CHANGE: A GLOBAL THREAT

## Evolution of atmospheric CO<sub>2</sub> concentration



### Annual total CO<sub>2</sub> emissions by world region since 1751 (right-hand panel).

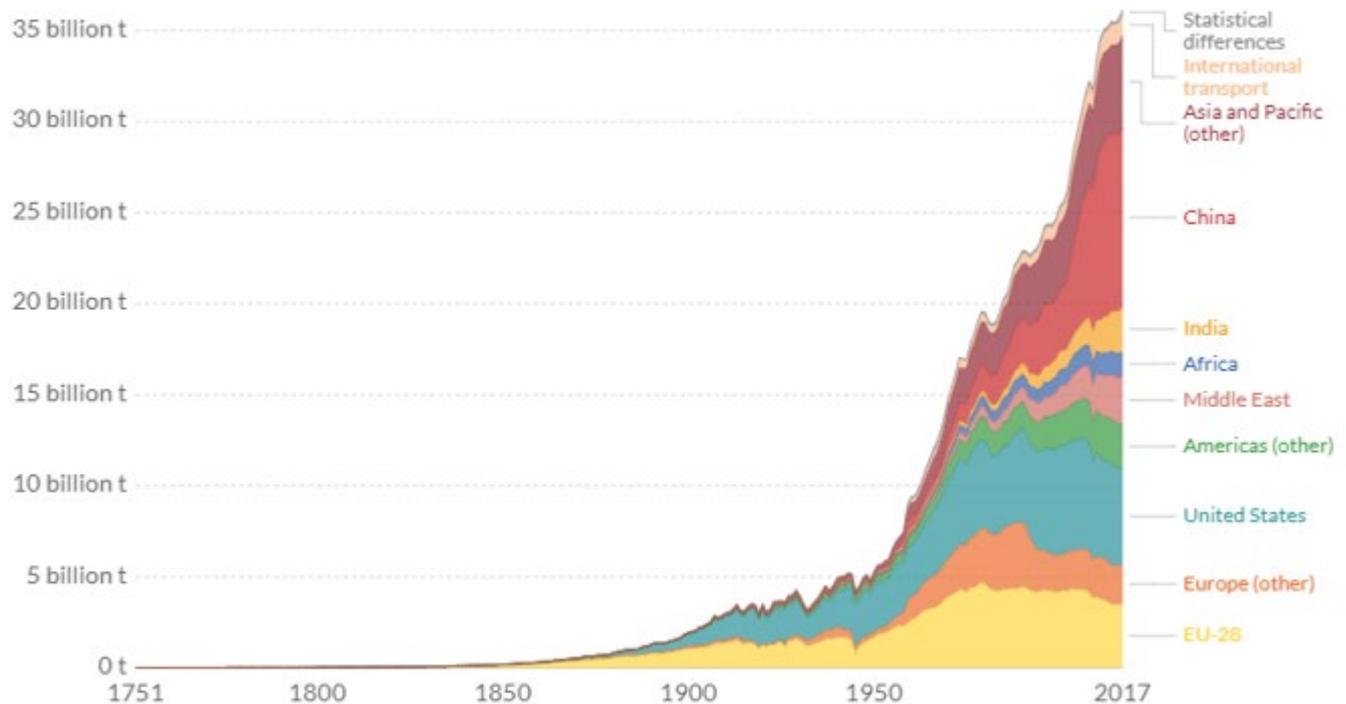
Sources: Bereiter et al. (2015), NOAA, [www.esrl.noaa.gov/gmd/ccgg/trends/data.html](http://www.esrl.noaa.gov/gmd/ccgg/trends/data.html);

Source: The green swan - Central banking and financial stability in the age of climate change (BIS, BDF - January 2020)

# CLIMATE CHANGE: A GLOBAL THREAT

2017	
Statistical differences	256.68 million t
International transport	1.16 billion t
Asia and Pacific (other)	5.07 billion t
China	9.84 billion t
India	2.47 billion t
Africa	1.33 billion t
Middle East	2.67 billion t
Americas (other)	2.40 billion t
United States	5.27 billion t
Europe (other)	2.15 billion t
EU-28	3.54 billion t
<b>Total</b>	<b>36.15 billion t</b>

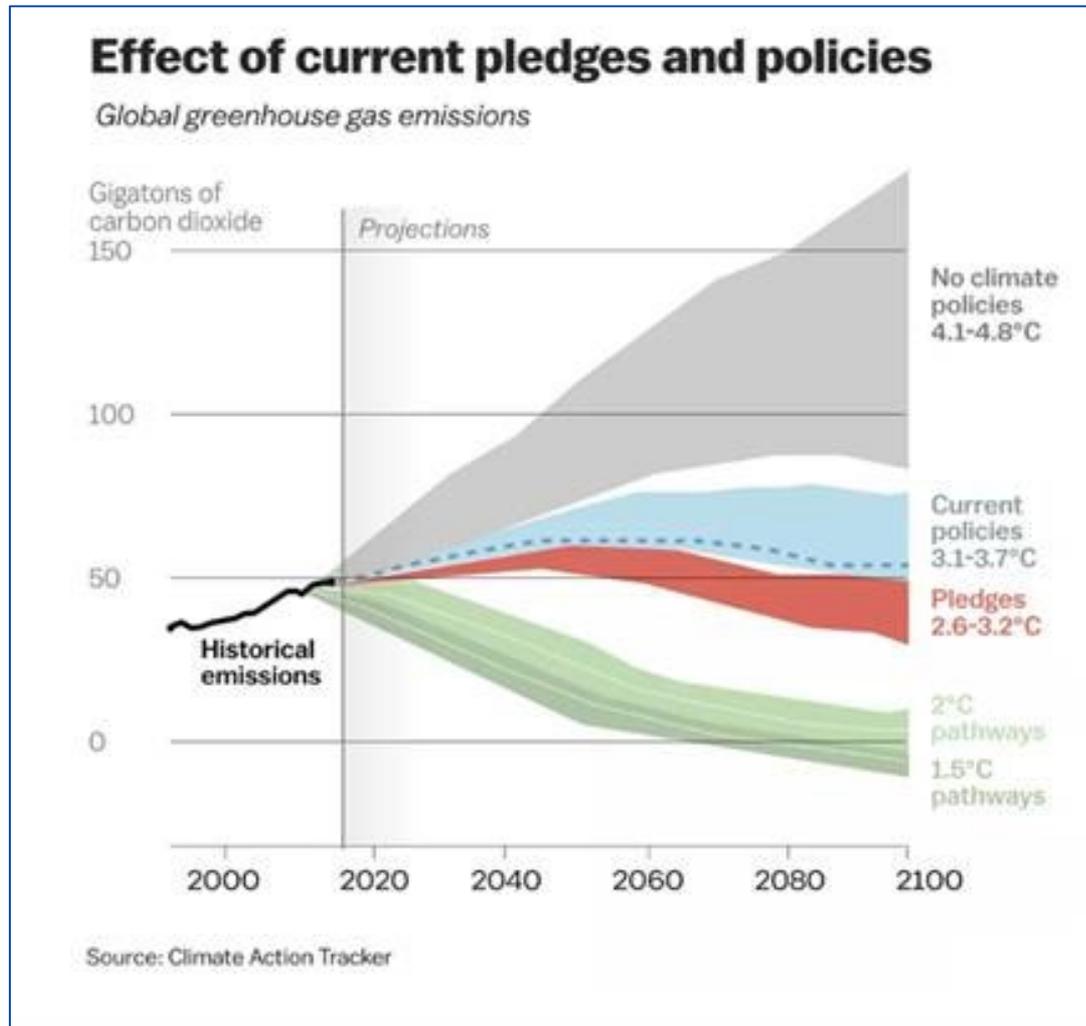
Annual total CO<sub>2</sub> emissions, by world region



Source: Carbon Dioxide Information Analysis Center (CDIAC); Global Carbon Project (GCP)  
 Note: The difference between the global estimate and the sum of national totals is labeled "Statistical differences".

Source: The green swan - Central banking and financial stability in the age of climate change (BIS, BDF - January 2020)

# CLIMATE CHANGE: A GLOBAL THREAT





## CLIMATE-RELATED RISKS ARE A SOURCE OF FINANCIAL RISK

- **Policy-makers** are the ones in charge to take proper policy actions.
- **Central Banks** have to take their responsibilities within the framework of their mandates.



## CLIMATE-RELATED RISKS ARE A SOURCE OF FINANCIAL RISK

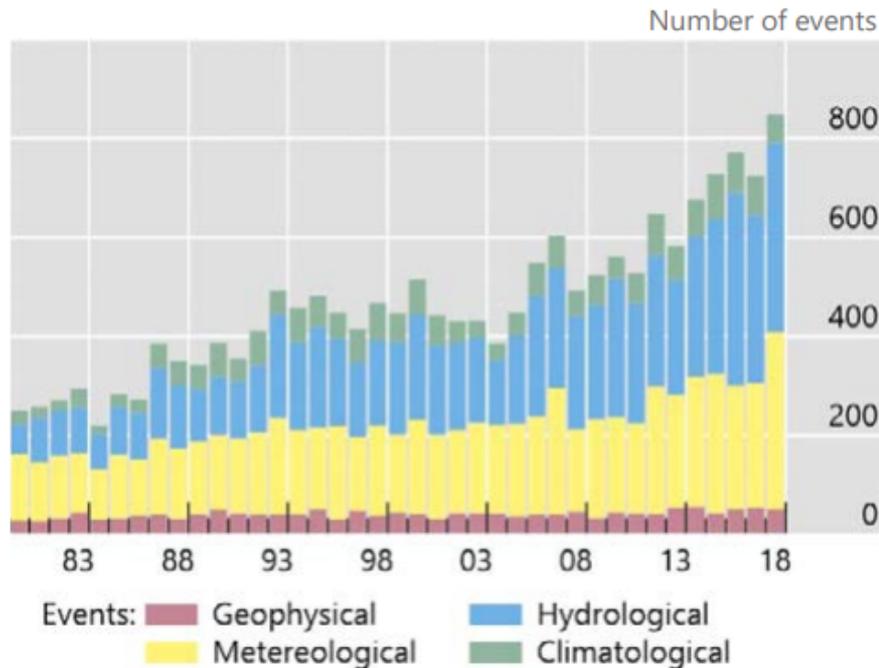
- Climate change source of structural change in the economy/financial system with a number of specificities.
- **Climate-related risks are a source of financial risk** (both physical and transition risks).
- It is therefore within the mandates of Central Banks and supervisors to ensure the financial system is resilient to these risks.



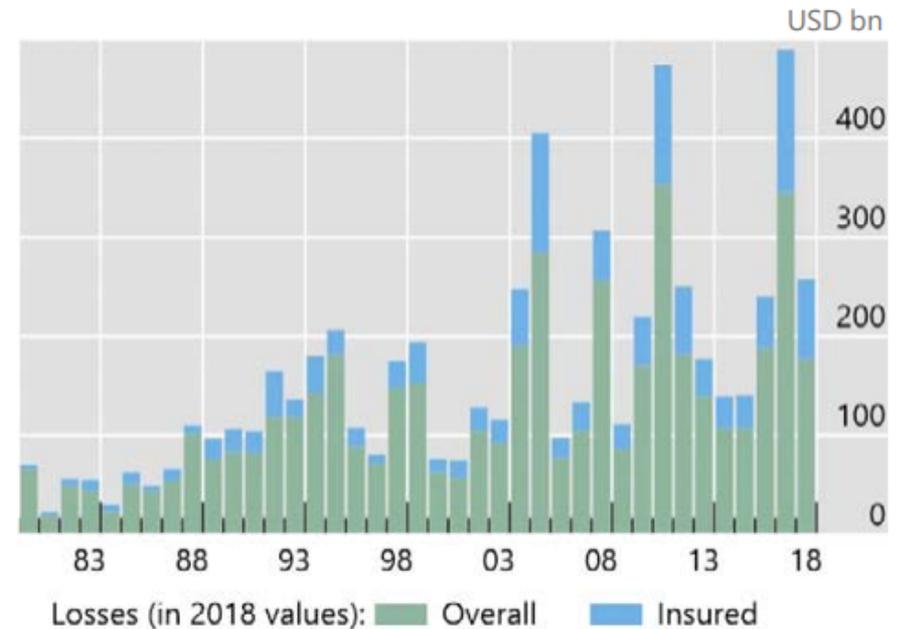
# PHYSICAL RISKS IMPACTS: INCREASED NUMBER OF EXTREME WEATHER EVENTS AND RELATED COSTS

*Increase in the number of extreme weather events and their insurance, 1980–2018*

Number of relevant natural loss events



Overall and insured losses



Includes copyrighted material of Munich Re and its licensors.  
Source: MunichRe (2018).

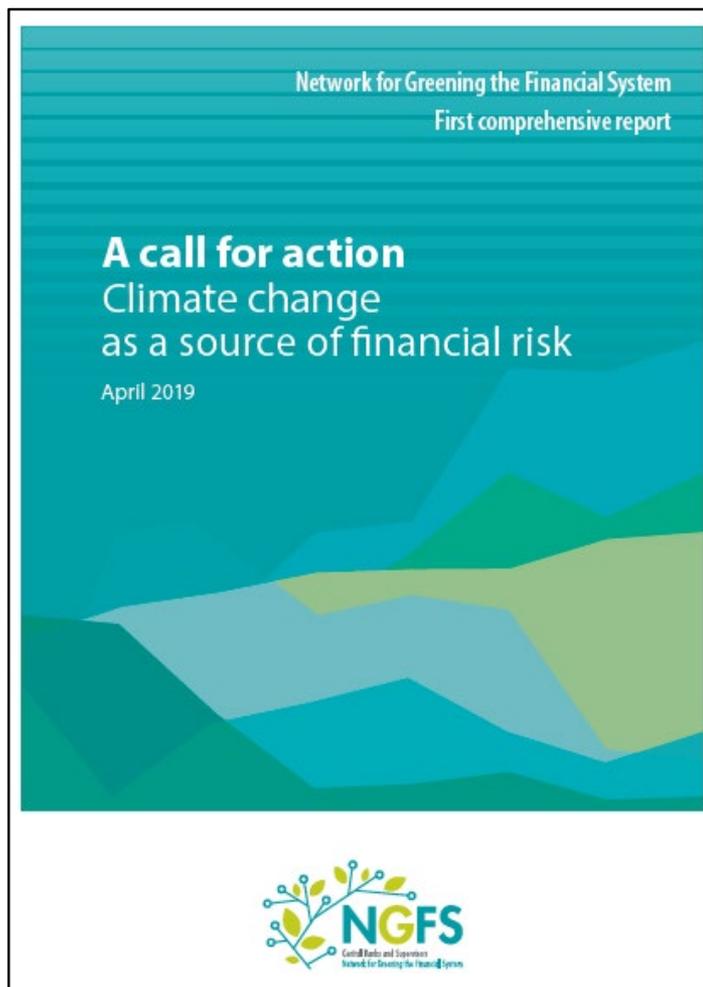
# THE NETWORK FOR GREENING THE FINANCIAL SYSTEM



- Paris Dec. 2017 One Planet Summit: **8 Central banks and Supervisors established the NGFS.**
- Today: **59 members** (including Bundesbank and Bafin) and **12 observers.**
- **Coalition of the willing.**
- NGFS members' jurisdictions cover:
  - Supervision of over **3/4** of the global systemically important banks and **2/3** of the global systemically important insurers;
  - Over **53%** of global greenhouse gas emissions.



# FIRST NGFS COMPREHENSIVE REPORT (APRIL 2019)



	Integrating climate-related risks into financial stability monitoring and micro-supervision
	Integrating sustainability factors into own-portfolio management
	Bridging the data gaps
	Building awareness
	Achieving robust and internationally consistent climate – and environment – related disclosure
	Supporting the development of a taxonomy of economic activities

- Among the deliverables to be published in 2020, we can mention:
  - **reference scenarios and guidelines** on how to use them for stress testing exercises;
  - **a guide for supervisors on how to integrate climate-related risks into their work.**

# HOW THE BANQUE DE FRANCE/ACPR WALKS THE TALK

- In April 2019, the ACPR published two surveys on French financial institutions (banks and insurers) facing climate change related risk.
- By end 2020, the Banque de France/ACPR will conduct a first climatic “pilot exercise”:
  - Banks and insurers will take part on a voluntary basis;
  - Scenario aligned with the work of the NGFS;

- The Banque de France has chosen three pillars and five objectives to operationalize its Responsible Investment Charter (2018).
- The Charter is applicable to portfolios backed to own funds and to the pension liability, that represent around €20 billion.

- Two strong beliefs for a broader integration of climate change within monetary policy:
  - Integrate climate change in all our economic and forecasting models;
  - Do an overhaul of our collateral assessment framework to reflect climate-related risk (instead of opening a somewhat emotional debate on the merits of a green quantitative easing).



# TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

- The TCFD (market-driven and voluntary based) structured its recommendations around four thematic areas:
  - 1) Governance
  - 2) Strategy
  - 3) Risk management
  - 4) Metrics and targets
- As of December 2019, support for the TCFD has grown to over 930 organizations, representing a market capitalization of over **US\$ 11 trillion**.

## OTHER MARKET DRIVEN INITIATIVES

- **CLIMATE ACTION 100+** → 450 investors with more than **USD \$40 trillion in assets under management** have signed on to this call for the world's largest corporate GHG emitters to take necessary action on climate change. BlackRock joined the initiative in January 2020.
- **NET ZERO ASSET OWNER ALLIANCE** → 18 institutional investors (**US\$ 4 trillion in assets under management**) who committed to transition their investment portfolios to net-zero GHG emissions by 2050.