OLLI Study Group 395
Climate Policies: what works, what doesn't.
Miria Pigato

Class # 5: Climate Change, Monetary Policy and ESG Investing

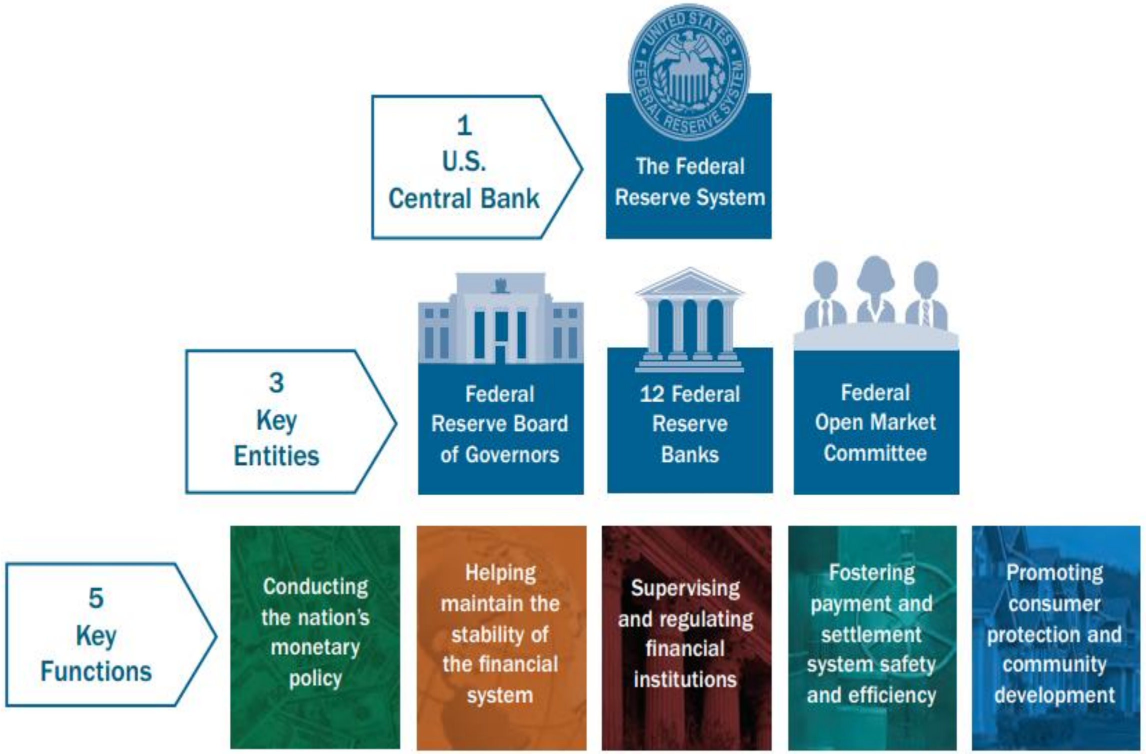
https://media.istockphoto.com/vectors/heavy-task-and-problems-business-man-pushing-heavy-rock-up-hill-with-vector-id1227002229?k=20&m=1227002229&s=612x612&w=0&h=_xJHElpoZEPYIrMbkFMRicU7iPj2dl2fuV3hCWPhgNw=

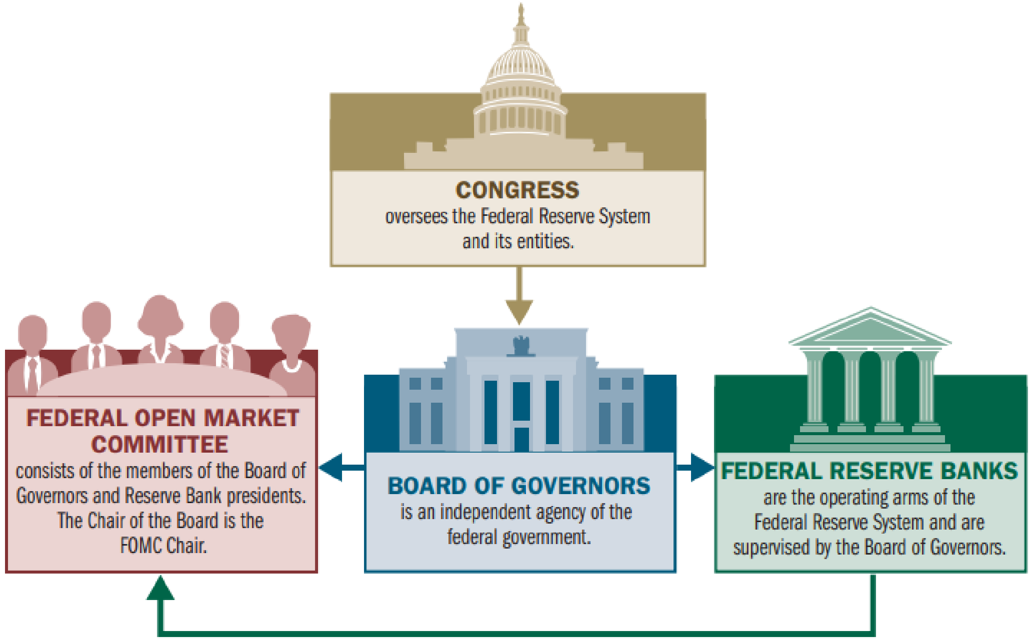
Outline

- The Federal reserve system
  - How the Federal Reserve conducts monetary policy
- Climate change and monetary policy
  - Mark Carney’s tragedy of the horizon
- Should central banks assume responsibility to fight climate change?
  - Climate Change and the Fed
- Climate Finance
- Integrating Environmental, Social and Governance factors into Investing
  - Green Washing
  - Embracing sustainability: the examples of Blackrock and Engine No. 1

The Federal Reserve System

The Federal Reserve System is unique among central banks. It performs five functions in the public interest.

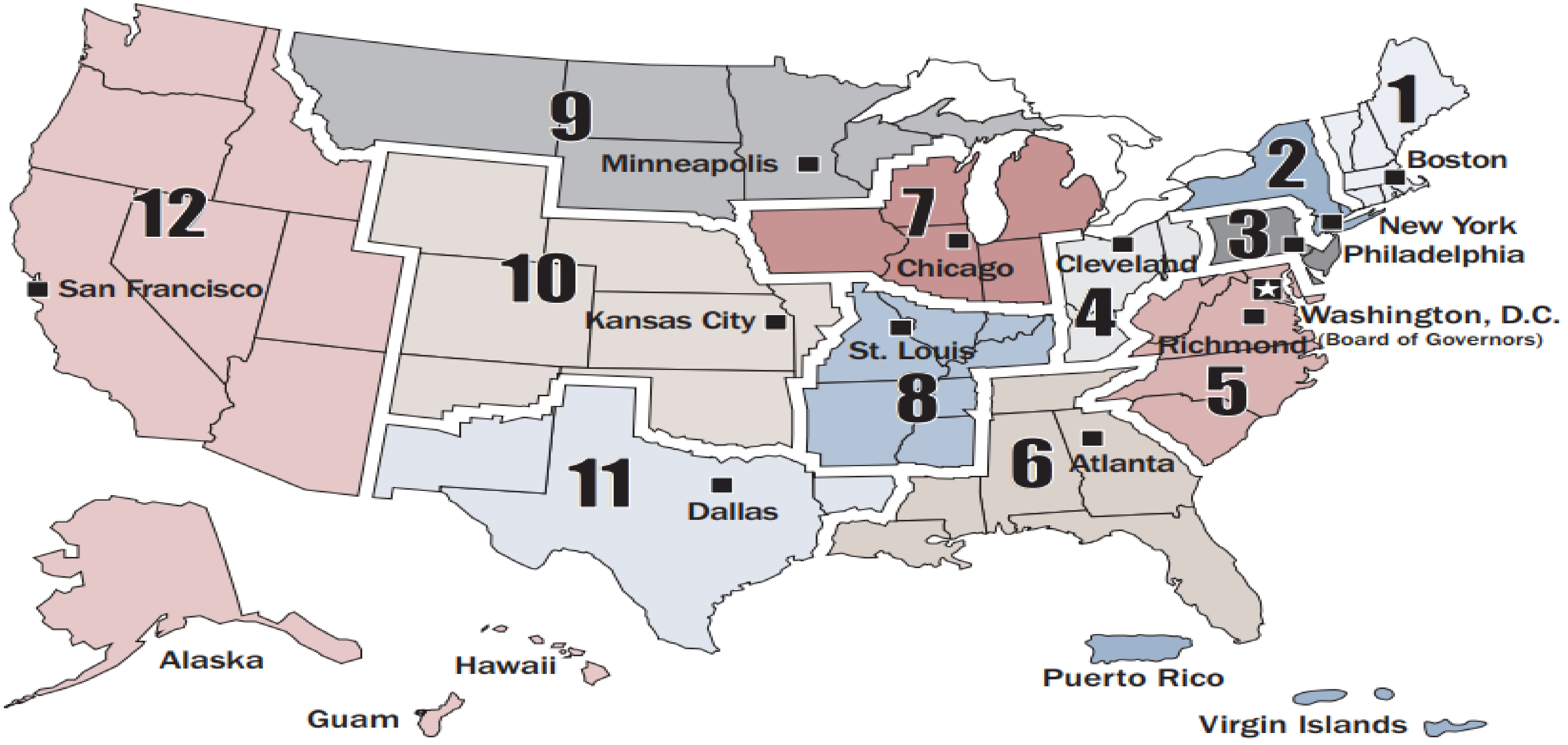




Three key entities, serving the public interest

https://www.federalreserve.gov/aboutthefed/files/the-fed-explained.pdf

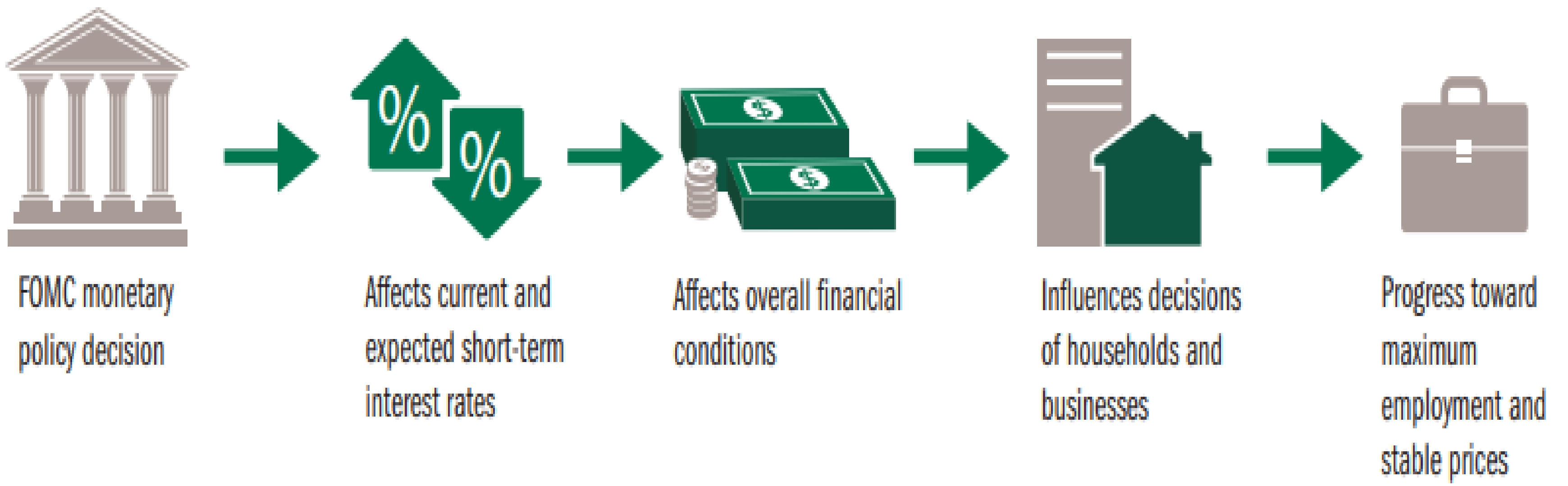
12 Federal Reserve banks operate independently but under the supervision of the Federal Reserve Board of Governors.



https://www.federalreserve.gov/aboutthefed/files/the-fed-explained.pdf

How the Federal Reserve conducts monetary policy

The Federal Reserve conducts monetary policy in pursuit of the goals set for it by Congress. The mandated goals are considered essential to a well-functioning economy for households and businesses.



By law, the the Fed must pursue the economic goals of price stability and maximum employment.

https://www.federalreserve.gov/aboutthefed/files/the-fed-explained.pdf

Re-defining the long-term goals of monetary policy

In August 2020 the Fed made some changes on its long-term goals of monetary policy.

1) It defined the maximum level of employment as a broad-based and inclusive goal: the Fed would *respond to shortfalls of employment* from its maximum *level* rather than the previous *deviations from its maximum level*.

- This reflects the intention to keep interest rates lower as a way to boost employment in poor communities - including communities of color - where people are more likely to be unemployed.

2) **The Fed will focus on keeping an inflation rate of 2% on average over time.** To do so, the FOMC will aim for inflation to run moderately higher than the 2% target for some time to make up for past misses of inflation to the low side of the target**.**

https://static.ffx.io/images/$width_620%2C$height_414/t_crop_fill/q_86%2Cf_auto/ffc8a87d250b44af62df19b520c408dbe69bd038

Climate Change and monetary policy

MARK CARNEY

You need to bring the future to the present in order to take actions today. That's how to solve the tragedy of the horizon.

Mark Carney: Governor, Bank of Canada, 2008-2013.
Governor, Bank of England, 2013-2020
UN Special Envoy on Climate Action and Finance

The tragedy of the Horizons speech (2015)

Climate change is the tragedy of the horizon.

- The tragedy is that the horizon of the normal business cycle is measured in just a few years. The political cycle is just three-four yearlong. Regulators, central banks, often look out two or three years.
- All of those horizons are **shorter** than the horizon over which the impacts of climate change will manifest. **By the time those physical impacts manifest, it's too late to address it.** Once climate change becomes a defining issue for financial stability, it may already be too late.

What is needed:

- Better information about the carbon intensity of investments to allow investors to assess risks
- Governments providing guidance on possible carbon price policies.
- Annual stress tests of bank balance sheets

https://www.greenbiz.com/article/mark-carney-how-we-get-finance-act-climate#:~:text=The%20%22tragedy%20of%20the%20horizon%22%20is%20that%20the%20horizon%20of,out%20two%20or%20three%20years.

Climate Change and Financial Stability

There are three broad channels through which climate change can affect **financial stability**:

- **First, physical risks**: these risks arise from floods and storms that damage property or disrupt trade and impact the value of real estate, mortgages and insurance liabilities.
- **Second, liability risks**: the impacts that arise from parties who have suffered damages seek compensation from those they hold responsible. Such claims have the potential to hit emitters – and, if they have liability cover, their insurers.
- **Finally, transition risks**: these could arise from the policies and the process of adjustment towards a lower-carbon economy. Policies taken too late could prompt a reassessment of the value of a large range of assets.

Transmission channels in real estate and insurance

	Climate Risks	Economic Risks	Financial Risks	Financial Stability Risks
Real Estate	Rising sea levels, frequency of storm surges	Increased inundation of coastal parcels	Decreased value of coastal real estate	Abrupt repricing of mortgage lending markets
Insurance	More frequent and severe hurricanes, wildfires, etc.	Greater disruption to local economic activity	Pressure for higher rates, lower supply of insurance and reinsurance	Greater uninsured losses, spillover effects

https://www.federalreserve.gov/econres/notes/feds-notes/climate-change-and-financial-stability-20210319.html

Should central banks assume responsibility to fight climate change?

Questions:

- To what extent climate risks affect the context within which central banks are pursuing their mandates?
- Is fighting climate change consistent with central banks' current mandates, especially price stability?
- Are central banks' current tools and frameworks adequate to fight climate initiatives?

Central Banks mandates

- **US : Price stability and maximum employment.**
- The **European Central Bank's** mandate is to maintain **price stability +** to support the general economic policies in the Union [and] the sustainable development of Europe based on balanced economic growth and …and a high level of protection and improvement of the quality of the environment."
- The **Bank of England's** legal framework defines **price stability** as the central bank's primary objective and adds support for national economic policies as a secondary objective.
- The laws governing the **Bank of Japan, the People's Bank of China, and the Swiss National Bank** directly conflate price stability with economic development, describing the former as a means to achieve the latter.

Source: Adapted from Honohan (2019).

Central Banks use different instruments to tackle climate change

- **China, India, Pakistan, Bangladesh, Vietnam, and Indonesia** have adopted prudential instruments designed to shift the allocation of credit from high- to low-carbon sectors.
- The central bank of **Brazil** requires commercial banks to stress test their lending against environmental and social risk criteria and hold additional capital against these risks.
- The Bank of **Lebanon** has reduced obligatory reserve requirements on loans for low-carbon projects.
- In 2016, **Bangladesh** Bank introduced a 5 percent minimum credit quota for low-carbon sectors.
- The Reserve Bank of **India** requires that 40 percent of commercial bank lending flow to priority sectors, a category that includes a range of renewable energy projects.

Climate change and the Fed

In 2020, the Fed joined other central banks in acknowledging that climate change poses a threat to the financial system. In 2021 it joined the Network of Central Bank and Supervisors for Greening the Financial System.

Governor Powell declared:

"Our role on climate change is a limited one but it is an important one, and it is to assure that the banking institutions that we regulate understand their risks and can manage them."

- The Fed's Board of Governors has created two new entities:
    - the Financial Stability Climate Committee, to focus on the broader financial system, and the
    - Supervision Climate Committee, to focus on individual institutions.

Central banks and financial regulators are encouraged to use macro and micro prudential regulations to limit systemic risks and preserve financial stability.

In June 2022, The Basel Committee* on Banking Supervision issued the principles for the effective management and supervision of climate-related financial risks.

These are 18 principles covering corporate governance, internal controls, risk assessment, management and reporting. The principles seek to improve practices and provide a common baseline for banks and supervisors, while retaining sufficient flexibility.

Source: https://www.bis.org/bcbs/publ/d532.pdf

Central Banks in developing countries are more advanced in tackling climate change.

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Climate Finance

What is Climate Finance ?

- Climate Finance refers to public (governments) and private financing of projects focusing specifically on climate change **mitigation** and **adaptation** in developing countries**.** Climate finance aims to:
  - **reduce emissions** and **enhancing sinks** of greenhouse gases, and/or,
  - **reduce the vulnerability** and **increasing the resilience** of human and ecological systems to negative climate impacts.

Who is involved in Climate Finance?

International Climate Funds

Governments can contribute money through funds including the Green Climate Fund, Adaptation Fund; Global Environment Facility; Climate Investment Funds.

Governments

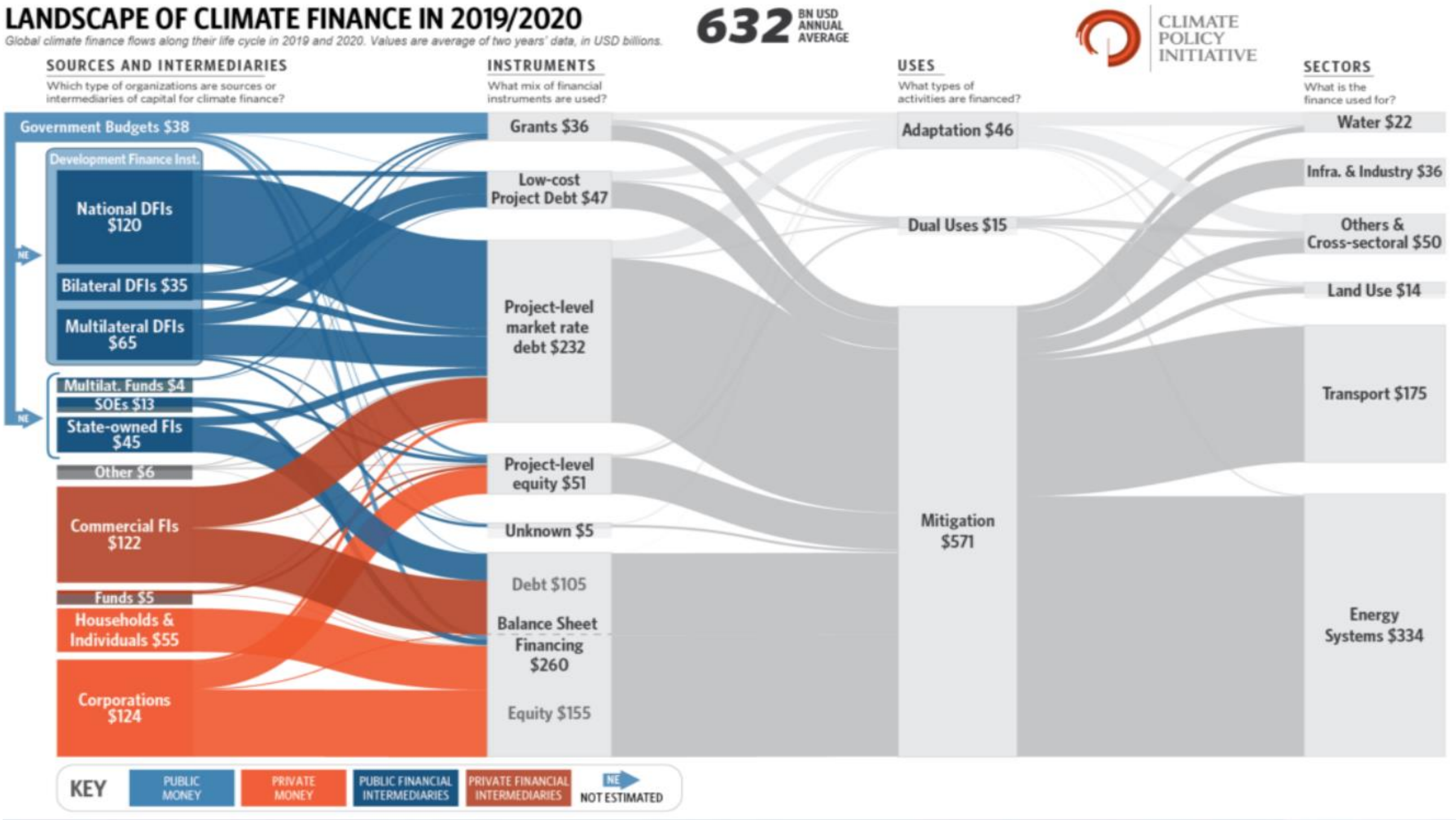
Governments provide public money for climate finance. Wealthy countries agreed to collectively provide $100 billion a year in climate finance, however this target has not been met.

Development Finance Institutions

Multilateral Development Banks (international financial institutions consisting of members from multiple nations); Bilateral Aid agencies; Export Credit Agencies; National Development Banks.

Private Sector

The Private Financial sector includes: Commercial Financial Institutions, Private Equity, Venture Capital, Infrastructure Funds; Corporates, Households, Corporate Institutional Investors – insurance companies, pension funds & endowments.



LANDSCAPE OF CLIMATE FINANCE IN 2019/2020
Global climate finance flows along their life cycle in 2019 and 2020. Values are average of two years' data, in USD billions.
632 BN USD ANNUAL AVERAGE
CLIMATE POLICY INITIATIVE
SOURCES AND INTERMEDIARIES
Which type of organizations are sources or intermediaries of capital for climate finance?
INSTRUMENTS
What mix of financial instruments are used?
USES
What types of activities are financed?
SECTORS
What is the finance used for?
Government Budgets $38
Development Finance Inst.
National DFIs $120
Bilateral DFIs $35
Multilateral DFIs $65
Multilat. Funds $4
SOEs $13
State-owned FIs $45
Other $6
Commercial FIs $122
Funds $5
Households & Individuals $55
Corporations $124
NE
Grants $36
Low-cost Project Debt $47
Project-level market rate debt $232
Project-level equity $51
Unknown $5
Debt $105
Balance Sheet Financing $260
Equity $155
Adaptation $46
Dual Uses $15
Mitigation $571
Water $22
Infra. & Industry $36
Others & Cross-sectoral $50
Land Use $14
Transport $175
Energy Systems $334
KEY
PUBLIC MONEY
PRIVATE MONEY
PUBLIC FINANCIAL INTERMEDIARIES
PRIVATE FINANCIAL INTERMEDIARIES
NE NOT ESTIMATED

Key findings

- **Total climate finance has reached USD 632 billion in 2019/2020**, but flows have slowed in the last few years. An increase of at least 590% in annual climate finance is required to meet internationally agreed climate objectives by 2030.
- **The public sector accounted for 51%** (USD 321 billion) of 2019/2020 tracked climate finance, mostly provided by Development Finance Institutions.
- **The majority of climate finance — 61%** (USD 384 billion) — was raised as debt, of which 12% (USD 47 billion) was low-cost or concessional debt.
- **More than 75% of 2019/2020 tracked climate investments flowed domestically**. Three-quarters of global climate investments were concentrated in East Asia & Pacific, Western Europe, and North America, while the remaining regions received less than a quarter.

Source: https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2021/

Integrating Environmental, Social and Governance factors into Investing

https://m.foolcdn.com/media/dubs/images/ESG_Investing.width-880.png

What is ESG Investing?

ESG investing can be defined as 'integrating Environmental, Social and Governance factors of companies into the fundamental investment process. Sustainable funds differ from conventional funds because they have a sustainability objective while also seeking financial returns.

Environmental

- Awareness/reduction of emissions of greenhouse gases and impact on local pollution.
- Energy efficiency, waste recycling
- Clean technologies, biodiversity program etc.

Social

- Pay and work conditions of employees
- Access to healthcare
- Workplace health and safety; diversity; employment rights, child labour and slavery
- Diversity, and a shared sense of purpose can make workers more productive and communities more engaged

Governance

- Bribery and corruption
- Independent directors
- Ethics in business
- Transparent disclosure of ESG criteria
- Whistle-blowing policies
- Governance of the tension between shareholders financial interest and managerial self-interest.

Are US investors interested in ESG?

Are you interested in 'sustainable investment'?

	Very/Somewhat interested	Not too interested	Not interested at all
	%	%	%
Total	42	30	28
Gender			
Male	42	28	30
Female	42	31	27
Age			
18 to 49	58	23	20
50 to 64	33	35	31
65 and older	32	33	36
Household income			
$90,000+	44	30	25
Less than $90,000	39	30	31
Investments			
$100,000+	42	30	29
Less than $100,000	43	28	29
Party ID			
Democrats	62	20	18
Independents	45	34	21
Republicans	15	37	48

Based on U.S. investors, aged 18 and older, with $10,000 or more in stocks, bonds or mutual funds

GALLUP PANEL, JUNE 22-29, 2021

Multiple investment strategies

Rising interest in ESG is the result of changing investor preferences.

2019: 70% of the millennial are interested in sustainable investing compared to only 49% of the general population.

To achieve sustainability objectives, funds tend to rely on multiple investing strategies

- Negative screening: not investing in certain firms or sectors
- Positive screening: selecting firms that satisfy specific sustainability criteria
- Impact investing: aiming to make a measurable sustainability impact alongside a financial return.

Materiality of ESG

ESG materiality refers to whether or not some information is relevant to a company's ESG reporting. Indicators are needed. Example of environmental indicators:

- **Scope 1** covers **the direct emission:** how much carbon the company emits from producing goods and services.
- **Scope 2** extends beyond to cover **indirect emissions** when the company is using electricity and other purchased forms of energy.
- **Scope 3** are the indirect impacts associated with upstream suppliers and downstream users of the product.

Different materiality approaches can shape the choice of key metrics used by the providers and make it difficult to measure/compare ESG performance.

- Most ESG rates rely heavily on the corporate disclosures
- ESG ratings typically relay on easily visible, measurable indicators of social performance, that do not indicate an organization's true commitment to broad social goal.

Evaluation of Tesla by MSCI and FTSE

Tesla's ESG performance was evaluated by two firms, the Morgan Stanley Capital International (MSCI) and the Financial Times Stock Exchange Group (FTSE).

- MSCI uses a rules-based methodology to identify industry leaders and laggards according to their exposure to ESG risks and how well they manage those risks relative to peers.
- FTSE Ratings are calculated using an Exposure-weighted average, meaning that the most material ESG issues are given the most weight when determining a company's scores.

MSCI rated Tesla as one of the top global car manufacturers when it comes to ESG, while FTSE rated it last.

- ➢ MSCI gave Tesla a near-perfect score for environment, due to its emphasis on the low carbon cars produced and its clean technology.
- ➢ FTSE gave it a 'zero' on environment as it only rates the emissions from its factories.

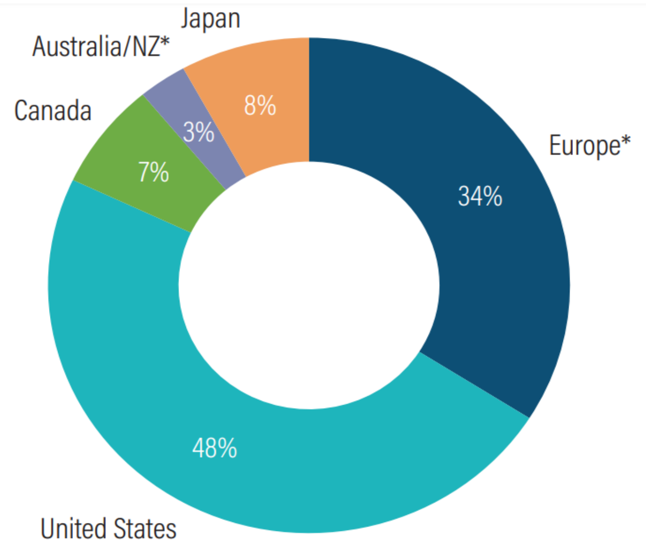
Source: https://www.irishtimes.com/business/personal-finance/are-you-sure-you-re-investing-ethically-1.4104613

What is the value of ESG investment?

Global assets under management, 2016-2020 (USD billions)

REGIONS	2016	2018	2020
Total AUM of regions	81,948	91,828	98,416
Total sustainable investments only AUM	22,872	30,683	35,301
% Sustainable investments	27.9%	33.4%	35.9%
Increase of % sustainable investments (compared to prior period)		5.5%	2.5%

Proportion of global sustainable investing assets by region 2020

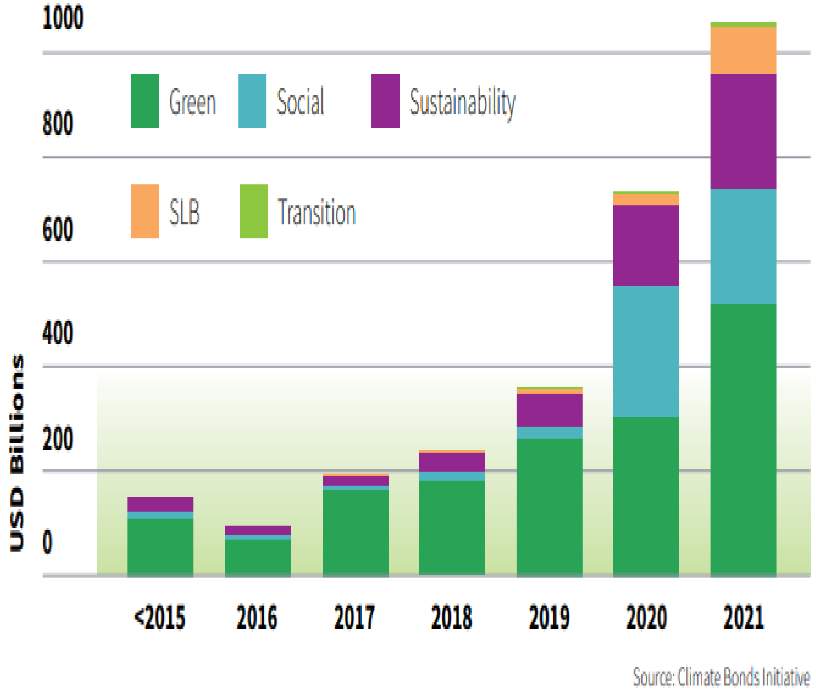


* Europe and Australasia have enacted significant changes in the way sustainable investment is defined in these regions, so direct comparisons between regions and with previous versions of this report are not easily made.

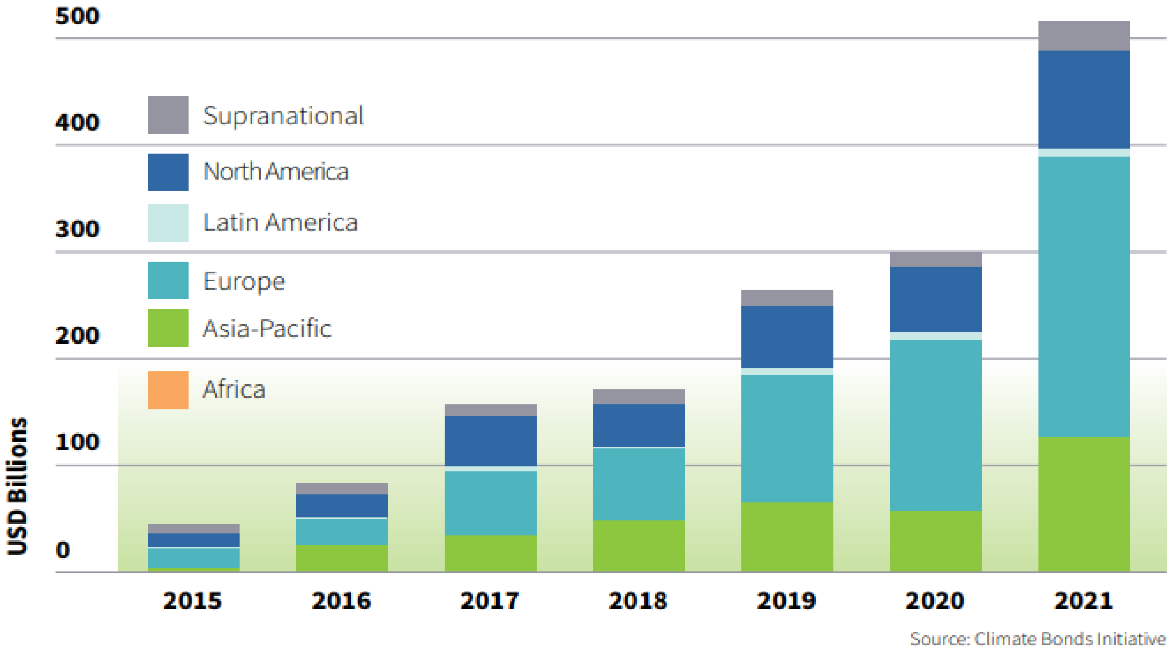
Source : The *Global Sustainable Investment Review*

Record growth of green and sustainable bond instruments

Green, Social, Sustainability, Sustainability-linked and Transition bonds surpassed USD1tn in 2021

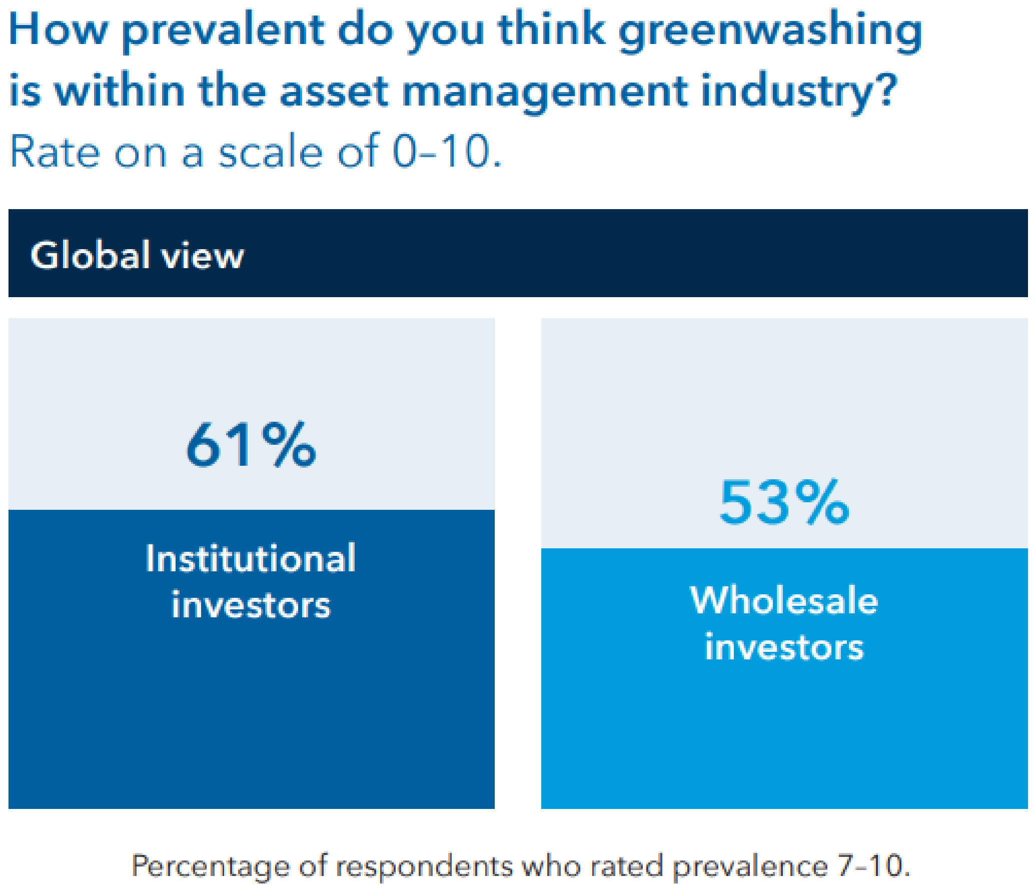


Half of the green bond volume in 2021 originated from Europe



Greenwashing is a major obstacle to ESG investment

- **Greenwashing** is the process of conveying a false impression or providing misleading information about how a company's products are more environmentally sound.
- **Greenwashing involves renaming, rebranding, or repackaging products** in order to convey the idea that they're more natural, wholesome, or free of chemicals than competing brands.



Examples of greenwashing

2022. Innocent drinks (owned by Coca-Cola) released TV cartoon ads – featuring cute animals singing songs about recycling and fixing the planet.

- Type of greenwashing: insincere TV adverts

2015. Volkswagen claimed positive environmental performance. This derived from the installation of "defeat devices" designed to cheat emissions tests in 11 million vehicles

- Type of greenwashing: insincere ad campaign

2008 EasyJet claimed that its plane emitted 22% less carbon dioxide than other planes on the same route

- Type of greenwashing: insincere ad campaign

2020. Ikea made beechwood chairs using illegally sourced wood

- Type of greenwashing: accredited illegal logging

2020 Ryan Air claimed to be Europe's "lowest emissions airline". The claim was more or less made up and the Advertising Standards Agency promptly banned the ads.

- Type of greenwashing: false low-emissions claims

Many companies embraces sustainability: the example of Blackrock

With nearly $6 trillion in assets under management, **BlackRock is the largest asset management firm and one of the most powerful investors in the world.**

Larry Fink' 2020 letter to CEOs

https://www.blackrock.com/corporate/investor-relations/2020-larry-fink-ceo-letter Black Rock's pledges:

- Integrate ESG considerations into all active management decisions
- Divest from fossil fuel companies that generate more than 25 per cent of their revenues from thermal coal in its discretionary active investment portfolios
- Publish details on the sustainability profile of every mutual fund, covering areas such as their carbon footprint or data on controversial holdings
- Require companies to disclose in line with the Task Force on Climate-Related Financial Disclosures and the Sustainability Accounting Standards Board
- **Set a goal of increasing sustainable assets under management by more than tenfold this decade — from $90bn in January 2020 to more than $1tn**

Exxon Mobile defeated by activist hedge fund

https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.ft.com%2Fcontent%2Febfdf67d-cbce-40a5-bb29-d361377dea7a&psig=AOvVaw1zdDyjG2Xwb6GaXuyRl_Cw&ust=1665582685380000&source=images&cd=vfe&ved=0CAoQjRxqFwoTCLiu8pOp2PoCFQAAAAAdAAAAABAE

- **Exxon Mobil Corp** is a global oil company with one of the worst track records on climate change of any other oil companies. Engine No. 1, was virtually unknown before the fight.
- **Engine No. 1 is** a $250 million dollar hedge fund created by **Christopher James** with $250 million of his own funds in December 2020.
- On May 25, 2021, Engine No.1 successfully waged a battle to install **three directors** on the board of Exxon Mobil Corp with the goal of pushing the energy giant to reduce its carbon footprint.
  - Engine No. 1 managed to have the support of some of Exxon's biggest institutional investors. BlackRock, Vanguard and State Street voted against Exxon's leadership and gave Engine No. 1 powerful support.

Source: https://www.nytimes.com/2021/06/23/magazine/exxon-mobil-engine-no-1-board.html

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