



# Green & sustainable finance :

## Markets, Instruments, Greenwashing & Taxonomy

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# Agenda

- Background & Context
- Green financing instruments and products
- Concept of Greenwashing
- EU and other Taxonomy



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# Background & Context

# ESG Mandates



ESG investing refers to a set of standards for a company's behavior used by investors to screen potential investments.



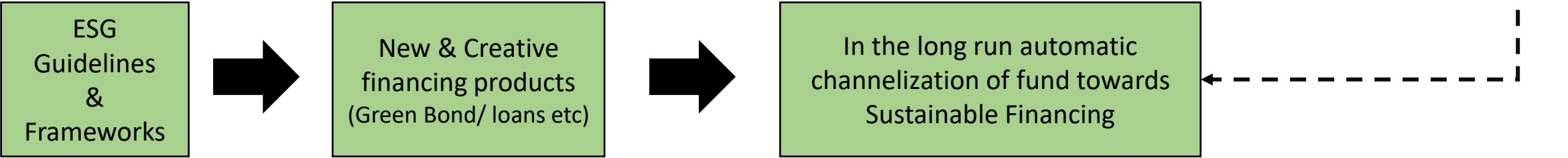
ESG is a framework that helps stakeholders understand how an organization manages risks and opportunities around **sustainability** issues like **GHG emissions, usage of natural resources** etc



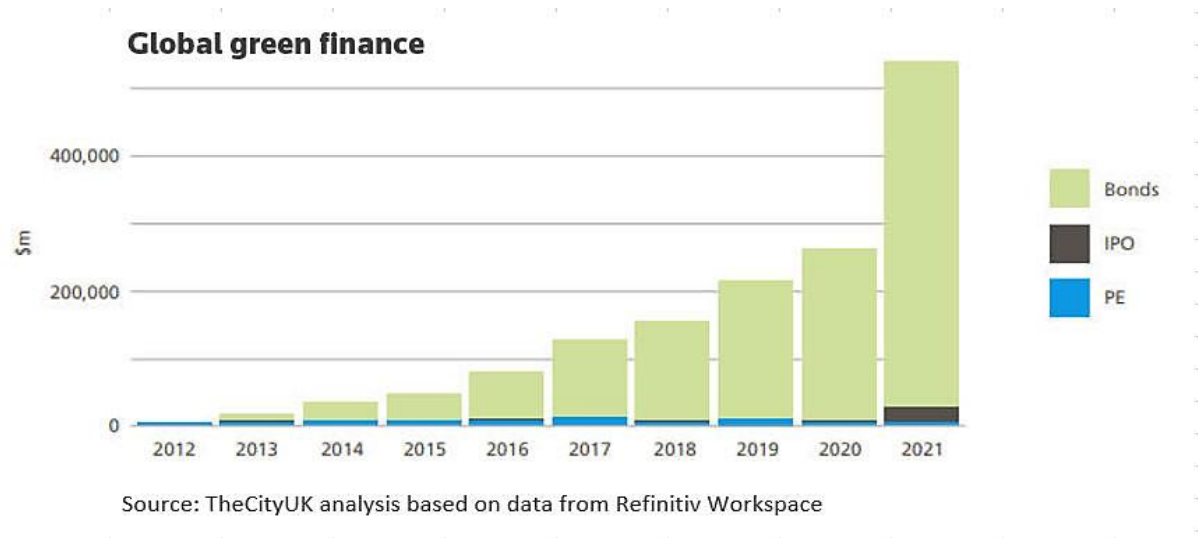
The funded companies are expected to be responsible towards environment, society as a whole and are led by accountable managers



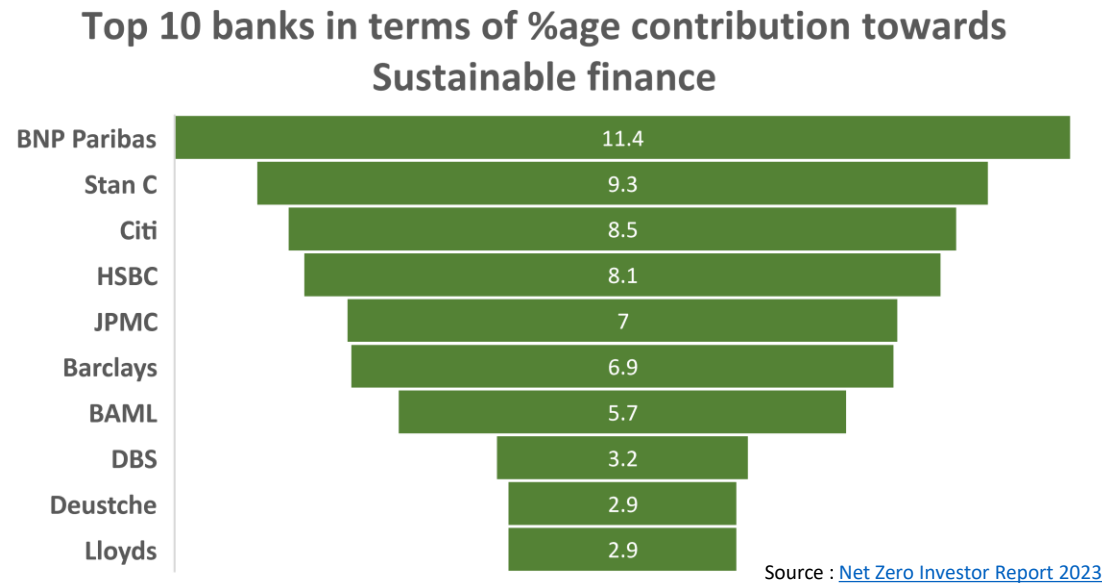
## Broad objectives of ESG financing



# Global Green Financing Trend



Source : [GSIA Report 2021](#)



	2014	2016	2018	2020	GROWTH PER PERIOD			COMPOUND ANNUAL GROWTH RATE (CARG) 2014-2020
					GROWTH 2014-2016	GROWTH 2016-2018	GROWTH 2018-2020	
Europe* (EUR)	€9,885	€11,045	€12,306	€10,730	12%	11%	-13%	1%
United States (USD)	\$6,572	\$8,723	\$11,995	\$17,081	33%	38%	42%	17%
Canada (CAD)	\$1,011	\$1,505	\$2,132	\$3,166	49%	42%	48%	21%
Australasia* (AUD)	\$203	\$707	\$1,033	\$1,295	248%	46%	25%	36%
Japan (JPY)	¥840	¥57,056	¥231,952	¥310,039	6,692%	307%	34%	168%

Source : [GSIA Report 2021](#)

- According to a Bloomberg study, sustainable investing has now gone mainstream, with an estimated \$37.8 trillion in assets under management in FY2022. (Read [more](#) )
- Japan saw the biggest growth
- Total AUM under sustainable financing stood at \$35.3 Tn as of 2020
- As of 2020 ~36% of total AUM are sustainable financing



# Quiz time

**Which of the following elements does sustainable finance NOT include?**

- a) Integration of environmental, social and governance factors
- b) corporate engagement and shareholder action
- c) approval by United Nations
- d) best-in-case screening of investments



# Quiz time

**Which of the following elements does sustainable finance NOT include?**

- a) Integration of environmental, social and governance factors
- b) corporate engagement and shareholder action
- c) approval by United Nations**
- d) best-in-case screening of investments





# Green financial instruments and products

# Major Green Instruments



**Green Bonds**



**Green Loans**



**Green Funds**



**Other Green loans**

(Green Car loan, Green mortgage etc)

- Bonds whose proceeds are earmarked for environmental projects
- Largely self-regulated
- Intl Capital Mkts Association (ICMA) has laid down definitions and standards for green bonds

Excerpts of ICMA Green bond principles:

Use of Proceeds	Project evaluation & Selection	Management of Proceeds	Reporting
<ul style="list-style-type: none"><li>• Renewable energy</li><li>• Energy efficiency</li><li>• Pollution prevention &amp; control</li><li>• Sustainable water and wastewater management</li><li>• Clean transportation</li><li>• Green buildings</li><li>• Biodiversity conservation</li></ul>	<ul style="list-style-type: none"><li>• The issuer of green bond should clearly communicate :<ul style="list-style-type: none"><li>• The environmental objectives</li><li>• Eligibility criteria for selection of a project for financing</li></ul></li></ul>	<p>The net proceeds of green bond financing should be tracked by the issuer on regular basis linked to “Lending &amp; Investment operations for Green projects”</p>	<p>The issuer should regularly report on the Green bond proceeds allocation &amp; utilization in their annual reports</p>





- Form of financing where borrowers are expected to use the proceeds exclusively to fund projects with environmental objectives
- Globally green loans underwriting have gone up from \$30 Bn (2015) to \$90 Bn (2019)
- Power Sector (70%), Utilities (8%) and real estate(6%) are the top three borrowers globally

Use of Proceeds	Project evaluation & Selection	Management of Proceeds	Reporting
Designated Green Projects should provide clear environmental benefits, which will be assessed, measured, and reported by the borrower.	The borrower of a green loan should clearly communicate how it is organized to assess and select projects that will receive loan proceeds. In addition, the borrower explains how it will manage environmental and social risk of eligible projects.	The proceeds of a green loan should be credited to a dedicated account or tracked by the borrower to maintain transparency and promote the integrity of the product.	quantitative performance measures (for example, energy capacity, electricity generation, greenhouse gas emissions reduced/avoided, etc.) have to be reported

Ex: DSM: Dutch Health Nutrition company took \$1 Bn loan linked to its GHG emissions. The interest rate was linked to GHG emission ,Efficiency etc.



## Green Funds

- Mutual Funds and ETFs that only takes sustainable companies with low carbon footprints into consideration.
- Selection of companies are generally done by using various ESG indicators like FTSE Russell, MSCI etc.
- These funds completely excludes companies dealing in weapons, tobacco, gambling etc
- As of Apr 2020, world's largest ETF : MSCI USA SRI – \$ 6.7 Bn

## Green Car Loans

- Car Loans targeted only for EV or environment friendly car purchase
- Can be found in Sweden, Singapore, India



## Green Mortgages

- To finance energy efficient homes

## Sustainable Credit Cards

- A small percentage of the purchase goes to environmental charities





A conceptual graphic illustrating ESG integration. It features a glowing yellow line graph with seven data points, showing an overall upward trend. Below the graph, four small green seedlings with two leaves each are planted in pots made of stacked coins. The pots increase in height from left to right. To the right of the seedlings is a large, spherical, moss-covered object resembling a globe. The entire scene is set against a dark green background with a soft light gradient.

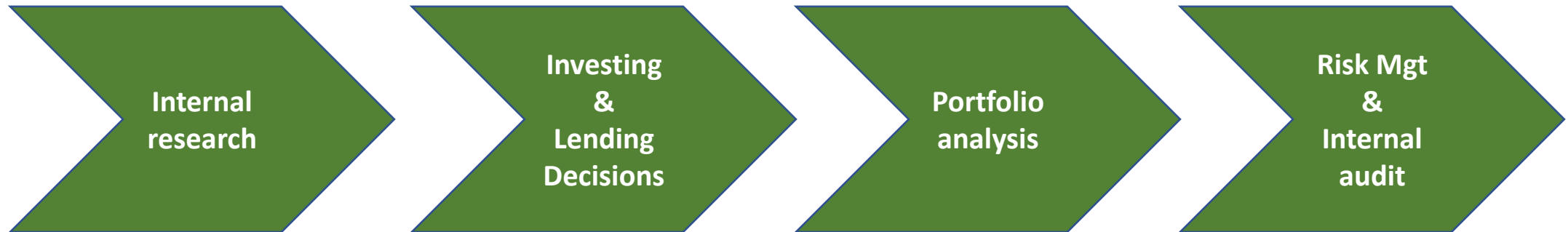
# ESG Integration



# ESG Integration: What and why ?

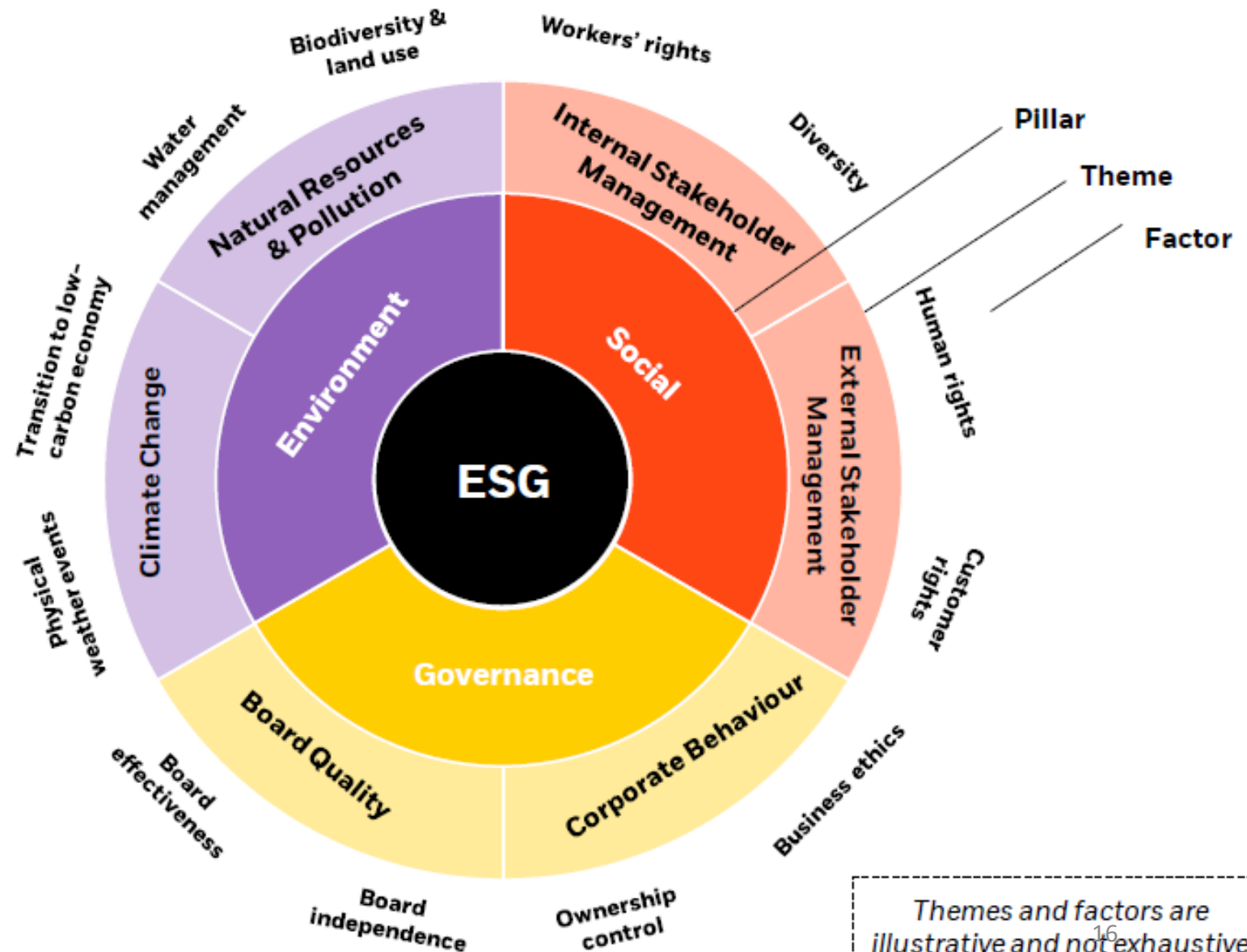
- What : The process of including non-financial ESG factors in investment analysis and decisions to better manage risks and improve returns on investment
- Why : ESG integration into a broader strategy can improve performance and enhance the competitiveness of an organization through long term value creation and winning trust of investors and stakeholders

## Parts of Investment and operational chain where ESG can be integrated



# ESG Integration: Blackrock case study

- **Blackrock**; one of the largest investment firms, uses this framework based on the three pillars and several themes of ESG before making any investment decision
- Like Blackrock, most of the Bank or investment companies have developed or are in the process of development of ESG frameworks for optimizing their investment decisions.

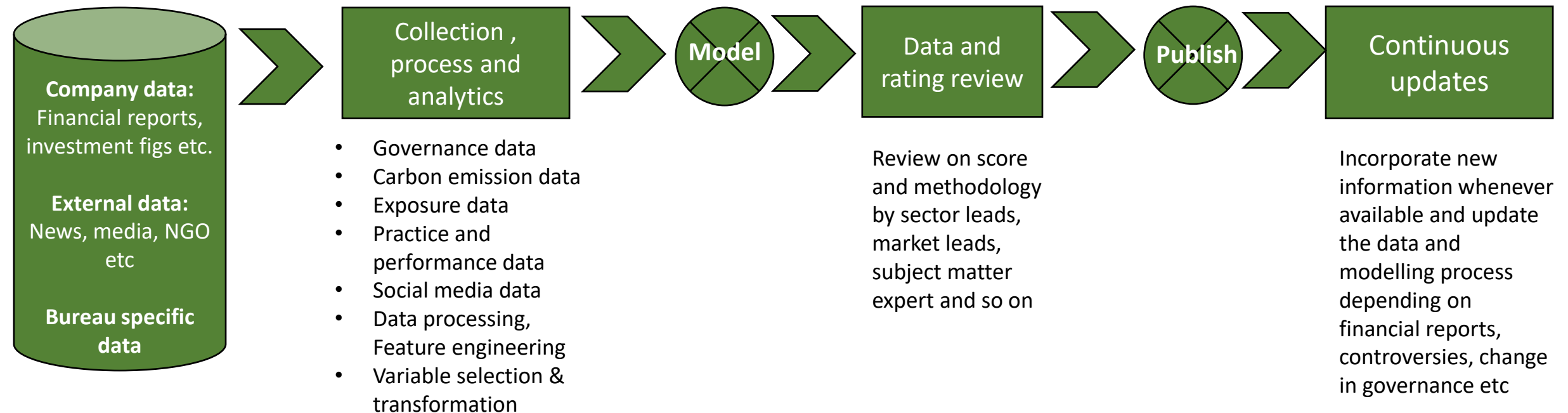


# ESG Ratings and scores

## ESG Scores and ratings

- Many investors, lenders and BFSI firms are now integrating ESG and climate considerations for their operations and investments.
- ESG ratings and scores based on data from Bloomberg, FTSE, MSCI etc act as good indicators for this purpose

## ESG Score generation process



Leading ESG  
Data providers:

REFINITIV 



MSCI 

S&P Global

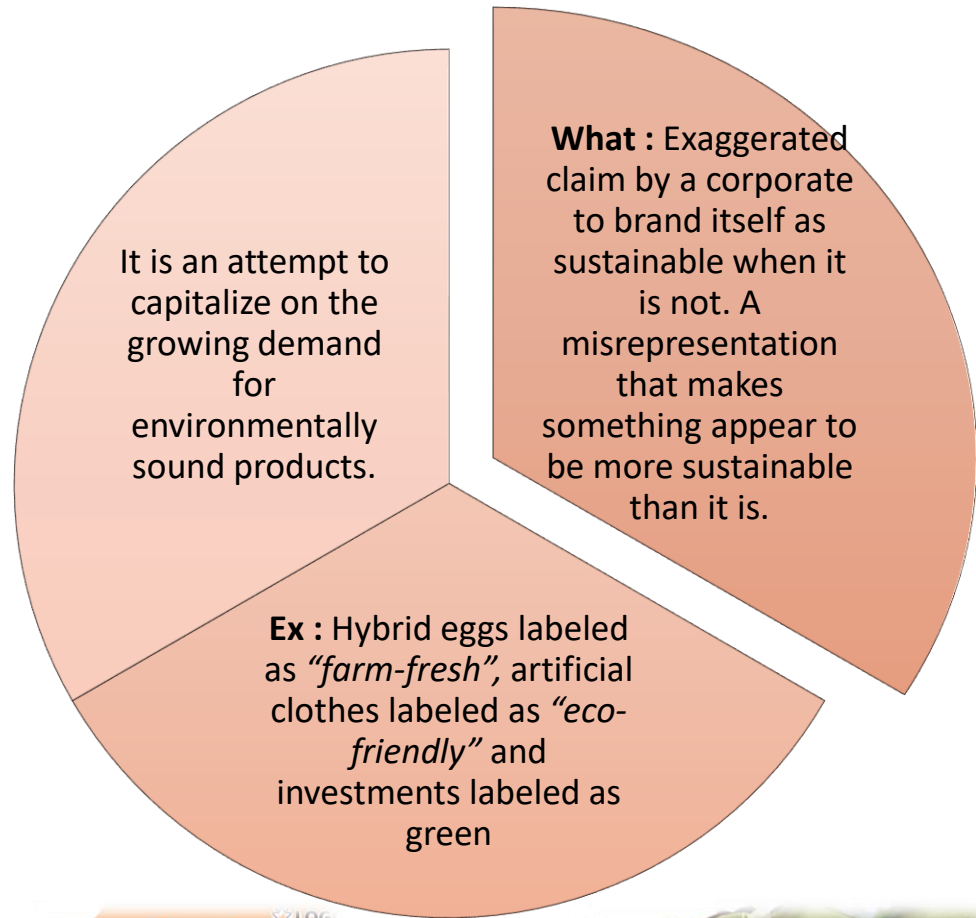
Bloomberg



The image features a conceptual illustration of greenwashing. In the foreground, four small green seedlings are planted in pots made of stacked coins, arranged in a row on a bed of dark soil. The pots increase in height from left to right. Above the seedlings, a glowing yellow line graph with circular markers trends upwards from left to right. To the right of the seedlings is a large, textured green sphere resembling a moss ball. The background is a dark, blurred green.

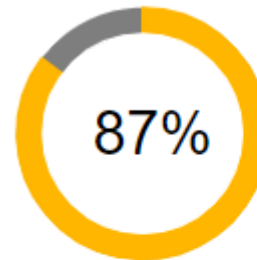
# Concept of Greenwashing

# Greenwashing: What and how ?

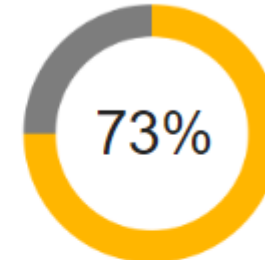


- **Why :** Consumers these days are willing to pay more for ecologically sound products.
- Oil and mining companies who want to be part of certain mutual fund portfolios brand themselves as “Green”
- A Tobacco production company which wastes water, wants to increase its market value (share price) by positioning itself as Green company and claiming that it is reducing reliance on tobacco business.

Sustainability is a key factor in decision making



Of investors say they think corporate reporting contains unsupported sustainability claims (i.e., greenwashing)



Of investors want companies to report the cost of meeting sustainability commitments





# Greenwashing: Case in point – Nestle

“Plastic waste is one of the biggest sustainability issues the world is facing today. Tackling it requires a collective approach. We are committed to finding improved solutions to reduce, reuse and recycle. Our ambition is to achieve 100% recyclable or reusable packaging by 2025”

NESTLÉ CEO MARK SCHNEIDER

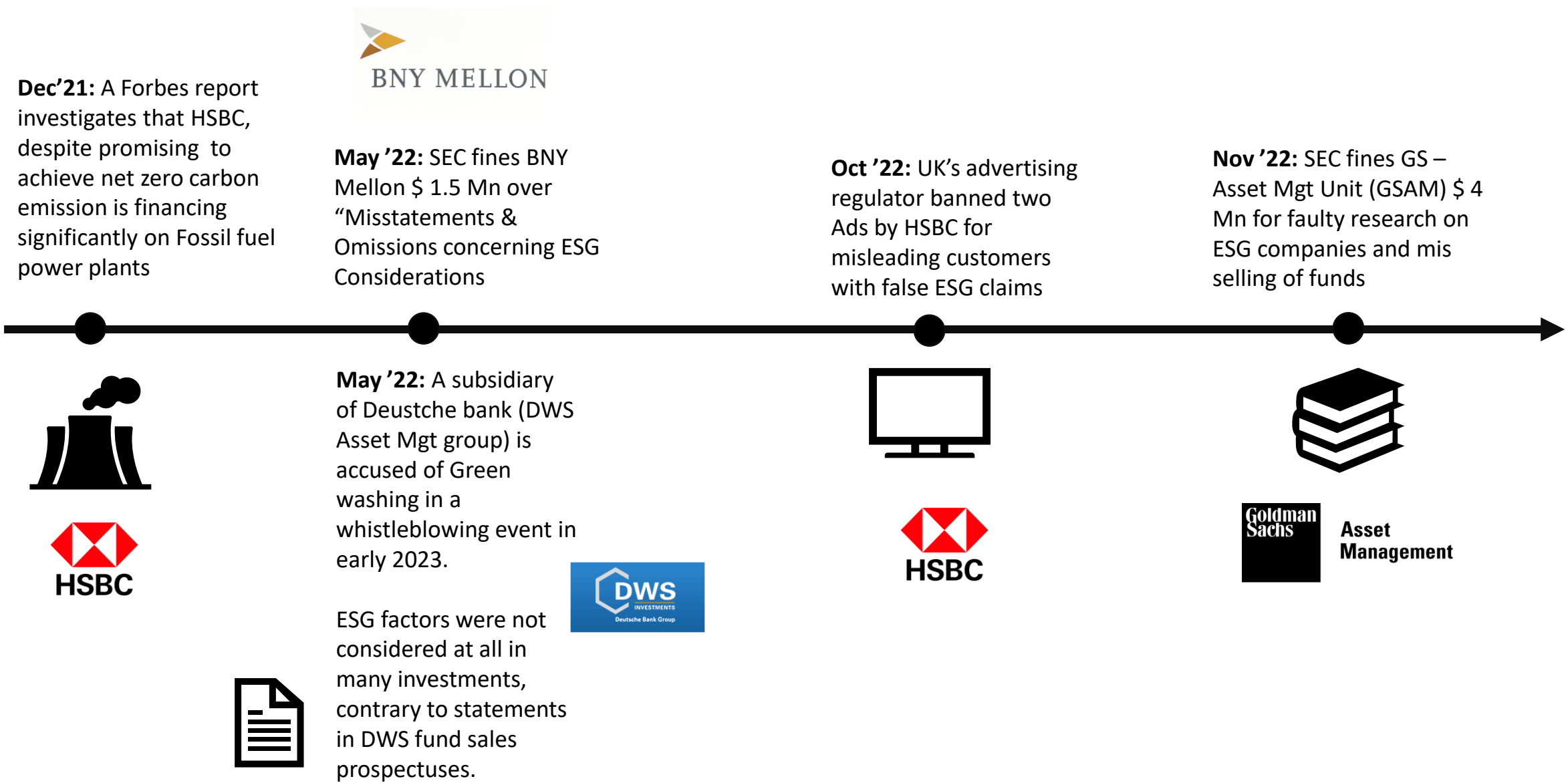
PR Release by Nestle- April 2018

- Just a year later in 2019, a beach clean-up in the Philippines revealed almost 17% of the litter was from Nestlé products
- Nestlé pays just \$200 to pump 210 million gallons of water per year while from Michigan , while another nearby city Flint continues to go without clean drinking water.





# Greenwashing examples : Banks



# How to prevent Greenwashing ?

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- **Taxonomy** is the process to prevent greenwashing.
- Classification system to clarify which investments are environmentally sustainable and which are not.
- Pioneered by EU now different ESG and Sustainability taxonomies are coming in different parts of the world (UK, HK, Canada, China etc)





# Quiz time

**A company might engage in greenwashing for all the following reasons EXCEPT which?**

- a) To appeal to consumers' desires.
- b) To make themselves look better.
- c) To increase their sales.
- d) To decrease waste or water usage





# Quiz time

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# EU & other Taxonomies

# Context : The European Green Deal

- Set of policy initiatives by the European Commission (2020) with the overarching aim of making the European Union (EU) climate neutral in 2050.
- **Target:** 50% cut in emissions by 2030 and net zero carbon emissions by 2050

## Expected outcome



fresh air, clean water, healthy soil  
and biodiversity



renovated, energy efficient  
buildings



healthy and affordable food



more public transport



cleaner energy and cutting-edge  
clean technological innovation



longer lasting products that can be  
repaired, recycled and re-used



future-proof jobs and skills training  
for the transition



globally competitive and resilient  
industry



# The EU Taxonomy

## What is it?

- A classification and naming system in line with the **European Green deal** that would help, establishing a list of environmentally sustainable economic activities

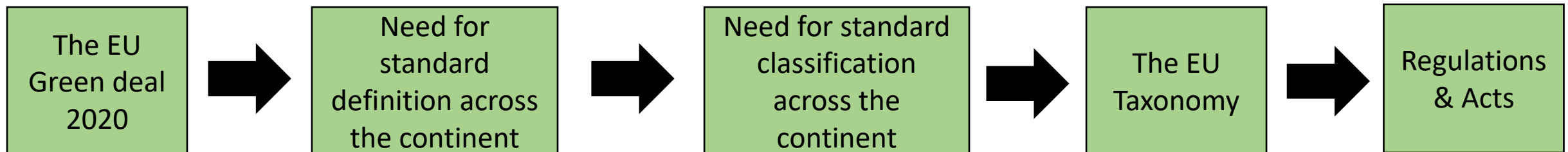
## Who made it?

- EU council set up by ECB



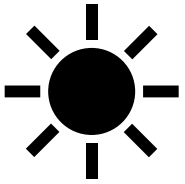
## Why is it needed?

- The EU taxonomy would provide companies, investors and policymakers with appropriate definitions for which economic activities can be considered environmentally sustainable
- Security for investors and protect private investors from **greenwashing**
- Help companies to become more climate-friendly
- Mitigate market fragmentation and help shift investments where they are most needed



# The objectives of EU Taxonomy regulation

## Environmental Objectives :



Climate  
Change  
mitigation



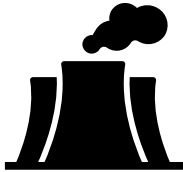
Climate  
Change  
Adaption



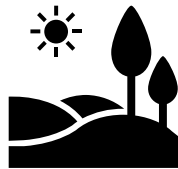
Protection  
of water  
and marine  
resources



Transition  
to a  
circular  
economy



Prevention  
of  
pollution



Protection  
of  
biodiversity  
& ecosystem

## When does an activity qualify as environmentally sustainable as per EU Taxonomy?

The economic activity contributes to one of the six environmental objectives

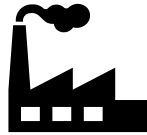
The economic activity does 'no significant harm' (DNSH) to any of the six environmental objectives

The economic activity meets 'minimum safeguards' such as the UN Guiding Principles on Business and Human Rights to not have a negative social impact

# KPIs as per EU Taxonomy reporting

Companies will be required to disclose percentage of turnover, OPEX, and CAPEX associated with sustainable economic activities.

## KPIs for Non-Financial Corporates



### Turnover

- Proportion of turnover derived from products or services aligned with the Taxonomy ; i.e. turnover %age generated from products or services that meet the environmental sustainability criteria

### CapEx

- Proportion of the capital expenditure of taxonomy-aligned activities; i.e. CapEx %age for products or services that meet the environmental sustainability criteria

### OpEx

- Proportion of the operating expenditure associated with taxonomy-aligned activities

## KPIs for Financial Corporates



### GAR

- **Green Asset Ratio:** Proportion of exposures related to a credit institution's taxonomy-aligned activities compared to its total assets

### GIR

- **Green Investment Ratio:** Proportion of taxonomy-aligned investments managed in the value of all covered assets under management (AuM)





# Quiz time

**What are the two main targets of the EU Green Deal?**

- a) 50% cut in emissions by 2050 and net zero carbon emissions by 2030
- b) 50% cut in emissions by 2030 and net zero carbon emissions by 2050
- c) 20% cut in emissions by 2030 and net zero carbon emissions by 2040
- d) 40% to 45% cut in emissions by 2040 and net zero carbon emissions by 2070



# Quiz time

**What are the two main targets of the EU Green Deal?**

- a) 50% cut in emissions by 2050 and net zero carbon emissions by 2030
- b) 50% cut in emissions by 2030 and net zero carbon emissions by 2050**
- c) 20% cut in emissions by 2030 and net zero carbon emissions by 2040
- d) 40% to 45% cut in emissions by 2040 and net zero carbon emissions by 2070

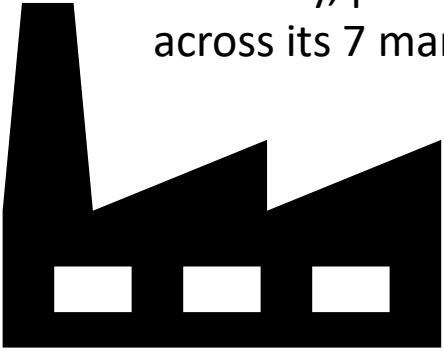
# Thinking time





# Chemtoplast : Chemical company going green

**Chemtoplast** : A chemical company based out of Germany, plans to replace all its existing heat pumps across its 7 manufacturing units

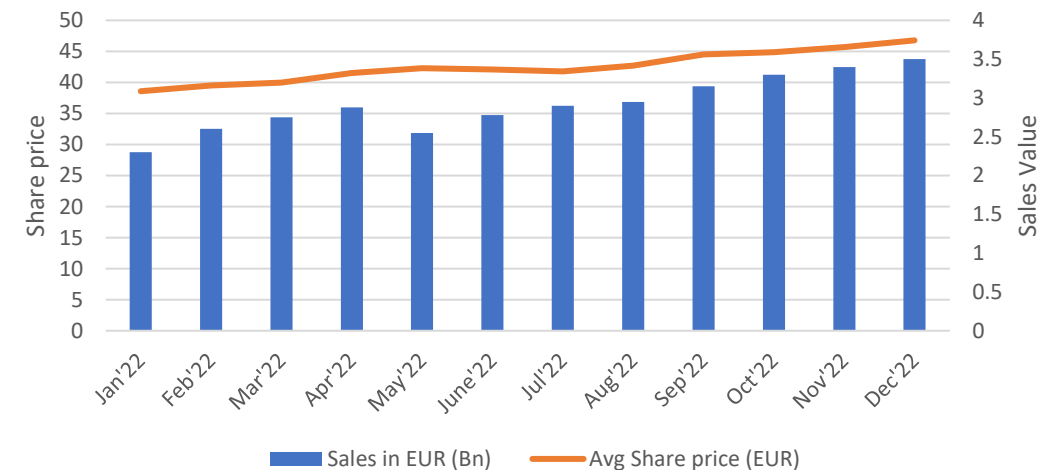


- The company argues that the new heat pumps would significantly reduce carbon / refrigerant emission as compared to the older ones.
- **Chemtoplast** is also one of the firms that claims to have taken initiatives for **going green** and becoming carbon neutral by 2040
- The latest PR and advertisements of **Chemtoplast** are also targeted towards ESG , sustainability and carbon neutrality
- The investors are happy, share price is going up so are the sales volume
- In order to finance the replacement of the existing heat pumps the company approaches XYZ bank for green financing



Latest Print ad from **Chemtoplast**

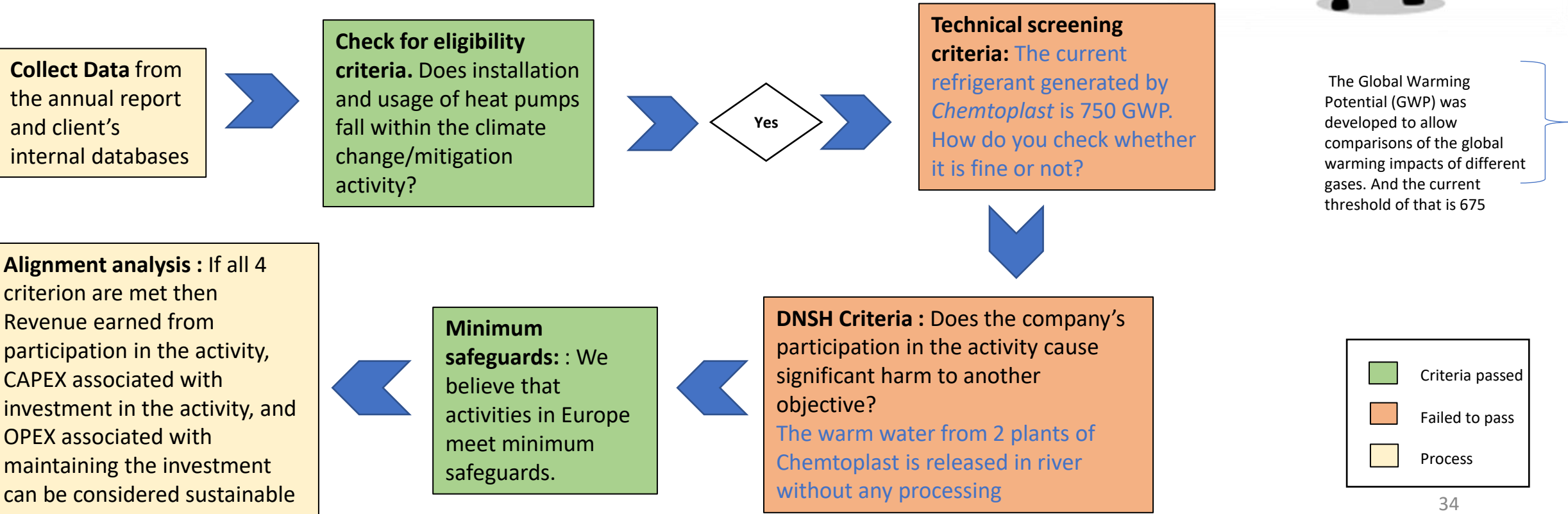
Total sales & Avg Share price of Chemtoplast in 2022



# Chemtoplast : Green or not Green that's the question ? ? ?



How would you go about the assessment ?



# Other Taxonomies and alignment with EU

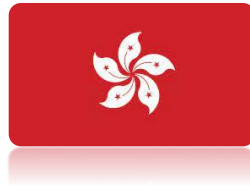
## China

- China's green taxonomy, known as the "Green Bond Endorsed Project Catalogue" was first released by the People's Bank of China (PBoC) in 2015
- A revised version of this taxonomy is published in 2021 making it more aligned with global standards
- In July 2020, the same month as the launch of the EU taxonomy, the EU and China initiated a working group within the International Platform on Sustainable Finance (IPSF) to undertake a technical comparison of taxonomies from the two jurisdictions.
- The Common Ground Taxonomy (CGT), a comparative study of the green taxonomies of China and the EU, was published in early November of last year at the COP26.



## Honk Kong

Notably Hong Kong's central bank, the Hong Kong Monetary Authority (HKMA), which is also a member of the IPSF, intends to take the CGT as reference to design a tailored sustainable finance taxonomy that aligns with the city's own economic structure



## UK

UK is also working on the next phase of green taxonomy. This is going to be substantially different from EU.



## Canada

- On March 2023, Canada's Sustainable Finance Action Council (SFAC) also published its Climate Investment Taxonomy
- Backed by 25 largest FIs of Canada this Taxonomy is going to pave the way for investment categorization
- Though this is mostly aligned with EU taxonomy, it introduces a transitional category as well unlike EU.
- The "transition" label would apply to projects that substantially reduce emissions from hard-to-decarbonize sectors.







# Quiz time

**How many sustainable objectives are there in the EU taxonomy system?**

- a) 6
- b) 4
- c) 10
- d) 8



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# CSRD – A Quick Intro

- EU's Corporate Sustainability Reporting Directive (CSRD), which went into effect in January 2023.
- A reporting standard that spans over environmental, social, and governance topics and are intended to provide insight into a company's sustainability impacts, risks and opportunities

## Who should comply with CSRD ?

All companies with securities listed on an EU-regulated market

“Large” EU companies that are not listed

- Large is defined as companies that exceed certain asset, revenue and workforce size thresholds in two consecutive years

EU companies that are part of a “large group” and not listed

- Reporting is required for an EU entity (including an EU subsidiary of a US company) if it is the parent of a group that exceeds certain asset, revenue and workforce size thresholds in two consecutive years.



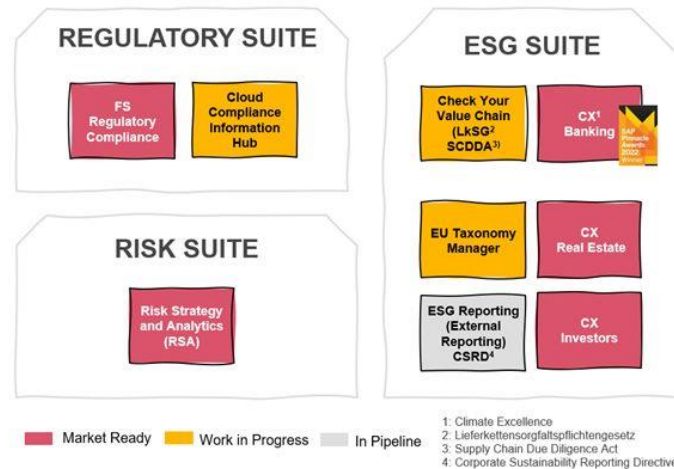


# Consulting solutions & Industry case studies

# Industry practices and case studies

- **PwC Germany : EU Taxonomy manager** – Part of one stop ESG SAAS Solution under making for ESG reporting , risk and regulatory offerings


Portfolio of PwC Suites & Products  
on SAP Business Technology Platform



- **Another Big 4 :** Greenomy and another Big 4 firm has made an Alliance to distribute EU Taxonomy reporting solutions across Europe
- [Read more here](#)

- **Another Big 4 :** Elia group one of the leading Transmission company of EU has partnered with Deloitte for the EXU taxonomy analysis and implementation.
- The consulting firm performed a full-scale assessment with respect to eligibility, data collection and analysis, Technical Screening Criteria (TSC) assessment, DNSH analysis and finally KPI calculations and assessment
- More details [here](#)



- **Sustainalytics:** A research firm by Morningstar has developed “EU Taxonomy Solution” that assess firm’s alignment to the EU taxonomy.
  - The team of experts tracks around 9500 companies across 90 taxonomy activities to collect data and report the 3 KPIs.
  - [Read more here](#)
- 
- **celsia.io :** software platform with the tools for measuring the sustainability level and getting their sustainability score, in accordance with the EU Taxonomy and SFDR.
  - [Read more here](#)





**Thank you**