



Maria Moreira
Proposition Sales for RPM

Refinitiv Sustainable Finance

Turning the Art of ESG into Science

REFINITIV[®]
DATA IS JUST
THE BEGINNING[®]



Regulatory Solutions

EU Sustainable Finance Action Plan

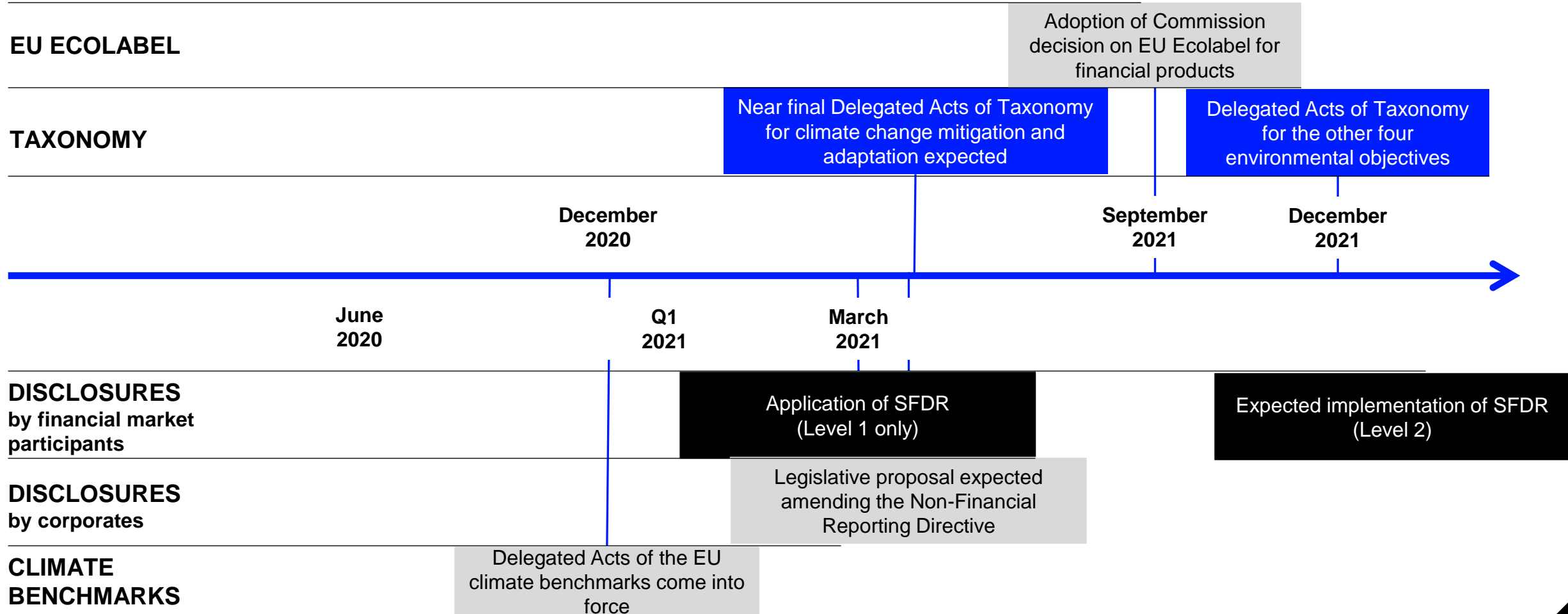
EU Sustainable Finance Action Plan so far

The Action Plan 2018 stretches across the whole investment chain

1	Taxonomy TEG	Develop an EU classification system for environmentally sustainable economic activities	6	Sustainability in research and ratings	Explore how credit rating agencies could more explicitly integrate sustainability into their assessments. Study on sustainability ratings and research and exploring possible measures to encourage their uptake.
2	Standards and labels TEG	Develop EU standards (such as EU Green Bond Standard) and labels for sustainable financial products (via Ecolabel) to protect integrity and trust of sustainable finance market	7	Disclosures by financial market participants	Enhance transparency to end-investors on how financial market participants consider sustainability
3	Fostering investment in sustainable projects	Exploring measures to improve the efficiency and impact of instruments aiming at investment support. Mapping on investment gaps and financing.	8	Sustainability in prudential requirements	Explore the feasibility of reflecting sustainability in prudential rules (where justified from a risk perspective)
4	Incorporating sustainability in financial advice	Amend MiFID II and IDD delegated acts to ensure that sustainability preferences are considered in the suitability assessment.	9	Strengthening sustainability disclosures by corporates TEG	Enhance climate and sustainability-related information provided by corporations
5	Developing sustainability benchmarks TEG	Develop climate benchmarks and ESG disclosures for benchmarks	10	Fostering sustainable corporate governance & promoting long-termism	Collect evidence of undue short-term pressures from capital markets on corporations and consider steps for promoting corporate governance that is more conducive to sustainable investments.

Achieved

Implementation timelines



EU BMR – ESG Disclosures for all benchmarks

5

Developing
sustainability
benchmarks

TEG



The EU BMR regulation was amended to introduce 2 new types of benchmarks as well as enhancing ESG disclosure requirements for administrators of benchmarks. It entered into force on 30 April 2020 and became fully applicable from 23 December 2020:

- 1. Two climate benchmarks were created** and aim at reallocating capital towards a low-carbon and climate resilient economy. The Paris-aligned benchmarks (PAB) are fully aligned with the goals and objectives of the Paris Agreement and Climate Transition Benchmarks (CTB) are benchmarks where the portfolio of asset is on a decarbonization strategy. The legislation sets out minimum standards for the design of the methodology which rely on data sources/providers such as Refinitiv.
- 2. ESG disclosures for all benchmarks** – with the exception of interest rates and currency benchmarks, administrators of benchmark must now disclose how ESG factors are reflected in their methodology.

EU BMR – ESG Disclosures for all benchmarks

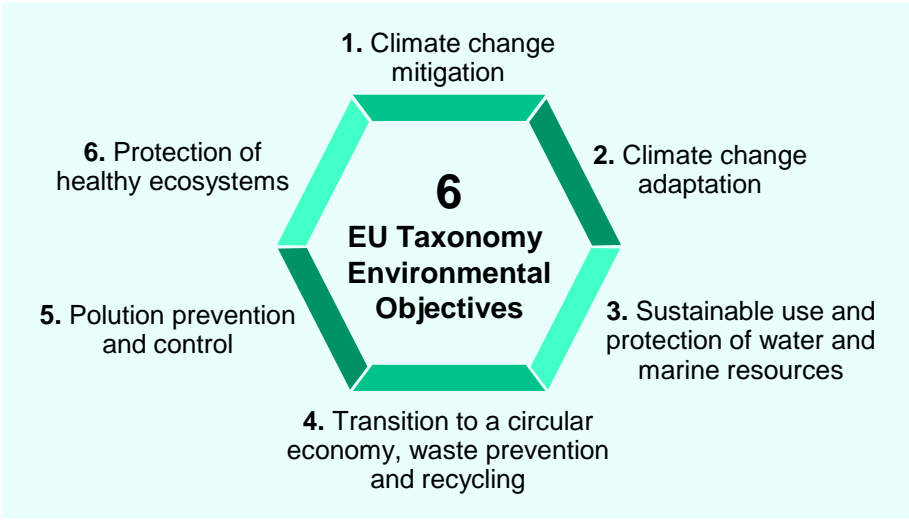
REFINITIV SOLUTION: Refinitiv supports clients with data in both areas to enable creation of the two climate benchmarks, as well as meet the benchmark disclosure requirements for equity benchmarks.

S#	ESG factor for Disclosure	Category	Required/Voluntary for Equities?	Type of ESG Redistribution	ESG Data Points/Titles to utilize for creation of derived data to report towards Column 1	Suggested guidance on how to utilize data field to create Derived data	RDP Bulk Field Name
1	Weighted average ESG rating of the benchmark (voluntary).	Combined ESG Factors	Voluntary	Derived	ESG Combined Score	Use this data field for each constituent to create Weighted average rating for benchmark	ESGCombinedScore
2	Overall ESG rating of top ten benchmark constituents by weighting in the benchmark (voluntary).	Combined ESG Factors	Voluntary	Derived	ESG Score	Use this data field for each constituent to create Weighted average rating for benchmark	ESGScore
3	Weighted average environmental rating of the benchmark (voluntary).	Environmental	Voluntary	Derived	Environment Pillar Score	Use this data field for each constituent to create Weighted average rating for benchmark	EnvironmentPillarScore
4	Exposure of the benchmark portfolio to renewable energy as measured by capital expenditures (CapEx) in those activities (as a share of total CapEx by energy companies included in the portfolio) (voluntary).	Environmental	Voluntary	To be launched in 2021	Renewable Energy Produced	Production volumes and revenues can be used as proxy.	RenewableEnergyProduced
5	Exposure of the benchmark portfolio to climate-related physical risks, measuring the effects of extreme weather events on companies' operations and production or on the different stages of the supply chain (based on issuer exposure) (voluntary).	Environmental	Voluntary	To be launched in 2021	n/a		N/A
6	Degree of exposure of the portfolio to the sectors listed in Sections A to H and Section L of Annex I to Regulation (EC) No 1893/2006 of the European Parliament and of the Council as a percentage of the total weight in the portfolio.	Environmental	Required	Derived	Organization ID	Utilize Organization ID i.e. PermID to find NAICS code in Symbology File	OrganizationId
					NAICS Code	Utilize NAICS Code and NAICS to NACE Mapping provided to find NACE code OR	ClassificationNaicsPrimarySchema
					TRBC Code	Utilize TRBC Code and TRBC to NACE Mapping provided in Section B.4 of "Handbook of Climate Transition Benchmarks, Paris Aligned Benchmark and Benchmarks' ESG Disclosures" (December 20th 2019) to find NACE code	ClassificationTrbcPrimarySchema
7	Greenhouse gas (GHG) intensity of the benchmark.	Environmental	Required	Derived - 100% reported, not estimated	Total CO2 Equivalent Emissions To Revenues USD in million (normalized)	This data field is normalized but only has reported data, not estimated For estimated emissions by revenue, use data field in the next row and normalize by dividing by Revenue	TotalCO2EquivalentsEmissionsToRevenues

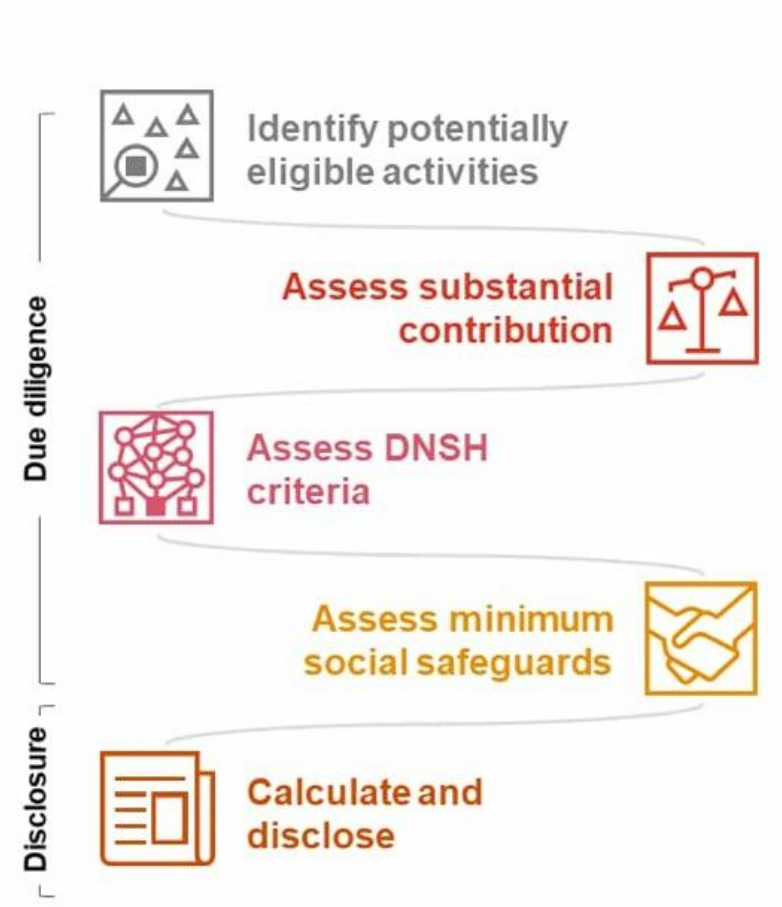
EU Taxonomy Regulation

The EU Taxonomy, the foundational piece from the Action plan on financing sustainable growth, is a classification tool to **help investors and companies consistently determine whether an economic activity is environmentally sustainable or not.**

It provides specific, quantitative thresholds on environmental performance for economic activities to be considered compliant with the EU Taxonomy.



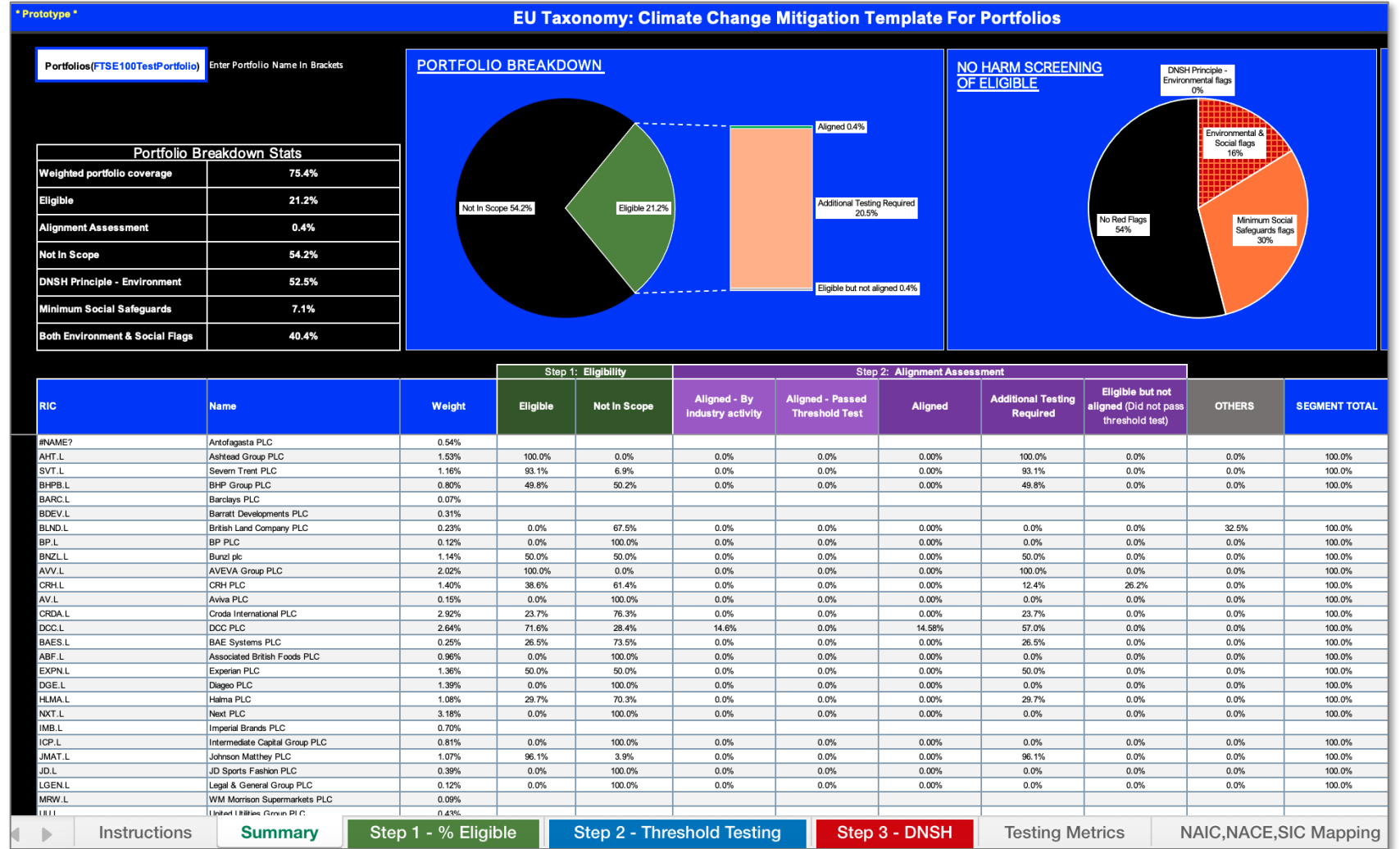
Q2 2020	<ul style="list-style-type: none"> EU Taxonomy Delegated Acts for climate change mitigation and adaptation. This is delayed due to concerns about lack of funding for transition activities in Eastern Europe.
Dec 2021	<ul style="list-style-type: none"> Companies in scope of NFRD must disclose % of revenues generated from EU Taxonomy eligible activities for climate change mitigation and adaptation Financial market participants must disclose to what extent they invest in EU Taxonomy eligible activities for climate change mitigation and adaptation Delegated Acts for the remaining 4 environmental objectives expected tbd
Dec 2022	<ul style="list-style-type: none"> Companies in scope of NFRD must disclose % of revenues generated from EU Taxonomy eligible activities for the remaining 4 environmental objectives Financial market participants must disclose to what extent they invest in EU Taxonomy eligible activities for the remaining 4 environmental objectives



EU Taxonomy Regulation

REFINITIV SOLUTION: Refinitiv is working on creating **EU-Taxonomy-aligned products** to help users fulfil their compliance obligation and start evaluating their portfolio against the Taxonomy before the regulation is in force.

! Complicated, calculation intensive exercise with requirement for Fundamental Data as well!



SFDR- what is it?

SFDR is the EU’s attempt to standardise the language and labels for SI products, promote transparency and reduce “greenwashing”

It applies to Financial Market Participants (FMPs)* and financial advisors with disclosure requirements at both entity (firm) and product levels. It is intended to apply to all financial products marketed to the EU, including those managed by non-EU firms

SFDR effectively implements a three-tier categorisation of financial products:

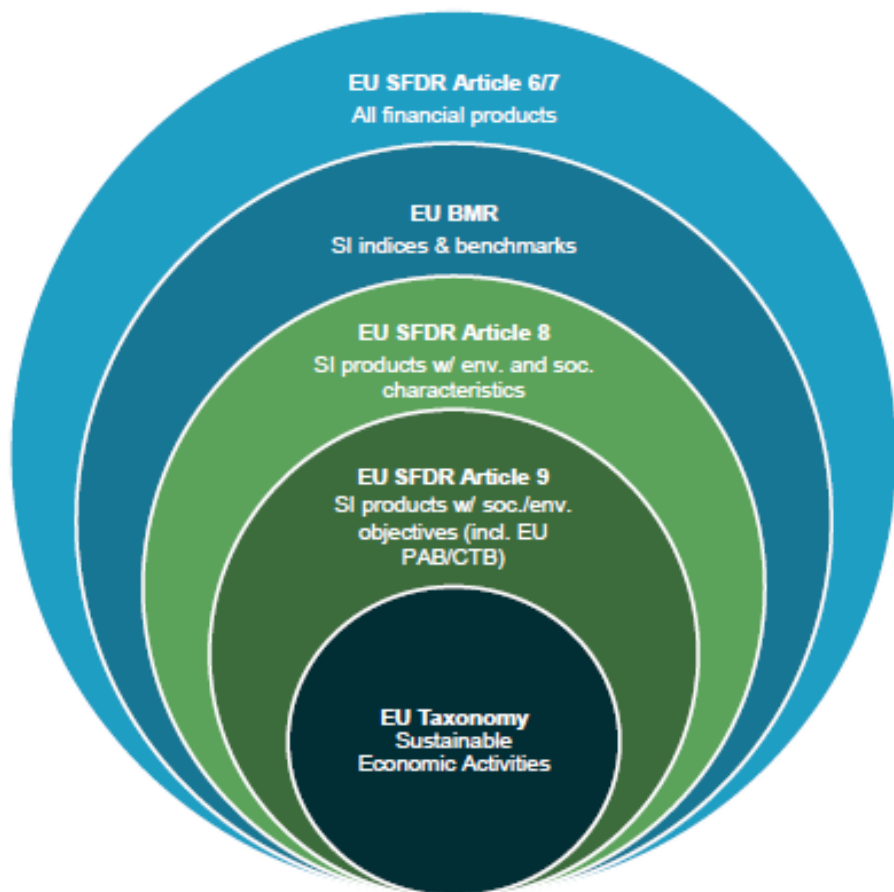
- a. **Article 9** – financial products with the objective of “sustainable investments” (including the specific sub-set of a reduction in carbon emissions as an objective)
- b. **Article 8** – financial products promoting environmental or social characteristics
- c. **Others** – other financial products, not falling into either Article 8 or 9

From 10 March 2021, asset managers with EU users must comply with **Level 1 requirements** i.e.:

- Disclose and annually report on the extent to which they consider the adverse impacts of their investment activities on certain ESG objectives (e.g. CO2 emissions, biodiversity, gender pay gap) and actions taken to mitigate them (e.g. company engagement)
- Disclose annually and report on E or S features of any Article 8 or 9 products and how they will be met.

Level 2 requirements are delayed, so are expected to apply from Jan 2022 including:

- Detailed indicators on principal adverse impacts should be disclosed from 2023 – with 2022 as the reference period



SFDR - Sustainable Finance Disclosure Regulation

REFINITIV SOLUTION: Based on the draft RTS published in February 2021, Refinitiv has solid coverage across the proposed measures.

Data measures including duplicates	
EU ESG disclosure	73

Level of Match	Count of Data Measures
Direct	53
No Match	6
Partial	14
Grand Total	73

Data Measures NOT covered by Refinitiv

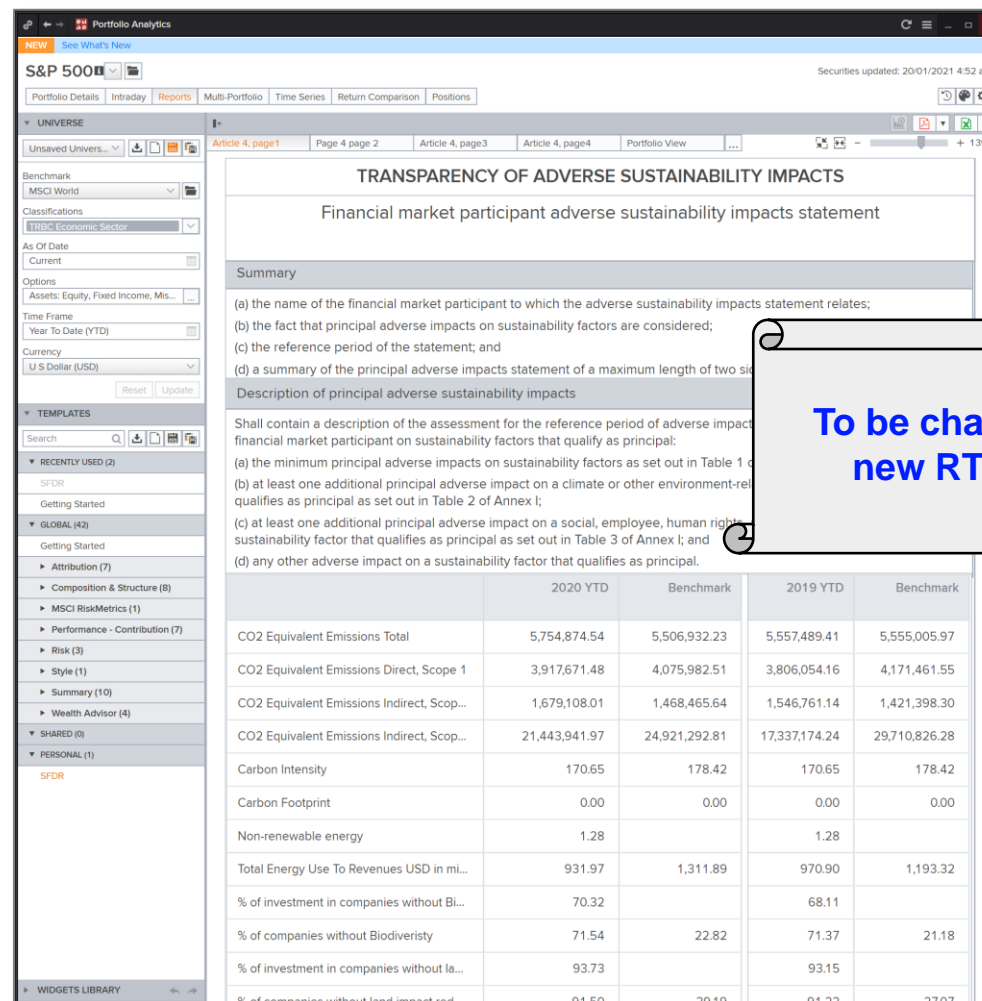
Table 1. Mandatory

- 17. Exposure to fossil fuels through real estate assets
- 18. Exposure to energy-inefficient real estate assets

Table 2. Opt in but must report on 1

- 8. Exposure to areas of high water stress
- 14.1 Natural species and protected areas / Share of investments in investee companies whose operations affect threatened species
- 19. Energy consumption intensity
- 22. Land artificialisation

REFINITIV SOLUTION II: Refinitiv is creating SFDR template in Eikon providing portfolio level aggregation of the RTS metrics.



The screenshot shows a report titled "TRANSPARENCY OF ADVERSE SUSTAINABILITY IMPACTS" for the S&P 500 index. The report includes a summary section with the following points:

- (a) the name of the financial market participant to which the adverse sustainability impacts statement relates;
- (b) the fact that principal adverse impacts on sustainability factors are considered;
- (c) the reference period of the statement; and
- (d) a summary of the principal adverse impacts statement of a maximum length of two sides.

The report also includes a table of metrics for 2020 YTD, Benchmark, and 2019 YTD. A callout box points to the table with the text: "To be changed as per new RTS metrics".

	2020 YTD	Benchmark	2019 YTD	Benchmark
CO2 Equivalent Emissions Total	5,754,874.54	5,506,932.23	5,557,489.41	5,555,005.97
CO2 Equivalent Emissions Direct, Scope 1	3,917,671.48	4,075,982.51	3,806,054.16	4,171,461.55
CO2 Equivalent Emissions Indirect, Scop...	1,679,108.01	1,468,465.64	1,546,761.14	1,421,398.30
CO2 Equivalent Emissions Indirect, Scop...	21,443,941.97	24,921,292.81	17,337,174.24	29,710,826.28
Carbon Intensity	170.65	178.42	170.65	178.42
Carbon Footprint	0.00	0.00	0.00	0.00
Non-renewable energy	1.28		1.28	
Total Energy Use To Revenues USD in mi...	931.97	1,311.89	970.90	1,193.32
% of investment in companies without Bi...	70.32		68.11	
% of companies without Biodiversity	71.54	22.82	71.37	21.18
% of investment in companies without la...	93.73		93.15	
% of companies without land impact red...	91.50	20.10	91.77	27.07

SFDR Mapping Table

Table 1 (Universal mandatory indicators)

Indicators applicable to investments in investee companies

Climate and other environment-related indicators

Adverse sustainability indicator	Metric	Refinitiv - Level of Match	Refinitiv Data Measures	Field Code	Comment	Formula or context if no formula available	
Greenhouse gas emissions	1. GHG emissions	Scope 1 GHG emissions	CO2 Equivalent Emissions Direct, Scope 1	TR.CO2DirectScope1		$\sum_n^i \left(\frac{\text{current value of investee company's emissions}}{\text{current value of investee company's revenue}} \right)$	
		Scope 2 GHG emissions	CO2 Equivalent Emissions Indirect, Scope 2	TR.CO2IndirectScope2		$\sum_n^i \left(\frac{\text{current value of investee company's emissions}}{\text{current value of investee company's revenue}} \right)$	
		From 1 January 2023, Scope 3 GHG emissions	CO2 Equivalent Emissions Indirect, Scope 3	TR.CO2IndirectScope3		$\sum_n^i \left(\frac{\text{current value of investee company's emissions}}{\text{current value of investee company's revenue}} \right)$	
		Total GHG emissions	CO2 Equivalent Emissions Total	TR.CO2EmissionTotal		$\sum_n^i \left(\frac{\text{current value of investee company's emissions}}{\text{current value of investee company's revenue}} \right)$	
	2. Carbon footprint	Carbon footprint	Direct	CO2 Equivalent Emissions Direct, Scope 1 CO2 Equivalent Emissions Indirect, Scope 2 CO2 Equivalent Emissions Indirect, Scope 3	TR.CO2DirectScope1 TR.CO2IndirectScope2 TR.CO2IndirectScope3		$\sum_n^i \left(\frac{\text{current value of investee company's emissions}}{\text{current value of investee company's revenue}} \right)$
	3. GHG intensity of investee companies	GHG intensity of investee companies	Direct	CO2 Equivalent Emissions Direct, Scope 1 CO2 Equivalent Emissions Indirect, Scope 2 CO2 Equivalent Emissions Indirect, Scope 3 Total Revenue	TR.CO2DirectScope1 TR.CO2IndirectScope2 TR.CO2IndirectScope3 TR.TotalRevenue		'GHG intensity of investee companies' s $\sum_n^i \left(\frac{\text{current value of investee company's emissions}}{\text{current value of investee company's revenue}} \right)$

List of Challenges

When developing solutions...

SFDR

- Final list of metrics not defined (yet)
- Missing metrics – especially in real estate
- How to aggregate missing data – low level of disclosure in certain metrics

Eu Taxonomy

- Translation of business classification standards to NACE
- How companies report their business segments
- Screening criteria – metrics thresholds – extremely detailed / hard to collect
- Screening criteria – targets are of a high standard – for example no cement company passes test
- Resolution – using company level ESG data applied at business segment level



Under Directive 2014/95/EU, large companies have to publish reports on the policies they implement in relation to environmental protection, social responsibility and treatment of employees, respect for human rights, anti-corruption and bribery.

Non-financial reporting apply to large public-interest companies with more than 500 employees. This covers approximately 6,000 large companies and groups across the EU, including listed companies, banks, insurance companies, other companies designated by national authorities as public-interest entities

REFINITIV SOLUTION: Refinitiv has built a digital ESG onboarding system called the ESG Contributor Tool

ESG Self Contribution – learn more >

REFINITIV

Home ESG Officers & Directors

Lakshmi, Amrutha
Home
Change Password
Log out

WHY CONTRIBUTE?

Environmental, Social and Governance

As an investor relations professional, you now have the ability to review, update and publish your firm's Environmental, Social and Governance (ESG) data which are available to investors across the globe.

Refinitiv offers one of the most comprehensive ESG databases in the industry. Our clients get access to ESG data on over 7,000 public companies globally, across more than 400 different ESG metrics, with history going back to 2002.

Using our new ESG Contributor Tool, you can manage your data. Your data is available to institutional investment firms, asset managers, investors, corporations, universities & research firms across various products. Our products allow the financial community to incorporate ESG factors into portfolio analysis, equity research, screening and analysis.

The contribution tool allows you to:

- Contribute your company ESG data for the current year
- Review and edit the historical ESG data that is already contributed by your company

Officers & Directors

As an investor relations professional, you now have the ability to review and update your firm's officers & directors' data on our platform. Join the 50,000 public and 125,000 private companies representing 1.76 million unique people by contributing your firm's details to one of the most comprehensive databases of executives and directors in the world. Our database is the industry source for:

Welcome to The REFINITIV Contributions Channel

THE RIGHT DATA WON'T COLLECT, CONTEXTUALISE, CONNECT, ANALYSE, INTERPRET AND VISUALISE ITSELF.

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DATA IS JUST THE BEGINNING

Email: amrutha.lakshmi@refinitiv.com
Password: ****
Forgot Password? Request Access
SIGN IN

Home ESG Officers & Directors

ENVIRONMENTAL, SOCIAL, GOVERNANCE

Environmental Social Governance Submit Scores Peer Analysis

🏆 - Scoring Measure

FISCAL YEAR

PERIOD END DATE 30-Sep

REPORTING CURRENCY

animal

ENVIRONMENTAL PRODUCTS

- Animal Testing
- Animal Testing Cosmetics
- Animal Testing Reduction

ANIMAL TESTING

Is the company directly or indirectly involved in animal testing?

[More Info](#)

ANIMAL TESTING

Is the company directly or indirectly involved in animal testing?

What we expect from you:

- Provide, if the company is testing its products on animals or if it is sourcing raw materials which are tested on animals.
- Provide, if the company claims to be gradually reducing or replacing the number of animal tests.
- Answer No, if the company mentions that it is not involved in animal testing or if it claims to have ended all animal testing.
- Provide, if the company claims to perform animal tests solely in cases where this is required by law.
- The data measure is mostly relevant to the health care sector.

Below cannot be considered:

- Non-Animal Testing.
- Positron Emission Tomography (PET).

Qualified Data:

Animal research

We recognise that animal research is a subject of ethical concern. We use alternatives to animals whenever we can and we aim to carry out studies with the fewest animals possible. However, animal studies remain a vital part of our research as, in many cases, this is the only way to demonstrate the effects of a potential new medicine in a living body before it is tested in humans. Regulations require us to test the safety of all new medicines on animals before they are evaluated in clinical trials.

Explanation- The Company is involved in Animal Testing.

CSRD

The image shows a web application interface for 'POLICY WATER EFFICIENCY'. It features a table with columns for '2019' and '2018'. The table has rows for 'Value*', 'Unit', 'Scaling', 'Source Type*', 'Source Date*', 'Link to Source*', 'Supporting Text*', 'Page Number', and 'Scope'. A modal dialog is open, showing a detailed view of the '2018' source entry. The dialog includes fields for 'Value*', 'Unit', 'Scaling', 'Source Type*', 'Source Date*', 'Link to Source*', 'Supporting Text', 'Page Number', and 'Scope'. A 'Save' button is highlighted in the dialog.

	2019	2018
Value*		TRUE
Unit		
Scaling		
Source Type*		Sustainability
Source Date*	DD-MMM-YYYY	13-Nov-2017
Link to Source*		https://www.
Supporting Text*		Water: Potable water use decreased by 19% compared to the prior year. This decrease is mainly attributable to...
Page Number		64
Scope		Global

	2019	2018	2017
Value*	TRUE	TRUE	TRUE
Unit			
Scaling			
Source Type*	10-K		Sustainability Report 2017
Source Date*	02-Oct-2019		13-Nov-2017
Link to Source*	www.		https://www.
Supporting Text			Water: Potable water use decreased by 19% compared to the prior year. This decrease is mainly attributable to...
Page Number	33		64
Scope	Global	Global	Global

Refinitiv ESG Data & Ratings

Coverage & Disclosure



ESG Glass Pyramid

ESG Rating

Detailed Data

Disclosure Stimulus

Quantified Materiality

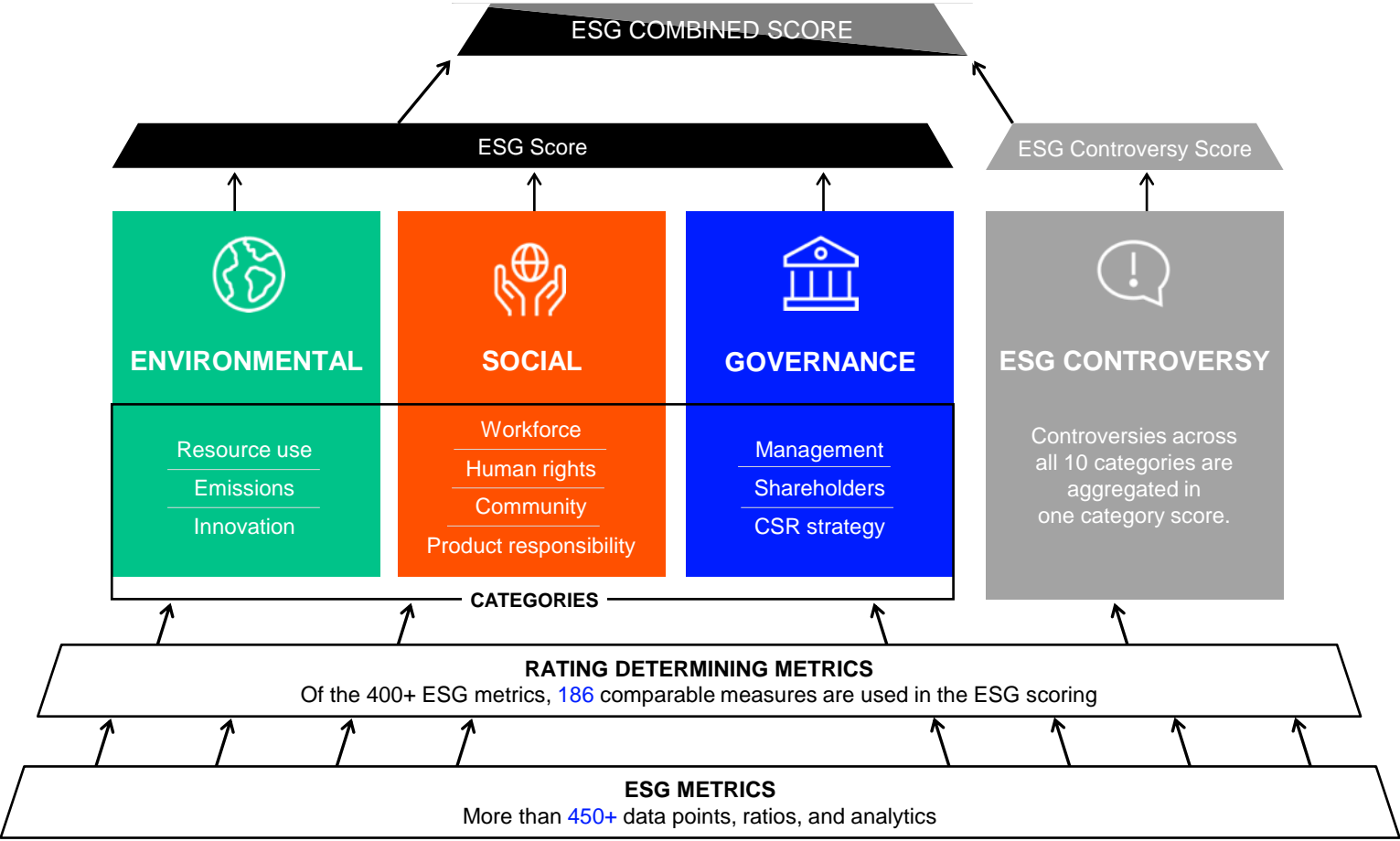
Transparent Methodology

Objectivity - Formulae

Rating Structure

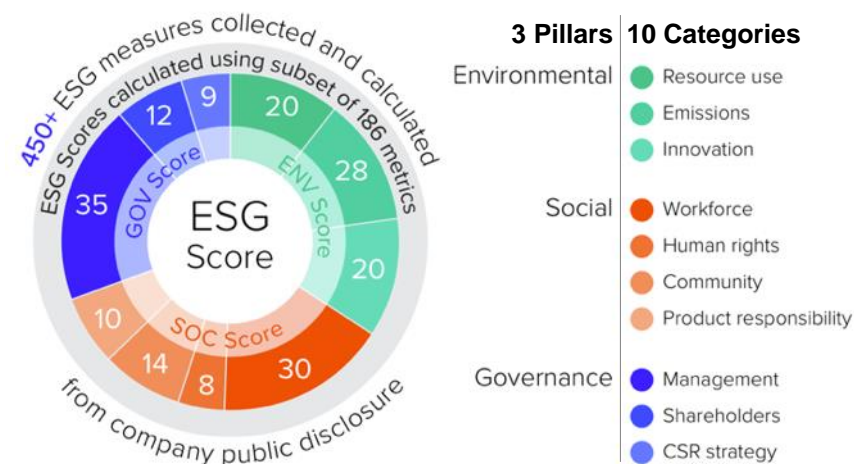
ESG rating pyramid

Combining company reporting & controversies through a bottom-up ranking aggregation



Rating Structure

Emissions Category Bottom-up



Percentile Rank scoring methodology

- Benchmarked to TRBC Industry Groups (*Country of Domicile in case of Governance*)
- Category score is derived as **sum** of all the metrics scores used to create it, followed by ranking
- Zero transparent companies (*not reporting anything in specific category*) are excluded while calculating percentile ranks
- Zero transparent companies get category score = 0

$$\text{score} = \frac{\text{n. of companies with a worst value} + \frac{\text{n. of companies with the same value included in the current one}}{2}}{\text{n. of companies with a value}}$$

*Magnitude weights of all ten categories are summed up for respective industry group. Each category magnitude weight is divided by sum of magnitude weights of respective industry group to derive category weight.

Emissions Category Metrics in ESG Rating	Dt.	+/-
Total CO2 Equivalent Emissions To Revenues USD	F(I)	-
VOC or Particulate Matter Emissions Reduction	B	+
Total Waste To Revenues USD	F(I)	-
Waste Recycled To Total Waste	F(I)	+
Total Hazardous Waste To Revenues USD	F(I)	-
Water Pollutant Emissions To Revenues USD	F(I)	-
Environmental Expenditures Investments	B	+
Policy Emissions	B	+
Targets Emissions	B	+
Biodiversity Impact Reduction	B	+
Flaring Gases	F	-
Cement CO2 Equivalents Emission	F	-
Ozone-Depleting Substances	F	-
NOx and SOx Emissions Reduction	B	+
NOx Emissions	F	-
SOx Emissions	F	-
VOC Emissions	F	-
e-Waste Reduction	B	+
Emissions Trading	B	+
Environmental Partnerships	B	+
EMS Certified Percent	B	+
Environmental Restoration Initiatives	B	+
Staff Transportation Impact Reduction	B	+
Accidental Spills	F	-
Climate Change Commercial Risks Opportunities	B	+
CO2 Equivalent Emissions Indirect, Scope 3	F	-
Self-Reported Environmental Fines	F	-
Internal Carbon Price per Tonne	F	+

Materiality in an Example

Category score weights different according to materiality to the industry group*

Coal			
Pillar	Category	W %	PW %
ENV	Resource Use	19%	41%
	Emissions	20%	
	Innovation	2%	
SOC	Workforce	10%	29%
	Human Rights	7%	
	Community	10%	
	Product Res.	2%	
GOV	Management	20%	30%
	Shareholders	6%	
	CSR Strategy	4%	

Banking Services			
Pillar	Category	W %	PW %
ENV	Resource Use	2%	14%
	Emissions	2%	
	Innovation	10%	
SOC	Workforce	19%	50%
	Human Rights	10%	
	Community	12%	
	Product Res.	9%	
GOV	Management	24%	36%
	Shareholders	7%	
	CSR Strategy	5%	

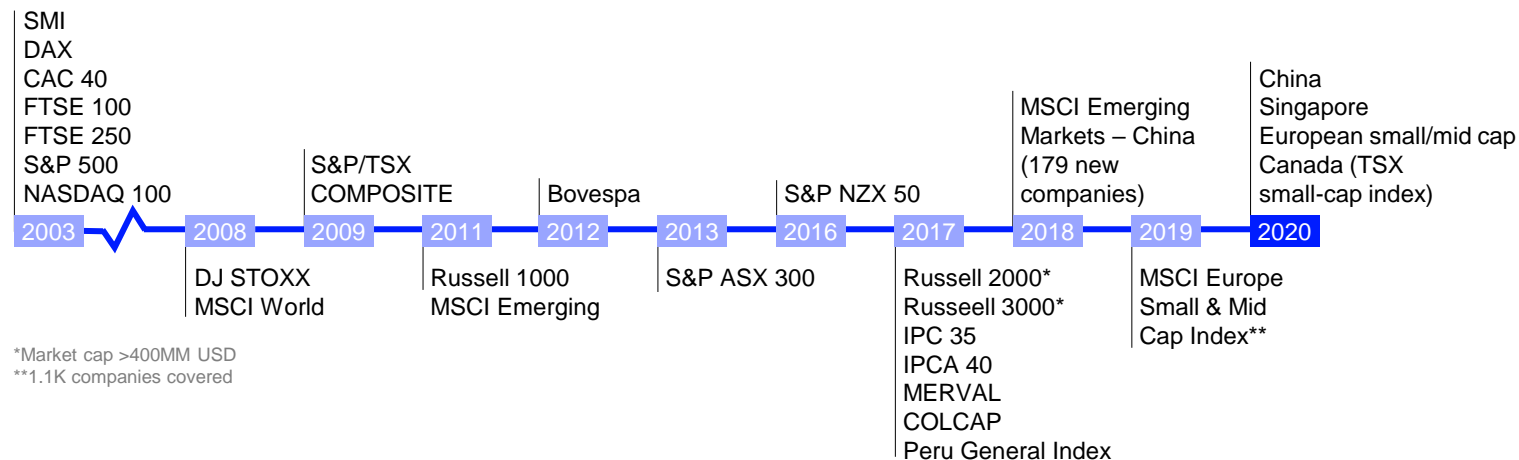
ESG Data – DBOR

Sample view of ESG metrics

Pillar	Category	Eikon Code	DFO Codes	Title	Description	Data Type	Units
Environmental	Emissions	TR.AnalyticCO2	ENERO03V	Total CO2 Equivalent Emissions To Revenues USD in million	Total CO2 and CO2 equivalents emission in tonnes divided by net sales or revenue in US dollars in million.	Float	(Tonnes/Revenue\$) * 1000000
Environmental	Emissions	TR.AnalyticVOCorPMReduction	ENERO09V	VOC or Particulate Matter Emissions Reduction	Does the company report on initiatives to reduce, substitute, or phase out volatile organic compounds (VOC) or particulate matter less than ten microns in diameter (PM10)?	Boolean	Y/N
Environmental	Emissions	TR.AnalyticTotalWaste	ENERO10V	Total Waste To Revenues USD in million	Total amount of waste produced in tonnes divided by net sales or revenue in US dollars in million.	Float	(Tonnes/Revenue\$) * 1000000
Environmental	Emissions	TR.AnalyticWasteRecyclingRatio	ENERO11V	Waste Recycled To Total Waste	Total recycled and reused waste produced in tonnes divided by total waste produced in tonnes.	Float	Ratio
Environmental	Emissions	TR.AnalyticHazardousWaste	ENERO12V	Total Hazardous Waste To Revenues USD in million	Total amount of hazardous waste produced in tonnes divided by net sales or revenue in US dollars in million.	Float	(Tonnes/Revenue\$) * 1000000
Environmental	Emissions	TR.AnalyticDischargeWaterSystem	ENERO13V	Water Pollutant Emissions To Revenues USD in million	Total weight of water pollutant emissions in tonnes divided by net sales or revenue in US dollars in million.	Float	(Tonnes/Revenue\$) * 1000000
Environmental	Emissions	TR.AnalyticEnvExpenditures	ENERO24V	Environmental Expenditures Investments	Does the company report on its environmental expenditures or does the company report to make proactive environmental investments to reduce future risks or increase future opportunities?	Boolean	Y/N
Environmental	Emissions	TR.PolicyEmissions	ENERDP0051	Policy Emissions	Does the company have a policy to improve emission reduction? - in scope are the various forms of emissions to land, air or water from the company's core activities - processes, mechanisms or programs in place as to what the company is doing to reduce emissions in its operations - system or a set of formal, documented processes for controlling emissions and driving continuous improvement	Boolean	Y/N
Environmental	Emissions	TR.TargetsEmissions	ENERDP0161	Targets Emissions	Has the company set targets or objectives to be achieved on emission reduction? - in scope are the short-term or long-term reduction target to be achieved on emissions to land, air or water from business operations	Boolean	Y/N
Environmental	Emissions	TR.BiodiversityImpactReduction	ENERDP019	Biodiversity Impact Reduction	Does the company report on its impact on biodiversity or on activities to reduce its impact on the native ecosystems and species, as well as the biodiversity of protected and sensitive areas?	Boolean	Y/N
Environmental	Emissions	TR.CO2EmissionTotal	ENERDP023	CO2 Equivalent Emissions Total	Total Carbon dioxide (CO2) and CO2 equivalents emission in tonnes. - following gases are relevant : carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCS), perfluorinated compound (PFCS), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3) - total CO2 emission = direct (scope1) + indirect (scope 2) - we follow green house gas (GHG) protocol for all our emission classifications by type	Float	Tonnes
Environmental	Emissions	TR.CO2DirectScope1	ENERDP024	CO2 Equivalent Emissions Direct, Scope 1	Direct of CO2 and CO2 equivalents emission in tonnes. - direct emissions from sources that are owned or controlled by the company (scope 1 emissions) - following gases are relevant : carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCS), perfluorinated compound (PFCS), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3) - we follow green house gas (GHG) protocol for all our emission classifications by type	Float	Tonnes
Environmental	Emissions	TR.CO2IndirectScope2	ENERDP025	CO2 Equivalent Emissions Indirect, Scope 2	Indirect of CO2 and CO2 equivalents emission in tonnes. - indirect emissions from consumption of purchased electricity, heat or steam which occur at the facility where electricity, steam or heat is generated (scope 2 emissions) - following gases are relevant : carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCS), perfluorinated compound (PFCS), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3) - we follow green house gas (GHG) protocol for all our emission classifications by type	Float	Tonnes
Environmental	Emissions	TR.FlaringGases	ENERDP026	Flaring Gases	Total direct flaring or venting of natural gas emissions in tonnes. - relevant to oil & gas sector companies - flaring of produced gas - the process of burning-off surplus combustible vapors from a well, either as a means of disposal or as a safety measure to relieve well pressure - is the most significant source of air emissions from offshore oil and gas installations - we follow green house gas (GHG) protocol for all our emission classifications by type	Float	Tonnes

Coverage & Unique Features

Indices covered

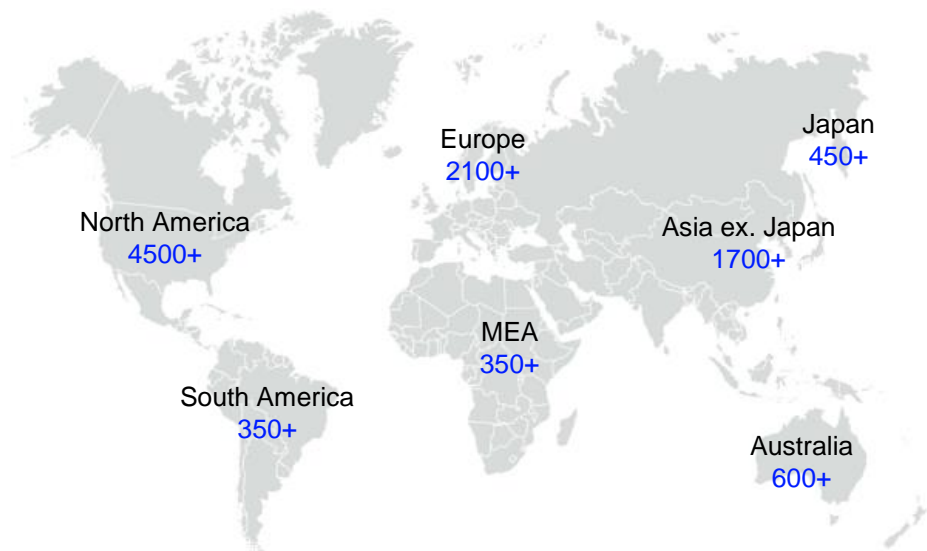


ESG Data coverage

76 countries
80% of global market cap

1.8M officers, directors
10K publicly listed companies with ESG data

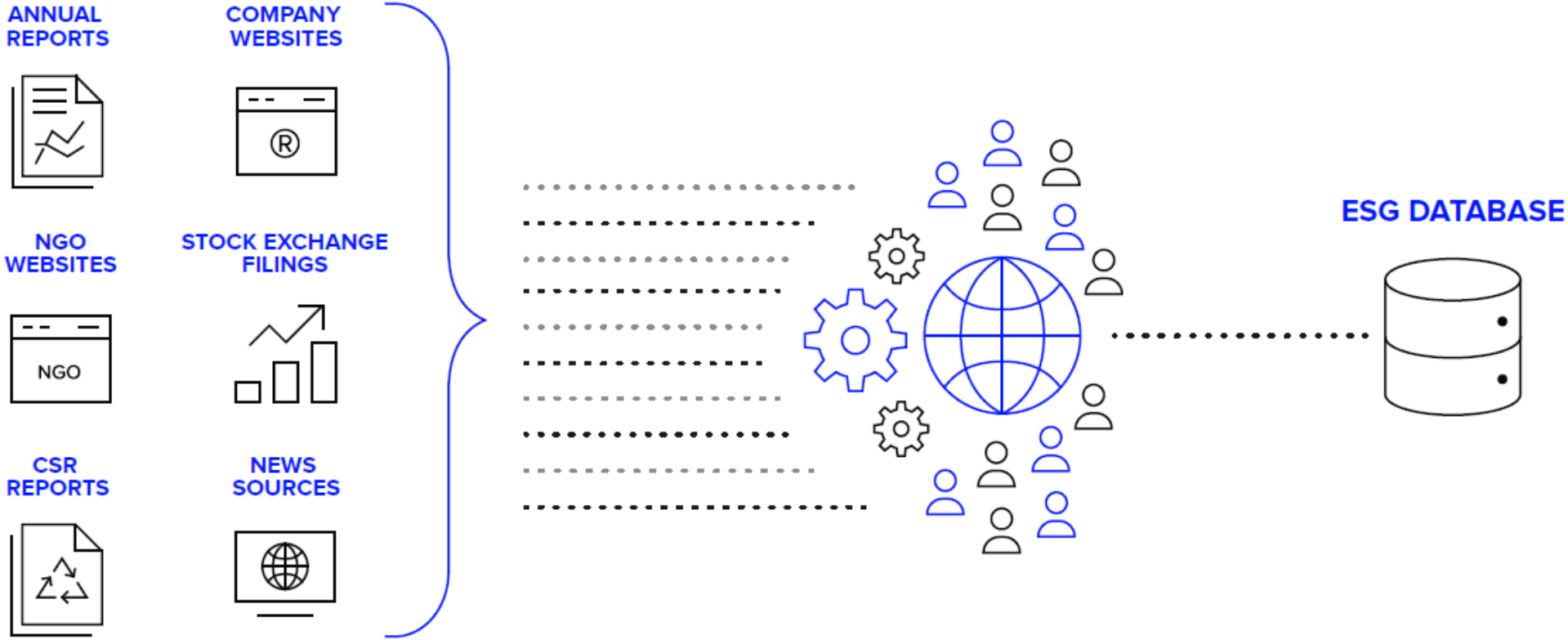
769K individual fixed income securities



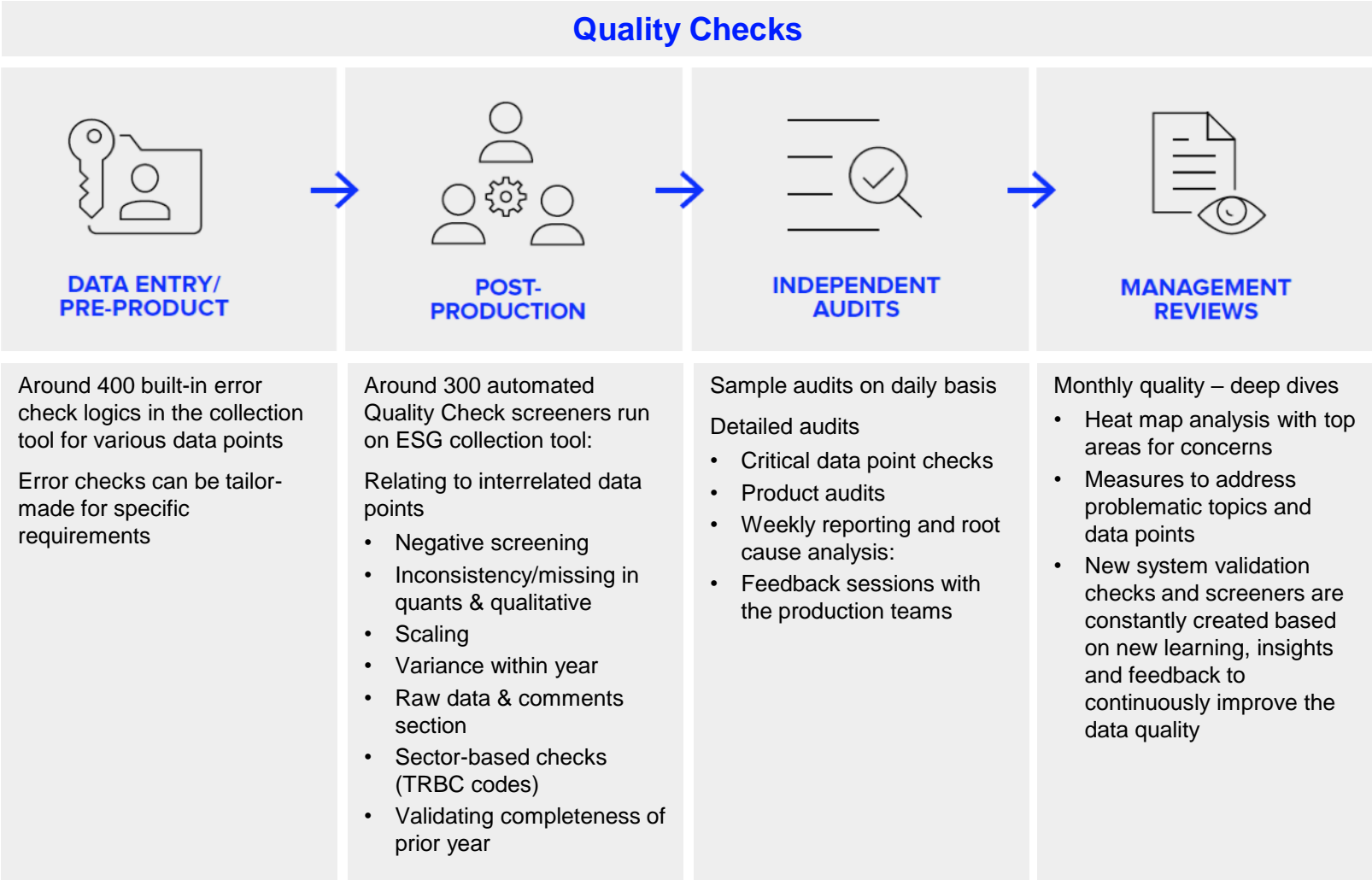
Unique Features

Raw Data Rigorous Quality Checks	450+ Metrics, inc scores & grades
	Transparency & Audibility
	History Back to 2002
Rating Pillars, Categories, Controversies	Scoring Customisation
X-Asset Green Bonds League Tables	Integrated with Fundamentals
	Eikon – Tailored Analytics
Delivery Multiple Delivery Channels	Eikon, Workspace – All ESG inc.
	Standalone Feeds – charged sep.
	Integrated with Quant & WM
	Real-time ESG Proxies
Rapid Data Expansion – ESG Contributor tool >	

ESG Data - Collection



ESG Data – Quality Assurance



Climate Metrics and Disclosure Ratios

Eikon Code	Title	Transparency %
TR.AnalyticEstimatedCO2Total	Estimated CO2 Equivalents Emission Total	100.00
TR.CO2EstimationMethod	CO2 estimation method	100.00
TR.PolicyEmissions	Policy Emissions	56.65
TR.CO2EmissionTotal	CO2 Equivalent Emissions Total	42.89
TR.AnalyticCO2	Total CO2 Equivalent Emissions To Revenues USD	42.73
TR.ClimateChangeRisksOpp	Climate Change Commercial Risks Opportunities	36.84
TR.ISO14000	ISO 14000 or EMS	36.14
TR.CO2DirectScope1	CO2 Equivalent Emissions Direct, Scope 1	35.52
TR.CO2IndirectScope2	CO2 Equivalent Emissions Indirect, Scope 2	35.24
TR.EnvPartnerships	Environmental Partnerships	29.83
TR.TargetsEmissions	Targets Emissions	28.62
TR.EmissionReductionTargetYear	Emission Reduction Target Year	25.87
TR.EmissionReductionTargetPctage	Emission Reduction Target Percentage	22.57
TR.CO2IndirectScope3	CO2 Equivalent Emissions Indirect, Scope 3	20.71
TR.StaffTransportationReduction	Staff Transportation Impact Reduction	18.33
TR.EnvInvestments	Environmental Investments Initiatives	14.42
TR.EMSCertifiedPct	EMS Certified Percent	13.94
TR.NOxEmissions	NOx Emissions	13.57
TR.SOxEmissions	SOx Emissions	13.10
TR.NOxSOxEmissionsReduction	NOx and SOx Emissions Reduction	11.06
TR.AnalyticVOCorPMReduction	VOC or Particulate Matter Emissions Reduction	10.00
TR.VOCEmissionsReduction	VOC Emissions Reduction	7.01
TR.EmissionsTrading	Emissions Trading	6.25
TR.VOCEmissions	VOC Emissions	5.83
TR.PMReduction	Particulate Matter Emissions Reduction	5.81
TR.CarbonOffsetsCredits	Carbon Offsets/Credits	2.40
TR.InternalCarbonPricing	Internal Carbon Pricing	1.93
TR.InternalCarbonPriceTonne	Internal Carbon Price per Tonne	0.97
TR.FlaringGases	Flaring Gases	0.54
TR.CementCO2Emission	Cement CO2 Equivalents Emission	0.22

Top 10 industries with highest Climate Data Transparency

Industry Name	Transparency %
Multiline Utilities	51.06
Office Equipment	47.50
Construction Materials	42.35
Electric Utilities & IPPs	42.28
Chemicals	40.16
Industrial Conglomerates	38.84
Paper & Forest Products	38.02
Containers & Packaging	37.68
Automobiles & Auto Parts	36.20
Diversified Industrial Goods Wholesalers	35.88

Summary

Refinitiv ESG Glass Pyramid

1. Objective Methodology

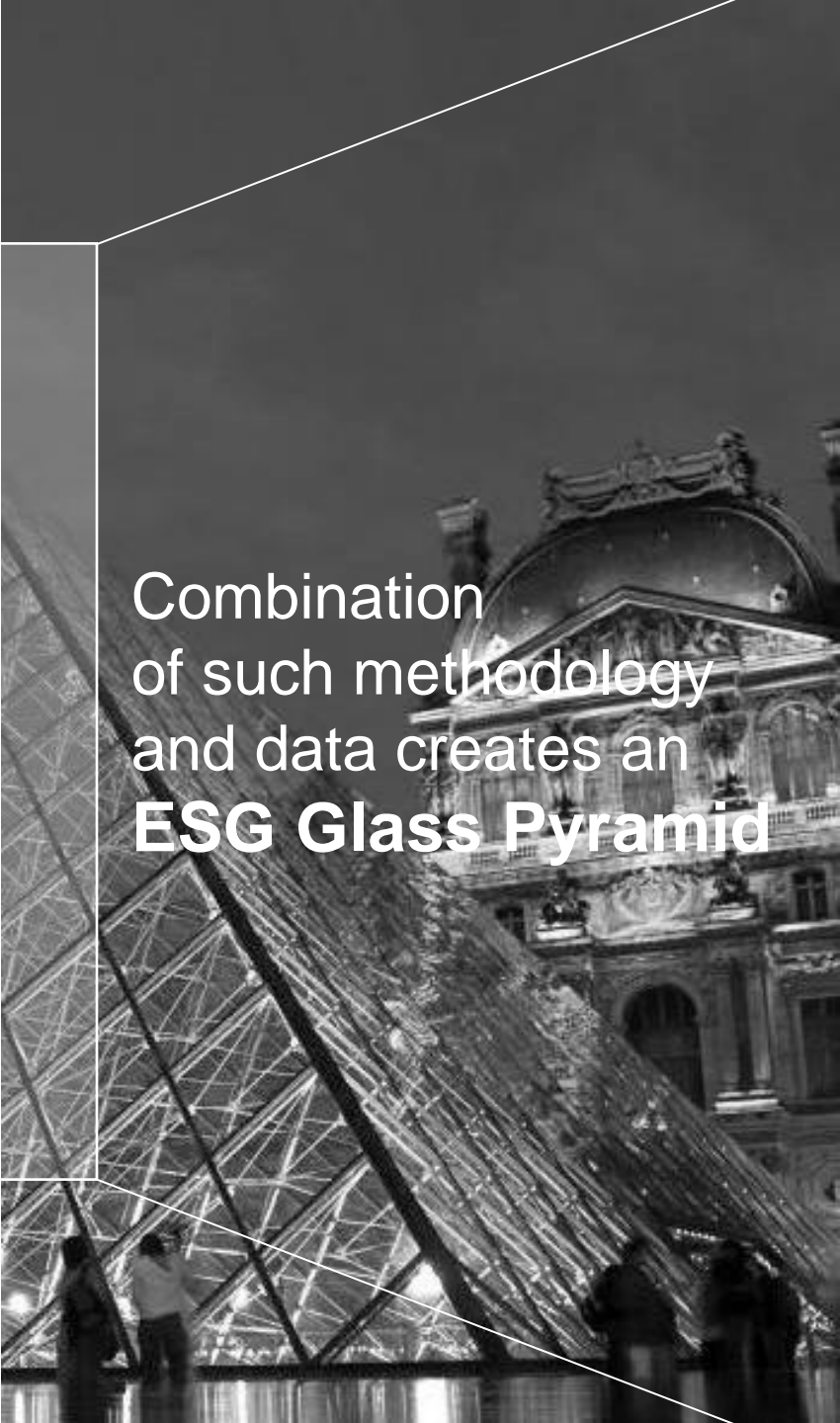
Documented, objective, formula-driven best in class methodology that allows moving easily in the **ESG rating pyramid** – from the rating to the underlying data, or from the underlying data to the final rating.

The methodology provides insights into how critical challenges such as materiality, transparency stimulus, company size bias for controversies are handled.

2. Technology Enabled Data

The amount of individual data metrics available in and outside of the ESG rating, allows detailed analysis of each aspect of ESG, and facilitates scrutinizing a company's risk exposure and the management of exposure.

The data are mapped to all mainstream ESG frameworks (SASB, TCFD, DJSI, GRESB etc.) hence allow adherence to specific nomenclatures and regulatory requirements.



Combination of such methodology and data creates an **ESG Glass Pyramid**

Thank you!