



BUDAPEST
STOCK
EXCHANGE

Fenntartható pénzügyek, ESG befektetések

ESG Data

Turning the Art of ESG into Science

Barnabas Acs, Ph.D.
barnabas.acs@refinitiv.com

REFINITIV™

DATA IS JUST
THE BEGINNING



ESG & Sustainable Finance

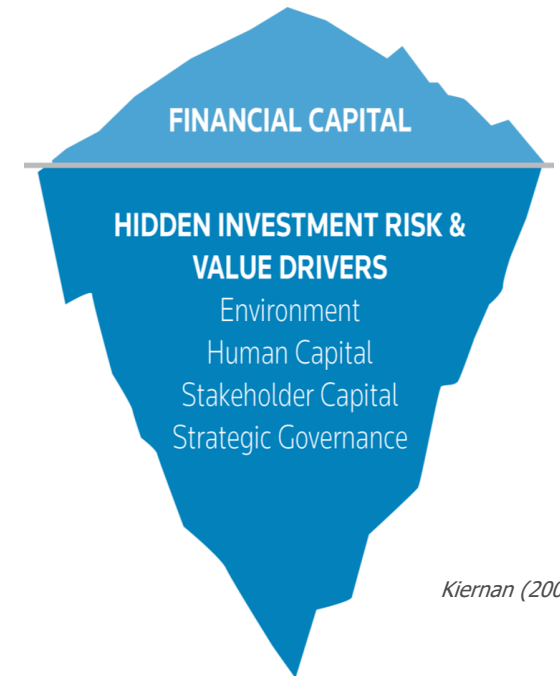
Drivers of Market Growth

- **World** is changing – climate change, pollution, resource depletion
- **People** are changing – greater awareness, transfer of capital to millennial generation
- **Regulation** is changing – more in numbers and descriptiveness
- **Data** is changing – breadth and depth, **ESG a risk mitigation and alpha generation factor**



Requirements changed

ESG stands for set of material non-financial information ensuring sustainable profitability published by the company itself and reinforced / challenged by the flow of news / controversies.



World is Changing

Climate change occurs when changes in Earth's climate system result in new weather patterns that remain in place for an extended period of time.

BBC NEWS

Follow

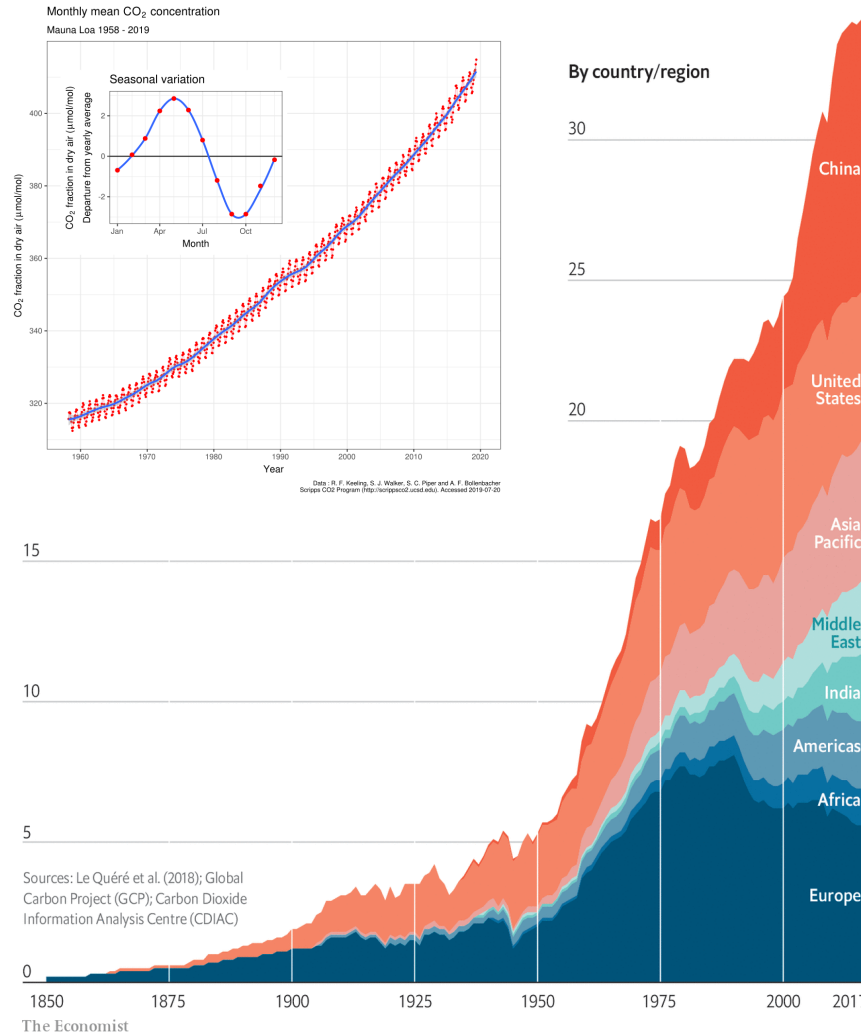
UK weather: Sunniest spring since records began

29 MAY 2020 · 2-MIN READ

The UK has experienced its sunniest spring since records began in 1929, the Met Office has said.

It is also set to be the driest May on record for some parts of UK, including the driest in England for 124 years.

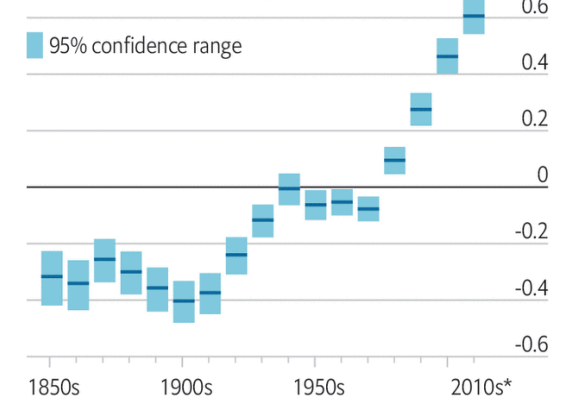
Some areas are already warning of drought conditions despite exceptionally wet weather and flooding earlier in the year.



Sources: The Economist, IPCC, Wikipedia

Global temperature change by decade, °C

Relative to 1961-1990 average



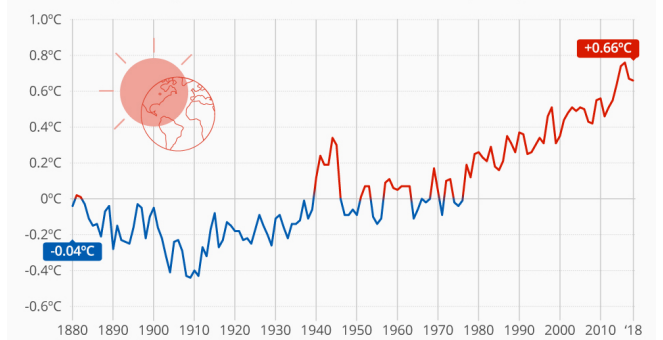
Sources: HadCRUT4; Morice et al. (2012)

*To July 2019

The Economist

The Oceans Are Getting Warmer

Annual divergence of global ocean temperature from 20th century average



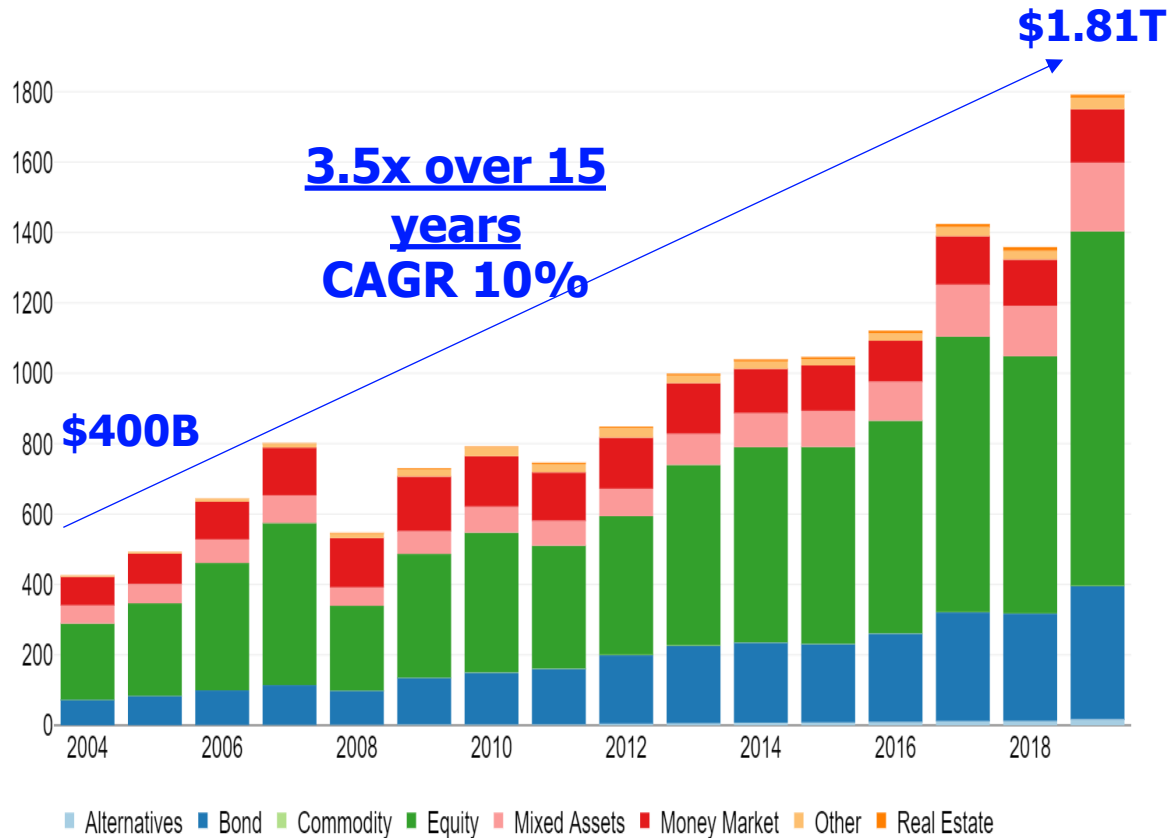
© StatistaCharts Ocean surface temperatures Source: NOAA National Centers for Environmental Information (NCEI)

statista

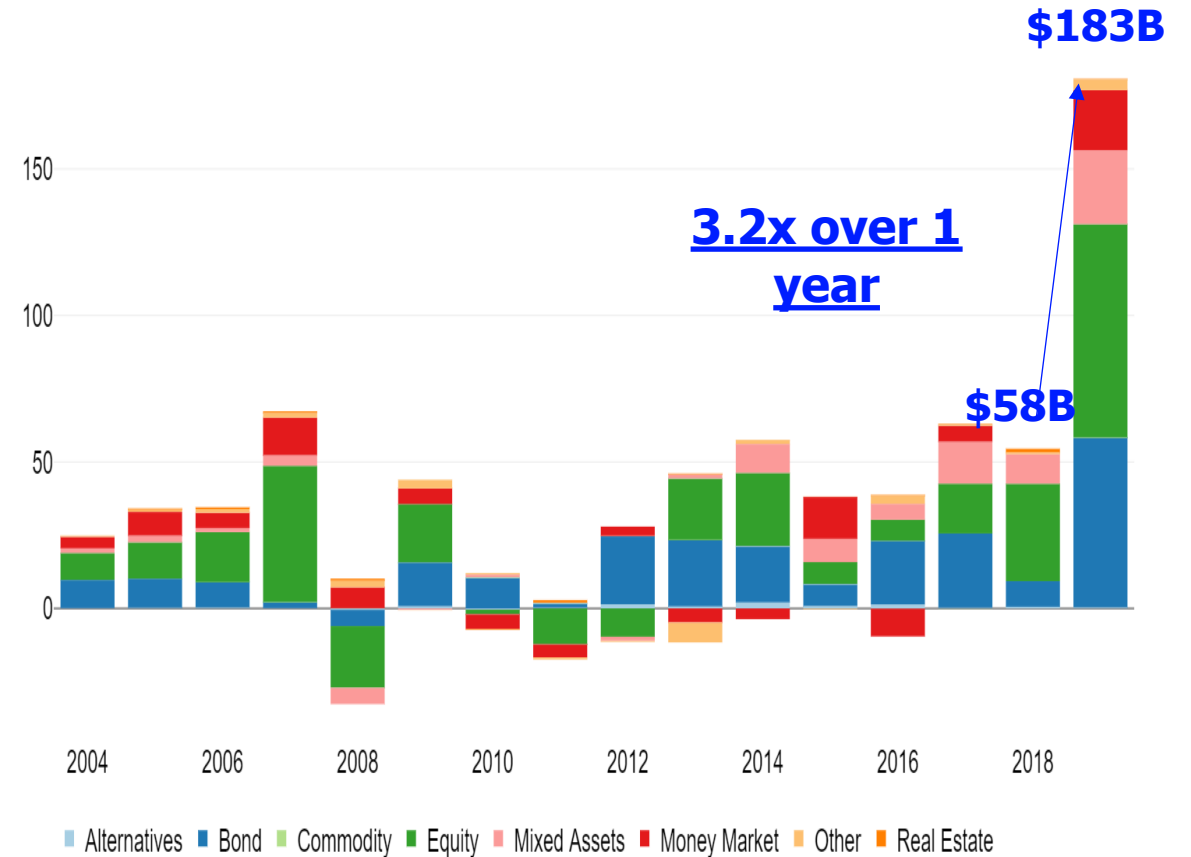
People are Changing

After years of bank research papers indicating that the millennial generation will make a difference, manifestation has finally arrived. The role of the millennials still to be quantified, but the rise of sustainable thinking is unmatched.

ESG Funds – Global AuM – Asset Type



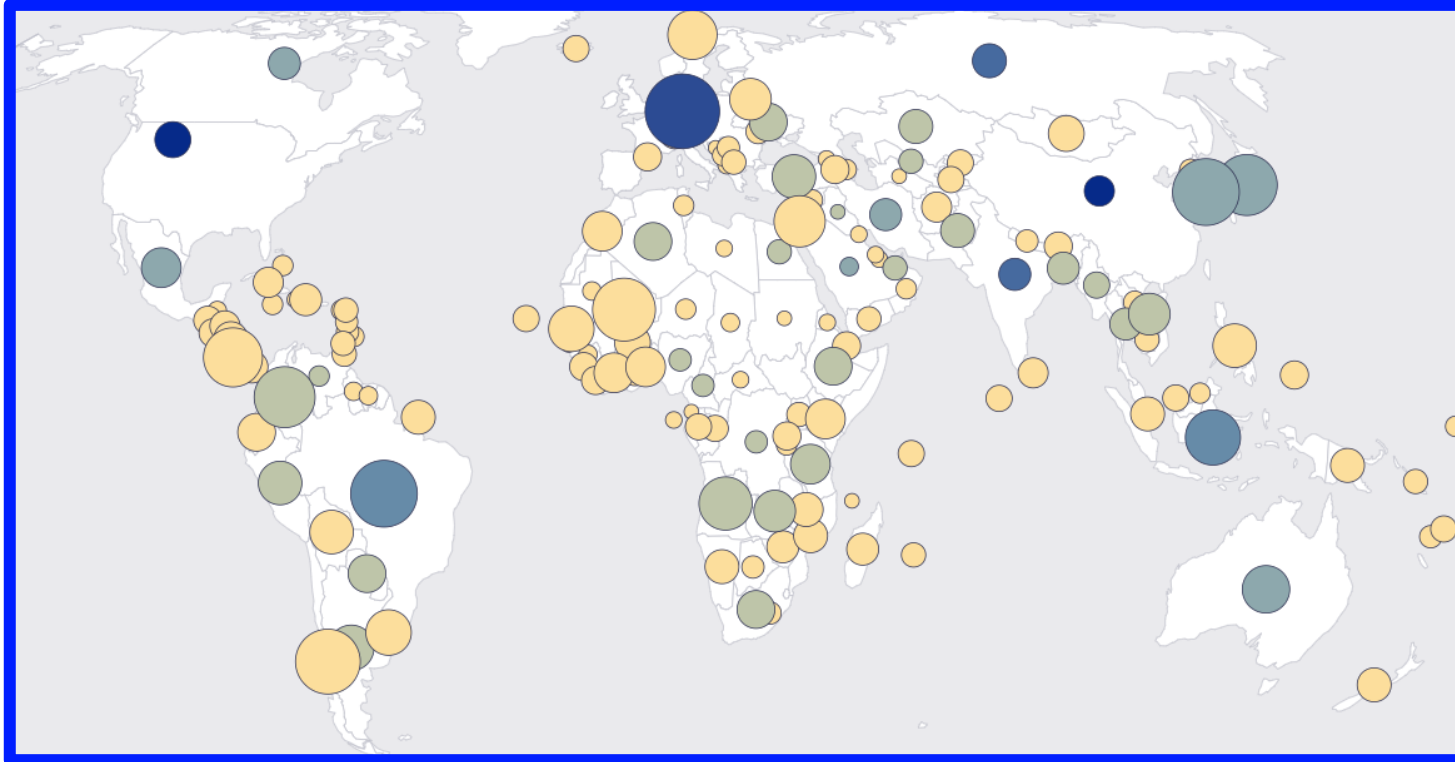
ESG Funds – Global Net Flows – Asset Type



Mutual Funds (including Fund of Funds) and Exchange Traded Funds (USD Billion)
Lipper Data from Refinitiv at 31 December 2019

Regulation is Changing

The impending climate crisis, which will have a potentially disastrous impact on our economies and requires urgent policy action (IPCC 2018),



The **size** of the circle represents the number of climate laws and policies. The larger the circle, the higher the number of climate laws and policies

The **colour** of the circle represents Carbon dioxide emissions from the use of fossil fuel and the manufacture of cement, land-use change, and forestry (MtCO₂e). The darker the circle, the higher the emissions.

25 countries and over 1,250 local governments have officially declared the existence of a climate emergency.

There are over 1,800 climate laws and policies globally

A climate emergency declaration is often accompanied by new or revised climate-related policies, regulations and measures to reduce greenhouse gas emissions.

Expect: Converging standards and ESG Innovation

Investors continue to identify inconsistent information as one of the primary hurdles for investing in ESG, and as a result, regulators are trying to provide a platform to facilitate the production of better and more comparable data.

The EU Sustainable Finance Action Plan is in the process of introducing measures that seek to improve the consistency of information — whether through a green taxonomy or disclosure regulation — further technical guidance will be produced in 2020.

By: Julia Walker, Head of Government and Industry Affairs, Refinitiv



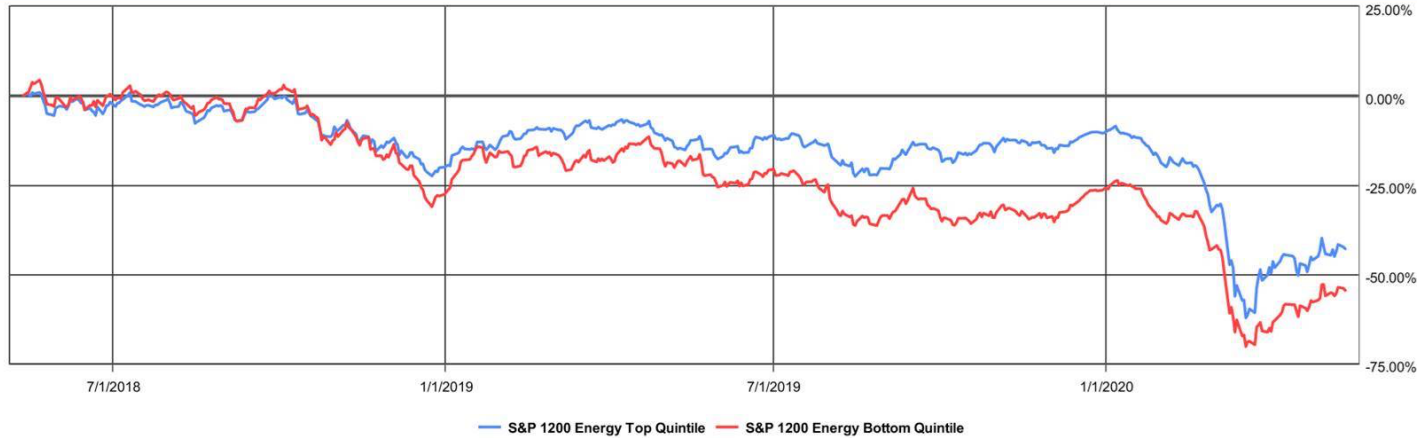
Data is Changing – ESG a Factor

S&P 1200 Energy and a factor model: equally weighted ESG Score and Total Return

S&P 1200 Energy Top Quintile vs Bottom Quintile

- Total Return with 11.67% better in top vs bottom
- ESG score difference: 43.62 in favour in top
- Emission score difference: 38.67

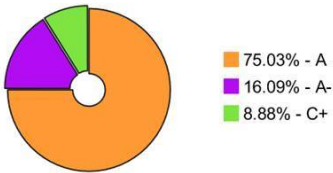
Cumulative Performance - Time Period: 2 Years (2Y) - As of 5/12/2020



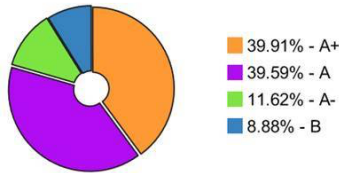
Summary Report - Time Period: 2 Years (2Y) - As of 5/12/2020

	S&P 1200 Energy Top Quintile	S&P 1200 Energy Bottom Quintile	Difference
Total Return	-42.91	-54.58	11.67
ESG Score	82.11	38.50	43.62
Emissions Score	88.93	50.46	38.47

Top Quintile - ESG Score Grade



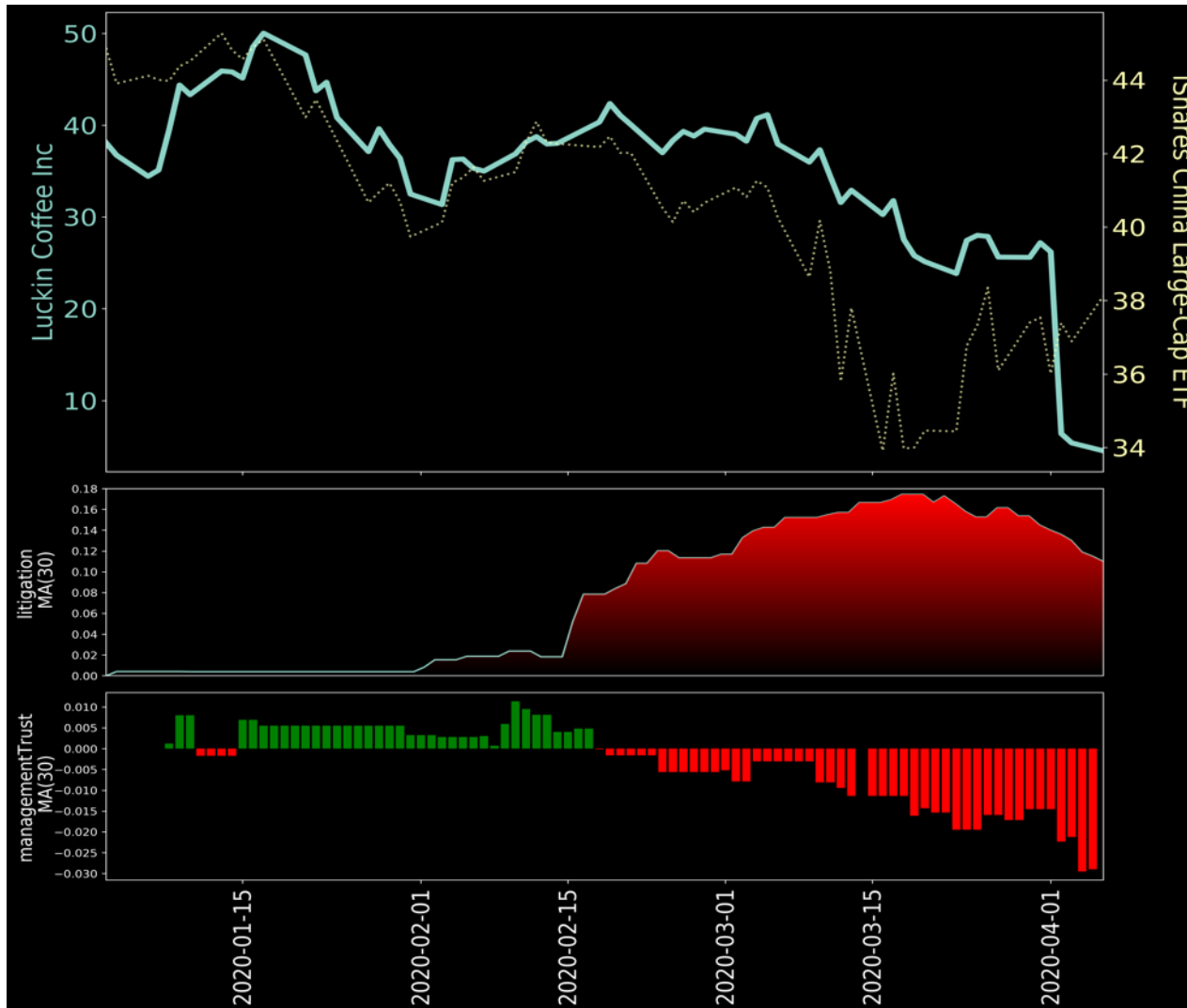
Top Quintile - Emissions Score Grade



Top Quintile - Top 5 by Total Return

Issue Name	Portfolio Return	ESG Score Grade	Emissions Score Grade
Neste Ord Shs	32.90	A-	A
Enbridge Ord Shs	8.52	A-	A+
Oneok Ord Shs	6.09	B	A+
ConocoPhillips Ord Shs	0.26	B+	A-
Origin Energy Ord Shs	-0.29	B	B+

Data is Changing – ESG a Factor



Management Trust and Litigation Index

Luckin Coffee shares dropped 75% when they revealed that their accounting was improper in **beginning April**. But **MarketPsych** data showed very low *Management Trust* and an increase in *Litigation* before the reveal.

Luckin Coffee's chart of 2020 shows that MarketPsych *Litigation Index* rose substantially towards the company since back in February, and the *Management Trust* Index fell substantially. Clearly, there was concern back in **mid February**. Luckin Coffee's share price is the light blue line. Also plotted the China Composite index against the share price for Luckin, to show when Luckin substantially diverged from its parent index.

[MarketPsych Details](#)

ESG Use Cases

Asset Management

Focused on ESG Strategies

- Capital allocation - screening out of various company exposures
- Identify best-in-class companies on ESG criteria
- Determine laggards & drive shareholder activist campaigns
- Measure, track and quantify impact of allocation decisions on non-financial criteria
- Track company performance on ESG issues vs benchmark

Focused on Pure Risk Return Strategies

- Identify ESG metrics that can be used to drive long term risk models to inform avoidance of exposure to transition, physical, reputational risks
- Identify ESG data correlations with long term under/out performance to inform alpha generation strategies

Quant Analysts & Hedge Funds

- Identify ESG metrics that can be used to drive short term risk models to inform avoidance of exposure to reputational risks
- Utilize unstructured news and to inform long strategies
- Utilize controversies data to inform short strategies

Investment Banks

- Clients willing to bank with based on ESG considerations?
- Identifying acquisition/divestiture options for clients to drive sustainable outcomes
- Identifying clients in need of transition financing
- Quantifying risk exposure (transition/physical/reputational) on the lending book
- Using T&C's data on precedent sustainable financing deals to inform pricing

Wealth Advisors

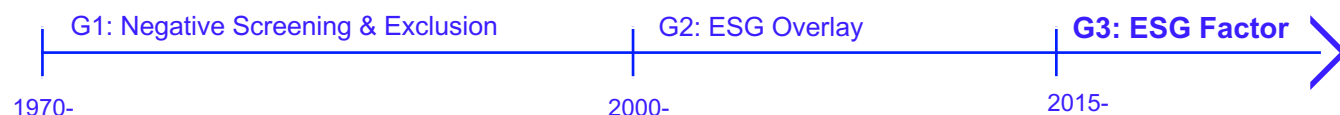
- Provision of ESG scores / specific metrics in portals to investors
- Screening out certain securities based on company activity
- Index tracking on ESG criteria

Companies

- Use data to measure / track / manage the transition to sustainable operations
- Report and benchmark on sustainability performance to ensure uninterrupted financing of corporate operations
- Adhere to regulatory requirements


Requirements changed

Generations of ESG Integration



!! Data Requirements have changed !!

1. **Transparency, quality, combination of ratings and details**
2. **Data and analytics equally important**
3. **Handled as fundamental data rather than alternative data**
4. **Asset class expansion: funds, fixed income, countries**

Types of Data Provision	<h3>Outside-IN</h3> 	<h3>Inside-OUT Rules Based</h3> 	<h3>Inside-OUT Researched Based</h3>
	<ul style="list-style-type: none"> • Public's perception of a company's performance • Numerous news and social media sources • AI powered "sentiment scoring" 	<ul style="list-style-type: none"> • Company's own view collected, interpreted and transformed into ESG Scoring/Ranking • Publicly available information, generated by the company + news controversies • Data based, rules based rating of companies performance 	<ul style="list-style-type: none"> • Company's own view collected, interpreted and transformed into ESG research • Publicly available information, generated by the company + news & social media for controversies • Data based, subjective judgement on companies performance
	<ul style="list-style-type: none"> ⊕ Frequently updating ⊕ PiT time series & overlay ⊖ Relative - compared to previous state ⊖ Obscure methodology ⊖ Limited number of indicators 	<ul style="list-style-type: none"> ⊕ Regular updates » time series ⊕ Transparent methodology ⊕ Customizable, ratings to individual indicator level ⊖ Doesn't provide expert advise ⊖ Work with data might be cumbersome 	<ul style="list-style-type: none"> ⊕ Infrequent, irregular updates ⊕ Deep Analysis on performance ⊖ Time series limited to few aggregations ⊖ Obscure methodology ⊖ Limited number of indicators

More and more of Data – Analytics – Onboarding



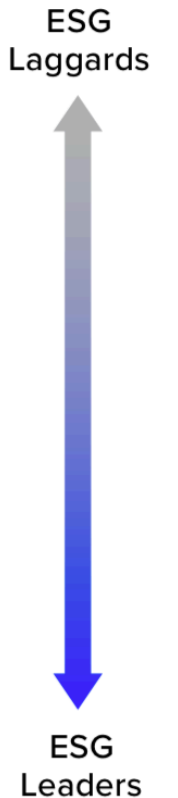
Refinitiv ESG Ratings

Rating Structure

1. Objective quantitatively driven, **best in class rating** built on publicly available data, with no human opinion involved - combining company reporting & controversies through a **bottom-up ranking aggregation**.
2. Introduces a **materiality matrix** derived through reporting transparency and relative weight of industry group median values.
3. Adds **transparency stimulus** by penalising non-reporting of metrics through clearly defined formulae.

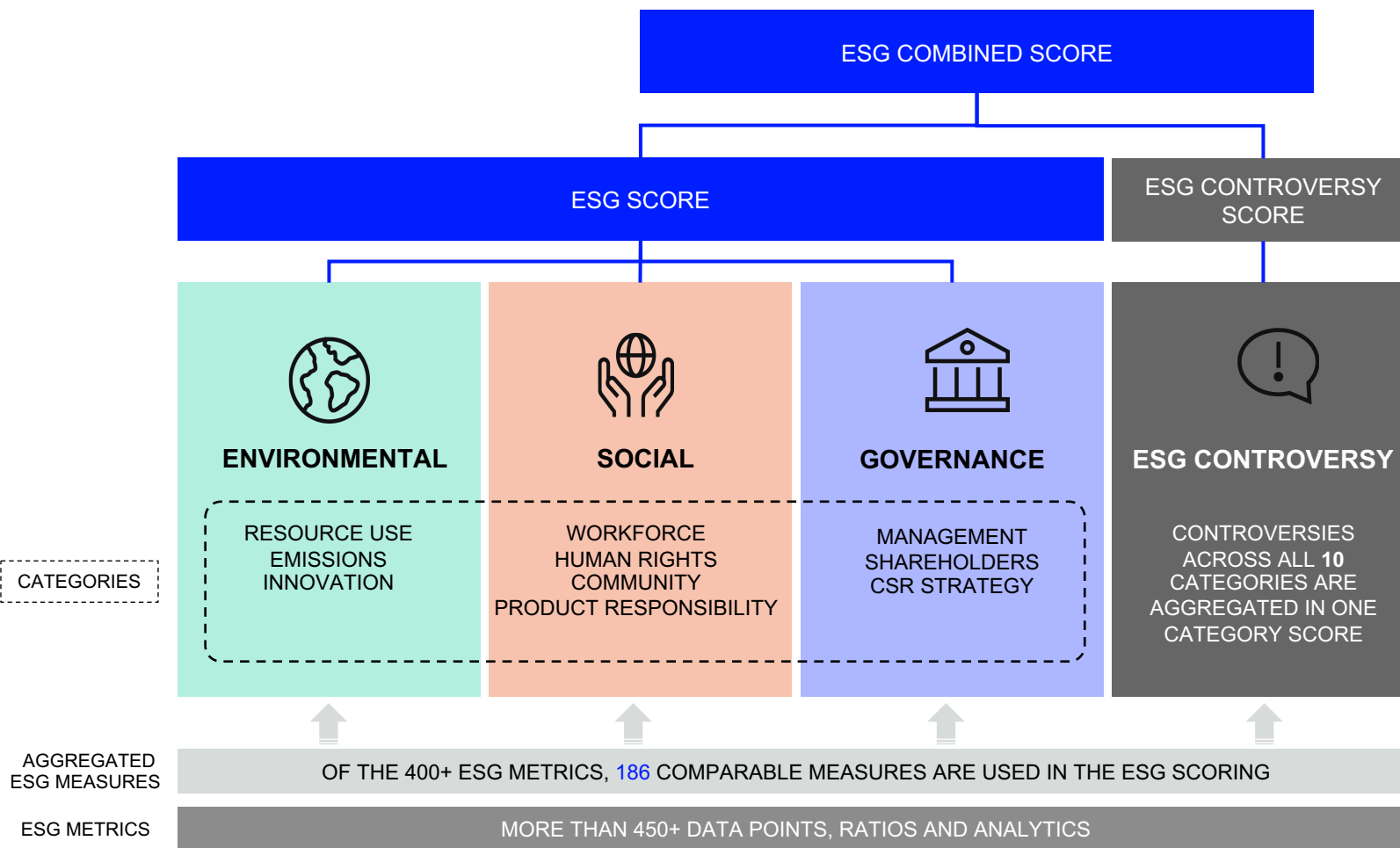
4. Clear **ratings description**

Grade	Description
D -	“D” score indicates poor relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly.
D	
D +	
C -	“C” score indicates satisfactory relative ESG performance and moderate degree of transparency in reporting material ESG data publicly.
C	
C +	
B -	“B” score indicates good relative ESG performance and above average degree of transparency in reporting material ESG data publicly.
B	
B +	
A -	“A” score indicates excellent relative ESG performance and high degree of transparency in reporting material ESG data publicly.
A	
A +	



Rating Structure

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

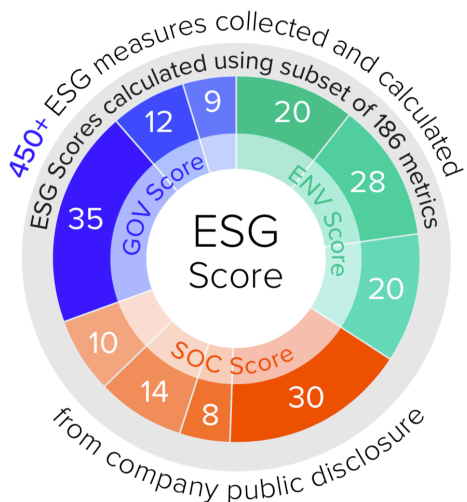


ESG Controversies Score is calculated based on 23 ESG controversy topics

- Same percentile ranking formula as ESG scores based on the number of controversy news with **severity rate applied** determined by company market cap

#	Category	Controversy Title
1	Community	Anti-Competition Controversy
2	Community	Business Ethics Controversies
3	Community	Intellectual Property Controversies
4	Community	Critical Countries Controversies
5	Community	Public Health Controversies
6	Community	Tax Fraud Controversies
7	Human Rights	Child Labor Controversies
8	Human Rights	Human Rights Controversies
9	Product Res.	Consumer Controversies
10	Product Res.	Controversies Customer Health & Safety
11	Product Res.	Controversies Privacy
12	Product Res.	Controversies Product Access
13	Product Res.	Controversies Responsible Marketing
14	Product Res.	Controversies Responsible R&D
15	Workforce	Diversity and Opportunity Controversies
16	Workforce	Employees Health & Safety Controversies
17	Workforce	Wages Working Condition Controversies
18	Workforce	Strikes
19	Management	Mgt Compensation Controversies
20	Shareholders	Accounting Controversies
21	Shareholders	Insider Dealings Controversies
22	Shareholders	Shareholder Rights Controversies
23	Resource Use	Environmental Controversies

Rating Structure



- Environmental
 - Resource use
 - Emissions
 - Innovation
- Social
 - Workforce
 - Human rights
 - Community
 - Product responsibility
- Governance
 - Management
 - Shareholders
 - CSR strategy

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

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

*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.

Title	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	+

Category & Pillar Weights

Different according to materiality to the industry group*

Goal

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

Banking Services

Pillar	Category	W %	PW %
E	Resource Use	2%	14%
	Emissions	2%	
	Innovation	10%	
S	Workforce	19%	50%
	Human Rights	10%	
	Community	12%	
	Product Res.	9%	
G	Management	24%	36%
	Shareholders	7%	
	CSR Strategy	5%	

Overview Analytics

NDASE.ST NORDEA BANK ABP

Company search Dashboard Governance Long-Term Returns Environment Citizenship News

Contact us
Page info

COMPANY DETAILS

Country of Headquarters:	Finland
TRBC Industry Group:	Banking Services
Name of Exchange:	--
Fiscal Year End Date:	2020-12-31
Company Market Cap:	308.06 B
Number of Employees:	29,000
CSR Sustainability External Audit:	True
CSR Sustainability External Auditor Name:	Ohrlings PricewaterhouseCoopers AB
Ultimate Parent:	Nordea Bank Abp
Ultimate Parent Id:	5060588378
Immediate Parent:	Nordea Bank Abp
Succeeded By:	--

SEGMENTS

BUSINESS DESCRIPTION

Nordea Bank Abp is a Finland-based bank engaged in corporate merchant banking, as well as retail banking and private banking. The Bank reports four main business areas, namely Personal Banking, Commercial & Business Banking, Wholesale Banking and Asset & Wealth Management. Personal Banking provides services and solutions for the Bank's household customers in the Nordic markets. Commercial & Business Banking serves large, medium-sized and small corporate customers. Wholesale Banking provides banking and other financial solutions to large-sized Nordic and international corporate, institutional and public companies. Asset & Wealth Management provides investment, savings and risk management products, manages customers' assets and advises individuals, as well as institutional investors on their financial situation.

COMPANY PERFORMANCE CHART

Historical Performance ▶ FY2014 FY2015 FY2016 FY2017 FY2018 (Current) Benchmark Median

93 ENVIRONMENT

Resource Use	▲ 97
Emissions	▲ 98
Environmental Innovation	▼ 83

LONG-TERM RETURNS 32

18	Earnings Quality
60	Long-Term Yellow Flags
18	Combined Credit Risk

75 GOVERNANCE

Shareholders	▲ 85
Management	▲ 96
Workforce	▲ 68
ESG Controversies	▼ 4

CITIZENSHIP 80

85	CSR Strategy
99	Community
94	Human Rights
41	Product Responsibility

MATERIAL FACTORS

Title	Description	Trend line	FY2014	FY2015	FY2016	FY2017	FY2018
Board Cultural Diversity	Percentage of board members that have a cultural background different from the location of the corporate headquarters.		87.50	90.00	90.91	85.71	100.00
Female on Board	Percentage of female on the board.		37.50	40.00	36.36	42.86	46.15
Board Structure Policy	Does the company have a policy for maintaining a well-balanced membership of the board?		True	True	True	True	True
Policy Board Diversity	Does the company have a policy regarding the gender diversity of its board?		False	False	True	True	True

PEERS MANAGER

Company search

RIC	Name
SWEDA.ST	Swedbank AB
SEBA.ST	Skandinaviska Enskilda Banken AB
SHBA.ST	Svenska Handelsbanken AB
DNB.OL	Dnb ASA
DANSKE.CO	Danske Bank A/S
KBC.BR	KBC Groep NV
CBKG.DE	Commerzbank AG
ABND.AS	ABN Amro Bank NV
STAN.L	Standard Chartered PLC

Onboarding

[Short video demo here](#)

The screenshot shows the Refinitiv website interface. At the top left is the Refinitiv logo. Below it are navigation tabs for Home, ESG, and Officers & Directors. On the right, a user profile dropdown menu is open, showing the user's name 'Lakshmi, Amrutha' and options for Home, Change Password, and Log out. The main content area is titled 'WHY CONTRIBUTE?' and features a section for 'Officers & Directors' with a detailed description and a list of benefits. A blue sign-in overlay is positioned in the foreground, containing a sign-in form with fields for Email and Password, a 'SIGN IN' button, and links for 'Forgot Password?' and 'Request Access'. The overlay also includes a welcome message and a graphic with the Refinitiv logo and the tagline 'THE RIGHT DATA WON'T COLLECT, CONTEXTUALISE, CONNECT, ANALYSE, INTERPRET AND VISUALISE ITSELF.'.

REFINITIV™

Home ESG Officers & Directors

Lakshmi, Amrutha
Home
Change Password
Log out

WHY CONTRIBUTE?

Environmental, Social and Governance

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:

- Identifying key decision makers in an organization
- Researching key linkages and evaluating the strength of a management team
- Conducting due diligences on people
- Monitoring personnel changes for a particular company or industry

Using our new Officers and Directors Contributor Tool, you are able to manage your firms officers and directors' data that is then disseminated to institutional investment firms, investors, corporations, universities & research firms across our suite of products and partners' products (i.e. Financial Times).

• Review and edit the historical ESG data that is already available for your company

• Ensure your firm's data is properly represented in our products

Welcome to The REFINITIV Contributions Channel

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

REFINITIV™
DATA IS JUST THE BEGINNING

Email: amrutha.lakshmi@refinitiv.com

Password: ****

Forgot Password? Request Access

SIGN IN

ESG Contribution – Your Reporting One-stop Shop

ESG Categories and Data Dictionary

Home **ESG** Officers & Directors

ENVIRONMENTAL, SOCIAL, GOVERNANCE

USER GUIDE FAQ Reports

Environmental Social Governance Submit Scores Peer Analysis

Note: Values are standardized to a common unit.

Expand All Collapse All

- Scoring Measure

FISCAL YEAR	2019	2018	2017	
PERIOD END DATE	30-SEP-2019	30-SEP-2018	30-SEP-2017	
REPORTING CURRENCY	AUD	AUD	AUD	
animal				<input type="text" value="Search"/>
▼ ENVIRONMENTAL PRODUCTS				
Animal Testing		FALSE	FALSE	
Animal Testing Cosmetics		FALSE	FALSE	
Animal Testing Reduction		FALSE	FALSE	

ANIMAL TESTING

Is the company directly or indirectly involved in animal testing?

[More Info](#)

Onboarding

ESG Categories and Data Dictionary

The screenshot shows a web interface for ESG categories. At the top, there are navigation tabs: 'Home', 'ESG', and 'Officers & Directors'. Below this is the main heading 'ENVIRONMENTAL, SOCIAL, GOVERNANCE'. A secondary set of tabs includes 'Environmental', 'Social', 'Governance', 'Submit', 'Scores', and 'Peer Analysis'. A 'Scoring Measure' icon is visible. Below these are input fields for 'FISCAL YEAR', 'PERIOD END DATE' (with '30-SEP' as a value), and 'REPORTING CURRENCY'. A search bar contains the text 'animal'. A dropdown menu is open, showing 'ANIMAL TESTING' as the selected item. Below the dropdown, there is a list of sub-categories: 'ENVIRONMENTAL PRODUCTS', 'Animal Testing', 'Animal Testing Cosmetics', and 'Animal Testing Reduction'. A 'More Info' link is highlighted next to 'Animal Testing'.

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.

NFRD

Non-Financial Reporting Directive
In force

WHAT - 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

SFDR

Sustainable Finance Disclosure Regulation
March 2021

This regulation will introduce disclosure obligations on how institutional investors and asset managers integrate environmental, social and governance (ESG) factors into their risk management processes. Delegated acts will further specify requirements on integrating ESG factors into investment decisions, which is part of institutional investors' and asset managers' duties towards investors and beneficiaries.

Thank you!

Barnabas Acs, Ph.D.
barnabas.acs@refinitiv.com

REFINITIV™
DATA IS JUST
THE BEGINNING 