ESG/Sustainability within risk management framework

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Understanding the ESG regulatory framework
Tackling sustainability
The European Union journey

Finance can make the difference
The EU has committed to three ambitious climate and energy targets by 2030:

- Minimum 40% cut in greenhouse gas emissions compared to 1990 levels
- At least a 32% share of renewables in final energy consumption
- At least 32.5% energy savings compared with the business-as-usual scenario

To make the EU climate-neutral by 2050, Europe needs between €175–290 billion in additional yearly investment in the next decades

Important for insurers to get ahead of regulatory trend to avoid being left behind
Sustainability/ESG regulatory roadmap

European Commission
NFRD¹ to be applied in 2018 (based on year 2017) by Member States

France
Law for Energy Transition and Green Growth, Art 173 and reporting obligations

Mark Carney
Speech on the Tragedy of the Horizons

Paris Agreement
to keep global warming well below 2°C

TCFD²
Report led by the FSB

Note: ¹Non-financial reporting directive. ²FSB’s task force on climate related financial disclosures.
Understanding EU long term action plan

One comprehensive strategy to finance sustainable growth

Reorienting capital flows towards sustainable investment
Mainstreaming Sustainability into risk management
Fostering transparency and long-termism

10 Actions

1. Establish EU Sustainable taxonomy
2. Create standards and labels
3. Foster investment in Sustainable projects
4. Incorporate sustainability in investment advice
5. Develop Sustainability benchmarks
6. Integrate ESG in ratings and market research
7. Clarify institutional investors and asset managers duties
8. Incorporate Sustainability in prudential requirements
9. Strengthen Sustainability disclosure and accounting
10. Foster Sustainable corporate governance

## Disclosures by financial entities from 2021 on 2020

The disclosures regulation places the following requirements on financial market participants:

<table>
<thead>
<tr>
<th>Scope</th>
<th>What to disclose</th>
<th>Where to disclose</th>
<th>Who should disclose</th>
</tr>
</thead>
<tbody>
<tr>
<td>All investment products</td>
<td>How negative impacts on financial returns arising from sustainability risks are integrated in risk policies</td>
<td>Websites, pre-contractual information, marketing communication</td>
<td>All financial entities</td>
</tr>
<tr>
<td></td>
<td>How the financial entity considers adverse impacts on sustainability factors (negative externalities)</td>
<td>Websites, pre-contractual information</td>
<td>Compulsory for financial entities &gt;500 and holding companies, other entities to disclose on a comply or explain basis</td>
</tr>
<tr>
<td></td>
<td>How the financial entity, as a share or debt holder, is engaging the corporate to reduce their negative externalities</td>
<td>Websites, pre-contractual information</td>
<td>Compulsory for financial entities &gt;500 and holding companies, other entities to disclose on a comply or explain basis</td>
</tr>
<tr>
<td>Investment products with sustainability characteristics or objectives</td>
<td>How these sustainability characteristics or objectives are met</td>
<td>Pre-contractual information, websites, periodical reports, marketing communication</td>
<td>All financial entities</td>
</tr>
</tbody>
</table>

EU taxonomy and potential investment universe

Global Corporate universe (equity, fixed income, private assets)
Key functions are impacted by ESG

Top management
- Awareness of reputational risk and making sure that risk mitigating factors are in place
- Defining the ESG strategy and corporate governance
- Minimizing externalities of the investment

Finance
- Delivering reportings, including ESG reportings (CSR reports etc.)
- Analysing ESG impact on accounting
- Ensuring shareholder value

Sales & Marketing
- Which products to be sold to policy holders?
- How positioning the company?

Risk Management
- Including sustainability and ESG risks in the risk framework (Solvency II, economic model etc.)
- Challenging CIO, Actuaries, ALM vs. ESG risk

Investment
- Defining ESG criteria for the investment portfolio
- Portfolio screening
- Proposing scenario to optimize yield and ESG
- Implementation of the strategy

Liabilities
- Defining ESG criteria for the liabilities
- Portfolio screening
- Proposing business strategies

Source: Schroders.
Integrating ESG and Climate
Within the risk management framework
ESG strategy building

Which steps do you need to implement?

1. Screening your current ALM, what is your current situation
   1. Identifying ESG raw risk criteria, especially climate and sustainability risks
      - Ecological – electricity consumption, GHG emissions...
      - Social – proportion of female executive...
      - Governance – reporting, executive package...
   2. Creating and application of screening tools
   3. Running the analysis and aggregating this info with the right indicators, e.g.
      - E – temperature or carbon footprint of the investment portfolio
      - S – employee satisfaction/well being
      - G – transparency rating

2. Defining objectives and timing, e.g.
   - E – Reducing the portfolio's temperature from current 4 degrees down to 2 degrees within 10 year
   - S – Engaging companies to improve the employees well being (from score A to score B within 15 years)
   - G – Eliminating corporate without transparency

3. Implementation
   1. Risk assessment: measuring the sensitivity of the portfolio to the objectives and to the ESG risk criteria
   2. Investment process: choosing and applying one or several levels of ESG integration
      - Impact investment (explicit factor)
      - Exclusion (exclusion of tobacco...)
      - Thematic/best in class investment
      - Full ESG integration across the balance sheet
      - Active ownership to transition corporate: voting and engagement
   3. Communication/ESG disclosure, reporting
      - Corporate: communicating in coherence with all the above!
ESG strategy building

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Your investments (equities, bonds, loans etc.) finance
Companies, states, real estate projects that are impacted by and impact E S or G factors

Our approach: starting with possible quantifiable impacts, ~50 business activities, with measurable social costs or benefits
An inflection point in sustainable investing
More pressures, more data, more action


Companies do not operate in a vacuum
How companies make money is as important as how much they made

Companies **contribute to society** and **impose costs** on it, neither of which have been reflected in their financial statements.

Those **social deficits** and **credits** are becoming real financial impacts as regulator and social pressure grows.

Source: Schroders.
Social impacts are becoming financial costs
As their role has expanded, large businesses face growing pressures

Large companies have become 20–30% more important to economies and societies over last 20y

Growing pressures to contribute to societies; irresponsible behaviour is becoming a liability

Source: Fortune, IMF, OECD, BEA, Gulling et al., OECD tax database, General Social Survey, American Action Forum, Heritage Foundation, Schroders calculations and estimates. Note: data from Fortune is not available prior to the 1990s; we have estimated the equivalent values, using data from Thomson Reuters. Data is the latest available as of January 2019.
Corporate impacts are increasingly important to investors

Bigger risks, divergent profitability, investment challenges and insight potential

Growing challenges

Corporate externalities (our analysis), as % mkt cap.

Corporate bifurcation

ROIC dispersion (1st minus 4th quartile avg. ROIC/average ROIC)

Equity market inefficiencies

Stock returns from correctly forecasting earnings one year ahead

More analysis becoming possible

Sustainability reports published annually

Social externalities are becoming financial costs

Source: Thomson Reuters, GRI, Schroders.
Developing our own measure of social impact

A systematic process to develop and refine robust company analysis

1. Identify impacts
   Extensive analysis of academic research, industry analysis, NGO reports and our own perspectives

2. Define measurement process
   >400 academic studies collated to examine costs Measurement defined systematically using three approaches

3. Determine stability of the analysis
   Identify the most robust measures to include in firmwide analysis

4. Implement across global universe
   Analytical logic reflected in robust coding platform; results shared across Schroders

5. Integration into investment decisions
   Systematic integration (e.g. SMFE); universe definition (e.g. European sustainable equities); Idea generation (e.g. global equities); Portfolio measurement

Ongoing development to refine and strengthen the analysis

Source: Schroders.
Identify impacts across the spectrum of stakeholders

Wide range of business activities with measurable social costs or benefits

Source: Schroders. Labels combine multiple impacts to improve legibility.
Rigorous bottom up analysis is vital
Social impacts can be quantified

Over 400 academic and industry studies of social impacts and externalities

Over 70 data points for each company, estimated where not disclosed e.g. wages, taxes

Combining academic analysis and objective company data

Source: Schroders as at Schroders SustainEx research published April 2019.
Translating social cost to company exposure

Alcohol example

**Identify impacts**
Alcohol consumption results in significant health and indirect social costs

**Definition and assumptions**
Estimate annual global social burden of alcohol use

**Calculation**
Estimate share of global alcohol sales for each company using reported data. Multiply by global cost estimate

- Objective analysis based on company data, inferred estimates and transparent assumptions

17 academic studies examined

Source: Schroders.
Translating social cost to company exposure

Carbon emissions example

**Identify impacts**
The evidence linking GHG emissions to temperature rises is clear. We expect carbon prices to rise in the future to drive decarbonisation on the required scale.

**Definition and assumptions**
Estimate the global social cost per tonne of carbon emissions

13 academic studies examined.

**Calculation**
Impact of every company calculated based on its direct carbon emissions and a consistent global social cost of carbon

Objective analysis based on company data, inferred estimates and transparent assumptions

Source: Schroders.
Bringing the analysis together
A consistent approach across global companies

Social impact as % sales

Source: Schroders, Asset4, Worldscope. Categories shown are for illustrative purposes only and do not reflect any recommendation to buy/sell any security.
Analysis spans a wide range of positive & negative impacts

Net impact of each measure examined, US$bn

Source: Schroders. December 2018. Based on analysis of c9,000 global companies
Positive and negative impacts across sectors

Sector level summary of impacts across global sectors

Source: Schroders. December 2018. Based on analysis of c9,000 global companies, aggregated to ICB industries.
What is CONTEXT?

Themes
- 735 global ESG trends for 47 sub-sectors

Metrics
- ~260 data points from ~80 sources

Companies
- 11,000+ companies covered

Time
- Several years in the making

What questions do they raise? How can we measure performance?

What are the key trends in each sector?

What conclusions do analysts reach?
ESG strategy building

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ESG screening of a balance sheet

ESG Risks/Carbon reportings with Sustainalytics/Sequantis
ESG screening of a balance sheet

ESG/Carbon reportings with Sustainalytics/Sequantis

**ESG risk rating of the balance sheet: 20.5/100**

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<th>Environment</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Very high</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>3.2</td>
<td>4.7</td>
<td>16.5</td>
<td>20.5</td>
</tr>
</tbody>
</table>

**Factors breakdown**

Carbon intensity report

The carbon intensity report shows ton CO2/per million USD. To calculate it, we take total sales of all companies in portfolio. Then we looked up the carbon emissions the company has made in the year. From this we get the tons per US$1m revenue.

- The carbon intensity score for the balance sheet is 218.1 ton CO2/million USD
- The carbon intensity score for an Iboxx European Corporate bond benchmark is 172.1

The score can be improved by the companies improving their carbon intensity score which will translate into the portfolios overall score or by reducing the allocation to the companies.
ESG reporting with Sustainalytics & Carbon metrics

To compare yourself with your
ESG reporting with Schroders metrics

To understand better your ESG risks

Superior Sustainability Profile

Sustainability Scores

Carbon Profile

Carbon Intensity$^2$

Portfolio breakdown by Sustainability scores$^1$

Coverage

Portfolio: 62%
Benchmark: 77%

Source: Schroders, as at 30 September 2020. $^1$ Sustainability score is based on our proprietary tool, SustainEx. SustainEx is a robust, objective framework to measure the social and environmental costs companies impose, or the benefits they provide, which are not currently recognised as financial costs or benefits. $^2$ Carbon intensity represents Scope 1&2 emissions relative to each $1 mn of sales.
ESG reporting with Schroders metrics

Example of a Managed Portfolio

Source Schroders
ESG reporting with Schroders metrics

Understanding the externalities of your portfolio
ESG strategy building
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A new era for carbon intensity
Return to pre-industrial emissions with continued economic expansion

Carbon emissions per capita vs. GDP per capita since 1750

Source: BP Statistical Review, Maddison (OECD), UNFCC, IEA, IIPCC, UN Population Division, Schroders
Climate change continues to move up investment agendas

Improving economics, growing awareness, shareholder action

Technology overtaking policy as a driver

Growing social awareness & concern

Rising shareholder pressure

Source: Grantham Institute, Thomson Reuters, Google Trends, ProxyInsight, Schroders
Over 1,000 institutions collectively responsible for almost $9 trillion of AUM are committed to some level of fossil fuel divestment.
But, the most common climate risk measures are too narrow
<20% of MSCI ACWI captured by typical climate risk measures

Bubble size proportionate to market value captured

- Every company will be impacted by climate risk to some extent; ~15% of the value of the average company is at risk
- There will be huge opportunities as well as costs; $2tr of investment in climate solutions needed to meet Paris Accord commitments
- Typical climate exposure measures fail to identify many of the most exposed companies
- Many portfolios marketed as climate resilient face bigger risks than investors expect
- We have developed tools to measure the impacts of the major effects of climate change

Source: Schroders using MSCI data. Sizes of bubble represent share of MSCI ACWI (by market cap) caught by common climate risk measurements: Any fossil fuel reserves: 10%, Carbon intensity > twice market level: 11%, Total climate change revenue exposure > 20%: 4%, Not caught by any filter: 81%
Separating the question into when and what
Building a climate risk measurement & management toolkit

Climate risk & opportunity

Speed and scale of action to mitigate climate change

Impact of climate action on investments

- Climate Progress Dashboard tracks pace and scale of climate action
- Climate risk analyses (Carbon VAR, Physical risk etc) examine impacts of action on investments & portfolios

Climate risk tools available across investment desks

Source: Schroders
## Significant changes ahead to reach global targets

Climate Progress Dashboard tracks scale and speed of climate action

### Aggregate implied temperature rise

<table>
<thead>
<tr>
<th>Category</th>
<th>Aspiration</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Political ambition</strong></td>
<td>2.8°</td>
<td>3.0°</td>
</tr>
<tr>
<td><strong>Business and finance</strong></td>
<td>3.4°</td>
<td>3.3°</td>
</tr>
<tr>
<td><strong>Technology solutions</strong></td>
<td>3.1°</td>
<td>2.5°</td>
</tr>
<tr>
<td><strong>Entrenched industry</strong></td>
<td>4.5°</td>
<td>4.9°</td>
</tr>
<tr>
<td><strong>Public concern</strong></td>
<td>3.3°</td>
<td></td>
</tr>
<tr>
<td><strong>Climate finance</strong></td>
<td>5.5°</td>
<td></td>
</tr>
<tr>
<td><strong>Renewable capacity</strong></td>
<td></td>
<td>2.5°</td>
</tr>
<tr>
<td><strong>Fossil fuel reserves</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Political action</strong></td>
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<tr>
<td><strong>Carbon prices</strong></td>
<td>3.3°</td>
<td></td>
</tr>
<tr>
<td><strong>CCS¹ capacity</strong></td>
<td>4.9°</td>
<td></td>
</tr>
<tr>
<td><strong>Fossil fuel production</strong></td>
<td></td>
<td>5.9°</td>
</tr>
</tbody>
</table>


Aggregate implied temperature rise **3.9°**
Climate Progress Dashboard
Measuring progress

- The IEA publishes the most comprehensive and widely referenced analyses of emissions scenarios that would lead to different temperature rises
- Those scenarios describe the changes in fossil fuel production, transport electrification, CCS use etc that would be required in combination for each trajectory
- By comparing actual progress to the rate required in each scenario, we can estimate the temperature rise implied by activity in each area, considered in isolation
- By examining progress across a wide range of indicators, we can build a view across the many areas that will need to change in the future
- Differences between indicators highlight inconsistencies in the scale and pace of progress in related markets (eg oil production vs. electric vehicle use)

Source: Schroders
## Climate impacts: business & investment risks

Starting with “what will change”

<table>
<thead>
<tr>
<th>What needs to change?</th>
<th>How will those changes be achieved?</th>
<th>Impact on earnings and valuations?</th>
<th>Overall risk exposure?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regulation</strong></td>
<td>E.g. Carbon prices to $100/t</td>
<td>Global cash flows 15–20% lower</td>
<td>Most portfolios face 10–20% valuation risk under 2° scenario</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>E.g. 6% p.a. growth in wind capacity</td>
<td>Positive growth options 25–30% of market cap</td>
<td></td>
</tr>
<tr>
<td><strong>Fossil fuels</strong></td>
<td>E.g. 35% drop in fossil fuel production</td>
<td>Up to 70% impact on sector valuation</td>
<td></td>
</tr>
<tr>
<td><strong>Physical risk</strong></td>
<td>E.g. 3% p.a. increase in economic costs</td>
<td>Insurance costs up to 5% of current valuations</td>
<td></td>
</tr>
</tbody>
</table>

Source: Schroders.
Change 1: Regulation

Substantial rise in carbon prices needed over the next decades

Carbon pricing will soon cover a quarter of global emissions

Share of global GHG emissions covered (%)

Carbon prices are set to rise significantly

US$/tonne


Carbon Value at Risk
Examining carbon pricing through an industry lens

Example: ABB

Before

5,139
33,785

Factors

Higher costs with carbon pricing

Supply Chain

Higher prices as industry costs rise

Volumes fall with demand elasticity

After

4,550
34,750

-11% decrease in profits

Source: Schroders, All numbers in $mn. Sales, Costs, EBITDA values are averages over 2013-16. Assumption: CO2 prices increase to $100/tonne.
Conventional tools are not a shortcut
Limited relationship between carbon footprints & Carbon VAR

Note: Assumes CO2 price is $100/tonne. Source: Schroders, as of December 2019.
Change 2: Technology
Infrastructure shifts to 2035 will reshape financial markets

Current and projected capital investment across the energy complex

Future capital stock is estimated by combining forecast investment in each category with assumed depreciation of existing assets (ranging from 15-50 years for useful lives). We assume energy infrastructure's share of economy-wide capital stock remains unchanged. Source: Datastream, IEA, Schroders.
Redefining growth across markets
Translating a macro view of climate change into market implications

<table>
<thead>
<tr>
<th>Energy resources</th>
<th>Emissions reduction</th>
<th>Efficient energy use</th>
<th>Physical adaptation</th>
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<tbody>
<tr>
<td>Environmental resources</td>
<td>6.4%</td>
<td>9.5%</td>
<td>11.5%</td>
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<tr>
<td>Fossil fuel production</td>
<td>1.2%</td>
<td>5.8%</td>
<td>9.3%</td>
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**Examples of positive/negative impacts**

<table>
<thead>
<tr>
<th>Direct effects</th>
<th>Winners</th>
<th>Losers</th>
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<td>Oil and gas extraction</td>
<td>Solar and wind farms</td>
<td>Coal utilities</td>
<td>LED producers</td>
<td>Steel</td>
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**Downstream markets**

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<th>Biofuel refining</th>
<th>Petrochemicals</th>
<th>Energy storage</th>
<th>Cement producers</th>
<th>Smart metering</th>
<th>3D printing</th>
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**Upstream industries**

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<th>Oilfield equipment</th>
<th>Solar cell makers</th>
<th>Coal mining</th>
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Investment growth projections based on IEA technology forecasts and reviews of individual markets using third-party market studies. Source: IEA and Schroders.
Translating growth into value implications
Modelling in Re-insurance and Steel industries

Project how much larger or smaller each industry would be if the global economy moves toward alignment with two degree warming, rather than the current trajectory.

Assume industry profitability (EBITDA/ Assets) moves from current levels to long run sustainable levels; the time it takes to adjust reflects industry discipline.

Combine the effect of higher or lower assets with profitability projections to gauge future earnings trends in each industry.

Compare the present value of those earnings effects to the current enterprise value of each sector to gauge the scale of risk each faces.

Source: Schroders
Wide range of impacts across sectors
Approximate balance of winners and losers

Comparison of industry level positive or negative impact; comparison of two degrees to current trajectory

Compare the present value of those earnings effects to the current enterprise value of each sector to gauge the scale of risk each faces

Source: Schroders
Change 3: Physical risk
GHG emissions, temperatures and disasters are all rising in tandem

Causes and effects of climate change have risen in tandem

Source: EM-DAT, NASA, Schroders and UN FCC. Based on most recent data available in May 2018
Mapping physical damage
Using insurance modelling to assess damage

1. Damage caused by climate change, based on estimated economic costs relative to GDP over the last 20 years.

2. Companies’ exposure to physical risks calculated by combining country risk analysis with their reported geographic assets.

3. Costs of insurance against physical damage calculated using current exposures, standard global loss ratios and projected damage growth over the next 13 years.

Source: Munich Re, Schroders.
Wide range of impacts
From limited risk to significant across sectors

Estimated impact (insurance cost) relative to enterprise value, by sector

Source: Schroders
Change 4: Fossil fuels
Consumption of fossil fuels under climate scenarios

Meeting climate goals could hit oil production hard...

Historical production/fade from existing capacity

...and coal production even harder

Historical production/fade from existing capacity

Source: Schroders based on BP Statistical Review, IEA and OECD data.
Profitability will depend on the industry’s response
Wide range of profit outcomes depending on discipline

Discipline will help oil companies master their own destiny...

...and coal companies even more so

Source: Datastream, Schroders
Not all companies are equally exposed
Many fossil fuel producers have a buffer against demand constraints

Fossil fuel production profit pool per tonne of contained CO2

Source: Carbon Underground, Thomson Reuters, Bloomberg.
Most companies will be hurt...
10-20% impact on global equity valuations

Source: Thomson Reuters, MSCI, CDP, Schroders
...but there will be winners & losers

Impacts of 10th and 90th percentile companies

Source: Thomson Reuters, MSCI, CDP, Schroders
Considering climate risk through the investment chain

Climate change strategy

Climate progress dashboard

Carbon Value at Risk (CVaR)

Physical risk model

>200 company engagements\(^1\) covering:
carbon emissions, reduction targets, physical risks, analysis & disclosure in line with TCFD recommendations

Source: Schroders. \(^1\)January to December 2019.
Climate change at Schroders

Voting record on shareholder resolutions

Number of shareholder resolutions voted on

Source: Schroders, as at 31 December 2019.
ESG strategy building

Which steps do you need to implement?

1. **Screening your current ALM, what is your current situation**
   1. Identifying ESG raw risk criteria, especially climate and sustainability risks
      - Ecological – electricity consumption, GHG emissions...
      - Social – proportion of female executive...
      - Governance – reporting, executive package...
   2. Creating and application of screening tools
   3. Running the analysis and aggregating this info with the right indicators, e.g.
      - E – temperature or carbon footprint of the investment portfolio
      - S – employee satisfaction/well being
      - G – transparency rating

2. **Defining objectives and timing, e.g.**
   - E – Reducing the portfolio’s temperature from current 4 degrees down to 2 degrees within 10 years
   - S – Engaging companies to improve the employees well being (from score A to score B within 15 years)
   - G – Eliminating corporate without transparency

3. **Implementation**
   1. Risk assessment: measuring the sensitivity of the portfolio to the objectives and to the ESG risk criteria
   2. Investment process: choosing and applying one or several levels of ESG integration
      - Impact investment (explicit factor)
      - Exclusion (exclusion of tobacco...)
      - Thematic/best in class investment
      - Full ESG integration across the balance sheet
      - Active ownership to transition corporate: voting and engagement
   3. Communication/ESG disclosure, reporting
      - Corporate: communicating in coherence with all the above!
Different approaches of ESG investment

Where could you start the ESG implementation journey in your balance sheet?

**Best-in-class investing** =
Using an ESG analysis/rating approach with a proper SRI team

**Active ownership** =
Engaging to help companies transition could be more impactful than disinvesting. Requires a proper engagement team

**Full ESG integration** =
All investment and risk management people have an ESG role

**Thematic investing** =
Investing in a strong thematic (Climate change, demography, technology, sugar in the agro industry...)

**Negative screening** =
Exclusion of FI and/or equity exposure to specific corporate/countries (Tobacco, coal, ...; death penalty, corruption etc.)

**Impact investing** =
Improving one specific ESG factor in one product (social healthcare, renewable energies, energy efficient real estate etc.)
Sustainable investing – key terms to understand

**Corporate responsibility**
A company's responsibility to operate its business in a way that does not harm the environment or society as a whole.

**Active Ownership / Shareholder activism**
Actively exercising your shareholder rights and engaging with investee companies to encourage responsible corporate behaviour and improve long-term shareholder value.

**Engagement**
A purposeful dialogue between a company and its shareholders that aims to enhance and protect the value of investments. This might take place to seek additional information about a company's practices or to encourage improvements in performance and processes.

**Screening**
An investment approach used to filter companies based on pre-defined criteria before investment. You can use a negative screen (in which you deliberately exclude certain companies because of their involvement in undesirable activities or sectors) or a positive screen (in which you select companies based on their sustainability practices).

**Impact investing**
Investments that are made with the primary goal of achieving specific, positive social benefits while also delivering a financial return. They create a direct link between portfolio investment and socially beneficial activities, historically most of the activity has occurred in unlisted assets.

**Thematic investing**
Investing in companies that can be classified under a particular investment theme such as renewable energy, waste and water management, education or healthcare innovation.

**ESG integration**
An investment approach that takes into consideration a range of sustainability and ESG-related risks and opportunities in addition to traditional financial analysis.

**Responsible investing**
An investment approach that considers ESG-related risks and opportunities as part of its investment process and includes engagement and voting in order to generate sustainable, long-term financial returns with consideration for society and the environment.

**Sustainable investing**
An investment approach in which a company's sustainability practices are paramount to the investment decision and in which ESG analysis forms a cornerstone of the investment process.

Source: Schroders.
# Impact investing: Green Bonds

<table>
<thead>
<tr>
<th>Company</th>
<th>Green/social bond</th>
<th>Sustainability goals of the bond</th>
<th>Engagement and conclusion</th>
<th>Sector</th>
<th>Credit rating</th>
<th>Yield</th>
</tr>
</thead>
</table>
| Assicurazioni Generali | ASSGEN 2.124 10/01/2030 (Green)       | - Renewables  
- Energy efficiency  
- Waste and water management  
- Clean transportation | - We view Generali as above-average on social and environmental factors  
- Scope to improve | Insurance       | BBB-          | 2.0%  |
| Credit Mutuel Arkea   | CMARK 0.375 10/03/2028 (Social)       | - Social housing  
- Childcare centres  
- Single-parent shelter  
- Medical treatment facilities for the underprivileged | - Active supporters of cultural, healthcare, education and social enterprises in local regions | Banking         | A+           | 0.5%  |
| Enel                 | ENELIM 2.65 09/10/2024 (SDG-linked)    | - SDG-linked bond. Added incentives to meet its energy transition goals  
- Specific emphasis on SDGs #7, #9, #11 and #13 | - Focused on the decarbonisation of power production and reduction of carbon footprint  
- Ranks well vs. peers | Utilities       | BBB+          | 0.2%  |
| EDP                  | EDPPL 4.496 04/30/2079 (Green)        | - Support transition to low carbon  
- Renewable energy projects: wind and solar power | - Top position in share of renewables  
- Increased focus on Brazil, North America and parts of Europe  
- Overall strong ESG performer | Utilities       | BB           | 1.9%  |
| LeasePlan            | LPTY 1.375 03/07/2024 (Green)         | - Sustainable vehicle fleet  
- Aim to achieve net zero emissions by 2030 | - Minimal exposure to diesel  
- Only 2.9% of fleet is diesel euro 5 or older, rapidly rolling down to zero | Auto leasing    | BBB           | 0.5%  |

Source: Schroders.
Impact investing: Private healthcare = strong social impact (cont.)

Biotechnology is curing unprecedented diseases

Venture backed companies with curative treatments against untreatable diseases

<table>
<thead>
<tr>
<th>VC backed company</th>
<th>Schroder Adveq invested(^1)</th>
<th>Disease</th>
<th>Response/cure rates</th>
<th>Outcome for investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHARMASSET</td>
<td>yes</td>
<td>Hepatitis C</td>
<td>94%</td>
<td>Acquired by Gilead for USD 11bn in 2011</td>
</tr>
<tr>
<td>juno therapeutics</td>
<td>yes</td>
<td>Leukemia</td>
<td>92%</td>
<td>Acquired by Celgene for USD 9bn in 2018</td>
</tr>
<tr>
<td>bluebirdbio</td>
<td>yes</td>
<td>Cerebral adrenoleukodystrophy</td>
<td>88%</td>
<td>Public, USD 9.3bn market cap</td>
</tr>
<tr>
<td>Spark therapeutics</td>
<td></td>
<td>Retinal dystrophy</td>
<td>93%</td>
<td>Public, USD 3.0bn market cap</td>
</tr>
<tr>
<td>avengeis</td>
<td></td>
<td>Spinal muscular atrophy</td>
<td>100%</td>
<td>Acquired by Novartis for USD 8.7bn in 2018</td>
</tr>
</tbody>
</table>

Source: Schroder Adveq, 2019.

\(^1\)Former underlying portfolio companies (indirect investments).
Companies shown above are for illustrative purpose only.
Impact investing: Infrastructure equity

Regaz – Social Impact

Investissement dans Régaz
32% de Regaz, une société française de distribution de gaz, acquise en 2018

1. Poids économique direct
Résumé des dépenses directement générées par la structure (exploitation et investissement)

2. Poids économique indirect
Issus des échanges tout au long de la chaîne de valeur (sous-traitants et fournisseurs)

3. Poids économique induit
Issus de la consommation des ménages générée par les revenus liés au poids économique direct et indirect

51 m EUR
Impact économique direct calculé sur la base des investissements et des charges d’exploitation

68 m EUR
Calcul de l’impact économique indirect et induit basé sur une méthode statistique.

358 emplois soutenus
Correspond aux emplois créés ou maintenus en lien avec l’activité. Il s’agit des équivalents temps plein (ETP) des employés de Régaz, des employés des sous-traitants et des fournisseurs ainsi que de ceux générés par la consommation des ménages.


Source: Schroders.
Impact Investing: Infrastructure debt

Investment thesis
- Diversified portfolio of district heating services under long term concession agreement generating predictable cash-flows
- Holding company financing, but low leverage at asset level and moderate consolidated leverage

Origination
- Acquisition finance transaction generated from long standing relationships with the financial sponsor and excellent knowledge of the asset
- One of only two lenders invited to participate

Major risk considerations
- Volume: well diversified portfolio, medium term contracted cash flow profile, with residual impact from weather change
- Capital structure: sponsor holds 100% of the asset and business plan has significant headroom to financial covenants embedded

Risk spider analysis
Residual risk (R), combining likelihood (L) and potential impact (I), from 1 = low to 7 = high

ESG considerations
- District heating contribute to the energy transition through significant cost savings in collective rather than individual heating, and uses renewable energy such as energy from waste or geothermy
- The operating company has environmental certificates
- Sponsor is a signatory to internationally-recognised principles for responsible and sustainable investment

Deal summary
Country        France
Sector      District heating
Schroders AIDA role  One of two participants
Debt tranche       Junior
Moody's RiskCalc      Ba2
Asset         Brownfield

Investment summary
Investment date 08 August 2018
Tenor      7 years bullet
Invested capital €44.2m
Format Secured, at HoldCo level, subordinated to OpCo debt
Interest rate  E + 4.50% with Euribor floor (and 1.65% upfront fees)

Capital structure at closing
Equity  50%
Junior debt  4%
Senior debt  46%

Source: Schroders, April 2019. Confidential. Reference to companies shown are for illustrative purposes and not a recommendation to buy and/or sell.
Thematic investing: Climate Change – Equity

Climate change strategies generate environmental impact and Investment opportunities

- Climate change requires a dramatic transformation in the global economy
- Policy implications are already far-reaching and will affect almost all industries in time
- The theme will increasingly impact company fundamentals (revenues, profitability, and valuation)
- The implications of this are poorly understood, which creates a powerful source of alpha

Source: Schroders, as at 30 June 2019.
Thematic investing: Climate Change – Equity (cont.)

The low-carbon energy transition will be hugely disruptive

New investment and earnings opportunities will come from three key structural trends

1. **Decarbonisation of power generation**
   - The share of electricity generated from renewables is expected to increase from 20% to closer to 85% by 2050 in order to reduce carbon emissions

2. **Electrification of energy use**
   - The share of electricity in final energy consumption is expected to increase from 20% to nearer 45% by 2050 due to the growth of electric vehicles

3. **Increased efficiency of consumption**
   - The energy intensity of the global economy must fall by nearly two-thirds by 2050 to limit the growth in overall power consumption

Source: Schroders, ¹Energy intensity is the amount of energy needed to produce one unit of GDP. Source: Schroders, IEA, BNEF, IRENA, as of June 2019.
Thematic investing: Climate Change – Equity (cont.)

Clean energy has tremendous growth opportunities
Renewable energy is now the lowest cost form of power

Expected average levelised US energy costs in 2020

$/Mwh

250
200
150
100
50
0

Nuclear Coal Gas Offshore Wind Solar Onshore Wind

By early in the next decade, as further cost declines are realised and module efficiencies continue to improve, we expect that without incentives, solar will be $0.03 to $0.04 per kilowatt hour product, below the variable costs required to operate an existing coal or nuclear generating facility of $0.035 to $0.05 per kilowatt hour.

Jim Robo, CEO of NextEra, January 2018

Source: Schroders, Citi Utilities Research, October 2017.
**Thematic investing: Climate Change – Equity (cont.)**

Translation of the theme into a climate change portfolio- Five broad themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Industry examples</th>
<th>Company examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Transport</td>
<td>Railroad infrastructure, electric, hybrid and natural gas transport</td>
<td>Samsung SDI, Umicore, Infineon</td>
</tr>
<tr>
<td>Environmental Resources</td>
<td>Water infrastructure, agricultural productivity and forestry</td>
<td>Kubota, Lindsay, Tomra</td>
</tr>
<tr>
<td>Clean Energy</td>
<td>Nuclear power, renewable energy, grid infrastructure</td>
<td>First Solar, Vestas, Orsted</td>
</tr>
<tr>
<td>Low-Carbon Leader</td>
<td>Low-carbon disruptors, low-carbon industry leaders</td>
<td>Norsk Hydro, Croda</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>Lightweight materials, lighting, smart grid, test measurement and controls</td>
<td>Sekisui Chem, Spirax-Sarco</td>
</tr>
</tbody>
</table>

Source: Schroders as at 30 June 2019. For illustrative purposes only, it does not represent any recommendation to invest in the above mentioned securities.
Best-in-class investing: Corporate Bond

Sustainability assessment
CaixaBank SA: Spanish banking group with social development goals

Social assessment:
- High employee training hours (av. 72 hours pp)
- Working to increase number of female and younger workers
- Linked to LaCaixa’s benevolent foundation. Will need to work hard to maintain that reputation
- Taking the industry lead in SDG bonds

Governance assessment:
- Several board members have no finance experience
- Whistleblowing policy unclear
- Commitment to increase gender diversity on board to 30% by 2020

Conclusion
- La Caixa have an outsized influence on strategy
- Integration of acquisitions has been executed well
- Improvements to board diversity expected
- Work to do to ensure staff remain happy amid tightening labour market

Schroders A to D rating:
Schroders E, S & G ratings

Source: Schroders. For illustrative purposes only and should not be considered as recommendation to buy/sell.
ESG strategy building

Which steps do you need to implement?

1. Screening your current ALM, what is your current situation
   1. Identifying ESG raw risk criteria, especially climate and sustainability risks
      - Ecological – electricity consumption, GHG emissions...
      - Social – proportion of female executive...
      - Governance – reporting, executive package...
   2. Creating and application of screening tools
   3. Running the analysis and aggregating this info with the right indicators, e.g.
      - E – temperature or carbon footprint of the investment portfolio
      - S – employee satisfaction/well being
      - G – transparency rating

2. Defining objectives and timing, e.g.
   - E – Reducing the portfolio’s temperature from current 4 degrees down to 2 degrees within 10 years
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   - G – Eliminating corporate without transparency

3. Implementation
   1. Risk assessment: measuring the sensitivity of the portfolio to the objectives and to the ESG risk criteria
   2. Investment process: choosing and applying one or several levels of ESG integration
      - Impact investment (explicit factor)
      - Exclusion (exclusion of tobacco...)
      - Thematic/best in class investment
      - Full ESG integration across the balance sheet
      - Active ownership to transition corporate: voting and engagement
   3. Communication/ESG disclosure, reporting
      - Corporate: communicating in coherence with all the above!
Engagement
Increasingly important

2019 sample engagement topics

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Social</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodiversity</td>
<td>Customers</td>
<td>Accounting practices</td>
</tr>
<tr>
<td>Climate change</td>
<td>Data security</td>
<td>Auditors</td>
</tr>
<tr>
<td>Environmental policy/ strategy</td>
<td>Health and safety</td>
<td>Board committees</td>
</tr>
<tr>
<td>Environmental products and services</td>
<td>Human capital management</td>
<td>Board structure</td>
</tr>
<tr>
<td>Environmental supply chain</td>
<td>Human rights</td>
<td>Business integrity</td>
</tr>
<tr>
<td>Forests</td>
<td>Labour standards</td>
<td>Corporate strategy</td>
</tr>
<tr>
<td>Pollution</td>
<td>Nutrition and obesity</td>
<td>Transparency and disclosure</td>
</tr>
<tr>
<td>Waste management</td>
<td>Product safety</td>
<td>Governance oversight</td>
</tr>
<tr>
<td>Water management</td>
<td>Social policy/ strategy</td>
<td>Remuneration</td>
</tr>
<tr>
<td>Supply chain management</td>
<td>Shareholder rights</td>
<td></td>
</tr>
</tbody>
</table>

Number of engagements

Effectiveness of change facilitations

Source: Schroders, as at 31 December 2019. Top ten topics we engaged with companies are shown in pink. By company engaged. Our experience suggests it takes an average of 2 years for companies to effect the change requested. In 2018 we introduced a new change facilitation process to automatically contact any company where we have voted against management. We communicate our global voting policy, the rationale behind our decision to vote against and invite the company to engage with us.
Engagement in practice
Using our influence to protect long-term value

Unilever poised to quit FTSE 100 after more than 30 years

Concerns
- Delisting would result in forced-selling at a sub-optimal price
- Protectionist nature of Dutch market
- Failed to consider alternative simplification through UK incorporation

Actions
- 1:1 engagements with the Board
- Collective engagement via Investor Forum
- Publicised our intention to vote against management following little progress

Outcome
Company abandoned proposal

Source: Evening Standard
The security shown above is for illustrative purposes only and is not to be considered a recommendation to buy or sell.
Engagement in practice

Modern slavery

Case study: thematic engagement
Engagement: Modern Slavery

54
Letters sent to FTSE 100 companies

37
Responses so far

28
Discussions in progress

Poor performers
Non compliance with minimum standards
Better performers

easyJet gsk Intertek
M&S

bp ITV
Bi

Royal Mail

next

Paddy Power

Sainsbury's

Vodafone
We assess every resolution, conducting our own research and applying our core corporate governance principles outlined in our ESG policy.

We consider a range of factors including the circumstances of each company, long-term performance, governance, strategy and the local corporate governance code.

We normally hope to support management, however we are not afraid to vote against if we believe it’s in the best interest of our clients to do so.
Voting in practice
Schroders’ global voting record

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meetings</td>
<td>5,151</td>
<td>5,168</td>
<td>5,378</td>
<td>5,227</td>
<td>5,876</td>
</tr>
<tr>
<td>Resolutions</td>
<td>57,942</td>
<td>61,114</td>
<td>62,058</td>
<td>56,510</td>
<td>61,156</td>
</tr>
<tr>
<td>With management</td>
<td>85%</td>
<td>84%</td>
<td>82%</td>
<td>86%</td>
<td>87%</td>
</tr>
<tr>
<td>Against</td>
<td>15%</td>
<td>16%</td>
<td>18%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>% meetings where we voted against at least one resolution</td>
<td>42%</td>
<td>39%</td>
<td>47%</td>
<td>48%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Source: Schroders, as at 31 December 2019.

Map note: The percentages on the map are calculated from the number of meetings in each region.

Resolutions note: We vote against on numerous resolutions but these are predominantly based around board structure and executive remuneration. We work closely with the investors and engage extensively with the company before inputting an against vote. This is the number of resolutions we have voted on. We rarely table resolutions ourselves.
Suggestions to integrate ESG and Climate
Within your risk management framework
Why not implementing the British climate stress test scenario?

“The potential financial impacts of climate change are well-documented. Furthermore, the PRA's recent Supervisory Statement¹ set out the importance of firms using scenario analysis to assess the impact of the financial risks from climate change on their business strategy. However, last year's Task Force on Climate-related Financial Disclosures (TCFD) report (published in September 2018) showed that while firms were starting to consider impacts to their strategic resilience resulting from climate change, few were systematically using scenario analysis.

This exploratory exercise is designed to provide additional market impetus in this area. It will also provide additional data that informs the Bank's development of a consistent and effective approach to climate-focused scenario analysis, both domestically and through international groups like the Network for Greening the Financial System (secretariat by Banque de France). Whilst this exercise will inform future Bank work, it should be viewed as investigatory in nature. The assumptions and methodology have been designed on this basis and should therefore not be taken as a precedent for future domestic or international exercises.”

Scenario A

A sudden transition (a Minsky moment²), ensuing from rapid global action and policies, and materialising over the medium-term business planning horizon that results in achieving a temperature increase being kept below 2°C (relative to pre-industrial levels) but only following a disorderly transition. In this scenario, transition risk is maximised. The scenario is based on the type of disorderly transitions highlighted the IPCC Fifth Assessment Report (2014)³. [Shock parameters illustrative of potential impact in 2022]

Scenario B

A long-term orderly transition scenario that is broadly in line with the Paris Agreement. This involves a maximum temperature increase being kept well below 2°C (relative to pre-industrial levels) with the economy transitioning in the next three decades to achieve carbon neutrality by 2050 and greenhouse-gas neutrality in the decades thereafter. The underlying assumptions for this Scenario are based on the scenarios assessed in the IPCC Special Report on Global Warming of 1.5°C (2018)⁴. [Shock parameters illustrative of potential impact in 2050]

Scenario C

A scenario with failed future improvements in climate policy, reaching a temperature increase in excess of 4°C (relative to pre-industrial levels) by 2100 assuming no transition and a continuation of current policy trends. Physical climate change is high under this scenario, with climate impacts for these emissions reflecting the riskier (high) end of current estimates⁵. [Shock parameters illustrative of potential impact in 2100]

¹[Missing footnote text]. ²[Missing footnote text]. ³[Missing footnote text].
Why not implementing the British Climate stress test scenario?

Impacts on investments from both physical and transition risk for Life and General Insurers

<table>
<thead>
<tr>
<th>Sector</th>
<th>% of investment portfolio in following sectors</th>
<th>Assumptions</th>
<th>Scenario A</th>
<th>Scenario B</th>
<th>Scenario C</th>
<th>Scenario A</th>
<th>Scenario B</th>
<th>Scenario C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food extraction¹</td>
<td>Gas/Oil/Co2/Oil (inc. crude)</td>
<td>Change in equity value for sections of the investment portfolio comprising material exposure to the energy sector as per below:</td>
<td>-45%</td>
<td>-42%</td>
<td>-38%</td>
<td>-5%</td>
<td>-20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coal</td>
<td>-40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oil</td>
<td>-42%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gas</td>
<td>-25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power generation¹</td>
<td>Power transmission and delivery of natural gas and, renewables (production and transmission)</td>
<td>-55%</td>
<td>-50%</td>
<td>-15%</td>
<td>+10%</td>
<td>-5%</td>
<td>-20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coal</td>
<td>-45%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oil</td>
<td>-25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gas</td>
<td>-15%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Renewables (inc. nuclear)</td>
<td>+10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


²Refer to footnote no.1 in previous page.
ESG integration

What have to be the insurer CRO focus?

1. The situation and the strategy
   1. Which % does take in consideration ESG risks?
   2. How do you include ESG in your choice of new investment
   3. Your % of green, social, governance, assets? (impact investment)
   4. What is your carbon footprint?
   5. How do you converge towards the 2 degree scenario?

2. Governance to manage Climate & ESG risks embedded in the investments (Pillar II)
   1. The sustainable Investment policy: impact investing? Thematic investing? E or S or G? or all?
   2. The choice of the ESG criteria/risks for corporate and governments for direct investments
   3. The choice of ESG criteria/risks for delegated investments to choose third party asset managers and their products

3. Risk management (Pillar I)
   1. Risk management of the ESG risks: follow up of the implementation
   2. Measuring the impacts of the ESG integration on performance, risks and ESG externalities (Carbon footprint, non fossil electricity, etc.)
   3. Stress testing the balance sheet

4. Communication (Pillar III)
   1. Regulatory requirement
   2. The corporate communication
Annex
Action plan on financing Sustainable growth

One comprehensive strategy - three main objectives - ten actions

Reorienting capital flows towards sustainable investment

Mainstreaming Sustainability into risk management

Fostering transparency and long-termism

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**Actions**

1. **Establish EU Sustainable taxonomy**
   - COM is progressively developing the EU taxonomy. The technical details (screening criteria) are developed by the Technical Expert Group (TEG) that will deliver their report by Q2 2019.

2. **Create standards and labels**
   - COM explores the use of the EU Eco-Label framework for green financial products. By Q2 2019, the TEG will prepare a report on an EU Green Bond Standard building on current best practices. On the Eco-label, JRC has launched an open consultation (open until 25 January 2019).

3. **Foster investment in Sustainable projects**
   - COM explores measures that will improve the efficiency and impact of instruments aiming at investment support. A mapping on investment gaps and financing took place in Q3 2018, best practices for sustainable investments were exchanged on (inter-)national and EU level in Q4 2018.

4. **Incorporate sustainability in investment advice**
   - COM will ensure that advisors will take into account the sustainable preference of clients. Draft delegated acts were published for Feedback in May 2018. COM reviewed stakeholder feedback and published the final version of the delegated act.

5. **Develop Sustainability benchmarks**
   - COM will increase the transparency of sustainability benchmarks. The TEG is currently assisting the Commission in developing minimum standards for low-carbon benchmarks and minimum disclosure requirements for ESG benchmarks. It will deliver a report by Q2 2019.

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## Action plan on financing Sustainable growth

### One comprehensive strategy – three main objectives – ten actions

<table>
<thead>
<tr>
<th><strong>Reorienting capital flows</strong> towards sustainable investment</th>
<th><strong>Mainstreaming Sustainability into risk management</strong></th>
<th><strong>Fostering transparency and long-termism</strong></th>
</tr>
</thead>
</table>

### Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>6.</strong></td>
<td>Integrate ESG in ratings and market research</td>
</tr>
<tr>
<td><strong>7.</strong></td>
<td>Clarify institutional investors and asset managers duties</td>
</tr>
<tr>
<td><strong>8.</strong></td>
<td>Incorporate Sustainability in prudential requirements</td>
</tr>
<tr>
<td><strong>9.</strong></td>
<td>Strengthen Sustainability disclosure and accounting</td>
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<tr>
<td><strong>10.</strong></td>
<td>Foster Sustainable corporate governance</td>
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</table>

# The legislative proposals

The most urgent actions from the AP were taken forward as legislative Proposals in May 2018.

<table>
<thead>
<tr>
<th>#</th>
<th>Proposal Description</th>
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</table>
| 1 | Establish EU Sustainable taxonomy  
   | **Taxonomy Proposal:** Proposal setting out criteria to determine the environmental sustainability of an economic activity (‘taxonomy’). |
| 5 | Develop Sustainability benchmarks  
   | **Benchmark Proposal:** Proposal to create two new categories of benchmarks as well as minimum disclosure requirements for ESG benchmarks. |
| 7 | Clarify institutional investors and asset managers duties  
   | **Disclosure Proposal:** (i) introduce consistency on how institutional investors and asset managers should integrate sustainability in investment decision-making processes; (ii) increase transparency towards end-investors. |
| 4 | Incorporate Sustainability into financial advice  
   | The Commission published the final version of the delegated act. |

Source: European Commission.
What is the EU taxonomy?

EU Taxonomy is a list of economic activities with performance criteria for their contribution to six environmental objectives.

<table>
<thead>
<tr>
<th>EU Taxonomy IS</th>
<th>EU Taxonomy IS NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A list of economic activities and relevant criteria</td>
<td>A rating of good or bad companies</td>
</tr>
<tr>
<td>Flexible to adapt to different investment styles and strategies</td>
<td>A mandatory list to invest in</td>
</tr>
<tr>
<td>Based on latest scientific and industry experience</td>
<td>Making a judgement on the financial performance of an investment – only the environmental performance</td>
</tr>
<tr>
<td>Dynamic, responding to changes in technology, science, new activities and data</td>
<td>Inflexible or static</td>
</tr>
</tbody>
</table>

Environmental objectives

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy, waste prevention and recycling
5. Pollution prevention and control
6. Protection of healthy ecosystems

EU taxonomy is an encyclopedia

Source: European Commission.
Intended impact of an EU taxonomy

**Market practice**

**Different taxonomies** among Member States and institutions hinder cross-border capital flows

**Costs for real economy** to raise capital and for financial institutions to provide clarity

**Burdensome for investors** to check and compare information

**Hampering investments into a more sustainable economy**

**EU Sustainable taxonomy**

A harmonised list of economic activities that can be considered **environmentally sustainable** for investment purposes

**Intended impact**

- **Certainty for economic actors** and financial market participants
- **Protection of private investors** and mitigation of Greenwashing
- **Easier for real economy** to raise capital
- **Mitigation of** market fragmentation
- **Basis for further policy action**

**Reorienting capital flows towards sustainable investment**

Source: European Commission.
### Key elements of the February 2019 political agreement between co-legislators

<table>
<thead>
<tr>
<th>EU Climate Transition Benchmarks</th>
<th>The EU Climate transition benchmarks brings the resulting benchmark portfolio on a <strong>decarbonisation trajectory</strong>, meaning a <strong>measurable, science-based and time-bound trajectory</strong> to reduce carbon emissions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Paris-aligned Benchmarks</td>
<td>The EU Paris-aligned Benchmarks brings the resulting benchmark portfolio's carbon emissions <strong>in line with the Paris Climate Agreement goal to limit the global temperature to 1.5°</strong> compared to pre-industrial levels.</td>
</tr>
<tr>
<td>Benchmarks ESG Disclosures</td>
<td>The Benchmarks ESG disclosures ensures that <strong>ESG and climate-related considerations can be integrated in the valuation</strong> of assets across various asset classes.</td>
</tr>
</tbody>
</table>
| Other key elements              | - Extension of the transitional period for providers of ‘critical benchmarks’ — interest rates such as Euribor or EONIA — by two extra years until 31 December 2021  
- Extension of the period for mandatory contributions/administration to five years  
- Extension of the transitional period also covers the possibility for benchmarks administered in third-countries to be used in the EU for another two years |

Source: European Commission.
Tackling sustainability
EU action plan

What is the EU doing?
The EU is acting: 3 pieces of legislation presented in May 2018 will incentivise and channel private sector investment into green and sustainable development. This follows a 10-point Action Plan for sustainable finance.

1. A unified EU green classification system – ‘taxonomy’
   To determine if an economic activity is environmentally sustainable based on harmonised EU criteria. The European Parliament adopted its report in April 2019. In June 2019, the Technical Expert Group on Sustainable Finance published the first classification system – or taxonomy – for environmentally-sustainable economic activities. This aims to provide guidance for policy makers, industry and investors on how best to support and invest in economic activities that contribute to achieving a climate neutral economy.

2. Sustainability-related disclosures
   Enhanced disclosures by manufacturers and distributors of financial products to end-investors. Financial market participants will have to disclose to their clients the impact of sustainability on financial returns and the impact of their investment decision on sustainability. The European Parliament and the Council reached a political agreement in March 2019.

3. Climate benchmarks and benchmarks’ ESG disclosures
   Two new categories of climate benchmarks to orient the choice of investors who wish to adopt a climate-conscious investment strategy. Political agreement readied by European Parliament and Council in February 2019. The TEG published an interim report on climate benchmarks and benchmark’s environmental, social and governance (ESG) disclosures, and launched call for feedback in June 2019.
Tackling sustainability

EU action plan

Other initiatives

**Strengthening international cooperation**
On-going discussions with third countries to scale up sustainable finance globally.

**EU standards and labels**

**Preferences on sustainability**
Requiring financial firms to take into account their clients' preferences on sustainability when giving investment advice or managing their assets.

**Enhanced transparency in corporate reporting**

**Integrating Sustainability**
The European Securities and Markets Authority, the European Banking Authority, the European Insurance and Occupational Pensions Authority have already delivered their advice to the Commission on sustainability risk integration in financial decision-making, and on the need for a change in banks and insurers’ prudential treatment of assets with a favourable environmental and social impact (in addition to sustainability-related actions on their own initiative).
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