Course 2022-2023 in Sustainable Finance
Lecture 1. Introduction

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1 The opinions expressed in this presentation are those of the authors and are not meant to represent the opinions or official positions of Amundi Asset Management.
“Sustainable finance refers to the process of taking environmental, social and governance (ESG) considerations into account when making investment decisions in the financial sector, leading to more long-term investments in sustainable economic activities and projects. Environmental considerations might include climate change mitigation and adaptation, as well as the environment more broadly, for instance the preservation of biodiversity, pollution prevention and the circular economy. Social considerations could refer to issues of inequality, inclusiveness, labour relations, investment in human capital and communities, as well as human rights issues. The governance of public and private institutions — including management structures, employee relations and executive remuneration — plays a fundamental role in ensuring the inclusion of social and environmental considerations in the decision-making process.” (European Commission).
Many words, one concept

Figure 1: Many words, one concept
Responsible investment (RI)

Responsible investment is an approach to investment that explicitly acknowledges the relevance to the investor of environmental, social and governance factors, and of the long-term health of the market as a whole.

Sustainable investing (SI)

Sustainable investing is an investment approach that considers environmental, social and governance factors in portfolio selection.

Socially responsible investing (SRI)

SRI is an investment strategy that is considered socially responsible, because it invests in companies that have ethical practices.

Environmental, Social and Governance (ESG)

Environmental, Social, and Corporate Governance (ESG) refers to the factors that measure the sustainability of an investment.
Sustainable Investing
≈
Socially Responsible Investing (SRI)
≈
Environmental, Social, and Governance (ESG)

Remark

Blue Finance ⊂ Green Finance, Climate Finance ⊂ Sustainable Finance
Historical perspective

- Responsible investment (RI): 2000's
- ESG investing (ESG): 2010's
- Sustainable finance (SF): 2020's

Why?
Historical perspective

- At the beginning, sustainable finance mainly concerns final investors and asset owners (ethics) \( \Rightarrow \) **responsible investment**
- Then, it gains momentum in asset management \( \Rightarrow \) **ESG investing**
- Finally, it spreads across all financial actors (e.g. issuers, banks, central banks, etc.) \( \Rightarrow \) **Sustainable finance**
ESG motivations

Figure 2: The raison d’être of ESG investing

- Systemic & Economic Sustainability
- Values and Ethics
- Financial Performance
- Risk Management
- Fiduciary Duty
How many acronyms do you know?
A myriad of acronyms

Many financial actors

ESG financial ecosystem

- Asset owners (pension funds, sovereign wealth funds (SWF), insurance and institutional investors, retail investors, etc.)
- Asset managers
- ESG rating agencies
- ESG index sponsors
- Banks
- ESG associations (GSIA, UNPRI, etc.)
- Regulators and international bodies (governments, financial and industry regulators, central banks, etc.)
- Issuers (equities, bonds, loans, etc.)
- Society and people

ESG Investing ⇔ ESG Financing (= Sustainable Finance)
The issuer point of view of ESG

Corporate financial performance (CFP)
- Friedman (1970)
- Shareholder theory
- Corporations have no social responsibility to the public or society
- Their only responsibility is to its shareholders (profit maximization)

Corporate social responsibility (CSR)
- Freeman (2010)
- Stakeholder theory
- Corporations create negative externalities
- They must have social and moral responsibilities
- Impact on the cost-of-capital and business risk
Sustainable investment forums

GSIA members

- The European Sustainable Investment Forum (Eurosif), http://www.eurosif.org
- Responsible Investment Association Australasia (RIAA), https://responsibleinvestment.org
- Responsible Investment Association Canada (RIA Canada), https://www.riacanada.ca
- UK Sustainable Investment & Finance Association (UKSIF), https://www.uksif.org
- The Forum for Sustainable & Responsible Investment (US SIF), https://www.ussif.org
- Dutch Association of Investors for Sustainable Development (VBDO), https://www.vbdo.nl/en/
- Japan Sustainable Investment Forum (JSIF), https://japansif.com/english
Sustainable investment forums

Figure 3: 2018 GSIA report

Figure 4: 2020 GSIA report
Initiatives

- Principles for responsible investment (PRI)
- Climate Action 100+
- Net zero alliances: (NZAOA, NZAM, PAII, NZBA, NZIA, etc) \(\Rightarrow\) GFANZ
PRI (or UNPRI)

**Figure 5:** Principles for Responsible Investment (PRI)

https://www.unpri.org
PRI (or UNPRI)

- Early 2005: UN Secretary-General Kofi Annan invited a group of the world’s largest institutional investors to join a process to develop the Principles for Responsible Investment
- April 2006: The Principles were launched at the New York Stock Exchange
- 6 ESG principles
- The 63 founding signatories are 32 asset owners\(^a\) and 31 asset managers\(^b\) and data providers\(^c\)

\(^a\)AP2, CDC, CDPQ, CalPERS, ERAFP, FRR, IFC, NZSF, NGPF, PGGM, UNJSPF, USS, etc.
\(^b\)Amundi (CAAM), Sumitomo Trust, BNP PAM, Mitsubishi Trust, Threadneedle, Aviva, Candriam, etc.
\(^c\)Trucost, Vigeo, etc.
Signatories’ commitment

“As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and corporate governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these Principles may better align investors with broader objectives of society. Therefore, where consistent with our fiduciary responsibilities, we commit to the following:

- Principle 1: We will incorporate ESG issues into investment analysis and decision-making processes.
- Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices.
- Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- Principle 4: We will promote acceptance and implementation of the Principles within the investment industry.
- Principle 5: We will work together to enhance our effectiveness in implementing the Principles.
- Principle 6: We will each report on our activities and progress towards implementing the Principles.

The Principles for Responsible Investment were developed by an international group of institutional investors reflecting the increasing relevance of environmental, social and corporate governance issues to investment practices. The process was convened by the United Nations Secretary-General.

In signing the Principles, we as investors publicly commit to adopt and implement them, where consistent with our fiduciary responsibilities. We also commit to evaluate the effectiveness and improve the content of the Principles over time. We believe this will improve our ability to meet commitments to beneficiaries as well as better align our investment activities with the broader interests of society.

We encourage other investors to adopt the Principles.”

Source: https://www.unpri.org
**Figure 6: PRI Signatory growth**

Source: https://www.unpri.org
Rating agencies


Rating agencies

- ESG scores and ratings
- ESG data
- ESG indices
Regulators: Who? Why?

Table 1: The supervision institutions in finance

<table>
<thead>
<tr>
<th></th>
<th>Banks</th>
<th>Insurers</th>
<th>Markets</th>
<th>All sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>BCBS</td>
<td>IAIS</td>
<td>IOSCO</td>
<td>FSB</td>
</tr>
<tr>
<td>EU</td>
<td>EBA/ECB</td>
<td>EIOPA</td>
<td>ESMA</td>
<td>ESFS</td>
</tr>
<tr>
<td>US</td>
<td>FDIC/FRB</td>
<td>FIO</td>
<td>SEC</td>
<td>FSOC</td>
</tr>
</tbody>
</table>

- Greenwashing
  - Explicit & deliberate greenwashing;
  - Unintentional greenwashing.

- Fiduciary duties
## ESG regulations

### Figure 7: Who will regulate ESG? — The regulators viewpoint (MSCI, 2022)

<table>
<thead>
<tr>
<th>Year</th>
<th>Financial Regulators</th>
<th>Central Banks</th>
<th>Governments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4</td>
<td>12</td>
<td>34</td>
<td>51</td>
</tr>
<tr>
<td>2011</td>
<td>7</td>
<td>5</td>
<td>8</td>
<td>42</td>
</tr>
<tr>
<td>2012</td>
<td>6</td>
<td>2</td>
<td>15</td>
<td>57</td>
</tr>
<tr>
<td>2013</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>2014</td>
<td>22</td>
<td>4</td>
<td>22</td>
<td>48</td>
</tr>
<tr>
<td>2015</td>
<td>11</td>
<td>3</td>
<td>13</td>
<td>47</td>
</tr>
<tr>
<td>2016</td>
<td>3</td>
<td>3</td>
<td>16</td>
<td>55</td>
</tr>
<tr>
<td>2017</td>
<td>4</td>
<td>10</td>
<td>6</td>
<td>123</td>
</tr>
<tr>
<td>2018</td>
<td>16</td>
<td>7</td>
<td>24</td>
<td>116</td>
</tr>
<tr>
<td>2019</td>
<td>4</td>
<td>17</td>
<td>1</td>
<td>139</td>
</tr>
<tr>
<td>2020</td>
<td>22</td>
<td>1</td>
<td>11</td>
<td>159</td>
</tr>
<tr>
<td>2021</td>
<td>8</td>
<td>11</td>
<td>24</td>
<td>213</td>
</tr>
</tbody>
</table>

**Source:** [https://www.msci.com/who-will-regulate-esg](https://www.msci.com/who-will-regulate-esg)
ESG regulations

Figure 8: Who will regulate ESG? — The regulated viewpoint (MSCI, 2022)

Visit the MSCI website

https://www.msci.com/who-will-regulate-esg

and obtain the detailed list of regulations

by year, country, regulator, regulated investors, etc.
The example of central banks

Figure 9: Network of Central Banks and Supervisors for Greening the Financial System (NGFS)

- Launched at the Paris One Planet Summit (OPS) on December 2017
- 8 founding members: Banco de Mexico, BoE, BdF, Dutch Central Bank, Buba, Swedish FSA, HKMA, MAS and PBOC
- As of March 19th 2021, the NGFS consists of 89 members (CBs, EBA, EIOPA, ESMA) and 13 observers (BCBS, IMF, IAIS, IOSCO)
The example of central banks

Go the NGFS website (https://www.ngfs.net) and download the NGFS climate scenarios: https://www.ngfs.net/en/publications/ngfs-climate-finance-research-portal

See also https://data.ene.iiasa.ac.at/ngfs (NGFS scenario explorer hosted by IIASA²)

²International Institute for Applied Systems Analysis
Table 2: List of the main reporting frameworks

<table>
<thead>
<tr>
<th>Perimeter</th>
<th>Acronym</th>
<th>Name</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>GC</td>
<td>UN Global Compact Initiative</td>
<td>2000/2000</td>
</tr>
<tr>
<td></td>
<td>GRI</td>
<td>Global Reporting Initiative</td>
<td>1997/2000</td>
</tr>
<tr>
<td></td>
<td>IIRC</td>
<td>International Integrated Reporting Council</td>
<td>2010/2013</td>
</tr>
<tr>
<td></td>
<td>ISSB</td>
<td>International Sustainability Standards Board</td>
<td>2021/2023</td>
</tr>
<tr>
<td></td>
<td>SASB</td>
<td>Sustainability Accounting Standards Board</td>
<td>2011/2016</td>
</tr>
<tr>
<td></td>
<td>SDGs</td>
<td>UN Sustainable Development Goals</td>
<td>2015/2016</td>
</tr>
<tr>
<td>Climate</td>
<td>CDP</td>
<td>Carbon Disclosure Project</td>
<td>2000/2000</td>
</tr>
<tr>
<td></td>
<td>CDSB</td>
<td>Climate Disclosure Standards Board</td>
<td>2007/2015</td>
</tr>
<tr>
<td></td>
<td>PCAF</td>
<td>Partnership for Carbon Accounting Financials</td>
<td>2019/2020</td>
</tr>
<tr>
<td></td>
<td>SBTi</td>
<td>Science Based Targets initiative</td>
<td>2015/2015</td>
</tr>
<tr>
<td></td>
<td>TCFD</td>
<td>Task Force on Climate-Related Financial Disclosures</td>
<td>2015/2017</td>
</tr>
</tbody>
</table>
Sustainable Development Goals

**Figure 10:** The SDGs icons

![SDGs Icons](https://sdgs.un.org/goals#icons)

*Source: [https://sdgs.un.org/goals#icons](https://sdgs.un.org/goals#icons)
## Sustainable Development Goals

**Table 3: The 17 SDGs**

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Description</th>
<th>E</th>
<th>S</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No poverty</td>
<td>End poverty in all its forms everywhere</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>2</td>
<td>Zero hunger</td>
<td>End hunger, achieve food security and improved nutrition and promote sustainable agriculture</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>3</td>
<td>Good health and well-being</td>
<td>Ensure healthy lives and promote well-being for all at all ages</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Quality education</td>
<td>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Gender equality</td>
<td>Achieve gender equality and empower all women and girls</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Clean water and sanitation</td>
<td>Ensure availability and sustainable management of water and sanitation for all</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Affordable and clean energy</td>
<td>Ensure access to affordable, reliable, sustainable and modern energy for all</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>8</td>
<td>Decent work and economic growth</td>
<td>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Industry, innovation and infrastructure</td>
<td>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

## Sustainable Development Goals

**Table 4: The 17 SDGs**

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Description</th>
<th>E</th>
<th>S</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Reduced inequality</td>
<td>Reduce inequality within and among countries</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>11</td>
<td>Sustainable cities and communities</td>
<td>Make cities and human settlements inclusive, safe, resilient and sustainable</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Responsible consumption and production</td>
<td>Ensure sustainable consumption and production patterns</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>13</td>
<td>Climate action</td>
<td>Take urgent action to combat climate change and its impacts</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Life below water</td>
<td>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Life on land</td>
<td>Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>16</td>
<td>Peace, justice, and strong institutions</td>
<td>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Partnerships for the goals</td>
<td>Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

The GHG Protocol corporate standard classifies a company’s greenhouse gas emissions in three scopes\(^3\):

- **Scope 1**: Direct GHG emissions (○)
- **Scope 2**: Consumption of purchased energy (○○)
- **Scope 3**: Other indirect GHG emissions (●●)
  - **Scope 3 upstream**: emissions associated to the supply side
    - 1. First tier direct (●)
    - 2. Tier 2 and 3 suppliers (●●)
  - **Scope 3 downstream**: emissions associated with the product sold by the entity
    - 1. Use of the product (●●●)
    - 2. Waste disposal & recycling (●●●●)

\(^3\)Measurement robustness: from ○○○○ (very high) to ●●●● (very low)
Each year, CDP sends a questionnaire to organizations and collects information on three environmental dimensions:

1. Climate change (based on the GHG Protocol)
2. Forest management
3. Water security
Table 5: Examples of 2019 carbon emissions and intensity

<table>
<thead>
<tr>
<th>Company</th>
<th>Emission (in tCO₂e)</th>
<th>Revenue (in $ mn)</th>
<th>Intensity (in tCO₂e/$ mn)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SC₁</td>
<td>SC₂</td>
<td>SC₃&lt;sup&gt;up&lt;/sup&gt;</td>
</tr>
<tr>
<td>Amazon</td>
<td>5 760 000</td>
<td>5 500 000</td>
<td>20 054 722</td>
</tr>
<tr>
<td>Apple</td>
<td>50 549</td>
<td>862 127</td>
<td>27 624 282</td>
</tr>
<tr>
<td>BNP Paribas</td>
<td>64 829</td>
<td>280 789</td>
<td>1 923 307</td>
</tr>
<tr>
<td>BP</td>
<td>49 199 999</td>
<td>5 200 000</td>
<td>103 840 194</td>
</tr>
<tr>
<td>Caterpillar</td>
<td>905 000</td>
<td>926 000</td>
<td>15 197 607</td>
</tr>
<tr>
<td>Danone</td>
<td>722 122</td>
<td>944 877</td>
<td>28 969 780</td>
</tr>
<tr>
<td>Exxon</td>
<td>111 000 000</td>
<td>9 000 000</td>
<td>107 282 831</td>
</tr>
<tr>
<td>JPMorgan Chase</td>
<td>81 655</td>
<td>692 299</td>
<td>3 101 582</td>
</tr>
<tr>
<td>LVMH</td>
<td>67 613</td>
<td>262 609</td>
<td>11 853 749</td>
</tr>
<tr>
<td>Microsoft</td>
<td>113 414</td>
<td>3 556 553</td>
<td>5 977 488</td>
</tr>
<tr>
<td>Nestle</td>
<td>3 291 303</td>
<td>3 206 495</td>
<td>61 262 078</td>
</tr>
<tr>
<td>Pfizer</td>
<td>734 638</td>
<td>762 840</td>
<td>4 667 225</td>
</tr>
<tr>
<td>Samsung Electronics</td>
<td>5 067 000</td>
<td>10 998 000</td>
<td>33 554 245</td>
</tr>
<tr>
<td>Volkswagen</td>
<td>4 494 066</td>
<td>5 973 894</td>
<td>65 335 372</td>
</tr>
<tr>
<td>Walmart</td>
<td>6 101 641</td>
<td>13 057 352</td>
<td>40 651 079</td>
</tr>
</tbody>
</table>

Source: Trucost (2022) & Authors’ calculations.
**Table 6: The 11 recommended disclosures (TCFD, 2017)**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>#</th>
<th>Recommended Disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>1</td>
<td>Board oversight</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Management’s role</td>
</tr>
<tr>
<td>Strategy</td>
<td>3</td>
<td>Risks and opportunities</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Impact on organization</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Resilience of strategy</td>
</tr>
<tr>
<td>Risk management</td>
<td>6</td>
<td>Risk ID and assessment processes</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Risk management processes</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Integration into overall risk management</td>
</tr>
<tr>
<td>Metrics and targets</td>
<td>9</td>
<td>Climate-related metrics</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Scope 1, 2, 3 GHG emissions</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Climate-related targets</td>
</tr>
</tbody>
</table>

Source: [https://www.fsb-tcfd.org](https://www.fsb-tcfd.org).
Examples of recommended metrics

- GHG emissions (absolute scope 1, scope 2, and scope 3 GHG emissions; financed emissions by asset class; weighted average carbon intensity)
- Transition risks (volume of real estate collaterals highly exposed to transition risk; concentration of credit exposure to carbon-related assets; percent of revenue from coal mining)
- Physical risks (number and value of mortgage loans in 100-year flood zones; proportion of real assets exposed to 1:100 or 1:200 climate-related hazards)
- Climate-related opportunities (proportion of green buildings, green revenues)
- Capital deployment (green CAPEX)
- Internal carbon prices (internal carbon price, shadow carbon price)
- Remuneration
Figure 11: Total number of ESG regulations

Regulatory framework

Figure 12: Number of ESG regulations per region

European Union

- The action plan on sustainable finance (May 2018)
- The European Green Deal (December 2019)
- The Fit-for-55 package (July 2021)
- The REPowerEU plan or energy security package (May 2022)
European Union

- EU taxonomy regulation
- Climate benchmarks (PAB)
- Sustainable finance disclosure regulation (SFDR)
- MiFID II & IDD
- Corporate sustainability reporting directive (CSRD)
Figure 13: Sustainable finance — implementation timeline
Figure 14: Sustainable finance — implementation timeline
EU taxonomy regulation

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystem
The common principles are:

- A year-on-year self-decarbonization of 7% on average per annum, based on scope 1, 2 and 3 emissions
- A minimum carbon intensity reduction $\mathcal{R}^-$ compared to the investable universe
- A minimum exposure to sectors highly exposed to climate change

Two labels:

1. CTB: (climate transition benchmark) ⇒ $\mathcal{R}^- = 30$
2. PAB: (Paris aligned benchmark) ⇒ $\mathcal{R}^- = 50$
SFDR

- Article 6 (or non-ESG products)
  It covers standard financial products that cannot be Article 8 or Article 9

- Article 8 (or ESG products)
  It corresponds to financial products which “promote, among other characteristics, environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices”

- Article 9 (or sustainable products)
  In addition to the points covered by Article 8, these financial products have a sustainable investment objective
  + SI, PAI, etc.
⇒ sustainable preferences
- **Environmental factors**: (1) climate change mitigation; (2) climate change adaptation; (3) water and marine resources; (4) resource use and circular economy; (5) pollution; (6) biodiversity and ecosystems.

- **Social factors**: (1) equal opportunities for all; (2) working conditions; (3) respect for human rights.

- **Governance factors**: (1) role and composition of administrative, management and supervisory bodies; (2) business ethics and corporate culture, including anti-corruption and anti-bribery; (3) political engagements of the undertaking, including its lobbying activities; (4) management and quality of relationships with business partners.

\[
\text{single materiality} \neq \text{double materiality}
\]
**ESG strategies**

1. **Exclusion**
   - Exclusion policy & negative (or worst-in-class) screening

2. **Values**
   - Norms-based screening

3. **Selection**
   - Positive (or best-in-class) screening

4. **Thematic**
   - Sustainability themed investing (e.g. green bonds)

5. **Integration**
   - ESG scoring is fully integrated in portfolio management

6. **Engagement**
   - Voting policy & shareholder activism

7. **Impact**
   - Impact investing

**Figure 15:** Categorisation of ESG strategies (Eurosif, 2019)
Exclusion/Negative Screening

The exclusion from a fund or portfolio of certain sectors, companies or practices based on specific ESG criteria (worst-in-class)

Examples:

- Systematic exclusion of issuers rated CCC
- Exclusion of issuers rated BB, B and CCC
- Sector exclusion (e.g., Energy)
- Sub-industry exclusion (e.g. Coal & Consumable Fuels)
- Exclusion list of individual issuers

Source: Global Sustainable Investment Alliance (2019)
ESG strategies

Values/Norms-based Screening (and Red Flags)

Screening of investments against minimum standards of business practice based on international norms, such as those issued by the OECD, ILO, UN (Global Compact) and UNICEF.

In Europe, the top exclusion criteria are (1) controversial weapons (Ottawa and Oslo treaties), (2) tobacco, (3) all weapons, (4) gambling, (5) pornography, (6) nuclear energy, (7) alcohol, (8) GMO and (9) animal testing (Eurosif, 2019).

Examples:

- Controversial sectors: controversial weapons, conventional weapons, civilian firearms, nuclear weapons, nuclear power, thermal coal, tobacco, alcohol, gambling, adult entertainment, genetically modified, fossil fuels production & reserves
- Many ETF funds

Source: Global Sustainable Investment Alliance (2019)
ESG strategies

Selection/Positive Screening

Investment in sectors, companies or projects selected for positive ESG performance relative to industry peers (best-in-class)

Examples:

- Selection of issuers rated AAA, AA and A
- Selection of issuers that have improved their rating (Momentum ESG strategy)

Source: Global Sustainable Investment Alliance (2019)
Thematic/Sustainability Themed Investing

Investment in themes or assets specifically related to sustainability (for example clean energy, green technology or sustainable agriculture)

Examples:
- Funds invested in Green Bonds
- Funds invested in Social Bonds
- Funds invested in Sustainable Infrastructure
- Funds invested in Natural Resources

Source: Global Sustainable Investment Alliance (2019)
ESG strategies

ESG Integration
The systematic and explicit inclusion by investment managers of environmental, social and governance factors into financial analysis

Examples:
- The stock picking score is a mix (50/50) of a fundamental score and an ESG score
- The fund must have an ESG score greater than the score of its benchmark

Source: Global Sustainable Investment Alliance (2019)
Corporate Engagement/Shareholder Action

The use of shareholder power to influence corporate behavior, including through direct corporate engagement (i.e., communicating with senior management and/or boards of companies), filing or co-filing shareholder proposals, and proxy voting that is guided by comprehensive ESG guidelines.

Examples:
- Voting policy
- Public divestment
- Biodiversity and deforestation financing
- Engagement with target companies on a specific subject (e.g., pay ratio or living wage)
- Escalated engagement: concerns public, proposing shareholder resolutions & litigation

Source: Global Sustainable Investment Alliance (2019)
Impact Investing

Targeted investments aimed at solving social or environmental problems, and including community investing, where capital is specifically directed to traditionally underserved individuals or communities, as well as financing that is provided to businesses with a clear social or environmental purpose.

Examples:
- Funds with a Social Impact objective
- Funds invested in Green Bonds
- PAB and CTB ETFs

Source: Global Sustainable Investment Alliance (2019)
Impact Investing/Community Investing

- **Impact Investing**
  Investing to achieve positive, social and environmental impacts – requires measuring and reporting against these impacts, demonstrating the intentionality of investor and underlying asset/Investee, and demonstrating the investor contribution.

- **Community Investing**
  Where capital is specifically directed to traditionally underserved individuals or communities, as well as financing that is provided to businesses with a clear social or environmental purpose. Some community investing is impact investing, but community investing is broader and considers other forms of investing and targeted lending activities.

Source: Global Sustainable Investment Alliance (2021)
The market of ESG investing

**Figure 16:** Sustainable investment assets at the start of 2016

- **$23 tn**
  - Global Responsible Investment market in 2016

- **~ 1/4**
  - of global assets under management

- **+25%**
  - Growth in 2 years

- **CANADA**
  - $1.1 tn
  - 49% growth in 2 years

- **USA**
  - $8.7 tn
  - 33% growth in 2 years

- **EUROPE**
  - $12.04 tn
  - 12% growth in 2 years

- **AUSTRALIA / NZ**
  - $500 bn
  - 247% growth in 2 years

- **JAPAN**
  - $480 bn
  (vs $7 bn in 2014)

Source: GSIA (2016).
The market of ESG investing

Figure 17: Sustainable investment assets at the start of 2018

- **USA**: $12.0 tn, 38% growth in 2 years
- **Canada**: $1.7 tn, 42% growth in 2 years
- **Europe**: $14.1 tn, 11% growth in 2 years
- **Japan**: $2.2 tn, 7% (vs $474 bn in 2016)
- **Australia / NZ**: $0.7 tn, 46% growth in 2 years

The market of ESG investing

Figure 18: Sustainable investment assets at the start of 2020

- $35.3tn Global RI market in 2020
- 35.9% of total global AUM
- +15% Growth in 2 years

Source: GSIA (2020).
Figure 19: Asset values of ESG strategies between 2014 and 2018

The market of ESG investing

Table 7: ESG asset growth

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<td>−24.0%</td>
<td>15 030</td>
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<td>Values/Norms-based</td>
<td>19.0%</td>
<td>−13.1%</td>
<td>−11.5%</td>
<td>4 140</td>
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<tr>
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<td>Selection</td>
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<td>50.1%</td>
<td>−24.9%</td>
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<td>Thematic Investing</td>
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<td>Engagement</td>
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<td>8.3%</td>
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<tr>
<td>7</td>
<td>Impact Investing</td>
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<td>33.7%</td>
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