EVALUATION | AS OF NOVEMBER 2020

EUROPEAN UNION

TRANSPARENCY **(Dimension)**
Common disclosure framework (Sub-dimension)

1. Disclosure on governance **SCORE 8/10**

The Non-Financial Reporting Directive (NFRD) and the Sustainable Finance Disclosure Regulation (SFDR) mainly define disclosure requirements at the European level.

NFRD: Climate change related governance aspects in mandatory reporting is not explicitly mentioned in the NFRD (Directive 2014/95/EU). Additionally, general governance aspects are mentioned. The same applies to the guidelines on non-financial information.

However, the European Commission launched an initiative to review the NFRD in 2020. One aim is to improve disclosure of climate and environmental data by companies. Due to the COVID 19 pandemic, the review has been postponed to the first quarter of 2021.

As an addition to the NFRD, the European Commission issued non-binding guidelines (Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019/C 209/01) in June 2019, which will provide further guidance to companies on how to disclose climate change related information, in line with the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD) and the climate change related metrics developed under the new EU taxonomy. Based on the TEG's draft report, it divides its recommendations into two types: 1. should consider and 2. may consider. To achieve a non-binding character, the much stricter type "should", proposed by the TEG, was not adopted. Type 1 recommendations on governance include: 1. Describe the role of the board in overseeing climate-related risks, opportunities and impacts. 2. Describe the role of the top management in assessing and managing climate-related risks, opportunities and impacts. Type 2 recommendations include: Describe whether, how and at what levels (in particular board and management) the company has access to expertise on climate-related issues, either from its own internal capacity and/or from external sources.

SFDR: In November 2019 the EU adopted the Regulation (EU) 2019/2088 on sustainability-related disclosure in the financial sector (SFDR), which will come into effect in March 2021. The SFDR requires financial market participants and financial advisors to disclose policies on the integration of sustainability risks in the investment decision-making process and insurance advice. European supervisory authorities are currently developing further guidance to the SFRD through regulatory technical standards (RTS), which will cover the content, methodology and presentation of ESG disclosures both at entity level and at product level. The first RTS "on sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts" was to be developed originally by December 2020 but was due to the Covid-19 pandemic postponed to a later stage in 2021.

2. Disclosure on strategy **SCORE 8/10**

The Non-Financial Reporting Directive (NFRD) and the Sustainable Finance Disclosure Regulation (SFDR) mainly define disclosure requirements at the European level.

NFRD: Climate change related strategy aspects in mandatory reporting is not explicitly mentioned in the NFRD (Directive 2014/95/EU). Additionally, general strategy aspects are mentioned. The same applies to the guidelines on non-financial information.

However, the European Commission launched an initiative to review the NFRD in 2020. One aim is to improve disclosure of climate and environmental data by companies. Due to the COVID 19 pandemic, the review has been postponed to the first quarter of 2021.

Following the Directive 2014/95/EU on non-financial reporting, large undertakings with more than 500 employees, shall include a non-financial statement (containing e.g. performance, position and impact of activities and business model, relating to environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters) in their management report. Climate-related aspects are vaguely covered.

As an addition to the NFRD, the European Commission issued non-binding guidelines (Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019/C 209/01) in June 2019, which provides further guidance to companies on how to disclose climate change related information, in line with the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD) and the climate change related metrics developed under the new EU taxonomy. Based on the TEG's draft report, it divides its recommendations into two types: 1. should consider and 2. may. To achieve a non-binding character, the much stricter type "should", proposed by the TEG, was not adopted. Type 1 recommendations on strategy include: 1. Describe the principal climate-related risks the company has identified over the short, medium, and long term throughout the value chain, and any assumptions that have been made when identifying these risks. This description should include the principal risks resulting from any dependencies on natural capitals threatened by climate change, such as water, land, ecosystems or biodiversity. 2. Describe the impact of climate-related risks and opportunities on the company's business model, strategy and financial planning. 3. Describe the resilience of the company's business model and strategy, taking into consideration different climate-related scenarios over different time horizons, including at least a 2 °C or lower scenario and a greater than 2 °C scenario.

SFDR: In November 2019 the EU adopted the Regulation (EU) 2019/2088 on sustainability-related disclosure in the financial sector (SFDR), which will come into effect in March 2021. The SFDR requires financial market participants and financial advisors to disclose policies on the integration of sustainability risks in investment decision-making process and in insurance advice. European supervisory authorities are currently developing further guidance to the SFRD through regulatory technical standards (RTS), which will cover the content, methodology and presentation of ESG disclosures both at entity level and at product level. The first RTS "on sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts" was to be developed originally by December 2020, but was due to the Covid-19 pandemic postponed to a later stage in 2021.

3. Disclosure on risk management **SCORE 8/10**

The Non-Financial Reporting Directive (NFRD) and the Sustainable Finance Disclosure Regulation (SFDR) mainly define disclosure requirements at the European level.

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However, the European Commission launched an initiative to review the NFRD in 2020. One aim is to improve disclosure of climate and environmental data by companies. Due to the COVID 19 pandemic, the review has been postponed to the first quarter of 2021.

As an addition to the NFRD, the European Commission issued non-binding guidelines (Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019/C 209/01) in June 2019, which will provide further guidance to companies on how to disclose climate change related information, in line with the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD) and the climate change related metrics developed under the new EU taxonomy. Based on the TEG's draft report, it divides its recommendations into two types: 1. should consider and 2. may. To achieve a non-binding character, the much stricter type "should", proposed by the TEG, was not adopted. Type 1 recommendations on risk management include: 1. Describe the company's processes for identifying and assessing climate-related risks over the short, medium, and long term and disclose how the company defines short, medium, and long term 2. Describe processes for managing climate-related risks (if applicable how they make decisions to mitigate, transfer, accept, or control those risks), and how the company is managing the particular climate-related risks that it has identified. 3. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management. An important aspect of this description is how the company determines the relative significance of climate-related risks in relation to other risks.

SFDR: In November 2019 the EU adopted the Regulation (EU) 2019/2088 on sustainability-related disclosure in the financial sector (SFDR), which will come into effect in March 2021. The SFDR requires financial market participants and financial advisors to disclose policies on the integration of sustainability risks in investment decision-making process and in insurance advice. European supervisory authorities are currently developing further guidance to the SFRD through regulatory technical standards (RTS), which will cover the content, methodology and presentation of ESG disclosures both at entity level and at product level. The first RTS "on sustainability indicators in relation to adverse impacts on the climate and other environment-related adverse impacts" was originally to be developed by December 2020, but was due to the Covid-19 pandemic postponed to a later stage in 2021.

4. Disclosure on metrics and targets **SCORE 8/10**

The Non-Financial Reporting Directive (NFRD) and the Sustainable Finance Disclosure Regulation (SFDR) mainly define disclosure requirements at the European level.

NFRD: Climate change related disclosure on metrics and targets in mandatory reporting is not explicitly mentioned in the NFRD (Directive 2014/95/EU).

However, the European Commission launched an initiative to review the NFRD in 2020. One aim is to improve disclosure of climate and environmental data by companies. Due to the COVID 19 pandemic, the review has been postponed to the first quarter of 2021.

As an addition to the NFRD, the European Commission issued non-binding guidelines (Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019/C 209/01) in June 2019, which provides further guidance to companies on how to disclose climate change related information, in line with the Financial Stability Board's TaskForce on Climate-related

Financial Disclosure (TCFD) and the climate change related metrics developed under the new EU taxonomy. Based on the TEG's draft report, it divides its recommendations into two types: 1. should consider and 2. may. To achieve a non-binding character, the much stricter type "should", proposed by the TEG, was not adopted. Type 1 recommendations on metrics and targets include: 1. Describe the outcomes of the company's policy on climate change, including the performance of the company against the indicators used and targets set to manage climate-related risks and opportunities. 2. Describe the development of GHG emissions against the targets set and the related risks over time.

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The European Corporate Reporting Lab was established in 2018 as part of the European Financial Reporting Advisory Group (EFRAG) to promote innovation and the development of best practices in corporate reporting, such as environmental accounting. In this forum, companies and investors can share best practices on sustainability reporting, such as the climate change related disclosure in line with the TCFD's recommendations. The European Lab Steering Group is now carrying out some preparatory work for possible non-financial reporting standards in the revised version of the NFRD, which will be published in the beginning of 2021.

5. Adapt accounting standards **SCORE 4/10**

Even though the European Commission considers a revision of the accounting standards, reflection on introducing guidelines to account for environmental impact has not been expressed so far. Current regulations, e.g. NFRD or IFRS, do not cover environmental accounting implicitly. In 2018 the EC published a consultation paper on the Fitness Check of the EU framework for public reporting by companies. With respect to this consultation, both ESMA and EBA did not find evidence to support the argument that IFRS Standards hamper "the adequate and timely recognition and consistent measurement of climate and environmental risks".

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6. Accounting for stranded assets risk **SCORE 3/10**

Currently IFRS 6 (Exploration for and Evaluation of Mineral Resources) and IFRS 36 (Impairment of assets) generally regulate the accounting for impairments with specifications for the mining and oil and gas sector. The current standard makes impairment of stranded assets not mandatory. The European Commission will request European Financial Reporting Advisory Group (EFRAG), where appropriate, to assess the impact of new or revised IFRSs on sustainable investments. The Commission has asked EFRAG to explore potential alternative accounting treatments to fair value measurement for long-term investment portfolios of equity and equity-type instruments. In Q4 2018, EFRAG reported on the impact of IFRS 9 on long-term investments and potential improvements to the standard for the treatment of equity instruments. The European Corporate Reporting Lab was established in 2018 as part of the European Financial Reporting Advisory Group (EFRAG), to promote innovation and the development of best practices in corporate reporting, such as environmental accounting. In this forum, companies and investors can share best practices on sustainability reporting, such as the climate change related disclosure in line with the TCFD's recommendations. The European Lab Steering Group is now carrying out some preparatory work for possible non-financial reporting standards in the revised version of the NFRD, which will be published in the beginning of 2021.

TRANSPARENCY **(Dimension)**
Investors' fiduciary duties (Sub-dimension)

1. Investment evaluation transparency **SCORE 8/10**

The Shareholder Rights Directive II requires institutional investors and asset managers to draw up and publish a Shareholder Engagement Policy. This policy must comply with transparency requirements with respect to ESG and includes information obligations on climate change related aspects. The directive does not specify exactly what information the policy must contain in this context and to what extent.

In November 2019 the EU adopted the Regulation (EU) 2019/2088 on sustainability-related disclosure in the financial sector (SFDR), which will come into effect in March 2021. The SFDR requires financial market participants and financial advisors to disclose policies on the integration of sustainability risks in investment decision-making process and in insurance advice. SFDR introduces new transparency and periodic reporting requirements for investment management firms at both product and manager level. The requirements at the product level are of particular importance for this indicator.

Disclosures will also include pre-contractual information on the result of the assessment of likely impacts of sustainability risks on the return of the financial products they advise on. Respective regulatory technical standards (RTS) were to be developed originally by December 2020, but were due to the Covid-19 pandemic postponed to a later stage in 2021.

.2. Shareholder responsibility for governance and strategy **SCORE 6/10**

The Shareholder Rights Directive II outlines the shareholder's responsibility and includes the concept of shareholder activism. It makes reference to the UN Principles for Responsible Investment and clearly outlines the necessity from a shift from short termism to a long term investment horizon. However, its framing is rather vague and leaves much space for country regulation design. This may signify a risk that national regulation will be implemented rather loosely.

3. Asset manager responsibility **SCORE 8/10**

The Shareholder Rights Directive II outlines the duties of asset managers to cover non-financial aspects, and introduces a mid to long-term perspective. However, it is not stipulated on which time horizon non-financial aspects have to be taken into account (longer than the investment horizon of the investor?). Climate change related aspects are not outlined in detail.

Pension: Institutions for occupational retirement provision (IORPs): IORP II/ Directive 2016/2341 allows IORPs to take into account the potential long-term impact of investment decisions on climate change related factors. IORP II explicitly states the reflection of climate change related aspects in multiple areas such as risk management, governance, potential member information. EIOPA will also issue guidelines that specify how investment decisions and risk assessments by IORPs are to take ESG risks into account under IORP II.

In November 2019 the EU adopted the Regulation (EU) 2019/2088 on sustainability-related disclosure in the financial sector (SFDR), which will come into effect in March 2021. The SFDR requires financial market participants and financial advisors to disclose policies on the integration of sustainability risks in investment decision-making process and in insurance advice. SFDR introduces new transparency and periodic reporting requirements for investment management firms at both product and manager level. The requirements at the firm level are of particular importance for this indicator.

4. Executive remuneration policy **SCORE 6/10**

The Shareholder Rights Directive II requires companies to disclose the principles of executive remuneration and indicate the impact climate change related performance aspects have on remuneration. It does not require that these aspects form part of the factors to be included in the remuneration.

The new Sustainable Finance Disclosure Regulation (SFDR) requires financial market participants and financial advisors to include in their remuneration policies "information on how these policies are consistent with the integration of sustainability risks (SFDR; Art. 5). They shall also publish that information on their websites.

5. Climate change-related risk management **SCORE 7/10**

Pension: IORP II makes climate change related risk assessment mandatory for pension funds and related products. Insurance: Solvency II requires insurers to take future developments into account including new business plans or the possibility of catastrophic events that might affect their financial standing. The Own Risk and Solvency Assessment (ORSA) is a new tool designed to assist with this. However, it does not outline climate change related factors explicitly.

Other assets: UCITS/AIFMD do not include related considerations.

Institutions falling under the SFDR: In November 2019 the EU adopted the Regulation (EU) 2019/2088 on sustainability-related disclosure in the financial sector (SFDR), which will come into effect in March 2021. The SFDR requires financial market participants and financial advisors to disclose policies on the integration of sustainability risks in investment decision-making process and in insurance advice. These policies shall be published on their websites. Moreover, financial market participants shall include descriptions of the assessment of the likely impacts of sustainability risks on the returns of the financial products they make available.

TRANSPARENCY (Dimension)

Consumer transparency (Sub-dimension)

1. Packaged Retail and Insurance-based Investment Products (PRIIPs) — SCORE 3/10

The European Supervisory Authorities ESMA, EBA and EIOPA (the ESAs) presented a review of the key information document (KID) and a draft regulatory technical standard to amend the PRIIPs in July 2020. There is however no reference to environmental or social objectives.

New information standard for all "packaged investment products" (PRIIPs), in particular investment funds, endowment life insurance and certificates is enacted through EU Regulation 2016/2340.

2. Investment advisor duties — SCORE 7/10

ESMA is in the process of updating MIFID II to integrate sustainability risks into risk assessment and management as well as governance structures and consumer preferences. A consultation report was published in December 2018, which shows that ESG risks should be considered where relevant. The final report was published on 30 April 2019. However, since then, only one amendment to the regulation has been made, which did not take sustainability risks into account.

3. Retail product transparency incl. labels — SCORE 6/10

Mandatory product reporting on climate change related risk assessment and measurement is not explicitly required. Neither the Regulation 809/2004 nor the EU prospectus directive 2017/1129 does foresee changes in this regard.

In May 2018, the Commission published its proposal to amend the benchmark regulation, in accordance with the Action Plan on Financing Sustainable Growth. In July 2020 the EC adopted new rules setting out minimum technical requirements of the methodology of EU climate benchmarks. Benchmark administrators now must describe how ESG factors are reflected in each benchmark (and its methodology) they provide and publish them.

The Action Plan on financing sustainable growth foresees that the Commission will explore the use of the EU Ecolabel framework for certain financial products. DG ENV and DG FISMA are currently coordinating the process of developing Ecolabel criteria. The extension of the Ecolabel framework to financial products, by way of a Commission Decision, is expected for Q3 2021. The EU Ecolabel will build on the taxonomy framework to assess the underlying assets of financial products.

4. Green products standards **SCORE 4/10**

The Action Plan on financing sustainable growth foresees that the Commission will explore the use of the EU Ecolabel framework for certain financial products, to be applied once the EU sustainability taxonomy is adopted by the end of 2019.

The European Commission's Technical Expert Group (TEG) on sustainable finance has further prepared a report on an EU green bond standard. A draft version of green taxonomy developed by the TEG is expected for June 2019.

In June 2019, the European Commission's Technical Expert Group (TEG) on sustainable finance published its report on the EU Green Bond Standards, including its key recommendations. After the provision of feedback from more than 100 organizations, this process was completed with a usability guide in March 2020. From June to October 2020, there was another EU consultation on the possibility of a legislative initiative for an EU GBS open. On the basis of this consultation, the EU Commission will take the decision in Q4 2020 on how to take the EU GBS forward. The EC proposes that the financed green investments should be aligned to the taxonomy criteria. It is also foreseen to incorporate the use of proceed within the legal documentation and to publish a Green Bond Framework. A final version is expected earliest in 2021.

SYSTEM STABILITY (Dimension)

Supervisory authority positioning (Sub-dimension)

1. Awareness creation to climate change related risk incl. systemic risk **SCORE 9/10**

The EU Commission and its financial supervisory bodies (ESRB, EBA, EIOPA, and ESMA) raise awareness on climate change related risk in a comprehensive way, first and foremost in the context of implementing the Commission's „Action plan on financing sustainable growth" and with a dedicated website sections on the topic (https://ec.europa.eu/info/business-economy-euro/banking-and-finance/green-finance_de#overview, and also dedicated websites by EIOPA, EBA and ESMA). ECB is likewise actively addressing climate change related risks in a publicly available manner (e.g. https://www.ecb.europa.eu/ecb/orga/climate/html/index.en.html). In December 2019 EBA published its "EBA Action Plan on Sustainable Finance", describing its activities and mandates related to ESG factors and ESG risks.

The European System Risk board ESRB provides a publicly available knowledge base on climate change related risks and their potential systemic implication. Building on its 2016 publication "Too late too sudden: Transition to a low-carbon economy and systemic risk", ESRB continues its work on the implications of climate related risk, with the goal of "designing and conducting a stress test concerning physical and transition risks and their implications for financial stability in the EU" (Annual Report 2018).

The political agreement on the review of the European supervisory authorities of April 2019 further anchors ESG integration into ESA's overall supervisory role and priorities.

2. Provision of data, standard scenarios and methods: **SCORE 6/10**

Methodological guidance by European supervisory authorities for integrating climate change related risk into financial risk management underway in the context of the implementation of the European Commission's Action Plan on Financing Sustainable Growth.

The Network for Greening the Financial Systems (NGFS), the network across European central banks and supervisory authorities, has published first methodological guidance with its report "First comprehensive report « A call for action » which is amended by a technical supplement report, "Macroeconomic and financial stability - Implications of climate change (July 2019). In the technical supplement, there is first guidance with an in-depth overview of current analytical tools with their strengths and limitations. The report also provides a preliminary list of key risk indicators (physical and transition risk, as well as regarding impact channels on the real economy). The NGFS will further work on these aspects and provide additional methods and data support. ESRB continues its work on the implications of climate related risk, with the goal of "designing and conducting a stress test concerning physical and transition risks and their implications for financial stability in the EU (ESRB Annual Report 2018).

SYSTEM STABILITY **(Dimension)**
Regulation/Supervision of banks (Sub-dimension)

1. Requirements for bank governance/strategy **SCORE 4/10**

Directive 2013/36/EU (CRD IV Directive), the 2018 revised EBA Guidelines on the SREP (Supervisory Review and Evaluation Process) and ECB SREP guidance include the need for a sustainable strategy and governance structure with effective processes for reflecting all risks and covering at least a time horizon of 3 years.

With the new Banking package (CRD V and CRR II) there is no direct specific additional guidance on integrating climate change related factors into banks' governance, additional guidance is limited to risk management (see the following indicator).

2. Minimum requirements for bank risk management **SCORE 6/10**

Based on the Directive 2013/36/EU (CRD IV Directive) and EBA Guidelines, there is a comprehensive perspective on all material risks to be considered by banks' risk management, while not explicitly referencing climate change related risk. Thus, there is implicit coverage in principle to climate change related risks if material.
With the new Banking package (CRD V and CRR II) there is additional guidance on integrating climate change related factors into prudential supervision of banks' risk management. CRD V Article 98 (technical criteria for the supervisory review) adds the requirement for EBA to "assess the potential inclusion in the review and evaluation performed by competent authorities of environmental, social and governance risks (ESG risks), referring to an ESG risk definition including physical risks and transition risks (Article 449a CRR2), a definition of impact criteria in the short- and long term including stress testing and scenario analysis, and methods to be implemented by institutions. For this purpose, EBA is requested to submit a report to the Commission by 28 June 2021. As a first step, EBA published a survey on credit institutions' disclosure of information related to ESG risks in September 2020.

3. Bank stress tests **SCORE 4/10**

Directive 2013/36/EU and EBA guidelines take a comprehensive perspective on risk and assumptions to be considered, while not explicitly referencing climate change related risk.

There is neither reference to climate change related risk in EBA EU-wide stress test 2018 nor in the methodology published for the 2020 stress test (which covers 2020-2022) Due to the Corona Pandemic, the EBA has decided to postpone the development of the EU-wide stress test until 2021.

Climate change is again included in ECB's "single supervisory mechanism" risk map 2020 as one risk driver (with the note that its relevance rather refers to the longer term beyond the 3-year perspective taken).

4. Bank capital requirements **SCORE 5/10**

Capital requirements for banks, based on the Banking Package (CRD V and CRR II) currently do not include an explicit reference to climate change related risks and thus a distinction of "brown" or "green" assets. An appropriate long-term perspective is not encouraged.

There are discussions in the context of implementing action item 8 (prudential requirements) of the Commission's action plan with regard to "calibration of banks' capital requirements in the CRR and Directive to take into account climate change-related risks while safeguarding financial stability and ensuring coherence with the EU taxonomy."

CRR II introduces a specific "green supporting factor" with new Art. 501a ("Adjustment to own funds requirements for credit risk for exposures to entities that operate or finance physical structures or facilities, systems and networks that provide or support essential public services"). Art. 501a introduces a reference of contribution to the six environmental targets of the recently (proposed) EU taxonomy, including climate change mitigation and adaptation. An assessment of contribution to one of the six targets is included as one of the conditions to be met regarding 0,75-adjustment to own funds requirements for credit risk for exposures to entities that operate or finance physical structures or facilities, systems and networks that provide or support essential public services.

SYSTEM STABILITY (Dimension)
Regulation/Supervision of insurance companies (Sub-dimension)

1. Requirements for insurance governance/strategy **SCORE 6/10**

Based on Solvency II Directive 2009/138/EC, Delegated Regulation (EU) 2015/35 (Art. 269) takes a comprehensive perspective on the role of the risk management function, including identification and monitoring of emerging risks". EIOPA Guidelines on the governance system include the responsibility of the management for the overall risk management system. That implicitly covers climate change related risks if material.

Upon request by the EU Commission, the Supervisory Authority EIOPA has contributed to implementation of the action plan, amongst others, by providing (1) "Technical Advice on the integration of sustainability risks and factors in the delegated acts under Solvency II and IDD" and by providing an (2) "Opinion on Sustainability within Solvency II" (September 2019).

In its technical advice, EIOPA proposes to explicitly add sustainability risks next to emerging risks in Art. 269. In its opinion paper, EIOPA suggests that scenario analysis should help insurance undertakings to consider the impact of sustainability risks in the long-term and that scenario analysis should be embedded in undertakings' risk management, governance and ORSA. And that by using scenario analysis, insurance undertakings should be helped in identifying and assessing climate change-related risks in a forward-looking manner and by that inform business planning and strategy.

2. Minimum requirements for insurance risk management **SCORE 6/10**

Based on Solvency II, Delegated Regulation (EU) 2015/35 takes a comprehensive risk management perspective, (cf. Art. 259, 260, 269). This does in principle include climate change related risks if material, but is not explicitly guided by regulation.

Upon request by the EU Commission, the Supervisory Authority EIOPA has contributed to the implementation of the action plan, amongst others, by providing (1) "Technical Advice on the integration of sustainability risks and factors in the delegated acts under Solvency II and IDD and by providing an (2) "Opinion on Sustainability within Solvency II (September 2019).

In its technical advice, EIOPA proposes to explicitly add sustainability risks next to emerging risks in Art. 260 and Art.269.

In its opinion paper, EIOPA suggests that scenario analysis should help insurance undertakings to consider the impact of sustainability risks in the long-term and that scenario analysis should be embedded in undertakings' risk management, governance and ORSA. EIOPA adds that by using scenario analysis, insurance undertakings should be helped in identifying and assessing climate change-related risks in a forward-looking manner.

3. Insurance company stress-tests **SCORE 8/10**

The EIOPA insurance stress test 2018 framework included a scenario that referred to climate change related risk (physical risks) as a driver for more frequent natural disasters.

The EIOPA Financial Stability Report 12/2018 refers to climate change related risk as an emerging risk and describes it comprehensively. ESG risks were part of stress tests 2019 (occupational pension funds) for the first time. It turned out that even though the majority of IORPs stated to have taken appropriate steps to identify ESG risks and factors for their investment decision, only a minority of 30% already have processes in place to manage ESG risks.

4. Insurance capital requirements **SCORE 4/10**

There is currently neither an explicit reference to brown or green assets in Solvency II, nor in Delegated Regulation 2015/35/EU.

This is further clarified by EIOPA's "Opinion on Sustainability within Solvency II where it is stated that "the general valuation principles of Solvency II are neutral to different types of risks, including sustainability risks which materialise through existing risk categories. At the same time EIOPA acknowledges that market prices could in fact better reflect all sustainability risks and factors.

EIOPA further "acknowledges that the medium to long-term impacts of climate change cannot fully be captured in the Solvency II capital requirements which are designed to reflect the risks that undertakings are exposed to over a one-year time horizon. However, EIOPA does not consider that this time horizon should be changed, but rather complementary tools such as scenario analysis and stress testing would be more appropriate to capture impacts of climate change.

SYSTEM STABILITY **(Dimension)**
Regulation/Supervision of pension funds (Sub-dimension)

1. Requirements for pension fund governance/strategy **SCORE 7/10**

Directive 2016/2341/EU (IORP II Directive), Art. 21, requires Institutions for Occupational Retirement Provision (IORPs) to consider ESG factors in their system of governance related to investment assets/investment decisions. This includes climate change related risk.

According to Art. 19 (Investment rules) this is implicitly optional. The Commission's proposal for a regulation amending Directive 2016/2341 (May 2018) includes an amendment of Art. 19 to ensure ESG factors will in fact be included in investment decisions and risk management processes.

EIOPA's "Opinion on the supervision of the management of environmental, social and governance risks faced by IORPs (July 2019), directed at the competent authorities at national level, confirms that the system of governance needs to take into account ESG factors. However, no further action has been taken to implement the proposal since its publication.

2. Minimum requirements for pension fund risk management **SCORE 8/10**

IORP II Directive 2016/2341/EU (Preface 57, Art. 25 and Art. 28) explicitly refer to ESG risk and to climate change and stranded assets respectively, to be covered by IORPs' risk management where relevant. There is no guidance on methods.

According to Art. 19, Art. 28 may be implicitly optional. In combination with preface 57, we understand Art. 28, however, as a binding approach. The Commission's proposal for a regulation amending Directive 2016/2341 (May 2018) furthermore includes an amendment of Art. 19 to ensure ESG risks will be included in investment decisions and risk management processes.

EIOPA's "Opinion on the supervision of the management of environmental, social and governance risks faced by IORPs (July 2019), directed at the competent authorities at national level, confirms that the risk management needs to take into account ESG factors and provides some methodological guidance how assessment of ESG risks and integration of ESG risks into risk management systems could be reviewed by competent authorities.

3. Pension fund stress-tests **SCORE 7/10**

‚EIOPA's Pensions stress test 2019 (launched in April 2019) includes an assessment of ESG exposures for the first time. This includes climate change related risks in the sector. Results were published in December 2019. It turned out, that even though the majority of IORPs stated to have taken appropriate steps to identify ESG risks and factors for their investment decision, only a minority of 30% already have processes in place to manage ESG

4. Pension fund capital requirements **SCORE -/10**

not applicable

SYSTEM STABILITY **(Dimension)**

Regulation/Supervision of asset managers and investment funds (Sub-dimension)

1. Requirements for governance **SCORE 5/10**

EU regulations regarding investment funds (UCITS and AIF directives) refer to a comprehensive governance approach without explicit reference to climate change related risks or an appropriate long-term perspective.

Commission's proposal for a regulation amending Directive 2016/2341 (May 2018) includes a reference to AIF and UCITS. It proposes that sustainability risk procedures and impacts expectations will be included in pre-contractual disclosures. This implies no requirement on the comprehensiveness and time horizon of these procedures.

ESMA has been running a formal consultation on sustainability risks and factors in the UCITS and AIF directives as requested by the EU Commission. Its final report was published on 3 May 2019. Its technical advice includes explicit reference to sustainability risks in the governance requirements and proposes amending respective articles by the responsibility for sustainability (risks and factors).

2. Requirements for risk management **SCORE 5/10**

EU regulation regarding investment funds (UCITS and AIF directives) refer to a comprehensive risk management perspective without explicit reference to climate change related risks or an appropriate long-term perspective.

ESMA has been running a formal consultation on sustainability risks and factors in the UCITS and AIF directives as requested by the EU Commission. Its final report has been published on 3 May 2019. Its technical advice includes explicit reference to sustainability risks in the risk management requirements and proposes the inclusion of a dedicated risk category for sustainability risk.

SYSTEM STABILITY **(Dimension)**

Regulation/Supervision of rating agencies (Sub-dimension)

1. Requirements for organisation and risk management include ESG/climate risks and a long-term perspective **SCORE 5/10**

EU regulation 1060/2009 on credit rating agencies (CRA), Annex 1, requests that CRA have effective procedures for risk management. There is no explicit reference to climate change related risk but implicitly it should be covered if material.

The EU Commission's Action Plan on Financing Sustainable growth includes action item 6 on „Better integrating sustainability in ratings and market research". Regulator ESMA has run a formal consultation on how to integrate ESG into CRA regulation in 2019. In its final report "ESMA Technical Advice to the European Commission on Sustainability Considerations in the credit rating market" of July 2019, ESMA concludes that CRAs are considering ESG factors in their ratings but with significant variation in the extent of their consideration. ESMA concludes not to propose an amendment of CRA regulation to explicitly mandate the consideration of sustainability characteristics (due to the specific purpose of credit ratings) but rather proposes (1) an update of the CRA Regulation's disclosure provisions, to provide a more consistent level of transparency around how CRAs are considering ESG factors in their ratings and (2) points at legislative processes underway towards generally integrating sustainability assessments in the operational and decision-making processes of financial market participants, and points at "non-credit rating products that will fill the need for such sustainability considerations."

1. Provision of a clear transition pathway **SCORE 8/10**

Renewed Sustainable Finance Strategy: The European Commission already developed numerous action plans to shape a pattern for a low-carbon and climate-resilient economy - including an EU Action Plan on Financing Sustainable Growth in 2018 and a Green Deal Investment Plan in early 2020. Building on the action plan, the EC is currently working on the finalization of a „Renewed Sustainable Finance Strategy", which will be the core of all action plans, once completed. The renewed strategy is explicitly linked to the Action Plan, but at the same time, it is emphasized that an even more comprehensive and ambitious strategy is needed to achieve a successful transformation of the financial markets. Three focus areas were developed:

1. Strengthening the foundations for sustainable finance (enabling frameworks, tools and structures)
2. Increasing the effectiveness of the sustainability-related activities of citizens, financial institutions and companies
3. Dealing with and reducing climate and environmental risks.

The European Union has a clear ambition to develop a political framework conducive to a transition towards a green and sustainable economy. Established in 2014 and revised upwards in 2018, the 2030 Climate and Energy Frameworks key targets are to achieve a 40% cut in greenhouse gas emissions (from 1990 levels), 32% share of renewable energy and 32,5% improvement in energy efficiency by 2030. The EU has adopted several policies to support these objectives. In 2018, the Council approved a directive for the reform of the EU Emission Trading System which aims to implement an annual reduction of 2.2% of the total volume of emissions from 2021 onwards. In December 2019, the European Commission has published its EU Green Deal even raising the above mentioned ambitions. In September 2020, the Commission finally proposed to raise also the Frameworks targets to be able to achieve the green deal goals. The cut in greenhouse gas emissions will rise for example to 55%, compared to 1990. The EC will come forward with the legislative proposals by June 2021.

The transition towards a low-carbon economy is on the agenda of nearly all European institutions and the sensibility of European leaders on environmental issues leads us to expect further efforts in the coming years. Member countries were also requested to elaborate national plans to implement their nationally determined contribution. From 2020, Member States will be asked to develop their long-term strategies.

2. Risk reduction support for green finance **SCORE 9/10**

Risk reduction mechanisms are offered in the European Union through several financing programs to foster investments in green and sustainable projects, this includes:

• The „Private Finance for Energy Efficiency" (PF4EE) program, for instance, is a joint agreement between the European Investment Bank (EIB) and the European Commission to address the limited access to adequate and affordable commercial financing for energy efficiency investments. Beyond technical assistance, PF4EE offers risk sharing facilities covering potential losses of loans for energy efficiency project to its partner banks.

• Under the European Funds for Strategic Investments (EFSI), EIB and the European Commission provide support to private and public sector entities of all sizes, banks, funds and investment platforms by providing guarantees in case of losses. EFSI is dedicated to higher-risk profile investments in different sectors, including energy infrastructures, renewable energy and energy efficiency.

Further instruments have been developed at the European level:

• The European Local Energy Assistance (ELENA) offers grants to support the cost of technical assistance (feasibility and market studies, programme structuring, energy audits, financial structuring) and therefore improve the risk-profile of energy-related projects.

• The Joint Assistance to Support Projects in European Regions (JASPERS) aims at improving the quality of investment supported by EU Funds through project preparation, capacity building and implementation support.

• InnovFin is a programme designed for innovative small and medium sized enterprises, large companies and research institutions which covers a portion of the losses incurred by the financial intermediaries on loans.

3. Government incentives for green finance **SCORE 6/10**

Different incentives for green finance exist within the European Union. On the one hand, a carbon emission trading scheme has been implemented since 2005 and reforms have been constantly carried out to increase the price per ton of carbon and to make the market more efficient. On the other hand, several directives have been adopted (such as the directive 2009/28/EC on the promotion of the use of energy from renewable sources or the directive 2012/27/EU on energy efficiency obligation schemes) encouraging Member States to adopt financial incentives although the adoption of such mechanisms isn’t mandatory. Additionally, several financing programs subsidize and/or bear part of the risk of sustainable investments (losses coverage, use of instruments like mezzanine financing and subordinated loans). We find among them the Private Finance for Energy Efficiency and the European Funds for Strategic Investments of the EIB, ELENA (European local Energy Assistance), and FSF (Facility for Structured Finance).

1. Government investment strategy SCORE 6/10

In the European Union, the positioning of the public sector towards sustainable finance is mitigated. The European Investment Bank and the European Bank for Reconstruction and Development, together with several multilateral development banks, announced a joint framework for aligning their activities with the goals of the Paris Agreement. EIB Group's new climate strategy as well as the energy lending policy, published in November 2019, sets out that the EIB Group will align their financing activities with the goals of the Paris Agreement from the end of 2020. This includes, among other measures, a stop to the financing of fossil fuel energy projects from the end of 2021.

As part of the EU Green Deal, the EU is aiming to mobilize more than one trillion Euro in sustainable investments over the next decade through the EU budget and its instruments. To achieve this ambitious goal by 2027, a European Green Deal Investment Plan was adopted. The EC proposed that at least 25% of its total budget will contribute to climate action.

However, the research could not identify any generally formulated investment strategy that is binding for all European institutions nor a clear line in practice of all public entities. It is although interesting to signal that the ECB undertook an internal investigation to integrate ESG criteria into their investment policy. The European Central Bank has also, for the pension fund, delegated proxy voting for equity investment to investment managers that have signed up to the United Nations Principles for Responsible Investment

2. Government agencies issue Green Bonds SCORE 9/10

The European Investment Bank (EIB) was the first financial institution to issue, in 2007, a bond labelled Climate Awareness Bond (CAB) comparable to a green bond. Since then, EIB has become the biggest issuer of green bonds worldwide (as of June 2020). Until the end of June 2020, EIB has issued bonds with a volume of more than EUR 30.8 billion.

The European Bank of Reconstruction and Development (EBRD) is also a pioneer of the green bond market, having issued its first Green Bond in 2010, its Green Project Portfolio worth 4.1 bn euros. The development bank also issued the first ever dedicated climate resilience bond following the adoption of Climate Resilience Principles by Climate Bonds Initiative.

European Institutions are also enhancing the investor demand for green bonds since the European Central Bank (ECB) purchases for instance green bonds under its Eurosystem's asset purchase programme.

3. Green public financial institution SCORE 9/10

In November 2020, EIB published its Climate Banks Roadmap, stating EIB will transform from being an "EU Bank supporting Climate into "The EU Climate Bank . This roadmap sets out two main goals:

1. Increasing the share of its overall lending activity supporting climate action and environmental sustainability to exceed 50% by 2025.
2. Aligning all financing activities to the goals and principles of the Paris Agreement by the end of 2020. No financing activities are allowed to significantly harm the transition.

Therefore, every project seeking support by EIB has to pass an evaluation on climate change impacts.

An integral part of the EIB Group alignment framework is to use shadow costs of carbon to value net emissions of new projects. Based on latest modelling evidence, the EIBs shadow cost of carbon will increase to 250€/tonne by 2030 and 800€/tonne by 2050.
In line with its above-mentioned goals, EIB emphasises it will phase out support for fossil fuels by focussing support on power generation technologies under an emissions threshold of 250 g CO2 per kilowatt-hours. The strict Energy Lending Policy is one first element of the overall alignment framework.

Over the last five years, the EIB has provided more than €62 billion of financing for renewable energy, energy efficiency, and other production and distribution of energy. Even though EIB was not a „green bank", it has had the greening of the economy as a core value for years. Therefore, it is the largest multilateral provider of climate finance worldwide.

4.Central banks disclosure on climate-related risks **SCORE 3/10**

In November 2020, the ECB published its non-binding guide on climate-related and environmental risks, describing its supervisory expectations on risk management and disclosure. This guide outlines the ECB's understanding of the thorough management of climate-related and environmental risks under the current prudential framework and should serve as a basis for supervisory dialogue.

Climate-related risks were identified in 2019 and 2020 as one of the key risk drivers affecting the euro area banking system. This was published in the Financial Stability Review May 2019 and in the ECB Banking Supervision's risk assessment for 2019

Since May 2018, the European Central Bank (ECB) has been involved in the Network for Greening the Financial System (NGFS). ECB is getting acquainted with the management of climate-related risks as a part of its mandate to maintain financial stability and monitor and supervise European systemically-relevant banks.

With the rising awareness of its leaders as shown by numerous speeches on the ECB as well as the nomination of Christine Lagarde as president of the ECB, it could be expected that the ECB maintains its efforts on developing sustainable finance. However, the ECB does not disclose climate-related risks of its portfolio or other climate related aspects that affect monetary policy.

ENABLING ENVIRONMENT (Dimension)
Public capacity building and awareness raising on green finance (Sub-dimension)

1. Consumer education on green finance **SCORE 4/10**

In its consultation on the renewed sustainable finance strategy, the European Commission asks for opinions on actions towards capacity building and awareness raising in the area of financial literacy among citizens and financial professionals.

The Joint Research Centre (JRC) is the Commission's science and knowledge service. It is partly covering sustainable finance in its research activities. In January 2019, JRC held a conference called „Promoting sustainable finance". In September 2020, JRC invited for the second summer school on sustainable finance. The European Investment Bank (EIB) is also publishing research papers and essays with a focus on sustainable finance and climate action.

2. Curriculae on green finance (schools, universities, general public education) **SCORE 5/10**

In its consultation on the renewed sustainable finance strategy, the European Commission asks for opinions on actions towards capacity building and awareness raising in the area of financial literacy among citizens and financial professionals. The inclusion of sustainable finance in the curricula of schools and universities (in particular for future finance professionals) was explicitly mentioned as one possible point of action.

ENABLING ENVIRONMENT **(Dimension)**
Common green taxonomy (Sub-dimension)

1. Common green taxonomy **SCORE 9/10**

In December 2019 the European Council and the European Parliament reached political agreement on the text of a proposed Regulation on the establishment of a framework to facilitate Sustainable Investment, called Taxonomy Regulation. The Taxonomy Regulation was published in the Official Journal of the EU on 22 June 2020, following its adoption by the European Parliament on 18 June 2020 and entered into force on 12 July 2020. To inform its work on the action plan, including on the EU taxonomy, the European Commission established a Technical Expert Group (TEG) on sustainable finance in July 2018 to formulate an EU classification system for sustainable activities, i.e. EU taxonomy.

On 9 March 2020, the TEG published its final report on EU taxonomy. The report contains recommendations relating to the overarching design of the EU taxonomy, as well as extensive implementation guidance on how companies and financial institutions can use and disclose against the taxonomy. The EU Taxonomy is a tool to help investors, companies, issuers and project promoters navigate the transition to a low-carbon, resilient and resource-efficient economy.
The recommendations by the TEG are currently being translated into EU legislations through Delegated Acts. The Commission is supposed to publish the Delegated Acts by 30 December 2020.

ENABLING ENVIRONMENT **(Dimension)**
Green public-private initiatives of financial centres (Sub-dimension)

1. Green public-private initiatives of financial centres: **SCORE -/10**
Not relevant