

Sustainable Finance

Prudential Overview for LSI

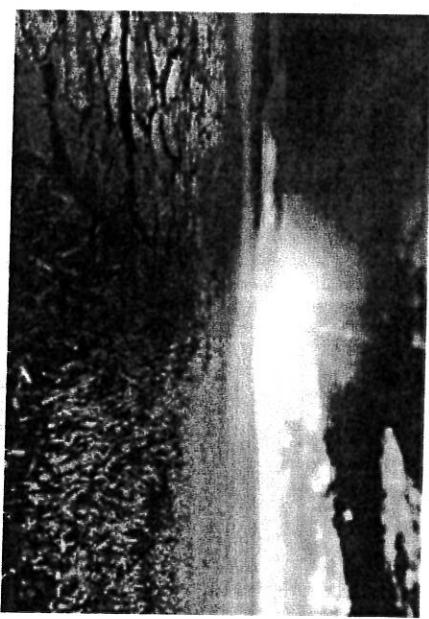
Banking Supervision Department
Risk Analysis Section

Athens, October 2020

Introduction

Objectives of this presentation:

- **Overview of the new topic of sustainable finance from a prudential point of view**, which is on top of the agendas of governments, regulators, supervisors, banks, asset managers, insurers ... **most agents in the economy**
- This presentation reflects **discussions to-date**: ongoing developments as we speak
- **Selected information** presented to facilitate understanding with simplifications
- Q&A session will follow after the end of the presentation
- Appendix with key resources for reference



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1. **Background: what is sustainable finance? Why is it relevant?**
2. **Impact on banks: key concepts and challenges**
3. **Key regulatory and supervisory expectations**
4. **BoG work and next steps**

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Sustainable Finance: Prudential Overview

1. **Background: what is sustainable finance? Why is it relevant?**
 - What is sustainable finance?
 - Global, EU and national targets
 - Why is it relevant: the role of banks and supervisors
2. Impact on banks: key concepts and challenges
3. Key regulatory and supervisory expectations
4. BoG work and next steps

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Background: What is sustainable finance?

Lack of universal common definitions of sustainable finance and Environmental, Social and Governance (ESG) factors, for the purpose of this presentation we will make a simplification (EC definition):

ESG: Environmental, Social and Governance

- Environmental considerations

Broad environment including climate change mitigation and adaptation, physical disasters, air and water pollution, resource depletion, and biodiversity loss

- Social considerations

Inequality, inclusiveness, labor relations, investment in human capital and communities

- Governance considerations (of a bank's counterparties)

Management structures, employee relations, rules for executives' remuneration, Code of conduct

... **interconnected**, as climate change can exacerbate existing systems of inequality, poor governance may harm inclusiveness...

Taking into account environmental, social and governance considerations when making investment decisions...
... leading to increased investments in sustainable projects and activities

ESG risks are the risks of negative financial effects from ESG factors on a bank's counterparties'

Background: Political agreements as the driving force

First-time strong political will to address issue

Problem global growth and prosperity due to industrialization since 1850 comes at a significant cost to the environment

If no action is taken, significant threats are created to the environment, economy, financial stability,...

- More extreme weather events,
- Resource degradation and shortages,
- Damage to land, property and physical capital
- Energy usage is up x20 times
- Sea levels are 20cm higher



- Last five years on track to be the warmest on record
- Global temperatures on track to increase by at least 3°C by 2100
- Climate change will reduce average income in the poorest 40% countries by 75% in 2100, the richest 20% may see some gains

Bank of Greece research studies estimate that:

- Greek GDP could fall annually by 2% until 2050 and even further until 2100 under a "business as usual" scenario
- Total cost of climate change to the Greek economy could reach a cumulative €701 billion by 2100
- Agriculture and tourism are the sectors expected to be most severely hit by climate change**

Action plans

- 'Paris Agreement' (2015) signed by 194 countries to limit increase in global temperature by 2100
- UN 2030 Agenda for Sustainable Development (2015) 17 Sustainable Development Goals by 2030
- EU Green Deal (2019) for climate neutrality by 2050 and enhanced by the EU Next Generations Recovery Fund (2020)
- National plan for energy and climate (ΕΣΕΕΚ) (2019)

National targets for 2030 (ΕΣΕΕΚ):

- CO₂ Carbon emissions down by 55% (vs. 2005)
- 35% share of renewables in energy consumption (vs 20%)
- 0% use of lignite for electricity production by 2028
- Increase of buildings' energy efficiency



- New requirements in CRR2/ CRD5 for ESG risks (EBA mandates), SSM initiatives, new EU regulation (Taxonomy, Green Bonds Standards...)

Risks (not meeting sustainable growth targets)
vs. Opportunities (financing the path to achieve targets)

Background: Why is it relevant to banks?

Due to the role of central banks, supervisors and industry in the economy

Governments are primarily responsible for meeting the international environmental targets, but this requires collective, coordinated and immediate actions:

- Significant public policy interventions (e.g. carbon taxes)
- Changes in entities' business models and investment choices (e.g. no investment in polluting entities)
- Changes in individuals' lifestyles (e.g. decrease of consumption of animals)...

... and increase of investments and capital re-orientation to sustainable projects, entities, industries

- estimation for €175-290bn yearly investment needs in EU until 2030
- Greek State budget for implementing the EΣΕΚ targets of 2030 is €43.8bn

... banks, insurance companies, asset managers and pension funds are main sources of finance

Immediate actions required from:

1. **Supervisors:** ensure institutions' compliance with prudential rules, perform supervisory reviews and stress tests
2. BoG: support general economic policies in Greece to contribute in meeting the State's environmental objectives
3. **Institutions:** work on addressing ESG risks (and opportunities), when providing finance, investing, servicing their clients,...
... while in this journey, there are several challenges to be addressed as we learn (e.g. lack of taxonomy, no transparency, no price differentials, poor data quality, no incentives...) before the environmental and social risks (and opportunities) are adequately reflected in asset valuations, investment decisions, risk management, supervision, monetary policies ...

Sustainable Finance: Prudential Overview

1. Background: what is sustainable finance? Why is it relevant?
2. Impact on banks: key concepts and challenges
 - Climate risk: most urgent
 - 2 types of climate risk
 - How banks are affected?
 - Banks' main practices
 - Challenges for addressing climate risks
3. Key regulatory and supervisory expectations
4. BoG work and next steps

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Impact on banks: Climate risk most urgent

Due to potential losses and uncertainty, more focus is required

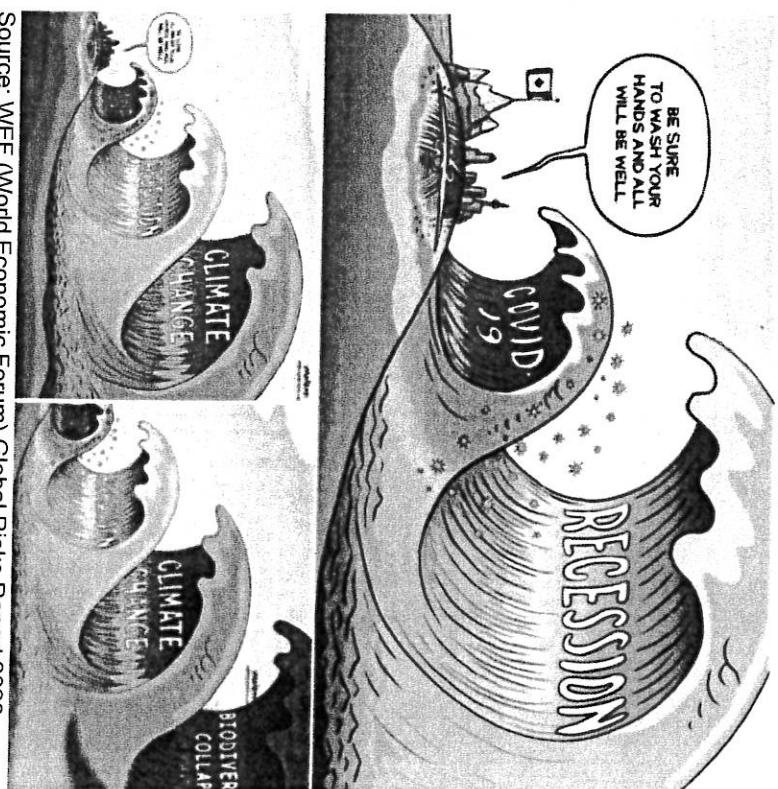
More focus currently is on climate risk:

Climate risk is not understood and assessed adequately because of its nature:

- Potential for far-reaching impact
- Multiple stakeholders, sectors, geographies affected through interconnectedness also in our economy: households, businesses, governments,...
- Climate risks **likely to be correlated** (triggering other environmental risks), with the potential for tails and in a non-linear manner
- Large uncertainty (for the exact policies, time horizon for implementation, transition pathways)

Irreversibility of climate change due to lack of appropriate technological means to tackle the problem

and high degree of certainty of materialization of climate risk in the future depending on the actions taken today



Source: WEF (World Economic Forum) Global Risks Report 2020

Impact on banks: 2 types of climate risk

Physical and transition risks

Physical risk: exposure to climate change

Financial losses due to:

- extreme weather events,
- gradual changes in climate,
- environmental degradation (air, water and land pollution, water stress, biodiversity loss and deforestation)

Banks exposed to losses due to their clients' lower profitability and capacity to repay debt (e.g. PD, LGD...)

(e.g. PD, LGD...)

Direct impact on
through:

Insurance companies and clients will suffer higher costs (claims and premia)

assets prices, collateral
prices, insurance
liabilities...

Transition risk: Process for transition to low-carbon economy

Financial losses during to the process of adjustment towards a lower-carbon and more environmentally sustainable economy (technology, policies, customer preferences)

Abrupt transition may create market disruptions even economic recessions

Under the EZEK, certain industries and activities will be replaced by new ones. geographical areas affected, new technology and innovation,...

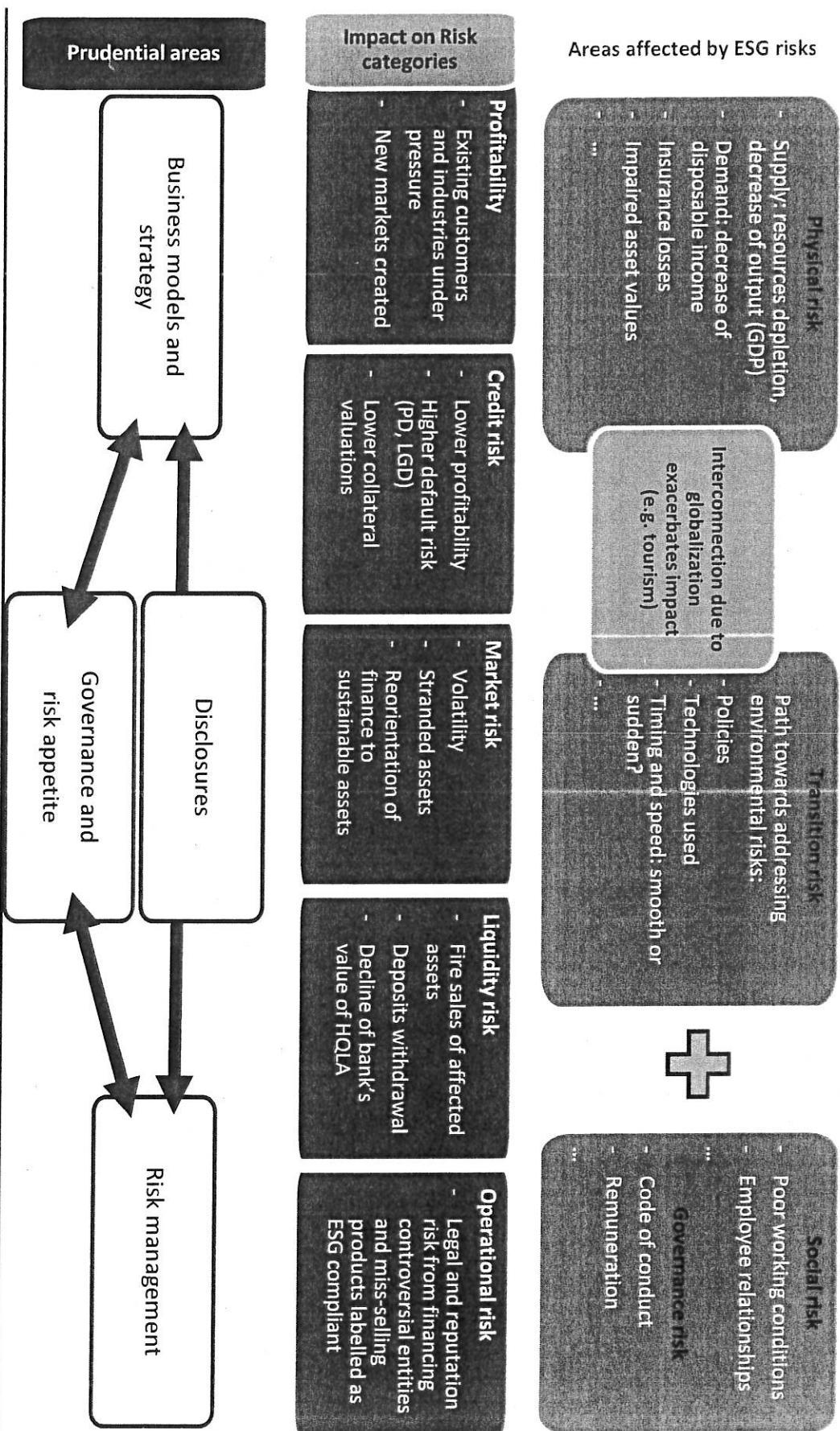
Timing and speed to low-carbon economy: abrupt or orderly? too little or more than enough?

Inadequate policy actions exacerbate impact of climate risks to be tackled in the future

Greece's vulnerability to weather – related events has been estimated as moderate by S&P methodology

Impact on banks: How banks are affected?

ESG risks affect multiple financial and existing prudential risks



Impact on banks: Banks' main practices

Less developed practices – need for understanding and analysis

Main observations from EU and international surveys to institutions:

- Awareness of the risks posed by climate change exists
- Growing involvement from highest-level decision-making bodies in monitoring climate risks

Risk management

- Only a few banks incorporate explicitly climate risk into risk appetite framework and capital planning
- Tools and methodologies still at an **early stage** (including scenario analysis and stress testing)

Greek SI: still at an early stage

- **Business practices** Not fully integrated into portfolio management and strategic planning
- Limited exposure to 'green assets'
- No adjustment in pricing for climate change



International

- **Statements of compliance** with international principles/ guidelines on ESG (UNEPFI, GRI Standards...)
- **Memberships** in international organizations for sustainable finance (UN

Banking

- Usually addressed through Corporate social responsibility framework (instead of risk management perspective)
- Not enough resources allocated in managing climate risk

- Some banks use limits and sector exclusion policies and for reputational risk only

Disclosures

- Banks plan to make more climate-related disclosures in the next 2-3 years following TFCD guidelines (and EU NFRD Guidelines)

- Limited inclusion in climate scenario analysis (by larger banks) - some qualitative assessment performed

Impact on banks: Challenges for addressing climate risks

Ongoing work to address shortcomings

Climate-related risks not explicitly addressed in prudential regulation and supervision

No common definitions, no taxonomy

- What should be considered as 'green asset' / 'brown asset'?
- What should be considered as high/ low carbon-intensive activity?
- What should be considered as 'sustainable' investment?

Lack of data for assessing risks in the financial sector

- What is the exposure of an entity to carbon-intensive assets/ industries/ activities?
- How to map the interlinkages between affected assets and sectors?

Lack of understanding of climate-related risks

- Should green/ brown assets be treated differently for prudential purposes?
- How to integrate climate risk in governance, strategy and risk management banks?

How to develop scenarios to assess climate-related financial risks?

- What will be the climate policies to be applied (timing and speed)?
- Breadth and complexity of transmission channels: what and how much be affected?
- What time horizon to use? (2030 or even 2050?)
- What will be the technological evolution to address climate change?
- How will consumer preferences drive the climate change transition?

Diverse climate-related disclosure practices currently observed across jurisdictions

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3. **Key regulatory and supervisory expectations**
 - Network for Greening the Financial System (NGFS)
 - EC
 - EBA
 - SSM
4. BoG work and next steps

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Key regulatory and supervisory expectations Network for Greening the Financial System (NGFS): influencer



NGFS six key recommendations drive its work:

Central banks and supervisors

1. Integrate climate-related risks into financial stability monitoring and micro-supervision
2. Integrate sustainability factors into own-portfolio management
3. Bridge data gaps
4. Build awareness and intellectual capacity, encouraging technical assistance and knowledge sharing (for banks also)

Policymakers

5. Achieve robust and internationally consistent climate and environment-related disclosures
6. Develop a taxonomy of economic activities

NGFS published in 2020 additional reports for banks which are useful sources of reference:

- Handbook on climate and environment-related risk management
- Guidelines on scenario-based risk analysis and reference scenarios to be used

Key regulatory and supervisory expectations

EU Regulation on sustainable finance: focused on investments

1. EC Action Plan on Sustainable Finance with three main objectives:

- **Rerorienting of capital flows** towards sustainable investment (taxonomy of activities, 'green products')
- **Managing financial risks** stemming from ESG issues (risk management and prudential requirements)
- **Fostering transparency and long-termism** in financial and economic activity (disclosures)

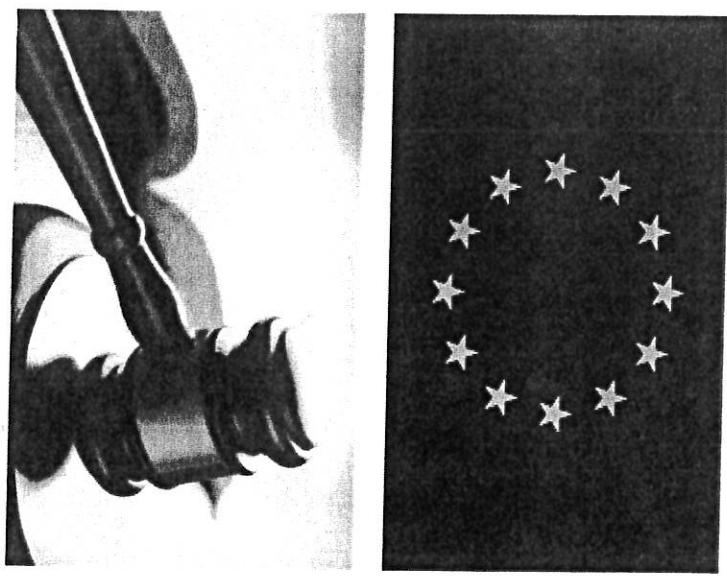
Currently under consultation for revision in light of the EU Green Deal and Next Generation Recovery Fund

2. EC high-level guidelines on corporate climate-related information

reporting (introducing the TFCD recommendations for climate-related disclosures in EU) (within the management report of large entities under the Non-Financial Information Reporting Directive – *currently under consultation*)

3. EC Taxonomy Regulation for sustainable investments (July 2020) and **list of environmentally sustainable activities** by defining technical screening criteria for each of the six environmental objectives:

- *Commission Delegated Acts be published from end 2020 until 2021 (application dates 1 year later), on the basis of the Technical Experts Group recommendations (first part published in March 2020)*
- 4. EU Green Bond Standard (*currently EC consulting on legal form of EU GBS*)
- 5. EU Climate benchmarks Regulation against which to assess alignment of investment strategies (*currently EC preparing final Delegated Acts*)



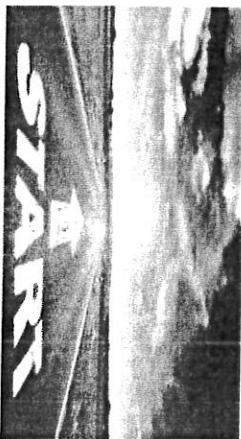
Key regulatory and supervisory expectations

Current EBA high-level recommendations for ESG risks

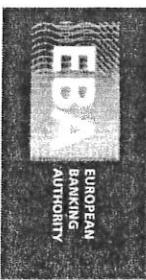


ESG risks have just started being addressed in the prudential regulation, through some high-level expectations – more specific requirements will be introduced from 2021 until 2025

1. EBA high-level recommendations for sustainable risks (best-efforts immediate application end-2019)
 - Act proactively to incorporate ESG considerations in business strategy and risk management.
 - Integrate ESG risks into business plans, risk management, internal control framework and decision-making processes.
 - Prioritise the identification of some simple metrics on how climate risks are embedded, into business targets, strategies, decision-making processes, and risk management.
 - For material climate-related and environmental risk, to adopt climate change related scenarios and use scenario analysis as an explorative tool
2. EBA Guidelines on loan origination and monitoring (EBA/GL/2020/06) applicable by 30 June 2021)
 - Credit risk culture to include consideration of ESG factors.
 - Add ESG factors and risks in credit risk appetite and risk management policies, credit risk policies and procedures, adopting a holistic approach.
 - If originated (or plan to originate) environmentally sustainable credit facilities:
 - Develop specific details of environmentally sustainable lending policies and procedures
 - Set up qualitative and, when relevant, quantitative targets to support environmentally sustainable lending activity, and to assess alignment with environmentally sustainable objectives.
 - When granting loans, to assess borrower's exposure to ESG factors and the appropriateness of the borrower's mitigating strategies.
 - Credit decision be clear and well documented and include all the conditions and pre-conditions, including those to mitigate the risks from the creditworthiness assessment, such as ESG risks
 - For credit facilities secured by property, when applicable, to take into account ESG factors affecting the value of the collateral (e.g. energy efficiency buildings, location)



Key regulatory and supervisory expectations EBA several mandates stemming from CRR2/CRDV



By 28 June 2021
(Discussion paper in q4 2020)

By 28 June 2022
(finalization in 2021)

By 28 June 2025
(possible acceleration of work)

Pillar 2: Report for SREP (art. 98(8) CRD5)

EBA to assess potential inclusion of ESG risks in the bank's management and in the supervisory review, including SREP, EBA to develop uniform definitions of ESG risks

EBA may issue Guidelines on the basis of this report for the inclusion of ESG risks in SREP

Pillar 3: ITS on Disclosures (art. 449a CRR2)

Large institutions with issued securities on a regulated market shall disclose information on ESG risks by 28 June 2022, including physical risks and transition risks.

Disclosures provided on an annual basis for the first year and biannually thereafter

Pillar 1: Report for Capital treatment (art. 501c CRR2)

EBA to assess whether a dedicated prudential treatment of exposures related to assets or activities associated substantially with environmental and/or social objectives would be justified

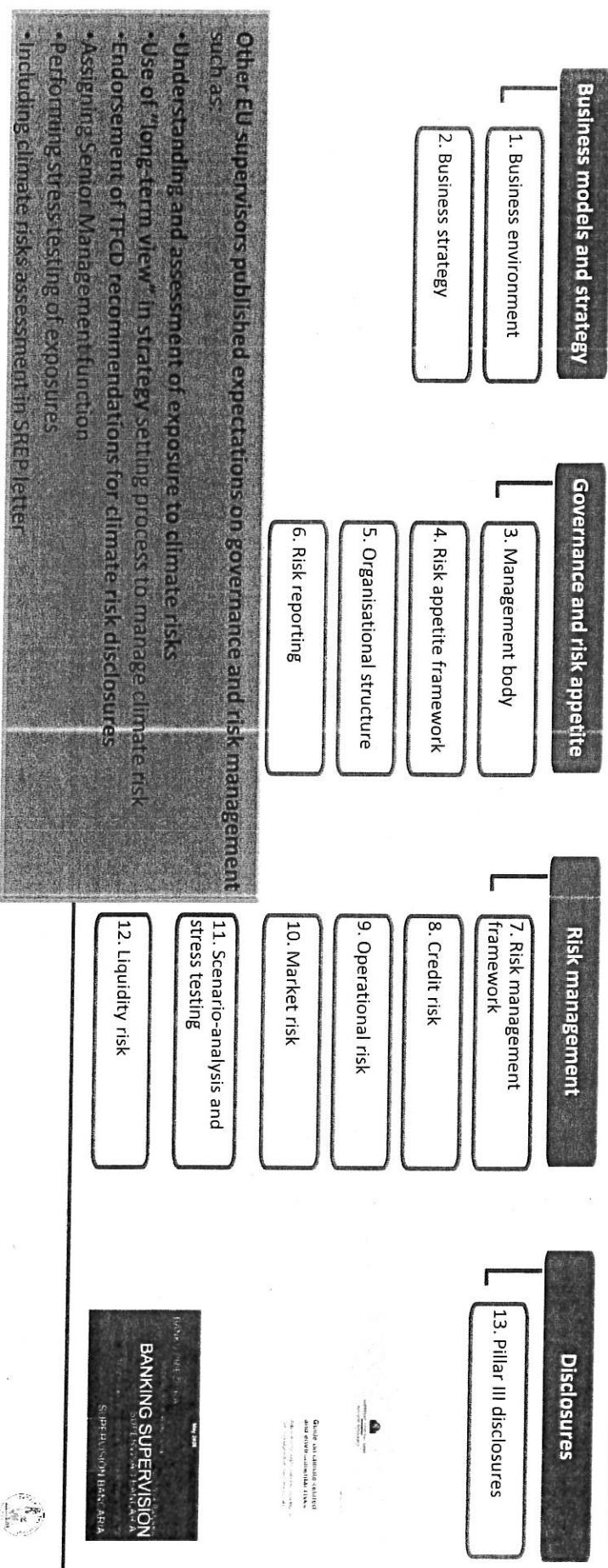
Key regulatory and supervisory expectations

SSM Guide on environmental risks the most developed so far

13 supervisory expectations primarily addressed to significant institutions (SIs) directly supervised by the SSM

* NCAs are recommended to apply the expectations in substance to less significant institutions (LIs)

- Proportionate approach, taking into account the materiality of their exposures to climate-related and environmental risks
- To be read in conjunction with other ECB guides, particularly the Guide to the ICAAP
- Consistent with other EU (EBA, EC) and international publications (FSB, NGFS, BCBS, OECD...)
- Application as of the date of publication of the guidance (by end of 2020)
 - First supervisory assessment and supervisory dialogue to be conducted in 2021 (for progress made during 2020)
 - Evolving framework as management and disclosure of environmental risks is evolving and expected to mature over time



BANKING SUPERVISION
Supervision of the
Banking Sector

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4. BoG action plan and next steps
 - BoG approach to address ESG risks
 - Main elements of questionnaire to LSI
 - Summary and next steps

Appendix

BoG action plan and next steps

BoG approach to address ESG risks: follows EU developments

Supervision	Other BoG initiatives
<p>Department of Supervision - Risk Analysis Section:</p> <ul style="list-style-type: none">- horizontally monitors developments and participates in groups of policy makers and supervisors (ECB, EBA, NGFS)- Performs desktop assessments related to ESG issues for Greek banks	<ul style="list-style-type: none">- Between the 3 most vocal Central banks on climate change in 2018-2019 (BoE and ECB)- Established Climate Change Impacts Study Committee (CCISC) in 2009 to analyse the economic, social and environmental impacts of climate change in Greece- Published studies and research papers
<p>No detailed national supervisory expectations yet:</p> <ul style="list-style-type: none">• In anticipation of specific EBA and SSM requirements• Self-assessment survey to LSI (<i>to be launched</i>)• Supervisory discussions to start in 2021	<p>Endorsed UN Environment Program Finance Initiative 'Principles for responsible Banking'</p> <ul style="list-style-type: none">• BoG urges banks to do the same and set ambitious targets

BoG action plan and next steps

Main elements of questionnaire to LSI

EBA recommends that institutions in EU take a forward-looking, long-term and comprehensive approach in considering ESG risks

As other EU supervisors, the Bank of Greece is launching a self-assessment questionnaire to LSI...

Objectives of the self-assessment

- to assess the degree of application of the EBA recommendations in the **Action Plan on sustainable finance** and assist in the preparation for the implementation of the **EBA Guidelines on Loan origination and monitoring**
- to understand the possible impacts of climate risks to LSI
- to inform the supervisory dialogue on ESG issues and prepare for meeting the future regulatory requirements

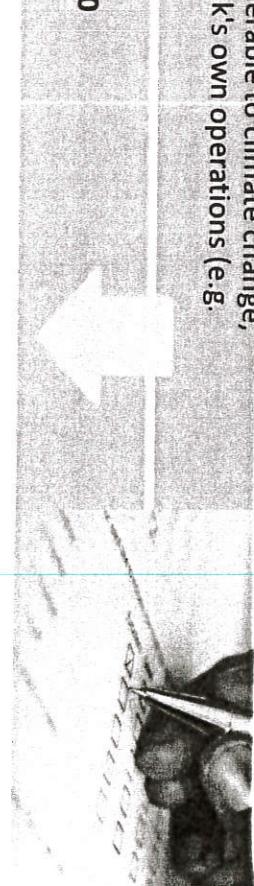
* The answers should be primarily related to the risks from counterparties (e.g. sectors vulnerable to climate change, real estate collaterals in areas vulnerable to climate change, investments in "brown" assets) and NOT stemming from the bank's own operations (e.g. emissions from own buildings)

Answers be provided to the Bank of Greece by 30 October 2020

Institutions are likely to be at an early stage in addressing ESG issues, however...
...we expect that they start discussing internally climate risk issues without delay and develop an action plan for meeting the current and future ESG requirements and implement relevant structural and organizational changes

Main areas of questionnaire

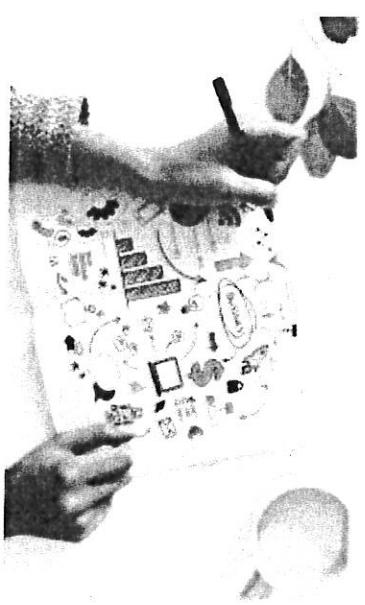
- Strategy and governance
- Risk management
- Scenario analysis/ stress testing
- Disclosures



BoG action plan and next steps

Summary and next steps

1. Sustainable finance is a top political priority globally, and will continue to be so in the next years, particularly during the implementation of the EU Green Deal and the investment of funds of the Next Generation EU project
2. Transition to a sustainable economy creates risks but also opportunities from additional financing needs and banks play a key role
3. The Greek banks are also vulnerable to climate risks through their counterparties and they need to start addressing these risks in a holistic manner, while also adjusting their business models to support sustainable growth
4. ESG risks (and opportunities) have just started being addressed in the prudential regulation, yet banks need to start now in understanding and addressing ESG risks in their business strategy, governance, internal processes, risk management and disclosures
5. EBA together with the SSM and other EU Bodies will deliver different mandates until 2025 on key prudential areas related to ESG
6. Any prudential relief for sustainable exposures, if any, is anticipated by 2025
7. The BoG contributes to policy making and starts supervisory dialogue:
 - A self-assessment questionnaire will be sent to LSIs
 - Results of the assessment will be discussed in the next supervisory dialogue



Appendix

Sources of information

- Paris Agreement <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
- UN 2030 Agenda for Sustainable Development <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- EU Green Deal https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
- Next Generation EU https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/recovery-plan-europe/pillars-next-generation-eu_en
- NGFS <https://www.ngfs.net/en>
- EC Action plan on sustainable finance https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en
- EBA Sustainable Finance <https://eba.europa.eu/financial-innovation-and-fintech/sustainable-finance>
- EBA Guidelines on loan origination and monitoring <https://eba.europa.eu/eba-seeks-future-proof-loan-origination-standards-taking-consideration-significant-transition>
- SSM Guide on climate risk https://www.banksupervision.europa.eu/legalframework/publiccons/pdf/climate-related_risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf
- BoG UNEPFI endorsement <https://www.bankofgreece.gr/en/news-and-media/press-office/news-list/news?announcement=61b30940-1ea7-4e1b-afc5-ce149b31b606>
- BoG Climate change studies <https://www.bankofgreece.gr/Pages/en/klima/default.aspx>