AquaSPICE

Advancing Sustainability of Process Industries through Digital and Circular Water Use Innovations

AquaSPICE

WP8: Communication, Dissemination, Training and Social Awareness

AUDENCIA

The AquaSPICE project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 958396.

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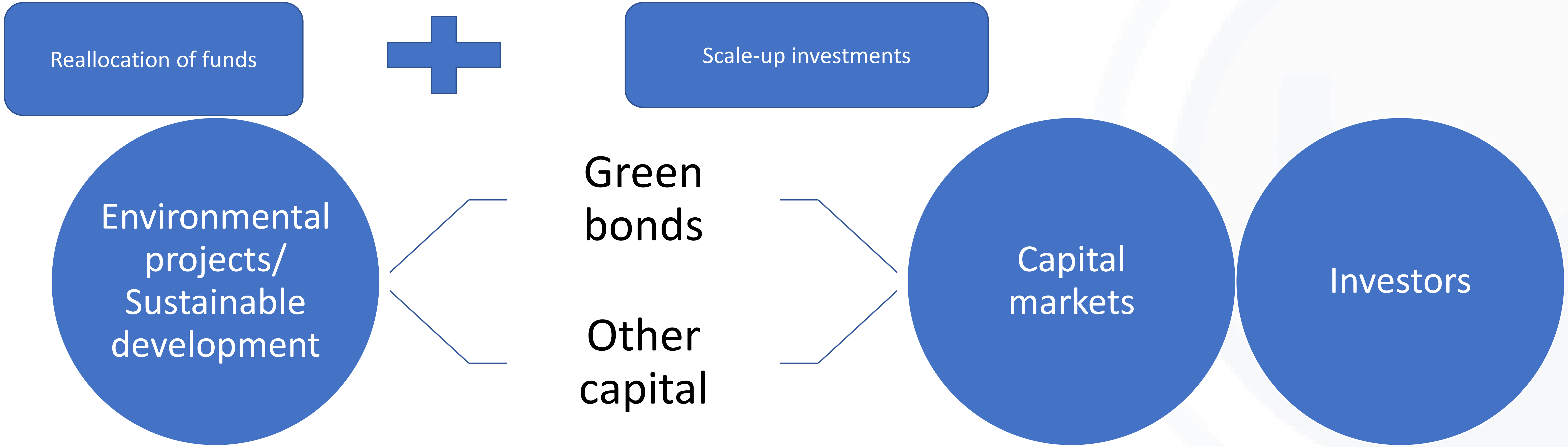
SUSTAINABLE FINANCE

Green Bonds

The AquaSPICE project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 958396.

Financial markets & GREEN BONDS

Green bonds are financial instruments that finance green projects and provide investors with regular or fixed income payments. Over the last 14 years, green bonds have become an important tool to address the impacts of climate change and related challenges.
- *Denise Odaro, IFC Head of Investor Relations, World Bank Group*



WHAT IS BOND FINANCE?

- Bond finance is a natural fit for Liquidity Coverage Ratio infrastructure assets. The case is especially clear for renewable energy infrastructure, which is characterised by high up-front capital costs and long-dated and frequently inflation-linked income streams.

Like any other bond, a green bond is a fixed-income financial instrument for raising capital from investors through the debt capital market. Typically, the bond issuer raises a fixed amount of capital from investors over a set period of time (the "maturity"), repaying the capital (the "principal") when the bond matures and paying an agreed amount of interest ("coupons") along the way. A green label can also be applied to a bond by another entity via its inclusion in a green bond index (Box 3) or via a "tag" on analytical tools widely used in financial markets such as the Bloomberg Terminal.

- A "green bond" is differentiated from a regular bond by its label, which signifies a commitment to exclusively use the funds raised to finance or re-finance "green" projects, assets or business activities (ICMA, 2015).

FOUR INDICES:

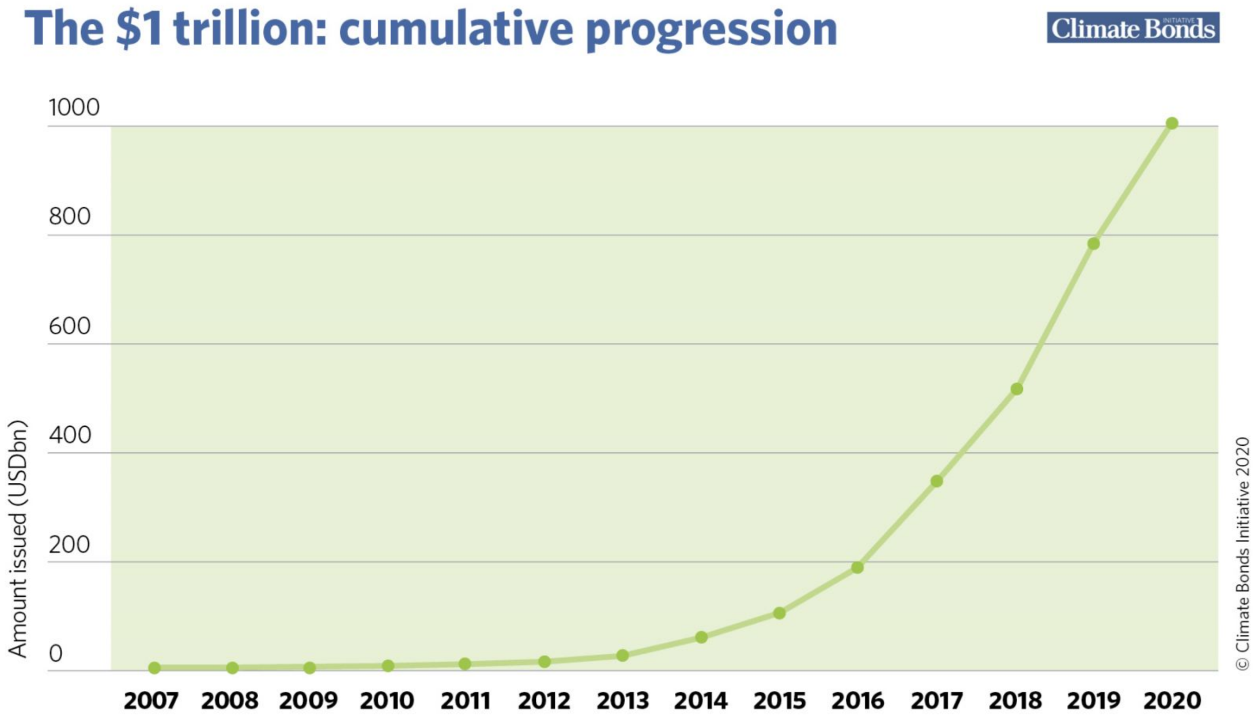
– Bank of America Merrill Lynch Green Bond Index
– Barclays MSCI Green Bond Index
– S&P Green Bond Index and Green Project Bond Index
– Solactive Green Bond Index

GREEN LABELED MARKET

The first green bond was issued in 2007 by the European Investment Bank (EIB), which was followed in 2008 by the International Bank for Reconstruction and Development (IBRD) (Coston et al., 2014; Stoian & Iorgulescu, 2019).

The green bond market grew from $1.5 billion in 2007 to $389 billion in 2018 (CBI 2018c, 2018). Since its launch, the Green Bond has been a resounding success.

In the 13 years since market inception we have calculated the average annual growth rate at approximately 95%.



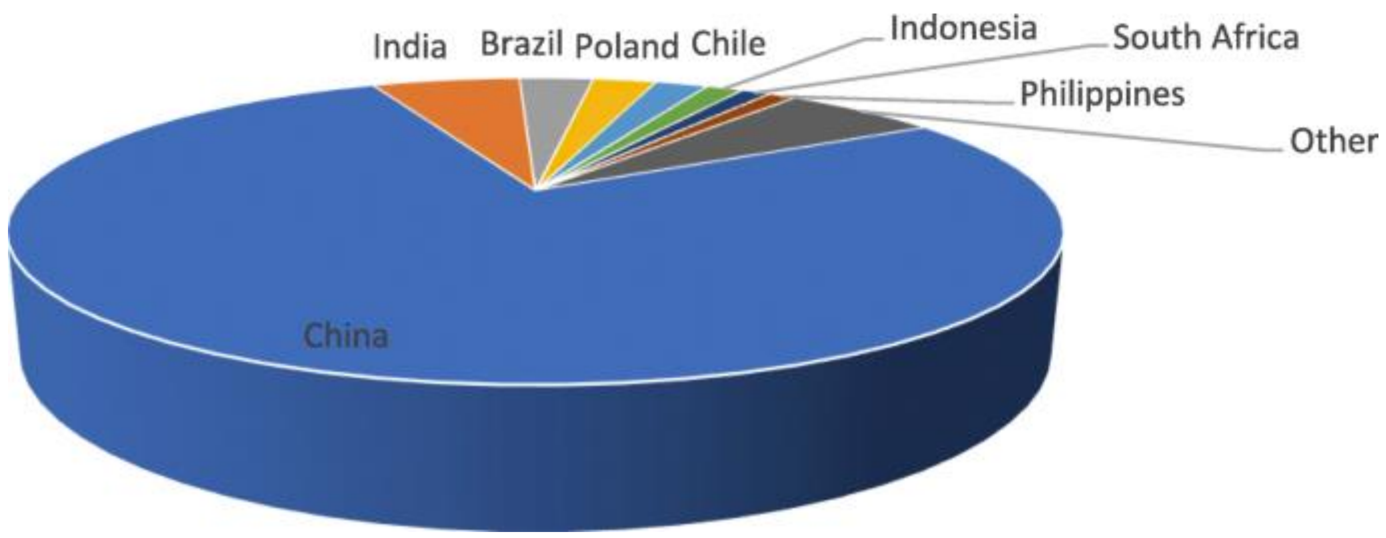
Source: Climate Bonds Initiative 2020

Source: Climate Bonds Initiative 2020

Video projection: How The $1 Trillion Green Bond Market Works https://youtu.be/ruXLhpXvhOE

CASE STUDY: China

China was the fourth-largest issuer of green bonds globally and by far the largest EMDE issuer with US$59 billion in 2021 issuance. This record demonstrated a strong rebound following the 2020 pandemic-related drop in issuance. Nonfinancial corporates accounted for US$29 billion of the total, triple the issuance in 2020 and 2019 and amounted to almost half of China's total green bond issuance in 2021. As a result, Chinese nonfinancial corporates surpassed financial institutions as the largest issuing sector.



Cumulative LMIC's Green Bond Issuance from 2012 to 2019 (%). Source: International Financial Corporation, Global Macro & Market Research, Bloomberg, Environmental Finance, Climate Bonds Initiative (2019) https://www.climatebonds.net/files/reports/2019_annual_highlights-final.pdf

In September 2015, the State Council of China issued the "Overall Plan for the Reform of Ecological Civilization System," which proposed to encourage banks and enterprises to issue green bonds (State Council of China, 2015). The "Green bond issuance guidelines" released by the National Development and Reform Commission (NDRC), if the bond issuers plan to invest the raised capitals into environmental-friendly projects, then they can apply to issue green bonds.

Chen X, Weber O and Saravade V (2022) Does It Pay to Issue Green? An Institutional Comparison of Mainland China and Hong Kong's Stock Markets Toward Green Bonds. Front. Psychol. 13:833847. doi: 10.3389/fpsyg.2022.833847

China has been largely successful in issuing infrastructure bonds and creating a market for these bonds, done mainly through state owned enterprises and the "quasi-public" sector. Between 2009 and 2013, an estimated 80% of infrastructure debt was raised through infrastructure bonds.

The high proportion of bond finance for infrastructure projects and low reliance on bond finance by Chinese corporates has resulted in modelling assumptions for this analysis using an average bond proportion of **47%** in the capital structure of renewables project finance and **20%** bond share in corporate finance by power utilities.

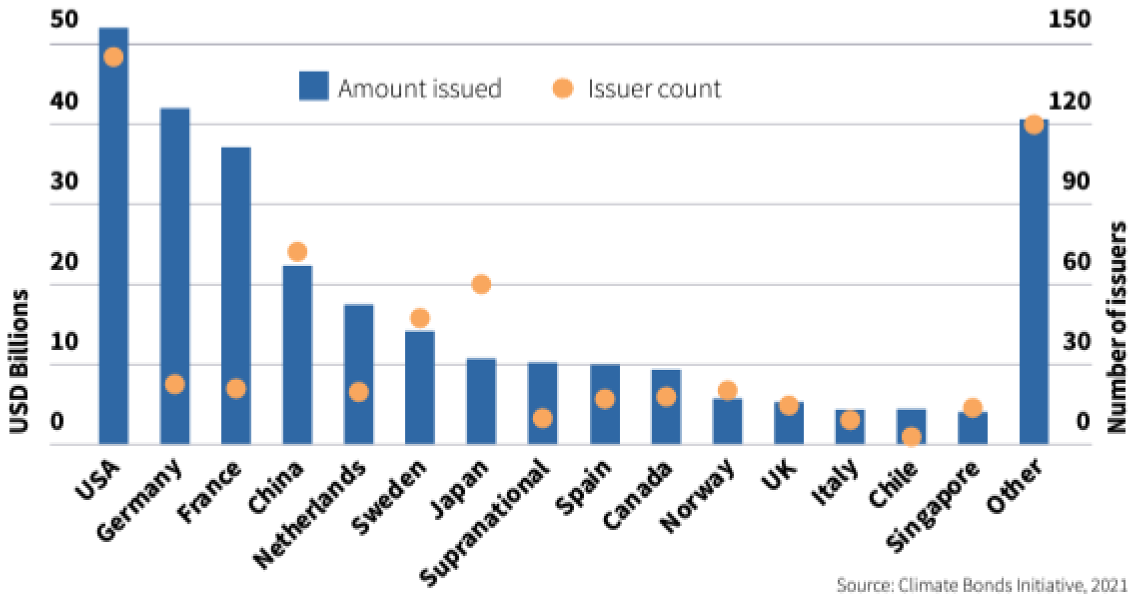
The current policy push to reduce reliance on the banking sector in China could hasten the development of an ABS market and bond markets Implications for institutional investors in general.

International Financial Institutions, and sub-sovereign development banks working in conjunction with policy banks, are seen as having the potential to play a pivotal role in the early development of a green bond market in China. Municipal bond issuance is currently low given the traditional reliance of municipalities on bank loans; this is changing rapidly, however, due to government policy aimed at swapping municipal debt for bonds.

EU GREEN BONDS

- The EU is a global leader in green bonds, with 48 % of global issuances in 2020 being denominated in euros and 51 % of the global volume of green bonds being issued in the EU. In terms of volume, in 2020 the US was the top country of issuance, followed by Germany, France, China and the Netherlands; Sweden and Spain were also among the top 10 countries worldwide. Europe has pioneered the green bond market, thanks to the world's first green bond issued by the EIB in 2007.

USA, Germany and France lead 2020 green bond issuance

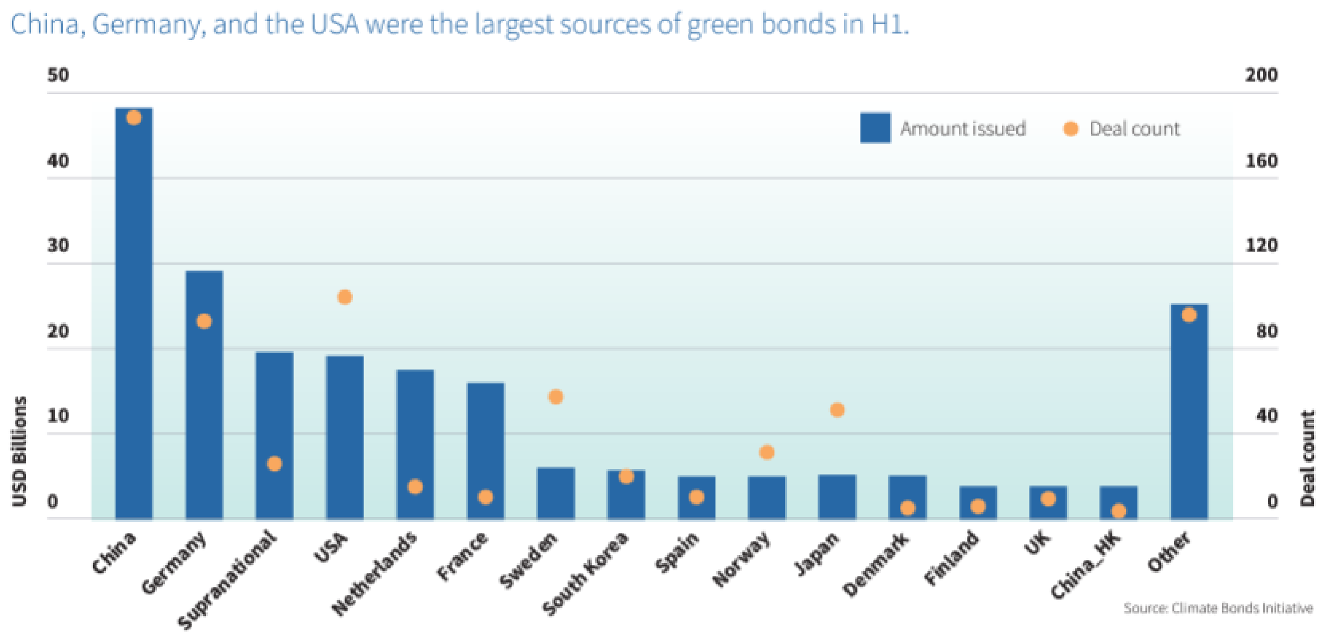


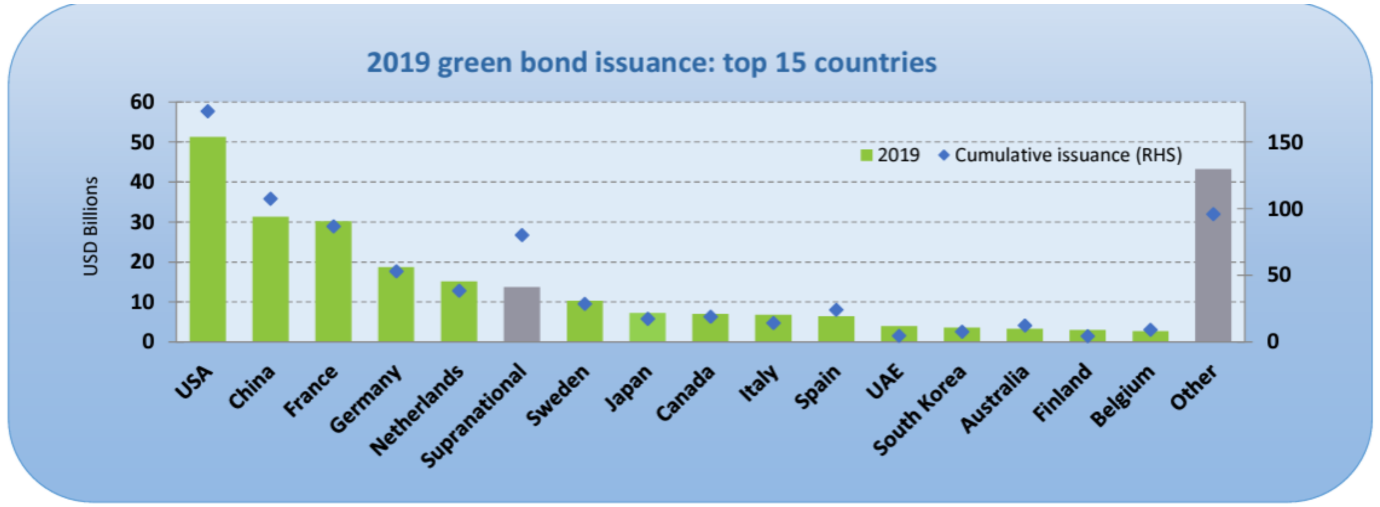
Source: Climate Bonds Initiative, 2021

European Investment Bank: The green bond pioneer In 2007, the EIB issued the world's first green bond, branded as a Climate Awareness Bond (CAB). Today, the EIB is the largest supranational issuer and is spearheading application of the EU taxonomy and EU GBS, championing EU standards globally. In its Climate Bank Roadmap 2021-2025, the EIB committed to gradually aligning CABs and Sustainability Awareness Bonds (SABs) with the proposed EU GBS. It was the first issuer to do so, describing the transition to the new EU regulatory framework in its 2020 CAB Framework and 2020 SAB Framework. The EIB has helped to develop the EU taxonomy and EU GBS in the Commission working groups, and published a seminal White Paper on the Need for a Common Language in Green Finance in 2017.

climate bonds standards

- In 2019, the European Bank for Reconstruction and Development's US$700 million bond issuance was the first dedicated climate resilience bond, with projects to be selected and managed in alignment with Climate Bonds Initiative's *Climate Resilience Principles*.





* *All charts and analysis are based on latest figures for 2019 issuance volume and number of deals. There are 28 deals still under assessment for inclusion in the CBI green bond database. Any subsequent variation will be reflected on the Climate Bonds website.*

Source: Climate Bonds Initiative 2020

Climate Bonds Initiative is an international organisation working to mobilise global capital for climate action

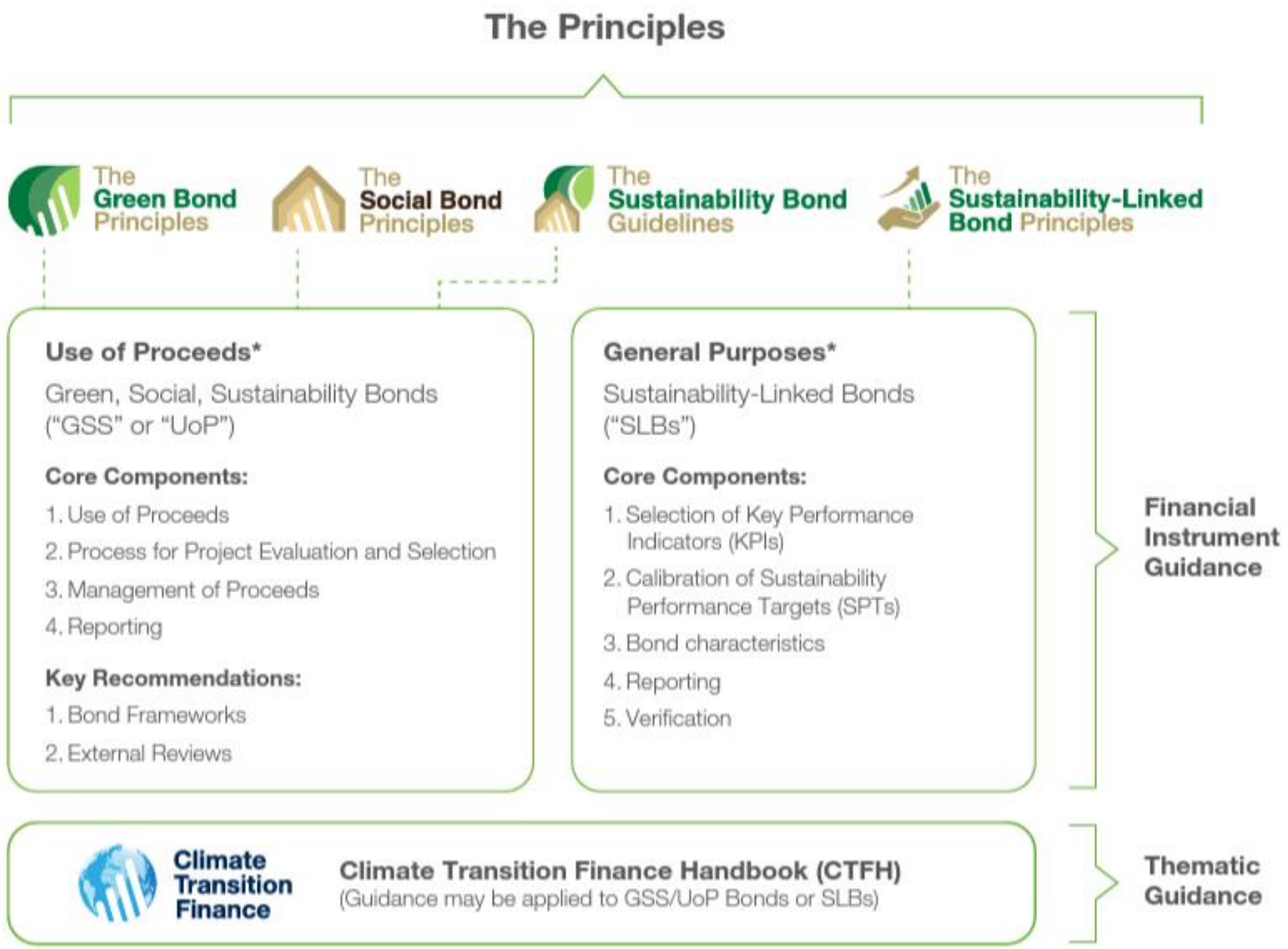
Climate Bonds Taxonomy

Table 1: Summary of the comparison between the draft EU Green Bond Standard and Climate Bonds Standard Version 3.0

Key Feature	EU Green Bond Standard (draft)	Climate Bonds Standard Version 3.0
Eligibility of projects and assets	Based on the EU Taxonomy which includes detailed criteria for relevant activities. Climate change mitigation criteria are aligned with achieving the goals of the Paris Agreement.	Based on the Climate Bonds Taxonomy plus sector-by-sector Eligibility Criteria. All criteria are aligned with achieving the goals of the Paris Agreement.
Green Bond Framework	Green Bond Framework document must be prepared as per specific re-quirements. Mandatory disclosure of the Framework prior to or at issuance.	Green Bond Framework document must be prepared as per specific requirements. Mandatory disclosure of the Framework prior to or at issuance.
Reporting prior to issuance	Legal documentation must include specific information regarding the environmental objective of the bond and use of proceeds.	Legal documentation must include specific information regarding the use of proceeds, management of proceeds, external reviewer and plans for report-ing after issuance.
External review prior to issuance	Mandatory verification prior to issuance and disclosure of verifier's report prior to or at issuance.	Mandatory verification prior to issuance and disclosure of verifier's report prior to or at issuance.
Reporting after issuance	Mandatory reporting with specific requirements for contents of the report. Annual reporting and disclosure is mandatory up to full allocation of proceeds and in case of any material change in allocation of proceeds. Defines 2 types of reporting: Allocation and Impact.	Mandatory reporting with specific requirements for contents of the report. Annual reporting and disclosure is mandatory for the entire period the bond remains outstanding. Defines 3 types of reporting: Allocation, Eligibility and Impact.
External review after issuance	Mandatory verification at least once after issuance and must be at or after full allocation of proceeds. Mandatory disclosure of verifier's report.	Mandatory verification at least once after issuance, within two years of is-suance. Mandatory disclosure of verifier's report.
Status of external reviewers	Must be Registered under the Voluntary Interim Registration Scheme.	Must be listed as an Approved Verifier on the Climate Bonds Initiative website.
Labelling of existing bonds	Allowed, with mandatory verification and disclosure of key documents.	Allowed, with mandatory verification and disclosure of key documents.

Source: Climate Bonds Standard Version 3.0

GREEN BOND PRINCIPLES

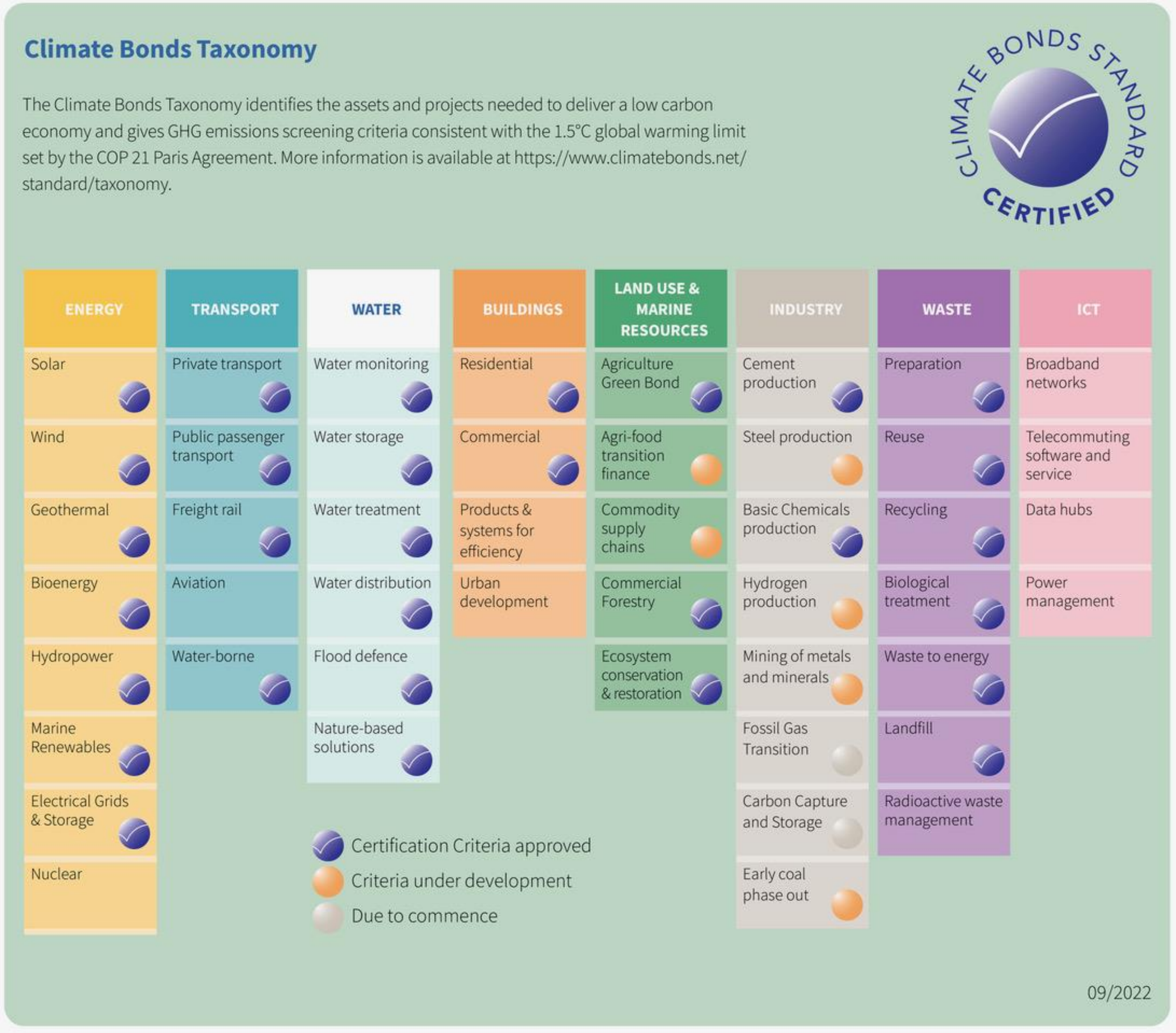


Source: ICMA (2021), Green Bond Principles, Available at: www.icmagroup.org/assets/documents/Sustainable-finance/2022-updates/Green-Bond-Principles_June-2022-280622.pdf

The Green Bond Principles (GBP) seek to support issuers in financing environmentally sound and sustainable projects that foster a net-zero emissions economy and protect the environment.

International Capital Market Association

CLIMATE BOND INITIATIVE TAXONOMY



- Climate Bond Initiative's taxonomy specifies the green definitions for the Climate Bond Standards and Certification Scheme and is guided by a panel of climate and energy experts.

Access here:
https://www.climatebonds.net/files/files/Taxonomy/CBI_Taxonomy_Tables-08A%20%281%29.pdf

Other forms of financing

- **GREEN LOANS:** Green loans are similar to green bonds in that funds are made available exclusively to finance or re-finance new and/or existing eligible “Green Projects” as defined in the *Green Loan Principles* developed by the Loan Market Association. Green Projects are defined the same way under both the Green Bond Principles and the Green Loan Principles, thereby providing issuers with the flexibility to choose between debt financing options for Green Projects.

- **TRANSITION BONDS:** Transition bonds are similar to sustainability-linked bonds and loans in that they do not generally require proceeds to be used to finance or re-finance Green Projects. Instead, the proceeds of transition bonds are used to fund a firm’s transition towards a reduced environmental impact or to reduce the firm’s carbon emissions14. Transition bonds may be an attractive option for issuers that are taking meaningful steps to reduce their environmental impact but do not have significant projects that would qualify as Green Projects and therefore would be unable to issue green bonds. These bonds require the publication of a transition framework, disclosure in line with the TCFD recommendations, commitment to the goals of the Paris Agreement or approved targets to achieve zero emissions by 2050, and reporting on transition performance.

- **SOCIAL BONDS:** The proceeds of social bonds are exclusively applied to finance or re-finance new and/or existing “Social Projects” as defined in ICMA’s Social Bond Principles10. Social Projects include providing and/or promoting affordable basic infrastructure, access to essential services, affordable housing and food security.

- **SUSTAINABILITY BONDS:** Sustainability bonds are instruments whose proceeds are exclusively applied to finance or re-finance a combination of both Green Projects and Social Projects in accordance with ICMA’s Sustainability Bond Guidelines.
- SDG-linked bonds: SDG-linked bonds include covenants based on the United Nations’ Sustainable Development Goals and the issuer is penalized if it fails to meet these covenants in the agreed timeframe.

- Source: Seville, D., Holmes, J., Murphy, M., (2020), ***Green bonds and beyond: sustainable finance in the capital markets***, TORYS

SWEDISH GREEN BONDS

- Sweden In December 2016, the Swedish Government’s green bond Inquiry was drawn up to highlight ways to promote the market for Green Bonds and respond to increasing demand. It presented proposals on what information investors need to make well-founded investment decisions, proposed a structure for processes and criteria for identifying green projects, and, inclusively, recommended the issuance of a sovereign Green Bond.

- Almost a year later, in November 2017, Sweden initiated a strategic partnership with France in four key areas for innovation and green solutions, including green finance. This partnership called for the involvement of both private and public stakeholders, to promote joint action and collaborative approaches to sustainable finance, including shared learning and experiences16. Parliament echoed Article 173 by approving a new regulation demanding pension fund managers to account for climate-related risks in their investment strategies (CBI, 2018).

Available a https://www.tresor.economie.gouv.fr/Articles/2018/03/28/partenariat-franco-suedois-pour-l-innovation-et-les-solutions-vertes-french-swedish-partnership-for-innovation-and-green-solutions

UK GREEN FINANCE TASKFORCE

- In September 2017, the UK Government established the UK Green Finance Taskforce to boost green finance developments and low-carbon economy and convey the necessary investments to meet national carbon reduction targets.

- On March 2018, the Taskforce published its final report providing recommendations for the government and the private sector on how to integrate green finance in financial services, including, for example, "driving demand and supply for green lending products, improving climate risk management with advanced data, building a green and resilient infrastructure pipeline, and issuing a sovereign Green Bond".

- The Green Finance Taskforce report sets out a series of recommendations on how the government and the private sector can work together to make green finance an integral part of their financial services sector. The government has subsequently published the Green Finance Strategy which takes forward the key themes of the taskforce.

- Green Finance Taskforce Terms of Reference (PDF, 163 KB, 2 pages)
- Green Finance Taskforce report (PDF, 2.56MB, 100 pages)

Available at https://www.gov.uk/government/publications/accelerating-green-finance-green-finance-taskforce-report

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BLENDED FINANCE AND GREEN TRANSITION

Public-private synergies

The AquaSPICE project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 958396.

CLASSIFICATION OF PUBLIC AND PRIVATE CAPITAL

• **Governments**, with examples including domestic financing through public expenditure using the Classification of the Functions of Government (COFOG), international development aid financing (e.g. official development assistance - ODA) and official sector transactions that do not meet ODA criteria (e.g. other official flows - OOF).

• **Development finance institutions** (DFIs), subdivided into:
• National DFIs: a single country owns the institution and finance is directed domestically;= Agence Française de Développement (AFD)
• Bilateral DFIs: a single country owns the institution, and it directs finance flows internationally;= AFD/Proparco (France)
• Multilateral DFIs: the institution has multiple shareholder countries and directs finance flows internationally.= European Regional Development Fund

• **Environmental/climate funds**, which can be further categorized into:
• National environmental/climate funds; =The French Agency for Ecological Transition
• Bilateral/multilateral environmental/climate funds.= Green Climate Funds

In the scope of this report, **private financial services providers** include:
• **Commercial financial institutions**: providers of private debt capital and insurance, including commercial and investment banks;
• **Investors:** including insurance companies, asset management firms, pension funds active in capital markets, venture capital and infrastructure funds;
• **Corporations**: for-profit legal entities;
• **Philanthropies**: including foundations and endowments.
Financial instruments: This includes capital supply instruments (equity, loans, bonds and grants); risk mitigation instruments that transfer risk (insurance, guarantees and off-take agreements); and fiscal, revenue instruments (subsidies).

GREEN TRANSITION AND THE ROLE OF STATE FUNDING

- We need private financing to fund a green transformation, and that the role of the state is to support financiers in doing so by providing ***guarantees to green projects or by "de-risking***". So why public money are important?

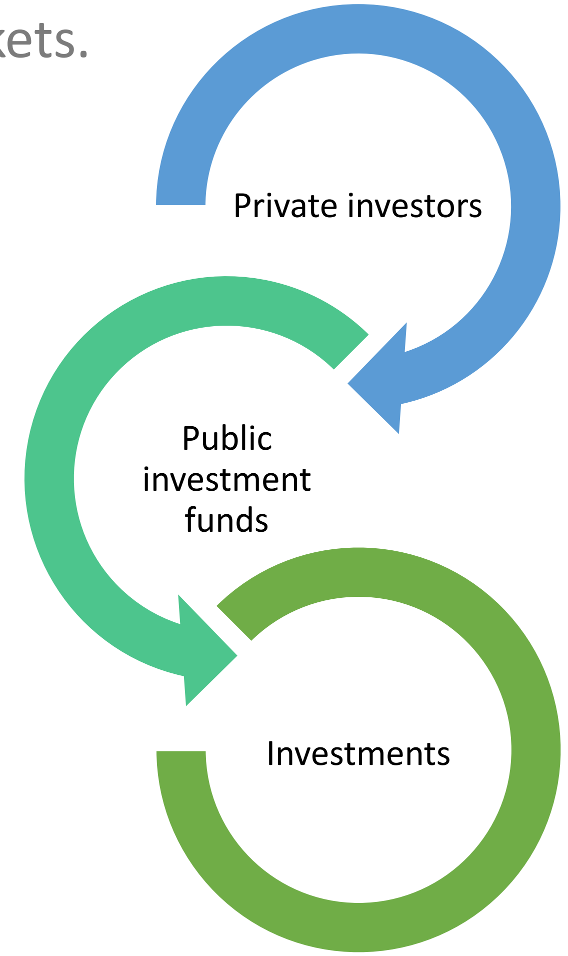
1) the state should issue public debt to fund its own green agenda = **supply financial markets with tradable assets (bonds)**
2) the state should reform sovereign debt markets to limit the practice of borrowing against longer-term debt in order to avoid the impetus for central bank bailouts of the private sector
3) make robust financial markets to **support the long-term liquidity of sovereign debt (regulated financial markets)**
4) the state should set green and "dirty" or equivalent standards with the explicit expectation that the central bank will be governed by these standards and not invest in "dirty" assets or support them in other ways (dirty assets are those investments that can harm the environmental or the society)
5) the state should certify projects that are designed to explore and develop future green technologies and consider providing preferential treatment for such projects, such as advantageous tax rates (tax incentives for going greener).

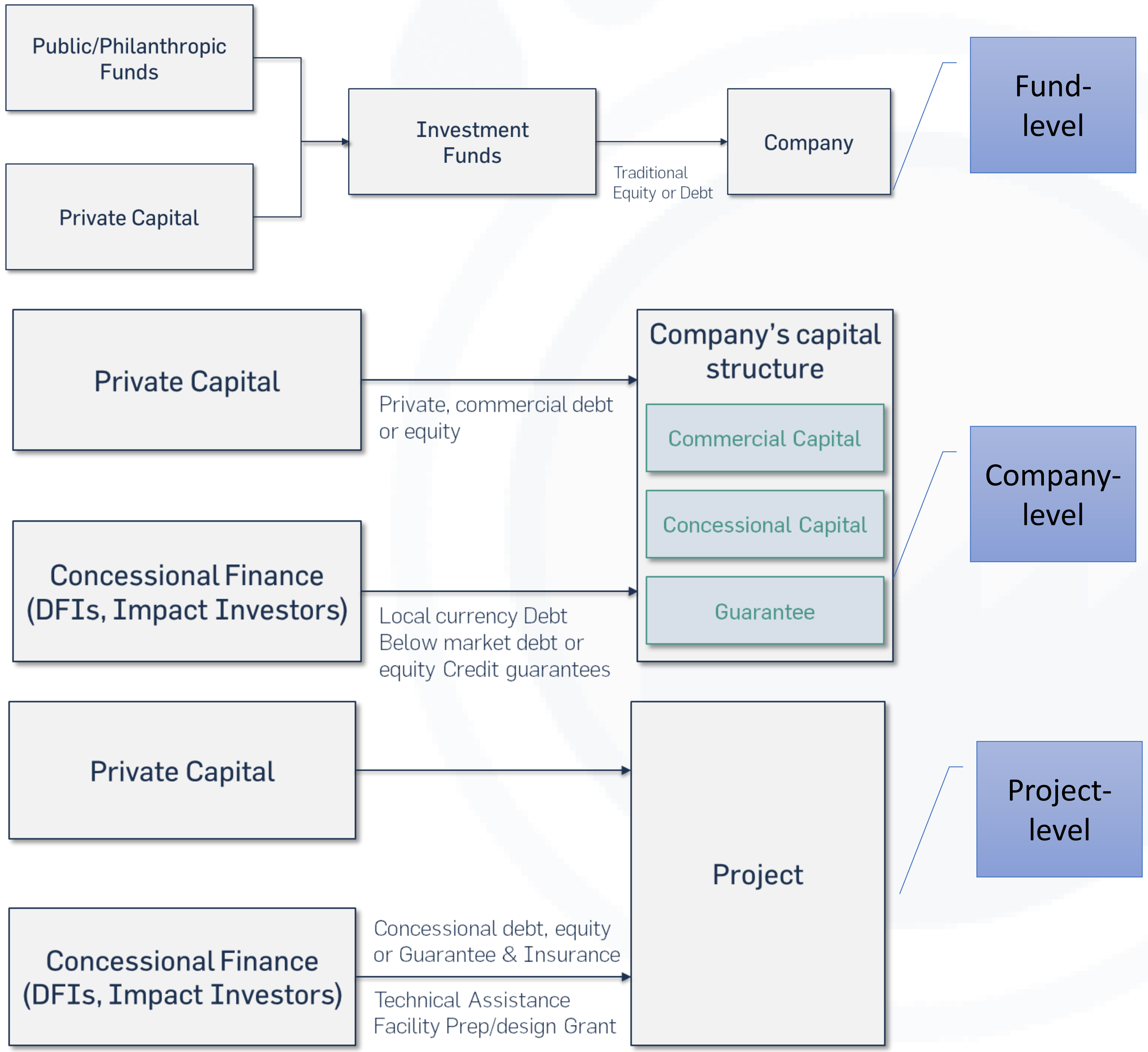
Blended finance

Public-private investments

- Blended finance has been identified as an effective way to address market distortions that occur from policy failures in pricing-in externalities. It allows the utilisation of catalytic capital from public or philanthropic sources to create societal or environmental benefits that are not otherwise captured, while creating a pathway for improved risk-adjusted returns for private investors

- “Through the balancing of risk-return profiles for investment opportunities, blended finance can result in the scale-up of investments in climate solutions and future technologies in both developed and emerging markets.





BLENDED FINANCE IN NATURE-BASED SOLUTIONS

Definition: “Actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human wellbeing and biodiversity benefits”. The goal of nature-based solutions is “to support the achievement of society’s development goals and safeguard human well-being in ways that reflect cultural and societal values and enhance the resilience of ecosystems, their capacity for renewal and the provision of services; nature-based solutions are designed to address major societal challenges, such as food security, climate change, water security, human health, disaster risk, social and economic development”.
- Source: 8 IUCN Global Standard for NbS

86% public finance

- USD 115 billion/year
- 1/3 invested into protection of biodiversity and landscapes
- 2/3 investments: forest restoration, peatland restoration, regenerative agriculture, water conservation and natural pollution control systems

https://youtu.be/lVrSQdwyEjg

4% private investments

USD 18 billion/year

USD 133 billion/year

NbS

- The State of Finance of Nature tracks global trends in public and private investment in nature-based solutions, aiming to improve data quality and identify opportunities for governments, businesses and financiers.

Examples:

Blended-finance examples

- **African Agriculture Fund (AAF)**
- The **African Agriculture Fund** (AAF) is a private equity fund supported by a pool of European and African development finance institutions to make a positive impact on African agriculture and food production.
- The fund reached US$ 246 million in mid-2013. The AAF Technical Assistance Facility (AAF TAF) is funded primarily by the European Commission. It is a grant-based facility that supports capacity building for small and medium sized enterprises (SMEs) invested in by the AAF and its SME sub-fund the AAF SME Fund, aiming to improve linkages between outgrowers, smallholders and the AAF portfolio companies, enhancing rural financing opportunities in communities where the AAF invests.
- **African Agricultural Ca**

- **Alterfin CVBA**
- **Alterfin CVBA** is a Belgium-based financial cooperative, managing a capital of US$ 65 million, channeling funds towards agricultural value chains (for working capital as well as long-term financing purposes). This is primarily done through funding rural microfinance and (with US$ 28 million allocated) small holder agriculture.

- **Beira Agricultural Growth Corridor (BAGC) Catalytic Fund**
- **Beira Agricultural Growth Corridor (BAGC) Catalytic Fund** is a partnership that encourages responsible private investment in commercially viable, early-stage agribusinesses, with direct benefits for many smallholder farmers in Mozambique. The project has two key elements:(1) the BAGC Partnership, a Mozambican not-for-profit membership organization that supports changes at the policy level; and (2) the BAGC Catalytic Fund, a social venture-capital investment vehicle managed by impact investor AgDevCo, which invests in emerging agribusinesses.

Source: https://blending4ag.org/en/media/examples-of-blended-finance.html

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CORPORATE SOCIAL RESPONSIBILITY

Sustainable investments

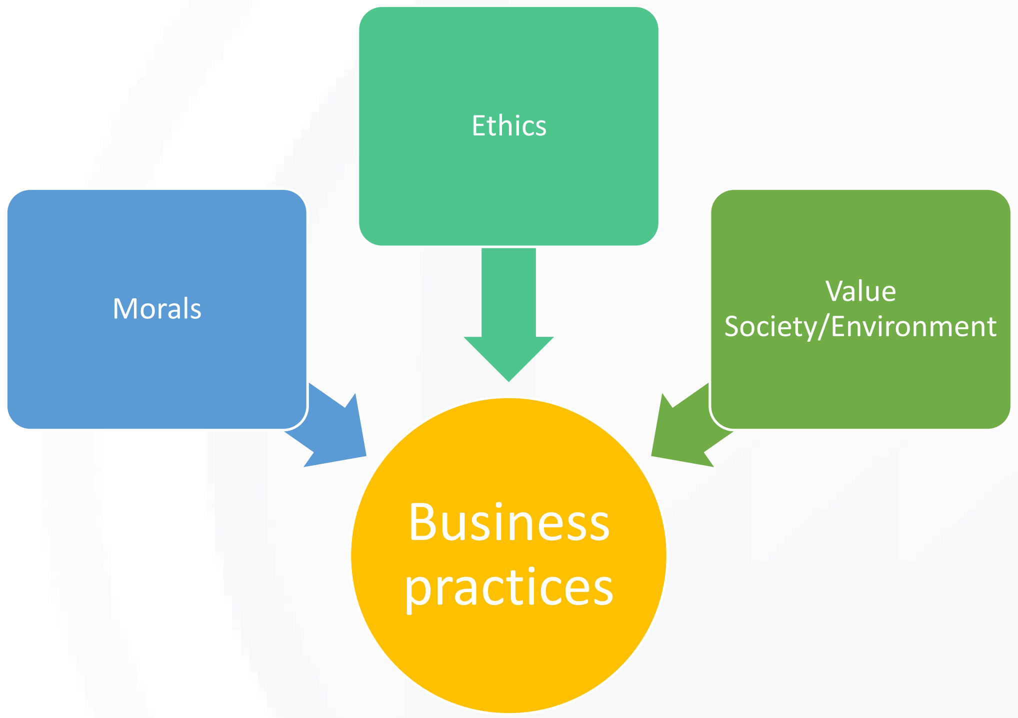
The AquaSPICE project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 958396.

Corporate social responsibility

Sustainable Development Goals

- Corporate Social Responsibility relates to the social and environmental initiatives that an organisation incorporates into its '**business operations and interactions with its stakeholders**' to build a sustainable future.

1. **Environmental** initiatives aim to reduce a business's impact on the environment. For example, organisations may implement strategies to reduce their carbon footprint, use less plastic or decrease their energy consumption.
2. **Philanthropic** responsibility relates to the actions that organisations take to make a positive impact on society, such as donating to charities, fundraising, or supporting local community projects through employee volunteering.
3. **Ethical** CSR is a business's focus on the fair treatment and equality of all its stakeholders. This includes customers, employees, and external companies in the supply chain. Ethical strategies include participating in fairtrade, equal wages, diverse recruitment and offering opportunities to those **who may be struggling to find work**.
4. **Volunteering:** Participating in local causes or volunteering your time (and your staff's time) to community events says a lot about your company's sincerity. When your company does good deeds without expecting anything in return, you express concern (and support) for specific issues and social causes.



CASE STUDIES:

Environmental and social examples

- **LEGO:** The toy company has invested millions of dollars into addressing climate change and reducing waste. LEGO's environmentally conscious efforts include reduced packaging, sustainable materials, and investments in alternative energy.
- **TOMS:** TOMS donates one-third of its net profits to charities that support physical and mental health as well as educational opportunities. During the pandemic, the brand directed all charitable donations to the TOMS COVID-19 Global Giving Fund.
- **Johnson & Johnson:** The brand Johnson & Johnson focuses on reducing its environmental impact by investing in alternative energy sources. Globally, Johnson & Johnson also works to provide clean, safe water to communities.
- **Starbucks:** The global coffee chain has implemented a socially responsible hiring process to diversify its workforce. Its efforts are focused on hiring more veterans, young people looking to start their careers, and refugees.
- **Google:** Google has demonstrated its commitment to the environment by investing in renewable energy sources and sustainable offices. CEO Sundar Pichai is also known to take stands on certain social issues.

Source: Business News Daily, What is Social Responsibility, Available at: https://www.businessnewsdaily.com/4679-corporate-social-responsibility.html

AquaSPICE

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EUROPEAN FINANCING FOR SUSTAINABLE GROWTH

Financial instruments, policies & regulatory framework

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EUROPEAN COMMISSION

ACTION PLAN ON FINANCING SUSTAINABLE GROWTH (EUGBS)

- **Reorienting capital flows towards a more sustainable economy**

1. **Establishing a clear and detailed EU taxonomy, a classification system for sustainable activities;**
2. **Creating an EU Green Bond and labels for green financial products;**
3. **Fostering investment in sustainable projects:** To increase investments in sustainable projects, the Commission connects sustainable finance frameworks and tools with the Sustainable Europe Investment, InvestEU and other relevant EU funds;

- **4.Incorporating sustainability in financial advice**
- In January 2019, the Commission published draft rules on how investment advisers and insurance distributors should take sustainability factors into account when providing advice to their clients;
- 5. **Developing sustainability benchmarks:** In May 2018, the Commission made a proposal for a regulation amending the benchmark regulation

European Commission (2020). Sustainable Europe Investment Plan – European Green Deal Investment Plan. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Brussels. Available at: https://ec.europa.eu/commission/presscorner/api/files/attachment/860462/Commission%20Communication%20on%20the%20European%20Green%20Deal%20Investment%20Plan_EN.pdf

Eu action plan on sustainable finance

PACKAGE OF MEASURES:

i) regulation on the establishment of a framework to facilitate sustainable investment, creating a unified EU classification system ("taxonomy") for environmentally sustainable economic activities;

ii) regulation on disclosures relating to sustainable investments and sustainability risks and amending Directive (EU)2016/2341, incorporating sustainability in institutional investors and asset managers duties;

iii) regulation amending the benchmark regulation, creating benchmarks for low-carbon and positive-carbon impact strategies to inform investors10.

- In line with the Commission's legislative proposals of May 2018, the EC set up the **Technical Expert Group on Sustainable Finance [TEG]** composed of 35 members from civil society, academia, business, and the financial sector, as well as additional members and observers from EU and international public bodies. The TEG began operating in July 201811 to assist and develop the Action Plan, which called for the creation of: **1) an EU taxonomy 2) an EU Green Bond Standard [EU GBS]** and eco-labels for green financial products 3) **methodologies and disclosures for EU climate benchmarks**, and 4) **guidance for corporate disclosure of climate-related information.**

Source: Available at https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance
Available at https://ec.europa.eu/info/publications/sustainable-finance-technical-expert-group

European policies:

EU GREEN DEAL

- https://audiovisual.ec.europa.eu/en/video/I-199819?&lg=EN
- Objectives: the European Green Deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring:
- no net emissions of greenhouse gases by 2050
- economic growth decoupled from resource use
- no person and no place left behind
- The European Green Deal set the blueprint for this transformational change.
- All 27 EU Member States committed to turning the EU into the first climate neutral continent by 2050.
- To get there, they pledged to reduce emissions by at least 55% by 2030, compared to 1990 levels.

- **35 million** buildings could be renovated by 2030
- **0** emissions from new cars by 2035
- **50%** reduction of emissions from vans by 2030
- **-225 Mt**old target
- **55%** reduction of emissions from cars by 2030
- **36-39%** new 2030 energy efficiency targets for final and primary energy consumption
- **1/3** of the world's public climate finance comes from the EU and its Member States
- **-268 Mt** current carbon removals
- **-310 Mt**new target
- **new 2030 energy efficiency targets for final and primary energy consumption**
- **160,000**additional green jobs could be created in the construction sector by 2030
- **30%** of the EU's Neighbourhood, Development and International Cooperation Instrument supports climate objectives
- **40%** new renewable energy target for 2030

Regulatory environment & policies' objective:

- European Climate Law: (Regulation (EU) 2021/1119) sets a new, more ambitious net greenhouse gas emissions reduction target of at least **-55% by 2030**, compared to 1990 levels. The European Climate writes into law the goal set out in the European Green Deal for Europe's economy and society to become climate-neutral by 2050.
  - \- The European Climate Law sets a **legally binding target** of net zero greenhouse gas emissions by 2050. The EU Institutions and the Member States are bound to take the necessary measures at EU and national level to meet the target, taking into account the importance of promoting fairness and solidarity among Member States.
  - Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law')
  - Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1119&from=EN
  - European Commission (COM(2020) 80) final Proposal for a Regulation of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law), Brussels
  - Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020PC0080&from=EN
- European Climate Pact: The European Climate Pact is a movement of people united around a common cause, each taking steps in their own worlds to build a more sustainable Europe. Launched by the European Commission, the Pact is part of the European Green Deal and is helping the EU to meet its goal to become climate-neutral by 2050.
  - Become an ambassador or become a friend of the Pact: https://climate-pact.europa.eu/ambassadors/become-ambassador-or-friend-pact_en

European financial instruments:

The European Green Deal Investment Plan

The European Green Deal Investment Plan will mobilise EU funding and create an enabling framework to facilitate and stimulate the public and private investments needed for the transition to a climate-neutral, green, competitive and inclusive economy. Complementing other initiatives announced under the Green Deal, the Plan is based on three dimensions:

•Financing: mobilising at least €1 trillion of sustainable investments over the next decade. A greater share of spending on climate and environmental action from the EU budget than ever before will crowd in private funding, with a key role to be played by the European Investment Bank.

•Enabling: providing incentives to unlock and redirect public and private investment. The EU will provide tools for investors by putting sustainable finance at the heart of the financial system, and will facilitate sustainable investment by public authorities by encouraging green budgeting and procurement, and by designing ways to facilitate procedures to approve State Aid for just transition regions.

•Practical support: the Commission will provide support to public authorities and project promoters in planning, designing and executing sustainable projects.

- €7.5bn — Just transition fund
- € 45 bn — Just transition scheme under InvestEU
- €25 & €30 bn — **A public sector loan facility with the European Investment Bank backed by the EU budget**

European financial instruments:

European Fund for Strategic Investments- InvestEU

- The EFSI aimed to overcome current market failures by addressing market gaps and mobilising private investment. It will support strategic investments in key areas such as infrastructure, education, research and innovation, as well as risk finance for small businesses.

- The InvestEU programme is a key pillar of the European Union's largest ever stimulus package to recover from the COVID-19 pandemic and to help build green, digital and fair European economy. The InvestEU Programme gives an additional boost to investment, innovation and job creation in Europe over the period 2021-27. It builds on the successful model of the Investment Plan for Europe, the Juncker Plan which mobilised more than €500 billion in the period 2015-20. With the aim of triggering a new wave – more than €372 billion - in investments using an EU budget guarantee

•Small mid-caps
•Small and medium-sized companies
•Social or micro-enterprises
•Private & public sector
The eligible final recipients can be natural or legal persons established in an EU country or in a third eligible country.

What types of projects are eligible for financing?

•Must have high societal and economic value contributing to EU policy objective
•Must attract private capital by addressing market failures.
•Must come on top of existing EIB and EU financing possibilities.
•Must be economically and technically viable.
•Must be consistent with EU state aid rules.

Go to InvestEU Portal

Video projection: https://ec.europa.eu/investeuportal/desktop/en/card-view.html#c,projects=+submitDateStr/asc

EIF for Venture Capital & Private Equity funds :

Financial initiatives under INVESTEU

Equity products- €10bn

Investments in the area of venture capital (including business angels), private equity and private credit (including fund-of-funds and cross-over funds) that pursue generalist, specialised or mixed investment strategies

- Capital Markets Union
- Enabling Sectors
- Climate & Environmental Solutions
- Digital & Cultural and Creative Sectors
- Social Impact

Apply here

Guarantee products- €10bn

The EIF, in its role of a guarantor, provides credit risk protection through portfolio (counter-) guarantees to selected financial intermediaries and shall partly cover the credit risk of eligible debt financing transactions granted to predefined categories of final recipients and included for coverage in the portfolio(s).

- SME Competitiveness
- Sustainability
- Innovation & Digitalisation
- Cultural & Creative
- Micro & Social
- Skills & Education

More info here

Invest Climate & Infrastructure Product

Climate and Infrastructure Funds

- The Climate and Infrastructure Funds will provide equity investments to, or alongside, climate & infrastructure funds investing in one or more of the six Thematic Strategies:

Social infrastructure

- Health and care facilities
- Social services, including at community-based level
- Educational and training infrastructure, including schools, training facilities and digital equipment
- Affordable social housing
- Enabling services related to the above

Clean Energy Transition & Climate

- Renewable energy generation, transmission, distribution and storage
- Storage and hybrids renewables
- Renewable infrastructure exposed to demand and price risk
- Energy efficiency
- Cross-border energy infrastructure / projects of common interest (PCIs)
- Projects that support the decarbonisation of and substantial reduction of emissions of energy-intensive industries

Sustainable transport

- General transport infrastructure
- Cleaner, Safe and Smart Mobility
- The development of the trans-European transport network (TEN-T

Environment & Resources

- Natural capital and circular economy infrastructure
- Bioeconomy

Digital connectivity & data infrastructure

- Digital connectivity
- Data Infrastructure
- Online platforms & Media infrastructure

Space infrastructure

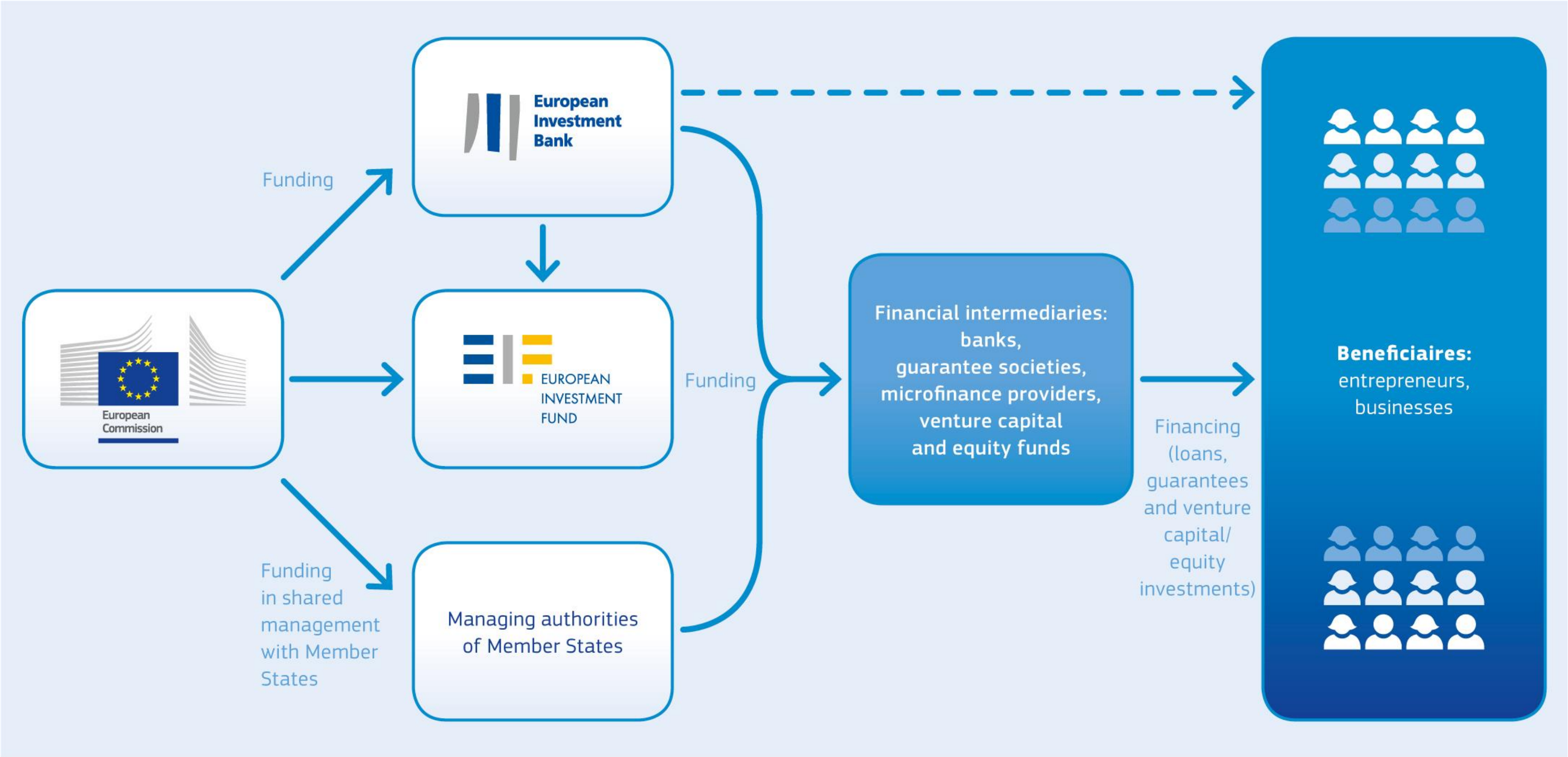
- Development, upgrade and greening of new and existing space and ground infrastructure
- Solutions for spacecraft de-orbiting and de-commissioning.

Apply here

European Progress Microfinance Facility

Employment & Social Innovation

- Microfinance providers act as EIF's intermediaries and provide micro-credit (loans below EUR 25.000) to (future) entrepreneurs and micro-enterprises with fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million.
- Microfinance providers by country: https://europa.eu/youreurope/business/finance-funding/getting-funding/access-finance/
- The decision to provide EU financing will be made by the local financial institutions such as banks, venture capitalists or angel investors. Thanks to the EU support the local financial institutions can provide additional financing to businesses.



Video projection: https://audiovisual.ec.europa.eu/en/video/I-126912?&lg=EN

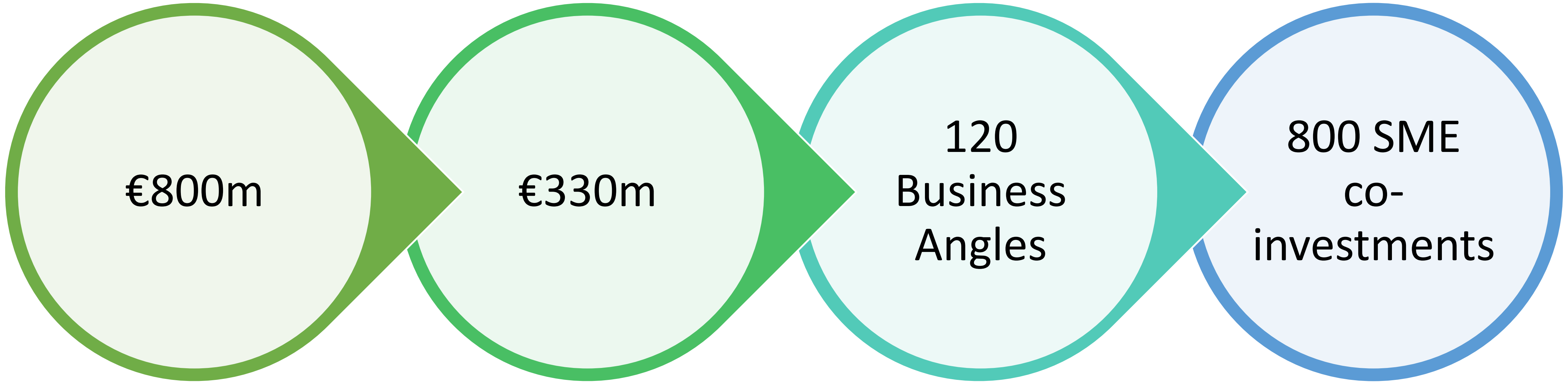
90% of European enterprises considered micro-enterprises

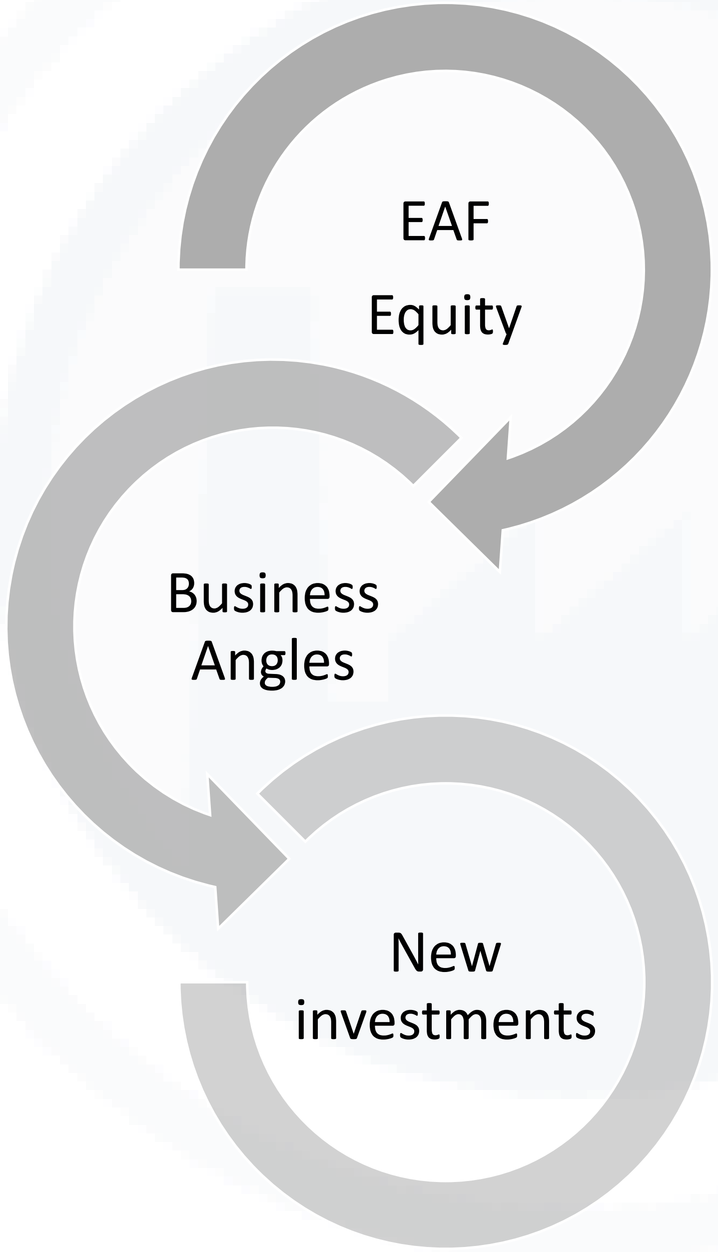
For micro-credit providers:

- provides to microcredit providers an institutional assessment or a microfinance institutional rating
- offers targeted capacity building through tailored trainings
- organises workshops, seminars and exchange visits between microcredit providers
- operates a dedicated helpdesk

European angels fund

- **A business angel is a private individual, often with a high net-worth, and usually with business experience, who directly invests part of their assets in new and growing private businesses. Business angels can invest individually or as part of a syndicate where one angel typically takes the lead role.**





COSME - Equity Facility for Growth (EFG)

- The Equity Facility for Growth (EFG) is a window of the Single EU Equity Financial Instrument which supports EU enterprises' growth and research and innovation (R&I) from the early stage, including seed, up to expansion and growth stage.
- EFG – managed by EIF – is part of COSME (Programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises), an initiative launched by the European Commission.

Through COSME EFG, EIF invests in selected funds – acting as EIF's financial intermediaries – that provide venture capital and mezzanine finance to expansion and growth stage SMEs, in particular those operating across borders. The fund managers will operate on a commercial basis, to ensure that investments are focused on SMEs with the greatest growth potential.

For SMEs:
Are you looking for equity finance? Download here the list of financial intermediaries currently operating under COSME EFG. For information about finance available under further EU initiatives, please visit http://europa.eu/youreurope/business/funding-grants/access-to-finance/

Horizon europe

What is Horizon Europe?

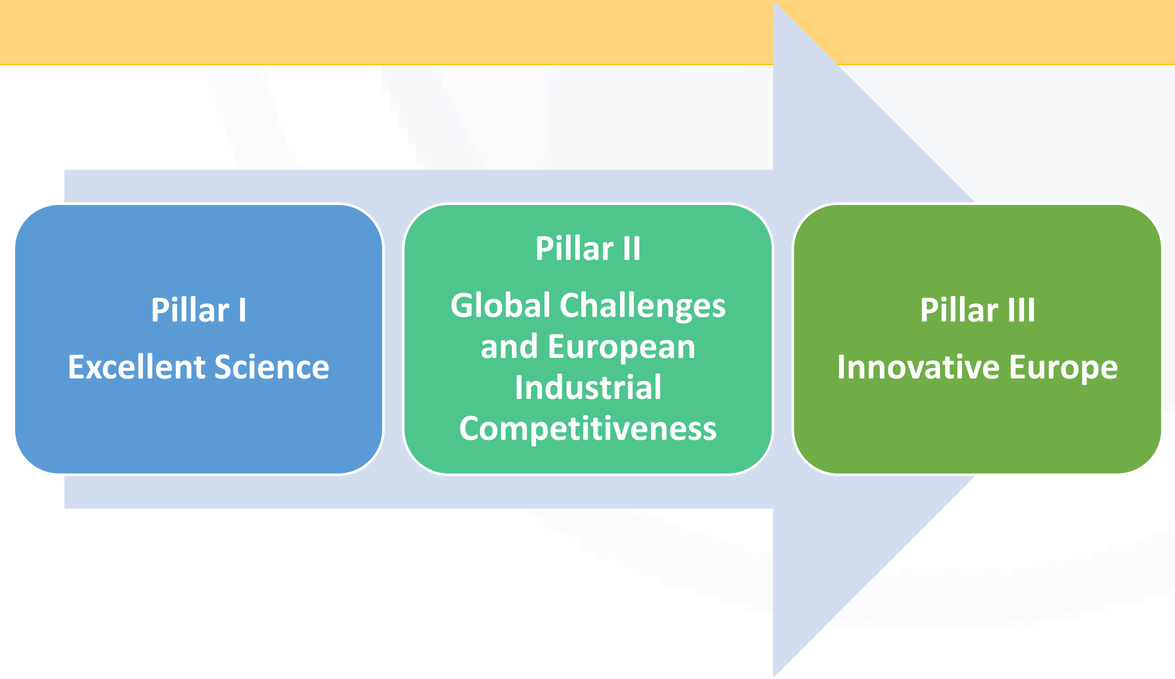
- **What is Horizon Europe?**

- Horizon Europe is the EU's key funding programme for research and innovation with a budget of €95.5 billion.

- It tackles climate change, helps to achieve the UN's Sustainable Development Goals and boosts the EU's competitiveness and growth.

- The programme facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges. It supports creating and better dispersing of excellent knowledge and technologies.

- Funding and tender opportunities



InnovFin Equity

- InnovFin Equity provides equity investments and co-investments to or alongside investment funds, focusing on companies in their early stages of development, operating in innovative sectors covered by Horizon 2020. The aim is to develop an extensive portfolio of funds, mobilising EUR 4-5bn of investments in businesses established or active in the EU and Horizon 2020 Associated Countries.
- Under InnovFin Equity, the EIF targets investments in:

- **technology transfer** funds whose strategy focuses on pre-seed (including proof of concept) and seed stages,
- funds pooled by **business angels** or **business angel co-investment funds** investing into innovative early-stage enterprises and social enterprises, and
- **venture capital funds** that provide funding to enterprises, including social enterprises, in their early stage and operating in Horizon 2020 sectors.

RESOURCES

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