

ELS Europe Ltd.

Translating necessary investments into financial value and developing investment-grade business cases

29 October 2026

www.elseurope.eu
dawn.slevin@elseurope.eu

Environmental Liability Solutions Europe Ltd.

Sustainable Finance and Risk Management Solutions



Mainstreaming Sustainable Processes & Technologies

Sustainable Investment Solutions

Strategic Risk Management & Innovation

Data & Disclosure

Training, Knowledge Exchange & Stakeholder Consultation

www.elseurope.eu

Investment Grade Geothermal Business Models

Business Model 01

Ownership & Risk Management 02

Innovative Sustainable Finance 03

Market Examples 04



Design Stage: Key steps to explore and frame business models, identify stakeholders, IRO* and finance options

*Impacts, risks and opportunities

Geothermal Opportunities

What are the unique opportunities considering that geothermal energy:

- Is not dependent on weather conditions.
- Is climate resilient with “low” hazard ranking. Gas based district heating, and other renewables solar, hydro, wind which present “moderate” hazard ranking.
- Provides complementary architectures. Can be integrated with other renewable energy sources such as solar and bioenergy.
- Has very low operation & maintenance (O&M) costs. Climate resilience contributes to Geothermal H&C’s very low operation & maintenance (O&M) costs.

Innovative Financing

May include:

- Insurance schemes to de-risk geothermal by compensating investors for unproductive wells/declining productivity.
- Direct funding from public sector and through assistance programmes/grants to help with project viability, develop district infrastructure and assess renewable energy options.
- Crowd-funding for community projects.

We will discuss:

- Public or Private finance, for example through EU Taxonomy alignment, EU Green Bond issuance such as may be raised by the municipality or energy service companies (ESCOs).

Sustainable Finance

EU Taxonomy

- Is a voluntarily market transparency tool.
- Is a classification system to help companies and investors identify “environmentally sustainable” economic activities and to make sustainable investment decisions.
- Is used to define an “environmentally sustainable investment”.
- Comprises the Taxonomy Regulation and its Annexes which define environmentally sustainable activities using “technical screening criteria” (“TSC”).
- Is undergoing amendment through the “Omnibus Proposal”.
- It is dynamic – meaning the targets are to be evaluated and strengthened in line with EU sector specific targets.
- Under the Corporate Sustainability Reporting Directive large companies have to report to what extent their activities are covered.

Sustainable Finance

EU Green Bond
“EU GB”

- EU Green Bonds are regulated financial instruments with rigorous transparency requirements (EU Green Bond Regulation).
- Co-exists with the EU Taxonomy and other standards within the EU’s sustainable finance framework.
- Is a way to raise funding for environmentally sustainable projects.
- The use of proceeds must be aligned with the EU Taxonomy.
- Issuers and external reviewers have rigorous transparency requirements.
- Issuers may apply both the EU GB and the ICMA green bond standards.
- Fines and Penalties for non-compliance, false statements and other infringements are in place.

Business Use Cases

Business use cases with economic activities eligible under the EU Taxonomy climate change mitigation and climate change adaptation Annexes include:

4.6 Electricity generation from geothermal energy

4.16 Installation and operation of electric heat pumps

4.18 Cogeneration of heat/cool and power from geothermal energy

4.22 Production of heat/cool from geothermal energy

*Cogeneration is defined in Article 2 point 30 of the Energy Efficiency Directive 2012/27/EU as: "*the simultaneous generation in one process of thermal energy and electrical or mechanical energy*"

Climate Objectives

Macrosector	No.	Activity	SC Type	Description
Energy	CCM 4.18 CCA 4.18	Cogeneration of heat/cool and power from geothermal energy	Own Performance	**Construction and operation** of facilities co-generating heat/cool and power from geothermal energy.
Energy	CCM 4.22 CCA 4.22	Production of heat/cool from geothermal energy	Own Performance	**Construction or operation** of facilities that produce heat/cool from geothermal energy.

Notes

CCM = climate change mitigation

CCA = climate change adaptation

To be considered aligned the economic activity must meet the substantial contribution and do no significant harm (DNSH) technical screening criteria and adhere to minimum social safeguards

SC to Climate Change Mitigation

No.	Activity	SC Criteria
CCM 4.18	Cogeneration of heat/cool and power from geothermal energy	The life-cycle GHG emissions from the combined generation of heat/cool and power from geothermal energy **are lower than 100 g CO2e per 1 kWh of energy output from the combined generation**.
CCM 4.22	Production of heat/cool from geothermal energy	The life-cycle GHG emissions from the generation of heat/cool **from geothermal energy are lower than 100 g CO2e/kWh.**

Other SC Criteria for both economic activities include:

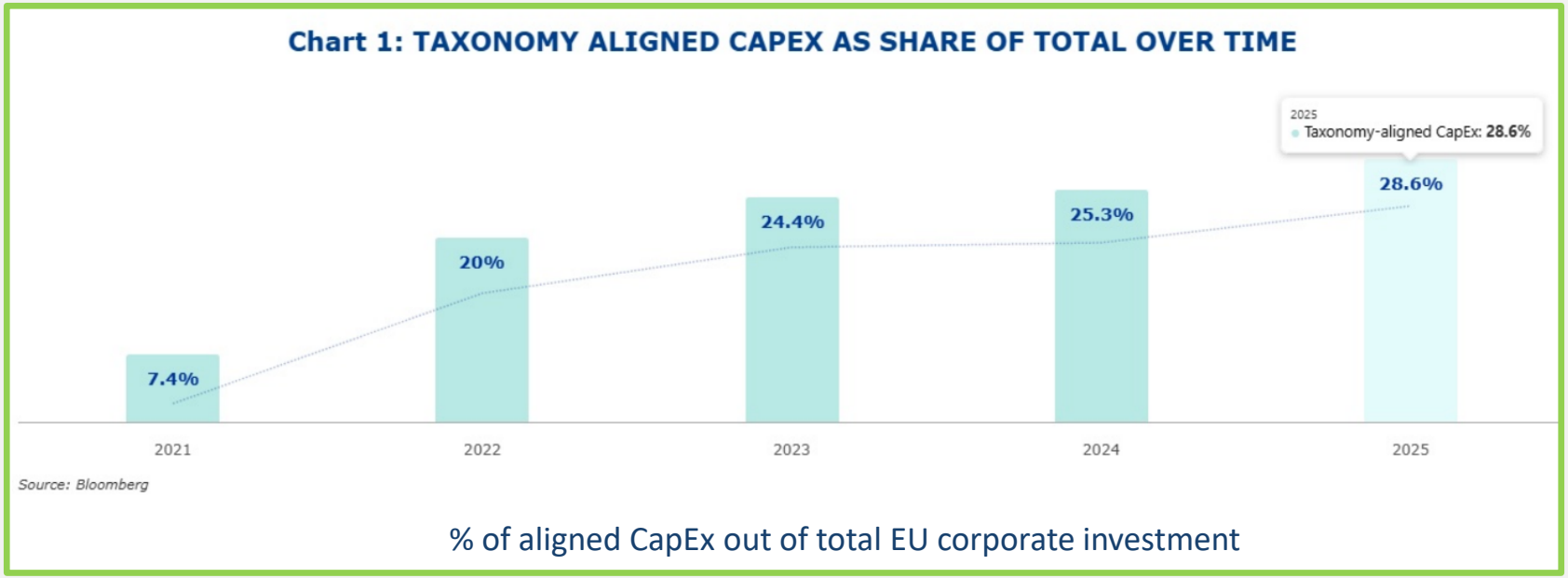
- Life-cycle GHG emissions are calculated based on project-specific data, where available, using 2013/179/EU or, alternatively, using ISO 14067:2018 or ISO 14064-1:2018.

- Quantified life-cycle GHG emissions are verified by an independent third party.

Capital Markets

In 2025,

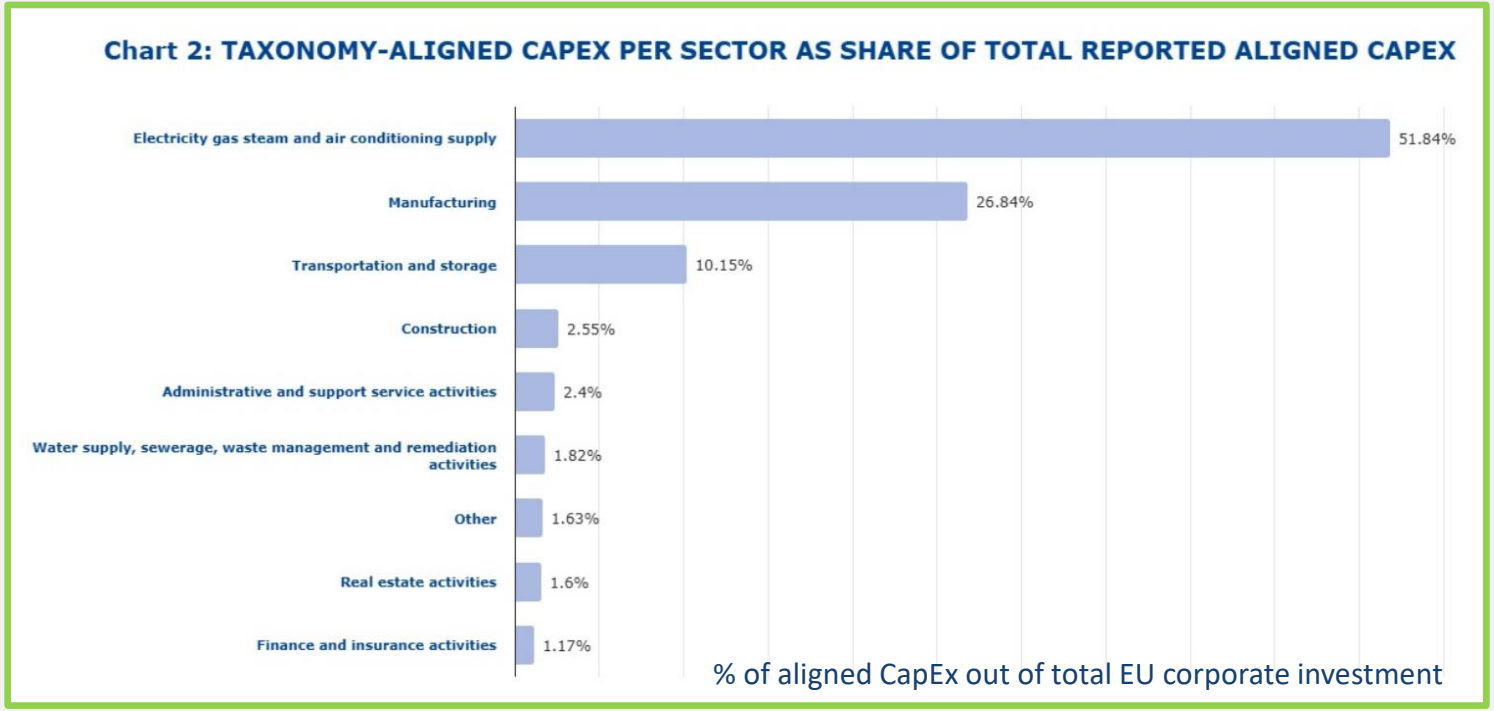
- Taxonomy-aligned turnover reached almost €1 trillion, corresponding to 14.5% of the total turnover of reporting companies
- Capital investments into Taxonomy-aligned activities amounted to €323.8 billion.
- The cumulative reported value was €1.224 trillion since 2021.



% of aligned CapEx out of total EU corporate investment

Capital Markets

- The highest investments were made in the utilities sector (51.8%), followed by manufacturing (26.8%) and transportation and storage sectors (10.2%).



Capital Markets

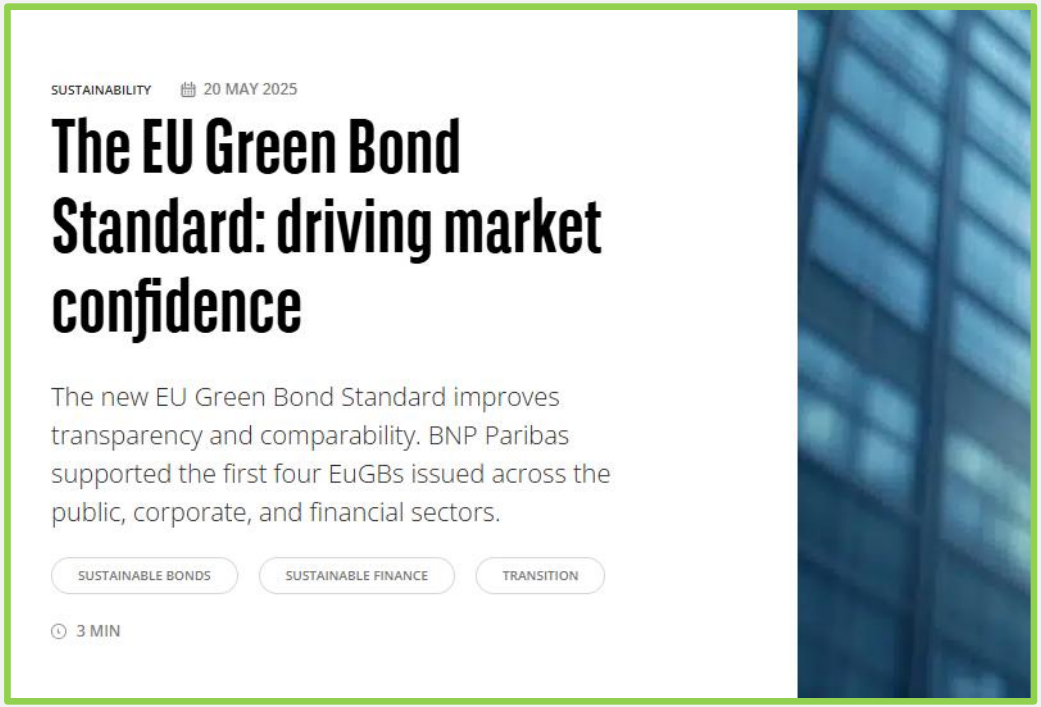
- By the end of 2025, EU GB issuance reached **€21 billion eq.** followed by a further **€39 billion** in 2026.
- Total issuance since the EU GB standard's application to September 2026 is around **€60 billion.**
- This represents 15% of the EU Green Bond Market.



Chart 4: Distribution of activities used in the EuGB market by environmental objective

Capital Markets

- EU GB Issuer diversification has been strong.
- Corporates account for 51% of EuGB issuance volume,
- Banks for 31%, and
- Sovereign, supranational and agency (SSA) issuers for 18%.



EU GB - Iberdrola

Project Example	A Spanish multinational electric utility company and one of world's largest renewable energy providers
Value (€)	3 EUGB Tranches Issued in 2026 totaling €2.1 billion – Oversubscribed 3x
Duration (yrs)	4-10 years (2030-2036)
Sector(s)	Renewable energy (4.1, 4.3), electricity transmission (4.9)
Finance Objectives	Iberdrola has a robust climate action plan backed by targets aligned with the 1.5 Celsius (C) scenario. As part of its climate action plan, it commits to reduce absolute scope 1, 2, and 3 emissions by 65% by 2030 and by 90% before 2040 against a 2020 baseline. The eligible green projects pursue the EU environmental objectives of Climate Change Mitigation including network investments in core markets + refinance selected renewables (4.1 solar PV Spain, 4.3 wind Spain, 4.9 T&D UK)
Use of Proceeds (Gradual Approach)	Iberdrola intends to allocate an amount equivalent to the EUGB proceeds in accordance with the gradual approach, referred in Article 4 of the European Green Bond Regulation, and before maturity proceeds shall be allocated in accordance with EU Taxonomy Regulation requirements. An amount equal to 100% of proceeds will be allocated to economic activities that are environmentally sustainable under Article 3 of the EU Taxonomy Regulation.

EU GB - Terna

Project Example	An Italian electricity company that operates as Italy's electricity transmission system operator (TSO)
Value (€)	€750 million – Oversubscribed 5x
Duration (yrs)	6 (2031)
Sector(s)	Transmission and distribution of electricity
Finance Objectives	Terna aims at issuing multiple EuGBs and use the proceeds to finance and refinance, in whole or in part, existing and future projects, including the development of sustainable infrastructure and the advancement of Italy's decarbonization goals. The eligible green projects pursue the EU environmental objectives of Climate Change Mitigation as referred to in Article 9 of Regulation (EU) 2020/852, they are all related to Climate Delegated Act '4.9 Electricity transmission and distribution activities.
Use of Proceeds (Gradual Approach)	Terna intends to allocate an amount equivalent to the EUGB proceeds in accordance with the gradual approach, referred in Article 4 of the European Green Bond Regulation, and before maturity proceeds shall be allocated in accordance with EU Taxonomy Regulation requirements. An amount equal to 100% of proceeds will be allocated to economic activities that are environmentally sustainable under Article 3 of the EU Taxonomy Regulation, being - Transmission and distribution of electricity (as classified in Commission Delegated Regulation (EU) 2021/2139).

EU GB - Covivio

Project Example	European real estate company that develops, lets and operates offices, hotels, and residential properties.
Value (€)	€500 million – Oversubscribed 4x
Duration (yrs)	9 (2034)
Sector(s)	Real Estate – Property Development & Management
Country	France

COVIVIO
Living real estate



Finance Objectives	Covivio's activities are contributing to the environmental objectives of the European Taxonomy, notably on Climate Change Mitigation and Climate Change Adaptation. With a portfolio of €23.1 bn, the Group is active in the transition towards a more responsible and sustainable construction sector.
Use of Proceeds (Portfolio Approach)	The proceeds of the EuGBs will be allocated based on a portfolio approach, meaning that an amount equivalent to the proceeds of EuGBs will be earmarked for allocation to the Eligible EuGB Portfolio. 100% of the proceeds of the EuGBs will be allocated to the acquisition and ownership of buildings. As Covivio S.A. will allocate the proceeds of the EuGBs to a portfolio of fixed assets, **no CapEx plan** is to be disclosed in accordance with Article 7 of the EuGB Regulation.

MAIL US

CONTACT US

Dawn Slevin, Managing Director

E-mail: dawn.slevin@elseurope.eu

Telephone: 353(0) 86 389 5068



Limitations, Restricted Use and Disclaimer

This Document including tables, diagrams, notes, texts, illustrations, graphics, files, arrangements, and any other accompanying material (referred to collectively as “this Document” has been prepared by ELS Europe at the request of Energy Institute Hrvoje Poľar (EIHP), Croatia’s Department for Energy Generation and Energy Markets, for the GreetGeo Conference (referred to herein as the “EIHP”).

This Document does not intend to give specific legal or commercial advice, nor is it intended for any other purpose. The information in this Document is abbreviated and summarised and is not to be relied upon for reporting.

The materials contained in this Document are the property of ELS Europe, and the use of these materials by any entity or person is strictly prohibited. ELS Europe does not permit the sharing of the material contained in this Document with third persons. The material provided in this Document shall not be modified, republished, or posted unless ELS Europe’s written consent is first obtained.

ELS Europe makes no representations or warranties (expressly disclaims) of any kind, express or implied with respect to this Document, including the information, content, and materials of this Document.

ELS Europe is not responsible for the content of websites and information resources that may be referenced in this Document. The access provided to these sites or the provision of such information resources does not constitute an endorsement by ELS Europe of the information contained therein.

ELS Europe hereby confirms that during the preparation of this document, the duty of care has been taken. Although great care has been taken by ELS Europe as to what is contained in this Document, no attempt has been made to give definitive or exhaustive statements of law or any opinions on specific legal or regulatory issues and no representation is made or warranty given that the information is complete or accurate. Furthermore, the applicable laws and regulations may change over time. As more legislation and regulatory guidelines are issued or updated, the accuracy of the information contained in this Document may be outdated or include omissions, inaccuracies, or other errors.

This Document does not constitute or offer legal, regulatory, tax or other advice and users of this Document should not rely on it as such advice. ELS Europe does not accept any liability to any user of this Document who relies on the content of this Document. Anyone requiring advice on any of the matters referred to herein should consult lawyers or other professionals familiar with the appropriate jurisdiction and legislation.

To the extent permitted by law, ELS Europe nor our respective employees, agents, service providers or professional advisers assumes any liability or responsibility for, or owes any duty of care for, any consequences of any person accessing, using, acting, or refraining to act in reliance on the information contained in this Document. ELS Europe shall not be liable to any person for any loss or damages (including, for example, damages for loss of business or loss of profits) arising in contract, tort, or otherwise from the access or use of (or inability to use) this Document.

While ELS Europe has endeavored to ensure that the information contained in this Document has been obtained from reliable and up-to-date sources, the changing nature of statistics, laws, rules and regulations may result in delays, omissions or inaccuracies in information contained in this Document. Whilst every effort has been taken to ensure the accuracy of the information in this Document, ELS Europe makes no representation and/or warranty express or implied that the information is correct, complete, or up to date. The information is subject to change at any time without notice. You should not take (or refrain from taking) any action in reliance on the information and we will not be liable for any loss or damage of any kind (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly as a result of such action or any decision taken.