



INSTITUTE OF ENERGY  
FOR SOUTH-EAST EUROPE

# Green Bonds and IENE



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FOR SOUTH-EAST EUROPE

# GREEN BONDS



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## GREEN BONDS AND IENE

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## Preface

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As of January 2021, IENE became the first organisation in Greece and SE Europe to be granted Approved Verifier status under the Climate Bond Standard. This is a significant milestone in the development of Green Bond markets in SE Europe.

As an Approved Verifier, IENE is in a position to assess project eligibility against the solar, wind, biomass, geothermal, energy efficiency, cogeneration and low carbon buildings criteria under the Climate Bonds Standard for green bond issuance. Verification services will be provided across all low carbon energy sectors for pre-issuance and post-issuance assurance.

### 1. What is a Green Bond (and How Does it Differ from an Ordinary Bond)?

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A green bond is a debt security that is issued to raise capital specifically to support climate-related or environmental projects. This specific use of the funds raised - to support the financing of specific projects - distinguishes green bonds from regular bonds. Thus, in addition to evaluating the standard financial characteristics (such as maturity, coupon, price, and credit quality of the issuer), investors also assess the specific environmental purpose of the projects that the bonds intend to support.

Green bonds are used solely for environmental goals, while sustainable bonds combine both environmental and social objectives. There are also social bonds, whose proceeds are dedicated to projects aimed at improving social welfare or helping disadvantaged populations. The range of socially conscious instruments keeps growing as more investors look to do good while making money, and regulators look to the instruments to influence policy and investment decisions. There are now loans linked to specific environmental, social or governance targets, which give companies an incentive to achieve what they say they will. And in October 2018, the Seychelles sold the world's first sovereign blue bond<sup>1</sup>, debt issued to finance marine and ocean-based projects that have positive environmental, economic and climate benefits.

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<sup>1</sup> World Bank (2019), "Seychelles launches World's First Sovereign Blue Bond", <https://www.worldbank.org/en/news/press-release/2018/10/29/seychelles-launches-worlds-first-sovereign-blue-bond>

Someone may wonder how green are green bonds. In its analysis<sup>2</sup>, Oslo-based Cicero uses three shades of green:

- dark green for things that will lower carbon emissions in the long run like wind energy
- medium green for things that take a good step forward such as plug-in hybrid buses
- light green for environmentally friendly steps that won't change the long-term outlook on their own, such as more efficient fossil-fuel infrastructure

Green bonds can be **issued** by central and local government, banks or corporations. The green bond label can be applied to any debt format, including private placement, securitisation, covered bond, as well as labelled green loans which comply with the Green Bond Principles (GBP<sup>3</sup>) or the Green Loan Principles (GLP<sup>4</sup>).

More specifically, issuers from more than 50 countries have sold green bonds including supranational institutions such as the World Bank and the EU's European Investment Bank. Companies are also in the market, along with local, state and national governments. The first emerging-market green bond was issued in South Africa in 2012. Poland opened the sovereign market in 2016, followed by the likes of France, Belgium and Ireland. The US is the largest source overall, led by the mortgage giant Fannie Mae and local governments selling notes to finance infrastructure such as sewerage upgrades.

The **buyers** of green bonds include institutional investors such as pension funds, insurance companies and asset managers. The overall green market is also getting a boost from investors seeking "responsible" or "sustainable" places to put their money. That has helped Europe's listed green funds double assets under management since 2013 to more than €32 billion in 2017, according to Novethic<sup>5</sup>, a sustainable finance data provider. In 2015, France became the first country to require institutional investors to report how they consider environmental

<sup>2</sup> CICERO (2015), "CICERO Shades of Green", <https://www.cicero.oslo.no/en/posts/single/cicero-shades-of-green>

<sup>3</sup> International Capital Market Association (2019), "Green Bond Principles (GBP)", <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

<sup>4</sup> Loan Market Association (2018), "Green Loan Principles", [https://www.lma.eu.com/application/files/9115/4452/5458/741\\_LM\\_Green\\_Loan\\_Principles\\_Booklet\\_V8.pdf](https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf)

<sup>5</sup> Novethic (2018), "The European Green Funds Market 2018", [https://www.novethic.com/fileadmin/user\\_upload/tx\\_ausynovethicetudes/pdf\\_complets/Novethic\\_2018\\_European-Green-Funds-Market\\_SustainableFinance.pdf](https://www.novethic.com/fileadmin/user_upload/tx_ausynovethicetudes/pdf_complets/Novethic_2018_European-Green-Funds-Market_SustainableFinance.pdf)

factors. The EU is likely to encourage asset managers across the bloc to integrate sustainability requirements into investment decisions as part of its work on the Green Bond Standard.

## 2. Global Green Bond Activity (2019 and 2020)

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### **2019 Global Green Bond Market Overview**

Based on annual figures provided by Climate Bonds Initiative<sup>6</sup>, global green bond issuance reached \$258.9bn in 2019, increased by 51%, compared to 2018 levels of \$171.2bn. Issuance from eight new countries emerged in 2019 – Barbados, Ecuador, Greece, Kenya, Panama, Russia, Saudi Arabia, Ukraine – with a combined issuance of \$3.1bn. This takes the total number of countries with green bonds issued to 62 (excluding Supranational).

Meanwhile, 291 debut green bond issuers (i.e. had not issued before 2019) accounted for \$88bn of issuance, or 34% of the global 2019 market. 37% of debut issuer volume was attributed to non-financial corporates and 25% to financial corporates. Sovereigns and loans followed, respectively with 11% and 9%. The largest debut issuer was the Dutch State Treasury Agency, issuing the Netherlands' first green sovereign, a Climate Bonds Certified transaction to the value of \$6.7bn. 40 of the 291 debut issuers, accounting for \$17bn in volume, came to market more than once in 2019. The largest in this group was the Republic of Chile with two deals totaling \$2.4bn, one in USD and the other in EUR – the first sovereign from Latin America has already returned to market with multiple deals in 2020. LG Chem and Citigroup were respectively the second and third largest.

\$171bn was issued by 215 repeat issuers (i.e. that had issued before 2019). This volume was evenly distributed across issuer types. Financial corporates (19%) and non-financial corporates (18%) remained top but were closely followed by government-backed entities (17%), ABS (15%) and development banks (14%). Repeat sovereign issuance contributed 9%, largely as a result of France tapping its French Green OAT three times for a total of €5.9bn; however, Belgium stood out as the most frequent sovereign issuer, with six taps (€2.4bn). Further, 132 entities issued multiple deals in 2019 (i.e. repeat within the year), mostly

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<sup>6</sup> The Climate Bonds Initiative is an international investor-focused not-for-profit organisation working to mobilise the \$100tn bond market for climate change solutions. The mission is to help drive down the cost of capital for large-scale climate and infrastructure projects and to support governments seeking increased capital markets investment to meet climate goals.

previous issuers but also several market debuts as mentioned above. 21 entities issued five or more deals during the year, contributing 28% of the total volume.

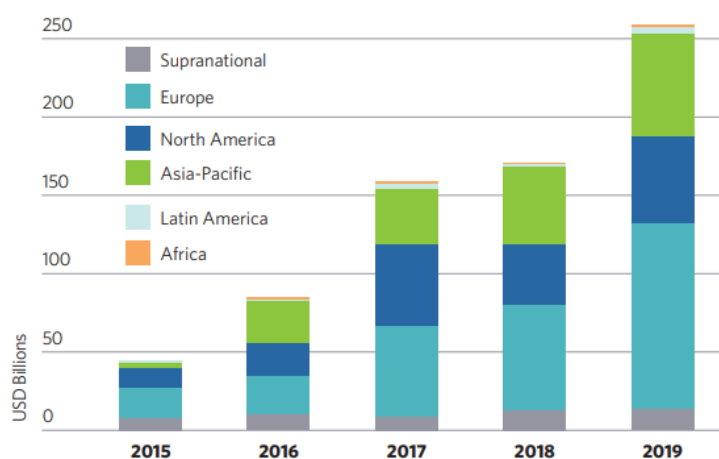
### Regions and Countries

#### ***All Regions Showed Increased Volume of Green Bonds Activity***

2019 was the first year since 2016 in which all regions (including supranational) increased volumes. Not only this, but the changes were considerable everywhere. The same is true looking at issuers and deals if Fannie Mae is excluded (slight dip in North America's deal count otherwise).

Europe experienced the largest increase, with an added \$50bn vs. 2018 representing 57% of the global expansion. All European issuer types, apart from loans and ABS, reached their highest level yet, with non-financial corporates, government-backed entities and development banks standing out as particularly strong (resp. 2x, 2.5x and 5x increase). This extends Europe's regional lead in cumulative volumes to over \$100bn more than North America and Asia-Pacific, which are respectively in second and third place.

**Figure 1 – Issuance by Region: Europe Drives 2019 Growth**



Note: Latin America includes Mexico.

Source: Climate Bonds Initiative

For the first time ever, 2019 saw Asia-Pacific achieve the second-highest regional volume in consecutive years (previously 2018 and 2016), with corporates accounting for almost 60% of this. Even so, APAC's 29% increase was smaller than North America's 46%, so the difference between the two regions was smaller in 2019 than 2018. By number of issuers, APAC is

comfortably the regional leader, having added another 126 issuers during 2019 (half of the total new issuer count). Japan was a key contributor to this, adding 22 issuers.

Elsewhere, Latin America and Africa both had their best years yet, respectively rising threefold to \$4.7bn and six-fold to \$898m (vs. 2018). Latin America's increase was driven by the Republic of Chile issuing the first sovereign deals from the region as well as continued strength from non-financial corporates (3x increase), while more than half of Africa's volume stemmed from Redstone Solar's ZAR8bn (\$567m) Certified green loan.

**Table 1 – Cumulative Green Bond Issuance by Region**

Region	Green bond markets	Issuers	Amount issued (USDbn)	Change 2018-19 (amount)
Europe	25	269	307.4	74% +
North America	2	167	190.4	46% +
Asia-Pacific	18	345	183.6	29% +
Supranational	-	11	79.4	9% +
Latin America	11	47	12.9	216% +
Africa	6	16	2.7	495% +

Source: Climate Bonds Initiative

### ***Supranational***

Supranational entities also reached a record figure – \$13.8bn, 9% higher than in 2018 – despite there being no new issuers. As well as this, however, multilateral development banks (MDBs) have remained important supporters of emerging market (EM) issuance by investing in and helping to structure debut green bond deals.

In addition to the usual support provided by large MDBs, such as the World Bank, IFC and EIB, smaller regional development banks have also stepped up their involvement. In Latin America, for example, the Inter-American Development Bank (IDB) has subscribed, in whole or in part, to multiple deals – e.g. Ecuador's first, by Banco Pichincha – while also helping new issuers come to market, most notably the Republic of Chile with its inaugural sovereign green bond programme.

The IDB is also developing a Green Bond Transparency Platform for Latin American green bonds. It will be publicly available (open access) and feature disclosure of all documents and information pertaining to the green bonds. In Asia, the Asian Development Bank (ADB) is a



frequent issuer of green bonds (\$2.4bn from 11 deals in 2019) and increasingly provides support to issuers. For example, after fully subscribing to B.Grimm Power's Certified deal in December 2018, including funding the Certification itself, in 2019 the bank invested in another deal by a Thai issuer: AC Energy. The ADB is also helping to develop the market in other ways, for instance launching an Action Plan for Healthy Oceans in early 2019 through which it will expand investments and technical assistance for the blue economy by \$5bn between 2019 and 2024.

Overall, the share of developed markets (DM) grew from 69% in 2018 to 72% in 2019, with that of EM falling slightly from 24% to 23%. Supranationals experienced the largest drop, from 7% to 5%.

### ***France, Germany & Netherlands Prominent***

Among the top 10 issuer domiciles, the top three remained the same in 2019: USA, China, and France. The USA's increase was substantial, rising \$15.8bn, or 44%, with Fannie Mae (FM) included. Excluding FM, the USA experienced an even larger expansion of 85%, taking the volume to \$28.5bn (from 137 deals). France, however, saw the largest increase of any country, more than doubling in amount issued to \$30.1bn (\$14.1bn in 2018), only \$1.2bn below that of China. Supported by policy, France has the widest pool of large issuers by some margin, with the Republic of France (\$6.6bn), SNCF (\$4.3bn), Engie (\$3.8bn), Société du Grand Paris (\$3.6bn) and Crédit Agricole (\$2.6bn) all contributing more than \$2bn.

Other European countries also saw large jumps in volume. In Germany, issuance rose 144% to \$18.7bn, while in the Netherlands a 105% increase took it to \$15.1bn. Like France, both Germany and the Netherlands feature large issuers; the top two in each country – KfW and LBBW, and the Dutch State Treasury and TenneT Holdings – make up around 60% of respective volumes. Overall, European markets tend to have the largest issuers. Sweden and Canada remained in the top 10 but ranked higher, while Japan and Italy were new entrants and Spain dropped to 10<sup>th</sup> place. However, all of these managed to increase volumes in 2019.

**Table 2 – Top 10 Issuer Domiciles 2019**

Country	Issuers	Deals	Amount issued (USDbn)	2018-19 change (amount)
1 USA	105	1,128	51.3	44% +
2 China	79	99	31.3	1% +
3 France	19	54	30.1	113% +
4 Germany	12	25	18.7	144% +
5 Netherlands	15	17	15.1	105% +
6 Sweden	40	106	10.3	66% +
7 Japan	47	66	7.2	73% +
8 Canada	14	17	7.0	63% +
9 Italy	10	11	6.8	128% +
10 Spain	11	17	6.5	3% +
<b>Top 10 total</b>	<b>352</b>	<b>1,540</b>	<b>184.3</b>	<b>49% +</b>
<b>Top 10 %</b>	<b>69.6%</b>	<b>85.5%</b>	<b>71.2%</b>	<b>-0.9% -</b>

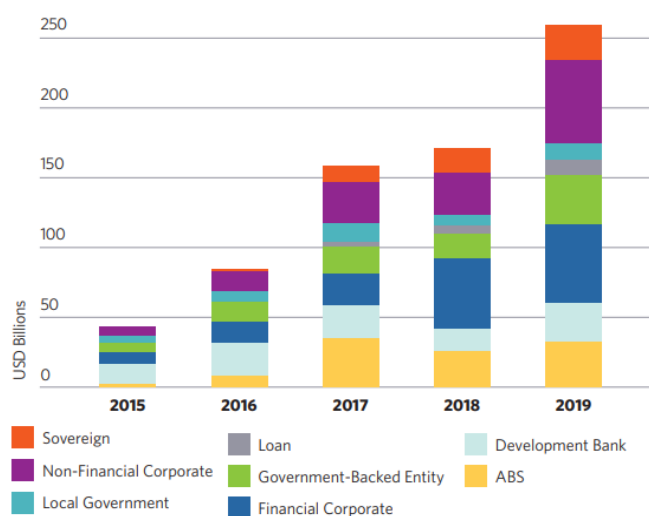
Source: Climate Bonds Initiative

### ***Non-financial Corporates Fuel Growth***

Like with regions, all issuer types experienced volume increases in 2019. The same is true by number of issuers and deals, apart from a small drop in ABS deal count due to less prolific issuance by FM. Within private sector issuance, non-financial corporates performed particularly well, topping the issuer type ranking for the first time. Their issuance more than doubled to \$59.1bn, overtaking financial corporates which only increased 12%, the least of all issuer types. This is a “reversal” of 2018, which saw financial corporates more than double in volume while non-financials stagnated.

Green loans were the second-largest movers in 2019, posting 98% growth. A total of 39 green loans were recorded during the year, the largest being a \$2.7bn Certified deal by debut Noor Energy 1 to finance a 950 MW solar plant in Dubai. Public sector issuance also rose robustly, with all issuer types apart from local governments reaching record volumes. Most of the increase was driven by government-backed entities – mostly European – and development banks, with both almost doubling in size. The latter was primarily due to strong issuance from national development banks such as KfW (over MDBs).

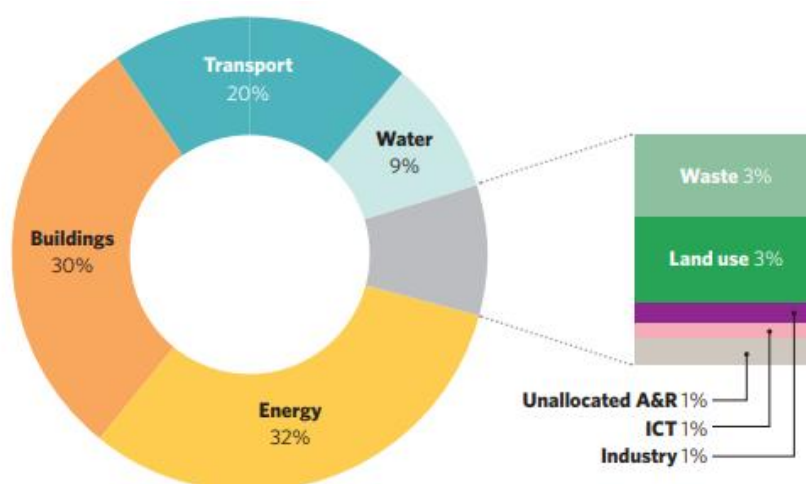
With nine issuers (eight in 2018), three of which were debuts, sovereigns increased another \$7bn (same gain as 2018) to reach almost \$25bn. The Dutch State Treasury Agency, a debut, ranked top with \$6.7bn, ahead of the Republic of France with \$6.6bn. The Kingdom of Belgium was third with \$2.7bn, its six deals being the only ones out of the country.

**Figure 2 – Non-financial Corporates Top Issuer Type for First Time, Rising 101%**

Source: Climate Bonds Initiative

***Energy, Buildings and Transport Extend Lead***

All use of proceeds (UoP) categories had volumes increase in 2019, most of them by a substantial amount – this contrasts with 2018, when they were mostly flat. While allocations rose across the board, the top 3 categories – Energy, Buildings and Transport – were the strongest performers, accounting for \$80bn of the overall \$88bn added. Buildings saw the largest absolute year-on-year increase (+\$30.1bn), closing the gap with Energy, while Transport was highest in relative terms with +71%. At 82%, their combined share reached the highest level since 2015 (77% in 2018).

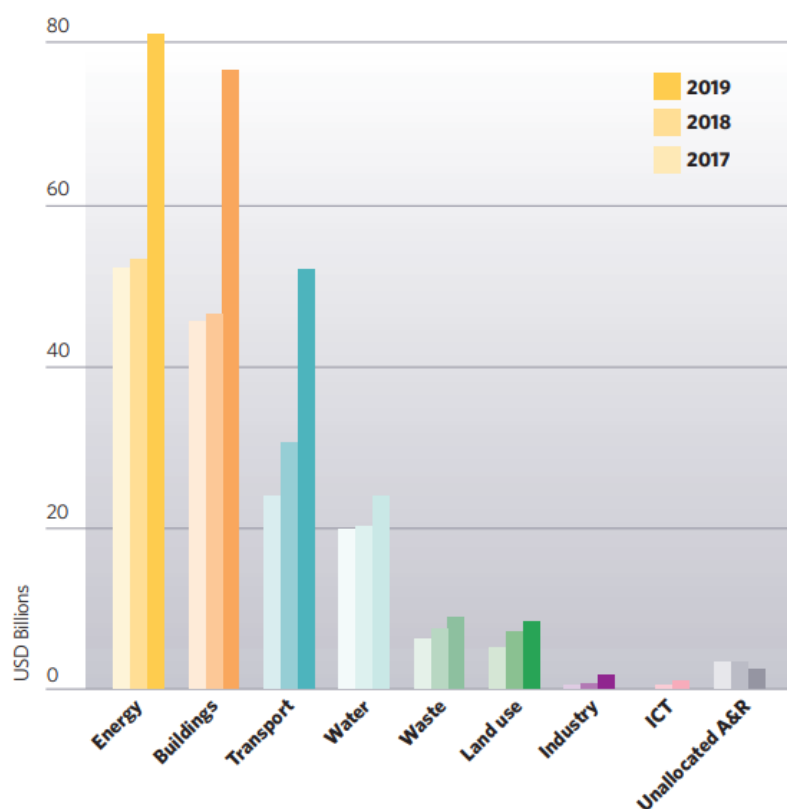
**Figure 3 – Use of Proceeds Categories Account for Over 80% of 2019 Issuance**

Source: Climate Bonds Initiative

Water, Waste and Land use experienced more moderate growth. Water (+18%), which almost doubled in 2017 but was flat in 2018, has cemented itself as the fourth largest category. Waste (+17%) and Land use (+17%) continued the steady rise of the last few years but have yet to reach \$10bn in annual volume. Comparing the growth in volume with the growth in number of deals and issuers yields some interesting differences.

In Waste, the number of deals rose 36%, while that of issuers only 10% - i.e. compared to 2018, the average amount allocated per deal fell while the amount per issuer increased. By contrast, in Land use the issuer count was up by 46% and deal count by 43%, suggesting lower average amounts for both. The drop in amount allocated per deal can be caused by (a) smaller deals, and/or (b) the share of Waste/Land use in each deal falling. Finally, ICT allocations increased sharply in 2019 (22x versus 2018), albeit from a very low base. This was due to large debut deals by Telefónica (€1bn), Verizon (\$1bn) and Vodafone (€750m) to finance increases in network energy efficiency as well as investments in renewable energy and green buildings.

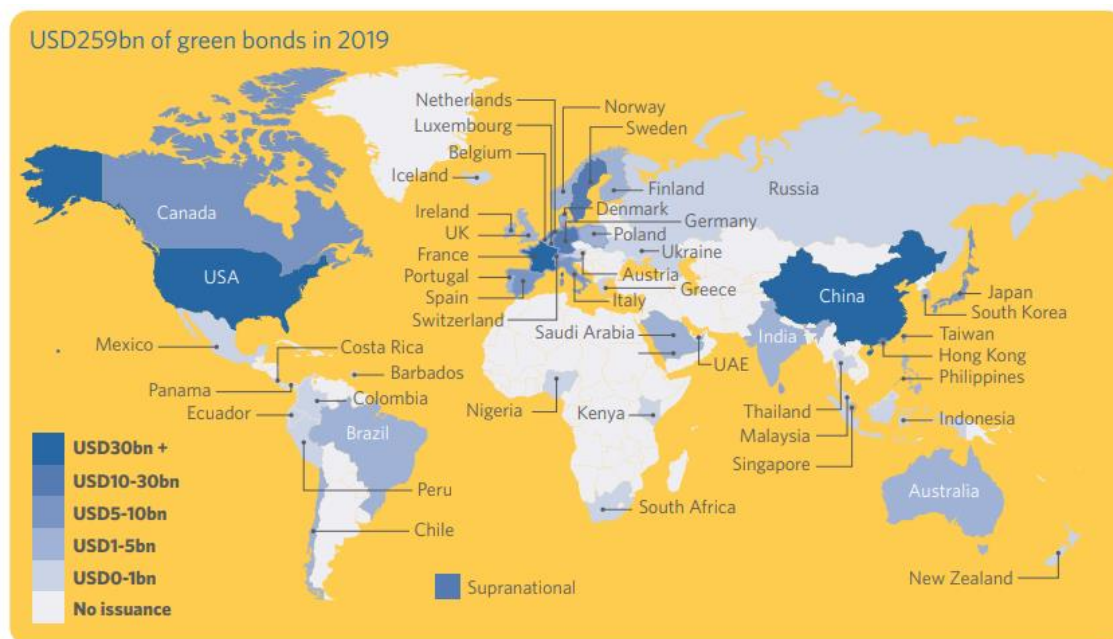
**Figure 4 – Energy, Buildings and Transport Increase their Share of UoP in 2019**



Source: Climate Bonds Initiative

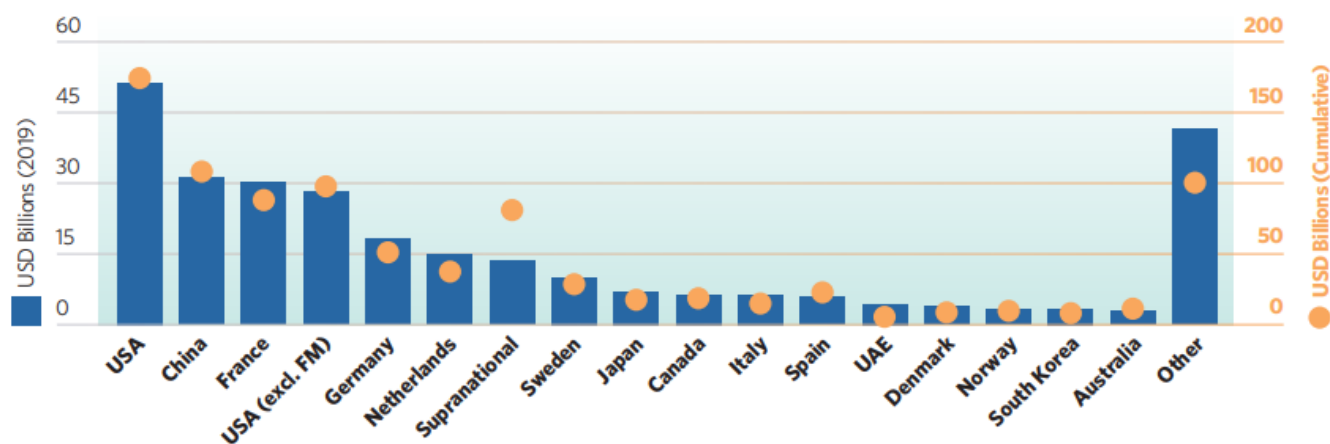
## **2019 Geographic Green Bond Market Overview**

Map 1 - 2019 Global Green Bond Activity at a Glance



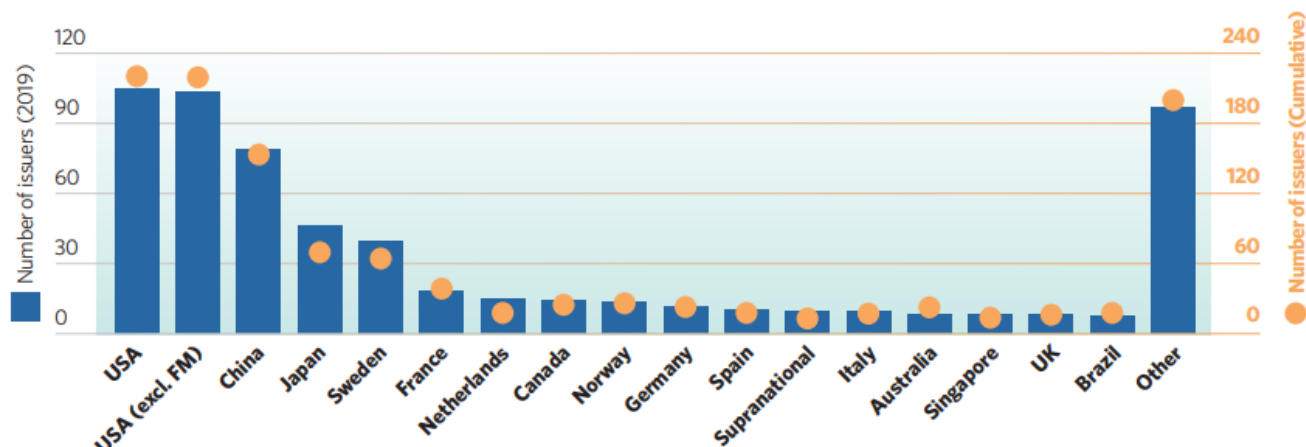
Source: Climate Bonds Initiative

Figure 5 - Top 2019 Countries: Amount Issued (2019 vs. Cumulative)



Source: Climate Bonds Initiative

Figure 6 - Top 2019 Countries: Number of Issuers (2019 vs. Cumulative)



Note: Country reflects the country of risk, which is different to the issuer's domicile if its parent is from another country. FM = Fannie Mae.

Source: Climate Bonds Initiative

### 2020 Global Green Bond Market Overview

Green finance market resilient, poised for 2021 expansion, positives emerge across green, social, sustainability & transition bonds, sovereign club to grow, annual \$1trillion coming closer. In a year characterised by uncertainty in all walks of life, green bond issuance rebounded in the second half of 2020 to reach a record-breaking \$269.5bn by the end of December, just above Climate Bonds 2019 final total of \$266.5bn (2018: \$171.4bn). After a strong first quarter, second quarter green bond issuance was impacted by the COVID-19 pandemic, but a record breaking third quarter ensured a strong finish.

The 2020 figure<sup>7</sup> is the highest since market inception and maintains the trend of nine consecutive years of increased green market growth. Green bonds, loans and sukuk<sup>8</sup> had originated from 53 countries in 2020. In a positive sign of product diversification, green loans and green sukuk origination more than doubled, rising from 11 countries in 2019 to 23 in 2020.

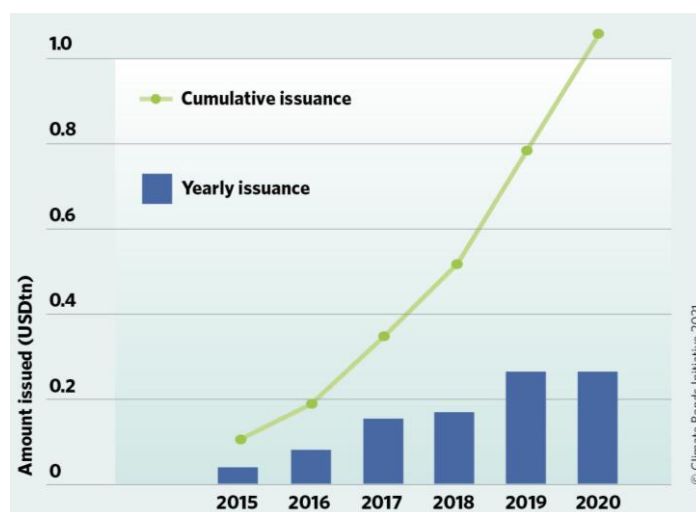
<sup>7</sup> This figure is subject to minor, upward adjustment at end January & into February as final data becomes available from pending and late December deals.

<sup>8</sup> A sukuk is an Islamic financial certificate, similar to a bond in Western finance, which complies with Islamic religious law, commonly known as Sharia. Since the traditional Western interest-paying bond structure is not permissible, the issuer of a sukuk essentially sells an investor group a certificate, and then uses the proceeds to purchase an asset that the investor group has direct partial ownership interest in. The issuer must also make a contractual promise to buy back the bond at a future date at par value.

### **2020 Saw 60% Average Annual Growth Since 2015 – Cumulative \$1Trillion Green Milestone Reached**

Since 2011, the annual issuance of green debt instruments has steadily increased with an evident upswing from 2015. At the end of 2015, the green debt capital market had just reached a cumulative volume of \$104bn. Five years later, the market surpassed the cumulative \$1tn milestone in early December, with the year ending at a \$1.05tn total. Cumulative market size in 2020 reflects an average annual growth rate of 60% since 2015.

**Figure 7 – Green Issuance (2015-2020)**



**Note:** Includes green bonds, loans, sukuk & green ABS.

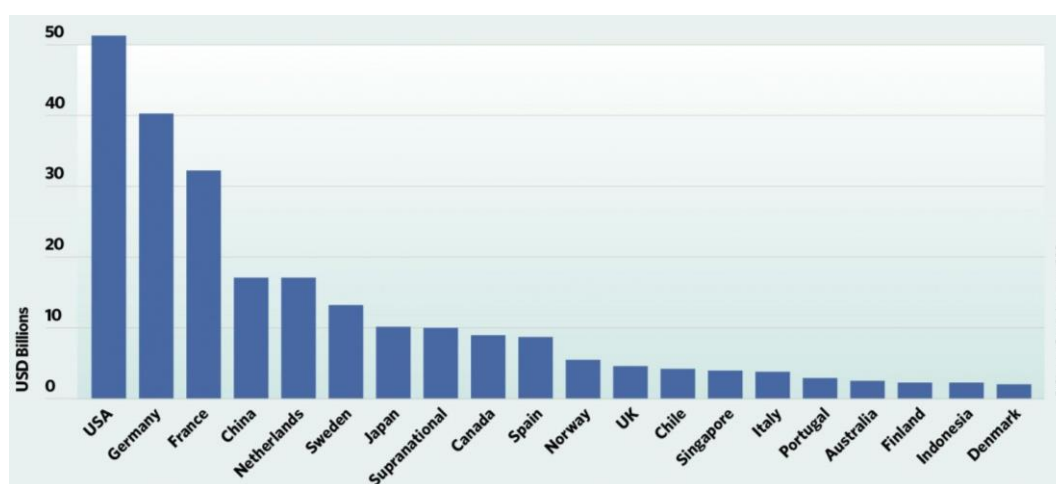
**Source:** Climate Bonds Initiative

### **Top 20 Countries for Annual Green Bond Issuance**

The United States again led national rankings (\$51.1bn), Germany second (\$40.2bn) and France third (\$32.1bn) with China fourth (\$17.2bn) and the Netherlands fifth (\$17.0bn). France's top three ranking continues its annual hold on a podium position through 2017, 2018 and 2019 and Germany appears in the top three for the first time.

Sweden took sixth place (\$13.3bn), Japan seventh (\$10.3bn), Canada eighth (\$9.0bn), with Spain (\$8.7bn) and Norway (\$5.6bn) rounding out the national Top 10. The remaining national places in the ranking are occupied by the UK, Chile, Singapore, Italy, Portugal, Australia, Finland, Indonesia, and Denmark. The top 20 have a combined total issuance of \$243.8bn. A host of other countries comprise the remaining \$25.7bn of annual issuance.

Figure 8 – Annual Green Bond Issuance (2020)



Source: Climate Bonds Initiative

***Top 10 Largest Green Bond Issuers***

Fannie Mae was the largest green bond issuer in 2020 with a total issuance of \$13bn. The enterprise's Multifamily Green MBS program is used to finance green mortgages backed by multifamily properties that are awarded green building certifications or display audited efficiency improvements.

Germany became the second-ranking green bond issuer in the year following its debut green sovereign bond. The domestic green bond market in Germany is already one of the biggest in the world, due in large part to bonds from state owned development bank KfW (the 4<sup>th</sup> highest). The Republic of France continues to be both a sovereign and European market leader, with its sovereign program the fifth largest individual source of green bonds in 2020.



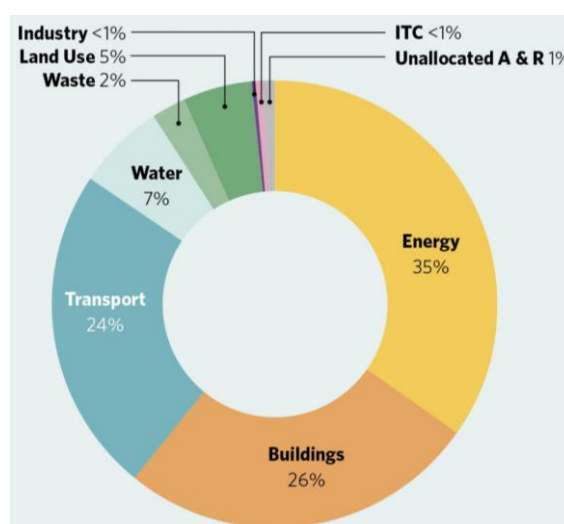
**Table 3 – Top 10 Largest Green Bond Issuers**

Position	Issuer	Amount Issued (USD)	Climate Bonds Certified
1.	Fannie Mae	13.0bn	
2.	Federal Republic of Germany	12.8bn	
3.	Société du Grand Paris	12.2bn	
4.	KfW	9.4bn	
5.	Republic of France	6.9bn	
6.	EIB	4.1bn	
7.	New York MTA	4.0bn	
8.	Republic of Chile	3.8bn	
9.	Dutch State Treasury Agency	3.4bn	
10.	TenneT Holdings	2.6bn	

Source: Climate Bonds Initiative

***Use of Proceeds Breakdown 2020***

Investment in the energy sector comprised the largest share of 2020 issuance, at \$93.6bn. Low Carbon Buildings represented the second-highest investment at \$70.6bn, followed in third place by Low Carbon Transport at \$63.7bn. Water Infrastructure at \$17.5bn and Land Use at \$13.6bn was the largest of the remainder.

**Figure 9 – Annual Green Bond Issuance (2020)**

Source: Climate Bonds Initiative

***Top Themes for 2021***

1. **The return of green multilateralism** as the White House rejoined the Paris Agreement, while it is expected to add momentum to COP and push climate higher on the agenda at G7, G7+, G20, OECD and a host of other bodies
2. **The opportunity for a new climate triple-axis** to slowly develop between China, EU and US as the world's largest economic blocs align on the fundamental mid-century goal of zero-carbon
3. **Transition, Transition, Transition** as institutional investor, policymaker and market focus grows on hard-to-abate sectors/industries, low carbon models and corporate capex plans
4. **The rise of the Sovereign Green Bond Club** as governments, policymakers and development banks back new issuance in developed and emerging economies to accelerate private sector issuance and markets
5. **Green, social, sustainable and sukuk** issuance proliferates, setting the pace towards the vital global milestone of more than \$1trillion in annual green investment
6. **Sustainability is increasingly embedded** in investment and financial market infrastructure as the twin influences of the EU Sustainable Action Plan/Green Taxonomy and increased central bank and financial regulator actions filter through multiple jurisdictions

***2021 – What Lies Ahead***

The impact of COVID-19 in 2020 proved a huge economic and social negative. In that context, the resilience of green finance markets led to a record year of issuance at \$269.5bn issuance, albeit a small increase over 2019. 2021 may enable a sustained resurgence.

NN Investment Partners posits a 2021 green bond market of €300bn (\$360bn). HSBC is predicting strong growth in Asia during 2021 and total green bond issuance between \$310-360bn. SEB envisages green bonds 'moving towards' \$500bn, subject to EU issuance. Credit Agricole expects up to €600bn (\$720bn) in combined green, social and sustainability bonds for 2021. Climate Bonds Initiative forecasts 2021 to produce a tenth consecutive green finance record with a figure ranging from a low to high \$400bn-\$450bn in global green bonds, loans and sukuk. Social and sustainability bonds are expected to deliver \$250-300bn on top of that.

### 3. Selection of Projects Funded Through Green Bonds

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The eligible Green Project categories, listed in no specific order, include, but are not limited to:

- **renewable energy** (including production, transmission, appliances and products),
- **energy efficiency** (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products),
- **pollution prevention and control** (including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/emission-efficient waste to energy),
- **environmentally sustainable management of living natural resources and land use** (including environmentally sustainable agriculture, environmentally sustainable animal husbandry, climate smart farm inputs such as biological crop protection or drip-irrigation, environmentally sustainable fishery and aquaculture, environmentally-sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes),
- **terrestrial and aquatic biodiversity conservation** (including the protection of coastal, marine and watershed environments),
- **clean transportation** (such as electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions),
- **sustainable water and wastewater management** (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation),
- **climate change adaptation** (including information support systems, such as climate observation and early warning systems),
- **eco-efficient and/or circular economy adapted products, production technologies and processes** (such as development and introduction of environmentally sustainable products, with an eco-label or environmental certification, resource-efficient packaging and distribution),
- **green buildings** which meet regional, national or internationally recognised standards or certifications.

#### 4. Prospects for Issuing Green Bonds in SE Europe

In **SE Europe**, the issuance market of green bonds does not actually exist, with only a small number of private sector companies and financial institutions having issued green bonds, but there are great prospects as the region is moving towards decarbonization and RES and energy efficiency projects are constantly increasing.

**Map 2 – SE Europe, as Defined by IENE**



Source: IENE

For instance, **Greece's** TERN Energy issued a seven-year €150mn green bond in October 2019<sup>9</sup>. EBRD invested €18mn in the green bond issuance, being the first certified climate bond that the EBRD is supporting in the country. Ernst & Young has verified that the bond meets the Climate Bonds Initiative's classification as a certified climate bond.

The investment is part of the EBRD's Greek Corporate Bonds Framework, developed to extend the Bank's support for the local corporate bond market and to strengthen its long-term viability. The funds will finance additional investments in renewable energy projects in Greece. The projects will also contribute to the country's target of increasing the share of renewable

<sup>9</sup> Aristeidou, O. (2019), "EBRD invests €18 million in TERN ENERGY's green bond", *EBRD*, <https://www.ebrd.com/news/2019/ebd-invests-18-million-in-terna-energys-green-bond.html>

energy to 35% of its total energy consumption by 2030. In June 2017, the EBRD launched its original Greek Corporate Bonds Framework, which has successfully leveraged €760mn of listed bonds. A new framework, the €185mn Greek Corporate Bonds Framework II, was approved in June 2018, leveraging an additional €350mn to date.

TERNA Energy is the largest wind-electricity producer in Greece. It has 1,512 MW of renewable energy power plants in operation or under construction, primarily wind farms, located in Bulgaria, Greece, Poland and the United States of America.

In addition, 2019 was also the year in which **Greece's** ELLAKTOR Group, taking into account the favorable conditions in the international capital markets, proceeded to the issuance of an international, green bond, with fixed rate without collateral, totaling €670mn over a five-year period. This was the largest high yield green bond in Europe for 2019 and the first high yield green bond in Greece. ELLAKTOR's bond recorded a wide participation from Europe, Asia and America, with more than 100 investors, of which 75% were foreign portfolios and only 25% of Greek origin<sup>10</sup>.

## 5. Basic Parameters for a Successful Green Bond Issuance

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The Green Bond Principles recommend a clear process and disclosure for issuers, which investors, banks, underwriters, placement agents and others may use to understand the characteristics of any given Green Bond. The Green Bond Principles emphasise the required transparency, accuracy and integrity of information that will be disclosed and reported by issuers to stakeholders.

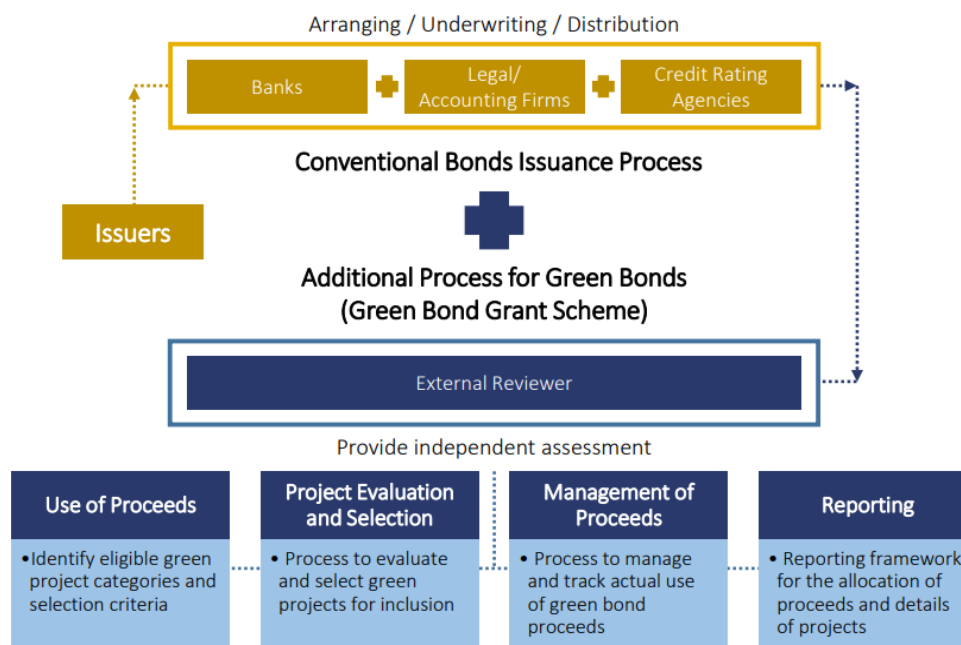
The Green Bond Principles have four core components:

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

### Figure 10 – How to Issue a Green Bond

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<sup>10</sup> ELLAKTOR Group (2020), "Ordinary General Meeting of the Shareholders of ELLAKTOR Group", [https://ellaktor.com/wp-content/uploads/2020/09/PRESS-RELEASE-ORDINARY-GENERAL-MEETING-10.09.2020\\_EN.pdf](https://ellaktor.com/wp-content/uploads/2020/09/PRESS-RELEASE-ORDINARY-GENERAL-MEETING-10.09.2020_EN.pdf)



Source: Climate Bonds Initiative

Concerning the role of External Reviewer, as shown in Figure 10, this also covers Advisory and Compliance services provided by specialized consultants such as IENE (see Section 9 of the present Report).

## 1. Use of Proceeds

The cornerstone of a Green Bond is the utilisation of the proceeds of the bond for Green Projects, which should be appropriately described in the legal documentation for the security. All designated Green Projects should provide clear environmental benefits, which will be assessed and, where feasible, quantified by the issuer.

In the event that all or a proportion of the proceeds are or may be used for refinancing, it is recommended that issuers provide an estimate of the share of financing vs. re-financing, and where appropriate, also clarify which investments or project portfolios may be refinanced, and, to the extent relevant, the expected look-back period for refinanced Green Projects.

The Green Bond Principles explicitly recognise several broad categories of eligibility for Green Projects (see Figure 14), which contribute to environmental objectives such as climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, and pollution prevention and control.

While the purpose of Green Bond Principles is not to take a position on which green technologies, standards, claims and declarations are optimal for environmentally sustainable benefits, it is noteworthy that there are several current international and national initiatives to produce taxonomies, as well as to provide mapping between them to ensure comparability. This may give further guidance to Green Bond issuers as to what may be considered green and eligible by investors. These taxonomies are currently at various stages of development.

Furthermore, there are many institutions that provide independent analysis, advice and guidance on the quality of different green solutions and environmental practices. Definitions of green and green projects may also vary depending on sector and geography.

## **2. Process for Project Evaluation and Selection**

The issuer of a Green Bond should clearly communicate to investors:

- the environmental sustainability objectives
- the process by which the issuer determines how the projects fit within the eligible Green Projects categories identified above
- the related eligibility criteria, including, if applicable, exclusion criteria or any other process applied to identify and manage potentially material environmental and social risks associated with the projects.

Issuers are encouraged to position this information within the context of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability. Issuers are also encouraged to disclose any green standards or certifications referenced in project selection. The Green Bond Principles encourage a high level of transparency and recommend that an issuer's process for project evaluation and selection be supplemented by an external review.

## **3. Management of Proceeds**

The net proceeds of the Green Bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner, and attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations for Green Projects.

So long as the Green Bond is outstanding, the balance of the tracked net proceeds should be periodically adjusted to match allocations to eligible Green Projects made during that period. The issuer should make known to investors the intended types of temporary placement for the balance of unallocated net proceeds.

The Green Bond Principles encourage a high level of transparency and recommend that an issuer's management of proceeds be supplemented by the use of an auditor, or other third party, to verify the internal tracking method and the allocation of funds from the Green Bond proceeds.

#### **4. Reporting**

Issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation, and on a timely basis in case of material developments. The annual report should include a list of the projects to which Green Bond proceeds have been allocated, as well as a brief description of the projects and the amounts allocated, and their expected impact. Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the Green Bond Principles recommend that information is presented in generic terms or on an aggregated portfolio basis (e.g. percentage allocated to certain project categories).

Transparency is of particular importance in communicating the expected impact of projects. The Green Bond Principles recommend the use of qualitative performance indicators and, where feasible, quantitative performance measures (e.g. energy capacity, electricity generation, greenhouse gas emissions reduced/avoided, number of people provided with access to clean power, decrease in water use, reduction in the number of cars required, etc.), and disclosure of the key underlying methodology and/or assumptions used in the quantitative determination. Issuers with the ability to monitor achieved impacts are encouraged to include those in their regular reporting.

Voluntary guidelines aiming at a harmonized framework for impact reporting exist for energy efficiency, renewable energy, water and wastewater projects, and waste management projects. The guidelines include templates for the format of impact reporting at a project and at a portfolio level that issuers can adapt to their own circumstances. The Green Bond



Principles encourage further initiatives, to help establish additional references for impact reporting that others can adopt and/or adapt to their needs. Guidelines for additional sectors are under development. The use of a summary reflecting the main characteristics of a Green Bond or a Green Bond programme and illustrating its key features in alignment with the four core components of the Green Bond Principles may help inform market participants.

### **External Review**

It is recommended that in connection with the issuance of a Green Bond or a programme, issuers appoint (an) external review provider(s) to confirm the alignment of their bond or bond programme with the four core components of the Green Bond Principles as defined above. There is a variety of ways for issuers to obtain such outside input to their Green Bond process and there are several levels and types of review that can be provided to the market.

An issuer can seek advice from consultants and/or institutions with recognised expertise in environmental sustainability or other aspects of the issuance of a Green Bond. It may cover areas such as the establishment of an issuer's Green Bond framework or the reporting of a Green Bond issuer. Consultancy or advisory services entail collaboration with the issuer and differ from independent external reviews. The Green Bond Principles encourage independent review of environmental features of the (types of) assets or activities associated with the Green Bond or Green Bond programme, where applicable.

Independent external reviews may vary in scope and may address a Green Bond framework/programme, an individual Green Bond issue, the underlying assets and/or procedures. They are broadly grouped into the following types, with some providers offering more than one type of service, either separately or combined:

- 1. Second Party Opinion:** An institution with environmental expertise that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an

evaluation of the environmental features of the type of projects intended for the Use of Proceeds.

2. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the Green Bond Principles, may also be termed verification.
3. **Certification:** An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
4. **Green Bond Scoring/Rating:** An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the Green Bond Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

An external review may be partial, covering only certain aspects of an issuer's Green Bond or associated Green Bond framework or full, assessing alignment with all four core components of the Green Bond Principles. The Green Bond Principles take into account that the timing of an external review may depend on the nature of the review, and that publication of reviews can be constrained by business confidentiality requirements.

The Green Bond Principles encourage external review providers to disclose their credentials and relevant expertise and communicate clearly the scope of the review(s) conducted. Voluntary Guidelines for External Reviewers have been developed by the Green Bond

Principles to promote best practice. The Guidelines are a market-based initiative to provide information and transparency on the external review processes for issuers, underwriters, investors, other stakeholders and external reviewers themselves.

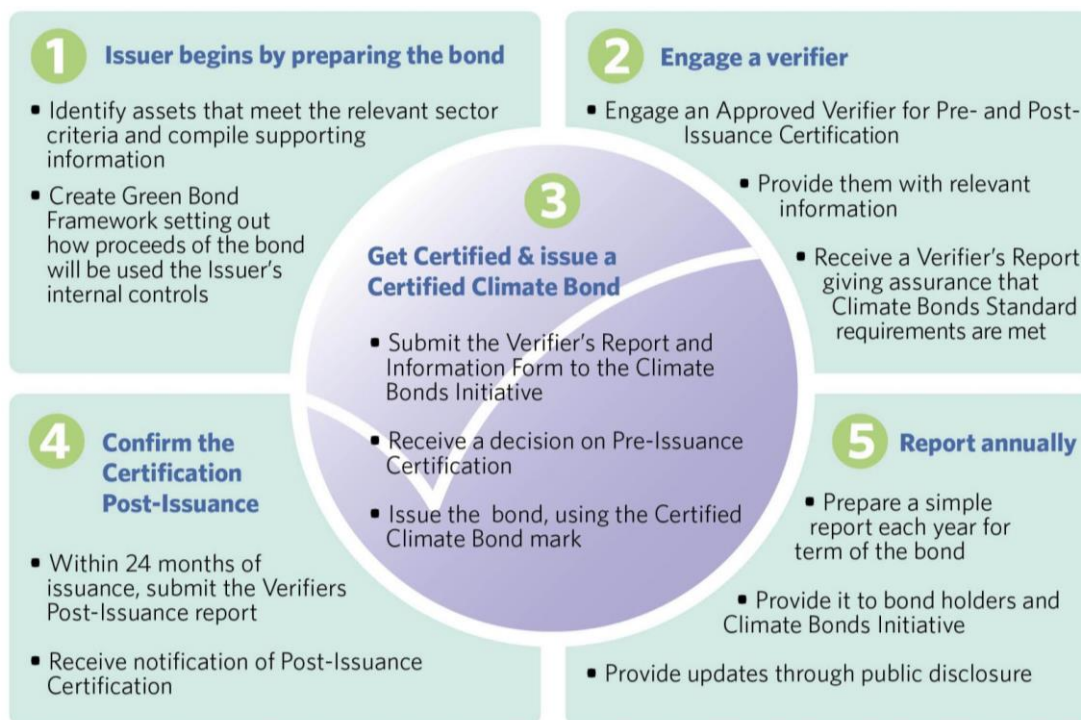
### **Climate Bonds Standard and Certification Scheme**

The Climate Bonds Standard and Certification Scheme is a labelling scheme for bonds, loans and other debt instruments. Rigorous scientific criteria ensure that it is consistent with the goals of the Paris Climate Agreement to limit warming to under 2 degrees. The Scheme is used globally by bond issuers, governments, investors and the financial markets to prioritise investments which genuinely contribute to addressing climate change. Climate Bonds Standard is designed as an easy-to-use tool for investors and issuers to assist them in prioritising investments that truly contribute to addressing climate change. The Standard is a public good resource for the market.

The Climate Bonds Standard is made up of two parts: (i) the parent standard detailing management and reporting processes and (ii) a suite of sector Criteria detailing the requirements assets must meet to be eligible for certification. The Certification Scheme requires issuers to obtain independent verification, pre- and post-issuance, to ensure the bond meets the requirements of the Climate Bonds Standard.

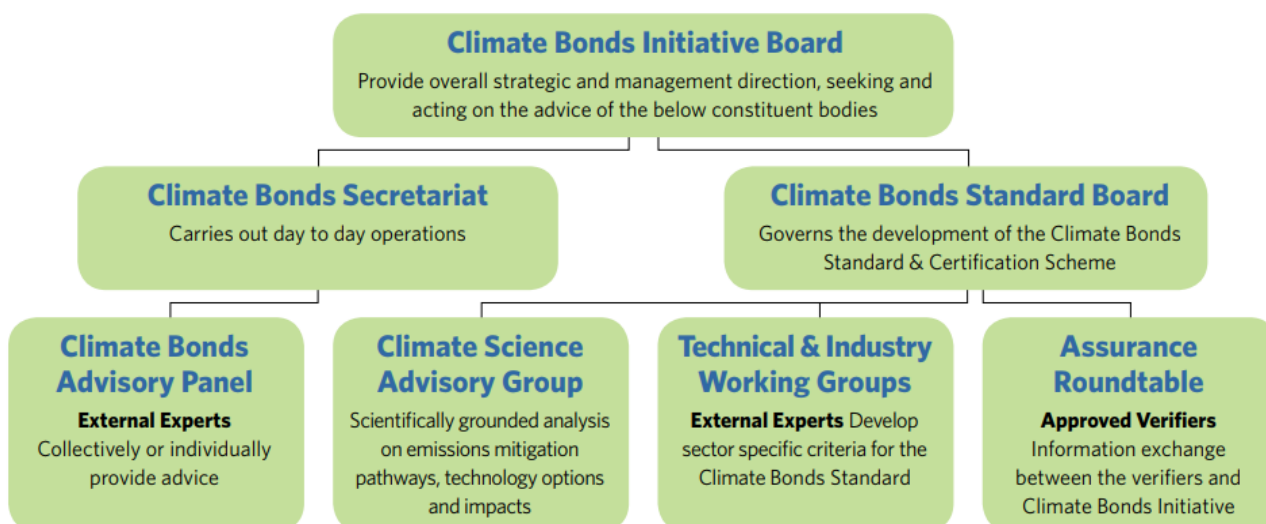
Sector specific Criteria or definitions of green are developed by Technical Working Groups (TWG), made up of scientists, engineers and technical specialists. Draft Criteria are presented to Industry Working Groups before being released for public comment. Criteria are presented to the Climate Bonds Standard Board for approval.

Figure 11 – Certification Process for a Bond, Loan or Other Debt Instrument



Source: Climate Bonds Initiative

Figure 12 – Governance of the Climate Bond Standard



Source: Climate Bonds Initiative

## 6. Who Can Issue a Green Bond?

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Any entity with bonding authority may issue Green Bonds, including private companies, financial institutions or governments. According to the Climate Bond Initiative, as of 2018, 145 entities in Europe have issued Green Bonds. These include:

- **Private companies:** Non-financial corporations, particularly energy and utility companies, finance specific environmental projects through Green Bonds issuance. Such issuances allow investors to know their investments are going to green solutions, as companies issuing Green Bonds obligate themselves to ring-fence the proceeds to specific, previously-outlined projects.
- **Financial institutions:** Commercial, investment and development banks can all issue Green Bonds. Such issuances signal the companies' commitment to sustainable development.
- **Municipalities and national governments:** Government entities can issue Green Bonds as a means to finance specific local projects or meet selected environmental targets. For municipalities, Green Bonds are a sure way to engage local stakeholders into financing sustainable solutions, while for national governments, sovereign Green Bonds aid in carrying out sustainable policy agendas and stimulate the flow of private capital investments.

The Green Bonds issuance should follow the aforementioned process.

## 7. Criteria for Issuing a Green Bond

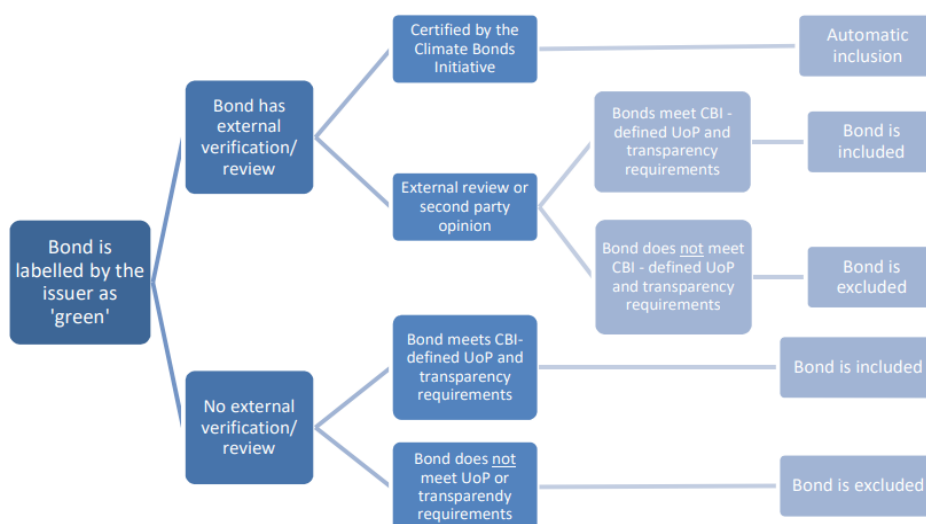
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The Climate Bonds Initiative uses a clear set of criteria to define green bonds for inclusion in its Green Bond Database. The four-step process to classify a green bond as eligible includes identification of environmentally themed bonds, reviewing eligible bond structures, evaluating the use of proceeds and screening eligible green projects or assets for adherence with the Climate Bonds Taxonomy<sup>11</sup>.

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<sup>11</sup> <https://www.climatebonds.net/standard/taxonomy>

Figure 13 – Green Bond Methodology



Source: Climate Bonds Initiative

**Process<sup>12</sup>****1. Identification of green themed (self-labelled) bonds**

The issuer of a green bond must declare that the bond is intended to be environmentally beneficial through labelling the bond. The label is most commonly 'green' however other labels such as climate-awareness, climate, environmental, carbon, sustainability and ESG (Environment, Social and Governance) are also eligible.

The issuer must use the label or description in a public document for the label to be valid. For example, the label can be used in reference to the bond in a press release from the issuer, statement on the issuers' website, the bond prospectus or supporting bond offering documents.

**2. Eligible bond structures**

The eligible bond structures are divided into asset-linked and asset-backed structures. Asset linked or use of proceeds bonds have earmarked proceeds from the bond sale for eligible projects. Some issuers of asset-linked bonds may choose to ring-fence proceeds through the

<sup>12</sup> The Process describes the market screening for inclusion in the green bond database.

use of separate accounts or vehicles. Ring-fencing is not an explicit requirement for inclusion, but proceeds must be at least earmarked for eligible green projects.

For asset-backed structures, bonds are divided into Project Bonds and Securitised Bonds.

- Project Bonds are eligible in case they are backed by a green project and the proceeds from bond sale are used solely to finance that same green project;
- Securitised Bonds are eligible if proceeds go towards green projects or assets. Thereby, collateralized assets must not be labelled as 'green'.

### **3. Transparency on the use of green bond proceeds**

Issuers must commit to use proceeds from the bond sale in full (lessor the bond arrangement fees) to finance eligible green projects or assets. If more than 5% of the proceeds are used for 'general corporate purposes' or projects that are not defined as green, the bond will not be eligible for inclusion. If proceeds are to be split across different projects, for example an ESG Bond with social projects and separate green projects, the bond would not be eligible.

### **4. Screening on green credentials**

Each bond is reviewed based on the green credentials of use of proceeds. This may be:

- earmarked proceeds for asset-linked, senior unsecured bonds;
- projects backing a project bond or
- assets backing an ABS.

At issuance, the issuer must declare the types of eligible green assets or projects to be financed with the proceeds (in line with the Green Bond Principles).

#### Inclusions<sup>13</sup>

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<sup>13</sup> The Market Intel at Climate Bonds screens the markets for all bonds and according to the Methodology, then puts them in the Green Bond Database. Inclusion in Green Bond Database for any bond is after issuance, after the bond is closed. Inclusion is conducted by the Market Intel at Climate Bonds.

Climate Bonds' market intelligence reviews the eligible asset types for green bonds using the definitions and criteria of the Climate Bonds Taxonomy. Bonds that are in line with the Taxonomy are included in their green bonds database.

### Exclusions

Bonds that are not aligned with the taxonomy are excluded from the list. In case a green marked bond is selected for inclusion under the described criteria but cannot fulfill the criteria later on, it will be removed immediately and is not marked as green anymore.

**Figure 14 – Sector Criteria Available for Certification**



Source: Climate Bonds Initiative

## **8. The Role of Green Bonds in Assisting RES & Clean Technology Companies to Grow**

Green bonds represent a considerable innovation through their focus on green use of proceeds, tracking, impact reporting and external reviews. They have provided bond investors with an unprecedented degree of transparency as well as a capacity to become involved in corporate strategies in a manner which was previously largely reserved to equity investors. It has also enabled bond markets to become a powerful force in green and climate mitigation finance.

However, concerns have been raised that the role of green bonds in financing new and especially additional green and climate mitigation projects has been limited. The criticism is



often that these projects would have in any case been funded by the mainstream bond markets. This arises arguably as the result of a misunderstanding of the structural refinancing role of bonds as described above and from a confusion with project bonds that have fundamentally different characteristics from other bonds.

Firstly, the debt capital markets offer many options for issuers wishing to raise money against their balance sheets and to re-finance projects. This has been especially true in the context of recent and ongoing favourable market conditions. Green bonds, however, ensure that refinancing occurs in a manner that uniquely serves the issuer's sustainability objectives and highlights them to all stakeholders. Projects that are being refinanced through green bonds are presented with full transparency and benchmarked against green definitions and taxonomies with the input of external reviews. This would not occur with other types of mainstream debt finance. Refinancing also of course makes additional funds available that can be reinvested into new green projects or to finance an issuer's overall transition strategy. These projects can be in turn refinanced by new green bonds and so on.

Secondly, project bonds are a niche market that especially finance infrastructure and where investors take a portion of the completion and/or performance risk of the project itself rather than the balance sheet of a corporate. The green bond market is already a much larger market than project bonds and one that successfully combines the refinancing approach of the mainstream bond markets with innovative visibility and benchmarking on green projects. Nonetheless, the concerns raised lead to legitimate questions on the actual role of green bonds and their contribution to sustainability. The benefits of green bonds can be summarised as follows:

- **Converting bond markets to green:** Green bonds have momentum in the international bond markets and are converting increasing number of issuers. This is important because (i) the capital flows being channelled to green projects are now without doubt substantial (\$170-180 billion in 2018), (ii) issuers are committing themselves to unprecedented levels of transparency and reporting on their green projects and (iii) are building an investor base that is committed to green investors and has an inherent interest in follow-on green issues.
- **Enabling corporate and institutional transition:** Green bonds create unprecedented market, and in some case media, visibility on the sustainability projects of both public

and private issuers. The overwhelming majority of these issuers are aligned with the Green Bond Principles which have been increasing the emphasis on issuers communicating an overall transition strategy to the market and their investors by recommending that issuers position their green projects within their “overarching objectives, strategy, policy and/or processes relating to environmental sustainability”. Issuers are subject to intense scrutiny from investors as well as from civil society on this point. At the issuer level, many executives have also testified within the context of regular feedback to the Green Bond Principles’ Executive Committee that the process associated with green issuance represents a strong in-house knowledge sharing and awareness building exercise that connects the treasury, business, sustainability, investor relations and reporting functions with the corporate organisation in a way that is seen as an important and unforeseen benefit.

- **Making green and climate investible:** the green bond market has considerably progressed the debate on what is green by facilitating the emergence of both market-based and regulatory definitions of what is green. These include, for example, the high-level project categories of the Green Bond Principles, the Climate Bonds Taxonomy<sup>14</sup>, and People’s Bank of China Green Bond Catalogue. In parallel, an ecosystem of firms and organisation drawn from the academic, audit, rating and consulting worlds (referred to collectively as “external reviewers”) has developed to provide advisory services on how to interpret and verify green projects. This ecosystem has allowed the markets to invest with much greater confidence in green projects without being held back by the detail of ongoing scientific or academic debates on green definitions. The EC’s plans to develop a Taxonomy integrate and build on the classifications developed for the international green bond market<sup>15</sup>.
- **Progressing the policy debate on green finance:** the green bond market has also provided policy makers an example of a largely market driven and successful initiative addressing green challenges and climate change mitigation. This has stimulated debate on how it may be further supported and how it may inform wider policy

<sup>14</sup> Climate Bonds Initiative (2019), “Taxonomy”, <https://www.climatebonds.net/standard/taxonomy>

<sup>15</sup> EU Technical Expert Group on Sustainable Finance (2019), “Proposal for an EU Green Bond Standard”, *Interim Report*, [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/190306-sustainable-finance-teg-interim-report-green-bond-standard\\_en\\_0.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190306-sustainable-finance-teg-interim-report-green-bond-standard_en_0.pdf)

initiatives. A number of governments have developed public policies to facilitate the issuance of green bonds. This has been the case in China (government guidelines for green bond issuance in various sector, capital and repo rates incentives), France (official label for green funds), ASEAN countries (definition of an ASEAN Green Bond standard), India (listing disclosure requirements for Green Bonds on the Securities Exchange Board of India).

## 9. IENE's Advisory Role in the Issuance of Green Bonds

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Over the years, IENE has built a regional network of energy experts with considerable experience on RES and Energy Efficiency projects, including advisory and assurance professionals, with solid experience and hence capable in supporting clients on green bond issuance across SE Europe. Between them, team members have worked on some of the leading issuances to date. IENE offers a wide range of services to support companies and investors during the lifecycle of green bond issuance. More specifically, IENE can offer the following range of services:

- 1. Review financing options:** IENE reviews and challenges the financing objectives and alternatives, enabling the investor to optimize the capital structure and making the most of debt market appetite. IENE specialists can help determine a preferred funding route, and act as a sounding board for the investor's management team.
- 2. Design green bond criteria:** IENE can help develop a green bond framework, 'green' criteria and specifications for the management of proceeds. IENE professionals can advise on project selection and evaluation, fund management processes and controls, and benchmark processes against industry best practice and evolving standards.
- 3. Execution:** IENE specialists can advise on the presentation of green credentials to potential investors and the issuance process of the debt, and liaise with stakeholders including credit rating agencies. In this context, IENE can:
  - (a). Prepare the necessary "green bond" report (i.e. Verifiers' Report) and information form
  - (b). Obtain a decision on Pre-Issuance Certification
  - (c). Facilitate the issuance of the "green bond" using the Certified Climate Bond mark

4. **Ongoing stakeholder management:** Once issued, IENE can help the investor assess the performance of a green bond through independent bond investor studies, giving unbiased insight into bondholders' perspectives and into the profile of bondholders.
5. **Third-party independent assurance:** To increase the credibility of the green bond, IENE can provide assurance on the issuer's processes and control for selecting green projects and managing proceeds, as well as on the issuer's progress reports.
6. **Monitoring and reporting:** IENE can undertake to develop performance indicators and project evaluation metrics to monitor and report on the financial and environmental outcomes of projects. Furthermore, IENE can support the investor in reporting to his company's internal and external stakeholders. In this context, IENE will assist the investor in:
  - (a). Confirming the certification post-issuance within 12 months
  - (b). Reporting annually on the progress of the funded project(s).

## Appendix I – The Institute of Energy for SE Europe

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The Institute of Energy for South East Europe (IENE) was founded in 2003 as an independent body by a small group of independent professionals and business executives active in the energy sector of the region. The Institute, which has its headquarters in Athens, Greece, is a non-governmental and non-profit organization (see [www.iene.eu](http://www.iene.eu) for further information).

### *Goals and Objectives*

The Institute's prime purpose is to constitute a permanent forum where energy issues can be discussed, analyzed, reformulated and presented to a broader audience, in unbiased, objective and credible terms. This is achieved thanks to the Institute's scientific standing, its managerial rectitude and the transparency of all its operations.

One of IENE's key objectives is to participate in the formulation of energy policies, both at national and international level, within the broader region of SE Europe. These policies focus on rationalizing the production and utilization of both conventional and renewable sources of energy. IENE is thus contributing towards the implementation of the European Union's sustainable strategy which combines social and economic development with environmental protection. The Institute aspires to play a significant role in providing public opinion with factual and unbiased information on subjects concerning energy, the environment and sustainable development.

### *Mission and Vision*

IENE's **mission** is to promote a broader understanding of the key energy issues in the region and provide a suitable platform for the exchange of views and information, open to professionals, companies, stakeholders and others who are actively involved in the energy sector.

The **vision** of IENE's founders and those of its members is to establish the Institute as the leading energy think tank in the region and at the same time develop a highly credible and worthwhile range of services covering research, assessment studies, sectorial surveys, educational activities, event organisation and networking. These services to be offered primarily to its members, but also to government and industry and other important

stakeholders. As part of its vision, IENE is committed to developing high-level research and analysis capabilities, with the involvement and in cooperation with leading energy experts from all different countries of the region.

The timely dissemination of information and analysis is an integral aspect of IENE's work with the aim of facilitating the understanding of central policy and complex technical issues; thus, helping to promote an informed public debate. The establishment of serious and dispassionate dialogue on SE Europe's key energy and environmental issues is seen as part of a democratic policy making process to which IENE is fully committed.

### *Operation*

The Institute's headquarters are in Athens while it has a well-established network of associates and expert advisors in all countries of the region and beyond. A small number of permanent administrative and secretarial staff (10 people in all, including the Executive Director) is responsible for manning the Institute's daily operations. This staff is backed by a number of external associates, who are fully engaged in research, information retrieval and editing (see [www.iene.eu](http://www.iene.eu) under Organisation and Management for a detailed insight into IENE's structure and operation).