



France

Country Briefing April 2018



Cumulative issuance: EUR37.7bn, 25 green bond issuers in total, 3rd in global rankings
2017 issuance: EUR20.3bn (4.5 times higher than 2016), 13 issuers
France boasts one of the first green bond markets. New impetus from state policy supports future growth.

Green bond opportunities in France

French issuers have propelled the country to an emblematic position.

French green bond issuance commenced in 2012 with the first three French deals coming from local government entities Île-de-France, Provence-Alpes-Côte d'Azur and Hauts-de-France. These pioneering deals laid a solid foundation. France now boasts the largest green bond market in Europe and the third largest globally.

A burgeoning market, fuelled by non-financial corporate and government-backed issuers since 2013, with a recent push from the state.

The EUR9.7bn Sovereign Green OAT, the largest green bond ever issued, accounted for nearly half the green bond volume placed by French issuers in 2017. It epitomizes the driving role of France in spurring growth (see detailed analysis on pp. 3-4).

The market has diversified since 2012, welcoming new issuers as well as new instruments. Mid-sized companies such as Neoen, Akuo Energy and Foncière INEA are starting to issue green bonds, a healthy sign of evolution for the French market.

Excluding the green sovereign, 2017 market volume more than doubled from 2016. Non-financial corporates accounted for about half the growth, primarily due to issuance from energy company Engie and the debut of property company Icade. Credit Agricole CIB accounted for the rest, mainly due to its USD3bn synthetic securitisation. It was the only bank to issue in 2017 and is the most prolific French issuer with 100 deals (EUR4.6bn) closed since 2013. The other 3 financial corporates have raised EUR1.8bn in total since 2015, starting with a benchmark size deal from Société Générale CIB.

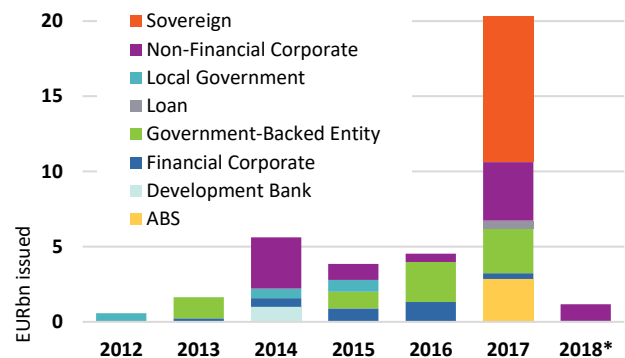
Green bond issuance from government-backed entities rose slightly in 2017, confirming their engagement in the market: new entrants Caisse des Dépôts et Consignations (CDC) and RATP joined SNCF Réseau and EDF. The involvement of the French government in green finance appears to have positively influenced partially and fully state-owned entities such as Engie and EDF (energy), SNCF Réseau and RATP (rail), and CDC (property).

New green debt instruments added in 2017 and 2018. The inaugural French green loan was issued in 2017 by Quadran; the first French green ABS by CACIB the same year. In Q1 2018, Natixis and Société Générale CIB each issued a green structured note which repackaged the French *GrOAT*.

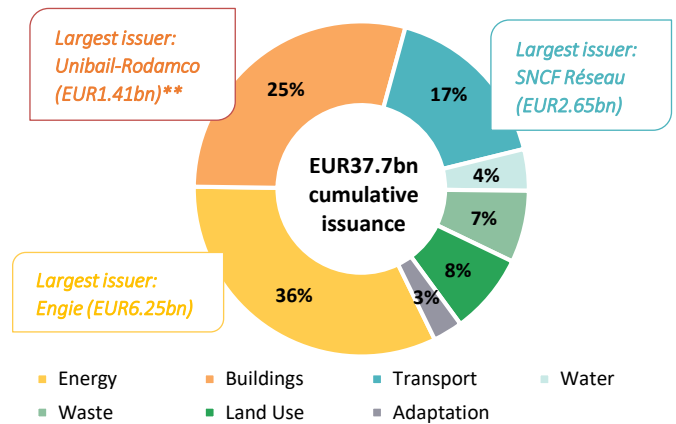
Energy and buildings account for 61% of cumulative proceeds allocations (see chart at right). The proceeds of green bonds issued in 2015 and 2016 were mainly used for clean energy: comprising nearly two thirds in 2016. In 2017, allocations to buildings (32%) surpassed those for energy (18%). The trend is continuing into 2018. Transport sector allocations have also increased, but there have been only limited allocations to water and waste management, sustainable land use and adaptation.

Ambitious building standards are best practice. A minimum of BREEAM Very Good¹ is the most commonly used standard by French green bond issuers in the building sector. We note that to give a more comprehensive assessment of the impact over the life of the bond, issuers would benefit from further disclosure on performance and measurement.

2017 green bond issuance more than quadrupled from 2016



Over 60% of proceeds allocated to energy and building assets/projects



Issuer Name	Issued EURm	Issuer type	Use of proceeds
New issuers in 2017			
CDC	500	Gov. backed corp	Buildings
Icade	600	Non-financial corp	Buildings
Ivanhoé Cambridge and Natixis Assurances	480	Loan***	Buildings
Quadran Energies Libres	46	Non-financial corp	Energy
RATP	500	Gov. backed corp	Transport
Republic of France	9,697	Sovereign	Mixed
New issuers in 2018			
Foncière INEA	100	Non-financial corp	Buildings

* Data throughout the report is as of 16th March 2018.

** The chart shows the largest corporate by sector. The French Green OAT allocates 33% of proceeds to buildings: this amounts to EUR3.2bn as of 16th March 2018.

*** A definition of green loan is available here: <https://bit.ly/2GxqOlk>. In addition, the Loan Market Association recently published the [Green Loan Principles](#).

A more diversified tenor profile for French green bonds compared to conventional bonds, as illustrated by the cumulative graph on the right. The tenors of 61% of green bonds from the **private sector** – which includes commercial bank Credit Agricole CIB, an energy company and three real estate companies – range between 10 and 15 years. This is longer than what is observed for vanilla bonds. Neoen and CACIB have issued green bonds with tenors between 15 and 20 years. Engie has issued a perpetual.

French **public sector** issuers dominate long-dated green bonds. SNCF Réseau's 30-year issue from 2017 is the longest-dated French green bond (excluding Engie's perpetual). The sovereign OAT's tenor is 22 years. The tenors of early green bonds from local government issuers and Agence Française de Développement (AFD) fall within the 10-15 years bracket, while RATP and CDC issued bonds with a 5-10 year term. The tenor profile of EDF's green bonds is diverse, but all tenors are greater than 5 years.

Long-dated bonds are a very good match with long-dated infrastructure investments as they provide security of financing and appeal to institutional investors, particularly pension funds and insurers.

French green bonds are overwhelmingly denominated in EUR (84% on a cumulative issuance basis). USD is the second most common currency (11%) and JPY comes third (1.5%), due to CACIB and EDF diversifying the denomination profile of their green bonds. About 16% of CACIB's issuance volume is denominated in emerging market currencies.

French investors have largely integrated the sustainability agenda in their investment strategies. French asset managers have embraced green bonds with dedicated funds offered by Amundi, Axa, BNP Paribas, Crédit Mutuel and Natixis/Mirova, and a dedicated ETF by Lyxor. The box at right highlights Climate Bonds' key findings from studying green bond pricing.

France demonstrates best practice issuance

An excellent track record in the use of external reviews. 94% of French green bonds by number and 97.5% by total amount issued obtained an external review. Of those reviewed, Vigeo Eiris provided second party opinions on 76% of bonds by amount issued, while Sustainalytics' share was 73% in terms of number of green deals. Other intermediaries active in the market include Oekom and EY.

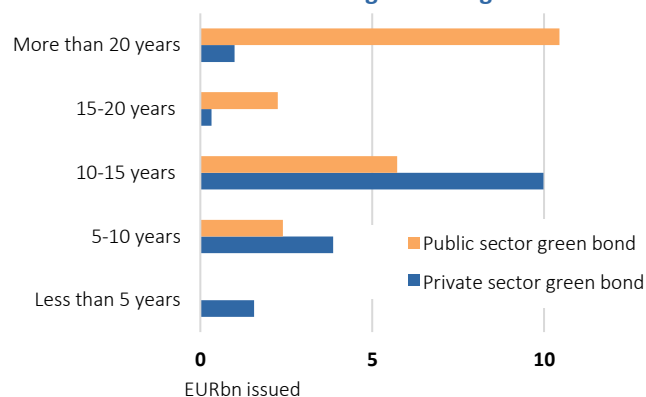
Certification on the rise. Since 2016, SNCF Réseau has issued three green bonds for a total of EUR2.65bn. All are Certified against the Climate Bonds Standard for Low Carbon Transport. The certification ensures that assets or projects financed by a green bond are consistent with the 2°C warming limit set in the Paris Agreement. As a regular issuer with a large portfolio of eligible assets (its ambition is to issue one green bond per year), SNCF Réseau has chosen the Programmatic Certification option, which allows the issuer to streamline the verification process. Some of its bonds' proceeds are financing new rail extensions, which are a key part of France's infrastructure plan (more on p.4).

On the green loan side, Quadran Energies Libres obtained the certification for their EUR46m deal in May 2017. More recently, Ivanhoé Cambridge and Natixis Assurances' EUR480m green secured loan was certified under the Climate Bonds Standard for Low Carbon Buildings (Commercial), making it the first loan to obtain certification under this sector criteria. Proceeds will finance the development of the DUO towers in Paris.

More green bonds financing buildings will have the opportunity to be eligible under the Climate Bond Certification scheme now that emissions intensity data has become available for the cities of Bordeaux, Lille, Lyon, Marseille, Nantes and Paris. Proceeds used for low carbon buildings in other cities will also qualify under the scheme if the intensity data is consistent with the requirements of an appropriate proxy.

High quality annual reporting. 84% of French bonds by number had reporting in place, according to our Use of Proceeds³ research conducted in 2017. While this is lower than in some other Western European markets, the quality of reporting tended to be high. EDF's reporting was highlighted as an example of best practice.

Public sector issues longer-dated green bonds



Pricing of green bonds from French issuers²

We have been observing how green bonds behave in the primary markets across countries. We have looked at green bonds issued between January 2016 and October 2017, denominated in either USD or EUR, with a minimum size of EUR300m. Our sample includes bonds from CDC, Engie, the French Treasury, Icade, RATP, Société Générale and SNCF Réseau. Generally, green bonds price tighter than initial price talk and are oversubscribed, but we note that this is no different from vanilla bonds. For Q2 and Q3 of 2017, green bonds achieved, on average and on a global basis, the same as or higher levels of oversubscription than a vanilla cohort. We also noted that EUR bonds in our Q3 sample (which includes Engie 2023 & 2029, ICADE 2027, SNCF 2047) tightened more aggressively during book-building than their corresponding vanilla baskets suggesting that the green label could contribute to tighter pricing.

We built yield curves on the issue date of 34 green bonds in our sample to determine whether there was a new issue premium, or the absence of one, what we termed a 'greenium'. We found that 14 bonds exhibited a traditional new issue premium (among them RATP 2027, Engie 2023 & 2029). Ten bonds priced on their existing yield curves (e.g. ICADE 2027, SNCF 2047), and 10 priced inside their yield curves, thus exhibiting a greenium (e.g. FRTR 2039). While the data is too limited to draw definite conclusions, we can say that green bonds investors cannot automatically assume that they will receive a new issue premium.

Snapshot of the top 10 French green bond issuers

Issuer Name	Outstanding green bonds (EURbn)	% of overall outstanding debt	Green bonds issued	Active since
Republic of France	9.7	<1%	1	Jan 2017
Engie	6.2	25%	4	May 2014
EDF	4.5	8%	4	Nov 2013
CACIB	4.4	<1%	100	Feb 2013
SNCF Réseau	2.6	6%	3	Nov 2016
Île-de-France	1.5	31%	3	Mar 2012
Unibail-Rodamco	1.4	12%	3	Feb 2014
AFD	1	3%	1*	Sep 2014
Société Générale	1	<1%	2	Nov 2015
Paprec	-	-	1**	Mar 2015

*The green bonds issued by AFD under their new framework did not meet the Climate Bonds Taxonomy as it lacks clarity on "fuel switching" eligibility criteria and whether new technologies include fossil fuels.

**Paprec's debut green bond (issued in March 2015 and tapped in April 2017) was called prior to its maturity date. The two other green bonds (EUR225m issued in March 2017 and EUR800m issued in March 2018) are pending inclusion. More information on the use of proceeds is required with respect to corporate acquisitions.

Large potential for future growth across sectors

Climate Bonds Initiative's annual flagship report *The State of the Market*⁴ identifies climate-aligned issuers, i.e. pure-play companies with products and assets that enable the transition to a low carbon economy. Several of them have now issued green bonds: Akuo Energy and EDF (energy sector), RATP and SNCF Réseau (transport), Foncière des Régions (buildings), Paprec (waste/recycling). There is more potential.

In the local government sector, Île-de-France, Hauts-de-France, Department de L'Essonne and the City of Paris have led the way. There is scope for other municipalities and regions to issue green bonds. Six cities including Lille, Lyon, Marseille and Tours are prospects for issuance. In total, we have identified 25 local government vanilla bond issuers that could become green bond issuers, among them:

- 5 municipalities;
- 9 departments, including Eure, which has some exposure to international bond markets, and Val d'Oise, which has the highest outstanding amount of bonds among French departments;
- 5 regions, including Pays de la Loire with the highest amount and number of bonds outstanding from local governments⁵.

Several government-backed entities are also candidates for debut green bonds. Société Nationale Immobilière has the widest exposure to international bond markets. Caisse de Refinancement de l'Habitat has the largest average bond size, and scale helps keep relative issue costs low. Compagnie de Financement Foncier has the highest amount of bonds outstanding, and the highest amount of bonds issued on international markets. More information and examples are provided in the table below.

A sectoral survey of potential French green bond issuers

The table provides examples of companies which operate in sectors that are aligned to the [Climate Bonds Taxonomy](#)⁶. It is not an exhaustive list.

Sector	Name	Issuer type	Issuer description
Energy	Bioneris	Non-financial corp	Operations include landfill biogas valorisation units generating energy to local communities
	Futuren	Gov backed entity	EDF's subsidiary, specialises in wind energy
Transport	Alstom	Non-financial corp	Rail transport equipment, systems and services for passenger and freight transportation
Buildings	Arkéa Public Sector SCF	Gov backed entity	Authorised to issue public sector covered bonds
	CAFFIL & parent company SFIL	Gov backed entity	Covered bond issuer whose assets comprise loans granted to public sector entities. Fully owned by SFIL, a French state-owned development bank. SFIL is preparing its first social bond and is considering issuing green bonds ⁷
	Caisse de Refinancement de l'Habitat	Gov backed entity	As a central agency, it has an explicit state guarantee to issue bonds for refinancing residential mortgages
	Compagnie de Financement Foncier	Gov backed entity	Offers secured loans, mortgages and bonds issued by local authorities
	Gecina	Non-financial corp	Commercial and residential buildings REIT. Some of its portfolio is BREEAM or LEED certified
	Klépierre	Non-financial corp	Shopping centre REIT operating across Continental Europe. Several centres are BREEAM certified
Water, Waste, Pollution Control	Société Nationale Immobilière	Gov backed entity	One of CDC's subsidiaries. Develops and manages affordable housing
	Veolia Environnement	Non-financial corp	Environmental services company. Business areas include water, wastewater treatment and waste management
Water, Waste, Pollution Control	SUEZ Environnement	Non-financial corp	Engie subsidiary, active in the areas of water and waste management, including water and wastewater treatment services and waste recovery
	Industry & Commercial	Saint-Gobain	Non-financial corp
Mixed	Agence France Locale	Gov backed entity	New entity dedicated to the funding of French local authorities, it was granted a banking license as a specialist credit institution in 2015
	Bpifrance	Gov backed entity	Public investment bank which provides financial support to SMEs. 50% owned by CDC. Growing the green economy is one of its priorities
	La Poste	Gov backed entity	Postal service company which introduced a green (eco-friendly) letter option in 2011. Part of its vehicle fleet is electric

Footnotes: 1. <https://www.breeam.com/>; 2&3. <https://www.climatebonds.net/resources/reports> search for 2. Pricing or 3. Use of Proceeds; 4. <https://bit.ly/2yJUzBi>; 5. The region intends to issue a green bond in September 2018, <https://bit.ly/2EffKY4>; 6. <https://www.climatebonds.net/standards/taxonomy>; 7. <https://bit.ly/2qOWN73>; 8. Manuel Adami, CBI Director of Investor Outreach & Partners Programme, sits on the TEEC label Committee <https://bit.ly/2E0iet7>; 9. <http://www.greenfinanceindex.net/GGF1/Report/>

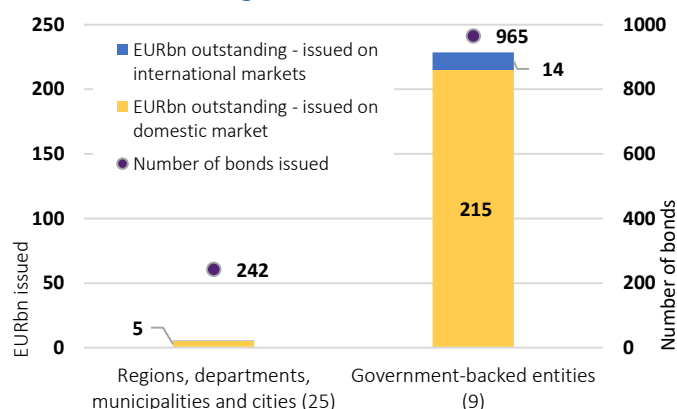
Republic of France's "GrOAT": a green stepping stone

France was the first nation to commit to issuing a sovereign green bond following COP21 in 2015. The Treasury tapped three times the EUR7bn inaugural issuance from January 2017, adding EUR3.8bn. It has identified EUR8bn of eligible spending for 2018.

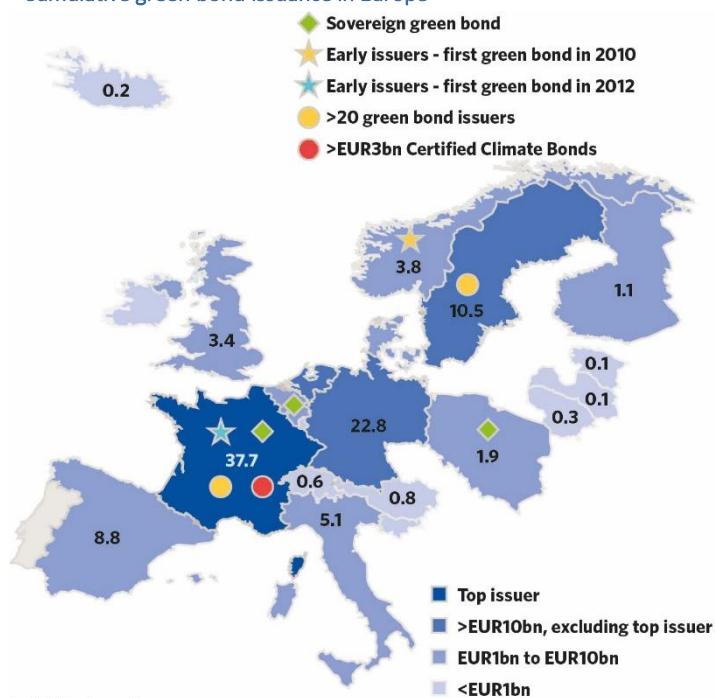
"The idea was to help the green bond market to develop, by providing investors sensitive to the environmental issue a liquid asset, with a sovereign risk profile, and to contribute to the defining standards not as a regulator but by imposing ambitious reporting obligations."

Jean Boissinot, French Treasury, 2017 Climate Finance Day, Paris

34 French public vanilla entities are potential green bond issuers



Cumulative green bond issuance in Europe



In EURbn issued

French government labels created to increase green asset visibility

1. The TEEC label, which integrates the Climate Bonds Taxonomy in its eligibility criteria, has been awarded to 18 funds with EUR2bn of assets under management (AUM)⁸.
2. 119 funds representing EUR22bn of AUM have received the label ISR.
3. The third label targets crowdfunding platforms, which finance green growth projects. To date, 16 platforms have been awarded the label.

What's in the pipeline?

The government has embarked on a Big Investment Plan worth EUR57bn, to be implemented during the current 5-year term. It includes EUR20bn for the energy transition, divided as follows:



EUR9bn to improve the energy efficiency of housing for low-income households and public buildings

EUR4bn to improve daily modes of transport

EUR7bn to finance a 70% increase in the renewable energy production capacity

In April 2018, the government will present the draft Mobility Orientation Act, which will set out investment priorities for major transport infrastructure projects for the next 20 years.

Green avenues



A Paris Green Bond Stock Exchange?

With now 10 stock exchanges having a dedicated green or sustainable segment, Paris could likely be the next addition.



Facilitating market access for SMEs

- Tax incentives for smaller companies
- Aggregation platforms for green securitisation.

France's favourable ecosystem

"Accelerating the greening of finance is an urgent matter to achieve very concrete results." *President Macron, GlobalCapital, October 2017*

When all green roads lead to ... Paris

It has been the long-standing ambition of Paris to become a centre of green finance. Numerous initiatives were created to drive market momentum. They all have, in various ways, positively impacted its development. Will 2018 be the year of green economy for France?

Enshrined in the Energy Transition for Green Growth Law, Article 173 (August 2015) makes climate risk disclosure mandatory for French institutional investors. Following on from the ground-breaking legislation, the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) released final recommendations in June 2017, providing detailed guidance for companies on how and what to integrate in their financial disclosures related to climate change. At the European level, in December 2016, the Parliament adopted a new regulation that will require pension fund managers in the EU to account for climate-related risks in their investment strategies, echoing Article 173.

The French financial markets regulator (AMF) also issued recommendations and best practices to guide the industry. Their December 2017 report provided an opportunity to make an initial assessment of how management companies are applying the Energy Transition for Green Growth Act, with added recommendations to facilitate the implementation of the Article.

Involved French stakeholders

- In May 2016, Paris EUROPLACE launched a new initiative called "Paris Green & Sustainable Finance Initiative", which became "Finance for Tomorrow" in June 2017. Climate-KIC's December 2017 study (in collaboration with I4CE and PwC) *Benchmarking the greenness of financial centres* depicts Paris favourably. So does the first edition of the Global Green Finance Index (GGFI 1) published in March 2018 by Z/Yen and Finance Watch⁹.
- During the Climate Finance Day held in Paris in December 2017 (and to be held annually), French green bond issuers pledged to further develop the market. French public finance institutions, representing EUR600bn of AUM, committed to integrate climate change issues in their investment policy.
- The European Commission's High-Level Expert Group on Sustainable Finance (HLEG) established in December 2016, chaired by Axa's Group Head of Regulation, Sustainability and Insurance Foresight included four French experts. Their roadmap released in January 2018 forms the basis of the newly unveiled *Action Plan on sustainable finance* from the Commission.
- Banks have proposed, through the French Banking Federation, a green supporting factor. The project has been put forward to the European Commission's Expert Group. One of the founding members of the Central Banks and Supervisors Network for Greening the Financial System (NGFS), Banque de France, has also started assessing banking risks related to climate change. The NGFS held their inaugural meeting in Paris in January 2018.

Global green bond issuance needs to double each year to hit USD1tn by 2020. French issuers are expected to continue making big contributions!

Data as of 16th March 2018. Source: Climate Bonds Initiative, Thomson Reuters

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