novethic

RESEARCH

Green and social **bonds**

A PROMISING TOOL

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KEY POINTS

A green or social bond is a debt issued on the market aimed at financing a clearly earmarked project generating a direct environmental benefit – renewable energies, energy efficiency and climate change adaptation – or a social benefit – social housing, health and education. Issuers commit to reporting on fund allocation.

Development banks are today's biggest issuers of green and social bonds. Local authorities and corporates lag some way behind, but are making an increasing number of such issues in their quest to diversify financing sources. Novethic estimates that roughly €8 billion in green and social bonds has been issued since the start of 2013, €5 billion of which by development banks.

Green and social bonds are an innovative tool for responsible investors, enabling them to earmark investments according to the environmental or social benefits expected from the project in hand. In this respect, the bonds constitute a new development focus for responsible investment, one based on the finality of the investment rather than the ESG qualities of the issuer alone.

Featuring the same financial conditions as conventional bonds, green and social bonds are attracting more and more mainstream investors looking to introduce ESG integration policies.

Green bond volumes are set to rise. Growth will be accompanied by the attentive monitoring of the financed projects and their impact, to steer clear of green washing. To that end, a range of ESG rating, verification and certification services are being introduced.

In the longer term, the development of this type of bond could lead the bond market as a whole toward greater transparency in terms of debt allocation. “Well-informed” investors could select bond issues according to their investment objectives, and ESG in particular.

INTRODUCTION

Issues of green bonds, socially responsible bonds and climate bonds are on the rise. Novethic estimates that some €5 billion in such bonds has been issued since the start of 2013 by development banks, the main issuers of this type of debt. The figure is equal to over half of their total issues since 2007.

Including local authorities, corporates and banks, a total €8 billion of these bonds has been issued thus far in 2013. Given the size of the bond market, which the OECD estimated at €95,000 billion in 2011, green and social bonds are still something of a niche but have strong growth potential. A number of large issues, from €500 million to €1 billion, were announced at the end of the year.

Unlike conventional bonds, green and social bonds are not intended to finance all the activities of the issuer or refinance its debt. They serve instead to finance specific projects, such as producing renewable energy or adapting to climate change, the risk of which is shouldered by the issuer. This makes them an innovative instrument, used to earmark investments in projects with a direct environmental or social benefit rather than simply on the basis of the issuer's sustainable development policy.

With financing being sought for the ecological transition, green and social bonds are promising instruments, sketching out at global level the shape of tools adapted to the financing of a green economy.

On the strength of these advantages, the interest of responsible investors – the main target of green and social bond issuers – is growing fast. Judging by issuer press releases and the most commonly used currencies, the main subscribers today are US investors, among them CalSTRS and fund managers like Calvert Investment Management and Trillium Asset Management. European asset owners are also starting to focus on green and social bonds. A Novethic survey[1] shows that 13% of them have already subscribed to such an issue or plan to do so.

The present study reviews the green and social bonds issued on the market and stresses the advantages inherent in this innovative financing tool. It then looks at how to ensure the bonds' credibility and impact against a backdrop of strong market growth.

[1] *Asset owner ESG strategies: From theory to practice,* Novethic, December 2013.

A REVIEW OF GREEN AND SOCIAL BONDS

From climate bond and green bond to social impact bond and SRI bond, a number of names have been coined for this type of bond in recent years, not all of them with the same meaning. We take a closer look.

Development bank bond issues

Supranational organisations and development banks were, back in 2006, the first to issue bonds specifically for projects with strong environmental or social benefits.

These entities made environmental protection in general, and the fight against global warming in particular, a core strategic focus. By issuing green bonds, they sought to enhance the visibility of their efforts in the field. The World Bank's first green bond issue followed the publication of "Development and Climate Change: A Strategic Framework for the World Bank Group" in 2008. The World Bank has since issued nearly $4 billion in what it calls Green Bonds.
In similar fashion, the "Climate Awareness Bonds" (CABs) issued by the European Investment Bank (EIB) since 2007 are part of the European Union's (EU) climate strategy, wherein the EIB's remit is to contribute to meeting EU objectives. CABs were first issued following the publication of the European Commission's "Energy Policy for Europe" and the Council of Europe's 2007-2009 Action Plan for a "European Energy Policy", adopted in 2007. The EIB qualified two investment categories as playing a decisive role in climate protection for the EU: renewable energies (the production of wind power, hydroelectricity, etc.) and energy efficiency (building insulation, co-generation, etc.). Energy produced by using coal or nuclear fission cannot be financed with this lending. The EIB has issued some €3.1 billion in CABs since 2007.

While development banks issue fewer social bonds, the very first were aimed at financing vaccination campaigns. "Vaccine bonds" were issued in 2006 by the International Finance Facility for Immunisation (IFFIm), an organisation set up by the Global Alliance for Vaccines and Immunisation (GAVI) to raise funds on the market to finance its campaigns. Vaccine bonds have since raised more than €4.5 billion. In a further example, the International Finance Corporation (IFC) launched "Women in Business Bonds" in 2013. Reserved for retail investors, the bonds finance the Banking on Women Program that supports women entrepreneurs in emerging countries. The programme has already made loans to 2,200 companies and financed training for 3,000 women.

Local authority bond issues

In France, the Nord-PasdeCalais *région* was the first local authority to issue a green and social bond, in 2008. The issue raised €50 million to finance a number of projects, ranging from "the development of rail and the processing and reclassification of brownfield land to High Environmental Quality construction" according to the related press release.

In the United States, the Federal Government has since 2009 authorised local government to issue Qualified Energy Conservation Bonds and New Clean Renewable Energy Bonds. Used to finance projects in energy efficiency (notably the remediation of public buildings) and renewable energies, these bonds provide investors with tax credits rather than dividend payments. At end-June 2012, the Federal Government authorisations to issue these bonds stood at $3.2 billion (€2.4 billion), but only $895 million (€670 million) had actually been issued.

While the volume of such bond issues by local authorities remains modest compared with those of development banks, the pace has picked up since late 2012 with issues by New York City and the State of Massachusetts in the USA and Göteborg in Sweden. In October 2013, Ontario Province in Canada announced that it would be issuing green bonds in 2014 to finance green infrastructure.

List of green and social bonds issued by local authorities since 2008

Date	Issuer	Issue's name	Amount
Dec-08	Région Nord-Pas de Calais (FR)	Socially Responsible Bond	€ 50 m
2009-2012	US Local Authorities	Qualified Energy Conservation Bonds and New Clean Renewable Energy Bonds	$ 895 m
Febr-12	Région Pays de la Loire (FR)	Socially Responsible Bond	€ 43 m
March-12	Région Ile-de-France (FR)	Green and Socially Responsible Bond	€ 350 m
Jul-12	Région Provence-Alpes-Côte d'Azur (FR)	Socially Responsible Bond	€ 119.5 m
Sept-12	Région Nord-Pas de Calais (FR)	Socially Responsible Bond	€ 80 m
Dec-12	New York City	Green Apple Bond	$ 339 m
May-13	The Commonwealth of Massachusetts	Green Bond	$ 100 m
Sept-13	Göteborg City (SE)	Green Bond	SEK 500 m
Nov-13	Kommunalbanken Norway	Green Bond	$ 500 m
		Total €m	2,064

Given their role to serve the public good, local authorities issue bonds that are both green *and* social more often than development banks do. The "environmentally and socially responsible bond" issued by the Île-de-France *région* in 2012 was allocated 50% to funds for financing environmental projects and 50% to economic, social and solidarity development projects. New York City's Green Apple Bonds are aimed at financing the replacement of light fixtures housing containing carcinogenic substances at over 700 schools, enabling the City to protect children's health and contribute to its reduction of greenhouse gas emissions.

Again in the USA, a bill was introduced to the House of Representatives in 2012 to authorise the Federal Government to issue Clean Energy Victory Bonds. Inspired by the victory bonds issued to finance the war effort during the First and Second World Wars, the new instruments would be Treasury bonds used to finance projects on renewable energies, energy efficiency and electric vehicles. They would target a broad range of investor categories, including individuals, with a low minimum investment of $25. Proponents claim the bond could raise as much as $50 billion.

Social Impact Bonds

Social Impact Bonds (SIBs), used in the UK and USA, are a source of some confusion. They are not bond issues but contracts between an originator, the government or a public entity, a private entity responsible for implementing a social service and investors providing the private entity with financing. Investors are repaid by the government only if the project meets its objectives. The first SIB was issued in the UK by the Ministry of Justice to help 3,000 inmates at Peterborough prison resettle in the community. The bond has raised £5 million (€5.9 million) in six years, with investors receiving payments once the reoffending rate for prisoners falls by 7.5%.

Corporate bond issues

Several green and social bonds have been issued by companies looking to tap the markets to finance environmental projects requiring considerable amounts of capital, such as renewable energy initiatives. The number and volume of such issues remains modest in relation to the size of the bond market. Novethic has identified at least four such issues in 2013. In one of them, Warren Buffet's company, MidAmerican Energy, raised $1 billion (€740 million) to finance a solar farm project.

Green and social bonds are an attractive source of investment for private companies. The Green Bonds issue launched by EDF in November 2013 illustrates the market's potential. The aim of the issue is to finance the renewable energy projects (75% wind and 25% solar) of the company's subsidiary, EDF Énergies Nouvelles. EDF is looking to play a part in the energy transition and to showcase its strategy on renewable energies. It also says that the bond issue serves to forge closer working relationships between its sustainable development, financial and operational teams. EDF raised €1.4 billion through the first issue and is already planning to make others.

Air Liquide, a new breed of bond issue

Air Liquide launched the "first SRI-labelled bond issue" in 2012. The €500 million issue was aimed at financing the acquisitions of the home healthcare companies Gasmedi and LVL Medical.

To attract responsible investors, Air Liquide called on the Vigeo sustainability rating agency to assess the ESG performance of its healthcare division and the two companies to be acquired. Air Liquide's healthcare division scored 43 out of 100, somewhat above the sector average. With Gasmedi and LVL Medical scoring lower ratings, Air Liquide committed to improving them and has since published ESG performance indicators specifically for its healthcare division in its annual report on sustainable development.

Two possible sources of confusion led to a certain amount of debate on the Air Liquide issue. First of all, it clearly differs from the green and social bonds described thus far in this study in that it is not intended to finance a specific project of considerable social benefit but to finance a company that, according to an Air Liquide press release, "meets SRI investor criteria". The social benefit of the issue was not highlighted, undoubtedly owing to the lack of a widely approved definition of what constitutes a "social" project. Also, requesting an ESG rating does not qualify a company to declare itself "SRI", as the responsible investment model by its very nature consists in investors themselves deciding on the ESG credentials of the issuer. That said, the Air Liquide issue did stir SRI investor interest through its earmarking and commitments to improve ESG performance.

More modest in volume, charity bonds in the UK are issued by charitable organisations, "Registered Charities" working to help disadvantaged people, promote amateur sports and protect the environment. In the largest charity bond issued to date, Golden Lane Housing raised £10 million (€12 million) in 2013 to finance the acquisition of buildings for people with learning disabilities.

Financial sector bond issues

Banks, long-standing bond issuers, have recently moved into the green bonds market. Bank of America kicked off the trend with a $500 million issue in November 2013.

Estimated market volume in 2013

Novethic estimates the total of green and social bonds issued since the start of 2013 at **nearly €8 billion**. The figure includes issues by agencies, supranational entities, local authorities, companies and banks observed between 1 January and 20 November 2013 (see table below). It does not include private placements, transactions with targeted asset owners exempt from rules on public offerings, or issues reserved for individuals, for lower amounts and of which it is impossible to draw up an exhaustive list owing to the scarcity of publicly available information on such transactions.

To put the total into perspective, Bloomberg estimates that development banks issued $12.5 billion (€9.3 billion) in green bonds between January 2007 and October 2013. Evidence of the acceleration of this market in 2013, more than half (€5 billion) of the total issues by supranationals and development banks have been made since the beginning of the year.

Green and social bonds issued in 2013				
Type of issuer	Date	Issuer	Issue's name	Amount
Supranationals and development banks	Febr-13	IFC	Green Bond	$ 1,000 m
	Febr-13	KEXIM	Green Bond	$ 500 m
	Apr-13	EIB	Climate Awareness Bond	SEK 500 m
	June-13	IFFIm	Vaccins Bond	$ 700 m
	Jul-13	BEI	Climate Awareness Bond	€ 1,150 m
	Aug-13	World Bank	Green Bond	$ 550 m
	Sept-13	BERD	Green Bond	$ 250 m
	Oct-13	AfDB	Green Bond	$ 500 m
	Nov-13	IFC	Green Bond	$ 1,000 m
	Nov-13	FMO	Sustainability Bond	€ 500 m
Local authorities	May-13	Massachusetts	Green Bond	$ 100 m
	Sept-13	Göteborg	Green Bond	SEK 500 m
	Nov-13	Kommunalbanken Norway	Green Bond	$ 500 m
Companies	Apr-13	Soitec (FR)	Solar Financing Bond	1,000 ZAR
	June-13	MidAmerica Energy's Solar Star (US)	Solar Bond	$ 1000 m
	Nov-13	Vasakronan (SE)	Green Corporate Bond	SEK 1,300 m
	Nov-13	EDF (FR)	Green Bond	€ 1,400 m
Bank	Nov-13	Bank of America	Green Bond	$ 500 m
			Total €m	7,895

Novethic chose to focus in this study on green and social bonds identified as such by their issuers. Climate Bonds Initiative (CBI), a British not-for-profit, has a broader definition of "Climate Bonds". CBI estimated the market at $346 billion at 1 March 2013, including, alongside clearly earmarked green and social bonds, all the bond issues by companies in sectors liable to contribute to the development of a low-carbon economy, including rail transport and nuclear. The company bonds in question should be distinguished from those mentioned above. Because they have not been identified as a project-dedicated bond by the issuer itself, investors cannot be sure of the environmental and social benefits they generate. However, some investors share the same definition as CBI. For example, Calvert Investments in 2013 launched the Calvert Green Bond Fund, invested both in bonds earmarked as green by issuers and in the bonds of companies supplying environmental products and services.

A PROMISING INVESTMENT TOOL

Despite greater constraints and longer issue times, green and social bonds are for issuers and investors alike an innovative financing tool compared with conventional bonds.

For issuers

Attracting responsible investors

The main aim of green and social bond issuers is to attract "responsible" investors. This investor class, recognised as a fast-growing target, consists of players more mindful of environmental, economic and social aspects and with a longer-term outlook. The press releases of the issuers consistently include information on the share of responsible investors having subscribed to the issue in question. For example, a press release from the African Development Bank, which issued its first green bonds in 2013, writes that 84% of the bonds were subscribed by "SRI-focused investors".

Local authorities in France pay close attention to all the stakeholders involved in a bond issue, not just the subscribers but the bookrunners, the aim being to show their support for responsible finance. Several French *régions* have since 2010 committed to requiring more transparency from their banks.

Diversifying financing solutions

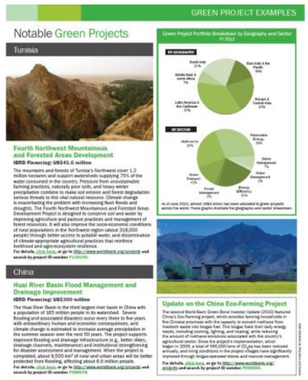
With their budgets on the decline and a relative drought in bank loans, local authorities in France are in their communication media increasingly stressing the need to diversify their financing sources. In a report published in June 2013, the Île-de-France *région* wrote that "the environmentally and socially responsible nature of the bond issue has increased order volumes by nearly 30%". The same concern is shared by EDF, whose €1.4 billion Green Bonds issue in 2013 enabled it to "over achieve its objective to attract new investors" in anticipation of future debt reimbursements. That concern is not shared by supranational organisations or development banks, whose financial ratings guarantee them robust conditions on the bond market. Development bank issues are more motivated by the desire to implement climate change policies and build closer dialogue with investors.

However, increased investor demand for green and social bonds could generate a more attractive exit price for all issuers. At equivalent financial conditions, investors should in theory be attracted to these bonds owing to their environmental and social benefit. But the players we have spoken to say that in practice this mechanism has yet to kick in.

For investors

Earmarking of proceeds with high environmental or social impact

Because the bond market is strongly associated with refinancing debt, green and social bonds are attractive to investors on two levels: they know the projects they are financing and the projects have an environmental or social benefit. Before subscribing to green and social bond issues, potential investors can attend road shows organised by issuers to obtain comprehensive information on the project to be financed. No such events are organised for conventional bond issues. The result is that investors are sure of exactly which projects they are investing in, and can then communicate on them with their stakeholders, generally in line with their responsible investment engagements. For example, in its 2012 responsible investment report, Humanis described the benefits of the Nord-Pas-de-Calais *région* bond issue as follows: "Apart from the purely financial benefits in terms of the risk/return profile, investing in this type of private bond serves to finance real-economy projects and supporting the local economy and employment".



The World Bank - Fourth annual investor update 2012

In addition to investor communication, development banks at least publicly announce the list of projects financed. World Bank reporting, for example, includes a short description of some of the projects financed, as well as their sector and geographical allocation.

Identical financial conditions

The financial conditions under which issuers offer investors green and social bonds are equivalent to those of their "traditional" bonds, meaning investors do not have to sacrifice performance or bear greater risk to achieve an environmental or social benefit. Investors, then, want plain vanilla products, and the market has moved to accommodate them. The first issues were actually more complex. In 2007, for example, the return of the EIB's Climate Awareness Bonds was linked to the performance of the FTSE4Good Environmental Leaders Europe 40 Index. The EIB also offered investors the option of using part of their return to cancel CO_2 emission allowances. According to the EIB, the market's fragmentation and lack of liquidity have for years been a barrier to developing strategies aimed at responsible investors.

Moreover, while the first issues did target responsible investors, their financial characteristics are increasingly attracting mainstream investors. Driven in some cases by their adhesion to the Principles for Responsible Investment, they can thus publicise their involvement in environmental projects. According to Swedish bank SEB, environmental bonds can also spur mainstream investors to take an interest in issues such as climate change and heighten their awareness of its impacts on their investments.

Targeting retail investors

Individual investors have also expressed an interest in these bonds. In the United States, for example, the 2013 green bond issue by the state of Massachusetts was initially open only to individual investors.

But the appetite from retail investors comes mainly from Japan. Traditionally risk-averse Japanese investors are drawn to the nature of the bonds, viewed as a safe investment, and to the related environmental benefit. They are sensitive to issues of energy self-sufficiency, pollution and climate change.

Several development banks, such as the World Bank, the EIB and Kommunalbanken Norway – with 14 issues since 2010 worth a total $300 million – have issued green bonds aimed specifically at this market. Called Uridashi Green Bonds or Uridashi Climate Bonds, these non-yen-denominated bonds should enable retail investors to compensate for Japan's low interest rates.

ENSURING TRACEABILITY AND IMPACT

The myriad names and approaches used by issuers of green and social bonds could lead to confusion in this market, particularly if it were to grow quickly. ESG rating, verification and certification initiatives are already being introduced to ensure the traceability of the issues. But above and beyond transparency on the projects funded, investors would like to be able to measure the ESG impact of these bonds.

Issuer ESG ratings

Three French issuers requested ratings for their ESG practices before launching their green and social bonds: the Nord-Pas de Calais *région*, the Île-de-France *région* and Air Liquide. The move underscores their determination to provide responsible investors with guarantees as to the project owners' ESG credentials as well as the environmental and social benefits, thereby enhancing the credibility of these issues.

However, having an ESG rating should not exempt issuers from explaining the projects' social or environmental benefit. For example, the first step taken by the Île-de-France *région*, when launching its March 2012 issue, was to provide information on the projects, while also disclosing its sustainability rating (59/100 awarded by Vigeo) after S&P and Fitch credit ratings (AA+/AAA). The Nord-Pas de Calais *région* did the same in 2008.

Third-party verification

Third-party certification of an issue or issue programme can provide guarantees as to the environmental benefits of the projects under consideration, or their selection process.

As this is currently a nascent market made up of just a few well-known issuers, investors can take it upon themselves to ensure that the projects selected meet their environmental or social expectations. Thus, according to the stakeholders surveyed, demand from European investors for third-party certification remains low. EDF's issue could be a game-changer, however. The company announced that its green bond issue would have dual certification, having asked Vigeo early on in the process to assess the projects on ESG criteria and Deloitte to conduct an annual verification of the use of funds.

Things are different in North America, where investors already believe it is important for issuers to have their bonds certified. Ontario, which is planning a green bond issue in 2014, has even already anticipated this need, announcing that it would be certified by a third party to help it determine which projects would qualify for a green bond.

To date there are two initiatives that enable independent third parties to certify the "greenness" of a bond issue. The first was launched by CICERO, the Center for International Climate and Environmental Research – Oslo, associated with the University of Oslo. It conducts due diligence on the issuer's processes and investment rules and verifies the eligibility criteria. CICERO has audited processes for the World Bank, the IFC and KEXIM, the Export-Import Bank of Korea, as well as the African Development Bank and Kommunalbanken Norway, which post this second opinion on their websites.

WHICH INVESTMENTS QUALIFY AS "GREEN"?

CICERO, the Center for International Climate and Environmental Research – Oslo, an independent research center associated with the University of Oslo, has reviewed IFC's inclusion criteria, which cover the following three groups of investments.

Renewable Energy (RE): investments in equipment and systems which enable the use of energy from renewable resources, such as solar, wind, hydro, biomass, geothermal and tidal.

Energy Efficiency (EE): investments in equipment, systems, products and services which help reduce energy consumption per unit of output, such as installing waste heat recovery systems, reducing transmission and distribution losses and producing energy efficient motors.

Other: investments that reduce GHG emissions in other ways, like sustainable forestry and agribusiness, capturing and flaring or use of methane, carbon capture and storage (CCS).

Extract of the « IFC Thematic Bonds » factsheet, 2013

The second initiative is the Climate Bond Standard, created by the Climate Bonds Initiative. The organisation offers Climate Bond certification, understood here not as any issue by a company in a business sector that promotes a low-carbon economy but as an issue used to fund a specific environmental project. One of the criteria for the label is for the issuer to have a third-party certify that its bond meets the requirements of the Climate Bond Standard and to publish information about its own ESG practices. For now, this certification is only available for bond issues intended to fund wind or solar power generation projects, effectively limiting the eligible issues. No issue has been certified to date.

Beyond the question of whether or not a certification or standard is desirable, it is important to establish a common framework so that green bonds do not turn into green washing. BofA Merrill Lynch and Citigroup published a "White Paper on Green Bonds" in September 2013, in which they call for a working group to be formed to drive the development of this nascent market. They also suggest a definition and a list of eligible environmental categories, as well as process and reporting requirements to be instituted for green bonds.

Performance indicators

In addition to a list of projects funded, issuers can publish more concrete information on their environmental or social benefits using performance indicators such as average CO_2 emissions avoided and the number of jobs created. For example, the Île-de-France *région* has developed indicators for each project funded, including the number of public housing units created, the number of emergency shelter beds for the homeless, and the increase in a purification plant's treatment capacity.

Investor demand for these quantitative indicators is high, as this is the easiest way for them to make sure their investments are having an impact. For the time being, issuers tend to publish indicators on a per project basis. They are not aggregated at the bond level, due mainly to the potential cost and the difficulty of gathering information. These indicators should nevertheless give investors the means to assess the environmental or social benefit of each euro invested and to provide their end clients with information on their responsible investment policy.

Green-Linked Coupon

Linking a bond's coupon to the achievement of environmental or social objectives would in theory seem like an effective way to ensure the impact of the investment. The issuer thus enjoys a lower borrowing cost if it meets its ESG objectives. In practice, attempts to issue this type of bond have failed because indexing a coupon's amount to ESG performance would disrupt the alignment of the issuer's and investor's interests as it exists today. If the issuer is rewarded for its efforts, investors would have to sacrifice some of their financial performance.

CONCLUSION

The green and social bond market, while still new, has a bright future ahead. The IFC plans to issue another $3 billion (€2.2 billion) in bonds with an environmental and social impact by the end of its fiscal year, reflecting the rapid growth in this market. In all, earmarked bonds launched by the IFC during the year would account for a quarter of its annual bond issue volume.

Asset owners, such as Zurich Insurance Group, are starting to explicitly include green bonds in their responsible investment policies. The Swiss insurer announced in November 2013 that it had launched a $1 billion (€740 million) mandate allocated to this type of bond.

Against this backdrop, it is vital to ensure that these issues have a real environmental and social impact and that they are not used for marketing purposes alone.

Green and social bonds have already had a real influence, particularly for the public financial institutions that issue bonds and feel compelled to provide a clearer explanation of the connection between these bonds and their sustainable development policy.

Ultimately, if the earmarking of bonds extends beyond green bonds, investors will be able to define their own ESG requirements, based on the characteristics of the issuers and of the projects funded.

REFERENCES

Green Bonds: Victory Bonds for the Environment, TD Economics, November 2013

Sustainable and Responsible Capital Markets, Euroweek, September 2013

Bonds and Climate Change – The State of the Market in 2013, Climate Bonds Initiative, July 2013

Painting the bond markets green, YourSRI, June 2013

Green Bonds, Sustainable Prosperity (University of Ottawa), September 2012

Financing the transition to a green economy: their word is their (green) bond?, Climat Brief n°14 – CDC Climat, May 2012

The Role of Pension Funds in Financing Green Growth Initiatives, OECD, September 2011

Green and social bonds

A PROMISING TOOL

A survey conducted by Dominique Blanc, Aurélie de Barochez and Aela Cozic

Novethic, a part of the Caisse des Dépôts Group, is a French research centre on Responsible Investment. It is also a sustainability media expert. Founded in 2001, Novethic is the sole provider of statistics on the French SRI market, analysing the major trends and conducting more expansive studies on specific topics. Novethic's SRI and green fund labels provide a reliable reference point for responsible investment funds available on the European market.

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