Bloomberg NEW ENERGY FINANCE

BNEF BLOOMBERG TERMINAL GUIDE 10 September 2015

Contents

1.	INTRODUCTION	1
2.	DATA GOVERNANCE	2
3.	LOCATING BONDS ON	
	THE BLOOMBERG	
	TERMINAL	5
4.	ADDITIONAL	
	INFORMATION AND	
	RESOURCES	q

Guide to green bonds on the Bloomberg Terminal

This guide sheds light on Bloomberg's approach to improving transparency in the green bonds market. It outlines the methodology behind the 'green bond' tag on the Bloomberg Terminal and shows how to identify and search for 'labelled' green bond opportunities (as well as other 'unlabelled' clean energy-related securities).

1. INTRODUCTION

The biggest challenge in identifying the 'labelled' green bonds universe is determining what constitutes a labelled green bond. At Bloomberg, our working definition, adopted from the <u>Green Bonds Principles</u> (GBP) (described below) and other organizations' pioneering issuance and analysis, is as follows:

 Labelled green bonds are fixed income instruments for which the proceeds will be applied towards projects or activities that promote climate change mitigation or adaptation or other environmental sustainability purposes.

This characterisation aims to ensure as much as possible that issuers adhere to accepted criteria for a labelled green bond issue's use of proceeds.

Bloomberg aims to build on this framework to make sustainability-oriented fixed income opportunities discoverable by using indicators (tags) to identify *labelled* green bonds. Bloomberg's approach, led by Bloomberg New Energy Finance (BNEF) in collaboration with Fixed Income and environmental, social and governance (ESG) product teams across the company, relies on a data governance process to ensure a robust, stable *labelled* green bond universe.

The scope of the rest of this document is as follows:

- Section 2 outlines Bloomberg's current approach to labelled green bonds on the Bloomberg
 Terminal; specifically, the methodology for applying the 'green bond' tag on the Bloomberg
 Terminal as well as the data governance process which underlies it.
- Section 3 discusses functions Bloomberg Terminal users can leverage to locate and analyse *labelled* green bonds (plus other *unlabelled* clean energy-related bonds).
- Section 4 highlights additional information and resources related to green bonds at Bloomberg.

This guide will be updated on an as-needed basis with details on recent enhancements. As the green bond market continues to develop, Bloomberg will continue to leverage BNEF's long-standing research on green bonds and underlying technologies and markets, Bloomberg's ESG and Fixed Income data and analytics platforms as well as the organisation's philanthropic engagements.

Green bonds: historical context

The term 'green bond' began appearing in 2007-08 when the European Investment Bank and the World Bank issued their first green-themed bonds. Since then, with growing investor interest in environmental assets of all types and the recognition that debt will be a major source of the transition to a low-carbon economy, the concept of green bonds has become increasingly relevant.

The <u>Green Bond Principles</u> (GBP) are a set of voluntary guidelines aimed at promoting transparency and disclosure for green bonds. The Principles were drafted in early 2014 and updated in March 2015.



10 September 2015

2. DATA GOVERNANCE

2.1. Overview

There are many shades of green in the world of green bonds as well as different categories of issuers and types of instruments. In addition, terminology often varies, with issuers using different titles to promote the environmental benefits of their bonds¹. While the use of proceeds often varies by bond as well, all issuers must commit to deploying the 100% of bond proceeds for environmental sustainability-oriented activities (outlined in Table 1, in broad strokes) in order for their bond to be identified as a *labelled* green bond on the Bloomberg Terminal.

Table 1: Acceptable use of proceeds types to be identified as a labelled green bond

Use of proceeds type	Example
Renewable energy	Solar, wind, hydro, geothermal, biomass/biofuel/bioenergy, waste-to- energy, tidal and other renewables
Energy smart technologies and energy efficiency	Electric and hybrid vehicles, fuel cells, energy storage, digital energy and energy efficiency (buildings, industry, LED and smart lighting)
Green buildings and infrastructure	New LEED, Energy Star, BREEAM or other certified building and energy efficient social infrastructure
Agriculture and forestry	Forestry management, reforestation, afforestation and land-use
Other sustainability	Other climate change adaptation/mitigation, including waste management, clean water, pollution control, etc.

Source: Bloomberg, Bloomberg New Energy Finance

Bloomberg observes specific exclusions from these categories of economic activities for green bonds' use of proceeds including – but not limited to – those involving coal and nuclear.

2.2. The use of proceeds tag

Bloomberg tags bonds with the 'Green Bond' label in the Use of Proceeds field when an issuer self-labels its bond as 'green' or identifies it as an environmental sustainability-oriented bond issue with clear additional statements about the company's commitment to deploy funds toward projects and activities in the above categories².

Bloomberg's general guideline is that an issuer's self-labelling consists of a concerted effort to market a bond's environmental sustainability-oriented characteristics in its issuance documentation and/or in official public communications that illustrate:

- The bond's use of proceeds falls within market-accepted activities and are 100% dedicated towards green activities and projects (Table 1);
- The issuer intends to meet certain criteria with respect to management of proceeds, transparency and/or reporting.

¹ For example, multilateral development banks (MDBs) use a variety titles like to 'Climate Awareness Bonds' (European Investment Bank), 'Environmental Support Bonds' (Nordic Investment Bank), and simply 'Green Bonds' (World Bank).

² Bloomberg welcomes confirmation from bond issuers who state their intention to adhere to the Green Bonds Principles (GBP), particularly with respect to assurance providers and ongoing reporting. However, given that this is a voluntary framework for issuance at this stage, Bloomberg will emphasise issuer disclosures and documentation in its review to determine alignment with the GBP's intent.



10 September 2015

Bonds issued under green bonds programs, such as those established by corporates, municipals and supranational and government development banks, fall under this umbrella. Table 2 lists labels that these issuers have used to describe their green bonds.

Table 2: Commonly used green bond labels

Term	Used by
Green Bond	Vasakronan, Bank of America, EDF, Unibail-Rodamco, TD Bank, GDF Suez, Hera, KBN, World Bank, City of Gothenburg Sweden, Commonwealth of Massachusetts
Green Sustainability Bond	Unilever
Climate Awareness Bond	European Investment Bank
Earth's Future Bond	European Investment Bank
Environmental Support Bond	Nordic Investment Bank
Environmental Sustainability Bond	European Bank for Reconstruction and Development
Qualified Energy Conservation Bond, Clean Renewable Energy Bond	US municipal issuers

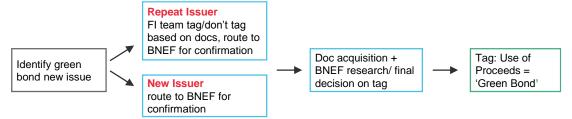
Source: Bloomberg, Bloomberg New Energy Finance

Bloomberg considers such labels one indicator of the issuer's intention to use funds raised for sustainability-oriented activities and projects. Each of these issuers substantiated the label with additional documentation to further describe the sustainability activities to be funded.

2.3. Data governance process

A green bond issue's review is initiated upon announcement or issue, depending on information availability, upon receipt of additional supporting documents and in subsequent quality checks. Figure 1 illustrates Bloomberg's data governance process tagging for newly issued green bonds.

Figure 1: Green bonds data governance process: tagging



Source: Bloomberg, Bloomberg New Energy Finance Notes: 'FI' refers to Fixed Income, 'BNEF' refers to Bloomberg New Energy Finance.

All green bonds require a term sheet or prospectus containing a 'use of proceeds' disclosure that aligns with the market-accepted categories listed in Table 1 – based on Bloomberg New Energy Finance research and review – in order to be identified as such on the Bloomberg Terminal³.

Table 3 outlines both the mandatory term sheet and prospectus with a green bonds use of proceeds disclosure, as well as optional documentation that may also convey information about the use of proceeds, which Bloomberg will recognize as supplementary information but insufficient for tagging.

³ Bloomberg may preliminarily apply the 'green bond' tag to a new bond from a repeat issuer prior to receiving a final term sheet or prospectus with 'use of proceeds' disclosure; however, ultimately all bonds must be accompanied by at least one of these documents.



10 September 2015

Table 3: Accepted documentation containing 'use of proceeds' information

Document	Mandatory	Supplementary
Term sheet or prospectus	✓	* (mandatory)
Side letter	×	✓
Syndicate email	×	✓
Official statement from issuer	×	✓
Published review of issuer's bond or bond framework by an external party	×	√

Source: Bloomberg, Bloomberg New Energy Finance

Direct communication from the issuer or syndicate, or third-party news, will not suffice in itself to ensure a green bond use of proceeds label unless the use and disposition of proceeds is substantiated in mandatory documentation (see Table 3) and research.

2.4. Planned enhancements to Bloomberg's *labelled* green bonds information

The <u>Green Bonds Principles</u> (GBP)⁴ have raised expectations of voluntary reporting according to a set of recommendations developed by a wide constituency of key market participants. Issuers have indeed begun to improve the extent of their disclosures to align with the Green Bonds Principles. In response, Bloomberg plans to execute a series of enhancements to accommodate the desire for more transparency and granular information on *labelled* green bonds. This guide will be updated to reflect any progress in this regard.

Bloomberg's approach to thematic social/sustainability bonds

Following on increasing thematic bonds issuance and Bloomberg's enhanced offerings for the green bonds marketplace, Bloomberg recognises the distinction between green bonds and social bonds and mixed sustainability bonds.

Because social and mixed sustainability bonds can be even more challenging and subjective to evaluate than green bonds, Bloomberg is developing a framework to give market participants insight into the bonds already issued in this universe, as well as Bloomberg's approach to identifying thematic bonds on the Bloomberg Terminal. Investors have increasingly been interested in such guidance for social and mixed sustainability bonds following the release of the updated GBP in 2015. Bloomberg recognises the value of the GBP framework for evaluating social and mixed sustainability bonds as well and will adapt that, where appropriate, for social and mixed sustainability bonds.

Bloomberg will currently combine these bond categories because of small existing issuance volume to date and the shared issuance characteristics, objectives and methodology. In addition, investors seeking these issues generally fall into the same SRI investor categories. As the market grows, Bloomberg will consider transparency enhancements to help users further evaluate alignment with investment objectives.

Bloomberg also recognises that this is an early stage market, which is still evolving. Bloomberg expects and welcomes information on project selection, management of proceeds, assurance providers and planned and post reporting as similarly outlined by the GBP for green bonds. This additional information enhances a clear statement about the use of proceeds. However, the use of proceeds remain the most important factor in terms of the governance of bond tagging.

⁴ The <u>Green Bond Principles</u> (GBP) are a set of principles, initially drafted by four investment banks in early 2014 and updated in March 2015, that aims to establish guidelines for transparency and disclosure in the market. These Principles focus on the use of proceeds of green bonds rather than on the environmental credentials of their issuers.



10 September 2015

3. LOCATING BONDS ON THE BLOOMBERG TERMINAL

Terminal users can leverage several functions to locate and analyse *labelled* green bonds on Bloomberg Terminal as well as in Excel using the Bloomberg API. Table 4 summarises functions relevant to *labelled* green bonds; additional details can be found in the subsequent sections.

Table 4: Summary of Bloomberg Terminal functions relevant to labelled green bonds

Terminal function	Use case (relevant bond types)	Exceptions	Details
SRCH <go></go>	Find and analyse labelled corporate, SSA and project bonds	Labelled asset-backed securities and US municipal bonds	Section 3.1
MSRC <go></go>	Find and analyse labelled US municipal bonds	Non-QECB/CREB labelled green bonds	Section 3.2
BBG Client <go></go>	Find, analyse and export to Excel curated labelled green bond universes	_	Section 3.3

Source: Bloomberg, Bloomberg New Energy Finance Notes: 'SSA' refers to 'Sovereign, Supranational and Agency' bonds.

Sections 3.3 and 3.4 discuss *unlabelled* clean energy bonds: how to find them on Bloomberg Terminal and Bloomberg New Energy Finance's clean energy exposure 'ratings' system.

3.1. Finding labelled green corporate, SSA and project bonds

Multilateral development banks have been issuing explicitly labelled 'green bonds' or 'climate bonds' since 2007. Main issuers include the World Bank and European Investment Bank. Corporate *labelled* green bonds were first introduced in late 2013. Only those bonds clearly classified by the issuers as green and substantiated with supporting documentation described in Section 2.2 are categorised as green bonds using the use of proceeds tag on the Bloomberg Terminal.

A shortcut to *labelled* green bonds can be found by typing '@GREEN' at the top of any screen and clicking the auto suggest 'SRCH@GREEN'. Table 5 lists steps that can be used for those who wish to conduct the search by using the Fixed Income Search function from scratch, for instance, in order to screen for additional fields. This process is illustrated in Figure 2.

Table 5: Labelled green corporate, SSA and project bonds

Step	Comments
1	SRCH <go>*</go>
2	Click the radio button 'Criteria'
3	Start typing 'green bond' into the field search
4	Click the auto-fill 'Bond Use of Proceeds (Green Bond)'
5	1 <go> to search</go>

Source: Bloomberg, Bloomberg New Energy Finance Note: (*) SRCH<GO> has an 'Ask a question' radio button for user keyword-driven inquiries.



10 September 2015

Figure 2: SRCH<GO> with use of proceeds 'Green Bond'



Source: Bloomberg, Bloomberg New Energy Finance

3.2. Finding labelled US municipal green bonds: CREBs and QECBs

This category includes municipal bonds issued under the US Build America Bonds' Clean Renewable Energy Bonds (CREB) and Qualified Energy Conservation Bond (QECB) programmes. These bonds' intended uses are to fund clean energy and energy efficiency projects. These bonds can be located by using the US municipal bond search function (MSRC<GO>) and the following steps in Table 6.

Table 6: US municipal green bonds retrieval: CREBs and QECBs

Step	Comments
1	MSRC <go></go>
2	71 <go>, 'More Criteria'</go>
3	Click 'ARRA Program'
4	Click 'CREB Direct Pay' and 'QECB Direct Pay'
5	Click 'Update'
6	1 <g0> to search</g0>

Source: Bloomberg, Bloomberg New Energy Finance

Although non-QECB/CREB *labelled'* green bonds cannot currently be located on Bloomberg Terminal using MSRC<GO>, these bonds have 'Green Bond' populated in the 'Purpose' field under '2) Addtl Info' of the bonds' DES pages.

3.3. Capturing the full universe: public portfolios

As mentioned in the previous section Bloomberg plans on building out its search and tagging functionality to enable easy location of user-defined green bonds universes. Prior to the execution of these enhancements users can locate portfolios of bonds by category using publicly available securities portfolios curated by BNEF. Users can access the portfolios by entering the portfolio ticker in Table 7 followed by the Client or the F12 key and <GO>, or by following the steps in Table 8 as illustrated in Figure 3.



10 September 2015

Table 7: Bloomberg *labelled* green bond (and *unlabelled* clean energy bond) public portfolios

Name	Broad definition	Portfolio ID
BBG LABELLED GREEN BONDS (EX- US MUNI)	Bonds labelled as green by the issuer (includes SSA, corporate, project bonds and ABS; excludes US municipal bonds)	H302724-1
BBG LABELLED US MUNI GREEN BONDS	US municipal bonds labelled as green by the issuer (includes bonds issued with a 'green bond' label, QECB and CREB bonds)	H302724-2
BBG UNLABELLED CLEAN ENERGY BONDS	Unlabelled green bonds directly linked to green activities; namely, project bonds and ABS (although certain SSA and US municipal bonds are included as well) – determined by BNEF	H302724-3

Source: Bloomberg, Bloomberg New Energy Finance Notes: Bloomberg has created pre-made search screens to facilitate identification of the green bonds universes. These can be found in the public portfolio searches and the example searches in Bloomberg Terminal's analytics platforms. The third portfolio, title 'unlabelled clean energy bonds', was previously titled 'BNEF-labelled'.

Table 8: Bloomberg *labelled* green bond (and *unlabelled* clean energy bond) public portfolios

Step	Comments
1	Type 'BBG', press the F12 key and <g0></g0>
2	Click 'BBG Green Bond Universe Portfolios'
3	Click on the Portfolio Name: 'Labelled green bonds (ex-US muni)', 'Labelled municipal green bonds' or 'Unlabelled clean energy bonds'
4	Click 4) PD to View Portfolio
5	2 Actions->Export to excel' for further filtering or import into PORT <go></go>

Source: Bloomberg, Bloomberg New Energy Finance

Figure 3: Bloomberg green bond public portfolios



Source: Bloomberg, Bloomberg New Energy Finance



10 September 2015

3.4. Finding bonds issued by clean energy corporates

BNEF A1 corporate bonds

BNEF maintains exposure ratings on over 46,000 organisations based on their exposure to the clean energy value chain (which includes both renewable energy and energy smart technologies), as outlined in Table 9.

Table 9: Bloomberg New Energy Finance clean energy exposure rating

Definition of 'clean energy exposure' The Bloomberg New Energy Finance 'clean energy exposure' rating is our estimate of the percent of an organisation's value that is attributable to its activities in renewable energy, energy smart technologies, carbon capture and storage (CCS) and carbon markets. To arrive at a rating, Bloomberg New Energy Finance assesses an organisation's sectors and sub-activities within these clean energy areas, and then calculates an estimate using reported segmented revenues (as the preferred metric), along with any other available metrics such as segmented EBITDA, megawatt-hour (MWh) breakdown of energy production and megawatt (MW) breakdown of generation assets' capacity. Bloomberg New Energy Finance's exposure estimate is presented as one of these units: A1 Main driver (50-100% of value) 50 to 100% of value is estimated to derive from this activity A2 Considerable (25-49% of value) 25 to 49% of value is estimated to derive from this activity A3 Moderate (10-24% of value) 10 to 24% of value is estimated to derive from this activity A4 Minor (<10% of value) Less than 10% of value is estimated to derive from this activity

Source: Bloomberg New Energy Finance

Bonds issued by 'A1'-rated organisations would be most representative of the 'pure-play' universe. *These ratings apply to the issuer and not to the specific issue, however.* As a result, a BNEF A1-rated company whose business activities are dedicated to clean energy may issue bonds for purposes that investors should evaluate relative to their green bond investment objectives.

Bonds issued by BNEF-rated companies can be located by using the bond search function, and following the steps as illustrated in Figure 4.

Table 10: BNEF A1 corporate bond retrieval

Step	Comments
1	SRCH <go></go>
2	Click the radio button 'Criteria'
3	In the field box type "BNEF New Energy Exposure Rating" and select this option
4	Choose 'Include'
5	Enter desired exposure rating(s): A1, A2, A3, A4
6	1 <g0> for results</g0>

Source: Bloomberg, Bloomberg New Energy Finance

Figure 4: SRCH<GO> with BNEF new energy exposure rating





10 September 2015

Source: Bloomberg, Bloomberg New Energy Finance

Other renewable energy corporate bonds

Corporate bonds issued by companies in the renewable energy sector (according to the Bloomberg Industry Classification System, BICS) can also be found in SRCH using 'Industry/Sector' equals 'Renewable Energy' as detailed in Table 11 and illustrated in Figure 5. This search yields a mix of pure-play renewable energy companies and companies that have exposure to renewable energy alongside other businesses. Because this search captures partial exposure to renewable energy, the search results partially overlap with a BNEF new energy exposure rating search.

Table 11: Corporate bonds from renewable energy companies

Step	Comments
1	SRCH <go></go>
2	Click the radio button 'Criteria'
3	In the criteria box type 'Sector/Industry Group' and select this option
4	Choose 'Include'
5	Enter 'Renewable Energy'
6	1 <g0> for results</g0>

Source: Bloomberg, Bloomberg New Energy Finance

Figure 5: SRCH<GO> for corporate bonds from renewable energy companies



Source: Bloomberg, Bloomberg New Energy Finance

4. ADDITIONAL INFORMATION AND RESOURCES

This document will be reviewed on an as-needed basis to reflect changes in market practice and/or Bloomberg analytical platforms. It can be found on BNEF <GO> and on the help pages of ESG <GO>. Other research and commentary on green bonds can be found on the following Bloomberg platforms:

- BNEF Market Outlooks, Analyst Reactions and Weekly Brief on BNEF <GO>
- BRIEF updates and insights on the Sustainable Finance Brief and the Clean Energy and Carbon Brief on BRIEF<GO>
- BNA published pieces on NI BNA<GO>
- BN News code: NI BONGREEN<GO>
- BI published bits on BI ESG<GO>



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