

## »» Market for green bonds is taking root



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Combating climate change and protecting the environment requires substantial investment around the world. The International Energy Agency estimates that investment in sustainable energy infrastructure will be required to a volume of USD 53 trillion around the world by the year 2035 just to limit the global temperature increase to 2 degrees Celsius. Government funds alone will not be sufficient to meet this enormous financial requirement. Rather, private-sector capital will have to be mobilised on a considerable scale. The still fairly young green bond segment has the potential to make an important contribution.

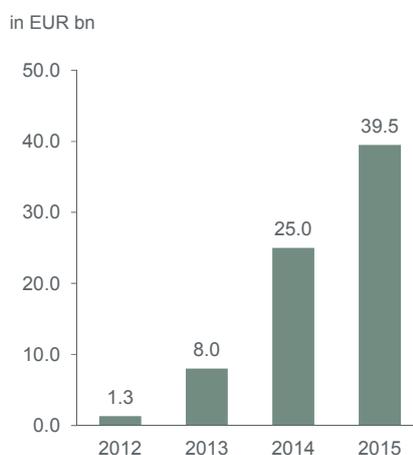
### The market is growing

Green bonds are variable or fixed-income securities issued by an entity that undertakes to use the issue proceeds to finance environmental and climate protection projects. Since the first bond was issued by the European Investment Bank in 2007, the green bond market has grown significantly, especially in the last three years. After a global issue volume of EUR 1.3 billion in 2012, green bonds worth EUR 39.5 billion were issued in the year 2015 alone (see figure).

Up until the year 2012, green bonds were issued primarily by supranational promotional banks which used the issue proceeds to refinance their environmental and climate protection loans. The number and diversity of actors has since increased considerably. In addition to supranational banks and agencies, private enterprises are now among the biggest issuers of green bonds. These groups of issuers accounted for 40 and 37 %, respectively, of the green bond issue volume of 2015, followed by private banks with 18 % and the public sector (municipalities) with 3 %. The majority of

issuers still come from Europe and the USA, with a share of 47 and 18 %, respectively, in the 2015 green bond issue volume. Last year showed that emerging countries such as India, China, Brazil and Mexico are increasingly tapping into the market as well, with a share of 10 % in the 2015 issue volume.

Figure: Green bond issues



Source: Bloomberg, KfW

Green bond proceeds are primarily used to finance measures in the areas of renewable energy and energy efficiency. The financing of other environmental projects such as green mobility strategies or sustainable water management is also gaining importance.

### New opportunities

Unlike with conventional bonds, tying the issue proceeds to a specific purpose enables buyers of green bonds to establish a direct link between their investment and the issuers' green financing projects. This is particularly interesting for investors with sustainable investment strategies. It enables issuers of green bonds to expand their investor basis. The returns and investment risk of green bonds are usually linked to the issuers' credit quality, as in the case of conven-

tional bonds. So far the yields that are achievable with new issues of green bonds are on the same level as those of conventional bonds from the same issuer.

### Need for standardisation

Green bonds so far make up only a small segment, accounting for just 0.1 % of the overall bond market. As the market develops, further improving the quality and transparency of green bonds through standardisation will be crucial. After all, 'green bond' is not yet an internationally protected label and it is usually classified as such by the issuers themselves. The 'Green Bond Principles' introduced by several financial market actors in 2014/2015 are an important step towards standardisation. These principles state the criteria against which green bonds should be structured – although on a voluntary basis. They include rules for the use of funds, project selection, the management of the capital raised and ongoing reporting. The principles also recommend monitoring by an independent third party.

It is important to bear in mind that higher transparency and reporting obligations cause additional costs compared with conventional bonds. Rising transaction costs could influence issuing activity in the green bond market segment. ■

### Green bonds: Top 5 largest issuers in 2015

1. EIB – EUR 3.8 bn
2. KfW – EUR 3.7 bn
3. TerraForm Power – EUR 2.3 bn
4. EDF – EUR 2.2 bn
5. ING Bank – EUR 2.1 bn

Source: Bloomberg, KfW