Green bonds: The missing piece of the jigsaw

E3G Briefing[1], Ingrid Holmes[2], May 2010

> The UK has committed itself to having a near zero carbon economy by 2050. Delivering this low carbon transition will require a total investment of at least £750 billion over the next two to three decades.

> There is enough money: the UK bond market is valued at about £1.2 trillion. £700 billion of this made up of UK government gilts. The insurance and pension industries hold a combined value of £850 billion of bond assets (not all in the Sterling bond markets) and are dominant buyers.

> Currently, most of this capital flows to high not low carbon projects. New market structures — such as a Green Infrastructure Bank backed by green bonds — are required to unlock institutional investor capital to address current market capacity constraints.

> Combined with robust and bankable policy frameworks, green bonds will enable targeted public co-investment to address confidence gaps and unlock opportunities for new public-private investment. They will demonstrate that the UK is serious and committed to tackling climate change and demonstrate new models of public-private investment partnerships.

> For a green bond market to flourish, all participants, issuers, brokers and investors, need to be able to make a return. Simply characterizing a bond as "green" will appeal to only a small sector of the bond markets, ensuring that green bonds remain a niche product.

> The conventional bonds markets have grown up the way they are for good reason. They are generally liquid and well priced. A green bond offering should therefore broadly reflect the existing bond offerings, carrying similar

[1] E3G is an independent non-profit organisation with a mission to accelerate the transition to sustainable development; see **www.e3g.org**

[2] Ingrid Holmes leads E3G's Low Carbon Finance programme. This briefing builds on a report to E3G by Alex Veys (May 2010) The Sterling Bond Markets and Low Carbon or Green Bonds

characteristics – including level of return – so that an investor can feel immediately comfortable investing.

> The largest single concentrations of money are in the hands of institutions such as insurance companies and pension funds. Such institutions will be looking for long-dated inflation-linked bonds – to match their long-dated inflation-linked liabilities – and a premium is likely to be needed to encourage early uptake when the market is less liquid. Beyond this, for Government to incentivize insurance companies and pension funds to move these billions of pounds into green bonds will need attractive and reliable long term incentives. The Government can efficiently deliver this through a Green Infrastructure Bank, guarantees and tax incentives.

> If green bonds are Government-backed (i.e. issued as 'green gilts' or 'GIB green bonds' with a Government guarantee), borrowing costs are lower. A bond issued by the GIB without Government backing will require a default risk premium, raising the cost of borrowing.

> Green Bonds will need to be backed by visible, stable and transparent revenue streams to pay coupons: it will be critical that the characteristics of the revenue stream fit neatly with the needs of bond investors. Policy will need to be constructed to support this structural requirement. So for example a Feed-in-tariff is likely to be more suitable than a Renewable Obligation Certificate.

> Energy efficiency — an investment opportunity estimated to be worth ~£350bn in the UK, ~£111bn of which needs to be invested in homes — is a clear green bond opportunity. A bond issuance would address two of the most significant financing barriers: access to capital and the aggregation challenge. Energy efficiency bonds would provide the missing upfront capital needed by the majority of householders, and which the energy companies do not have the balance sheets to provide; this capital could be paid back as a Pay-As-You-Save loan. It would also aggregate the investment opportunity for institutional investors.

> We would expect the private sector to also issue green bonds, in which case a green bond "rating agency" to "police" bonds will be needed to ensure that funds are used for green investments and that insurance and guarantees can therefore be reliably offered.

- These tasks are manageable: between 2003 and 2009, UK pension funds increased their bond holdings by 9% and reduced their equity holdings by 14%[3]. An asset allocation move from equities to bonds is a significantly riskier change than an allocation within a financial sector. Hence an allocation of 25% to a different sort of bond (green bonds) is not as risky as it seems, especially if some of these come with an AAA rating.

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[3] Mercer (2009) Asset Allocation Survey 2009