Safety, Accessibility and Sustainability Panel

TRANSPORT FOR LONDON
EVERY JOURNEY MATTERS

Date: **7 July 2015**

Item: **Transport for London Green Bond**

This paper will be considered in public

1 Summary

1.1 This paper provides the Panel with an overview of the development, issue and benefits of Transport for London's first Green Bond.

2 Recommendation

2.1 **The Panel is asked to note the paper.**

3 Background

3.1 TfL's goal is to keep London working, growing and to make it a great place in which to live. To achieve this goal, TfL has to continue to provide a reliable and safe transport network but also improve and expand the transport network in a sustainable and environmentally efficient fashion to support the requirements of a growing population as well as providing the population with a good and healthy quality of life.

3.2 TfL's Business Plan sets out the priorities for its multi billion pound investment programme. It states which capital projects will be supported within the constraints of affordability through the funding available to TfL through sources such as grants and borrowing. During 2015/16 TfL will raise £600m in incremental borrowing, this amount was agreed with Government during the 2013 Spending Review.

3.3 TfL raises its incremental borrowing from different sources, including loans from the European Investment Bank (EIB) and bonds issued to investors in the capital markets. A bond is a financial instrument that allows TfL to borrow money from private investors for a defined period of time. TfL could also raise the debt from Government through the Public Works Loan Board, but at present it is significantly cheaper to source the debt from the EIB or capital markets. Every pound saved in interest costs on the debt can be reinvested in TfL's operations and capital programme.

3.4 At present TfL is only able to borrow money in GBP. Hence, the number of investors buying TfL's traditional bonds is fairly limited, as a lot of global investors prefer to access larger and more liquid EUR and USD bond markets. In addition, having a high credit rating TfL issues debt at lower interest rate than other more riskier entities, and this also limits the number of interested investors. To minimise over reliance on existing investors and to keep the rate TfL pays on its bonds low, TfL has recently started focusing on different ways to appeal to a larger number of investors (diversification of the investor base).

3.5 In April 2015, TfL issued a Green Bond to achieve the above goals. One of the key differences between a green bond and a traditional bond is that the funds received by TfL can only be used to fund projects with demonstrable environmental benefits.

4 Green Bond Development and Delivery

4.1 Over the last 18 months TfL has been closely monitoring the development of the green bond market. In 2014/15 TfL started testing an appetite for a TfL Green Bond in various meetings with investors and received a positive feedback. This enabled TfL to start the essential preparations for issuing a Green Bond, including identifying eligible projects and structuring them into a framework.

4.2 TfL developed a Green Bond Framework, which followed the Green Bond Principles – voluntary process guidelines that clarify the approach for issuance of green bonds and promote transparency and disclosure. TfL's Corporate Environmental framework, which sets out the priorities to improve environmental performance of TfL's investment programme and directly managed operations forms the backbone of the TfL Green Bond Framework in that it sets out seven strategic environmental areas for TfL in the delivery of its investment programme and operations: air quality; carbon, energy and climate resilience; resource management; noise mitigation; natural environment; pollution prevention; built environment.

4.3 The project categories selected to be financed by the Green Bond have to contribute to at least two of the seven strategic environmental areas. In addition, Sustainable Transport (which includes mass urban transit and cycling) is commonly assessed as a green bond project category in its own right.

4.4 TfL has identified 5 eligible project categories: World Class Capacity, London Underground station upgrades and station capacity, New Routemaster buses and bus fleet upgrades, cycling improvements and Rail capacity and enhancement projects. Most of these categories contribute to encouraging a shift towards more sustainable mode of transport by increasing capacity on trains or at stations or by encouraging the uptake of cycling through improved infrastructure. In addition, the categories contribute to improvements in air quality, energy efficiency, improvements to the urban realm and natural environment.

The project categories include:

(a) **World Class Capacity:** over £2bn investment programme aimed at upgrading the rolling stock (trains) and associated signalling systems on a number of Tube lines (Jubilee, Northern, Victoria, Piccadilly, Night Tube) to increase capacity by increasing the frequency of trains. **Key environmental benefits:** supports modal shift; reduction in carbon emissions through the introduction of regenerative breaking and new signalling (enabling constant speed);

(b) **Station Upgrades and Station Capacity**: **(Ca £1.7bn)** this category includes projects aimed at increasing capacity and reducing congestion at some of London's busiest stations (Bank, Victoria, Bond Street, Tottenham Court Road, etc). In addition, it includes investments to renew the asset condition, the energy efficiency and built environment of a number of smaller stations. **Key environmental benefits:** supports modal shift and passengers flows and energy efficiency through LED lighting and new less consuming ventilation systems;

(c) **New Routemaster Bus and bus fleet upgrades (ca £200-250m):** introduction of 800 hybrid New Routmasters (NRMs) in total, of which ca 400 are already rolled out (300 have best-in-class Euro 5 engines and the rest have the new ultra low Euro 6 engine). All NRMs cut CO_2 and NOx emissions relative to the old buses; and investments in the retrofit of buses to upgrade them to latest standard (filters and Selective Catalytic Reductions systems to reduce NOx, PM10 and CO_2 emissions);

(d) **Cycling improvements (ca £200m):**

i. TfL is currently investing in infrastructure aimed at increasing the uptake of cycling as an alternative mode of transport. There are already 500k cycle journeys every day. The goal is to achieve 1.5m by 2026. TfL in investing in new cycle superhighways, some of which include segregated lanes; in additional cycle parking and in making a number of dangerous junctions safer for cyclists.

ii. The key environmental benefits are in the form of improved air quality, reduced carbon emissions, noise mitigation and improvements to the urban realm. Cycling is a very clean and quiet form of transport. In addition, by providing more space to support physically active modes of transport, restricting motor vehicle access were necessary, and creating safe routes to schools, people from all walks of life will feel safer, more relaxed and choose to walk and cycle.

(e) **London Rail Enhancements and Capacity Projects:** includes projects aimed at increasing capacity on trains and stations (fifth carriage) thus promoting modal shift on sustainable transport as well as initiatives which contribute to pollution prevention (minimising oil spillages at depots, positive impact on contaminated land through DLR tracking projects), resource management (rain water harvesting measures in depots).

5 Second Party Opinion

5.1 It is a common practice on the green bond market for the borrower to obtain an approval from an independent party, which would evaluate the eligibility of the projects and the compliance of the bond with the Green Bond Principles. TfL chose to seek a second party opinion on its Green Bond Framework and the environmental benefits of the eligible project categories. This helped to ensure that TfL conveyed a strong message about the environmental benefits that was clear to investors.

5.2 DNV GL, one of the world's leading certification bodies reviewed TfL's Green Bond Framework and sought written evidence for project environmental benefits. TfL provided this from its work on sustainability assessments and environmental requirements in procurement. DNV issued an opinion noting that the TfL Green Bond is compliant with the Green Bond Principles. The results show that every eligible project category meets at least three of the seven strategic areas.

6 Outcome

6.1 TfL issued a Green Bond in April 2015. The target size of the transaction was £400m, however the investor interest significantly exceeded this amount. Given the large demand for the bond (larger than what is likely to have been achieved via a traditional bond issue) TfL was able to achieve a very competitive interest rate on the bond and make an estimated saving of ca £1.2m (over the 10 years) compared to what it could have expected to achieve with a traditional bond. The savings compared with borrowing from Government amounted to ca £13m over 10 years (undiscounted).

6.2 The tenor (duration) of TfL Green Bond was chosen to be ten years, which was shorter than the typical period for most of TfL's traditional bonds (20 to 50 years). The choice of shorter duration allowed TfL to attract investors who have ten year investment limits, such as central banks and bank treasuries. TfL's bond is the longest dated Sterling Green Bond that has been issued to date.

7 Accounting and Reporting

7.1 TfL will provide an annual management assertion to confirm how much of its proceeds were allocated to the eligible projects. TfL will use existing accounting mechanisms to allocate and manage the funding. The Green Bond Framework commits TfL to reporting on total environmental performance in the Health Safety and Environment Report, which is required to be published once a year, while the Green Bond is outstanding.

8 Green Bond Benefits

8.1 One advantage of a Green Bond is that investors are becoming more and more sensitive to what the proceeds of their investments are used for and some investors will only invest in Green bonds.

8.2 By issuing a Green Bond TfL was able to attract a larger number of investors than it had achieved in the past through a traditional bond, as some of the investors would not have participated if the bond proceeds were not going to be used for projects with environmental benefits.

8.3 A more diverse range of investors was also achieved. This allocation was different to that seen with previous standard bonds, including more international investors, central banks and new “green” investors with specific environment linked objectives.

8.4 In addition to the favourable interest rate referred to in 6.1, the Green Bond has a number of non-monetary benefits. It allowed TfL to raise its profile by highlighting the excellent work undertaken to mitigate its impact on the environment including improving air quality and reducing, carbon emissions.

9 Next Steps

9.1 TfL continues to engage with interested stakeholders in order to raise the profile of its Green Bond transaction and the initiatives funded by its proceeds, including financial press, conferences and non-for-profit organisations, such as the Climate Bond Initiative.

9.2 TfL will continue to monitor the Green Bond market and investor interest. The TfL Green Bond Framework has been set up to enable TfL to issue more Green Bonds in the future. In practice, the decision to issue a green bond or a standard bond will be taken on a case by case basis and will depend on such factors as market conditions, investor demand and accounting and tax considerations.

List of appendices to this report:

None

List of Background Papers:

None

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