Transition Bond Frameworks for Reaching Climate Targets

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What are transition bonds

While developed country signatories of the Paris Agreement plan to mobilize $100 billion per year,¹ the International Energy Agency estimates that $53 trillion in energy-related investments alone will be required by 2035 to achieve the 2C temperature target. Additionally, the annual abatement costs of achieving the current Nationally Determined Contributions (NDC) reduction targets submitted by member countries could require $97 to $191 billion by 2030.²

A variety of finance mechanisms that leverage both public and private resources are thus crucial to channel global capital into the Paris Agreement and NDC initiatives.

In the context of reaching our climate targets – e.g., the 2C target set at Paris – the role of transition finance is going to be key. Simply defined, transition finance is the flow of finance towards transitioning the business activities to stated climate targets.³ Transition bonds, then, are the listed instruments enabling flow of debt capital enabling climate transition. For example, they could allow not only funding of solar energy-based power plants but also funding of coal power plant retirements, that is they would enable not only more of so-called green assets (e.g., solar power plants) but also less of so-called brown assets (e.g., coal power plants).

Transition bonds are like other knowns bonds, such as green bonds or sustainability linked bonds. Green bonds, in their broadest definitions, are essentially transition bonds given that they are enabling climate transitions; however, green bonds are sometimes more narrowly focused on zero-carbon activities only, such as solar energy.⁴ Sustainability linked bonds, on the other hand, connect the returns on the bonds to certain sustainability related

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¹ UNFCCC, 2019. Adoption of the Paris Agreement. Available at https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf
outcomes, which can again be related to climate transitions; however, not all investors or issuers may want to link the cost of capital to these outcomes. It can also be argued that both green and sustainability linked bonds are ultimately transition bonds in a broad sense.

What should be principles for classification of transition bonds?

A transition bond framework needs to align with appropriate transitions. It should, therefore, start with climate goals. Currently, the outcome is clear – a well-defined climate goal, such as the 2C Paris target. Second, any framework needs to be able to align with transition pathways (e.g., a linear path to net-zero by 2050); and third, it needs to specify business level activities (e.g., solar power plants) that enable getting to this climate target. The first and second – i.e., climate goals and transition pathways – would need to be specified at the firm level.

However, a transition bond framework also needs to allow for flexibility in getting to climate goals, by recognizing the need for various choices. For example, the IPCC identifies multiple pathways to get to the 1.5C target, and different pathways may have different roles for natural gas. These include a necessary tension between stringency and flexibility of choosing pathways and associated activities. Stricter choices would enable reaching climate targets is a more certain manner, however they may ignore industry constraints on making the required transition. On the other hand, less stringent choices may allow flexibility in getting to climate goals; however, they also open possibility of greenwashing.

Further, given the confusion around definitions, this also brings up the issue of whether this framework should be regulation driven or an organically developed protocol within the industry.

A framework for classification

The literature on transition bonds is expanding over time. While these frameworks are of different ambition (i.e., climate targets) and specificity (i.e., transition pathways and business activities), there seems to be consensus on sector-based approaches. Given that each sector is unique and would require specialized approaches that rely on sector level experts, the focus on sector-based approaches makes sense.

Beyond agreeing on a sector-based approach, the biggest gap is the specificity of recommendations on grades of transition finance. While it is possible to be highly prescriptive while being focused on the 1.5/2C climate targets,
this approach is likely to be inflexible to industry needs and constraints. On the other hand, providing too much flexibility may result in lack of tangible progress towards meeting climate targets.

In this context, a suitable approach may be to allow issuers to issue transition bonds with different transition ratings to indicate the underlying ambition. These ratings would then provide suitable information to stakeholders to make informed decisions. These transition ratings, which would be separate from the credit ratings, would also appropriately bypass the debate around the need to incorporate the climate risk aspects into credit ratings.16

![Graph showing transition pathways](image)

**Figure 1.** Example transition pathways, starting from current emission levels and going to zero, for A-rated bonds. All pathways below the black line would qualify for a AAA rating, whereas all pathways between the green and black lines would qualify for an AA rating, and so on.

This indicates the need for transition bond ratings to reflect the ambition of the climate goal as well as the commitment to a transition pathway,17 in a way like the key performance indicators and sustainability performance targets proposed for sustainability linked bonds.18 For example, like credit ratings (Figure 1), we may use the letter rating (i.e., A/B/C) to denote the stringency of the climate target (i.e., 1.5-2/3/4 C), and the sub-letter rating (i.e., AAA/AA/A) to denote the ambition of the transition pathway (i.e., the climate ambition reached by 2030/2040/2050).

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18 ICMA, 2020c. Ibid.
Dealing with offsets and data quality

Offsets have been around since the early days of climate negotiations, including the Clean Development Mechanism (CDM) and various voluntary markets. However, there have been various issues with offsets, from the perspectives of effectiveness as well as efficiency. On the other hand, there is an increasing recognition that offsets may eventually be needed to get to our ambitious climate targets.

Given this potentially crucial role for offsets, the focus may need to be on what are the real issues for using offsets, and can these issues be resolved in a credible manner? Offsets would work only if they were of high quality, which has proven extremely hard so far. Thus, the solution on offsets may lie in ensuring quality, using independent and trusted verifiers to do so. At the very least, it would require a trusted international registry that certifies high-quality offsets. Finally, there appears to be consensus that offsets, even if used, should not justify inaction, and follow only after all feasible activities for appropriate transitions have been utilized.

On data, the trick is to ensure that appropriate data is collected, and with high degree of transparency as well as accuracy, so that the ex-ante claims on transition pathways can be verified. This would require three steps, the first two being ex-ante and the third being ex-post, as follows. First, setting climate targets, pathways corresponding to these targets, and activities along these pathways; with focus on demonstrating additionality compared to business-as-usual pathways. Second, assigning transition bond issuances to the stated targets, pathways, and activities; and creating special purpose vehicles that would contain the proceeds of these bonds. Third, demonstrating that the proceeds in these special purpose vehicles are indeed allocated to promised activities, pathways, and targets.

These three steps would allow for verification of additionality with respect to business-as-usual pathways, using both simple and sophisticated statistical techniques. Like offsets, the third step would also require working with independent and trusted verifiers. It turns out that most of these principles have already been highlighted earlier for green bonds, and have also been recently reiterated not only for green bonds but also for sustainability linked bonds, and, the real issue may be in lack of implementation, primarily due to the voluntary nature of these frameworks; which we believe is likely to be addressed with mandatory (esp. regulatory) approaches.

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23 SFI, 2021. Ibid.
24 EF, 2020. Ibid.