Green Finance

A Bottom-up Approach to Track Existing Flows

IN PARTNERSHIP WITH

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IFC International Finance Corporation
WORLD BANK GROUP

Executive Summary

If we are to transition to a sustainable global economy, we need to scale up the financing of investments that provide environmental benefits, known as "green finance."
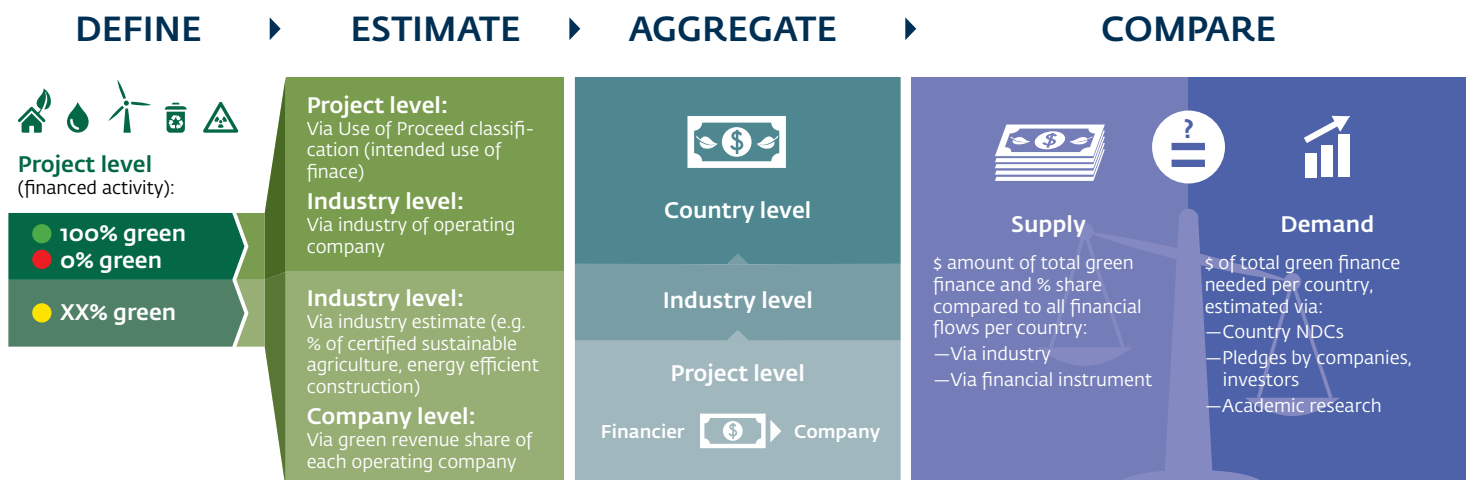
Various financial institutions, international initiatives, standard setters, and regulatory bodies have developed their own approaches to green finance. The diversity of approaches and definitions across the financial sector makes it difficult to assess overall progress. This is further constrained by data availability, which limits the rigor of the analysis of existing green finance flows.

A comparison of the current supply of private sector green finance and the global demand by country would allow for the development of clear action points to close any gaps. Building on the work of the Group of 20 (G20) Green Finance Study Group, the IFC Climate Policy team has developed a new approach to assess and track green finance, focusing on the banking sector, to understand the current status of green lending and provide recommendations on how to better align different approaches to measuring green finance. This will allow for analysis on a broader scale, which could result in better policies to mobilize additional green finance.

This bottom-up methodology first <u>defines</u> what is "green" at a project level, based on the intended use of the investment in the real economy, through the application of <u>estimates</u> for the respective green share per project. It then <u>aggregates</u> the numbers at an industry and country level. These results can be <u>compared</u> to green finance needs to identify gaps and action points.

There are many challenges to implementing this approach, including the lack of consistency in the definition of green and other relevant data points, such as sector classifications across available datasets.

DEFINE ▶ **ESTIMATE** ▶ **AGGREGATE** ▶ **COMPARE**

Project level (financed activity):
- 100% green
- 0% green
- XX% green

Project level: Via Use of Proceed classification (intended use of finace)

Industry level: Via industry of operating company

Industry level: Via industry estimate (e.g. % of certified sustainable agriculture, energy efficient construction)

Company level: Via green revenue share of each operating company

Country level

Industry level

Project level

Financier ▶ Company

Supply
$ amount of total green finance and % share compared to all financial flows per country:
—Via industry
—Via financial instrument

Demand
$ of total green finance needed per country, estimated via:
—Country NDCs
—Pledges by companies, investors
—Academic research

CHALLENGE 1: DEFINING GREEN AND FINDING SUITABLE ESTIMATES

- **Project-level data:** The share of green finance can best be identified by examining the actual project activity, classified as "use of proceed"[a] in financial datasets. However, this classification can identify green only in some cases, and its definition is often imprecisely applied. For example, "project finance" may be chosen instead of "clean energy." These unclear definitions lead to information gaps.

- **Sector-level data:** If the use-of-proceed classification does not provide useful information, the industry of each operating company can serve as an estimate for the green share of every project. Publicly available studies indicate each industry's share that yields environmental benefits, such as certified green buildings in the real estate sector. But, the industry classifications used vary across different datasets. This lack of consistency complicates the approach when combining data sources.

- **Company-level data:** The share of green revenues per operating company can provide a more sophisticated estimate than sector-level data. However, this information exists in a consistent format only for a few listed companies.

[a]The "use of proceed" is a classification for an investment that indicates the intended use of that investment.

CHALLENGE 2: AGGREGATING THE DATA

- **Borrower's location:** As each project's location is not available in a consistent format, the operating company's location is used. This introduces inaccuracies given the cross-border activities of many companies. For example, the location listed in datasets refers to the place of legal incorporation of the borrower or head offices and not the physical location where the proceeds of the loan will be applied.

- **Financier's location:** If data is aggregated per financing institution, there is often limited information on how much of the project was financed by a particular financier and their location. This lack of information leads to limitations in the analysis.

- **Combining datasets:** For a meaningful analysis of green finance per financial instrument, project location (countries), project operator (companies), and project financier (lending banks, bond issuers, investors), different datasets need to be combined. This means that connecting factors must be found across datasets. This can be a unique identifier per financed project (a project ID), operating company, or financing institution. However, many different identifiers are used across datasets and geographies. The lack of consistency complicates the linking of different sources to aggregate the data at different levels.

CHALLENGE 3: COMPARING SUPPLY WITH DEMAND

- **Supply:** Findings remain limited to rough estimates given the challenges described above.

- **Demand:** Existing policy targets still need to be translated into indicators for how different sectors in the real economy have to change in each country to achieve the Paris Agreement targets and the Sustainable Development Goals. For such sector indicators, a breakdown of the need for finance per financial instrument is needed to conduct a rigorous analysis.

Banking:
Application of the methodology to the loan market reveals some initial estimates

Define	The methodology is applied to a dataset on syndicated loans by Thomson Reuters. Green project finance is defined based on the industry of the borrower.
Estimate	The green percentage of projects is applied to industry classifications using existing research figures: ● **100 percent green:** Clean energy ● **0 percent green:** Oil and gas, petrochemicals, pipelines, coal power ● **17 percent green:** Real estate ● **13 percent green:** Food and beverages, paper and forest products, agriculture ● **10 percent green:** Infrastructure and transport
Aggregate	The results are aggregated per industry and the country of the borrower.
Compare	Supply has not been compared with demand yet, due to the topic's complexity. Results:

82 percent of all syndicated loans in 2014 financed projects in sectors with some green activities.	Considering the dollar value of all loans in 2014, almost **15 percent** was green financing.	Of all lending to projects with some green share, **41 percent** of loans were for green real estate and **21 percent** for infrastructure and transport (potentially because other industries use less project finance through loans).	The United States has the largest share, with **35 percent** of the total amount, followed by the United Kingdom with **8 percent.** China and India have the biggest share among emerging markets, both with **4 percent.**

Bonds:
Green bond labels allow for consistent tracking, but improvements are needed

- The Green Bond Principles[b] allow for consistent tracking across markets, datasets, and geographies
- The size of the global bond market has been estimated as a total of $90 trillion, with $694 billion climate-aligned bonds, of which $118 billion are labeled as green bonds (17 percent)

Institutional investors:
While awareness seems to be widespread, implementation is weak

- Despite many investor initiatives, a lack of clear definitions limits the actual application and tracking of environmental, social, and governance investing criteria (ESG)
- 1,072 investors currently report on their ESG investment activities to the Principles for Responsible Investment (PRI)
- Very few integrate ESG criteria into fundamental decision making

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[b]The Green Bond Principles are voluntary guidelines that recommend transparency and disclosure in the green bond market, and promote integrity by clarifying the approach for issuance of a green bond. http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/green-bond-principles/

CONCLUSIONS AND RECOMMENDATIONS

The development and tracking of green finance activities is gaining momentum. However, current data availability limits the rigor of the analysis of existing green finance flows. Definitions and tracking are most advanced in the bond market and could serve as an example for other areas. For banking, loan tracking processes need to be improved and institutional investors need to implement clear decision-making criteria. To get a full picture of green finance, we need to track "green" at the level of each project. Cooperation between market players on the following action points is crucial:

	Multinational organizations	National regulators	Private financial sector	Data providers and standard setters
Short term	• Analyze clients' demand for green finance • Convene efforts at national and international levels to establish green finance typologies and standards consistent with policy targets	• Understand market players' current practice of green finance tracking • Understand and articulate national needs for green finance • Promote transparency and consistency in financial datasets	• Improve application of use-of-proceed classifications, where already used, for better identification of project purpose • Integrate existing ESG criteria into investing decisions	• Increase awareness of the need to integrate green finance into existing datasets • Engage with peers to set a consistent green finance typology, and harmonize unique company identifiers and industry classifications
Medium term	• Pilot analysis comparing supply and demand for selected countries with clear policy plans • Implement recommendations emerging from international groups to put in place green finance typologies and standards • Link bottom-up approach on green finance with top-down research	• Develop new regulations for banking, bonds, and institutional investors • Build on lessons learned from peers, such as China's green banking regulations and Nigeria's sustainable banking principles	• Build on the green bonds experience: Develop clear definitions/tracking mechanisms per financial instrument • Integrate data on green revenue share per company into decision making	• Advocate for better data on green activities at company level, by building green revenue share data into corporate reporting procedures, for example • Develop new services for clients supplying or demanding green finance data