

# Financing Europe's clean energy transition

As investment in key infrastructure in Western Europe has increased in recent years, so too has the need for financing to support clean energy projects. What is green energy credit and how can it support the transition to a low carbon economy, particularly in Western Europe?



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## Overview and benefits of green energy credit

Green energy credit is commonly understood as loans that finance clean energy assets, such as onshore and offshore wind farms, and solar PV plants. The cash flows of these assets tend to be predictable, long-term, linked to inflation, and relatively contracted. In addition, they typically benefit from either government-backed contracted revenue – such as feed-in-tariffs, or revenue contracted through bilateral private sector agreements, such as corporate power purchase agreements. The loans – typically project finance loans – are long-term, floating rate, non-recourse, and sized on a conservative basis, with a lower maximum loan-to-value ratio than might be seen in other sectors, and benefit from a large security package. Lastly, due to the floating rate nature of these loans, they can offer protection against rising interest rates.

## Green energy financing in Europe

Green energy loans are essential to the growth of green energy across Europe, and enable developers and investors to fund projects without needing to provide the entirety of the capital required through their own equity commitments. This allows the developers and investors to initiate a greater number of projects.

Despite total energy transition financing exceeding €550 billion<sup>1</sup> in Western Europe between 2010 and 2020, the funding gap for the energy transition remains significant. According to the G20, total expected public and private infrastructure investment capital requirements in Europe will total approximately

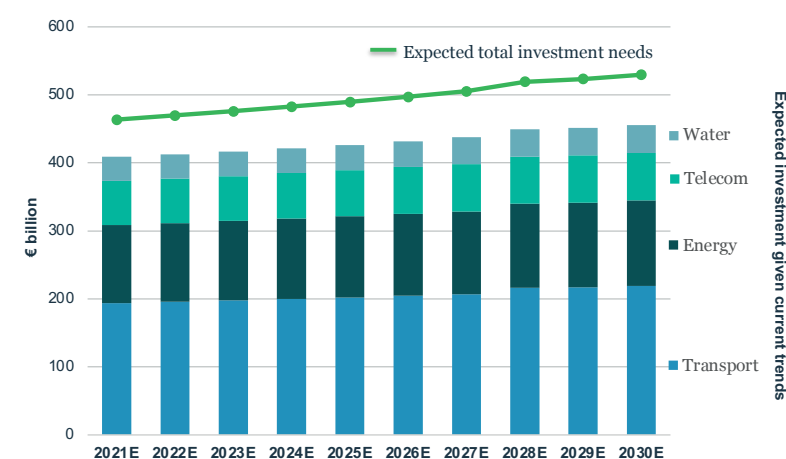
€5 trillion between 2021 and 2030.<sup>2</sup> European countries will therefore need to increase their investment in sustainable infrastructure and energy transition projects through a wave of fresh lending, not only if they intend to meet sustainability targets, but also to accommodate regional infrastructure needs.

The scale of the green energy credit market means that a well-diversified debt portfolio is readily achievable, and can contribute to more stable performance through a reduction in the impact of asset- or country-specific factors, such as plant outages, energy price volatility and regulatory or statutory changes. Additionally, marginal annual default and recovery rates for project finance loans typically improve as the loans season and the projects continue their operating life, while rated loans to corporate issuers tend to see their default rates increase with time.

## Bridging the funding gap

New capital from new sources will not suffice to fill the infrastructure investment funding gap, even with the attractive value proposition the sector represents, as the funding gap is too significant. New capital from existing sources, such as banks whose capital is already financing clean energy assets, will also be required. This process is already underway as certain banks are selling legacy energy transition loans – tied to old projects – to free up balance sheet capital. This liberated capital allows banks to lend to new energy transition assets, or to provide new lending positions in existing, operational transition assets and in parallel generate income for the lenders. With this movement of capital, the liquidity in the green credit market increases together with the volume of green energy assets financed. The market is also an increasingly circular system: As new lenders to the market observe that the original loans of the old lenders are not as illiquid as they once were, this will likely result in a reduced cost of debt for borrowers, whether new to the sector or not. Other forms of securitisation and investment are also possible to further this process and, alongside primary and secondary financings, provide multiple options for lenders and investors to match

Infrastructure investment needs in Europe by sector (2021 – 2030)



Source: Global Infrastructure Outlook, Global Infrastructure Hub.

their risk and return criteria against the adequate portfolios of loans. This increasingly tailored approach makes investing substantial sums in green debt more attractive for institutional investors than it was just a few years ago.

## ESG portfolio analysis

ESG considerations are integral to the green energy financing process. Among the multiple risks assessed, the compliance of the permitting and authorisation process followed by the project owner is a key aspect of the review. An ESG investment analysis will also assess the environmental permit and whether the necessary measures have been put in place to account for any environmental risk. Similarly, a governance issue can be flagged as part of the review process. Post-financing, the primary lender receives reporting on a periodic basis containing a list of key project information. With this information, the lender can calculate on the basis of the clean energy generated by the project, the avoided emissions that its financing has enabled. While this assessment can take various routes, one way is to assess the average carbon intensity of the electricity grid of the country in which a project that has been financed is based. The lender can define how much carbon dioxide the project has avoided by virtue of producing its electricity without requiring the combustion of fossil fuels, whether gas or coal, or other

greenhouse gas generating activities. This is one of many ways lenders can bring transparency around ESG matters in green energy credit.

## Stability and sustainability

The topic of energy independence in Western Europe has become increasingly front of mind in recent months and we believe it will continue to play an important role in the future of the overall regional economy going forward. In this context, green energy credit in particular can be an attractive source of return, stability and diversification for institutional investors who at the same time wish to achieve sustainability objectives.

To learn more about our infrastructure platform, visit [Nuveen.com/infrastructure](https://www.nuveen.com/infrastructure)

### FOOTNOTES:

- Sources: Thompson One Project Finance database, IRENA Renewable Power Generation Costs in 2020, IEA World Energy Investment 2021, Glennmont Partners analysis.
- Global Infrastructure Outlook, Global Infrastructure Hub.

Responsible investing incorporates Environmental Social Governance (ESG) factors that may affect exposure to issuers, sectors, industries, limiting the type and number of investment opportunities available, which could result in excluding investments that perform well.

