

Project Finance

Annual observed recovery rates - Energy focus

December 2023

Green Energy Recoveries now visible

Climate Change and Green Transition: The Role of Project Finance

Project Finance by banks is essential for the transition to green energy. Banks need to strategically manage differing risks, including climate risks, of renewable and non-renewable energy projects. Understanding the project risks is the key factor in this endeavour; crucial for both regulatory modeling in the context of advanced IRB models under Basel IV as well as for pricing and decision making. Project finance emerges as a key segment for banks to commit to substantial financial backing for a sustainable future.

Project Finance Defaults in the Global Credit Data Loss Database

Bank internal Loss and Recovery Data has been collected from 50+ global banks since 2000. Typical project finance deals are large in size but low in number and the 890 defaulted facilities represent a substantial database. Historical observed Recovery Rates and Time to Peak Recovery are shown here by common risk drivers: Region and Sector. GCD members receive granular data including country level and granular industry groups for deeper analysis.

Drivers of Loss

Project Finance risks vary based on project nature, location and involved parties. Common elements include construction risk, operating risk, supply and off-taker risk as well as environmental, social and political risks. On the next page we delve into the specifics of energy projects, elucidating the differences between risks associated with renewable and non-renewable projects.

Note on Terms Used (see [Appendix](#) for more details)

Observed Recovery Rate refers to the historically observed nominal average recovery cash flows divided by outstanding at default. It is based on resolved loans for years 2000-2019.

Time to Peak Recovery is calculated as the center point of recovered cash flow.

890	80%	1.5
Number of Facilities	Observed Recovery Rate	Time to Peak Recovery

Region

	Number of Facilities	Observed Recovery Rate	Time to Peak Recovery
Africa & Middle East	14	85%	1.5
Asia & Oceania	184	83%	1.4
Europe	310	76%	1.4
Latin America	53	76%	2.0
North America	329	81%	1.5

Sector

	Number of Facilities	Observed Recovery Rate	Time to Peak Recovery
Energy	226	79%	1.2
Infrastructure & Transport	157	71%	1.8
Intangibles	50	92%	1.6
Manufacturing	71	76%	1.4
Mining	80	81%	1.3
PPP/PFI	35	73%	1.1
Telecom	54	81%	1.2
Utilities & Environment	210	86%	1.7
Unknown	7	72%	1.9

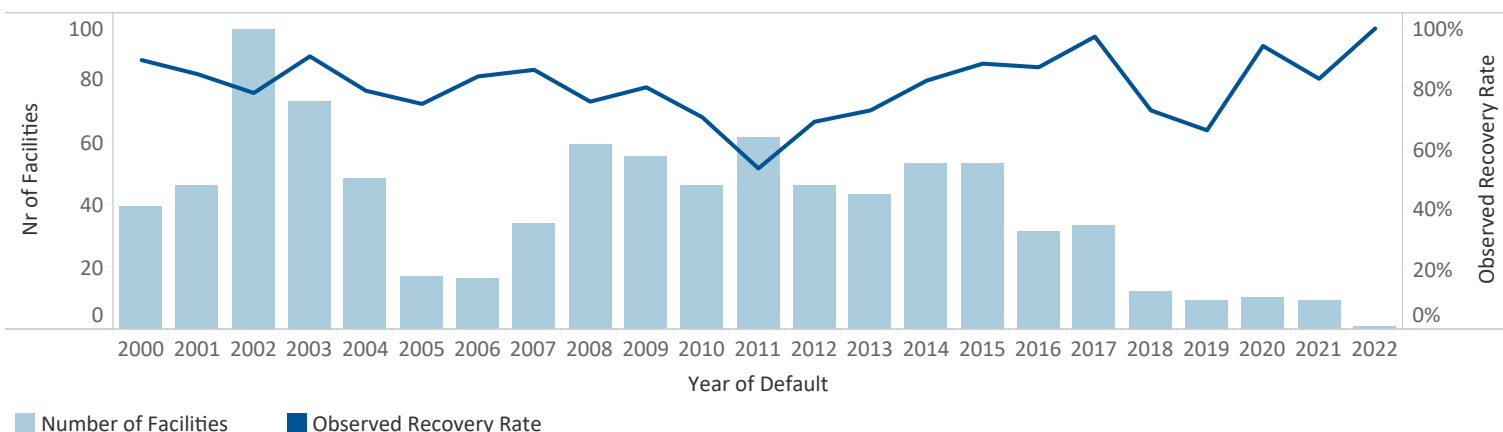
Energy includes Renewables and Non-renewable projects. See next page for a more detailed analysis.

Recoveries and Losses in COVID and other Crisis Times

This report shows historical observed recovery rates. For recent years the increasing portion of yet to be resolved cases adds uncertainty to the outcome and numbers must be interpreted carefully. For these unresolved cases the ultimate recoveries are unknown and therefore, they are not included here.

	Number of Facilities	Observed Recovery Rate	Time to Peak Recovery
Downturn Covid 2020	10	94%	0.8
Downturn GFC 2008-2009	114	78%	1.3
Other Years	766	80%	1.5

Due to the resolution bias the dataset has few defaults for recent years. Impact of pandemic will materialize over the next few years.



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Powering a Sustainable Future:

A Comparison of Green and Fossil Fuel Energy Projects

The defaulted renewable energy project data collected so far reveals a recovery rate that falls short of expectations of lower risk compared to non-renewable projects. A reason for this might be the relatively young renewable energy sector where early stage projects were initially riskier due to leapfrogging of technology and the occasional unsuccessful development of infant technologies.

With a limited number of defaults in renewable projects the data remains inconclusive at this stage. However, we anticipate that future data will reveal differences in risk as we explain below:

Construction Risk: For fossil fuels, with centuries of experience, construction risks are notably low, whereas renewable projects, particularly pioneering ones, faced higher initial risks, which have diminished with technological advancements.

Supply Risk: Supply risks vary with fossil fuels having known reserves but facing political and environmental limitations, while wind and solar projects generally exhibit lower supply risks, although changing water levels can impact hydro projects.

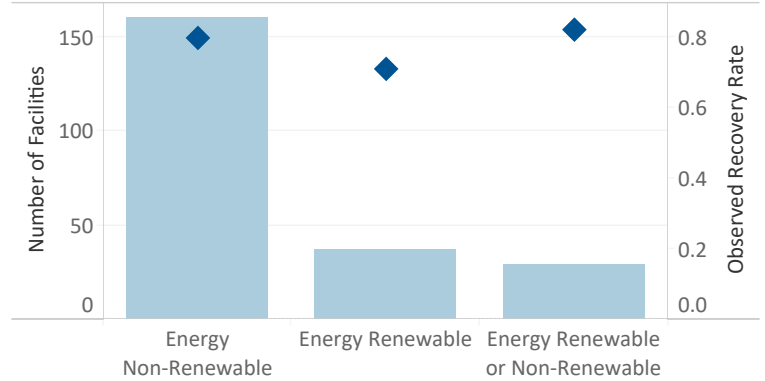
Operational Risk: Operational risks are generally lower for wind and solar projects given their reduced maintenance compared to gas and coal plants.

Off-take Risk: Off-take risks including pricing concerns have evolved as green subsidies, once essential, have decreased over time.

Environmental (transition and physical), social and political risk: Public acceptance of green energy varies; while there is a growing demand for sustainable energy sources, concerns arise when such projects directly impact local communities. The evolving political and social landscape, driven by increased demand for green initiative will lower fossil fuel project's acceptance.

A comprehensive understanding of renewable vs fossil fuel risk can only be achieved by examining both default rates and recovery rates. We intend to delve into this analysis in our upcoming reports.

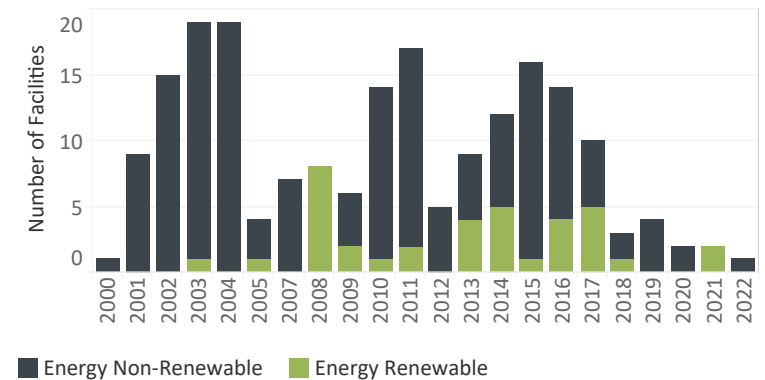
Renewable vs. Fossil Fuel Energy Recovery Rates



GCD members exclusively receive full details of the defaulted projects.

■ Number of Facilities ■ Observed Recovery Rate

Time Line of Defaults: Green Energy is younger



GCD's Mission in ESG and Climate Risk Integration for Banks

GCD has a history and strength in data standard setting, data pooling, method sharing and benchmarking.

Information

GCD operates as the pivotal hub, providing a secure and trusted environment for the exchange of information (conference sessions, webinars and working groups).

Stress Testing Benchmarking

Benchmarking for methods, driver identification and common stress test factors, through working groups, surveys and the creation of best practice papers.

Climate Effect Benchmarking

UNEP FI alliance to establish industry wide standards in ESG data collection and reporting to help banks with their risk management activities.

Data Collection

GCD's standard setting in data collection for climate integration to credit risk measurements

Join the Focus Group



Global Credit Data maintains the world's highest quality, most exhaustive member-bank contributed data source for credit risk.



More from Global Credit Data

This report draws on verified information collected from 50+ global or regional banks over 20 years and covers over 300,000 defaulted facilities in total.

[Explore our other reports.](#) They provide an instant insight into observed Recovery Rates and other key benchmarks for various exposure classes, industry sectors and collateral types:

Corporates, Banks and Financial Institutions, Sovereigns, Real Estate Finance, Shipping Finance, Aircraft Finance.

To meet the standards set by global regulations like BCBS239, GCD has established a robust framework to continuously measure, monitor and improve [data quality](#).

About

At GCD, our mission since 2004 has been to empower banks and the financial industry with a deep understanding of credit risk through a unique data source. As a non-profit organisation owned by 50+ member banks, we collect valuable data directly from banks' books.

GCD's activities revolve around pooling credit loss data, particularly from low default portfolios. Beyond data pooling we foster knowledge exchange, facilitate research and information sharing services, creating a dynamic environment for insights and collaboration.

Join our community to access exclusive data insights gain market understanding, and benchmark your performance against industry peers.

www.globalcreditdata.org

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