



Green Bonds for Renewable Energy

Energy Community Secretariat, Hungarian National Bank & Western Balkans Green Center: Webinars on Green Bonds
May 2022

AGENDA

1. IRENA background
2. Renewable energy investment trends
3. Energy transition investment needs
4. Unused capital pools: Institutional investors
5. Innovative instruments: Green bonds
6. Green bonds for renewable energy
7. Recommendations for stakeholders

IRENA: the only intergovernmental agency dedicated to renewables

- Near universal membership (160+ countries)
- Helping members transition to a sustainable energy system
- Principal platform for international cooperation on renewables
- Repository of knowledge on renewable energy:
 - Statistics
 - Policy
 - Technology
 - Finance



COUNTRIES

Select a Country ▾

GEOGRAPHICAL FOCUS

[Africa](#)

[Asia & the Pacific](#)

[Europe](#)

[Latin America & the Caribbean](#)

[Middle East & North Africa](#)

[North America](#)

INITIATIVES

[Clean Energy Corridors](#)

[Coalition for Action](#)

[Collaborative Frameworks](#)

[Global Geothermal Alliance](#)

[Parliamentary Network](#)

[Renewable Energy Roadmap \(REmap\)](#)

[Renewables Readiness Assessments](#)

[SIDS Lighthouses](#)

PROJECT FACILITATION

[About project facilitation platforms](#)

[Develop a project \(Project Navigator\)](#)

[Energy Transition Accelerator Financing \(ETAF\) Platform](#)

[IRENA for CIP](#)

[Locate a project site \(Global Atlas\)](#)

[Open Solar Contracts](#)

KNOWLEDGE, DATA & STATISTICS

[Data & Statistics](#)

[Policies & Measures](#)

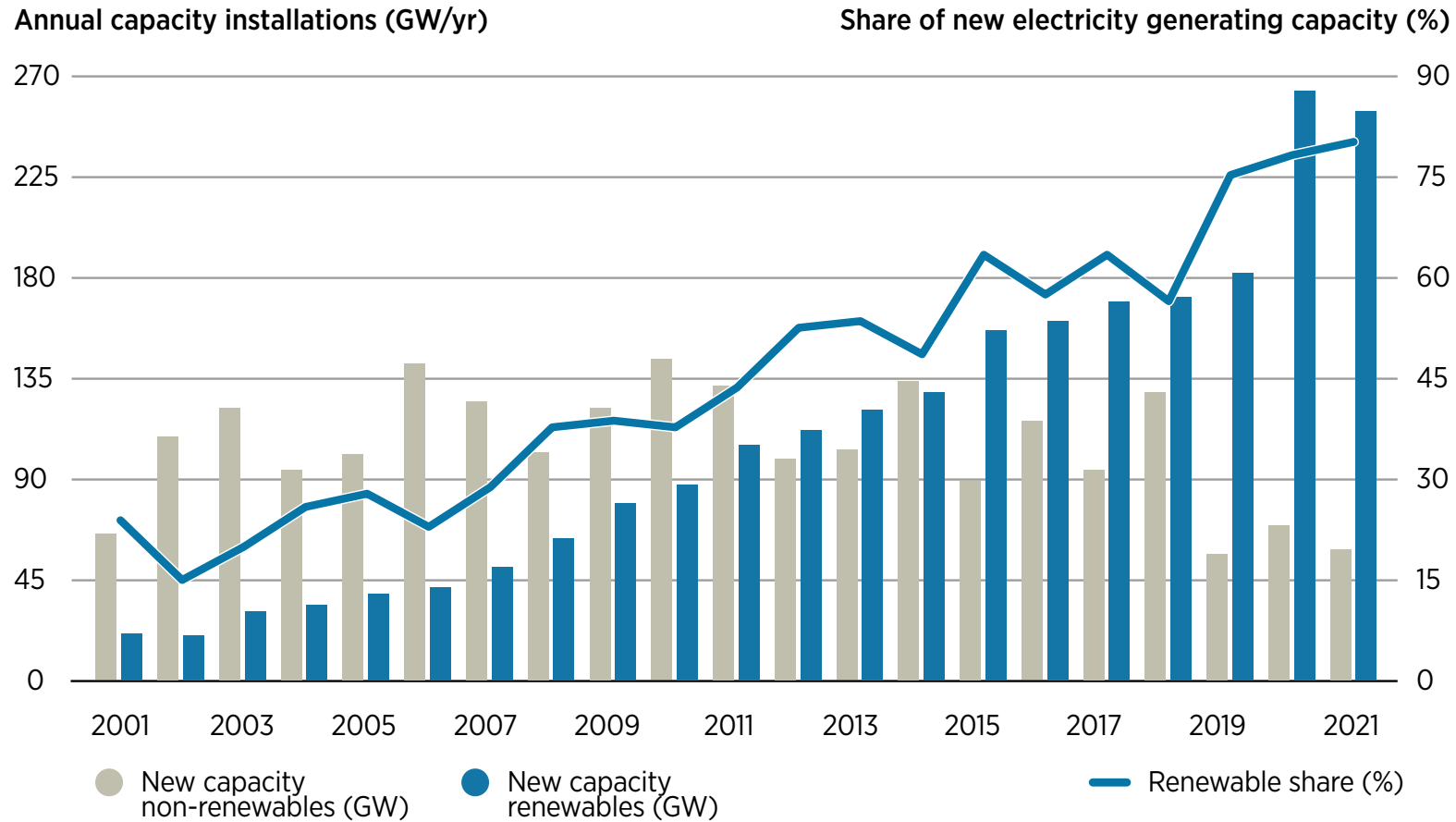
[Publications](#)

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TOPICS

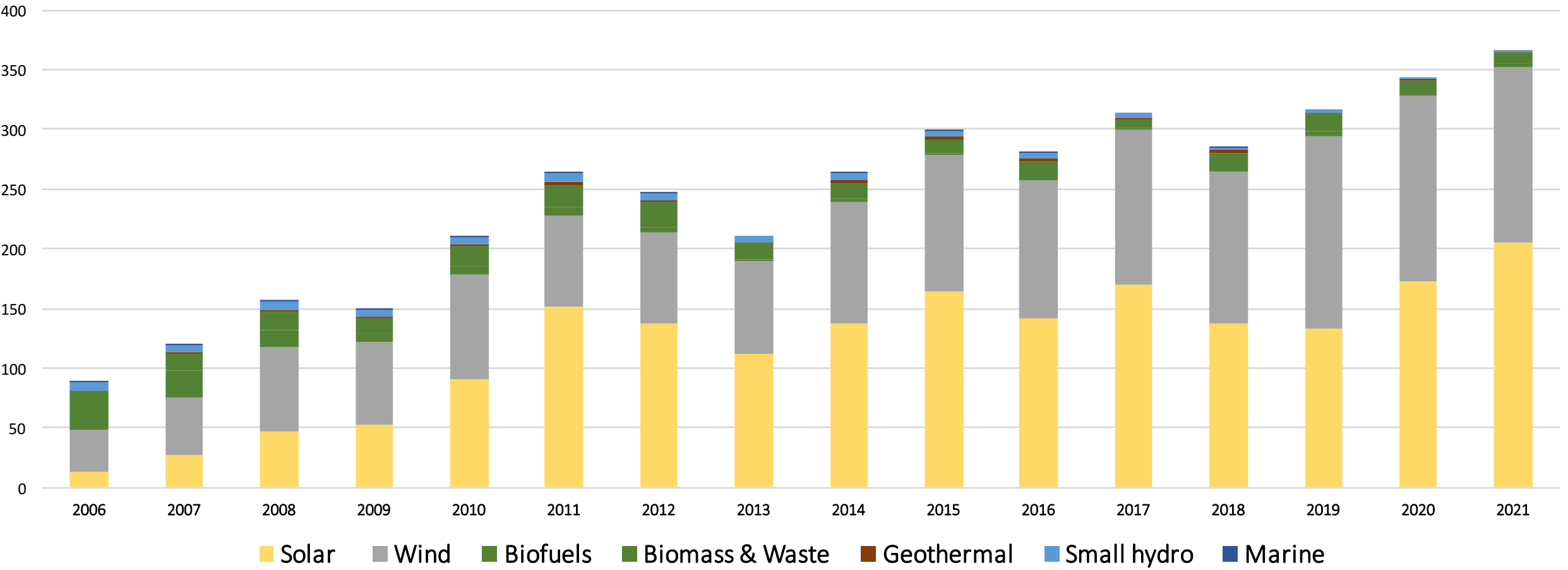
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Renewable energy power capacity additions



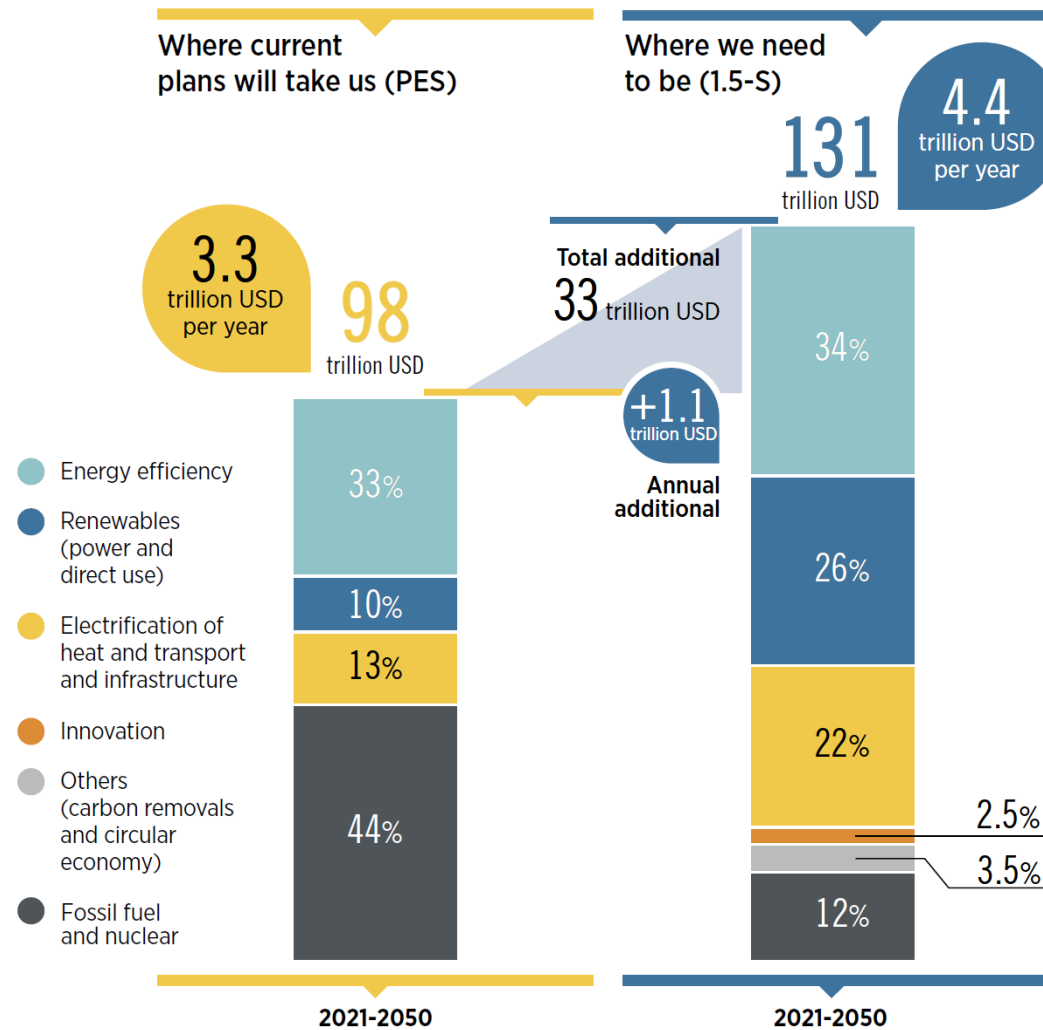
Source: (IRENA, 2022)

Renewable energy power investments: past & present (excl. large hydro, USD billion, 2006-2021)



Source: (BNEF, 2022)

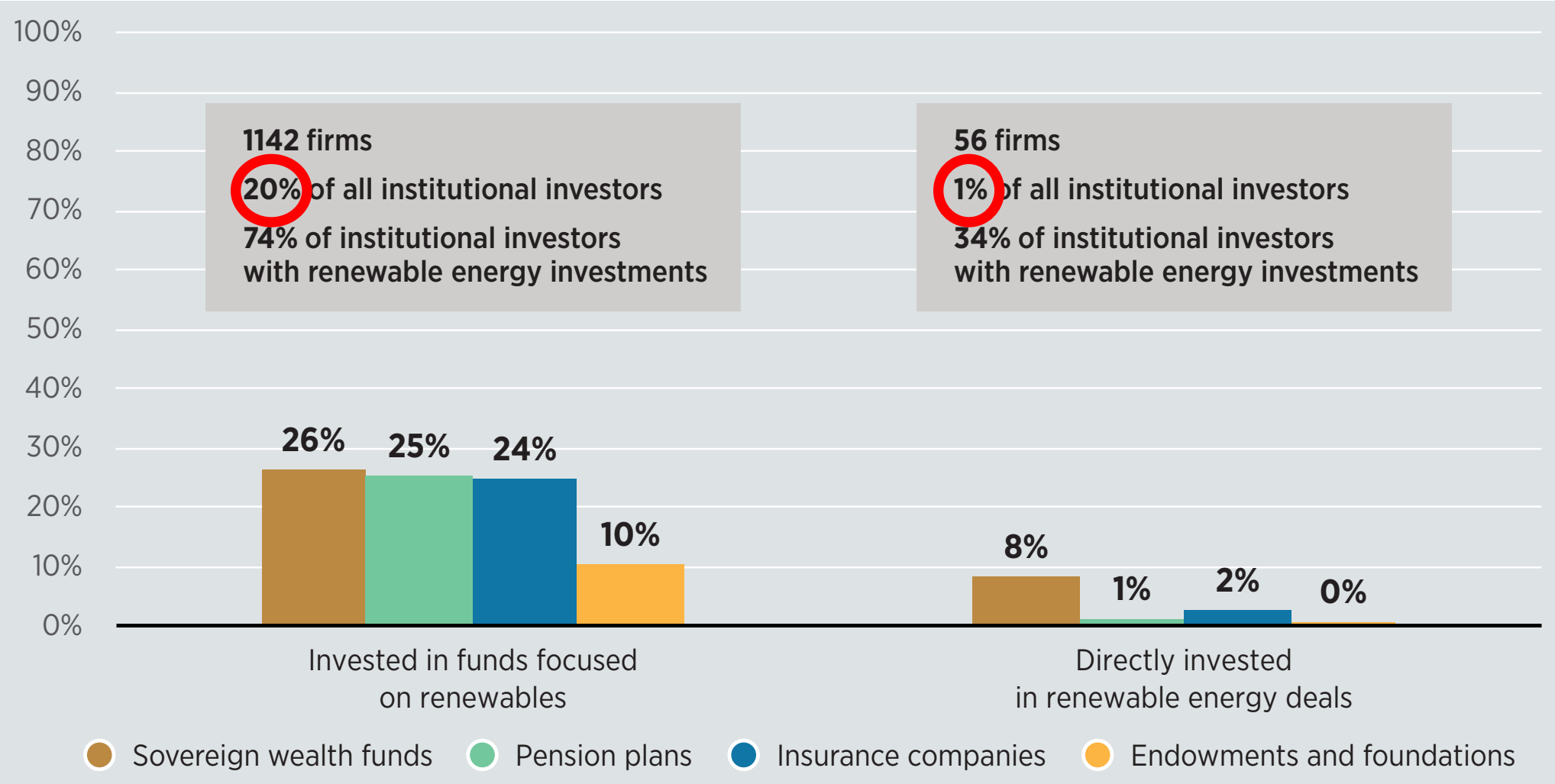
Renewable energy investments: the future?



Source: (IRENA, 2022)

Mobilising all capital pools: Spotlight on institutional investors

Number of institutional investors with renewable investments (via funds or direct), 1990 – Q2 2019, by investor type

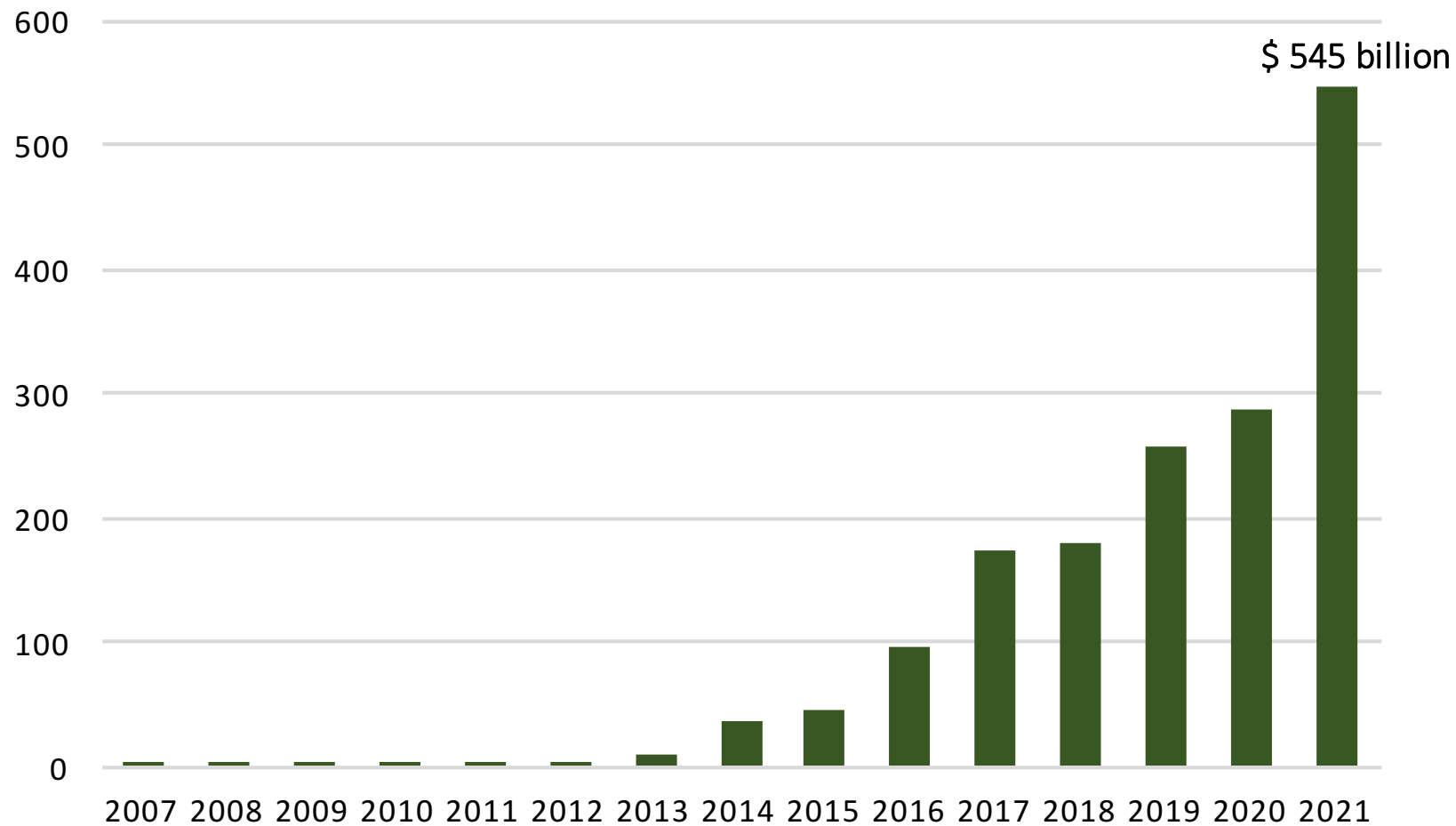


Source: (IRENA, 2020) analysis based on Preqin (2019) data

How to activate institutional capital

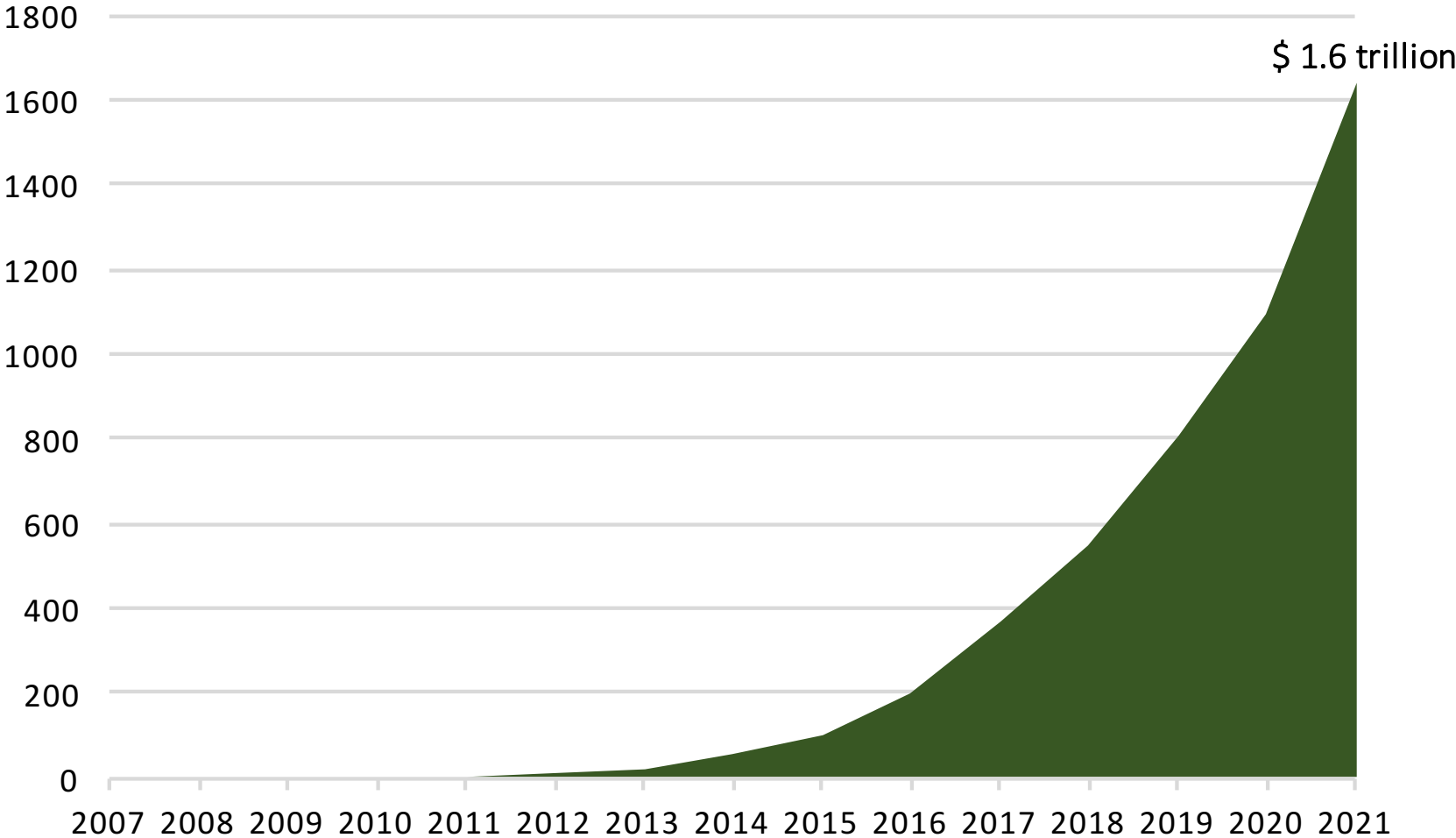


Green bond market - Annual issuances (2007-2021, USD bn)



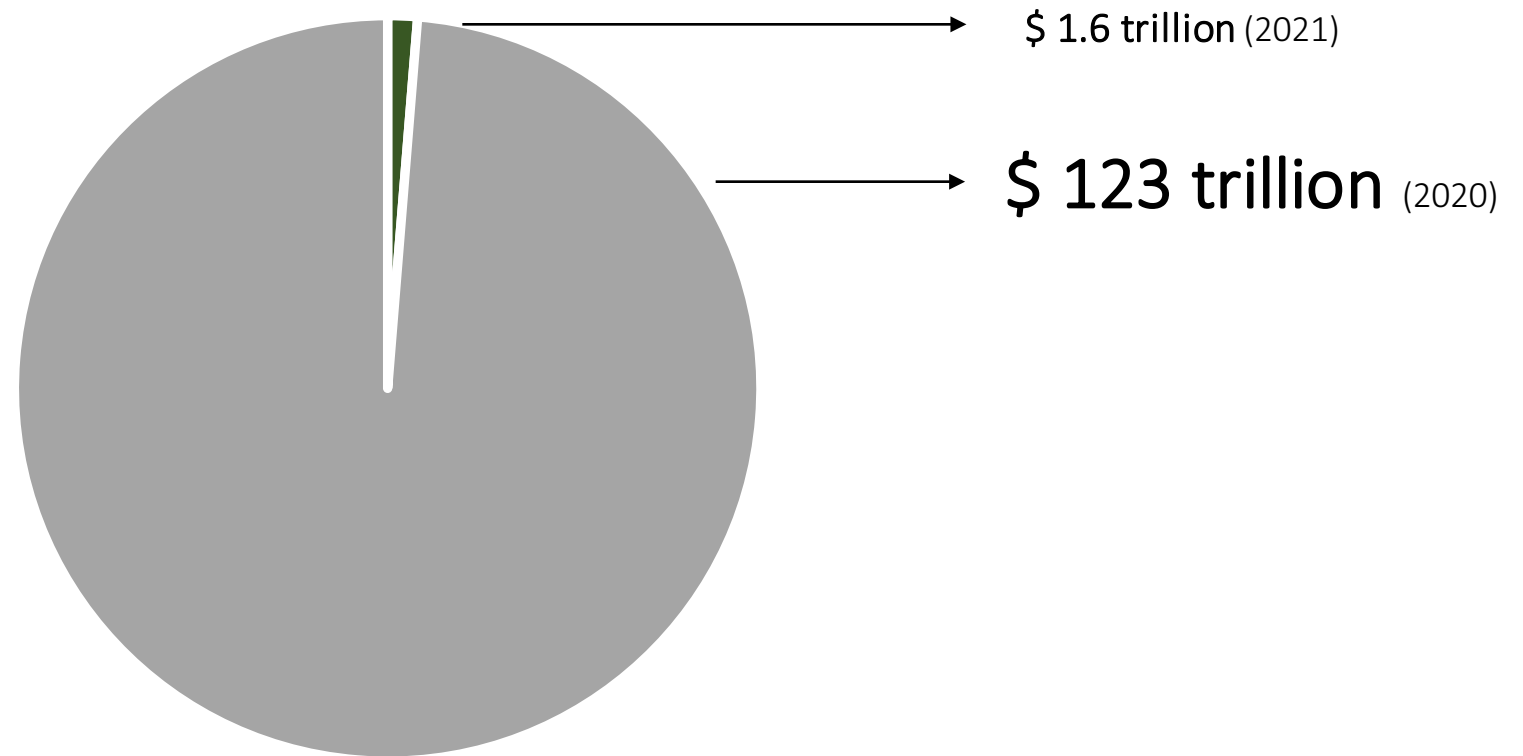
Source: (Environmental Finance database, 2022)

Green bond market - Cumulative issuances (2007-2021, USD bn)



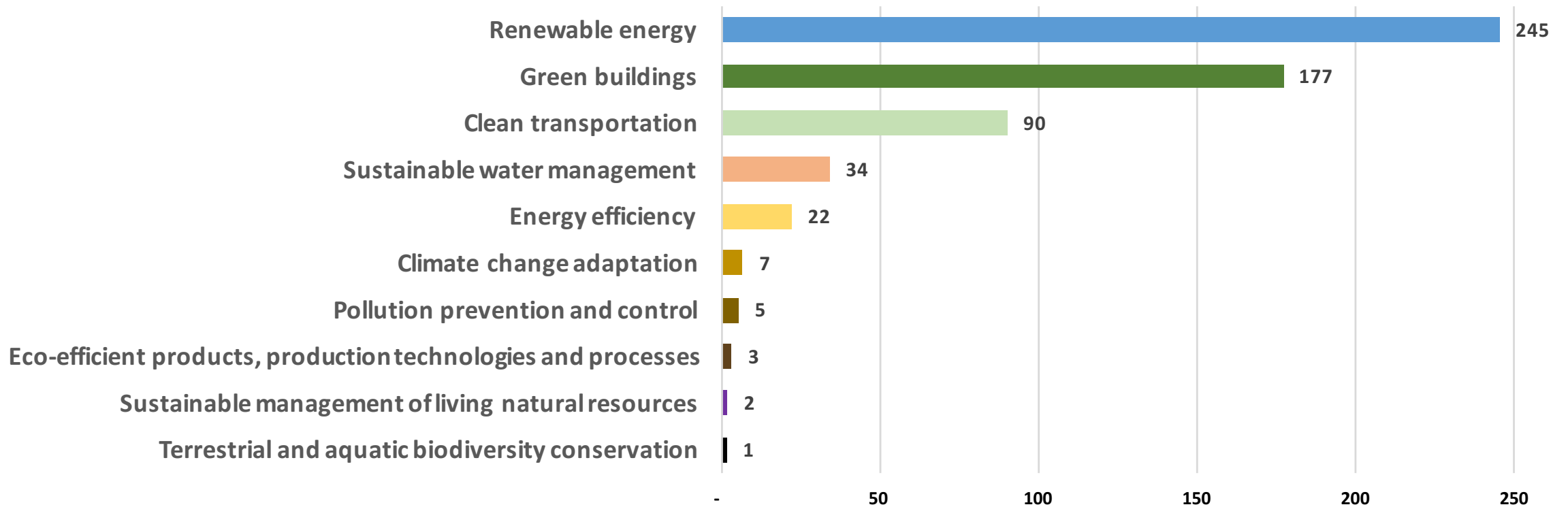
Source: (Environmental Finance database, 2022)

Green bonds as a percentage of the entire bond market



■ Green bond market (2021) ■ Global bond market (2020)

Use-of-proceeds categories

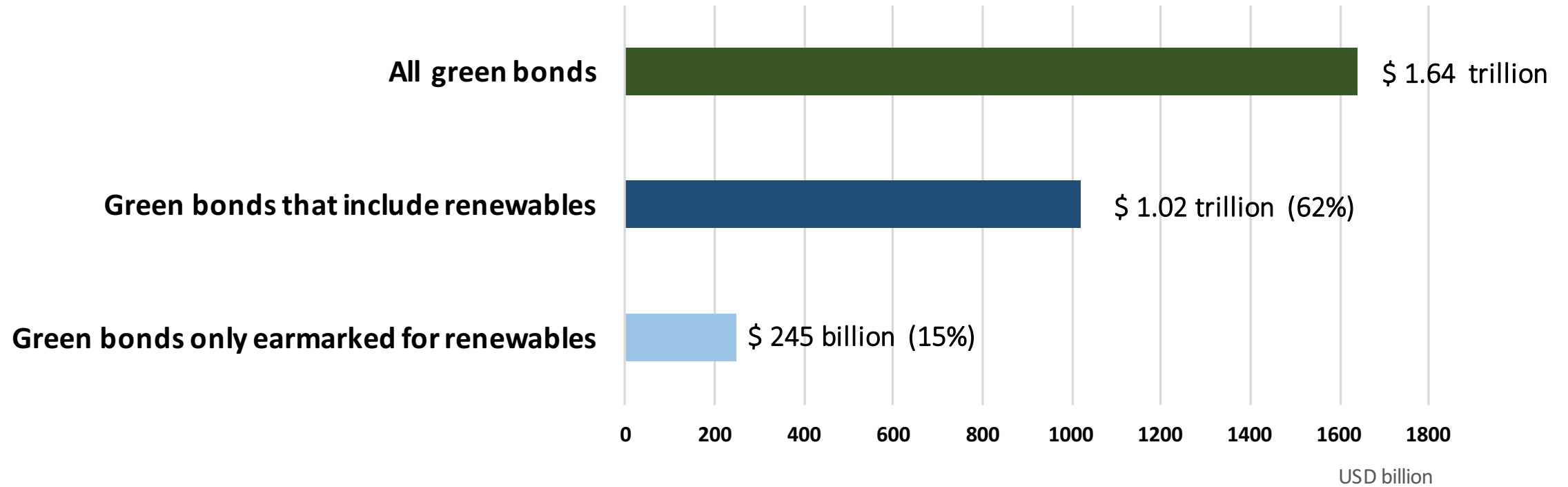


Source: (Environmental Finance database, 2022)

USD billion



Green bonds for renewables



Source: (Environmental Finance database, 2022)

Green bonds for renewables

- Larger issuance size
 - Renewables-only = USD 230 million
 - All green bonds = USD 100 million
- Slightly longer maturity
 - Renewables-only vs All green bonds: 13 years vs 10 years
- Similar regional distribution:

	<u>Renewables-only</u>	<u>All green bonds</u>
Africa	0.4%	0.2%
Asia– Pacific	24%	23%
Europe	50%	45%
Latin America	2%	2%
North America	23%	22%
Supranational	-	7%

Green bonds for renewables

➤ Top 5 issuing countries:

Renewables-only



1. United States \$51 bn



2. Germany \$35 bn



3. China \$28 bn



4. Spain \$20 bn



5. Netherlands \$18 bn

All green bonds



1. United States \$322 bn



2. China \$215 bn



3. France \$178 bn



4. Germany \$153 bn

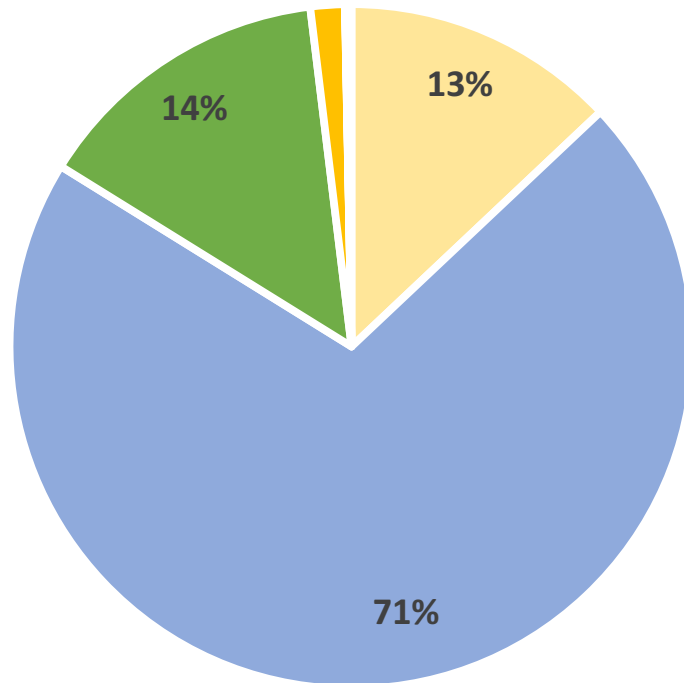


5. Netherlands \$71 bn

Green bonds for renewables

Renewables-dedicated Green Bonds

(2007-2021, in USD)



Agency

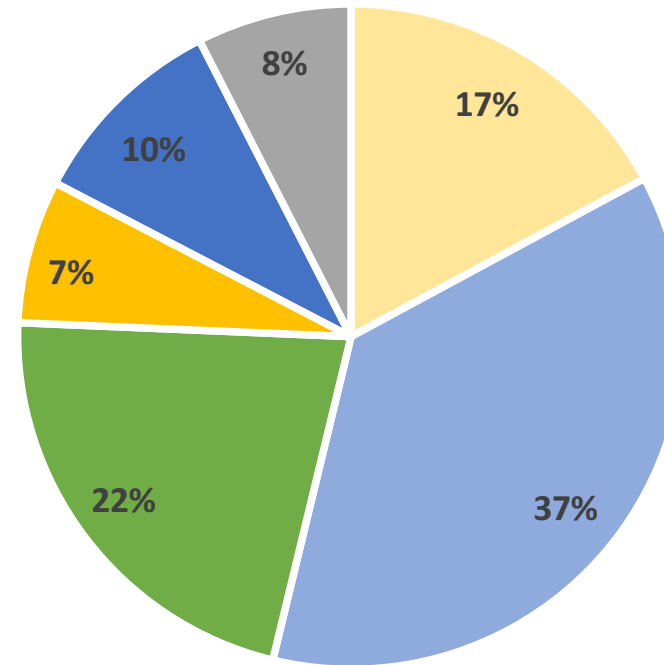
Municipal

Corporate

Sovereign

All Green Bonds

(2007-2021, in USD)



Financial Institution

Supranational

Corporate bond issued for renewables

ENERGY TODAY

THURSDAY, DEC 16, 2021, 15:20

EBRD invests EUR 5 mln in Lithuanian Green Bond

Banking



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The European Bank for Reconstruction and Development said it is investing EUR 5 million in a EUR 25 million Green Bond issued by UAB Atsinaujinančios Energetikos Investicijos (AEI).

Financial institution's bond issued for renewables

National Bank of Greece raises EUR 500 million via green energy bonds



Photo: Pixabay

NBG sold green energy bonds worth EUR 500 million with the obligation to invest the funds in hydropower, wind parks and photovoltaic projects in Greece.

The European Bank for Reconstruction and Development revealed it invested **EUR 50 million** in a six-year senior preferred green debt issuance by the National Bank of Greece (NBG). The Greek lender sold the country's first green energy bonds, worth EUR 500 million and with an **interest rate or coupon of 2.75% and a yield of 2.875%**.

NBG sold the securities within the green bond framework that it adopted in April. They are compliant with the International Capital Market Association's (ICMA) Green Bond Principles, which recommend transparency and disclosure.

The Athens-listed bank said it can use the funds only to finance or refinance equipment, development, manufacturing, construction, operation, distribution and maintenance of hydropower projects up to 20 MW, **onshore wind energy projects** and **solar power plants** in Greece.

Pioneering move for Greece

NBG is the country's first lender in five years to issue senior notes. Senior preferred bonds have the highest priority in payback. The debt is callable in five years, which means the bank has the right to redeem it one year before maturing.

Eighty institutional investors pledged EUR 1.2 billion or 2.4 times more than NBG needed to sell the green energy bonds

Agency bond issued for renewables



Evwind, News Menu, offshore, Wind Energy, wind energy

Vattenfall issues EUR 500 million green bond

🕒 February 7, 2021 👤 reve

Vattenfall has issued a new EUR 500 million green senior bond. The issue was oversubscribed by more than 3.5 times. Vattenfall now has three green bonds outstanding with a total size of EUR 1.5 billion.

The proceeds from the bond issue will be earmarked for investments in the four eligible categories specified in Vattenfall's Green Bond Framework: Renewable energy and related infrastructure, energy efficiency, electrification of transport and heat, and industrial projects. Barclays, BNP Paribas, MUFG and Nordea acted as joint bookrunners on the bond issue.

Vattenfall's CFO Kerstin Ahlfont comments on the strong demand for the bond: "I am happy to say that we have once more seen a very strong interest among European investors when issuing our new green bond and that so many have chosen to contribute to our goal of enabling fossil-free living within one generation."

The settlement date is 12 February 2021.

Facts green bond:

Size:	EUR 500 million
Interest spread:	ms+38bps
Yield:	0.155%
Coupon:	0.125%
Price:	99.762%
Listing:	Nasdaq Stockholm
Documentation:	EMTN
Governing law:	Swedish law

How to further grow the 'green bonds for renewables' market?



Policy makers

- Supporting policies for renewable energy
- Development of the green/ sustainable finance sector
- Review of institutional investors green mandates and restrictions



Development banks

- Capacity building for green bond programmes
- Economic support for green bond programmes and issuances
- De-risking of renewable energy projects



Institutional investors

- Internal capacity building for climate-related risks
- Review and revision of investment targets and incentives
- Cooperation with public and private financiers



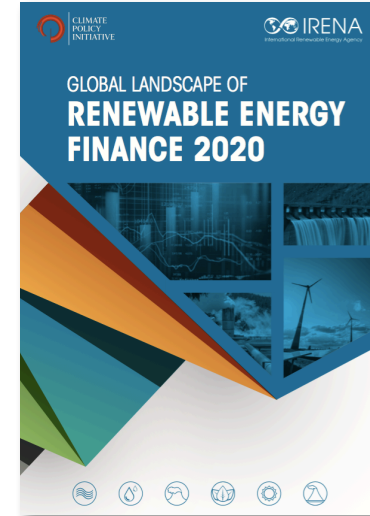
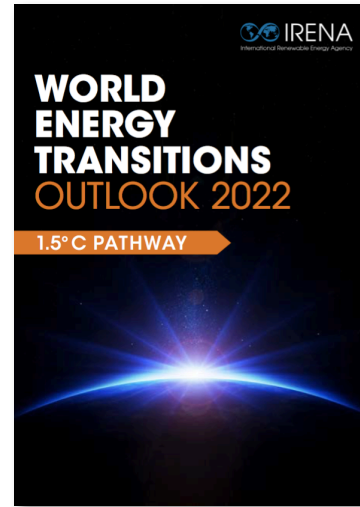
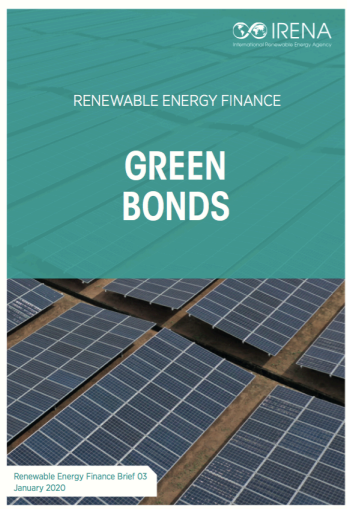
Others

- Commercial banks
- Ratings agencies
- International organisations
- Individual investors



Thank you!

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➤ Links:

- <https://www.irena.org/publications/2020/Jan/RE-finance-Green-bonds>
- <https://www.irena.org/publications/2020/Nov/Mobilising-institutional-capital-for-renewable-energy>
- <https://www.irena.org/publications/2022/Mar/World-Energy-Transitions-Outlook-2022>
- <https://www.irena.org/publications/2020/Nov/Global-Landscape-of-Renewable-Energy-Finance-2020>