CARIBBEAN ACTUARIAL ASSOCIATION

BALANCING THE EQUATION • SHAPING A SUSTAINABLE FUTURE • THE 55rd ANNUAL CONFERENCE

Balancing Green Financing between Mitigation and Adaptation Strategies

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Climate Change Impacts

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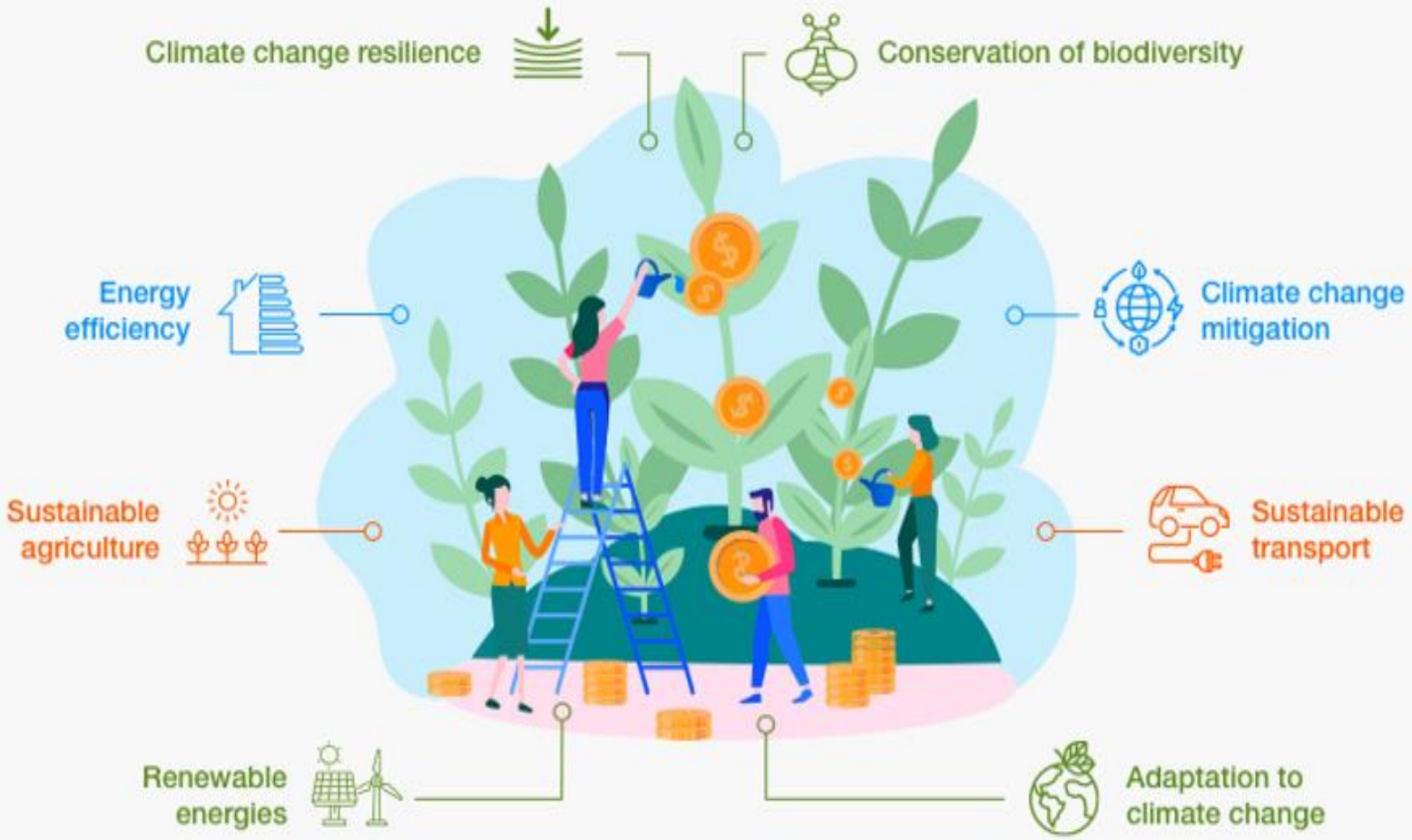
What is **Green Finance**?



It generally refers to **finance** for activities aiming to **mitigate** or **adapt** to the impacts of **climate change**

Why Green Finance?

Climate Change

- To limit global warming

Reduce GHG Emissions

- to 1.5°C above pre-industrial levels

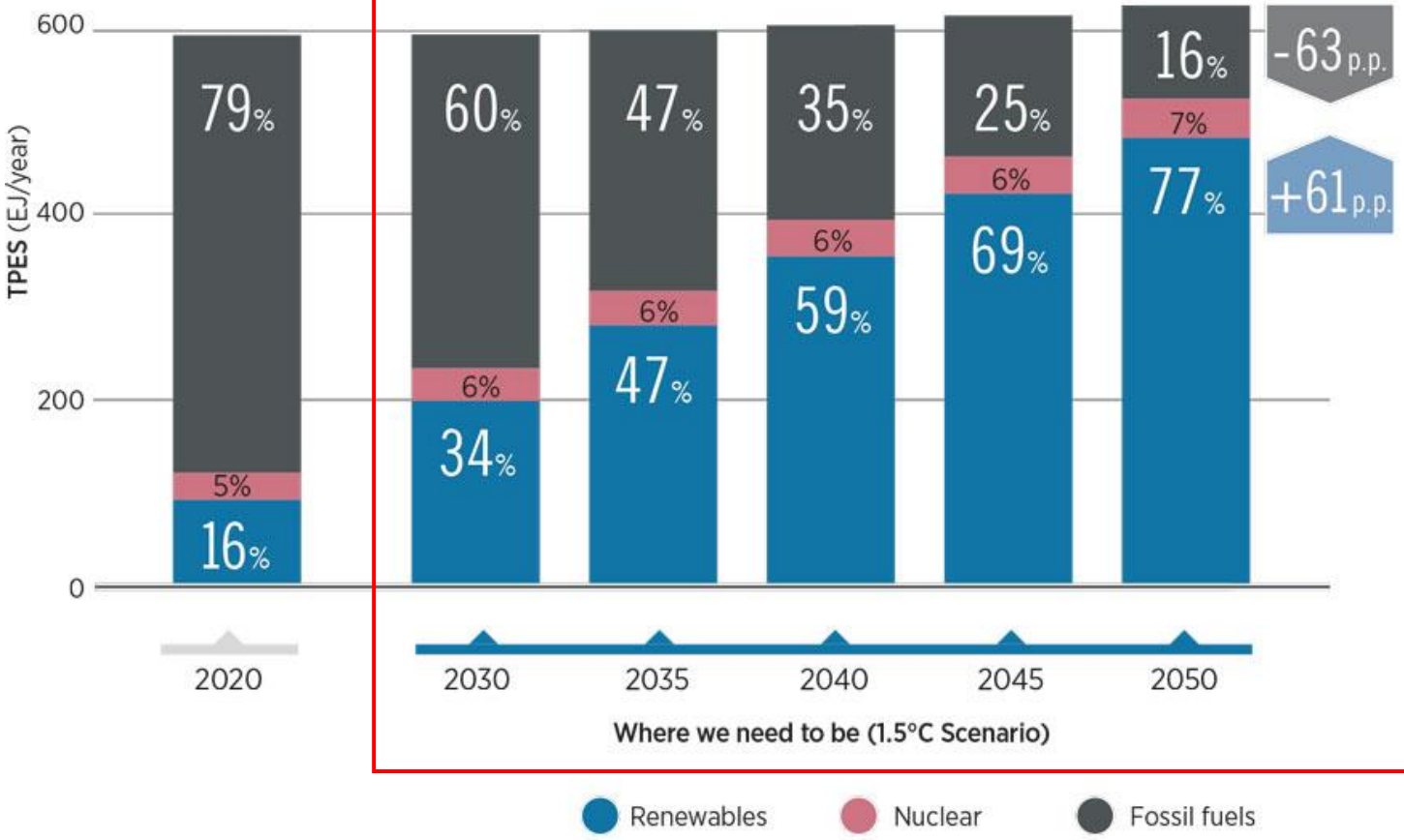
Paris Agreement Objectives

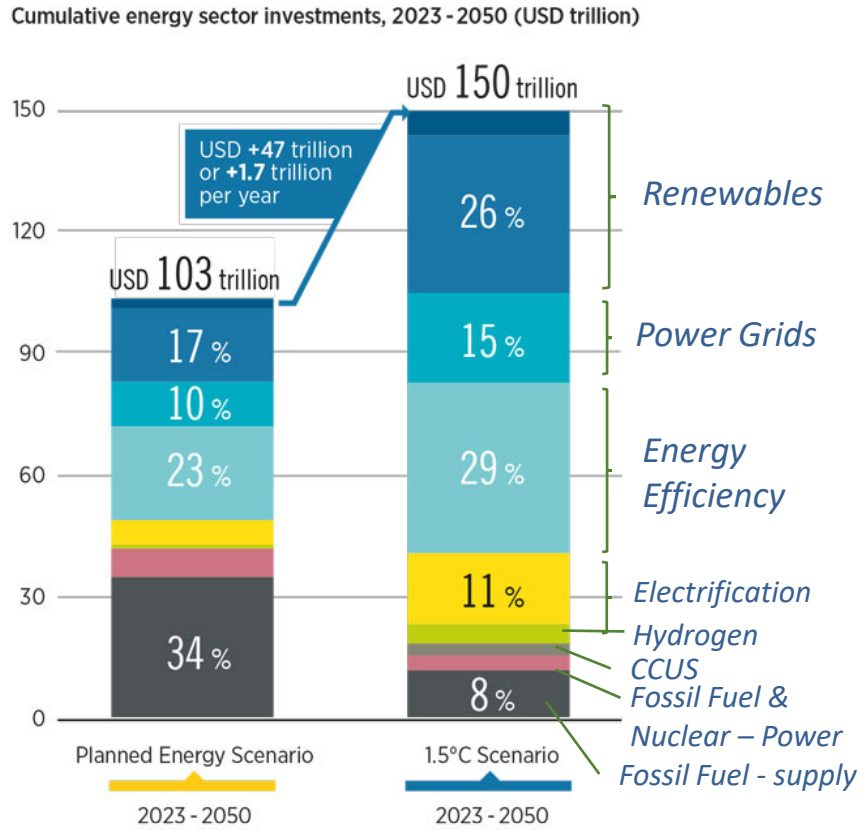
- requires clean energy and green infrastructure investments

US$4 trillion *annually* by the year 2030

Renewables would account for 77% of primary energy supply by 2050 in the 1.5°C Scenario

Support is needed to help developing countries realise ambitious renewable energy targets





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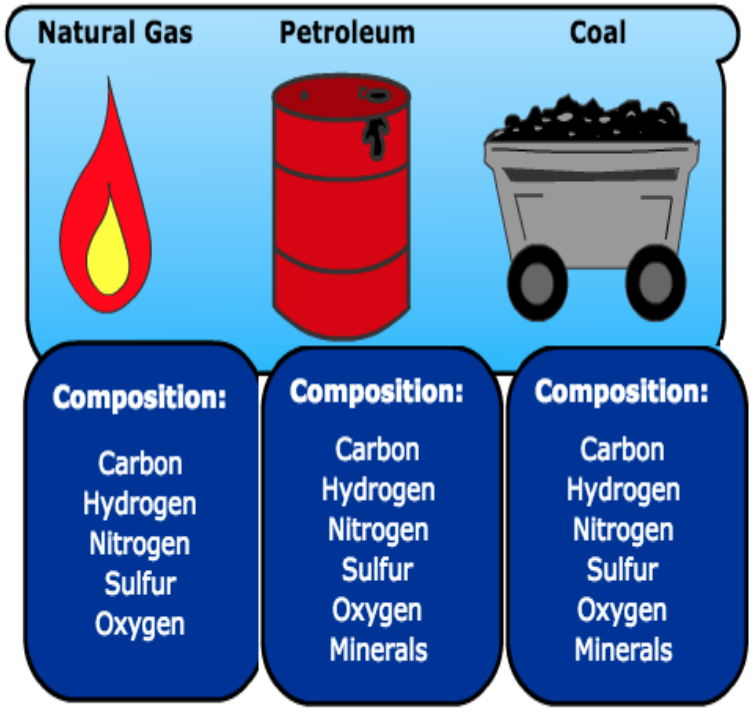
Clean Energy Outlook



Green Financing

also known as **climate bonds**

fixed-income financial instruments

used to **fund projects**

provide **positive environmental and/or climate benefits**

GREEN BONDS

MAIN USES

Renewable energy

Energy efficiency

Clean transportation

Responsible waste management

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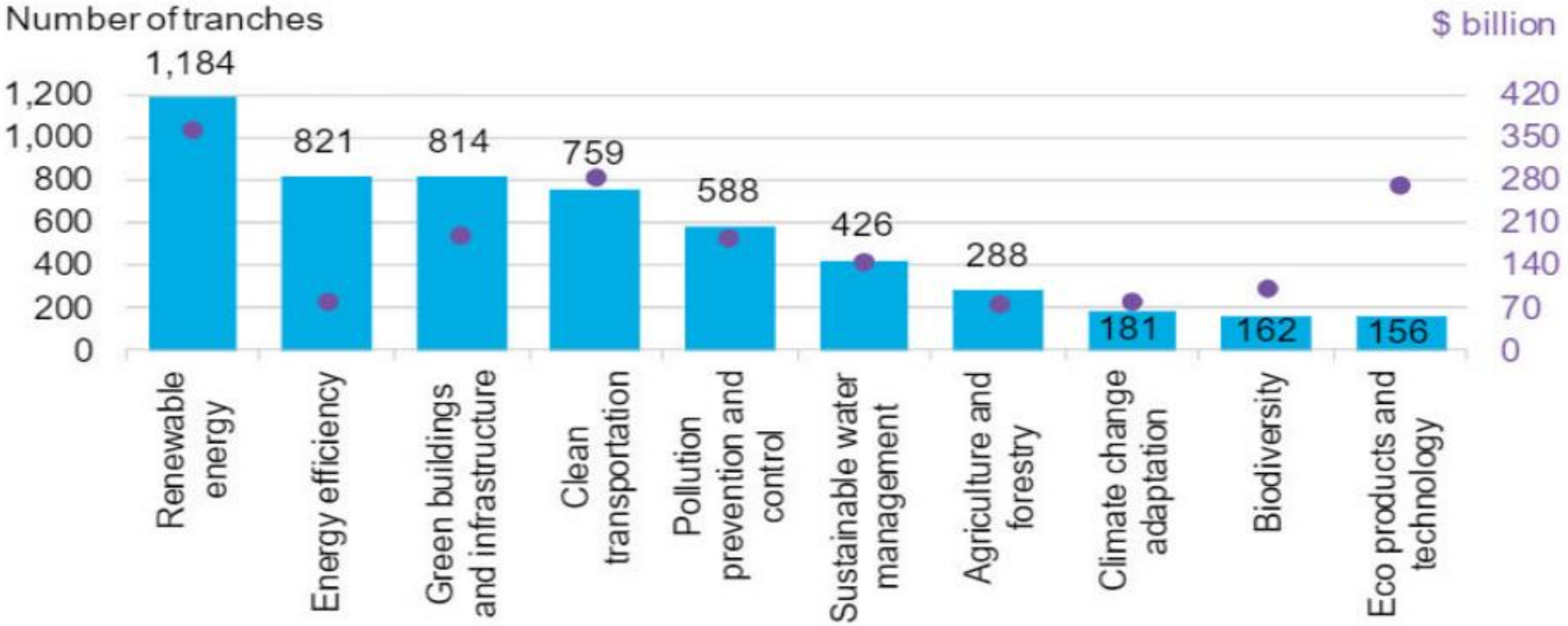
Green Bond Proceeds - 2022



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Green Bond Market: 2022

Issuer	$bn
People's Republic of China	35.6
European Union	17.3
Federal Republic of Germany	15.9
French Republic	12.6
Kingdom of the Netherlands	10.1
European Investment Bank	7.6
Fannie Mae Pool	6.0
Republic of Korea	5.0
Canada	4.8
Republic of Austria	4.3

Source: BloombergNEF, Bloomberg LP. By parent issuer.

- **Green bonds have experienced strong growth at the global level &**
- **represent, as of 2021, a USD1.5 trillion market,**
- with **issuers including governments, supranational institutions, and corporates** such as **institutional investors and financial institutions**
- Among corporate issuers **within the energy sector,**
- **utility firms stand out as early adopters,**
- **motivated by their investments in renewable infrastructure**
- **as part of their strategy to reduce greenhouse gas (GHG) emissions**

Key Benefits of Issuing Green Bonds

Broader Investor Base and Greater Demand

Issuers can diversify their bondholder base by attracting investors focused on being "green"

Enhanced Brand Image and Increased Visibility

Enhances image and brand awareness in a market

Reinforces Green Commitment and Increases Drive to Achieve Targets

Investors will require issuers to follow through on green goals

Possible Cost Savings

Given the high demand, these bonds are usually oversubscribed, which may result in better pricing

Encourages Formalisation of Green Goals and Policies

Issuers will be required to formalise green goals and policies

"GREENIUM"

– namely the **premium paid by investors** in green bonds vis-à-vis comparable conventional bonds

– is mostly driven by **increased demand from institutional investors** and

– **limited supply** from green bond issuers

– based on the logic that **investors are willing to pay extra or accept lower yields in exchange for a positive sustainable/environmental impact**

Are your Bonds truly Green?

Source: International Capital Markets Association

1 Funds must be allocated to eligible projects

→ Do projects comply with green definitions? (e.g. as per the IFC, World Bank, CBI criteria)

2 Proceeds of the issuance must be tracked

→ Are they truly dedicated to green projects? (excluded if >5% of proceeds out of scope)

3 Use of proceeds must be reported periodically

→ Is disclosure on use of proceeds transparent? Do issuers pass annual reporting checks?

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- "Green" credentials have been ***overstated***
- ***Making false, misleading or unsubstantiated claims about the positive environmental impact of project***

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- **Social bonds fund projects** which provide access to **essential services, infrastructure and social programmes to underserved people and communities,** for example:
  - **Access to essential services such as healthcare and education;**
  - **Basic infrastructure such as clean drinking water, sanitation and electricity;**
  - **Access to affordable housing; and**
  - **Job creation and employment generation**

Sustainability bonds used to

finance projects which bring clear environmental and socio-economic benefits

Sustainability-linked bonds provide financing to issuers who commit to specific improvements in sustainability outcomes

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Example: Uruguay

- In October 2022, Uruguay issued a pioneer finance instrument: the first sovereign sustainability-linked **bond in the world to include a step-down mechanism that is activated upon the achievement of environmental targets** tied to the country's nationally determined contribution (NDC) to the Paris Agreement

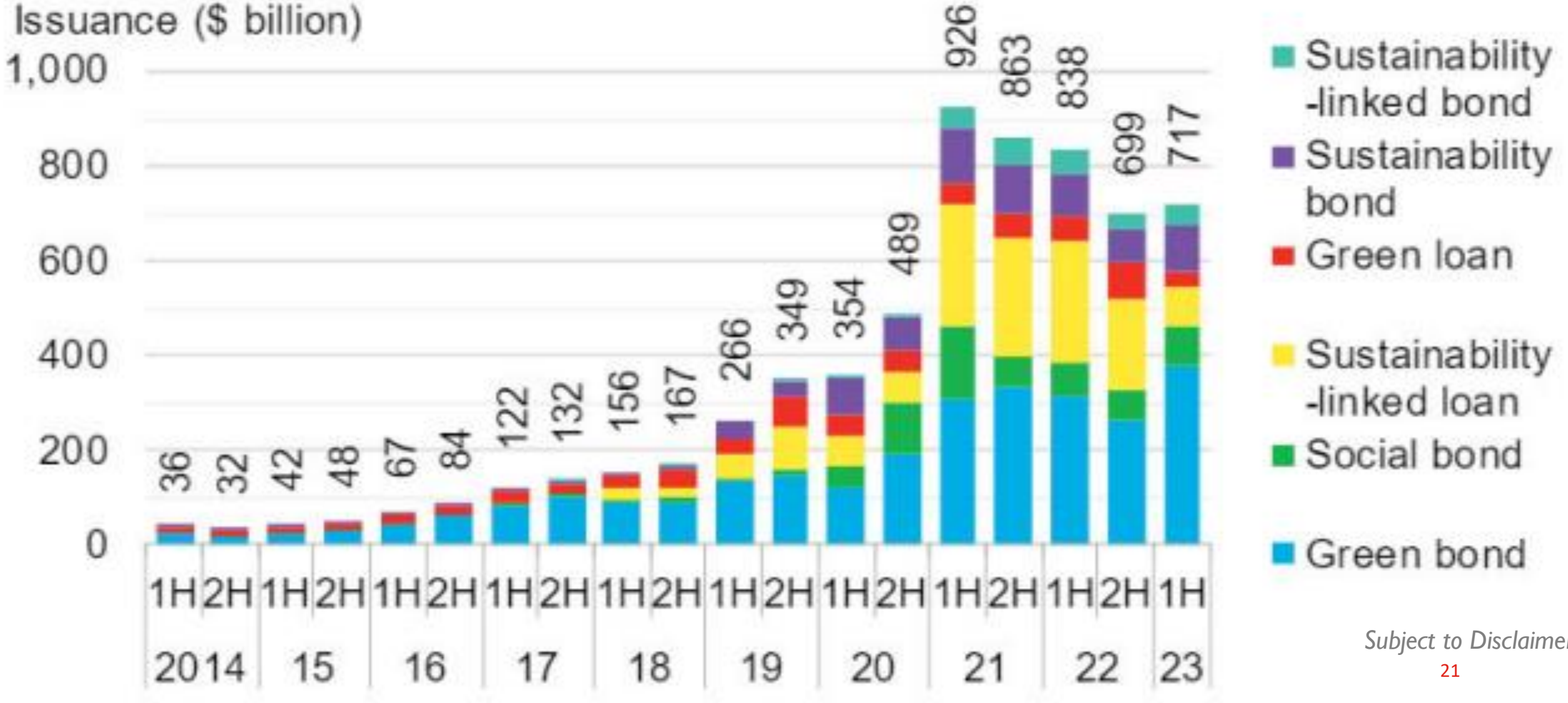
- The IDB worked with Uruguay's Ministry of Economy and Finance (MEF) in preparing the framework for this bond

- The issuance attracted 188 investors from Europe, Asia, the United States, and Latin America, where 21% were new holders of Uruguayan debt.

- The **total demand for the bond was US$3.96 billion, greatly exceeding the US$1.5 billion Uruguay decided to issue**

Environmental Finance Recognizes IDB's Financial Transactions in Barbados and Uruguay - Sostenibilidad (iadb.org)

Annual Sustainable Debt Issuance 2014 – 2022



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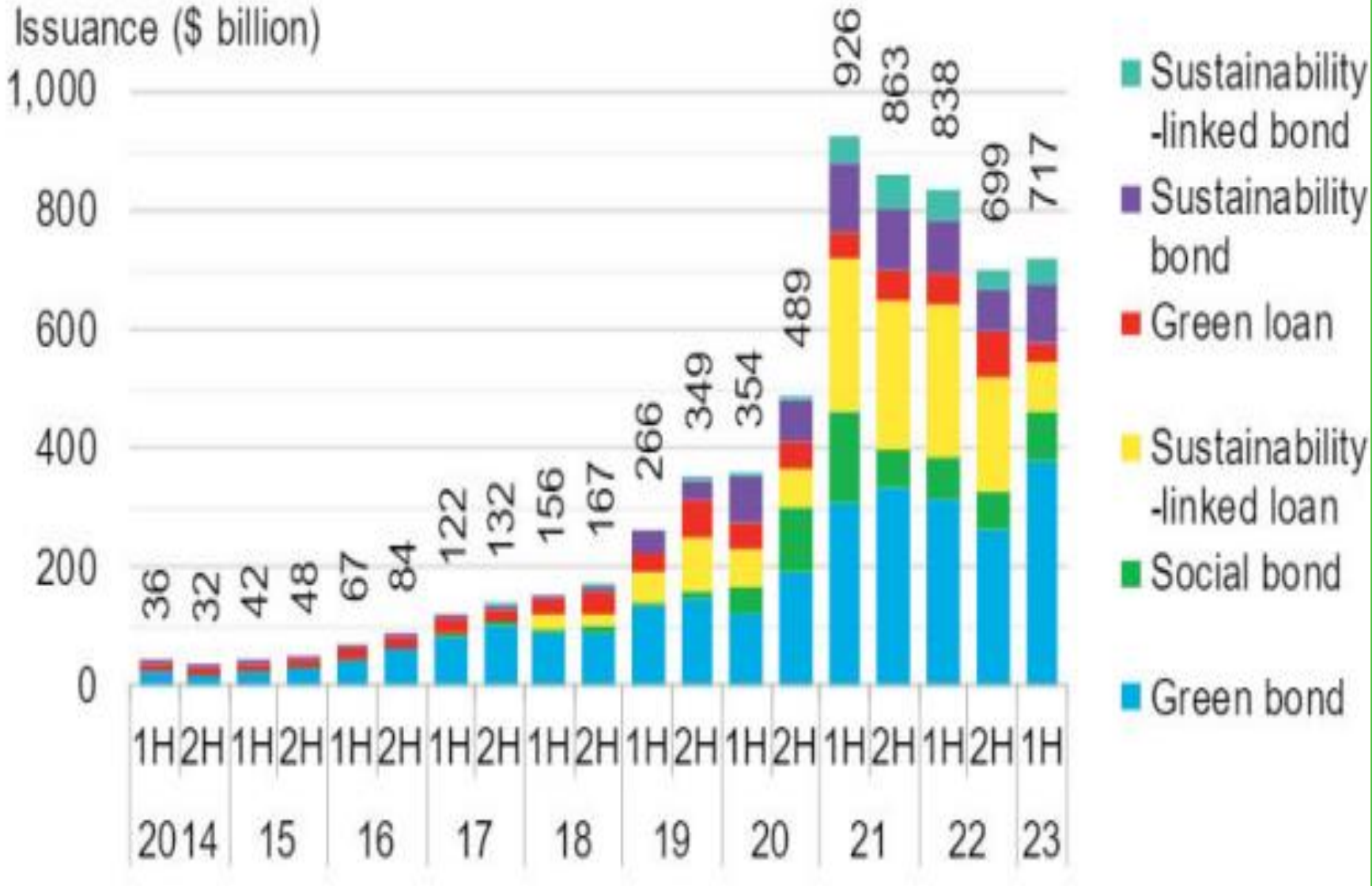

- The sustainable debt market has **grown exponentially since 2014**
- 2022 was the **first year** issuance **declined year-on-year**
- Green bonds continue to be the largest category, with **US$380 billion issued in H1 2023**
- To-date, more than **US$2.8 trillion-worth of green bonds** have been brought to market

Sustainable Financing Commitments By Select Banks

Republic Financial Holdings

US$200 Million
by 2025 to support actions that would help achieve major climate finance goals

CREDIT SUISSE

US$336 Billion
of sustainable financing over the next 10 years

Scotiabank

US$280 Billion
by 2030 to low-carbon, sustainable business

JPMORGAN CHASE & CO.

US$2.5 Trillion
to 2030 to address climate change and sustainable development

RBC

US$400 Billion
in sustainable financing by 2025

citi

US$1 Trillion
to sustainable finance by 2030

Goldman Sachs

US$750 Billion
across investing, financing and advisory services by 2030

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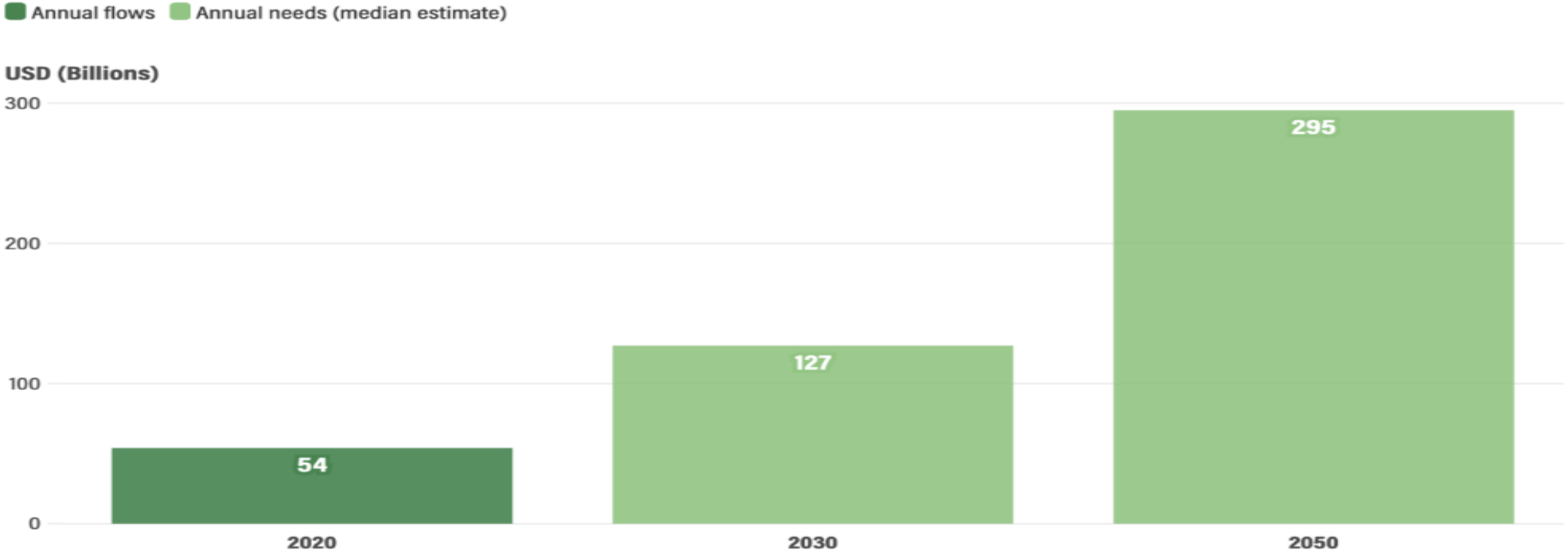
25%

ADAPTATION

gets short-changed in climate finance

Current global adaptation finance vs. projected needs



Source: Climate Policy Initiative, Global Landscape of Climate Finance; IPCC WGII AR6

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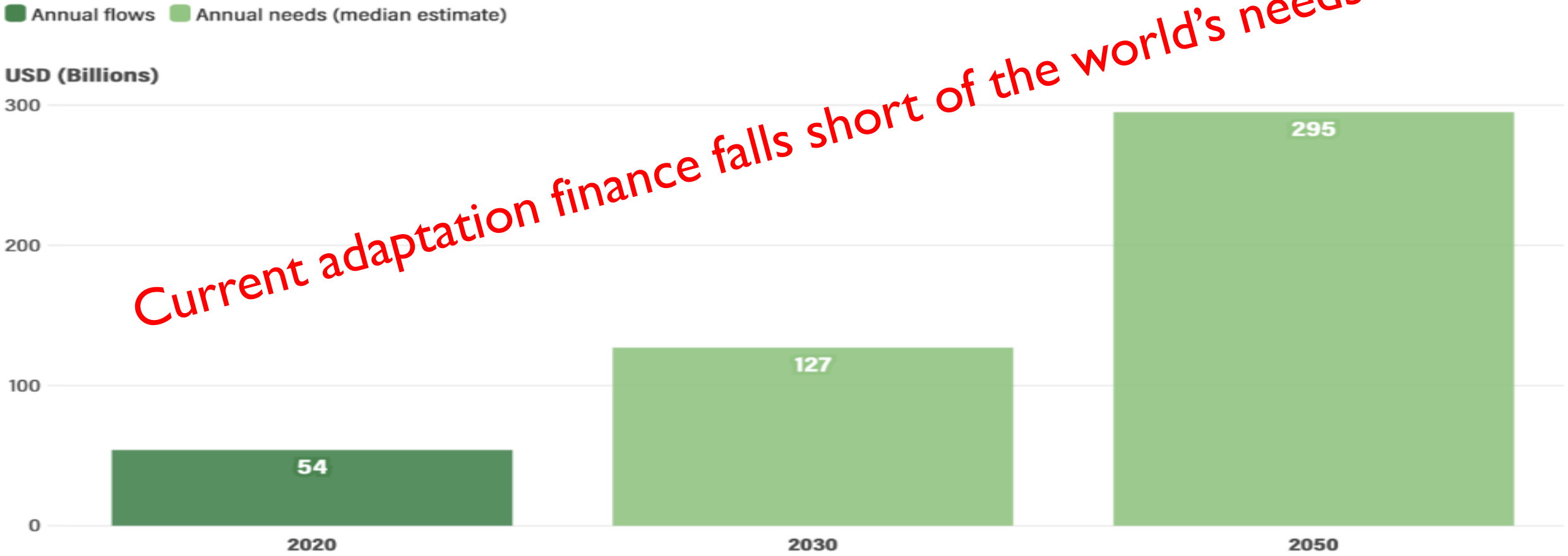
Current global adaptation finance vs. projected needs



Current adaptation finance falls short of the world's needs

Source: Climate Policy Initiative, Global Landscape of Climate Finance; IPCC WGII AR6

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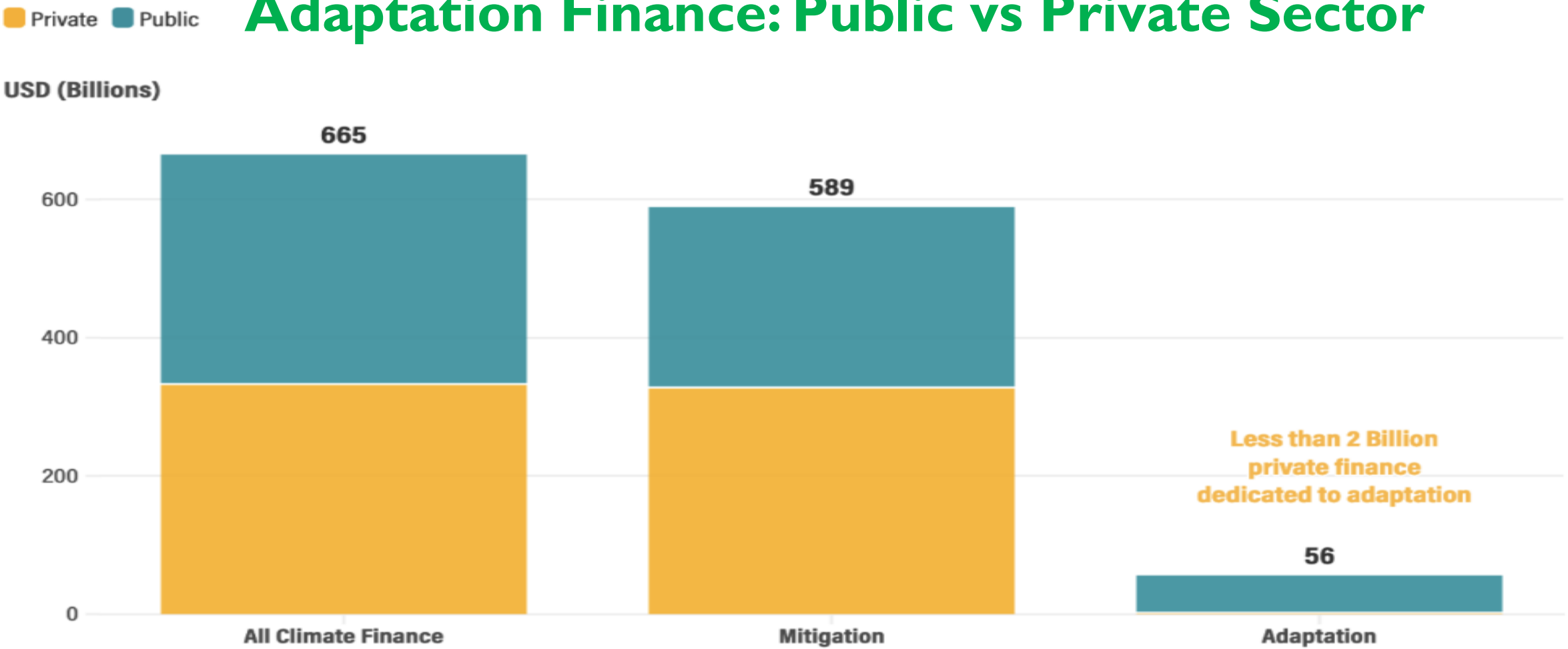
Adaptation Finance - Shortfall

- **Cost of adaptation in developing countries, such as TnT**, a SIDS, is expected to reach **US$300 billion per year by 2030**
- By contrast, **global adaptation finance flows were US$46 billion** in 2020, of which only **US$29 billion in funding was directed to developing countries**
- Developing countries require an estimated **US$160-US$340 billion per year by 2030** to adapt to increasing climate impacts; this amount is projected to increase to **US$315-US$565 billion by 2050**
- **Currently less than $50 billion — or just 10% of all climate finance — is allocated to adaptation.** As emphasised at COP27, the amount of adaptation finance to developing countries needs to increase by **5x to 10x**

Adaptation Finance: Public vs Private Sector



Source: Climate Policy Initiative, Global Landscape of Climate Finance

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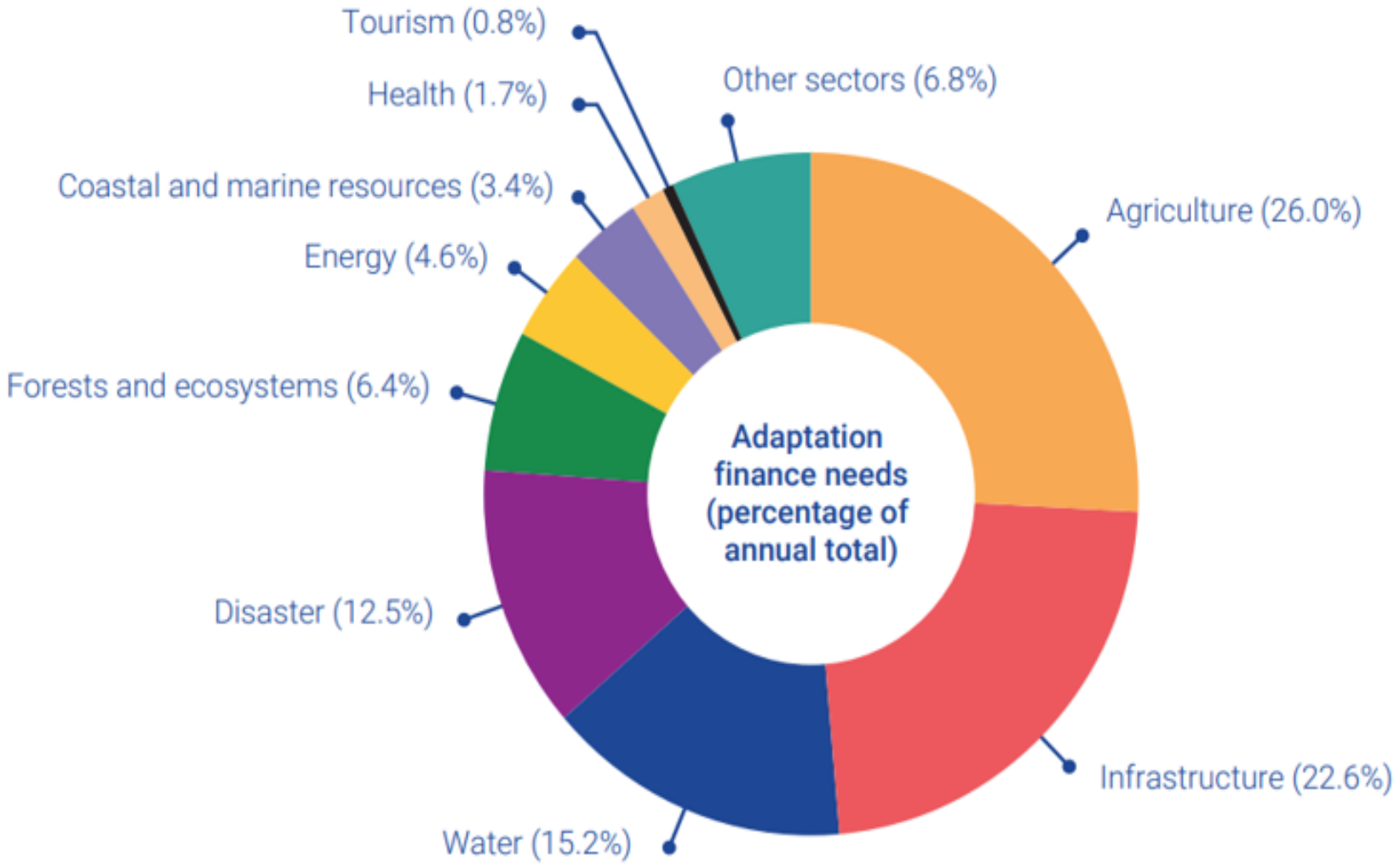
Adaptation Finance Needs By Sector

The evidence suggests that the **adaptation finance gap is larger than indicated in 2020** and widening (United Nations Adaptation Gas Report, 2021)



Source: United Nations Framework Convention on Climate Change (UNFCCC) 16th May 2023

Green Financing Key Insights

Global energy production is the main emitter of green house gases today.

75%

of greenhouse gas emissions caused by energy sector

83%

of primary energy comes from fossil fuels

To reach net-zero, clean energy must be massively scaled up.

505 GW

of new wind power needed per year by 2030

455 GW

solar PV needed per year by 2030

Unprecedented investment is needed to enable this transformation.

USD 4 T

investments in clean energy needed annually by 2030

~70%

of clean energy investments need to come from the private sector

Sources: BNEF, IEA

Green Financing Partnerships

MINISTRY OF Works & Transport

Government of the Republic of Trinidad and Tobago
MINISTRY OF PLANNING AND DEVELOPMENT

IDB

CARIBBEAN BIODIVERSITY FUND

THE NATIONAL GAS COMPANY OF TRINIDAD AND TOBAGO LIMITED

GEFF Green Economy Financing Facility

European Bank for Reconstruction and Development

Where finance and green technologies meet

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CLIMATE REPORT
SOME PROGRESS, MUST TRY HARDER
INVESTMENT D
MAKING COMMITMENTS B+
RENEWABLES C+
KEEPING TO COMMITMENTS D-
ADAPTATION D
CLIMATE FINANCE INCOMPLETE


Any
Questions

Thank You!

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