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SUMMER COURSE

Guest Lecture: 11 August 2026

Financing a Sustainable Future: Understanding Sustainable Finance

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Learning Outcomes

The diagram consists of three rounded rectangular boxes arranged horizontally, each containing a learning outcome. The boxes are colored blue, green, and green from left to right. They are set against a light blue background that features a large, faint arrow pointing to the right. The first box is blue and contains the text 'Explain the concept, importance, and role of sustainable finance in addressing sustainability challenges'. The second box is green and contains the text 'Distinguish key sustainable financing purposes and instruments, including mitigation, transition, adaptation and resilience financing.'. The third box is green and contains the text 'Evaluate key challenges and emerging developments shaping the future of sustainable finance.'

Explain the concept, importance, and role of sustainable finance in addressing sustainability challenges

Distinguish key sustainable financing purposes and instruments, including mitigation, transition, adaptation and resilience financing.

Evaluate key challenges and emerging developments shaping the future of sustainable finance.

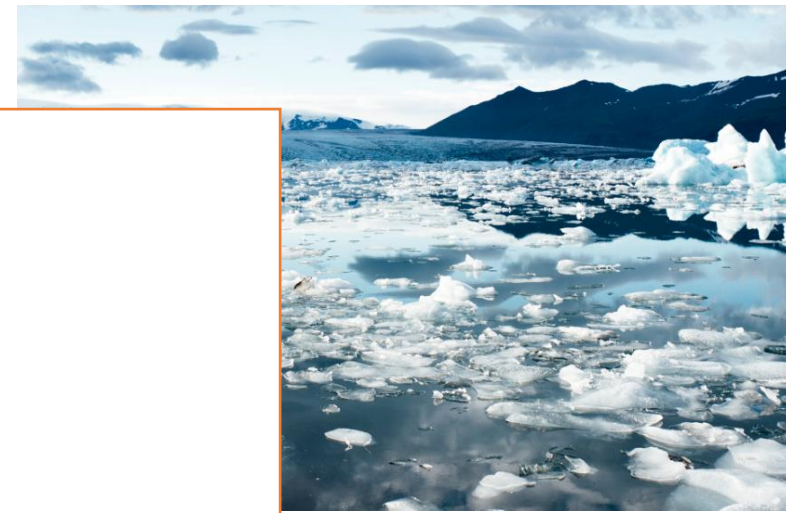


Who should pay for climate change?





Who should pay for climate change?



<https://app.sli.do/event/kPonhesSmiqhF2wUKaJQV8>





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Part I: What is Sustainable Finance?



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Why Sustainable Finance Matters?

Addressing Global Sustainability Challenges

- *Growing global awareness* of climate change, biodiversity loss, and environmental degradation has driven strong demand for sustainable practices:
 - reduce carbon emissions
 - transform their operations to mitigate the adverse impacts of climate change
 - create climate-friendly products and services (Ghadge et al., 2020; Pattberg, 2012).



Why Sustainable Finance Matters?

On a global scale, the United Nations (UN) estimates that US\$5 to 7 trillion annually is needed to meet the Sustainable Development Goals (SDGs) by 2030.

An average annual investment of \$9.2 trillion in physical assets is required to achieve net-zero emissions by 2050.



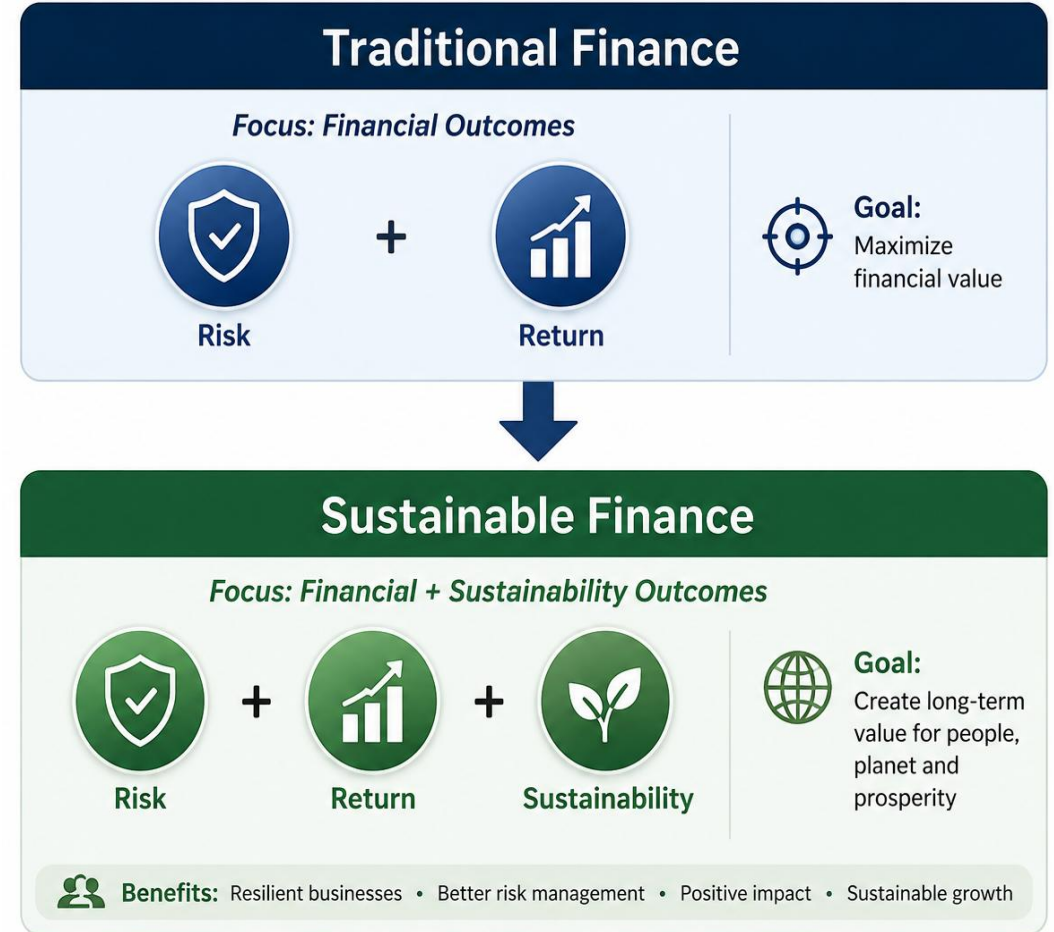
Bridging Climate Ambition and Implementation

- *Without adequate financing*, climate ambitions cannot be translated into meaningful implementation, which has positioned *sustainable finance* as a cornerstone of global economic governance.

What is Sustainable Finance?

- A financial approach that incorporates **environmental, social, and governance (ESG)** considerations into investment and business practices.
 - Fund projects *aligned with sustainability targets* and SDGs (Fatemi, 2013)
 - Create long-term economic value, *reduce ESG risks, and help* firms meet stakeholder expectations while complying with regulations (Schoenmaker & Schramade, 2018).

** [Sustainable Finance](#) definition by OJK.





From Shareholder Wealth to Stakeholder Value

- Financial sector - *a catalyst* for accelerating the transition to sustainability and facilitating the efficient allocation of capital (Maltais & Nykvist, 2020).

The role of FINANCE has evolved significantly.

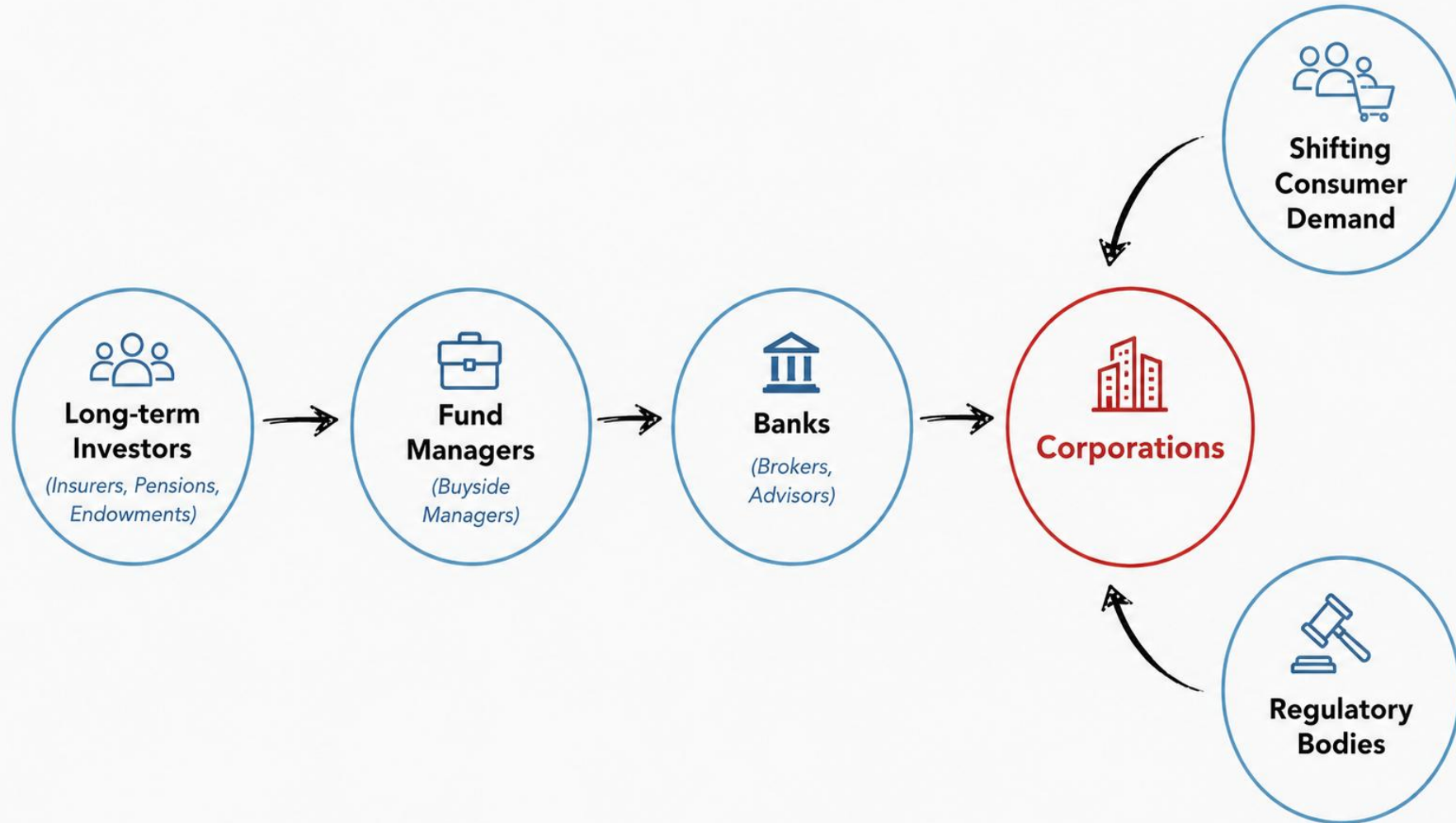
Maximizing shareholders'
wealth



Promoting stakeholders'
wealth for common good



Who Shapes Sustainable Finance?



Why Are Investors Paying Attention to Sustainability?

- *Risk & Return*: Climate and ESG factors can affect risk, competitiveness, and long-term value.
- *Investor Preferences*: Some investors seek environmental and social outcomes alongside financial returns.
 - *Greenium* in the bond markets
- *Portfolio Allocation*: Capital can be reallocated away from companies or sectors that do not meet investment criteria.
 - [Eg: Case: Divesting from companies | Norges Bank Investment Management](#)





Sustainable Finance Market



[Source: Sustainable Finance Market Size & Share, Growth Outlook 2034](#)



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Part II: What Do We Finance, and How?



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What Do We Finance?

MITIGATION

Reducing the causes of climate change by cutting or removing greenhouse gas emissions.

Examples:

- Shift from fossil fuels and transition to low-carbon/renewable energy
- [*The Top 5 Largest Solar Projects In South East Asia - Renewable Energy in Southeast Asia: Powering Sustainable Futures*](#)
- Carbon removal technologies
- Protect forests and oceans as carbon sinks
- Reduce carbon footprints through behavioral change

Goal: Net zero & limiting global warming to 1.5°C

TRANSITION

Supporting high-emitting sectors gradually reduce emissions, even if they are not yet fully green.

Examples:

- Steel plant replacing coal with green hydrogen
- Cement company reducing clinker usage
- Airlines investing in sustainable aviation fuel (SAF)
- Natural gas replacing coal (depending on the taxonomy)
- Carbon capture and storage (CCS)
- [Sample: Transition Finance Framework by TNB](#)

Goal: Enable the shift from high-carbon to low-carbon activities



What Do We Finance?

ADAPTATION

Adjusting to the actual or expected impacts of climate change to minimise harm and manage changing conditions.

Examples:

- Build defences against sea-level rise
- Climate-proof buildings and infrastructure
- Adapt crops to changing weather conditions
- Change behaviours to cope with climate impacts

Goal: Reduce vulnerability to the impacts of climate change

RESILIENCE

Building the capacity to anticipate, withstand and recover from the impacts of climate change.

Examples:

- Develop early-warning systems for extreme weather
- Increase urban green spaces to absorb flooding
- Plant trees to reduce extreme urban heat

Goal: Strengthen the capacity to withstand and “bounce back” from climate impacts



Concept Check

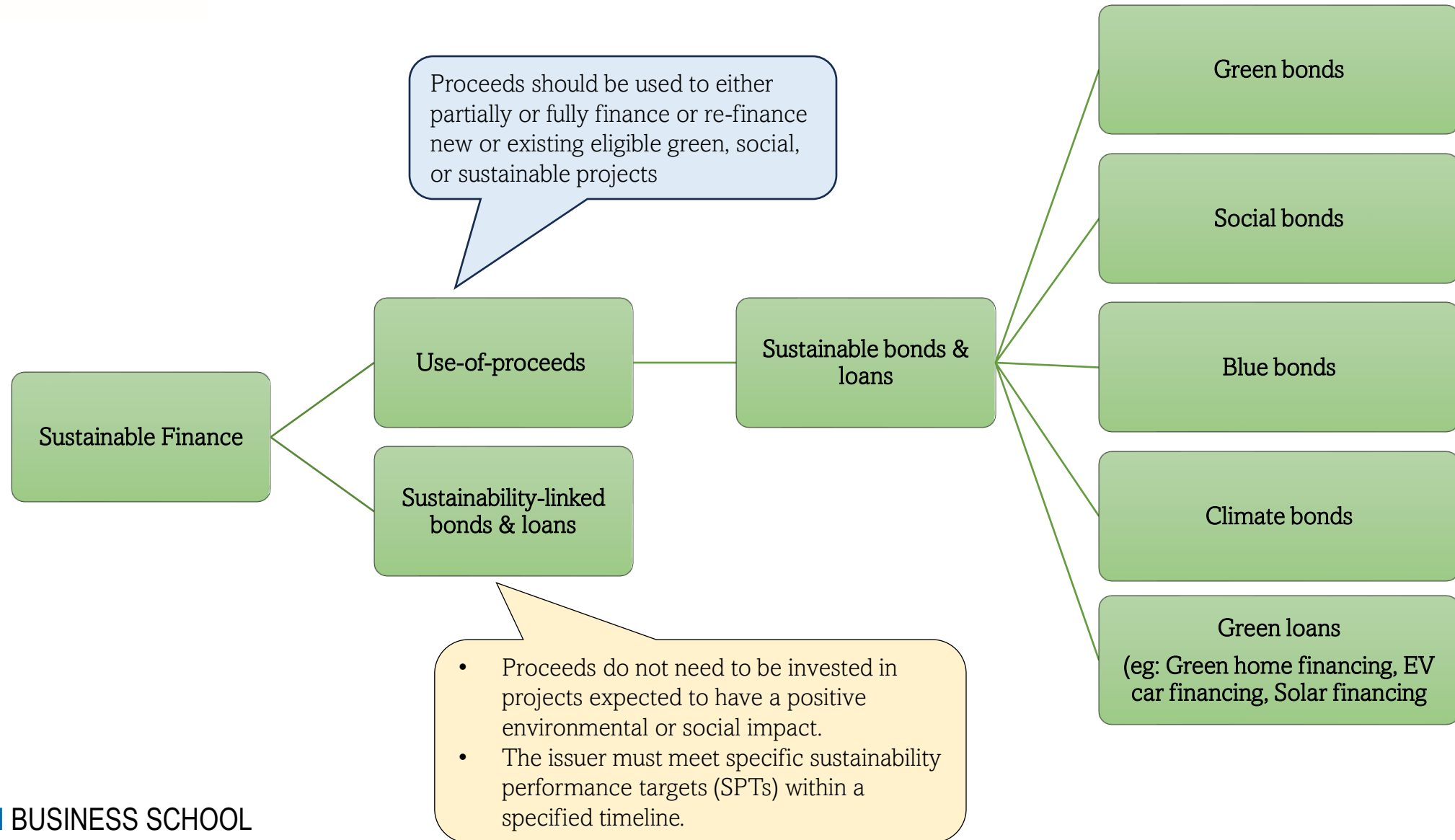


If you were the bank assessing these three loan applications, how would you classify each project: mitigation, transition, adaptation, or resilience?

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How Do We Finance It?

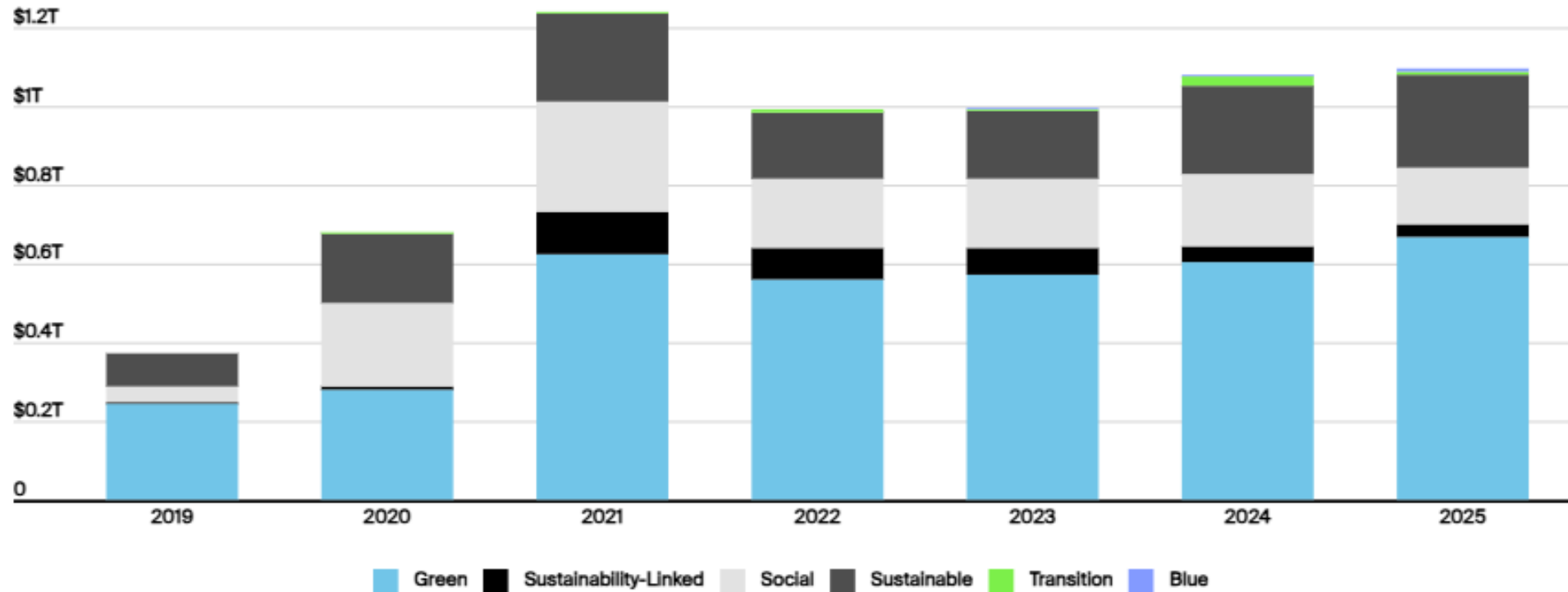


Sustainable Standards and Taxonomies

- **TWO** widely used international standards developed by *private sector-led institutions*:
 - International Capital Market Association (ICMA)
 - Climate Bonds Initiative (CBI)
- Since 2021, several regional and national sustainable bond frameworks have emerged across Asia.
- These frameworks are broadly aligned with the ICMA Principles, emphasizing *transparency, appropriate use and allocation of proceeds, and timely reporting*.
- Key examples include:
 - ASEAN Green, Social, and Sustainability Bond Standards
 - Japan's Green Bond Guidelines
 - China's Green Bond Principles



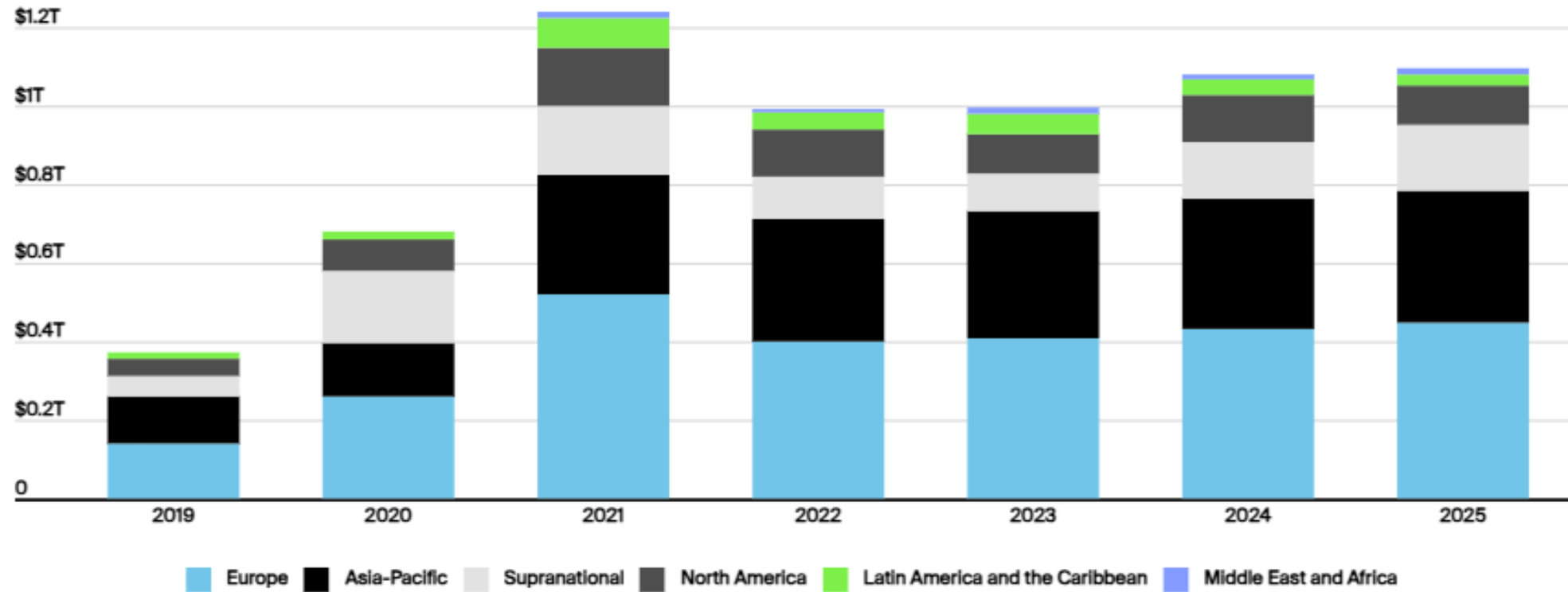
Sustainable Bond Issuance (2019 – 2025)



[Sustainable Bonds Report — Full year 2025](#)



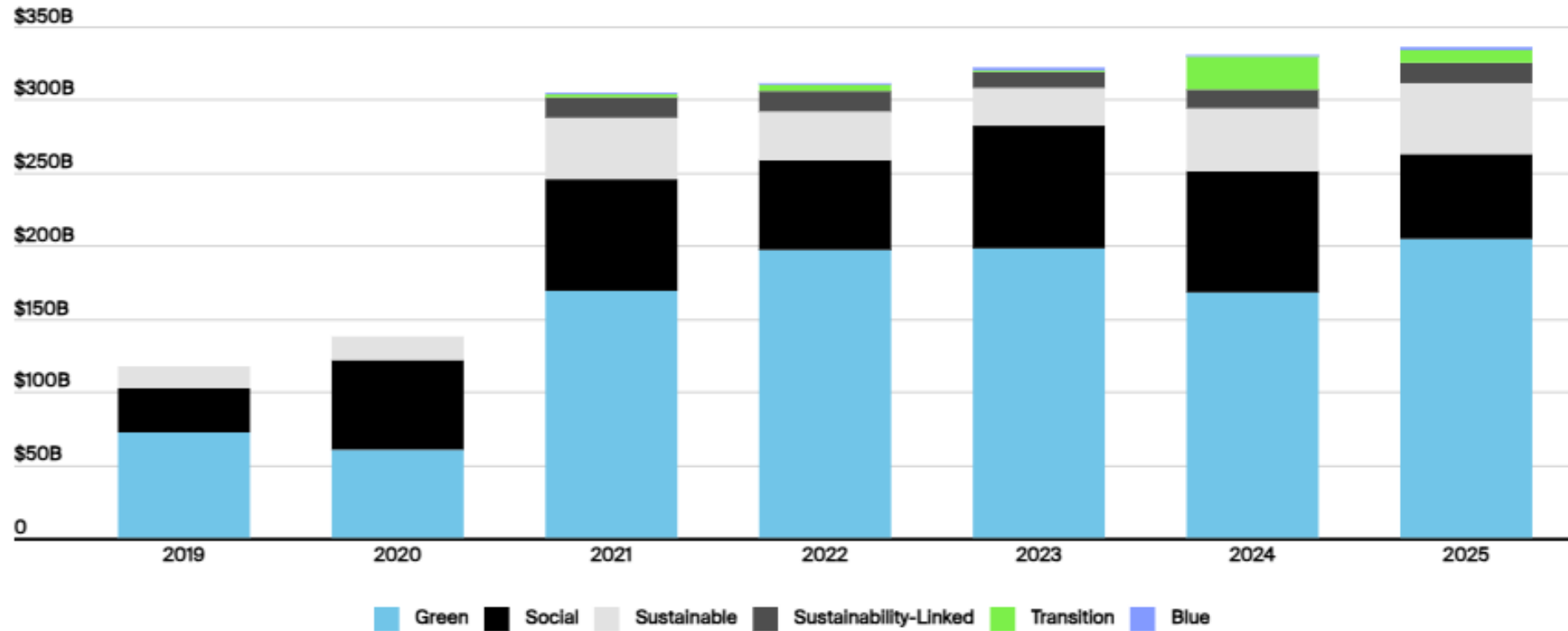
Sustainable Bond Issuance by Region (2019 – 2025)



[Sustainable Bonds Report — Full year 2025](#)



Asia-Pacific Bond Issuance (2019 – 2025)



[Sustainable Bonds Report — Full year 2025](#)



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Part III: Case Studies



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Sustainable Finance Case Studies



Shed light on the practical journeys of companies in embracing sustainable finance, featuring pioneering companies including:

- Axiata Group Bhd (*Telecommunication*)
- IOI Corp Bhd (*Palm Oil*)
- reNIKOLA Holdings Sdn Bhd (*Renewable Energy*)
- Yinson Holdings Berhad (*Energy*)
- [Leadership in Action: Sustainable Finance Case Studies](#)



Case Study 1: Sustainability-Linked Sukuk



- One of Yinson's sustainability missions is to address climate change and its impacts (SDG 13):
- To achieve carbon neutrality by 2030 and attain net-zero carbon emissions by 2050.
- This climate action is the focal point of Yinson's strategic development and is embedded in its business units.
- December 7, 2021, Yinson marked a historic moment with the issuance of Malaysia's first-ever **Sustainability-Linked Sukuk Wakalah**, valued at RM1.0 billion, rated A1 by RAM and A+ by MARC.

The issuance is built on Yinson's *Sustainability-Linked Financing Framework* and *Climate Goals Roadmap* and is associated with three key SPTs:

1. Increasing renewable energy generation capacity at Yinson-controlled plants.
2. Reducing Yinson's carbon intensity per barrel of oil equivalent (boe)
3. Lowering Yinson's carbon intensity per megawatt-hour (MWh).



Continue...

- **Challenges faced by the Issuer**

- *Absence of regulatory guidelines* in Malaysia at the time of issuance.
- *Define sustainability goals* and the specific *metrics* to measure progress toward those objectives.
- Transparency played a vital role, with a commitment to disclosing SPTs and subjecting them to independent review.
- *Failing to meet the SPTs* may lead to penalties, adding complexity to the venture and setting it apart from conventional bonds, which do not entail such stringent performance targets.
- Managing investor expectations.
- While investors were intrigued by the concept and expressed interest, they expected returns comparable to those of conventional bonds.



Case Study 2: Blue Sukuk



Air Selangor prices world's first blue sukuk at RM200mil

Wednesday, 29 Jul 2026 | 7:12 PM MYT



Related Stories



- Blue SRI Sukuk Kelestarian, was issued under Air Selangor's RM20 billion Islamic Medium Term Notes Programme and carries a 15-year tenure, priced at 4.33%.
- Blue Sukuk is issued under Air Selangor's *Sustainable Development Sukuk Kelestarian Framework Version 2.0*. The revised framework aligns with:
 - International Capital Market Association's (ICMA) Green Bond Principles 2025
 - Social Bond Principles 2025
 - Sustainability Bond Guidelines 2021
 - International Finance Corporation's (IFC) Guidelines for Blue Finance Version 2.0.
- To finance projects related to sustainable water and wastewater management, protection of water resources, and long-term water security.
- RAM Sustainability S/B has issued a *Preliminary Assessment* confirming that it meets requirements under the IFC's Blue Finance Guidelines Version 2.0.



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Part IV: Challenges & Future of Sustainable Finance



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Challenges

- **Credibility & Greenwashing:** A sustainable label does not automatically guarantee meaningful environmental or social impact. *Credible standards, verification, and transparency* remain essential.
- **Measuring Real Impact:** Financing an eligible project does not necessarily create *new* sustainable investment. *Refinancing* existing projects is common, raising questions about **additionality**.
- **Weak Accountability:** Sustainable-finance commitments may have limited contractual consequences *when issuers fail to meet their stated sustainability obligations*.
- **Fragmented Standards & Verification:** Investors need credible and comparable sustainability information. *External verification* can improve transparency and comparability, but may increase issuance costs and is not universally required.
- **Market & Financial Constraints:** Sustainable bonds do not necessarily provide cheaper financing. Evidence of a systematic “*greenium*” is limited, while sustainable bonds may be less liquid than comparable conventional bonds.

The Future of Sustainable Finance

- **Improve Disclosure & Transparency:** Consistent and comparable reporting on *use of proceeds, refinancing, and sustainability performance*.
- **Strengthen Investor Protection:** Clearer contractual obligations and *meaningful penalties for non-compliance* to reduce moral hazard and greenwashing.
- **Raise the Ambition of Sustainability Targets:** Ensure sustainability-linked targets are *material, measurable, and sufficiently ambitious* to drive real change.
- **Strengthen Independent Assurance:** Improve oversight of *second-party opinion and assurance providers* to enhance credibility and manage conflicts of interest.
- **Improve Taxonomy Interoperability:** Greater *consistency and comparability across national and regional taxonomies* to reduce fragmentation.
- **Deepen Market Liquidity:** Improve the *tradability and liquidity of sustainable bonds* to support further market growth.



Conclusion



- Sustainable finance is **not just a trend**; it is a critical tool to tackle global challenges like climate change, inequality, and resource scarcity.
- **Redirection of capital** towards projects and initiatives that promote long-term environmental and social sustainability while ensuring financial viability.
- Foster **inclusive economic growth** and **create resilient systems** for future generations.
- Sustainable finance is **a bridge between profitability and responsibility**, proving that financial returns and sustainability goals can go hand in hand.

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Thank You...

