Sustainable Finance Revolution

How bank can profit from sustainable growth.

—

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With you today

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Introduction to sustainable finance

ESG learnings for financial Services

1. We live in a multi-speed sustainability world

2. Our regulators are still in the driving seat

3. Compliance is complex, but can be made easier

4. The goal, is not just producing reports

Introduction to sustainable finance

01

Green finance

Financing low-carbon technologies and solutions such as wind, solar, batteries, and electric vehicles, and no/low-carbon assets, activities and entities.[2]

02

Transition finance

As the market rapidly evolves, definitions of transition finance are converging around the financing of a wide spectrum of technologies, activities, and entities that facilitate a transition to net zero. Currently in the market, transition finance refers to the financial support that high-emitting sectors acutely need to decarbonize.[3]

03

Adaptation and resilience finance

Financing technologies, activities, and entities which aim to manage and minimize risk, reduce vulnerability, and enhance the capacity of systems to deal with the impacts of natural hazards and climate change.[4]

04

Climate finance

Climate finance typically refers to "new and additional financial resources" provided by developed countries to emerging market and developing countries (EMDE) to support with the transition to net zero. It can include green, transition and adaptation finance, and can encompass aspects of just transition, and nature and biodiversity.[5]

[1] Glasgow Financial Alliance for Net Zero (GFANZ). "Scaling Transition Finance and Real-economy Decarbonization: Supplement to the 2022 Net-zero Transition Plans report" (December 2023).
[2] Ibid.
[3] Ibid.
[4] The Global City. "Scaling Transition Finance: Finding of the Transition Finance Market Review" (2024).
[5] United Nations Climate Change. "Introduction to Climate Finance" (2024).

Why this matters

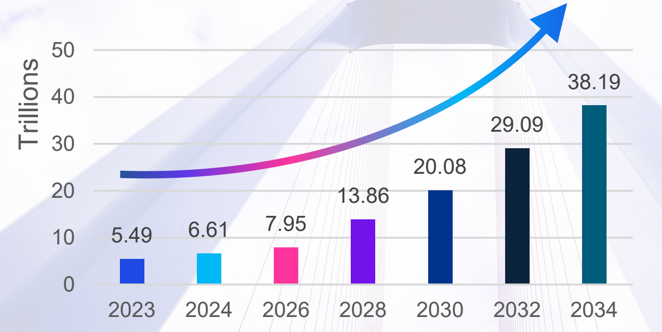
Globally, the growth of sustainable finance is expected to be driven by increasing awareness of environmental and social issues, leading to higher demand for sustainable investment options.

Rapid growth in ASIA-PACIFIC

The Asia-Pacific region is expected to have a rapid growth in sustainable finance market, fueled by government initiatives and investor interest.

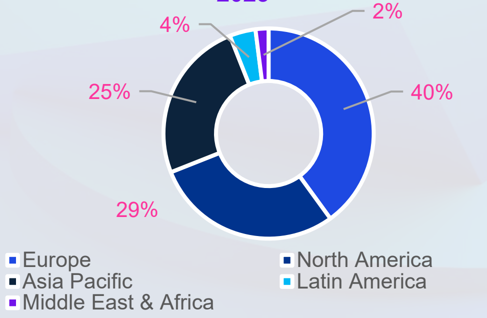
19.2%

of compounded annual growth rate (CAGR) from 2024 - 2034



USD38.19 trillion

is projected to reach in 2034 globally with a presence of opportunities for sustainable finance.



Opportunity for sustainability in developing infrastructures

Water management, green buildings, renewable energies, public transit, etc.

Source: Precedence Research

Sustainable finance - creating value & building resilience

View the Report

Urgent need for climate finance: There's a critical requirement for substantial capital to facilitate the transition to a zero-carbon future. Experts believe that spending needs to triple the current global levels to meet Paris Agreement commitments.

Role of banks in sustainable finance: The financial services sector is witnessing growing demand for sustainable finance solutions. Banks have an opportunity to lead in decarbonization initiatives while managing risks and stakeholder expectations to achieve net zero goals while also growing their lending business.

Investment opportunities across sectors: KPMG focuses on four essential areas in sustainable finance that present examples of how banks can crystallize their sustainability lens: agriculture, adaptation and resilience, infrastructure, and retail housing. Real-world examples demonstrating the breadth of investment opportunities that offer convincing returns and discernible climate-positive impacts.

Building a sustainable financial ecosystem: A successful economic transition requires banks to integrate sustainability throughout their value chain, utilizing advanced credit decision-making, risk pricing capabilities and innovative products to effectively support customers in their decarbonization efforts amidst the complexities of the transition.

Sustainable finance journey – key initiatives

1992 … UNEP FI established

UN Principles for Responsible Investment in 2012

2015
- Science-based Targets Initiative
- Climate Action in Financial Institution Initiative
- Task Force on Climate-related Financial Disclosures

2016
- Guide to Banking and Sustainability by UNEP
- Climate Action 100+
- Principles for Positive Impact Finance by UNEP

2017
- TCFD Banking Pilot Report by 16 leading banks

2018
- Paris Agreement Capital Transition Assessment

2019
- Paris Aligned Investment Initiative (IIGCC)
- Network for Greening the Financial System
- International Platform on Sustainable Finance
- Launching of Principles for Responsible Banking
- Coalition of Climate Resilient Investment
- A Comprehensive Investor Guide to Scenario-based for Climate Risk Assessment

2020
- 200 banks across 58 countries signed the principles of responsible banking.
- The Investor Agenda

2021
- Net Zero Banking Alliance & Net Zero Insurance Alliance
- Glasgow Financial Alliance for Net Zero (GFANZ)
- Net zero Financial Consultants & Net zero Financial Services

2022 …

2024
- Sustainable Banking and Finance Network (SBFN)

2025

Donald Trump's withdrawal from the Paris Agreement in 2025

Uncertainty?

Divergence?

The US lagging behind?

Opportunities?

Key learnings from American climate withdrawal

1. It's unclear what the full effect will be, but it certainly isn't zero

2. Public and private approaches of US banks to climate are diverging

3. The US will continue to manage climate risks, but will lag behind others

4. Climate risks and opportunities persist, and those best prepared will seize the advantage.

Sustainable finance journey in Thailand

2016

Ratification of Paris Agreement

The government of Thailand ratified the Paris Agreement on Climate change

2017 - 2018

Thailand sustainability investment

SEC introduced the "Thailand Sustainability Investment" list, comprising listed companies that have voluntarily committed to ESG principles.

2019

Establish the working group

BOT, SEC, OIC, and MOF established the working group on sustainable finance (WG-SF).

Sustainable banking guideline

Thai Banker Association (TBA) released the Thailand Sustainable Banking Guidelines, promoting sustainable lending practice.

2020

Framework and information platform

Public Debt Management Office published the Sustainable Finance Framework, and SEC with ThaiBMA launched Green, Social and Sustainability Information Platform.

2021

Sustainable finance Initiative in Thailand

SEC published guidelines for issuing Green, Social, and Sustainability bonds, and WG-SF published the sustainable finance initiatives for Thailand.

2022

Directional Paper

The directional paper issued by BOT sets out the strategic direction for the financial institution..

2023

BOT in action & Thailand taxonomy

BOT issued the Policy statement outlining the their expectations for financial institutions, and the Thailand Taxonomy was officially published in the first quarter of 2023. As well, TBA shared the industry handbook for financial institutions in Thailand.

2024

Draft of Thai Climate Change Act.

This act aims to establishes various instruments to regulate carbon emissions.

Next step

1 BOT's expectation

Governance

Strategy

Risk management

Disclosure

- Targets for providing sustainable finance focused on environmental objectives
- Targets for transition finance to support adaptation
- Offering products that facilitate adaptation toward greater environmental friendliness
- Build awareness, engage with clients to promote and support their transition plans

2 Thailand Climate Change Act

This Act is aimed to pass the parliamentary process by the end of 2025

3 ISSB Standard

The SEC is holding public hearings to roll out a roadmap for the adoption of ISSB standard, aiming to be reported between 2027-2031 depend on SET listed category

02

Sustainable finance in action

Sustainable finance in action

Weaving sustainable finance into everything they do and become 'Business as Usual'

Successful bank requires a swift supercharging of sustainable investments

Four essential areas of sustainable finance

Sustainable finance is not just a regulation, it's driving transformation into business operations and investments

Sustainable finance - primary product types

Sustainable finance products can primarily be bucketed into four product segments

Use of proceeds (UoP)

Products devoted to financing new and existing projects or activities with **positive environmental, social or sustainable impacts**

Volumes of both **UoP** bonds and loans have been **growing year on year** (6 and 15 percent)

Sustainability-linked (SLB/SLL)

Financing via bonds or loans that is **not for a designated purpose** but where an element of pricing is instead linked to **achievement of ESG KPIs and SPTs**

Volumes dipped significantly in 2023 due to **the risk of greenwashing**, but loans are starting to rebound (over 12 percent in 2024).

Transition-related

A new set of emerging products linked to **transition/bridging activities**, emissions reduction and financing of these initiatives (both UoP and Transition-Linked)

These are emerging in sectors where **transitioning to "pure green"** on 'Day 1' poses a challenge, such as in Shipping and Aviation.

Consumer-specific products

Growing ranges of consumer/retail products varying from green **home**, **auto** and **improvement** loans, as well as **credit cards** and **savings accounts**.

Globally, **challenges around adoption and incentives** for these products have meant that scaling hasn't been super-charged.

Market Data: https://www.westpaciq.com.au/thought-leadership/2025/02/q4-2024-sustainable-finance-market-update

Agricultural finance

Agricultural finance

Agriculture finance is vital not just because of its contribution to emissions, but also in climate change adaptation and mitigation efforts, supporting sustainable practices that enhance resilience against climate impacts. It enables investments in technologies and practices crucial for helping reduce emissions, improving food security, and promoting environmental sustainability in agriculture.

What is agricultural finance?

- Agricultural finance provides loans, insurance and investments for farmers and agribusinesses, covering inputs, equipment, infrastructure and value chain activities.
- This type of loan aims to improve productivity, sustainability, food security and rural development, with a focus on clean water, soil health and risk mitigation.

Why is it important?

- 12 percent of total emission, 30-40 percent by 2050
- Employing over a billion people and generating US$1.3 trillion annually
- The agricultural finance market invests US$400 billion yearly

Agricultural finance

Lloyds bank

Lloyds Bank

1,000 largest agriculture customers

Covers soil health, carbon emissions, water quality, biodiversity, animal health and social and community impacts of the farm.

Santander

Santander and Atitlan partnered

A goal of fund over EUR500 million

A new global investment platform aimed at driving sustainable agricultural projects

Adaptation finance

Adaptation finance

Adaptation finance refers to financial resources dedicated to helping countries, communities and businesses adapt to the impacts of climate change. This can include funding for infrastructure improvements, new technologies and capacity-building initiatives that increase resilience to climate change impacts. An ideal adaptation model combines funding from three key sectors: the public sector, the private sector and financial services sector.

What is adaptation finance?

- Adaptation finance, as defined by the World Resources Institute, is funding for actions that lessen the risks and damages from climate hazards like storms and droughts. This includes investments in strengthening infrastructure, developing climate-resilient agriculture, establishing social safety nets, and improving climate risk management.
- This encompasses financial flows from developed to developing countries, domestic investments by both developed and developing countries, and private sector contributions.

Why is it important?

Every US$1 spent on adaptation generates US$12.

Adaptation finance needs in developing countries are likely to be 10-18 times as great as finance flows

Global adaption finance capital needs to be increased and moved in the right direction.

Adaptation finance

Standard chartered

Standard Chartered, KPMG and the UN have joined forces to define the future of resilience finance.

More than 100 investible activities are identified across adaptation and resilience.

Santander

BRL17 million to support agroforestry, non-timber forest product cooperatives, and eco-businesses in five biomes

US$47.24 million for deforestation-free soy production in the Cerrado region

Infrastructure finance

Infrastructure finance

Investing in sustainable infrastructure is critical for mitigating the impact of climate change. Sustainable investment in the construction and maintenance of infrastructure will help to develop new and more sustainable methods and technologies, leading to a lower carbon footprint.

What is infrastructure finance?

- Infrastructure finance involves funding projects for building and maintaining infrastructure. Traditionally government-led, it's increasingly reliant on private sector's involvement due to fiscal constraints. Massive investments (trillions of dollars annually) are needed to meet sustainable development goals, making private investment and financial institutions crucial partners.

Why is it important?

Infrastructure projects worldwide will exceed US$9 trillion in 2025.

Infrastructure emits 79 percent of all greenhouse gas emissions worldwide.

65 percent of current spending on physical assets for energy and land-use systems goes towards high-emissions assets. However, it is predicted that over the next 30 years, an average of 70 percent of spending would be on low-emission assets

Infrastructure finance

A group of 20 commercial banks

The GBP2 billion will fund the construction of 60 new wind turbines by a group of 20 commercial banks.

A group of 14 commercial banks

US$1.8 billion investment in a new desalination plant and high-pressure water pipeline in Chile

HKMC

Launched two pioneering infrastructure loan-backed securitization transactions totaling over US$828 million

Green retail housing finance

Green retail housing finance

As outlined by the UNEP in January 2024, when including the construction industry, the buildings sector is responsible for more than 37 percent of global GHG emissions. However, the buildings sector offers the most cost-effective and impactful long-term solutions to address climate risk. With more than half of the world's population now living in urban areas, housing is becoming more in demand with significantly more urgency to be sustainable over the long term.

What is green retail housing finance?

- Green retail housing finance focuses on making residential buildings more environmentally sustainable through financing and construction. This involves incorporating energy-efficient, water-conserving, and sustainable materials into homes, promoting "green" mortgages with preferential terms for environmentally-friendly properties, offering financial products that incentivize sustainable home upgrades, and highlighting the untapped economic benefits of retrofitting existing homes.

Why is it important?

The green building revolution could open a US$ 1.8 trillion global market opportunity by 2030.

Globally expected grow to US$1,257 billion in 2028, and US$1,374 billion by 2034 from US$550 billion in 2024

Global home container market size is expected to be US$126.57 billion by 2034 with the CAGR of 6.72 percent.

Global smart home market size will grow at a CAGR of 21.38 percent

Green retail housing finance

UAE

Low-rate lending for sustainable home building and improvements

Offers ancillary finance for solar panels and sustainable construction materials

Deutsche Bank and EIB

Deutsche Bank and the EIB are leading the way with EUR600 million in green mortgages.

EUR150 million green housing lending via a synthetic securitization of consumer loans

Financing the transition in Thailand

Bank A

Supports clients that invest in alternative energy sources, improve energy efficiency, or have an environmentally friendly transportation.

The bank has been providing loans with attractive interest rates and terms and conditions to customers in targeted sectors who aim to achieve the transition to net zero.

Bank B

Provides loans for investments in reducing the use of new resources, waste reduction, and innovative waste management solutions.

Focusing on SME, the bank will incentivize SME customers to become green with low interest rates for the first two years. The objectives of borrowing are limited to reducing the GHG emissions, installing EV chargers, or improving water and waste management.

Bank C

Offers loans and debt instruments for environmentally friendly activities.

The bank provides sustainable loans for corporate clients and infrastructure projects, specifically designated for projects with positive environmental benefits. For retail customers, the offers include clean mobility or solar rooftops for auto and mortgage loans.

Bank D

Financially supports corporate and SME companies to achieve the transition to neutral and net zero.

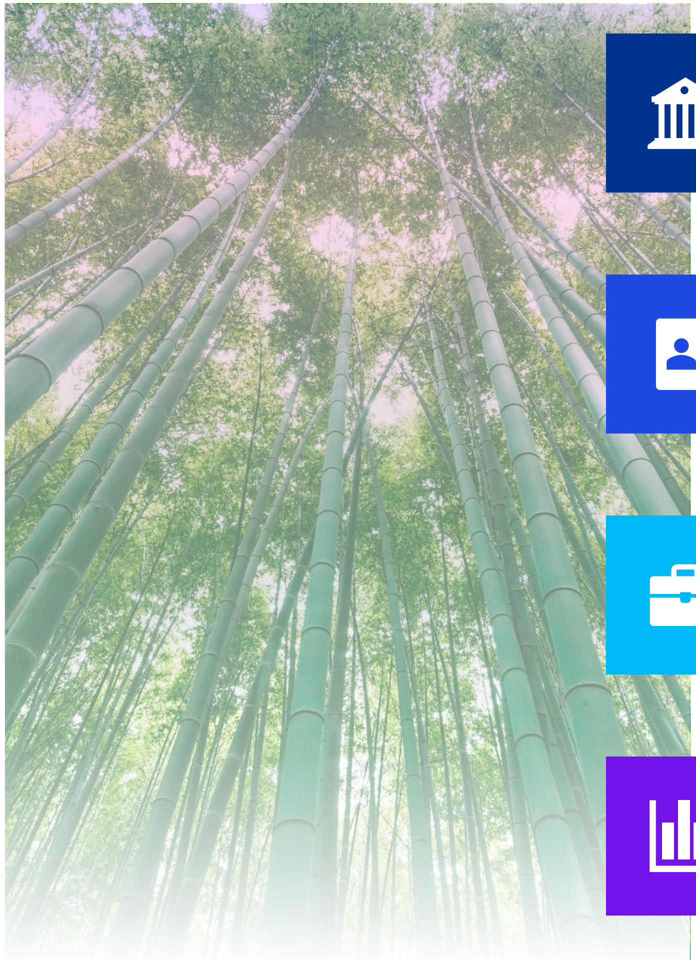
The bank offers green loans that provide incentivized interest rates and low fees.

Bank E

Provides a recommendation on changing construction materials to be environmentally friendly.

Their products and services are not limited to grant loans for environmentally friendly purposes but also include consult by their experts on real estate investment, focusing on environmentally-friendly real estate projects.

Key takeaways



Opportunities for sustainable finance with expected market size at USD 38.19 trillion and the 19.2% of CAGR

Urgent need of climate finance from clients and urgent action for bank to facilitate client’s transition.

Rather than being merely regulatory, sustainable finance is embedding and evolving into everything we do, becoming ‘Business as Usual’.

The range of sustainable products is rapidly expanding, driven by innovation, consumer demand, and a global shift toward eco-conscious solutions.

04

Q&A

KPMG Post Event Survey

: Sustainable Finance Revolution

KPMG supports clients with:

Access to global insights

Get access to leading practices, trends and potential roadblocks. We leverage the latest industry knowledge, alliance partnerships and deep experience with organizations like yours around the world to help you achieve your targets faster.

A systems-based approach

KPMG financial services specialists work closely with expert colleagues in key economic sectors, such as energy, agriculture, commercial real estate and industrial, to help banks understand how to best support their customers' decarbonization journeys and sector-specific challenges.

Climate change, sustainability and social impact experience

We help banks understand material risk exposures, how to measure, report and monitor these, and how to interpret the growing complexity of policy, regulatory and key stakeholder needs.

Market-leading sector-specific capabilities and pre-configured assets

Our capabilities and assets include customizable target operating model (TOM) frameworks, transformation blueprints investment taxonomies and prioritized roadmaps and risk frameworks (e.g. greenwashing risk management). These provide a clear path for banks to enhance the capabilities needed to identify and decision transition finance opportunities while monitoring, managing and reporting on underlying climate change financial risks.

Proprietary tools and modeling suites

Our tools help accelerate the development and deployment of new products and capabilities to meet the needs of multiple stakeholders, be they customers, investors or regulators.

KPMG

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

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