

CASI

北京绿色金融与可持续发展研究院 INSTITUTE OF FINANCE AND SUSTAINABILITY

Green Finance: China and International Initiatives

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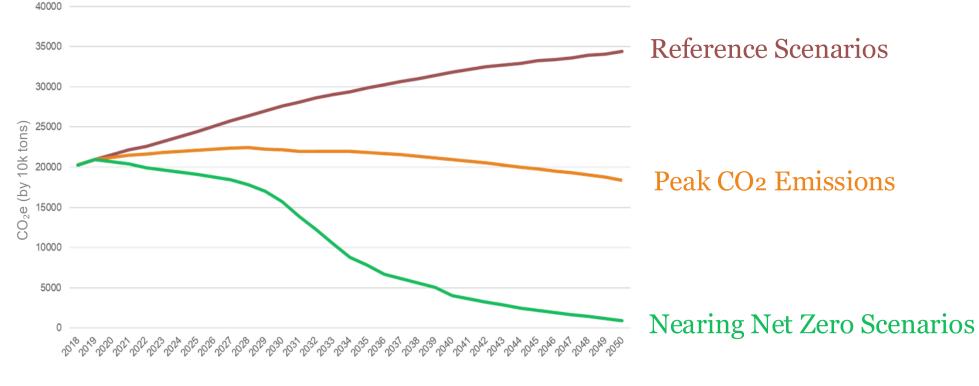
05 Transition Finance

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01 - China's Carbon Neutrality Agenda



Carbon Emission Trajectories under Different Scenarios



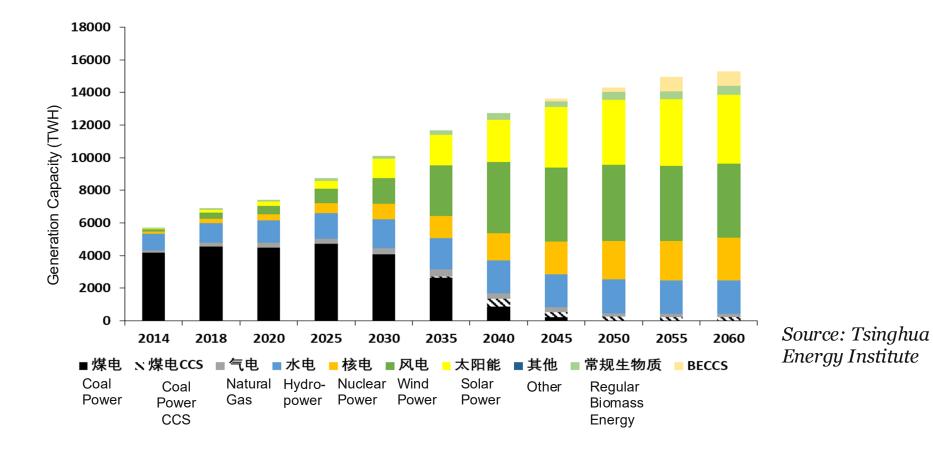
Source: Ma Jun & Ma Tianlu (2021)

Accelerated Energy Transition

China's renewable energy installation is now **50%** of global total and will likely double in the coming five years.



Renewables to account for 95% of China's power supply in 2045



EV penetration has reached 50% and may hit 90% by 2030

2000 1800 1600 1400 1200 1000 800 600 400 200 0 2021 2022 2023F 2024F 2025F 2026F 2027F 2028F 2029F 2030F

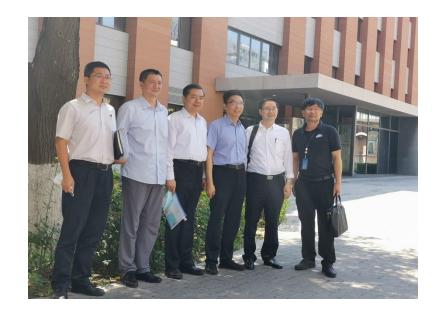
Prediction of EV Sales 2010-2030 (by 10k)

Source: EV Volumes

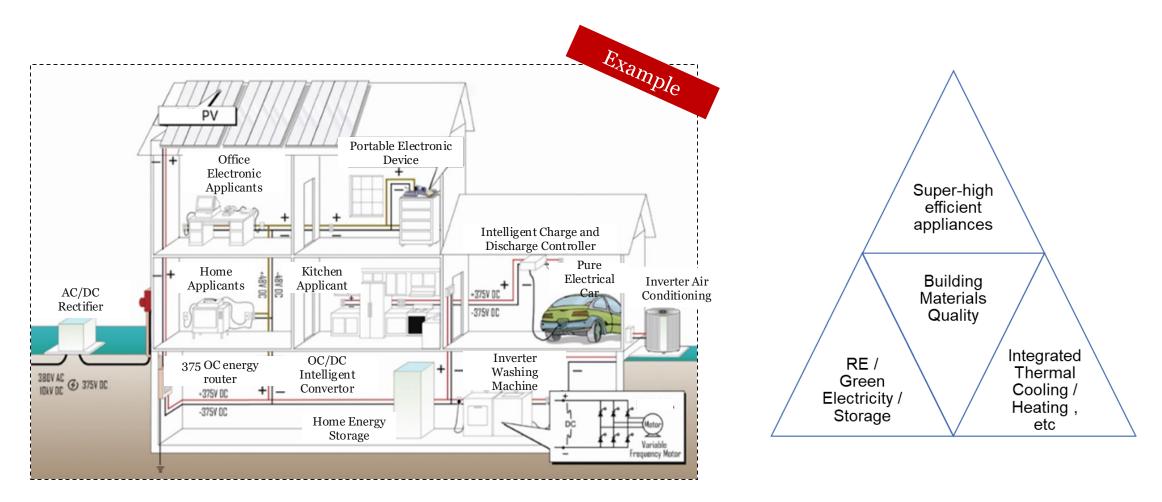


Green and Zero Carbon Buildings

Most new buildings will need to meet new zero carbon standards.



Green and Zero Carbon Buildings



Green Tech Investment Opportunities

Electricity	Smart grid, energy storage, distributed generation, technology advancement	BuildingsRetrofitting, electrification, integrated energy management solution	
Transportation	Electrification, hydrogen/biomass fuels, aviation/maritime innovation	AgricultureSystematic solution, innovation, consumption behavior shifting	
Industrial	Electrification, bio- energy/hydrogen, cement material substitution	Negative emissionCCUS, DAC	
New material	Bio-based polymer materials innovation and substitution	IT and digitalizationIntegration with all sectors, such as smart building, smart agriculture	

Trillion dollars in PE/VC investment are needed for in green technologies in China

02 - China's Green Financial System

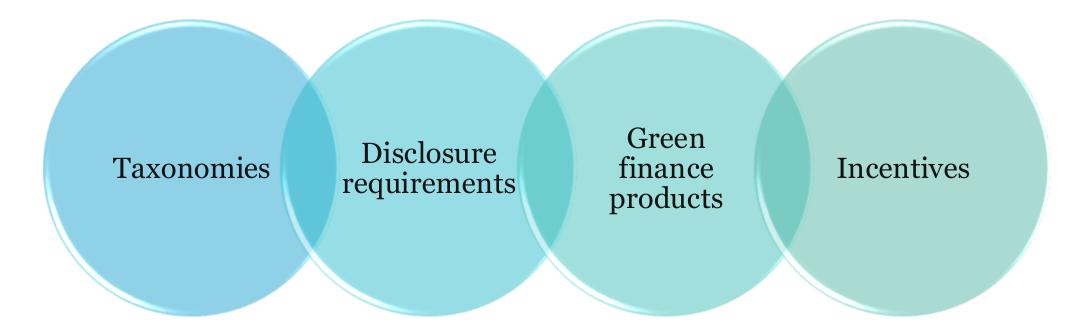


RMB 487tn

China Green Finance Committee estimates that **China will need to invest RMB487tn in green and low-carbon projects during next 30 years (2021-2050)** in order to achieve carbon neutrality. China's Green and Low-carbon Projects Investment

Four Pillars of China's Green Financial System

These pillars were developed under the 2016 China Green Finance Guidelines approved by the State Council.



Pillar 1: Green Finance Taxonomies

Neurly evaluated Contents	Newly-added Contents			
Newly-excluded Contents	Industries/Sectors	Projects under Industries/Sectors		
Clean energy: X Clean production and highly efficient utilization of coal X Coal-fired power X Coal-fired power X Coal mining X Coal washing X Small-scale hydropower X Clean production and highly efficient utilization of fossil fuels Green Transportation: X X Passenger rail transportation	Green equipment manufacturing: ✓ Energy-efficient equipment ✓ Advanced environmental protection equipment ✓ New energy and clean energy equipment ✓ Green ship ✓ Non-toxic and harmless raw materials Green agriculture: ✓ ✓ environmental management in agriculture and rural areas ✓ conservation of agricultural resources Urban ecology: ✓ ✓ Urban ecological protection and infrastructure construction Industrial Park upgrade: ✓ ✓ Pollution control and utilization of resources Green service: ✓ ✓ Green technology consulting service ✓ Green operation management service ✓ Environmental rights trading service ✓ Project evaluation audit and verification service ✓ Monitoring and testing service	 Clean energy: ✓ Smart power grids products and equipment ✓ Nuclear power plant ✓ Hydrogen power utilization facilities ✓ The capture, use and storage of carbon dioxide ✓ Efficient-energy storage facilities ✓ Pumped storage power stations ✓ Natural gas transmission, storage, transporting facilities ✓ Multi-functional complementary projects Green Transportation: ✓ Container multimodal transport system ✓ Shared transport facilities ✓ Road slung transport system ✓ Port, wharf shore power facilities and airport corridor bridge power supply facilities Supply of ecological products: ✓ Forest Recreation and health care ✓ Marine ranch 		

- China Green Bond Catalog (2021 version) included over 200 activities.
- About 20 local governments have published transition taxonomies.

Usages of Green Financial Taxonomies

Labelling of green financial instruments;

Mandatory reporting of green loan data by banks based on taxonomy;

Mandatory reporting of environmental benefits derived from green loans by banks;

Evaluation and ranking of green performance (e.g., green loan ratios) by bank;

Interest subsidies for green loans based on taxonomy.

Pillar 2: Disclosure Requirements

- Green loan borrowers and green bond issuers are required to report information on environmental benefits;
- **FIs** are required to report environmental information to regulators
- **Listed companies** are required to report ESG information;
- MOF has published ISSB-based disclosure standards.
- **Firms covered by carbon market** need to report carbon emissions.

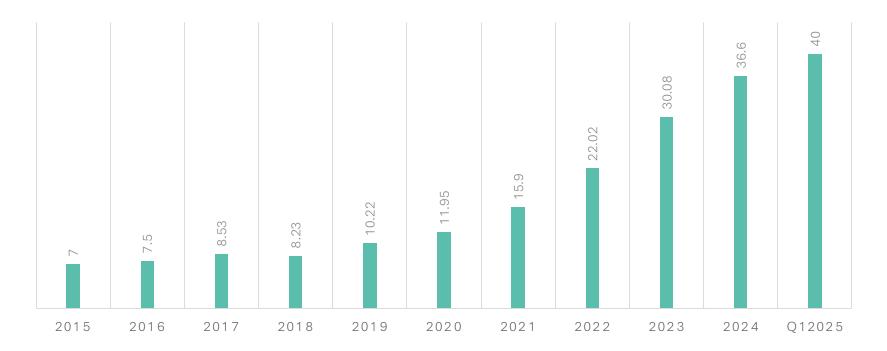


Pillar 3: Green Finance Products



Rapid Growth of China's Green Loan Market

Outstanding Balance of Green Loans in China (in RMB tn)



Source: PBOC and CBRIC

Financial product innovations

2

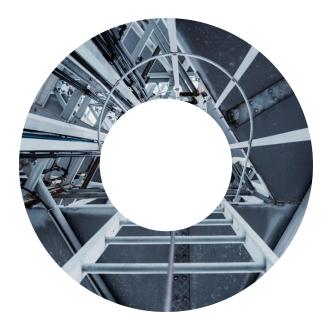
- Sustainability linked loans
- Sustainability linked bonds
- Transition loans/bonds
- Transition funds



Green ABSs



Green supply chain finance



Pillar 4: (1) Policy Incentives for Green Finance

PBOC relending facility (decarbonization facility)	
PBOC evaluation of banks' green performance (e.g., green loan ratios)	
Local government interest subsidies for green loans	
Local government guarantees for green loans	
Local government grants for green finance innovations by FI	
Local government subsidies for green verification	
Government grants for talent development programs	

Pillar 4: (2) Bank's Internal Incentives for Green Finance

Adjustments to green/brown risk weights

Discount to economic capital for green assets

Internal loan pricing discount

03 – G20 Sustainable Finance Roadmap



G20 Roadmap Action: Enhancing compatibility and consistency of sustainable finance taxonomies

Action 1

The G20 encourages jurisdictions that intend to develop their own alignment approaches to refer to a set of voluntary principles:

- Ensure **material positive contributions to** sustainability goals and
- Focus on **outcomes**;
- Avoid negative contribution to other sustainability goals (e.g., through do no significant harm to any sustainability goal requirements);
- Be dynamic in adjustments reflecting changes in policies, technologies, and state of the transition;
- Reflect good governance and transparency;
- Be **science-based** for environmental goals and science- or evidence-based for other sustainability issues; and
- Address transition considerations.

G20 Roadmap Action: Enhancing compatibility and consistency of sustainable finance taxonomies

Action 6

G20 to welcome the work program of the IFRS Foundation to develop a set of internationally consistent, comparable, and reliable baseline standards for disclosure of sustainability-related information on enterprise value creation.

 The IFRS Foundation work program, including its proposed International Sustainability Standards Board (ISSB), should be governed by a transparent and inclusive governance structure with public oversight provided by the Monitoring Board and a process of consulting a wide range of stakeholders.

- The ISSB should <u>develop a baseline global sustainability</u> <u>reporting standard</u> while allowing flexibility for interoperability with national and regional requirements, also taking into account the need to avoid disproportionate burdens on small and medium-sized enterprises (SMEs).
- The ISSB should over time <u>extend coverage from its initial</u> <u>focus on climate-related information to include other</u> <u>sustainability-related topics</u> such as nature, biodiversity and social issues.
- The <u>reporting standard</u> that the ISSB develops would be subject to review for endorsement by IOSCO. If endorsed, the standard could then be considered by individual jurisdictions, on a voluntary basis, via national or regional standard-setting processes or in establishing domestic reporting requirements.
- <u>Jurisdictions</u> will have their own <u>legal frameworks</u> for adopting, applying, or otherwise making use of international standards.

G20 Roadmap Action: Enhancing compatibility and consistency of sustainable finance taxonomies

Action 18

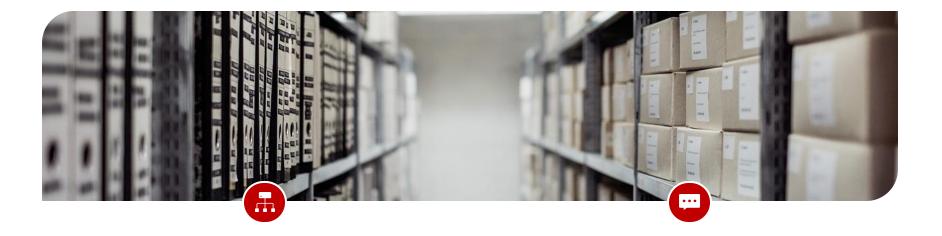
SFWG to work with appropriate IOs to develop high-level principles for a credible and consistent framework for financing a just climate transition. This work could map and review existing and emerging approaches, as appropriate, to:

- Enable transitions towards a low greenhouse gas emission economy;
- Explore options to incorporate transition considerations in sustainable finance alignment approaches (e.g., **taxonomies**, labels, portfolio alignment tools such as forward looking metrics);
- Identify and develop credible transition metrics, **pathways**, targets, and low greenhouse gas emission development strategies;
- Improve **disclosure requirements**;
- Develop and expand **tools to finance** climate transition; and
- Explore best practices for **mitigating negative** economic and social impact of climate transition on local communities and SMEs.

04 – Common Grand Taxonomy



A Global Challenge: Proliferation of Taxonomies



A large number of green/sustainable finance taxonomies have been (and are being) developed by **different jurisdictions and organizations**. If developed in silos, the proliferation of taxonomies may exacerbate problems such as **market segmentation**, **increased transaction costs (e.g., green verification costs) and risks of green washing** and may undermine efforts to promote cross-boarder green capital flows.

IPSF Working Group on Taxonomy (1/2)

- IPSF was launched in October 2019 by the European Union, China, Canada, Argentina, Chile, India, Kenya and Morocco.
- Until November 2021, 18 members of the IPSF represent 55% of greenhouse gas emissions, 50% of the world population and 55% of global GDP.



The work of the IPSF is informed by twelve observers

- the Coalition of Finance Ministers for Climate Action
- the European Bank for Reconstruction and Development
- the European Development Finance Institutions
- the European Investment Bank [2]
- the IFRS Foundation [2]
- the International Monetary Fund [3]
- the International Organisation of Securities Commissions
- the Network for Greening the Financial System
- the Organisation for Economic Co-operation and Development
- the United Nations Environment Programme Finance Initiative
- the United Nations Development Programme
- and the World Bank Group.

IPSF Working Group on Taxonomy (2/2)



- In July 2020, the EU and China initiated the Taxonomy
 Working Group, co-chaired by the EU and China, joined by IPSF members and observers.
- Co-chairs: Marcel Haag (EC), MA Jun (PBOC)
- Scope of work: <u>undertake a</u> <u>comprehensive assessment of the</u> <u>existing taxonomies for</u> <u>environmentally sustainable</u> <u>investments</u>, including identifying the commonalities and differences in their respective approaches and outcomes.

The Common Ground The Common Ground Taxonomy is... Taxonomy is not... \checkmark An analysis on approaches of the A legal documentation by the EU taxonomy and China EU and China which entails taxonomy, and the methodology requirement/obligation for for comparing and identifying either jurisdiction to change commonalities and differences their taxonomy. between some features of the two taxonomies A single taxonomy or exclusive An evolving tool that may help different actors to understand the definition of environmentally types of activities that could be sustainable economic activities covered under the respective covering all environmental taxonomies within the scope of objectives, such as the comparison exercise biodiversity, pollution

-

- ✓ A technical document for voluntary reference by interested parties within the limits of the scope of the comparison exercise
- An analytical tool or reference for other jurisdictions to consider when developing their own taxonomies

or all activities in the EU and China taxonomies as explained in the instruction report. A proposal for international standards or legal document that imposes any global standard on other jurisdictions.

Covering all eligibility features

prevention, etc.

	CGT Section	CGT category	C2.2 Manufacture of batteries			
Examples	C: Manufacturing	C2: Manufacture of clean energy technologies	C2.3 Production of wind generators C2.4 Production of solar generators D1.1 Electricity generation using solar photovoltaic technology			
of	D: Electricity, gas, steam and air conditioning supply	D1: Electric power generation, transmission and distribution	D1.3 Electricity generation from wind power			
Activities			D1.5 Electricity generation from hydropower			
in CGT		D1: Electric power generation,	D1.6 Electricity generation from bio-energy			
mcGi		transmission and distribution	D1.8 Storage of electricity			
			D2.1 District heating and cooling			
		D2: Steam and air conditioning supply	E1.1 Sewage sludge treatment – anaerobic digestion			
	E: Water supply; sewerage, waste	E1: Sewage sludge treatment	E2.2 Recycling non-hazardous waste			
	management and remediation activities	E2: Waste collection, treatment and recycling	F1.2 Renovation of existing buildings			
	F: Construction	F1: Construction and renovation of buildings	F2.1 Infrastructure enabling low-carbon road transport			
		F2: Construction of transport infrastructure	F2.2 Infrastructure enabling low carbon water transport F2.3 Low carbon airport infrastructure F2.4 Infrastructure for electric rail transport H1.1 Construction and operation of public transportation system			
	H: Transportation and storage	H1: Land transport including railways	urban and rural areas H1.2 Construction and operation of rail freight transport and upgrade of existing railways C2.2 Manufacture of batteries			

IPSF Taxonomy Working Group released the Multi-jurisdiction Common Ground Taxonomy (MCGT) in Nov 2024 during COP29

Number and Activity Name	D1.12 Transmission and distribution of renewable and low-carbon gases, including but not limited to low-carbon hydrogen and its derivatives such as ammonia					
Scope of activity	Conversion, repurposing or retrofit of gas ne	Conversion, repurposing or retrofit of gas networks for the transmission and distribution of renewable and low-carbon gases.				
Scenario analysis for Multi-jurisdiction CGT	Scenario 3 – EU and SAT criteria are equally stringent Justification of the scenario selection: EU and SAT criteria are equally stringent. There is no corresponding China activity					
Corresponding activities	China taxonomy: Activity is not in the China taxonomy	EU taxonomy: 4.14. Transmission and distribution networks for renewable and low-carbon gases	SAT: 1.8. Transmission and distribution of renewable and low-carbon gases			
Multi-jurisdiction CGT substantial contribution criteria	N/A	 I. The activity consists in one of the following: construction or operation of new transmission and distribution networks dedicated to hydrogen or other low-carbon gases; conversion/repurposing of existing natural gas networks to 100% hydrogen; retrofit of gas transmission and distribution networks that enables the integration of hydrogen and other low-carbon gases in the network, including any gas transmission or distribution network activity that enables the increase of the blend of hydrogen or other low carbon gasses in the gas system; 2. The activity includes leak detection and repair of existing gas pipelines and other network elements to reduce methane leakage. 				

Use Cases of CGT

The Common Ground Taxonomy serves three key functions:

- A comparison tool for different taxonomies;
- Enables green labelling for crossborder financial products;
- Offers a reference for jurisdictions developing new taxonomies.



MCGT was launched at COP29, Nov 2024

Use of CGT : Labelling green finance products



Labelling Chinese green bonds issued in international markets



Labelling existing Chinese green bonds



Labelling green panda bonds issued by international issuers



Labelling other green financial products

Example 1: Issuance of CGT-labeled Chinese green bonds

All major Chinese financial institutions and some corporates have used CGT as label for their international green bonds issuance since 2022. Total fund raising of CGT-labeled bonds reached approximately USD20bn. Benefits of CGT label includes **reduced verification costs, higher subscription rates and lower funding costs**.





松招商銀行

(2)1年,我仍在《届商银行播色、社会受任取习持故发展很多框拟》)下,通过卓靠显分行政行用只要元使原外,总型为 定期3(2)完成工业方配算单 30FR(有限需要推荐推算) 非接受利用原要称40 5年第3(2)优元单心面接接景。2022 年2月23日、我们通道电影已经打54年期4(4)优元"其他为处理者"等色意味,最高功能给制制行会球首 第(14代为选择》"主要思考。此外,子公司服用服用 2021年至公司服用正方以近初引用成发展是原则是、在原用服 FRA成功能以及不伸"该中国"主题是色质发行合价,最中间金融服成公司成为方行项目色质。







德意志银行(中国)为华能天成融资租赁有限公司(简称 "天成租赁")提供1.87亿元三年期应收账款的贸易融资。该交易是德意志银行集团第一笔符合《可持续 会融夫司分类目录(更新版)》(简称《目录》)标准的 贸易融资项目,所募集资金将为天成租赁在中国所建设的两个风电厂项目的直接租赁业务提供融资支持。 此项交易符合《目录》中"情景1"的定义、即该项经济活动在中国和欧盟两个分类目录中的定义明显重合。 并由此认定其在《目录》范围内具有可比性。



Example 2: Labelling legacy (existing) Chinese green bonds with CGT

China Green Finance Committee has organized an expert group to identify existing green bonds issued domestically that are CGT aligned, and label them as CGT-aligned domestic bonds in a publicly available database.

Number	Secruity Code	Bond short name	Type of Green Bond	Issuer	Year of Issuance	Issue Amount (RMB 100mil)	Pre-evaluation Agency	Secondly-evaluation Agency
1	131656048	WUHAN METRO GN 16(002)	Green debt financing instruments	WUHAN METRO GROUP CO.,LTD.	2023		Lianhe Equator	Morningstar
2	131781001	WUHAN METRO GN 17(001)	Green debt financing instruments	WUHAN METRO GROUP CO., LTD.	2023	5.20	Lianhe Equator	Morningstar
3	131900025	19 WHRT GN001	Green debt financing instruments	WUHAN METRO GROUP CO., LTD.	2023	1.00	Lianhe Equator	CECEP Hundred
4	132000017	SHENYANG METRO GN 20(001)	Green debt financing instruments	Shenyang Metro Group Co.,Ltd.	2023	10.00	Lianhe Equator	CECEP Hundred
5	132000026	RONG URBAN RAIL TRANSIT GN 20(002)	Green debt financing instruments	Chengdu Rail Transit Group Co.,Ltd	2023	13.00	Lianhe Equator	CECEP Hundred
6	132000029	SHENYANG METRO GN 20(002)	Green debt financing instruments	Shenyang Metro Group Co.,Ltd.	2023	10.00	Lianhe Equator	CECEP Hundred
7	132000031	WUHAN METRO GN 20(001)	Green debt financing instruments	WUHAN METRO GROUP CO., LTD.	2023		Lianhe Equator	CECEP Hundred
8	132100003	21 LNNEWENERGY GN001	Green debt financing instruments	Luneng New Energy (Group) Co., Ltd	2023	5.00	Lianhe Equator	CECEP Hundred
9	132100052	21 CRT GN003	Green debt financing instruments	Chongqing Rail Transit (Group) Co.,Ltd.	2023	5.00	Lianhe Equator	CECEP Hundred
10	132100057	21 CRT GN004	Green debt financing instruments	Chongqing Rail Transit (Group) Co.,Ltd.	2023	1.40	Lianhe Equator	CECEP Hundred
11	102101118	21 QINGDAO METRO MTN002	Green debt financing instruments	Qingdao Metro Group Co.,Ltd	2023	10.00	Lianhe Equator	CECEP Hundred
12	102101182	21 SZMG MTN003	Green debt financing instruments	Shenzhen Metro Group Co.,Ltd.	2023	20.00	Lianhe Equator	CECEP Hundred
13	132100084	CHONGQING METRO GN 21(005)(CARBON NEUTRAL BOND)	Green debt financing instruments	Chongqing Rail Transit (Group) Co.,Ltd.	2023	13.00	Lianhe Equator	CECEP Hundred
14	102101435	21 SHENZHEN ENERGY MTN001	Green debt financing instruments	Shenzhen Energy Group Co., Ltd.	2023	10.00	Lianhe Equator	CECEP Hundred
15	102101755	SHENZHEN METRO MTN 21(004)(CARBON NEUTRAL BOND)	Green debt financing instruments	Shenzhen Metro Group Co.,Ltd.	2023	7.00	Lianhe Equator	CECEP Hundred
16	132100109	GD GN 21(004) B (BLUE BOND)	Green debt financing instruments	GD Power Development Co.,Ltd	2023	13.00	Lianhe Equator	China Chengxin Green Finance Technology
17	102102078	QING CHENG NEW ENERGY MTN 21(001)(CNB)	Green debt financing instruments	Qingdao Chengtou New Energy Investment Co., Ltd.	2023	10.00	Lianhe Equator	China Chengxin Green Finance Technology
18	132100156	21 CRT GN006	Green debt financing instruments	Chongqing Rail Transit (Group) Co.,Ltd.	2024	10.00	Lianhe Equator	China Chengxin Green Finance Technology
19	132280007	22 CRT GN002	Green debt financing instruments	Chongqing Rail Transit (Group) Co.,Ltd.	2024	5.00	Lianhe Equator	China Chengxin Green Finance Technology
20	102280517	22 CD RAIL TRANSIT MTN003	Green debt financing instruments	Chengdu Rail Transit Group Co.,Ltd	2024	5.00	Lianhe Equator	China Chengxin Green Finance Technology
21	132280029	22 YALONG RIVER GN001	Green debt financing instruments	Yalong River Hydropower Development Company, Ltd.	2024	5.00	Lianhe Equator	China Chengxin Green Finance Technology
22	132280035	22 GDPD GN001A	Green debt financing instruments	GD Power Development Co.,Ltd	2024	2.10	Lianhe Equator	China Chengxin Green Finance Technology
23	132280036	22 GDPD GN001B	Green debt financing instruments	GD Power Development Co.,Ltd	2024	15.00	Lianhe Equator	China Chengxin Green Finance Technology
24	102280953	22 HUANENG JIANGSU MTN001	Green debt financing instruments	Huaneng Power International Energy Development Co.,Ltd.	2024	6.00	Lianhe Equator	China Chengxin Green Finance Technology
25	132280041	PETRO CHINA GN 22(001)	Green debt financing instruments	China National Petroleum Corporation	2024		Lianhe Equator	China Chengxin Green Finance Technology
26	132280042	YANTAI SALVAGE GN 22(001)	Green debt financing instruments	China Yantai Salvage Bureau	2024	20.00	Lianhe Equator	China Chengxin Green Finance Technology
27	102281065	22 CTGR MTN002	Green debt financing instruments	China Three Gorges Renewables (Group) Co.,Ltd.	2024	3.00	Lianhe Equator	China Chengxin Green Finance Technology
28	132280047	LONGYUAN POWER GN MTN 22(001)	Green debt financing instruments	China Longyuan Power Group Corporation Limited	2024	50.00	Lianhe Equator	China Chengxin Green Finance Technology
29	132280048	22 CPI LEASING GN002	Green debt financing instruments	CPI Ronghe Financial Leasing Co.,LTD	2024	5.00	Lianhe Equator	China Chengxin Green Finance Technology
30	132280049	22 YALONG RIVER GN002	Green debt financing instruments	Yalong River Hydropower Development Company, Ltd.	2024	15.00	Lianhe Equator	China Chengxin Green Finance Technology
31	132280052	22 CIMC GN001	Green debt financing instruments	China International Marine Containers (Group) Co., Ltd	2024	5.00	Lianhe Equator	China Chengxin Green Finance Technology

List of CGT-aligned Chinese Green Bonds (April 2025 version)

Green Finance: China and International Initiatives

Example 3: Developing green bonds funds based on CGT-labeled green bond database

Several asset management companies, including JP Morgan Asset Mgmt and Neuberger Berman Asset Mgmt, have developed **CGT-aligned China green bond funds** and have sold them to institutional and retail investors.

NEUBERGER BERMAN

The Neuberger Berman China Green Bond Fund is an innovative investment product that leverages the Common Ground Taxonomy (CGT). With a fundraising size exceeding CNY 2 billion, the fund is committed to investing at least 80% of its assets in green-labeled bonds. Moreover, as an actively managed fund, it considers the CGT as a global standard for selecting and assessing green bonds.



Example 4: Developing CGT aligned green bond indices

CFETS has developed three CFETS Common Ground Taxonomy Green Bond Indices.



Green Finance: China and International Initiatives

Example 5: Sri Lanka used CGT as a key reference for its green finance taxonomy

Tab Description and Benchmarks

Tab Description	Benchmarks
Climate Change Mitigation	 IPSF Common Ground Taxonomy - Climate Change Mitigation (2021) Sri Lanka updated NDCs (2021) EU Taxonomy - Climate Delegated Act (2021) China Green Bond Endorsed Project Catalogue (2021)
Climate Change Adaptation	 Sri Lanka updated NDCs (2021) National Adaptation Plan for Climate Change in Sri Lanka 2016-2025 IFC Climate Smart Agriculture Financing Opportunities in Sri Lanka (2021)
Other Green Objectives (covering environmental objectives 3 and 4)	 Green Bond Endorsed Project Catalogue (2021) Colombia Green Taxonomy (draft 2021) IFC Guidelines for Blue Finance (2022)

Column Description	
Number	Number of the activity in this document
Macro-sector	High-level sector classification
Activity	Activity
Description	Description of activity
Metric & Threshold for Sri Lanka	Metric to be met to be aligned with the taxonomy

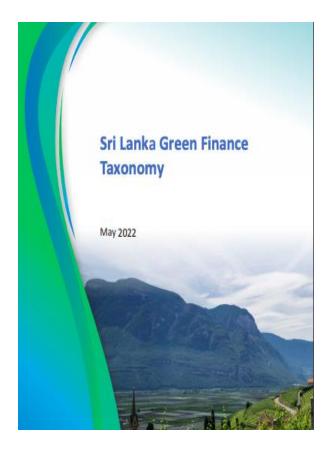


Figure 1: Taxonomy compatibility table

Example 6:
Hong Kong
used CGT as
a key
reference for
its
sustainable
finance
taxonomy

Sectors in Hong Kong Taxonomy	Common Ground Taxonomy	EU Taxonomy	Mainland China Taxonomy	ASEAN Taxonomy (V2)	Climate Bonds Taxonomy
Electricity generation					
using concentrated				Tier 1 Green	
solar power technology					
Electricity generation				Tier 1 Green	
using solar photovoltaic					
technology					
Electricity generation				Tier 1 Green	
from wind power					
Construction and					
operation of public					
transportation system					
in urban and rural areas					
Construction and					
operation of personal					
mobility devices, cycle					
logistics					
Water Transport					
(freight and passenger)					
Collection and transport					
of non-hazardous waste					
in source segregated					
fractions					
Utilisation/ treatment					
of domestic waste -					
anaerobic digestion					
Sewage sludge					
treatment – anaerobic					
digestion					
Construction of new					
buildings					
Renovation of buildings					

Future of MCGT

(1) Further expansion of the jurisdiction basis for the MCGT

- We are inviting more countries/jurisdictions (e.g., Brazil, Australia, South Africa, etc) to join the IPSF taxonomy working group and participate in the development of next version of the MCGT.
- Expanding the number of participating countries would further enhance the credibility and influence of the MCGT and could incentivize the participating countries.

(2) Cover more green finance activity sectors

- Expand to cover additional green development objectives;
- Covering more transition finance activity sectors;
- Extending to emerging green
 investment themes, i.e. green data
 center, sustainable textile,
 ecological tourism, natured-based
 solutions, etc.

(3) Promote market usages of MCGT

- promoting market innovation of use cases. These use cases can include :
- Labelling bonds, loans, bond funds, indices, ABSs;
- Setting up database which hosts MCGT-aligned bonds globally;
- Compiling internationally comparable stats of green performance.

05 – Transition Finance Framework



Pillars of G20 Transition Finance Framework



Identification Of Transition Activities

Disclosure

Financing Tools

Mitigating Negative Social Impact

1. Identification of Transition Activities

Broadly speaking, two approaches are taken for identifying transition activities: principle-based approach and taxonomy-based approach.

Principle-based approach

 It is used by Climate Transition Finance Handbook developed by ICMA and the Basic Guidelines on Climate Transition Finance released by Japan Financial Services Authority;

The taxonomy-based approach

- It takes the form of a list of specific "transition" or "transitory" activities classified by sector.
- These taxonomies, with varying levels of specificity in terms of technical pathways and emission reduction targets, are used by the EU, and China, and considered by many other jurisdictions.

2. Reporting of Transition Activities

There is an emerging consensus that the reporting framework could cover the following elements:

- Robust transition strategies, goals and timelines;
- Goals be set as <u>science-based targets</u>;
- Historical Scope 1 and Scope 2 GHG emissions data, and Scope 3 data as appropriate;
- Corporate governance to ensure implementation;
- Progress reporting;
- Use of proceeds; and
- Implementation of safeguard measures.

3. Policy Incentives

Sectoral policy levers such as the provision of land for renewable projects

Green finance incentives (e.g., monetary policy instruments; subsidies for verification)



Transition funds with government funding **Fiscal measures** such as subsidies, tax incentives, and govt procurement

Emission trading mechanisms

4. Financial Instruments for Transition Activities

Debt instruments - transition and sustainabilitylinked loans and bonds:

- With clearly specified transition targets;
- Incentives and penalties for outperformance/underperformance against targets, disclosure requirements, use of proceeds requirement, etc.

Equity-related instruments:

• including investments by transition funds, PE/VC funds, buyout funds, and mezzanine financing, that are suitable for companies adopting new technologies, highly indebted companies, and/or SMEs;

Risk-mitigation products and others.

5. Identifying and Mitigating Negative Social Impact

Measures need to be taken to ensure that transition activities do not result in significant unemployment, energy shortage, inflation and bring other negative social and economic implications. - Possible measures to integrate "just" element into transition finance:

- Include an assessment of employment implications in fundraiser's transition plan;
- Include mitigation measures (e.g., training and reskilling programs) in transition plan;
- Disclosure the employment related information and mitigate measures;
- Consider including employment performance measures in KPI design of SL products.

In China, the PBOC is leading the development of national-level transition finance framework

<u>The People's Bank of China</u> is developing a policy framework (including taxonomy, disclosure, products, and incentives) for transition finance.

- China's current green finance taxonomy already covers some <u>project-based transition activities</u> (about 1/4 of the 86 climate mitigation activities in green taxonomy could be viewed as "transitional").
- Transition taxonomy will include both project- and entity-based activities that are aligned to the country's carbon peaking and carbon neutrality goals.
- PBOC's current work concentrates on developing four industries' transition finance taxonomy



湖州市转型金融支持活动目录

(2023年版 试行)

Many Chinese local governments have published their transition finance taxonomies

一、企业概况 Corporate Overview

(一)基本信息。简述企业基本信息(企业成立时间、发展历史、经营地点、法定代表人、控股股东、占地规模、用工规模、注册及实收资本、投入规模等)。

(二)主营业务。简述企业主营业务范围(主要产品名称或服务范围),经营情况(主要产品年产值、税收、销售收入等),发展状况(企业及产品在行业中的地位、市场份额、产品生产工艺技术装备水平),经营生产资格。

(三)节能降碳情况。简述近年来企业节能降碳的举措和 成效,包括但不限于技术改造、可再生能源利用、能效管理、 原辅材料替代等。

(四)碳排放情况。简述企业碳排放情况现状,包括近两 个年度的范围1和范围2排放数据(有条件的可包括范围3)。

	计算碳排放量用基础数据						
	年度	净外购电力 (万千瓦时)	净外购热能 (百万千焦)	使用原油 (吨)	使用原煤 (吨)	使用燃气 (万立方米)	
	年						
近两个年度	年						
碳排放情况	计算工业增加值用基础数据						
	年度	税金 (万元)	利润 (万元)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	资薪酬 (万元)	折旧 (万元)	
	年						
	年						

行业	行业 代码	低碳转型技术或路径	低碳转型 基准值1	2025 年 低碳转型 目标值
一、纺织业	17	1.产业结构调整与集聚协同	-	-
棉纺织及印染精加工	171	 按照国家、行业及地区规划指导,严格执行《产业结构调整指导目录》《产业发展与转移指导目录》等文件要求,推进产业 		**
毛纺织及染整精加工	172	集聚,形成集约低碳型发展方式,推动产业布局优化;推动纺	**	**
麻纺织及染整精加工	173	 织产品高端化发展; 跨行业跨区域协同,促进产业循环耦合发展,实现节能降碳。 2.用能结构低碳转型 通过优化企业能源结构,促进能源消费清洁低碳化,包括:依据《关于进一步推进电能替代的指导意见》,鼓励企业微电网建设,加快厂房光伏、分布式风电、多元储能、热泵、余热余压利用、智慧能源管控等一体化系统开发运行,提高多能高效互补利用,加大生物质燃料等可燃废弃物替代燃煤,提高天然 	**	**
丝绢纺织及印染精加工	174		**	**
化纤织造及印染精加工	175		**	**
针织或钩针编织物及其制品 制造	176		**	**
家用纺织制成品制造	177		** 🦷	**

Huzhou Transition Plan Template (1)



Huzhou Transition Plan Template (2)

三、转型行动计划 Technical Pathways and Financing Pla

描述企业为实现上述转型目标,拟采取的低碳转型技术、 路径和措施,包括但不限于加强供应链合作、用能结构低碳化、 低碳原料替代、资源循环利用、提高终端用能装备电气化水平、 生产工艺节能降碳改造升级、重点和通用耗能设备节能改造、 节能管理、固碳负碳类技术、数字化、有助于降低碳排放强度 的第三方咨询服务等。

	□在《湖州市转型金融支持活动目录》内,为对应行业第
低碳转型	条技术路径
技术与路径	□不在《湖州市转型金融支持活动目录》的,技术路径为:
(可多选)	
1	

四、财务与转型融资计划

描述企业为了实现低碳转型目标、实施转型行动计划所需

投入资金以及融资计划。

廿刑机、儿筒	预计到 2025 年,转型项目建设或生产运营等活动所需投入的资金为		
	转型投入估算	万元	
	转型融资计划	意向融资金额:万元	

Green Finance: China and International Initiatives

Governance 五、转型计划实施的保障措施

(一)组织机构。描述企业为保障转型计划实施,在组织

机构设置、人力资源配置、员工培训等方面拟采取的措施。

	是否设置转型计划实施的牵头部门?
	□是,部门名称:
	□ 중
组织设置	是否开展支持转型计划实施的人力资源配置及员工培训(可多选)?
1	□是,招募具有绿色低碳专业背景的人员
Plan	□是,开展绿色低碳主题的员工培训
	□ 香

(二)监督管理。描述企业为保障转型计划实施,在转型 目标监测、温室气体排放监测、信息披露报告体系等方面的制

度建设情况。

是否建立转型成效(碳排放水平)监测及汇报机制? 监督管理 □분 日香

Just Transition 六、公正转型与社会责任

(一)公正转型情况。

描述企业实施转型计划对就业、供应链、物价等方面的潜在

影响。

	转型计划是否会对员工产生影响? □是,可能导致员工人数大幅变动 □是,可能导致一线工人收入降幅大于等于10% □否
公正转型	转型计划是否会对供应链、物价产生影响?
情况	□是, 使供应链上下游企业数量同比降幅大于等于 20%
	□是,引起能源短缺(导致居民用能价格同比增幅超过20%)或引起基
	础原材料供应短缺(导致供应链相关价格同比增幅超过20%)
	总体影响:□正向 □负向
(=	·)无重大损害原则落实情况。描述企业实施转型计划
是否会对	其他可持续发展目标产生较大负面影响(如污染环
境、破坏	生物多样性)。
王壬十招官	林利让别具不会对其他可持续发展目标充止放于各面影响(加运流环境

无重大损害

1. 持续发展目标产生较大负面影响(如污染环境) 转型计划是 原则落实 破坏生物多样性)? □是 □否 情况

(三)考核激励。描述企业为保障转型计划实施,在关键

绩效指标、 绩效管理等方面的制度安排或打算

键结效指标(碳强度)和结效管理机制? 考核激励 □ 是、设计与转型目标挂钩的奖励方 (可多选) □ 是, 其他 □ 否

(四)风险管控。描述企业转型计划实施面临的主要风险

因素,包括政策、市场和技术等方面,并且有针对性地制定防

范化解措施。

1010/1146	
	转型计划实施预计可能产生的风险类型及防范化解措施:
	□政策风险,如节能降碳政策推进节奏发生变化等
	拟采取措施:□持续监测管理企业碳排放 □基于行业及地区相关规
	划科学调整减碳目标及路径 □其他:
转型风险	□ 市场风险,如低碳转型方案影响企业竞争力等
管控	拟采取措施: □积极进行技术创新、提升产品服务质量
(可多选)	□有序开展低碳转型项目 □其他:
	□技术风险,如本行业转型技术路径发生重大更新等
	拟采取措施: □动态更新减碳技术路径
	□保障技术研发投入 □其他:
	□无风险

Disclosure 七、转型信息披露

描述转型信息披露内容和计划,披露内容应至少包含转型 计划落实情况、转型效果与目标进度、转型融资资金使用情况、 与转型金融工具条款相关的关键绩效指标完成情况、公正转型 相关指标情况等。

企业应定期主动向金融机构提供有关披露信息,或授权湖 州市"绿贷通""碳账户"平台采集并供金融机构查阅

转型信息 披露形式及 内容		录贷通""碳账户"平台采集并供金融机构查阅 要求向金融机构披露
八、	承诺与责任	Promise and Responsibility

企业应承诺转型方案有关的所有材料均据实提供,并自愿 按金融机构要求定期填报相关指标情况,配合做好信息采集和 跟踪评价。

永诺与责任	 企业承诺: □本单位近三年信用状况良好,无违法违规和失信行为; □转型方案有关的所有材料均据实提供; □如违背以上承诺,愿意承担相关责任; □自愿按金融机构要求定期填报相关指标情况,配合做好信息采集和跟踪评价。
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06 – Capacitybuilding Alliance of Sustainable Investment (CASI)



CASI Launched at COP28 in Response to TAAP's Call for Actions

Ma Jun, President of the Beijing-based Institute of Finance and Sustainability (IFS) and former Co-Chair of the G20 Sustainable Finance Working Group (SFWG), together with representatives from the founding members, launched CASI at COP28.



CASI Responds to TAAP's Priorities

- CASI is a global initiative dedicated to capacity building in sustainable finance and investment, with a focus on serving the needs of Emerging Markets and Developing Economies (EMDEs). *(Response to Actions 1 and 6)*
- CASI creates and consolidates knowledge by forming a network of knowledge and distribution partners, which helps to scale up efforts, exchange best practices, develop high-quality contents, and connect these resources with countries and audiences in need. *(Response to Action 4)*
- CASI strengthens engagement with knowledge recipients by offering tailored learning programs based on international and regional best practices, makes them available in multiple languages, expands access through online platforms, and promotes the transition finance framework. (*Response to Actions 7 and 8*)





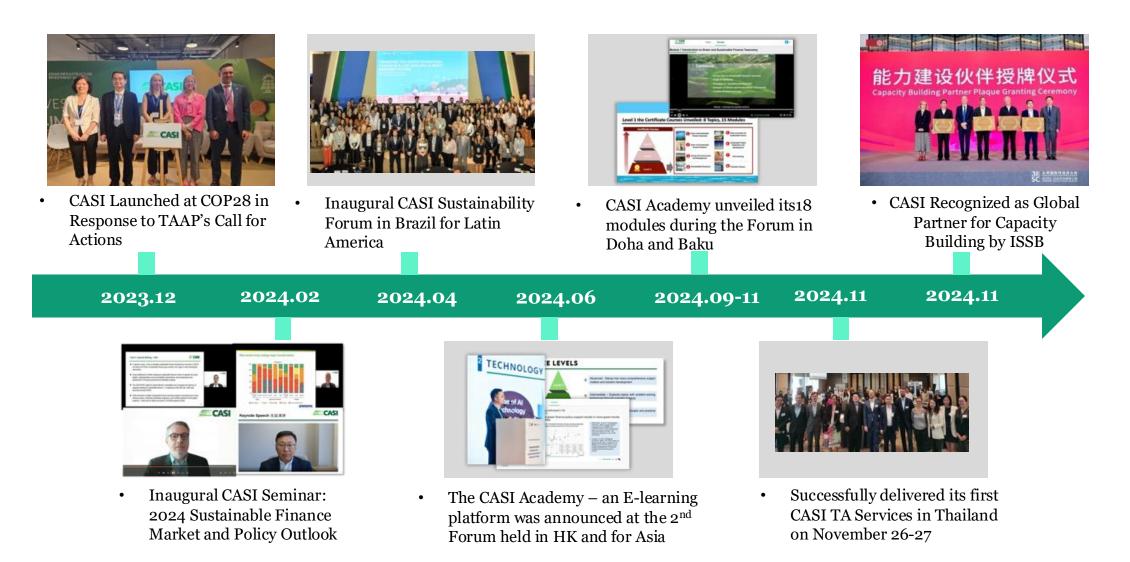
Rapid Growth of Membership Network

- CASI membership has grown vigorously, from 42 members since launched in December 2023 to 67 members as at end of November 2024.
- Global network spanning across Asia, Europe, the Americas, Africa, and Oceania, with a focus on Emerging Markets and Developing Economies (EMDEs).





CASI Milestone





CASI Learning Programs



The Launch of CASI Academy



June 24, 2024, Hong Kong, Platform Launched

At its second in-person event in Hong Kong, CASI launched the Online Learning Program to provide quality sustainable finance education in Emerging Markets and Developing Economies. This program offers a comprehensive range of courses through an online platform utilizing AI Text-to-Speech (TTS) technology.



September 23, 2024, Doha, Introductory Courses Launched



At the CASI Sustainability Forum in Doha on September 23, two modules from the introductory course were launched for free access, with more courses scheduled to be released later in the year.

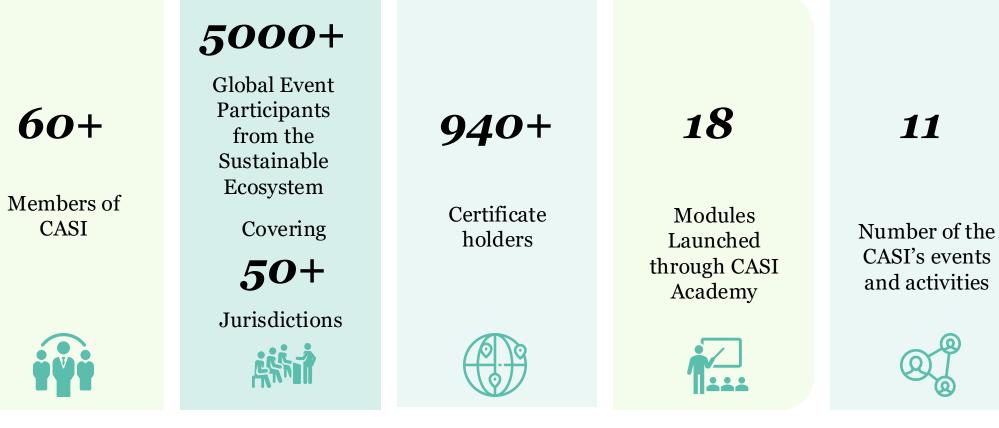
November 15, 2024, Baku, Level-1 launched

• During the CASI Sustainability Forum at COP29 in Baku, the inaugural set of Level-1 courses was officially launched. This initial offering includes 8 topics and 15 modules, delivered in 4 languages, and supported by AI assistants featuring a diverse range of accents.



May 2025

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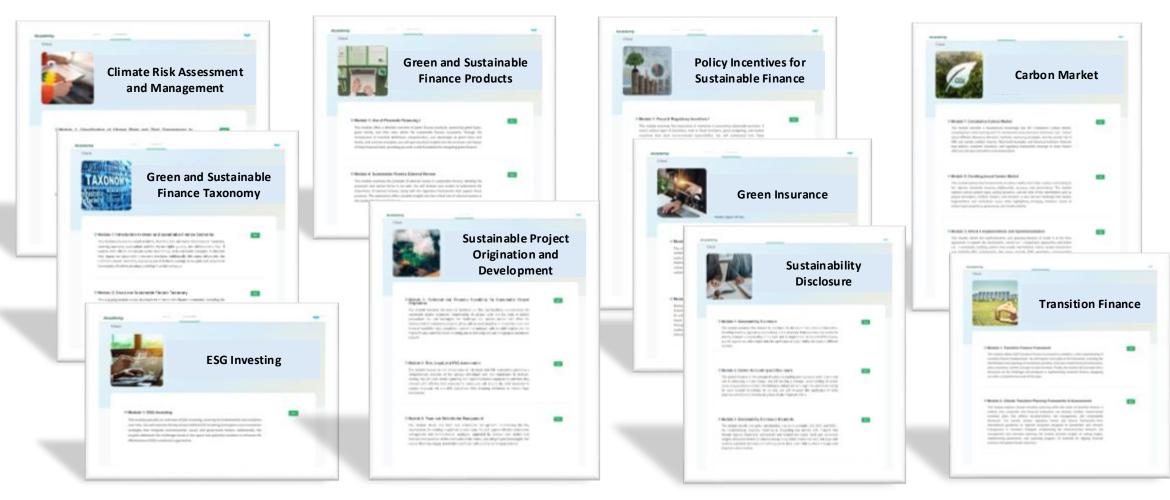


CASI Key Message



As of now, CASI Academy has launched 26 on-line modules







Case Study: Early Practice of Materiality Assessment by Banks, Laying the Foundation for ISSB Disclosure



Source: Kasikombank sustainability report 2023.

CASI Goal and Plan for 2025



CASI	• Q1: In-person capacity-building event in Africa.
Sustainability Forums	• Q2 : In-person capacity-building event in Malaysia .
CASI Seminars	Conduct 8-10 thematic seminars throughout 2025.
	 Continue to enrich its level-1 course modules, develop and roll out 50 modules.
CASI Academy	• Develop an examination system and issue certificates .
	• Enrich the CASI Academy platform with new features.
CASI TA Services	• Offer more targeted TA services to governments and financial institutions.

Contact Us



CASI secretariat: CASI@ifs.net.cn







CASI's LinkedIn





CASI Academy

Thank You!