



Charting the Future: How Digital, Intelligent & Green Tech are Reshaping Chinese Banking

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Instructor's CV



- **Chen Sichong**, Professor, School of Finance, Zhongnan University of Economics and Law; Director of the Finance Department; Executive Head, Virtual Teaching and Research Section for Banking Management Courses of Ministry of Education of China; Executive Director, ESG Research Institute.
- Ph.D. in Finance; Assistant Professor, Graduate School of Commerce and Management, Hitotsubashi University; Visiting Professor, Warrington College of Business, University of Florida; Deputy General Manager of the Personal Credit and Housing Finance Department, China Construction Bank (Hubei).
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数字技术与 现代银行业导论

AN INTRODUCTION TO
DIGITAL TECHNOLOGY
AND MODERN BANKING

本书具有以下特点：

◎ **全面系统。**对现代银行业经营中数字技术的底层逻辑及其应用场景进行了系统梳理。不仅阐述了数字技术的原理、特性及其应用，还从经济学理论角度揭示出数字技术如何重塑银行业的规模经济和范围经济。此外，书中探讨了数字技术在银行业务的多个关键领域—包括营销、授信和风控等—的全过程应用，并提供了丰富的银行数字化转型实践案例。

◎ **紧跟实践变革。**银行数字化转型中，“人”尤为重要。本书紧跟大数据+人工智能等数字技术给现代银行业带来的深刻变革，聚焦商业银行数字化经营中复合型人才的培育，旨在培养学生根据银行数字化经营的业务场景，匹配和应用“数字素养”。

◎ **理论与实践并重。**几位作者深耕相关学术领域多年，其深厚的研究功底为分析提供了坚实的理论支撑。同时，他们都具有国有大行的挂职工作经历，并多次开展银行内部培训，对现代银行业数字化经营场景进行了深入的观察和思考，确保本书内容与银行业实践紧密结合。

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陈思翀 白小滢 董志华 主编

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作者简介

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董志华，男，中南财经政法大学金融学院副教授，硕士生导师，路易斯安那大学拉斐特分校数学专业博士；曾就职于美国知名咨询公司任商业数据分析师，挂职于中国建设银行湖北省分行任金融科技部副总经理；主持或参与多项国家级与省部级研究项目，发表多篇论文；曾获全国青教赛二等奖、湖北省青教赛一等奖，湖北省青年教学能手等荣誉。

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An Introduction to Digital Technology and Modern Banking

1. Comprehensive and Systematic Analysis

It systematically examines the underlying logic, technical principles and application scenarios of digital technologies in modern banking.
It reveals how digitalization reshapes banking economies of scale and scope from an economic theory perspective.

2. Multi-Domain Coverage

Covers digital applications in core banking functions (marketing, credit granting, risk control) with real-world cases.
Explores innovative practices in rural revitalization, ESG, green/low-carbon development, and modernizing social governance.

3. Focus on Human-Centric Transformation

Addresses profound impacts of digital technologies (e.g., big data + AI) on banking.
Emphasizing cultivation of interdisciplinary talent to train students to apply digital literacy within business contexts of bank digitalization.

4. High Practical Utility

Serves as both an accessible textbook for university economics and finance programs and an essential training reference resource for banking professionals navigating digital transformation.



庄子罐

中南财经政法大学金融学院教授、博士生导师，中南财经政法大学碳交易与碳金融研究中心主任；武汉大学金融学博士、北京大学博士后；主持国家社科基金、国家自然科学基金、教育部人文社科基金等项目，参与国家社会科学基金重大项目和教育部哲学社会科学研究重大课题攻关项目。在宏观经济政策、碳市场与碳金融、低碳转型与绿色发展等领域积累了丰富的学术研究、政策咨询和项目研究经验。

陈思翀

中南财经政法大学金融学院教授，博士生导师，中南财经政法大学碳交易与碳金融研究中心副主任；日本一桥大学商学金融博士；曾任日本一桥大学商学院讲师、美国佛罗里达大学惠灵顿商学院访问教授；挂职中国建设银行湖北省分行住房金融与个人信贷部副总经理；主要研究领域为国际金融、资产定价、金融机构、金融领域的政治经济学以及碳金融。主持国家自然科学基金、国际合作科研基金、教育部留学回国基金等项目；主要成果发表于中英文权威期刊以及《财经》、《经济日报》、《证券日报》等大众传媒

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气候变化与可持续发展银行

庄子罐 陈思翀 编著

庄子罐 陈思翀 编著

气候变化 与可持续发展银行

CLIMATE CHANGE AND
SUSTAINABLE BANKING



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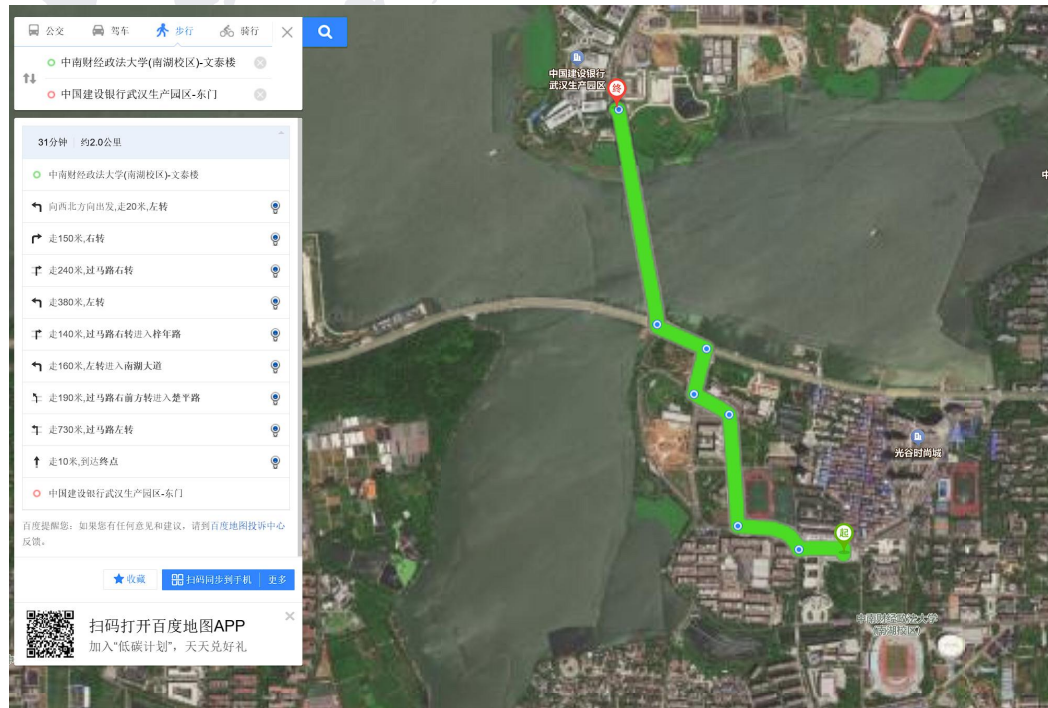


My working experience in CCB



CCB's Production Park near ZUEL across the south lake

(Direction from Wentai Building to the Park)



Contents:

1. Understanding the Era's Characteristics and the Wealth Code Digital, Intelligent, and Green Transformation

2. New Paradigm, New Tools, and New Framework

- I. New Paradigm: Digital Technologies & Unstructured Data
- II. New Tool: Fine-Tuned Large Financial Models & AI Agents
- III. New Framework: Green Finance and Sustainable Development



Part III

New Framework: Sustainable development

Traditional Chinese financial culture

以义取利

Pursuing profit in a righteous way

义利并举

Pursuing both benefit and righteousness (uphold justice while pursuing interests)

Banking system is supporting China's vision for sustainable development

绿色清水就是金山银山 -- 2005

Lucid waters and lush mountains are invaluable assets

人类命运共同体 -- 2012

Community with a Shared Future for Mankind

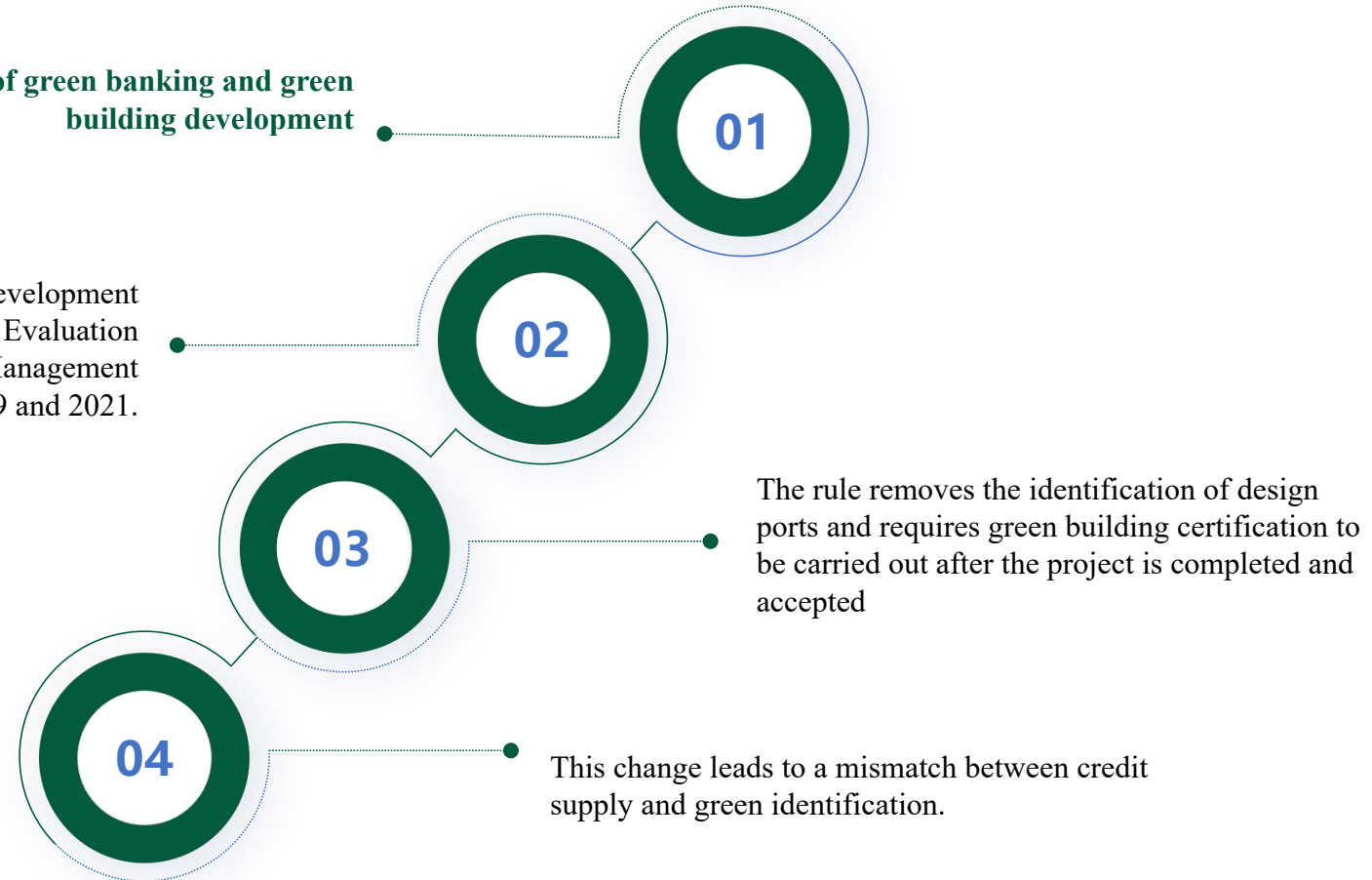
清洁美丽新世界 -- 2015

Harmonious Homeland of Cleanliness and Beauty

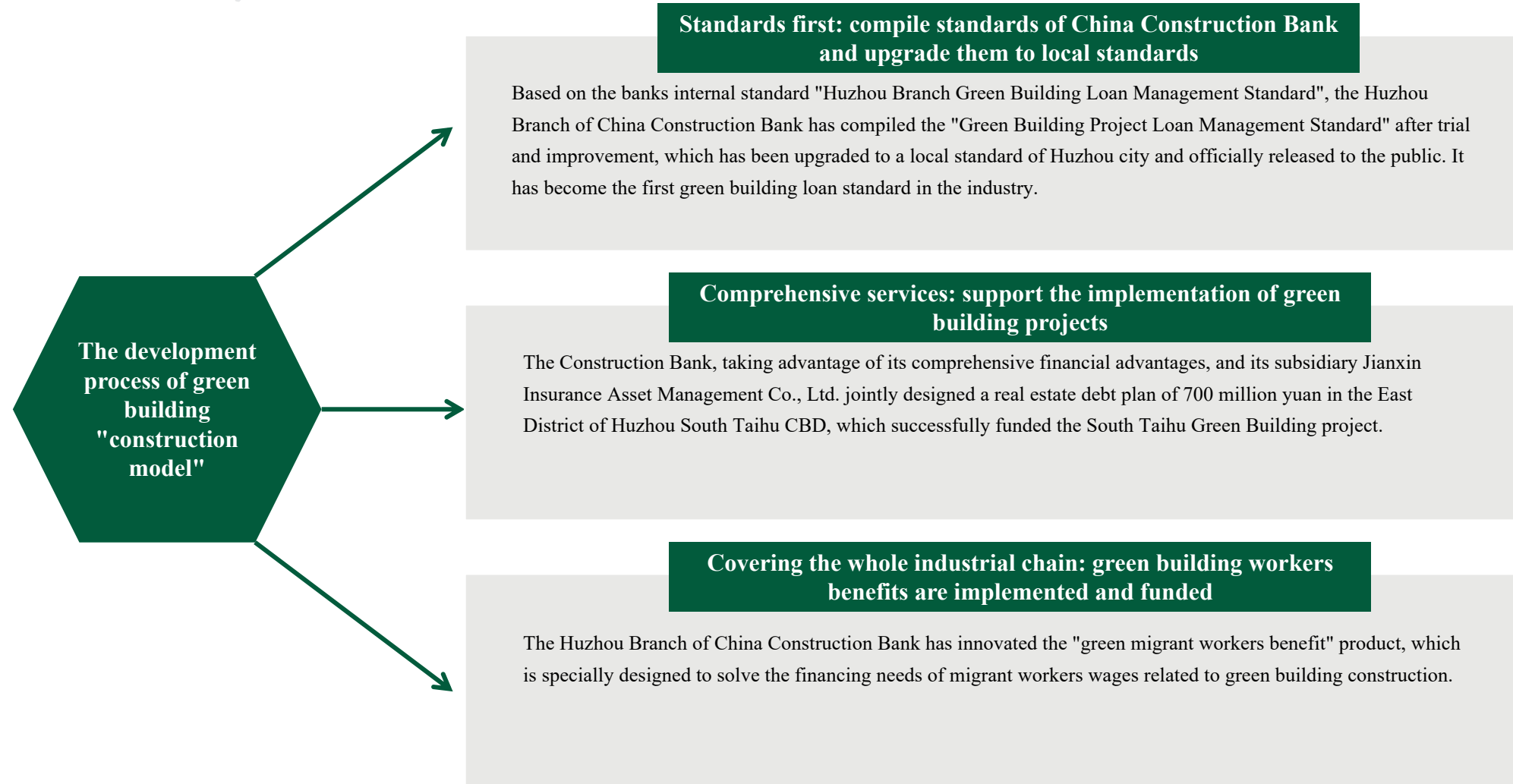
Case review: Green building and Green Banking

Findings: The dilemma of green banking and green building development

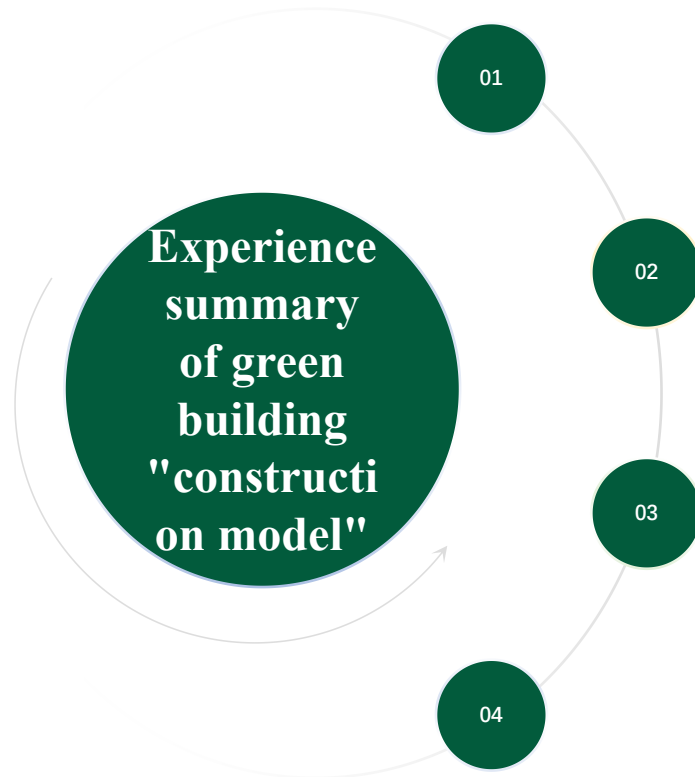
The Ministry of Housing and Urban-Rural Development released new versions of the Green Building Evaluation Standard and the Green Building Identification Management Measures in 2019 and 2021.



Case review: Green building and Green Banking



Case review: Summary of experience of green building "construction model"



Identify the difficulties and pain points

Mismatch between credit commitment and maturity.

We will formulate local standards for green building loans

The Implementation Specifications for Green Building Project Loans were formulated, and third-party safeguard measures were introduced to identify them in advance.

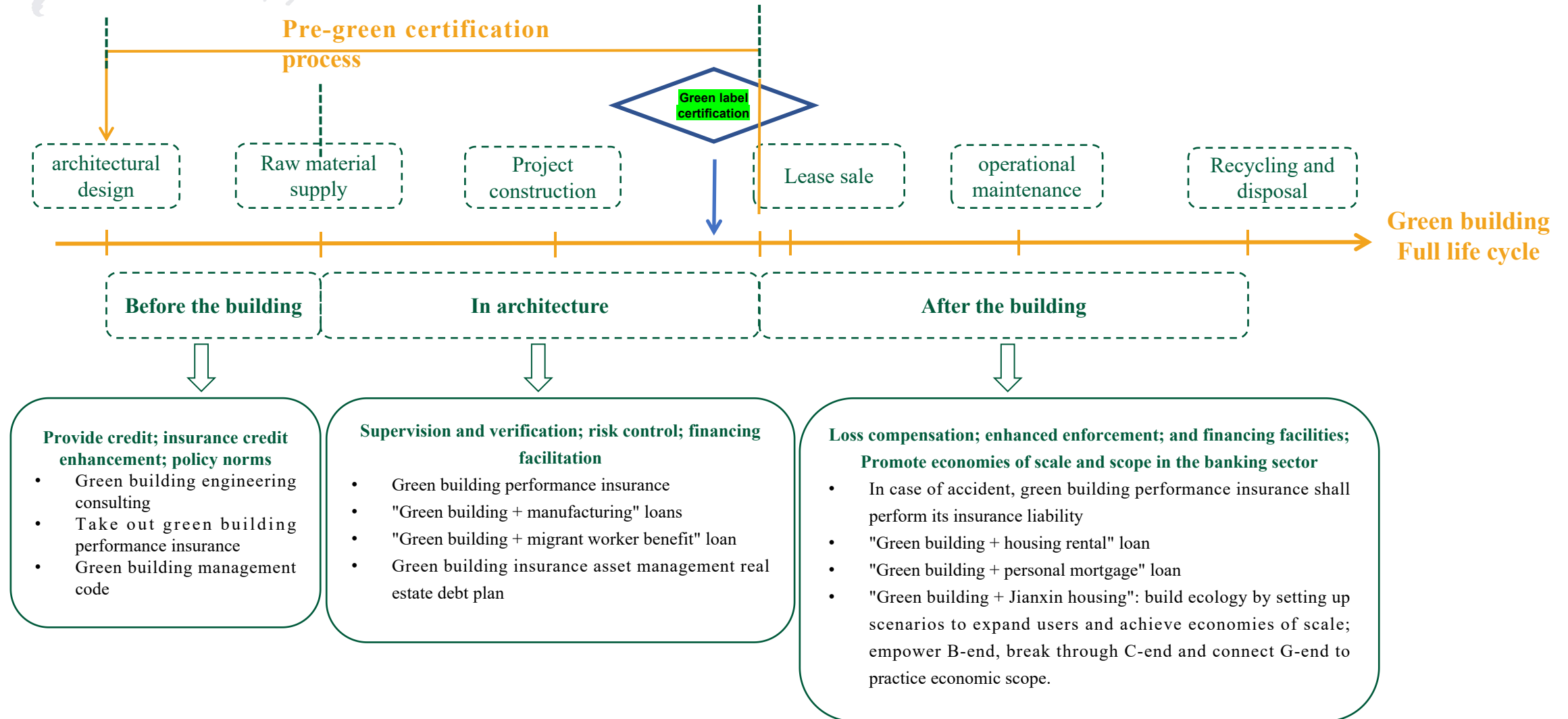
Establish a loan management mechanism for the whole life cycle of green building projects

Establish a green building project database before the loan, do a good job in the identification and review of green building loans during the loan, and strengthen the punishment of green building dishonesty after the loan.

Use product innovation to empower the whole green building industry chain

Innovate "green building +" series of products: such as green building + housing rental, green building + migrant workers benefits, green building + personal mortgage loans.

Case review: Green building and Green Banking



? Question:

Why does CCB introduce green building insurance?



Questions

Why does CCB introduce green building insurance?

(1) The coordinated development of green finance and green building is in trouble

The verifiability problem leads to the obstacles in the coordinated development of green finance and green building.

(2) The new mode of green building insurance participating in green building effectively solves the dilemma

The specific business operation mode of green building insurance is as follows: before construction, the third-party risk management agency (TIS) provides the green building insurance policy; during construction, TIS provides the whole process of risk control service; after construction, if the green rating is not scheduled, the insurance policy will be compensated.

(3) Green building insurance can give full play to the comprehensive financial service capability

Green building insurance can be combined with a number of financial products, such as "insurance + credit", "insurance + policy" and "insurance + consulting".

Sustainability report by Chinese banks

- There are significant differences in the industry of sustainable information disclosure. In 2003, the financial industry had the highest disclosure rate; more than half of the power, mining, transportation, medical and other eight industries; public utilities had only 2 3% of the disclosure rate.

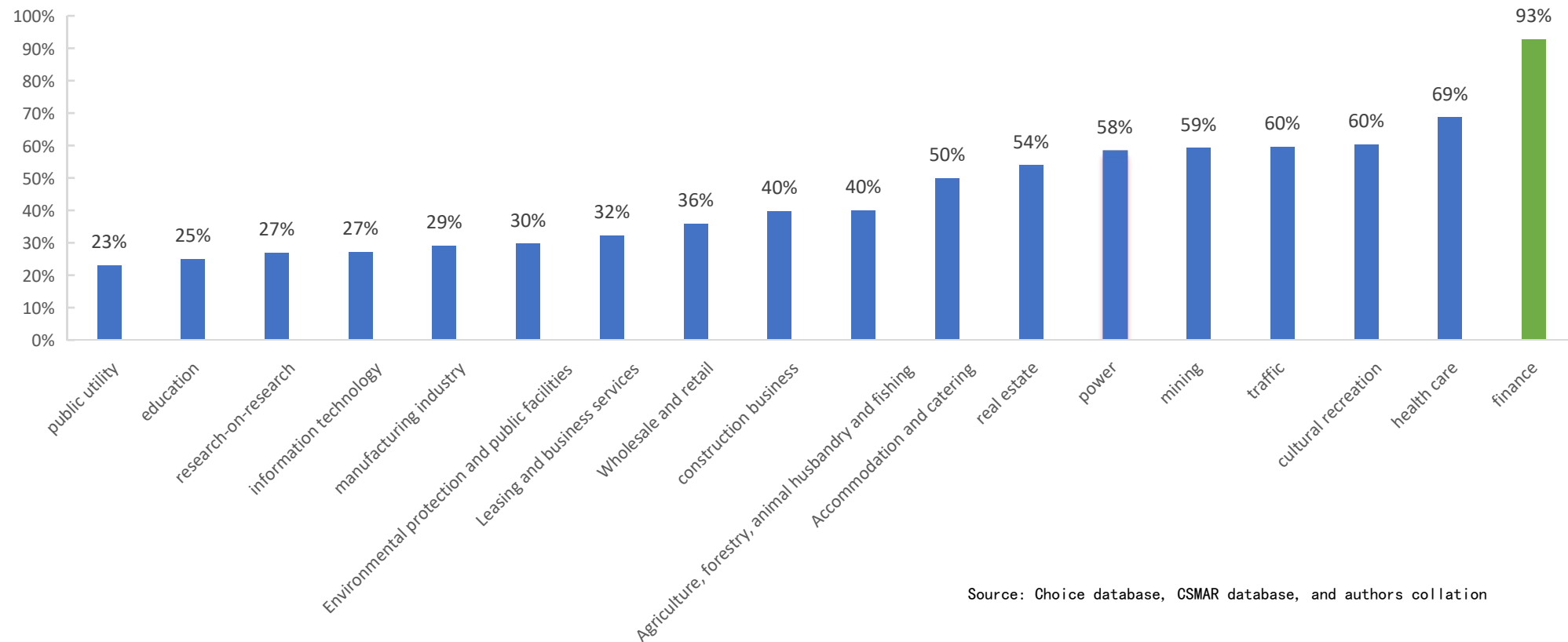
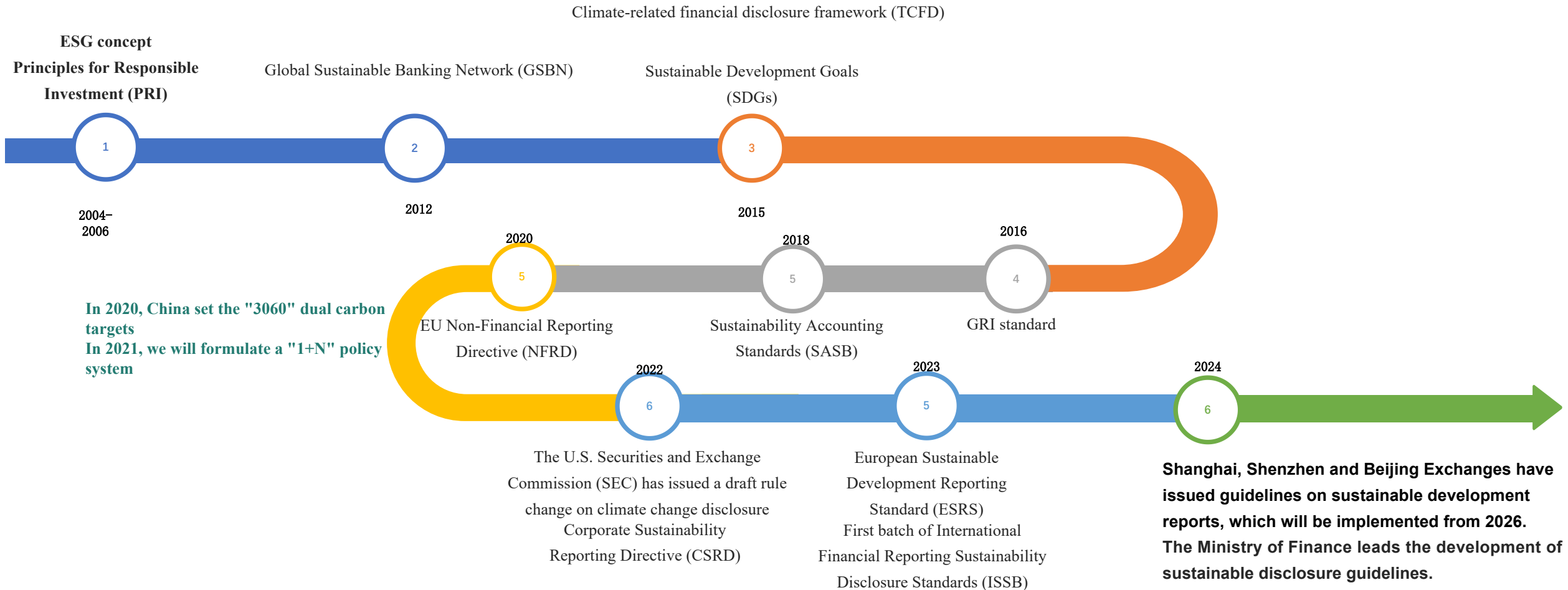


Figure: Disclosure rate of sustainable development information of A-share listed companies in various industries in 2023

Banks continue to transform to sustainable development



From ESG to Sustainable development: international experience and Chinese practice



Source: Compiled by the author

Background of the construction of sustainable information disclosure system

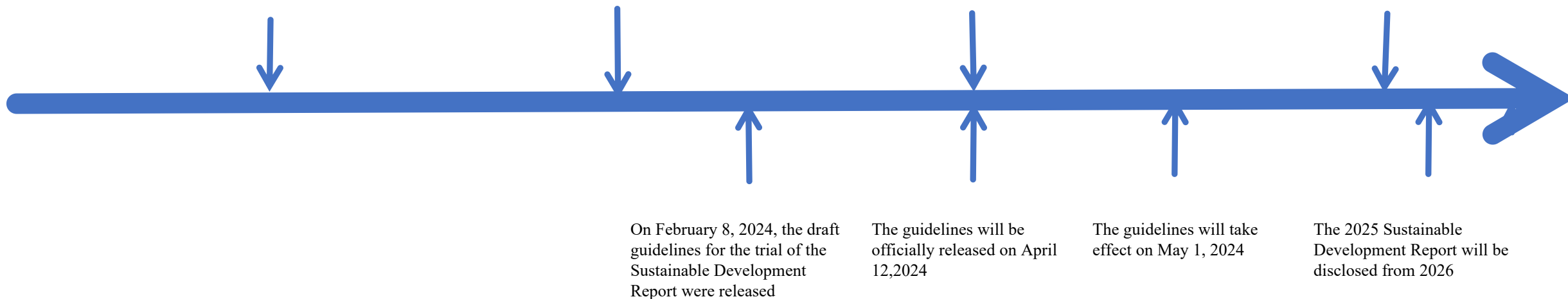


On June 26, 2023, the International Sustainability Standards Board (ISSB) officially released the International Financial Reporting Sustainability Disclosure Standards (IFRS) S1 and S2, which will take effect in 2024.

From October 30 to 31, 2023, the Central Financial Work Conference proposed to accelerate the construction of a financial power

On April 12, 2024, The State Council issued the "Several Opinions on Strengthening Regulatory Methods and Promoting the High-quality Development of the Capital Market", known as the new "Nine National Measures": "1+N" policy system

In November 2024, the Ministry of Finance issued the Enterprise Sustainable Disclosure Guidelines —— Basic Guidelines (Trial)

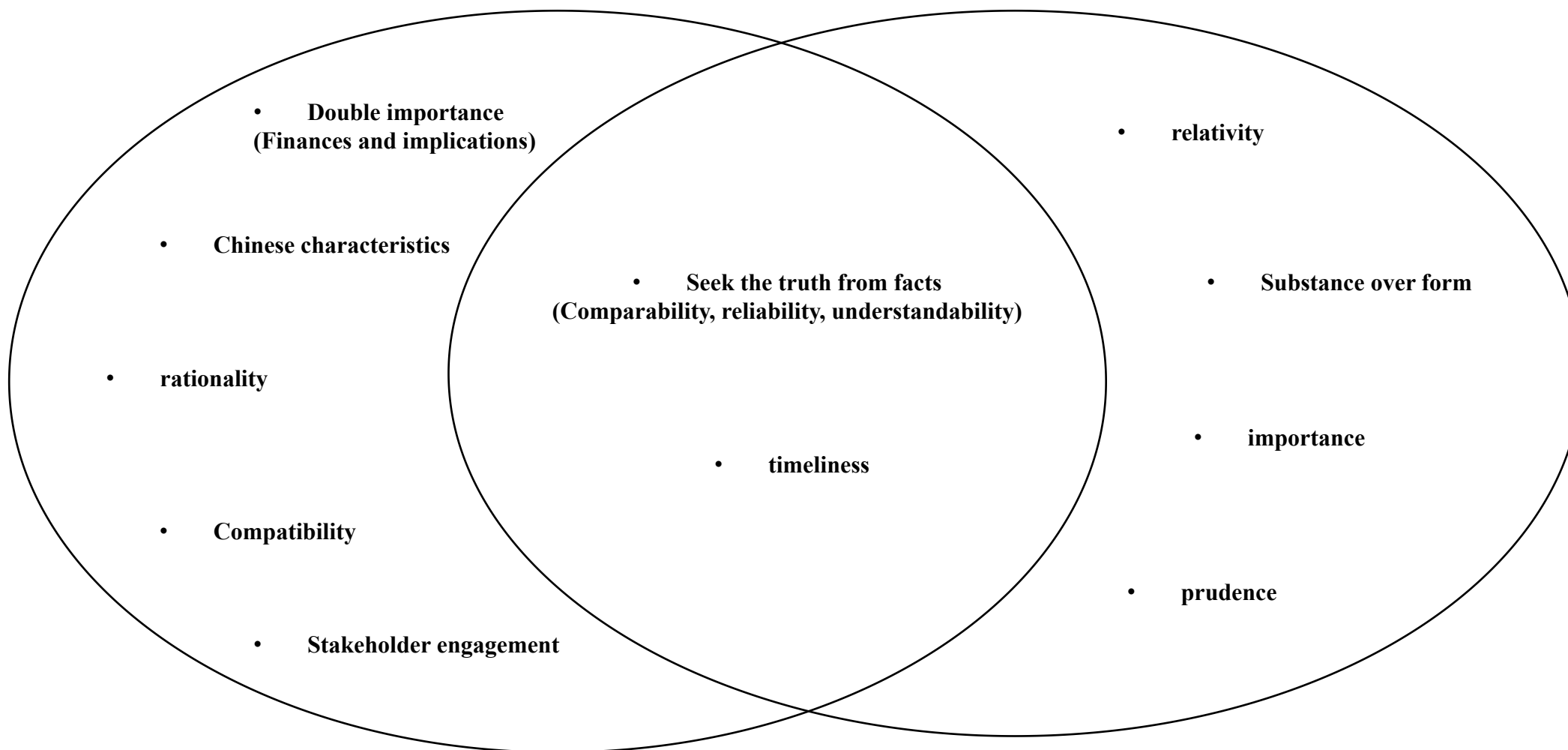


Guiding calendar

Guiding principles

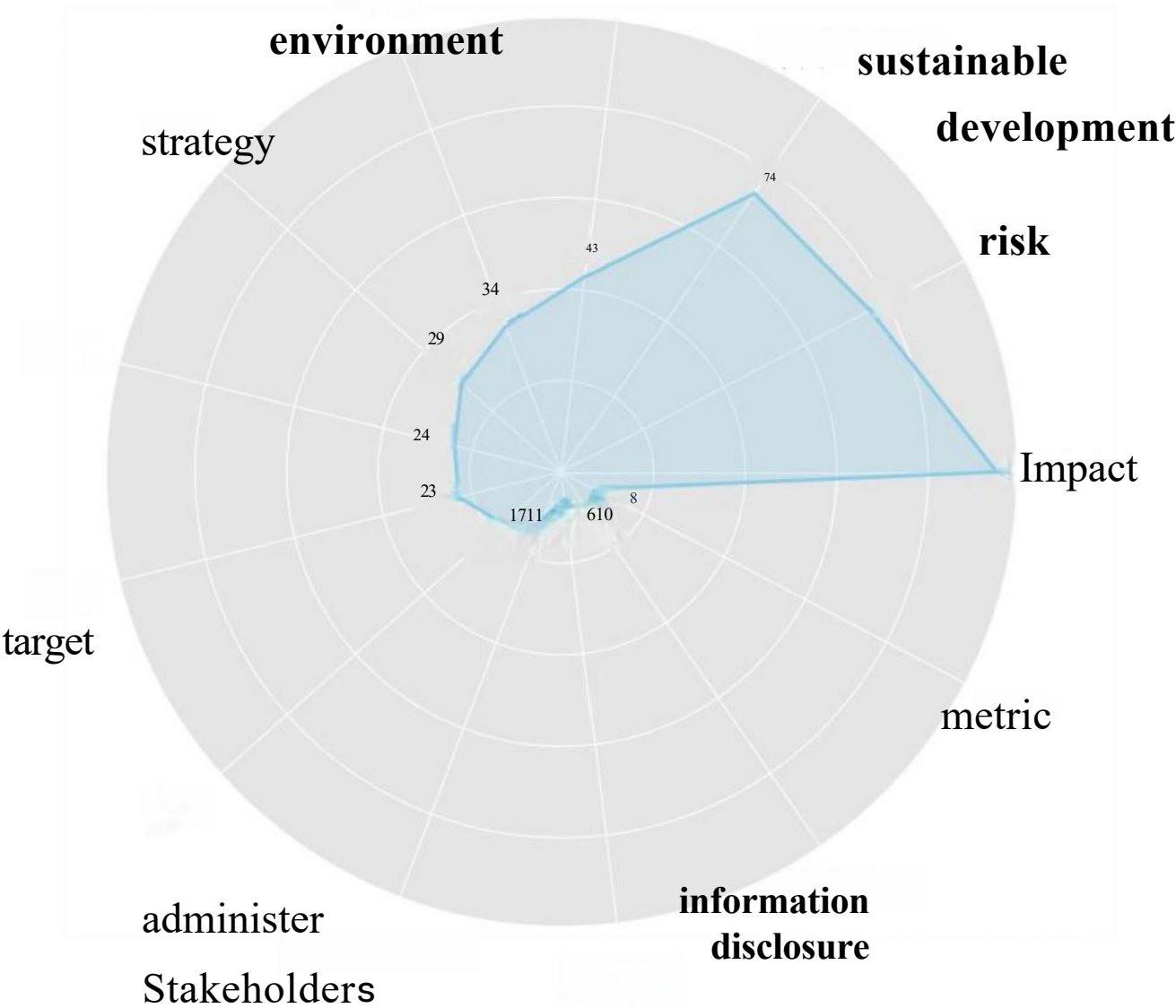
Sustainability report

annual report





Guidance Keywords



Key word frequency statistics of the Guidelines

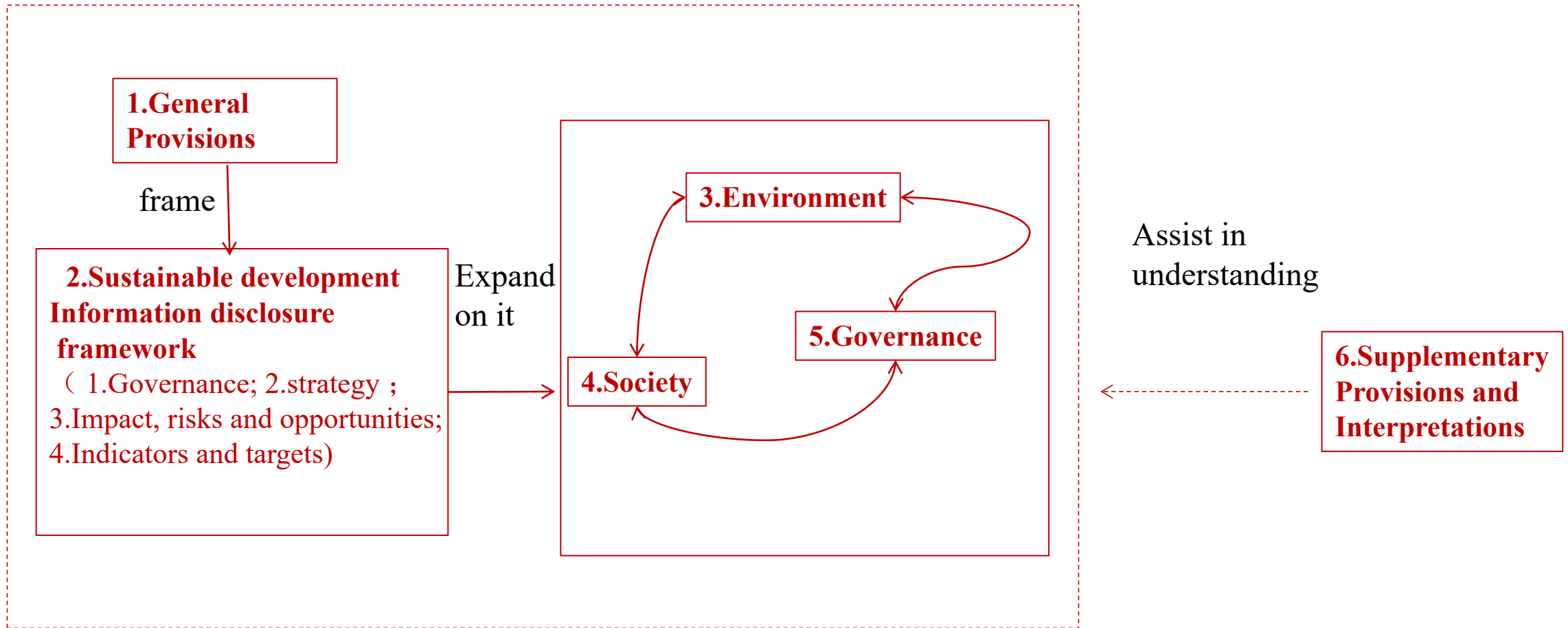
陈思翀

investor

Cultivate civilization and reason, and embrace a world with virtue

The structure of the guidance

Six chapters



Guidance features

Chinese characteristics are in line with international standards

Chinese characteristics :

- Sustainability reporting sets disclosure standards and dominates agenda-setting

International characteristics:

- Refer to the ISSBs four-pillar framework
- Absorb the concept of financial materiality disclosure
- Reflects the trend of global sustainable information disclosure content

Finance and influence Quantitative and qualitative emphasis

The disclosure subject is required to identify the dual impact of each issue:

- Impact on financial materiality

- Substantial impact on multiple stakeholders and society

Combine compulsion with voluntariness

Subjects of mandatory disclosure:

- Sample companies of Shanghai 180 Index
- Shenzhen 100 index sample company
- Sample companies in the Sci-Tech 50 Index
- Listed companies at home and abroad simultaneously

Voluntary disclosure:

- Other listed companies

Guiding issues

There are 21 topics: 8 on the environment, 9 on society, and 4 on sustainable development governance.

Climate resilience
(encouragement)
Transformational plan
Total greenhouse gas
emissions
Emission reduction measures
Carbon emission related
opportunities
.....

:: Addressing climate change
Emission of pollutants
* waste disposal
:: Conservation of ecosystems and biodiversity
Environmental compliance management
* energy utilization
* water resources utilization
* circular economy

E: environment

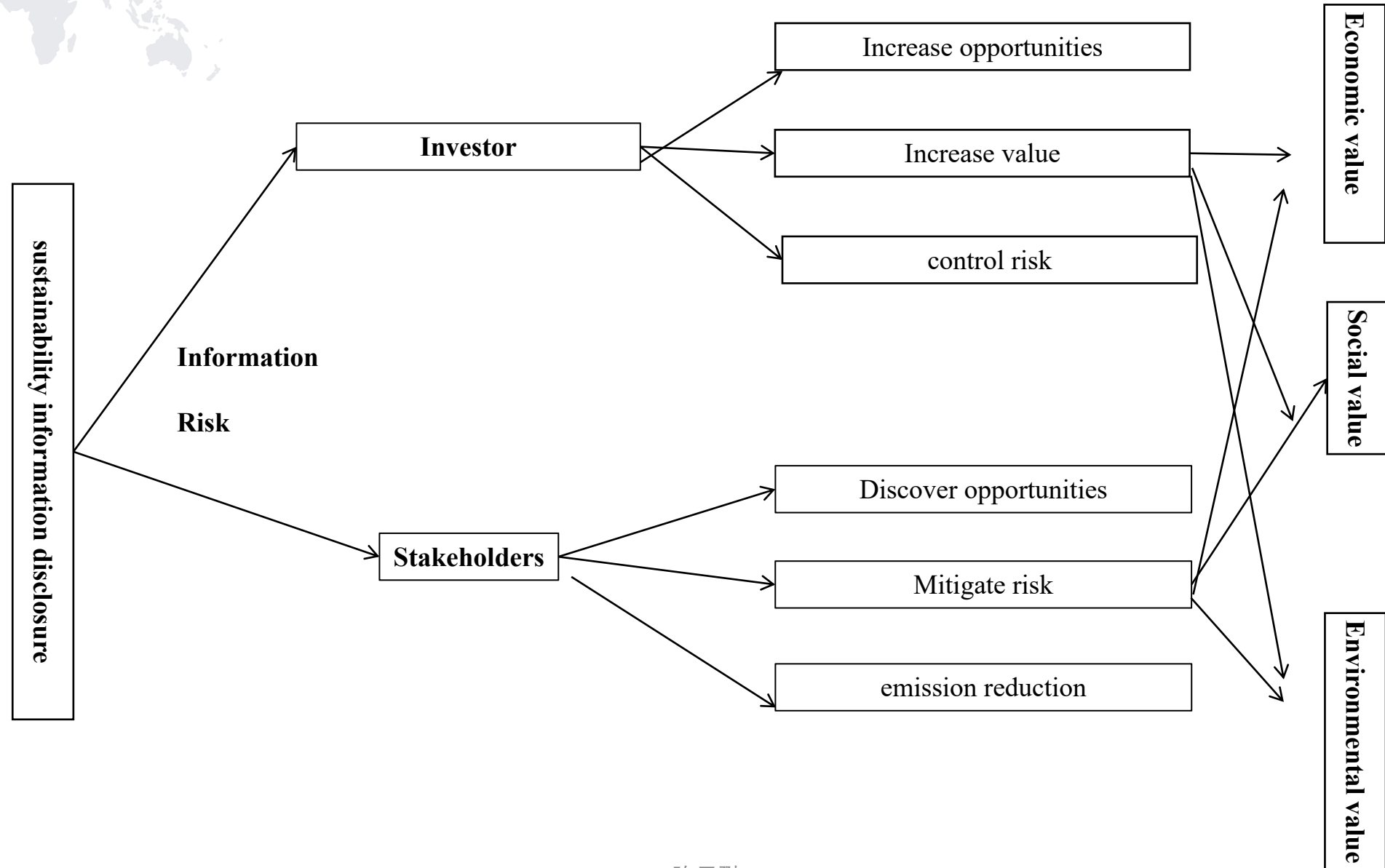
* rural revitalization
:: Social contribution
* innovation-driven
:: Ethics of science and technology
Supply chain security
Equal treatment of small and medium-sized
enterprises
* Product and service safety and quality
* Data security and customer privacy
protection
* staff

S: society

G: administer

:: Due diligence to identify and
respond to negative impacts and risks
related to sustainable development
(encouraged)
:: Stakeholder communication
:: Anti-commercial bribery and anti-
corruption
* illicit compelition



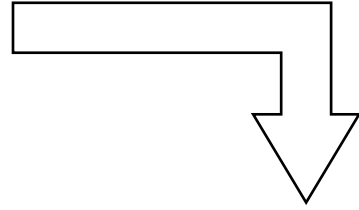


How does the sustainable development ability of listed companies affect enterprise value?

I. TRAINING AND DISCLOSURE (Disclosure)

Under the guidance of supervision, the company should:

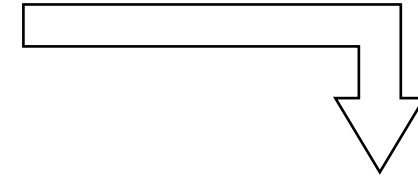
- Learn the rules of study;
- Do a good job in personnel training;
- Guide the implementation of the company;



II. Monitoring and Incentives (Monitoring)

Investors and stakeholders:

- Do a good job in sustainable development rating;
- Quantitative incentive indicators;
- Building investment ecology;



Constraints and influences (Influencing)

Promoting listed companies:

- High quality information
- High coverage
- High-quality development

Question:

Why is “digital, intelligent and green” driving the bank transformation?

Question:

What are the main challenges faced in the digital, intelligent and green transformation of banks?

Question:

How to promote the bank transformation?



Thank you for listening!