



中央财经大学绿色金融国际研究院
International Institute of Green Finance, CUFE

Green and sustainable finance in *China* and Europe

中欧绿色和可持续金融

International Institute of Green Finance
Central University of Finance and Economics (CUFE), Beijing
中央财经大学 (CUFE) 绿色金融国际研究院 (北京)

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1

The International Institute of Green Finance
绿色金融国际研究院



International Institute of Green Finance (IIGF)

绿色金融国际研究院

- Independent Chinese Think Tank
独立的研究机构（中国特色）
- Formally under the Central University of Finance and Economics
中央财经大学名下设立
- Founded in 2011 as Research Center for Climate and Energy Finance (IIGF since Sept. 2016)
成立于2016年9月，前身是2011年9月成立的气候与能源金融研究中心
- Standing member of the Green Finance Committee, China Society for Finance & Banking
中国金融学会绿色金融专业委员会的常务理事单位
- 40+ staff members, expanding rapidly since establishment in 2016
现有40多名员工，自2016年成立后正迅速扩大
- Member of the Belt and Road Initiative International Green Coalition (BRIGC)
“一带一路”绿色发展国际联盟成员
- Director: Professor Wang Yao
院长：王遥教授

Key Strategic Advantages

核心战略优势

- ✓ Close ties with a number of Chinese government branches
与多个中国政府机构有密切关系
- ✓ Most complete Chinese green bond database
最完整的中国绿色债券数据库
- ✓ First comprehensive database on ESG variables for Chinese listed companies
首个全面的中国上市公司ESG评级数据库
- ✓ More than 15 International projects in Europe, US and Asia
在欧洲、美国和亚洲有超过15个国际项目





Speaker: Dr. Christoph NEDOPIL WANG



Professional experience 工作经历

Current 当前:

- Director Green Belt and Road Initiative Center, IIGF (China)
- “一带一路”研究中心负责人，中央财经大学绿色金融国际研究院（中国）
- Senior Research Fellow, Central University of Finance and Economics (CUFE) (China)
- 高级研究员，中央财经大学（中国）

Previously 过往:

- Economist, IFC/World Bank (Washington)
- 经济学家，国际金融中心/世界银行（华盛顿）
- Innovation Policy Advisor, Government of Rwanda (Rwanda)
- 卢旺达政府创新政策顾问（卢旺达）
- SHÄRE Innovation in Mobility GmbH Founder/CEO // 创始人/首席执行官（德国）
- YOUSE Innovation Research GmbH (Germany), Founder/CEO // 创始人/首席执行官（德国）

Education 教育背景

- MPA, Harvard Kennedy School
- 公共管理硕士，哈佛肯尼迪学院
- PhD Economics, TU Berlin
- 经济学博士，柏林工业大学
- MSc Engineering, TU Berlin
- 工程学硕士，柏林工业大学



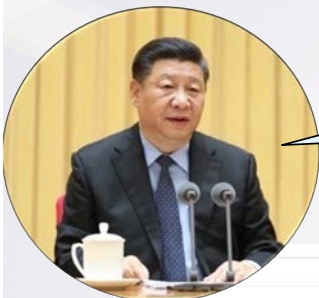


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The Development of Green Finance in China 中国绿色金融发展

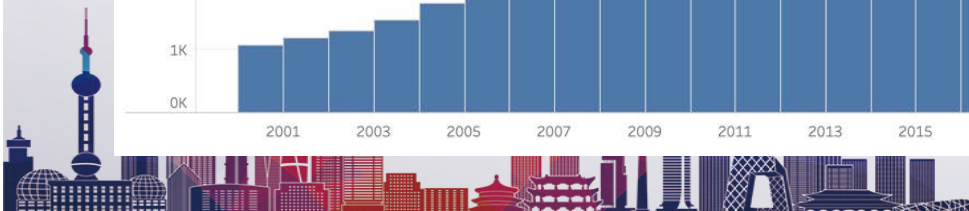
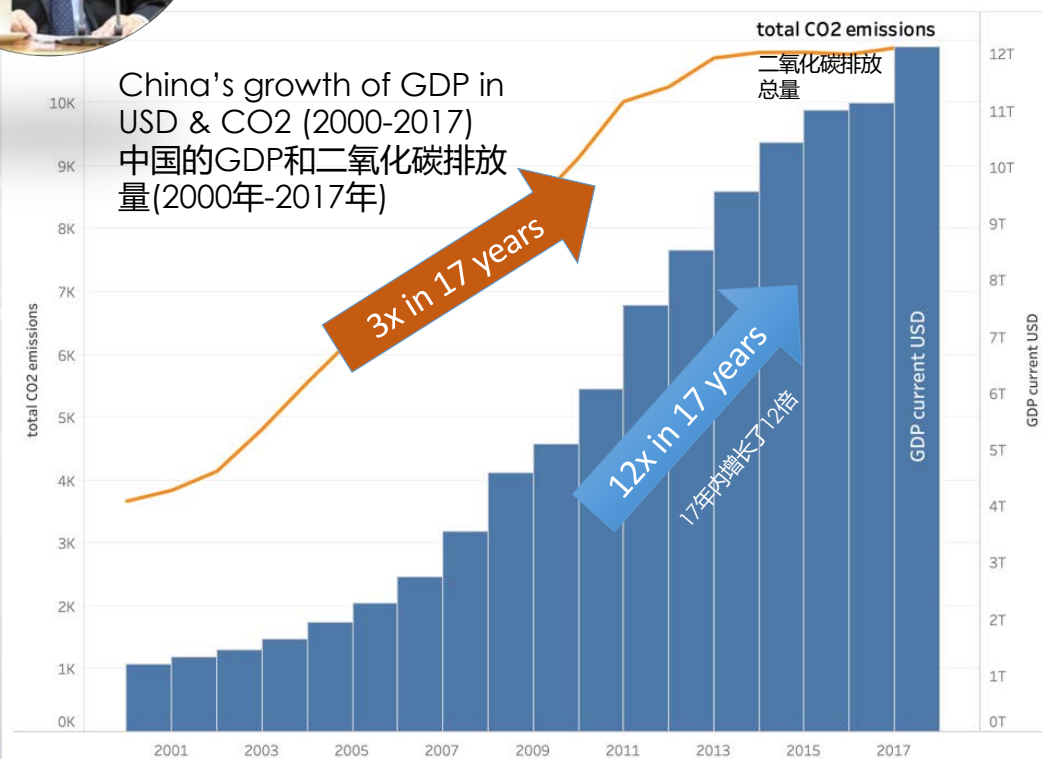


China's exponential economic development 高速发展的中国经济



“We must speed up the construction of a system of ecological civilization and ensure that the ecology and environment are fundamentally improved by 2035, and that our goal of building a beautiful China is basically achieved”

“到2035年，生态环境根本好转，美丽中国目标基本实现。”



Why China has accelerated green finance development? 为什么中国需要加快发展绿色金融？



- Soil: 16% is polluted
土壤：16%被污染
- Water: 2,4% clean, 60% unsuitable for agriculture
水：2.4%是洁净的，60%不适于农业发展
- Air: 75% of cities have unhealthy PM2.5 levels
空气：75%的城市PM2.5保持在不利于人体健康的水平
- Greenhouse gas: World's largest emitter with expected peak in 2025
温室气体：世界最大排放国，2025年达到峰值



中国绿色金融发展里程碑 China's Green Finance Milestones

- CBRC – Green Credit Guidelines
- 中国银监会—中国绿色信贷指引

- CBRC – Green Credit KPIs
- 银监会—绿色信贷实施情况关键评价指标

- CBRC – Green Credit Statistics System
- 中国银监会—绿色信贷数据系统

2012

2013

2014

2015

2016

2017

2018

2019

2020

- Green Credit Forum
- 中国绿色信贷论坛
- SBN was launched
- 可持续银行网络成立



- 联合国气候变化大会（巴黎 2015）

- PBOC – Guidelines for Establishing the Green Financial System
- 人民银行—关于构建绿色金融体系的指导意见

- CBRC – Guidance Notes on Risk Management for Overseas Banking
- 银监会—加强银行业金融机构境外运营风险管理

- Bank of Jiangsu – Adopt Equator Principles
- 江苏银行—采纳赤道原则

- Bank of Huzhou – Adopt Equator Principles
- 湖州银行—采纳赤道原则

- UNDP – SDG Finance Taxonomy (China)
- 联合国开发计划署—可持续发展投融资支持项目目录（中国）
- MEE – climate finance guidance
- 生态环境部—应对气候变化融资的指导意见



2030 & 2060 climate targets
2030和2060生态环境目标



Cornerstone: Guidelines for Establishing the Green Financial System (2016)

政策基石：《关于构建绿色金融体系的指导意见》（2016年）



Green Financial System in China 中国的绿色金融体系

Green Credit
绿色信贷

Green Securities
绿色证券

Green Insurance
绿色保险

Green Funds and
Green PPP
绿色基金和绿色政府和
社会资本合作（PPP）



Environmental
Rights Trading
环境权益交易

Environmental Risk
Analysis
环境风险分析

Local Practices
地方参与

International
Cooperation
国际合作

中国人民银行
THE PEOPLE'S BANK OF CHINA

信息公开	新闻发布	法律法规	货币政策	信贷政策	金融市场	金融稳定	调查统计	银行会计	支付体系	金融科技
	人民币	经理国库	国际交往	人员招录	金融研究	征信管理	反洗钱	党建工作	工会工作	金融标准化
服务互动	公开目录	公告信息	在线访谈	图文直播	工作论文	音频视频	市场动态	网上展厅	报告下载	报刊年鉴
	网送文告	办事指南	在线申报	下载中心	洗钱举报	网上调查	意见征集	金融知识	关于我们	

2017年8月29日 星期二 | 我的位置: 首页 > 沟通交流 > 新闻

中国人民银行 财政部 发展改革委 环境保护部 银监会 证监会 保监会关于构建绿色金融体系的指导意见

字号 大 中 小 文章来源: 沟通交流 2016-08-31 21:49:30

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目前,我国正处于经济结构调整和发展方式转变的关键时期,对支持绿色产业和经济、社会可持续发展的绿色金融的需求不断扩大。为全面贯彻《中共中央 国务院关于加快推进生态文明建设的意见》和《生态文明体制改革总体方案》精神,坚持创新、协调、绿色、开放、共享的发展理念,落实政府工作报告部署,从经济可持续发展全局出发,建立健全绿色金融体系,发挥资本市场优化资源配置、服务实体经济的功能,支持和促进生态文明建设,经国务院同意,现提出以下意见。

一、构建绿色金融体系的重要意义

(一)绿色金融是指支持环境改善、应对气候变化和资源节约高效利用的经济活动,即对环保、节能、清洁能源、绿色交通、绿色建筑等领域的项目投融资、项目运营、风险管理等所提供的金融服务。

(二)绿色金融体系是指通过绿色信贷、绿色债券、绿色股票指数和相关产品、绿色发展基金、绿色保险、碳金融等金融工具和相关政策支持经济向绿色化转型的制度安排。

(三)构建绿色金融体系主要目的是动员和激励更多社会资本投入到绿色产业,同时更有效地抑制污染性投资。构建绿色金融体系,不仅有助于加快我国经济向绿色化转型,支持生态文明建设,也有利于促进环保、新能源、节能等领域的技术进步,加快培育新的经济增长点。





1 Develop green credit 发展绿色信贷

1. Status 现状

About USD 2 trillion in green credit (with ESG evaluation of the banks) – about 85% of financial system

中国绿色信贷规模达两万亿，占金融体系85%

- Green as proportion is about 10% today 绿色比例现约10%
- Industrial Bank, Pudong Development Bank, ICBC, ABC 兴业银行，浦东发展银行，工商银行，农业银行
- Green credit included in monetary policy 绿色信贷纳入货币政策中

2. Trend 趋势

Green credit growing faster than credit in general, so the proportion is increasing 1% a year

绿色信贷总体上比一般信贷增长更快，所占比例年增长率1%

3. Challenges 挑战

Not implemented uniformly across all banks. Not all banks are convinced by the business case

并非所有银行统一实施。并非所有银行都对相关商业案例深信不疑

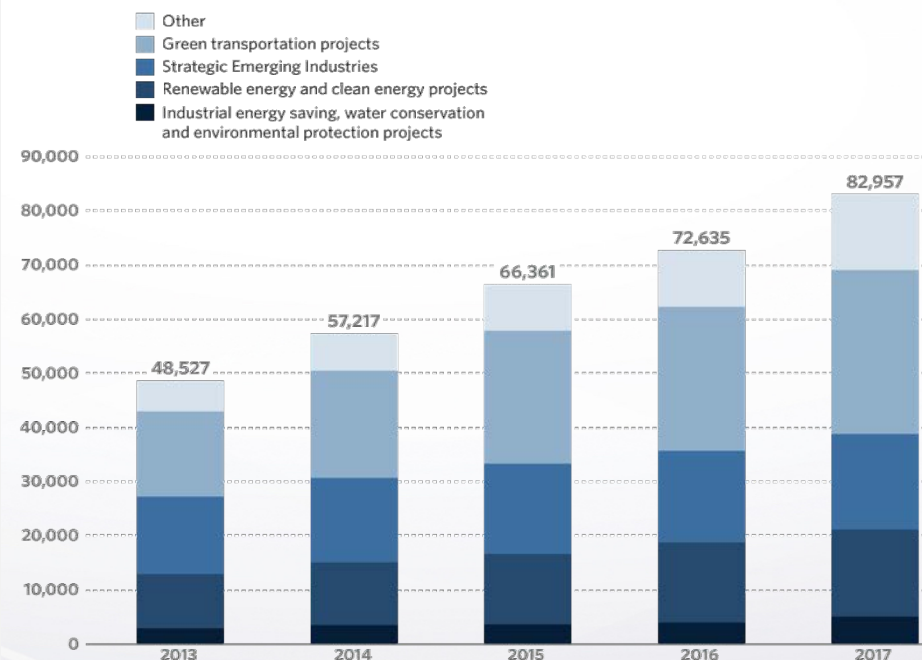
4. Recommendations 建议

Greater incentives from monetary policy, stronger policy signals, more guidance on business case

更大的货币政策激励，更强的政策型号，更多的商业案例指引

Green Credit allocation CBIRC sectors (in 100 million RMB)

绿色信贷行业分布（按照银保监会行业标准，单位：人民币亿元）





2

Promote the securities market to support green investment 推动证券市场支持绿色投资

1. Status 现状

China is one of the largest green bond markets in the world (about USD190 billion issuance), depending on the definition
中国是世界上规模最大的绿色债券市场之一

2. Trend 趋势

Since 2016 rapid expansion starting with mostly FIs, 2017: diversified issuer base, 2018: stagnation as part of financial and bond market deleveraging policies – green bonds still increasing as proportion

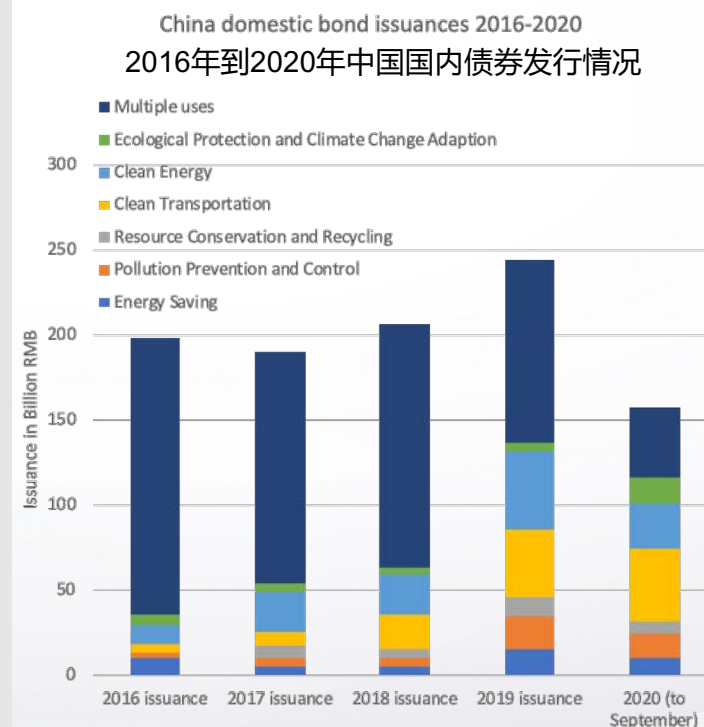
2016年以来金融机构快速扩张，2017年发行者多样化；2018年受去杠杆化影响停滞，但绿色债券按比例增长

3. Challenges 挑战

Keeping up pace in an economic 'downturn'.
在经济下行的大形势下保持增长

4. Recommendations 建议

Greater green supporting factors, lower transaction costs, guidance for understanding and perception, attract international investors
更多的绿色支持因素，更低的交易成本，引导人们理解和感知，吸引国际投资人



Source: International Institute of Green Finance
来源：绿色金融国际研究院



3 Establish green development funds 建立绿色开放型基金

1. Status 现状

800+ local green funds set up in China 800多个地方绿色基金在中国设立

2. Trend 趋势

Number of funds being established down from 240 in 2017 to 150 in 2018 and similarly few in 2019

建立的资金数量从2017年的240个减少到2018年的150个，2019年同样减少

3. Challenges 挑战

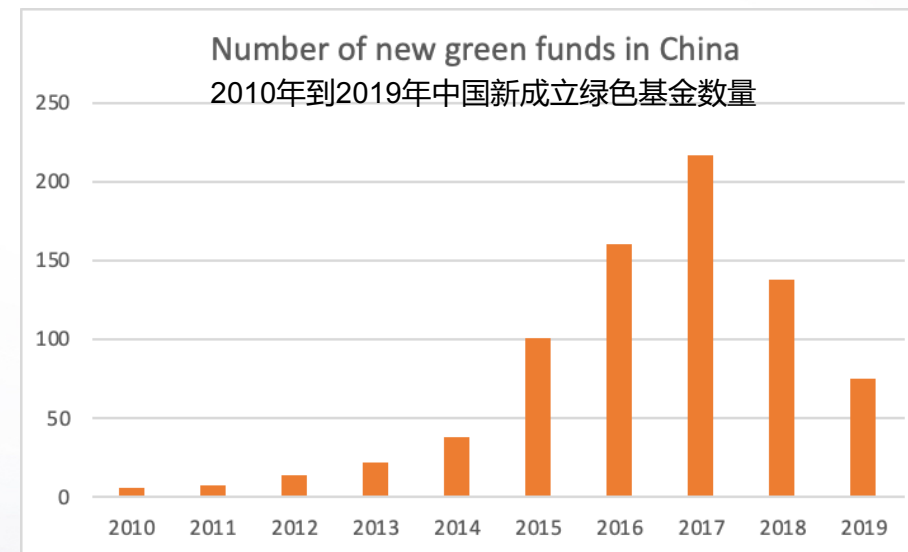
Estimating what methods catalyze the most private capital to prioritize public funds. Blended finance

评估哪些方法可以最好撬动社会资本；混合融资

4. Recommendations 建议

Greater cooperation with international financiers to obtain both expertise and capital, e.g. Shandong Green Fund.

与国际金融机构加强合作，以获得专业知识和国际资金，例如：山东绿色基金



Innovative pilots for Green Finance 绿色金融的先锋创新



Duplicable practices 可复制的最佳实践

- Best practices get duplicated in areas such as government guidance, green financial product innovation, mechanism innovation, risk prevention.
- 在政府引导、绿色金融产品创新、机制创新、风险防范等领域，最佳实践可以被复制。

Financial Risk Prevention 金融风险防控

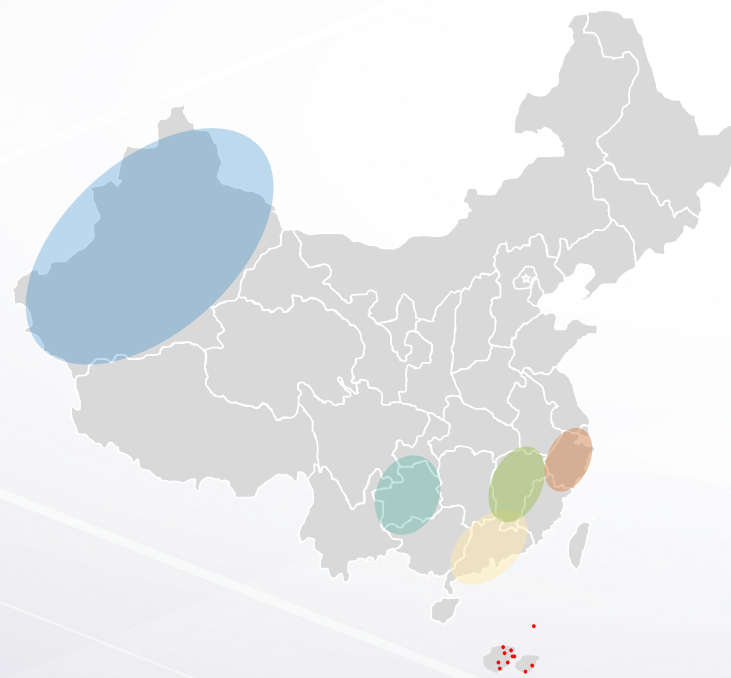
- Avoid severe green financial risks by establishing a mechanism involving risk monitoring, Early Warning, Prevention and damage control.
- 通过建立包括风险监测、预警、预防和损害控制的机制，避免严重的绿色金融风险。

Green Finance Infrastructure 绿色金融基础设施

- Progress has been made in project database, information disclosure, credit reporting system and green finance standardization.
- 在项目数据库、信息披露、信用报告制度、绿色金融标准化等方面取得了进展。

Positive impact 积极影响

- Environmental Issues such as air and water quality have been effectively addressed in the pilots, contributing greatly to the eco civilization.
- 空气、水质等环境问题在试点中得到有效解决，为生态文明建设做出了巨大贡献。





3

SDG Finance in China
中国可持续发展投融资

What is the SDG Finance taxonomy? 什么是可持续发展投融资支持项目目录？

Launched on June 6,
2020
2020年6月6日发布

1

The first project classification system with impact assessment and reporting criteria. 第一个评估和报告标准具有影响力的项目分类系统。

2

Special focus on closing the gap of access to socioeconomic empowerment and advancing vulnerable groups, beyond climate change mitigation, adaptation and environmental protection. 特别注重缩小获得社会经济赋权能力的差距，并在减缓、适应气候变化和保护环境之外促进弱势群体的发展。

3

It responds to both China's development scenario and the global development context, making it as relevant and widely applicable as possible. 它既顺应了中国的发展形势，也顺应了全球发展的大背景，使其具有尽可能强的针对性和广泛的适用性。

4

It is characterized by mapping to SDGs to allow investors and project developers to clearly identify SDG enabling projects. 它的特点是根据可持续发展目标绘制地图，使投资者和项目开发商能够清楚地确定可持续发展目标扶持的项目应具备哪些条件。

5

It is for various asset categories, not for any single financial instrument. 它针对多种资产类别，而不是单一的某种金融工具。



Concept of the SDG Finance Taxonomy

可持续发展目标融资分类法的内容



SDG Finance Taxonomy

可持续发展目标融资分类法

Basic infrastructure

基础设施

Affordable housing

可负担的住房

Health

健康

Education, Technology and Culture

教育、科技和文化

Food Security

食品安全

Financial Services

金融服务

Green and low-energy housing

绿色低碳住宅

Pre-fabricated housing

过渡安置房

Housing material recycling

建筑材料循环利用

Housing for low income group

低收入群体保障性住房

Transportation

交通

Utility corridor

水电通道

Water

水资源

Energy

水能

Environmental sanitation

环境卫生

Green spaces

绿色空间

ICT

信息通讯

Medical care and sanitation service

医疗关怀和公共卫生服务

Technology innovation and promotion of healthcare

技术创新和促进健康

Manufacturing for medical and sanitation industry

公共医疗卫生设施建设

Healthcare logistic services

跨区域医疗服务

Public health governance and services

公共健康管理和服务

Education

教育

Technology

科技

Culture and sports

文体事业

Agricultural production

农业生产

Agricultural products and food processing

农产品和食物加工

Agricultural product logistics, trade and retail

农产品物流, 交易和存储

Agricultural production inputs and facilities

农业生产投入和机器

Agricultural education and skill building

农业教育和技能培训

Savings and current account financial services

储蓄和短期账户金融服务

Credit financial services

信用金融服务

Insurance services

保险服务

Basic financial health and assistant services

基础金融健康和助理服务

- Arctic route of Belt and Road Initiative
- Overland route of Belt and Road Initiative
- Maritime route of Belt and Road Initiative

“冰上丝绸之路”
 “陆上丝绸之路”
 “海上丝绸之路”

4

Green finance strategies in the BRI

“一带一路”绿色金融



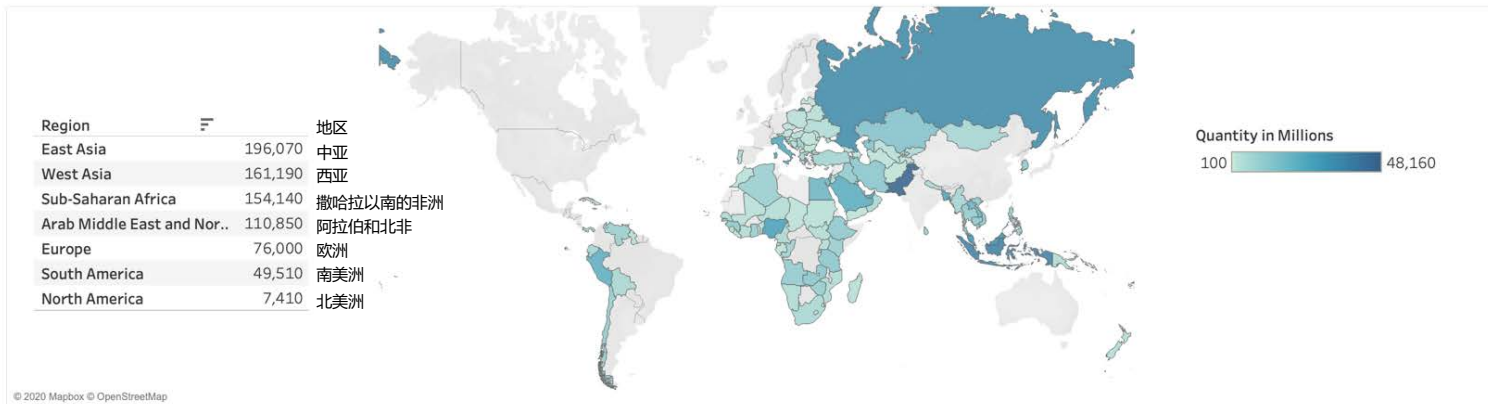
The Lamu port is part of the larger transportation corridor between Kenya, Ethiopia, South Sudan and Uganda.

AUSTRALIA

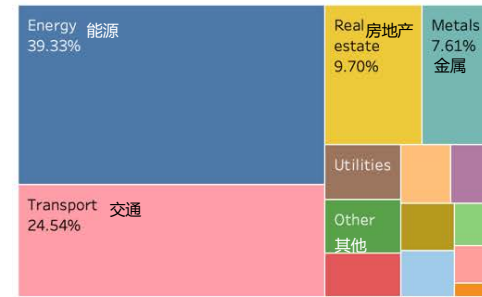
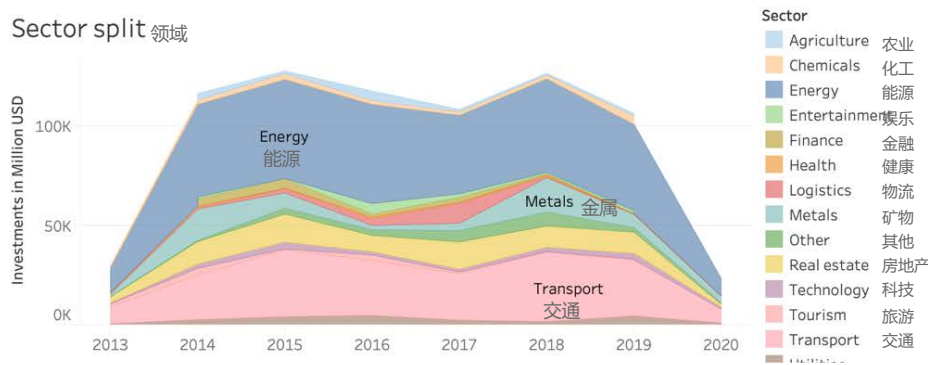


Investment trends in the BRI

一带一路投资发展趋势



Sector split 领域



(c) Copyright 2020 Green BRI Center, International Institute of Green Finance (IIGF), Beijing
Data: American Enterprise Institute (AEI), China Investment Tracker, 2020

- Particularly energy and transport investments are relevant 尤其与能源与交通投资相关
- Investments have dropped significantly from 2018 to 2020 从2018到2020, 投资已经大幅减少
- 2020 seeing a strong drop of BRI investments 2020将迎来一带一路投资的巨大减少

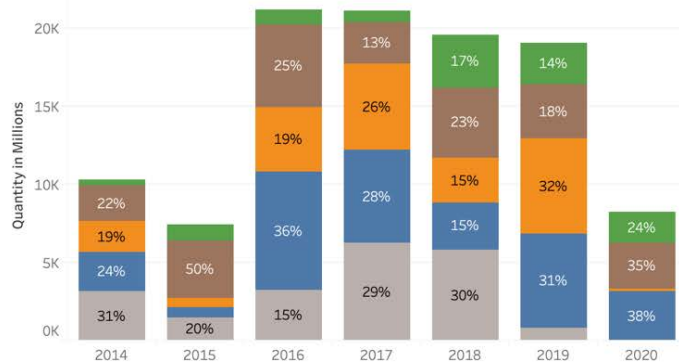




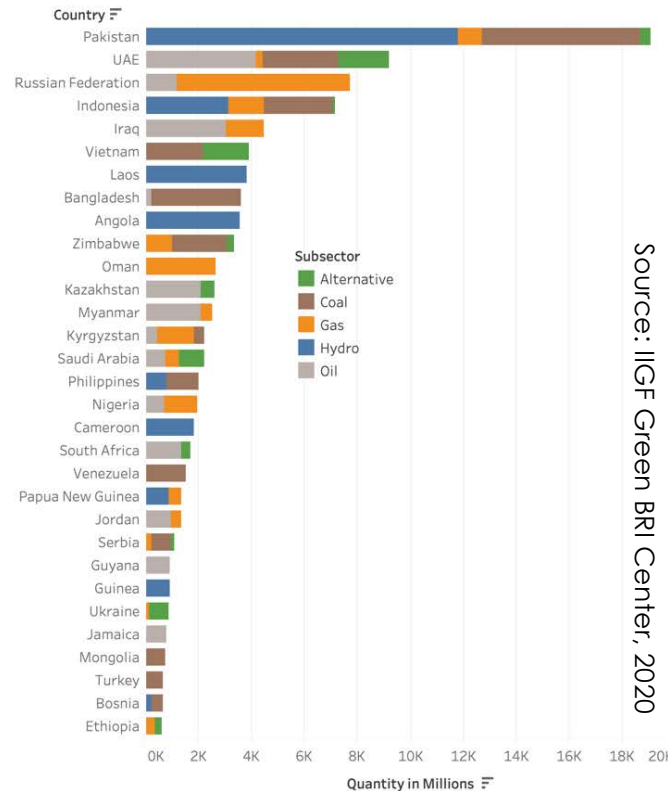
Green versus conventional energy investments

绿色能源投资VS传统能源投资

Renewable versus fossil fuel energy investments



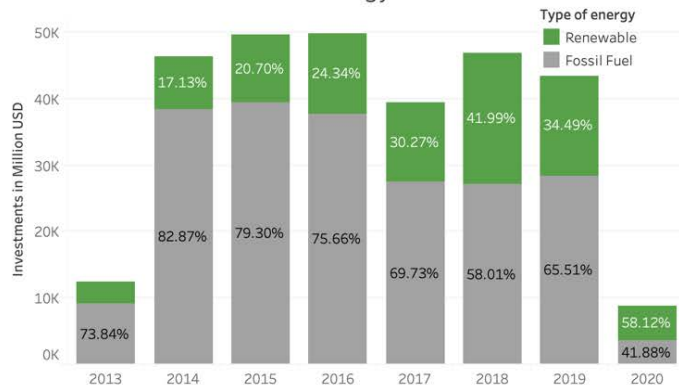
Energy investments 2014-2020H1



Source: IIGF Green BRI Center, 2020



Renewable versus fossil fuel energy investments



- In 2020, 58% of China's energy investment (upstream and downstream) were carbon-friendly 2020年, 中国能源投资中的58%投向可再生能源
- The investment in coal in 2019 was at its lowest level 2019年的煤炭投资达到最低点
- Particularly Pakistan is a recipient of Chinese energy investments 巴基斯坦尤其为中国能源投资的主要接受国

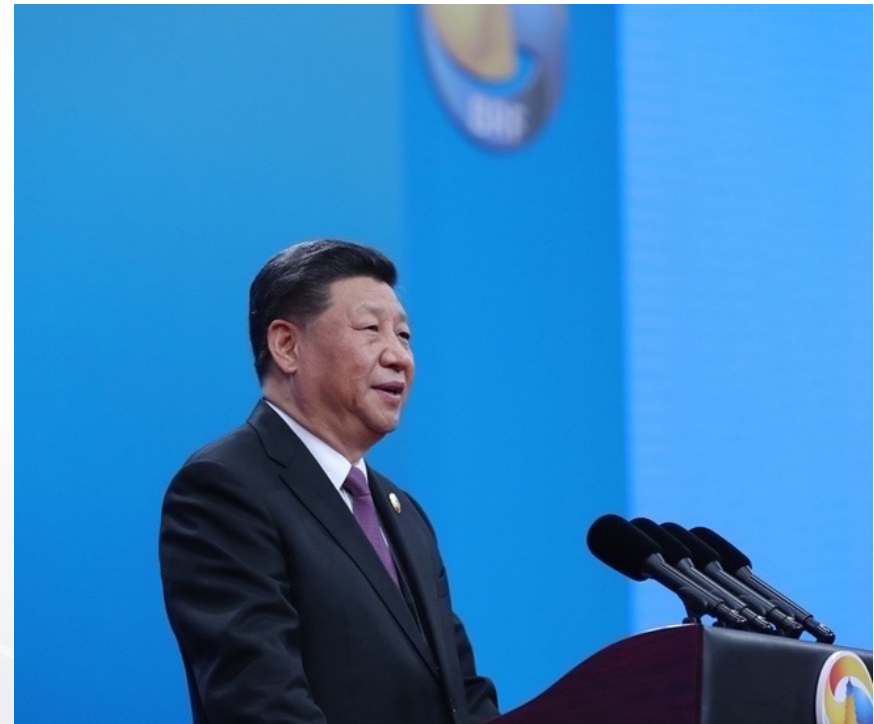


President Xi Jinping highlights Green BRI Belt and Road Forum 2019

习近平在2019年的“一带一路”国际合作高峰论坛中强调“绿色”一带一路

我们要坚持开放、绿色、廉洁理念，**把绿色作为底色**，推动绿色基础设施建设、绿色投资、绿色金融，保护好我们赖以生存的共同家园。

“We need to pursue open, green and clean cooperation. The Belt and Road **aims to promote green development**. We may launch green infrastructure projects, make green investment and provide green financing to protect the Earth which we all call home.”



Green Finance in BRI 一带一路的绿色金融



- 7 principles:
 1. Embedding sustainability into corporate governance 将可持续性纳入公司治理
 2. Understanding environmental, social and governance risks 充分了解ESG风险
 3. Disclosing environmental information 充分披露环境信息
 4. Enhancing communication with stakeholders 加强与利益相关方沟通
 5. Utilizing green financial instruments 充分运用绿色金融工具
 6. Adopting green supply chain management 采用绿色供应链管理
 7. Building capacity through collective action 通过多方合作进行能力建设
- Signed by 27 global financial institutions (e.g. Agricultural Bank of China, Bank of China, CDB, EXIM Bank, Deutsche Bank, Silk Road Fund) in April 2019 to accelerate greening the BRI.
- 本原则由27方机构在2019年4月为加速一带一路绿化进程而签署（例如中国农业银行，中国银行，中国开发银行，中国进出口银行，德国国家银行，丝路基金）



ASIAN INFRASTRUCTURE
INVESTMENT BANK

- AIIB issued Directive on Environmental and Social Framework in February 2016 (amended in February 2019) AIIB在2016年2月发布了环境与社会框架指令（修订于2019年2月）
- Focus 重点关注:
 - Reducing environmental and social risks, 降低环境与社会风险
 - Ensure environmental and social soundness and sustainability 保障环境与社会完整与可持续发展
 - Support integration of environmental and social aspects in decision-making 支持把环境和社会因素纳入决策
 - Provide mechanism for addressing environmental and social risks and impact along the project cycle 提供处理项目周期内环境和社会风险及影响的机制
 - ...

Good to know 近期:

ICBC Singapore issued first USD 2.2 billion green BRI bonds (USD, CNY, EUR) in April 2019 2019年4月，中国工商银行在新加坡发行了22亿美元的绿色“一带一路”债券（包括美元，人民币，欧元）



Green light system for BRI investments

“一带一路”项目绿色发展指南（“交通灯”机制）

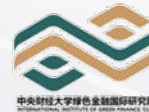


To be launched on
Dec 1, 2020
将在2020年12月1日
发布

- In June 2019, Mr. Li Ganjie, BRIGC's Co-chair, Minister of Ecology and Environment suggested to research the idea of a **'Green Light' system for BRI projects** 2019年6月，中国生态环境部兼一带一路绿色发展国际联盟部长李干杰建议就“一带一路”项目“交通灯”机制开展研究。
- The “Green Light System” will provide guidance on the assessment and classification of BRI projects from the perspective of preventing ecological and environmental risks, in order to support decision making on green development “交通灯”系统将从防范生态环境风险的角度，对一带一路项目进行评估和分类指导，为绿色发展提供决策支持



Involved organizations:





5



EU-China
cooperation
中国-欧盟合作



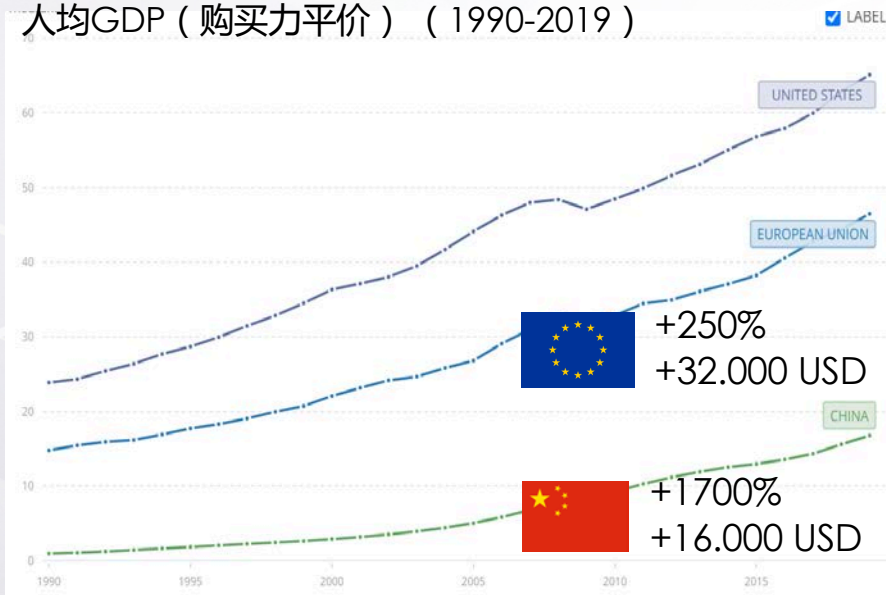


A current comparison of EU and China

中国和欧盟现状比较

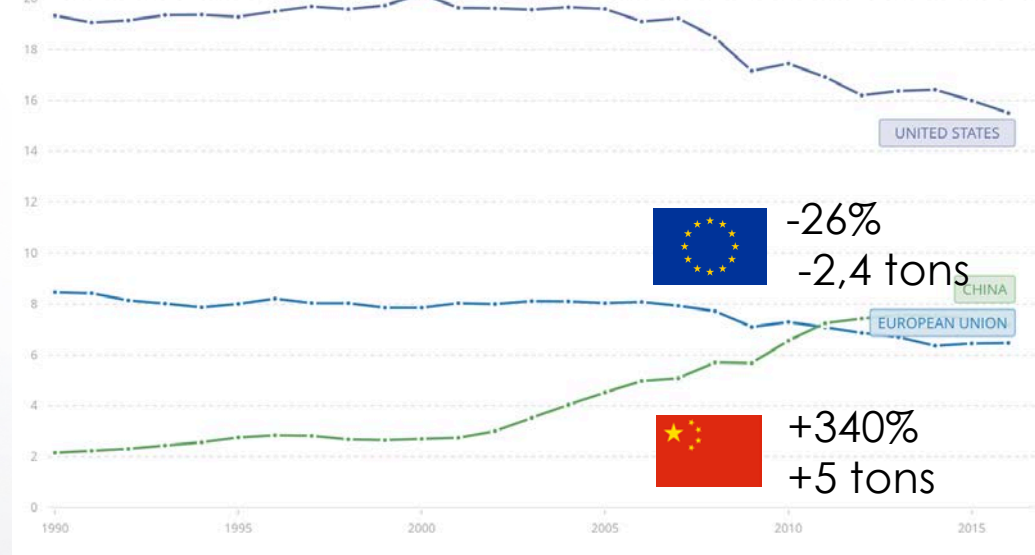
GDP (PPP) per capita (1990-2019)

人均GDP (购买力平价) (1990-2019)



CO2 emissions per capita (1990-2019)

人均二氧化碳排放 (1990-2019)





EU-China Summit, 2020 中欧峰会2020

- Reaffirmed the commitment to the Paris Agreement the Montreal Protocol; Agreed to set up high-level policy dialogue on climate and environment; discussed reform in carbon pricing and fossil fuel subsidies; Promised to strengthen cooperation to motivate private capital to sustainable and green economy.
重申对《巴黎协定》和《蒙特利尔议定书》的承诺；同意建立关于气候和环境的高级别政策对话；讨论了碳定价和化石燃料补贴的改革；承诺加强合作，以激励私人资本转向可持续和绿色经济。

Central Banks and Supervisors Network for Greening the Financial System (NGFS) 中央银行和监管机构合作构建绿色金融系统网络 (NGFS)

- 8 countries initiated and 67 member countries joined, among which 28 of them are BRI countries including United Arab Emirates, Morocco, Malaysia (Up to November 2020)
8个倡议国家，67各成员国家和28个包括阿联酋、摩洛哥、马来西亚在内的一带一路国家（截至2020年9月）

Harmonization of Green Finance Standards between China and the EU 中欧标准互通

- White paper No.1 , The Need for A Common Language in Green Finance, released on COP23. It suggested a common framework for green finance standards between China and the EU, laying the foundation for a future harmonized standard which helps cross border green bond investment.
在COP23会议上发布了1号白皮书《绿色金融需要共同语言》。该白皮书提出了中国和欧盟需要绿色金融标准的共同框架，为未来的一致性标准奠定了基础，有助于跨境绿色债券投资。
- White paper No.2 , The Need for A Common Language in Green Finance, released on COP24. It offers an idea of a “translation” mechanism to harmonize the differences between standards in China and the EU. 在COP24会议上发布了二号白皮书《绿色金融的共同语言需求》。它提出了一个名为“翻译”机制的设想，以协调中国和欧盟标准之间的差异。



Challenges for EU-China green finance cooperation

中欧绿色金融合作面临的挑战

- Differences in green finance standards
 - Inclusion of clean coal in current Chinese green bond and green industry catalogue (expectations are that this will change in 2021)
 - Differences of verification and reporting on green finance
- High expectations on China's ETS still waiting to be fulfilled
 - EU-China cooperation on ETS established in 2014
 - China has promised to establish national ETS in 2017
 - China has again strengthened policies to accelerate ETS development under the MEE
- 绿色金融标准差异
 - 清洁煤仍然包含在中国的绿色债券和绿色产业目录中（这一点在2021年有望得到改善）
 - 绿色金融的核查和报告差异
- 中国的碳排放交易体系有待完善
 - 中欧的碳排放交易体系合作开始于2014年
 - 中国2017年承诺构建全国范围内的碳排放交易市场
 - 中国生态环境部重申加速构建全国碳排放交易市场



A person in silhouette is standing on a boat, looking out at a sunset over a body of water. The sun is low on the horizon, creating a bright glow and lens flare. The sky is filled with soft, textured clouds. The foreground shows the dark silhouette of the boat and the person's arm raised to their forehead. The overall mood is contemplative and serene.

6

Next steps 展望

Source: <https://www.biodiversityfinance.net/#>



The challenges for the next step 下一步行动面临的挑战

Improve Policy
Coordination 缺少政策合作

Different standards to be
harmonized 标准有待统一

Awareness and capacity to
be improved 意识和能力有待提升



Quantitative analysis in
environmental risks and benefits to
be strengthened 对环境风险和利好的定
量分析有待加强

Innovation in green financial
products to be expanded 绿色金融
产品创新有待提高

Insufficient Environmental information
disclosure in the financial market 金融
市场环境信息披露不足





Key take-aways 要点总结

- China is facing environmental pressures at home and abroad
 - China is driving green finance at home and abroad with an integrated green finance market
 - A variety of initiatives have been started to accelerate greening the BRI, such as the GIP in the financial sector or the green-light system from the regulator
 - EU-China cooperation key for further strengthening green financial market development
- 中国面临着国内外的双重环境压力
 - 中国正在以统一的绿色金融市场推动国内外绿色金融市场发展
 - 中国已采取一系列措施加速“一带一路”的绿色发展，如金融领域的“一带一路”绿色投资原则(GIP)和监管机构牵头的“交通灯”系统
 - 中欧合作对进一步加强绿色金融市场建设至关重要



There is no PLANET B!



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www.green-bri.org

