

This is not an ADB material. The views expressed in this document are the views of the author/s and/or their organizations and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy and/or completeness of the material's contents, and accepts no responsibility for any direct or indirect consequence of their use or reliance, whether wholly or partially. Please feel free to contact the authors directly should you have queries.



Financing Energy Efficiency & Carbon Emissions Reductions in Buildings (EU & US)

建筑能效与减排融资 (欧盟和美国)

Matthew Ulterino
Property Investment Project Coordinator
投资项目协调员
UNEP Finance Initiative
联合国环境规划署金融倡议



UN Finance Initiative 联合国金融倡议

Overview

概述

- Established in 1992 by the private sector to push finance innovation for sustainable development

倡议由私营部门于1992年制定，旨在推动金融创新，促进可持续发展。

- 240+ members globally from banking, investment and insurance industries
来自于银行、投资和保险行业的全球240多个成员参加。

- Seeks systemic shift toward low-carbon, resilient, equitable, and resource-efficient assets and businesses

寻求系统性的，向低碳、韧性、公平和资源高效的资产和业务方向转变。

- Visit www.unepfi.org to learn more

详情请登陆www.unepfi.org 进行了解。



European Commission Action Plan on Sustainable Finance

欧盟委员会可持续融资行动计划

The European Commission's Action Plan on Financing Sustainable Growth identified three objectives:

可持续增长融资行动计划确定了三个目标：

1. **Reorient capital flows** towards sustainable investment in order to achieve sustainable and inclusive growth
重新引导资本流向可持续投资，以实现可持续和包容性增长。
2. **Manage financial risks** stemming from climate change, resource depletion, environmental degradation and social issues; and
控制由气候变化、资源枯竭、环境退化和社会问题引起的财务风险；
3. **Foster transparency** and long-termism in financial economy activity.
提升金融与经济活动的透明度，推动其长期发展。

Developing a Taxonomy is one of ten action areas.
建立分类标准是十项工作之一。

Reports available: 报告详见网址：

https://ec.europa.eu/info/publications/sustainable-finance-taxonomy_en#190618



EU Sustainable Finance Taxonomy

欧盟可持续融资分类标准



IS 是

A list of economic activities and relevant criteria

经济活动清单及相关标准

Flexible to adapt to different investment styles and strategies
灵活适应不同投资方式和策略

Based on latest scientific and industry experience

基于最新的科学和行业经验

Dynamic, responding to changes in technology, science, new activities and data

动态响应技术、科学、新活动和数据的变化

IS NOT 不是

A rating of good or bad companies
对公司优劣进行评定

A mandatory list to invest in
强制性投资清单

Making a judgement on the financial performance of an investment – only the environmental performance
判断一项投资的财务业绩——仅是环境绩效

Inflexible or static
不够灵活或保持不变

EU Sustainable Finance Taxonomy

欧盟可持续融资分类标准



Type of activity 活动类型	Technical screening criteria 技术筛选标准	Examples 举例
1) Activities that are already low carbon. Already compatible with a 2050 net zero carbon economy 1) 低碳活动：已经符合2050净零碳排放经济的相关标准	Likely to be stable and long-term 可能稳定和长期	<ul style="list-style-type: none"> • Zero emissions transport • Near to zero carbon electricity generation • Afforestation • 零排放运输 • 近零碳排放的电力项目 • 植树造林
2) Activities that contribute to a transition to a zero net emissions economy in 2050 but are not currently operating at that level. 2) 可促进2050净零碳排放转型的活动，但是目前还未达到2050低碳经济的标准	Likely to be subject to regular revision, tending towards zero emissions. 可能会定期修订，趋向于零排放	<ul style="list-style-type: none"> • Building renovation; • Electricity generation <100g CO₂/kWh • Cars <50g CO₂/km • 建筑改造 • 碳排放量小于100克二氧化碳/千瓦时的电力项目 • 尾气排放低于每公里50克二氧化碳的汽车
3) Activities that enable those above. 3) 可促成以上活动的活动	Likely to be stable and long-term (if enabling activities that are already low carbon) or subject to regular revision tending to zero (if enabling activities that contribute to transition but are not yet operating at this level). 可能长期稳定的（如果活动已经是低碳的），或定期修订趋向于零排放（如果活动有助于转型，但尚未达到这一水平）。	<ul style="list-style-type: none"> • Manufacture of wind turbines • Installing efficient boilers in buildings • 制造风力涡轮机 • 建筑物内安装高效锅炉

Value of Green to Lenders and Investors

绿色信贷对于贷方和投资者的价值

Evidence to support green loans: lower default risk of underlying assets

支持绿色信贷：降低标的资产的违约风险

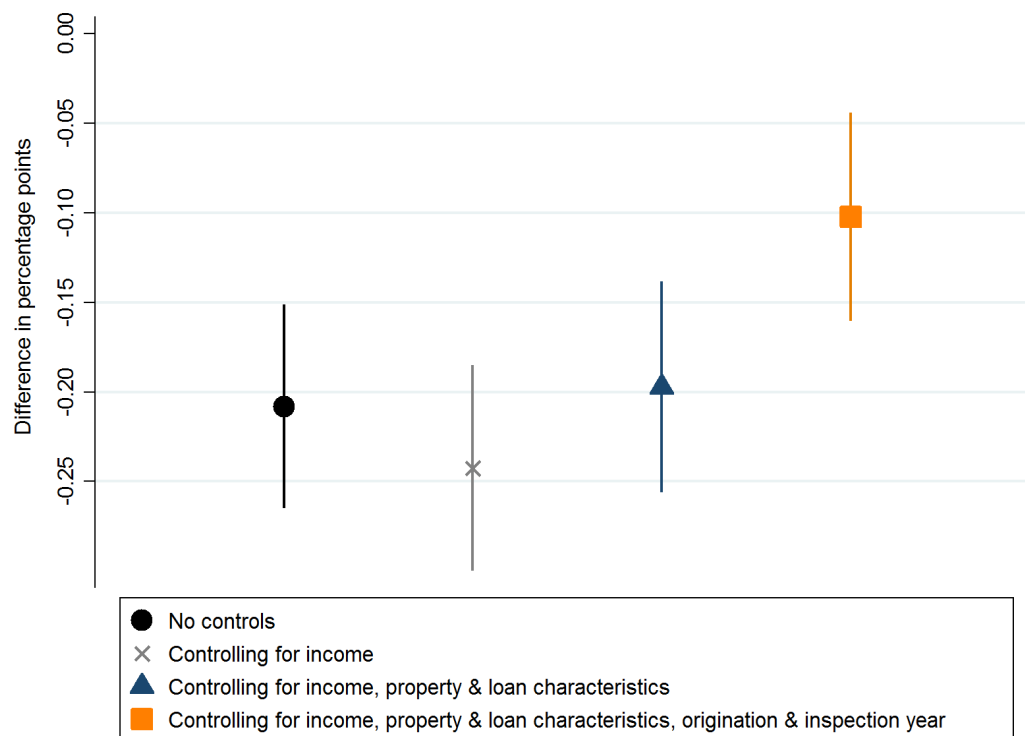
- [Bank of England](#) research linking energy efficiency of residential properties and mortgage defaults
- [英格兰银行](#)关于住宅能效与抵押贷款违约的关联研究

Graph: difference in mortgage arrears (high energy efficiency vs low energy efficiency)

Efficiency based on EPC rating
图：抵押欠款差异（高能效 vs 低能效）

基于EPC评级的能效

Loan origination between 2008–2017 / 1.8 million data points
2008-2017年贷款发放 / 180万数据量



Note: bars display 99 percent confidence intervals.



Value of Green to Lenders and Investors

绿色信贷对于贷方和投资者的价值

Attracting investor capital to green mortgage backed securities

吸引投资者投资绿色抵押贷款支持证券

- Fannie Mae [Green MBS](#) 房利美[绿色抵押支持证券](#)
 - Single asset security against multifamily residential loans 针对多户住宅贷款的单一资产证券
 - Energy Star certification 能源之星认证
 - Approximately \$35 billion issued since 2012 自2012年以来发行了约350亿美元
- Natixis / Ivanhoe / Callahan [‘green CMBS tranche’](#) [绿色商业抵押支持证券分级](#)
 - Manhattan commercial office refinance 曼哈顿商业办公室再融资
 - Based on LEED Platinum Certificate for Existing Buildings 基于建筑LEED白金认证
- Obvion [‘green’ STORM](#) covered bond [绿色住房抵押支持证券](#) 资产担保债券
 - Residential mortgages – top 15% / 30% in energy performance 住宅抵押贷款——其中，能效方面最高占15%/30%
- European Mortgage Federation [Energy Efficient Mortgages Initiative](#) and [Energy Efficiency Data Protocol and Portal](#)

欧洲抵押贷款联合会——[能效贷款倡议、能效数据协议和门户](#)

 - Planned covered bond 计划资产担保债券
 - Standard approach to ‘green tagging’ “绿色标签”的标准方法



Thank you 谢谢！

Comments or questions? 欢迎提问

UNEP FI Property Working Group key contacts:

联合国环境署金融倡议资产工作组主要联系人：

Matthew Ulterino
Property Investment Project Coordinator
UNEP Finance Initiative

Tel: +1 (585) 417-0615 (US)
Tel: +44 (0)20 8133 8620 (UK)
matthew.ulterino@un.org

Anna Murray (PWG Co-Chair)
BentallGreenOak

anna.murray@bentallgreenoak.com

Calvin Kwan (PWG Co-Chair)
Link REIT

calvin.kwan@linkreit.com

