

绿色债券支持绿色产业 项目范围研究

Research on Green Industry and Projects Supported by Green Bond

CECEP Hundred Technical Service

CONTENT 主要内容



- 我国现有绿色债券支持绿色产业项目范围的界定 Existing Definitions on Green Bond Endorsed Green Projects in China
- 2 我国绿色债券投向绿色产业项目概况 Overview on Green Bonds Proceeds Allocation
- 3 总体思路与方法 Our Approach
- 绿色债券支持绿色产业项目范围总体研究框架 Research Outline on Green Bonds Endorsed Projects
- 案例讲解——绿色建筑

 Case Analysis-Green Building





Existing Definitions on Green Bond Endorsed Green Projects in China

我国现有绿色债券支持绿色产业项目范围的界定

|我国现有绿色债券支持绿色产业项目范围的界定 | Existing Definitions on Green Bond Endorsed Green Projects in China



€ 《绿色债券支持绿色产业项目目录》(2015年版)

PBOC - Green Bond Endorsed Catalogue (2015)

2015年12月 中国人民银行39号公告 中国绿色金融专业委员会

爲■《绿色债券发行指引》

NDRC- Guidance on Green Bond Issuance 2015年12月 国家发改委

②《中国证监会关于支持绿色债券发展的指导意见》

CSRC-Guidelines on Green Bond Development 2017年3月 中国证券监督管理委员会



Seven Ministries- Guidelines on Building
Green Finance System

2016年8月

人民银行 财政部 发改委 环境保护部 银监会 证监会 保监会





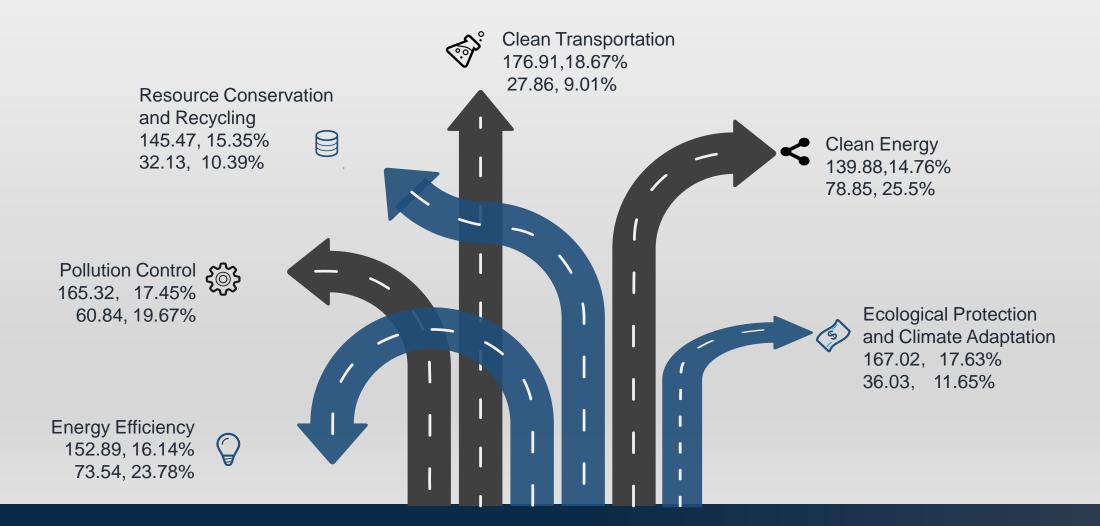
Overview on Green Bonds Proceeds Allocation

我国绿色债券投向绿色产业项目概况

我国绿色债券投向绿色产业项目概况 Overview on Green Bonds Proceeds Allocation



2016年全年贴标绿色债券和绿色ABS发行规模2052.3亿元 2017年1-6月我国境内绿色债券和绿色资产支持证券共计发行规模744.4亿元。
Labeled green bonds and green ABS had a total issuance of 205.23 billion Yuan(USD31.6 billion) in 2016
Labeled green bonds and green ABS had a total issuance of 74.44 billion Yuan in 2017 Jan-June







Our Approach 总体思路与方法

总体思路与方法 Our Approach



立足我国现阶段基本国情和新的阶段性特征,合理构建支持范围

Scoping and Defining Green Bond Endorsed Projects should consider current development stage and national conditions

- Rapid development
- Dense Population
- Fragile Environment
- Complex climate problems



- •Extensive and rampant pollutant emissions
- Looming environmental risks

Posing threats to food, water and ecological safety

总体思路与方法 Our Approach



与我国现行发展战略、规划方案紧密衔接

确保准确的绿色投向

In line with National development

strategies and plans to make sure proceeds are all

allocated to green industries and projects





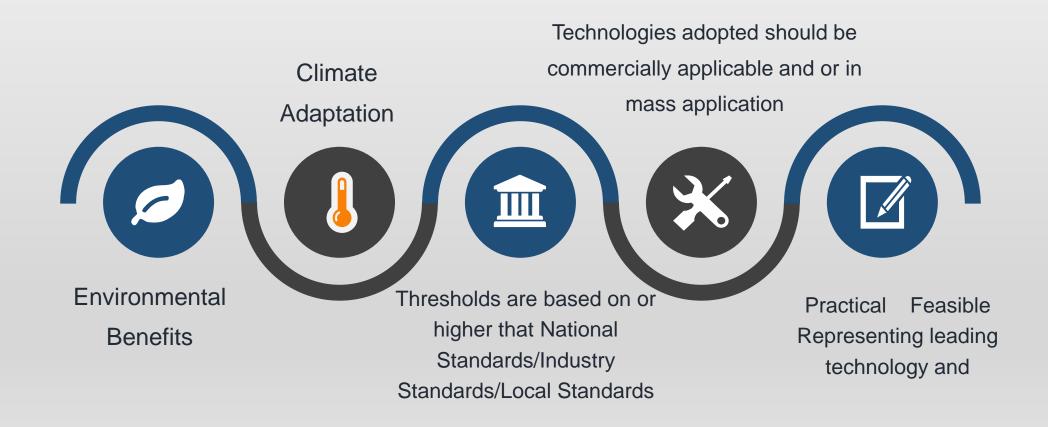
Development plans guiding future trend and investment

总体思路与方法 Our Approach



以能产生正向环境效益和满足应对气候变化需求为基本依据,科学确定支持内容与标准

Criteria and thresholds will be determined based on proved environmental benefits







Research Outline on Green Bonds Endorsed Projects

绿色债券支持绿色产业项目范围总体研究框架





Green, Low Carbon and Circular

■ 持续关注环境改善 Focusing on Environmental Improvement

■ 落实国家应对气候变化战略 Implementing climate change strategy

■ 进一步强调资源节约高效利用 Targeting Resource Conservation and Recycling

绿色债券支持绿色产业项目范围总体研究框架 Research Outline on Green Bonds Endorsed Projects

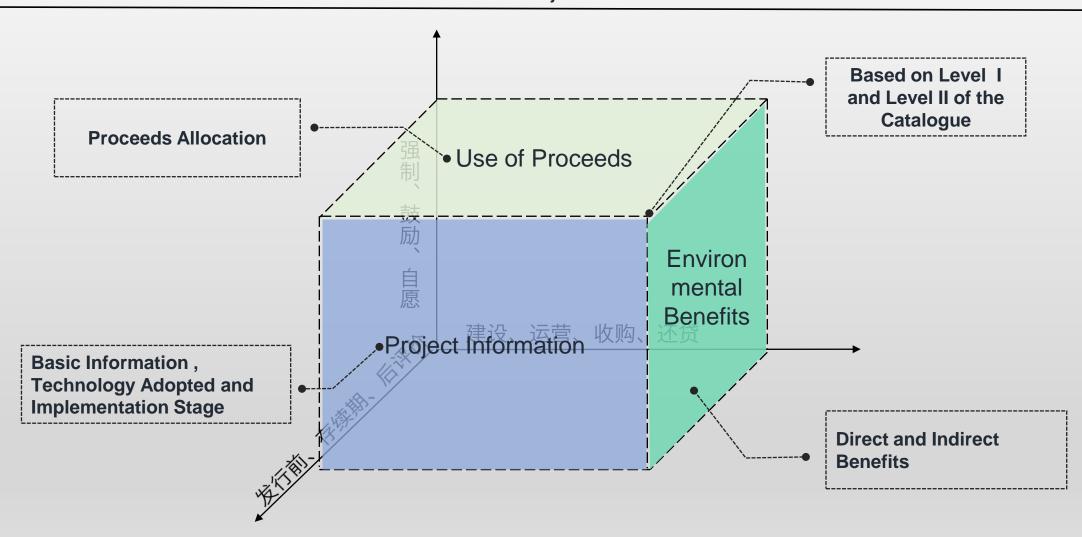


2015版目录 **Catalogue 2015 Edition** 节能 Energy Efficiency 污染防治 Pollution Control 资源节约与循 Resource Conservation 环利用 and Recycling 清洁交通 Clean Transportation 清洁能源 Clean Energy 生态保护和适 **Ecological Protection** 应气候变化 and Climate Adaptation



绿色债券支持绿色产业项目范围总体研究框架 Research Outline on Green Bonds Endorsed Projects









Case Analysis-Green Building

案例讲解——绿色建筑

5

案例:绿色建筑——主要内容与范围

Green Building-Scope and Contents



绿色民用建筑 Green Residential Building





既有建筑节能专项改造 Retrofit Dedicated to Improve Energy Efficiency

绿色工业建筑 Green Industrial Building





可再生能源技术应用设备 Renewable Energy Application Equipment

既有建筑的绿色改造 Green Retrofit on Existing Buildings





绿色建筑材料和关键部件 Building Material and Key Components

案例:绿色建筑——主要内容与范围



Green Building-Scope and Contents

绿色民用建筑 Green Residential Buildings

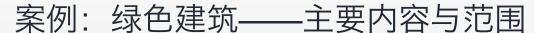
获得国家绿色标识的各类民用建筑单体或建筑群的建设和运营管理活动,其中新建绿色建筑建设须获得设计阶段二星级及以上标准的绿色标识,绿色建筑运行管理须获得运行阶段一星级及以上标准的绿色标识。 获得我国政府认可的国际绿色建筑认证体系认证的绿色民用建筑建设及运行。

New green Residential buildings should obtain a "Two Star" design label, and at operation stage, green Residential buildings should obtain at least "One Star" label; or other International building labels recognized by Chinese government.

绿色工业建筑 Green Industrial Buildings

获得国家绿色标识的各类工业建筑单体或建筑群的建设和运营管理活动,其中新建绿色工业建筑建设须获得规划设计阶段 二星级及以上标准的绿色标识,绿色工业建筑运行管理须获得全面评价阶段一星级及以上标准的绿色标识。获得我国政府认可 的国际绿色建筑认证体系认证的绿色工业建筑建设及运行。

New green industrial buildings should obtain a "Two Star" label for planning and design, and at operation stage, green Residential buildings should obtain at least "One Star" label; or other International building labels recognized by Chinese government.



Green Building-Scope and Contents



Green Retrofit on Existing Buildings

One star label for operation after retrofit

Retrofit Dedicated to Improve Energy Efficiency

E.g. Building energy system retrofit that meet national standards.



Renewable Energy Application Equipment

Equipment manufacturing that meet governing national standards

Building Material and Key Components

Building material manufacturing dedicated for green buildings that meet governing national standards

案例:绿色建筑——主要环境效益指标

Green Buildings-Main Environmental Indicators





新建绿色民用建筑 New Green Residential Buildings

- 对于建筑单体,应评价节能量,替代化石能源量、非传统水源利用量、可再利用材料使用量等指标;
- For single building, energy savings, alternative amounts to fossil fuels, untraditional water source used and recycling building materials used will be applicable
- 对于建筑群,应评价人均用地面积、绿地率、节能量、替代化石能源量、非传统水源利用量、可再利用材料使用量。
- For building cluster, Land area per capita, greening rate, energy savings, alternative amounts to fossil fuels and untraditional water source used as well as recycling building materials used will be applicable

案例:绿色建筑——主要环境效益指标

Green Buildings-Main Environmental Indicators



人均用地面积=项目总建筑面积/居住区容纳的规划人口数量 Area per capita = Total building area/ total population planned

<mark>绿地率</mark>=居住区用地范围内各类绿地面积总和/居住区用地面积 Greening rate= total green areas/ land areas

节能量特指建筑热工和采暖设计带来的节能量 Energy saved through improved design of energy supply and heating **E**₁ 建筑综合能耗 stands for comprehensive energy consumption

Eo 《严寒和寒冷地区居住建筑节能设计标准》 (JGJ26-2010)中公布的建筑能耗 stands for energy consumption illustrated in "Design Standards for Energy Efficiency of Residential Buildings in severe cold and cold areas"

$$E = E_1 - E_0$$

案例:绿色建筑——主要环境效益指标 Green Buildings-Main Environmental Indicators



替代化石能源量建筑使用可再生能源提供生活热

水、空调冷量和热量、电量之和。

Alternative amounts to fossil fuels refers to water, heating and colling as well as electricity powered by renewable energy.

非传统水源不用与传统地表水供水和地下水供水的水源,包括再生水、雨水和海水。

Untraditional water source include recycled water, rainwater and sea water.

可再利用材料指不改变物质形态可直接利用的,或经过组合、修复可直接再利用的回收材料。
Recycling building materials refer to materials can be used directly without physical change or can be recycled after combination or repair

案例:绿色建筑——主要环境效益指标

Green Buildings-Main Environmental Indicators





绿色民用建筑运营 Green Residential Building Operation

- 对于建筑单体,应评价节能量,替代化石能源量、非传统 水源利用量、可再利用材料使用量等指标;
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- 对于建筑群,应评价人均用地面积、绿地率、节能量、替代化石能源量、非传统水源利用量、可再利用材料使用量。
- For building cluster, Land area per capita, greening rate, energy savings, alternative amounts to fossil fuels and untraditional water used as well as recycling building materials used will be applicable



THANK YOU 谢 谢



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