



WORLD  
RESOURCES  
INSTITUTE

# 全球供应链的绿色转型

Green Transition of Global Supply Chains

房伟权 世界资源研究所  
WEE KEAN FONG, WRI

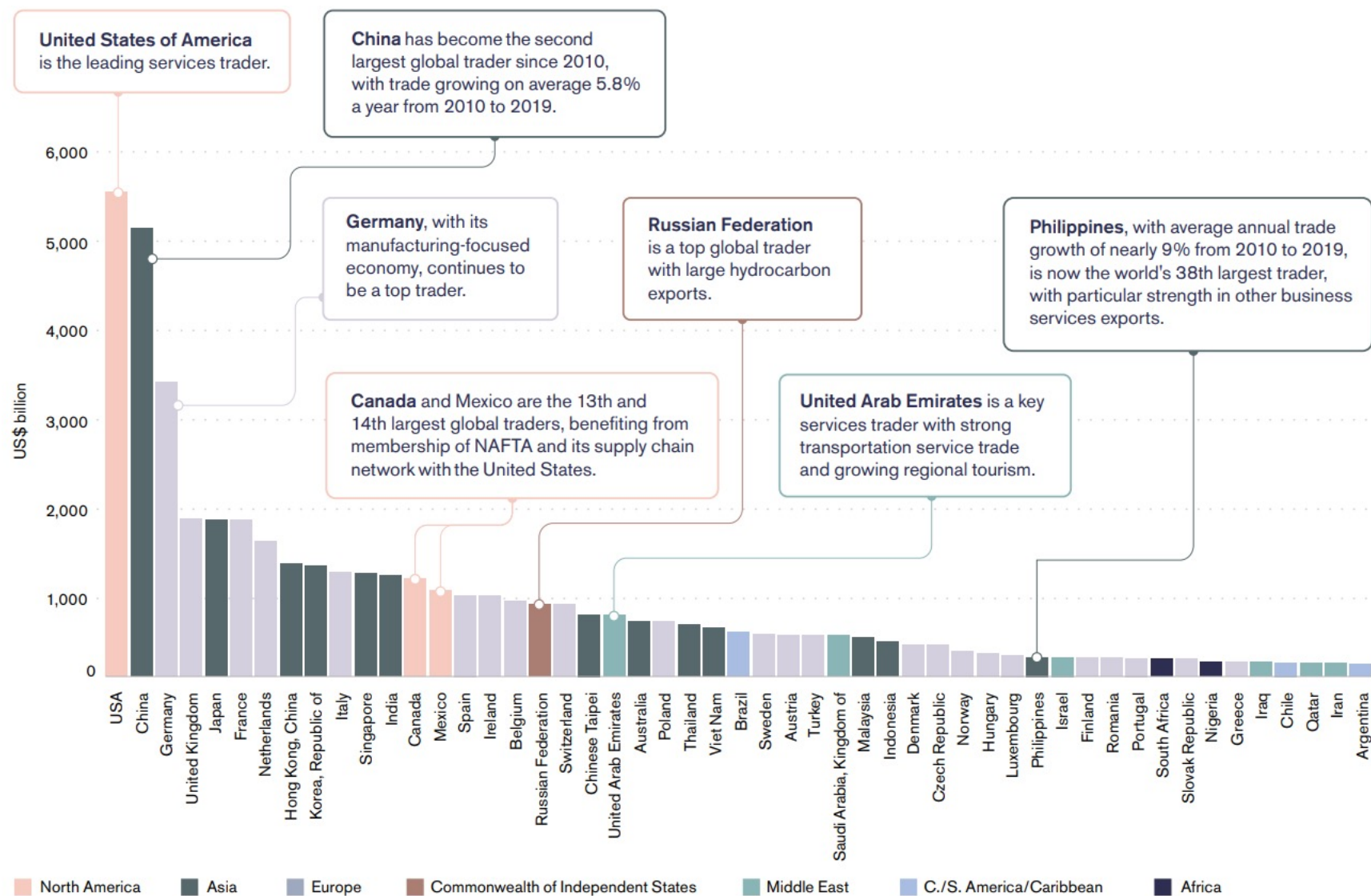
*The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.*

Photo credit: Dynamic Inventory



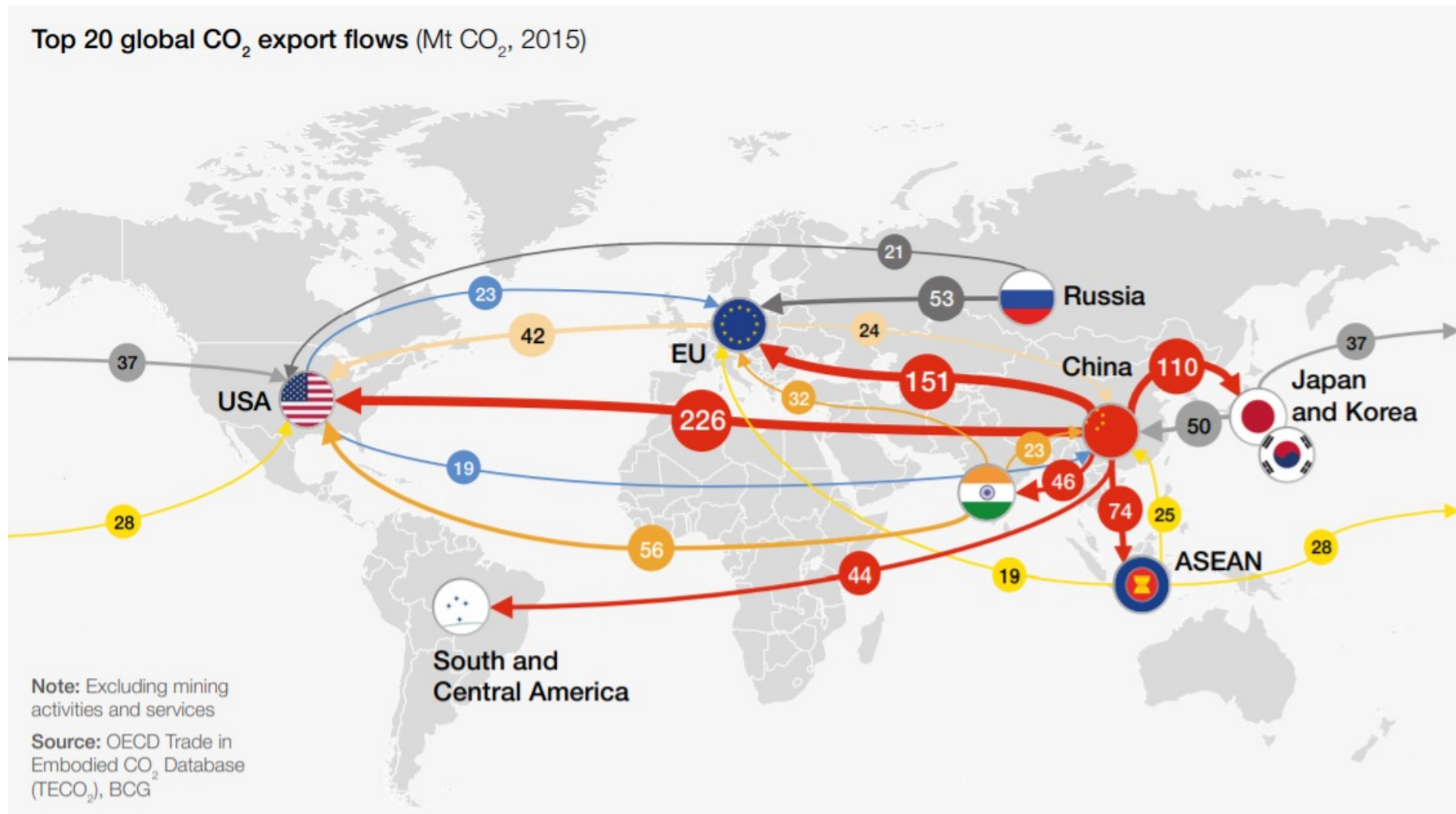
# 2019年的主要贸易国

World's leading traders of goods and commercial services, 2019



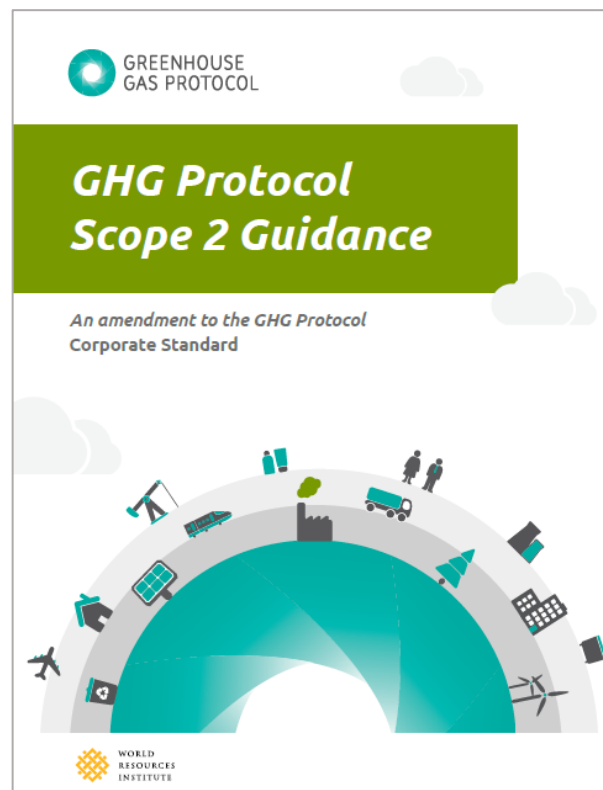
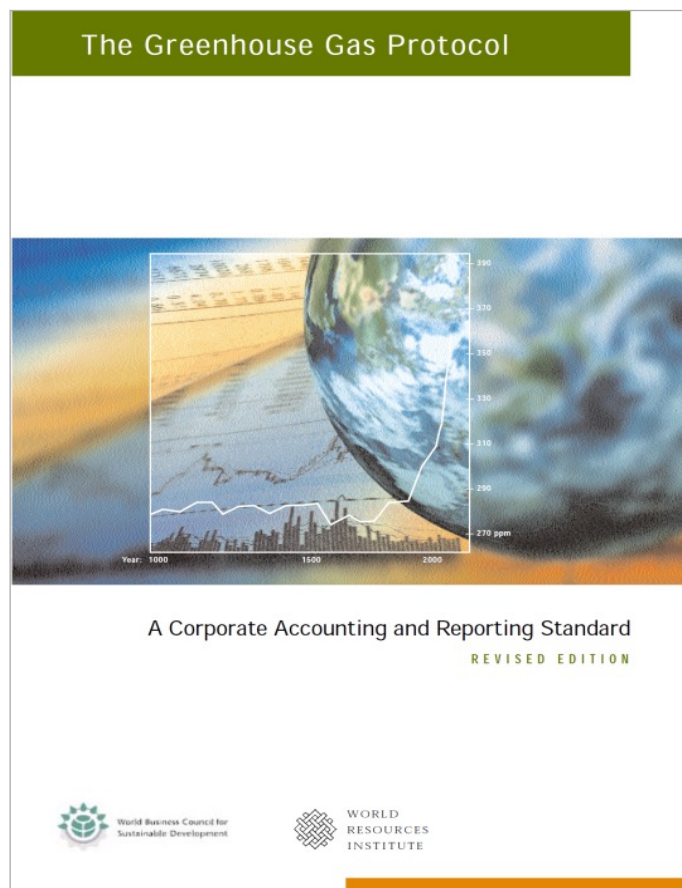
# 国际贸易带来的隐含碳排放

Embedded carbon in global trades



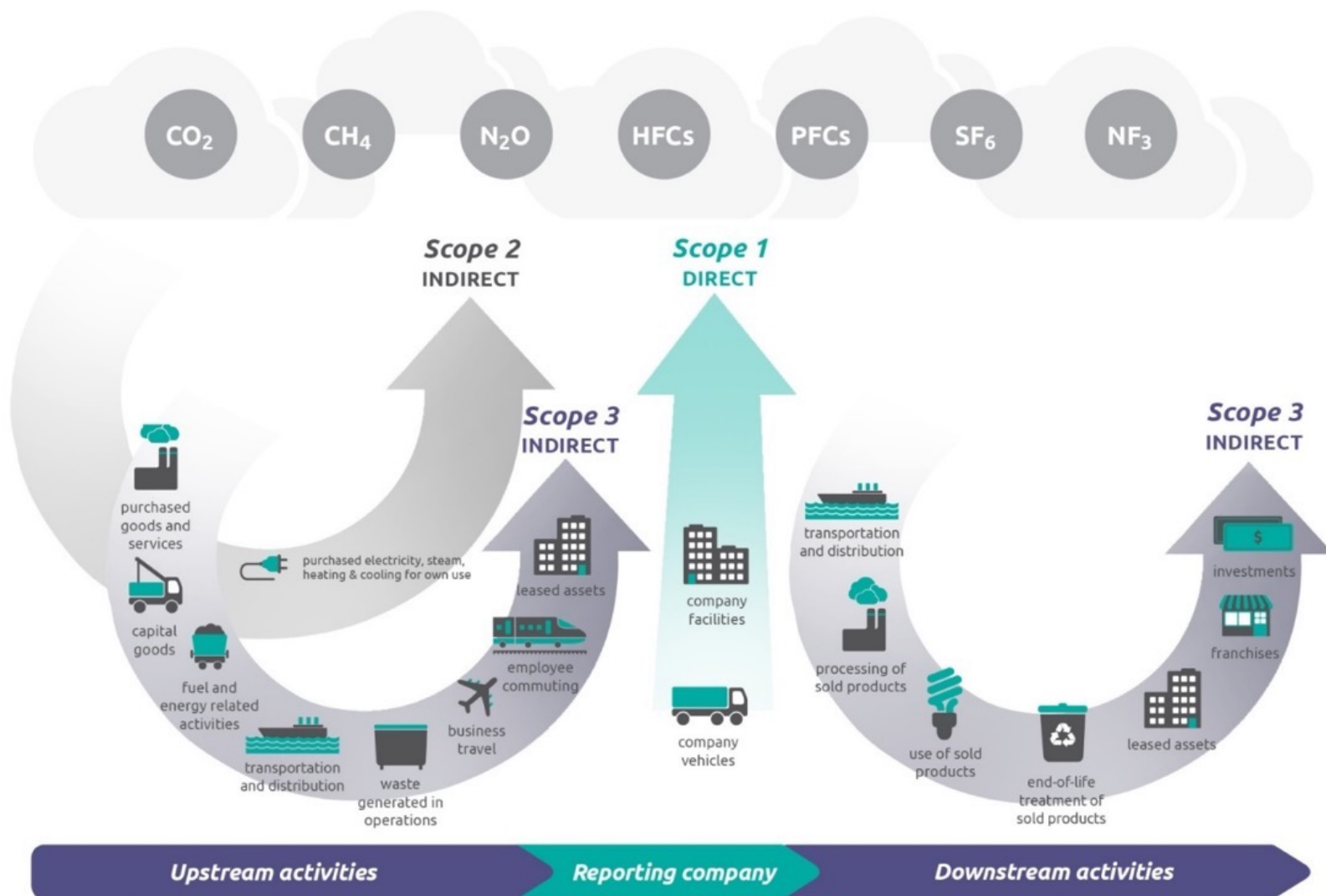
# 企业温室气体核算体系

## Corporate Greenhouse Gas Protocol



# 企业全价值链温室气体排放

Corporate value chain GHG emissions



## 范围一 直接温室气体排放

### Scope 1: Direct emissions

公司拥有或控制的排放源，例如公司拥有或控制的锅炉、熔炉、车辆等产生的燃烧排放。

## 范围二 电力产生的间接温室气体排放

### Scope 2: Indirect emissions from purchased electricity and steam

企业所消耗的外购电力、热力或蒸汽产生的温室气体排放。外购电力是指通过采购或其他方式进入该企业组织边界内的电力。范围二的排放实际上产生于电力生产设施。

## 范围三 其他的间接温室气体排放

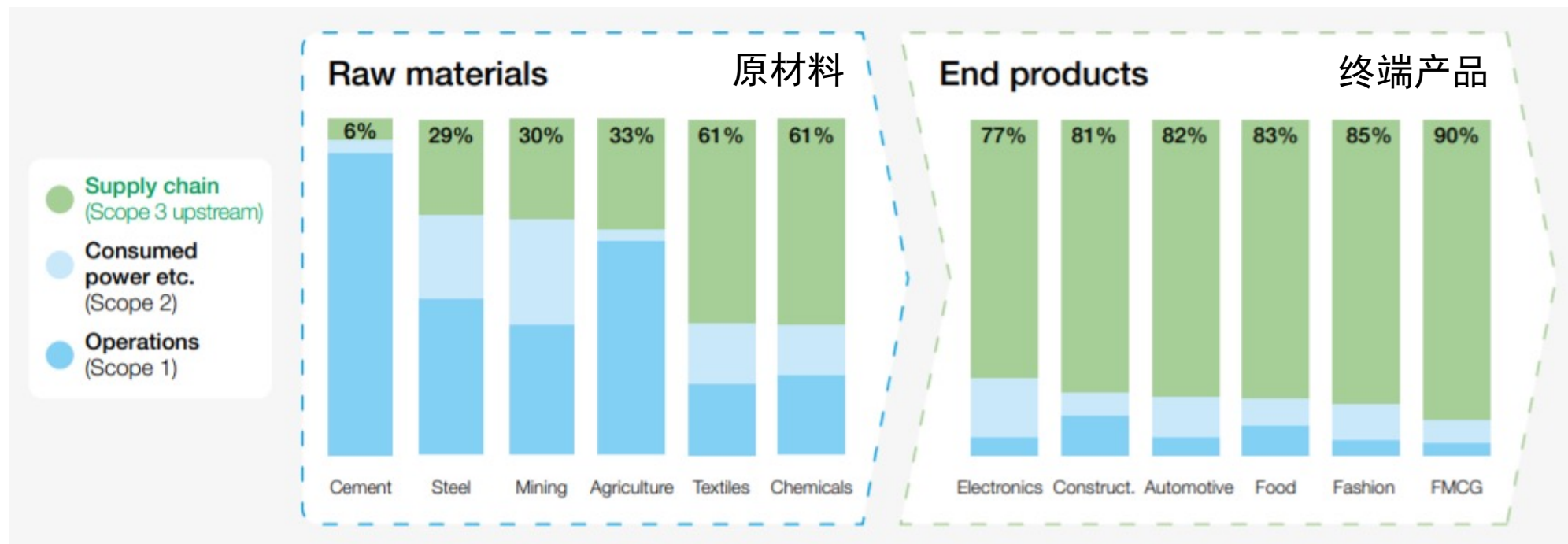
### Scope 3: All other indirect emissions

范围三的排放是一家公司活动的结果，但并不产生于该公司拥有或控制的排放源。



# 供应链关联的温室气体排放

Supply chain related GHG emissions



# 科学碳目标倡议

Science Based Target Initiative



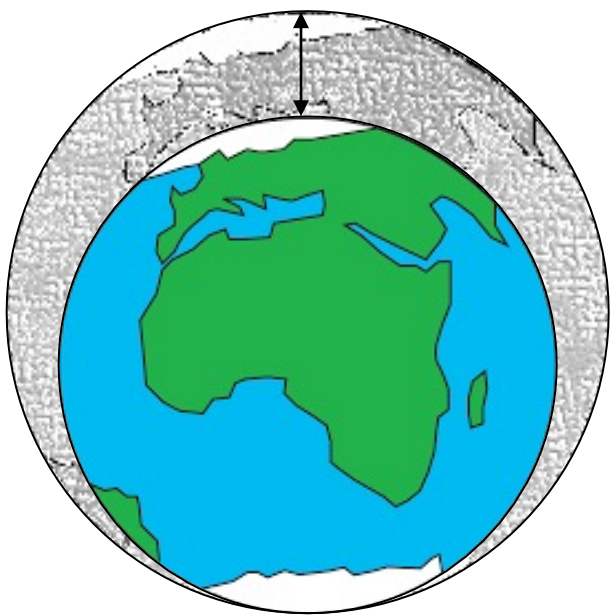
科学碳目标倡议（SBTi）动员公司制定以气候科学为基础的温室气体减排目标，  
以在向低碳经济转型的过程中提升竞争优势。

Science-based greenhouse gas emissions reduction target setting will become standard business practice and corporations will play a critical role in the transition towards a zero-carbon economy

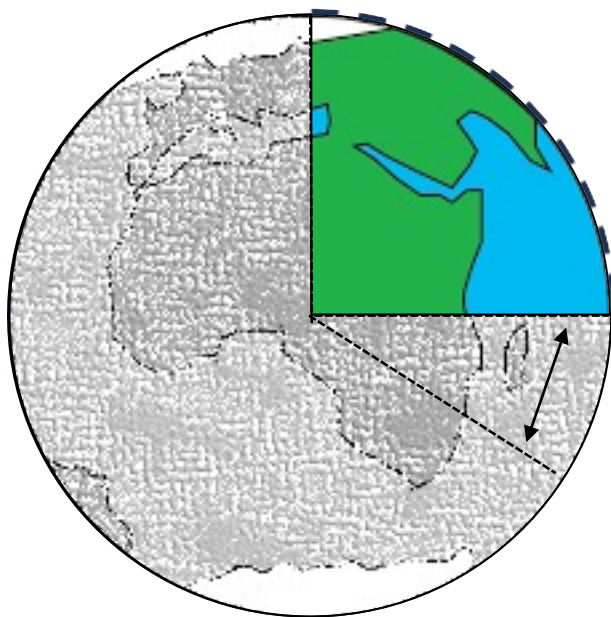
# 科学碳目标的基本概念

Science Based Target concept

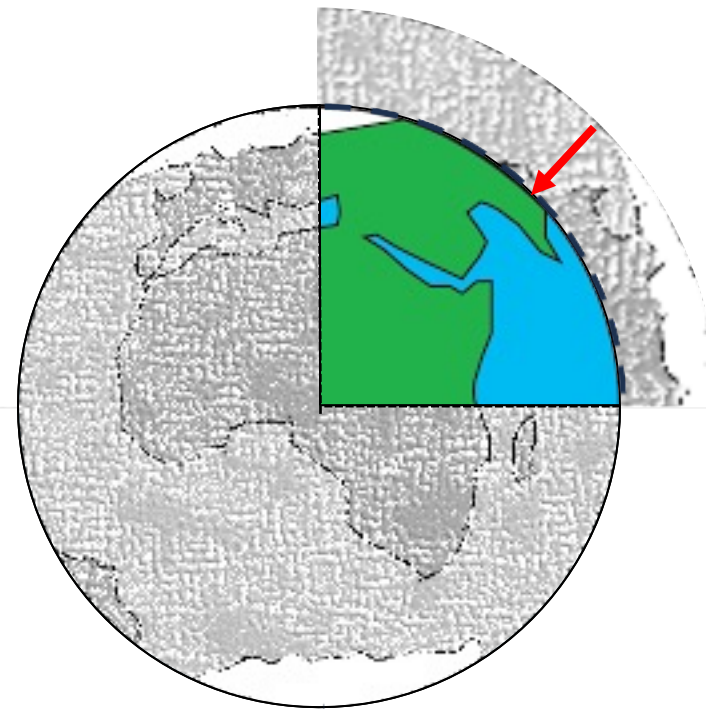
全球的碳排放配额是多少？  
What's the global carbon budget?



在这个全球的配额之中，  
我能分配到多少？  
What's my share?



基于我的基准年，  
我需要减少多少排放？  
How much do I need to reduce?





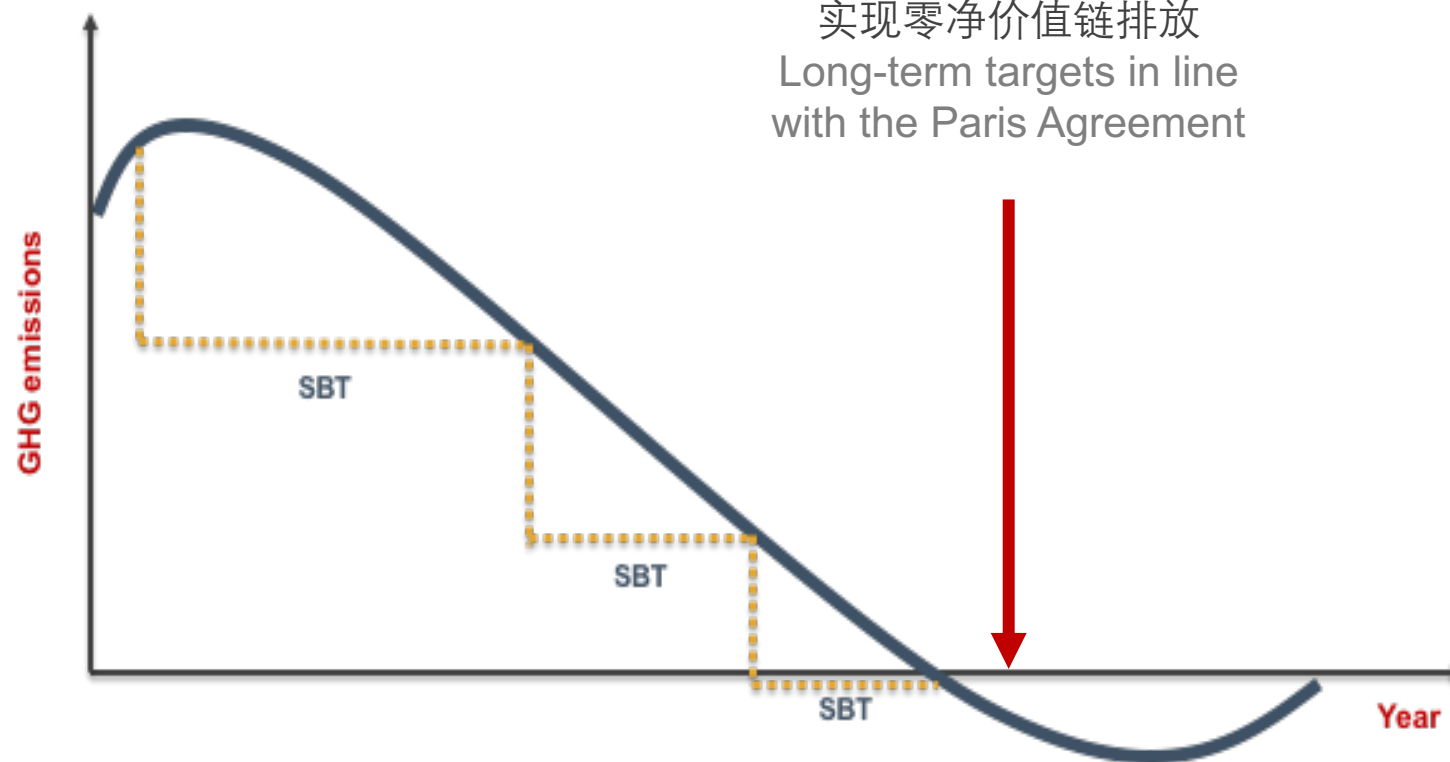
# 和巴黎协定一致的时间表

Paris-compatible schedule

## 长期目标

在与巴黎目标一致的时间表和碳预算内  
实现零净价值链排放

Long-term targets in line  
with the Paris Agreement





SCIENCE  
BASED  
TARGETS

科学  
碳目标

1929

Committed

973

Approved

Kellogg's

lenovo  
联想

Walmart

SONY



京东物流  
JD Logistics

TESCO



Standard Chartered



LONGi



adidas

Bloomberg



Coca-Cola  
HBC



McKinsey  
& Company



nrg

Panasonic



IHG



xerox



KIRIN

Johnson & Johnson

Steelcase

S&P Global



PEPSICO



SWIRE PROPERTIES

HITACHI

RICOH



SUMITOMO CHEMICAL



DECATHLON

Orsted



Electrolux



CVS Health



SIEMENS  
energy



# 低碳供应链的市场机遇

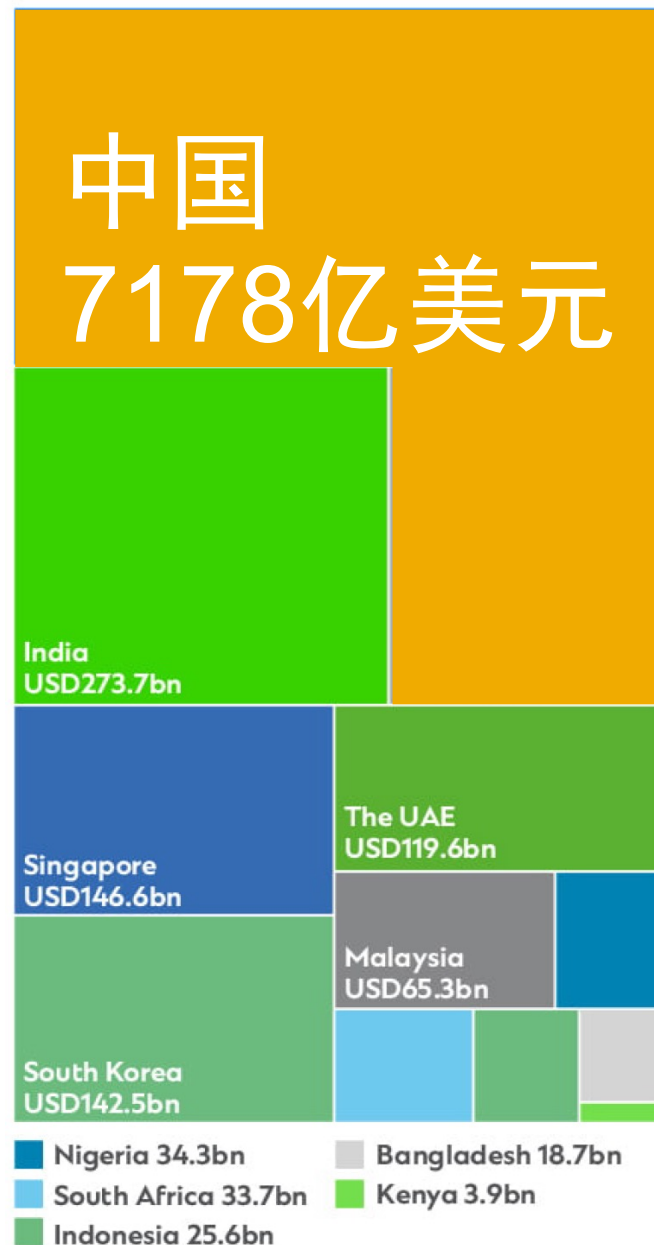
Market potential of low-carbon supply chains

# 73%

的排放量来自供应链  
emissions are from supply chains

Source: Carbon Dated. Standard Chartered Bank, 2021.

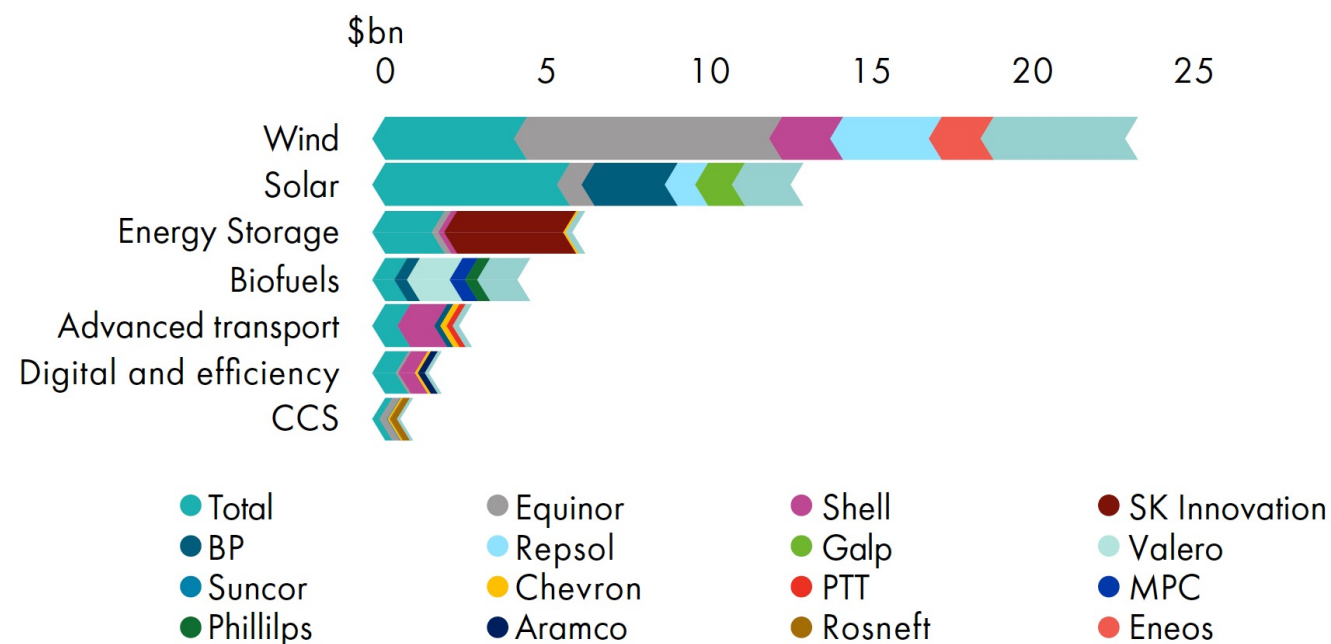
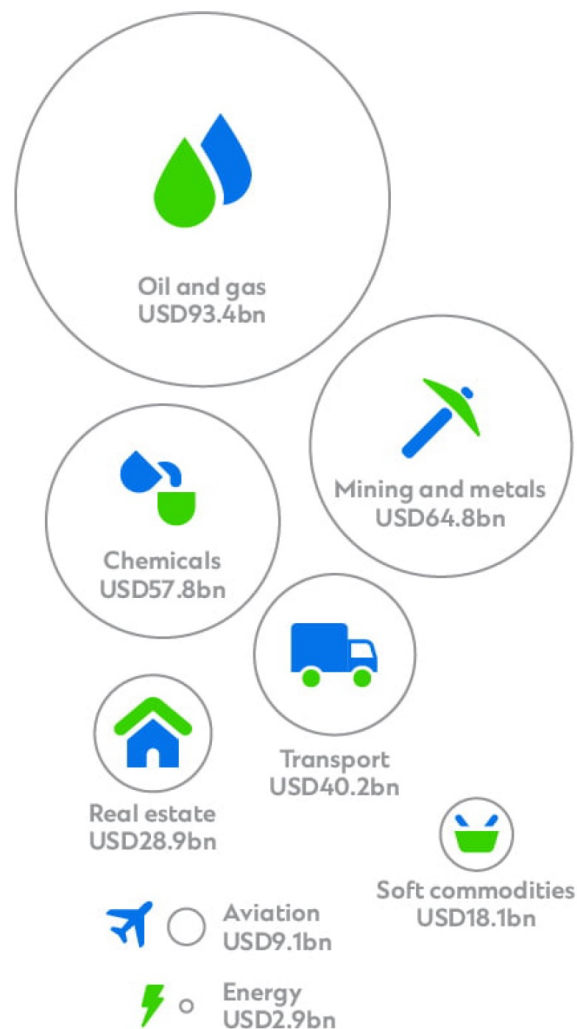
The research was conducted between March and April 2021 with 400 leaders responsible for sustainability or supply chains across 400 of the world's largest multinational corporations.





# 亟需转型的产业

## Industries facing transition risk



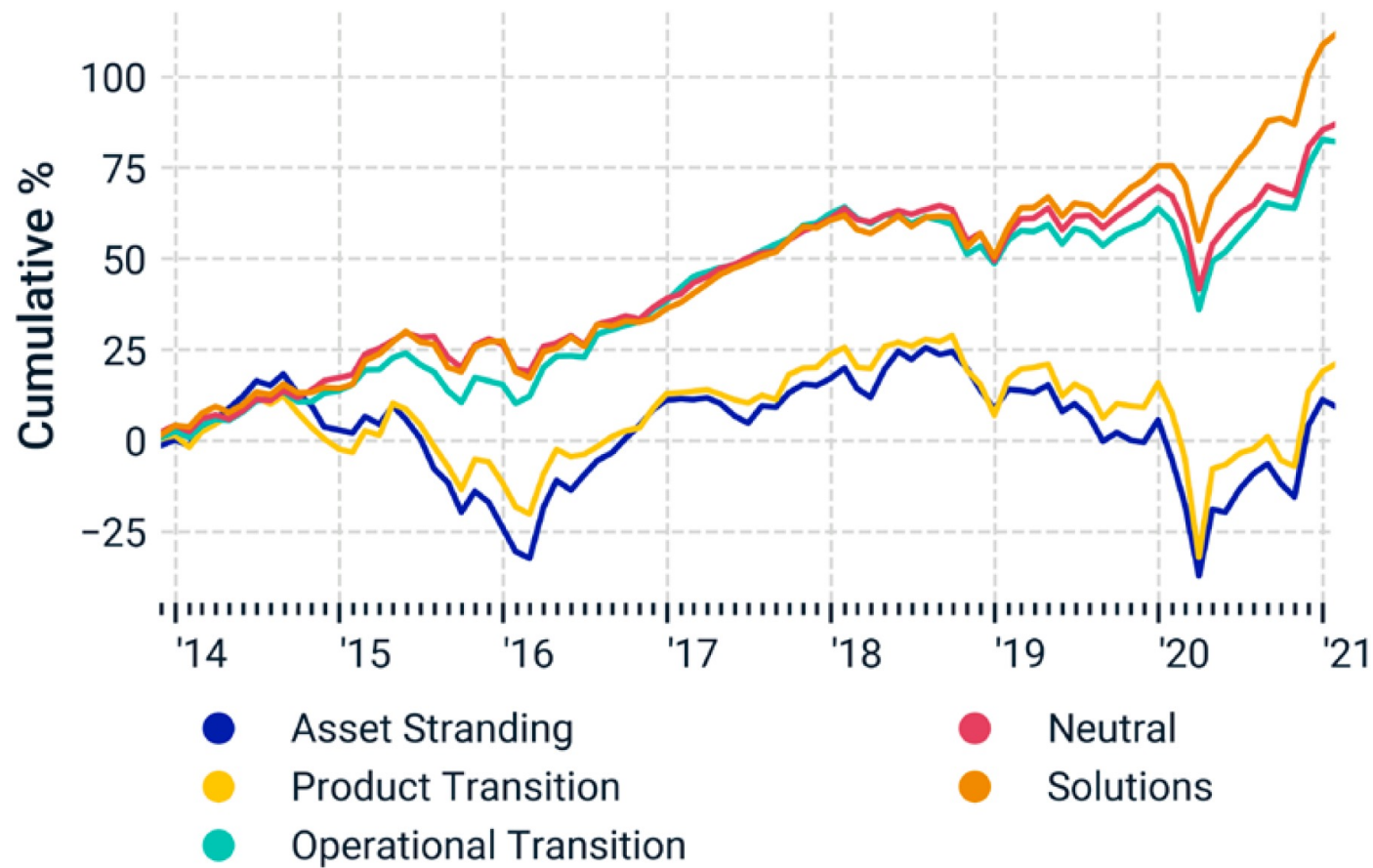
石油天然气企业在2015-2020期间的低碳投资  
Oil and gas sector investment in low-carbon technologies, 2015-2020

Source: Carbon Dated. Standard Chartered Bank, 2021.

The research was conducted between March and April 2021 with 400 leaders responsible for sustainability or supply chains across 400 of the world's largest multinational corporations.

# 气候风险 vs 市场表现

Climate risk vs. Market performance



# 气候环境风险已成为企业家最关心的问题

Business leaders' perception on climate and environmental risks



## Top Risks by likelihood

by likelihood

- 1 Extreme weather
- 2 Climate action failure
- 3 Human environmental damage
- 4 Infectious diseases
- 5 Biodiversity loss
- 6 Digital power concentration
- 7 Digital inequality
- 8 Interstate relations fracture
- 9 Cybersecurity failure
- 10 Livelihood crises

## Top Risks by impact

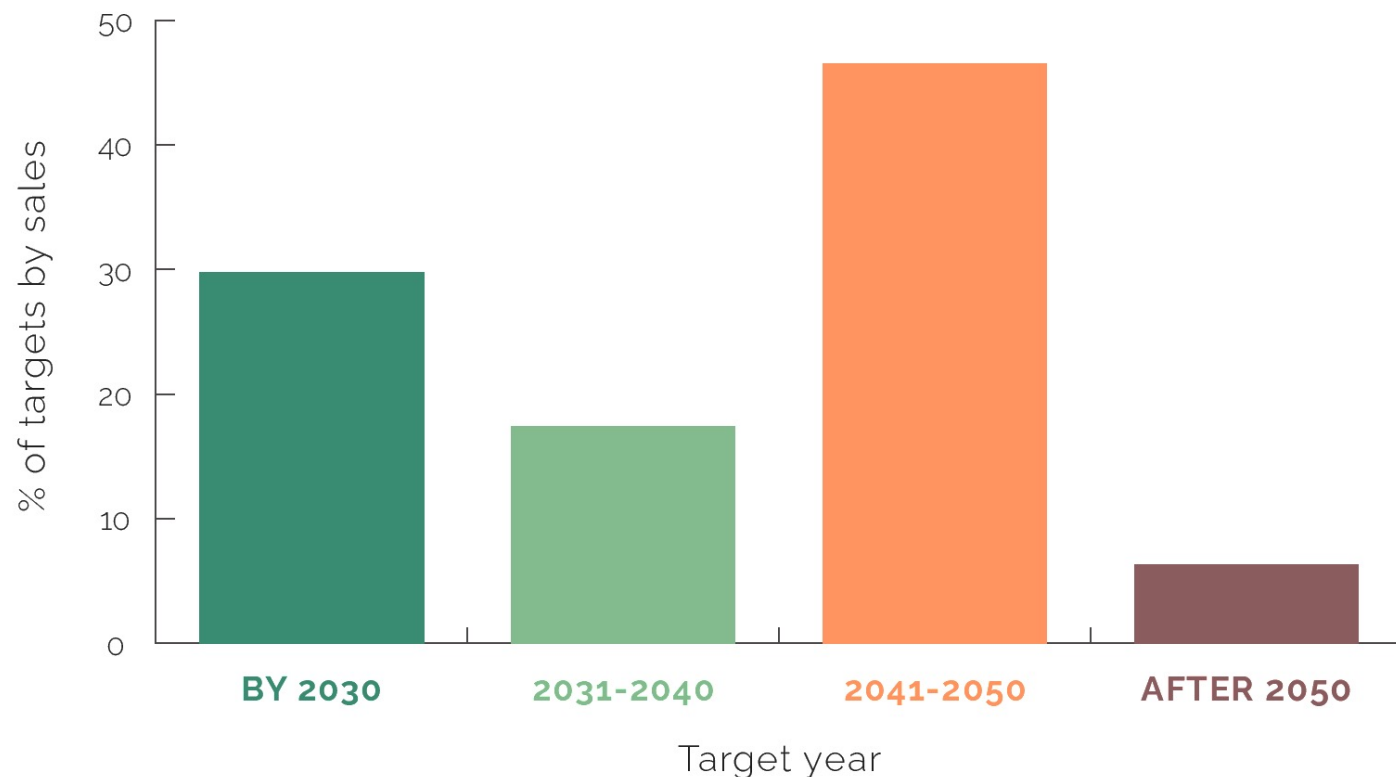
by impact

- 1 Infectious diseases
- 2 Climate action failure
- 3 Weapons of mass destruction
- 4 Biodiversity loss
- 5 Natural resource crises
- 6 Human environmental damage
- 7 Livelihood crises
- 8 Extreme weather
- 9 Debt crises
- 10 IT infrastructure breakdown



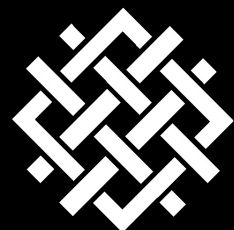
# 越来越多的企业承诺净零目标

More and more corporations commit to net zero targets



# 21%

的全球2000家最大上市公司  
已承诺了净零碳目标  
Companies with net zero targets



WORLD  
RESOURCES  
INSTITUTE