



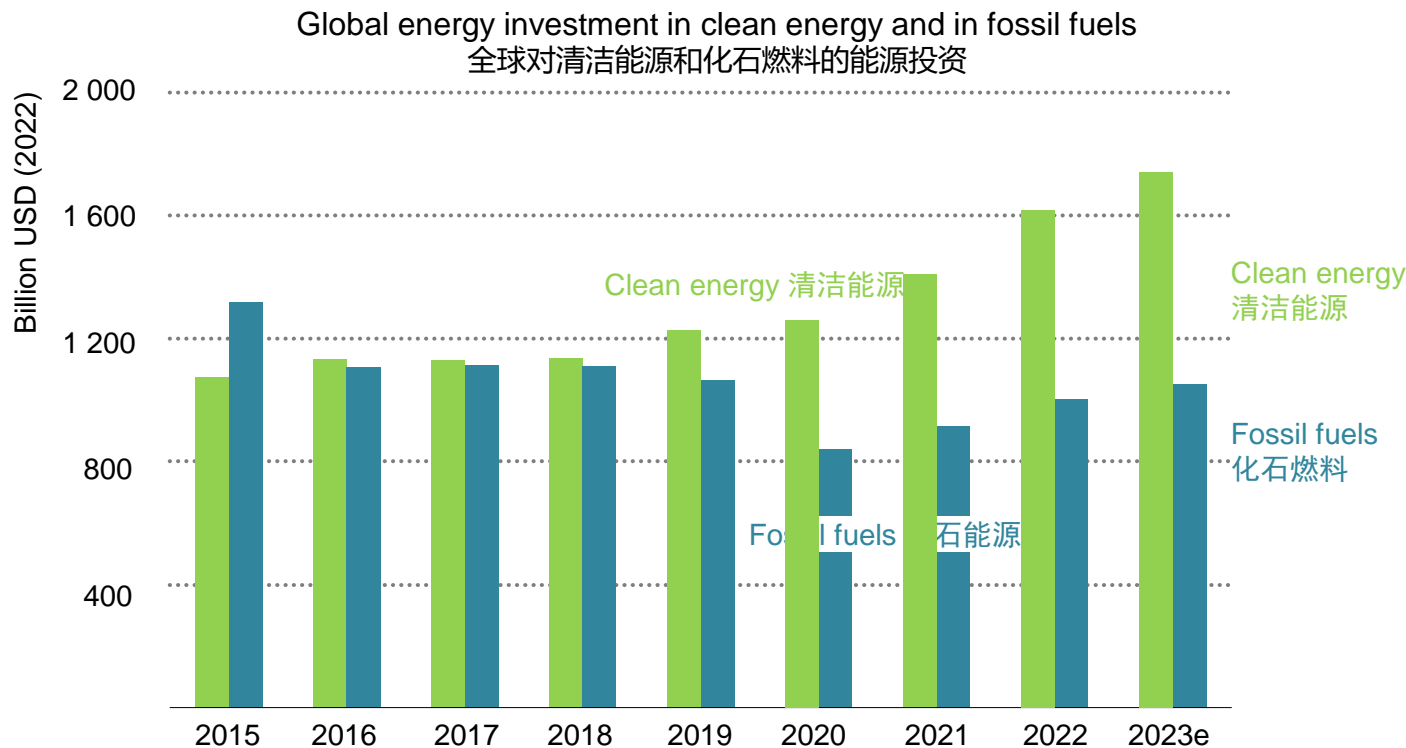
World Energy Investment 2023

世界能源投资2023

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Paris, 20 September 2023 法国巴黎，2023年9月20日

Clean energy investment is widening the gap over fossil fuels

清洁能源与化石燃料投资的差距正在扩大



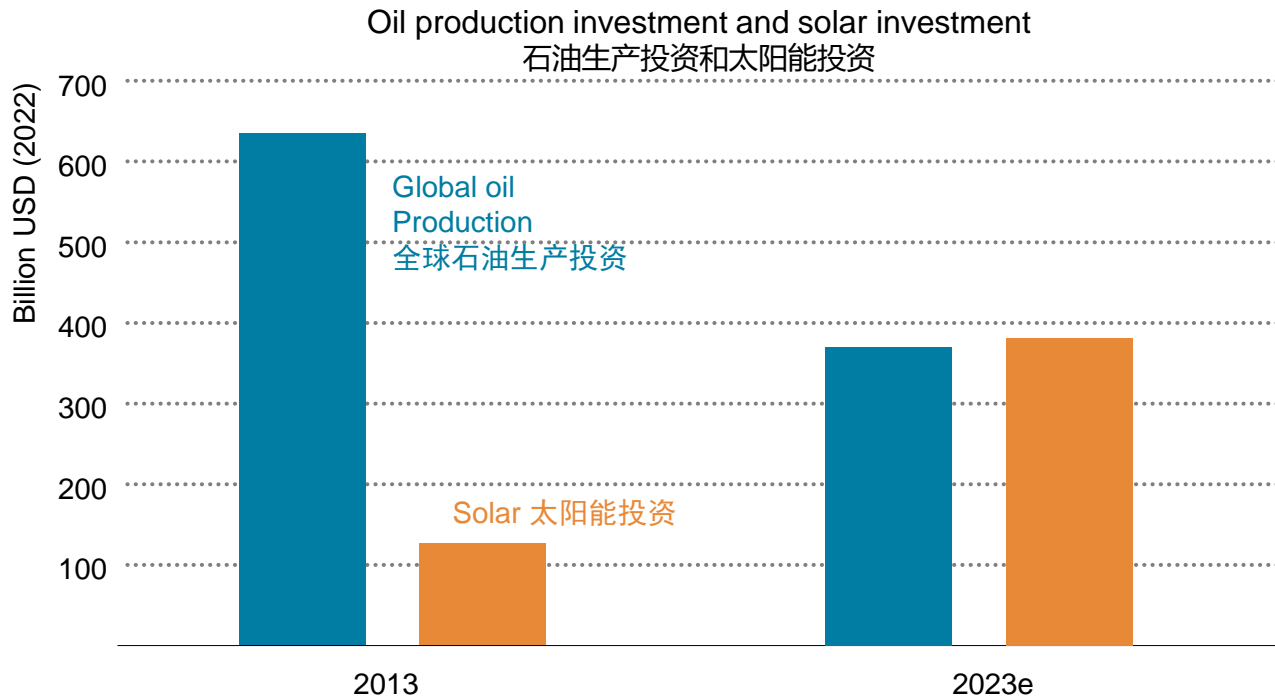
For every dollar invested in fossil fuels, about 1.7 dollars are now going into clean energy.

Five years ago, this ratio was one-to-one.

现在，每投资1美元化石燃料，就有约1.7美元投资于清洁能源。五年前，这个比例是一比一。

Solar investment is eclipsing oil production investment

太阳能投资正在大幅超越石油生产投资

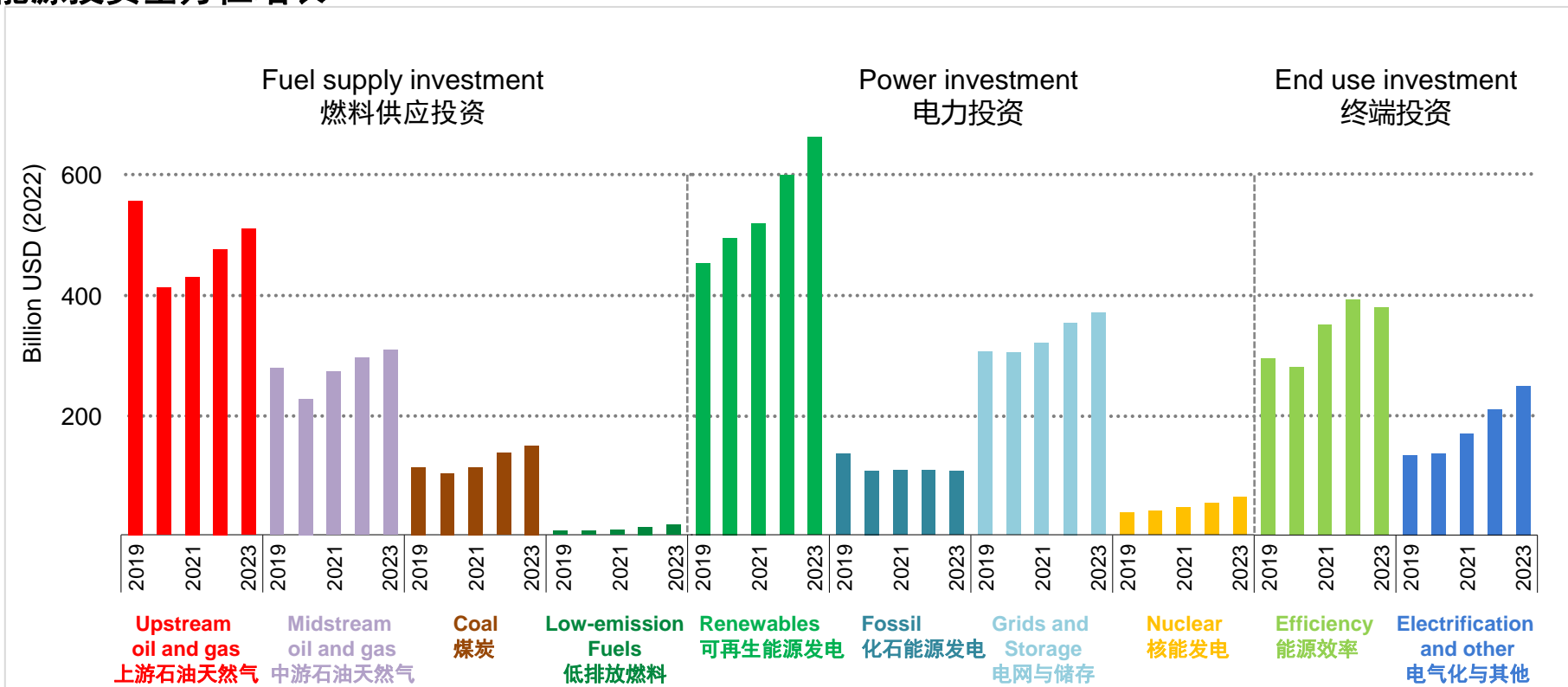


More than one billion dollars is spent every day on solar, which is set to overtake investment in oil production for the first time

平均每日有超过十亿美元的太阳能投资，首次超越石油生产投资。

Energy investment is up almost across the board

能源投资全方位增长

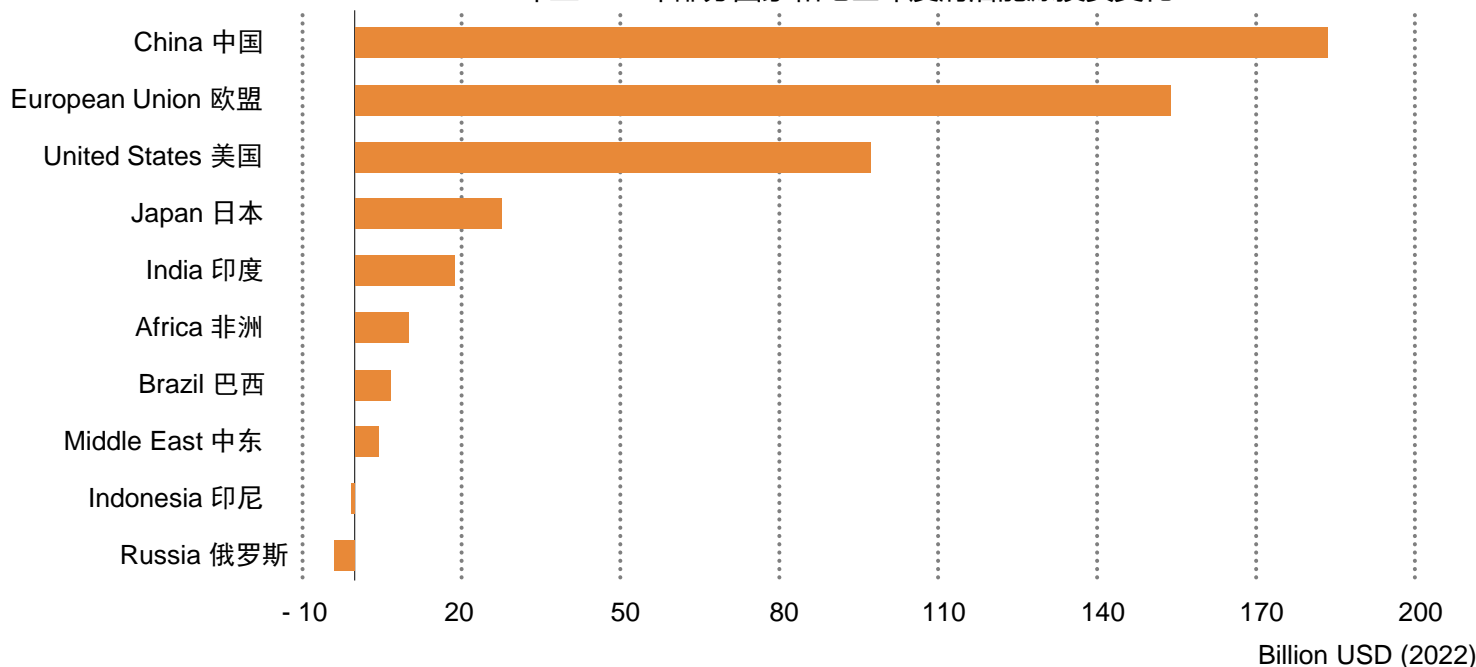


Only investments in upstream oil and gas and fossil fuel-fired power generation remain below pre-pandemic levels.
只有上游石油和天然气以及化石燃料发电的投资仍低于疫情前水平。

Growth in clean energy investment has been strong, but uneven

清洁能源投资增长强劲，但不平衡

Change in annual clean energy investment in selected countries and regions between 2019 and 2023e
2019年至2023年部分国家和地区年度清洁能源投资变化



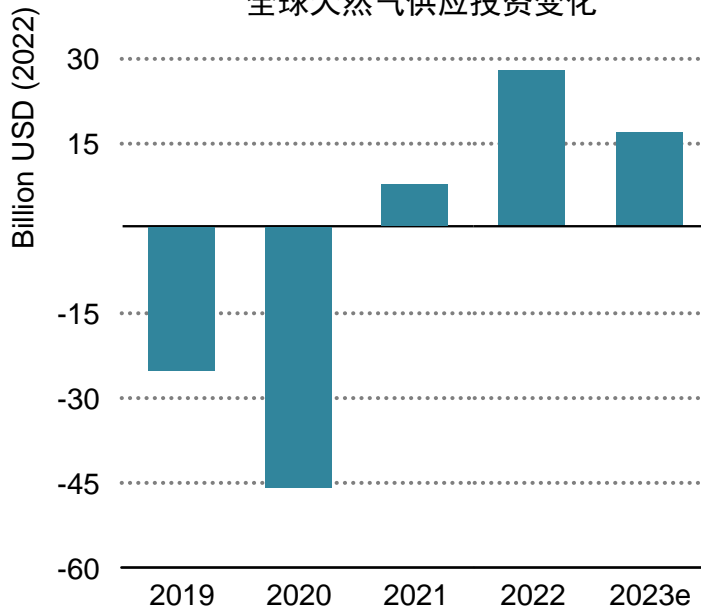
There are bright spots in other countries, but more than 90% of the increase in clean energy investment since 2021 has taken place in advanced economies and China.

尽管其他国家也有投资亮点，但自2021年以来，清洁能源投资增幅中有超过90%来源于中国和发达国家经济体。

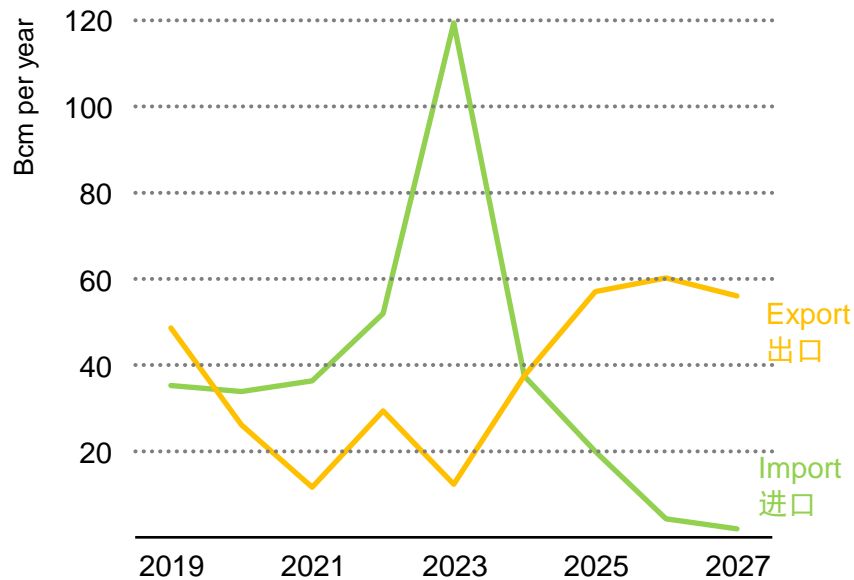
Gas investments respond to Russia's cuts

天然气投资对俄罗斯制裁作出了反应

Change in global investment in natural gas supply
全球天然气供应投资变化



Annual LNG capacity additions
每年新增液化天然气产能



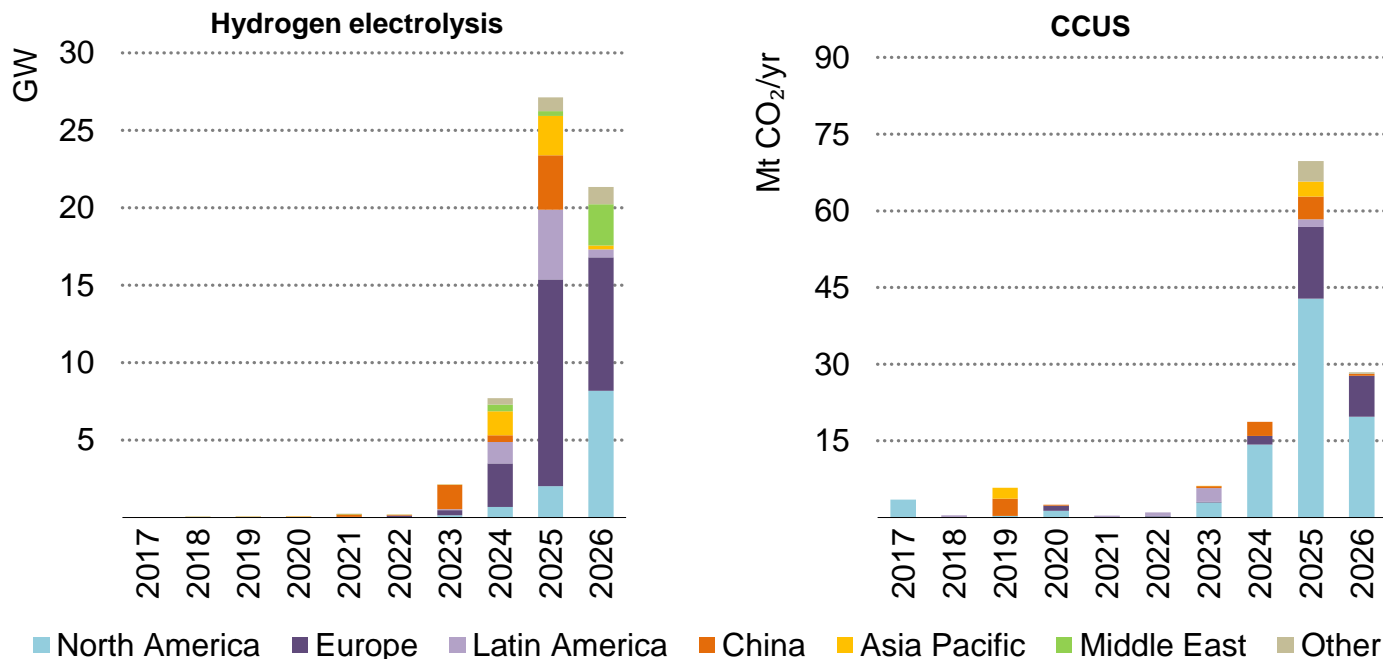
A key dilemma for investors undertaking large, capital-intensive gas supply projects is how to reconcile strong near-term demand growth with uncertain and possibly declining longer-term demand

对于开展大型资本密集型天然气供应项目的投资者来说，一个关键的困境是如何协调近期内强劲增长的需求，以及长期不确定且可能下降的需求。

Signs of life for low-emissions fuels

低排放燃料抬头

Capacity additions of hydrogen electrolysis and CO₂ capture by announced start date, 2017-2026
电解氢和碳捕捉的产能增长（按照公布的开始日期），2017-2026年



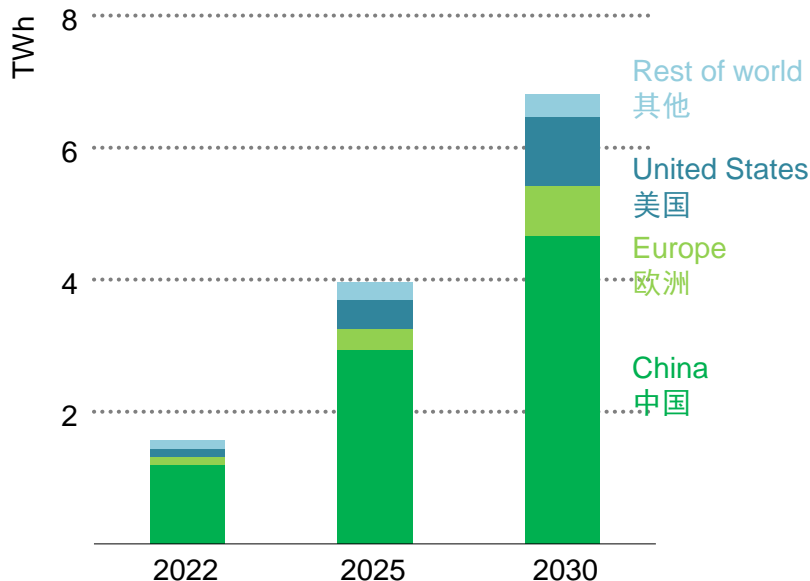
Strong policy signals and new support schemes have triggered a rapid expansion in the project pipelines for low-emissions hydrogen and CCUS

有力的政策信号和新的支持计划促进了低排放氢气与CCUS技术相关试点项目的快速扩张。

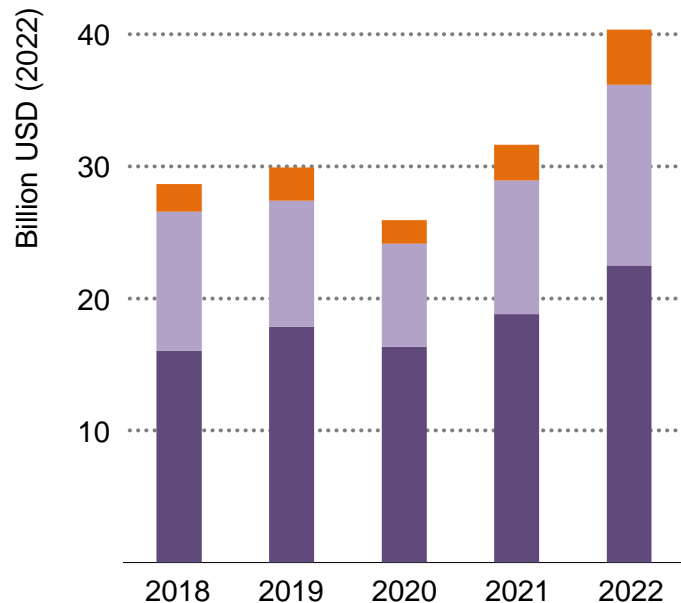
Can clean energy & critical mineral supplies expand in tandem?

清洁能源和关键矿产供应能否同步扩大？

Lithium-ion battery manufacturing capacity 锂离子电池制造产能



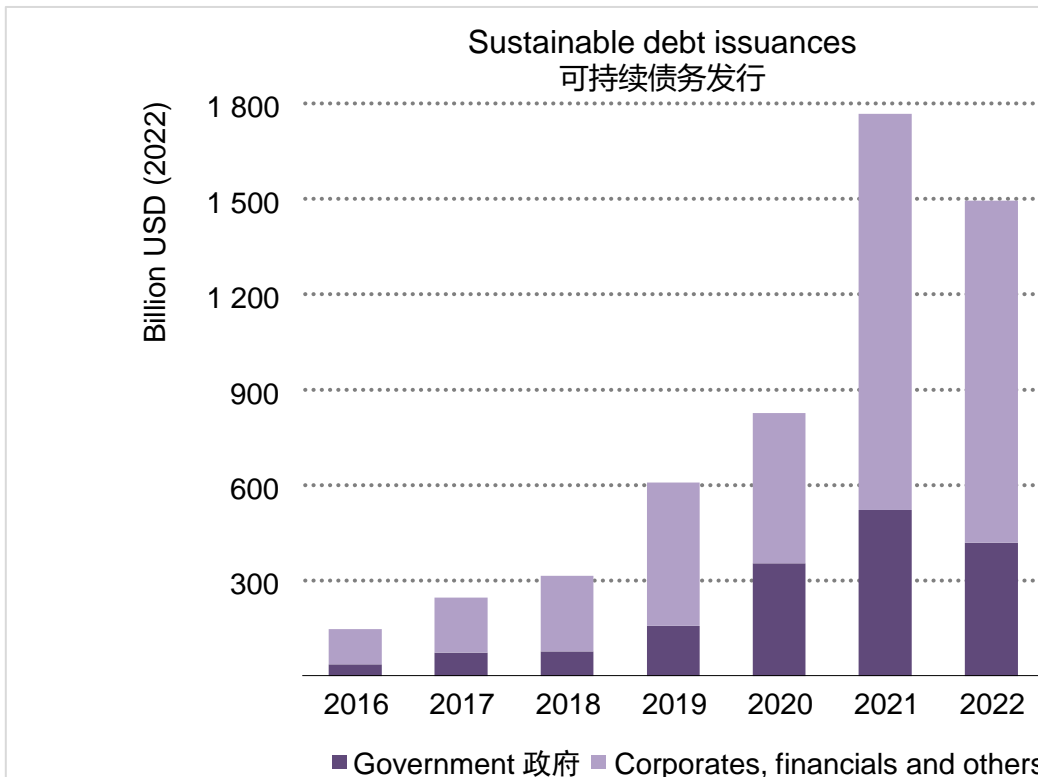
Capital expenditure by major mining companies in non-ferrous metals 主要矿业公司在有色金属的资本支出



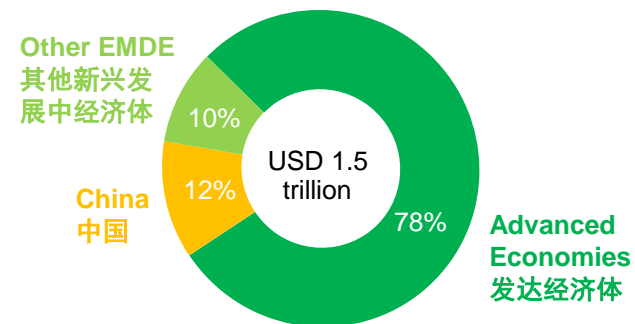
Competition for clean energy manufacturing is stepping up as countries and companies look to secure positions in major growth sectors; reliable, diverse supplies of critical minerals and metals are critical to smooth transitions
随着各国和企业寻求在主要增长领域占据一席之地，清洁能源制造业的竞争正在加剧；关键矿物和金属的可靠、多样化供应对于平稳过渡至关重要。

Can sustainable finance get to where it's needed most?

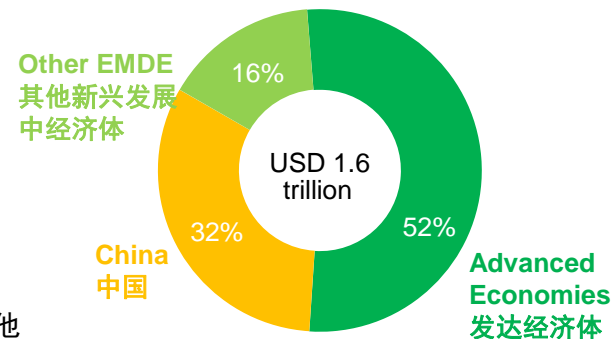
可持续金融是否足够有针对性？



Sustainable debt issuances
可持续债务发行情况 2022



Clean energy spending 清洁能源支出 2022



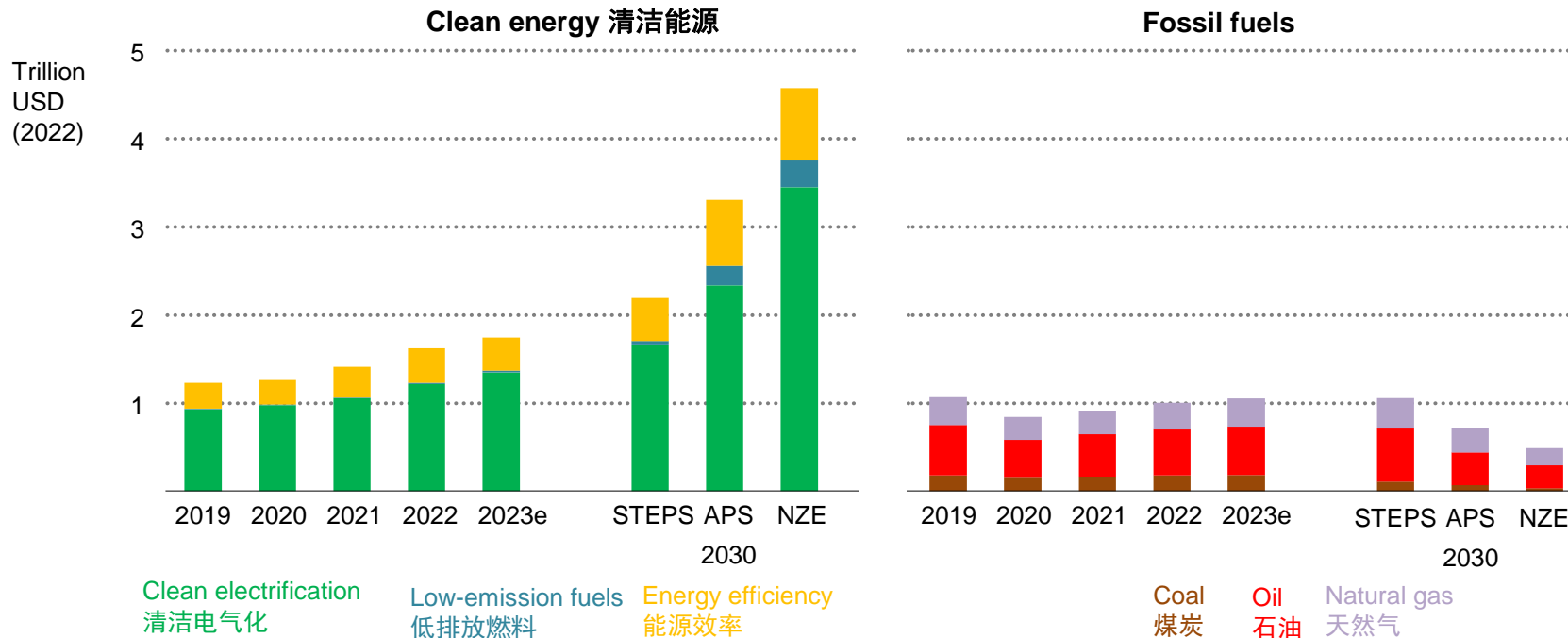
Sustainable finance has weathered the storm of the energy crisis, but big open questions remain on how to mobilise greater support for transitions in emissions-intensive sectors and in developing economies

可持续金融已经受住了能源危机的风暴，但如何动员更多金融资源，以推动排放密集型行业、发展中经济体的转型，仍然是一个重大问题。

Strong momentum, but a long way to go

势头强劲，但任重道远

Historical investment in energy benchmarked against needs in IEA scenarios in 2030 以IEA2030年情景需求为基准的历史能源投资



Scaling up clean investment, particularly in emerging and developing economies, is the key task for the sustainable and secure transformation of the energy sector
如何扩大清洁投资，尤其在新兴和发展中经济体中，是能源部门可持续、安全转型的关键任务。



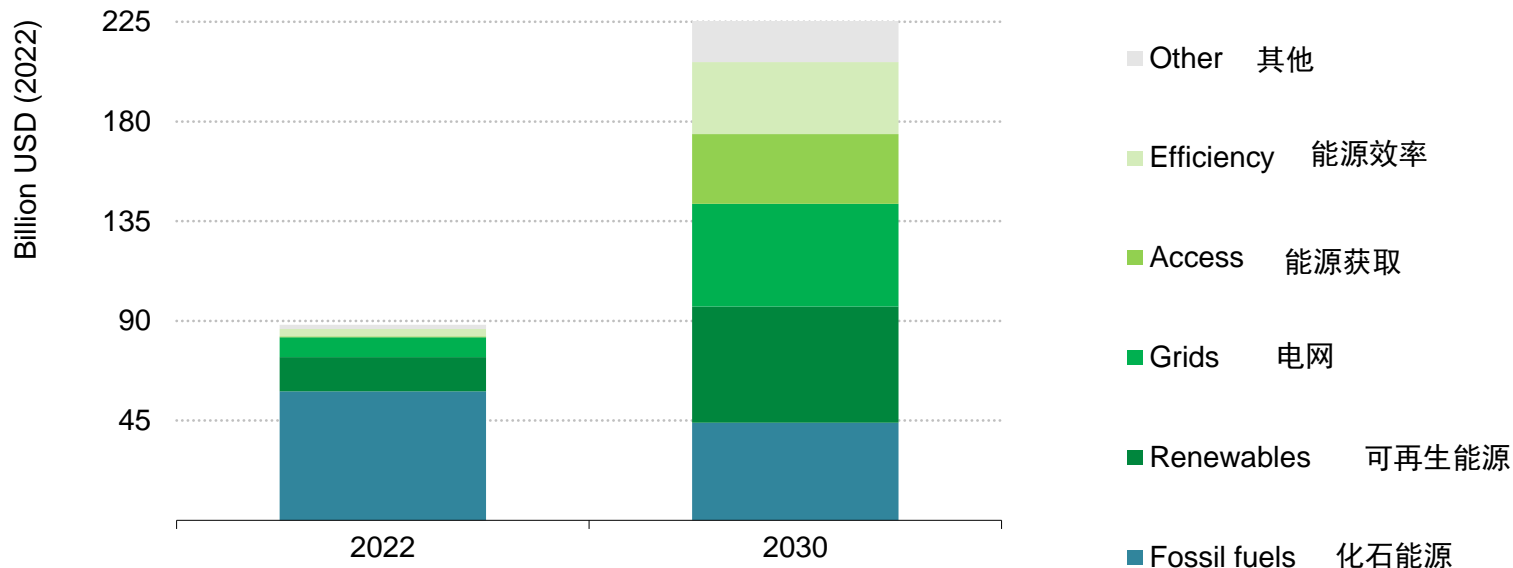
This new report, in collaboration with the AfDB, explores the investment needs for Africa to achieve universal energy access by 2030 and the NDCs in full and on time

在IEA与非洲开发银行合作的新报告中，探讨了非洲到2030年实现普遍能源获取，以及全面准时实现国家自主贡献的投资需求。

Unlocking Africa's clean energy potential

释放非洲清洁能源潜力

Energy investment in Africa, by scenario 2022-2030



Reaching the continent's sustainable development goals, including energy access and national climate targets, sees investment more than double from today's levels by 2030; all the growth comes from clean energy and infrastructure

为了实现非洲大陆的可持续发展目标，包括能源获取和国家气候目标，到2030年，投资将比当今水平增加一倍以上，所有的增长都将来自清洁能源和基础设施

iea