

同心协力零碳雄心：成员公司范围三减排实践

Together to Reduce GHG Emissions

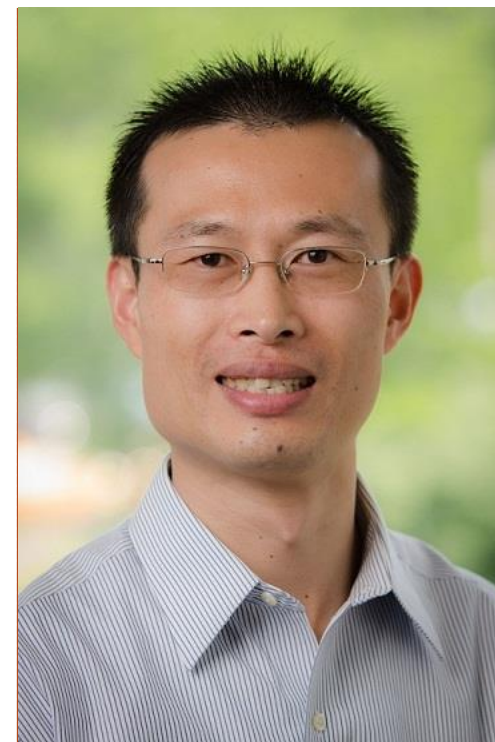
卢罡 | 亚太区安全健康环保及可持续发展总监 | 阿斯利康

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嘉宾介绍 Speaker Bio

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- 背景：本科毕业于上海大学工业工程专业，后陆续取得上海交通大学工业工程硕士及香港大学国际工商管理硕士学位。拥有26年跨国企业安全健康环保的管理经验，曾就职于通用汽车、英特尔、通用电气，担任相关管理职责，目前负责阿斯利康在亚太区所有生产工厂的安全健康环保及可持续发展的管理工作。



与我们的合作伙伴和供应商同心 协力，减少温室气体排放

Engaging with our partners &
suppliers to reduce greenhouse
gas emissions

引领可持续发展

Leading in Sustainability



着眼未来

居安思危

携手行动

**Taking action to
drive sustainability
is fundamental
– to build a healthy
future for **people,
society, and the
planet****



立足之本 - 现在和未来 The Licenses to Operate - Now & Future



The Bottom Line and Basics to Keep Business Running



A Higher Bar and The Differentiators to Enable Long Term Success –
The Potential Bottom Line and Basics in the future

立足之本 - 现在和未来 The Licenses to Operate - Now & Future

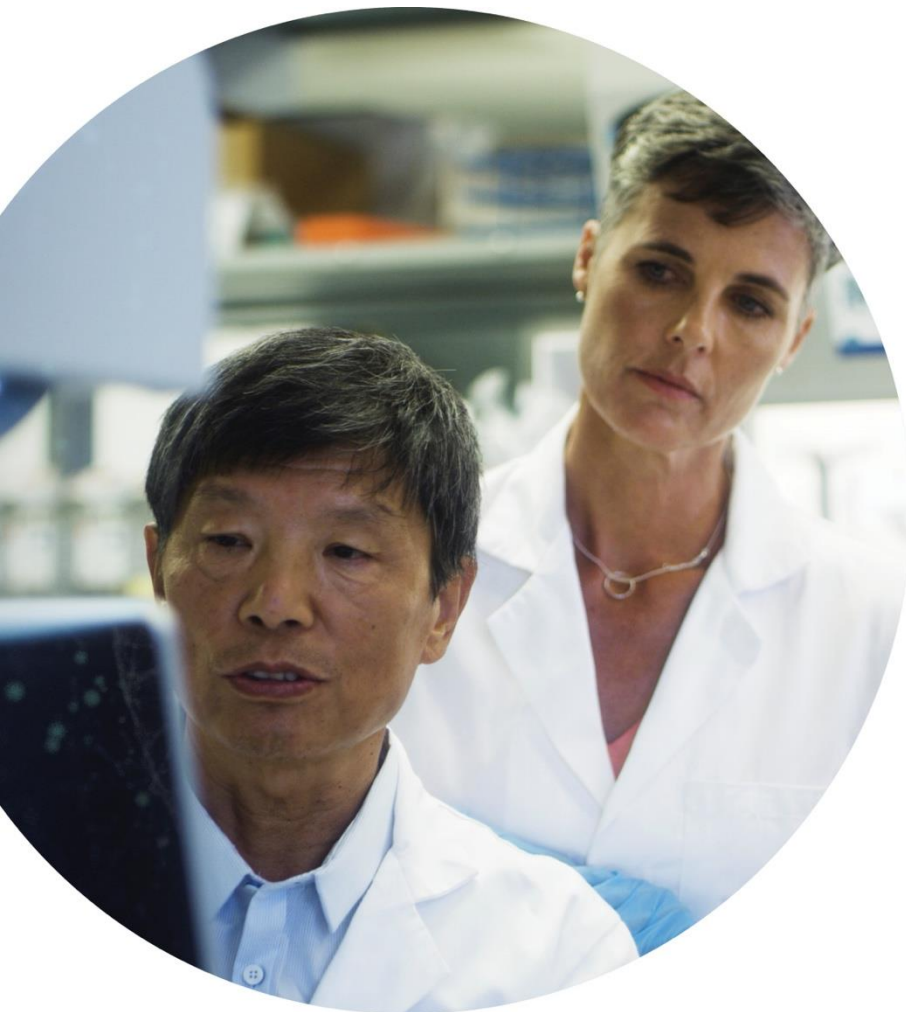


商业向善

价值为王

赢之有道

阿斯利康2022年度全球亮点 AstraZeneca 2022 global highlights



\$44.4bn

Total Revenue
(incl. COVID-19 medicines)
总营收

+25%

Total Revenue
growth
营收增长

\$9.8bn

invested in our
science
研发投入

179

projects in development
pipeline
项目梯队

59.3%

reduction in Scope
1 and 2 greenhouse
gas emissions
since 2015
碳减排

83,500

employees
员工总数

198

successful market
launches
产品上市

+44m

people reached
through our Access
to Healthcare
programmes
医疗保障

34

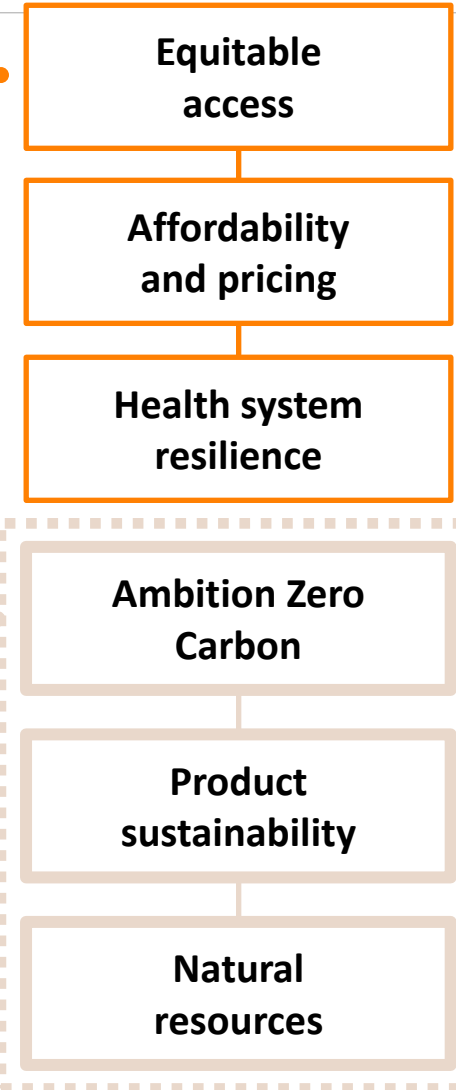
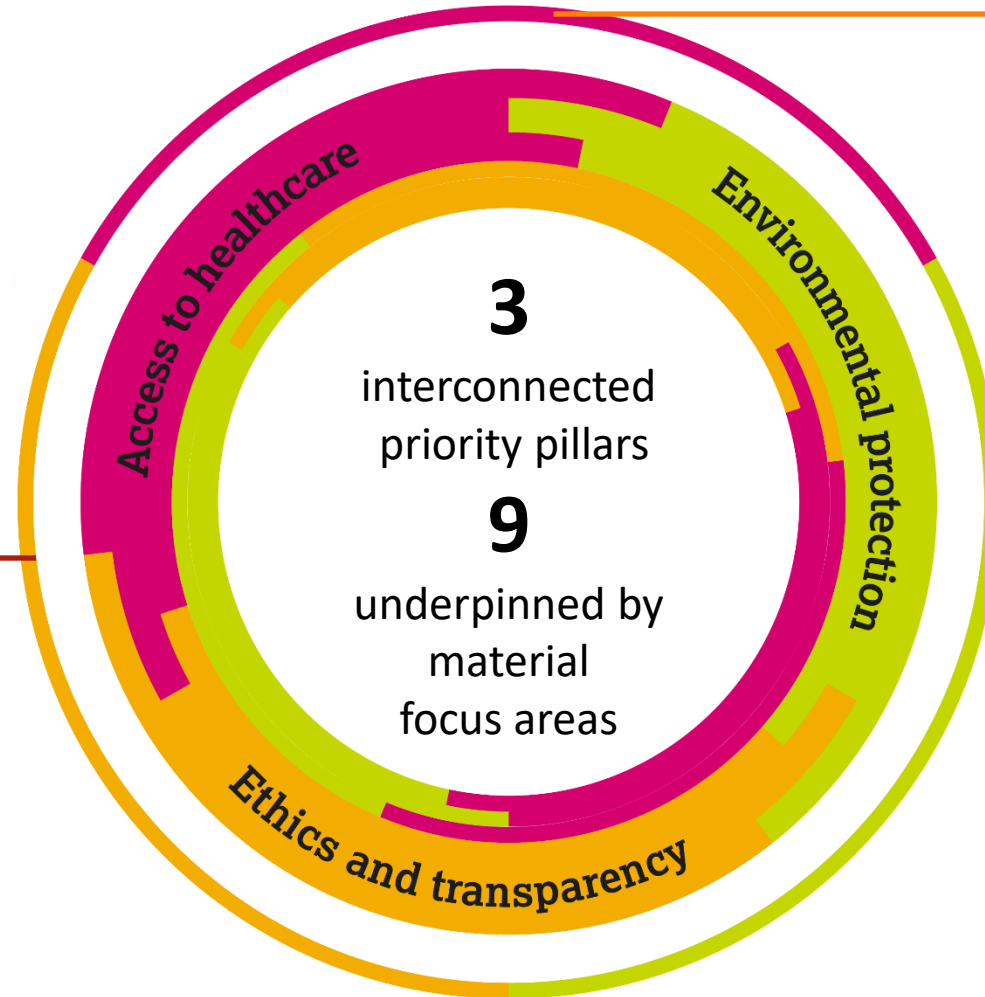
regulatory approvals
and authorisations
in major markets
市场准入

我们可持续发展中相互关联的核心领域和重点聚焦

Our interconnected pillars and focus areas



The results of our 2021 **materiality assessment** identified the issues that matter most to AstraZeneca and our stakeholders, and **showed where we can have a positive impact.**



基于科学的零碳雄心

Ambition Zero Carbon

Ambitious science-based decarbonization strategy, accelerating our progress **towards net zero with long term, published goals**

From 2026, we will have reduced our Scope 1 and 2 GHG emissions by 98%, by:

- **RE 100** Using 100% renewable energy for heat and power
- **EV 100** Maximising transition to an electric vehicle fleet
- **EP 100** Doubling energy productivity
- **Reducing and capturing** F-gas emissions at our sites

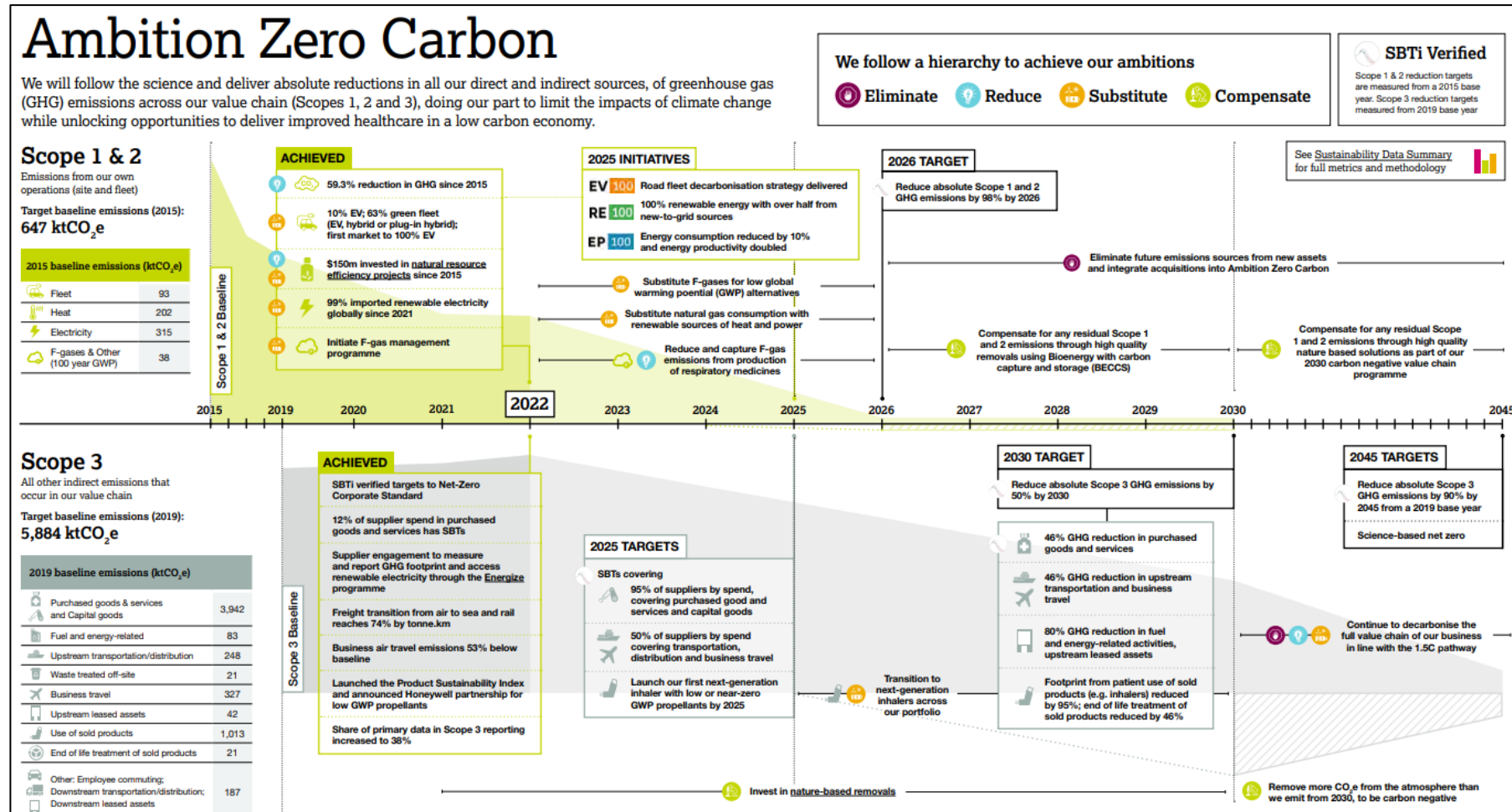
By 2030, we aim to halve our entire value chain footprint –Scope 3 – on the way to becoming science-based net zero by 2045 at the latest, by:

- 95% of key suppliers and partners having science-based targets by the end of 2025
- Transitioning to next-generation respiratory products with low or near-zero climate impact propellants
- ‘Designing in’ sustainability across product lifecycles and embedding net zero into cost of goods



净零碳排放之路的公开透明报告 – 零碳路线图

Transparent reporting on progress towards Net Zero



AstraZeneca Sustainability Report 2022 https://www.astrazeneca.com/content/dam/az/Sustainability/2023/pdf/Sustainability_Report_2022.pdf

我们的期望

AstraZeneca's Supplier Expectations for sustainability engagement



Contract Terms

合同条款



**Inclusion &
Supplier Diversity**

包容性和多元性



EcoVadis

ESG

企业社会责任评级



SBTi

Climate Action

科学碳目标

气候行动



CDP

Carbon disclosure

碳排放披露

不断提升的外部要求

Requirements are changing, underpinning our goals

- Growing requirements for **transparency & traceability up the supply chain Tier 2+**
- E.g. human rights, deforestation, carbon emissions transparency



EU Corporate Sustainability
Due Diligence Directive



Supply Chain Due
Diligence Act



Climate Corporate
Accountability Act



Net Zero Supplier Roadmap



EU Deforestation-free
products Regulation



Federal Supplier Climate Risks
and Resilience Rule



Transparency Act



Climate focussed, circular
supply chains

可持续市场倡议 & 制药业供应链倡议

SMI Health Systems Task Force common standards & PSCI decarbonisation model give direction & learning support for suppliers



Sustainable Markets Initiative



SMI Whitepaper: <https://a.storyblok.com/f/109506/x/c8d17852a1/smi-hstf-supply-chains-whitepaper.pdf>

PSCI Decarbonisation Maturity Model: <https://pscinitiative.org/downloadResourceFile?resource=1845>

可持续市场倡议

Sustainable Markets Initiative (SMI)



Sustainable Markets Initiative

For Nature, People & Planet

- The **SMI Health Systems Taskforce** (TF) was launched at COP26 in Glasgow, at the request of His Majesty King Charles III and is championed by AstraZeneca CEO, Pascal Soriot.
- The TF brings together CEOs or equivalents from global biopharma companies, healthcare organisations, multilateral and policy institutions and academia.
- Collectively, the group aims to accelerate the delivery of net zero, patient-centric healthcare.

SMI China Council is being established with support of President Xi and His Majesty King Charles III.

This will include CEOs of Chinese companies (mainly SOEs) cross-sector with the aim to collaborate with the SMI global TFs to:

- ✓ Accelerate solutions to decarbonize supply chains
- ✓ Promote and scale cooperation
- ✓ Deliver tangible actions to transition to a sustainable future

Opportunity to collaborate and accelerate planned pilots/initiatives in China
(e.g., clean power-purchase agreement, clean heat pilots, digital health)

 中国国际贸易促进委员会
CHINA COUNCIL FOR THE PROMOTION OF INTERNATIONAL TRADE

 中国国际商会
China Chamber of International Commerce

SMI China Council

Including Energy Transition Taskforce, CCUS¹
Taskforce, Health Systems Taskforce

SMI China Council Secretariat

SMI China Healthcare Taskforce
Co-chairs:

AstraZeneca 

 华润医药商业
CR PHARMA COMM

可持续采购 一个转变的过程

Sustainable Sourcing – a change process



Saving our planet is now a communications challenge. We know what to do, we just need to act

Sir David Attenborough

让我们一起行动起来 – 共同协作的机会

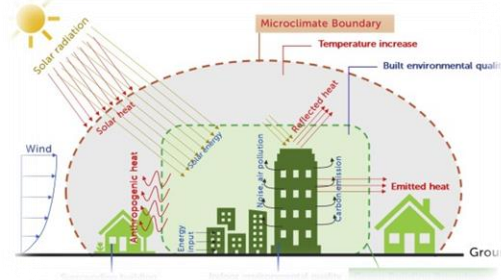
Actions to Start – opportunities for collaborations

Clean Electricity 绿色电力



- **PPA** - Mid-to-Long Term Framework Agreement

Clean Heat 绿色热能



- Heat Pumps
- Electrification
- **Renewable Natural Gas** (Bio Methane)

Green Refrigerant 绿色制冷剂



- **Low GWP** Refrigerant
- Leakage Detection System
- Capture & Recycle Equipment

Green Cleaning Agent 绿色消毒清洗剂



- **Alternative Agent** Vs. Solvent such as Ethanol



Green Treasure Hunt 绿色寻宝活动 – 能源、水、废弃物审计

通过共同努力来推动转变 – 全球协作的机会

Embedding change through collaboration & initiatives

Activate Program



Founding Members

AstraZeneca | Bristol Myers Squibb | GSK | Johnson & Johnson | Pfizer

Welcome to

Energize

A Program to Increase Access to Renewable Energy for Pharmaceutical Supply Chains

Powered by Schneider Electric's NEO Network™

Sponsored by:

AMGEN AstraZeneca Biogen Boehringer Ingelheim Bristol Myers Squibb Chiesi GSK Johnson & Johnson MERCK NOVARTIS

novo nordisk Pfizer Roche sanofi Takeda teva ucb

我们的期望 – 行动起来

Our message to AstraZeneca's partners & suppliers – take action now

1. define your materiality – what aspects of sustainability should you be focussing on (明确重点)
2. set a strategy to address those aspects (制定策略)
3. make a company commitment and make it public (公开承诺)
4. mobilise all your employees for action (全体动员)
5. engage all of your suppliers – Tier 1, then beyond (供应商推动)
6. deliver against the goals for sustainable business growth (用达标来助力可持续发展的业务发展)



Sourcing Green Power in China Opportunity to join SMI¹ Power Purchase Agreement project led by AstraZeneca

加入可持续发展倡议行动项目 – 在中国共同采购绿色电力

应对挑战 – 可持续发展倡议健康系统工作组 中国绿色电力采购项目

The SMI Health Systems Task Force has launched a green PPA project in China to tackle the renewable electricity sourcing challenge.

Why is it important?



Healthcare GHG emissions
coming from electricity,
with Asia being a key region for
pharma manufacturing (30-60%)

Green Power initiative enables access (for suppliers) to
green power through PPAs in India and China

- Opportunity to collaborate on Power Purchase Agreements (PPAs) to grow supply of renewable energy
共同协作、推动增长
- Supporting suppliers in meeting SMI joint, minimum supplier standard of committing to min. 80% renewable energy by '30
助力企业、满足要求
- Given regulatory pressures and increasing demand for RE, there is urgency to act now to secure steady supply at better prices
稳定供应、合理定价

在中国获取绿色电力的途径

Several options exist to unlock access to renewable power in China



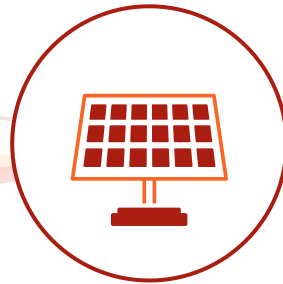
Green electricity certificate (GEC) 绿电证书

- An e-certificate with a unique code ID issued by govt., including national green certificate and i-REC and TIGRs (internationally used)



Direct Investment 直接投资

- Corporates invest in RE power generation directly or through third parties; have partial ownership of the installations



Distributed installation 分布式绿电设施

- Corporates generate power with onsite distributed PV or wind power installations for self-consumption or export to the grid



Power purchase agreement (PPA) 绿电购买协议

- Licensed power generators directly sign PPAs with corporates through the power trading center
- Quickly developing since 2021

Focus for today



Distributed power trading (DPT) 分布式绿电交易

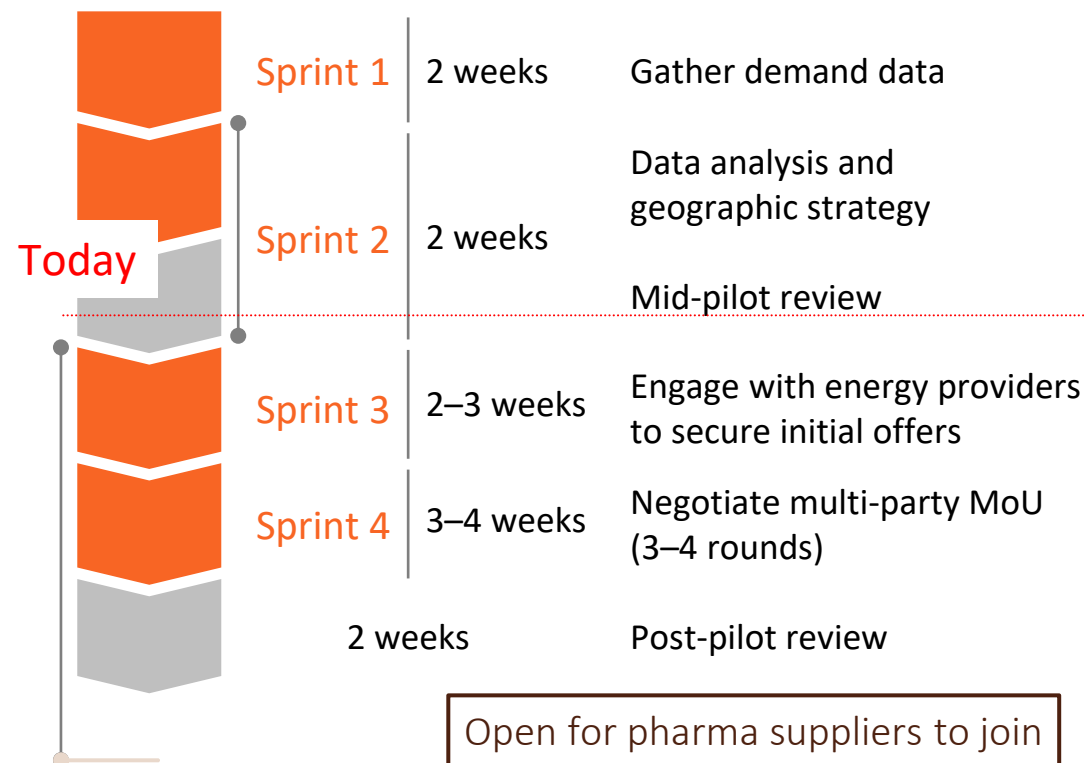
- Corporates buy power from neighboring distributed generation systems via distribution grids
- Still in pilot

绿色电力集中采购项目

Green PPA project | AstraZeneca leading the effort, started with 4 pharma companies and 1 pharma supplier—open for others to join

- AstraZeneca is leading an effort to sign renewable energy Power Purchase Agreements in China – through a multi-party framework agreement, open for pharma suppliers to join
多方框架，开放参与
- This collaboration will drive benefits for all joined companies/suppliers, and there's real benefits in joining now rather than later as prices of PPAs may see an increase (See next page)
立即参与、及早获益

Approach consist of 4 sprints – now open for other pharma suppliers and companies to join sprints 3+4
四程接力项目模式



Call for action | Why join the PPA initiative now?

时不我待，立即行动

Pharma suppliers should consider joining the
PPA efforts now as ...



Many of you have an ambitious target for renewable electricity by '25/'30 – joining now means you are one step closer to have RE in China by '24



Supply of RE is already tight and sourcing complex, with supply expected to become increasingly constrained through legislation driving green demand



In China, prices of green PPAs may see an increase from '24 onwards – driven by rise of demand likely outpacing supply ramp-up



Acting before demand ramps up and fills top tier developers' pipelines may help secure better prices via a discount vs. market if able to secure a longer-term strategic framework agreement with providers



RE can offset (partial) impact of an increasing 'carbon price' (e.g., through CBAM, ETS) – reducing the cost gap between RE and grid electricity



Earlier engagement of RE developers means building relationships readying for meeting targets

中国绿电市场处于发展初期 – 政策多变、前景光明

China's green electricity market remains at their infancy – regulatory outlook extremely dynamic, but expected to improve

Status quo

Conditional recognition of Green Electricity Certificates (GEC) by RE100



Fragmented market rules



Limited inter-provincial electricity trade



Spot market integration



Outlook



- Latest policy (08/'23) reinforces GEC's uniqueness and traceability of environmental attributes
- Government is also working towards accelerating unconditional recognition of GEC by global standards



- NDRC¹ has accelerated power market reform since Q2/'21
- Approved work plan of green power trading pilot in 09/'21
- Announced Guidance on Accelerating the Development of a Uniformed National Power Market in 01/'22



- Policy announced to orderly promote inter-provincial power trading in 01/'22
- Updated policy by Beijing Power Exchange Center in 08/'23 clarifying process for interprovincial green power trading²



- 14 provinces currently in pilot
- Most provinces expected to have spot market by 2030

**We are looking for
more suppliers to
get involved**

**期待更多的供应商加
入我们的项目**

- We are looking for pharma suppliers to expand the group and build momentum
- We believe that together we can achieve better economics and lead the decarbonization effort more effectively
- If you are interested please reach out to gary.lu@astrazeneca.com and Lu.Jingwen@bcg.com, and we will gladly provide you with more details

Questions welcomed

Science can

Build a sustainable future for
people, society and the planet



Appendix

中国绿电的供需矛盾会增加绿电采购的难度

Shortage of RE supply in relation to potential RE demand will increase the difficulty of buying green electricity in the market

Projected renewable energy (RE) demand and supply balance outlook in China, 2025E-2035E, TWh/%

