

The background of the slide is a black and white photograph of a modern building's glass and steel facade, viewed from a low angle looking up. A large, semi-transparent blue and teal rectangular graphic is overlaid on the left side of the image.

全球壁挂炉市场发展趋势分享

Global WHB Market Development Analysis

初琦 (Chris) , 副总经理, 高级顾问
英国建筑服务研究与信息协会 (BSRIA) 亚太区
佰世越管理咨询 (北京) 有限公司
2022年3月

Contents



全球能源政策解读
Global energy policy



全球供热市场概况
Global heating market overview



欧洲壁挂炉系统应用趋势
Europe WHB system trend



壁挂炉产品技术方向
WHB technology trend



/ 01

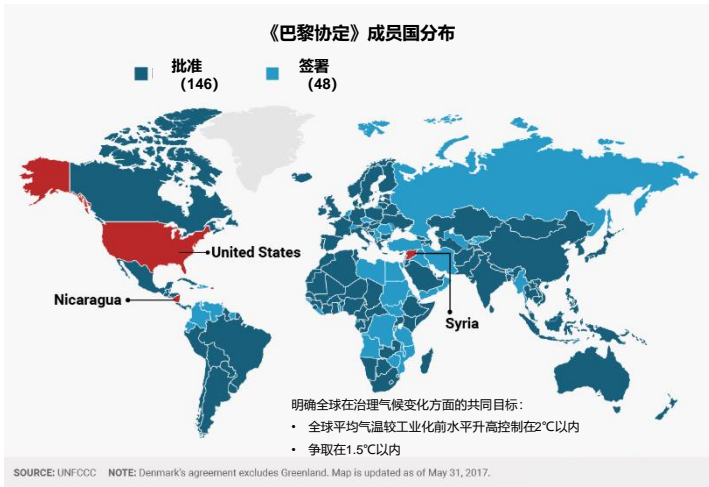
全球能源政策解读

Global energy policy



全球气候治理方向：严格限制碳排放量，推动能源转型！

Global climate governance: carbon emissions and energy transformation



1992年《联合国气候变化框架公约》



Empowered lives.
Resilient nations.



United Nations
Framework Convention on
Climate Change

1997年《京都议定书》



2005年《巴黎协定》



各地区减排目标

Regional carbon emission targets



第26届联合国气候变化大会
(COP 26)



2050年实现碳中和



2050年实现碳中和
2030年减排55%



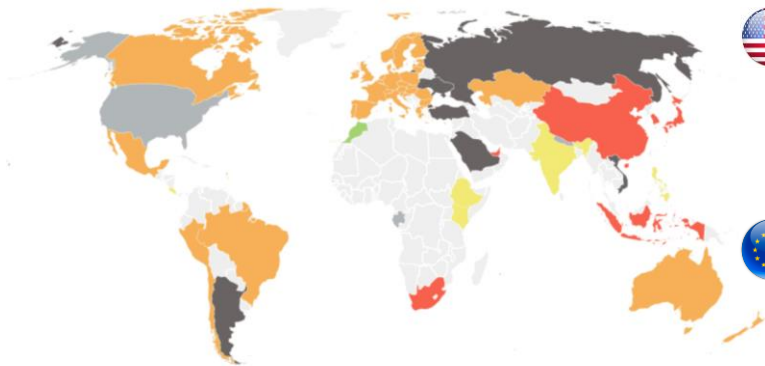
2060年实现碳中和

COP26会议主席：“目前我们将全球变暖幅度控制在1.5摄氏度以内，但是否可以继续保持将取决于未来能否信守承诺以及在应对气候变化问题上的行动力”

“We can now say with credibility that we have kept 1.5 degrees alive. But its pulse is weak and it will only survive if we keep our promises and translate commitments into rapid action ...” Alok Sharma, COP26 President

各地区减排工作路径

Regional carbon emission paths



The maps displayed are for reference only.



“超过三分之一的美国人口目前正经历着高于平均水平的快速升温，499个县的升温水平已经超过1.5摄氏度”

“More than a third of the American population is currently experiencing rapid, above-average rates of temperature increase, with 499 counties already breaching 1.5°C (2.7°F) of heating” The Guardian, Sun 6 Feb 2022



风电、太阳能等可再生能源供应不稳定；欧洲现阶段严重依赖天然气；欧洲天然气产量减少，俄罗斯供气也在减少；严重供需失衡

The supply of renewable energy such as wind power and solar energy is unstable; Europe is now heavily dependent on natural gas; Europe is producing less gas, and So is Russia; Severe imbalance between supply and demand



重要的过渡能源：天然气

Natural gas as transition energy



欧盟计划将天然气和核能视为绿色能源

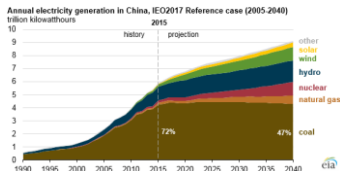
将核能和天然气项目纳入“绿色”投资目录草案，目的是将私营投资引入到实现碳中和目标所需要的各种行动中。认可将天然气作为向可再生能源转换的过渡能源；缓解政府财政压力

EU plans to label gas and nuclear energy as “green” (EU taxonomy: specification of criteria for investment), which means funding to go towards nuclear and gas projects ...

More funds



Less green



New, 14th 5-year plan 2021-2025

提升天然气消费占比



- 十四五规划，明确提升天然气占比
- 天然气是最低碳、清洁的化石能源
- 未来几年，燃气壁挂炉仍然会受到青睐
- 没有明确的冷凝政策；更严格的排放标准

更切合实际的发展路线

/ 02

全球供热市场分析

Global heating market overview



2021年全球暖通市场概况

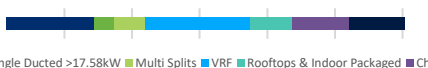
World HVAC market by industry - 2021

家用空调
(550亿欧元)



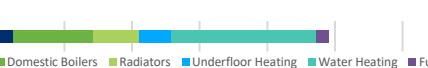
15%

商用空调
(650亿欧元)



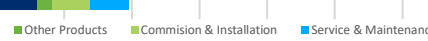
17%

传统供热
(410亿欧元)



8%

楼宇自控
(85亿欧元)



4%

可再生能源供热
(160亿欧元)



13%

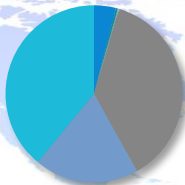
- 空调：原材料上涨、高能效产品升级
- AC markets bounced back-up in double digit growth in residential and commercial markets; raw material prices rising; high efficiency product upgrading
- 楼宇自控：写字楼、酒店行业复苏缓慢
- Higher spec products and rising ASP were recorded across the globe; offices & hotels recovery slowly
- 供热：疫情后供热市场复苏
- Traditional heating markets recovering but uncertainty due to some bans and incentives to switch to renewables; market recovery after the COVID-19

0 10,000 20,000 30,000 40,000 50,000 60,000 70,000

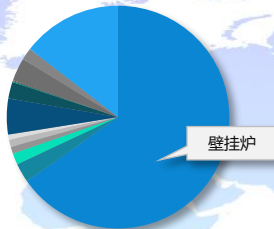
2021年全球住宅供热市场

World Residential Heating Markets, vol by region, 2021

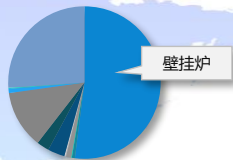
北美
N America
(9 m units)



欧洲
Europe
(11 m units)



中国
China
(6 m units)



- 家用燃气锅炉 Gas DB
- 生物质 Biomass
- 家庭商用锅炉 Residential CB
- 分体式空气源 Air to water - split systems
- 热回收热泵 Air to water combined with heat recovery
- 热接口单元 Heat Interface Units
- 固定式电热 Fixed Electric

- 家用燃油锅炉 Oil DB
- 电热 Electric
- 水地源热泵 Ground/ water to water
- 一体式空气源 Air to water - monobloc systems
- 混合热泵 Hybrid heat pump
- 冷暖空调 Air-to-air heat pumps
- 暖气片 Furnaces

/ 03

欧洲壁挂炉系统应用趋势

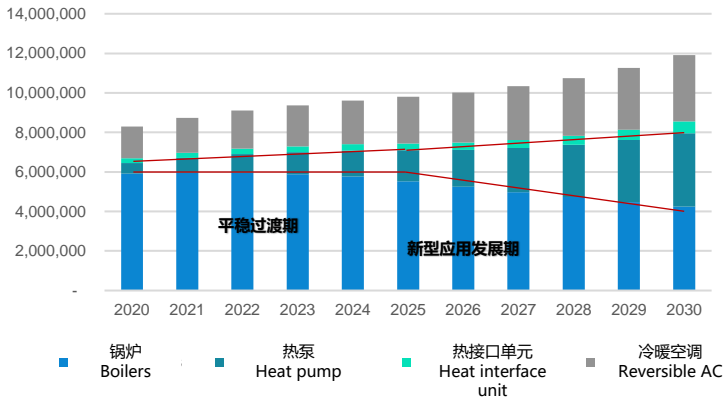
Europe WHB system trend



欧洲住宅供热系统应用趋势 - 2030

Europe heating system trend - 2030

2020-2030年欧洲住宅供热市场发展趋势 (法国、德国、意大利、荷兰、英国)
Market evolution in the progressive scenario 2020 – 2030, by volume, FR, DE, IT, NL, UK



壁挂炉系统应用方向:

- 1) 天然气管道掺20%氢; 英国推广掺氢技术, 相当于减少250万辆汽车排放; 不降低天然气管道安全性, 不需要更换现有燃气设备。
- 2) 氢能源锅炉; BDR在荷兰建成试点项目; 制氢和储运成本高。
- 3) 混合能源系统; 热泵在高寒地区能效低; 可用燃气锅炉作为热泵备份

/ 04

壁挂炉产品技术方向

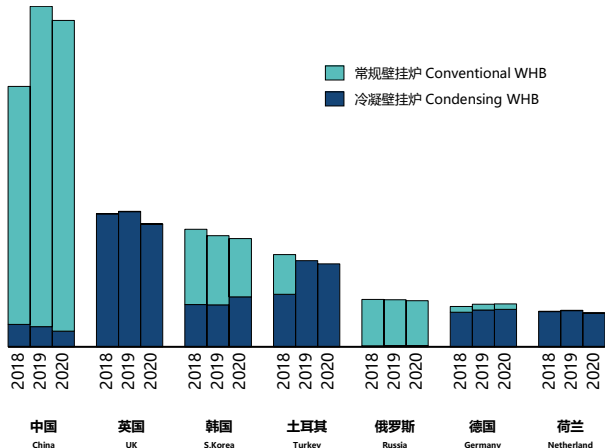
WHB technology trend



壁挂炉技术方向：冷凝

WHB technology trend - condensing

全球主要国家壁挂炉市场发展趋势
WHB market trend in major countries in the world



冷凝产品价格高，需要政策助推



政策介入较早，市场全部采用冷凝壁挂炉



受经济、房地产、疫情影响，市场下滑



2019年开始禁止非冷凝产品



没有价格补贴，低价产品为主



对冷凝产品进行补贴；强制置换达到一定年限的非冷凝锅炉；对混合能源系统进行补贴。



禁止使用非冷凝炉



冷凝占比低；除北京外，缺乏政策支持；未来需要政策助推

展望2030年之后... Beyond 2030 ...

Not on track to deliver



- 政府应对气候变化和能源转型的态度
The government's approach to climate change and the energy transition
 - 负责任的减排解决方案
CO2 emission reduction solutions
 - 更多的补贴
More subsidies
- 利益团体的博弈
Competition between relevant parties

谢谢观看!
Thank you!



初琦
副总经理
高级顾问

Chris Chu
Deputy General Manager
Senior Consultant

英国建筑服务研究与信息协会(BSRIA)亚太区总部
佰世越管理咨询(北京)有限公司

地址:北京市朝阳区东四环中路60号远洋国际中心C座905 邮编100025
905, Tower C, Ocean Int'l. Centre, No.60 East 4th Ring Middle Road, Chaoyang District, Beijing, P.R.
China 100025
T: +86 (0)10 6465 7707 ext.209 | F: +86 (0)10 6465 7717
M: +86 (0)137 01373860 | E: chris.chu@bsria.com.cn | W: www.bsria.com.cn



企业公众号



个人微信