

# 全球港航业脱碳转型-马士基观点分享

## Decarbonising the global Shipping and Port industry - Maersk Perspective



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The 7<sup>th</sup> Maritime Silk Road Port International Cooperation Forum, Ningbo



采取措施应对气候变化刻不容缓，全球航运物流业任重道远

The science is clear: We are in a climate emergency and global logistics is part of the problem

35亿吨

全球物流业每年排放CO<sub>2</sub> 排放

3%

国际航运CO<sub>2</sub> 排放占全球排放百分比

3400 万吨

马士基集团范围一业务运营的CO<sub>2</sub>直接排放量

1000+万吨

马士基集团每年消耗燃油量

3.5 bn tons

of CO<sub>2</sub> emissions emitted from global logistics every year

3%

of global CO<sub>2</sub> emissions emitted from international shipping

34 mio tons

of CO<sub>2</sub> directly emitted from A.P. Moller-Maersk operations (scope 1)

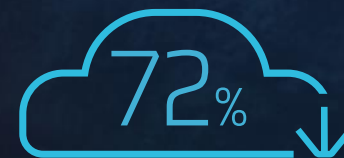
10+ mio tons

of fuel oil consumed each year by the A.P. Moller-Maersk fleet

# 制定零碳方针

## Setting a course for zero carbon by 2040

为了发展、繁荣与增长，我们的行为必须与气候行动相结合  
For us all to thrive, prosperity and growth must be coupled with climate action.



2030年比2008年CO<sub>2</sub>排放减少  
Relative reduction in CO<sub>2</sub>

物流脱碳承诺  
*A pledge to decarbonise logistics*

2030 Net-zero CO<sub>2</sub> Vessels



2040 Net-zero CO<sub>2</sub> Operations



# 马士基实现2040年净零排放路线图

## Maersk's Roadmap to deliver Net Zero by 2040



2030年:在全供应链范围内为客户提供行业领先的绿色解决方案  
2030: Industry-leading green customer offerings across the supply chain



2030年: 与基于科学的目标倡议全球温控上升低于1.5摄氏度保持一致  
2030: Aligned with Science Based Targets (SBTi) initiative 1.5-degree pathway



2040年:整体业务实现净零排放, 并为客户提供100%的绿色解决方案  
2040: Net zero across our business and 100% green solutions to customers

- 海运: 至少25%的货物运输使用绿色燃料  
Ocean: Min. 25% of cargo transported with green fuels.
- 空运: 至少30%的货物运输使用可持续航空燃油  
Air: Min. 30% of cargo transported with Sustainable Aviation Fuels.
- 合同物流及冷链: 至少90%业务提供绿色运营 (排放范围一和二)  
Contract logistics and cold chain: Min. 90% green operations (scope 1 and 2).
- 内陆运输: 最少20%的客户货物运输使用可再生电力和/或绿色燃料  
Inland transportation: Min 20% of customer cargo moves on renewable electricity and/or green fuels.

- 海运: 运营碳强度降低50% (与2020年相比)  
Ocean ~50% reduction in emission intensity (2020 baseline).
- 码头: 范围一和二排放量减少70% (与2020年相比)  
Terminals ~70% absolute reduction of scope 1 and 2 emissions (2020 baseline).
- 在上述方案之外, 2030年前实现每年减少500万吨温室气体排放  
Natural Climate Solutions used above and beyond 1.5-degree target to sequester at least 5 million tonnes of GHG per year by 2030

- 为客户提供100%的绿色解决方案  
100% green solutions to our customers.
- 全范围和全业务实现碳中和  
Net zero greenhouse gas emission across all scopes and businesses.
- 以全球温控1.5摄氏度为基本指导, 按SBTi及碳中和的相关要求, 碳排放当量与2020年相比至少降低90%。  
Aligned with the Net Zero criteria of the Science Based Targets initiative and a pathway to limit global warming to 1.5 degree resulting in emissions reductions of at least 90% from 2020 levels.

我们的**客户承诺**按时将其供应链脱碳

Our **customer commitment** to decarbonise their supply chains in time and...



.....**对社会承诺** 在未来十年采取行动并推动影响

...a **societal commitment** to act and drive impact in this decade



# 海运业务脱碳两大核心

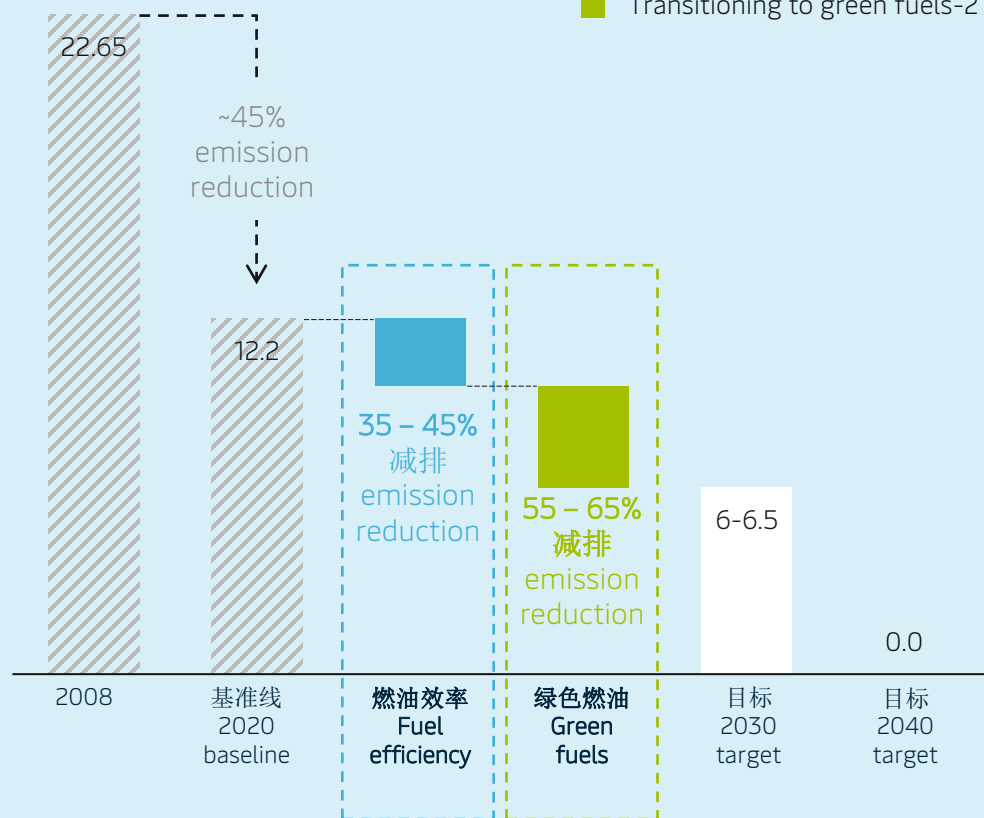
There will be two core levers to decarbonize our Ocean Segment

1 – 提升燃油效率 fuel efficiency improvements

2 – 绿色燃油转型 transitioning to green fuels

船舶能效运营指数  
EEOI: gCO<sub>2</sub>e/ton\*nm

■ Fuel efficiency improvements  
■ Transitioning to green fuels-2



## 核心一 提升燃油效率

### Level 1 Fuel efficiency improvement

- 优化网络 Network optimization
- 网络执行力 Network execution
- 技术管理 Technical management

通过稳定可靠的网络提高燃油效率, 助力实现客户承诺

Fuel efficiency levers enable other customer promises through a stable and reliable network

## 核心二 绿色燃油转型

### Level 2 Transitioning to green fuels

- 计划新造船舶都是绿色船舶  
Transitioning to green vessels through our current newbuilding plan
- 改造现有船舶使其从石化燃料改为使用绿色燃料  
Retrofit select existing vessels from fossil to green fuels
- 扩大使用生物柴油或其他可立即使用的生物燃油  
Expand usage of biodiesel or other drop-in biofuels
- 碳中和船舶租赁  
Introduce chartered carbon neutral vessels
- 我们认为绿色甲醇与生物柴油相结合是本世纪二十年代唯一确定且可规模化的技术方案并产生重大影响

We see green methanol in combination with biodiesel as the only certain and scalable pathway towards significant impact this decade

# 马士基在脱碳进程中取得了切实进展

## Maersk has made a tangible progress on its decarbonization journey

### 全球首艘绿色甲醇为燃料的集装箱船舶

#### The world's first green methanol vessels



- 马士基首艘2100标箱低碳船舶于2023投入使用-比此前预计时间提前7年  
Maersk's first low carbon vessel with 2100 TEU operational in 2023 - seven years ahead of its initial ambition.
- 24艘以绿色低碳甲醇为燃料的双燃料远洋船舶将于2024-2027年投入运营,  
24 ocean going dual fuel vessels sailing on low carbon methanol will be operational during 2024-27
- 所有马士基新建船舶都将使用绿色低碳燃油  
All future Maersk-owned new vessels will be able to sail on low carbon fuels
- 与10家企业签署合作意向-3家来自中国  
Entered ten green methanol partnerships - 3 from China
- 在码头方面, APMT 正在实施电动设备并实现码头自动化, 以减少碳足迹  
On the terminal side, APMT is piloting electric equipment and is automating its terminals to reduce its carbon footprint

# 码头公司的脱碳措施

## The efforts for decarbonizing our terminals



减少  
Reduce

码头设备设施的燃油和电力消耗  
Fuel and electricity consumption of  
equipment and facilities at the terminals



替代  
Replace

石化燃油驱动的设备电气化  
Equipment run on fossil fuel with electrified  
alternatives



脱碳  
Decarbonise  
(能源供应 energy supply)

改用绿色电力、屋顶太阳能板等可再生能源和使用绿色燃料  
By switching to green electricity, on-site renewables such as  
rooftop solar panels and using green fuels

实现绿色发展需要整个产业链的合作和联合创新: 一荣俱荣, 一损俱损  
A mega trend like this calls for radical cooperation and joint innovation  
across the industry – either all of us win, or all of us lose



Thank you  
谢谢

Kay Geithner, Managing Director,  
APM Terminals Crane and Engineering Service  
凯歌, 马士基码头港口机械和工程服务公司 总裁

