



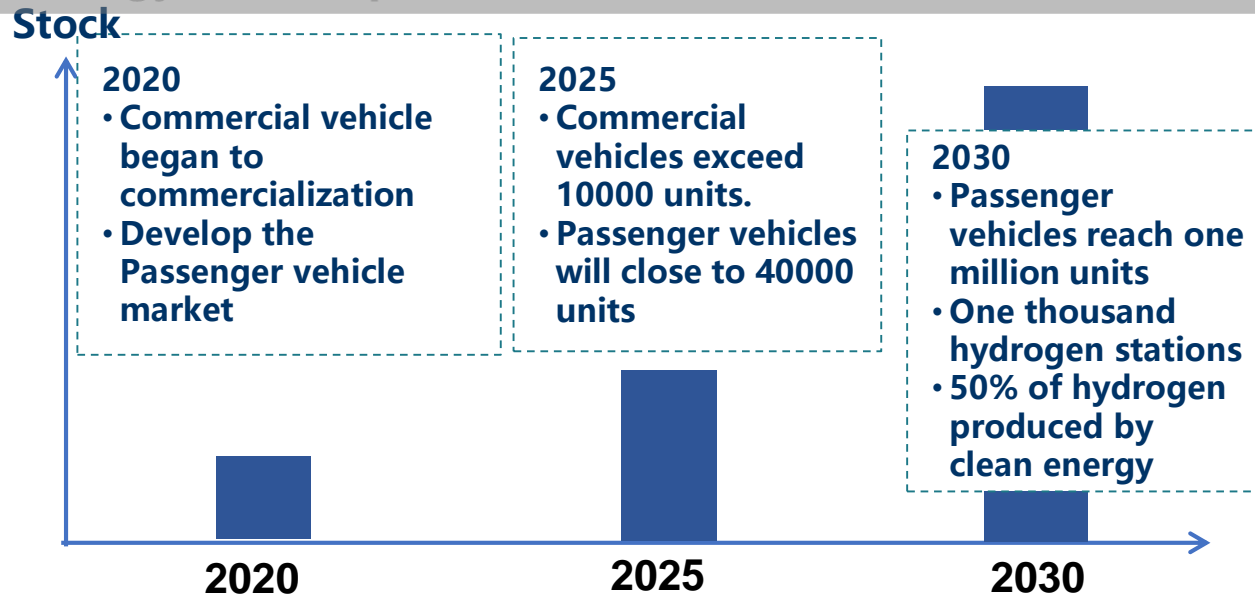
中国汽车工程学会
China Society of Automotive Engineers

H2 Valley in China

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Vision of The Hydrogen and FCV

■ Entrusted by MIIT and the National Power Strategy Advisory Committee, China SAE organized more than 1000 experts from industries, universities, research institutes and other organizations completed the Energy-saving and New Energy Vehicle Technology Roadmap which was released in October 26, 2016.



Local governments actively deploying the hydrogen and FCV industry

- At present, China has initially formed H₂ and fuel cell demonstration and promotion areas, such as JJJ-region, Yangtze river delta, pearl river delta, etc.

Favorable environment of Hydrogen and fuel cell development is forming.

Beijing-Tianjin-
Hebei Region

Beijing-Zhangjiakou

Yangtze River delta

Shanghai and Rugao\Changzhou\Suzhou
in Jiangsu Province

Pearl River delta

Foshan-Yunfu\Dongguan, Guangdong

Beijing-Zhangjiakou



Renewable Energy
to H₂



High pressure H₂,
Liquid Hydrogen
and Pipeline



Transport Application:
2021:3000 FCVs
H₂ Corridor to Beijing

Other Applications planned:

- power-heat cogeneration in communities
- Backup power
- Blending H₂ into natural gases pipelines

Foshan

■ Location

- ✓ Located in the Center of Guangdong and Pearl River Delta
- ✓ In the west of Guangzhou
- ✓ Near Hongkong and Macau



HRS : 1 in operation, 9 under construction



FCV: 50 including,
Buses: 14
Logistics vehicles: 35
Refrigerated trucks: 1



Yangtze River Delta hydrogen corridor construction and hydrogen economic integration development planning

Short-term :
Form inner- and intercity connections
3 H2 highways
Shanghai\Jiangsu\Nantong\Huzhou

Middle-term :
10 H2 Highways
Connecting main cities within Yangtze River Delta

Long-term :
H2 network within Yangtze River Delta



Barriers and suggestions

- **Barriers**
 - Cost (hydrogen, FCV)
 - Lower the emission to reach life cycle emission reduction
 - Lack of HRS
 - Policies and awareness
- **Overcome**
 - Demonstration and scale up
 - R&D to reduce cost
 - Incentives in the beginning phase
- **Suggestions for information sharing within IC-8**
 - Experiences and plans to form hydrogen supply system
 - Assessment of the technology and application scenarios

THANKS!

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