

Japan's Mid- and Long-Term Mobility Vision & Cooperation between Europe and Japan

Shinichiro OKA

Japan Automobile Manufacturers Association

European Office

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1. JAMA Profile & Member Activities

2. Japan's Mid- and Long-Term Mobility Vision

3. Cooperation between Europe and Japan





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JAMA Profile

- Established on 3 April 1967.
- JAMA (Japan Automobile Manufacturers Association, Inc.) is a nonprofit industry association comprising Japan's 14 manufacturers of passenger cars, trucks, buses and motorcycles.
- Its objective is to promote the sound development of the automobile industry and contribute to social and economic welfare.
- Its 14 member companies are:







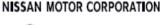
















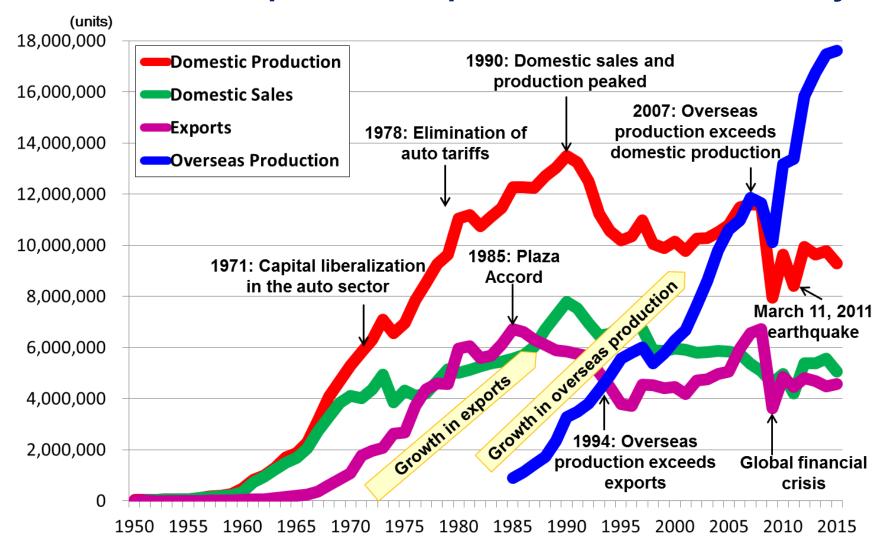






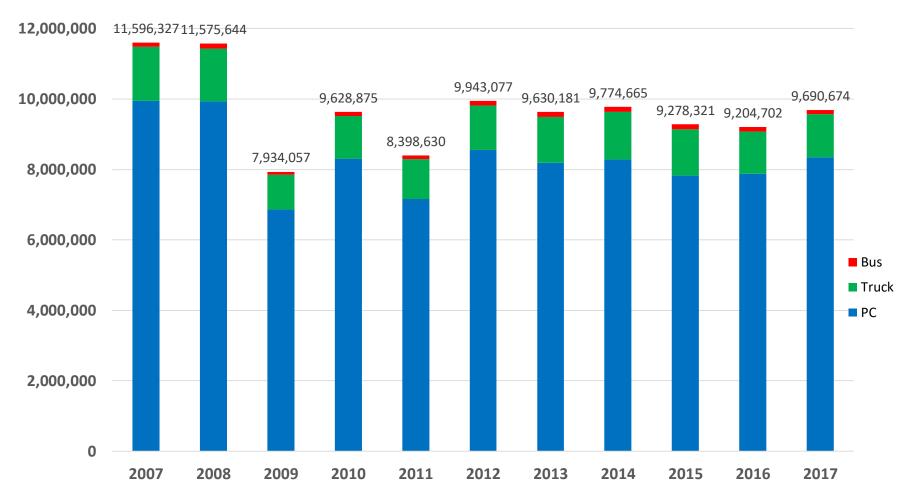


Historical Development of Japan's Automobile Industry



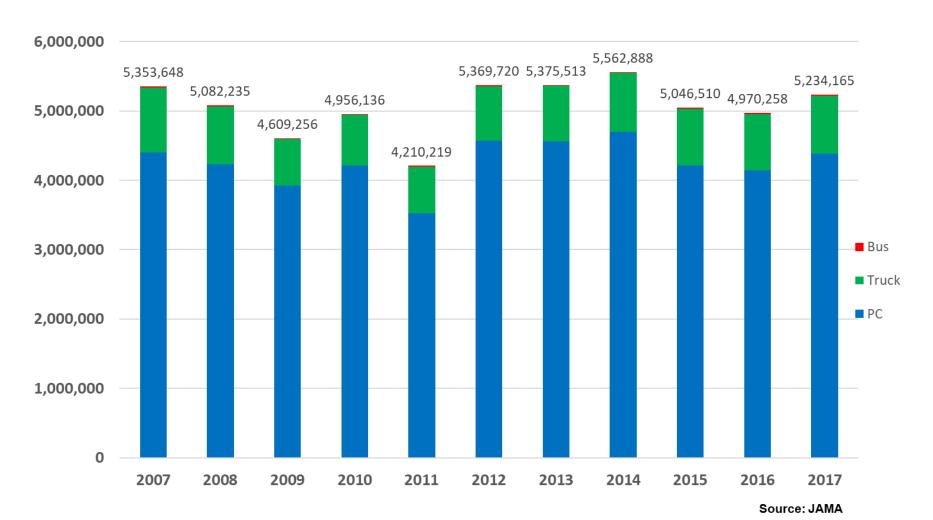


Vehicle Production in Japan





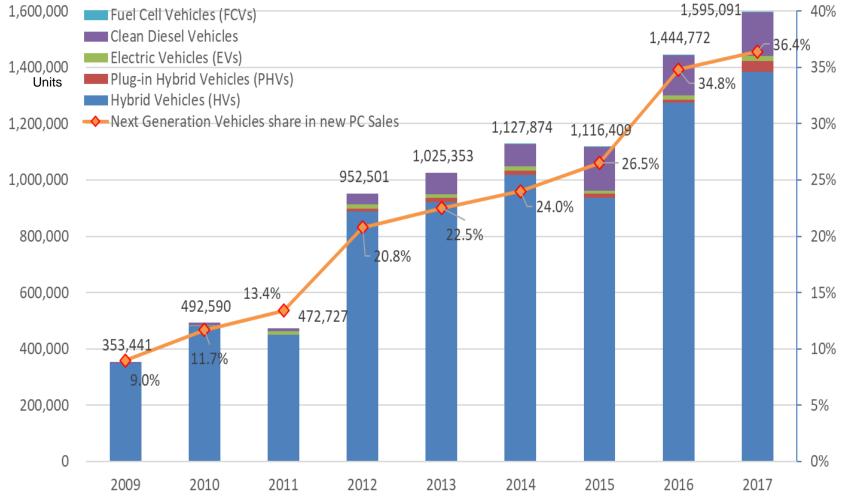
Vehicle Sales in Japan





Characteristics of Japan's Market

■ In 2017 next-generation vehicles accounted for more than 35% of new passenger car registrations.

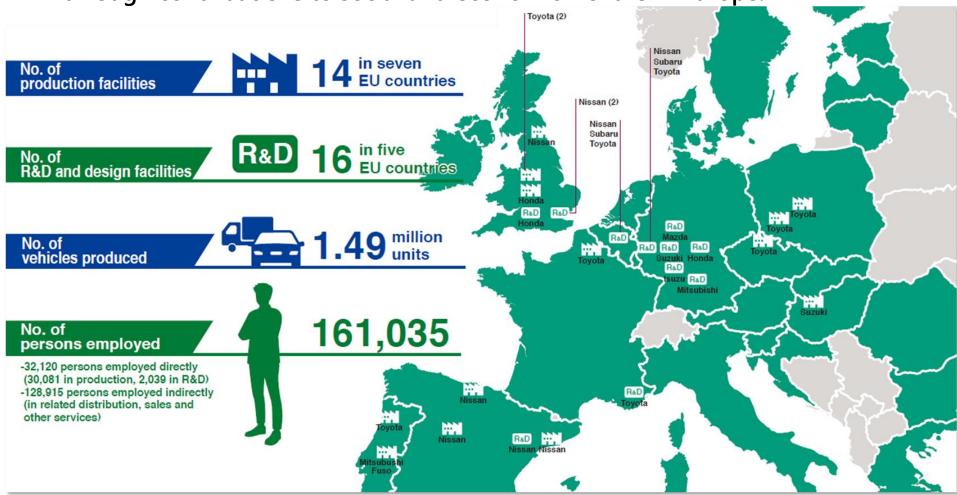


Note: "Hybrid Vehicles" includes hybrid minicars as of 2017.



Contributions in the EU

■ We are working towards the goal of comprehensively sustainable mobility through contributions to social and economic welfare in Europe.



(As of December 2016)



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Mobility to date

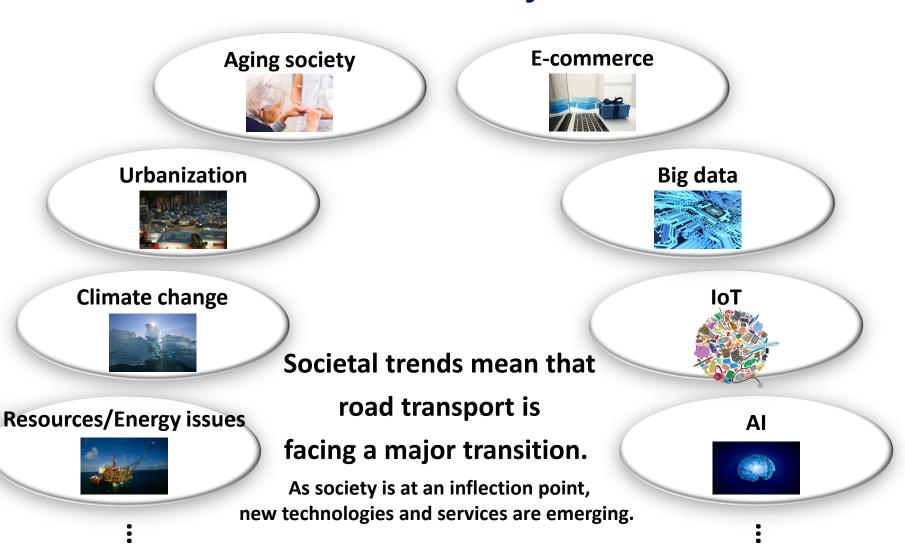
Mobility has brought PLEASURE to our lives.





Societal trends impacting mobility

Now is the time to move on mobility's future.





JAMA's approach

We will continue to bring enjoyment and convenience to daily life through advances in mobility.

Universal missions of mobility



Improve safety
(Safe and secure)



Reduce burden on the environment (Sustainable)



Improve efficiency of travel

(Quick and convenient)



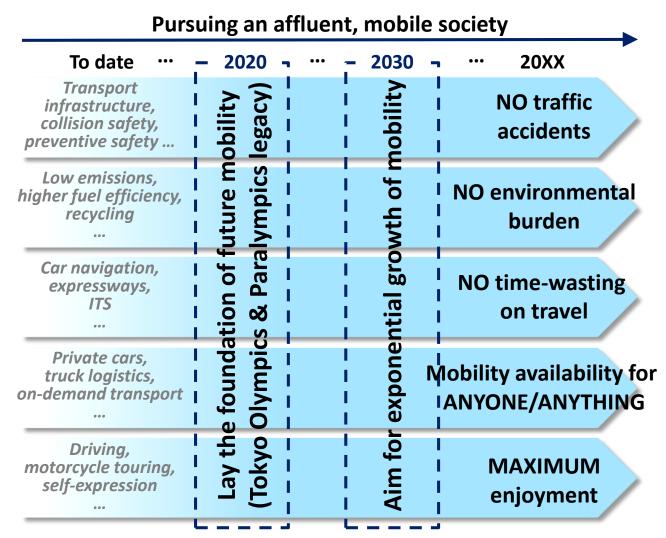
Ensure freedom of travel

(Anytime, anywhere)



Create emotional value

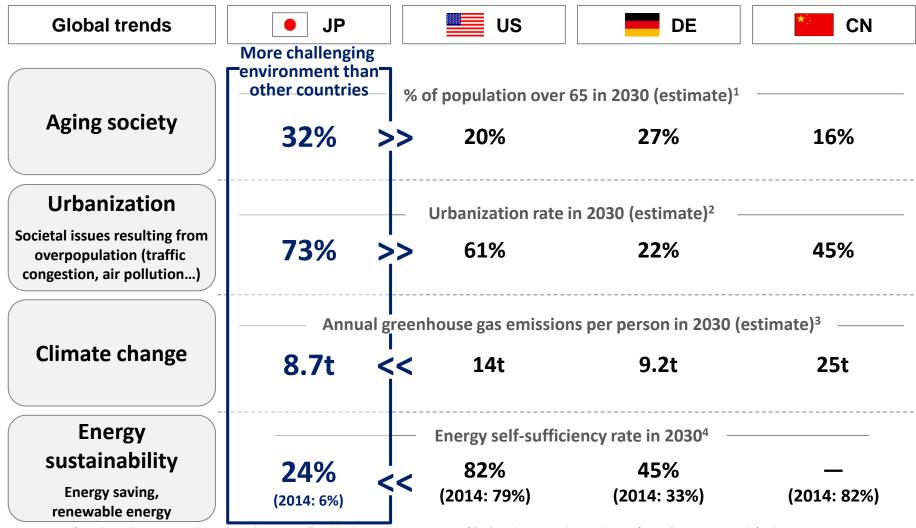
(Fun and comfortable)





Japan hit by global megatrends ahead of other countries

Future mobility solutions developed in Japan, a "frontier of social issues," will contribute to solving global issues.

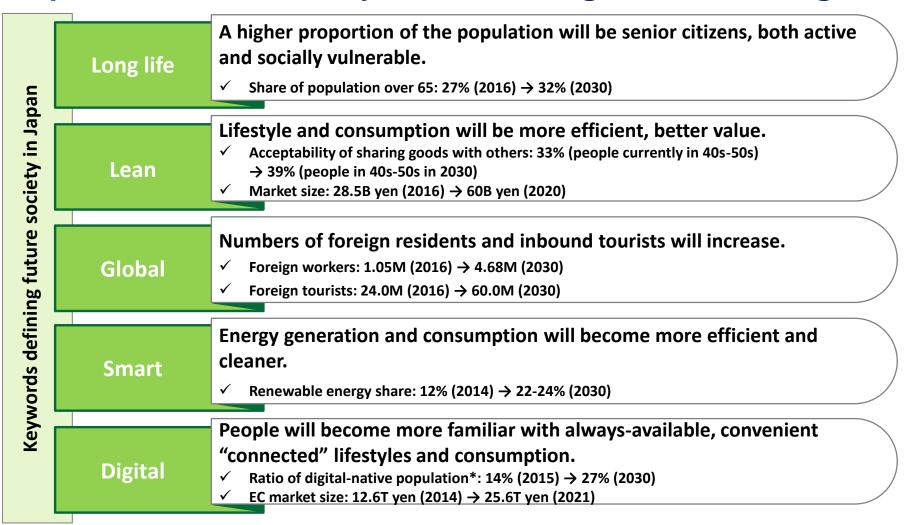


^{1:} Proportion of people aged 65 or over in the total population. 2: In "World Urbanization Prospects 2014" (UN), settlements with a population of 0.3 million or more are defined as cities.

^{3:} Each country's greenhouse gas emissions target value in 2030 included in the Paris Agreement (US: Annualized 2025 target value) is divided by EIU's population estimate in each country in 2030. 4: Japan: Based on gov't target for 2030; US: Based on predictive value of EIA (Energy Information Administration); DE: Based on gov't target for 2050.

Future society in Japan

Japanese values, lifestyles will undergo further change.



^{*}Defined as population born after 1999, when mobile phones with Internet connection were launched in Japan.



Future land usage and transport systems in Japan

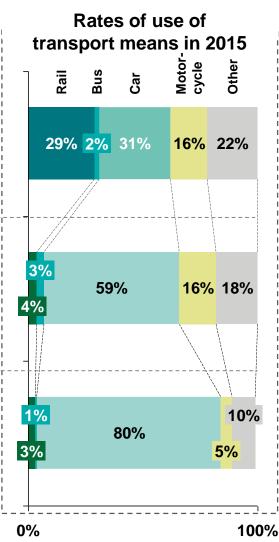
Land usage and transport systems vary from area to area.

Metropolitan areas

- Expanding megacities
 - Further development of mega agglomerations
 - Highly urbanized environments with multimodal transport systems

Provincial hubs and rural areas

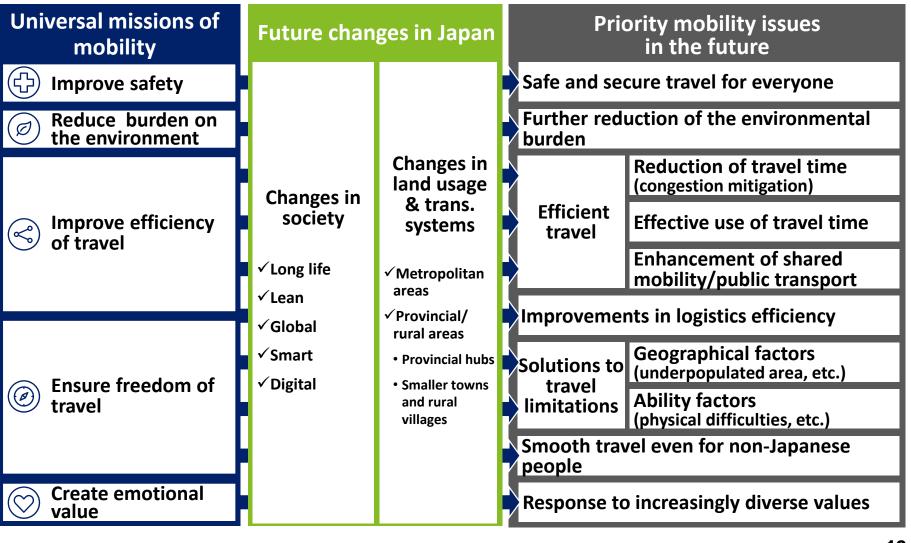
- Provincial hubs, where urban functions are concentrated
 - The concentration of urban functions will accelerate to provide efficient public services in spite of population declines and reduced financial circumstances.
 - Car-oriented, with public transport developed to certain levels as well
- Smaller towns and rural villages, located outside or well beyond provincial cities
 - Around provincial hubs undergoing urban function concentration, sparsely populated areas remain.
 - Car-oriented, with extremely limited transport options





Priority issues for future mobility

Mobility issues will arise as a result of changes in society, land usage, and transportation availability.





Potential of mobility by 2030

Continued enjoyment and convenience in mobility, with 2030 as the milestone

Priority mobility issues in the future	
Safe and secure travel for everyone	
Further reduction of the environmental burden	
Efficient travel	Reduction in travel time
	Effective use of travel time
	Enhancement of shared mobility / public transportation
Improvements in logistics efficiency	
Solutions to travel limitations	Geographical factors
	Ability factors
Smooth travel even for non- Japanese people	
Response to increasingly diverse values	

2030

20XX

- ✓ From controlling human errors to more advanced risk prediction
- ✓ Improve not only driving performance, but also environmental performance over lifecycle
- ✓ Achieve smooth traffic flow, in addition to providing traffic information
- ✓ From comfortable driving to comfortable and useful ways of using travel time
- ✓ Multiple forms of transport in addition to sharing
- ✓ From reduction of drivers' workload to needing less personnel
- ✓ Improve the transport efficiency of the **whole logistics network**, instead of each part
- ✓ Provide sustainable transportation for people/areas facing practical travel limitations
- Universal transport regardless of language ability

✓ Propose attractive products/services tailored to individual lifestyles

Go beyond the limits of human ability with technology

- ITS/Automated driving

- Electrification
- Connectivity

NO traffic accidents

NO environmental burden

NO timewasting on travel

Provide solutions

beyond hardware improvements

- Services as well as products
- Expanded mobility options

Mobility availability for ANYONE/

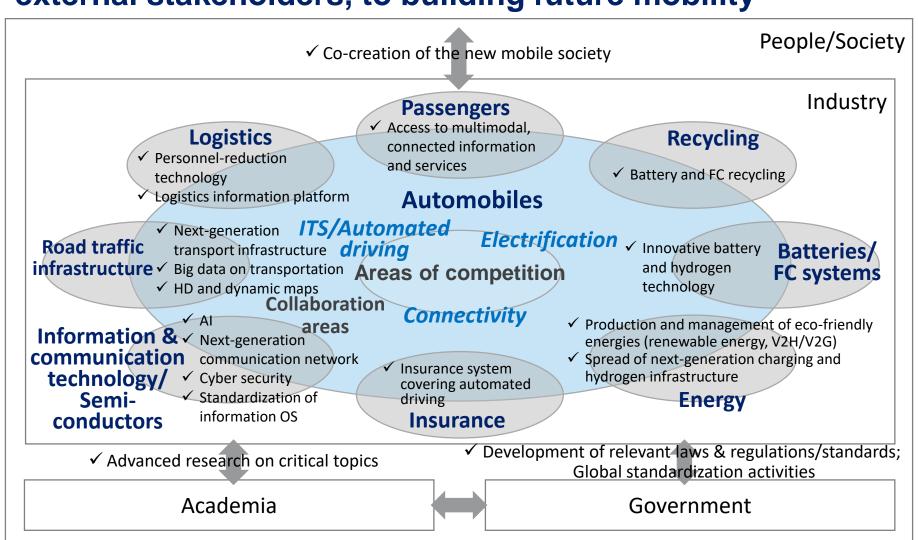
ANYTHING

MAXIMUM enjoyment



An ecosystem for achieving 2030 mobility goals

An intra-industry collaborative approach, also involving external stakeholders, to building future mobility





2020 Olympics and Paralympics legacy

A post-2020 legacy to serve as a stepping stone in achieving future mobility

Collaborative industry/academia/government projects until 2020

2020

2030

TS/Automated driv

Connectivity

Assess the benefits and accuracy of dynamic maps

Assess the effects of ITS/automation in reducing pedestrian accidents

Test next-generation transportation systems in real-world conditions

Use and popularize renewable energy

Establish an innovative energy management system

Develop innovative storage battery technology

Olympic & Paralympic Showcase



Showcase automated bus (Haneda Airport)



Showcase automated driving on expressways

(Haneda→Tokyo Waterfront City)



Demonstration of Level-4 automated driving on a regular road

(Tokyo Waterfront City)

2020 Legacy (foundation of future mobility)

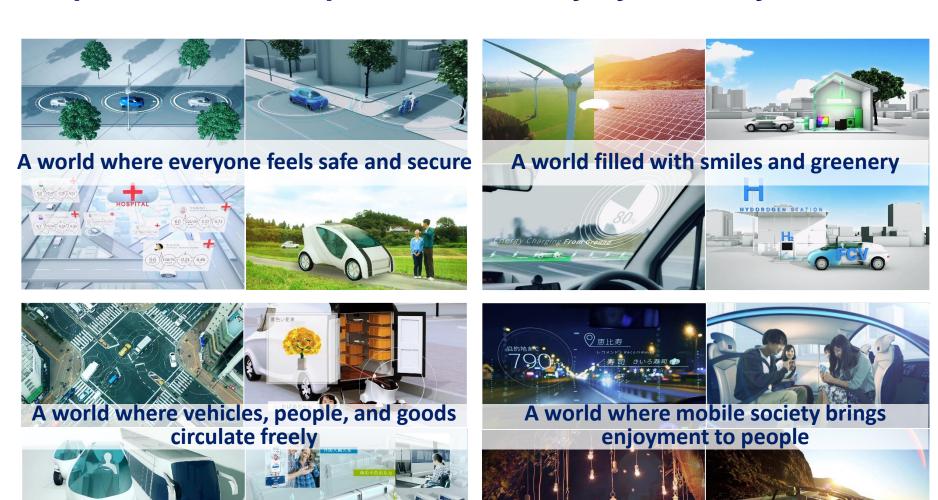
- Development of Wider public infrastructure acceptance
- Development of Accumulated technology legislation and know-how

Aim for exponential (based on legacy use) development of mobility



Envisioning mobility in Japan in 2030

Exponential development in mobility systems by 2030





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Earliest implementation of the EU-Japan EPA

- EU and Japan are principal partners who share the same values in the promotion of human rights, democracy, and the rule of law.
- The EPA will create a huge economic zone, with 600 million people and approximately 30 percent of world GDP.
- Improvements will be made in market access and rules (esp. regulatory cooperation).





Cooperation at Industry Level

- ACEA-JAMA Consultation Meetings
 - 18 bilateral talks have been held since the 1990s.
 - ACEA and JAMA have been working together on many issues of common interest.



- VDA-JAMA Technical Exchange Meetings
 - 2 meetings have been held since 2015; the 3rd to be held in July
 @ Tokyo
 - Topics: Standardization, Automated driving, Electric vehicles, Hydrogen (FCVs, infrastructure etc.), Data access & Data security



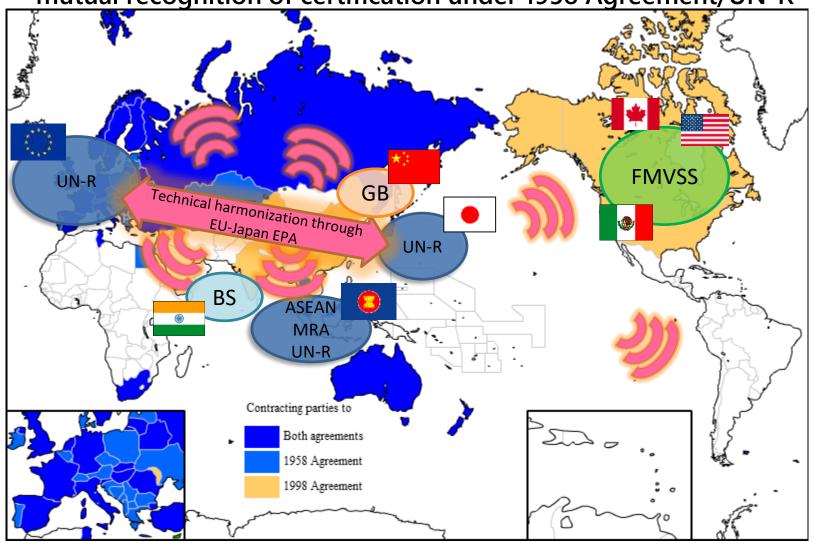






Regulatory cooperation

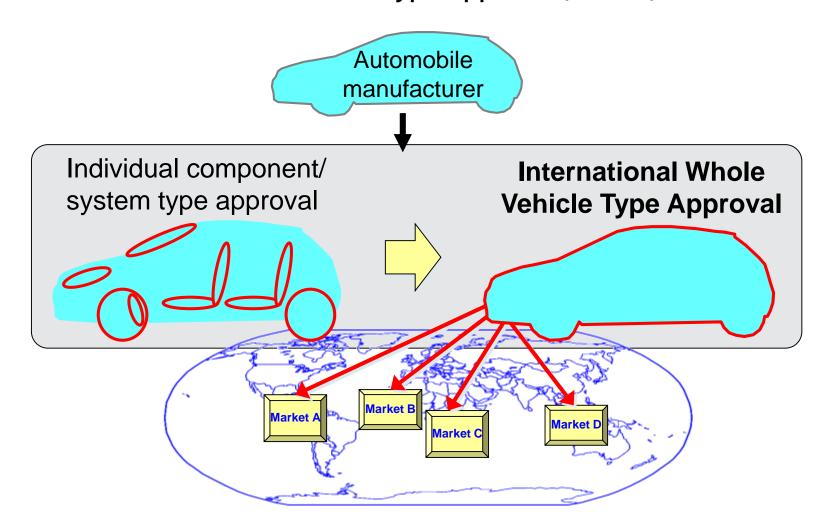
■ EU-Japan EPA will facilitate harmonization of regulations/ mutual recognition of certification under 1958 Agreement/UN-R



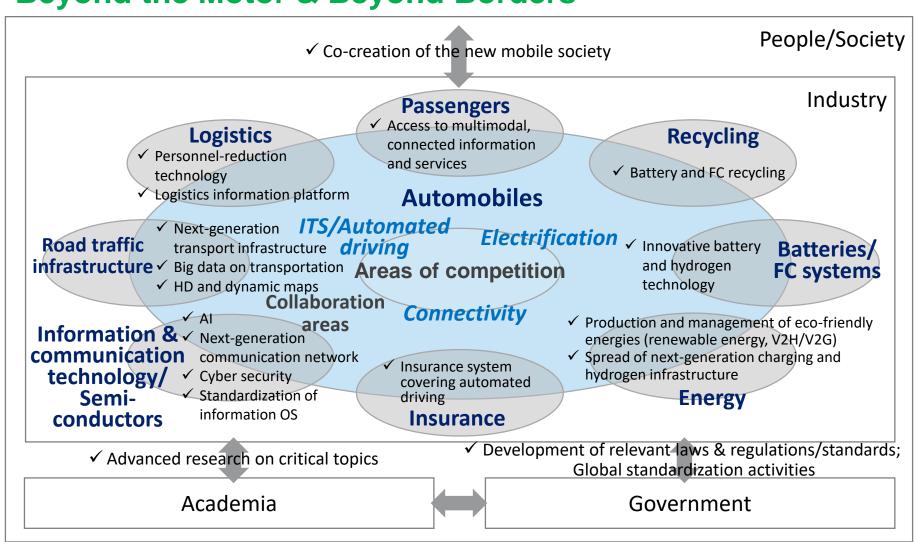


Regulatory cooperation

International Whole Vehicle Type Approval (IWVTA)



Beyond the Motor & Beyond Borders





Danke schön!

Thank you very much!

ありがとうございました。