

Technology Transfers by Japanese Auto Industry

Vancouver , October 30, 2008

Japan Automobile Manufacturers Association, Inc. (JAMA)

<<Current status of technology transfer>>

The Japanese auto industry is increasing technology transfers actively.

Japanese automakers are expanding our global operations and overseas production through capital tie up with partners in the countries.

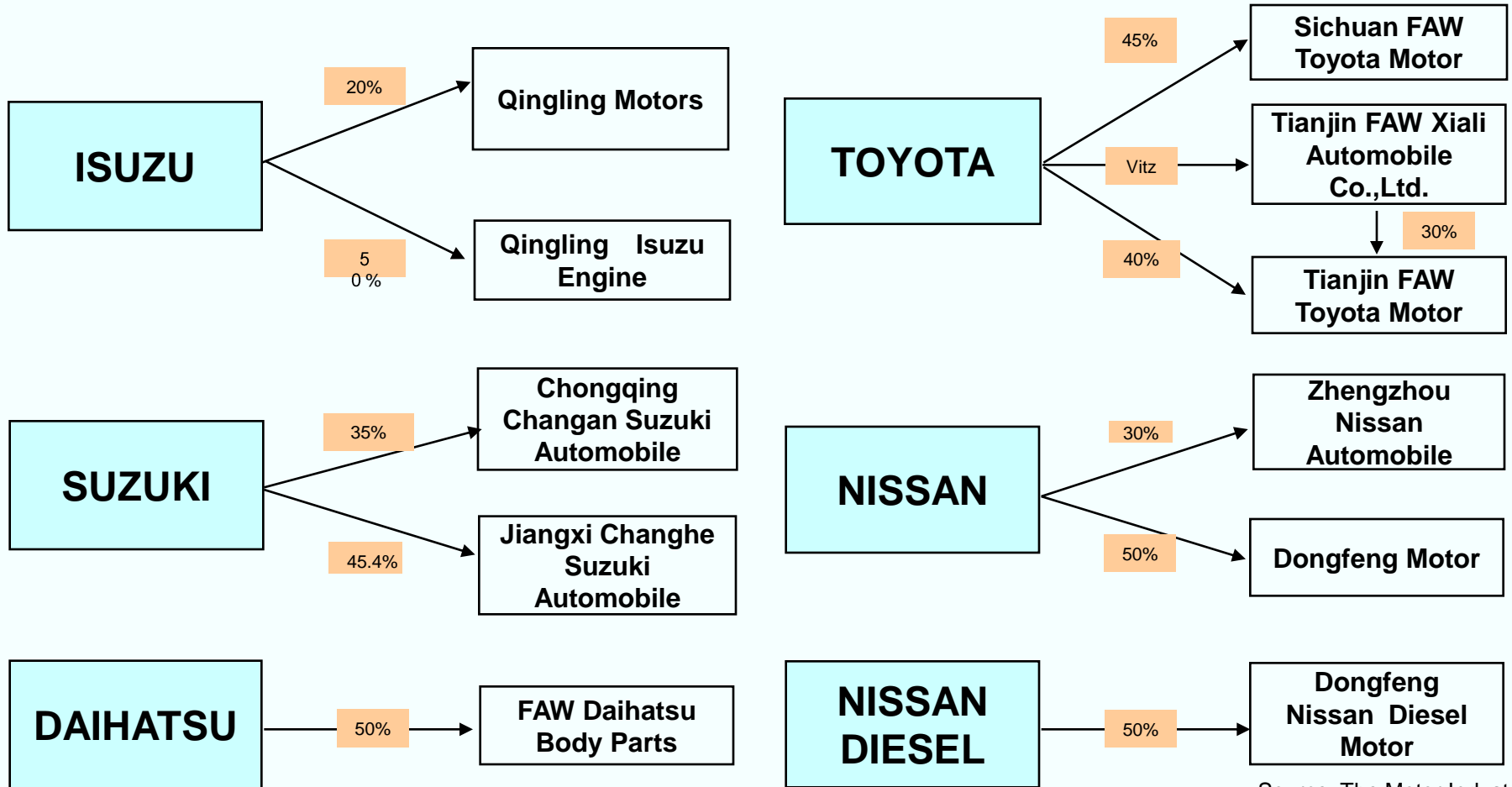
Technology transfer

[1] Widespread use of fuel-efficient vehicles

[2] Construction of ecological and productive plants in overseas

[3] Expansion of local parts purchasing (Local contents)

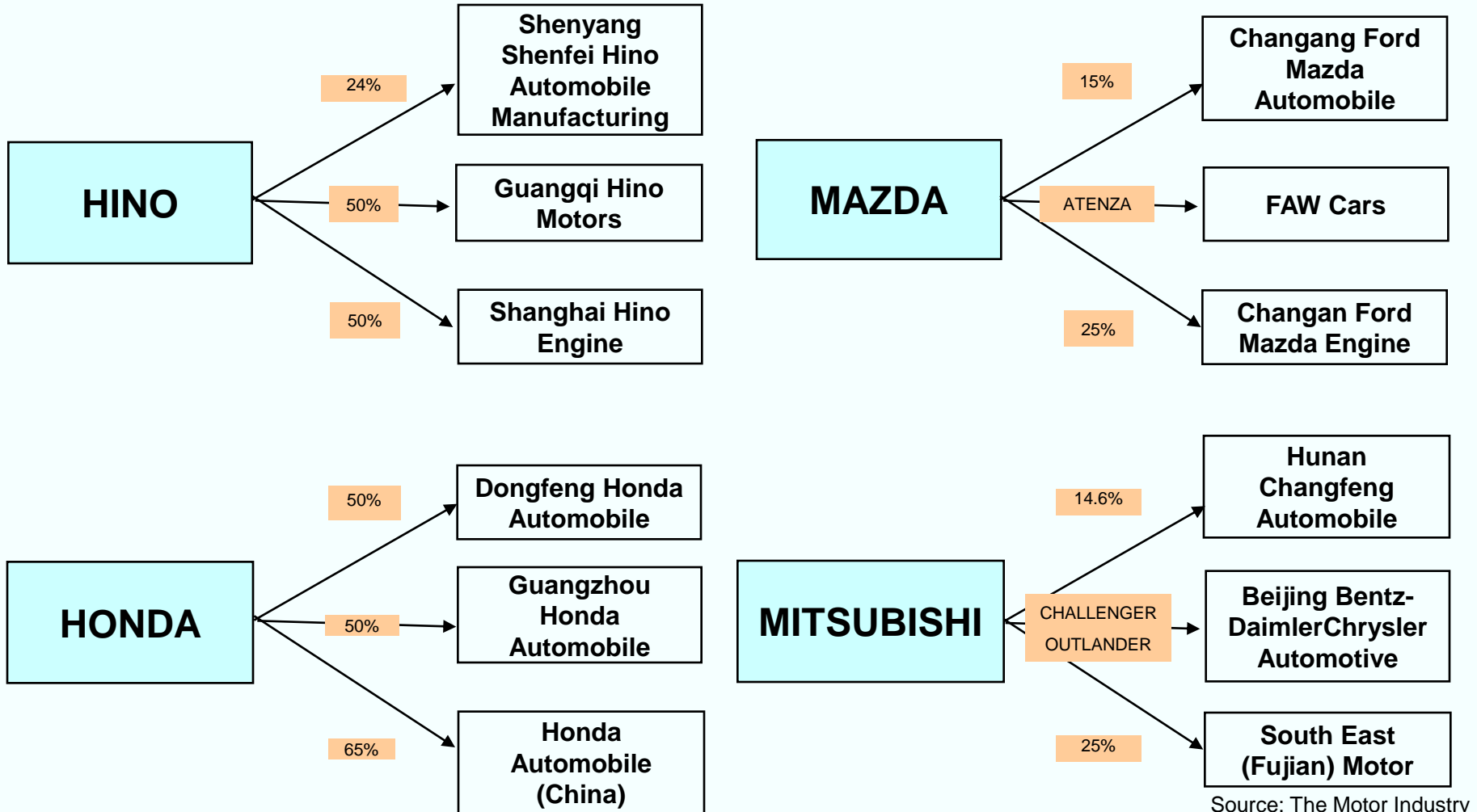
Capital Business tie up / Japan – China (1)



*% → investment

Source: The Motor Industry of Japan, 2008

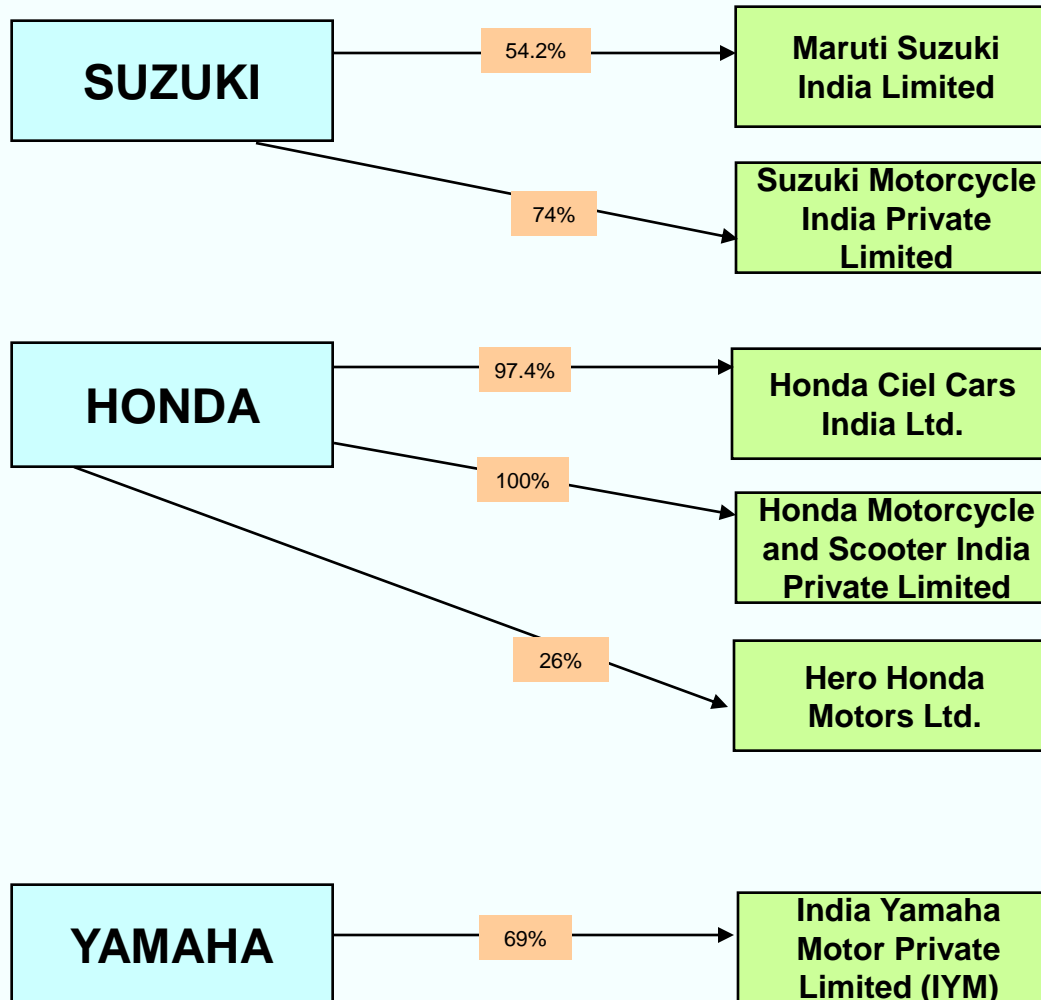
Capital Business tie up / Japan – China (2)



*% → investment

Source: The Motor Industry of Japan, 2008

Capital Business tie up / Japan – India



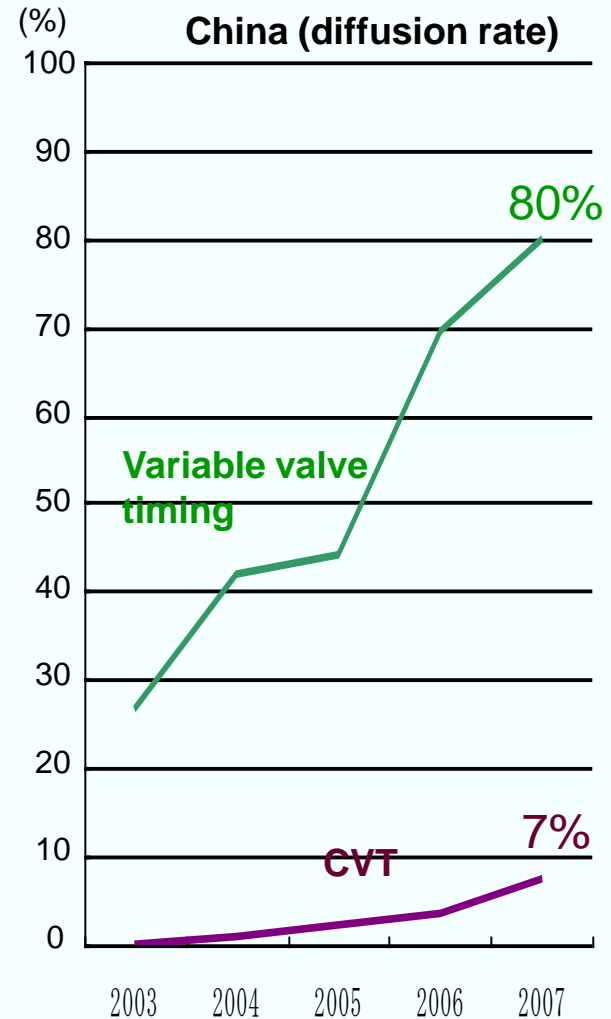
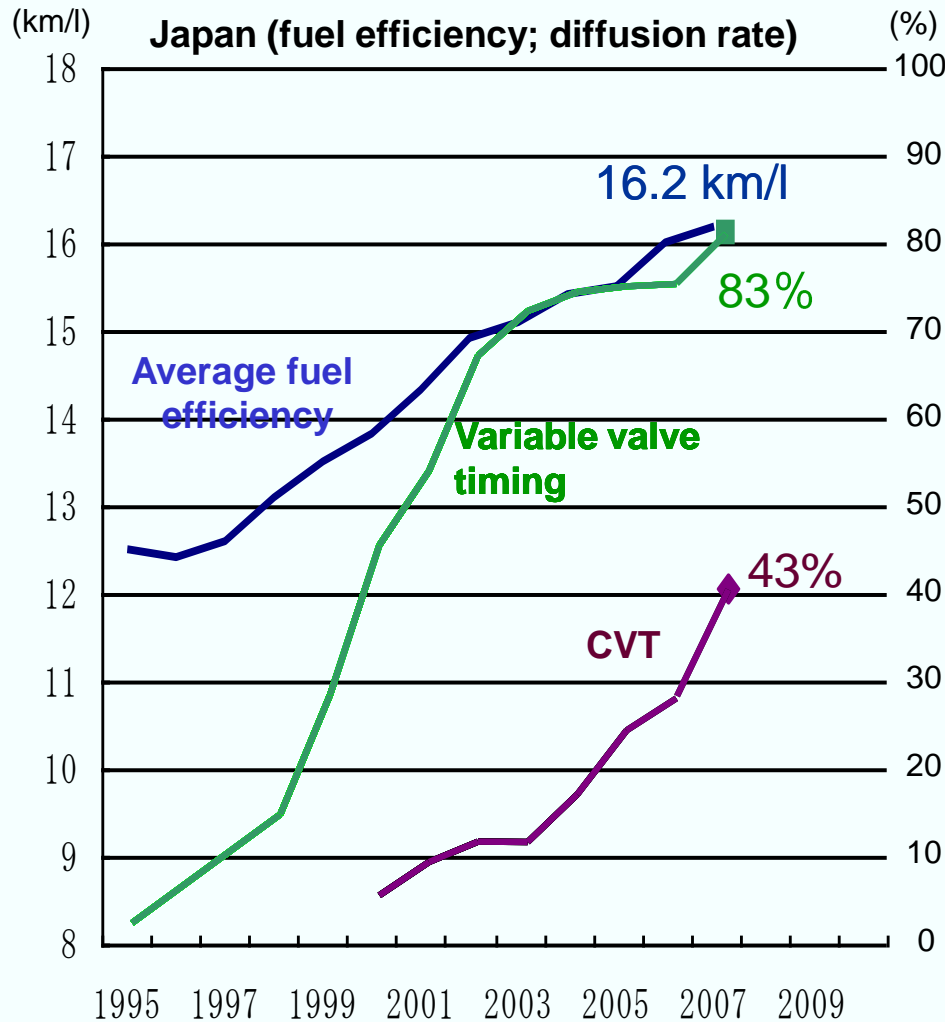
*% → investment

Source: The Motor Industry of Japan , 2008

[1] Expanded Use of Fuel-efficient Vehicles

Data on gasoline vehicle fuel efficiency and diffusion rates of variable valve timing technology / CVT

-- The use of fuel efficiency improving technologies on the steady increase --



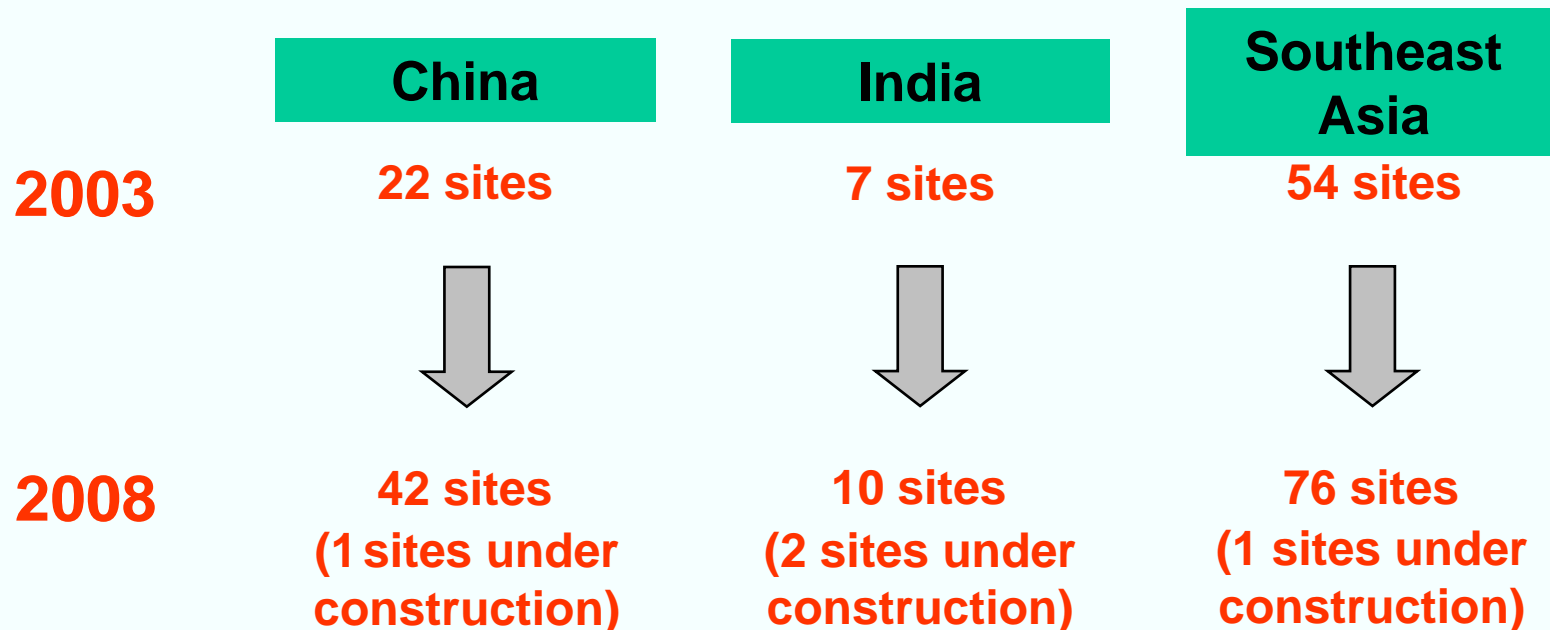
Source: JAMA data

[2] Construction of Ecological and Productive Plants

<<Overseas production by Japanese automakers>>

Japanese automakers are engaged in overseas vehicle production at our plants in China, India, and Southeast Asia.

[Number of Japanese automakers' overseas production sites (as of 2008; including part production plants)]



[2] Construction of Ecological and Productive Plants

<<Environmental measures at Japanese automakers' overseas plants>>

Levels of energy efficiency and pollution control facilities at Japanese automakers' plants in China and India are equivalent to those in Japan.

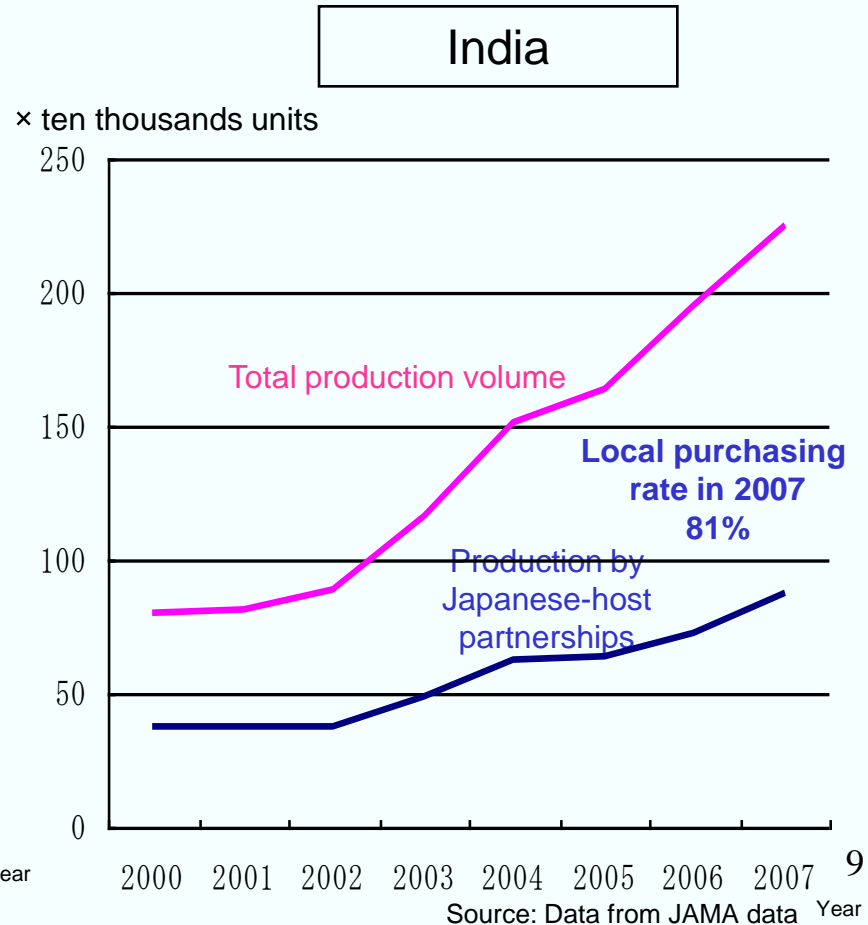
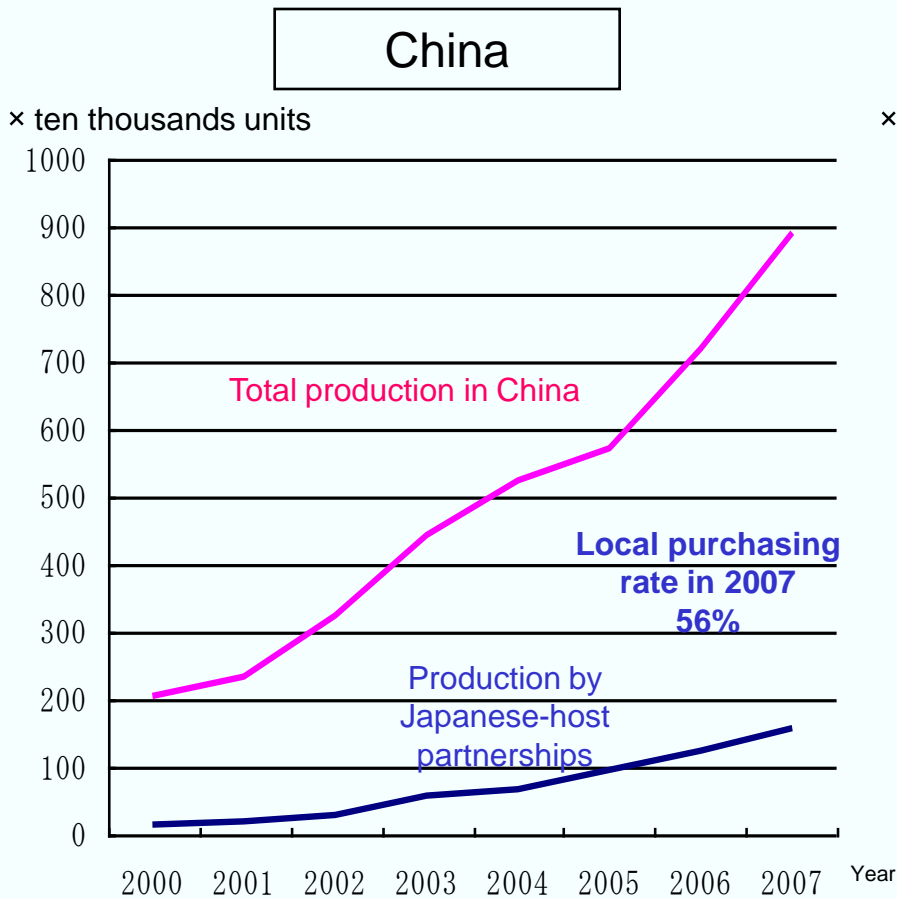


Japanese automakers' production operations are also making contributions to improving the environment of the countries.

[3] Expansion of local parts purchasing (Local contents)

Data on vehicle production volume and local purchasing rate of Japanese automakers

Production volume at Japanese/partner production sites are on the increase.



《Activities on Traffic Flow Improvement》

Cooperation for traffic flow improvement in Thailand

Increases in Average Vehicle Speed by Setting Traffic Lights with Systematic Control

	Before project	After project	Speed Gain (+ km/h)
Average for total area	12.4 km/h	19.1 km/h	+ 6.7

Reductions in Greenhouse Gases after Project Implementation

Daily Emissions Vol. Before	Daily Emissions Vol. After	Daily Reduct. Vol.	Annual Reduct. Vol.	Reduct. Rate (%)
54,336 kgCO ₂ /day	45,576 kgCO ₂ /day	8,763kgCO ₂ /day	3,197 tCO ₂ /year	16.1%

Statistical data compiling

Japan is planning to conduct a preliminary survey for the compilation of statistical traffic data in collaboration with Indian governments and Industries.

By compiling statistical data in a road traffic, verification of the effectiveness of technology transfer can be achieved.

- (1) Proposal of a running volume (distance) investigation technique
- (2) Investigation on running speed

<<*Conclusion 1*>>

By increasing the use of advanced energy-saving and environmental technologies for automobiles worldwide, both protection of climate change and sustainable mobility can be achieved at the same time. Specifically, it is important to improve vehicle production efficiency and vehicle fuel efficiency on a global scale.

Since advanced technologies related to production and products are very essence of the competitiveness of automakers, these technologies are transferred on a business basis.

Japanese automakers are increasing fuel-efficient vehicles through capital tie up with local partners.

Capital tie up not only contributes to the wider use of fuel-efficient vehicles, but also raises the production efficiency through localized production.

In addition, it improves the production/product technologies of suppliers through expansion of local parts purchasing.

<<*Conclusion 2*>>

Through correct management of intellectual property, automakers' corporate activities are stimulated, which in turn promotes more business entries and accelerates technology transfers.

CO2 reductions in a road transport sector requires not only greater fuel efficiency but traffic flow improvement, efficient use of vehicles and diversification of automotive fuel supply.

In addition, statistical data collection for analyzing effectiveness of each measure is also important. These can be best achieved through technology transfers and government-industry collaborations.

Thank You