

Real World Experiences of Technology Transfer

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Honda Motor*

Honda Products

Fuel CELL vehicle



ASIMO



CBR1000RR



Hybrid



Commuter



Tiller



CUV



FIT



タンアピ

Outboard



Generator



Forza



Honda Environmental Statement

As a responsible member of society whose task lies in the preservation of the global environment, the company will make every effort to contribute to human health and the preservation of the global environment. In each phase of its corporate activity. Only in this way will we be able to promote a successful future not only for our company, but for the entire world.

In June 1992, Honda established and announced the Honda Environmental Statement

Global Climate Change:

Complex challenge, Shared responsibility

Industry

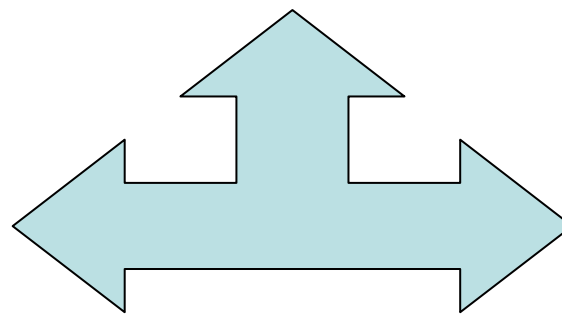
Motor vehicle manufacturers and energy suppliers must work to provide consumers with products that support the goal of reduced GHG Emissions (particularly CO₂ As the predominant GHG Generated by Honda products During their life cycle) while customer s expectations for product performance, including safety utility, comfort, quality and reliability.

Consumers

Consumers must be willing to purchase products that achieve lower GHG emissions.

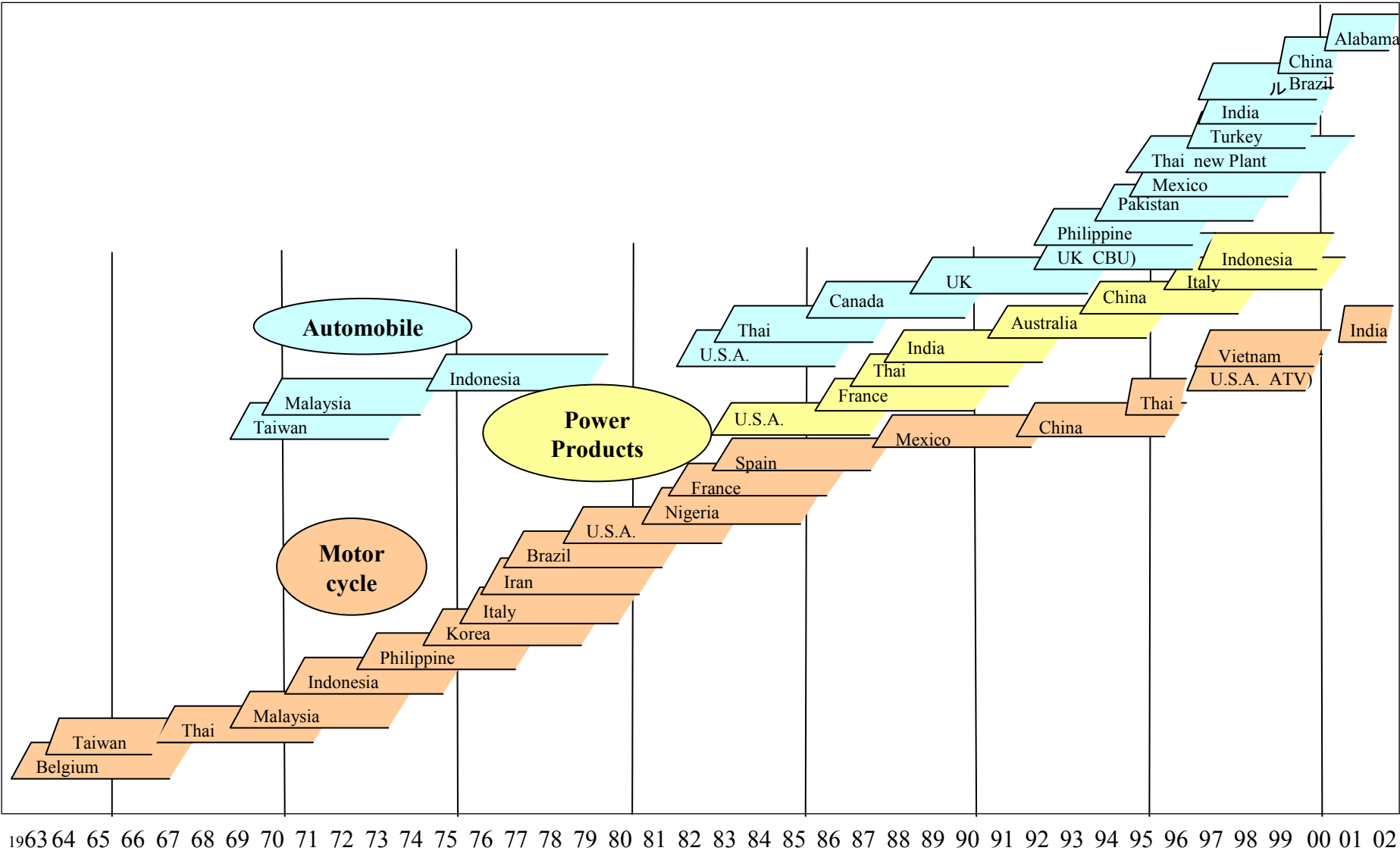
Government

Government must adopt market-based policies that promote consumer interest in products with regard to GHG emissions and support the development and deployment of products with regard to GHG emissions and high fuel efficiency. In setting mandatory requirements, government programs should adhere to performance-based standards that give manufacturers the flexibility to pursue multiple near and long term technological approaches to increasing to increasing fuel efficiency



Shared responsibility

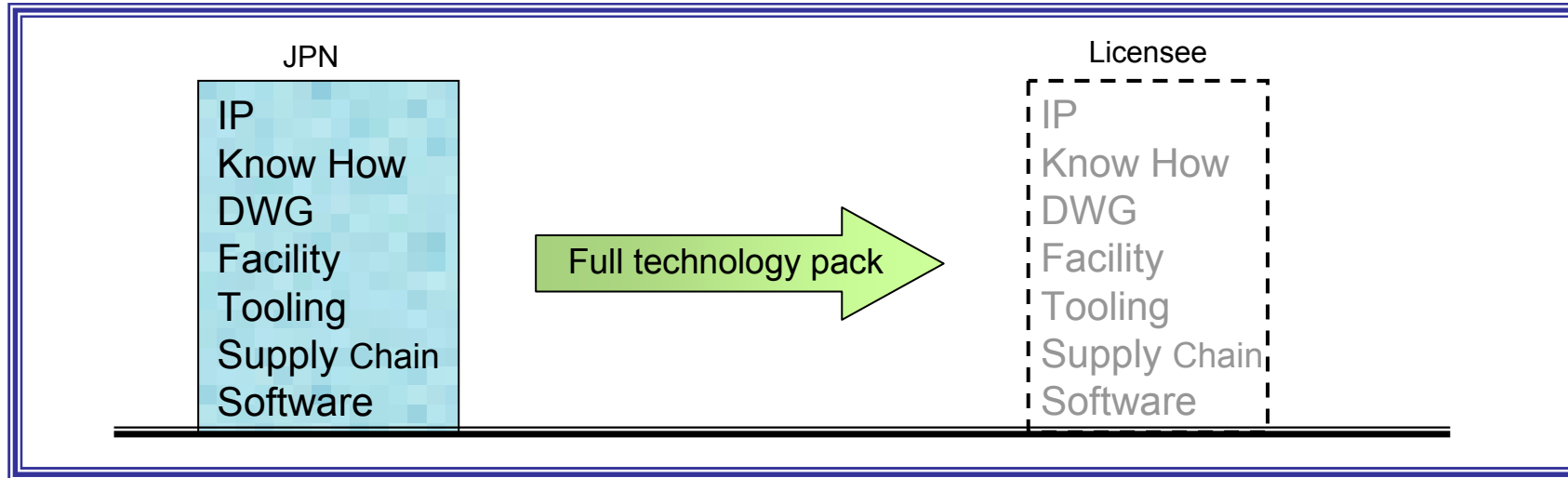
History of Honda Global Operation



From 2006 level

		2010 reduction goal	FY2010 result
Product	Automobiles	10 % (g/kg/unit)	12.6 %
	Motor cycles	10 % (g/kg/unit)	14.4 %
	Power equipments	10 % (g/kg/unit)	10.8 %
Production	Automobiles	10 % (g/kg/unit)	2.3 %
	Motor cycles	20 % (g/kg/unit)	47.1 %
	Power equipments	20 % (g/kg/unit)	17.6 %

Real World Technology Transfer



3 basic issues for tech. transfer to developing countries:

- Policies (laws)
- Technologies
- Finance

What we learned from license experiences:

Tangible items: Easy to transfer

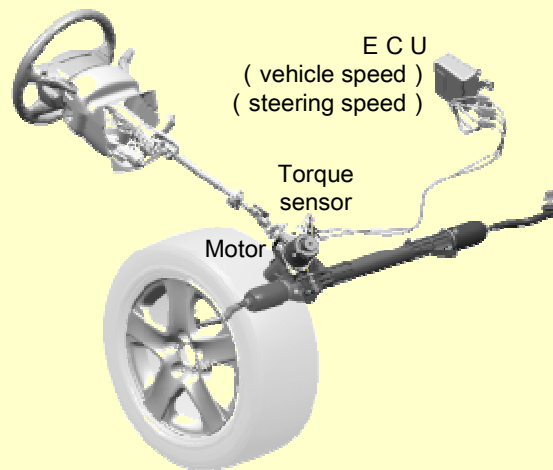
In tangible items: **Implicit knowledge (human support)**

EPS: Electric Power Steering

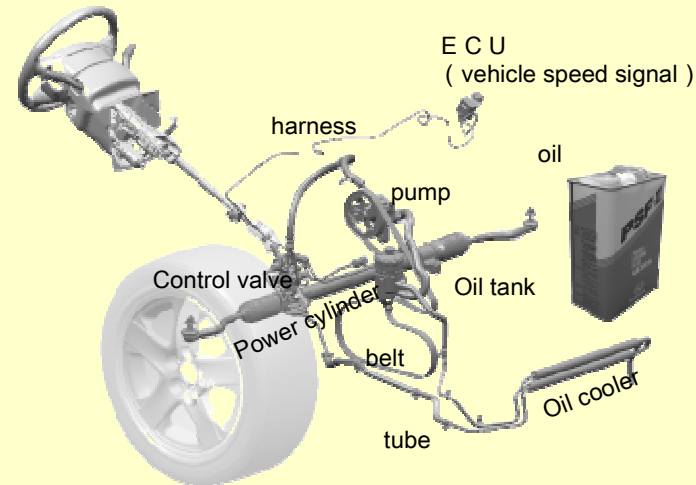
Honda is the first auto company to roll out a volume production vehicle with Electric Power Steering System (EPS)

Mechanical Structure (2005 Honda Legend)

Electric Power Steering



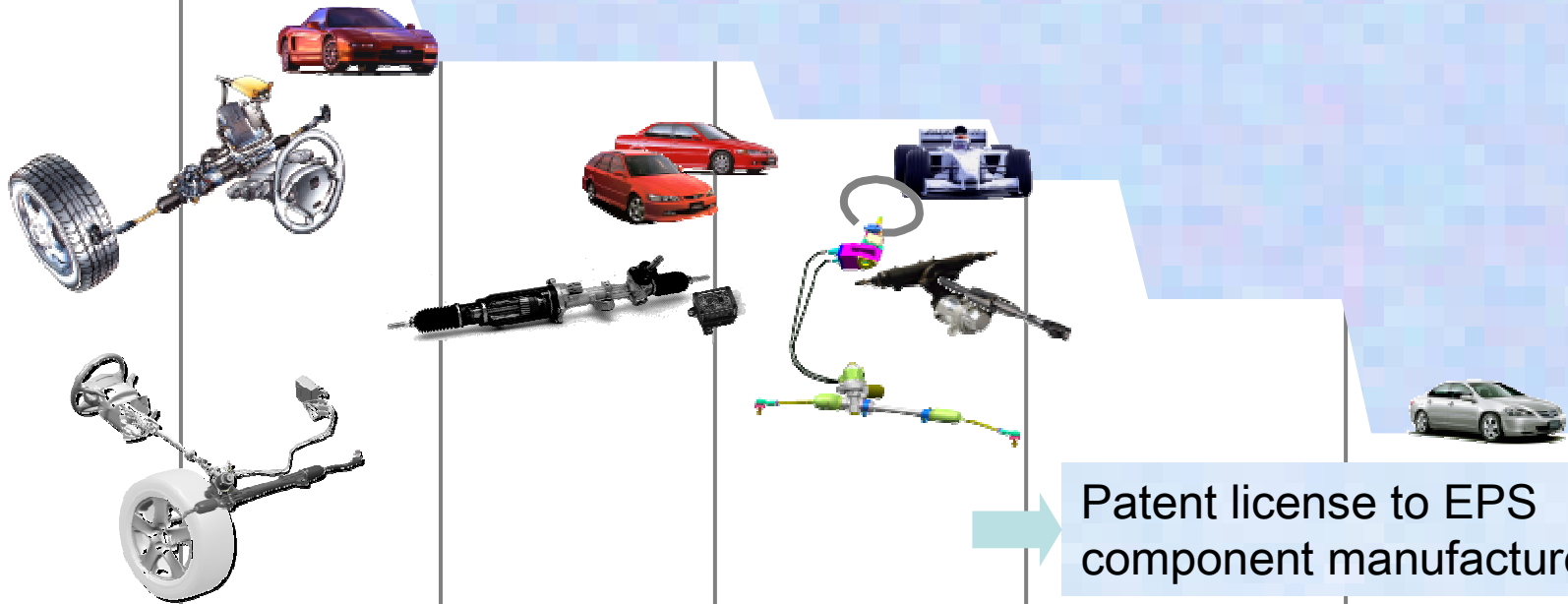
Hydraulic Power Steering



Benefits:

- 1: Less components
- 2: More than 10% weight reduction
- 3: EPS to reduce more than 4% fuel consumption
- 4: EPS to save hydraulic system oil (zero waste oil)
- 5: EPS to reduce CO₂ emissions

•1981 : Basic Research began



22 million vehicles sold (2008)

1: Save fuel consumption

1.05 million kl/year

2: Save CO₂ emission

2.5million t/year

3: Save waste oil

44 million kl/year



BLUE SKIES FOR
OUR CHILDREN