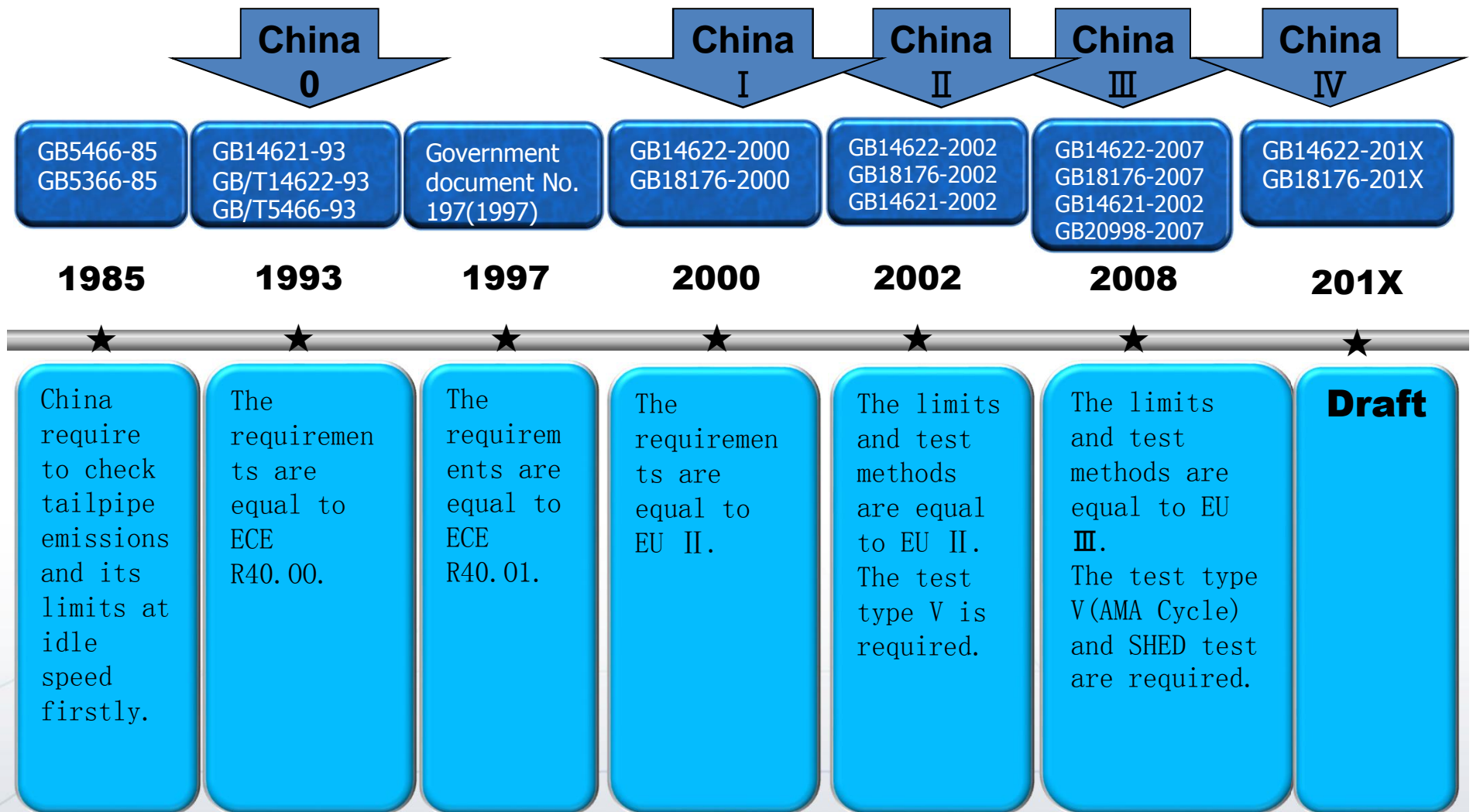


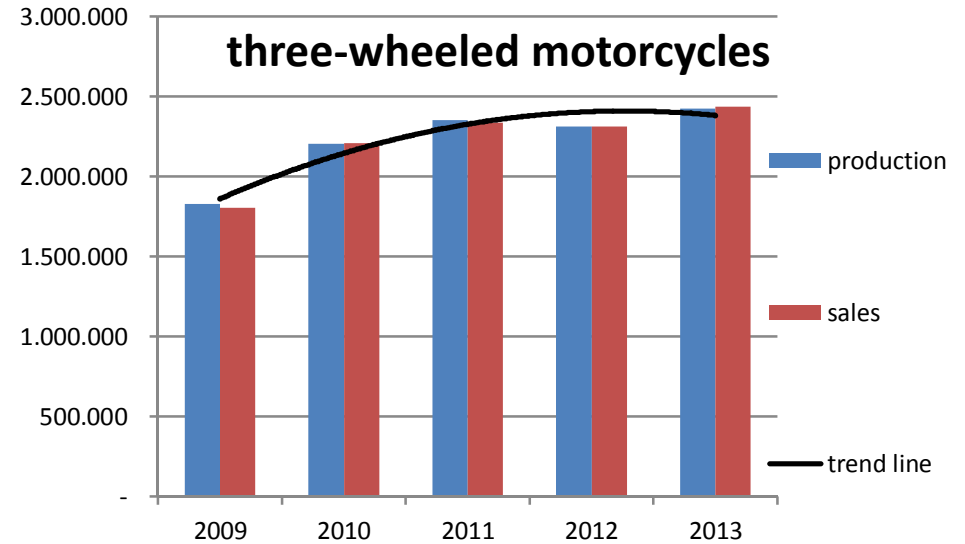
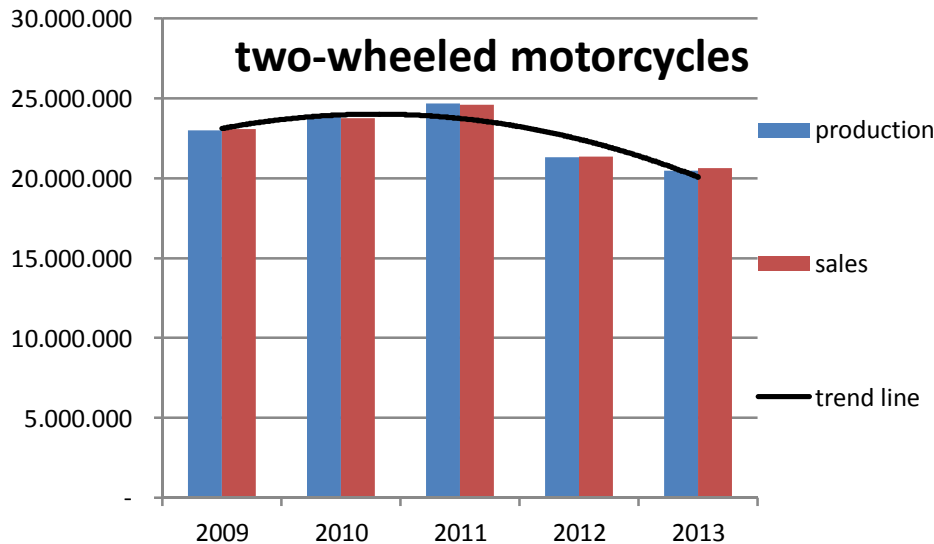
The Standards for Emissions of Motorcycle in China

Tianjin Motorcycle Technical
Center (TMTC)
2014. 2

The Stages of Standards for Emissions of Motorcycle in China

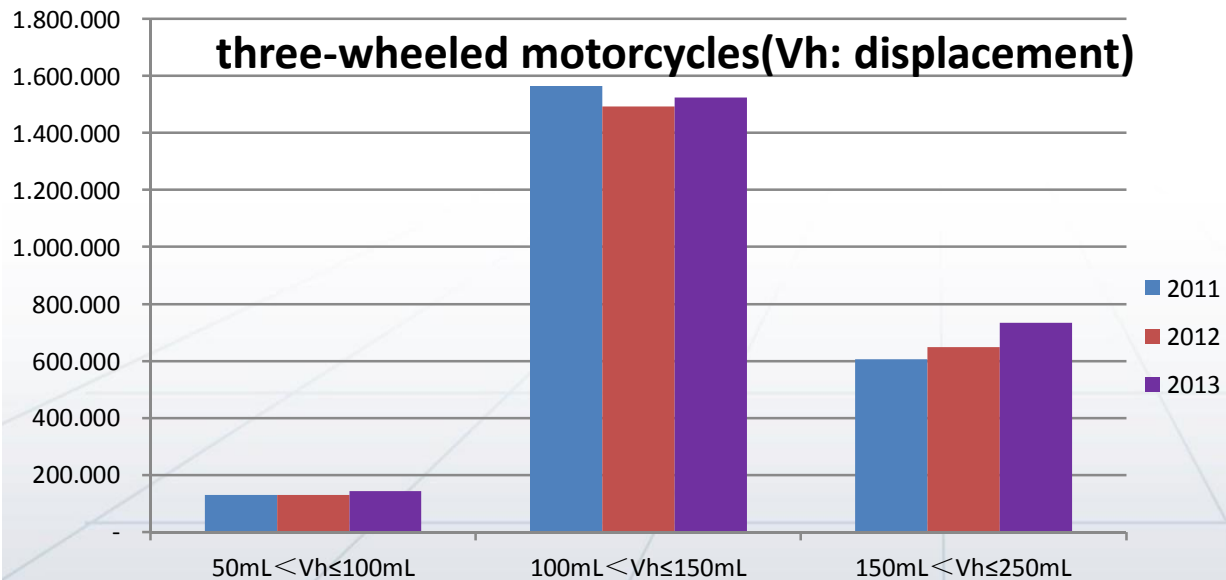
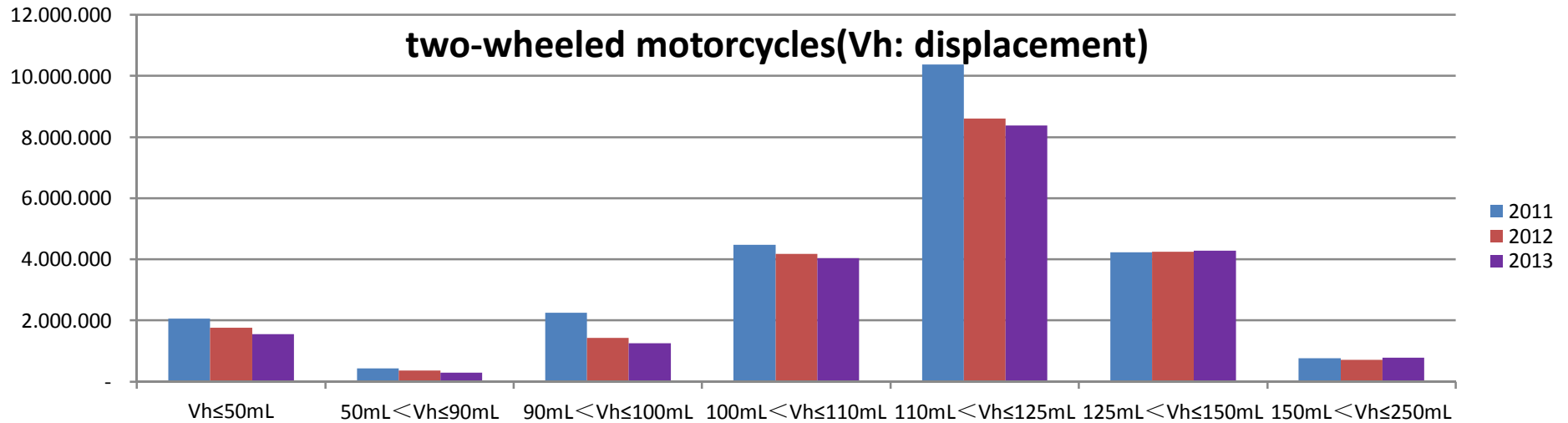


The Industry Development of Chinese Motorcycle



There are more than 200 manufacturers which produce motorcycles, and most of the motorcycles are using carburetor.

Motorcycle Sales from 2011 to 2013



The big displacement of two-wheeled(Vh>250mL) and three-wheeled(Vh>250mL) motorcycle is very small part of Chinese market, just about thousands.



The Standards for Emissions of Motorcycle (China IV draft)

Item		Framework in Stage IV	Remarks
Type I test	test method	<p>Two-wheeled motorcycles with and without side-car: GTR2(in general)</p> <p>Two-wheeled and three-wheeled mopeds :ECER47</p> <p>Right three-wheeled motorcycles:ECER40</p>	/
	limits	Equal to (EU)No.168/2013	/
Type II test		The test method and limits are required.	/
Type III test		It is not allowed that any fuel, lubrication oil or crankcase gases escape to the atmosphere from the crankcase gas ventilation system in the draft. But the influence/suitable on Chinese market from the type III test in EU IV draft is being investigated.	/



The Standards for Emissions of Motorcycle (China IV draft)

Item		Framework in Stage IV	Remarks
Type IV test	Test method	SHED Test: Diurnal+Hot Soak<2.0g/test	/
	BWC	BWC test is required	The result of approval test would be used for COP.
	Durability	Under discussion	/
Type V test	Test cycle	The AMA cycle is used in the draft. And the SRC is studying now.	/
	Mileage	Equal to (EU)No.168/2013	/
Noble Metal Content test		The Noble Metal Content (Pt: platinum Rh: rhodium Pd: palladium) of catalyst is required to be analyzed.	The test result should be equal to the manufactures declare.
Motorcycles with CI engines		The test method and limits are listed in the draft.	/



Comments on OBD (GTR NO. XX)

We hope that the OBD I test would be simple. The reason is that Chinese motorcycle industry is so huge, and most of motorcycles are using carburetor. The cost of changing from carburetor to Fuel Injector is too high.

Suggestions as follow:

1	OBD emission thresholds: We support that setting the limits and offering sets of OBD threshold limits as alternatives for contracting parties. But we don't hope that it is required in OBD I . We suggest it would be required in OBD II or OBD X.
2	Monitoring significant reduction of propulsion unit torque would not be required in OBD I .
3	The functional requirements, such as ABS, could be required in OBD I .
4	The requirement of (IUPR) should not be required in OBD1 .
5	The fault codes which influence the emissions should be consistent with ISO standards, but the fault codes which influence business secret may be not.
6	The categories of vehicle, L1 to L5, would be required OBD I in Chia Stage IV.



Thank you for your attention!

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