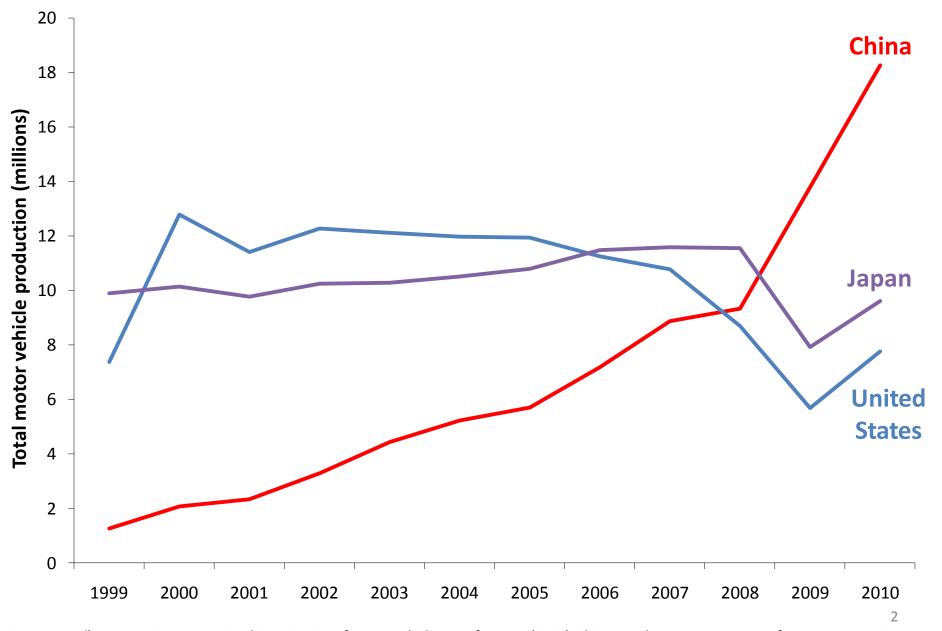
China's Transport Sector



David Sandalow EIA Annual Energy Conference April 27, 2011

Chinese auto production is skyrocketing

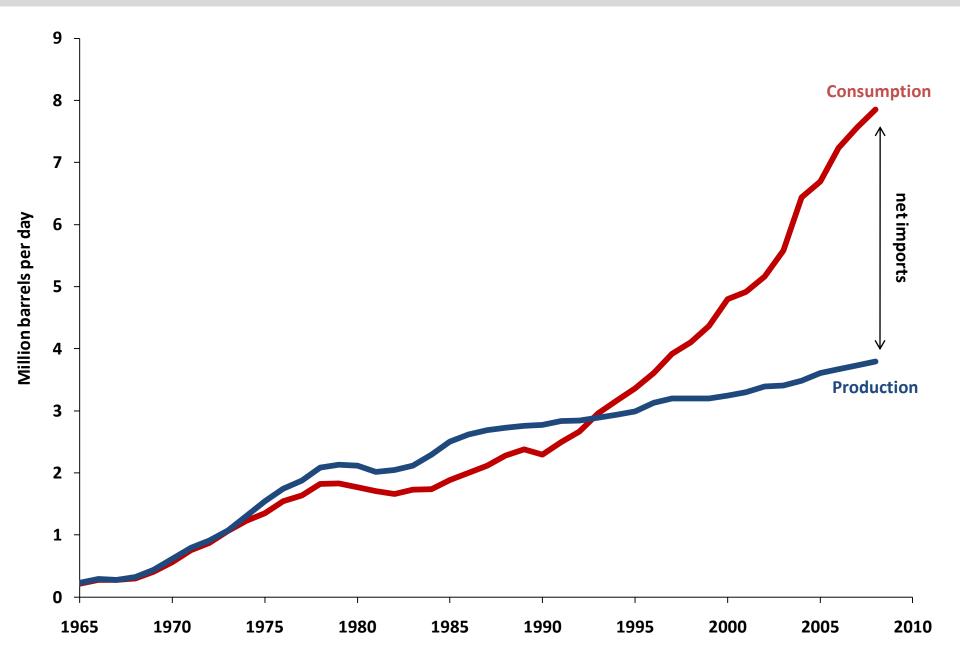


Source: Ward's Automotive, International Organization of Motor Vehicle Manufacturers (OICA), Chinese and Japanese Auto Manufacturers Associations

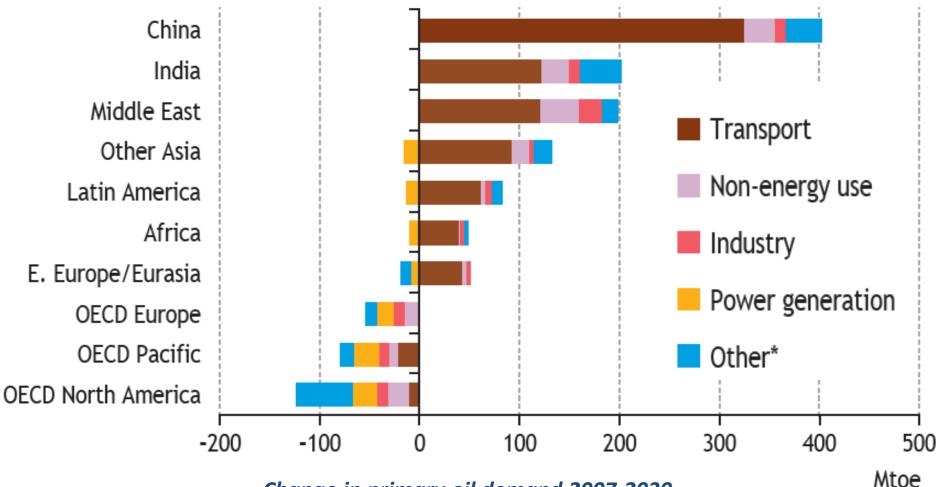
Almost all Chinese production sold to rapidly growing domestic market



China became a net importer in 1990s; now imports ~50% of oil

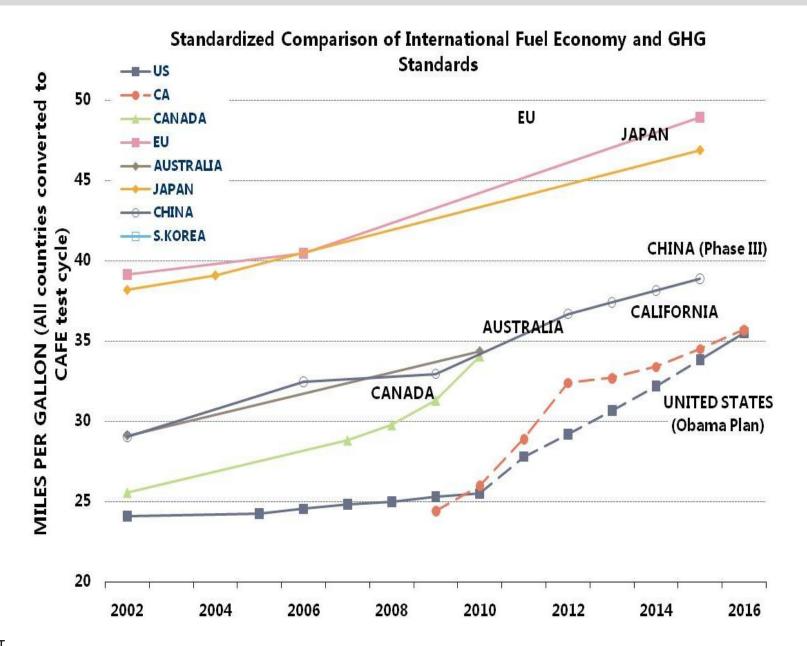


Chinese oil demand growth (mainly for transport) leads world



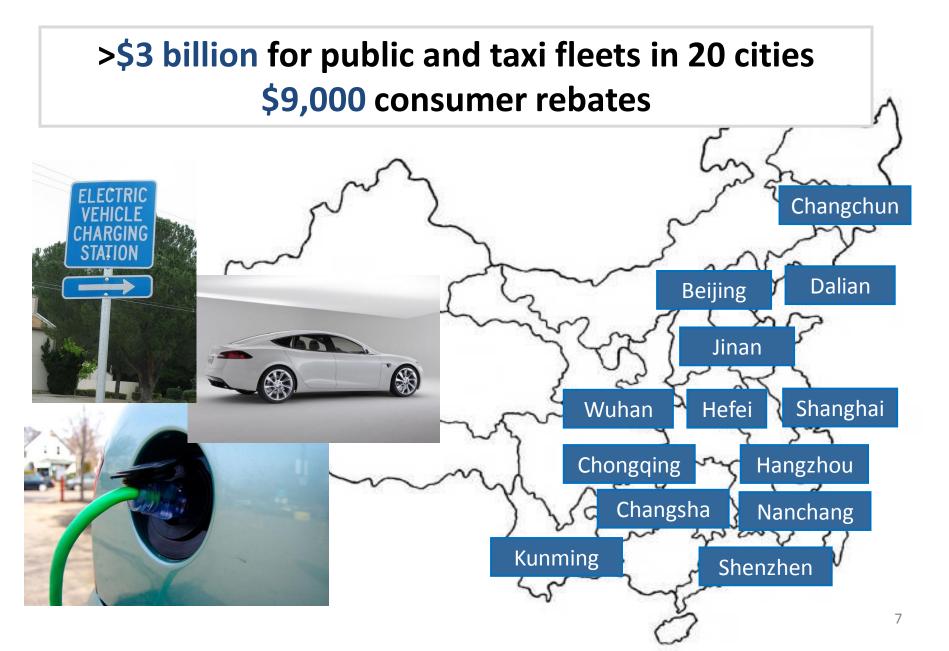
Change in primary oil demand 2007-2030

China has adopted increasingly stringent fuel economy standards

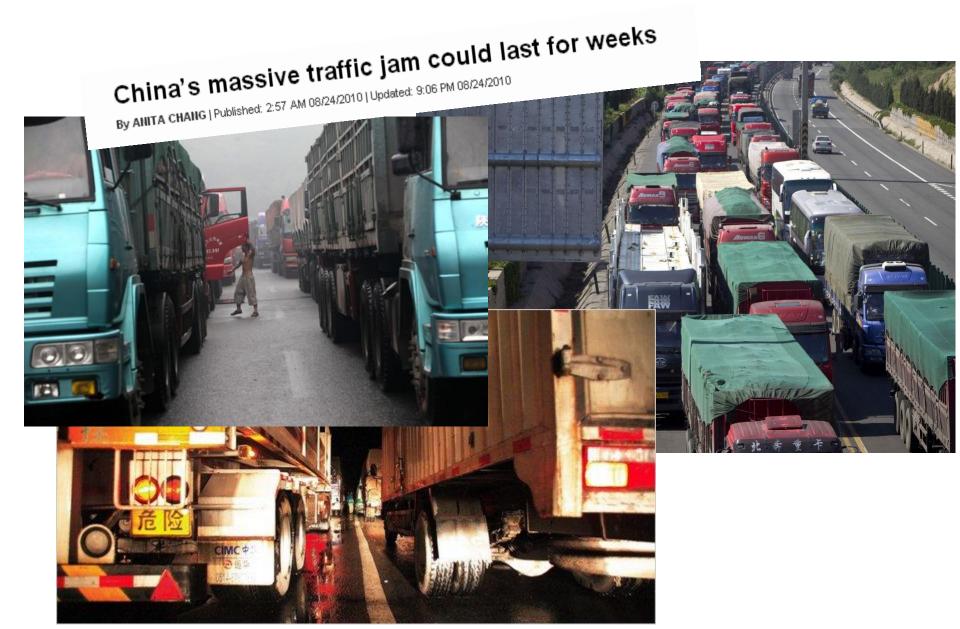


Source: iCET

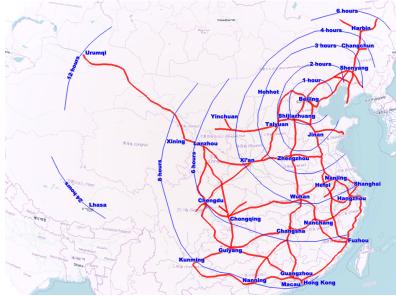
China has strong incentives for advanced vehicle deployment



Traffic challenges



China has the world's fastest and largest high-speed rail network



Expected travel times between Chinese provincial capitals



The Beijing-Tianjin intercity railway

- *Fastest speeds:* Chinese trains now reach operating speeds of **220 mph**, faster than their European and Japanese counterparts, and a Chinese train holds the world speed record of **260 mph**
- Largest network: China's 4,600 miles of HSR lines is the world's largest, and by 2020 is expected to more than double to 9,700 miles (more than the rest of world combined)
- *Technology dominance:* in just six years (from 2004-2010) China went from HSR importer to exporter (to Turkey, Brazil, Venezuela and others)

Compare and contrast...

S&T have long been a foundation of U.S.-China cooperation



Deng Xiaoping and Jimmy Carter sign the U.S.-China S&T Agreement – the first bilateral agreement after normalization of relations in 1979



U.S.-China Clean Energy Research Center

