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# Fuel Efficiency Programs in China

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中国可持续能源项目  
The China Sustainable Energy Program

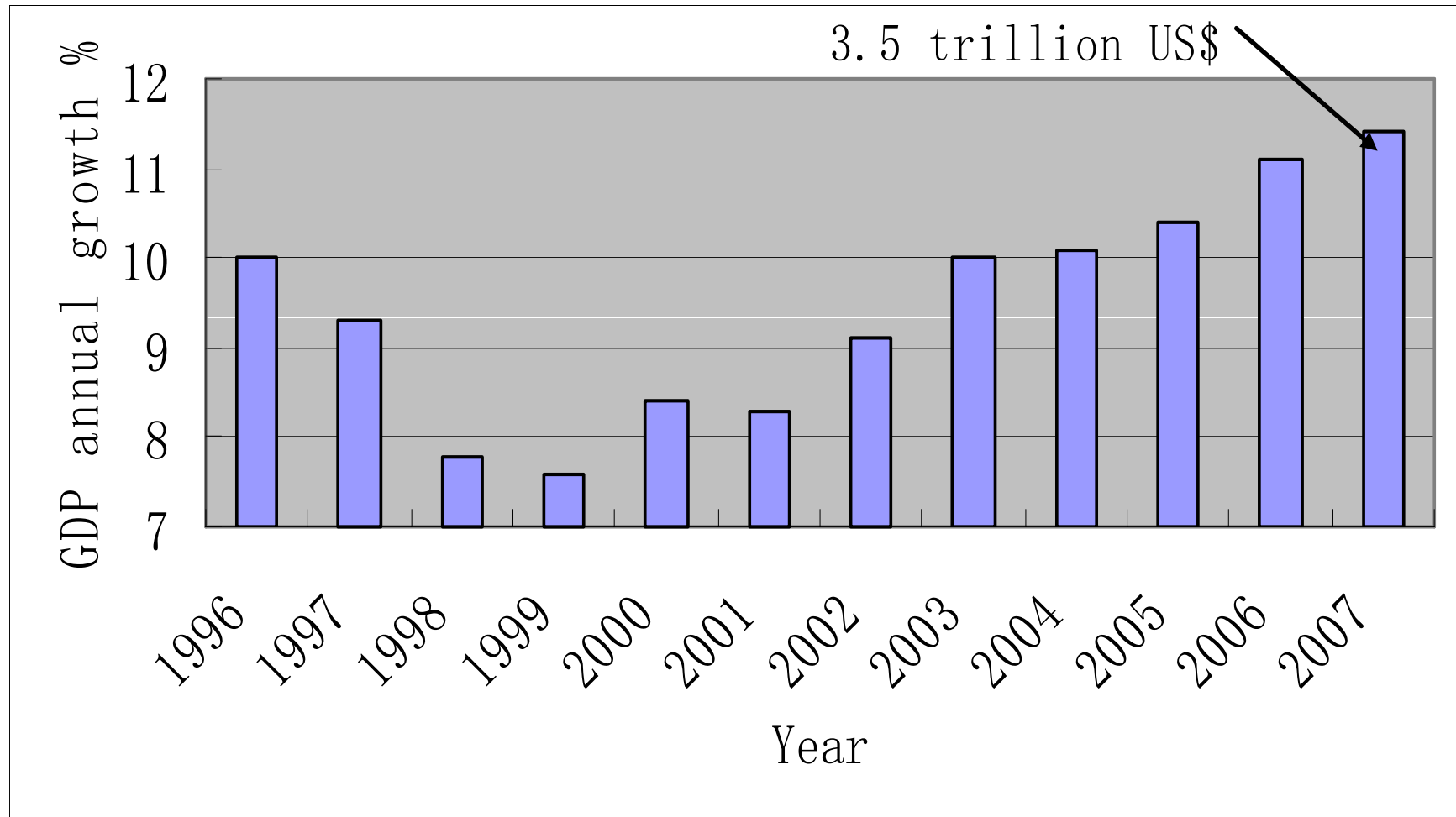
# Outline

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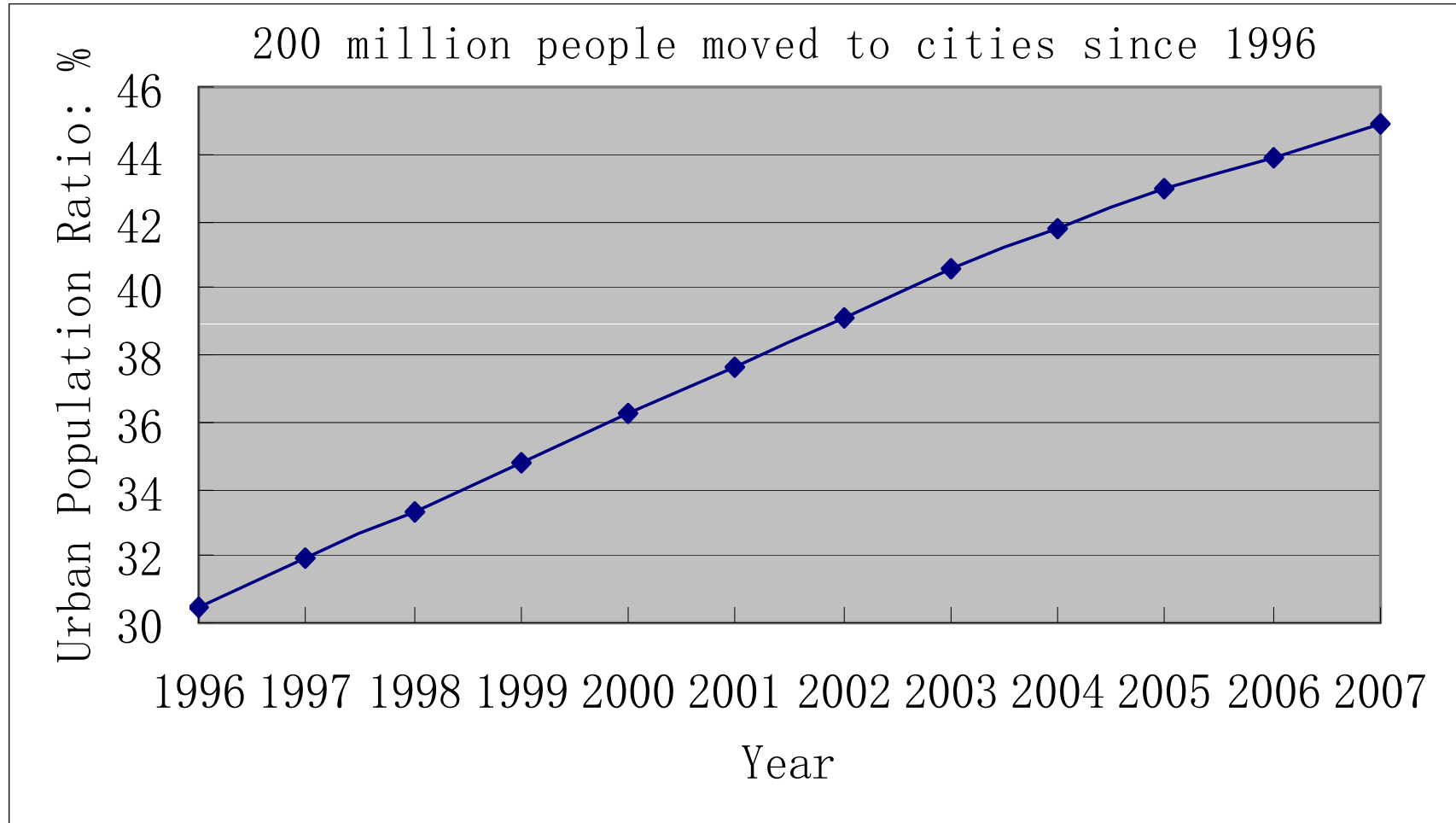
- **Background**
- **Fuel Economy Standards**
- **Impacts Evaluation**
- **Next Steps**



# China's GDP



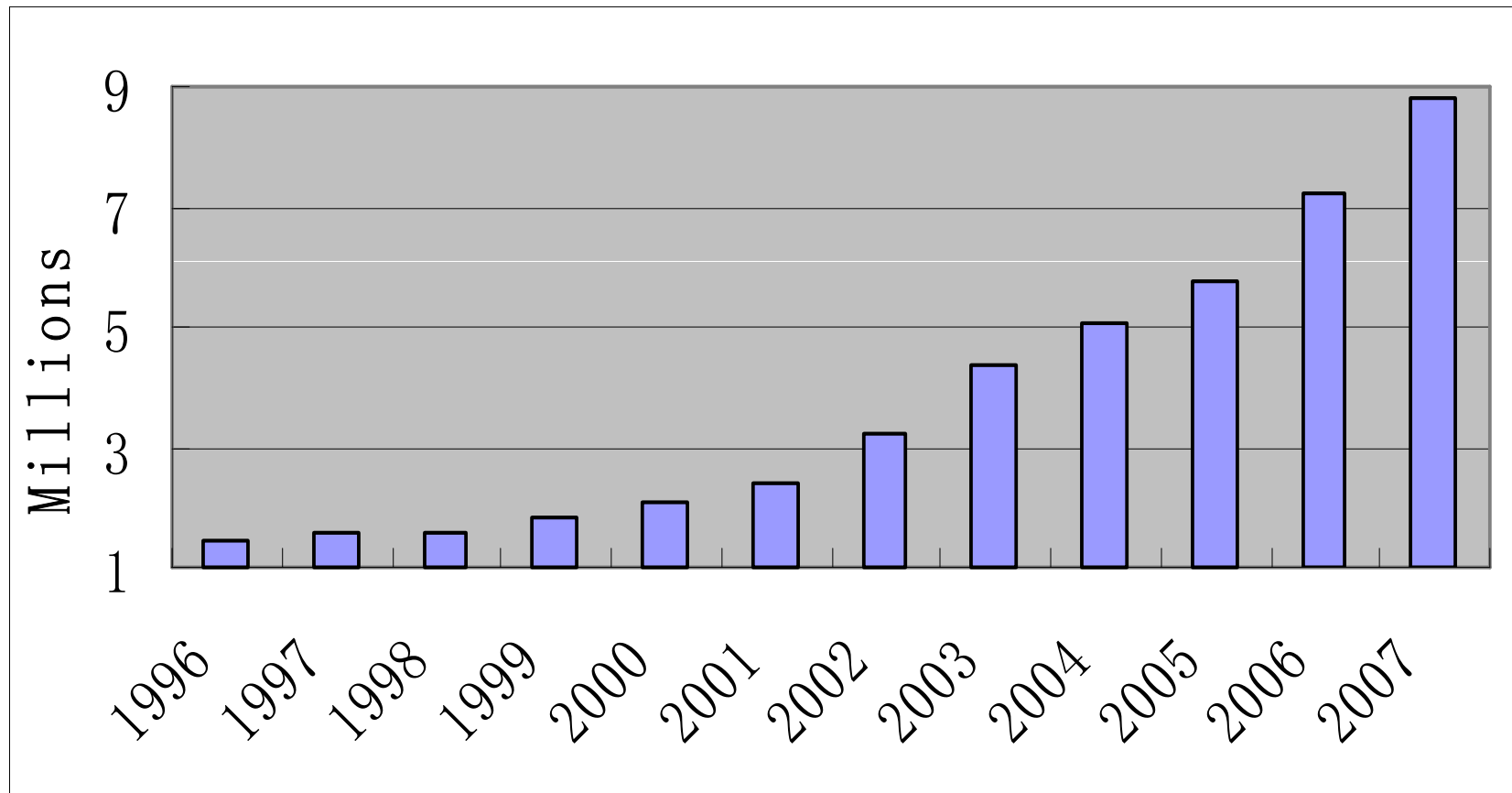
# Urbanization Ratio in China



# New Vehicle Sales Are Booming

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## No. 2 largest auto market



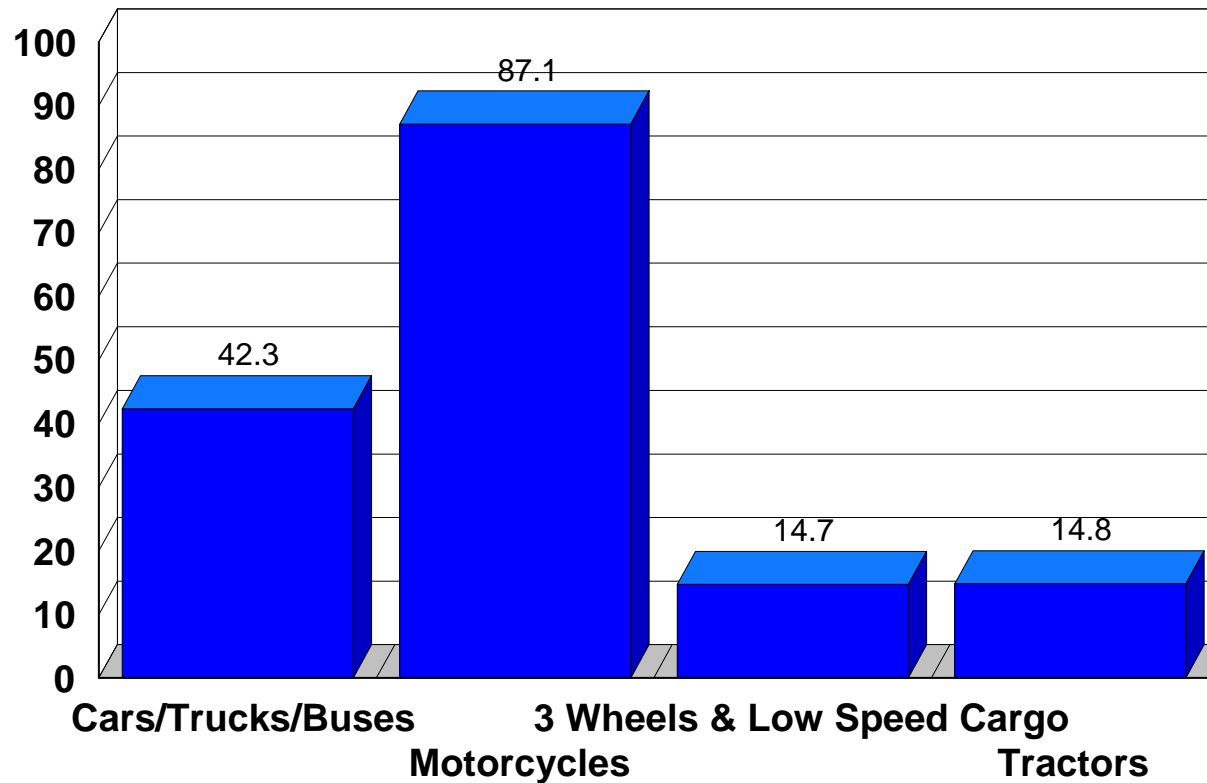
# Most Vehicles Are In Cities



# Current Vehicle Population in China

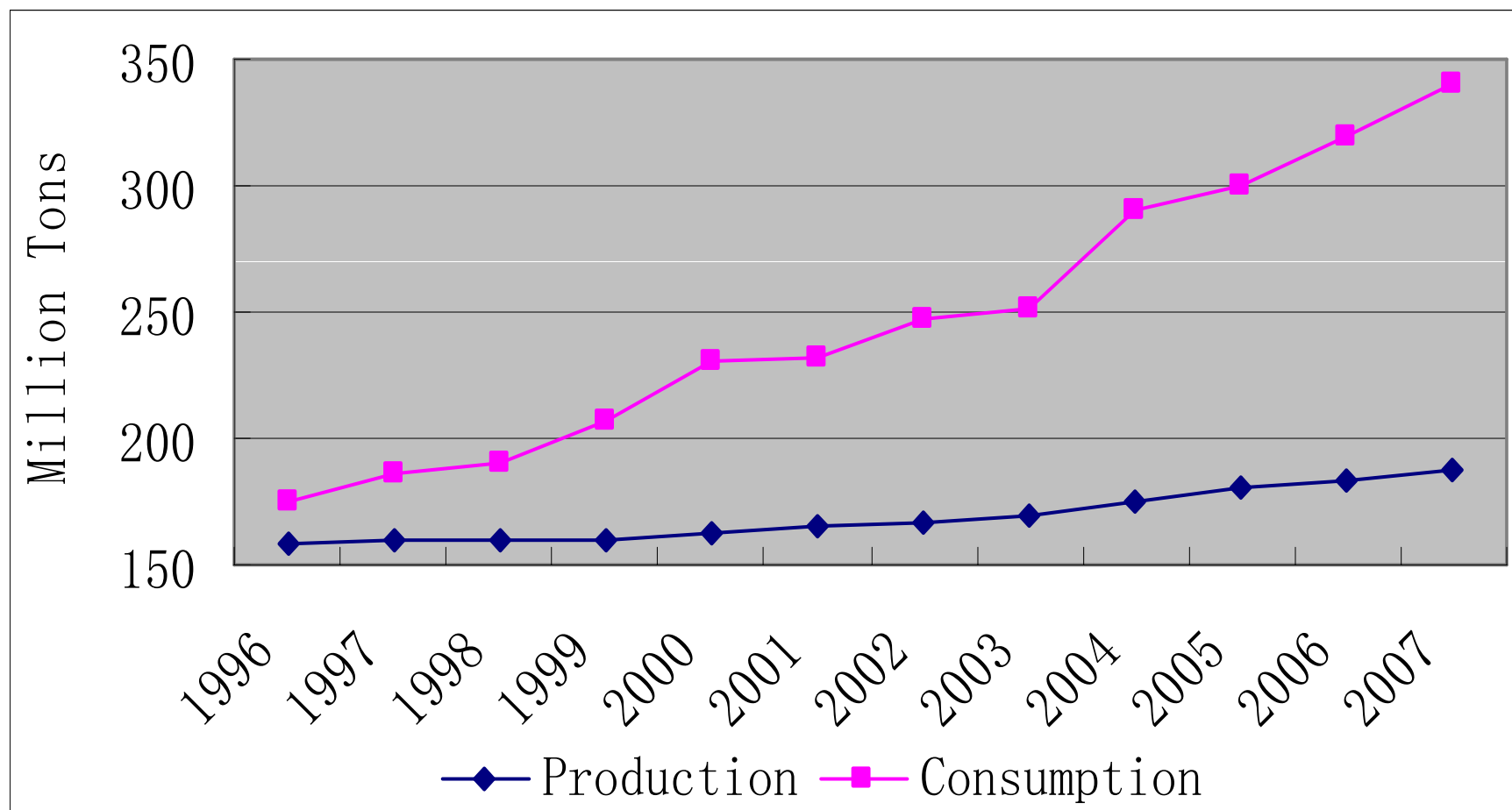
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Millions



# Crude oil prod'n & consum'n

**> 40% oil import dependence**



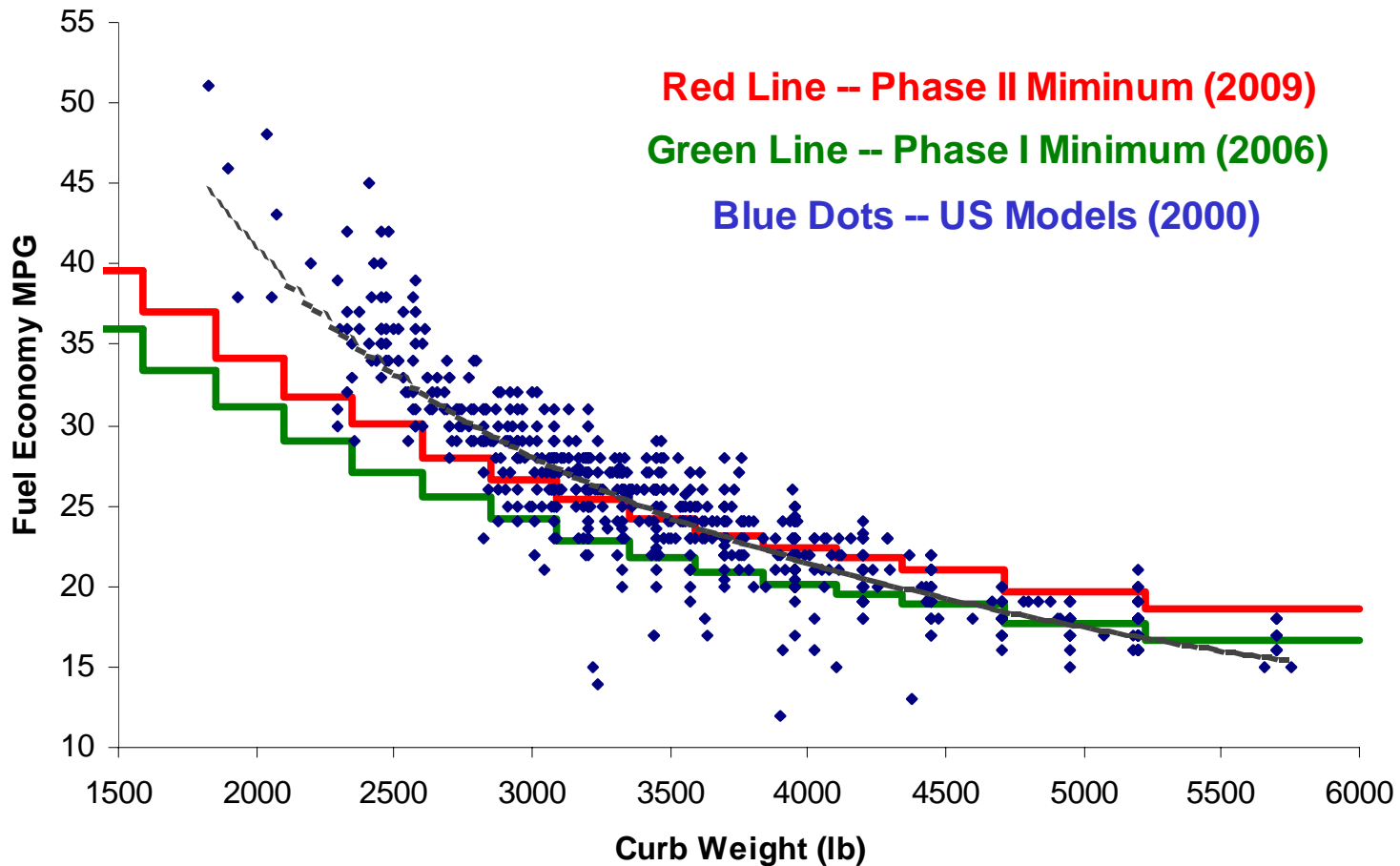
# Fuel Economy Standards

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- **Passenger Cars**
  - **China's first mandatory vehicle fuel economy standard (2004)**
  - **16 classes based on weight**
  - **Comparatively more stringent against heavy vehicles**
  - **Phase I – July 1<sup>st</sup>, 2005 (2006)**  
**Phase II – Jan. 1<sup>st</sup>, 2008 (2009)**
  - **New model for type application & certificated models**



# China vs. U.S. – Loose for Light Models But Tough for Heavy Models (SUVs)



# Others Requirements

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- **Light-duty commercial vehicles implemented since Feb. 1<sup>st</sup>, 2008**
- **Rural vehicles start from June 1<sup>st</sup>, 2008**
- **Fuel efficiency labeling (auto industry) start from July 1<sup>st</sup>, 2008**



# Electric bikes in China

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- **China Produced Approximately 15 Million Electric bikes in 2007**
- **This dramatic growth has been largely due to legislation banning gasoline fuelled scooters and motorcycles, introduced from 1996 onwards in several major Chinese cities**



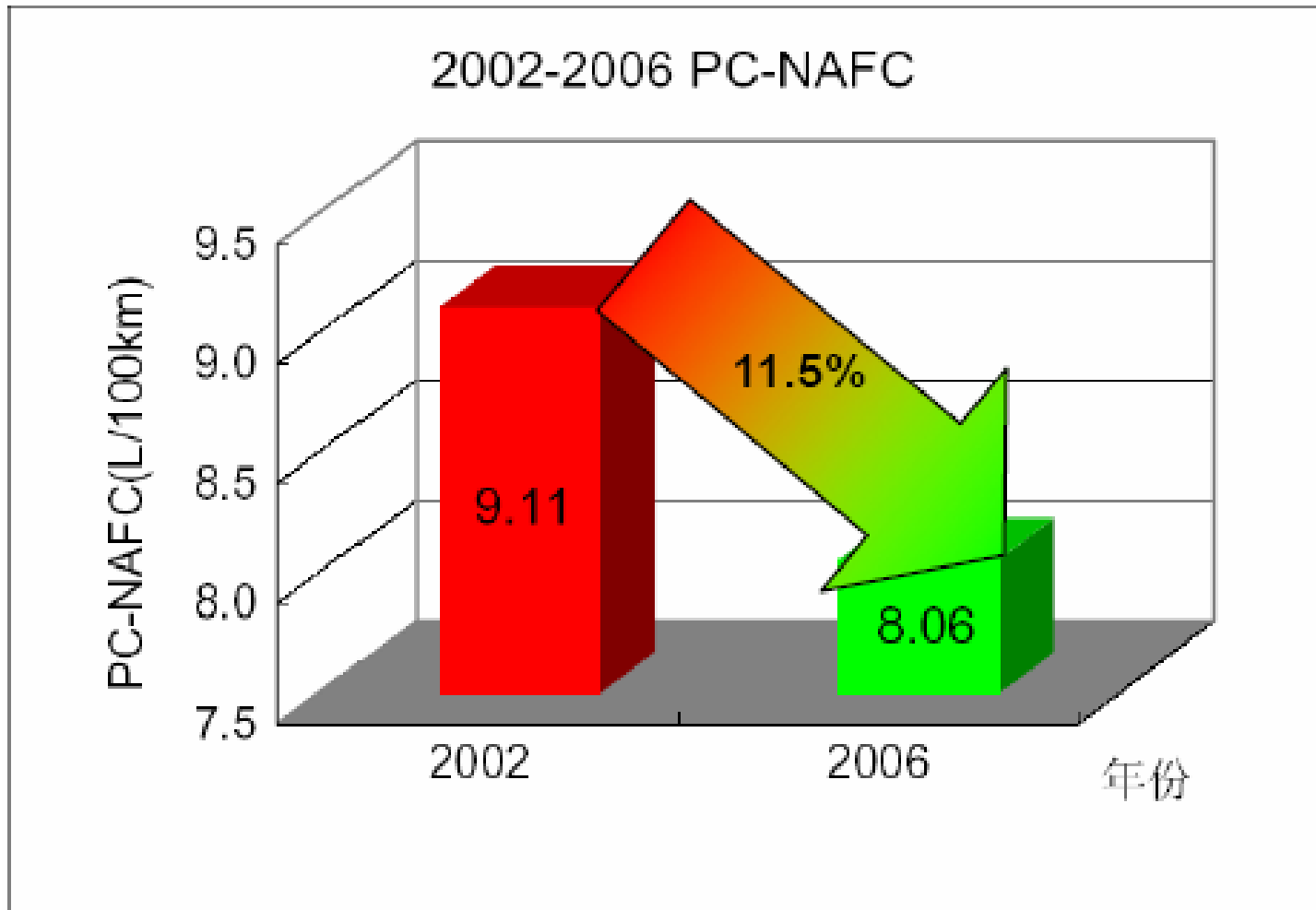
# Others in Progress

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- **Phase III of passenger car**
- **Medium- & heavy-duty commercial vehicles**
- **Motorcycles (WTO review)**
- **Fuel efficiency labeling (national, WTO review)**



# Impacts



# Other Impacts

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- **From 2003 to 2006, 1.18 million tons of gasoline was saved and 3.7 million tons of CO2 was reduced**
- **Poor technologies and products were discouraged; more than 400 models were banned**
- **Higher improvement ratio from heavy vehicle models**



# Problems & Challenges

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- **Without a long-term energy saving goal, it's not clear how fast and how stringent the standards could go**
- **Clean fuels become the biggest challenge for further strengthening the standards**
- **Conformity of products is not clear**
- **Tested fuel efficiency is far deviated from real situation**
- **Imported cars are excluded**



# Recommendations

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*Goal: reduce oil consumption*

- ✓ **Fuel economy standard is only one tool to improve the fuel efficiency (FE); fiscal policies to favor the purchase and use of more efficient vehicles are also very important; e.g. vehicle excise tax, purchase tax, and registration fee etc.**
- ✓ **Other tools to reduce VMT and Population should also be considered; e.g. prioritize public transportation, adopt fuel tax, and traffic control related policies (high parking fee, air quality management)**





# Thank you!

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**The Energy Foundation (EF)**

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