

## The Changing World of Diesel: An Introduction

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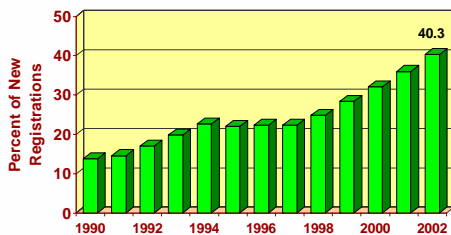
## The Changing World of Diesel

- Growing interest in and use of Diesel Engines
  - Better fuel efficiency
  - Potential benefits for climate change
- Rapidly Advancing Technology
  - Ultra Low Sulfur Diesel
  - Particle Filters, NOx Controls
- Some Continuing Challenges



## European Diesel Growth

W. Europe Diesel-Fueled Vehicle Share of  
New Passenger Car Registrations

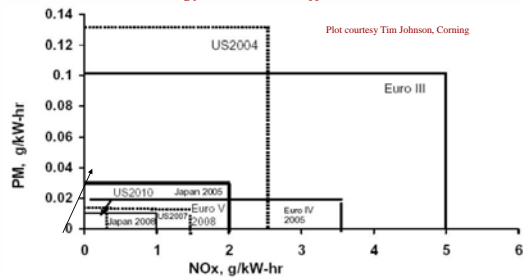


Source: ACEA [www.acea.be](http://www.acea.be)



## Emissions standards becoming much tighter worldwide

Progress we have made, and ACES project to test the newest  
technology, will kick-off this session



Plot courtesy Tim Johnson, Corning

## Changing Attitudes Among Regulators

WSJ.com THE WALL STREET JOURNAL.  
ONLINE

“Clean-Air Czar of California Shifts to Accept  
Diesel Engines”

“In Controversial turnaround, Regulator Sees Diesel as Alternative  
in Global Warming Fight” (10/24/02)



## Continuing Challenges: Existing and Older Diesels

- Contributor to Particulate Matter (PM) health effects
- Potential contributor to allergy and inflammation
- Diesel and Cancer
- Three studies of existing exposures to be presented here today



***How Best To Replace/Retrofit***  
*In Developed, and Especially Developing World*

