



15-16 May 2008, FIA Headquarters, Paris

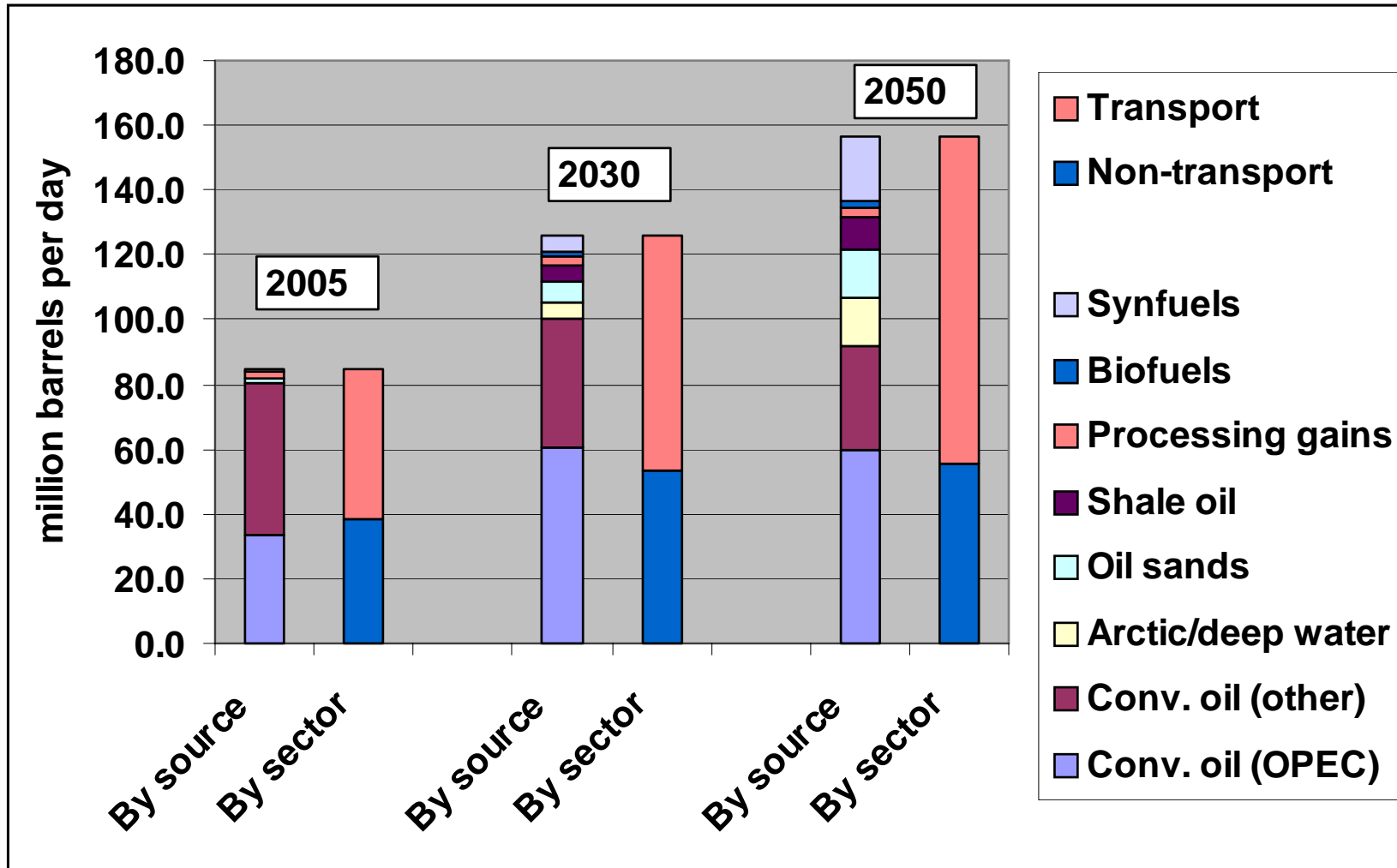
Towards a Global Approach to Automotive Fuel Economy

**Nobuo Tanaka
Executive Director
International Energy Agency, Paris**

www.IEA.org



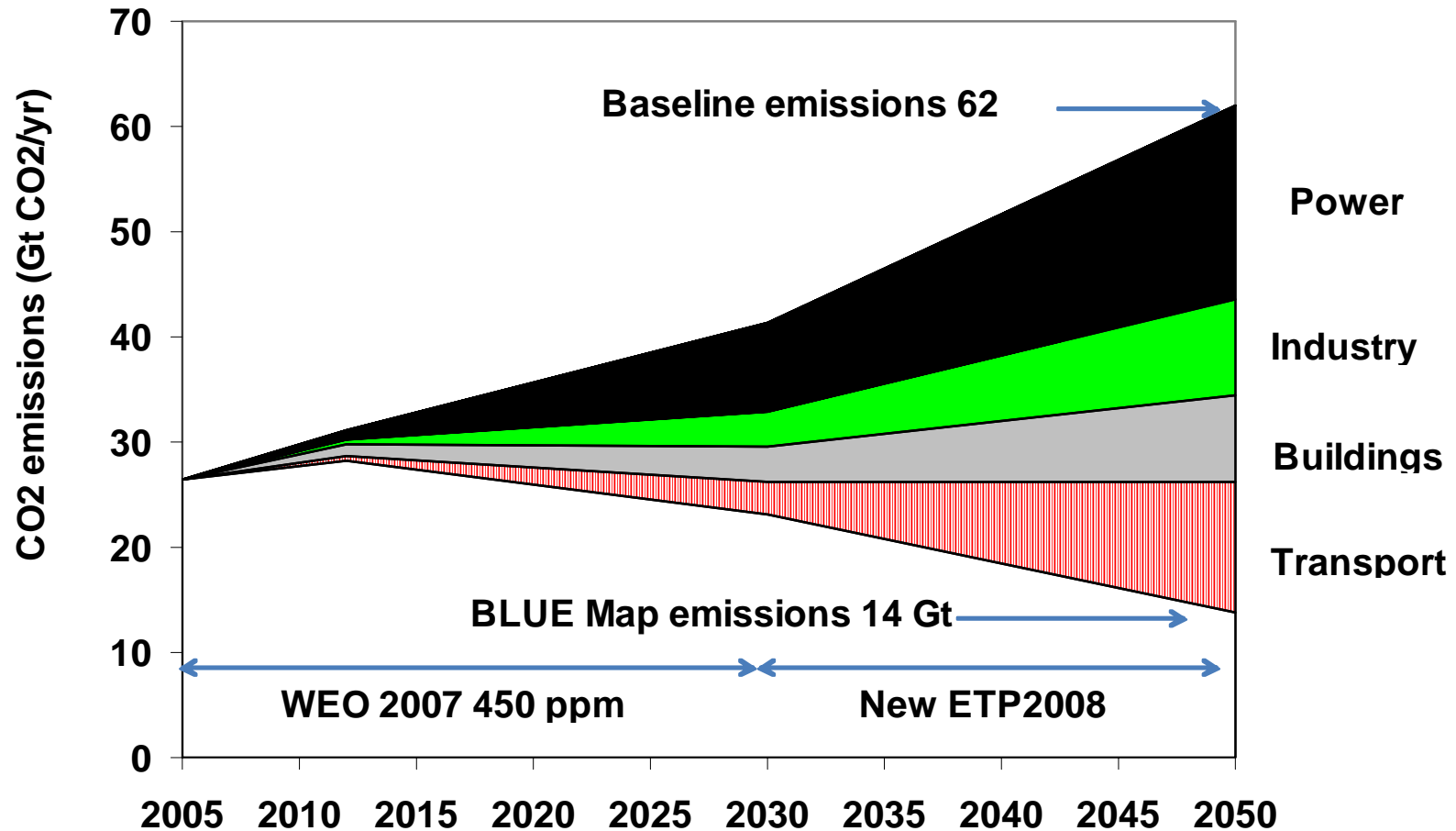
IEA ETP 2008 Baseline: Liquid Fuels to 2050





We need a global 50% CO2 cut by 2050

ETP 2008: Where CO2 reductions come from





How transport can achieve deep CO₂ emissions reductions

- Efficiency improvement generally is our cheapest option
 - ◆ Clearly our most important near term option
- Electric and hydrogen vehicles are important long-term options, but will take time
 - ◆ Plug-in hybrids are a likely first step
- Biofuels could be important, but only if sustainable and really deliver CO₂ reductions – big questions



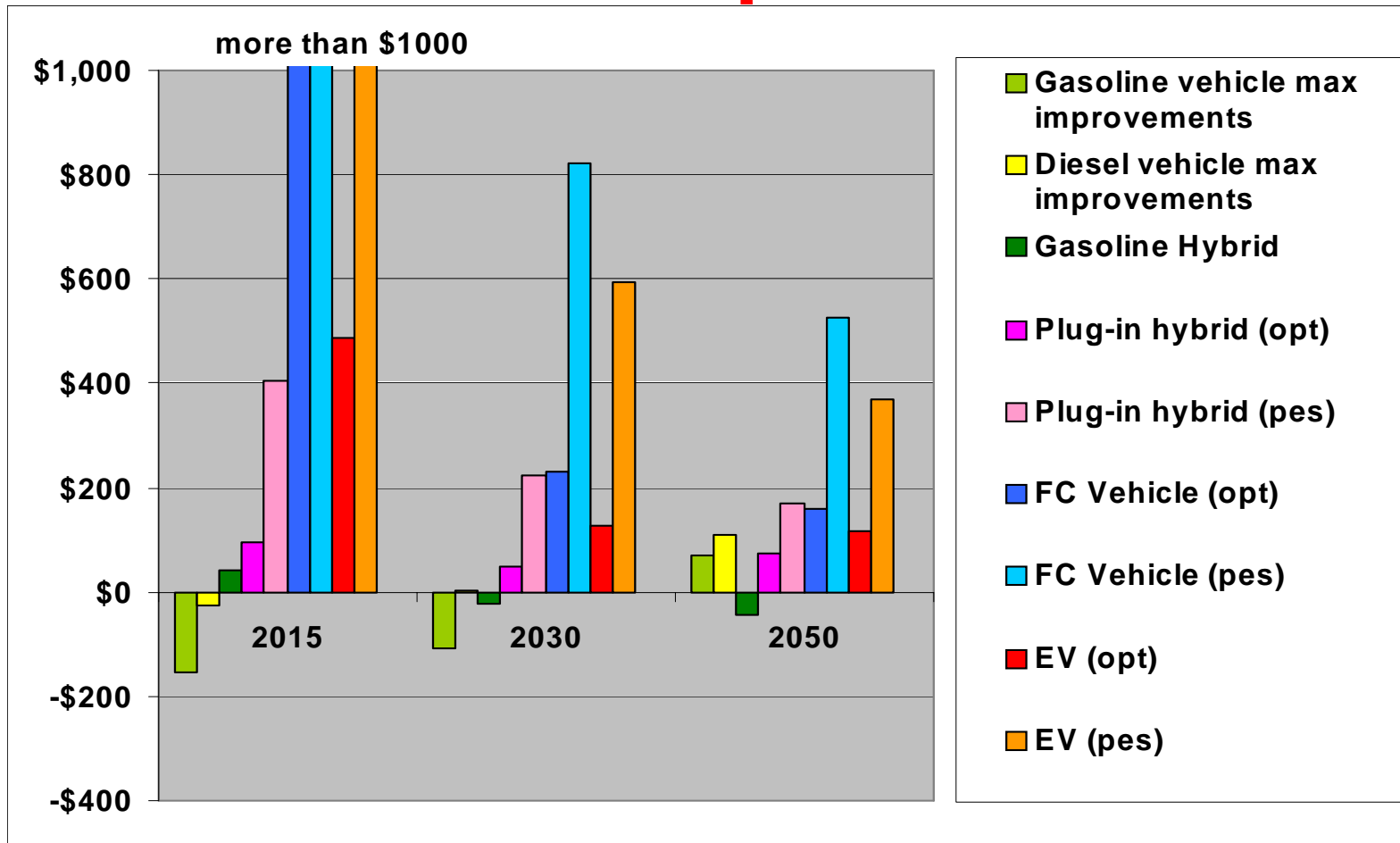
ETP 2008: Low Cost Transport Option

- **New LDVs can become 50% more efficient by 2030**
 - ◆ **In some countries, progress toward this 50% target has already begun**
 - This is, very roughly, moving from 8 L/100 km to 4. EU is already well below 8.
 - Some individual vehicles, like Prius are there already
 - ◆ **Involves maximum use of available technology, including hybrids**
 - ◆ **Important to constrain increases in vehicle size, weight and power**
 - ◆ **Plug-in hybrids may play a significant role if battery costs come down further**



LDV Technology Costs

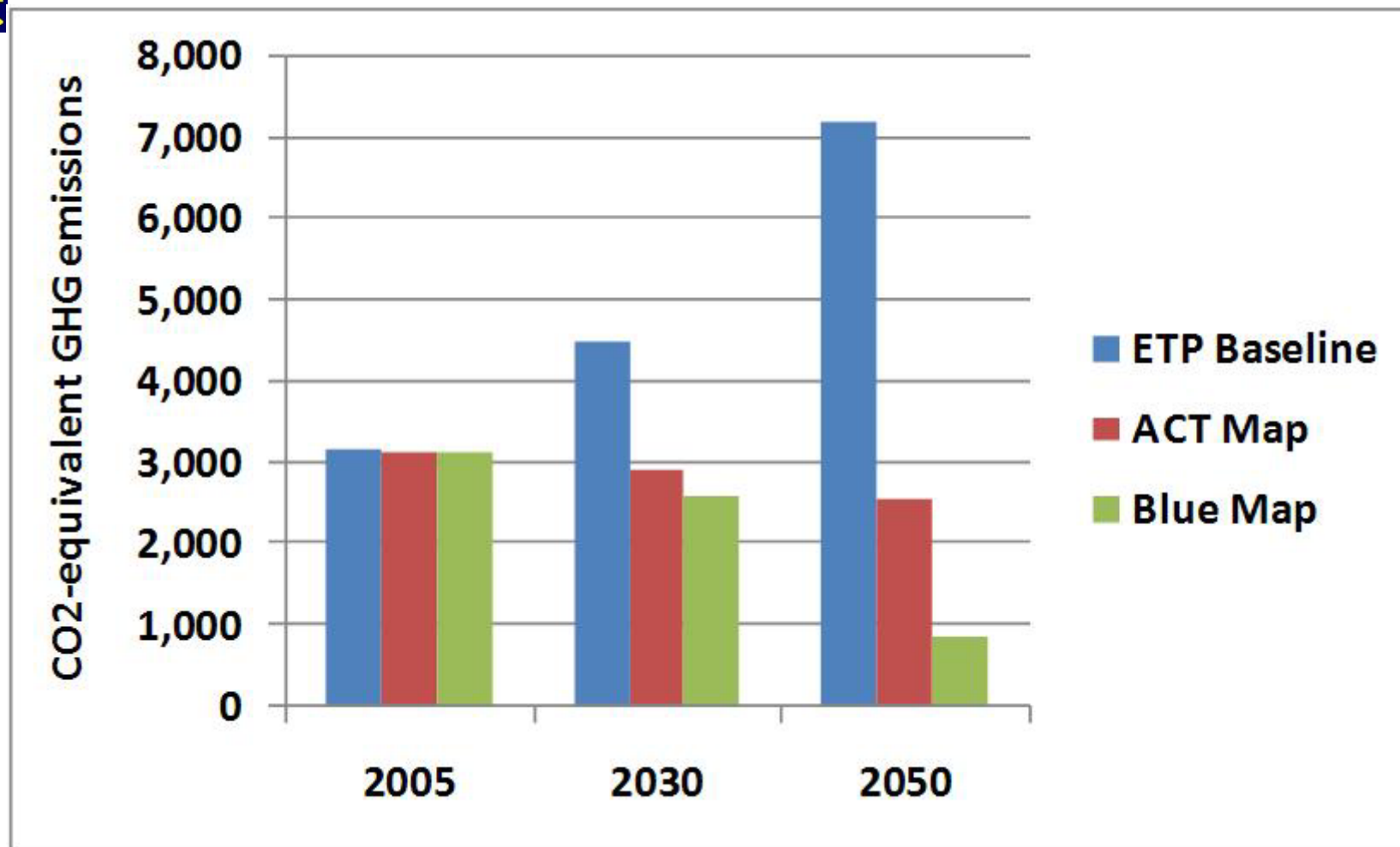
ETP: Net cost per tonne CO2



Opt: optimistic, pes; pessimistic; based on \$60/bbl oil and undiscounted vehicle and fuel costs



ETP Scenarios for Light-duty Vehicles



Note: GHG emissions are measured as well-to-wheel life cycle CO2-equivalent emissions



Policy Considerations: OECD

- We will have LDV efficiency/CO₂ regulations in several OECD countries
 - ◆ US, Japan, Korea, EU and Canada will have them by 2010
 - ◆ US, Japan and several EU countries will also have efficiency/CO₂-differentiated vehicle tax policies
- We will need to keep tightening regulations over time in order to achieve 50% reduction potential
 - ◆ And perhaps support regulations with fiscal incentives
- Current regulatory systems are quite different
 - ◆ Different test procedures and stringency
 - ◆ Different regulatory design including lead time
 - ◆ Different supporting fiscal measures
- Do we need to eventually align these systems?
 - ◆ Would benefits justify such an effort?



Conclusions

- Thus there is a lot to talk about at this conference!
- We need a road map for how to get to a 50% reduction in vehicle energy intensity around the world by 2030
- We need to identify the needs, the information gaps, the directions for policy, the role for different actors
- What happens next? Shape of an initiative
 - ◆ IEA is on board and ready to help