

ADEME



Agence de l'Environnement
et de la Maîtrise de l'Énergie

Indicators for energy efficiency policies monitoring

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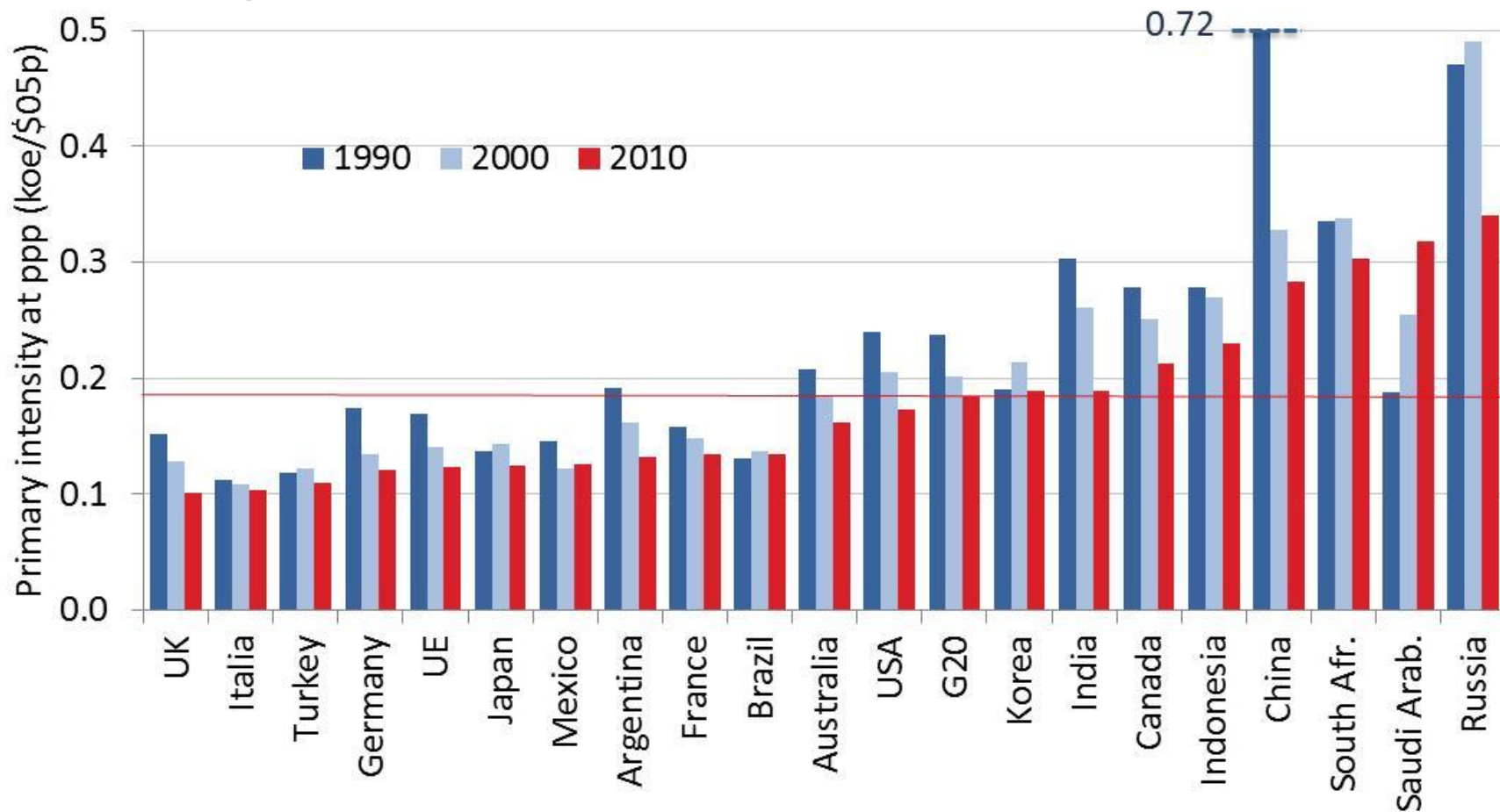
Energy efficiency policies and indicators: ADEME experience

- **European database on indicators (Odysee, 200 indicators, DG TREN) and on Policies (MURE, 1500 national measures)**
- **World Energy Council : report every 3 years, database « worldwide panorama on energy efficiency indicators and policies evaluation »**
- **IPEEC : international cooperation on indicators and policies with Mercosur, India, Mexico...**
- **MEDENER : brochure and indicators**
- **CEN/CENELEC and ISO 257 on energy saving calculation under discussion**

...in partnership with other institution as IEA, EEA...

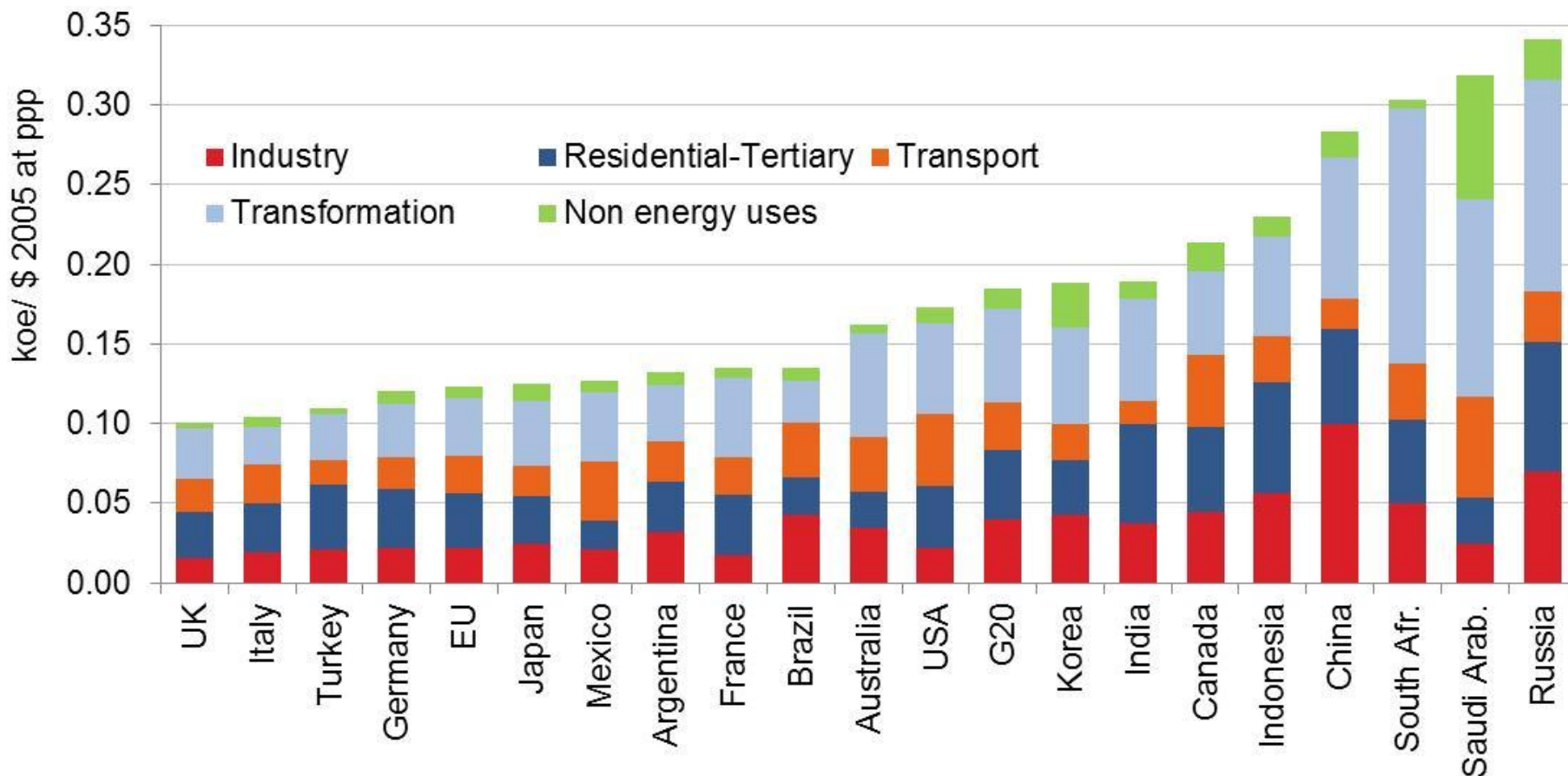
Primary energy intensity (1990-2010)

A significant improvement in most of the countries



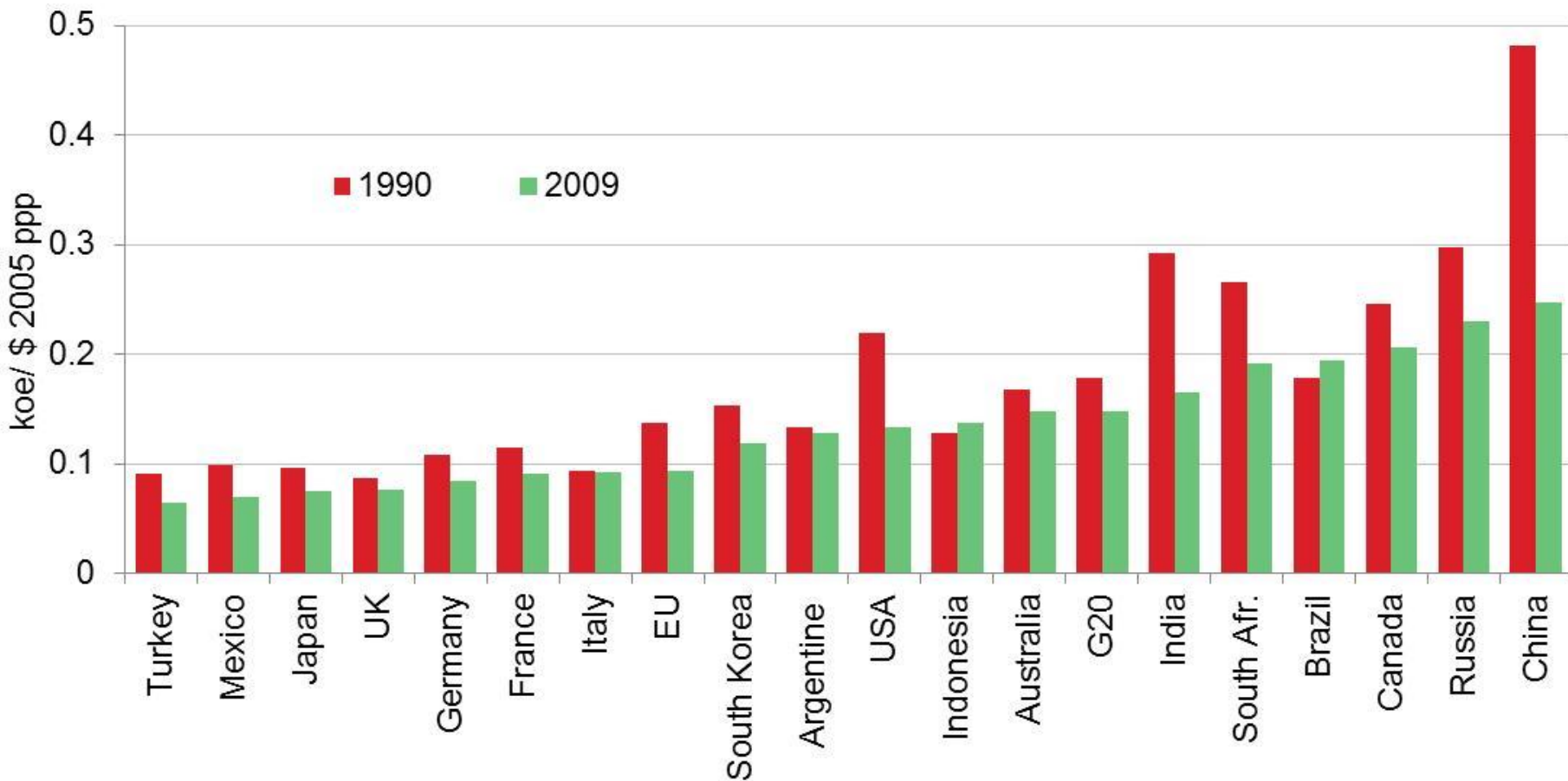
Primary energy intensity by sector. 2010

Global results are largely depending on the sectors breakdown

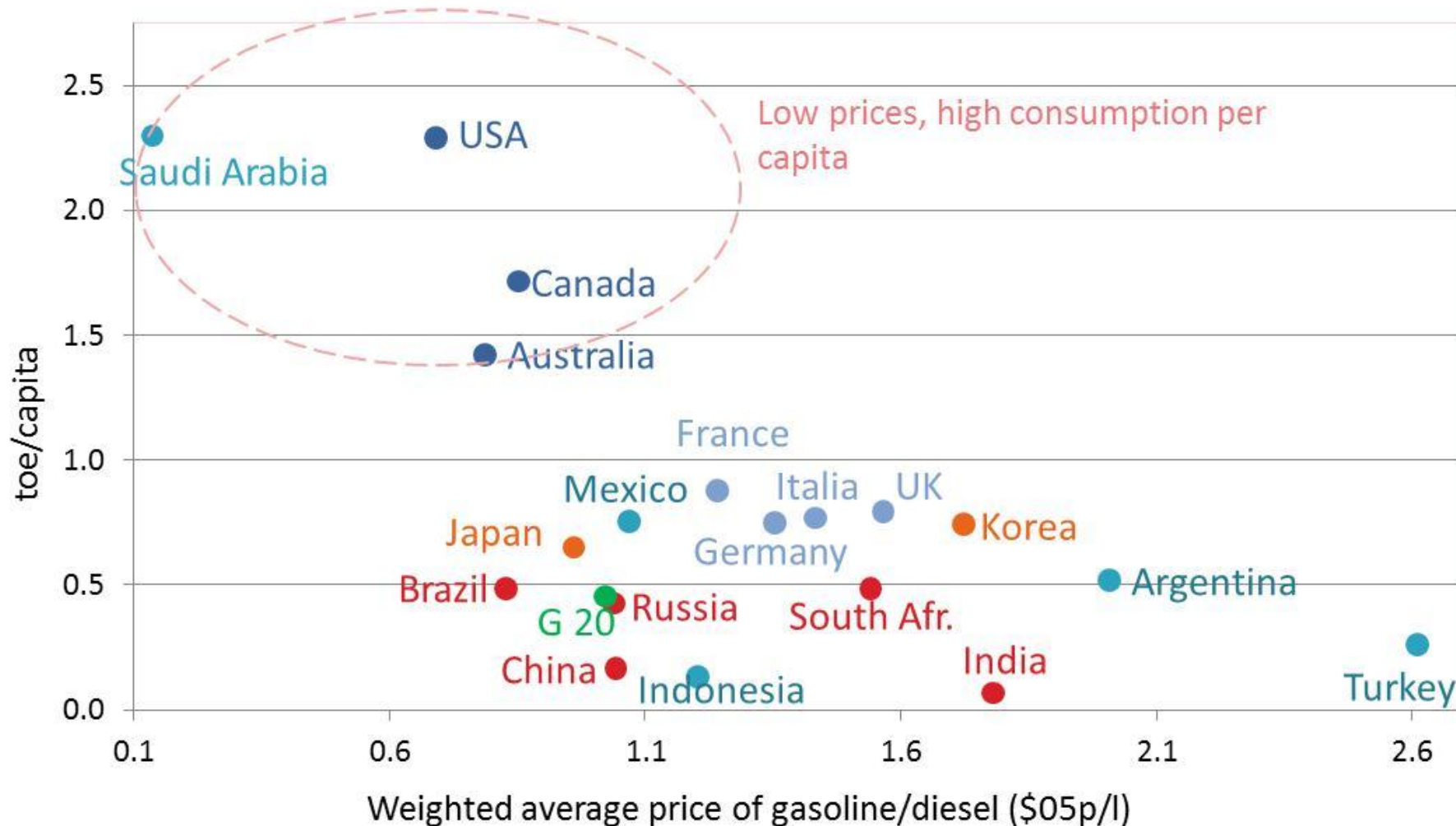


Energy intensity in industry

A decrease in almost all of the countries

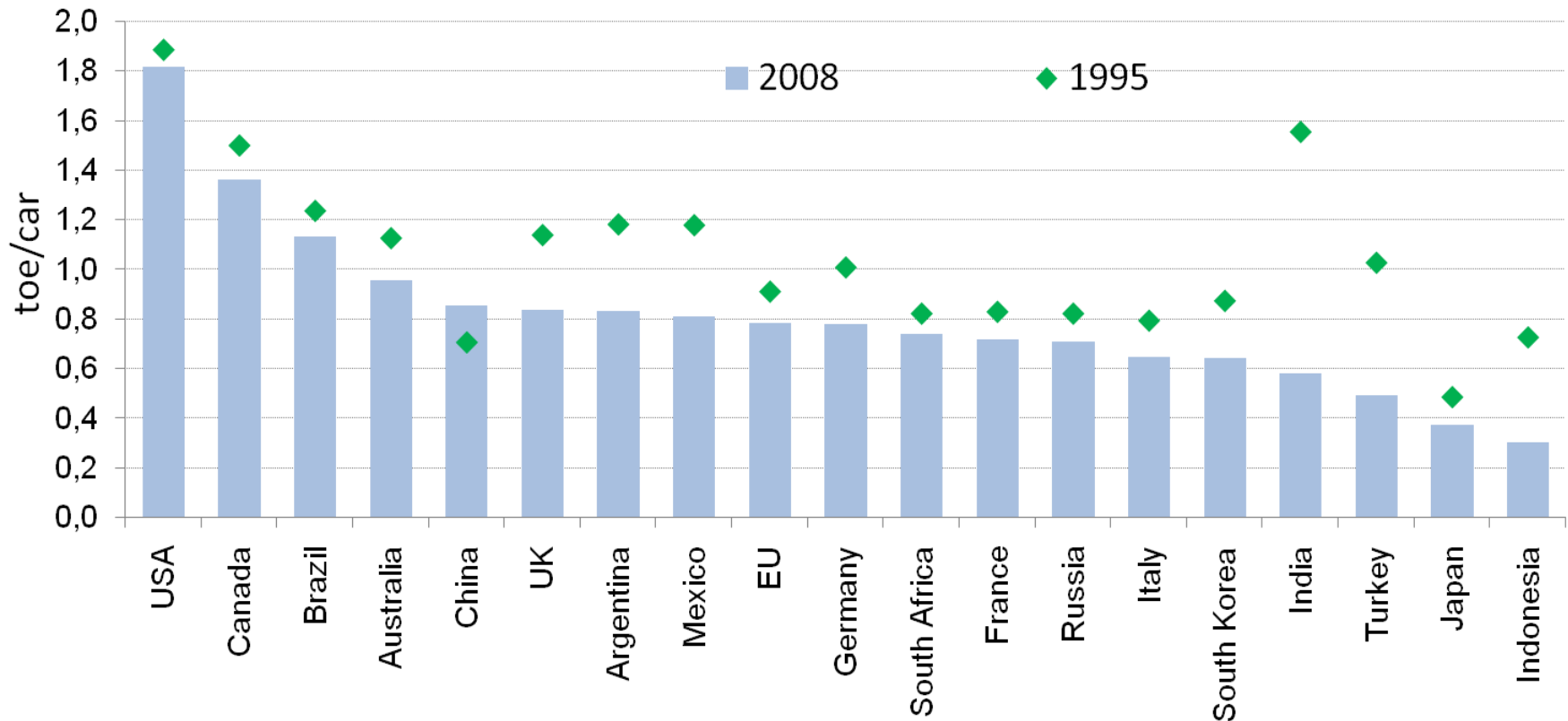


Road transport energy consumption per capita and motor fuel prices (2010)



Consumption of road transport per car equivalent

A significant improvement due to a better performance of vehicle stock

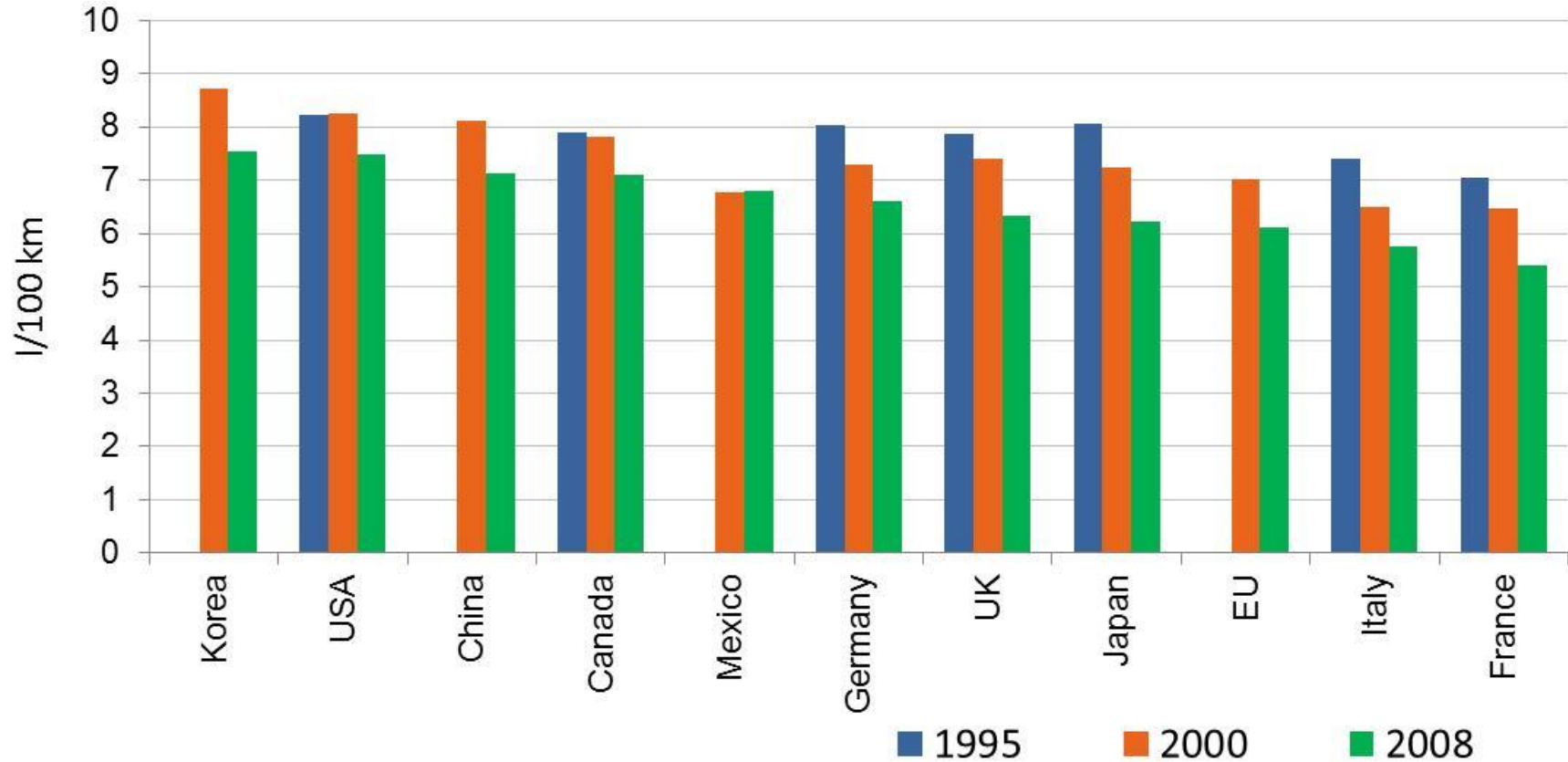


1 bus equivalent to 15 cars. 1 truck equiv to 4 cars. 1 motorbike equiv to 0,15 cars

Source: Enerdata for the energy consumption of road, IRF and national sources for the number of vehicles

Specific consumption of new cars

10% to 20% improvement in almost all of the countries



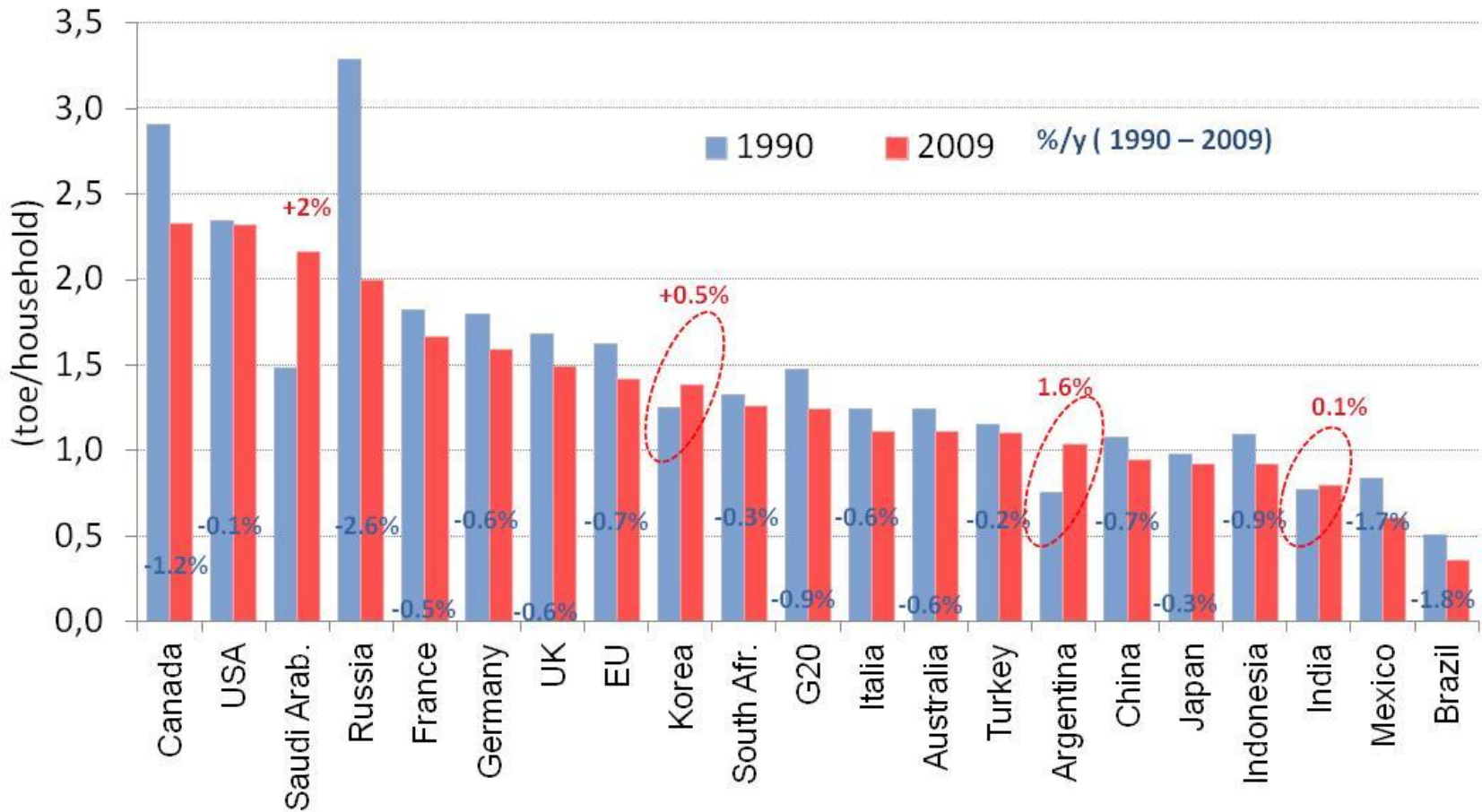


These performances are driven by the implementation of several measures on new cars:

- Subsidies for purchasing new efficient cars, or incentives for scrapping old non efficient cars.
- Fiscal measures such as taxes based on energy/CO2 emissions, in EU, Japan, China and North American countries.
- Regulation: car label and fuel efficiency standards in several countries (both car label and fuel efficiency for USA, Canada, Japan, Korea, China, Australia, EU; and only car label for India, Brazil and South Africa).

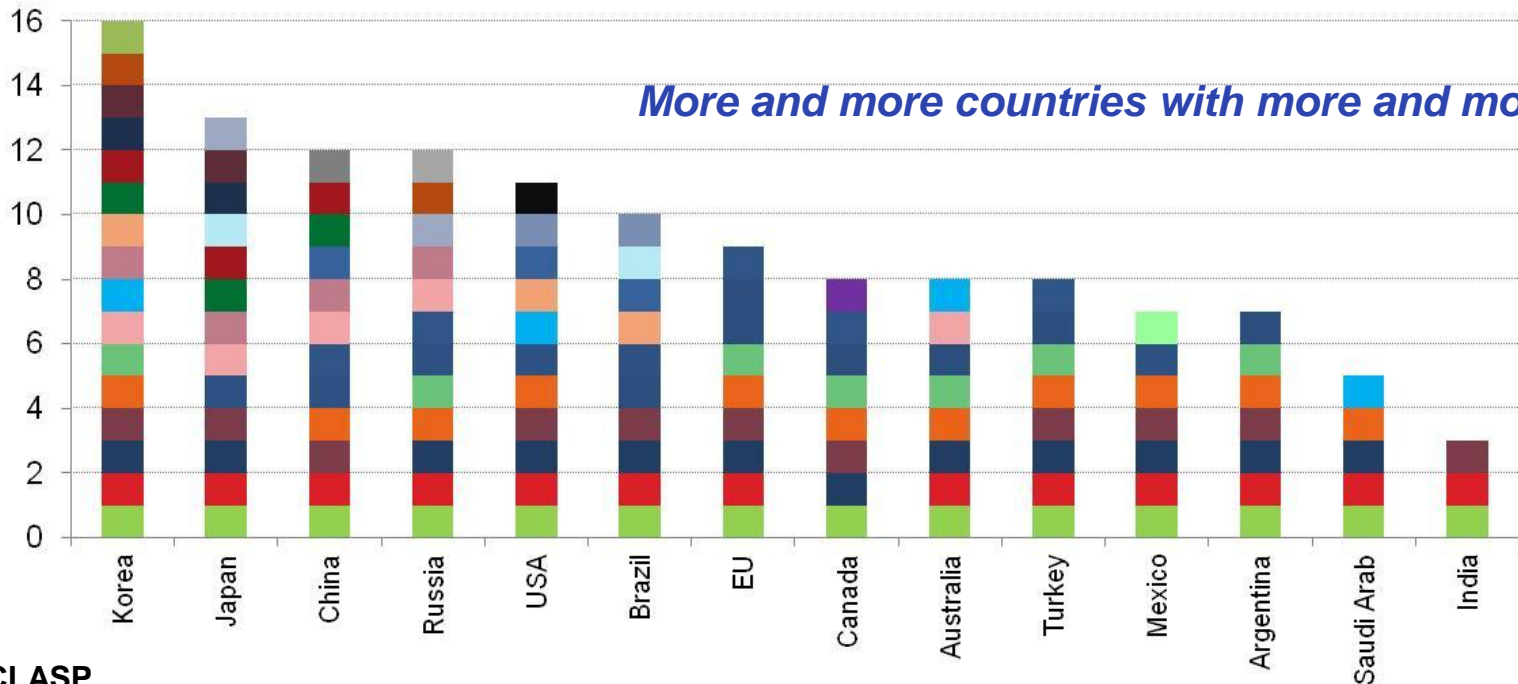
Energy consumption per household

A diversification linked to lifestyle and location



Household's appliances with mandatory label in 2011

- refrigerator
- washing machine
- oven
- boilers
- cooking appliances (gas)
- space heater
- heaters (pool)
- AC
- dishwasher
- computer
- fans
- furnace (gas)
- imaging equipment
- water chillers
- freezers
- clothe dryers
- heat pumps
- TV
- toilet electric seat
- wine chillers
- telephony
- lamps (CFL, incandescent)
- water heaters
- microwave oven
- rice cookers
- audio/video equipment
- pump
- stove





Measures for efficient appliances

- Labelling programmes cannot alone transform the market and are usually completed by Minimum Energy Performance Standards (MEPS) in the great majority of countries. Aim of MEPS is to improve the energy efficiency of new appliances by requiring a minimum energy efficiency rating to remove the least efficient products from the market.
- To be effective, labelling programmes and performance standards must be regularly updated and upgraded. In Asia there has been a rapid growth in the number of equipment with labels or MEPS.
- Financial instruments have been implemented in almost all G-20 countries to encourage investments in energy efficient equipment by reducing the investment cost, either directly (economic incentives) or indirectly (fiscal incentives).

Energy efficiency indicators are essential to:

- Monitor the performances of a country, a region
- Elaborate policies and measures in connection with energy efficiency potentials
- Evaluate results
- Develop international benchmarks

More information

- WEC <http://www.wec-policies.enerdata.eu/>
- IEA database
<http://www.iea.org/textbase/pm/?mode=pm>
- ENERDATA worldwide energy database
www.enerdata.net
- ODYSSEE indicators in EU <http://www.odyssee-indicators.org/>
- CLASP <http://www.clasponline.org/index.php>
- ADEME www.ademe.fr