Potentials of Energy Conservation in Industry Sector of Iran

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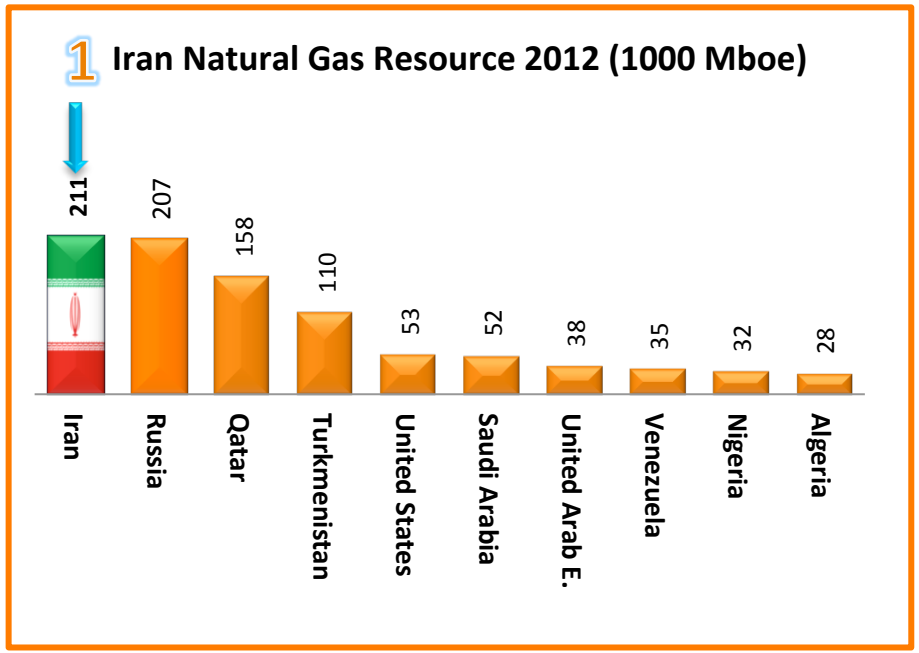
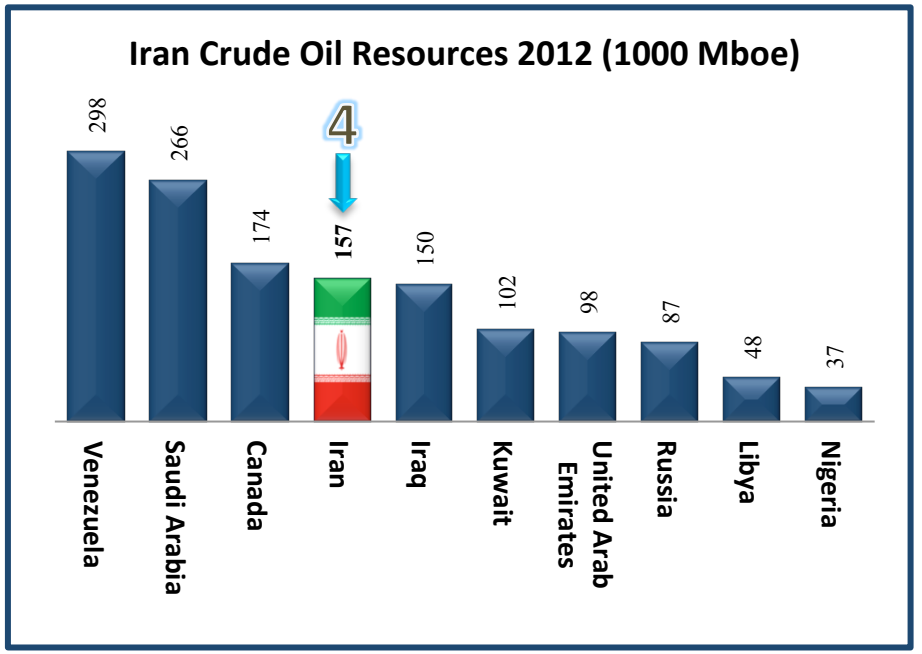
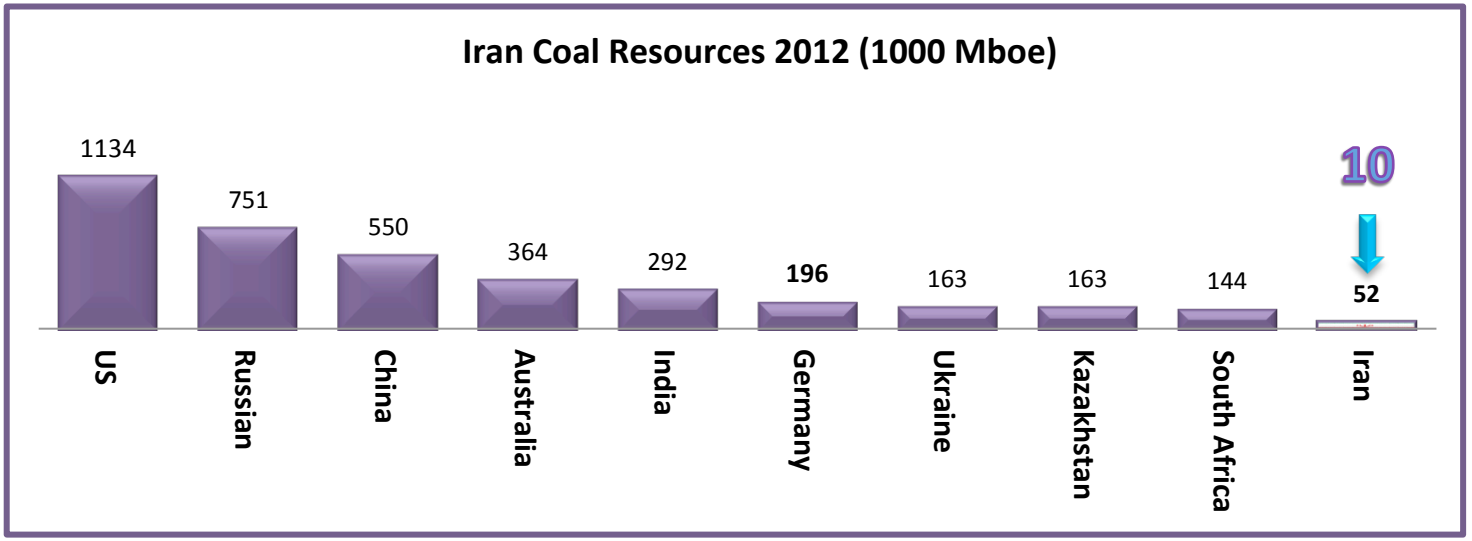
eceee 2014 Industrial Summer Study

Fossil Energy Resources

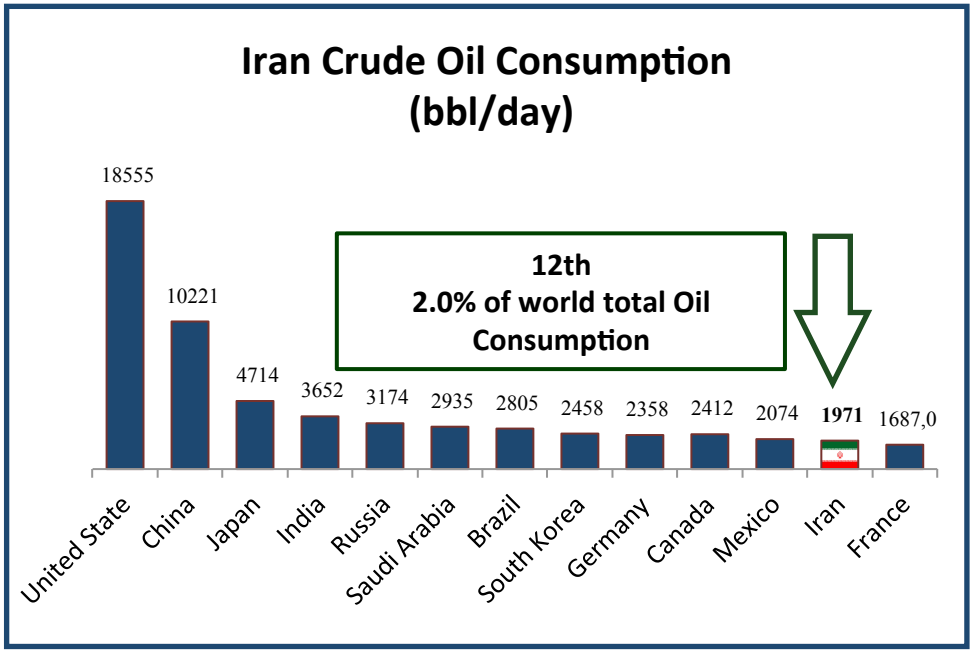


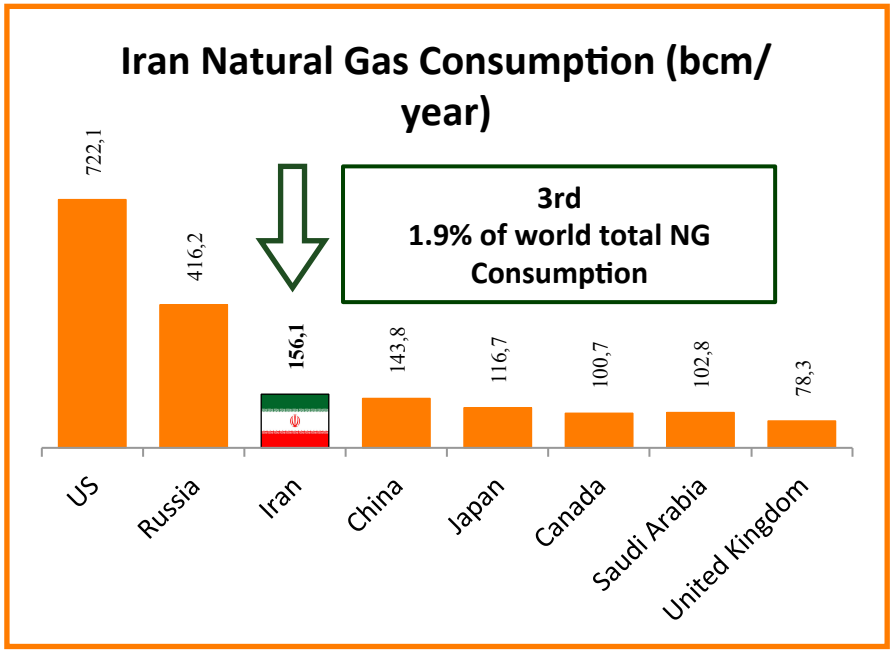


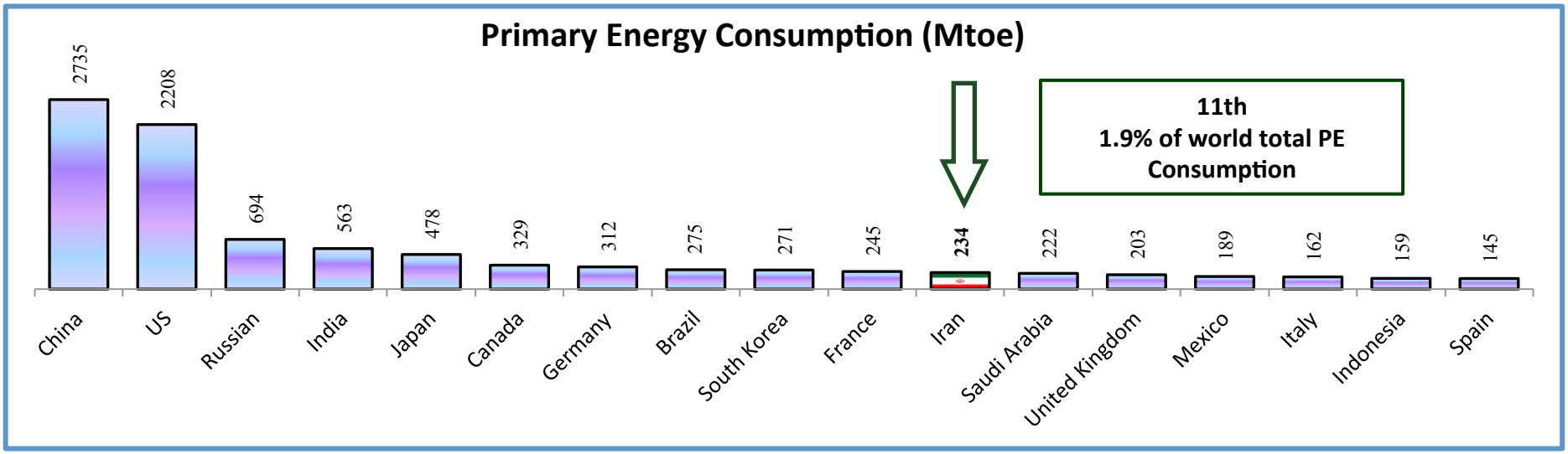


Source: BP Statistical Review of World Energy. June 2013

Energy Consumption

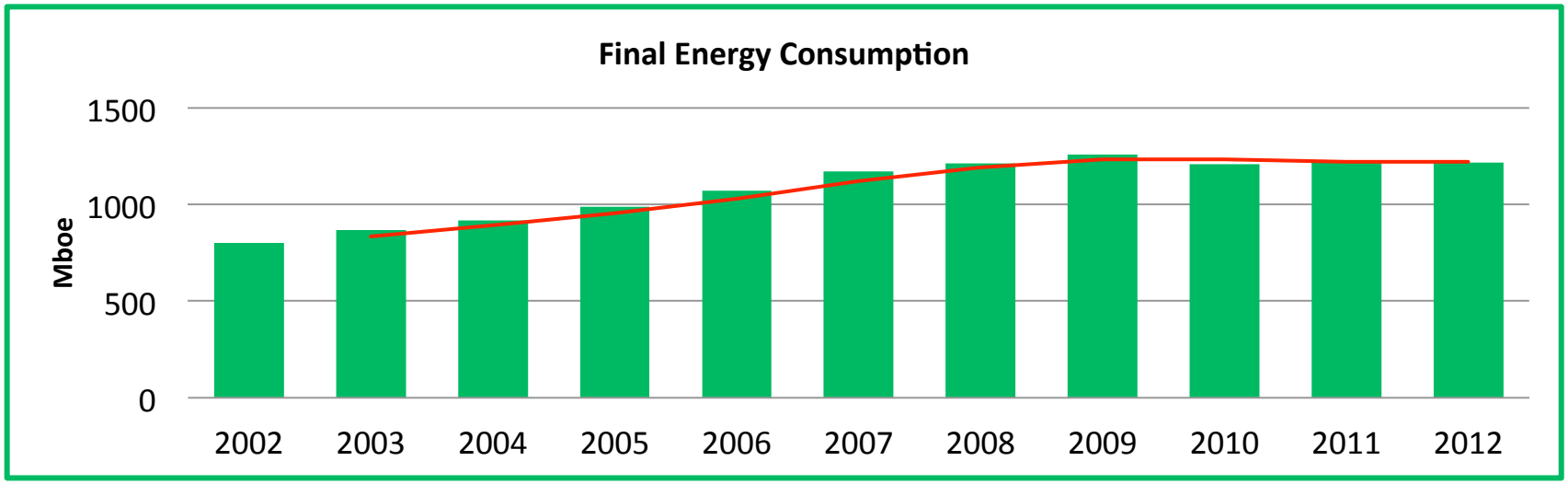


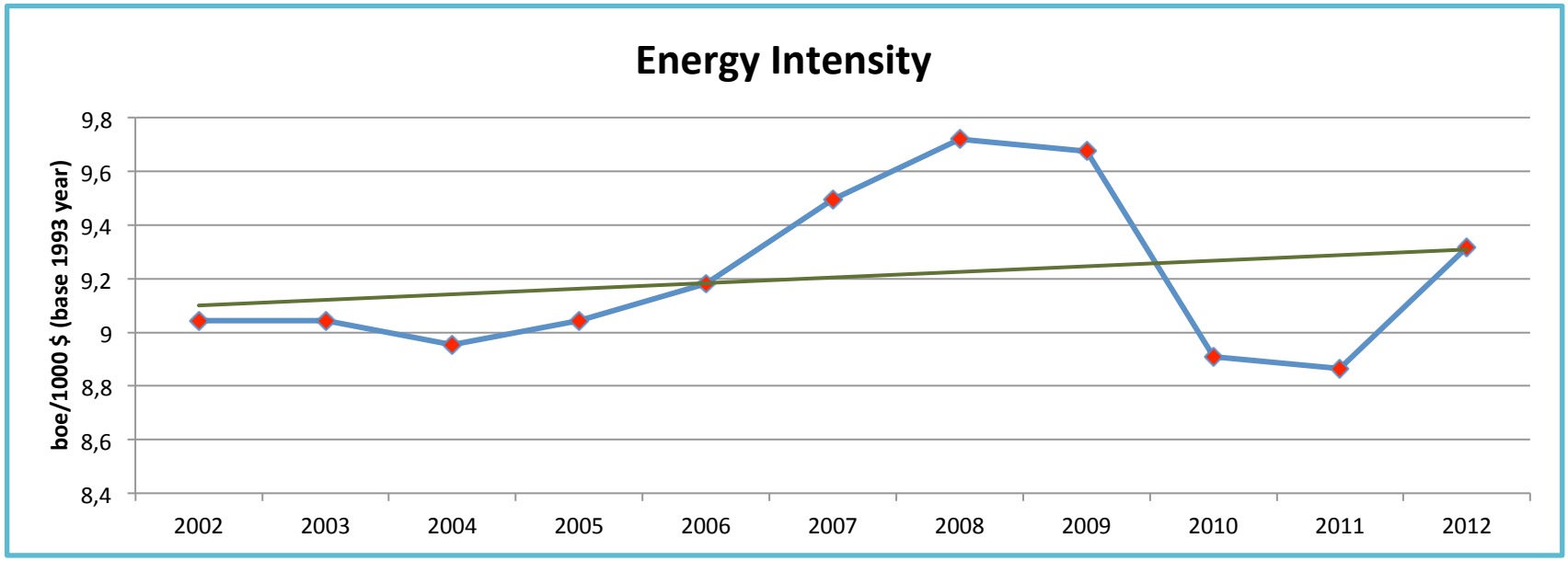




Source: BP Statistical Review of World Energy. June 2013

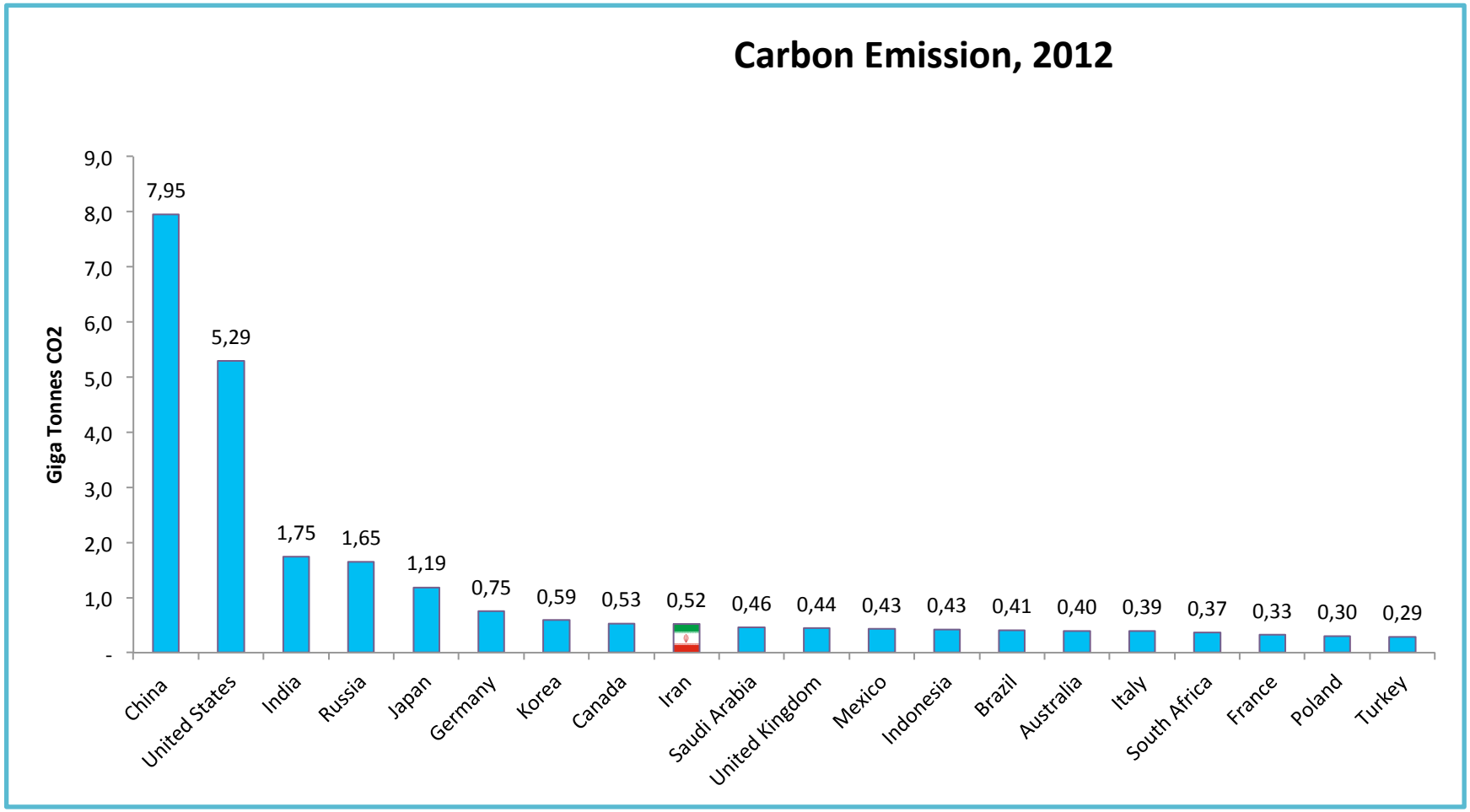
What is the trends?





Source: Islamic Republic of Iran's Hydrocarbon Balance, 2011

Carbon Emission is a problem?

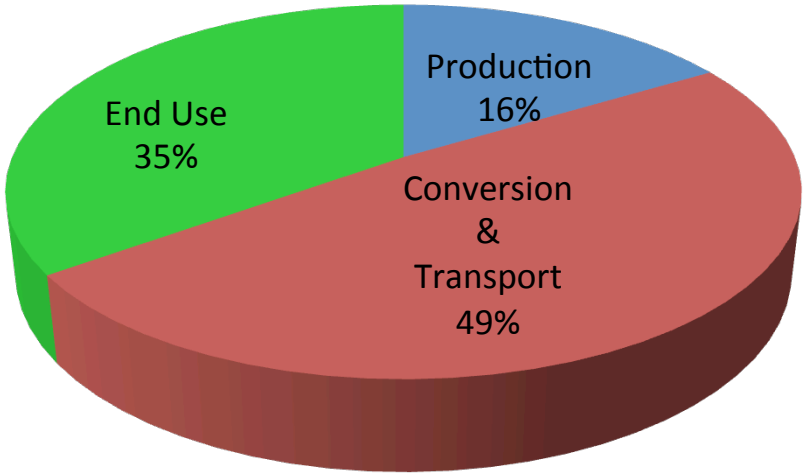


Source: **CO2 Emissions From Fuel Combustion Highlights 2013**

Losses in Iran energy system

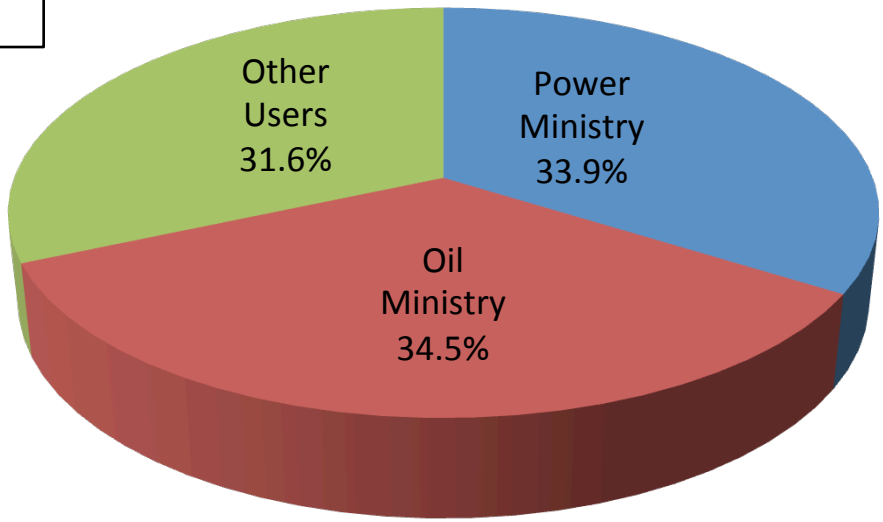
1

Losses Share in each section



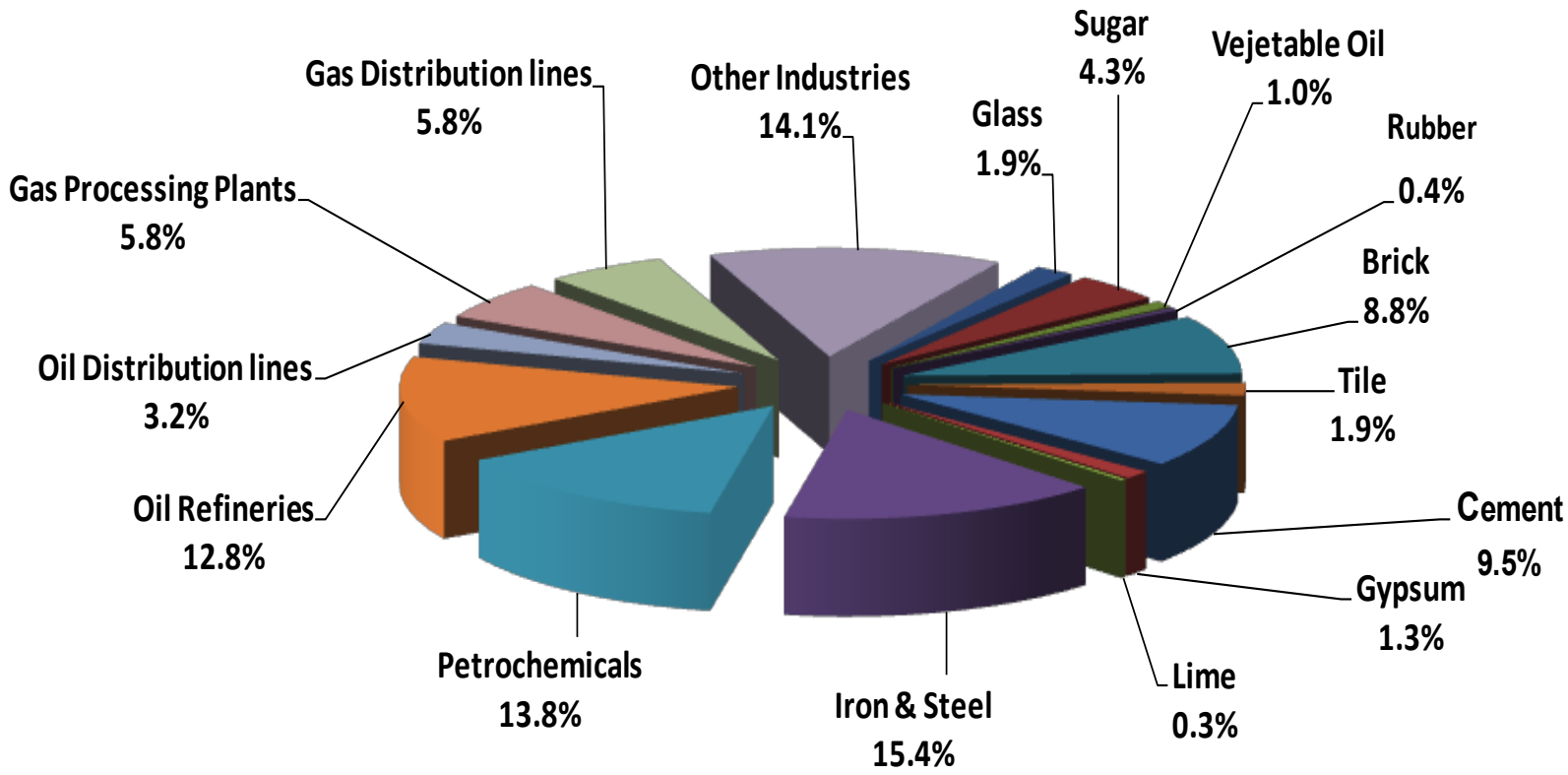
2

Losses Share in each organization



Source: Islamic Republic of Iran's Hydrocarbon Balance, 2007

Share of each industry in Iran energy use



Power Plants are excluded

Source: Islamic Republic of Iran's Hydrocarbon Balance, 2007

Potential energy saving based on industrial standard development

Industry	Potential energy saving (MBOE/Year)	CO2 Reduction MT/ Year
Non- polymeric petrochemical complexes	9.02	3.12
petrochemical complexes (new plants)	33.22	11.5
Gas distribution line	6.16	2.1

Industry	Potential energy saving (MBOE/Year)	CO2 Reduction MT/ Year
Cement (existing)	2.2	0.8
Cement (new)	2.25	0.8
Brick	3.24	1.1

Industry	Potential energy saving (MBOE/Year)	CO2 Reduction MT/ Year
Power plants (new plants)	49.13	17
CCHP	6.42	2.23

Industry	Potential energy saving (MBOE/Year)	CO2 Reduction MT/ Year
Iron & Steel (existing)	6.77	2.3
Iron & Steel (new)	6.33	2.2

Industry	Potential energy saving (MBOE/ Year)	CO2 Reduction MT/ Year
Total	158.92	55.07

Industry	Potential energy saving (MBOE/ Year)	CO2 Reduction MT/ Year
Oil refineries (9 existing)	10.92	3.8
Oil refineries (new)	9.12	3.2
Gas refineries (12 existing)	6.16	2.1

Source: Iran Fuel Conservation Organization (IFCO)

159 million barrels of crude oil equivalent per year

(about 0.44 MBOE per day)

Conclusion

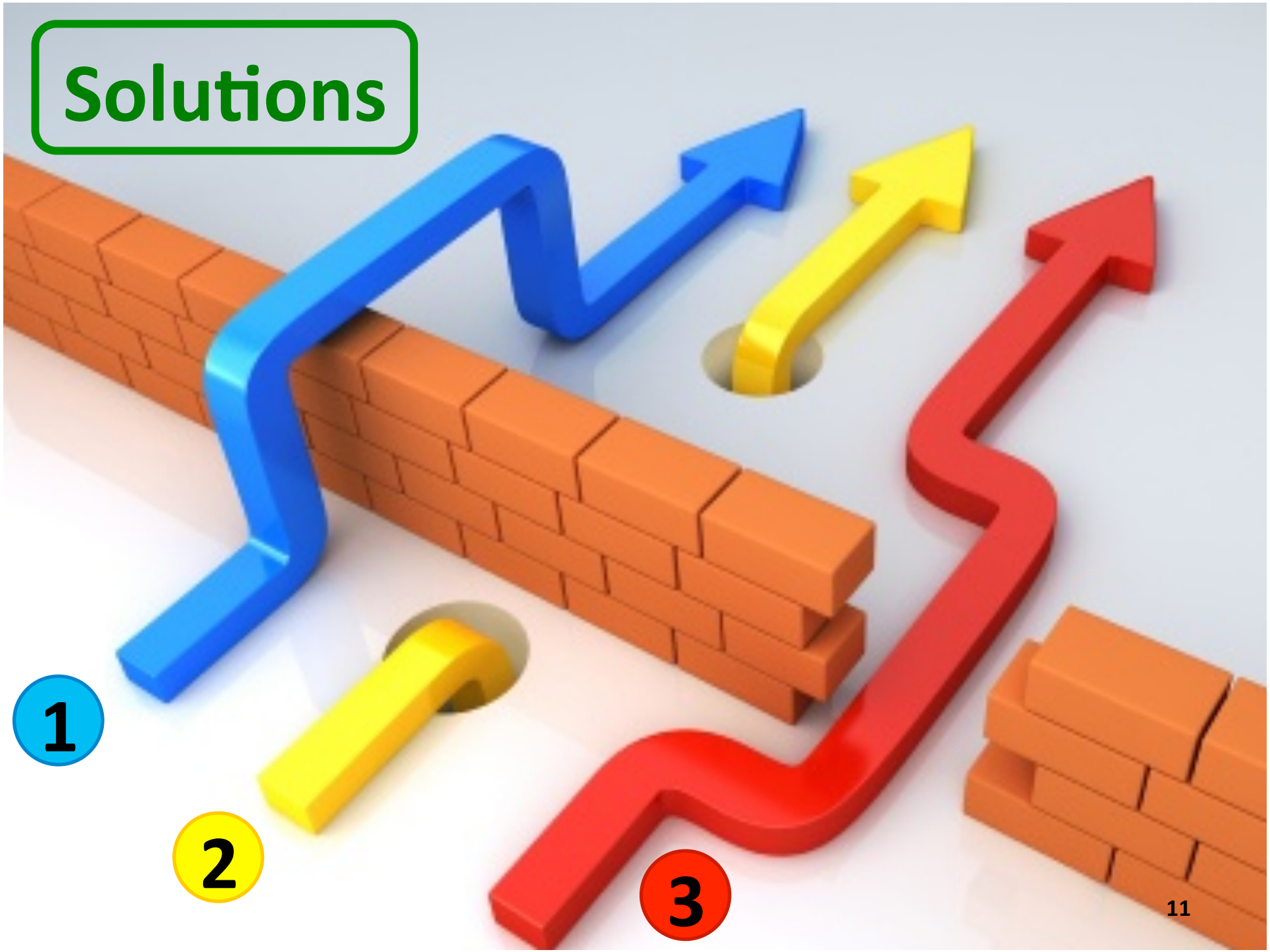
With very low investment in comparison to most countries.

But…

barriers

- low energy prices
- financial constraints
- Lack of EE Technologies
- Need Capacity building

Solutions

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