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Energy Efficiency Market Report 2016

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Good policy delivers the benefits of energy efficiency

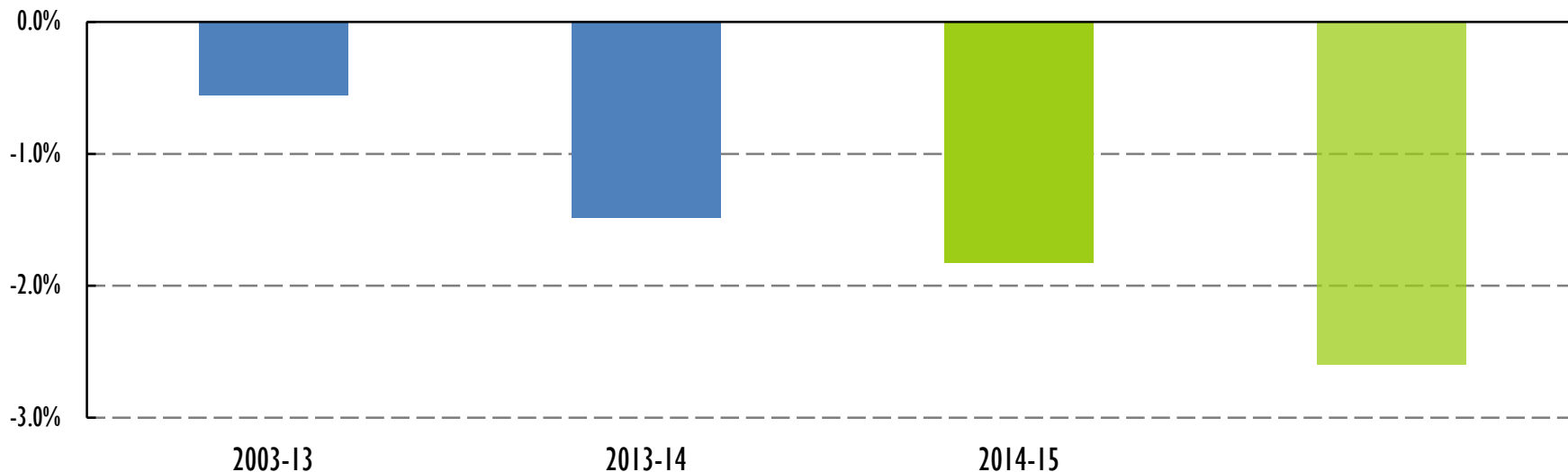


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- Energy efficiency is the one energy resource all countries possess in abundance, and is an essential part of delivering all energy goals.
- Global energy efficiency gains are accelerating, even in the current low price environment.
- 2015 saw global investment in energy efficiency grow 6% to \$220 billion.
- Energy efficiency is now at a scale to influence global energy markets, and is becoming more central in climate change responses.
- Strong government policies are essential to deliver the energy efficiency improvements the world requires.

Energy intensity is improving but not fast enough

Global annual energy intensity gains

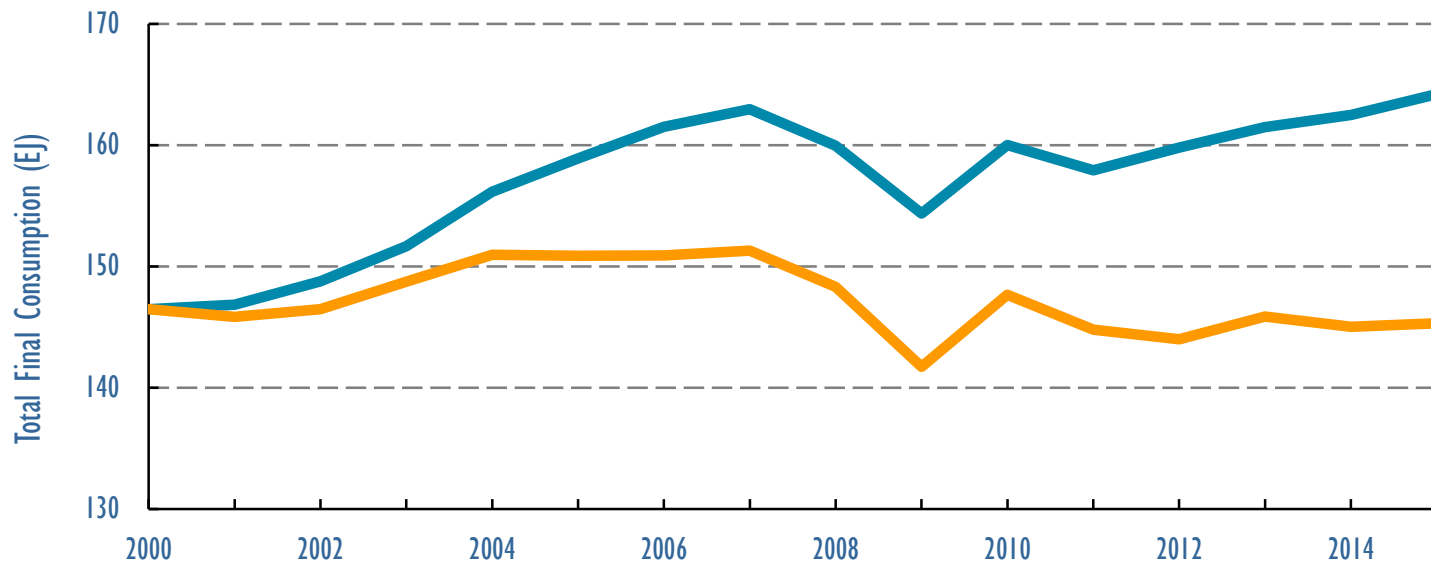


In 2015, global intensity improved by three times the average of the last decade, despite a low price environment. Intensity gains need to increase to 2.6% to achieve our climate goals.

Energy efficiency is the main driver of intensity improvements



Final energy demand and energy demand if efficiency had not improved over 2000 levels in IEA countries

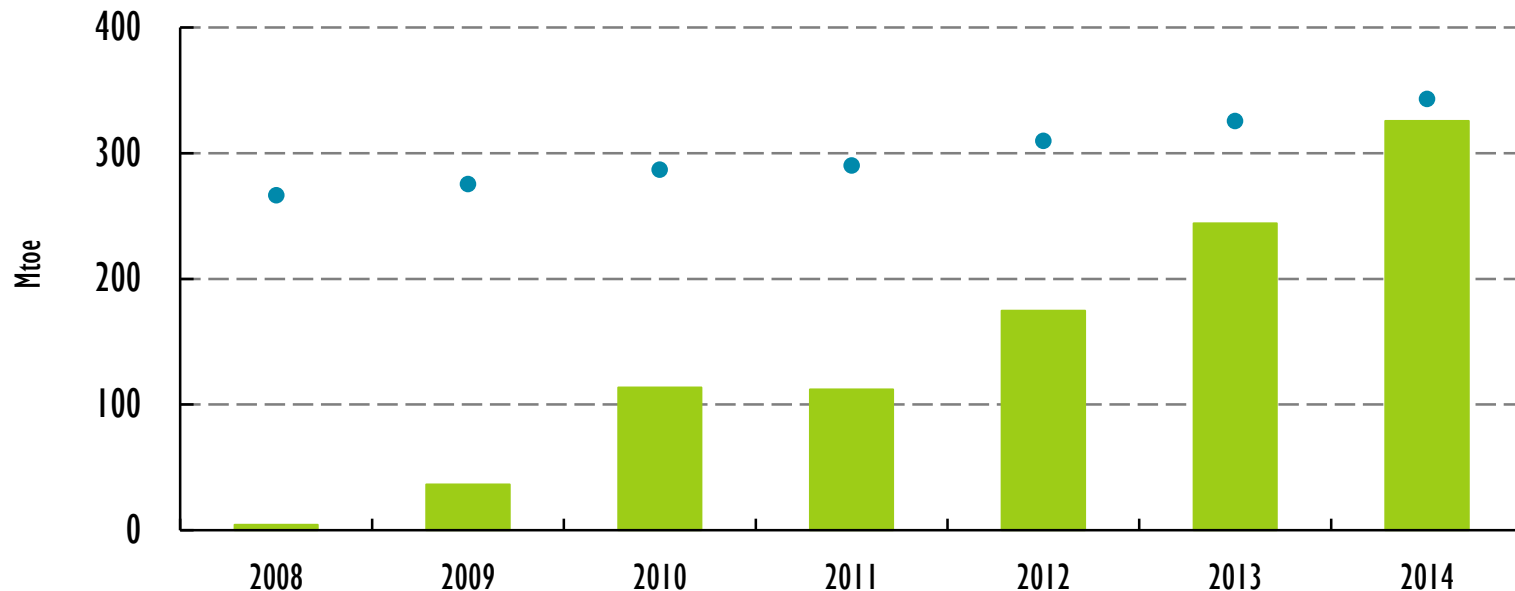


Without efficiency gains energy demand in 2015 in IEA countries would have grown and would have been higher than the 2007 peak

In China, efficiency and renewables are decarbonising its energy system



Primary energy savings from efficiency gains since 2000 and renewable energy supply in China



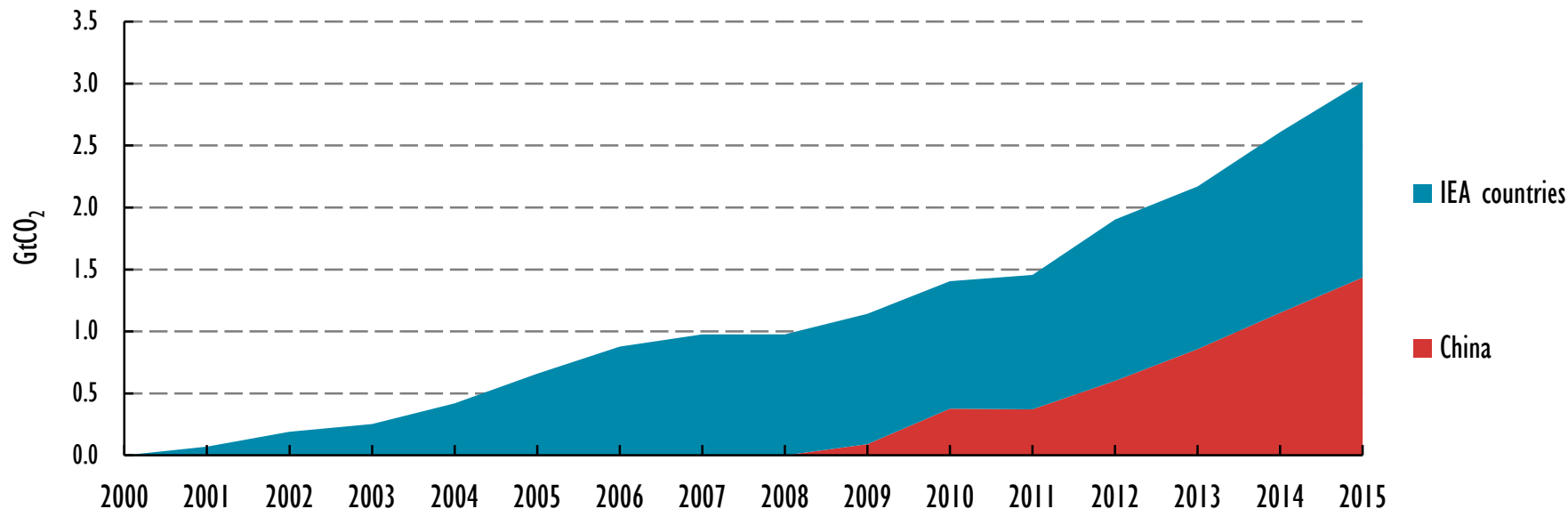
Dramatic progress on energy efficiency saved 350 million tonnes of coal in 2014. Energy savings are as large as China's renewable energy supply.

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Energy efficiency is reducing CO₂ emissions



CO₂ emissions reductions from efficiency improvements since 2000 in IEA countries and China

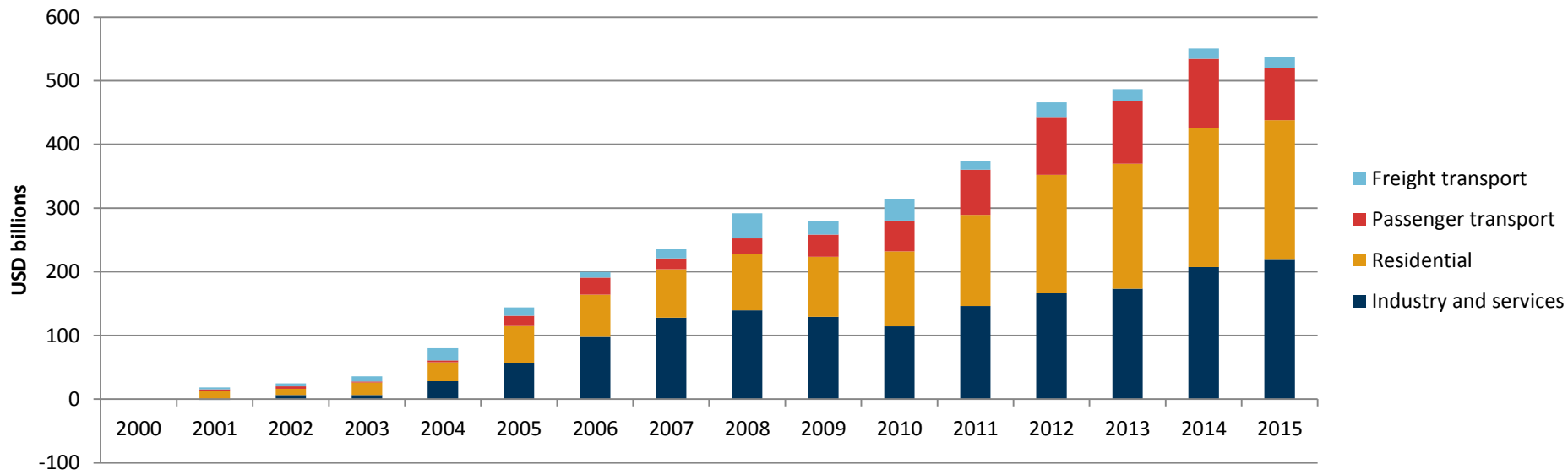


In 2015, efficiency gains in IEA and China reduced their combined emissions by 15%. Efficiency policy in China is one of the most important global actions to reduce emissions.

Energy efficiency reducing energy bills



Avoided expenditure on energy from energy efficiency improvements in IEA countries www.iea.org



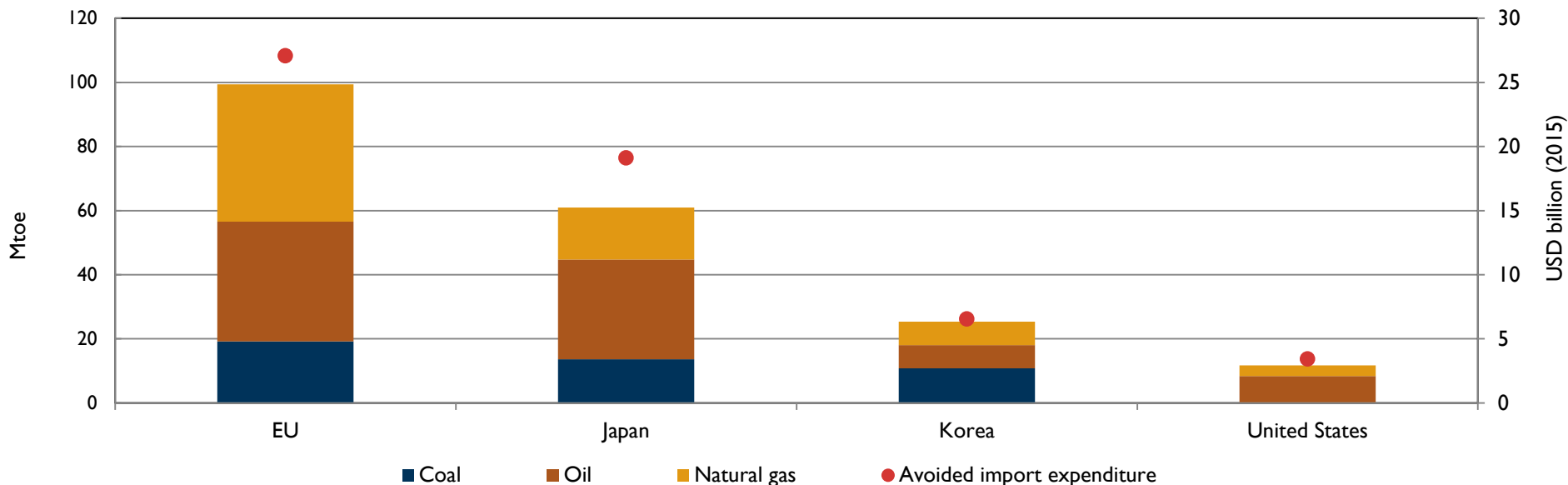
In 2015, energy efficiency led to average per capita savings of \$500 and \$540 billion in total across IEA countries. Savings in EU-19 were €280 billion or €600 per capita.

Energy efficiency is improving energy security



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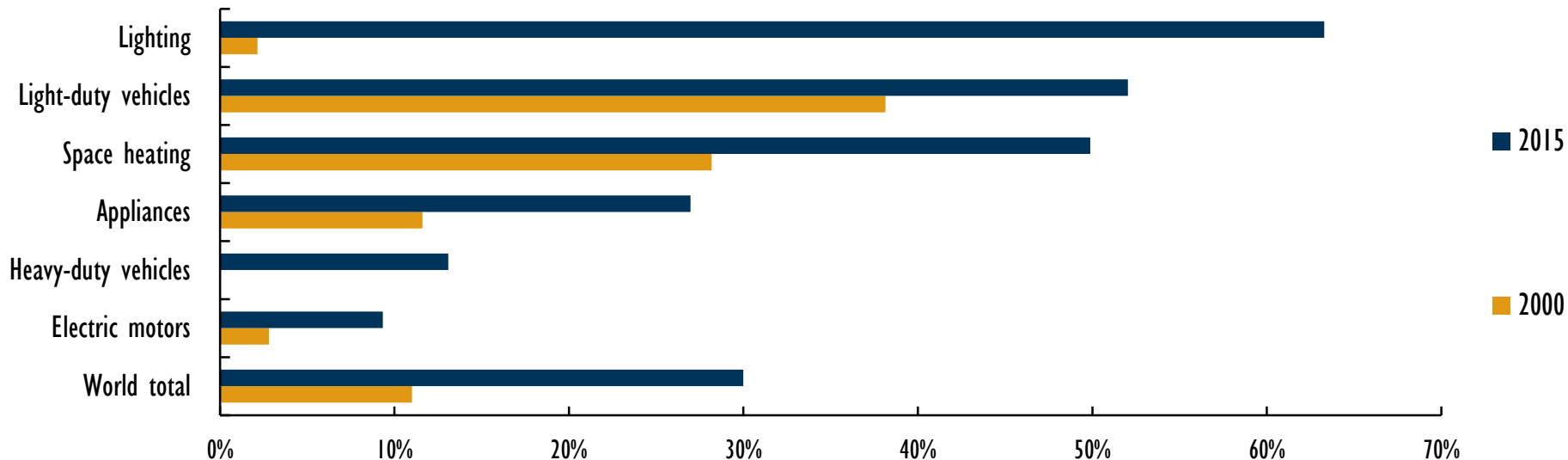
Avoided imports for IEA members from efficiency gains, 2015



The EU made up half of all IEA import savings and reduced imports bills by \$27 billion (10% of its total energy import bill)

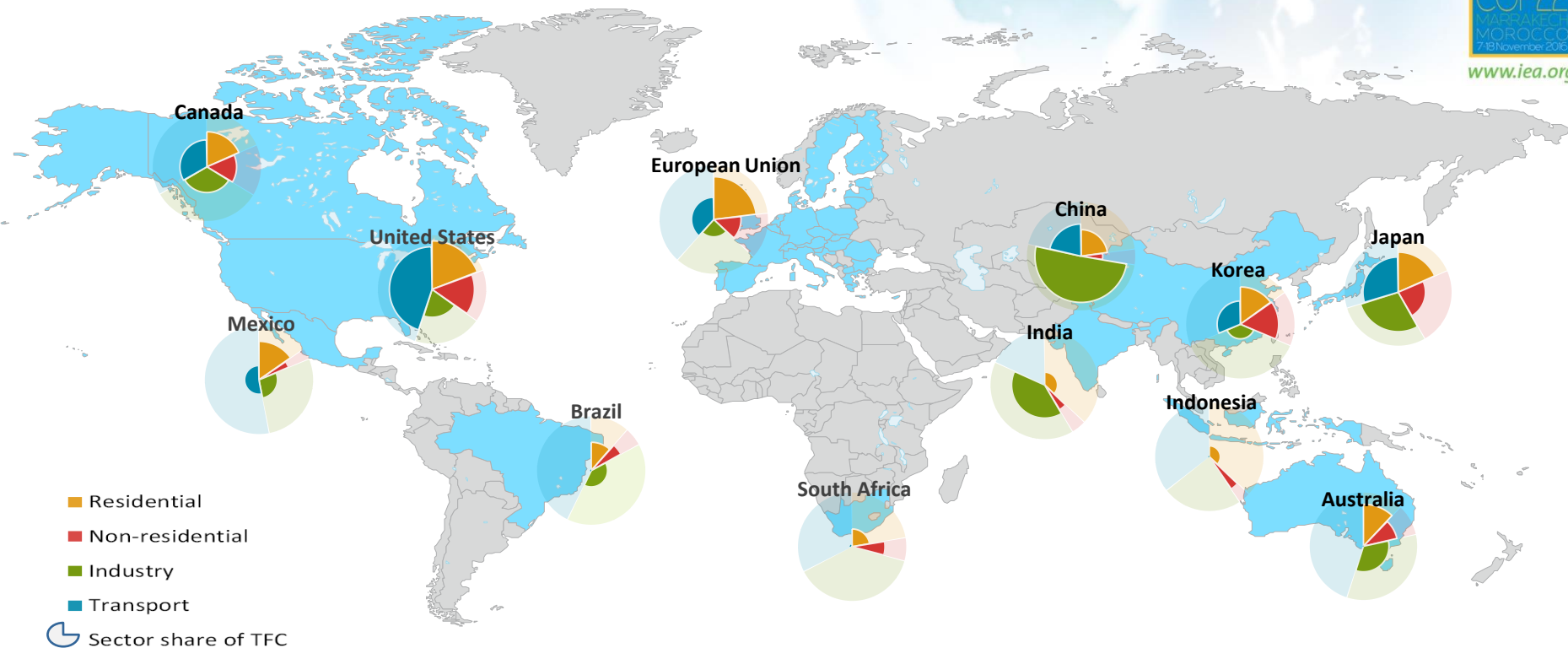
Efficiency gains have been driven by the expansion of policy

Share of global energy use covered by mandatory standards and regulations



30% of the world's energy consumption is now covered by mandatory standards and regulations, up from 11% in 2000.

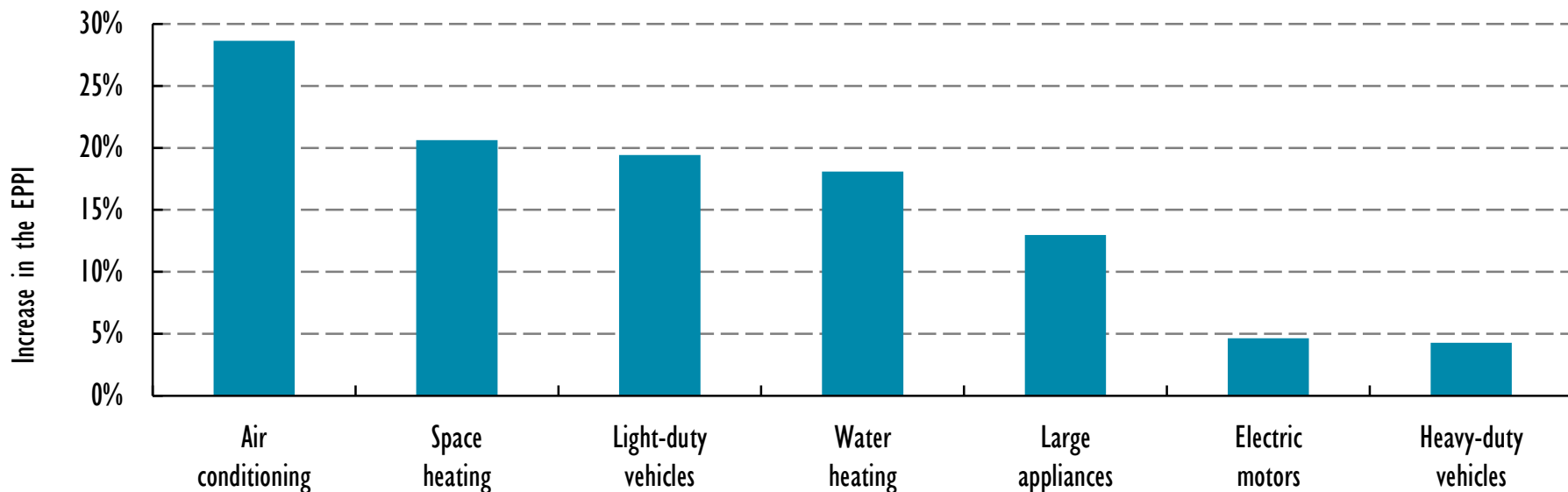
Policy coverage around the world



China has the world's largest coverage thanks to its industrial energy savings targets, EU increased its coverage from 6% in 2000 to 23% in 2015.

The IEA's Efficiency Policy Progress Index measures growth in policy effectiveness

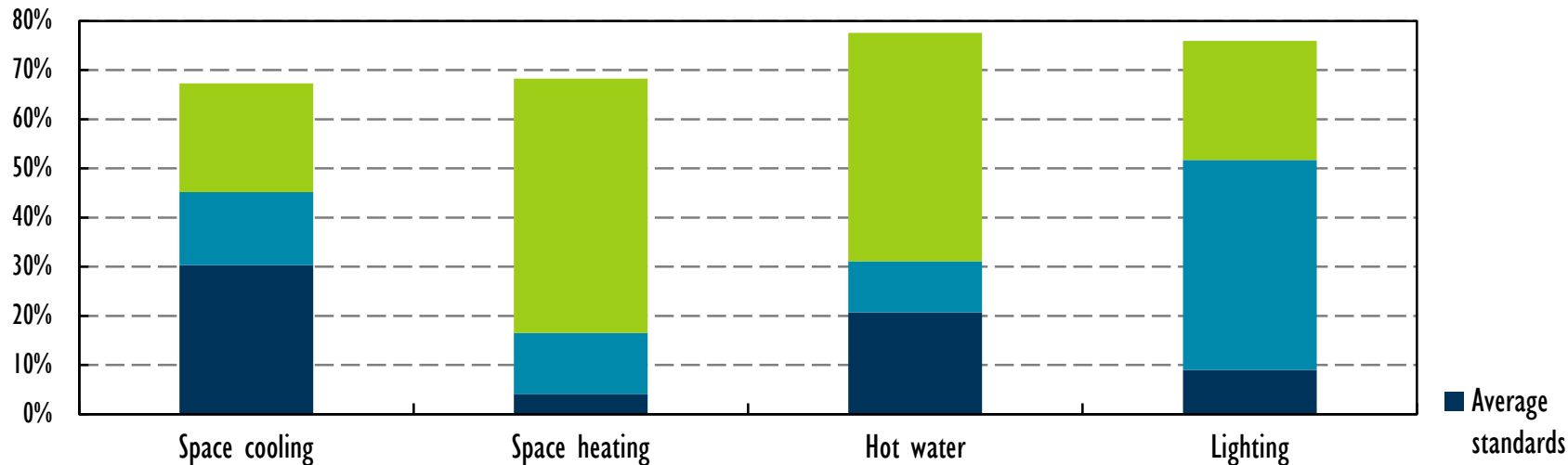
IEA Efficiency Policy Progress Index (EPPI) increase by end use, 2005-15



The EPPI tracks combined progress of policy coverage and strength. The most progress was in the buildings sector and the largest potential for improvement is in the freight and industrial sectors.

Policies still have significant potential to save energy

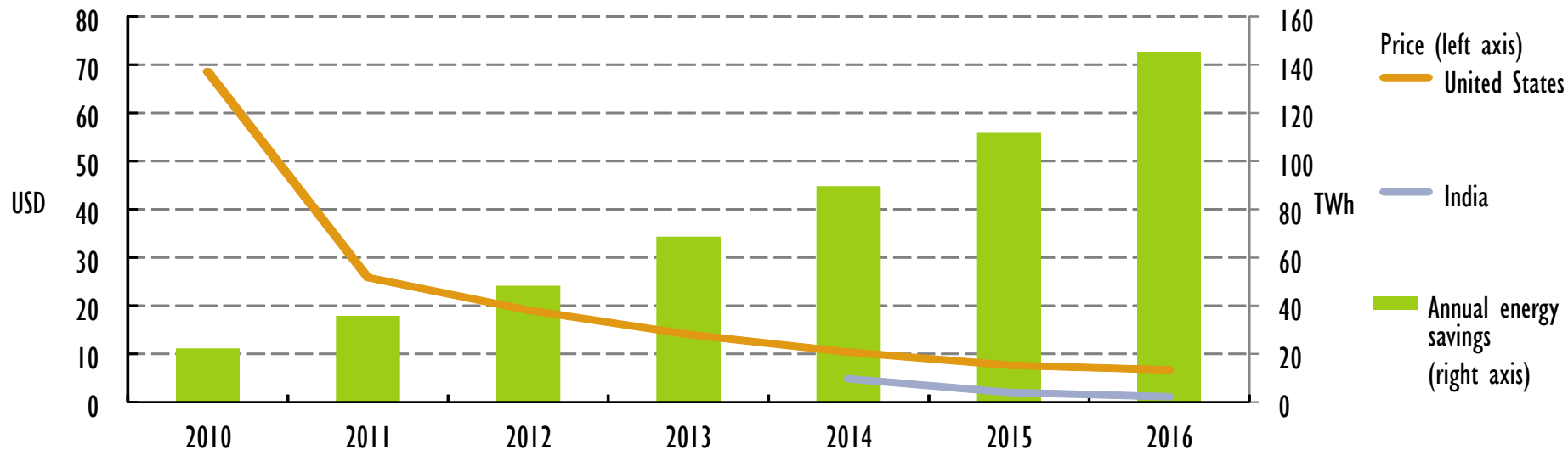
Energy savings potential of standards as a share of global end-use energy, 2015



If the best in class standards had been implemented in all countries, global residential energy consumption would have been 14% lower in 2015.

Policies can also drive down the price of Technology opening up new markets

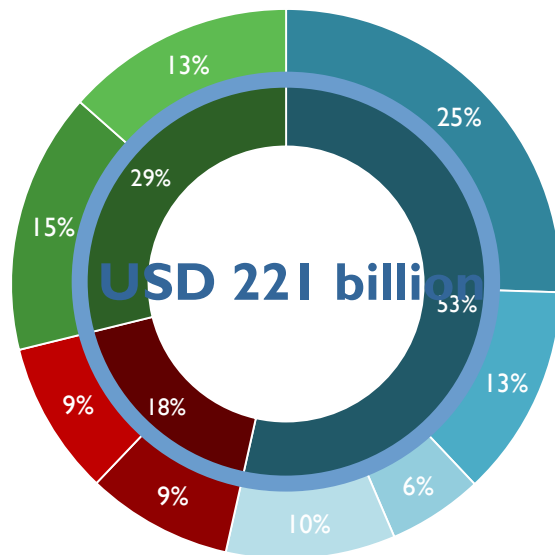
Global annual energy savings from efficient lighting and LED bulb prices



Falling LED prices boosted global investment to \$6 billion and generated annual savings of 140 TWh.

Energy efficiency investment is growing in response to policy

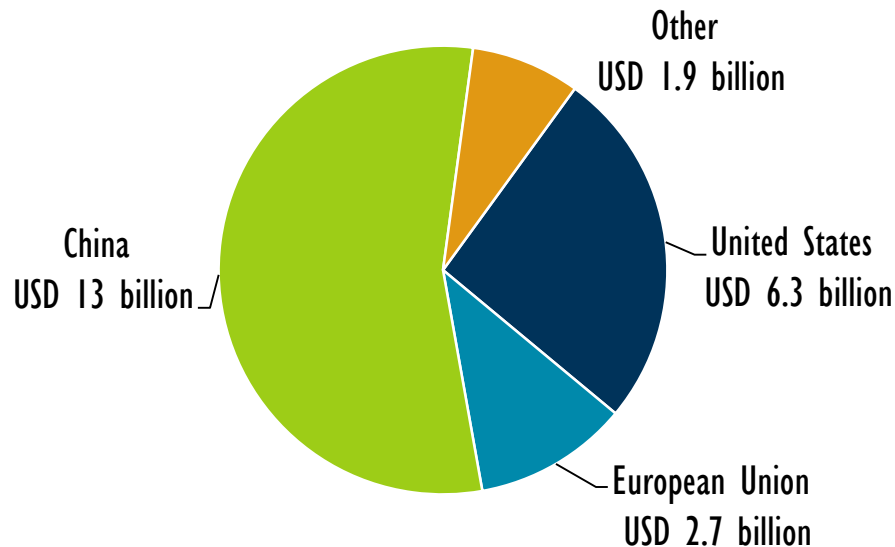
Global investment in energy efficiency by sector, 2015



Investment in energy efficiency increased by 6% in 2015, led by growth in the buildings sector.

The market for energy efficiency services appears poised for growth

Global energy efficiency service company revenues by country/region, 2015



The global energy services market was USD 24 billion in 2015. China's market is growing 7% per year, US market doubled in 10 years, EU market had small growth.

Concluding messages



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- **Global energy intensity improvement is accelerating, despite declining energy prices, but more is required.**
- **Policy delivers, but stronger policy is required: Still 70% of global energy use is outside of any mandatory efficiency requirements.**
- **Energy efficiency is a central component of any suite of actions to meet the EU's GHG targets.**
- **Countries can learn from each other on energy efficiency. The IEA will continue to lead global analysis and knowledge exchange.**

Thank you

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- Microsite: <http://www.iea.org/eemr16/>
- Contact: energyefficiency@iea.org



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