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Energy Efficiency Market Report 2016

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Good policy delivers the benefits of energy efficiency

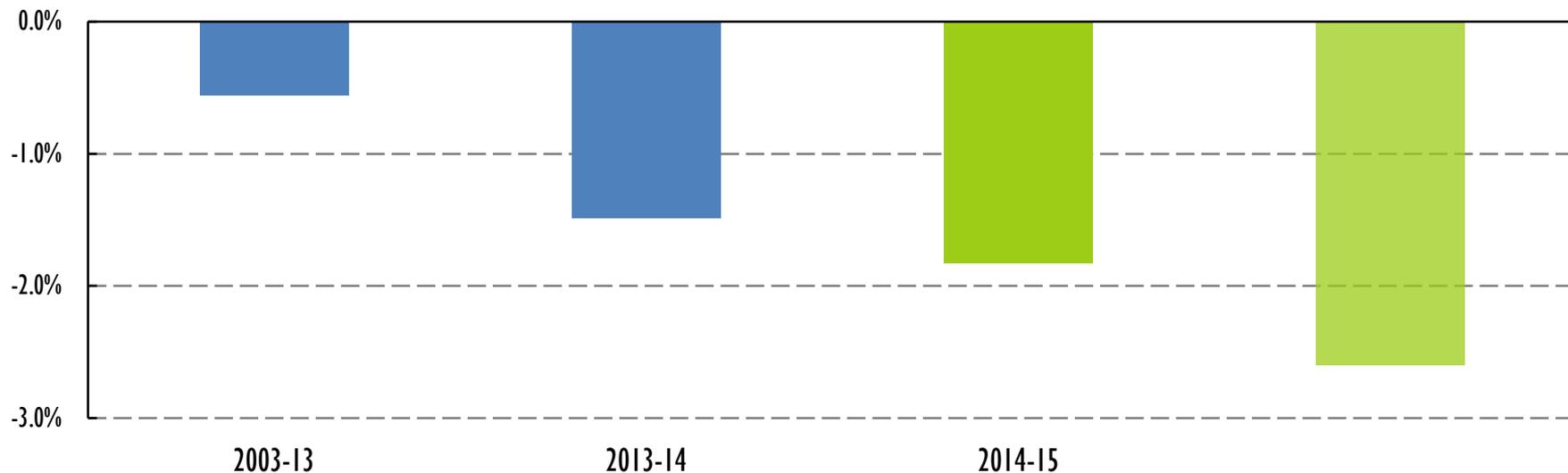


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- Energy efficiency is the one energy resource all countries possess in abundance, and is an essential part of delivering all energy goals.
- Global energy efficiency gains are accelerating, even in the current low price environment.
- 2015 saw global 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

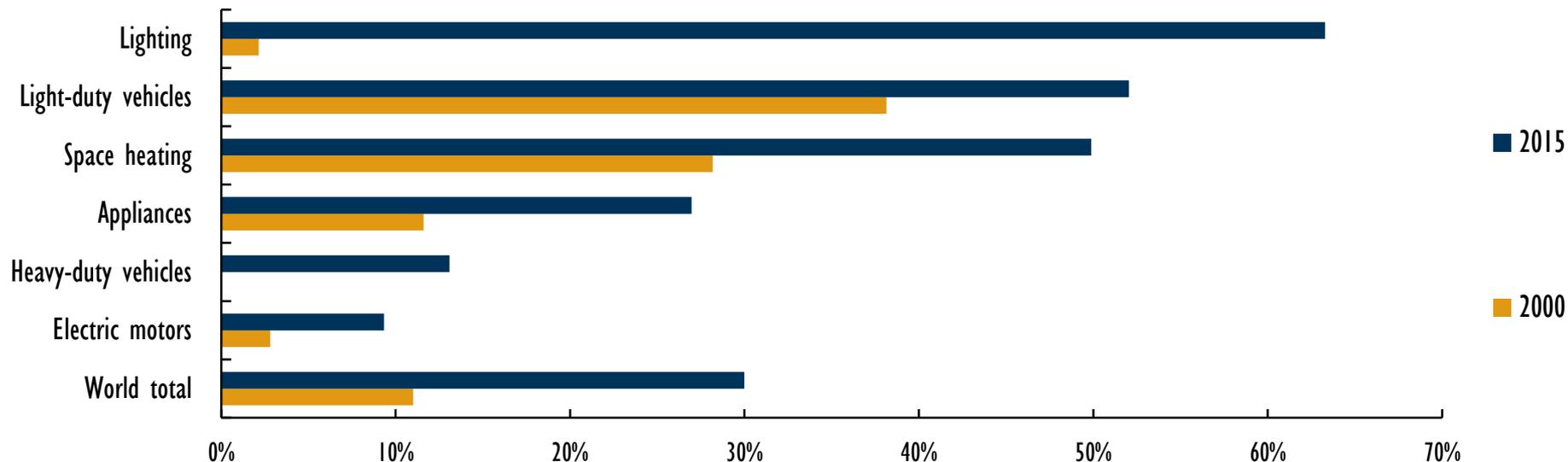
Global annual energy intensity gains



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.

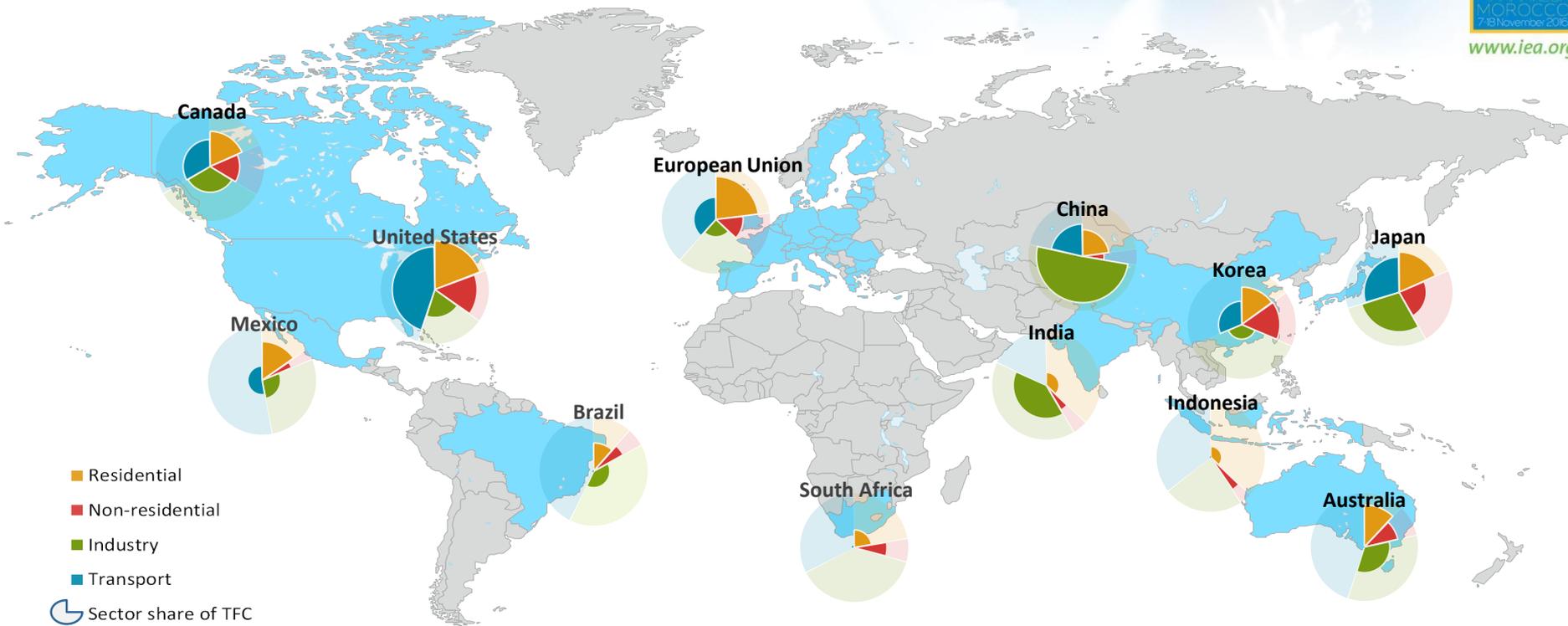
Efficiency gains have been driven by the expansion of policy

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.

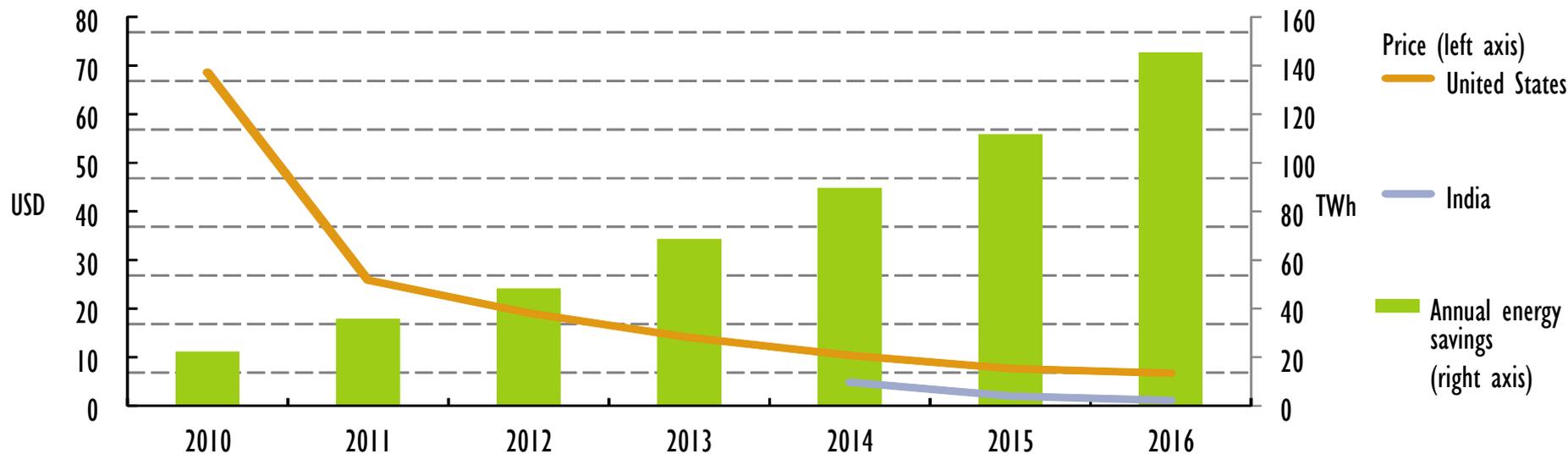
Policy coverage around the world



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.

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

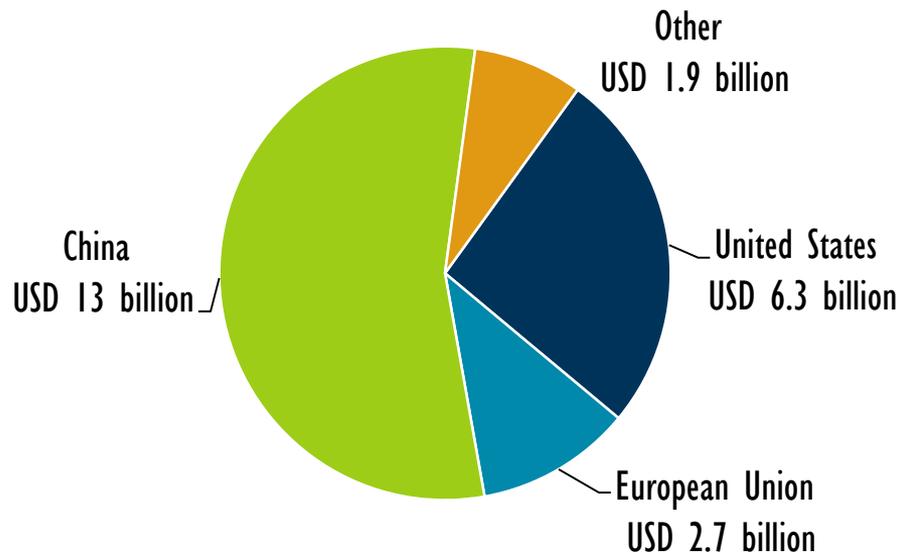
Global annual energy savings from efficient lighting and LED bulb prices



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

The market for energy efficiency services appears poised for growth

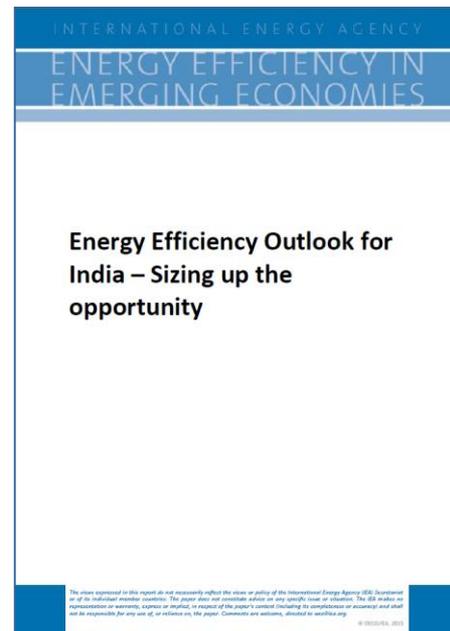
Global energy efficiency service company revenues by country/region, 2015



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.

India Energy Efficiency Outlook: Sizing up the opportunity

- Highlights the potential to increase energy efficiency in the Indian energy sector in the short & long term
- Two scenarios modelled to 2040:
 - **New Policies Scenario (NPS):** assumes only policies and measures that have been formally adopted & announced as of mid-2015
 - **India Efficiency Scenario (IES):** shares the same assumptions but includes all economically viable possibilities to increase energy efficiency

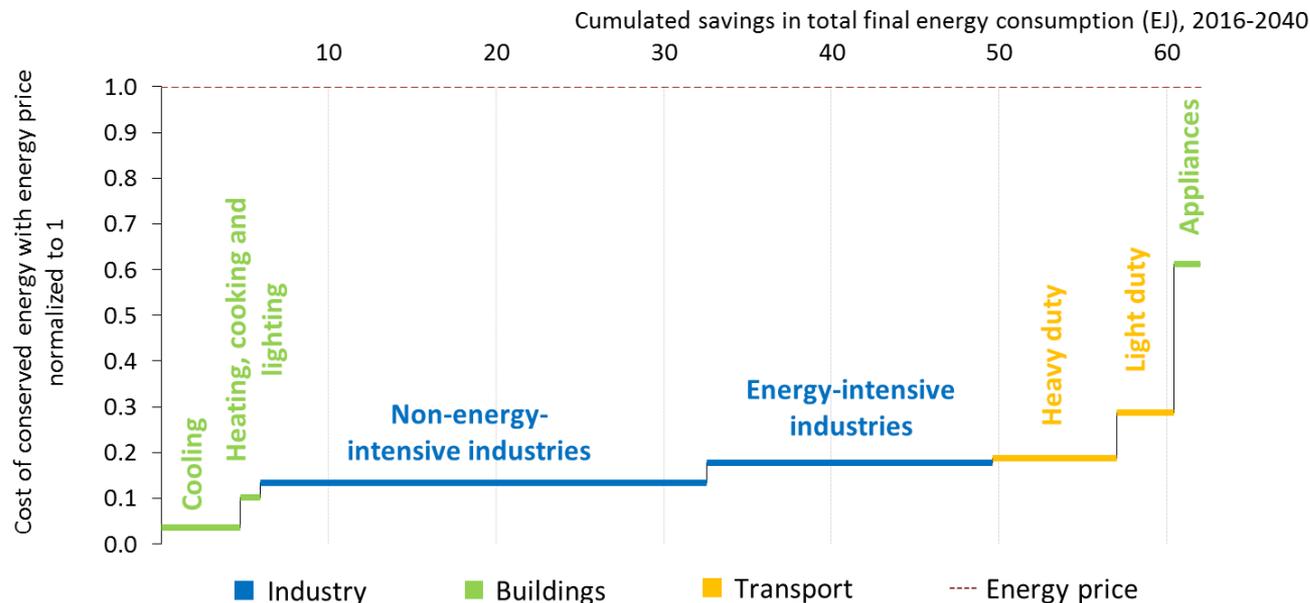


Energy efficient investments deliver savings that payback



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Estimated average cost of conserved energy of energy efficiency investments in selected end-uses in the India Efficiency Scenario (normalised energy prices), 2016-40



Under the India Efficiency Scenario, on average, five rupees are saved for every rupee invested in energy efficiency

Key Messages

- India is making significant progress but more is possible
- **Energy intensity could improve by 19% and primary energy demand reduced by 16% in 2040**
- Majority of the savings will come from **industry**
- Highest energy efficiency investment needed is in **transport**



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Success Stories:

Perform, Achieve, Trade (PAT) Scheme



- Innovative, mandatory, market-based programme already delivering considerable energy savings
- Specifies energy saving targets for 478 energy-intensive facilities in India
- **First cycle (2012-15):** aimed at reducing energy consumption on average by 4.1%, equivalent to 36% of total industrial energy consumption (2009-10 levels)
- **Results:** 427 industrial facilities participated achieving a 5.3% reduction in energy consumption
- **Next steps:** Extend to 900-950 industrial facilities, representing 50% of industrial energy consumption (2009-10 levels)

The multiple benefits of residential LED lighting in India



- **Energy Efficient Prosperity and Make in India** come true
- **EESL-IEA collaboration to develop tailored stories for:**
 - **Central government; Households; Lighting manufacturers; State governments and state utilities**
- **Benefits from EESL's 100 million LEDs in India, e.g.:**
 - **Reducing annual household electricity bills by approximately 15%**
 - **Equivalent to taking 2.7 million cars from the road**
 - **Fastest growing LED market in the world**
 - **Temporary employment created for more than 35,000 people**
 - **Reduction in power investment costs equivalent to 40 billion INR**
- **EESL-IEA to launch the stories next month**

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

