International Energy Agency

WORLD ENERGY OUTLOOK

Energy Efficiency Potential in South Africa: Economic and social impacts

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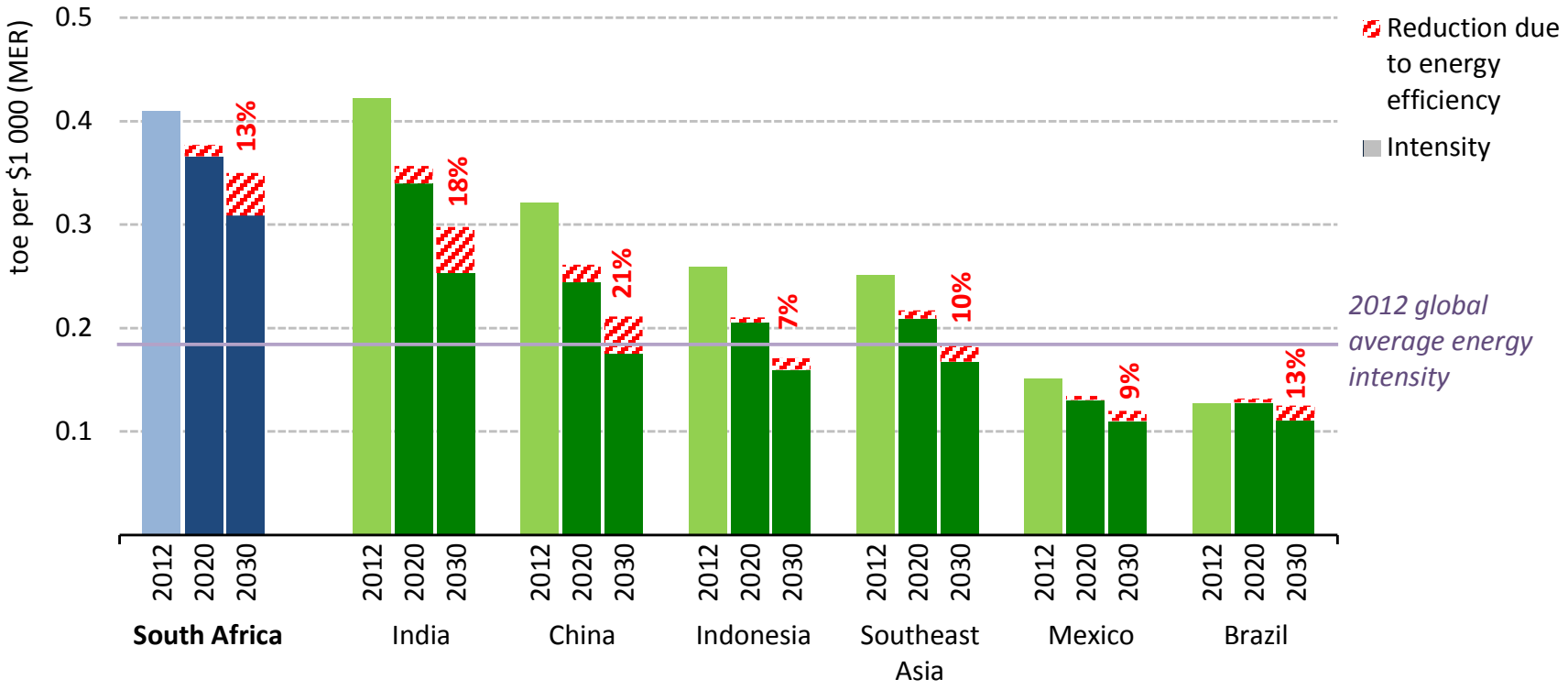
South Africa is currently one of the most energy-intensive economies in the word

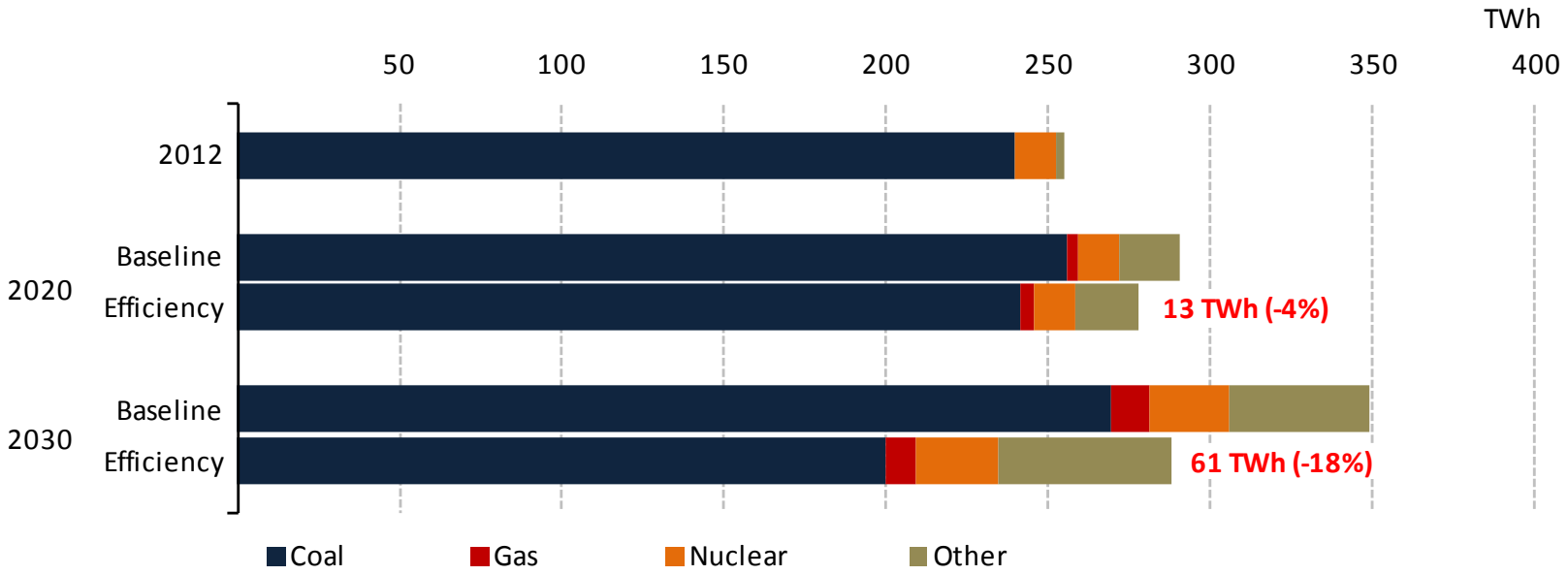
GDP intensity of total primary energy demand in selected countries



Energy efficiency can reduce energy intensity in South Africa by 13% in 2030

The Power sector is crucial to any strategy in the energy system

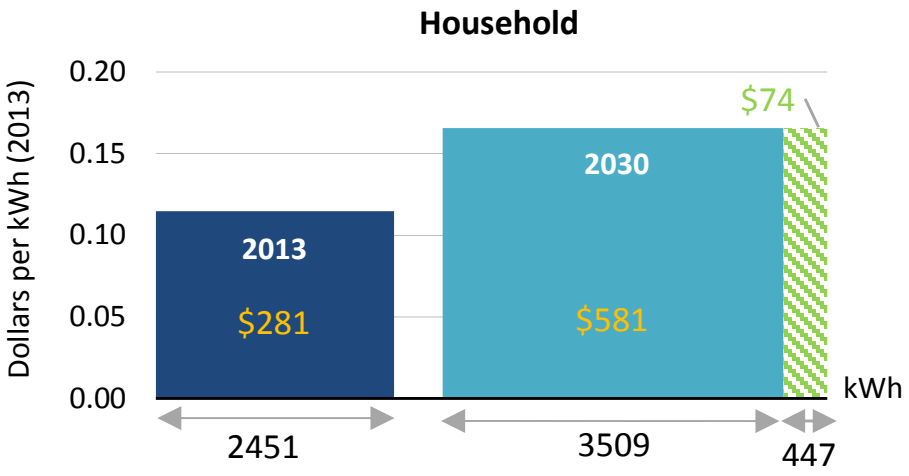
Savings in electricity generation in the Efficiency Scenario with respect to the Baseline Scenario

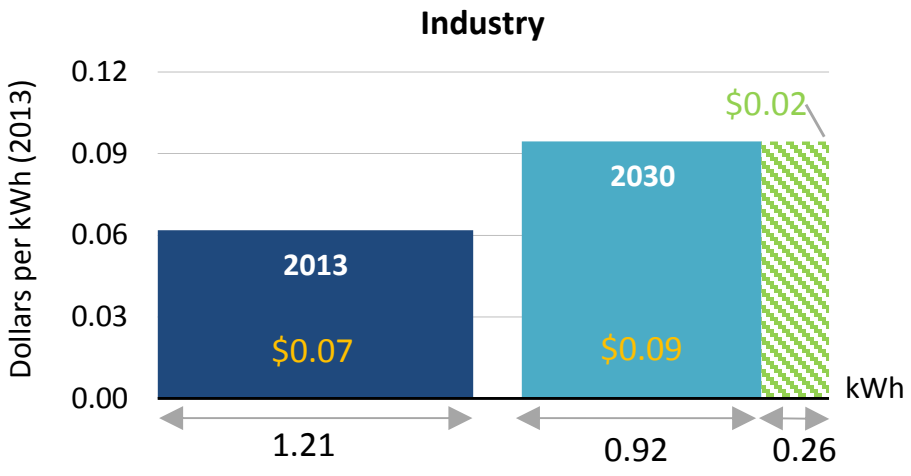


The diffusion of more energy-efficient equipment, such as appliances and electric motors, reduces the need for additional generation capacity by 18% in 2030

Electricity bills are set to increase

Electricity bills and potential savings for household and industry sectors, 2013 and 2030

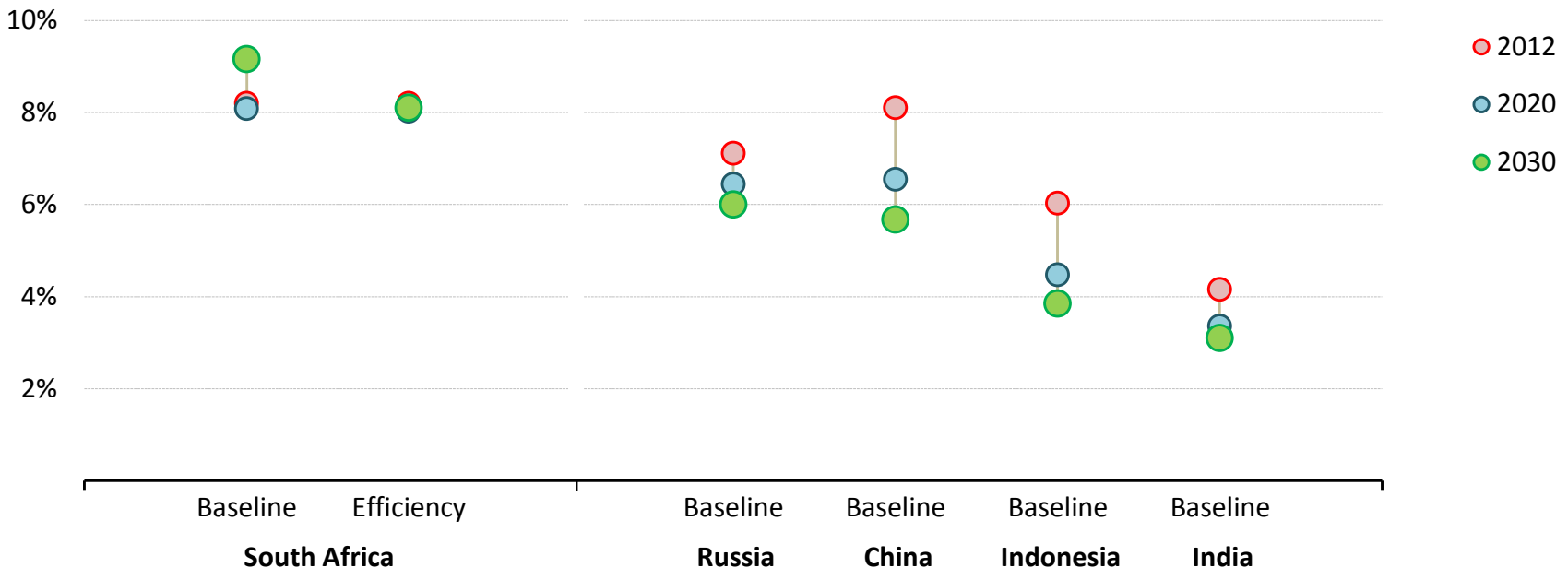




Efficiency measures can help moderate the impact of growing electricity prices on consumers bills

Energy spending in the economy

End-use energy spending as share of GDP



Despite plentiful indigenous coal resources, South African spending on energy can be contained at current levels if efficiency measures are implemented

Tapping into the energy efficiency potential

- Improving data collection and data quality is of primary importance to develop and track credible and measurable indicators
- Tapping the vast potential of energy efficiency leads to a net reduction in primary energy demand and electricity of around 15%
- South Africa can avoid burning 25 million tonnes of coal and avoid to build almost 10 gigawatts of new capacity by 2030
- Oil savings offset the need to build a refinery with an equivalent capacity more than that of the Secunda coal-to-liquids plant
- Integrating energy-efficiency policies in overall energy policies is essential to steer the South African on to a more efficient course