



Beyond energy savings: The multiple benefits of energy efficiency

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Paris, March 5 2018



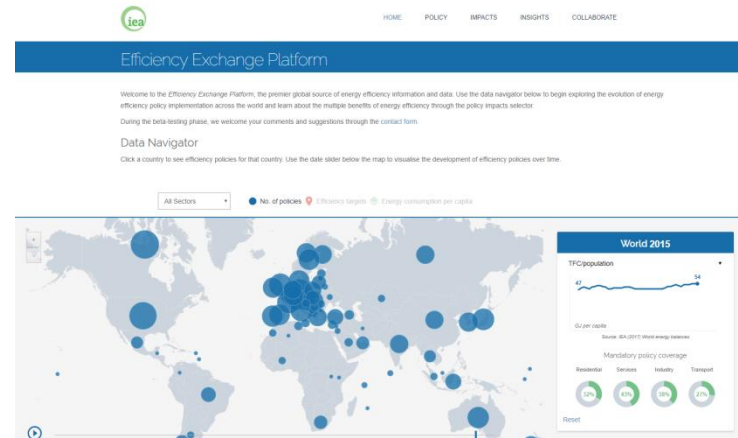
Global conference



Training weeks



Global Exchange Platform

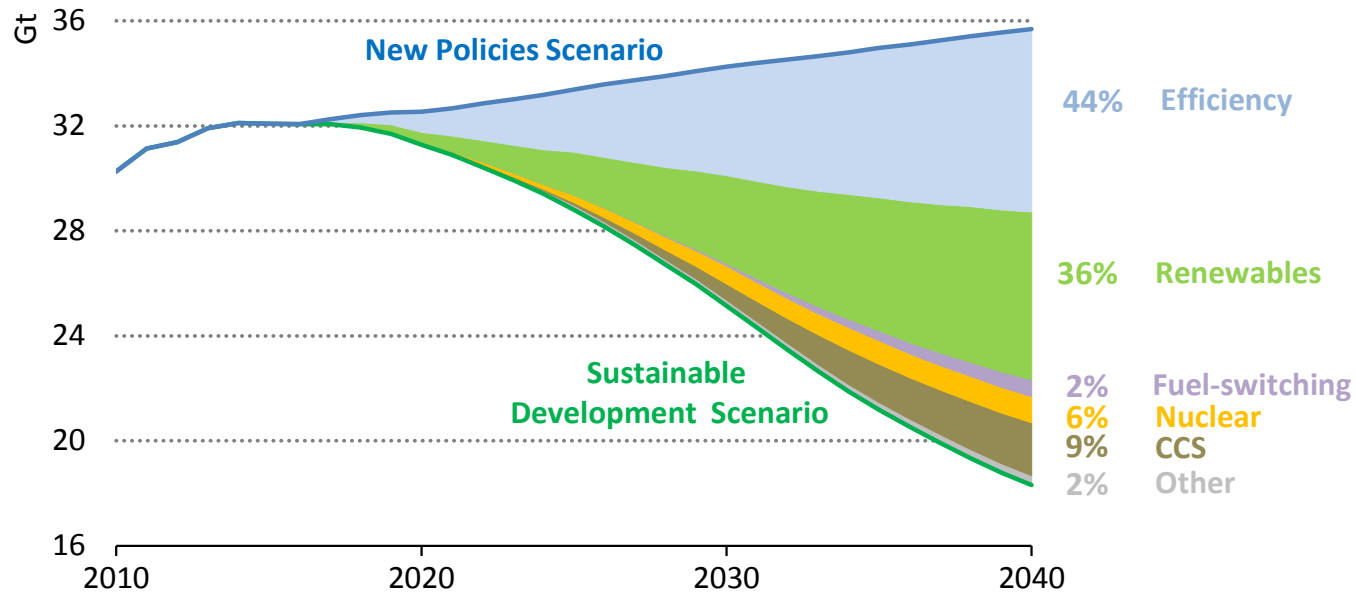


Clean Energy Transition Programme



Energy efficiency is key to the global energy transition

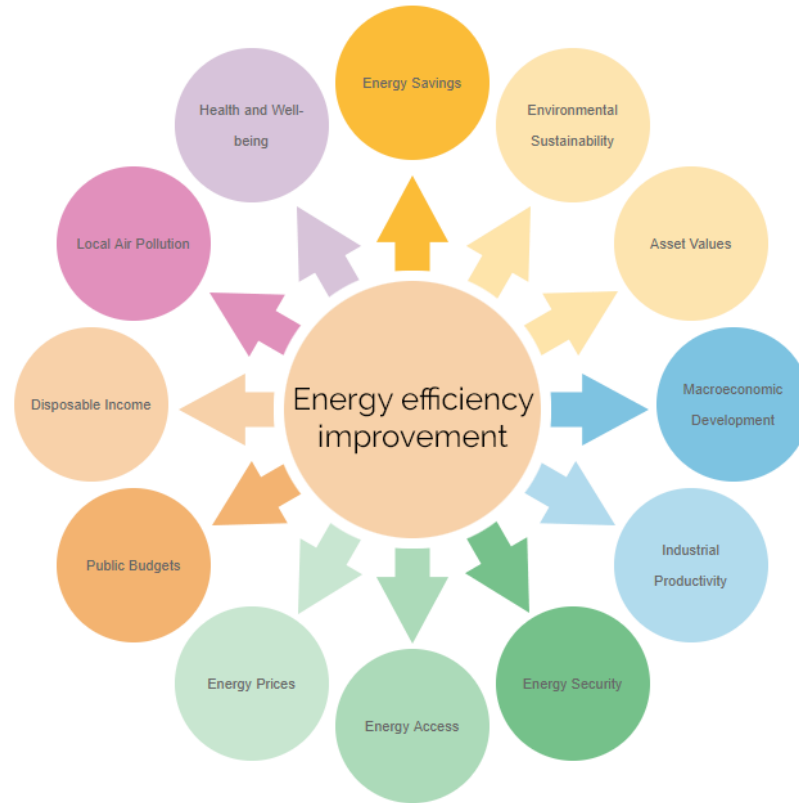
Global CO₂ emissions reductions in the New Policies and Sustainable Development Scenarios



Source: International Energy Agency (2017), World Energy Outlook 2017, OECD/IEA, Paris

Energy efficiency and renewables account for 80% of the cumulative CO₂ emissions savings in the Sustainable Development Scenario

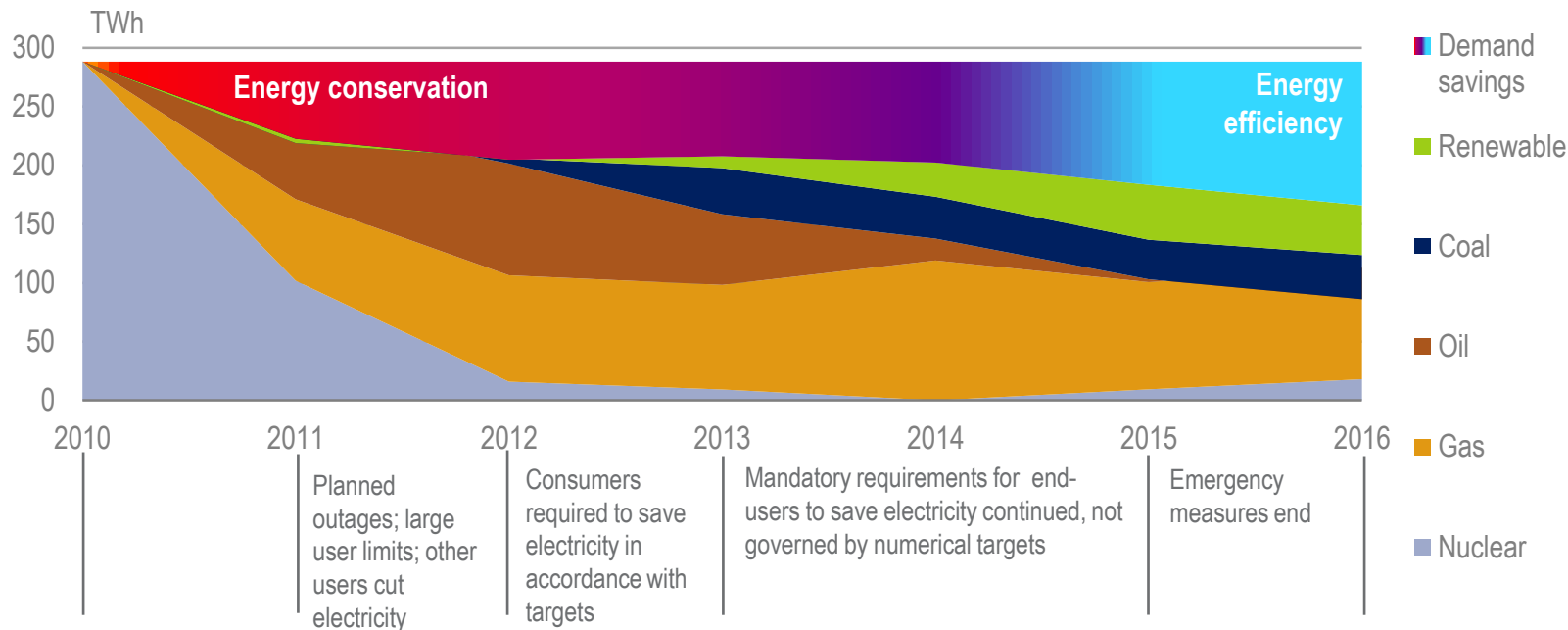
Multiple benefits: A holistic approach to energy efficiency



Multiple Benefits of energy efficiency “Flower”

Energy conservation and efficiency drives security

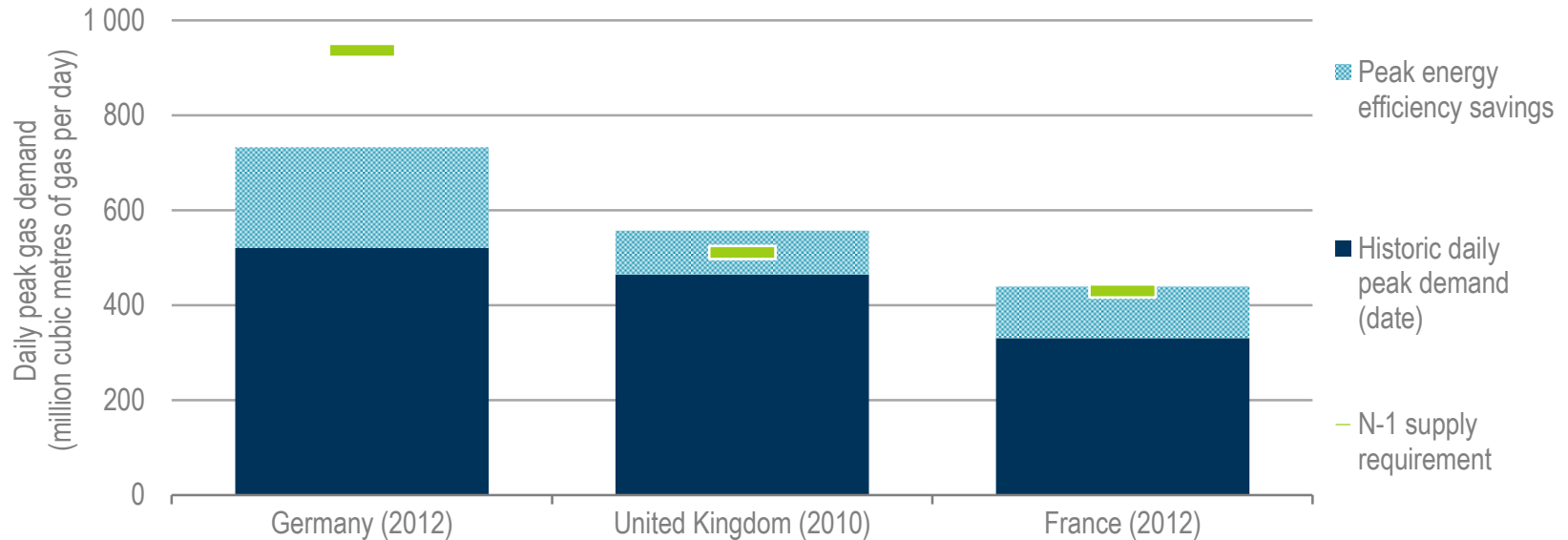
Replacement of nuclear electricity generation capacity in Japan after shutdown



Demand savings from conservation and efficiency measures provided the greatest single contribution (39%) to the replacement of nuclear generation capacity after Fukushima.

Efficiency improves short-term energy security

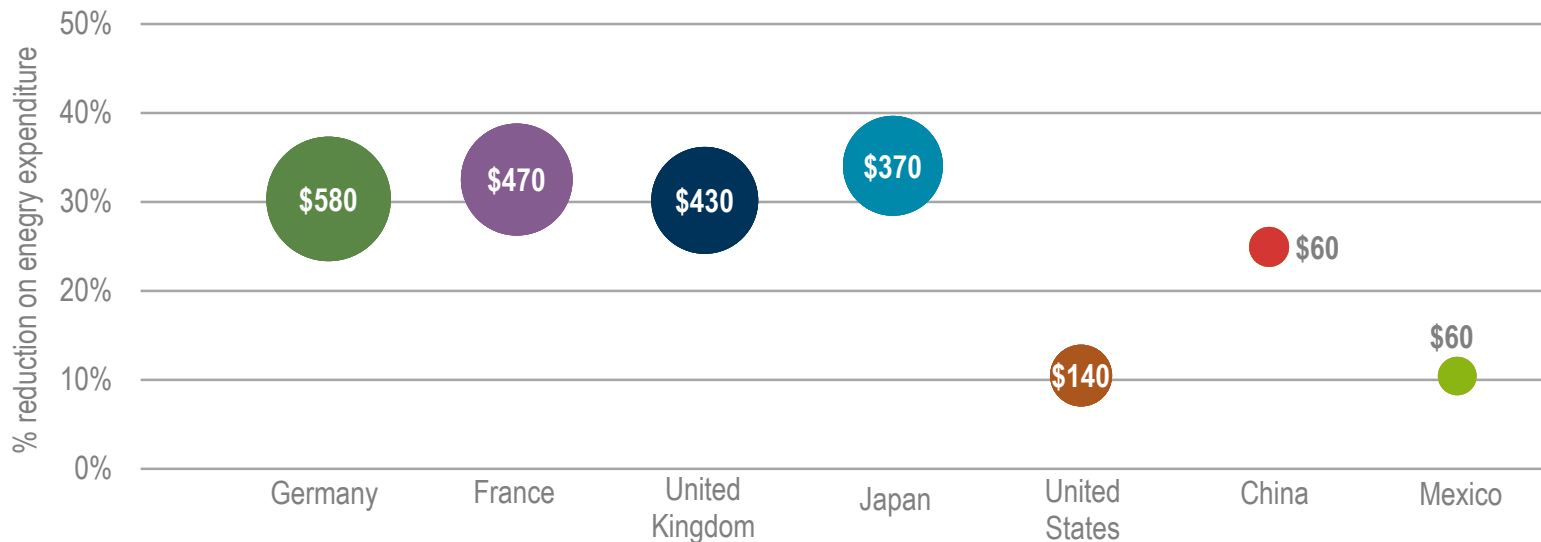
Historical peak daily gas demand and efficiency savings in selected European markets



Without energy efficiency Germany's N-1 indicator would be reduced to 128% and the United Kingdom and France would not meet the standard

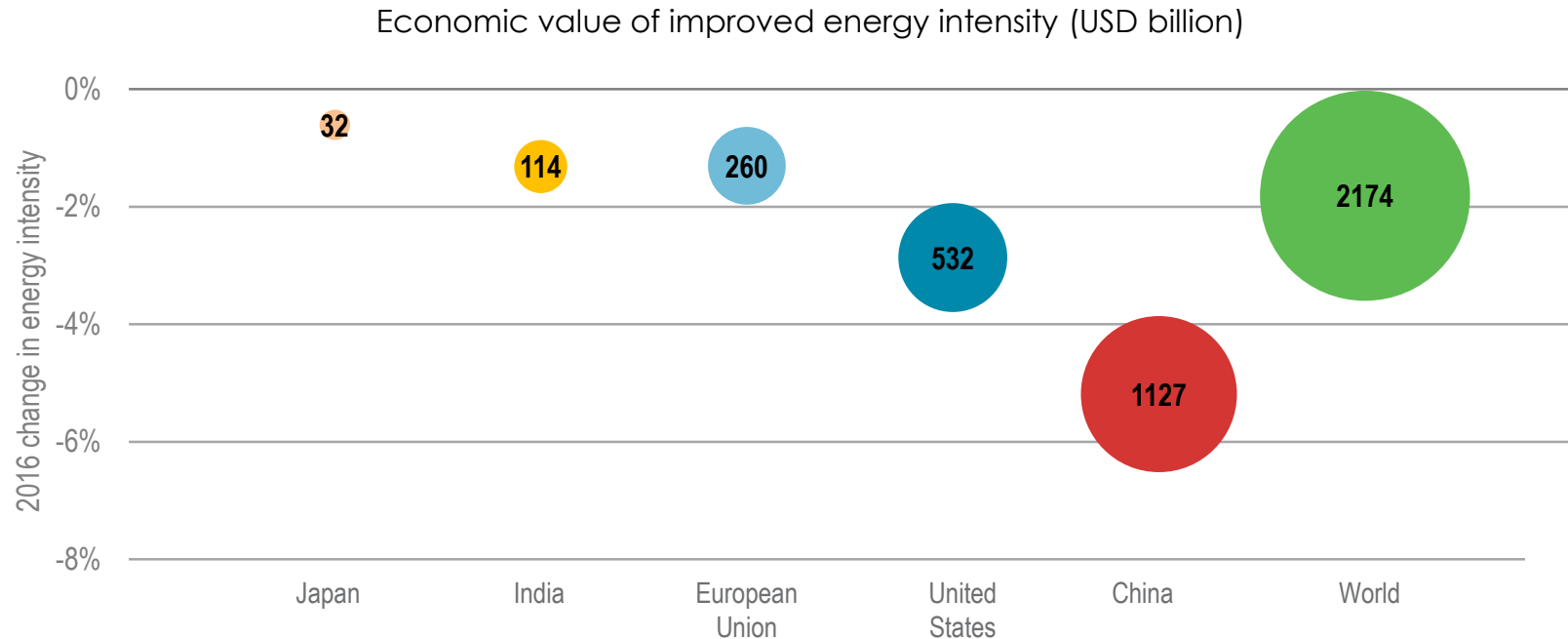
Energy consumers are making big savings

Per capita household energy expenditure savings in 2016 due to efficiency



Efficiency gains since 2000 have helped households in major economies save 10 to 30% of their annual home and travel energy costs

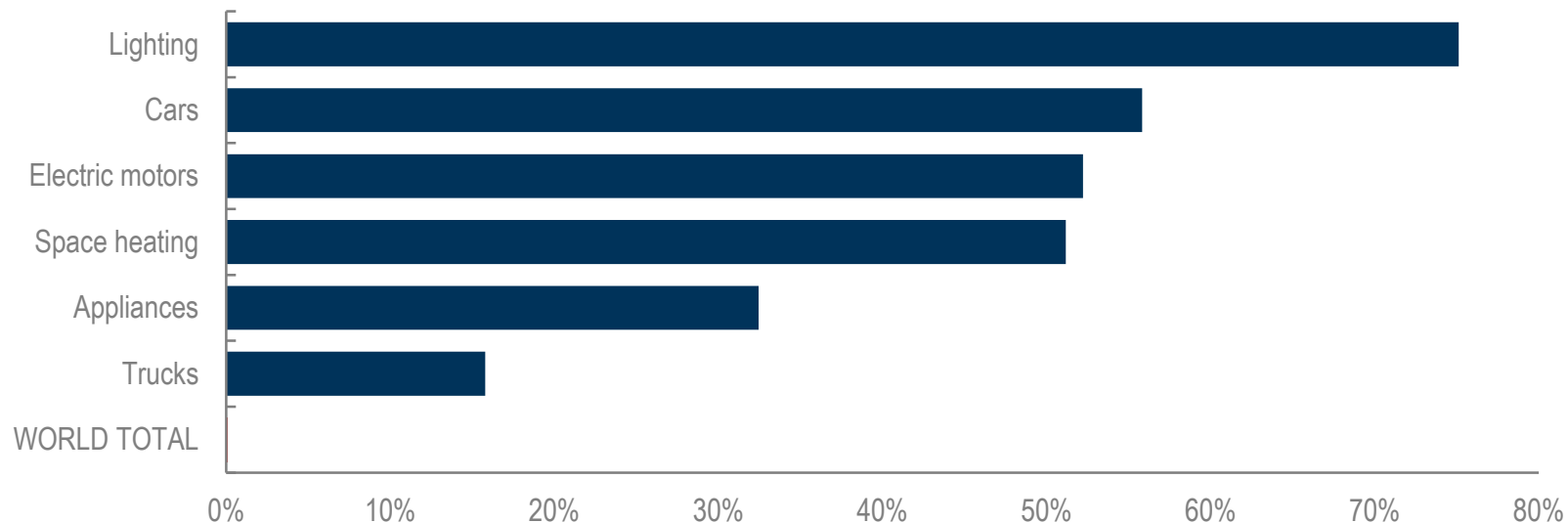
Efficiency delivers a global energy productivity bonus



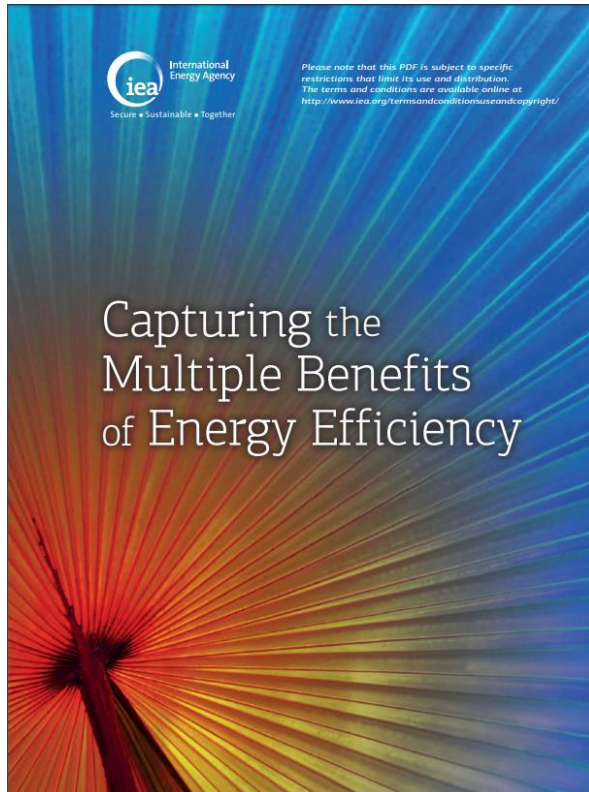
The 2016 intensity improvement represents an additional USD 2.2 trillion of value created from global energy use, equivalent to twice the size of the Australian economy.

The world's efficiency policy coverage needs to expand

Share of global energy use covered by mandatory efficiency policies, 2016



**The amount of global energy use covered by mandatory efficiency policies grew in 2016.
But 68% of energy use remains uncovered.**



- Since 2014, hundreds of evaluations conducted
- The multiple benefits of energy efficiency are real and measurable
- ...but gaps remain.

1. Is the **geographic scope** of our evidence base wide enough? Do we have enough evidence in countries whose energy consumption is projected to grow?
2. How broad is the **sectoral coverage** of the existing evidence base?
3. How much do we know about the benefits of different efficient **end uses**?
4. Is evidence targeting **policy needs**?
5. Are policies being designed with **multiple benefits in mind**?

The screenshot shows a webpage with the IEA logo in the top left and a navigation menu with links for HOME, POLICY, IMPACTS, INSIGHTS, and COLLABORATE. The main heading is "Multiple benefits of energy efficiency". Below it is a paragraph explaining the term "multiple benefits" and its purpose. A selector is mentioned below the text. The central part of the page features a circular diagram with "Energy efficiency improvement" at the center, surrounded by ten benefit categories: Energy Savings, Environmental Sustainability, Asset Values, Macroeconomic Development, Industrial Productivity, Energy Security, Energy Access, Energy Prices, Public Budgets, and Disposable Income. At the bottom, there is a "Resources" section with a brief instruction and three resource cards: "Accounting for Health Benefits" (Journal article), "Assessing and measuring the performance of energy efficiency projects" (Report / Book), and "Benefits of Energy Efficiency on the German Power Sector" (Report / Book).

- Aim: a globally applicable set of resources on the multiple benefits of energy efficiency.
- Your help is needed



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