

Tremendous potential for more energy-efficient appliances

The most energy-efficient appliances already available today can save between 60 and 85% of energy compared to inefficient models that are still on sale in many countries, while providing the same or better service. The potential for refrigerators and freezers, is about 60%, for television sets up to 65%, and for computer monitors more than 80%. Further energy efficiency improvements are likely in future.

If this potential were harnessed by markets and supported by policy, more than 1500 TWh of annual world-wide electricity demand and 1,000 Mt of CO₂ emissions could be saved by the year 2030. In addition, energy efficiency in traditional biomass cooking stoves could avoid up to 1,500 Mt CO₂eq of greenhouse gas emissions per year. World electricity demand could thus be reduced by 4,6% and CO₂ emissions by 6,5% compared to business-as-usual by 2030. This will require policy to address the residential, commercial, and industry sectors with more stringent efficiency policy.



About 40% of these savings could be achieved from the worldwide adoption of the most stringent energy efficiency regulations. Most energy efficient technologies are already far beyond existing regulations, so the other 60% of the potential lies in reaching this “best practice” level. This emphasises that energy efficiency policy is incomplete .

Even in economies that already have policies requiring or promoting high energy efficiency levels, significant savings are possible. Where requirements are limited, the savings from accelerated adoption of leading policies would stimulate much larger savings.

Therefore, policymakers all over the world should pay attention to efficiency developments internationally. The tremendous energy efficiency potential implies that demand-side energy efficiency options should be treated as prominently as supply-side options. Demand-side energy efficiency programmes are key to achieving international reduction goals.

Many policy measures and programmes are highly cost effective, because they benefit the economy as a whole. Sound information about energy-saving potential and policy measures to achieve it is essential. It will drive implementation and international harmonisation of activities such as minimum energy performance standards and programmes to raise the efficiency of appliances and energy-using equipment.

The **bigEE Policy Guide** provides such information. bigee.net/policy