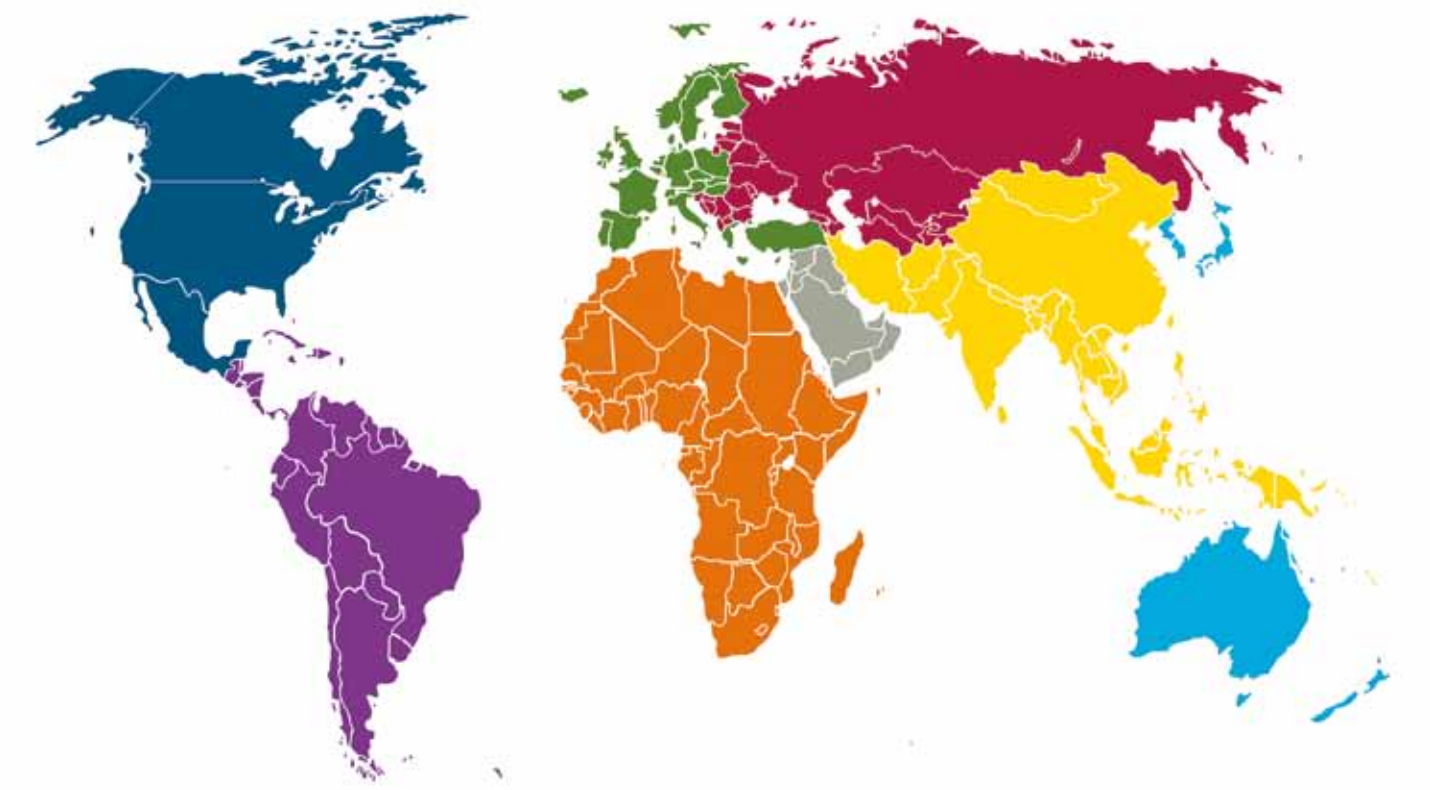




# The Global Sustainable Energy Challenge



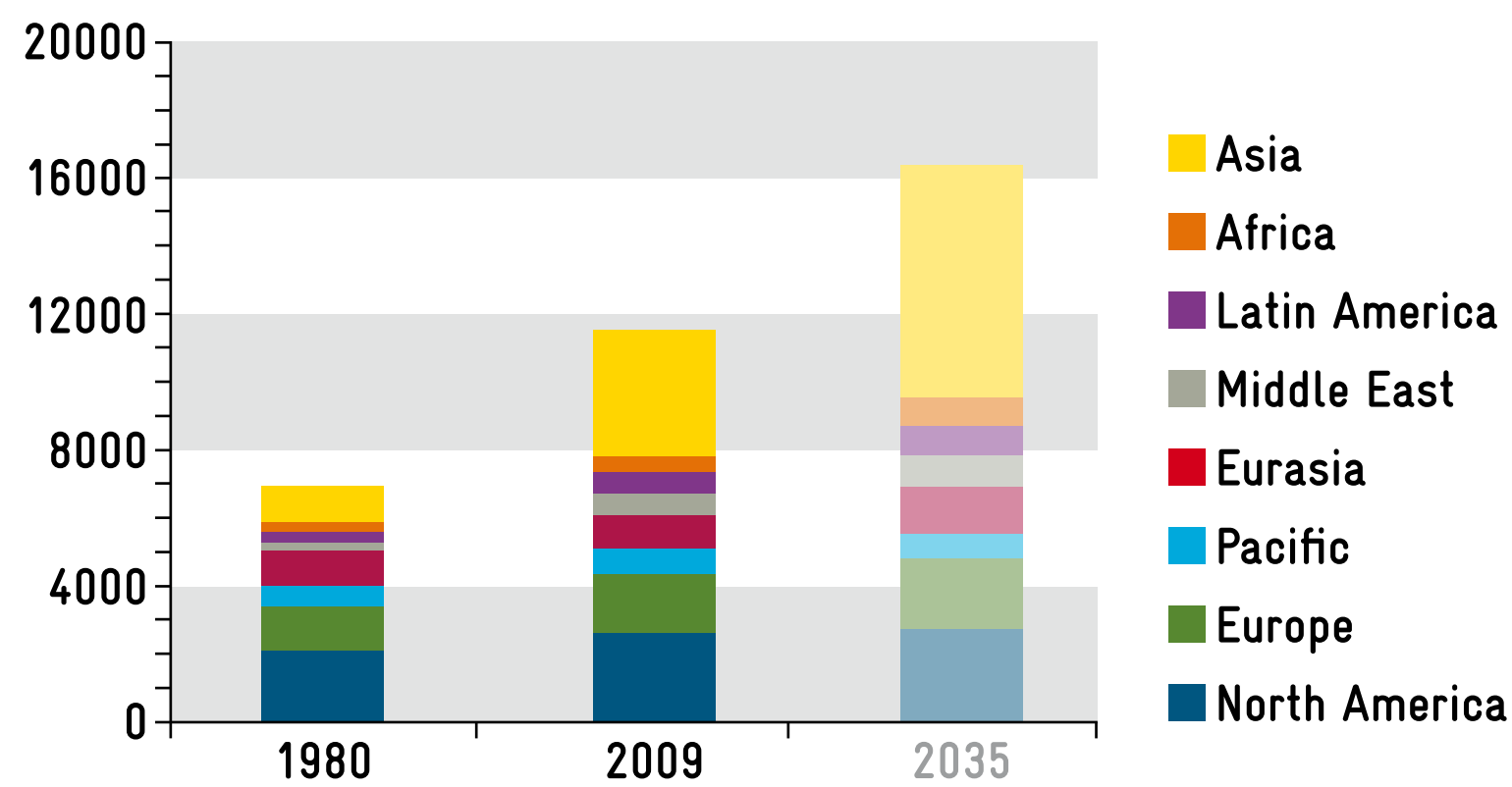
Energy is required for a variety of our daily needs, for instance, heating, lighting, cooking, communication, and also for society in terms of production processes and transportation. Energy consumption levels differ widely around the world: in some regions people use modern energy services 24 – 7, while in other parts of the world people depend on gathering wood to burn for fuel.



„We need a global clean energy revolution that makes energy available and affordable for all.“

**Ban Ki Moon,**  
Secretary-General of the United Nations

## Energy consumption will grow the most in Asia



Total energy consumption (Mtoe)

Data based on World Energy Outlook 2010 and 2011

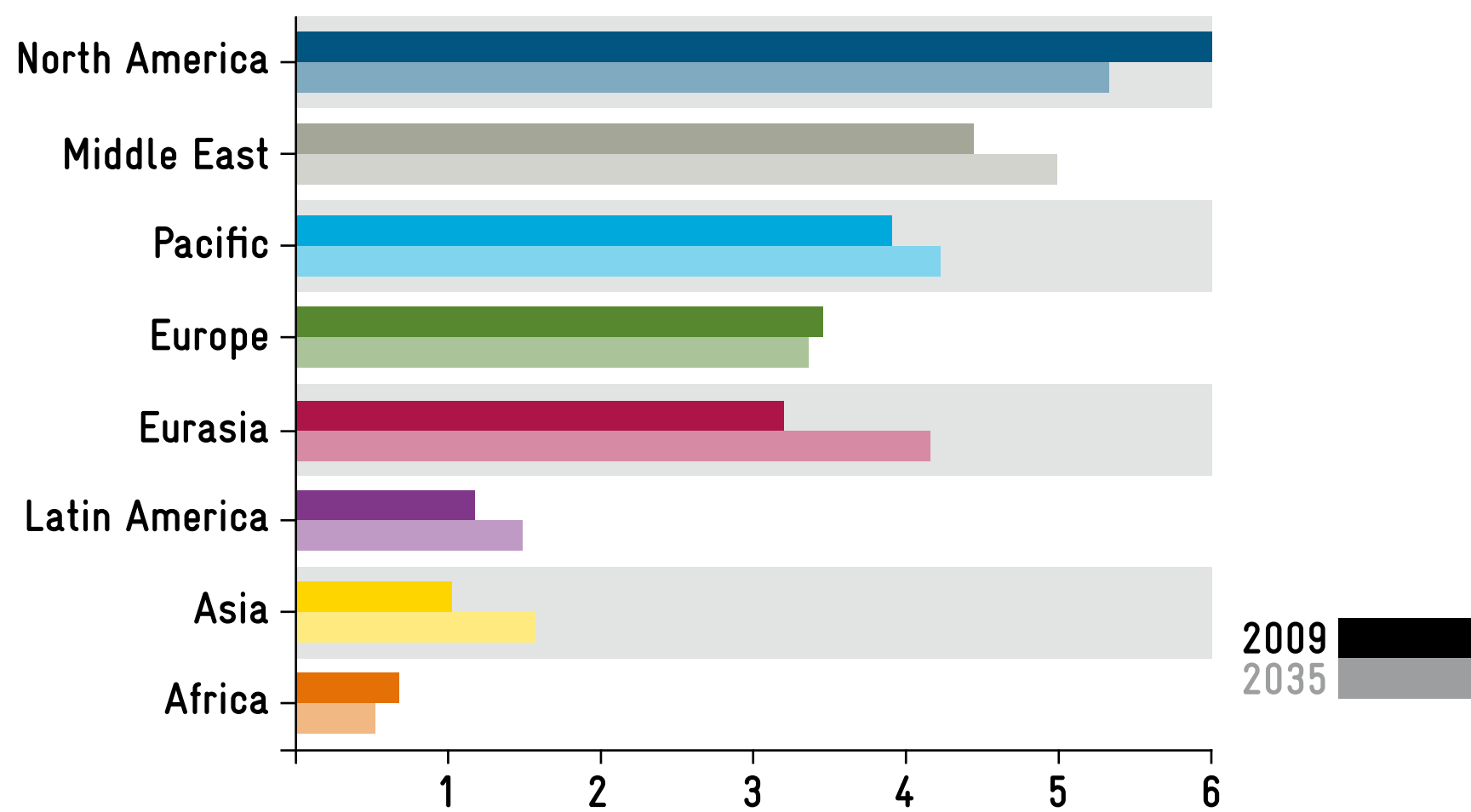
- Global energy consumption has almost doubled in the last 30 years.
- Energy demand is set to further increase in all regions.
- Ambitious policies could stabilize or reduce total consumption in developed regions and change trajectories in the developing world.



„We have to meet the unlimited demand of the people for resources and the cultural life.“

**Xie Zhenhua,** Vice Chairman of China's National Development and Reform Commission

## Per capita energy consumption remains highest in North America



Per capita energy consumption (toe per capita)

Data based on UN Population Division 2010 and World Energy Outlook 2010 and 2011

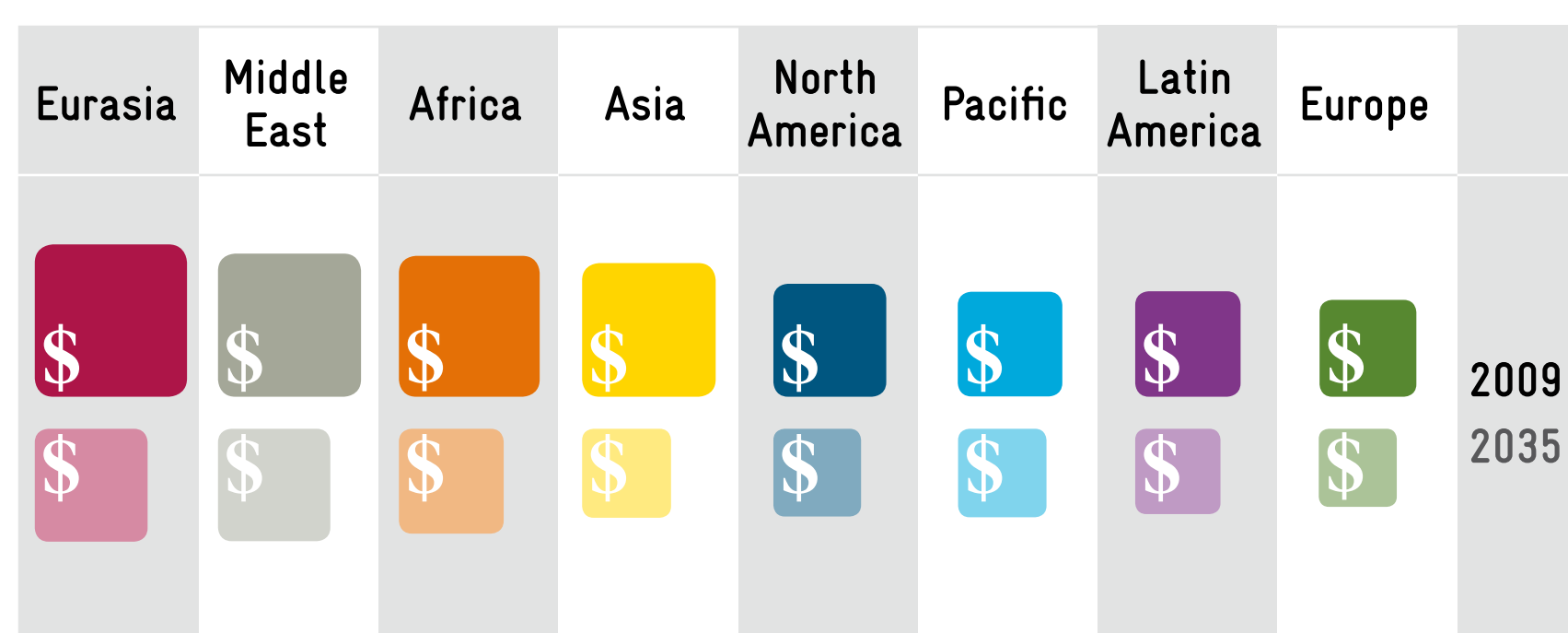
- In North America and Europe per capita consumption is expected to decrease, mainly due to energy efficiency improvements.
- Energy consumption per capita is expected to increase significantly in Asia (by some 50%), followed by Eurasia (30%) and Latin America (25%).
- An Asian or Latin American person living in 2035 is still likely to consume only half as much energy as a European.
- In Africa, per capita consumption is already very low, but it is expected to decrease further leading to higher rates of people living in energy poverty.



„We have known for decades that our survival depends on finding new sources of energy. Yet we import more oil today than ever before.“

**Barack Obama,**  
President of the United States

## Energy intensity reductions are expected in all regions



Energy intensity is the amount of energy used to produce one unit of economic output. (toe per 1000 US\$)

Data based on World Energy Outlook 2010 and 2011

- All regions are expected to require less energy for the same economic output as more efficient technologies become available.
- Europe, dominated by service activities, is currently the most energy efficient region, but Asia and Latin America are expected to achieve similar levels.
- Eurasia and the Middle East are both endowed with abundant energy sources and have the highest energy input today. It is likely they will maintain that position into the future.



„More efficient energy use is the key to unlocking valuable environmental and economic benefits.“

**José Manuel Barroso,**  
President of the European Commission