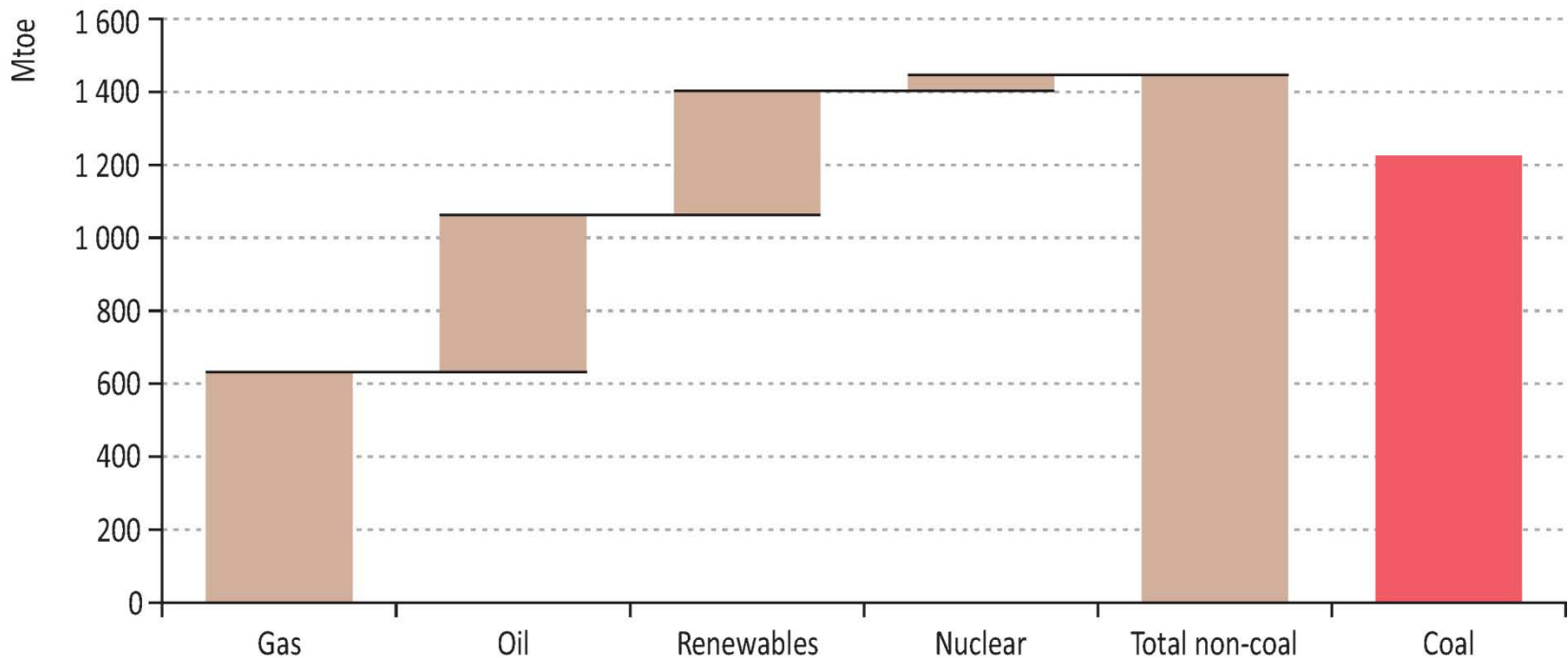


Coal won the energy race in the first decade of the 21st century

**WORLD
ENERGY
OUTLOOK** 2011

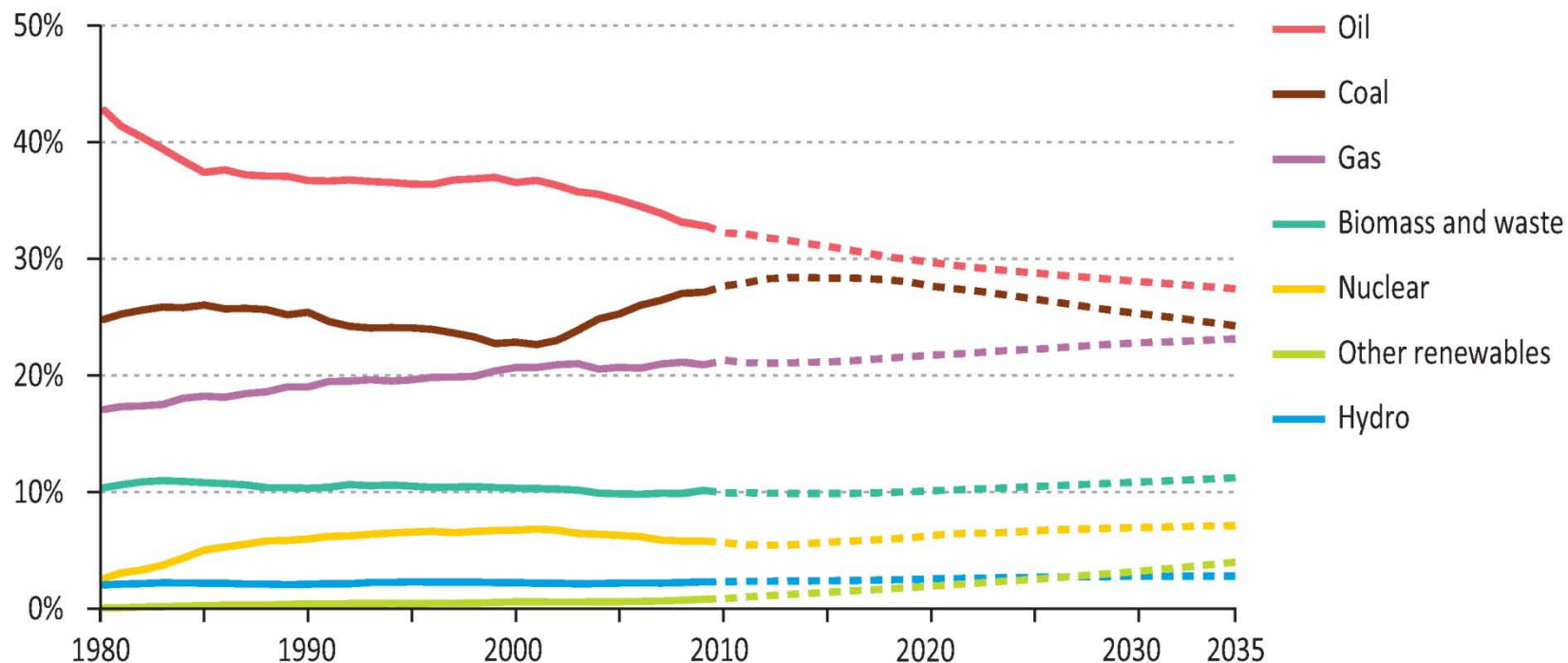
Figure 10.1: Incremental world primary energy demand by fuel, 2000-2010



***Coal accounted for nearly half of the increase in global energy use over the past decade,
with the bulk of the growth coming from the power sector in emerging economies***

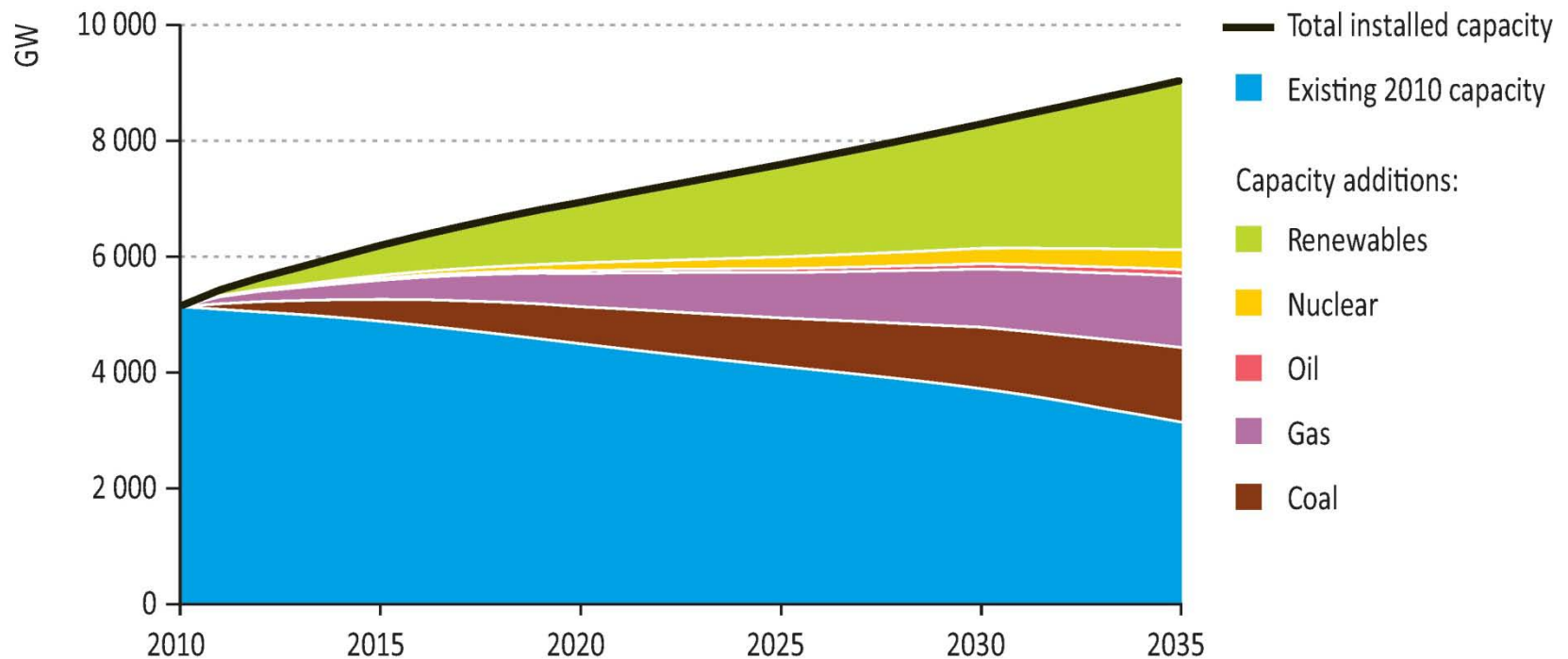
Natural gas & renewables become increasingly important

**Figure 2.7: Shares of energy sources in world primary energy demand
in the New Policies Scenario**



**Global primary energy demand grows by 40% between 2009 & 2035,
oil remains the leading fuel though natural gas demand rises the most in absolute terms**

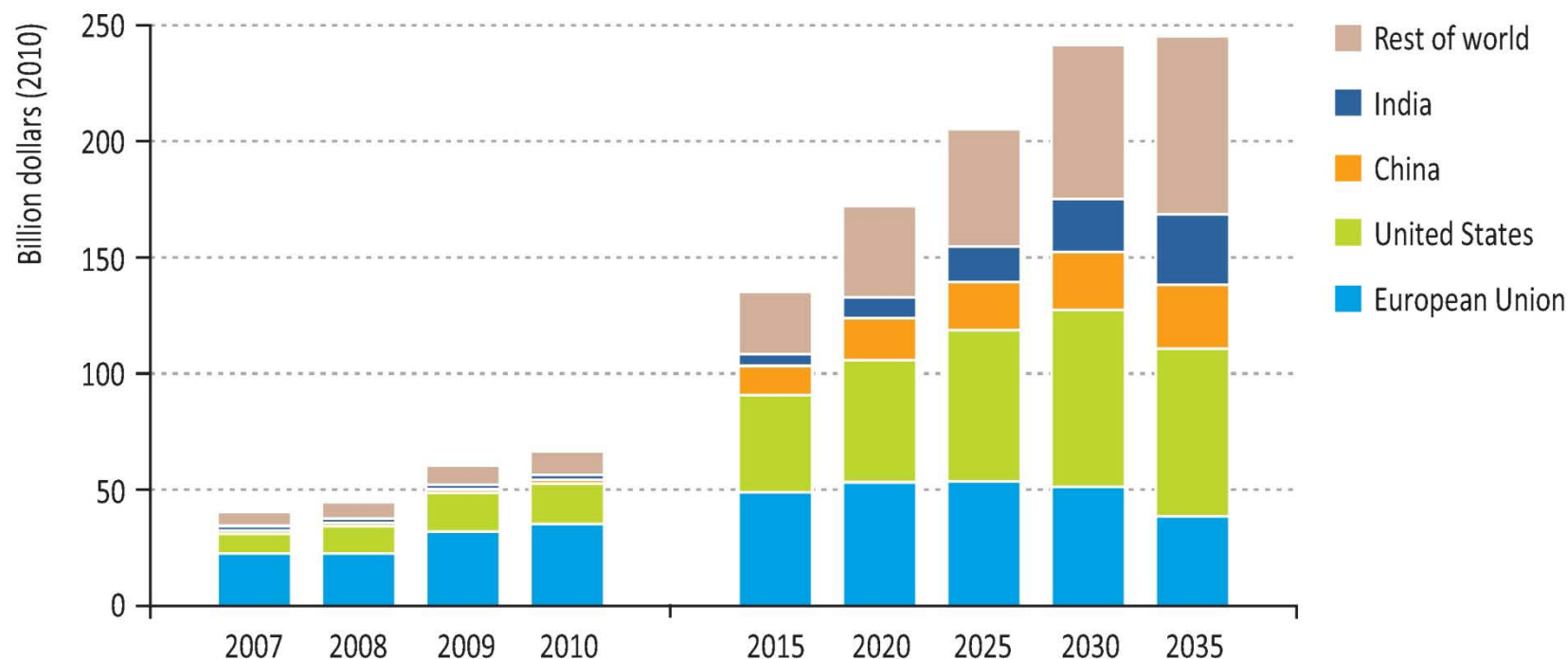
Figure 5.11: Global installed power generation capacity and additions by technology in the New Policies Scenario



Renewables and nuclear power account for more than half of all the new capacity added worldwide through to 2035

The overall value of subsidies to renewables is set to rise

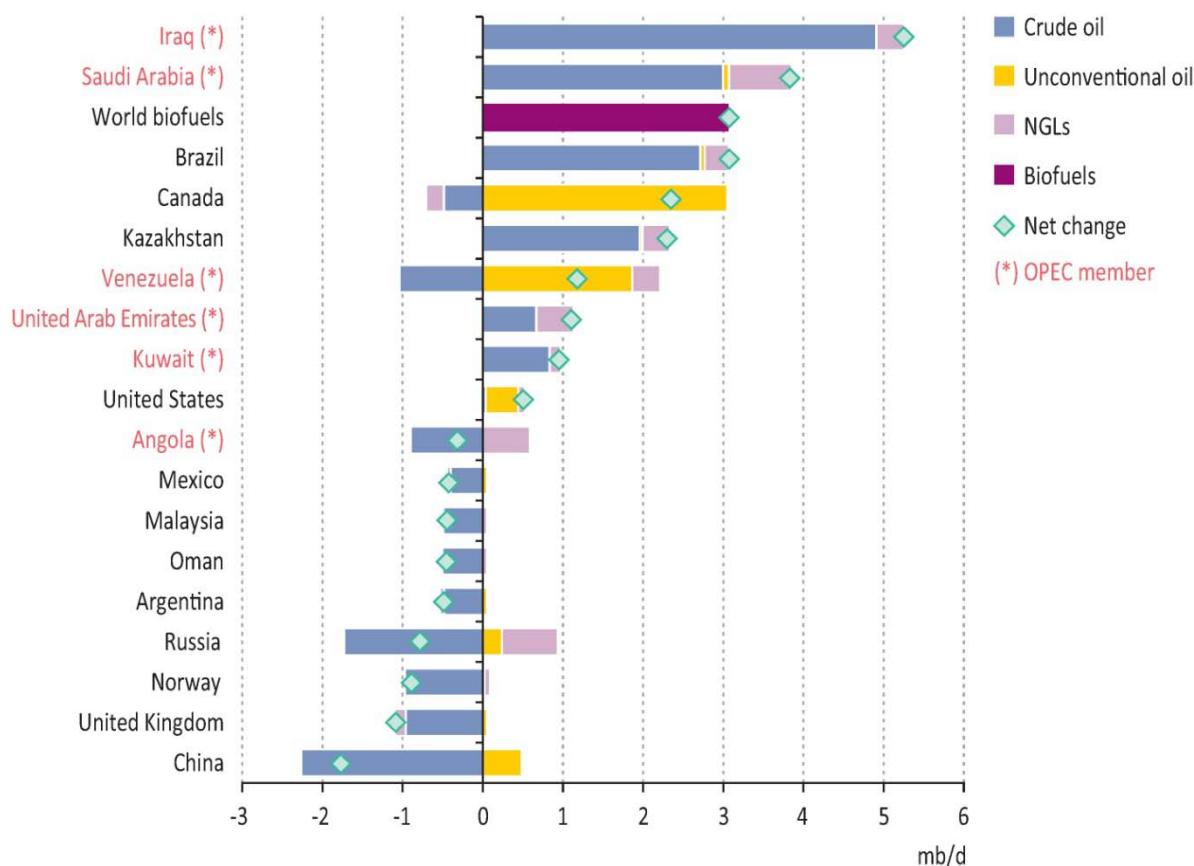
Figure 14.13: Global subsidies to renewables-based electricity and biofuels by region in the New Policies Scenario



Renewable subsidies of \$66 billion in 2010 (compared with \$409 billion for fossil fuels), reach \$250 billion in 2035 as rising deployment outweighs improved competitiveness

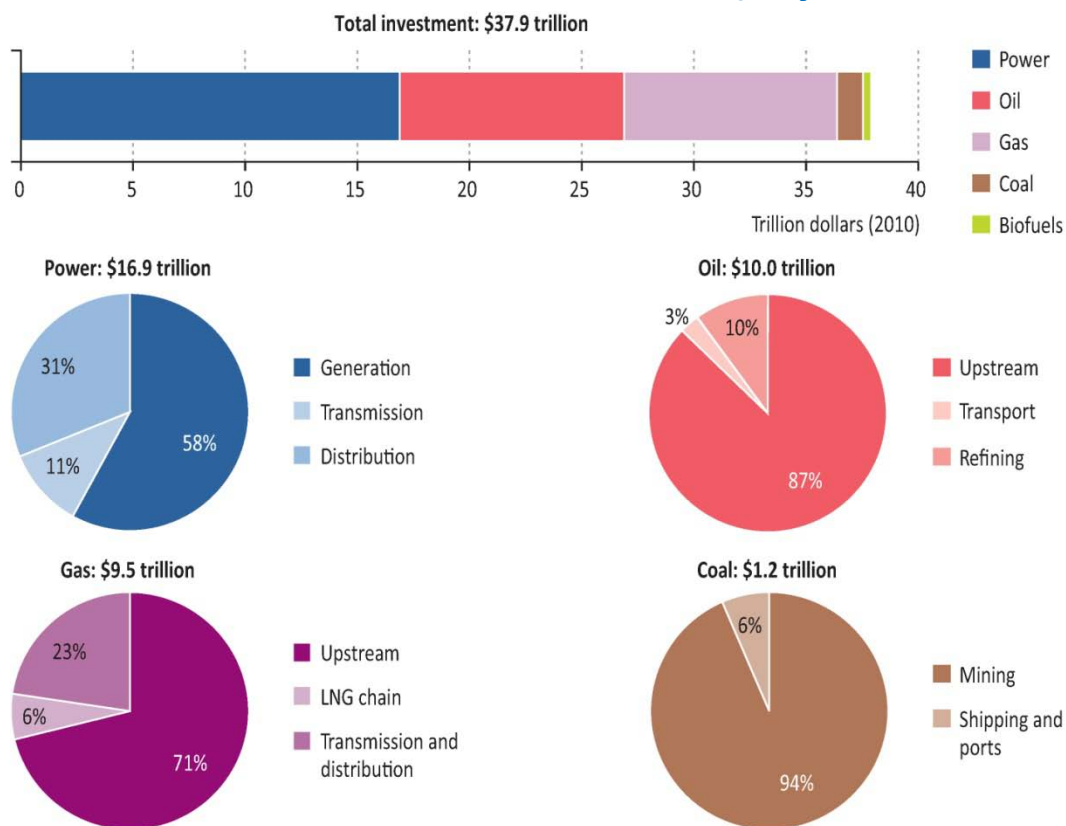
Rising transport demand & upstream costs reconfirm the end of cheap oil

Figure 3.17: Major changes in liquids supply in the New Policies Scenario, 2010-2035



The MENA region is set to supply the bulk of the growth in oil output to 2035, while companies operating elsewhere turn increasingly to more difficult & costly sources

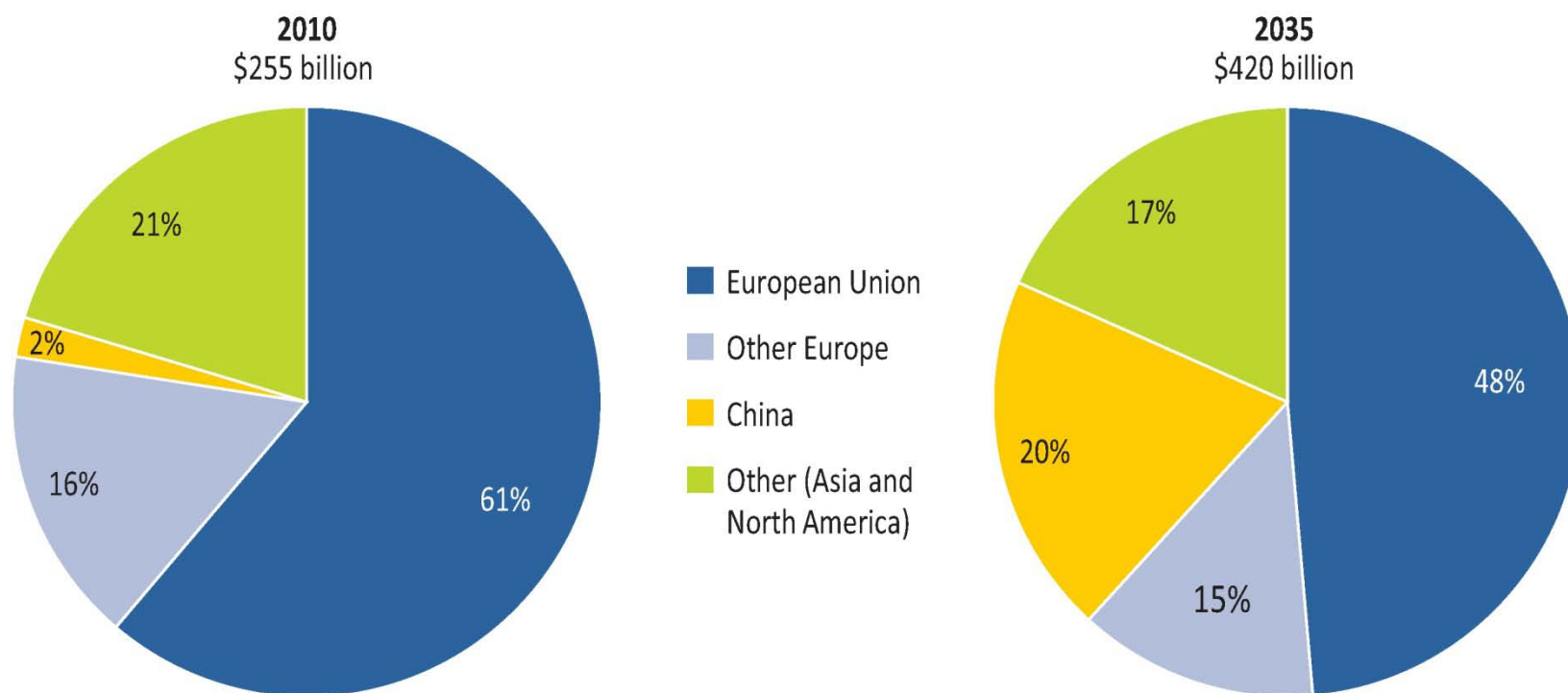
Figure 2.20: Cumulative investment in energy-supply infrastructure by fuel in the New Policies Scenario, 2011-2035 (in year-2010 dollars)



Cumulative investment of \$38 trillion – almost \$1.5 trillion per year – is required in energy-supply investment to 2035, with 45% in the power sector alone

Russia remains a cornerstone of the global energy economy

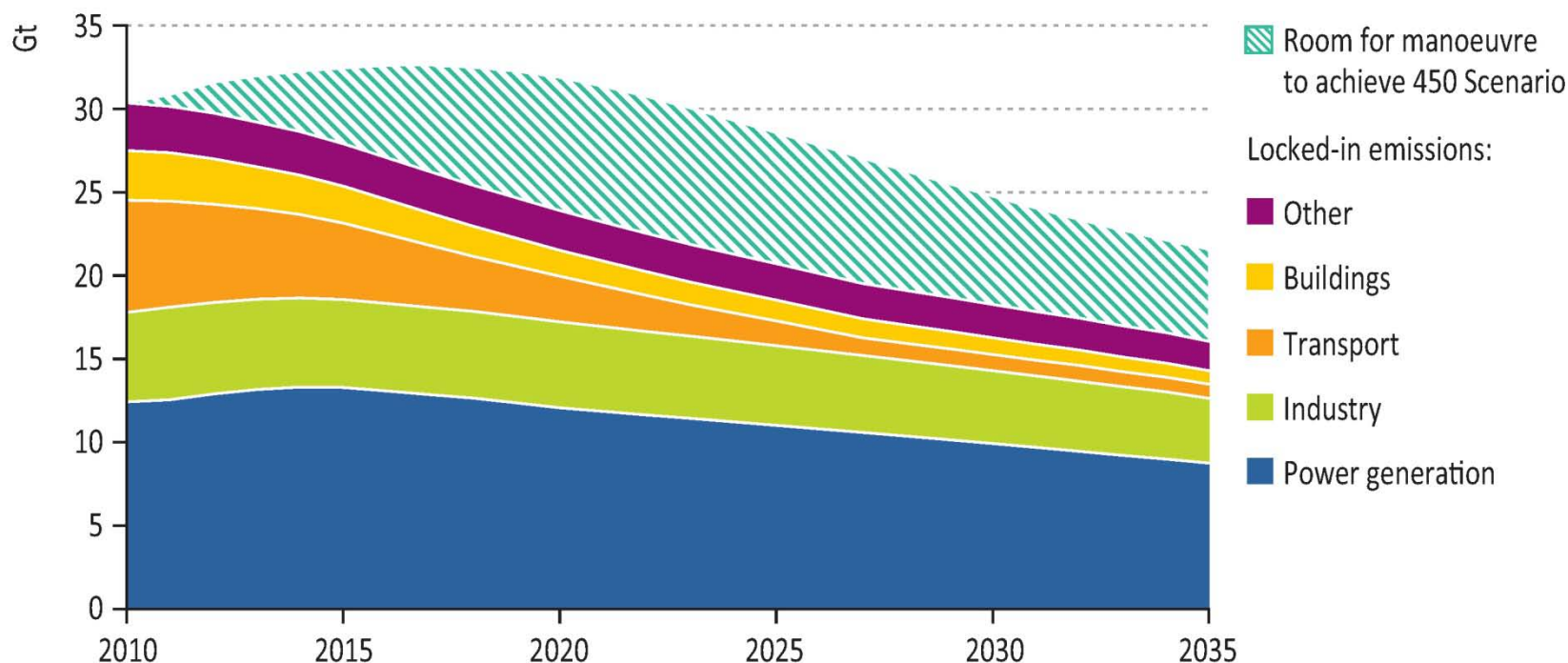
Figure 9.4: Sources of Russian revenue from fossil fuel export sales



An increasing share of Russian exports go eastwards to Asia, providing Russia with diversity of markets and revenues

The door to 2°C is closing, but will we be “locked-in” ?

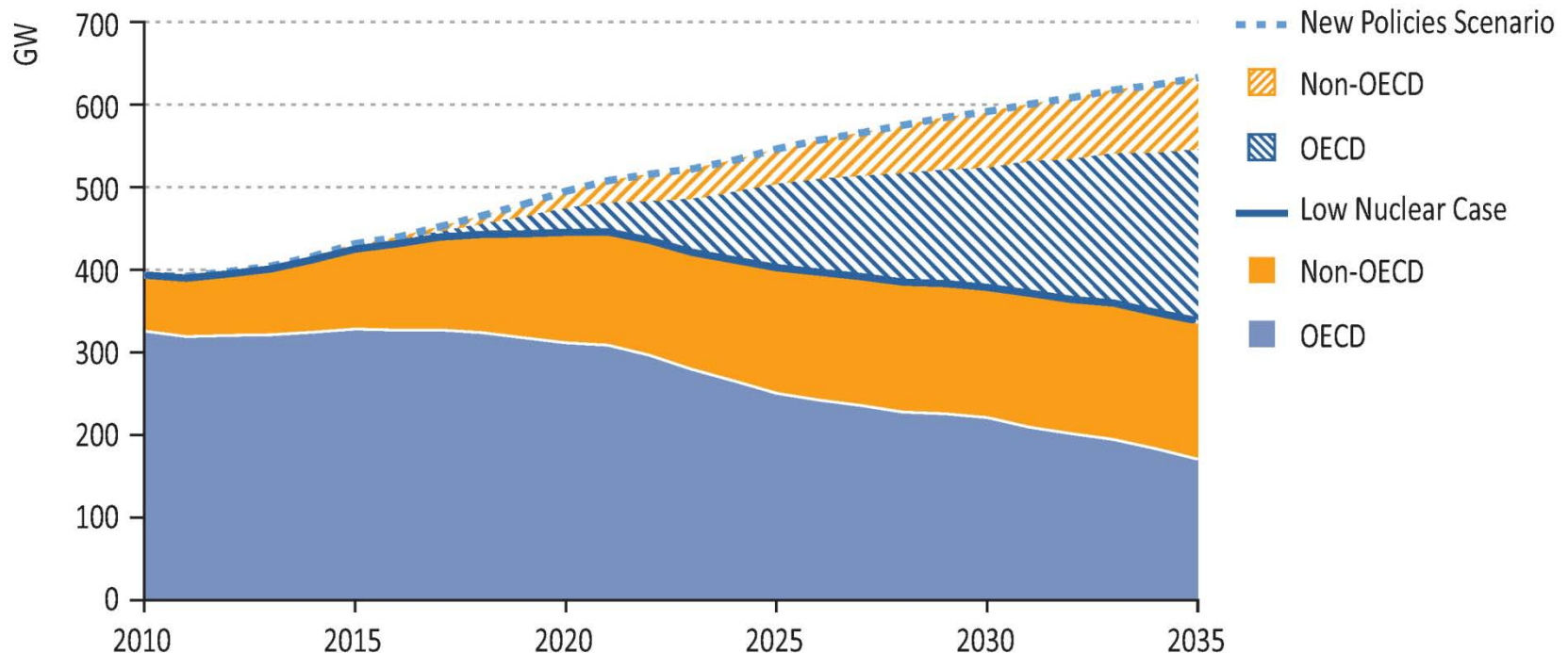
Figure 6.12: World energy-related CO₂ emissions from locked-in infrastructure in 2010 and room for manoeuvre to achieve the 450 Scenario



Without further action, by 2017 all CO₂ emissions permitted in the 450 Scenario will be “locked-in” by existing power plants, factories, buildings, etc

How a low nuclear future could look

Figure 12.3: Nuclear power capacity in the Low Nuclear Case



Nuclear power capacity drops by 15% between 2010 & 2035 as a result of a bigger wave of retirements outweighing a slower rate of new construction than in the New Policies Scenario