
Forum ACP

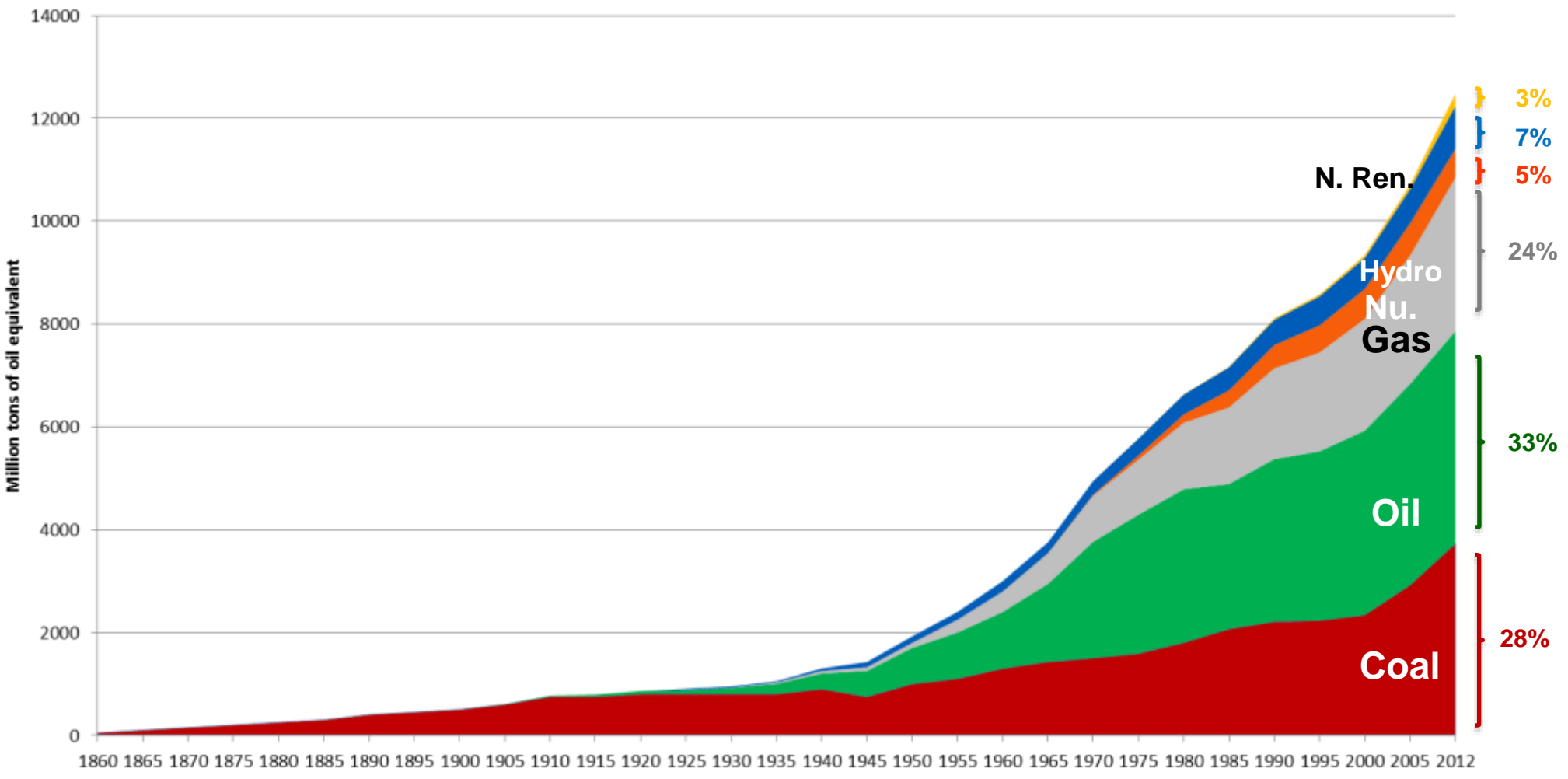
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**Réponse aux besoins croissants en
énergie**

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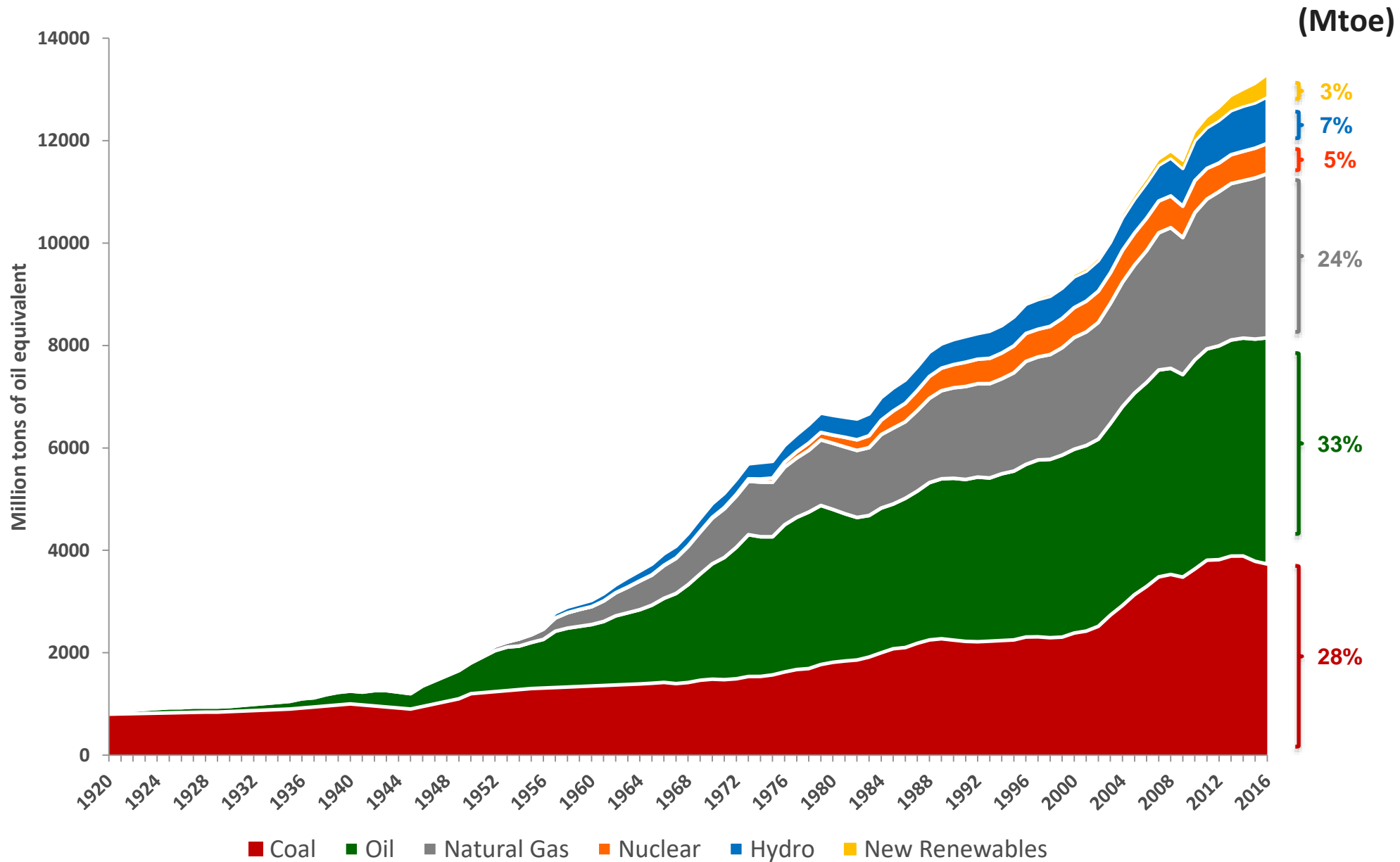
World primary energy consumption (1/2)

(Mtoe)



Sources : Schilling & Al. (1977), BP Statistical 2013 - 2016

World primary commercial energy consumption (2/2)



World energy demand in 2050

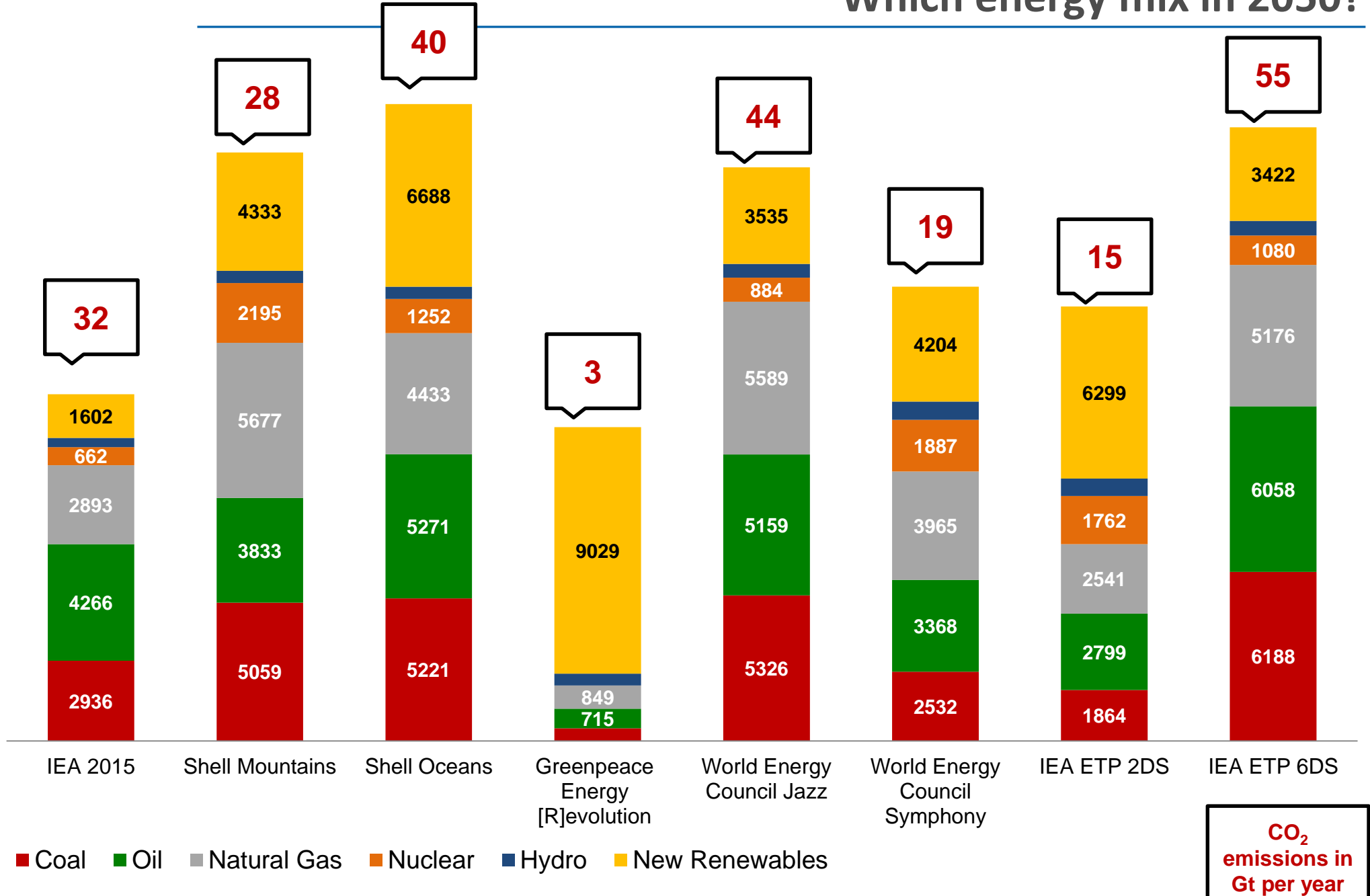
Btoe (10 ⁹ toe)	1960	2016	2050		
			A1	B	C1
Oil	1.0	4.4	5.0	4.0	2.7
Gas	0.4	3.2	5.7	4.5	3.9
Coal	1.3	3.7	5.4	4.1	1.5
Nuclear	0	0.6	2.9	2.7	0.5
Sub-Total	2.7	11.9	19.0	15.3	8.6
Renewables	0.6	2.3	5.5	4.5	5.6
Total	3.3	14.2	24.5	19.8	14.2

Case A1: high-growth, there is high future availability of oil and gas resources. Dominance of oil and gas is perpetuated to the end of the 21st century.

Case B: “middle-course” scenario. More modest estimates of economic growth and technological development. Case B manages to fulfill the development aspirations of the South, but less uniformly and at a slower pace than in the other cases.

Case C1 : most challenging. Optimistic about technology and geopolitics. In Scenario C1 nuclear power proves a transient technology that is eventually phased out entirely by the end of the 21st century.

Which energy mix in 2050?



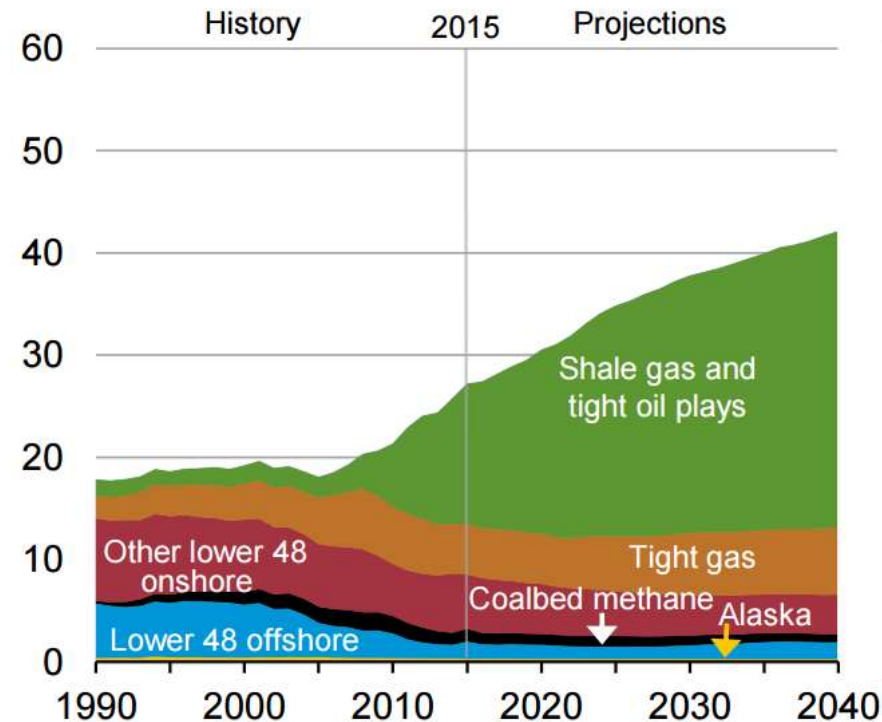
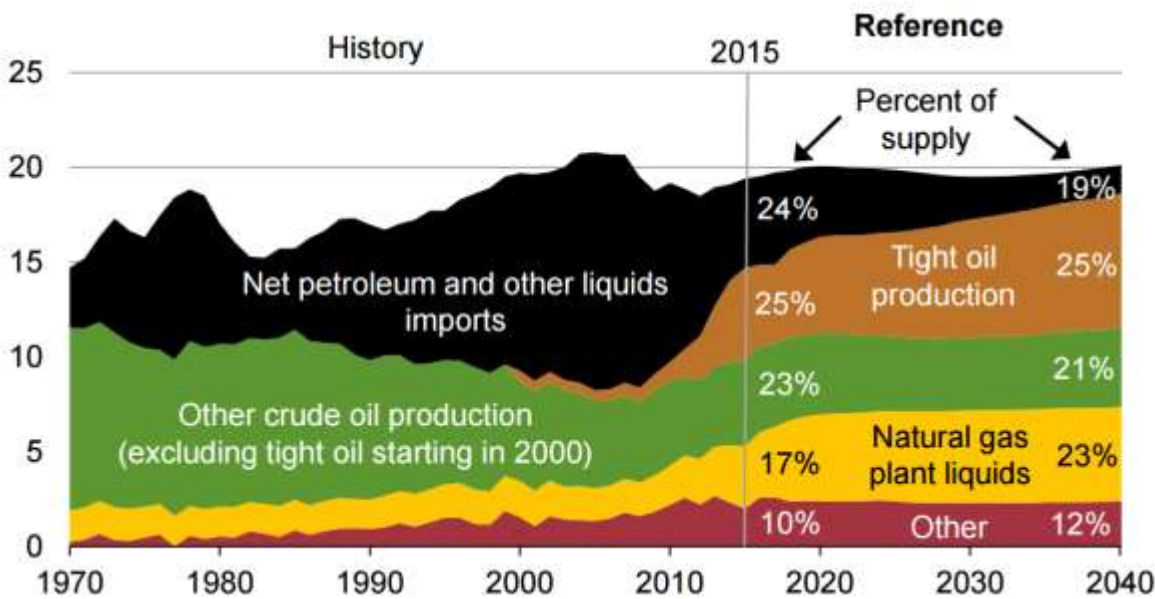
CO₂ emissions in Gt per year

Sources: IEA WEO 2016, IEA Energy Technology Perspectives 2016, Shell Scenarios to 2050, Greenpeace, World Energy Council

US Oil & Gas production today and tomorrow

U.S. petroleum and other liquid fuels supply by source, 1970-2040 (million barrels per day)

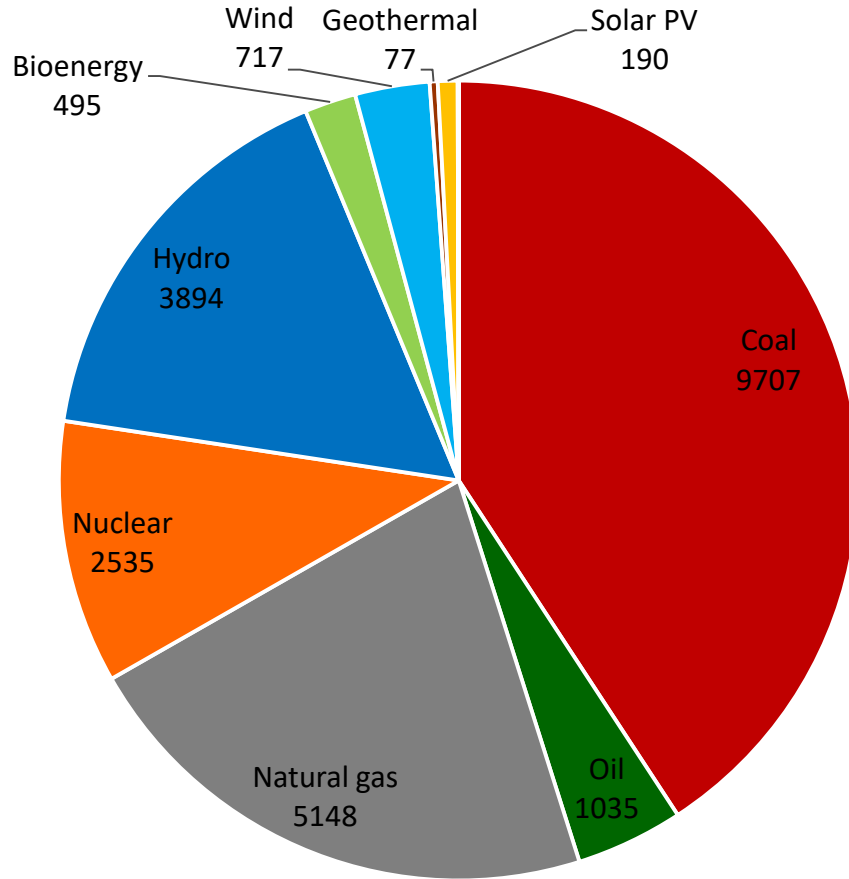
Natural gas production by source, 1990-2040 (trillion cubic feet)



Note: "Other" includes refinery gain, biofuels production, all stock withdrawals, and other domestic sources of liquid fuels

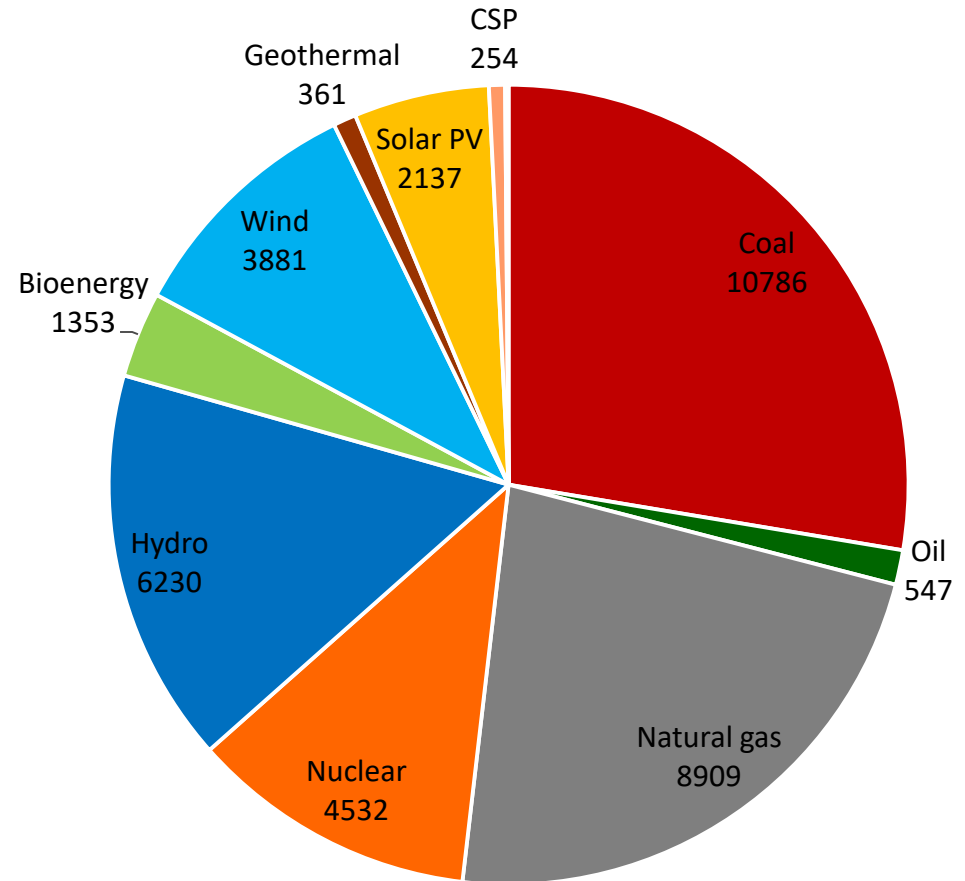
World electricity generation 2015-2040

2015



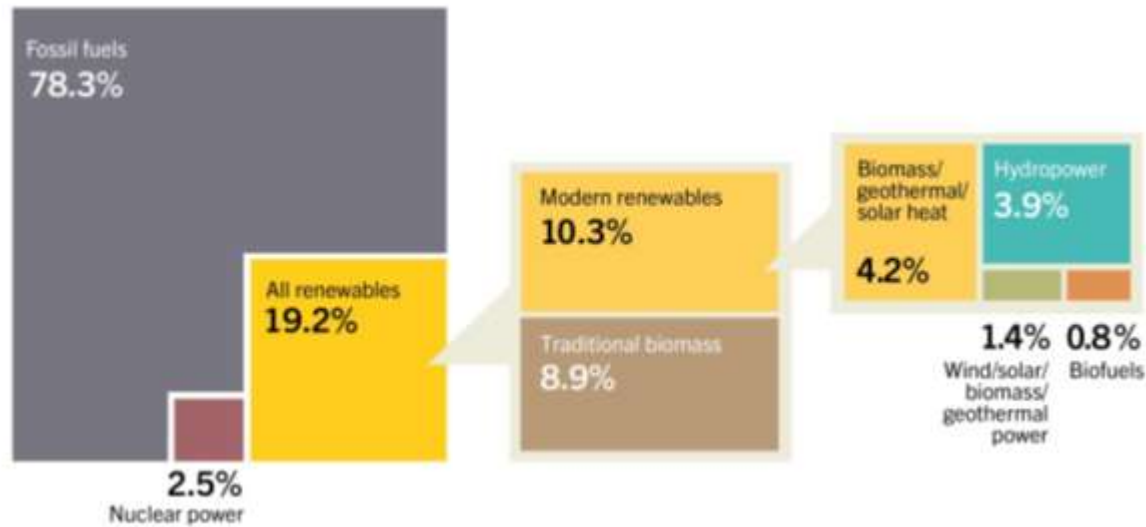
23808 TWh

2040

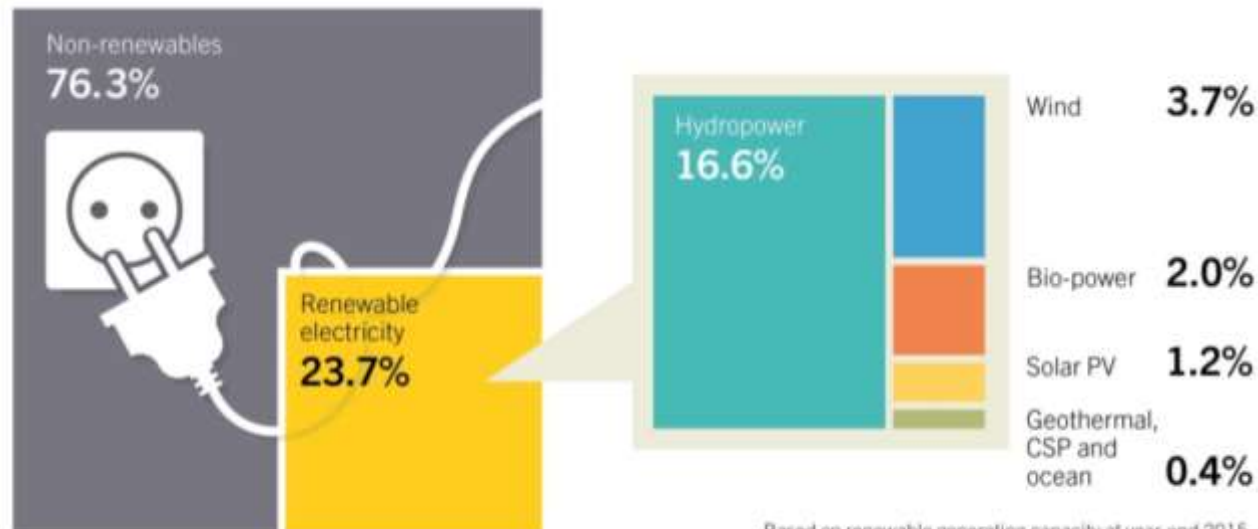


39044 TWh

Share of renewable energies in global final energy consumption in 2014



Share of renewable energies in global electricity production in 2015



Based on renewable generating capacity at year-end 2015.
Percentages do not add up internally due to rounding.