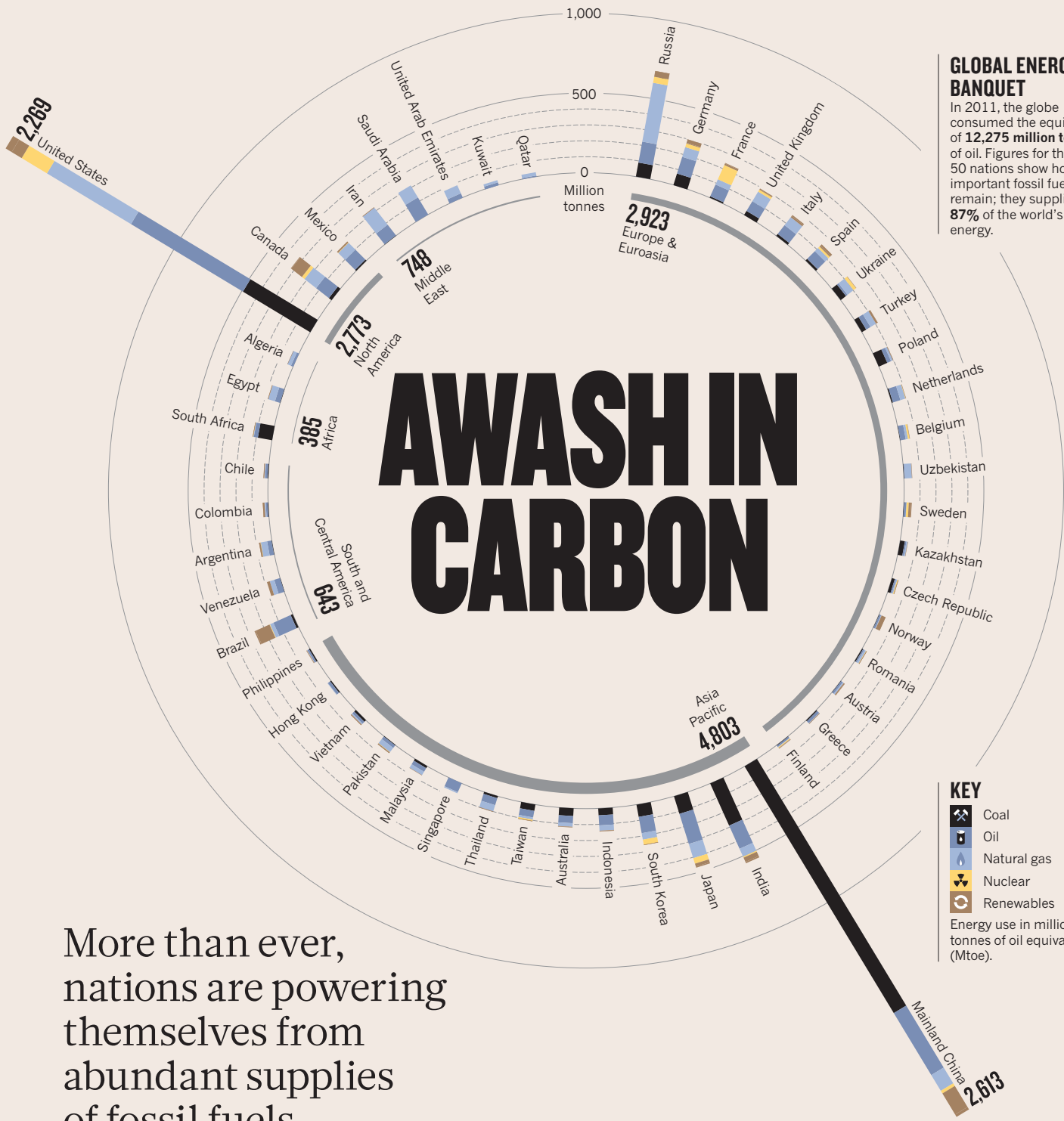


GLOBAL ENERGY BANQUET

In 2011, the globe consumed the equivalent of **12,275 million tonnes** of oil. Figures for the top 50 nations show how important fossil fuels remain; they supplied **87%** of the world's energy.



AWASH IN CARBON

KEY

- Coal
 - Oil
 - Natural gas
 - Nuclear
 - Renewables
- Energy use in million tonnes of oil equivalent (Mtoe).

More than ever, nations are powering themselves from abundant supplies of fossil fuels.

Even though countries are burning unprecedented amounts of oil and gas, the estimates of how much is left continue to grow, thanks to high prices and new technologies that have enabled companies to find and extract new resources. A decade ago, it was the tar sands of Canada and Venezuela. More recently, hydraulic-fracturing technologies have opened up oil and gas resources in the United States. Across the globe, proven oil and gas reserves are 60% higher today than they were in 1991. At current

consumption rates, those reserves would last for about 60 years — and that could be extended by new discoveries and unconventional deposits. Coal reserves have not increased in size, but the supply will last for at least a century at current rates of consumption.

Renewables such as solar and wind power are growing faster than any other source of energy, but are barely making a dent in fossil-fuel consumption. The scale of the challenge will only grow as the expanding global population requires more energy. This tour of global and regional energy trends makes clear that even with aggressive action to reduce energy consumption and curb emissions, fossil fuels will be around for a very long time. ■

AFTER KYOTO
The legacy of a climate treaty
nature.com/kyoto

Design by **JASIEK KRZYSZTOFIK**
Reporting by **JEFF TOLLEFSON** and **RICHARD MONASTERSKY**

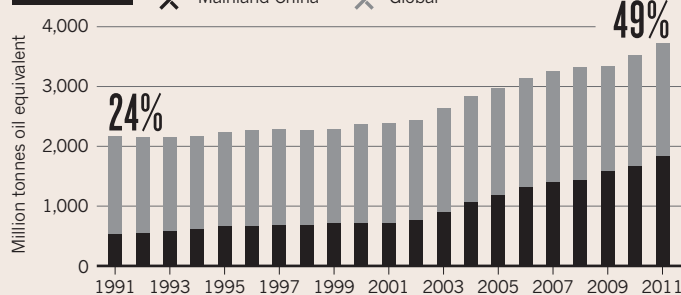
SOURCE: BP STATISTICAL REVIEW OF WORLD ENERGY 2012



ALL THE COAL IN CHINA

Mainland China now accounts for half of global coal consumption but at current consumption rates, it only has 33 years of domestic coal left.

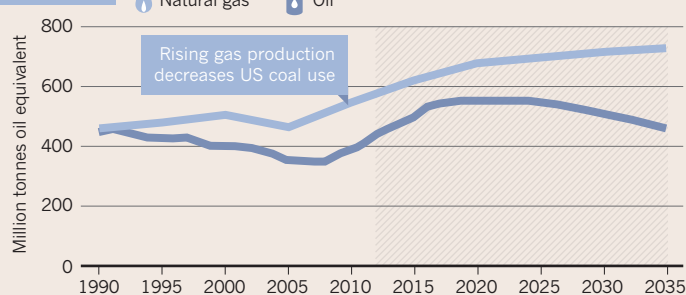
Mainland China Global



US BONANZA

Hydraulic fracturing of tight rocks in the United States is driving a surge in oil and gas production that would continue for at least a decade in one scenario explored by the International Energy Agency.

Natural gas Oil



SOURCE: IEA WORLD ENERGY OUTLOOK 2012

SOURCE: IEA ENERGY POVERTY REPORT 2010



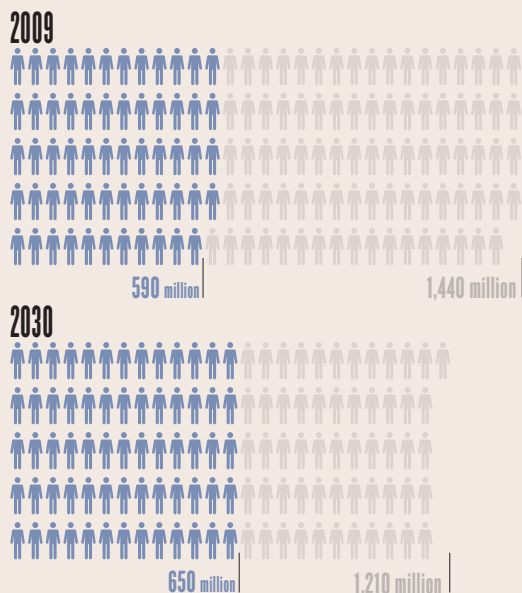
AFRICA UNDERPOWERED

In 2009, roughly one in five people had no access to electricity, more than 40% of them in sub-Saharan Africa. By 2030, the worldwide number without electricity will fall, but more Africans will lack access.

Population lacking electricity. One icon equals 10 million people.

In Africa

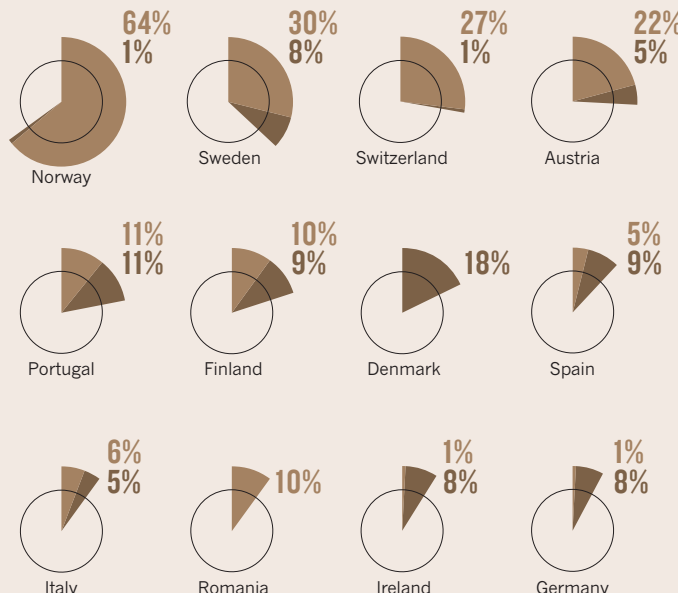
Worldwide



RENEWING EUROPE'S ENERGY

Many European nations get a sizeable fraction of their energy from renewable sources; wind and solar power are growing rapidly.

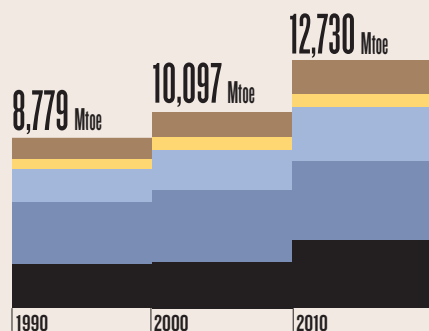
Hydro Wind, solar and other renewables



SOURCE: BP STATISTICAL REVIEW OF WORLD ENERGY 2012

PAST AND FUTURES

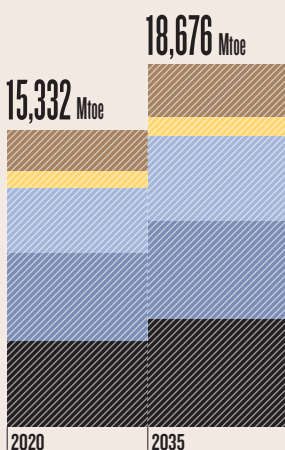
Global energy use has jumped by 45% over the past 20 years, mostly from fossil fuels. The International Energy Agency has projected demand in million tonnes of oil equivalent in three scenarios. Each scenario has very different consequences for greenhouse-gas changes between 2010 and 2035. Keeping carbon dioxide levels below 450 parts per million (p.p.m.) would give the world even odds of limiting global warming to 2°C.



SOURCE: IEA WORLD ENERGY OUTLOOK 2012

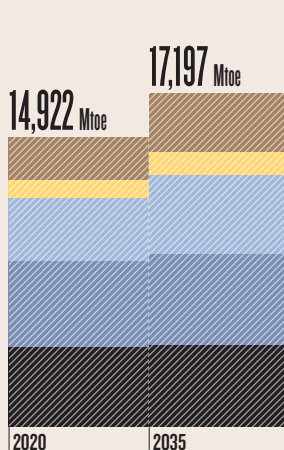
CURRENT POLICIES CONTINUE

Emissions rise 46%



NATIONS CARRY OUT ANNOUNCED ENERGY POLICIES

Emissions rise 23%



NATIONS AIM TO KEEP CO2 UNDER 450 P.P.M.

Emissions fall 27%

