

IEA sees shift to low-carbon energy

-- By Anca Gurzu - 11/10/15, 2:00 AM CET

The world is shifting towards low-carbon fuels, according to an [International Energy Agency](#) report released Tuesday, which finds coal use declining, oil prices set to rebound in the next five years, and cleaner natural gas gaining an edge on its dirtier rivals.

Released just three weeks before the start of the Paris COP21 climate talks, the [IEA's World Energy Outlook](#) finds deep differences in energy use across the world.

While rich countries from the Organization for Economic Cooperation and Development will see their energy demand drop by 2040, energy use worldwide is set to grow by one-third, driven primarily by India, China, Africa, the Middle East and Southeast Asia.

The EU will see the sharpest drop in energy demand, a 15 percent decline by 2040, followed by Japan at 12 percent and the U.S. at 3 percent. Non-OECD countries together will account for all the increase in global energy use by 2040.

1. Oil prices rebalancing

Oil prices are set to reach \$80 per barrel in 2020, up from less than \$50 at present, thanks to an uptick in demand, the IEA said. However, higher prices, efforts to phase out fossil fuel subsidies and energy efficiency policies will keep demand moderate over the long term.

The EU, the United States and Japan will see oil demand fall by 2040, according to the report.

The IEA's forecast came with some caveats, as the agency did not rule out a scenario under which oil prices could remain low for longer — staying close to \$50 per barrel until the end of decade and only gradually rising back to \$85 in 2040. However, it found that such a scenario would have a big impact on OPEC country revenues, which would decline by one quarter, making it unlikely they would stick with high production levels over the long term. Although consumers would see benefits from lower prices, reliance on Middle Eastern oil imports would increase.

2. Coal "ebbing away"

Moderate demand for oil stands in sharp contrast to coal where consumption in the OECD is projected to drop by 40 percent by 2040, according to the 29-country IEA. In the EU it is set to drop by one-third from current levels.

"The momentum behind coal's surge is ebbing away — and the fuel faces a reversal of fortune," the IEA said.

The message is in line with a recent report by Greenpeace, which found worldwide [coal use fell](#) 2.3 percent to 4.6 percent in the first nine months of 2015 compared to the same period last year.

Coal has increased its share in the global energy mix from 23 percent in 2000 to 29 percent today, largely thanks to increased use in developing countries like India. But that increase will slow — coal represented 45 percent of the increase in global energy demand over the last decade, but it will only represent about 10 percent of total growth to 2040.

This further growth will be largely due to a tripling in coal demand in India and Southeast Asia, which will account for four out of every five tons of coal consumed globally.

Although China will remain “by a distance” the world’s largest producer and consumer of coal, the country’s plans to introduce an emissions trading scheme in 2017 will help “curb the appetite for coal,” according to the IEA.

In all, the share of coal in the global electricity mix is set to drop from 41 percent to 30 percent.

3. The rise of renewables

While shifting away from coal, the EU is set to lead growth in renewable generation, with wind, solar and other technologies accounting for 50 percent of power production by 2040, followed by China and Japan at 30 percent.

The agency also found an increase in renewable subsidies could spur the use of green power. Such subsidies came to \$112 billion (€104 billion) in 2014. A 50 percent increase, to about \$170 billion in 2040, “secures a five-fold increase in generation from non-hydro renewables,” according to the organization.

Christian Egenhofer, an analyst at the CEPS think tank in Brussels, said it was “remarkable” to see the IEA coming out in favour of renewable subsidies.

“The IEA is an organization with its DNA based in fossil fuels, yet they come with a relative positive message on renewable subsidies,” he said.

The share of non-fossil fuels in the global energy mix is set to rise from 19 percent today to 25 percent in 2040.

Natural gas is the only fossil fuel that will see its share rise: consumption is set to increase by almost 50 percent by 2040. China and the Middle East are the main regions accounting for the growth demand, overtaking the EU’s gas market size.