Coal remains the most widely used means of electricity production in the world. It also happens to be the biggest emitter of climate-changing carbon dioxide of any fuel.
Despite efforts to tackle global warming, worldwide demand for coal was up one percent last year, mainly due to demand in Asia.
China is by far the biggest consumer of coal which is mainly used to produce electricity. However even in China there is now political pressure to improve air quality in urban areas, with a new trend towards using natural gas and renewables.
In 2017, after two years of declines, International Energy Agency figures showed global coal demand rising to 5.357 million tonnes of coal equivalent .
While many advanced economies, such as Canada, Germany and the United Kingdom are considering how to phase out coal use in power generation, the same is not true everywhere.
India seems set to replace China as the world's biggest coal consumer while Asian countries such as Indonesia, Malaysia, Pakistan, Philippines and Vietnam have also registered big increases.
"Many developing economies view coal as important to their economic development because of its ready availability and relatively low cost," the IEA said in it World Energy Outlook 2018 report.
The prediction is for demand to breach 5,400 million tonnes before 2040 with an expected drop in use in China, the European Union and the United States set against the rises in India and Southeast Asia.
Coal is key to the climate change issue as it was responsible for 40 percent of carbon dioxide emissions last year, ahead of oil (34 percent) and natural gas (19 percent), according to figures from the Global Carbon Project group.
The IEA warns that "urgent action" is needed to boost levels of carbon capture and storage. At present the costs of such technology can be prohibitive.
There are currently two large-scale carbon capture, utilisation and storage projects in operation, according to the IEA; the Boundary Dam project in Saskatchewan, Canada and the Petra Nova Carbon Capture project in Texas, United States, with annual capture capacities of 1.0 million tonnes of carbon dioxide and 1.4 Mt CO2, respectively.
Another major CCUS project in Mississippi has been abandoned.
The total capacities of the two operating projects,2.4 million tonnes of carbon dioxide per year would have to be boosted to 350 million tonnes by 2030 in order to respect the Paris climate accord, according to IEA.
"Rapid, least-cost energy transitions require an acceleration of investment in cleaner,

smarter and more efficient energy technologies," it said.
Source: phys.org