

World may draw 77% of its power from clean sources by 2050 – IPCC

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UNITED NATIONS -- The world could be drawing almost 80 percent of its energy from renewable sources by 2050, the Intergovernmental Panel on Climate Change said in a report released today.

Taking a broad view of renewable power -- including not only wind, solar and geothermal power but also wood scavenged in the developing world -- the report says renewables could constitute about 77 percent of all power generation, measured in exajoules per year, up from 13 percent.

The 77 percent by 2050 estimate represents the report's most optimistic scenario, assuming a host of policy changes by governments to put a stiff price on emissions of greenhouse gases and generous support for renewable generation.

On the low end, the report says renewables might constitute just 15 percent of energy generation by 2050.

"While the report concludes that the proportion of renewable energy will likely increase even without enabling policies, past experience has shown that the largest increases come with concerted policy efforts," the report's authors say in a release.

The IPCC released the executive summary of its 1,000-page "Special Report on Renewable Energy Sources" at a meeting in Abu Dhabi, United Arab Emirates. The IPCC was formed to study climate change and propose solutions for tackling greenhouse gases.

Prepared by 120 IPCC scientists, the report excludes nuclear power from its definition of renewable energy and focuses on solar photovoltaics, wind generation, hydropower, geothermal, ocean wave generation technologies, biomass and liquid biofuels.

The report sees the growth of alternative energy sources outpacing fossil fuel generation and nuclear generation to 2050.

It also predicts that expanding renewable energy use will contribute more to lowering greenhouse gas emissions levels than either nuclear generation or coal- and gas-fired power generation that incorporates carbon capture and storage.

The IPCC renewables report also assumes technological advances will make renewables more enticing to markets.

"The technical potential of renewable energy technologies exceeds the current global energy demand by a considerable amount, globally and in respect of most regions of the world," the report says.