Global renewable energy deployment needs a six-fold increase in order to begin to achieve the Paris climate agreement goals, a new report from the International Renewable Energy Agency said Tuesday.

During IRENA's launch of its Global Energy Transformation: A Roadmap to 2050 at the Berlin Energy Transition Dialogue on Tuesday, it stated that the historic climate accord of Paris in 2015 seeks at minimum to limit average global temperature rise to below 2 degrees in this century compared to the pre-industrial levels.

In recognition of energy efficiency and renewable energy being the main pillars of energy transition, the report showed that "renewables, in combination with rapidly improving energy efficiency, form the cornerstone of a viable climate solution. Keeping the global temperature rise below 2 degrees is technically feasible. It would also be more economically, socially and environmentally beneficial than the path resulting from current plans and policies."

However, the report warned that the global energy system must undergo a profound transformation, from one largely based on fossil fuels to one that enhances efficiency and is based on renewable energy.

"Such a global energy transformation – seen as the culmination of the 'energy transition' that is already happening in many countries – can create a world that is more prosperous and inclusive," the report said.

Currently, emission trends are not on track to meet the climate goal and governmental plans worldwide still fall far short of emission reduction needs, according to the report.

"Under current and planned policies, the world would exhaust its energy-related 'carbon budget' in under 20 years to keep the global temperature rise to well below 2 degrees while fossil fuels such as oil, natural gas and coal would continue to dominate the global energy mix for decades to come," the report reads.

Therefore, the report stressed that immediate action is crucial to meet the below 2 degrees goal while cumulative emissions must at least be reduced by a further 470 gigatons by 2050 compared to current and planned policies to meet that goal.

"The total share of renewable energy must rise from around 18 percent of total final energy consumption in 2015 to around two-thirds by 2050. Over the same period, the share of renewables in the power sector would increase from around one-quarter to 85 percent, mostly through growth in solar and wind power generation," the report projects.

It added; "the energy intensity of the global economy will have to fall by about two-thirds, lowering energy demand in 2050 to slightly less than 2015 levels. This is achievable, despite significant population and economic growth, by substantially improving energy efficiency,"

According to IRENA, all countries can substantially increase the proportion of renewable energy out of total energy usage by 2050 while renewables can make up to 60 percent or more of many countries' total final energy consumption.
Source: energia.gr