

Light Pollution Obstructs One-Third of the World to View the Milky Way, Study Finds

14/06/2016



A new report by an international team of scientists revealed that man-made light pollution obstructs a third of humanity's ability to view the Milky Way. The authors of the study recommend the conversion of light installations to LED light bulbs which the US Department of Energy supports.

A new study published in the journal of Science Advances says that more than a third of the world's population, including 80% of Americans and 60% of Europeans, can no longer view the Milky Way as a result of man-made light pollution.

The research also noted that more than four-fifths of Earth's inhabitants now live under the hazy skies polluted by artificial light which effectively obstructs a third of humanity's population to see the Milky Way galaxy.

"This is a huge cultural loss with unforeseeable consequences in the future generations. Pristine night skies are a precious merchandise. The entire population lives under skies so bright that the eye cannot fully dark-adapt to night vision," scientist and lead author Fabio Falchi said as mentioned in a CNN report.

An international group of scientists created a new global atlas of artificial light pollution that details how man-made light permeates the planet. The scientists claim that light pollution obscures humanity's vision of celestial entities and events in the solar system and the entire Milky Way.

"The new atlas provides a critical documentation of the state of the night environment as we stand on the cusp of a worldwide transition to LED technology," said Falchi as quoted in a <u>press release</u>. "Unless careful consideration is given to LED color and lighting levels, this transition could unfortunately lead to a 2-3 fold increase in skyglow on clear nights."

The study also revealed that the tiny city-state of Singapore is the most light-polluted country on the planet with its entire population missing out the chance of experiencing a true night. Trailing closely are Kuwait and Qatar, Sky



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<u>News</u> reported. On the other hand, Chad, Central African Republic and Madagascar are countries with populations least exposed to artificial light.

To minimize the obstruction caused by man-made light pollution, Dr. Falchi suggests the use of Light- Emitting Diode (LED) light bulbs in lighting installations- a conversion proposal the US Department of Energy supports.

"If all U.S. lighting installations were replaced overnight with the best LED technologies available in 2014, our nation would save 4,896 trillion Btu of energy," the department says as quoted by <u>Christian Science Monitor</u>. "That is MOST of the 7,000 trillion Btu we now use for lighting."