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Scientists: Ozone layer recovering

Chemist calls discovery 'victory for diplomacy'

By SETH BORENSTEIN
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WASHINGTON Earth's protective but fragile ozone layer is beginning to recover, largely because of the phase-out since the 1980s of certain chemicals used in refrigerants and aerosol cans, a U.N. scientific panel reported Wednesday in a rare piece of good news about the health of the planet.

Scientists said the development demonstrates that when the world comes together, it can counteract a brewing ecological crisis.

For the first time in 35 years, scientists were able to confirm a statistically signifi-

cant and sustained increase in stratospheric ozone, which shields us from solar radiation that causes skin cancer, crop damage and other problems.

From 2000 to 2013, ozone levels went up 4 percent in the key mid-northern latitudes at about 30 miles high, said NASA scientist Paul Newman. He co-chaired the every-four-years ozone assessment by 300 scientists, released at the United Nations.

"It's a victory for diplomacy and for science and for the fact that we were able to work together," said chemist Mario Molina. In 1974, Molina and F. Sherwood Rowland wrote a scientific study forecasting the ozone depletion problem. They won the 1995 Nobel Prize in chemistry for their work.

The ozone layer had been

thinning since the late 1970s. Man-made chlorofluorocarbons, called CFCs, released chlorine and bromine, which destroyed ozone molecules high in the air. After scientists raised the alarm, countries around the world agreed to a treaty in 1987 that phased out CFCs. Levels of those chemicals between 30 and 50 miles up are decreasing.

The United Nations calculated in an earlier report that without the pact, by 2030 there would have been an extra 2 million skin cancer cases a year around the world.

Paradoxically, heat-trapping greenhouse gases — considered the major cause of global warming — are also helping to rebuild the ozone layer, Newman said.

The report said rising levels of carbon dioxide and other gases cool the upper

stratosphere, and the cooler air increases the amount of ozone.

And in another worrisome trend, the chemicals that replaced CFCs contribute to global warming and are on the rise, said MIT atmospheric scientist Susan Solomon. At the moment, they don't make much of a dent, but they are expected to increase dramatically by 2050 and make "a big contribution" to global warming.

The ozone layer is still far from healed. The long-lasting, ozone-eating chemicals still lingering in the atmosphere create a yearly fall ozone hole above the extreme Southern Hemisphere, and the hole hasn't closed up. Also, the ozone layer is still about 6 percent thinner than in 1980, by Newman's calculations.