Environment News Futures

India, US Announce \$60 Million Clean Energy Financial Support

PTI | Jun 8, 2016

Washington: India and the US on Tuesday announced the setting up of two financial assistance programmes worth \$60 million for supporting India's much-needed clean energy initiatives including in solar power and other renewables.

"The United States is committed to bring to bear its technical capacity, resources and private sector, and is jointly launching with India new efforts, to spur greater investment in India's renewable energy sector, including efforts that can serve as a model for other ISA member Countries," the White House said.

How Climate Change Threatens Panda Conservation

IANS | Jun 7, 2016

New York: Pandas do not like it hot and rising temperatures can also put pressure on their food supply by eliminating vast amounts of bamboo plants, researchers say.

"Higher climate temperatures would upset the entire system in the panda reserves and the wild, eliminating vast amounts of bamboo," said one of the researchers James Spotila, professor at Drexel University in Philadelphia, Pennsylvania, US.



Two giant pandas at a zoo in Taiwanese capital Taipei. (AFP photo)

Danger from Extreme Storms, High Seas to Rise, Warn Australian Researchers

June 8, 2016—University of New South Wales

Storms that battered Australia's east coast are a harbinger of things to come and a stark reminder of the need for a national effort to monitor the growing threat from climate change, UNSW coastal researchers warn.

"The damage we've seen is a harbinger of what's to come," said Ian Turner, Director of the Water Research Laboratory at the University of New South Wales. "Climate change is not only raising the oceans and threatening foreshores, but making our coastlines much more vulnerable to storm damage. What are king high tides today will be the norm within decades."

Scientists Confirm Folk Remedy Repels Mosquitoes

July 3, 2006—University Of Mississippi

Swatting mosquitoes and dodging other biting bugs is nearly a year-round chore in the Southeast, but such pests are swarming across the country with the advent of summer weather. And with warnings about West Nile virus and other insect-borne diseases out, keeping the pests away has taken on new urgency.

A traditional folk remedy, known among people in Mississippi's hill country for at least a century, may provide some relief without all the worries of DEET and other harsh chemicals. Scientists at the United States Department of Agriculture-Agriculture Research Service housed at the National Center for Natural Products Research at the University of Mississippi have isolated compounds in the American beautyberry plant, *Callicarpa americana*, that may keep chomping insects away.

"My grandfather would cut branches with the leaves still on them and crush the leaves, then he and his brothers would stick the branches between the harness and the horse to keep deerflies, horseflies and mosquitoes away," said Charles T. Bryson, an ARS botanist in Stoneville, Miss. "I was a small child, maybe 7 or 8 years old, when he told me about the plant the first time. For almost 40 years, I've grabbed a handful of leaves, crushed them and rubbed them on my skin with the same results."

Bryson told his supervisor about the folklore repellent, and in 2004 the USDA-ARS at the UM natural products research center began investigating the beautyberry plant as a potential natural insect repellent. Charles Cantrell, an ARS chemist in Oxford, and Jerry Klun, an ARS entomologist in Beltsville, Md., confirmed that the natural remedy wards off biting insects, such as ticks, ants and mosquitoes: "I've rubbed the leaves on my arms, and it works," Cantrell said.

"Traditional folklore remedies many times are found to lead nowhere following scientific research," he continued. "The beautyberry plant and its ability to repel mosquitoes is an exception. We actually identified naturally occurring chemicals in the plant responsible for this activity." Three repellent chemicals were extracted during the 12-month study: callicarpenal, intermedeol and spathulenol. The research concluded that all three chemicals repulse mosquitoes known to transmit yellow fever and malaria. Mosquitoes carrying the West Nile virus were not tested as part of the study, but the USDA-ARS has since filed a patent application to use callicarpenal as an anthropod repellent.

There are barriers, however, to producing the repellent for mass consumption. The product must be registered with the Environmental Protection Agency, which may cost millions of dollars, and a cost-effective manufacturing procedure must be determined.

"It's difficult to bring a repellent onto the market," Cantrell said. "We still have many unanswered questions: both the toxicity levels and evaporation rates are unknown. We're still in the early stages." Cantrell also said, "It's quite unusual to find a plant producing this type of compound, but it's synthesizing it for some reason. Perhaps, it's naturally defending itself against insect attack."

World Carbon Emissions Stopped Growing in 2015, says BP

Move towards renewable energy and away from coal power helped stall emissions growth last year but slowdown may be temporary, says oil giant. China overtook Germany and the US as the world's biggest generator of solar power in 2015. Carbon emissions stopped growing in 2015 for the first time in 10 years as the world turned its back on coal and embraced energy efficiency and renewable power with increased vigour, according to a new set of statistics.

China led the way in driving down emissions but the latest figures from oil company BP come with a warning that the progress may not last. With the exception of a drop in global emissions around the time of the 2009 financial crisis, which heavily depressed overall business activity, the BP figure of 0.1% growth in CO₂ is the lowest for 25 years.

Wind power capacity grew by 17.4% and solar by 32.6% last year with China overtaking Germany and the US as the largest generator of solar. America's overall renewable energy capacity increased by 19.7%, Germany's by 10.9% and Britain's by only 4.8%.

"There are good reasons for thinking that some of this (CO₂) slowdown reflects structural forces (pushing for low carbon power) that are likely to persist and grow in importance," said Spencer Dale, BP's chief economist. "But some probably reflects cyclical factors, particularly the contraction of China's most energy-intensive sectors, which are unlikely to keep being repeated and may well unwind in future years," he added.

How the Great Barrier Reef Got Polluted – From Farms and Fossil Fuels to Filthy Propaganda

Graham Readfearn

In late November 2015, as corals across the northern section of the Great Barrier Reef started to bleach white, the game was finally up. For years, Australians had been told the country's jewel in the ocean's crown was on the mend. Only months earlier the Coalition government had won a two-year fight to keep the reef off a United Nations list of world heritage sites in danger.

The stakes were high. International reputations and tourist dollars were at stake. The foreign minister, Julie Bishop, and the trade minister, Andrew Robb, had even attacked Barack Obama, who feared for the reef's future.

The reef was not in danger, Bishop insisted. The president was misinformed, claimed Robb.

Conservative commentators hanging around News Corp media have said the dangers to the reef were overblown. The mining industry cast the views of environmentalists as green propaganda, ignoring how for the most part, conservationists were echoing the findings of the government's own scientists.