

## World News Roundup

## Climate

## 2C limit

## World split on carbon-cutting

BONN, Oct 22, (AFP) — A pivotal question has split world powers along unfamiliar lines as they haggle over how to avert catastrophic global warming: Should they set a goal of entirely eliminating carbon-belching industries?

Tensions over the concept, called “decarbonisation”, illustrate how wide the divides remain less than six weeks before a 195-nation UN forum gathers in Paris to try to tame climate-altering forces.



Hollande

Their overarching goal is to limit global warming to two degrees Celsius (3.6 degrees Fahrenheit) over pre-Industrial Revolution levels so as to avoid dangerous consequences such as rising sea levels, increasingly violent storms, large-scale droughts and spreading disease.

Two decades of negotiations over how to rein in global warming have been fraught with disagreements.

But few are so basic as the dispute over how far to go in eliminating emissions of carbon dioxide (CO2) and other so-called greenhouse gases blamed for trapping the Earth's heat.

Just weeks ahead of the Nov 30-Dec 11 meeting in Paris, nations cannot even agree on the meaning of decarbonisation — does it denote a desired outcome, or an open-ended odyssey? Does it apply only to CO2 or other greenhouse gases too?

The term has flashed in and out of various versions of a draft agreement to be presented to ministers and heads of state in the French capital.

Green groups pushing for a 100 percent renewable economy by 2050 hailed the word's reappearance — following a minor rebellion by developing nations — in a revised text unveiled in Bonn Tuesday.

## Fighting

“It tells us the direction of travel, and where we want to be by 2050, by the end of the century, and how we are going to get there,” said climate activist Mohamed Adow of Christian Aid, a group fighting for the rights of poor countries.

Unlike many issues debelling the talks, the tussle over decarbonisation does not respect the traditional split between rich and developing nations.

It was the United States that insisted on putting the term back on the table after it had been excised by the two presiding diplomats in a radical pruning during the Bonn talks.

The European Union — aligned with Washington on most climate matters — resists using the word.

This is despite French President Francois Hollande and German Chancellor Angela Merkel successfully lobbying other members of the Group of Seven (G7) rich nations to enshrine decarbonisation in a joint statement in June.

“The EU is in a bit of a quandary,” said Alden Meyer, a climate analyst from the Washington-based Union of Concerned Scientists.

“Decarbonisation makes it very clear that you cannot continue to rely on coal as a major source of energy. Poland is rejecting that.”

In the 28-member EU, where positions are adopted by consensus, that means gridlock.

## Emissions

Reducing greenhouse gas emissions, or eliminating them altogether, is key to the UN goal of limiting global warming to 2C.

The UN's science panel recommends slashing emissions from coal, oil and gas by 40-70 percent by 2050 from 2010 levels, and to near zero by 2100, if the world is to have a reasonable chance of reaching its objective.

Japan, meanwhile, is rapidly ramping up its coal-based energy sector to replace the nuclear capacity it shut down after the 2011 Fukushima disaster.

The only reason Japan, along with coal-reliant Canada, signed on to the landmark G7 statement in June, said Meyer, is because “they could interpret it as a process, not as an outcome.”

Developing nations, too, are divided. In August, Brazilian President Dilma Rousseff issued a joint statement with Merkel calling for the “decarbonisation of the global economy in the course of the century.”

“Brazil is the first of the major emerging economies to back decarbonisation as a goal,” said France's climate ambassador Laurence Tubiana.

China, the world's biggest greenhouse gas emitter by volume, has pledged to cap rising carbon dioxide emissions by “around 2030”.

Costa Rica has embraced full decarbonisation, but many others under the G77 umbrella of 134 developing nations are reluctant to swear off coal and other carbon-polluting fuels to power fast-growing populations and economies.

The Alliance of Small Island States, whose very existence is at risk from rising seas, was “carefully studying” decarbonisation as a strategy, said its key negotiator Amjad Abdullah.

The hesitation is understandable. While the rapid phase-out of fossil fuels would lessen global climate impacts, poor nations want assurances from the rich world that there will be money for replacing cheap and abundant fossil fuels with renewable technologies.



This NASA image obtained Oct 21, 2015 shows a mosaic of Pluto and its largest moon Charon, representing the global response to its popular ‘#PlutoTime’ social media campaign. (AFP)

## Playwright, Pluto mission leader honored for ‘Ingenuity’

The leader of the Pluto mission and the playwright who starred in the Broadway musical “Hamilton” are being honored with American Ingenuity Awards.

Smithsonian magazine announced some of this year's 12 winners of the

prize for innovators in art, science and culture on Wednesday. The magazine polls Smithsonian museum directors and curators to find innovators impacting their fields. The prizes will be awarded Nov 12 at the

National Portrait Gallery.

The winners include planetary scientist Alan Stern, who led the Pluto mission; “Hamilton” playwright and star Lin-Manuel Miranda; artists Zoe Crosher and Shamim Momin, creators of a 100-

billboard “Manifest Destiny” project that runs across America; Alzheimer's disease researchers and neurologists Doo Yeon Kim and Rudolph Tanzi; and Francoise Mouly, creator of revolutionary comic books for children. (AP)

## Science

## Faraway objects being destroyed by ‘Death Star’

## Test proves universe is ‘spooky’

LONDON, Oct 22, (Agencies) — The universe really is weird, which is bad news both for Albert Einstein and for would-be hackers hoping to break into quantum encryption systems.

Eighty years after the physicist dismissed as “spooky” the idea that simply observing one particle could instantly change another far-away object, Dutch scientists said on Wednesday they had proved decisively that the effect was real.

Writing in the journal Nature, researchers detailed an experiment showing how two electrons at separate locations 1.3 km (0.8 mile) apart on the Delft University of Technology campus demonstrated a clear, invisible and instantaneous connection.

Importantly, the new study closed loopholes in earlier tests that had left some doubt as to whether the eerie connection predicted by quantum theory was real or not.

Einstein famously insisted in a 1935

scientific paper that what he called “spooky action at a distance” had to be wrong and there must be undiscovered properties of particles to explain such counter-intuitive behaviour.

## Idea

The idea certainly confounds our day-to-day experience of the world, where change only appears to occur through local interactions. But in recent decades scientific evidence has been building that particles can indeed become “entangled”, so that no matter how far apart they are, they will always be connected. The Delft experiment is conclusive because, for the first time, scientists have closed two potential loopholes at once.

The first suggests that particles could somehow synchronise behaviour ahead of time, while the second implies that testing might detect only a subset of prepared entangled pairs.

To prove their case, the team led by Delft professor Ronald Hanson

used two diamonds containing tiny traps for electrons with a magnetic property called spin and measured all entangled pairs across 1.3 km separating two laboratories.

A white dwarf star in the Constellation Virgo turns out to be a “death star” worthy of “Star Wars.”

Astronomers announced Wednesday that they have discovered a rocky object coming apart in a death spiral around this distant star. They used NASA's exoplanet-hunting Kepler spacecraft to make the discovery, then followed up with ground observations.

“This is something no human has seen before,” said Andrew Vanderburg of the Harvard-Smithsonian Center for Astrophysics in Cambridge, Massachusetts, the lead author.

“We're watching a solar system get destroyed,” he said in a statement.



This undated illustration provided by the University of Utah shows a pig-nosed turtle that lived alongside tyrannosaurs and duck-billed dinosaurs, on Oct 21. (AP)



Coley



Ige

## Discovery

**Turtle from dinosaur era found:** A strange pig-nosed turtle that lived alongside tyrannosaurs and duck-billed dinosaurs has been discovered in Utah.

The University of Utah announced the finding in a news release Wednesday. A team from the Natural History Museum of Utah discovered fossils of strange-looking turtle in the Grand Staircase-Escalante National Monument in southern Utah.

Joshua Lively of the University of Texas at Austin called it one of the weirdest turtles that ever lived. He studied the fossils for his master's thesis.

The 2-foot-long (about two-thirds of a meter long) turtle lived about 76 million years ago during the Cretaceous Period when southern Utah was a wet, hot climate with rivers and bayous.

Researchers say its pig-like nose with two nostrils makes it unlike any other turtle ever found.

The findings were published in the Journal of Vertebrate Paleontology. (AP)

**Former telescope to be taken:** The University of Hawaii announced Wednesday that a British-built observatory will be taken from Mauna Kea - a move that fulfills the governor's request to remove 25 percent of telescopes from the mountain considered sacred by many Native Hawaiians.

Gov. David Ige made the request in May amid protests against the building of a giant \$1.4 billion telescope near the

summit of the mountain.

Ige said 25 percent of the 13 telescopes already on the mountain must come down

before the new Thirty Meter Telescope is ready for operation.

Construction of the new telescope has



Car of the Dutch team Nuon Solar Team crosses the finish line to win the 2015 World Solar Challenge, in Adelaide on Oct 22. Forty-five solar cars from 25 different countries participated in the 3,000 kms race from Darwin to Adelaide. (AFP)

## 99 pc probability of LA-area earthquake

LOS ANGELES, Oct 22, (AP) — There is a 99.9 percent chance of a magnitude-5 or greater earthquake striking within three years in the greater Los Angeles area, where a similar sized temblor caused more than \$12 billion in damage last year, according to a study by NASA and university researchers.

The study released Tuesday was based on Global Positioning System and airborne radar measurements of how the Earth's crust was deformed by the magnitude-5.1 quake on March 28, 2014, in La Habra, southeast of downtown Los Angeles. Damage included broken water mains and cracked pavement.

n't indicated when it will resume construction, but the facility is still expected to be operational by 2024, spokeswoman Caroline Witherspoon said.

The university said the latest telescope marked for decommissioning will be UKIRT Observatory, formerly known as the United Kingdom Infrared Telescope. It was first targeted for removal in 2009.

“It will be completely removed and the site will be restored and not used anymore,” said Guenther Hasinger, director of the Institute for Astronomy of the University of Hawaii at Manoa. (AP)

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**Inslee overturns plan:** Washington's governor has overturned a decision by wildlife managers to expand cougar hunting in the Pacific Northwest state, siding with animal rights advocates seeking to protect the solitary felines.

In a letter to a prominent animal rights group, Governor Jay Inslee said the Department of Fish and Wildlife abused its power and violated state law by imposing a last-minute, substantial rule change without providing an adequate forum for public input.

“Transparency and openness in state government are essential in order to maintain the trust of the public,” he wrote to the Humane Society of the United States this week. He also ordered the commission to seek public comment on the matter. (RTRS)

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## Ohio finalizing defense:

Ohio is

ready to deliver its

formal comeback to

another state's claim

that a rival aviator

beat the Wright

brothers as first in

flight, defending

what one witness described

Wednesday as

“a marketing brand of enormous value.”

A resolution repudiating Connecticut's

claim cleared its final committee hurdle

Wednesday. Senate passage was expected

and its sponsor said the third state in the

Wright fight - North Carolina - was sup-

portive. The Wrights were born in Ohio

and took their first flight off Kitty Hawk,

North Carolina, in 1903.

The Ohio measure responds to a 2013

Connecticut law honoring aviator Gustave

Whitehead as flying in 1901, two years

ahead of Dayton residents Orville and

Wilbur Wright.

“I heard Connecticut was also laying

claim to Sasqatch and the Loch Ness mon-

ster,” Ohio state Sen Bill Coley quipped as

the resolution cleared his committee. (AP)

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## Tech monitors cows' weights:

Australian

farmers managing cattle

stations as large as some European nations

will soon be able to monitor their cows

and pastures from space as part of

“groundbreaking” technology, scientists

say.

The technology, developed with govern-

ment and private funding, taps into a

satellite passing overhead to record the

weights of herds daily while monitoring

pasture conditions — a task traditionally

impossible due to the stations' vast sizes

and harsh, remote locations.

Some stations, such as Newcastle

Waters in the Northern Territory, span

10,000 square kilometres (3,861 square

miles) — an area larger than Cyprus —

and home to 55,000 cattle.

Australia is one of the world's largest

beef exporters. (AFP)

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## 7m deaths tied to pollution:

A new

World Health Organization (WHO) report

on Thursday highlighted the urgent need

to reduce emissions of black carbon,

ozone and methane — as well as carbon

dioxide — which all contribute to climate

change.

Black carbon, ozone and methane — fre-

quently described as short-lived climate

pollutants (SLCPs) — not only produce a

strong global warming effect, they contribute

significantly to more than seven million

premature deaths annually linked to air

pollution.

The report, “Reducing Global Health

Risks Through Mitigation of Short-Lived

Climate Pollutants”, produced in collabora-

tion with the Climate and Clean Air

Coalition to Reduce Short-Lived Climate

Pollutants, reveals that interventions to cut

SLCPs can reduce disease and death and

contribute to food security, improve diets

and increase physical activity. (KUNA)

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## MIT to fight warming:

The

Massachusetts Institute of Technology

announced a five-year plan Wednesday

to combat climate change but said it won't

divest its \$12.4 billion endowment from

fossil fuels, despite pressure from students

and a campus committee.

Senior officials at the elite science

and engineering research school crafted

the “action plan” after a yearlong effort

to gauge campus opinions on climate

change. The university hosted a debate

on the topic and assembled a committee

that ultimately urged MIT to divest

from the most damaging fossil fuel

industries, including coal and tar sand

companies.

The MIT report warns of “catastrophic

outcomes” linked to current energy use,

but said the school can help by maintain-

ing ties with fossil fuel companies. (AP)

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**Cuba launches initiative:** Cuba on

Wednesday launched an initiative to

protect sharks in some of the most pristine

habitat for the predators whose popula-

tions have been in steep decline.

The action plan, reached through two

years of collaborative research with the

New York-based Environmental Defense

Fund (EDF), will impose size and capture

limits on fishermen, set aside protected

areas and create closed seasons for shark-

fishing, officials said.

The Cuban government has recog-

nized its special place in the world of

sharks as scientists believe nearly 100

of the world's 500 shark species swim

in Cuban waters, sustained by a rela-

tively healthy coral reefs, the EDF

says.

Protecting shark populations also

makes business sense for the fishing and

tourism industries. Scuba divers travel

from around the world to swim with

Cuba's sharks. (RTRS)