

EVENTS

Emissions stall

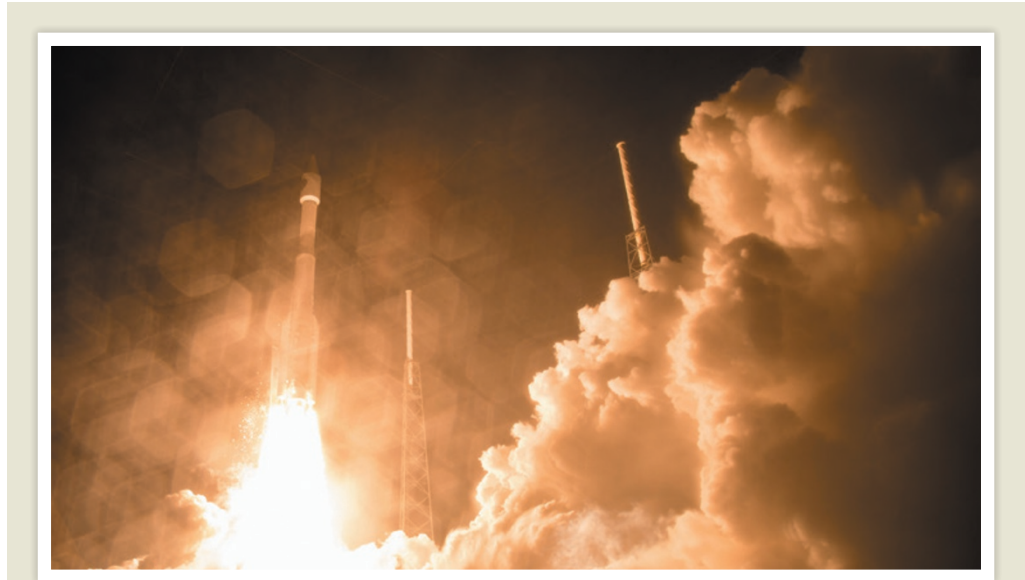
Carbon dioxide emissions from the global energy sector remained flat in 2014, even though the world's economy grew by 3%, the International Energy Agency announced on 13 March. It marks the first time in 40 years that CO₂ emissions have stalled or fallen in the absence of an economic downturn. The agency suggests that global efforts to reduce greenhouse-gas emissions may be having a larger impact than previously thought. It also cited increasing efforts to boost energy efficiency and the expansion of renewable energies in China and industrialized nations.

Pacific-cyclone woe

Humanitarian-aid teams are rushing to islands in the South Pacific after a category-five cyclone struck the region last week. Parts of Vanuatu have declared a state of emergency after Cyclone Pam made landfall on 13 March. Other island nations including Kiribati, Tuvalu and Papua New Guinea also suffered damage from possibly "the worst natural disaster the South Pacific has seen", according to the United Nations Office for the Coordination of Humanitarian Affairs. Vanuatu's president Baldwin Lonsdale blamed climate change for contributing to the disaster. The confirmed death toll stood at 24 as *Nature* went to press.

Ganymede's ocean

The slow dance of auroras on Jupiter's moon Ganymede is the best evidence yet for a liquid ocean beneath its icy shell. At a 12 March NASA briefing, Joachim Saur at the University of Cologne in Germany described how his team used the Hubble Space



AUBREY GEMIGNANI/NASA/GETTY

Craft launches to study magnetosphere

NASA's Magnetospheric Multiscale (MMS) mission soared into space after a spectacular night launch from Cape Canaveral, Florida, on 12 March. Hours later, the four MMS spacecraft separated from their launch rocket and entered Earth's orbit, where they will fly in formation taking electrical and magnetic measurements. The mission will study

what happens in space when magnetic field lines annihilate each other and reconnect, releasing energy explosively. These 'magnetic reconnections' disrupt the magnetosphere, Earth's protective shield, allowing through electrically charged particles streaming from the Sun that can knock out power grids during solar storms.

Telescope to study Ganymede. The rate and angle at which the auroras move suggest that the hot electrified gases are influenced by an underground ocean of salt water. Ganymede is the biggest moon in the Solar System, and its large ocean is a potential habitat for extraterrestrial life.

Biosafety lapse

The US Centers for Disease Control and Prevention (CDC) issued its findings from an inquiry into hygiene practices at Tulane National Primate Research Center, a biosafety-level-3 research lab in Louisiana, on 13 March. The deadly bacterium *Burkholderia pseudomallei* is confirmed to have infected five rhesus macaques after the pathogen

was inadvertently transmitted from a vaccine lab elsewhere on the premises. The CDC, in Atlanta, Georgia, concludes that frequent lapses in personal protective equipment use by staff were the likely cause. Research at the facility has been suspended since 11 February. At least one worker may have been exposed to the bacterium.

RESEARCH

Marine tally

Marine taxonomists have nearly completed a vast project to compile a list of all known sea-dwelling species. In an update on 12 March, a team from the World Register of Marine Species (WoRMS) said that there are 228,445 known marine organisms, and that

they have eliminated 190,400 previously listed species that were duplicates. WoRMS, hosted by the Flanders Marine Institute in Belgium, said that it had added 1,451 new species in 2014 alone, although there are likely to be hundreds of thousands more that have not yet been formally identified. See go.nature.com/vg5ifd for more.

Sierra Leone trial

A phase II clinical trial of the Ebola drug TKM-Ebola-Guinea began last week in Sierra Leone. The drug, made by Tekmira of Burnaby, Canada, is a synthetic small interfering RNA molecule that blocks genes needed for the virus to replicate. Earlier versions greatly increased

MICHAŁ WUJTOR/AGENCIA GAZETA survival in non-human primates. In the Sierra Leone trial, funded by London-based biomedical charity the Wellcome Trust and led by the University of Oxford, UK, the drug has been modified to match the Ebola strain causing the current epidemic.

London gene study

One hundred thousand people in London will have the protein-coding portion of their genomes sequenced, researchers announced on 13 March. The East London Genes & Health study will compare the 'exomes' of Pakistani- and Bangladeshi-heritage residents with their medical records, in search of gene variants linked to conditions particularly common in these groups, such as heart disease and type 2 diabetes. Researchers will also study the effects of mutations that inactivate paternal and maternal copies of genes.

PEOPLE

Palaeo pioneer dies

The pioneering Polish palaeontologist Zofia Kielan-Jaworowska (pictured) died on 13 March, aged 89. Beginning in the 1960s, she led numerous digs in the Mongolian Gobi desert, discovering a rich fossil record of early mammals. Her finds challenged the belief that the earliest mammals were rare



and lacking in diversity and only underwent significant adaptive radiation after the dinosaurs became extinct.

Bio centre heads

Europe's leading bioinformatics centre announced a leadership change on 11 March. Ewan Birney and Rolf Apweiler, already at the European Bioinformatics Institute (EBI) in Hinxton, UK, will take the helm as joint directors from 1 July, when current director Janet Thornton steps down. The EBI, a branch of the European Molecular Biology Laboratory in Heidelberg, Germany, maintains important databases for DNA sequences, protein structures and other biological data.

FUNDING

Australian save

The Australian government has bowed to pressure from the scientific community to

fund key national research infrastructure that was under threat of closure. On 16 March, education minister Christopher Pyne said that the government would put up the Aus\$150 million (US\$115 million) it had allocated to the 27 facilities covered by the National Collaborative Research Infrastructure Strategy for the 2015–16 financial year. Funding had been due to run out on 30 June, and had been contingent on parliament passing controversial higher-education reform legislation. That bill was defeated in Australia's senate on 17 March. See go.nature.com/apjxey for more.

POLICY

Cigarette vote

Britain's House of Commons voted on 11 March to force tobacco manufacturers to use standardized packets for cigarettes sold in the country. Standardized packaging has been promoted by some researchers and health campaigners as a way of reducing tobacco consumption, but has been fiercely opposed by the industry. Health groups say that standardized packaging is supported by science and should be welcomed, but at least one tobacco company has threatened legal action

COMING UP

20 MARCH

The United Nations releases its *World Water Development Report*, which looks at emerging global trends and challenges that will affect and be affected by water resources.

go.nature.com/t7vnan

22–26 MARCH

The American Chemical Society's meeting takes place in Denver, Colorado. Its theme is the chemistry of natural resources.

go.nature.com/oo2gbd

22–27 MARCH

The conference 'Habitability in the Universe: From the Early Earth to Exoplanets' takes place in Porto, Portugal. It is the first meeting of the European Life-ORIGINS group.

go.nature.com/hsv8oy

if the law successfully passes its next stage in the House of Lords.

BUSINESS

Drugs by 23andMe

The pioneering personal-genetics company 23andMe is becoming a drug-maker. On 12 March, the company, of Mountain View, California, famed for its saliva-based genetic tests and run-ins with the US Food and Drug Administration, announced the creation of a therapeutics group headed by Richard Scheller, a former executive of the biotechnology company Genentech in South San Francisco, California. The new division will use genetic information from 23andMe's customers to inform the development of medicines.

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TREND WATCH

Cases of rare meningitis W have risen sharply in England. A virulent strain has emerged that is twice as deadly as the more common meningitis B, prompting an advisory committee to recommend on 13 March that the UK government vaccinate 14–18-year-olds against meningitis W. The strain is similar to one that has caused recent outbreaks in South America, says Shamez Ladhani, a paediatric infectious-diseases consultant at Public Health England. The UK cases are not related to travel.

MENINGITIS W RISES

Cases of meningitis W in England are increasing year on year, prompting new vaccine advice.

