

# SEVEN DAYS

The news in brief

## POLICY

### Oil-pipeline vote

On 18 November, the US Senate rejected legislation to approve the controversial Keystone XL pipeline, which would connect oil sands in Alberta, Canada, to US refineries near the Gulf of Mexico. Supporters fell one vote shy of the 60 needed to advance the pipeline proposal in the Senate; the House of Representatives had approved the bill on 14 November. The issue is expected to resurface in January, when Republicans who favour the pipeline take control of the US Congress.

### Climate pledges

At a conference for the Green Climate Fund in Berlin last week, 21 donor countries promised US\$9.3 billion to help developing nations to deal with climate change. The total fell just short of the \$10 billion that the fund, established in 2011, was meant to have held by the end of 2014.

### Clinical-trials data

The US National Institutes of Health and the Food and Drug Administration proposed regulations on 19 November that would make it harder for researchers and companies to hide negative results and harmful side effects that occur in clinical trials. See page 477 for more.

### Runaway emissions

Without a significant new international climate agreement, greenhouse-gas emissions are set to overshoot targets intended to limit global warming to 2°C above pre-industrial levels, the United Nations Environment Programme reported on 19 November. On the basis of existing climate commitments, the agency projects that annual global emissions will



ASHLEY COOPER/CORBIS

## Wave power hits choppy waters

Pelamis Wave Power, based in Edinburgh, UK, said on 21 November that it lacked funds to continue development of its system to generate electricity from oceanic wave power. The company will enter administration, a rescue mechanism that allows it to keep operating and assess options for its future. Pelamis's technology (pictured) uses connected buoys atop the ocean that wriggle in a snake-like motion. Hydraulic pumps along the chain

use the motion to drive fluids to an on-board generator. The firm, which has been testing a pair of 750-kilowatt machines in the Orkney Islands, lost a partnership with German utilities firm E.ON last year. Pelamis and other wave-power firms have had trouble attracting commercial interest from the energy sector, in part because current devices cannot withstand battering by the seas over the long term (see *Nature* 508, 302–304; 2014).

exceed targets by as much as 23% in 2020 and 40% in 2030. The report suggests that for the goal to be met, net carbon dioxide emissions must fall to zero between 2055 and 2070, followed by the same reduction in other greenhouse gases.

### Polar code

Ships operating in polar waters will be regulated internationally for the first time under a 'polar code' adopted by the International Maritime Organization on 21 November. The United Nations' shipping agency agreed the code, which will regulate the types of ship that are allowed to operate in Arctic

and Antarctic waters and how they are run, in the wake of high-profile accidents in Antarctica and an increasingly ice-free Arctic. It aims to safeguard both human life and the delicate environments around the poles. See [go.nature.com/jd5z4t](http://go.nature.com/jd5z4t) for more.

## BUSINESS

### Charity windfall

The Cystic Fibrosis Foundation has made US\$3.3 billion by selling its rights to royalties on cystic-fibrosis drugs, it announced on 19 November. The charity, based in Bethesda, Maryland, received the rights as a condition of its early \$75-million

investment in cystic-fibrosis therapies developed by Vertex Pharmaceuticals of Boston, Massachusetts. The high price of the resulting drugs — about \$300,000 for a year of treatment — has caused controversy (see [go.nature.com/noodlm](http://go.nature.com/noodlm)). The foundation sold the rights to Royalty Pharma of New York City.

### Drug-cost shock

It costs US\$2.56 billion to develop a drug that makes it to market, the Tufts Center for the Study of Drug Development reported on 18 November. The figure is more than double its 2003 estimate. The enormous cost attracted immediate criticism

CEA from charities and non-governmental organizations involved in drug development, who said it was exaggerated. The centre, based in Boston, Massachusetts, receives some funding from the pharmaceutical industry, but says that it maintains its independence. Its estimate drew on data from 10 firms on 106 randomly selected drugs that entered human testing from 1995 to 2007.

## PEOPLE

**New AAAS head**

Rush Holt, the New Jersey physicist who is retiring from the US House of Representatives, will be the next chief executive of the American Association for the Advancement of Science (AAAS) in Washington DC. Holt replaces Alan Leshner, who since 2001 has led the organization that publishes the journal *Science*. The AAAS announced the appointment on 18 November. During his time in Congress, Holt pushed for increased science funding. Earlier in his career, he helped to lead the Princeton Plasma Physics Laboratory in New Jersey.

**ITER leader**

French nuclear official Bernard Bigot was nominated on 20 November as the next director-general of ITER,



the multibillion-euro project to build the world's largest nuclear-fusion reactor. Bigot (pictured) is currently chair of the CEA, the French Alternative Energies and Atomic Energy Commission, and will succeed Japan's Osamu Motojima. Bigot says that he plans to reform the project's management and governance, which has been blamed for budget overruns and construction delays. See [go.nature.com/xct961](http://go.nature.com/xct961) for more.

**Jail for physicist**

Turkish astrophysicist Esat Rennan Pekünlü at Ege University in Izmir begins serving a 25-month jail sentence this week, after being convicted of preventing female students who wear headscarves from attending class. In 2013, he lost his appeal to have the sentence overturned by the Constitutional Court (see [go.nature.com/tm8wus](http://go.nature.com/tm8wus)). The US-based International

Human Rights Network of Academies and Scholarly Societies is looking into the case, and last month Pekünlü filed an appeal to the European Court of Human Rights.

**Research fraud**

Igor Dzhura, a former senior research associate in biomedical engineering at Vanderbilt University in Nashville, Tennessee, falsified results in at least 69 images across 7 publications and 3 grant applications, reported the US Office of Research Integrity (ORI) on 20 November. Dzhura has also been fired by the drug firm Novartis, where he worked after leaving Vanderbilt. Investigations by the ORI and the university found that Dzhura also duplicated and renamed computer files to give the appearance of experiments he had never conducted. As part of a three-year agreement, Dzhura will retract or correct several journal articles, including a 2000 paper in *Nature Cell Biology*.

## RESEARCH

**Publishing pressure**

The Bill & Melinda Gates Foundation announced on 20 November the world's strongest policy supporting open-access research. From January 2015, researchers

## COMING UP

**30 NOVEMBER**

Hayabusa 2, the world's second mission to retrieve asteroid samples, launches from the Tanegashima Space Center in Japan.

**1–12 DECEMBER**

Lima hosts international climate negotiations at the 20th Conference of the Parties to the United Nations Framework Convention on Climate Change.

[go.nature.com/p6lv6w](http://go.nature.com/p6lv6w)

funded by the charity, based in Seattle, Washington, must make their resulting papers and underlying data open access immediately on publication — and must make them available for commercial reuse. A 12-month delay on openness is allowed, if needed, until 2017. But the demand to allow commercial reuse directly conflicts with the policies of many journals, including *Nature* and *Science*. See [go.nature.com/tdumvy](http://go.nature.com/tdumvy) for more.

**LHC data shared**

Collision data from the Large Hadron Collider (LHC) are being made freely available for the first time by CERN, Europe's particle-physics lab near Geneva, Switzerland. The Open Data Portal, launched on 20 November, is part of CERN's push to preserve its data by encouraging researchers, citizen scientists and students to mine them (see *Nature* **503**, 447; 2013). Some of the first results shared come from the LHC's Compact Muon Solenoid collaboration, which has committed to releasing data three years after collection. Selected data sets prepared for educational purposes will also be made available.

**NATURE.COM**

For daily news updates see:

[www.nature.com/news](http://www.nature.com/news)

## TREND WATCH

Jean Tournadre, a geophysicist at France's national marine research agency IFREMER, says that he has made the most accurate determination yet of the rise in global maritime traffic — and in the accompanying pollution. Data from space-borne altimeters, which bounce radar off oceans to measure altitude, allowed him to track ships (J. Tournadre *Geophys. Res. Lett.* <http://doi.org/xb5;2014>), and showed a fourfold increase in traffic over 20 years, particularly in the Arabian Sea and Bay of Bengal.

**THE GROWTH IN SHIP TRAFFIC**

Satellite data show global ship traffic quadrupled between 1992 and 2012, with proportional growth greatest in the Indian Ocean.

