

SEVEN DAYS

The news in brief

BUSINESS

Solar subsidy cuts

Spain's government is slashing subsidies to its photovoltaics industry by around 30%, or €740 million (US\$970 million) per year, as part of plans to save more than €4.6 billion in electricity costs over the next three years. The measures, announced on 23 December, cut generous feed-in tariffs (the price an electricity utility must pay to generators of solar energy) by capping the subsidized hours that solar plants can sell. Solar industry investors protested that the changes would damage the industry.

Rare-earth quotas

Tensions over trade in rare-earth elements rose after China's ministry of commerce cut export quotas. On 28 December, it announced that the first batch of rare-earth mineral exports for 2011 would total 14,446 tonnes, 35% below the allowed quota in the first half of 2010 — and said that it would levy new export duties on rare-earth elements and alloys. Rare-earth elements are quite

plentiful, but China controls more than 90% of their supply. They are used as catalysts and in technology including magnets, car batteries, wind turbines and mobile phones.

RESEARCH



Plant catalogue

A working list of known land plant species — a key tool for conservation efforts — was released at the end of 2010 (see www.theplantlist.org). This eases a major problem for researchers: it is impossible to find everything published about a plant unless you know all of its scientific synonyms. The screw pine *Pandanus tectorius* (pictured), for example, has 294 synonyms. Researchers at the Royal Botanic Gardens, Kew, UK, and

the Missouri Botanical Garden in St Louis sorted through 1.24 million plant names from a number of data sets, whittling them down to about 300,000 separate species linked to almost 480,000 synonyms.

POLICY

Emissions control

The US Environmental Protection Agency's first controls on greenhouse-gas emissions came into effect on 2 January. For now they only affect the fuel efficiency of new vehicles and the issuing of permits for new industrial emitters of large amounts of carbon dioxide. But the agency plans to introduce tougher regulations over the next few years. Its authority to regulate greenhouse-gas pollution (under the Clean Air Act) is being challenged by opposition in Congress and by litigation.

Brazil joins Europe

Brazil has become the first country outside Europe to become a member state of the European Southern Observatory (ESO), after signing a formal accession

COMING UP

9–13 JANUARY

The American Astronomical Society meets in Seattle, Washington, and includes the latest results from the Kepler mission's hunt for exoplanets. aas.org/meetings/aas217

10–14 JANUARY

Researchers meet in Paris to discuss the status of the Planck mission, which is measuring the Cosmic Microwave Background. www.planck2011.fr

agreement on 29 December. The deal — subject to parliamentary ratification — gives Brazilian astronomers access to telescopes at three sites in Chile operated by ESO, which is headquartered in Garching, Germany.

Nuclear treaty

The US Senate on 22 December ratified a deal with Russia to reduce nuclear arms, paving the way for new bilateral inspections. The New Strategic Arms Reduction Treaty (New START) was signed by the US and Russian presidents in April 2010, and requires the two nations to keep the numbers of their nuclear warheads and launch vehicles below limits that are lower than those agreed in a previous treaty; it also allows hands-on inspections to verify the numbers. The treaty awaits ratification by Russia's parliament. See page 9 for more on science and technology bills in the US Congress.

BUSINESS WATCH

In 2011 and 2012, the drug industry will face the worst effects of its 'patent cliff', as several major drugs face competition from generics. The world's best-selling drug — Pfizer's cholesterol-lowering medication Lipitor (atorvastatin) — may face competition from generics maker Ranbaxy of Gurgaon, India. Other blockbusters due to come off patent include Sanofi-aventis's anti-clotting drug Plavix (clopidogrel) and Eli Lilly's schizophrenia drug Zyprexa (olanzapine).

EDGE OF THE PATENT CLIFF

Blockbuster drugs with combined US sales of \$25 billion face competition from generics this year after losing patent protection.

