

THIS WEEK

EDITORIALS

WORLD VIEW The global climate target of a 2°C rise is not enough **p.7**

SLOW GOING Introduced tortoises spread ebony seeds again **p.8**



RING CYCLE Chemistry breakthrough could make more molecules **p.9**

Storm warning

Political hostility over global-warming policy in the United States is causing collateral damage. Plans for a National Climate Service deserve better.

Consider it as a shot across the bow. Republicans on the US House Committee on Science, Space, and Technology managed to include language in last month's agreement for fiscal 2011 that stops the National Oceanic and Atmospheric Administration (NOAA) from spending on a new National Climate Service. The temporary restriction has little immediate impact, given that NOAA proposed how to create the service in its 2012 budget request, which is currently up for debate. But the administration of President Barack Obama must now re-engage with lawmakers and make its case for the service, while ensuring that the proposal is not sunk by unrelated partisan battles.

The idea is simple and worthwhile. NOAA wants to collect various climate research and reporting activities under a single umbrella, which it says will make the government machine operate more efficiently and improve the quality of data released to the public — everything from the results of satellite monitoring and climate models to regional forecasts of drought and floods. Months before the spate of storms in April hammered midwestern and southern states, for example, NOAA warned of a higher likelihood of flooding and extreme weather associated with a La Niña circulation in the Pacific Ocean.

House science chairman Ralph Hall (Republican, Texas) has raised concerns about moving forward without a thorough review on Capitol Hill, but a Congress-commissioned external review by the National Academy of Public Administration endorsed the reorganization in September 2010. And Congress will weigh in throughout the budget process. Hall's claims that the creation of a climate service could undermine core research at the agency are plain wrong. NOAA's Office of Oceanic and

Atmospheric Research would see its budget cut by more than half, but that does not mean research is being axed. Nor is NOAA proposing anything new and grandiose at this point. The agency would merely be shifting many of its climate-related activities into a climate service.

Somehow this has become a partisan issue — 227 Republicans voted to approve a similar amendment to bar spending on the climate service during the appropriations debate back in February. It seems that many are determined to conflate the word 'climate' with the contentious debate over global-warming policy.

One of NOAA's core functions is to provide basic — and non-partisan — information on weather and climate, useful for everybody from scientists and governments to farmers, commuters and businesses. Indeed, so valuable is this information that the data themselves have become a commodity to be repackaged and sold on by private companies. The proposed reorganization would improve this service, and appropriators and lawmakers on both sides should endorse it.

Then they should focus on a bigger issue: satellite funding. This year's budget denied the first half of a two-year increase of nearly \$1.2 billion for the Joint Polar Satellite System, threatening a lapse in data and less-accurate forecasting. Building on its long-term prediction, and using satellite data, NOAA accurately forecast April's extreme weather several days in advance. The storms, which still killed hundreds of Americans, are a warning worth heeding. ■

amounts of data we continue to generate? How can we build better, greener computers and robots? The funded projects will also focus on social or political priorities for the European Union (EU), such as dealing with an ageing society, or monitoring the environmental impact of human activities. Perhaps we will see perceptive robots built to befriend the lonely.

The funding could also be described as beyond fiction; the promised money has yet to be magicked up. The commission clearly hopes that once the projects are fleshed out, they will prove irresistible to the European Parliament and Council of Ministers who must support long-term financing. And the financing is beyond fiction too: the consortia must provide half of the funds themselves, so are relying on being able to mobilize the required half-billion euros from national research agencies, industry or other sources. That's not something that academics have much experience in doing — and, as they will discover, it's not easy to exact long-term commitments for such high-risk research.

The grand EU flagships experiment is itself high risk, but wise. There can be no real losers: all of the consortia plan to continue their work, whether or not their pilots are selected for funding by the commission. Beyond that, who knows? ■

Flagship funding

The European Union plans to throw serious money at serious problems.

The European Commission this week launches six pilots for its multi-billion-euro Future and Emerging Technologies Flagships programme, under the slogan 'science beyond fiction' (see *Nature* doi:10.1038/news.2011.143; 2011).

The programme is, by a considerable margin, the most expensive ever set up in Europe purely for academic consortia. The pilots have been awarded €1.5 million (US\$2.2 million) each for one-year feasibility studies. Two or three will go on to win a colossal €1 billion in funding over ten years.

The science behind the flagship projects really is beyond fiction. The research is designed to address problems that we can foresee but don't yet know how to solve. How will we store the already overwhelming