

GOT A NEWS TIP? Send any article ideas for Nature's News section to newstips@nature.com

Japan budget threat sparks backlash

Nobel laureates and leading researchers rally to protest at proposed spending cuts.

Japanese scientists have mobilized a huge national and international protest against the budget-slashing policies of their new government.

The criticisms came as government-appointed working groups of roughly 20 people — with few scientists among them — reached the final week of hearings that are recommending budget cuts for 220 government-funded projects, including many major research initiatives. The recommendations are part of the government's effort to reduce next year's national budget by ¥3 trillion (US\$33.7 billion).

The proposed cuts would hit, among others, the SPring-8 synchrotron in Harima and a project to build the world's fastest supercomputer. But they also call for reductions in the grants that form the lifeline for many scientists (see *Nature* **462**, 258–259; 2009).

A hastily arranged symposium at the University of Tokyo on 25 November saw four Japanese Nobel laureates and a Fields medalist speak about the potential damage in front of some 1,000 attendees (see go.nature.com/oV9dZ2). At the end of the meeting, the audience erupted into applause to show its support for a proposed statement from the distinguished scientists calling for the government to "take into account the opinions of scientists and academics when deciding budgets for universities and allocations for research grants".

In the past week, the normally staid world of Japanese science policy has seen a rash of such statements. On 24 November, presidents from Japan's top nine national and private universities issued a declaration saying the government's policies "are moving in the opposite direction from

"The weakening of

technology means the

decay of our country."

our science and

the rest of the world" and called for funding of young-researcher grants and university-operating costs to be maintained.

The next day, the heads of nine university-related centres

that focus on computer and information technology issued a statement calling for support for the threatened supercomputer project. Leaders of 17 Centers of Excellence at the University of Tokyo, along with its president, have released a statement appealing for the maintenance of their budgets. Presidents from Japan's top nine national and private universities and 31 leaders of various Global Centers of Excellence have also weighed in.

Shiro Ishii, an emeritus professor of law at the University of Tokyo who organized the



Eminent Japanese scientists gathered to air concerns that the country could lose its competitive edge.

symposium, says that the sudden outcry reminds him of one of the most turbulent periods in Japanese history: the 1960 'anpo' demonstrations, when faculty members and students protested against the US-Japan security treaty.

On 26 November, the four Nobel laureates — chemist Ryoji Noyori, immunologist Susumu Tonegawa and physicists Reona (Leo) Esaki and Makoto Kobayashi — joined a delegation of scientists who met with Japan's Prime Minister Yukio Hatoyama to press their case. During the meeting, Noyori "pointed out that world-class infrastructures such as supercomputers, accelerators and bioresources are absolutely essential to academia and industry to carry out the highest-standard science and technology research", he later told *Nature*.

In a statement issued after the meeting, all eight science Nobelists living in Japan said:

"For Japan, a country poor in resources, the weakening of our science and technology means the decay of our country."

"I will firmly support science," responded Hatoyama.

"I will take the opinions of the Nobelists into consideration and decide our future direction."

In the last few days of the working-group hearings, which ended on 27 November, the groups gave full support to a prototype Japanese–European fusion reactor, part of the international ITER atomic-fusion project, in line with the Hatoyama administration's enthusiasm for developing new energy sources and green technology.

But a mid-size rocket being developed by a consortium including the Japan Aerospace

Exploration Agency faces a suspension of its budget. The working groups also recommended unspecified cuts to the ¥97-billion budget for major university-affiliated facilities, such as the Super-Kamiokande neutrino observatory in Hida and Japan's Subaru telescope at the Mauna Kea Observatory in Hawaii.

Hitoshi Murayama, director of the Institute for the Physics and Mathematics of the Universe at the University of Tokyo, has been particularly active in rallying support from international colleagues. "I've asked distinguished scientists from around the world to write e-mails to the vice-ministers of education and, as far as I know, about a hundred people responded."

George Smoot, a Nobel-prizewinning astrophysicist at the Lawrence Berkeley National Laboratory in Berkeley, California, has been quoted in the Japanese media as saying that the cuts "will send a strong message to the worldwide science community that Japan is no longer a trustworthy partner".

Marine geophysicist Greg Moore of the University of Hawaii laments the proposed 10–20% cut to Japan's ocean-drilling programme, which supports *Chikyu*, the world's largest research-drilling vessel. "I wonder how the Japanese government can justify wasting this technological jewel by further cutting support for its use," he wrote to the science ministry. "The worldwide marine geoscience community is rapidly losing confidence in Japan's ability to lead the Integrated Ocean Drilling Program," he added.

The government is now considering the working groups' recommendations and will unveil its budget by the end of the year.

David Cyranoski