

Germany sees opportunity in nuclear fusion, but funding for research remains uncertain

June 22 2023, by Frank Jordans



Germany's Science Minister Bettina Stark-Watzinger, left, arrives for a news conference to present the government's new strategy for supporting research into nuclear fusion, a technology some hope will some day provide almost unlimited, clean energy, in Berlin, Germany, Thursday, June 22, 2023. Credit: AP Photo/Markus Schreiber

The German government announced draft plans Thursday to boost domestic research into development of nuclear fusion, a technology some hope will provide abundant clean energy in the future, but left open how those efforts will be funded.

Science Minister Bettina Stark-Watzinger said that under the proposal, Germany will support all promising fusion technologies now being developed, including laser-based methods that achieved recent breakthroughs in the United States but aren't widely researched in Europe.

Another method, using powerful magnets, has already received significant support from Germany at both its own Wendelstein 7-X research reactor in the northern town of Greifswald, and at the International Thermonuclear Experimental Reactor, or ITER, in southern France.

"We want to address both magnet and [laser fusion](#)," Stark-Watzinger told reporters in Berlin, adding that the plan is to "substantially" increase the 149 million euros (\$163 million) that Germany currently provides annually for such research. She declined to be more specific.

"We don't yet know today which power plant concept will succeed," she said. "In the end it will be scientists and industry, which will build the fusion power plant, that decide."

Stark-Watzinger declined to say whether it could result in funding cuts for ITER, which has been plagued by delays and cost overruns, but said Germany would stand by its contractual obligations. The project is also under pressure because of the involvement of Russia, one of the few places of continued cooperation between Moscow and the West since the Russian attack on Ukraine.



Germany's Science Minister Bettina Stark-Watzinger attends a news conference to present the government's new strategy for supporting research into nuclear fusion, a technology some hope will some day provide almost unlimited, clean energy, in Berlin, Germany, Thursday, June 22, 2023. Document reads : 'Position paper fusion research'. Credit: AP Photo/Markus Schreiber



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Sibylle Günter, scientific director of the Max Planck Institute for Plasma Physics, acknowledged that a commercial fusion reactor may not begin operation in Germany until the second half of the century, but insisted that the investment would be worthwhile for future generations.

Germany aims to phase out the use of fossil fuels by 2045 and [switched off its last three nuclear power plants](#), which used conventional fission, in April after years of lobbying by environmentalists.

Stark-Watzinger made clear that she doesn't want a return of the old-style nuclear reactors, despite calls for that from some within her libertarian Free Democratic Party.



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"I wouldn't advocate building any reactor that uses this technology again," she said, adding that [nuclear fusion](#)—which works by merging atoms to release energy—wouldn't pose the same risks of uncontrolled

meltdowns and long-lived radioactive waste that come from splitting atoms.

"The advantages are clear and we have good conditions here," she said.

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