

Scientists made a major breakthrough in the field of nuclear fusion, one that could help pave the way to a nearly limitless source of clean energy.

The announcement excited officials.

- Simply put, this is one of the most impressive scientific feats of the 21st century.

This is a BFD.

Fusion is the nuclear process that powers the sun and occurs when the nuclei of two atoms combine, releasing energy, and for the first time, lab-made fusion released more energy than it took to start the reaction, a feat that has alluded researchers for decades.

- That's never been done before in any fusion laboratory anywhere in the world, so it's super-exciting.

To do it, scientists blasted 192 lasers at a pellet of fuel to fuse hydrogen atoms.

Fusion could one day produce a massive amount of emissions-free energy, without the long-lasting nuclear waste that fission in nuclear power plants produce, and without the risk of nuclear meltdown, but they're still away off from getting energy on the grid.

- This is one igniting capsule, one time, and to realize commercial fusion energy, you have to do many things.

You have to be able to produce many, many fusion ignition events per minute, and you have to have a robust system of drivers to enable that, so, you know, probably decades.

Still, recent advances in the field using a variety of fusion techniques are bringing the possibility of fusion energy closer to becoming a reality.

- Not six decades, I don't think.

I think not five decades, which is what we used to say.

I think it's moving into the foreground and probably, you know, with concerted effort and investment, a few decades of research on the underlying technologies could put us in a position to build a power plant.