

Macro Roundup Article

Headline: [How US Scientists Moved One Step Closer to Dream of Fusion Power](#)

Article Link: <https://www.ft.com/content/4ff76541-ebdc-43ed-bf4e-4faa75fcf2f9>

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Tweet: The fusion reaction achieved at Lawrence Livermore energy gain of 150% was greater than initially reported by the @FT, though they note that 330 MJ of electrical energy was used to produce 3.15 MJ of fusion energy.

Summary: The reaction produced about 3.15 megajoules of energy, which was about 150 percent of the 2.05MJ of energy in the lasers. Does this mean they have cracked fusion power? No. Achieving energy gain has been seen for decades as a crucial step in proving that commercial fusion power stations are possible. However, there are still several hurdles to overcome. First, energy gain in this context only compares the energy out to the energy in the lasers, not to the total amount of energy pulled off the grid to power the system. In fact, each shot requires 330MJ of electrical energy, delivered in a 400-microsecond burst. Scientists estimate that commercial fusion will require fusion reactions that generate between 30 and 100 times the energy going in.

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