Report March 5, 2026

Summary:

- **Funding Rounds Conclude With $1 Million Raised**
- **Lab is Warm, Anode Disassembly**
- **Funding The Fusion Future**
- **2025 Fusion In Review**
- **New Videos—Fusion Race, Fusion Song and More**

Funding Rounds Conclude With $1 Million Raised

Our Crowdfunding campaign and our Reg.D share offering ended simultaneously on Jan.28. We raised just over $530,000 through Wefunder, $30,000 more than our goal. Our Reg. D total came to $490,000. So our total investments in this round are just a bit over $1 million. That's certainly more than we spent in the same period, so when we collect the money, we should have some more cushion in the bank. While our audited financial report is not yet completed, we estimate that we have about $200,000 more in cash than at the start of the campaigns on March 1, 2025. That's very important in being able to keep the research rolling forward.

We thank all 566 investors who have invested through Wefunder, and all who invested through Reg D. It's you who keep us moving toward the fusion future. Of course, we will let everyone know when our next funding rounds open.

Lab is Warm, Anode Disassembled

Thanks to LPPFusion's Research Scientist, Dr. Syed Hassan's work on our roof in freezing temperatures, our furnace is now repaired with a new heat exchanger installed and our lab is again warm. For his work beyond the call of duty, Dr. Hassan has been designated a Hero of Fusion (Star with Five Icicles!)

Dr. Hassan removed the cracked heat exchanger (see chair in background for scale) and installed a new one on LPPFusion lab's snowy roof.

We are moving forward towards new experiments. Dr. Hassan, and LPPFusion Chief Scientist Eric Lerner removed the cracked anode from the anode plate, working inside our glove box. The glove box protects us from any residual beryllium dust as it operates under negative pressure with a fan continuously exhausting it to the outside, where any dust is diluted to safe levels. Research Assistant Sam Grund documented the process with photos and videos. Our next step is to assemble the new anode onto the plate.

In addition, the high-level cleaning of our lab to eliminate the lead dust, which we previously detected, is now complete. The cleaning schedule and delays in some small but important new parts have put off our restarting experiments to late March.

Cleaning old anode in the glove box in preparation for disassembly from the plate (below the burgundy Kapton layer)

Funding The Fusion Future

The latest economic survey in the US showed that consumer pessimism was at its highest level in a decade. More and more people think they can't afford the standard of living of decades past.

But there is an alternative to the present situation.

We asked all of you to send us your ideas for what should be done with the $5 trillion dollars per year in global direct energy costs that will be saved by replacing fossil fuels with clean, cheap, safe and unlimited Focus Fusion generators. We only got a dozen replies so far, but they pretty much hit the most obvious and popular items: free or affordable housing, free education at all levels, free healthcare, a clean environment, more affordable food, more basic scientific research, more productive industry and desalination to solve water supply problems.

So, as we promised, let's find out the cost of doing all this for the US alone, as an example, and then compare it with what we will save in the fusion future.

Overcoming the huge housing deficit in the US and make housing affordable for all—by having enough good housing for all—will require at least **doubling current housing production**, getting it close to the peak per-capita level of production reached back in the 1970's. (Truly back to the future!) That will take about $1 trillion per year with current production practice—but a lot less if we adopt the best manufactured housing practices of the Scandinavian countries.

Education also has to be nearly doubled to slash class sizes to those used in elite primary and secondary schools. That's another $1 trillion a year.

The size of the healthcare effort also has to nearly double to bring it back to the per-capita level of 50 years ago. That's not in terms of dollars, but in terms of hospital beds, doctors and nurses per capita. Again, gross costs will increase by $1trillion per year, but if healthcare were made free, we'd save huge expenditures on health insurance profits and bureaucracy--$ 0.65 trillion per year according to the US Congressional Budget office. So the net cost will be at most $0.35 trillion per year.

Cleaning up the environment over a ten-year period is estimated to cost about $0.1 trillion per year. We can double the basic scientific research efforts for only $50 billion—basic research pays off at 10-50 to 1 in benefits to society. We'll get more affordable food without any additional spending. When energy costs drop, food costs will drop due to the large energy inputs to agriculture. And cheap energy will make it possible on a much larger scale, more automated, but energy-intensive, forms of agriculture such as green houses and hydroponics. The same goes for more a productive industry. If we convert the highly productive aerospace defense industry from making arms for oil wars to making modern machinery for factories, productivity will soar.

We have to save desalination for a future update, as it will take a bit more research!

So what's the total cost for free health care, affordable housing, free and greatly improved education, a clean environment, more affordable food, more basic research and more productive industry? For the US, the tab is $2.5 trillion a year. That's somewhat more than the $1.6 trillion the US could be expected to save in direct costs of energy. But if we count in the roughly $ 1 trillion a year we'd save from slashing the huge expenditures on armaments and armies that mainly go to fighting endless oil wars, there will be enough to accomplish all this with some left over. And that's not counting the economic benefits that come from rapidly increasing industrial productivity which will make everything still cheaper. Bottom line—the future looks good with fusion.

Some of you have asked **how** money now spent on fossil fuels can be reallocated to social needs. It's a good question and we'll provide some answers in a near-future report.

2025 Fusion In Review

In addition to our own progress in 2025, which we have already reported, there were two major developments in the fusion energy field.

In research closely related to ours, Prof. Dieter Hoffman of Xi'An Jiatong University reported achieving a new record in hydrogen-boron fusion yield using the Mianyang laser on a solid target. They used one laser to produce a proton beam while another laser irradiated a boron target to produce a plasma target for the beam. They achieved a fusion yield of 0.28 J for a device energy input of roughly 80 kJ. This makes their fusion-energy to input-energy ratio almost exactly what LPPFusion has achieved with deuterium. The results are particularly important because they show orders of magnitude more fusion energy output than would be calculated for a beam focused on a solid target, indicating the relevance of various theorized enhancements to fusion yield, including the Quantum Magnetic Field Effect described by LPPFusion's own research.

The other major development was the record confinement times of over 1,000 seconds achieved almost simultaneously by China's EAST tokamak and France's WEST tokamak. In both cases, for the first time, the devices' active feedback controls succeed in confining the plasma for considerably longer than would be expected for a natural plasma. In the case of EAST, the plasma was confined for about 8 times as long as for a plasma without feedback control and for WEST, nearly 100 times as long. The achievement at WEST was greater as the ion temperature was much higher, about 4.5 keV (equivalent to 50 million K) as compared to 0.7 keV for East. Confinement times decrease with increasing temperature in natural plasmas.

The tokamak achievement opens the prospect of these devices reaching net energy with DT fuel in not too many years. However, researchers would still have to resolve very serious problems with using tritium, including neutron damage of the structures themselves. As well, the size of tokamaks and the costs of energy conversion would make it impossible for them to produce energy cheaper than existing energy sources. For that, only devices that produce dense hydrogen-boron plasmas—like our own DPF device—will do the job.

The WEST tokamak in Cadarache, France, broke confinement records in 2025

New Videos—Fusion Race, Fusion Song and More

Since the last report, LPPFusion released several videos on our YouTube channel. We released two more episodes in our Fusion Race series, one comparing the Low Density and High Density paths to fusion and the next one focusing on the High Density devices, including our own DPF. We posted the video of our open Shareholders Meeting and completed our series on the history of the debate in cosmology, The Cosmic Battle. On the lighter side, we released our new fusion energy song, Power of the Stars and a comic (and very timely) dialog on Crypto vs Fusion.