Spelling It All Out

Our Big Problem:

If there is a glimmer of hope that the polywell could produce cheap green energy: it will receive funding, lots of funding. I would argue that this is inevitable. The world has a problem - an energy climate problem. The future looks grim. Consider the following facts:

- Almost five percent of world GDP is spent on buying energy from oil [2]
- The IAEA estimates that: we need to invest 350 billion dollars, per year, to maintain our oil economy through 2030 [1]
- Global temperatures have risen 0.8 degrees since 1880 and, the burning of carbon is the reason [3]
- More than one million species face extinction due to climate change [8]
- Global warming could lead to large-scale food and water shortages [4]

The world has a problem and a working Polywell offers a solution. Just imagine if the polywell worked as advertised. Consider the characteristics of this device:

1. Recovered energy scales as the 5th of the radius [6]
2. Fusion produces 3 to 4 times more energy than fission. [7]
3. The reactor is small - by nuclear standards – and small is cheap.
4. The polywell has no carbon footprint.

It is no exaggeration then, to say that a polywell working like that, could change the world. It could save humanity from many – not all – but many monumental problems. That is the future I want to live in.

Reality Check:

The world economic forum was last weekend in Davos Switzerland. They setup a YouTube channel where world leaders answered questions. I watched all the clips. Over one third of the clips were on technology solutions to the economic, environmental or energy problems. The polywell touches all three issues. Yet, today, you could not talk about the polywell at the Davos meeting. They would laugh at you - and for good reason.

Established science believes the polywell is a dead end. Before we parade into Davos asking for research dollars; that has to change. Consider though: established science may be right. If that is proven true I will personally stop discussing the polywell. I do not go on wild goose chases. Until then, the polywells' success is like a flipping coin. We do not know if it will be heads or tails. Or even some third option. There are only two ways to get the attention of the leaders at Davos. Both need to come through legitimate science work:

1. Data which says this works.
2. Theory that shows this could work.

People have criticized the science publishing system as ossified, slow or politicized. That may be true. So far however, it has been the best way for our society to determine what is true and what is false. That is why whatever polywell data Dr. Nebels' team finds needs to be honestly and legitimately published.

What We Can Do:

There is also polywell theory. Here, there are many reasons for optimism. We have this online community - hundreds of people talking, blogging, thinking and discussing the polywell. We want critical thinking from that crowd – not blind acceptance. The established position is based entirely on theory - there is no data. We may yet find things that have been overlooked. We need everyone's help. This is a monumental task. As an individual, I have spent three years studying the Polywell - and I only really understand a small piece of this technology. We need to consolidate our knowledge. We need a community of polywellers reading over Rider's PhD thesis, combing through the references, explaining what they find on the internet and criticizing each others' work. We need people researching the gritty details on the components, energy recovery and the economics. We need the machine explained by more people, to more people and in a variety of different ways. It may turn out that this idea is garbage – but we can finally know for sure. You could call it grass-roots physics, or even, grass-roots environmentalism. What it is, is, an internet-based, volunteer driven, physics community, with the purpose of determining if the polywell could be a viable technology or, if it is garbage.

Fortunately, this is already happening; and has been happening for some time. We have an unbelievable community. From lawyers in New York to civil servants in Maui to computer programmers in Estonia - our community is truly vast and diverse. The mere idea of the polywell seems to have opened a flood gate of ideas and excitement. This needs to continue. For example, Bill F has built an extensive website and written a book on the Polywell. M Simon has written over five thousand responses on talk-polywell.com. Mark S is spending his own time and money building a reactor. The energy is there. If we could unify and organize that energy, we could be a serious force.

Mission Statement:

The purpose of this site will be, to the best of our ability, to assist the community in this effort. Below are our specific missions.

1. To educate the public about the polywell.
2. To use the most accurate and recent information available to us.
3. To explain things in a way that people can understand.
4. To be impartial, to present science as it is not as we would like it.
5. To be explicit about the level of confidence surrounding a statement.
6. To correct mistakes when they are found.
7. To admit, if we find out this is a bad idea.

In short, we will try our best to make the posts of the highest quality we can. That means posts that are well researched, well written and thoroughly fact checked. This takes time, so assume multiple weeks between posts. It also means correcting mistakes. There have already been

mistakes made. Your feedback is critical to catching these mistakes and keeping the standard of quality high. We want our posts ripped apart by the smartest most experienced people out there. We encourage you to think, question, and let your criticisms be heard.

Sources:

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