Plan to Bring Fusion Energy to the World from America

Embedded link for Website presentation

We are developing an energy based action game series and a utility payment method that will:

- Facilitate the American public in discovering that climate change occurs from variable factors in nature; manmade climate change theories are not sufficient justification to subsidize massive green energy projects which are inefficient and unsustainable.
  See our Climate News archives

- Facilitate the American people in discovering that mainstream renewable energy sources are not sustainable without massive tax payer subsidies; only hydro-carbon and nuclear energy can produce baseload power for electricity & transportation.
  See our Energy Management Simulation outline

- Facilitate the American people in discovering and learning about different forms of nuclear power; i.e. safe modern 4th generation fission, MSR, thorium/uranium fuel cycle and the need to master fusion.
  See our Why fusion is the only realistic solution

- Facilitate the American people in discovering that hydro-carbon fuel sources are finite and that we can be energy independent in America today but our grandchildren and certainly great grandchildren will be energy dry unless we start to master new sources of nuclear energy today because much science needs to be learned and technology developed.
  See our 2060 and Lights Out

- Our games and patented utility bill payment system will generate tens-hundreds of millions of dollars in annual recurring revenue which will be contributed to the Fusion Energy Incubator managed by the private sector.
  See our Games Comparable Analysis

- The Fusion Energy Incubator distributes money to private sector companies engaged in fusion energy science R&D and potential commercialization. We have identified several such private sector companies listed in the expanded section of this bullet point. This insures that the investors in these very high risk private sector companies will receive a return on their investments regardless of the commercialization of any science & technology.

  The United States government has funded fusion energy science research for over 50 years and at a combined total cost in excess of $25 billion. The research has been divided into two different scientific approaches known and Magnetic Confinement Fusion (tokamak and stellarators) (MCF) and Inertial Confinement Fusion (ICF.). The Magnetic Confinement projects receive funding from the Department of Energy Offices of Fusion Science and the Inertial Confinement projects are principally nuclear weapons oriented projects funded by the National Nuclear Security Administration division of the DOE.

  Our current state-of-the-art scientific understanding strongly suggests that neither the MCF nor ICF approach will ever lead to fusion energy reactors suitable for commercialization and production of electricity.

Scientific arguments by Dr. Glen Wurden and Dr. Robert L. Hirsch suggest that the MCF magnetic tokamak will never lead to a commercial power producing system suitable for utilities and grid level power.

An official Office of Defense Programs review of the ICF and High Energy Density Science portfolio suggests that America's flagship ICF project known as NIF at Lawrence Livermore National Labs will not achieve "fusion ignition."

Recognizing that the facility cost was a large component of the R&D cost which was the principal impediment to the progress of fusion development at the time, around the mid-1990's, Drs. Irv Lindemuth, Richard Siemon and Kurt Schoenberg of Los Alamos National Laboratory began to examine the cost of developing various fusion concepts in a fundamental way. The fusion parameter space is spanned by two basic plasma parameters, namely the plasma density and the magnetic field embedded in the plasma, which govern the physics of attaining fusion burn. The tokamak attempts to burn a plasma at a density of 10^{20} ions per m^3 in a magnetic field of several teslas (T), while laser ICF attempts to burn a plasma at a density of 10^{32} ions per m^3. In conventional ICF, no external magnetic field is applied to the target, but laser-plasma interaction can self-generate magnetic fields up to about 100 T. Essentially these two mainline approaches sit at two extreme isolated spots in the fusion parameter space.

Over the next decade, a fusion approach generally known as Magnetized Target Fusion developed. Dr. Irvin Lindemuth explains how this works in his MTF tutorial.
Today the development of fusion can be tackled by private enterprises without the heavy burdens and constraints associated with on again…off again government agency projects with bureaucratic management structures.

Therefore we are putting forth a plan which effectively puts the private sector in charge of fusion energy development and commercialization.

Funding will be obtained from the private sector and distributed to participating firms engaged in fusion science R&D. Through the enactment of new federal legislation similar to that proposed by Dr. Robert Bussard and James A. Bowery in 1995, success based awards are given to these private sector companies based on agreed milestone achievements.

Thus investors, venture capitalists, and the like will receive a financial return on their investments without the necessity of a "breakthrough moment" consisting of a commercially viable fusion reactor.

This further stimulates innovation and develops a spirit of competition to "win" major financial prizes as well as collaboration and scientific cooperation between the competing firms.

Currently we have identified Helion Energy, Tri Alpha, General Fusion, Tokamak Energy, Magneto-Inertial Fusion Technologies, Inc., and Lockheed Martin Compact Fusion program within their "skunkworks" division.

In addition to the existing private fusion based companies mentioned above, we strongly advocate encouraging additional companies and projects such as the Plasma Jet Magneto Inertial Fusion program proposed by Dr. Scott Hsu, et al, at Los Alamos National Labs in partnership with the private sector. The ARC compact fusion reactor proposed by MIT, and

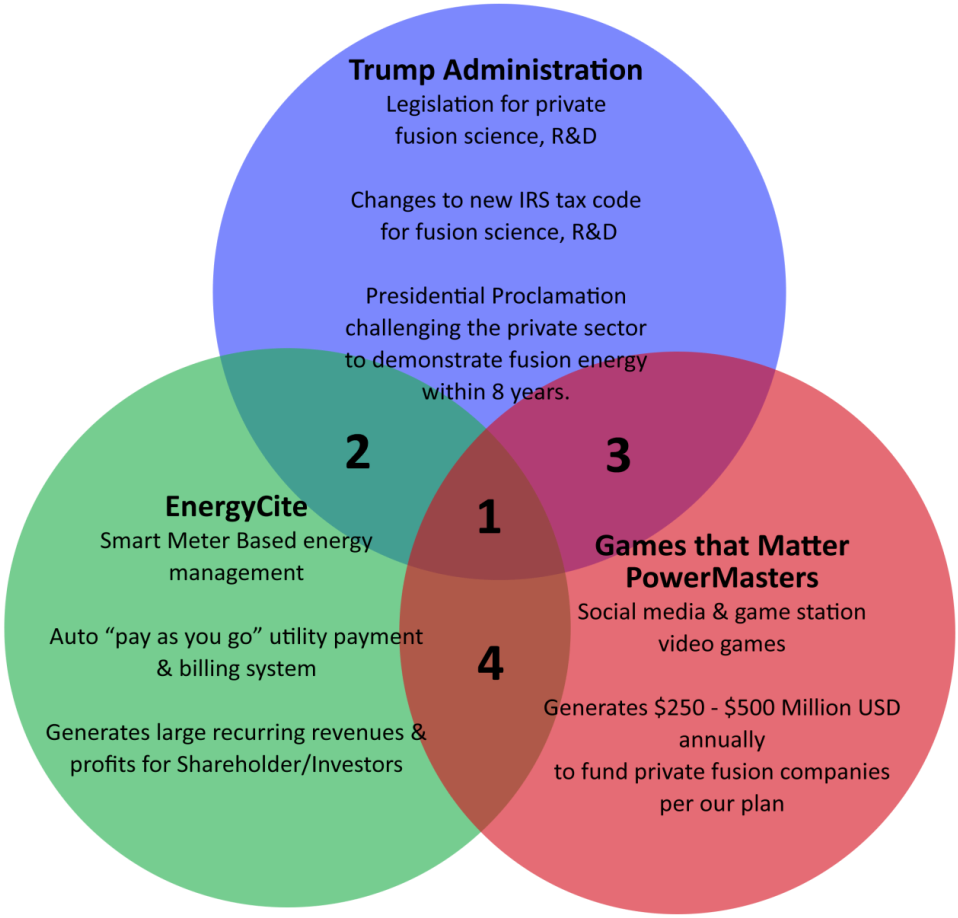
similar to the work being done by Tokamak Energy in the UK, should also be encouraged and funded.

See our [Fusion Incubator outline]

- Awareness is further developed and reinforced through the integration of the video game series and the use of electricity through the modern utility smart meters in conjunction with new innovative utility billing and payment methods.
  See our [EnergyCite LTD] site

We need the new administration to be aware of these issues and our outreach work

- We want a Presidential Proclamation to challenge the private sector to demonstrate fusion power within a decade
  See our [Proclamation to the World]



Follow these links for additional information and websites described in the Venn diagram above:

[EnergyCite.com] | [Trump Administration] | [GamesThatMatter.us]

1. **Industry Fusion Energy Consortium Generates $250 – $500 Million USD annually to fund private fusion companies per our plan**
   Learn more here

2. **New Administration favors conservation & individual control of energy use**
   Learn more here

3. **Presidential Proclamation challenges private sector and citizens to Fusion Solution. Energy Games allow people to help & feel good**
   Learn more here

4. **Games are based on home energy use; help consumers save money and drive EnergyCite sales**
   Learn more here