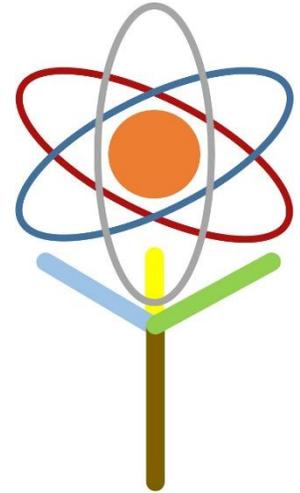


Washington, D.C. (June 6th, 2019) –



Hello Everyone:

This is an announcement for a fund-raising drive for the patent applications for 35 inventions. These inventions are intended to solve the climate change crisis—through strictly voluntary means—by making fossil fuels increasingly competitive and emissions free.

To kick-off the fund-raising drive and to explain the inventions and implementation, I have created an 8-part video series located here:

[www.thermalhydrogen.com](http://www.thermalhydrogen.com)

My method is one that does not appear to have been tried: teamwork among all energy suppliers—renewables, nuclear, and fossil. You see, they all have their strengths, but no energy supplier is perfect. However, with hard work and engineering, they can be brought together in a way that allows everyone to achieve more. Let me explain.

Renewables are intermittent, and when oversupplied, nuclear has no-where to go. Instead of curtailing these energy sources, we can bring them together to directly fuel heat-assisted electrolysis (splitting water into  $H_2$  and  $O_2$ ). The point of doing this, however, is not just to create a chemical energy carrier—it's for the pure oxygen as well.

A supply of pure oxygen is the ticket to increasingly competitive, emissions free fossil fuels. Today, we almost always combust fossil fuels with atmospheric oxygen, and the byproducts are then largely diluted with nitrogen because the atmosphere is mostly nitrogen.

The consequence of nitrogen dilution is that, in order to make fossil fuels emissions free, it must go through a “Carbon Capture” process, or gas separation, to isolate the  $CO_2$  from nitrogen for sequestration. Today, this gas separation process, “Carbon Capture”, makes up about 90% of the costs of emissions free fossil fuels.

But with teamwork, the fossil fuels can be supplied with a pure oxygen opportunity from electrolysis so that they can bypass “Carbon Capture”. They'll only produce what's called “sequestration-ready”  $CO_2$  ( $CO_2$  and water); we can recycle the water and sequester the  $CO_2$  for very low costs. This is certain because there's plenty of space for  $CO_2$  sequestration, and it's a mature technology.

You could think of this system as a sewer system for your machines—however, it's much more than that. Regardless of climate implications, fossils value pure oxygen because it allows them to use a more advanced thermodynamic cycle: 1) for electricity, the Allam cycle, 2) for hydrogen/syngas production, auto-thermal reforming, 3) for hydrogen/syngas utilization, (solid oxide) fuel cells.

Finally, by creating a system which integrates the organic elements, we can distribute pumpable hydrogen carriers rather than pure hydrogen. Thus, teamwork not only solves the hydrogen distribution challenge, but improves the current chemical energy distribution system.

These pumpable energy carriers are envisioned to be distributed through the existing pipeline system. And by making our current chemical energy distribution system more flexible, we can accommodate more renewable and nuclear energy. Indeed, together everyone achieves more.

A peer reviewed paper was published in 2017 in the International Journal of Hydrogen Energy. The paper showed that the system can be applied economy-wide and would result in an extraordinary efficiency gain.

A utility patent for the first four inventions was submitted in 2018. The international patent office found that the claims were “novel and inventive” and have encouraged patent applications in member countries.

The video series provides a vision for implementation, which will likely require a continental pipeline system for each continent. I intend to own this pipeline system privately as a means of compensating the technology developers whom I intend to sell the licensing rights of these inventions.

This work has been entirely self-funded by fees earned from my independent energy consulting practice over the past 5 years in Washington D.C.

I would appreciate your help in keeping this effort private and strictly voluntary. The website for donating is provided below. Please like, share, donate, and/or kindly alert your most generous, wealthy friend.

[www.gofundme.com/thermalhydrogen](http://www.gofundme.com/thermalhydrogen)

Thank you,

Jared Moore