

H₂O Orbit

It's About Sustainability

An Introduction and Overview



H2Orbit – It's About Sustainability

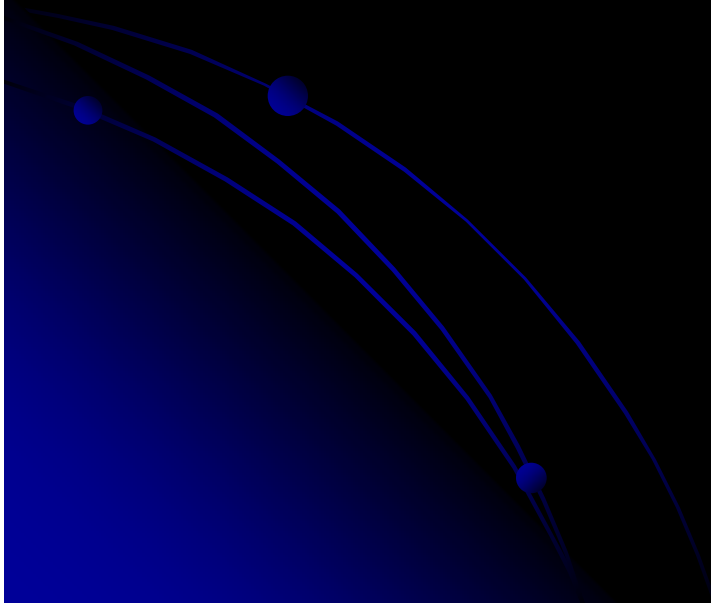
but what does that mean?

Sustainability:

- Is an attempt to provide the best enduring outcomes for human and natural environments
- Relates to the continuity of economic, social, institutional and environmental aspects of human society, as well as the non-human environment
- Is a means of configuring civilization and human activity in an enduring manner so that society, its members and its economies are able to meet their needs and express their greatest potential, while preserving biodiversity
- Is planning and acting for the ability to maintain these ideals over the very long term.
- Affects every level of organization, from the local neighborhood to the entire planet.

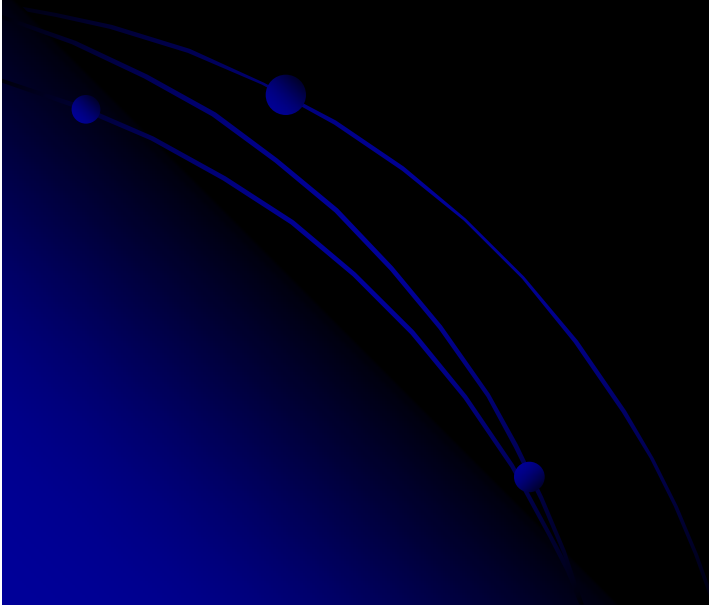
H₂Orbit – Vision Statement

The desired future is one that finds ample energy produced in the context of an enduring, sustainable biosphere for our planet and satisfies the requirements of not just humanity, but all life on Earth.



H2Orbit's Mission

Promote the high frontier to improve
ecological, economic and social
conditions.



H₂Orbit – Why the Mission?

- Anthropogenic activity is causing global climate change (e.g. Global Warming)
- Significantly improved technologies originally developed in the 1960's offers a way forward
- The process of solving this problem offers an opportunity to unite humanity creating a common heritage for all life on Earth
- Delivers a hopeful future
- Offers an opportunity to exercise free will and choose the path that does not lead to certain destruction

H₂Orbit - What caused these problems?

- The overwhelming majority of the problems have a root cause based in “energy production”
- Civilization requires immense amounts of energy to sustain basic services and grow to meet future needs
- The industrial revolution drove the creation of our hydrocarbon economy which resulted in the current situation

H₂Orbit – Why Space?

- Abundant, sustainable, enduring energy from our star the sun
- Ease of distribution increases global availability beyond current power grids
- Availability can increase as civilization grows
- Creates an obvious need for knowledge which leads to improved conditions and greater societal situational awareness
- Jobs for millions
- Integration into the global economy will fuel growth the remainder of this century and beyond
- Increases global security through lower dependence on hydrocarbons and nuclear based resources
- New industries and business opportunities from manufacturing to pharmaceutical research and materials
- New resource opportunities for raw materials
- New territory to support the pursuit of freedom and happiness
- Leverages the entrepreneurial spirit in us all – it will revitalize mankind

H₂O Orbit: Binding The CO₂



This is the chemical formula for creating calcium carbonate and is prepared by passing CO₂ through a solution of calcium hydroxide: the calcium carbonate precipitates out. It can then be used for a number of projects involving solid calcium carbonate, including reducing the acidity in water and increasing marine habitat.

We need to industrialize this process to create materials for building, restoring the health of our oceans, lakes, rivers and streams. Innovative structures like Reef Balls® can help restore our coral reefs around the world and reduce ocean acidity at the same time.

H2Orbit – Our Approach

- Increase societal situational awareness through direct and indirect communications
- Foster programs to facilitate behavior resulting in an increased chance of the mission's success
- Drive initiatives resulting in pervasive action
- Connect society to resolving the problem – not specific governments, not specific individuals
- Facilitate leadership, entrepreneurialism, freedom, innovation and the drive to get it done

H₂Orbit Strategy

1. Reduce greenhouse gas levels to pre-industrial revolution levels
2. Implement a method to deliver green sustainable energy that not only meets existing needs and demands growth required by civilization but for all life on Earth
3. Manage 1 & 2 along a timeline that prevents significant damage to the biosphere*

* This requires a cogent understanding of biosphere derived metrics that determine the collective 'sense of urgency'.

H₂Orbit Pro / Con

● Pros

- Clean sustainable biosphere
- Green sustainable abundant energy in perpetuity also in ample supply
- World hunger addressed through increased crop yields delivered by irrigation of arid lands
- Many diseases eliminated through the availability of clean water
- Global security increased through reduction in the need for nuclear power
- Millions of Jobs are created, many in sectors that never existed prior to this endeavor
- New territories are opened up in orbit, on the moon and elsewhere in the solar system allowing people increased opportunity to pursue their dreams
- Civilization has increased manufacturing capabilities
- Pharmaceutical and materials research can leverage the weightless environments to deliver products unavailable from Earth

● Cons

- Massive effort required to implement the strategy
- Geopolitical complexities are immense
- New legislation is required across many sectors to accommodate shifts in tax revenue sources to support green energy
- Economic shift in political power from sector to sector creates significant inhibitors to progress
- Some sectors of the economy will require retraining and education to maintain competitiveness
- Political power shifts within nationalistic frameworks will spill out to global issues
- Individuals and corporations failing to “see the big picture” will do everything in their power to prevent implementation of the solution
- Public companies deliver ROI to shareholders strictly based on financial returns that are independent of biosphere impact in many cases as mandated by law

H2Orbit Thought Experiment

● Cyclical Weather

- Biosphere CO2 levels continue to build
- Conservation efforts
- Alternatives slowly introduced as business can afford the market shifts based on public perception of the problems

● Linear Climate Change


- Public “gets” Global Warming
- Embraces H2Orbit 3 pronged strategy
- Races to assure sustainability of Earth’s biosphere

Add whatever you would like to list whatever you like under each of these columns. Then ask yourself:

“What happens if the model represented by that column fails? Where would mankind be then? What would the Earth look like if that model failed?”

H2Orbit thinks the answer might just be the same. The only difference is that only one of these scenarios offers a chance for salvation. The other only offers assured destruction. Which would you choose? We choose to try to solve the problem before it’s too late.

H₂O Orbit – Every Life On Earth:

- Depends on what you do next
 - Requires your action in some form right now
 - Educates every other life about our biosphere
 - Acquires its right to exist at birth
 - Means something to everything else
 - Spirits innovation to endure
- 

H₂Orbit – Individual Actions

- Plant plants
- Join a club or association
- Take a class then apply what you learned
- Engage your elected officials to affect supportive policies and legislation
- Participate in efforts with local schools to help our children understand
- Visit & support local museums
- Encourage experimentation
- Use green energy sources
- Correspond with friends, colleagues, peers, family and your sphere of influence
- Pursue a hobby that also supports our (collective our – as in us all) mission objective
- Teach others
- Start or join a project !
- Travel and / or communicate and engage with others around the world !
- Empower others
- Make books & videos available to others, especially children
- Learn about hydrogen technologies & apply them if you can
- Deliver presentations like this one to any audience that will listen

H2Orbit – It's About Sustainability

- We have some daunting challenges ahead
- Social issues we can work together to solve
- Ecological problems we can surmount through innovation and persistence of the human spirit
- Economical hurdles we can apply our entrepreneurial enterprise in creating new ways to integrate solutions into our economy
- In short – we can solve these problems

H₂Orbit – It's About Sustainability



- It's our only home
- Every one else lives here too
- In the grand scheme of things it's a pretty small place
- From out here you can't see borders – just where we live
- Our ancestors expected us to take care of their legacy
- What legacy will freedom leave Earth's progeny?

Thank you for your time.

We hope this has been enlightening and engaging.

We hope it stirs you to action