



A framework for a sustainable future

Biosphere Restoration Plan

We are in our current dire situation ultimately because societal systems are not fit for purpose.

To recover we are going to have to dramatically restructure.



Good news!

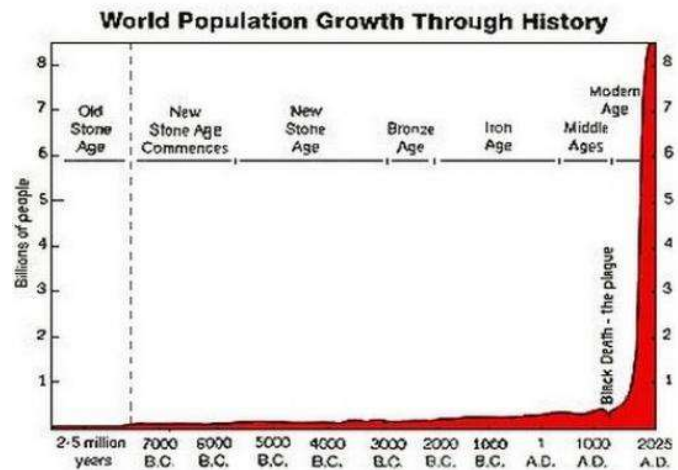
We know our goals. We already have agreement on where we want to go, 195 countries have signed up to the UN Sustainable Development Goals.

Notice they are in reverse order of importance!

Without a stabilised biosphere 13 14 & 15, the other goals are mostly unobtainable and having 16 & 17 in place is essential for achieving that!

Population

- **A massive resource.**
- Billions of people ready to be employed in restoring the environment.



Current population growth is, of course unsustainable, but it's happening in the poorer and less developed countries. It's falling, in countries with advanced economies.

The UN Sustainable Development Goals outline the aspirations. Biosphere Restoration is the only way the SDGs can be delivered.

Billions of people are available to be engaged on the task. We are our own greatest assets.

Global Resources

- Clean energy – practically unlimited resource for solar, wind, geothermal and nuclear
- Fresh water – effectively unlimited with sufficient available energy
- There is no shortage of wealth. 0.4% of the global bond market alone leveraged at 10 to 1 delivers \$90 trillion



We have the resources!

Endless clean energy from the sun, geological forces and our knowledge of chemistry and physics, mean that there is no limit to the energy we can generate and therefore, no practical limit on our ability to produce fresh water via desalination of ocean water.

The world is awash with unutilised capital, so we can afford to do the necessary work. (Indeed, we cannot afford not to!)

A primary failing of present societal structures is fraudulent Earth system accounting. If it is not sustainable, it's not growth!
It's a contingent liability!

Real growth is good.

It's dependent on doing things more efficiently, the use of infinite resources and the sustainable recycling of finite resources.

If it involves a contingent liability, such as pollution of the atmosphere or acidification of the oceans, that is not rectified, **its not growth.**



The power of the human mind is a limitless resource

- We have analysed the problems
- Identified what needs to be done
- Agreed upon our direction
- Marshalled our resources
- Now we must organise to succeed

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Thus far we have only scratched the surface of what is possible, growth lies in our infinite ability to innovate.



Human civilisation has been built on commerce

To work effectively, commerce needs a framework of societal structures - laws that place restraints on capitalism.

When commerce starts to fail, it is usually due to societal structures being unfit for purpose, as is happening now with human civilisation being on course for bankruptcy. Because without a viable environment – all societal assets will be lost!

Currently, our laws are not fit for purpose, because it's perfectly legal to pollute the atmosphere, rivers and oceans and not clean up the damage.



Barrister Polly Higgins, who sadly died of cancer in April 2019, proposed an International Law of Ecocide, as the 5th crime against peace, to make social and environmentally responsible corporate behaviour mandatory

Meaning that the polluter either pay to or be severely punished. This covers all emissions of greenhouse gases and other pollution.

The law of Ecocide has already been drafted and is ready to be added to the Rome Statute. A two-thirds majority of the 124 countries that are signed up to the Rome Statute could make it law. Several countries have already added Ecocide to their legal structure.

This will work, as it delivers a level playing field and allows for uniformity of action and fair market competition, and because, the directors of hydrocarbon companies love their children too.

Outrageously, the Law of Ecocide was nearly enacted in the 1970s, but it got blocked by hydrocarbon lobby groups and Western powers.

At this stage of human societal development all wealth is dependent on the health of the biosphere

This can best be measured by monitoring amount of active carbon in living things



A new financial paradigm is required where:

- the true value all living things is recognised, in a global account of living biomass
- the full cost of greenhouse gas emissions is calculated and not subsidised
- only sustainable growth that does not deplete biosphere resources, is recognised
- finite resources are fully recycled
- the value of people's work is fairly recognised, especially in respect of biosphere maintenance



It's time to stop flying blind and take active control.

For that, we need feedback indicators for: total ocean heat content, planetary albedo, atmospheric greenhouse gases, solar shielding by clouds, total biomass and economic indicators such as energy consumption per GDP.

The technology to measure this exists at an ever-increasing resolution.

As proposed, by the **ICES Foundation** (International Centre for Earth Simulation Foundation), a supercomputing centre is required to bring all the data together and build a digital twin of the whole Earth system, to allow us to safely navigate to a sustainable future. <http://www.icesfoundation.org/Pages/Home.aspx>

Tackling the problem is the biggest commercial opportunity of all time

Capitalism
under a fit for
purpose legal
framework
will deliver



- Demand is obvious - we all want to live!
- Supplying solutions delivers the biggest business opportunity of all time!

Demand is obvious - we all want to live!

As soon as you change the ground rules, to make it illegal to pollute the atmosphere, rivers, land and oceans, you immediately generate demand for ways of disposing of or avoiding the pollution.

Cleaning our atmosphere drives demand for space to grow things that will drawdown CO₂. Rural areas and the oceans can supply that demand immediately developing real value.

The work involved creates a demand for manpower creating work for millions of people.

Managing the process creates demand for carbon markets and carbon accounting.



Contracts for biosphere services

- The world's urban areas are going to require contracts with the rural areas, for the provision of biosphere life support services
- Huge investment will be required, in less developed countries and rural areas
- The opportunity and payback comes through the creation of new markets



What's required are contracts between the urban areas and the rural areas, for the provision of essential climate management services

Wealth created in the cities, by artificial intelligence and mechanisation, can be used to pay people in rural areas to remediate, restore & regenerate the environment.

It's a whole new economic engine!