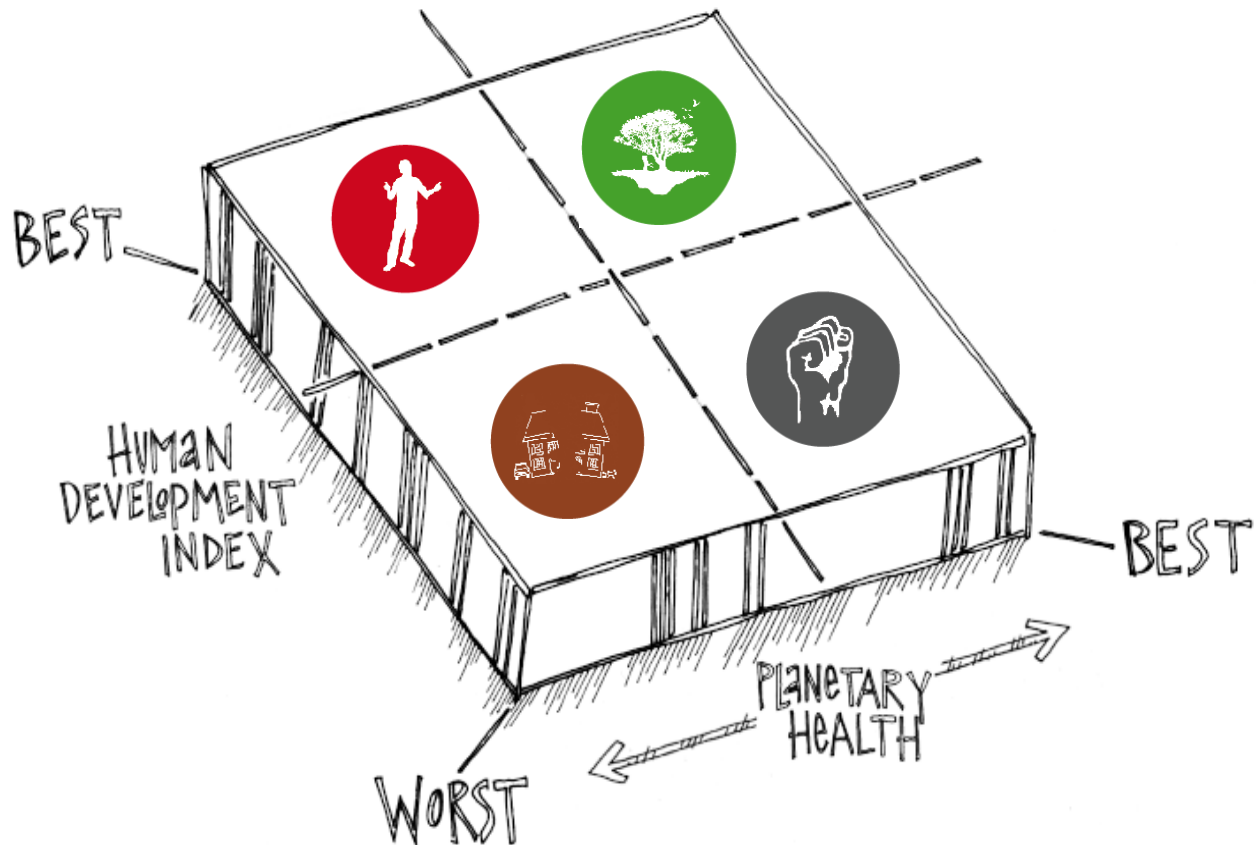


THE DESIGN 2050 CHALLENGE LIFE @ 1 PLANET...[OR NAUGHT]

foresight

plausible futures OVERVIEW

We've find scenarios are a useful tool to illustrate views of futures that one would normally not perceive. The four worlds presented on the following pages could each become our reality over the next twenty-five or thirty or forty years. Their usefulness lies not in their reality, but rather in their plausibility.



selfish
bubble



ecological
age



carbon is
crime

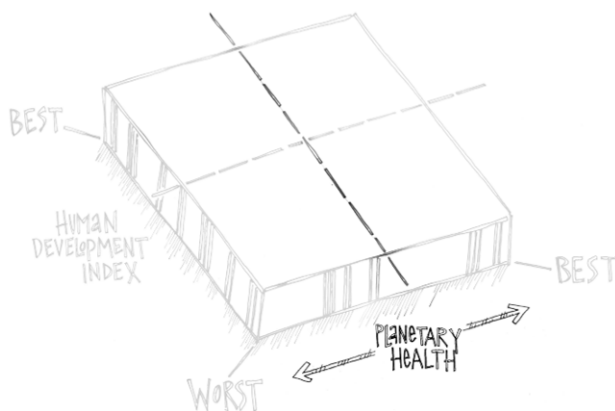
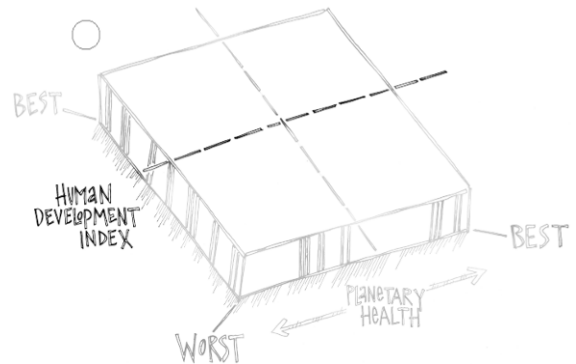


life is cheap

To define the parameters for the four different scenarios, two significant variables have been conceived and applied; they include the human condition and the planetary condition. This juxtaposition allows us to consider and to think through how these two conditions are inextricably linked and define our realities. Here is a brief overview of how the axes are defined.

The Human Development Index (HDI) combines three basic dimensions:

1. Life expectancy at birth as a given indicator of health and longevity of a population
2. Adult literacy and the gross enrolment in primary, secondary and tertiary educational institutions
3. The standard of living as measured by the natural logarithm of the gross domestic product (GDP) per capita and the purchasing power parity in US Dollars

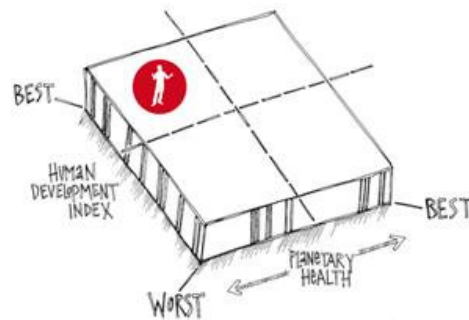


Planetary Health is considered to be an appropriate phrase to represent the carrying capacity of the planet. It included a consideration of the:

1. Number of species
2. Bio-diversity
3. Pollution
4. Abundance
5. Fertility

Selfish Bubble

Society is in denial about the dire state of the planet on which it lives; the Selfish Bubble world is driven by human interest with little accountability for society's impact on the planet. Countries compete for resources to feed unprecedented levels of consumption. Developing nations have created high levels of waste and emissions due to significant population increases.



Although people may deny the state which their planet's health is in, there is a pervading sense of guilt throughout this world. Guilt, however, is not a productive emotion, and humans continue to consume thoughtlessly, on the quest of personal satisfaction; being driven by ever-increasing expected standards of living. Reluctant to make lifestyle sacrifices for the sake of the environment there is widespread denial of the impacts of climate change, by politicians and even the media.

Newsprint is over. Anxiety over carbon is beginning to translate into a technological shift into virtual worlds, for communication purposes; providing greater access to information. Energy sources are still mostly conventional, with fossil fuels continuing to play a central role; alternative sources have yet to catch on. As consumers expect higher living standards, despite decreasing resources, technology becomes crucial in maintaining privileged lifestyles.

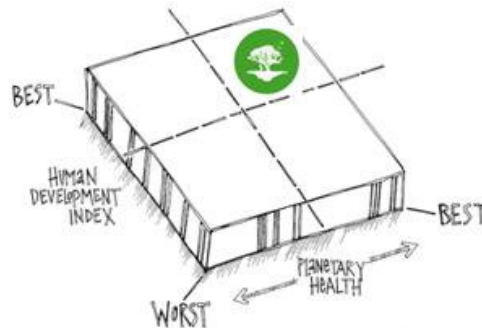
Economically the world is experiencing a boom time. Consumption rises and rises, in line with every increasing aspirations, often driven by popular media and marketing campaigns. Heavy investment in technology overshadows the pitifully low levels of investment in materials innovation, which might encourage efficient resource use and lower carbon consumption.

Despite worries over carbon usage consumption of resources and accumulation of waste still occurs at alarming rates. Emissions levels are similar to those predicted by the IPCC's high emissions scenario (see earlier footnote). Increasing droughts reflect water resource depletion, but the low value placed on this issue means that relatively few policies to redress the balance are in place or are considered a priority. Waste is not managed well globally; in fact, waste management systems are deemed a luxury, reflecting an absence of environmental policy.

Governments have failed to ratify the Kyoto Protocol, and its successor looks set to fall well short of the necessary targets to halt the irreversible damage being done to the planet. Instead of creating policies to mitigate disaster, governments too turn to investment in technology to solve society's problems. Developing cities are posing greater challenges to traditional global governance structures, as well as posing a significantly increasing threat to the ailing planet. Geographical boundaries are redrawn as states squabble over remaining resources; conflicts over resources such as energy are becoming a more common occurrence, as human society gradually destabilises itself in the pursuit of happiness.

Ecological Age

Society and governments have worked together to usher in an age of responsible resource use, care for the planet and maximisation of human living standards. Values are key, rather than profits. Carbon usage is minimised without preventing the development of technology products. Resource efficiency is paramount, and achievable in this Ecological Age.



The wealth gap and digital divide have reached historical lows; society is far less disparate than it has been in the past. Slow low-carbon lifestyles are in fashion in wealthier nations, pioneered by initiative such as the Slow Food Movement, started in Italy. Populations have stabilised and are reaping the well-being benefits of living in a healthier urban environment; food is grown within cities, and social units and businesses are far more self-reliant. To minimise emissions, and the vast amount of energy in meat production, vegetarianism prevails.

Clean technology and internet connectivity have brought huge benefits to developing countries, as well as solving the great carbon conundrum. Cities continue to grow, but their functions have changed. Urban areas are greener and smarter. Infrastructure systems and buildings are integrated for greater efficiency, and are designed with long lifecycles, containing phases of renewal and refurbishment.

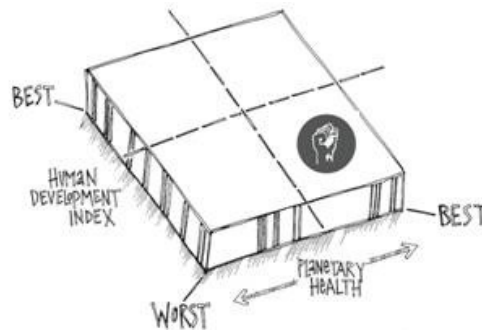
Global co-operation between governing bodies and technological innovation have led to the dramatic reduction of carbon emissions. The recognition that resource efficiency was paramount resulted in policy reforms and more value-based decisions which protected planetary resources. Strong forward-thinking policies supported by bottom-up activism have ushered in an Ecological Age, and information transparency has led to increased trust of governing bodies.

Individual companies too are held much more accountable for their carbon footprint and are forced to bear the cost of their violations; taxed heavily for polluting and using carbon. Even water use is taxed as due respect is paid to the importance of this vital resource. The better balance of energy economics reflects a good balance within the wider global economic system. Worldwide economic communities work together to achieve global goals; placing greater economic value upon environmental resources.

Low carbon practices in the home and the workplace have had positive impacts upon the natural world. Emissions levels are at an all-time low, and planetary health and well-being is deemed as important as societal development. Species under threat are monitored, subject to breeding and release programmes, and as a result biodiversity levels are on the up for the first time in recorded history. The planet is not only healthy but thriving.

Carbon is Crime

In this a world where Carbon is Crime there is strict carbon regulation and rationed carbon quotas; social welfare and healthcare are not seen as priorities. Lacking access to low-carbon technology those at the broadening base of the social pyramid resort to illegal ways of acquiring food, energy and water. For the majority there is little security and access to quality education and medical care is limited.



Society is divided by wealth more noticeably than ever before. The wealthy hoard crucial energy resources, using them to drive luxury vehicles at weekends or indulge in carbon-costly foods, whilst the poor struggle to obtain basic supplies necessary to maintain a decent living standard; exacerbating social unrest. Cities boom, as they have the concentrated levels of wealth necessary to develop the low carbon technologies necessary to thrive.

Cities have become super-green whilst they expand. Peak oil is a thing of the past; de-carbonisation dominates the current technology paradigm. There is a lot of investment in monitoring and reducing carbon use, cradle-to-cradle technologies and incorporating de-carbonisation into new designs, materials, construction and waste disposal methods. Buildings and transport systems become greener and smarter, implementing ubiquitous monitoring technologies.

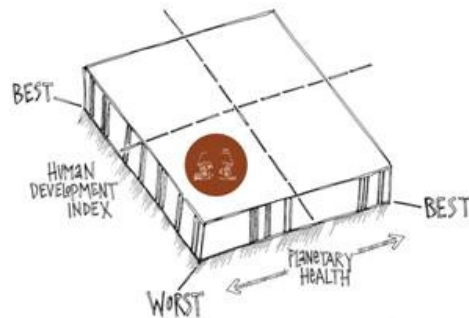
Due to de-carbonisation methods, globally emissions have fallen significantly; pursuing the low emissions scenario of the IPCC (see earlier footnote). Emissions-free technologies produce clean transport and manufacturing systems. Water supplies are monitored on micro rather than macro levels, reflecting a long overdue significance placed on access to clean water. As waste is no longer even produced, due to new methods of production which remove useless by-products, pollution levels of the natural world are at an all-time low.

The economy is based on reuse and repair, to minimise waste, and its inherent costs. Government revenue is significantly boosted by carbon-use taxation; which hits all strata of society. Mandatory life-costing has altered the way that production of goods and services is viewed and implemented, with visible economic costs attached to all forms of resource use.

Strong ecological and planning policies and heavy carbon taxation levels impel those disadvantaged by the wealth gap to pursue eco-terrorism. Lacking funds and access to new de-carbonization or emission-free technologies, the poorer members of society use black markets and illegal smuggling systems to obtain expensive uncontaminated food, water and resources. Much of the actions taken Society is crippled by disparities and suffers to maintain the health of the planet on which it dwells.

Life is Cheap

Both human and planetary health has spiralled down into an irreversible state of decay and depletion. Widespread pollution and climatic degradation continue to affect humanity, leading to a dramatic population decline. The wealth gap widens, producing a global social underclass.



Resources are contaminated, which in turn has impacted upon the planet's human and animal populations drastically; fragile species are continually becoming extinct, with even the human population suffering a significant loss in numbers. Water, air, energy and food supplies spread disease rapidly around the world. Fossil fuels still dominate energy sources, thus emissions levels equate to those which the IPCC terms as its medium emissions scenarios¹.

Technology accelerates sporadically as it continues to be driven by fossil fuels. As these fuel supplies decline however technology slows again; energy poverty reflecting economic poverty. Design focuses on maintaining the isolation of this new world with investments being ploughed into virtual communication and infrastructure systems, as well as resource engineering, such as genetic modification of food to produce safe nutritional supplies. Healthcare is another expanding area of technological focus due to the widespread disease.

Pandemics are common, and social patterns have changed to protect people from increased threats to their personal safety. Homes and businesses are surrounded by high levels of security, to avoid contact with contamination, via other people or resources. Communication is generally virtual as human contact is minimised in fear of disease spread and also thanks to technological developments. Gated communities prevail and a fortress mentality develops.

On personal and higher levels people and organisations are becoming inured to the health problems and resource shortages. Despite the dire state of affairs, there is little political response in terms of tackling the critical issues. Vast immigration rates, as people search for safe water, food and resources, produce no reaction from governments, despite placing an immense strain on social services. A military presence is noticeable policing border security and internal movements within countries.

Decrease of movement of people, besides immigrants, has led to a reversal of globalisation. People move far smaller distances in the past, fulfilling all needs within a more localised area. Trade across state borders has decreased significantly and multi-national economic communities such as NAFTA and the EU are breaking down. Companies which were once international, with offices in many countries, have shrunk in physical size, retreating to a single HQ office in one place. Barter economies and black markets increase as demand for resources outstrips supply. Crime and social unrest makes this world a threatening place.

¹ IPCC emissions scenarios document (<http://www.ipcc.ch/pdf/special-reports/spm/sres-en.pdf>)