



HARDIN TIBBS, futurist and CEO of Synthesys Strategic Consulting Ltd., a business futures firm in London.

THE LAST 100 YEARS: LOOKING BACK FROM 2112

Back in 2012, a futurist said: ‘To me, in 100 years is the beginning of a golden age – if we can use all of today’s enormous potential to solve all of today’s enormous problems.’ It is now January 2112, and the problems of unsustainability that loomed large exactly 100 years ago have been decisively solved. The solutions came from two sources: industry and the tipping point in cultural values that occurred early in the 21st Century.

The shift in cultural values seemed to happen quite suddenly after 2012, surprising most people. The shift to the worldview we take for granted today, which emphasizes environmental quality and universal social well-being as the overriding concerns of society, swept around the world in a matter of years, aided by internet-based social media.

Consumers soon made it very clear that they expected industry to use its technological know-how to address the problems of unsustainability. This would allow both companies and society itself to become sustainable. The success of this led to the big ‘shared value’ strategy that has guided business for most of the last century.

Once industry focused seriously on the question of sustainability, it quickly came up with a diagnosis of the core problem. The challenge was rooted in three global system fundamentals:

1. The fixed size of the global environment, i.e. the area of the planet surface and the size of the biosphere – the planetary network of ecosystems – are fixed.
2. The scale of industrial production worldwide, which was literally as large as nature, when measured by comparing the volume of industrial flows with the flows of the various chemical elements in and through the biosphere, for example carbon.
3. The exponential growth of economic consumption, which was doubling every 20 years in the late 20th and early 21st Centuries as a result of the combined growth of population and affluence. Put together, these three fundamentals

meant that by 2030 the volume of consumption would be (if it could get there) twice the size of the biosphere. But this could never happen, since 20th Century-style economic consumption ultimately drew resources from the biosphere, which would break down under the load.

This crunch of factors signaled that the global industrial economy would collapse before 2030 if it wasn’t reinvented to work on different technological principles. By 2012, the rumblings of this potential collapse could already be heard. The price of oil was rising as it got scarcer, in turn driving up food and commodity prices, and helping to trigger the global financial crisis.

The solution involved facing the three global system fundamentals head on, and treating them urgently as a major challenge that industry had to meet. Because consumer demand was rising exponentially and resource provision couldn’t keep up, resource provision had to change. The obvious way to do this was by turning the flow of all resources into a continuous loop. This had been known in principle for decades, but was only taken seriously in the period leading up to 2020. Using a combination of systems design and new technology, industry developed sustainable product platforms. They used closed loops of a few basic materials, and managed to leapfrog the environmental and scarcity problems about to engulf conventional resource supplies.

Following a fundamental economic rethink, the new production methods enabled, as we have seen, genuine abundance for everyone. Today we are all free to pursue personal development and well-being goals, and we live in conditions that 100 years ago were regarded as an impossible utopian dream.

See the slides from Hardin Tibbs’ lecture at the fourth In100Y-seminar about human values at a tipping point at www.in100y.dk/cph-seminars/4-its-our/from-the-seminar/