

Earth in the year 2050: The vision of Joshua Farley

In the year 2050, human population is in steady decline from a peak of 8 billion as a result of freely available birth control worldwide, and is expected to stabilize around 3 billion. Carbon emissions have been reduced by 90% below 2000 levels and though some climate change continues, it appears likely that runaway climate change has been avoided. Loss of biodiversity and the ecosystems required to sustain it has been halted, and massive restoration efforts are currently underway. The global economy is characterized by much greater equity. Citizens of wealthy countries consume less than half of what they did in 2008, having returned to a 1969 standard of living, while citizens of developing countries have attained the standard of living enjoyed by the wealthy nations in 1950. These outcomes were the result of economic, political and social revolutions that followed the market collapse of 2008-2009. First came the realization that solving the problems of climate change and peak oil required new technologies, and that if corporations produced and patented the required technologies, India and China would not be able to afford them. Accepting blame for causing climate change, the developed nations taxed carbon emissions then used the revenue to fund research into energy alternatives with the resulting knowledge made freely available to all. China and India adopted and improved on the resulting technologies, lead to far more rapid progress than considered possible. This led to the creation of a global information commons, for all information that protected or provided public goods. Second, a growing awareness of biophysical limits to economic growth led to a reformulation of the economic problem: rather than trying to allocate the resources provided by nature towards the economic products that created the greatest monetary value, the problem was to allocate ecosystem structure between conversion to human-made artifacts and the conservation necessary to provide vital ecosystem services in way that maximized quality of life for this and future generations. Recognizing that the market system failed to address this allocation problem, and building on the success of the information commons, common asset trusts (CAT) emerged around the world: resources created by nature or by society as a whole were awarded to the commons sector and managed by boards of trustees for this and future generations under legally binding mandates. Those who used more than their share of these resources were required to compensate the rest of society, and the revenue generated was used to provide more common assets, funding ecosystem restoration among other things. Third, calls for greater decentralization of power clashed with the need for international efforts to deal with the global financial and biophysical crises. The result was a steady global movement towards governance based on the subsidiarity principle, with political decisions made by the least centralized competent authority, which for many serious problems required revitalized global governance structures. The subsidiarity principle was also used for the commons sectors, e.g. global CATs for global resources, local CATs for local resources. Finally, society came to accept that the costs of economic growth had come to exceed the benefits, and the new economic goal was to maximize quality of life at the lowest possible cost; GNP was used as a measure of cost.