

Planetary Management Institute
Statement of Vision, Mission, Goals and Objectives

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Vision

A planet with an intact, stable biosphere, in which mankind lives in harmony with the other species of the planet

Situation Assessment

Mankind's large population and industrial activity are destroying the biosphere. Large human numbers and industrial production are the direct cause of a mass species extinction (estimated at 30,000 species per year), by pollution of the planet's air, land and water and destruction of wildlife habitat. Earth's old-growth forests are rapidly disappearing and the planet's forest coverage overall is shrinking. The production of greenhouse gases, including industrial gases and carbon dioxide from the burning of forests and fossil fuels, is contributing to global warming, which is further destabilizing the biosphere, threatening large-scale biospheric change, and causing the extinction of many more species, possibly including mankind.

The current planetary environmental crisis has been brought on by the advent of technology and access to massive amounts of energy from fossil fuels. Mankind's large-scale use of coal began to increase gradually from about 1650. Industrial use of petroleum started in the late 1800s, and by 1950, the "petroleum age" was well underway. It is estimated that about half of the planet's oil reserves have been consumed, and that global oil production will peak in the current decade. Barring a major catastrophe, the planet's oil reserves are expected to be exhausted by 2050. Coal reserves will last substantially longer, but coal is not nearly as convenient a source of commercial energy as oil. By 2050, the petroleum age will be over.

For millions of years, human population remained well below a billion people. The population of primitive man is estimated to have been on the order of twenty million people (i.e., from two million to two hundred million). Since the advent of agriculture, about 12,000 years ago, the population has been estimated to be about 200-300 million people. As mankind began to develop technology and utilize fossil fuels, human population began to grow. The population increased to about a billion in 1800, to two billion in 1925, three billion in 1960, four billion in 1974, five billion in 1987, and to six billion in 1999. It currently (2004) stands at approximately 6.4 billion, and is increasing by about 75 million per year. By its out-of-control population explosion, the human species is in the process of destroying most other species on the planet, and threatening its own existence.

At the present time, planetary management is under the control of economic / industrial society, which is either uninterested in or incapable of stopping the destruction of the biosphere and the accompanying mass species extinction. Apart from overall – and

complete – economic control by the wealthy, the human political system is largely anarchic, consisting of over 200 “sovereign” countries operated mainly by democratic political systems. Rather than trying to decrease the use of fossil fuels, which is the major factor underlying the human population explosion and the accompanying mass species extinction, all political leaders are calling for increased industrial production, increased energy utilization, and increases in the human material standard of living. Calls from environmentalists to halt the wholesale destruction of the planet’s biosphere have gone unheeded. Every year, more natural habitat is destroyed, thousands more species are made extinct, pollution of land and water increases, and greenhouse gas production and atmospheric concentrations rise. The environmental crisis has been in full swing for half a century, and shows no sign of abating.

The massive increase in human population was enabled by industrial agriculture (mechanized farming, irrigation, fertilizer, pesticides, herbicides, genetic modification), which was in turn enabled by advanced technology and the availability of massive amounts of energy from fossil fuel, mainly petroleum. As the petroleum age draws to a close, human population will fall back to the levels that preceded it, i.e., to a few hundred million or less. The human population is in a serious “overshoot” condition; that is, it is much larger than the environment can support, once fossil fuels exhaust. Human history, the science of ecology, systems theory, and catastrophe theory all suggest that human population will not decline “gracefully” to the levels that can be supported by solar-energy alone, without petroleum. Rather, the decline of human population will be catastrophic. As it always has, human society will continue to strive to maintain human population at the maximum possible level. When the system finally fails, the population will shrink because of famine, starvation, and war, not by “family planning” or “birth control,” or a “demographic transition.”

As global oil production peaks and global production starts to fall, widespread global conflict will occur. Countries will fight over the ever-decreasing oil supply. The first to feel the effects of the shrinking supply will be the less-industrialized countries, which will see their oil supply reduced to zero. Then, the weaker industrialized nations will be cut off. The world will erupt in global war. Finally, the strongest industrialized nations will erupt in civil war, as dwindling supplies are insufficient even for their needs. As global oil supplies decrease, the size of the human population will decrease correspondingly.

As long as human population remains high, the mass species extinction will continue. The mass species extinction will cease when human population starts to fall. That time will be one of great conflict among nations. The only significant issues facing humanity at the present time are whether mankind will survive as a species, and what other species will remain when the mass species extinction ends, as the petroleum age draws to a close.

As long as global oil production continues at high levels, there is little that can be done to stop the pollution of the planet, the destruction of the environment, and the mass species extinction. Modern society, driven by economics, global industrialization, and materialism, will continue to press industrial production to the limit, as long as it can. All nations and global organizations (such as the World Bank, the United Nations, and multinational corporations) press for more industrial production, saying that it will solve the problem when it is in fact the cause of the problem, and denying that continuing industrial production makes things worse – more poverty, more human misery, more environmental destruction, more species extinctions, and more global warming. As long

as oil production remains high, the planet will continue to be in the stranglehold of economics and there will be little hope for change, or for saving what remains of the planet's biodiversity.

As the world runs out of oil, the industrial world will be embroiled in chaos. At that time, mankind will have a chance to change things, to create a different future. And what is required to save the biosphere is a radical change in the human social system. When things start to fall apart, there will be the opportunity for choice. One choice will be to continue industrialization for as long as possible, until all fossil fuels (including coal) are exhausted. Under that choice, the mass species extinction will continue and global warming will continue. Mankind will either become extinct or live on a ruined planet with no other large animals and severely degraded biodiversity. On the other hand, those in charge as the current system collapses may choose to bring an end to global industrialization. They may accept that global industrialization is a cancer that is destroying the planet, and that, if we are to survive as a species in a biologically diverse planet, that system must be terminated, and never be allowed to occur again.

If the planet's biosphere is to be saved from destruction, mankind must reduce its numbers and industrial activity drastically. The question that arises is: "How many people, and at what level of living?" To try to answer this question, let us examine the factors underlying human population dynamics.

For millions of years, as long as mankind was primitive, the existence of human society did not threaten the stability of the planet's biosphere. Human population was always kept in check by the availability of food obtained by hunting and gathering. With the advent of primitive agriculture, human population expanded considerably, but still not to the point of causing the destruction of the biosphere and a mass species extinction. The problem we face today, where mankind's large numbers and industrial activity are destroying the planet and causing the extinction of many species, including mankind itself, arose with the advent of advanced technology and access to massive amounts of energy from fossil fuels. At that point, mankind was able to produce sufficient food to enable human numbers to expand to incredible size, with the result of massive destruction of the environment, pollution, global warming, and extinction of many other species. At the present time, nothing is keeping human numbers and industrial activity in check. The result is runaway population and industrialization, which are destroying the biosphere.

Now that it has advanced technology, if mankind is to survive and is to continue to thrive on a biologically diverse planet, it must cease its ages-long practice of expanding its population to the maximum size it can achieve. If it continues to do so, the mass species extinction will continue, global warming will continue, and mankind itself will become extinct. To survive, humanity must decide on, and enforce, a much lower human population level and industrial-activity level than is now the case. To date, most population "planners" have addressed the problem of determining human population size in terms of trying to determine the *largest* human population, at the highest possible material standard of living, that the earth might support. They have not been terribly concerned with the likelihood or rate of extinction of other species, or of the long-term quality of the environment, or on the risk of extinction of future human generations. This approach tries to achieve as high a material standard of living for as many currently-alive people as possible, subject perhaps to attempting to keep the risk of human extinction within the current generation's lifetime less than one. This approach is ill-conceived,

courts disaster at every instant, and is doomed to certain failure in the long run – and likely failure before very long at all. Human population and industrial activity under this approach are invariably large, to the extent that they have a noticeable impact on the rest of the biosphere. Under this approach, the likelihood of mankind’s degrading the environment and causing the extinction of other species, is always non-negligible. Over a sufficiently long time, this means that the likelihood of extinction – both for other species and for mankind – is virtually certain. A much better approach (to determining a long-term survivable population and stable biosphere) is to try to determine a *small* human population that has a very good chance of survival. This approach keeps the likelihood of serious damage to the environment and extinction of other species extremely low. A population size and composition that keeps the likelihood of extinction of species – human and others – very low has been termed a “minimal-regret” population (since it minimizes the “regret” that mankind and other species become extinct).

So, given this point of view – striving for a small human population that lives in harmony with the rest of the biosphere – what is a reasonable population size and composition for Earth? Let us reason as follows: For millions of years, the planet continued to thrive as a relatively stable, biologically diverse system, with a human population of less than a couple of hundred million living on it – many estimates falling in the range of 5-75 million people. Modern research estimates that, under solar-energy-based agriculture, the planet may be able to support as many as 500 million people. As long as mankind produces no more waste than natural systems can metabolize, the system is sustainable, and can continue indefinitely. But now that technology is “out of the box,” it seems unlikely that mankind, as a whole, will ever (willingly or unwillingly) return to a primitive, hunter-gatherer existence. So what size population is feasible, for a high-technology people? In our view, the key factor to consider is energy utilization. If mankind is to live in harmony with the rest of the biosphere, on which it depends for its continued existence, it cannot continue to utilize massive amounts of energy. Instead, it must limit its energy utilization to the levels that it used for millions of years. Modern, “high-tech” / “high-energy-use” societies use about 100 times as much energy as primitive, “low-tech” / “low-energy-use” ones. So, it is reasonable to speculate that if the planet can support, long-term, at most 500 million low-energy-use people, then it may well be able to support, indefinitely, one-hundredth that amount of high-energy-use (high-tech) people, or about five million high-tech people. Since low-tech people use very little energy, the global population could also include a small number (small relative to 500 million) of low-tech people, say, a primitive population of five million hunter-gatherers.

A population consisting of a single nation high-technology (high-energy-use) population of five million and a globally distributed primitive (low-energy-use) population of five million hunter-gatherers is a “minimal-regret” population. This population is a “feasible” long-term-sustainable population, in the sense that the planet was able to support a human population of this size for a very long time. Because it is very small, it imposes a minimal impact on the biosphere. Based on human history, it is sufficiently numerous – if widely geographically dispersed – that it has a low likelihood of extinction from local catastrophes or natural climate change. The purpose of the high-tech population is planetary management – to ensure that the global population never exceeds ten million total. This is done by forbidding industrial activity anywhere on the planet except in the single-nation of five million. The purpose of the hunter-gather population is to reduce the likelihood of human extinction from a single localized catastrophe.

Mission

The mission of the Planetary Management Institute is to work for the establishment of a minimal-regret global population consisting of a single high-technology nation of five million and a globally distributed hunter-gatherer population of five million. It will accomplish its mission by a program of education.

Goal

The goal of the Planetary Management Institute is to educate as many people as possible of the following facts:

1. Mankind's current large numbers and industrial activity are destroying the biosphere, causing the extinction of tens of thousands of species every year, and threatening the existence of mankind itself.
2. When the petroleum age ends, by 2050, human population will fall to a few hundred million or less. The only significant issues to address are what the state of the biosphere will be at that time, and whether mankind will still exist. Depending on what action is taken now and in the near future, three main options are possible: (1) mankind may be extinct; or (2) mankind may survive for a time on a ruined planet, or (3) mankind may live for a long time in a stable, biologically rich biosphere.
3. As global petroleum supplies exhaust, the world's industrial nations will become embroiled in global war. At that time, as the world plunges into chaos, the opportunity will exist to end the current system of global industrialization that is destroying the biosphere and establish a new system, based on low human population and low industrial activity. If action is taken to end global industrialization quickly, the likelihood of realizing option (3) above is increased – long-term survival in a stable, biologically diverse biosphere. If the forces that would promote continued global industrialization prevail, the outcomes will almost certainly be options (1) or (2) – mankind's extinction or diminished existence on a ruined planet.
4. A human population size and composition that is expected to survive for a long time, in a stable biosphere, is the "minimal-regret" population consisting of a single high-technology nation of five million and a globally distributed primitive population of five million hunter-gatherers.
5. Global chaos will begin as soon as global oil production starts to decline. That decline, called "Hubbert's Peak" is expected by many geologists to occur in the present decade, i.e., by 2010, and by a few by as late as 2020. The time for action – and massive global change, for better or worse – is in the very near future.
6. As global chaos breaks out, global population will fall rapidly. Most of the world's six billion people will perish. Few people will survive. If the future is to be one of human life in a biologically rich, stable biosphere, it will be necessary for the surviving leaders to realize that it is global industrialization that brought destruction to the planet and threatens the existence of mankind and the stability of the biosphere, and that the establishment of the minimal-regret population described above will assure the long-term existence of mankind in a stable, biologically diverse biosphere.

7. Because few people will survive the coming global catastrophe, it is very important, if all surviving leaders are to know the best route to mankind's long-term survival in a stable biosphere, that *everyone* now alive be made aware of the situation, and the recommended solution (viz., a minimal-regret population).

Objectives

1. Continue the development and operation of the *Foundation* Internet web sites, <http://www.foundationwebsite.org> and <http://www.foundation.bw> .
2. Work for the establishment of local Planetary Management Institutes and Planetary Management Departments in colleges and universities around the world.
3. Seek to disseminate the message of the Planetary Management Institute in as many ways possible, such as by e-mail, Internet discussion groups, local discussion groups, and political activity.