

INFINITE ENERGY

EXCERPTS FROM THE BOOK TRENDS 2000

Although the corporation would not take on its art patron role until early in the new millennium, already by the 1980's, forward-looking corporations were forming alliances to promote social responsibility in business. The idea that profit was not the sole aim of corporate existence amounted to a breach of Theo-economic faith. By early in the new millennium, this heresy had undermined the religion of the Industrial Revolution.

According to Theo-economic dogma the economy was God and finance its Philosophy -- but it was fossil fuel that energized the movement. To drive the Industrial Age machinery, mountains of coal, oceans of oil, and tons of uranium were needed. But in the undogmatic Global Age, God was God and higher consciousness its philosophy -- and the fuel that energized the movement was...water...and air...and sun...

The energy sources for the global Renaissance were renewable, free or almost free, and nonpolluting. To tap into energy in the new millennium did not require huge utilities to provide it or a complex infrastructure to mine, drill, refine, process, deliver, and store it.

The promise of "free" energy, held out by visionaries over the last decades of the twentieth century, was made good in the first decades of the twenty-first.

Alternative Energy had been a buzzword since the OPEC oil embargo of 1973. But a variety of factors, mainly connected to funding, kept the most obvious alternatives (wind, solar energy, geothermal energy) from becoming economically viable and universally applicable. In 1981, only \$155 million a year went into solar research and development. A single B-1 bomber cost \$250 million. Nevertheless, despite underfunding, significant progress was made that would make solar power economically more viable.

Eventually, the search for alternative sources turned up leads that in the twenty-first century would deliver endless supplies of clean, cheap, environmentally safe energy.

The most promising of these was cold fusion, or new hydrogen energy, discovered 1989. It was a relatively simple process, but it had scientists baffled.

The process involved applying a small amount of energy to a cell (containing deuterium, or heavy water, a hydrogen isotope). Early experiments produced undependable, irregular results, but when successful, cold fusion reactions produced as much as ten times *more* energy than went in.

Even cold fusion's discoverers were confounded. There was nothing in known science to account for the phenomenon. It was as though

three hundred years of rational science suddenly had to deal with an alchemist's dream come true. Unable to explain the process, and unwilling to face its implications, scientists attacked and dismissed cold fusion -- even as actual commercial heating units were being produced in Eastern Europe by using a process clearly related to the original discovery.

From Galileo to the Wright Brothers to Wegener and his theory of continental drift, the history of science is an unbroken sequence of breakthrough discoveries automatically dismissed and derided by the establishment of the day. Major newspapers ignored the historic Wright brothers flight of 1903 -- mainly because *Scientific American* claimed it was a hoax. For the next five years -- with the Wright brothers routinely flying test flights around tile field at Kitty Hawk -- experts continued to argue that heavier-than-air machines were scientifically impossible.

Scientific and industrial opposition might slow the energy revolution; it could not stop it. The Industrial Age was dying. The fossil fuels that drove it were no longer required. Global energy sources would include cold fusion, solar energy, geothermal energy, and even wind -- along with others that could not be predicted specifically but that were bound to be discovered, given the rate of new discovery and the thrust of scientific research at the millennium's end. New energy sources transformed the Global Age world more radically than the jet plane transformed travel.

It was a revolution on the order of the discovery of fire.

The energy revolution of the twenty-first century changed the way life was lived.

The technology was in place and spreading quickly. Within a generation, there were no gas bills, no oil bills, no wood bills, no coal bills, no electric bills, no gasoline bills, and no polluting coal or oil-fired power plants or furnaces, no gasoline engines, no nuclear plants generating still more radioactive waste. In one blow, industries and households were relieved of a significant percentage of their expenses.

The energy revolution made it possible for large numbers of people to live the alternative lifestyles they believed in.

It freed people in direct and in subtle ways from reliance upon established institutions and infrastructures. Practically, access to free energy made a life of voluntary simplicity, self-sufficiency, and technotribalism feasible without hardship. Freed from the energy grid, people could build houses anywhere that suited them. A permanent free supply of energy also meant that new buildings did not have to use toxic or environmentally destructive building and insulating materials just to conserve energy.

Psychologically, it re-created in technological format something akin to the sense of inner freedom enjoyed by Australian Aborigines and American Indians and other pretechnological and nomadic societies.

Globally, unlimited energy threw a wild card into the doomed hand being played out by the world's nuclear industries. If clean, free energy sources could be implemented quickly enough to shut down the world's

**TRENDPOST -
The energy revolution will be the single-biggest investment opportunity of the twenty-first century. Its ramifications will extend to practically every aspect of human and planetary life. To profit from the trend, potential investors should begin familiarizing themselves with the field thoroughly and immediately, and keep abreast of developments before they become official.**

ailing nuclear power plants, looming disaster might be avoided. New processes also held out the promise of neutralizing the radioactive wastes of the world.

Nations in Turmoil

Oil-producing nations had their revenues decimated. Countries whose economies depended wholly or substantially upon oil exports sank into depression, recession, or chaos. Developed nations convulsed from within as their energy infrastructures disappeared. For developing nations, the effects were almost entirely beneficial. Unlimited nearly free energy meant that vast sums of scarce hard currency no longer had to be spent on energy.

For a transitional couple of decades, products relying upon petrochemicals for their manufacture would sustain a diminished oil industry. Japan, other oil-poor nations, and much of Europe would continue to import. But the United States had an ample domestic supply to satisfy its needs. Eventually, petrochemicals would be profitably synthesized from hydrogen and carbon.

By the middle of the twenty-first century, the oil industry would be as dead as the whale oil industry.

The oil-rich Muslim countries, deprived of revenue, seethed with rebellion. Religious reformers had little trouble convincing the impoverished masses that secular governments allied with Western interests were responsible and the jihad was the solution. The chaos in non-Muslim oil-producing nations would be equally extreme but not religiously based.

Politically, the energy revolution and the demise of the Industrial Age's single most important industry affected foreign policy and the world balance of power. Sensitive strategic alliances were rethought. America's "national interests" no longer meant oil interests; it meant the nation's interests.

America was looking within. And the world was looking at America.

The Renaissance

No longer obliged to put huge sums of money into paying for energy, the United States directed its energies toward reenergizing itself.

Applying the principles of technotribalism, practical and enlightened programs were begun to transform decaying, crime-ridden, and crowded Industrial Age cities into Global Age urban communities.

Save the Children campaigns turned around a generation of kids who ten years earlier would have been lost to drugs and crime by the time they hit puberty. Class warfare, ethnic divisiveness, the intolerable disparity between the few rich and the many poor had to be intelligently and effectively addressed before Renaissance values could take root.

Advanced technologies, access to free energy, and the will to make it happen produced mass-transportation systems that finally made the modern city life-enhancing. This was part of a larger trend toward fast and efficient mass rail transport and a breakaway from the road

**TRENDPOST -
The chain of ancillary industries, products, and services that depend on or sustain the fossil fuel and nuclear energy industries will go down with them -- mining, drilling, refining, processing, delivering, storage, equipment. Public utilities will cease to exist. On-trend investors with money in these industries should monitor events closely to safeguard their holdings. Threatened industries should reinvent their mission**

mentality that strangled the cities and stifled the suburbs. Within two decades, Mag-Lev (magnetic levitation) and other high-speed rail systems and "people movers" took the pressure off of roads and highways. Advanced ground transport replaced the plane for short- and medium-range travel.