

Rachel's Environment & Health News

#738 - Environmental Trends -- Part 2

November 21, 2001

Here we continue summarizing the main points from the 327-page report titled OECD ENVIRONMENTAL OUTLOOK[1] from the Organization for Economic Cooperation and Development, which describes current environmental trends in the OECD's 30 member nations.[2] (See Rachel's #737.)

The OECD report forecasts environmental trends to the year 2020, using a traffic signal to highlight major conclusions: green lights where it's OK to "proceed with caution," yellow lights for important issues that are still shrouded in uncertainty and red lights for problems that require "urgent action" because they are likely to "significantly worsen" by 2020. (pg. 279) Notice that even the "green light" issues warrant only a "proceed with caution" advisory from the OECD.

Here we continue listing the most important "red light" problems that the OECD has identified:

**** Energy:** Total energy use will increase 35% in OECD regions by 2020, and 51% elsewhere in the world. Oil will remain the OECD's energy mainstay, and the share of oil supplied by OPEC countries[3] will increase from 54% today to 74% by 2020. Only 6% of energy will come from renewable sources (such as solar power) by 2020, says the OECD, and even this "will depend upon financial incentives from government." (pg. 148)

The OECD report does not say so, but any such financial incentives would be subject to challenge under World Trade Organization rules as illegal restraints of free trade. The WTO does not allow governments to subsidize particular industries, such as solar energy, though of course military subsidies to keep the oil flowing from the Middle East are allowed. By 2020, the share of OECD energy supplied by nuclear power may decline slightly from its current 11%, the OECD says, because the technology lacks popular support everywhere. (pg. 148)

**** Global warming:** "Global warming is a reality," says the OECD report. (pg. 157) As the Earth warms, we should expect more extreme weather in some regions (floods, droughts, and perhaps more "catastrophic" events such as large hurricanes and typhoons). We should also expect the sea level to rise somewhere between 6 inches and 37 inches by the year 2100, inundating valuable and densely-populated coastal lands. (pg. 162) Serious human diseases carried by mosquitoes, such as dengue fever (also called "breakbone fever" because it is so painful) and malaria, are likely to increase in both the northern and southern hemispheres, says the OECD. (pg. 162) "The possible effects of climate change are a widely recognised future threat to human health," says the OECD. "Climate change might result in new infectious diseases, as well as changing patterns of known diseases, and loss of life due to extreme weather conditions." (pg. 252)

"Overall studies show that some of the most adverse impacts [of global warming] are bound to occur in the Southern Hemisphere where countries are most vulnerable and least likely to easily adapt to climate change," says the OECD. (pg. 162)

Humans are contributing to global warming by releasing "greenhouse gases" -- mainly carbon dioxide, methane, and nitrous oxide. Of these, CO₂ is the largest. The OECD forecasts CO₂ emissions rising 33% in OECD countries and 100% in the rest of the world by 2020. To meet the goals of the Kyoto agreement, intended to curb the damage from global warming, OECD countries will need to reduce their CO₂ emissions by anywhere from 18% to 40% depending on what non-OECD countries do. (pg. 160) Given that the U.S. increased its CO₂ emissions 11% between 1990 and 1998, even an 18% reduction by 2020 would require a Herculean political commitment to reverse "business as usual." (pg. 159)

**** Chemicals:** Although the chemical industry creates large quantities of hazardous waste, an even bigger problem is its products. The OECD says there are somewhere between one and

two million chemical preparations on the market today, each a mixture of two or more individual chemicals that do not react with each other. Each of these preparations must be considered in light of workplace hazards, accidents involving hazardous materials, and harmful exposures of workers in other industries, consumers, the general public, and the natural environment, says the OECD. Unfortunately, there is "an immense knowledge gap about chemicals on the market," says the OECD: governments "lack adequate safety information about the great majority of chemicals." (pg. 223) The "unknown hazard" from chemicals is a "major concern," says the OECD. (pg. 226)

"Major concerns exist about the possible impact on the environment and human health of substances produced by the chemicals industry, which are found in virtually every man-made product," says the OECD. "Many are being detected in the environment, where particular problems can be caused by persistent, bioaccumulative and toxic chemicals. Concern is growing, for example, about chemicals which cause endocrine disruption and which persist in the environment," OECD says. (pg. 223) Endocrine disruption refers to industrial chemicals, released into the environment, that interfere with the hormones that control growth, development, and behavior in all birds, fish, amphibians, reptiles, snails, lobsters, insects, and mammals, including humans.

Evidently the OECD does not have confidence that governments --or the chemical industry itself -- can control the chemical problem because the report explicitly says that vigilance by non-governmental organizations -- the environmental movement --will be "critical" to the success of efforts to assess the hazards of chemicals that are already on the market. (pg. 233) And of course assessing the hazards is only a first step --prelude to the much more contentious question of curbs, phase-outs, forced substitutions, or bans.

In sum, persistent toxic chemicals "are expected to continue being widespread in the environment over the next 20 years, causing serious effects on human health," the OECD says. (pg. 19)

**** Human Health:** "The loss of health due to environmental degradation is substantial" in OECD countries. (pg. 253) The "most urgent issues" are "air pollution and exposure to chemicals," the OECD says. The "greatest cause for concern" is the "threat of continuing widespread release of chemicals to the environment." (pg. 252) "This is not only a question of the amount of chemicals that end up in the environment, but more a question of their characteristics and effects. Unfortunately, the latter are often unknown, as the recent discovery of the endocrine disrupting effects of certain pesticide ingredients has shown," the OECD says. (pg. 252)

The OECD estimates that environmental degradation causes somewhere between 2% and 6% of all human disease in OECD countries and 8% to 13% in non-OECD countries. (pg. 250) In OECD countries this presently translates into health-care costs between \$50 billion and \$130 billion per year, the OECD says. (pg. 252)

The OECD report highlights two kinds of air pollution that can harm humans: ground-level ozone, and fine particles, both created by cars and trucks. Ground-level ozone -- a component of smog -- exacerbates asthma, bronchitis, emphysema and other chest ailments, and diminishes lung capacity even in healthy children. Health standards for ozone are exceeded at 95% of monitoring sites in the U.S. and Japan and at 90% of sites in Europe, the OECD reports. (pg. 188)

Fine particles -- soot so small that you can't see it, except as a haze -- presently kill twice as many people as automobile accidents each year, the OECD says. (pg. 176) And particles produced by diesel engines cause lung cancer -- in the U.S. alone, an estimated 125,000 new cases each year, the OECD says.

Environment and health costs from transportation presently amount to 8% of GDP (gross domestic product) in Europe, not counting the costs of traffic congestion, the OECD says. (pg. 176) And motor vehicles will increase 32% in OECD countries by 2020, and 74% worldwide. (pg. 170) As we approach 2020, stricter emission controls will reduce urban air contaminants in many OECD countries, but much of the rest of the world will be driving older cars and trucks without benefit of modern controls.

Environmentalists, of course, would like to add many details to the OECD's sobering report. The most blatant omission is the biggest killer of all -- the workplace environment. As we have reported previously, work-related injuries and disease kill about 165 workers EACH DAY in the U.S. alone -- a mammoth, ongoing human rights violation that the OECD report has managed to ignore. (See RACHEL'S #578.)

By cherry-picking data and sometimes fudging the details, writers like Bjorn Lomborg manage to confuse the public by claiming that environmental problems have been exaggerated or don't really exist.[4] But this is the wrong time to be pretending that all is well because the trends are otherwise. The world's oceans, forests and biodiversity are clearly in trouble. Global warming is real and, given the political power of oil and coal companies, intractable. Waste is immense and growing, but toxic PRODUCTS are an even bigger problem. Toxic chemicals can now be measured at low levels in the bodies of living things everywhere on Earth, from the bottoms of the deepest oceans to the most remote mountain tops. Exotic industrial poisons have been introduced into all of us without our informed consent -- invading our bodies even before we are born -- and new harms from these toxic trespassers are discovered almost daily as ignorance and cover-up give way to openness and knowledge. But we needn't wait for yet another scientific study. We already know enough to act and act decisively.

The basic problem is that "free market" ideology regards the natural environment as an inexhaustible supermarket for raw materials and a bottomless free toilet for wastes. Both of these conceptions are dead wrong, and therefore "markets" must not be free -- they must be moderated by social covenants and government policies -- ranging from simple generosity and sharing on an international scale, to fessing up and taking responsibility for the consequences of our actions on a corporate scale, plus a range of government sanctions and strictures, including purchasing preferences, subsidies for clean technologies, green taxes and fees, precautionary regulations and actions, guarantees of workplace safety and health (with real teeth), stiff fines, and even prison for repeat polluters. The key reforms must aim to create a vastly more responsive democracy, allowing people to make decisions by talking together about those things that affect their lives, displacing the elitist corporate rule that both Democrats and Republicans today call government.

Reversing environmental decline will require above all the commodity in shortest supply: courageous political commitment and democratic policy innovations based firmly and explicitly on the principle of forecaring or precaution, to counteract decades of "free market" theology that have left governments weakened, democracy vitiated, and the environment inadequately protected. If we and our unelected "leaders" can't -- or won't -- face up to the necessary changes, the environmental outlook for our children and grandchildren will be grim indeed.

--Peter Montague (National Writers Union, UAW Local 1981/AFL-CIO)

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[1] Available at <http://www1.oecd.org/env/>.

[2] Last week we mistakenly omitted Ireland, a founding member of

the OECD. Current OECD member nations include Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the U.K. and the U.S.

[3] OPEC, the Organization of Petroleum Exporting Countries, has 11 members: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. See <http://www.opec.org/>.

[4] Bjorn Lomborg, *THE SKEPTICAL ENVIRONMENTALIST* (Cambridge, England: Cambridge University Press, 2001). See reviews of Lomborg in *NATURE* Vol. 414 (Nov. 8, 2001), pgs. 149-150; and *SCIENCE* Vol. 294 (Nov. 9, 2001), pgs. 1285-1286. And see http://www.wri.org/wri/press/mk_lomborg.html and <http://www.anti-lomborg.com/>.