

INTERNATIONAL
Herald Tribune

New alarms are rung on perils of global warming

The Associated Press

Tuesday, February 27, 2007

UNITED NATIONS, New York: To head off the worst of climate change, governments must pour tens of billions of dollars more than they are into clean-energy research and enforce sharp rollbacks in fossil-fuel emissions, a scientific panel reported to the United Nations on Tuesday.

The United Nations itself must better prepare to help tens of millions of "environmental refugees," the panel said, and the authorities everywhere should discourage new building on land less than one meter, or 39 inches, above sea level.

The 166-page report, two years in the making, forecasts a turbulent 21st century of rising seas, spreading drought and disease, weather extremes, and damage to farming, forests, fisheries and other economic areas.

"The challenge of halting climate change is one to which civilization must rise," said the panel of 18 scientists from 11 nations, whose work was conducted at the United Nations' request and sponsored by the private United Nations Foundation and the Sigma Xi Scientific Research Society.

Their dozens of recommendations about what to do to mitigate and adapt to global warming came three weeks after the Intergovernmental Panel on Climate Change, an authoritative UN network of 2,000 scientists, made headlines with its latest assessment of climate science.

The IPCC expressed its greatest confidence yet that global warming was being caused largely by the accumulation of carbon dioxide and other heat-trapping gases in Earth's atmosphere, mostly from the burning of coal, oil and other fossil fuels. If nothing is done, the panel said, global temperatures could rise by as much as 11 degrees by 2100.

Temperatures rose an average 1.3 degrees in the past 100 years. The scientists who produced the report released Tuesday said further increases this century should be limited to about 3.6 degrees or the world risked crossing a climate "tipping point" that could produce "intolerable impacts on human well-being."

They said global carbon dioxide emissions should be leveled off by 2015- 2020 and then cut back to less than one-third that level by 2100 — via a vast transformation of global energy systems, toward greater efficiency, away from fossil fuels and toward biofuels, solar and wind energy and other renewable sources of energy.

That changeover would be spurred by heavy "carbon taxes" or "cap-and-trade" systems, whereby industries' emissions are capped by governments and more efficient companies can sell unused allowances to less efficient ones.

Such programs — already in use in Europe under the Kyoto Protocol climate pact — have been proposed in Congress but are opposed by the Bush administration, which also rejected the Kyoto treaty.

The White House says that it is spending almost \$3 billion a year on energy-technology research and that that is its major contribution to combating climate change. But the UN panel said such research worldwide was badly underfunded and required a tripling or quadrupling of spending, to \$45 billion or \$60 billion a year.

Specialists say governments particularly should step up research into carbon capture and sequestration — technology to capture carbon dioxide in power-plant emissions and store it underground or underwater. In fact,

the experts panel urged governments to immediately ban all new coal-fired power plants except those designed for retrofitting with sequestration technology.

Among its list of recommendations, the report Tuesday also called on UN agencies to study the need for an internationally accepted definition of "environmental refugee," since treaties recognize only political refugees as eligible for aid from the UN refugee agency.

The report expresses "special concern" that international capacity could be overwhelmed by coastal refugees fleeing seas rising as they expand from heat and melted land ice. Scientists estimate that a rise in sea levels of one meter by 2100 — conceivable in IPCC projections — would displace roughly 130 million people worldwide.