

The report is scheduled to be released Nov. 9, but its summary findings were reported yesterday by the New York Times.

Gunnar Pálsson, Icelandic chairman of the Arctic Council, predicted in an interview last week that the report "is going to generate a great deal of attention throughout the world."

"Climate change is not something that's going to happen -- it is happening all over the Arctic," Pálsson said. "The Arctic is sort of a bellwether" for the rest of the earth.

Iceland has had much warmer summers recently and not much snow in Reykjavik the past two years, Iceland Ambassador Helgi Agustsson said. Pálsson said Icelanders fear two of their most commercially valuable fish -- capelin and herring -- are migrating to cooler waters, which "would have a pretty big economic impact."

The report's authors believe Arctic temperatures will rise several degrees in the coming decades, according to a summary prepared by Gunn-Britt Retter, a technical adviser with the council's Indigenous People's Secretariat. Winters are expected to become warmer, and wet periods in the Arctic are expected to become longer, more frequent or both.

If nations want to temper or reverse that trend, Corell said, they will need to act quickly because carbon dioxide, the gas that is the prime culprit in global warming, typically lingers in the atmosphere 100 years before being recycled.

"If you were to put the brakes on right away, it's still going to take a long time for that supertanker to slow down," he said. "So there's a time scale issue here that does relate to how you decide what to do and how quickly."

Pálsson said that while his country and a few others are suffering the most immediate effects from warming, other nations would have to take steps to curb climate change. "In order to contain these problems, we cannot think in terms of regional solutions," he said.

The Bush administration has consistently resisted calls for mandatory curbs on carbon dioxide emissions, saying that it would cost too many American jobs. A coalition headed by Sens. John McCain (R-Ariz.) and Joseph I. Lieberman (D-Conn.) is pushing legislation that would establish a pollution trading system aimed at cutting carbon dioxide emissions to 2000 levels by 2010, but it lacks the votes for passage.

Dana Perino, spokeswoman for the White House Council on Environmental Quality, said the council's work "is part of the \$8 billion the Bush administration has committed since taking office to climate change research. It reaffirms the importance of moving forward with the president's sensible strategy to address emissions in a way that keeps our economy strong."

Several sources said State Department officials had questioned some of the council's policy recommendations, which are to be released Nov. 24.

Pálsson would not address possible administration resistance to aspects of the report, saying, "the Arctic Council is not a political forum for negotiating policies." But he added, "This is a highly political subject."

It is not entirely clear why the Arctic is warming much more quickly than other areas. One factor is probably albedo, or the heat-reflecting value of ice. Once icepacks melt and that reflective power is lost, temperature increases can accelerate more quickly than while icepacks are intact.

Scientists have found that melting icepacks are more porous than previously believed, a factor that speeds their melt rate once melting begins.

Of particular concern is the rate of melting of Greenland's ice, Corell said. Scientists have estimated that a total melt of that icepack would increase global sea levels by more than 25 feet.