Scientists Call on International Leaders to Protect Vast Boreal Carbon Storehouse

December 14, 2009

Dear Prime Minister Batbold, President Halonen, Prime Minister Harper, President Hu Jintao, President Medvedev, President Obama, Prime Minister Stoltenberg, and Prime Minister Reinfeldt:

As leaders of the eight nations that steward the global boreal forest biome that accounts for more than half of the world's terrestrial carbon reserves and half of the world's remaining intact forests, you have an exceptional responsibility to the citizens of the planet. You also have an exceptional opportunity to show global leadership by calling for mechanisms to better protect these carbon reserves during the upcoming climate negotiations in Copenhagen.

Globally boreal forests are a key carbon pool that has been largely overlooked in the climate change policy debate to date. In fact, boreal forest holds more carbon per acre than any other land-based ecosystem, perhaps two or three times as much carbon as in the tropics. The boreal region is also home to some of the world's last intact forests, abundant populations of large mammals and birds and home to hundreds of indigenous communities. When boreal soils and peatlands are disturbed by development, major carbon reserves are released. These facts make it imperative that the world's policy makers and public now make a concerted effort to ensure that both the boreal forest and its vast stores of carbon remain intact. To achieve this will require both drastic cuts in industrial emissions and importantly, a vast increase in the areas protected for their carbon values and left undisturbed from industrial development.

Industrial emissions of greenhouse gases are moving the world into an uncertain future. Solutions to slow negative impacts of rapid and large changes are still possible, if we act swiftly and strategically on a global scale. First and foremost is, of course, a drastic reduction in industrial emissions of carbon from the burning of fossil fuels. Without real and substantial cuts in the amount of carbon we are putting into the atmosphere, the ecological foundations upon which humans and all life depends will be degraded and changed in more ways than scientists or the public have been able to predict or imagine. The northern parts of the planet, especially within your eight nations, are already experiencing some of the most dramatic impacts and will continue to be among the hardest hit on the globe.

Reducing the loss of carbon from industrial land-use needs to be included as part of the solution. In particular, the accelerating conversion of natural habitats for agriculture, forestry, mining, oil and gas extraction, hydropower and other industrial purposes must be slowed. Globally, land-use change has accounted for nearly 20% of annual greenhouse gas emissions. Because of these emissions, there has been a recent push to find financial incentives and policy instruments that will encourage developing tropical nations to slow deforestation and retain natural forests through environmental service payment schemes and increased protection efforts. This initiative is critical to helping to slow climate change impacts and to

protect the incredible species richness and indigenous cultures of these tropical regions and we encourage you to do your part to ensure that this continues. We also urge you to broaden this approach by including the world's carbon-rich northern boreal forests as a focus for future carbon protection policy solutions.

Policy mechanisms under negotiation should formally recognize the importance of maintaining intact carbon stores in the global boreal forest region and other terrestrial ecosystems and provide incentives for protecting and conserving large intact carbon rich ecosystems. All emissions including those from land-use activities should be accounted for in national carbon budgets and revenues obtained through separate regulatory processes like taxes or cap-and-trade should be used to lower total emissions and maintain intact ecosystems that will be the future climate change refugia for the earth's biodiversity.

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