

Intelligence MEMOS



From: Christina Caron and Glen Hodgson

To: Economy Observers

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Re: **SLOWING THE EROSION OF NATURAL CAPITAL: SCOPE FOR POLICY ACTION**

As we [outlined](#) yesterday, the erosion of natural capital – or environmental damage, including the impact of climate change – is affecting our economic prosperity.

Natural capital's erosion over the past several decades has become a brake on productivity growth, limiting global economic growth. Natural capital has shifted from productivity accelerator to productivity decelerator.

It is increasingly recognized that climate change acts as an adverse productivity shock, reducing GDP and productivity growth at an accelerating rate. The Canadian Climate Institute found that climate change is resulting in large and rising annual GDP losses in Canada, now amounting to 1 percent of GDP.

Wildfire frequency has doubled globally over two decades, risen by 11 times in western North America, and the losses from wildfires have multiplied. The total economic costs of the 2016 Fort McMurray wildfires were estimated at C\$10.9 billion, or 3.7 percent of Alberta's GDP; economic costs of the recent Los Angeles fires may exceed US\$250 billion, or 7 percent of California's GDP. Prominent economists Nicholas Stern and Joseph Stiglitz have reached the conclusion that "there is no high-carbon growth story" in the medium to longer term.

Similarly, biodiversity losses, resource depletion, and pollution generate significant economic costs that have been largely unacknowledged to date.

Scope for Policy Action

The collective and growing natural capital deficit has diminished the global stock of productive capital. An ever-growing economic edifice has been built on a dwindling natural capital foundation. Clearly, economic growth that erodes its own foundation is unsustainable.

How did this happen? For two centuries, natural capital has been generally unpriced, undervalued, and therefore overused. While economic models were developed on the premise of abundant natural capital and scarce physical capital, natural capital has now become relatively depleted and scarce. This is particularly relevant for Canada. Natural capital accounts for a higher share of Canada's total productive capital than in many advanced economies, including the US and most European nations, according to a UN Environment Program analysis.

The general absence of natural capital from conventional economic frameworks has obscured these costs, artificially inflated conventional measures of productive capacity, and deflected needed policy discussion. The systematic integration of natural capital into economic measurement and analytical and policy frameworks will be a critical first step in addressing the current misalignment between economic incentives and environmental sustainability.

Building awareness depends on better data and reporting. Statistics Canada is developing environmental-economic accounts, based on the UN System of Environmental Economic Accounting (UNSEE). A previous Intelligence Memo [proposed](#) the inclusion of natural asset valuations in government financial reports as a useful step.

Next, a forward-looking productivity strategy should identify actions that might slow and even reverse the long-term decline in natural capital, by investing in its preservation and restoration. Because these issues are inherently global, the solutions must also be global in scope, with focused local implementation and reporting.

The UNSEE is now being implemented in more than 90 countries. Two other key international frameworks are in place: the Paris Agreement on climate change; and the Montreal-Kunming Biodiversity Framework, adopted in 2023 by nearly 200 nations with the objective of halting and reversing biodiversity loss. In addition, a new High Seas Treaty, which will allow marine protected areas to be established outside national boundaries, awaits international ratification; and work has been underway to develop a Plastics Treaty, although these negotiations are currently stalled.

No doubt, focusing on longer-term goals in a highly fluid geopolitical and economic environment with multiple immediate challenges will be challenging, as will the implementation of global agreements from which the US is absent.

Other countries and leaders will therefore need to step forward to drive results under these agreements.

Ambition and creativity will be needed to adhere to the commitments in these international agreements, to advance them further, and to develop and implement appropriate policy tools and structures at the domestic and international levels. The ongoing transition towards carbon-free energy sources, often produced at a lower cost, provides grounds for optimism by offering a potential basis for sustained and sustainable improvement in productivity and living standards.

In Canada, the consumer carbon tax appears destined to be abandoned, so other measures will be required to reach our Paris Agreement commitments – a combination of regulation, incentives, carbon pricing for major emitters, and enhanced green investment. A commitment under the Biodiversity Framework to protecting 30 percent of Canadian land and water areas by 2030 will be another important element of a natural capital strategy. Other priorities include taking steps to reduce pollinator decline, remediate contaminated sites, and better manage our fisheries, forests and agriculture for sustainable harvest.

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