An Open Letter from Ecologists Regarding the Proposed Alto High-Speed Rail Project

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As a group of ecologists and conservation scientists based at Carleton University in eastern Ontario, we felt it important to provide an environmental perspective on the proposed Alto High-Speed Rail Project.

The proposed Alto Project presents both environmental benefits and harms. Benefits include potential decreases in greenhouse gas emissions, while harms include wildlife habitat loss, reduced ecological and hydrological connectivity, pollution, and disruption of social-ecological systems. Whether the harms outweigh the benefits will depend on how well the harms are mitigated. Effective mitigation of the environmental impacts may be possible, but it needs to start now, before route selection. For example, could the Alto line use existing rail and road rights-of-way to reduce habitat loss? And what about the possibility of raising the rail line in some areas so that people, water and wildlife can transit freely below? We urge the Alto planners to broaden their perspective at this most critical planning stage, to ensure that all avenues for protecting wildlife and ecosystems are included, so that the final result will benefit both people and nature.

Potential Environmental Benefits

There has been much discussion related to the environmental impacts of the proposed Alto High-Speed Rail Project, but it has potential environmental benefits. Trains, especially ones powered by electricity, are an efficient means of transporting people while reducing greenhouse gas emissions relative to other sources of travel (e.g., aircraft, cars, and trucks powered by combustion engines). Alto would connect several major cities (e.g., Quebec City, Montreal, Ottawa, and Toronto), so there would be an opportunity to reduce short-haul flights, which are among the most carbon-producing modes of travel. A reliable, affordable rail line could also reduce road traffic, which would reduce wildlife roadkill, a major risk to many wildlife species.

Potential Environmental Harms

The most obvious environmental harm from the proposed Alto Project is the loss of natural habitat. For example, the proposed routes between Ottawa and Peterborough would extend at least 270 km and require a right of way that could be as wide as 100 m. This represents a net loss of 27 km^2 - almost 300 football fields in area - of the habitats that wildlife depend on, including forests, wetlands, and river/lake beds. In addition, unless carefully mitigated, the Alto Project would sever ecological and hydrological connectivity in the Frontenac Arch Biosphere Reserve, which serves to connect the Algonquin to Adirondack corridor. The Algonquin to Adirondack corridor is the most important natural corridor east of the Rockies and it has been designated by Parks Canada as a priority for conservation. Pollution is also an important concern, particularly during construction, as careful planning is needed to keep sediment from entering lakes and rivers where it can smother fish and other aquatic life. The Project could also disrupt the established social-ecological systems that exist in these areas, altering the ways in which people interact with the environment.

Ensuring a net environmental benefit will require mitigating the potential harms - before a route is selected

As far as we are aware, mitigation has been absent from the Alto discussions so far, but this project could be completed while protecting our natural heritage. The reality is that almost all human development has environmental impacts, so the real question is how well those impacts can be mitigated. There is much expertise within the Quebec and Ontario region about how to mitigate the potential harms, but expertise must be brought in early in the planning process. To our knowledge, that has not occurred. In fact, discussions about mitigation seem to be relegated to a future phase, after route selection. This is unreasonable, because understanding potential threats and mitigations of potential routes is essential to route selection.

If there are already studies on the potential environmental impacts of the Alto project, we urge the planners to make those publicly available. We also urge the planners to create pathways for engagement with the academic community, who are standing by to provide scientific advice about impacts, mitigation, and trade-offs. A huge investment such as Alto has potential for both tremendous environmental benefits, and environmental impacts, and it must be undertaken with great care and with appropriate investments in environmental protection.

Signed…

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*Note - We have not included references here for simplicity and clarity, instead drawing on our collective expertise on these topics. Nonetheless, the statements and perspectives provided here are all supported by scholarly literature - including studies conducted by the signatories.

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