Now that we have made the environment a priority issue for policy-makers it is time to embark on concrete solutions to tackle the emissions contributing to climate change. Transportation accounts for a majority of the carbon dioxide emissions in our society, but few of us would be willing to give up the convenience of quick and easy travel from point A to point B in the name of reducing our emissions. So how can we maintain the current level of speed and convenience without burning copious amounts of fossil fuels? The answer: High-speed trains.

Although the average population density across Canada is not sufficient to support high-speed trains, there are regions within Canada that could comfortably support them. The best example is the "corridor" between Windsor and Quebec City. Most of this route follows Highway 401, which happens to carry the most traffic of any highway in North America. Not only would a high-speed train route along the corridor displace cars travelling along the 401, but we would also reduce the amount of flights between cities along the route such as Toronto, Ottawa, and Montreal. Short flights between these cities are the worst for carbon dioxide emissions because planes burn most of their fuel during takeoff and landing.

The high-speed trains Canadians love to ride when travelling in Europe are powered by electricity. The beauty of operating our transportation system on electricity is the flexibility available for its source. We can generate electricity from any number of carbon dioxide free sources, including hydro, wind, solar, and, yes, even nuclear.

It seems that as we get more educated about nuclear power we are starting to realize that it may not be as evil as we once believed.

The convenience of high-speed trains is something that cannot be overlooked. VIA Rail currently operates train service along the corridor, but it is underutilized. The trains we have now run on diesel fuel and they are sluggish compared to their modern-day counterparts.

If the tracks are upgraded and converted to allow for electric trains, we could install trains that run at speeds around 350 km/h and could compete with planes for quick travel between cities. These track upgrades would also provide jobs, and a high-speed train route would serve as an incentive to expand local mass transit systems. There would also be the potential for increased tourism to the region.

It is likely that we will need many different approaches to tackle the climate change problem.

What we need to do is start right now with proven technologies and concrete solutions such as high-speed train routes.

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