Follow up information to Senator Fraser’s question on December 15, 2016

Senator Fraser: Driving around the countryside, we increasingly see quite large farms of solar panels, but what I don't have is a fix on how large one of those collections of solar panels would have to be to supply a village. Do you have any sense on that? I'm thinking about your acute comment about social resistance to too much land use.

Mr. Fogwill: Going back to my point about low energy density for wind and solar, I wouldn't be able to give you an exact number right now. I could in terms of a follow-up. It would be extensive, and it would be several acres for a small village, and even larger than that as the community became larger.

Senator Fraser: Thank you. If you do have any data, it would be good to see.

Mr. Fogwill: Okay.

If we had to serve a community the size of Guelph, it would take about 6 to 7 sq kms of solar PV arrays, given that the capacity factor is about 15%. That would equate to about 380 MW of installed capacity.

If we used a combined cycle gas turbine, it would be smaller than a Costco store. Capacity required would be about 95 MW (capacity factor of 60%).