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**R. Atkinson**
Head, Drafting Department
Vancouver Community College
Vancouver, B.C.

*We welcome the use of* ***Science Dimension*** *articles for non-profit, education purposes.* ***Ed.***

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## Wind Article a Low Blow

The only thing diffuse about wind energy is the way Wayne Campbell describes it in "Project Éole: Catching Gaspé's Winds" in *Science Dimension* (1983 No. 6).

In his article, Campbell claims one reason Canada may not tap wind energy in a big way is because the strongest, and therefore most promising, wind resources are usually found in remote regions where the energy is not needed. This generalizes the truth to the extent that it hides it.

If you look at a map of wind energy resources in Canada, Campbell's generalization appears to be true. The greatest areas of terrain with high wind speeds are found in northern Canada, far away from the gluttonous south. But if you look a little closer, you will find regions with equally promising wind energy resources around St. John's, Newfoundland, in southern Alberta, and along the eastern seabord like the Gaspé penninsula, where Éole will be tested.

Is St. John's, Newfoundland, a remote area where the energy is not needed?

And what constitutes a remote region? In his paper "Wind Power: A Viable Energy Option," Saeed Quraeshi of Shawinigan's Advanced Energy Technology Department quotes data produced by the NRC in 1977 that says over 548 000 MW of potential wind generated capacity exist within 150 miles of Canada's electric utility networks. And, the two provinces of Quebec and Manitoba have the highest potentials of 100 000 MW each. Clearly, there is as much harnessable wind energy in Canada as our electric utilities are technically capable of absorbing.

It would appear the reasons why Canada may not use wind energy in a big way are not so much due to the fact that the wind energy resources are far away from the places where the energy is consumed, or because it is uneconomical to transport that energy over large distances; rather the biggest reason is political, not economic or technical.

I think George Orwell said in his book *1984* that in a time of universal deceit, telling the truth is a revolutionary act. If *Science Dimension* is not prepared to explore the future of renewable energy technologies except in inaccurate generalizations, then maybe it should maintain its integrity by avoiding the subject altogether. In my work writing for *Renewable Energy News*, I spend many hours trying to undo these generalizations. Why don't you give me a break?

**David Hoffman**
*Renewable Energy News*
Ottawa, Ont.

*While the statement that the strongest winds tend to blow in sparsely populated areas has exceptions, such as St. John's as you point out, it is nonetheless generally true. In St. John's there may well be significant opportunities for wind energy if it is competitive with local, alternative sources of energy.*

*The point that you make about the almost 550 000 MW of potential wind-generated capacity within 150 miles of our electrical utilities is a little more complicated. It is true that you can get a figure for the magnitude of a wind energy resource by multiplying the aerokinetic power density (based on regional average wind speeds) by land area and time. However, the fraction of this resource that it is technically and economically feasible to utilize for any job depends on the efficiency with which it can be converted and transported to the locale where it will be used. If you look at the agricultural potential of the Sahara desert it is useful to know the volume of water in the Mediterranean Sea, but this does not by itself solve the problem of turning these sands into a garden.*

*Finally, it has to be said that* ***Science Dimension*** *has reported the way things are NOW, in the PRESENT. Today, windmills* ***are*** *expensive, and there isn't yet a cheap, convenient way of storing and transporting large amounts of electrical energy. But research in these areas has already made significant progress, both in increasing the performance of wind energy systems and decreasing their costs. More progress is needed, however, and, as you are no doubt aware a great deal of work — like Projet Éole — is now under way.* ***Ed.***

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## Happy Valley Oversight

It's a little annoying when, a week or more after you've witnessed a craft of the Space Shuttle's magnitude visit your town/city as a "first" visit and landing outside the U.S.A., the National News and newspapers flash headlines of the Shuttle's first visit to Canada mentioning the same four cities you have in your article (1983 No. 4).

It is more annoying that after this much time has passed the correct information is still not being published.

I am sure the Shuttle's movement from the time it left the U.S.A., was displayed at the Paris Air Show, and then returned to the U.S.A. was not top secret information and could have possibly been obtained by your personnel.

The *Enterprise* made her first and second visit and landing in Canada at Happy Valley — Goose Bay, Labrador, in June. I might add that the first landing here was it's first landing outside the U.S.A.

The visit was highlighted with ramp visits made available to bus load upon bus load of school children, and camera buffs of all ages.

**Bernard Crawford**
Happy Valley, Labrador, Nfld.

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