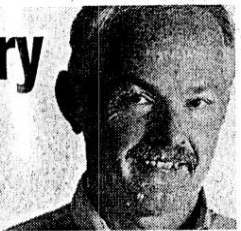


Looming energy crisis? Perhaps the solution is right under our feet

This Country

ROY MacGREGOR



Ron Tolmie is convinced he found the future in the past. The long-time employee of Atomic Energy of Canada Ltd. had moved into a farmhouse on the outskirts of Ottawa, an old stone structure that was cool in summer and freezing in winter, and he began to think about ways in which he might warm things up without melting his savings.

He remembered growing up in Southwestern Ontario in the 1930s and 1940s, and how ice was kept in summer by packing it in sawdust.

If you could store cold in summer, he wondered, why not heat in winter?

A simple question he thinks can be easily answered.

Unfortunately, no one's listening.

Tolmie, now 73, has taken his training in physics, his years at Atomic Energy, his contract work with the National Research Council, his own experience in the high-tech industry and come up with a solution he believes could save Canada from itself — if only Canada would hear him out.

But so far, he's had no reaction. He writes articles no one will publish, sends in papers no one takes time to read. And yet, absolutely convinced in his own heart and head, he carries on.

What Tolmie proposes is that Canada start thinking about a radical new approach to energy before it's too late. He believes the technology is available to store whatever is necessary in the ground. Heat that can be tapped into in winter; cold that can be captured in summer for cooling.

He calls it "seasonal storage," and he says the old ice house is but one example of how the theory has already been proved in the past.

"There's nothing new at all to it," he says one morning over coffee.

What sawdust can do for ice blocks, he says, solid rock — the ultimate insulator — can do so much better for both heat and cold. By sinking multiple bore holes into the rock base, solar heat and winter chill could be pumped down and conveniently stored for long periods. There are already, he says, such projects to be found in France and California — and even the odd one in Canada — but they get very little publicity and are largely dismissed by the energy establishment.

"It's pure David and Goliath," says Tolmie. "They have hundreds of billions of dollars. Seasonal storage has no identity. You don't have hundreds of billions of dollars — you don't even have hundreds of thousands of dollars."

All he has are his arguments.

Solar energy is as cheap as energy comes, and more efficient, he says, than is generally presumed. "The message is out there that renewable energy cannot possibly provide enough. But you need only Grade 6 science to know that's nonsense."

"The amount of solar energy landing on the reservoir behind a dam has more power than what that dam is capable of generating."

With available technology, he says, such free heat can be easily stored and could do much more than merely heat our cities in winter and cool them off in summer. It could save the country.

His experience in nuclear energy leads him to believe that it is not the answer — neither in cost nor in available uranium — and, he argues, if the nuclear industry cannot deliver, then more pressure will be put on oil and gas.

People have been conditioned to accept the rising cost of this energy source, he says, but they should not accept the environmental cost.

"If you go by the scientific papers rather than the newspapers," he says, "we're reaching to a

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point in global warming where we won't have the capacity to change our ways."

He ticks off a long list. A decade left in proven conventional oil reserves. A mad rush to develop the tar sands, with dire consequences for both natural gas and water. A growing sense that technology — which made the tar sands possible — will one day turn its attention back to Canada's vast coal reserves, creating even more problems.

"The problem is not supply," Tolmie maintains. "We're not running out of energy. We're running out of an ecology that can cope."

His main concern, no surprise, is Alberta, where the tar sands are seen by some as a financial boom and by others as an ecological explosion. "This is something we should not be allowing," he says. "Alberta should have a bright future, but it's going to be a basket case. We're doing things that will make life hell for our grandchildren."

There is an answer to all this, he says, and it's right below our feet.

But so far, no one's listening. He feels like a voice in the wilderness in a country where, one day, there may be no wilderness left.

"I'm baffled," he says of the lack of response. "I don't mind at all if anyone says it's nonsense. I'm sure there are some faults with what I'm proposing, and there are always things that could be improved."

"I'm not worried about negative reaction nearly as much as I am about no reaction."

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13/04/06

Your tipsheet to today's news

Final horrifying minutes

Jurors listened yesterday to the terr minutes on board hijacked United. Flight 93 as passengers fought al-Q rorists but failed to get into the coc fore the extremist at the controls cr Boeing into a field in Pennsylvania

The \$2-million Russo deal

Five organized-crime figures, inclu patch member of the Hells Angels, guilty to charges yesterday in a cor plea deal that awarded Toronto m Louise Russo \$2-million for the un hit that paralyzed her two years a

Environment budgets may

The Conservative government pla spending on Environment Canada designed to fight global warming t cent, and wants cuts of 40 per cent budgets aimed at climate change; government ministries, according ments obtained by The Globe and

Godfrey quits leadership r

Toronto MP John Godfrey became declared candidate to drop out of leadership race, deciding that nev concerns would keep him from fo campaign. A4

The sound of Sutherland

Theirs are voices that advertisers find irresistible. The Canadian-born father-and-son team of Donald and Kiefer Sutherland have voices you don't want to mess with. They pitch big-name products from Volvo, Ford, banks and beverages. R1



Remembering a matriarch

A coalminer's daughter, Marion M trained as a nurse during the Dep married the local doctor and bec as "the matriarch" of Springhill, t cause of her involvement in com fairs. The mother of singer Anne never let her daughter's internati overshadow her affection for her children. Obituary. R5

Iran to go on with uranium

In a further rebuff to the UN Sec cil, Iran said yesterday it plans tc with a large-scale uranium enric gram capable eventually of prod enough material for a nuclear bc

Ottawa won't support Nf

Prime Minister Stephen Harper throw Ottawa's weight behind th foundland government's bid to f velopment of the potentially ricl shore oil stake. B1

Clarification

Tim Naumetz is a freelance writ reporting on the federal accoun for the Ottawa Citizen, a CanWe per. An article yesterday incorre fied him as a CanWest reporter.

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The counterfeiters tried to make loonies, but failed. They couldn't make heads or tails of it.
— Peter Barwin, Kelowna

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