

Presentation to the Parliamentary Committee on Natural Resources Canada

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Thank you Mr. Chairman.

The Canadian Solar Industry Association (or CanSIA) represents the solar industry in Canada. We are a small industry, both in the context of Canadian society, and also in relation to the solar industries of other nations. In Canada the solar industry employs about 700 people – while Germany's solar industry employs 50,000 and in China it is estimated that the solar industry now employs over 200,000.

Canada is an energy rich nation – we are fortunate to have a bountiful supply of energy resources – both renewable and non-renewable. Canada has invested, and taken advantage of our non-renewable resources and as a result our oil and natural gas reserves have contributed significantly to our high standard of living.

But these energy resources are finite – at some point – 20, 30, 100 years from now they will not be able to meet all the energy needs of Canadians. Just like the sands in an hourglass – our carbon fuels are slowly running down – if we add more sand or restrict the flow – they still run down.

Three questions this committee should consider in pondering the future energy policy of Canada:

- Over the next two decades will energy prices go up or will they go down?
- Do nations want to import more energy or less?
- Is the world getting more concerned about climate change or less?

We must look outside of Canada's borders to see what countries are doing that are not blessed with Canada's rich, but finite, non-renewable energy resources. These countries are facing now what Canada must face in the future. And what we find is that solar energy is playing a major role in the energy policy of other countries.

- Solar energy is now a 15 billion dollar a year industry worldwide– and is growing by 35% annually.
- The price of solar energy is dropping – it is the only energy source that has seen its price drop consistently over the last 20 years. And it will continue to drop in the future.
- Our great neighbor to the south has recently announced a target of installing 10,000 MW of solar electricity over the next decade. Canada has no targets.
- Japan – ever the long-term thinker - has a solar target of 100,000 MW by 2030.
- Germany - the world leader for solar electricity – installed over 600 MW last year. Canada installed less than 2.
- In Austria – 1 out of every 7 homeowners now uses solar to heat their hot water. The village of Gleusdorf in southern Austria, with 35,000 people, has a greater installed capacity for solar heating than all of Canada.
- China has a renewable energy law that requires every new building to use solar water heaters. And as a result China is the largest solar market in the world with over 10,000 solar manufacturers. Canada has 4.
- Nor is China alone in mandating the use of solar – Israel, Spain, Greece, Holland also have similar federal building codes.
- The major solar firms now include names like Sharp, Sanyo, BP, Shell, and General Electric. Recently the National Bank of Canada issued a report on solar recommending the solar industry sector as a major investment opportunity.

- Globally – solar energy is becoming big business.

And what is Canada doing to prepare for the day, when the price of solar will be cheaper than other energy supplies, when other nations don't need or want our oil and gas, when other countries are reaping their investments in climate change technologies?

- In Ottawa you can not install legally a solar water heater in your home.
- In Calgary you cannot send your solar electrons into the grid with net metering.
- In Vancouver you do not have a right to the sunlight falling on your roof.

My message today is that Canada is not looking to the future of its energy supply but is rather stuck in the past. That the lack of government and political leadership in the past is creating serious problems for our children who will have to compete with nations that have taken their energy future into their hands today.

While in the 1980s Canada was a world leader in solar, Canada now lags every one of our trading nations in its support of solar energy. While other nations have moved ahead steadily – there has been 20 years of inaction in Canada. Now, even many third world countries are surpassing us with their levels of support for solar.

There is no support for solar PV by the Canadian government. Canada invests only 14% of what other industrialized nations invest in solar electricity – and this is spent on R&D. So while other countries are investing money on building industry capacity and to bring proven solar products to market, NRCan continues to study solar as something for the future. As a result sales in Canada are less than 20% of the international average – we are falling further behind each day.

Ontario is the shining light in Canada for solar with a recently announced provincial program that will see sales grow from 0.1 MW to 15 MW per year in the next 5-10 years. But remember that Germany now installs 40 MW a month. NRCan officials continue to say that PV is not cost effective for Canadians and not ready for the market place. So what does NRCan know that the rest of the world doesn't?

Solar is supposedly included in Class 43.1 of the income tax act. It is a tax measure that allows renewable energy technologies to be written off faster by companies. And yet solar is the only renewable energy technology that has restrictions placed on its participation – over 95% of solar applications are excluded from Class 43.1.

Use a wind generator that provides electricity that in turn runs an electric water heater – you're included – but heat that water using solar and you're excluded. Build a district co-gen heating plant – you're included – but use solar to heat your building and you're excluded.

For the solar industry Class 43.1 is all smoke and mirrors. Major changes are needed before Class 43.1 is a benefit to the solar industry. We have been lobbying for 10 years to be included in Class 43.1 but to no avail. Why is solar listed as being in Class 43.1 when in fact we are not?

And now I turn to REDI (the Renewable Energy Deployment Initiative). It is the only support for deployment that the solar industry has seen from the federal government since the mid 1980s. It is a small program with a budget of about 5 million dollars for this fiscal year and only provides support for a small segment of the solar market. It is slated to end in March 2007.

While a small budget compared to NRCan's entire 1.1 billion dollar budget, and it pales in comparison with the support provided in other countries, it is never the less all we got.

Currently, the funds for REDI have been frozen since March by the government under a review of all climate change programs and while a new "Clean Air Strategy" is developed and, hopefully, announced this fall.

However the solar applications for industrial and commercial buildings, which REDI supports, are closely tied to the building industry's construction cycle. Sales are made in the spring for installation in the summer. What good is it if REDI funds are available this fall or winter when the industry can't install its products then?

Further, the "freeze" is creating market uncertainty with potential buyers holding off making decisions.

As a result, sales of solar thermal projects, though meager by international standards, have plummeted this year.

If the government is committed to developing Canada's renewable energy resources then this freeze needs to be lifted before it does further irreparable damage to the solar thermal industry. If the government is truly committed to supporting renewable energies then allow the REDI program to act as a transition program to these new support mechanisms that NRCan says it's working on and that the government says it is intending to announce this fall.

So... Currently, there is little support for solar by the federal government, and the only program we have, REDI, is frozen and slated to end in March 2007.

What can the government of Canada do to insure that solar energy plays a role in the future energy supply of Canadians? Renewable energy sources like solar are not just about cleaner air and climate change. Yes solar has major benefits for our environment. But it is also about energy security, providing a cheap source of energy in the future and about providing jobs and wealth for Canadians.

Four key recommendations:

1. A National Energy Framework

Solar is not just a clean air issue – it must be included in energy policy discussions. All solar technologies, passive, PV and solar thermal, must have major roles in the development of a National Energy Framework. We should be planning for 20-30 years into the future for Canada's energy – not just for the day after tomorrow.

2. A Solar Strategy for Canada

We need a firm commitment from government and consistent policies. The government needs to live up to the fine words and often-stated aspirations that it expresses for renewable energies. Recently there have been encouraging words of support for solar from the Minister and the Deputy Minister of NRCan. But we have two decades to catch up on – we now need real, not token, action. We need a solar strategy for Canada.

3. Increase the Federal Budget for Solar to \$75 Million

Canada needs to build solar capacity today so that we'll be ready tomorrow when Canada will need new energy options. As a start the budget for solar needs to be increased so it is comparable to our trading partners. While the actual federal budget for support of solar is unknown – we estimate that it is less than 12 million dollars annually. To put us in the middle of the pack of other nations the budget for solar energy needs to be increased to 75 million dollars.

4. Support for Deployment – Not More R&D

Finally, the government's support needs to go into getting solar into the hands of Canadians. We do not need more study, more R&D – more technology development. I cannot stress this enough. We need to follow the footsteps of other nations who are 20 years ahead of us in their use of solar energy. We need help in developing the market for solar products – we need help in building industry capacity, we need help in getting Canadians to understand the advantages of our products.

As Canada's current energy resources run down – we must have other energy sources ready to replace them. And like every other energy source, like waterpower, oil, and nuclear in the past, it will take decades for solar to begin to make a major impact. But this cannot be an excuse for inaction.

I hope for the sake of my son, and the children and grandchildren of the committee members in this room, that Canada does not let the sands of time run out for Canada's energy future.

Thank you, Mr. Chairman.