The magazine of the Canadian Solar Industries Association Spring/Summer 2009



# ONTARIO INTRODUCES GREEN ENERGY ACT

Legislation and renewable tariffs exemplify a progressive economic plan

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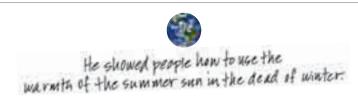
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# TOTAL Spring/Summer 2009

# Ontario Introduces Green Energy Act

Legislation and renewable tariffs exemplify a progressive economic plan

4 Alberta Communities Lasso the Sun

Alberta Solar Showcase raising awareness in a big way

- 7 Labour Forecast Bright Survey shows Canadian solar poised to experience dramatic growth
- Insurance Solutions
  for CanSIA Members
  Affordable and comprehensive insurance coverage at your fingertips
- **19** EcoENERGY Raises Heat on Residential Market

Pilot program aims to install 8,000 systems over three years



**6**About CanSIA

Industry News

20 Become a CanSIA Member 21 Solar Calendar

Advertiser.com

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CANADIAN PUBLICATIONS MAIL AGREEMENT #40064978





PUBLISHED JUNE 2009/CSI-B0109/8564

# CanSIA

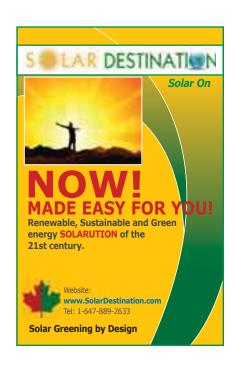
# **ABOUT CanSIA**

# CanSIA'S MISSION

To develop a strong, efficient, ethical and professional Canadian solar industry, able to serve an expanding domestic market, to provide innovative solar solutions to world energy problems and to play a major role in promoting the transition to a solar energy future worldwide.

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# **Industry News**

### **BACKFLOW STANDARD STYMIES SOLAR THERMAL INSTALLATIONS**

Widespread solar water heating is ready to take off after years of work from the industry and government to bring proven technology to thousands of Canadian homeowners, but a glitch in a CSA Standard, which many building and plumbing codes reference, may keep it grounded a little longer.

"This little bug has completely stymied the industry," says CanSIA Chair Patty Hargreaves of CSA standard B64, which specifies requirements for backflow prevention.

CanSIA is not the only organization surprised and a little frustrated to discover the standard deems solar technology a 'severe' environmental risk to water quality unless, as a senior consultant with the city of Toronto's energy efficiency office explains, it is installed with stringent and expensive precautions. "It kills a project's economics," explains Rob McMonagle.

"B64 is a pretty hefty standard right across Canada for all plumbing installations, and there is this one little reference to solar, but that's creating a huge challenge," he says.

A solar domestic hot water system contains a heat transfer fluid, which is heated by the sun. That heat is transferred to a home's potable water system through a heat exchanger, so the transfer fluid loop and potable water system are separate. B64 specifies the measures that must be taken, based on risk categories, to ensure non-potable fluids cannot leak or backflow into potable water. What is frustrating, says McMonagle, is Canadian CSA standard F379, pertaining to the design of packaged solar domestic hot water systems, requires backflow measures that ensure systems present minimal risk. But solar systems approved under F379 still fall under B64's blanket condemnation.

"What has happened is there are two standards, both providing different direction to the people who enforce the standards and the codes," he says.

To deal with this and similar problems, a solar thermal action committee on codes and standards, or STACCS, was formed in December at CanSIA's 2008 annual conference. McMonagle chairs the group

of about a dozen people collected from the industry and government across the country. Hargreaves, too, is a member.

"We're listening to manufacturers, installers and municipal officials," she says. "They're telling us this is a problem. There's a lot of work to do, but we're making progress."

The Ontario Ministry of Municipal Affairs and Housing, responsible for the Ontario Building Code, is also listening, says Hargreaves, and because code enforcement is municipal jurisdiction, this is the quickest path to a resolution in Ontario. She hopes other provinces will also take action. Otherwise, the B64 challenge must be overcome one municipality at a time. STACCS is working with CSA to have standards changed to alleviate the backflow prevention issue but getting the CSA standards rewritten, says McMonagle, could take years.

"The photovoltaic industry dealt with codes and standards issues back in the 1990s," he says, "and it seemed like it would never go away, but it got resolved."



### CANSIA BOARD EXPANDS INDUSTRY REACH

CanSIA's eight-member board of directors has spent much of the first half of its 2009 term working with all levels of government to resolve persistent national barriers to solar thermal deployment, and consulting within Ontario to help design a solar power feed-in tariff.

"The feed-in tariff program is groundbreaking throughout North America and has meant we're very active with stakeholder sessions. We want to make sure we arrive at a workable program for the industry," says Patty Hargreaves, CanSIA chair. "This program has the potential to roll out to the rest of the country. If it's a failure no other province is going to consider it, but if it's a success we have a foundation."

Work on the thermal side, says Hargreaves, extends to consulting with a growing number of provinces interested in solar water and air heating programs, and with federal ecoENERGY programs for renewable heat. "We have very good relationships at the federal government and with provincial governments, and our work with the solar thermal action committee on codes and standards is addressing building code, standards and CSA product certification issues."

Hargreaves and Vice-Chair David Eisenbud sent a letter to members in March, outlining some of the association's plans for 2009 and recent accomplishments. They also encouraged members to solicit solar companies and organizations to join CanSIA, and to get involved in national or regional objectives.

"One of the things we've been successful with so far this year is enlisting our members to participate in activities and work on committees, both solar thermal and PV. Support from members has enabled us to tremendously expand our reach," says Hargreaves.





### 2009 CONFERENCE PLANNING BEGINS

CanSIA's 2009 conference, December 7–8, at the Westin Harbour Castle in downtown Toronto, will evaluate major strides in and opportunities with provincial and federal policy development, as well as raise questions about where the industry should focus its attention in 2010.

"We have got to start focusing on a national strategy for solar, instead of province by province," says association President Elizabeth McDonald. "What's really interesting is the question about what our federal government should be doing. That has to be an important discussion. There is no real national strategy for renewable energy." Canadian policy and opportunities, particularly in Ontario, are attracting international interest, says McDonald, and this, too, will be reflected in the 2009 conference. What other countries are doing, especially the U.S., will also be discussed and is important to understand if the Canadian industry is to compete in global markets. The U.S. Solar Energy Industries Association has achieved a national commitment from Congress, with a 30-per cent investment tax credit for residential solar thermal and photovoltaic installations to the end of 2016.

"We're getting pushed by the U.S. There is no question," says McDonald. The Toronto conference must also dwell on the Ontario Green Energy Act and all that will have come from it by December, with particular attention to how this type of significant government policy can find footing elsewhere in the country.

"We're going to see more about other provinces. There are interesting developments, and I'd like to see some discussion about other provinces and jurisdictions. We'll have lessons to exchange."

More than 700 delegates attended last year's event, with a sold out trade show of 84 exhibitors. Contact CanSIA for more information; visit www.cansia.ca or call 866-522-6742, ext. 221.





# **CANSIA WORK MOVES WEST**

CanSIA is strengthening its efforts to advance the solar industry in Western Canada through the formation of a provincial caucus in British Columbia and the ongoing work of an Alberta committee.

"There are 30 CanSIA members in Alberta, and I have commitments from about a dozen to help put together a proposal to the province," says Dave Kelly, president of Calgary-based Sedmek Renewable Energy Systems.

The only provincial strategy benefiting the Alberta industry is a new micro-generation policy and associated regulation, updated earlier this year and designed to ease the installation of distributed alternative technologies under 1 MW, and to allow credit for excess generation.

"We'd like to see a feed-in tariff. It has not been excluded in changes to the provincial regulation, which means the mechanism is there if we ever get to that point."

Kelly says the Alberta committee will also propose provincial incentives for solar hot water, as neighbouring British Columbia and Saskatchewan have done.

Meanwhile, Joe Thwaites, president of B.C.'s Taylor Munro Energy Systems, says 40 CanSIA members turned out to the recent inaugural meeting of CanSIA-B.C. Thwaites says there is a lot happening in B.C., particularly on the solar thermal side with three proponent organizations working with the federal government's residential solar water heating deployment pilot. His company is connected to a pilot project, which recently completed the installation of 25 systems in a B.C. aboriginal community. And one of the pilot's most notable partner programs, SolarBC, launched in July 2008 and aimed at facilitating 2,000 residential installations by 2011, has done about 20 systems.

Citing regulatory barriers, Thwaites says there is a lot of work ahead to get the B.C. market moving. "I think we've also got a challenge with the economy right now. It's going to be hard to move the market when people are thinking about whether they still have a job in a month."

# Industry News

### ENERWORKS SUPPLIES WORLD'S LARGEST SOLAR HEATING AND COOLING INSTALLATION

EnerWorks has made a bold statement of its commitment to solar cooling with its technology now powering the largest solar thermal heating and cooling installation in the world. Six-hundred and forty EnerWorks solar thermal collectors are rack-mounted on the roof of the Fletcher Business Park in Fletcher, North Carolina, providing solar thermal heating and cooling for the industrial/commercial warehouse and offices.

"This entry into solar cooling demonstrates the possibilities of our proprietary technology for cooling," says Dr. Phil Whiting, EnerWorks president and CEO. "Solar cooling will be an area of significant growth for our company."

EnerWorks has entered into an exclusive partnership in North Carolina with Vanir Energy, LLC. Vanir Energy owns and operates the system and brought significant knowledge on linking solar thermal technology to space heating and cooling.

"When we were choosing partners for this project, EnerWorks came right to the forefront," says Steve Hunter, Vanir Energy's chief operating officer. "Their appliance approach to manufacturing gave us confidence as the equipment was preengineered, pre-tested and assembled before arriving at the job site. Their collectors are the highest energy-producing collectors available, and the integration between their in-house engineering and on-site project management brought the unrivalled level of support we were seeking of our partner."

"We received the order in early October," says Doug Kless, EnerWorks director of business development for the Southeast (U.S.), "and the system was commissioned at the end of



Photo courtesy of EnerWorks Inc.

December, ahead of schedule. From start to finish, it was a smooth process and a fabulous start to our partnership with Vanir."

"We were particularly impressed with EnerWorks's engineering team and the insights and value they brought to the design and installation of the system," adds Alex Leon, president of Vanir Energy. "Our due diligence revealed the exceptional quality of EnerWorks's solar thermal application, key to our selection of EnerWorks as the exclusive partner for all of the remaining projects in our Vanir Fund One, which makes entrance into this technology barrier-free."

# KINGSTON TO BE NEW HOME FOR CANADA'S FIRST SUPPLIER OF NEXT-GENERATION THIN-FILM SOLAR PANELS

After reviewing several locations, Everbrite Solar, a division of Everbrite Industries Ltd. of Toronto, announced plans to locate its state-of-the-art ultra-high efficiency photovoltaic (PV) manufacturing facility in Kingston.

With the help of several financial advisers, Everbrite Solar is raising \$500 million to invest in a highly specialized, robot-controlled manufacturing facility using leading-edge technology in the realm of "thin-film" solar module production. Everbrite also looks forward to discussions with the Government of Ontario regarding the project and the opportunity it presents. The planned plant will have an annual output of thin-film modules capable of generating 150 MW of clean solar power, and generate more than 1,200 direct, indirect and induced "green collar" jobs in the Kingston area.

"With this next-generation optical and coating technology and mechanized production process," said Everbrite

Solar President and CEO Karl Scherre, "generating clean solar power will, at last, be cost-competitive with electricity produced from the burning of fossil fuels."

Everbrite Solar's revolutionary technology surpasses traditional thin-film modules by dramatically increasing the efficiency of the module, lowering costs significantly and eliminating the environmental hazards associated with the earlier generations.

A key part of the announcement is Everbrite's intention to seek a collaborative research agreement with Queen's University to engage a multidisciplinary team of researchers to help ensure that Everbrite continues to be at the forefront of photovoltaic technology. Everbrite intends to invest up to \$25 million to build an experimental thin-film manufacturing facility to which

the Queen's researchers will have access for their studies and, as a result, help ensure that Kingston remains a focus of excellence in thin-film solar technology.

By using a broader spectrum of light and thereby producing electricity for more hours daily – even on cloudy days – these modules are ideally suited to the Canadian climate. Demand for solar panels is expected to increase exponentially, and Everbrite Solar is confident that the company will be in a strong position to capitalize on what is expected to be a \$50-billion market by 2012.

"Here in Ontario, having a stable and home-grown supply of solar panels will help the province achieve its goal of shifting more of its electricity production to renewable sources of energy and make Ontario a leader in the field of solar power generation," said Scherre.



# ONTARIO INTRODUCES GREEN ENERGY ACT LEGISLATION AND

# LEGISLATION AND RENEWABLE TARIFFS EXEMPLIFY A PROGRESSIVE ECONOMIC PLAN

# ONTARIO HAS INTRODUCED

SWEEPING new green energy legislation and longterm guaranteed prices for photovoltaic generation, inspiring hope that this is the threshold of change for the Canadian solar industry.

"You want to see this happen because it's not just about Ontario," says CanSIA president Elizabeth McDonald. "It's about what other provinces see, and whether they see an attractive combination of opportunities that will make them more interested in solar energy."

The Green Energy Act provides priority access to the grid for renewables, streamlined project approvals and quicker action on transmission system upgrades. "The Green Energy

Act itself is a framework that, when accompanied by a number of policy initiatives, will provide the opportunity here in the province of Ontario for billions of dollars of investment to occur," says Minister of Energy and Infrastructure George Smitherman.

Shortly after the act was introduced, the Ontario Power Authority proposed a feed-in tariff, or FIT program, with prices for electricity generated by solar and other renewable resources. The OPA also conducted stakeholder consultations to come up with program rules and a power purchase contract.

"Those are difficult details," says CanSIA vice-chair David Eisenbud, sales director for SunPower Energy Systems Canada. "If the pricing isn't right, which is my primary concern, it will not attract investment necessary to support the business activity."

Proposed photovoltaic tariffs, to be paid through a 20-year contract, are divided into two categories: rooftop and ground mounted. The OPA wants to contract ground-mounted PV generators at 44.3¢/kWh for installations no larger than 10 MW. It also proposes to reduce this price by 9 per cent each time the sum of its contracts increases by 100 MW. Because ratepayers support FIT, and the energy ministry estimates the proposed pricing schedule will add about I per cent to Ontario electricity bills, the power authority says it is cautious about pricing ground-mounted PV too high due to its potential impact on rates.

OPA CEO Colin Andersen says its recommendations are based on experience in Ontario and other jurisdictions around the world using the feed-in tariff mechanism. "The prices we're putting out

investors fail to materialize, the whole of the solar market will suffer, as will the economic goals of the Green Energy Act.

"This is an economic development initiative that will be funded primarily by ratepayers," says Eisenbud, "and value will come back to ratepayers, which is an important point, through local project spending and the circulation of investment dollars. Solar is a high-growth sector of the global economy and will help build businesses throughout Ontario."

Rooftop tariffs are delineated into four groups with prices declining as capacity increases: 10 kW and less at 80.2¢/kWh; 10 to 100 kW at 71.3¢; 100 to 500 kW at 63.5¢; and more than 500 kW at 53.9¢.

An area of concern with the proposed rooftop PV plan is a draft rule for behind-the-meter settlement, which entails the OPA subtracting the province's hourly

capacity and for installation barriers to be removed. The OPA's renewable energy standard offer program, or RESOP, which paid PV generators 42¢/kWh starting late 2006 and is being replaced by FIT, proved to be more effective at inspiring contracts than completed projects. Beyond the careful consideration of price points and a degression rate, Eisenbud wants the OPA to be cognizant of the challenges of building a market.

"If there is too short a time period where CanSIA members can bring the capacity to the market and hire knowledge and service, if it's too short before review or if there are still barriers to how the business process leads to projects being built, there will be a start-stop just like RESOP."

Once tariffs are in place, the act does promise to deal with some of the regulatory hurdles RESOP projects faced.

The Green Energy Act itself is a framework that, when accompanied by a number of policy initiatives, will provide the opportunity here in the province of Ontario for billions of dollars of investment to occur.

— Minister of Energy and Infrastructure George Smitherman

today are designed to allow renewable energy projects to recover the cost of building and maintaining the project and also to earn a reasonable rate of return over the duration of the contract," he says.

Eisenbud and McDonald, however, say the ground mount price needs to be higher, and in CanSIA's written recommendations to the OPA the association also asks for "a significantly reduced degression rate," either time-based or triggered by a much higher capacity limit.

"It's the trilogy you have to consider," explains Eisenbud. "The draft proposes a degression, a cap and price points that would short-circuit the market. It's a limiting device on the market as a whole. And it doesn't consider some of the changes CanSIA is presenting that will help support other segments of the market — the rooftop segments."

Eisenbud says CanSIA is providing the OPA with a "backstop" of information to help the agency find a balancing point between large-scale ground PV and smaller rooftop installations, emphasizing that if ground-mount

market price for electricity from its tariff payment. Where a PV generator and host customer are two separate entities, this complexity increases financial risk to the generator, which would be forced to collect the reconciled tariff from the OPA and electricity market revenue from its host. CanSIA has therefore recommended the OPA design a more streamlined payment structure that will deliver the full contracted tariff rate to the generator and allow separate electricity service charges be paid to the service provider.

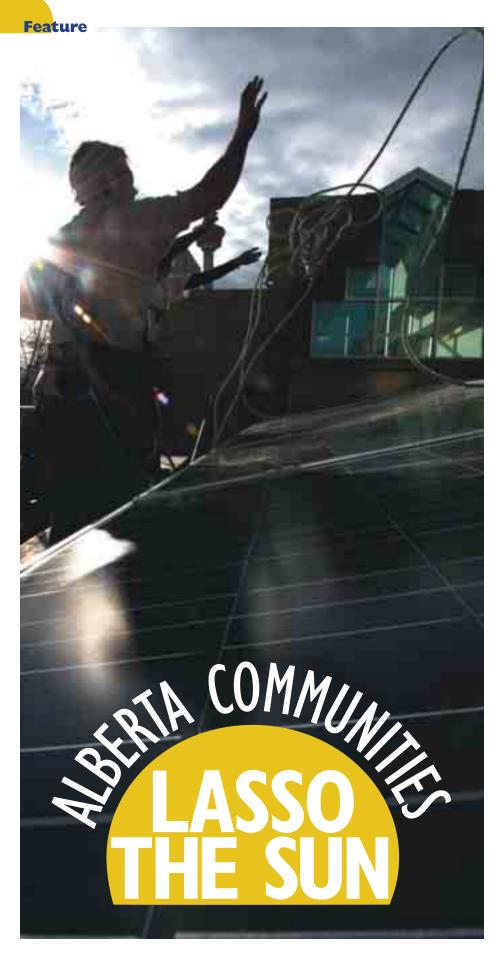
Considering how other more mature markets have evolved, says Eisenbud, CanSIA believes the roof segment, from homes to warehouses, is the long-term growth engine of the market. Both roof and ground installations are needed to balance the market, to attract investment and build capacity in the industry, he says, but the roof segment is a larger volume market category.

Before the Ontario solar market can really take off, though, Eisenbud says the industry needs a runway to build its own Smitherman says it will end what he calls "cumbersome processes that have created a patchwork of municipal bylaws." The proposed legislation says it will exempt renewable energy projects from municipal planning authority and create a "one window, one permit" approach to project approvals that guarantees a final decision on applications within six months.

While CanSIA and the PV side of the solar industry are engaged in the FIT process, the association is questioning the government on how the Green Energy Act will capitalize on the benefits of the solar thermal industry.

"We should be looking at this as a beginning," says McDonald. "Solar thermal people are disappointed. At the moment there is quite a bit of focus on PV, but this is going to be an ongoing dialogue with a government committed to green energy. As we try to get one program settled, the most important thing is to get the legislation passed.

"This is the beginning, not the end," McDonald said.



# WHEN A SCHOOL

AT the heart of a tiny Alberta community lost funding for its bus, it feared for its survival. Already committed to environmental stewardship, Cayley School jumped at the chance to join a novel solar PV project and put itself back on the map.

Now the rejuvenated school has received several awards for its involvement in the Alberta Solar Showcase. "We've got this solar PV installation right in our backyard, pumping electricity into the school, where the kids can see what's happening online." says Cayley School Principal Bill Holmes. "We have community members asking us 'how can I install a system like this and what sort of costs are involved?' It's no longer a far-fetched idea."

Cayley School teamed up with the MD Foothills as one of 20 municipalities participating in the Alberta Solar Showcase. From small towns to the two metropolises, participants have installed demonstration-scale grid-connected solar PV systems on public buildings.

Most Albertans are familiar with stand-alone solar PV that uses batteries to store electricity, but few had never seen a grid-connected system. Indeed, until

Research and writing by Bill Corbett and Mark Wolfe Photograph by Janne Hicklin and David Vonesch I was really impressed with the diversity of communities that got involved. The larger cities participated, but so did much smaller places. Alberta has this rural, conservative image, but the people in these communities are actually very open to [solar] technology.

— Kyle Kasawski of Conergy Canada

recently, only a handful existed in public locations in Alberta. Partner communities represent about 75 per cent of Alberta's population. These 20 systems are raising awareness and educating Albertans about the technology in a big way.

In a province largely powered by fossil-fuel based electricity, Alberta's Climate Change Central (C3) wanted to engage municipal governments in installing small grid-connected systems to educate Albertans about the technology.

With the support of the City of Medicine Hat, C3 found \$350,000 in matching funding through the Federation of Canadian Municipalities to launch the Alberta Solar Showcase in 2006. C3 used the funds to manage the project, provide technical support, build the website, develop detailed specifications and deliver training workshops. Each municipality covered the cost of its PV system.

Medicine Hat was first to erect a PV system in 2006 under this initiative. "It's certainly been a good hook to get the interest of the community," says city Environmental Manager Russ Smith. "It hasn't yet translated into a lot of solar arrays on residential roofs, but it appears to be heading that way." Medicine Hat recently announced rebates of \$6,000 for each residential grid-connected solar PV installation.

The remaining 19 systems were installed between 2006 and early 2009. These arrays are mounted on the rooftops and south-facing walls continued on page 16



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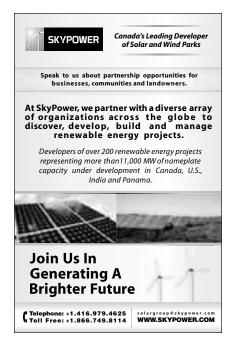


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of town and city halls, fire stations, municipal rinks and pools, libraries, a school and a seniors' centre.

"I was really impressed with the diversity of communities that got involved," says Kyle Kasawski of Conergy Canada. "The larger cities participated, but so did much smaller places. Alberta has this rural, conservative image, but the people in these communities are actually very open to this technology."

An integral part of the project was helping partner municipalities through the maze required to get approvals for grid-connected renewable energy systems. The spotlight this shone on a complex regulatory process may have helped prompt the provincial government to introduce much simpler rules for connecting micro-generation systems to the grid.

"The project raised awareness about the difficulties of interconnection," says Gordon Howell of Howell Mayhew Engineering. "Overall, it was a fantastic project that's building capacity within municipalities as well as suppliers, installers and electricians, many of whom were doing this for the first time."

Indeed, the number of Albertabased members of the Canadian Solar Industries Association doubled during the course of the project. The project also helped to educate other stakeholders including electrical inspectors and utility providers.

The other major educational aspect of the project is its website

(www.lassothesun.ca). Linked through a solar map of Alberta, each municipality has its own page, featuring its solar project and other environmental initiatives, real-time tracking of electricity generated by the solar array and tonnes of greenhouse gases (GHGs) avoided. The project generates some 25 megawatt hours and reduces GHGs by 26 tonnes a year.

Long after the Alberta Solar Showcase formally wraps up this spring, the PV installations and the website will remain. "The detail on the website offers a great project opportunity, so anyone can track the cumulative electricity generated by the project or compare one system to another," says Janne Hicklin, who managed the project for C3

"We recently re-jigged the specifications so they aren't so project-specific." says Hicklin. "These and additional resources and links are also available. Using these resources will help ensure high quality and safety standards for anyone planning a grid-connected solar PV installation."

"It's just the beginning," says Hicklin. "We set something in motion, now it's up to the participants to make the most of it. I'd hope that more municipalities would find ways to accommodate and encourage solar PV. If municipalities could enable the technology through municipal bylaws and provide meaningful incentives, I think Albertans would do more."







# LABOUR FORECAST BRIGHT

# SURVEY SHOWS CANADIAN SOLAR POISED TO EXPERIENCE DRAMATIC GROWTH

# THE ELECTRICITY SECTOR COUNCIL (ESC),

in partnership with the Canadian Solar Industries Association (CanSIA), released the findings of its Labour Force Survey showing the solar industry labour force is poised to experience dramatic growth – 101 per cent – over the next three years.

"We are pleased that along with this survey, we can point to the work already done by Natural Resources Canada in supporting the creation of occupational standards and curriculum for the design and installation of commercial and residential solar hot water and photovoltaic systems. The move certainly supports our findings that training and development are needed to build Canada's solar workforce," said Catherine Cottingham, executive director and CEO, Electricity Sector Council.

"Developing the solar industry's workforce has never been more important as is evidenced in these findings," said Elizabeth McDonald, CanSIA president. "We are pleased the Government of Canada has already taken proactive steps

The survey shows the highest growth rates are expected to fall into four job functions: project management (178 per cent), installation (146 per cent), sales (120 per cent) and manufacturing (107 per cent).



and will continue to work to ensure the solar industry has the talent and skills necessary to fulfill the growth predicted and to enable it to position itself in order to make renewable energy a key part of a worldwide economic stimulus."

The survey was administered when signs of the severe global economic downturn were already apparent. Since then, U.S. President Barack Obama announced his direction regarding environmental programs and the Ontario Government's Green Energy Act. The survey shows the highest growth rates are expected to fall into four job functions: project management (178 per cent), installation (146 per cent), sales (120 per cent) and manufacturing (107 per cent).

To meet the demand, the survey identifies a number of training streams needed to ensure an adequate labour force

to support the optimistic growth targets. Together, the ESC and CanSIA plan to work with the industry and stakeholders to develop policies and programs to ensure the industry has access to qualified and trained human resources to sustain its growth.

In December 2008, the Government of Canada began working with the Electricity Sector Council and CanSIA to develop new occupational standards for solar equipment installers. Work is also underway with the Association of Canadian Community Colleges on developing a national curriculum for designers and installers of solar energy systems. Funding for these investments came through the Government of Canada's ecoENERGY Renewable Heat Program.

The complete 2008 Solar Industry Labour Force Survey Report is available at www.cansia.ca.





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Sharon Macklin, CIP, CAIB Commercial Account Executive



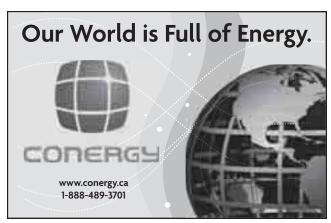
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# ECOENERGY RASES HEAT ON RESIDENTIAL MARKET

# THE FEDERAL GOVERNMENT HAS

more than doubled its residential solar water heating retrofit incentive, offering homeowners a \$1,250-installation rebate and is now working with provincial partners to raise it further still.

"We know partnerships have a significant impact on demand because they mobilize the resources of multiple parties," says Suzanne Deschenes, the Ministry of Resources' (NRCan) acting deputy director for housing in the Office of Energy Efficiency (OEE).

The OEE administers NRCan's ecoENERGY retrofit-homes program, which was launched in early 2007 and soon after offered a \$500 solar hot water installation rebate. In April 2009, NRCan bumped the program's incentives across the board by an average of 25 per cent.

"We more than doubled the grant for solar domestic hot water (SDHW)," says Deschenes, "but we don't know that the provinces are going to match us."

While the OEE looks for funding partners, more provinces and municipalities already offer greater SDHW incentives than ever before, but in sum it is a complex policy patchwork with no guarantee of longevity. The new ecoENERGY rebates are funded through a federal economic stimulus package, and when NRCan Minister Lisa Raitt announced them she encouraged homeowners to act quickly - funding is available no later than March 2011. Right now the solar industry can also promote the federal home renovation tax credit. another stimulus measure. Valued at 15 per cent of an SDHW installation after the first \$1,000, it is worth up to \$1,350, but only until February 2010.

These combined incentives available to every homeowner in the country approximate a 25 per cent rebate on an installed solar system, and a few Canadians

are already or may soon be in a jurisdiction with a federal-provincial SDHW incentive package that offers at least another \$1,000. "As homeowners look into this and realize the cost, the grants and the offset, I'm hoping we'll see some action. In the last year and a half, about 250 systems have been installed though our program, but that is not a measurement of what will be happening in the next year."

Another incentive layer about to be added to the mix is numerous retrofit and new-build SDHW programs, now emerging as a result of NRCan's residential solar water heating deployment pilot. To date, the \$9-million pilot has signed 15 contribution agreements, says Al Clark, NRCan's manager for renewable heat programs. Pilot proponents are in the process of initiating unique deployment plans and will receive federal funding based on the number of completed installations. Overall, the pilot's aim is to install 8,000 systems over three years.

"With the incentive levels out there now it's going to explode," says Clark. "It's given we're going to have thousands of systems, and there are all kinds of issues that come with that. We've got to make sure there are no regulatory hurdles and that we have good installers. It brings with it a range of issues regarding regulatory blockage and industry capacity."

CanSIA President Elizabeth McDonald agrees with Clark, and adds that she would like to see more high-level collaboration between federal and provincial governments to create a real strategy, reducing the policy patchwork and moving solar thermal technology "past the early adoption phase and into the mainstream."

"With the new money out there we're going to see more interest, but even if we can put all of these public programs together and decrease installation costs significantly, I'm not sure how many people know what solar thermal technology is.

We have an awareness issue."





# BECOME A CanSIA MEMBER

IT HAS BEEN MORE than a quarter of a century since the Canadian Solar Industries Association (CanSIA) was formed. Today, CanSIA continues to provide the vital services for solar industry professionals in Canada. We provide the resources that are essential to improve the climate for solar technologies and stimulate the market for ongoing growth and corporate success.

# What is in a CanSIA Membership?

# I) Canadian Solar Industry Directory

Your organization will be listed on our high-traffic web
database providing information on your organization's services
and operations, while also providing a link to your company's
website. CanSIA creates an annual color print version of the
Canadian Solar Industry Directory. This edition will provide
all the same company information, however in a fresh and
glossy format to be widely distributed to government offices,
building associations, trade associations, etc.

### 2) Referral Service

 CanSIA's national office receives numerous phone calls and e-mails every day from potential clients looking to do business with solar companies across Canada. CanSIA sends these inquiries to the Canadian Solar Industry Directory where your company will be listed, helping to generate sales for your business.

### 3) CanSIA's Annual Solar Conference

 The Association's annual conference is growing every year, bringing together solar companies from across Canada and the United States with builders, architects, manufacturers, distributors, installers and other members of the business and finance community. Your CanSIA membership will provide you with discount rates on registration, exhibitor packages, workshops and other events related to the conference.

# 4) Customer Financing Options Available for Qualified CanSIA Member Businesses

 CanSIA has partnered with TD Canada Trust, which will allow qualified solar businesses to provide financing options to customers. This program assists to reduce the upfront solar costs to your customers and is a "Simple, Fast and Easy" marketing tool to help your business grow.

### 5) Business and Employee Benefit Insurance Packages

 CanSIA has partnered with PBL Insurance Limited to offer commercial property/casualty insurance that provides enhanced coverage and specific relevance to solar contractors, manufacturers and wholesalers. PBL also offers specific employee benefit packages tailored to CanSIA corporate members.

# 6) Business Opportunities

 The CanSIA Members section of the website provides listings of Requests for Proposals (RFP) from local and national government agencies and other CanSIA proposals.

# 7) Press Release Listing

 Press release placement on the "News from Members" section of the CanSIA website.

# 8) Job Listing Service

 Place your organization's job opportunities on the CanSIA website to ensure you attract qualified candidates to help manage and grow your business.

### 9) CanSIA Newsletter

Receive the CanSIA biannual print newsletter, SOLutions. This
publication will keep you informed about solar and renewable
energy current events.

### 10) Other Benefits

- CanSIA has updated its website which now includes a fresh new design and web services such as a Members'-Only Forum to create greater value for your CanSIA membership.
- CanSIA members are eligible to participate in CanSIA
   Canadian Pavilions throughout various international
   conferences. Some of these events include InterSolar 2009,
   the 24th European Photovoltaic Solar Energy Conference
   & Exhibition, and SolarPower 2009.

What are the Membership Category Guidelines?				
Voting	Annual Membership Fee			
Corporate 1: 25+ employees or revenue > \$3 million	\$5,000			
Corporate 2: 6–24 employees or revenue > \$1 million	\$1,500			
Corporate 3: 3–5 employees	\$800			
Corporate 4: I–2 employees	\$400			
Non-Voting				
Supporter 1: Large government agencies, utilities or energy regulators	\$1,000			
Supporter 2: Small government agencies and small distribution companies	\$500			
Supporter 3: Large non-profits and educational institutions	\$400			
Supporter 4: Small non-profits and educational institutions	\$250			
Advocate/Individual: Not involved in commercial gain from the industry	\$100			
Advocate (Student/Senior)	\$50			

# How do you join CanSIA?

Easy – simply go to CanSIA's website at www.cansia.ca to fill out the online application and to find out more information on member benefits. Please call the CanSIA office at 866-522-6742 or send an e-mail to info@cansia.ca for additional information.





# **Clean Energy Expo China 2009**

Beijing, China July 8-10, 2009

# 4th Annual Renewable **Energy Finance and Investment Summit**

San Diego, California July 9-10, 2009

# Intersolar North America 2009

San Francisco, California July 14-16, 2009

# Second Annual Solar Convention

Las Vegas, Nevada September 15-17, 2009

# 24th European Photovoltaic **Solar Energy Conference & Exhibition**

Hamburg, Germany September 21-25, 2009

# PV Taiwan 2009

Taipei, Taiwan October 7-9, 2009

# ISES Solar **World Congress 2009**

Johannesburg, South Africa October 11-14, 2009

# **Solar Power International 2009**

San Jose, California October 19-22, 2009

# CanSIA Solar Conference 2009

Toronto, Ontario December 7-8, 2009

# Solar Energy 2010

Berlin, Germany February 16-20, 2010

For more information on these and other upcoming events, visit the CanSIA website at www.cansia.ca.

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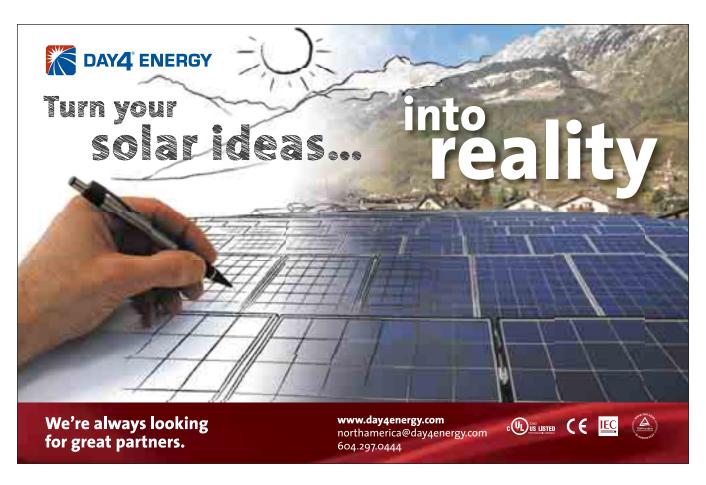


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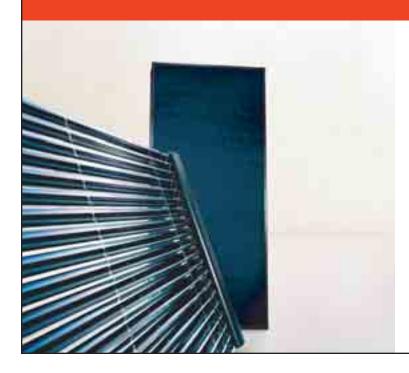
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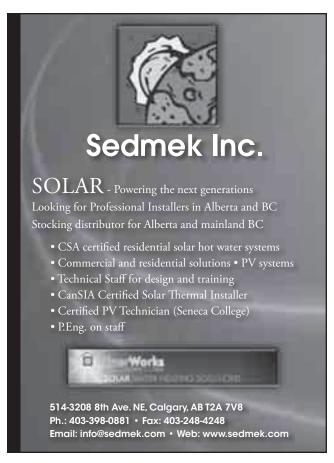
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