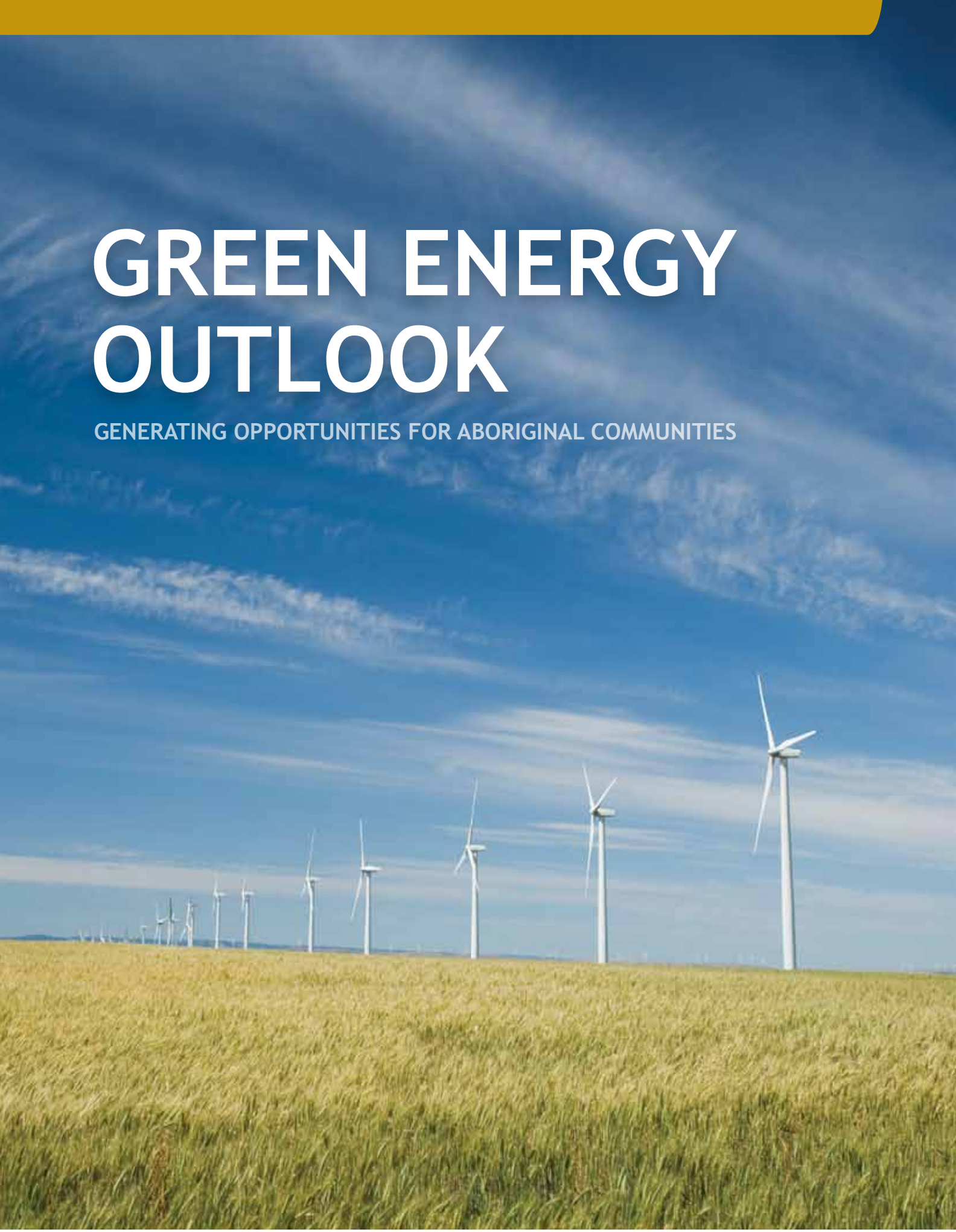
GREEN ENERGY OUTLOOK

GENERATING OPPORTUNITIES FOR ABORIGINAL COMMUNITIES



Aboriginal Human Resource Council
connections – partnerships – solutions

OSEA

OSEA

The Ontario Sustainable Energy Association (OSEA) has been helping municipalities, First Nations communities, businesses and institutions to develop renewable energy projects for more than a decade. OSEA also led the successful campaign for a Green Energy and Green Economy Act for Ontario.

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Aboriginal Human Resource Council
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The Aboriginal Human Resource Council works with large companies and Aboriginal small and medium businesses to develop partnerships and workplaces which promote inclusion. The council develops sectoral and labour market strategies to promote Aboriginal entry to key sectors of the economy.

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Aboriginal Green Energy Outlook

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INTRODUCTION

The Aboriginal Human Resource Council and The Ontario Sustainable Energy Association have come together to publish *Green Energy Outlook: Generating Opportunities for Aboriginal Communities* as part of their shared interest in promoting, advancing and sharing best practices to encourage the full participation of Aboriginal people in Canada's expanding green energy sector.

Aboriginal communities understand the importance of making decisions that sustain creation, Mother Earth, and future generations. Earth, air, fire, and water are basic sacred elements respected across Aboriginal communities since time immortal. It is these same elements that are now fuelling the multibillion dollar "green revolution."

Green energy represents the next great opportunity for Aboriginal communities. Aboriginal communities, business, and individuals are, by nature, in a position to play a vital role and prominent place in this industry.

The ability to efficiently develop and deploy the green industry and the Aboriginal workforce are two most important and intertwined needs in Canada today. Ontario's Green Energy and Economy Act, which allows individuals and companies to sell renewable energy to the power grid at fair, fixed long-term rates is further stimulating Aboriginal potential. The Act is the only one-of-its-kind worldwide that promotes Aboriginal participation with measures that include: an **Aboriginal Loan Guarantee Program**, an **Aboriginal Energy Partnerships Program** and **Aboriginal price incentives** over and above the feed-in tariffs being paid for renewable energy. It is estimated the Green Energy and Green Economy Act will result in the creation of over 50,000 jobs in Ontario's Green **Energy sector in the next three yea**rs, which will drive over $10 billion worth of revenue.

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SECTOR OVERVIEW

Let us not forget that many cities in Canada are less than a hundred years old. Indigenous Peoples have lived in this land for more than one hundred centuries.

A few of the social, environmental and economic benefits of green energy for Aboriginal communities:

Environmental

- reduces greenhouse gas emissions
- mitigates impacts of climate change
- reduces illnesses caused by pollution

Economic

- sustainable revenue generation
- keeps more energy dollars in the local economy
- creates jobs
- provides energy security
- requires straight forward, not highly specialized, repair and maintenance skills

Social

- provides opportunities for local participation and capacity building in local communities
- builds capacity for future projects and initiatives
- offers training in skills in work located in rural communities where it is needed
- creates long-term, high quality jobs and skills
- can become a symbol of the community and a source of pride and identity

The renewable energy sector is exploding around the world. In the race to reduce the greenhouse gas emissions polluting the atmosphere countries are moving quickly to replace their dwindling fossil fuels with more sustainable and secure sources of energy from wind, sun and water. Canada is no different.

As well as protecting the environment and preserving the planet, renewable energy also holds out the promise of new green jobs in manufacturing and maintenance, and for services such as installing solar panels on roofs and insulating homes. The opportunities are boundless and open to everyone, including Aboriginal people whose traditional and treaty land is vital for developing renewable energy.

Canada is a little late in the game. Europe has a much more developed renewable energy sector that began emerging more than a decade ago. Today Denmark produces 20 per cent of its power from wind alone while Germany gets 15 per cent of its electricity from renewable sources. But the newcomers are learning quickly, and the United States is now the world leader in wind, with an industry that employs 85,000 people. Meanwhile, China is gearing up to head the pack in the manufacture of solar systems.

In Canada, the sector is just opening up, often at the individual, community or provincial levels. Ontario is leading the way with the passage of the most progressive energy legislation in North America. The provincial Green Energy and Green Economy Act make it possible for everyone, from a homeowner or community group to a First Nation or a small business, to generate green electricity. As well as eliminating systemic barriers that had held up development, the Green Energy and Green Economy Act offers generous financial incentives for generating renewable energy. The province is paying fixed, long-term prices for green electricity, enabling people to recover their upfront costs - for instance from installing solar panels - and making a fair profit.

The Green Energy Act also provides opportunities for First Nations, Métis and Inuit people and includes strong provisions designed to encourage the full participation of Aboriginal communities specifically. Canada's courts have decreed that Aboriginal communities must be consulted before there is any development on treaty or traditional land, and this is reiterated in the Ontario regulations. At the same time, commercial companies are offered financial incentives to form partnerships with First Nations, Métis and Inuit people. Those Aboriginal communities that own renewable energy generators - in full or in part - are paid a higher price for their power.

Ontario estimates that 50,000 new jobs will be created because of its Green Energy Act. Other provinces and territories are watching Ontario closely. Meanwhile, they are pursuing their own renewable energy plans.

British Columbia's commitment to reducing the province's greenhouse gas emissions by 33 per cent by 2020 has spurred an explosion of interest in renewable energy projects, especially run-of-river hydro generation. Since many of these rivers are located in First Nation territory, opportunities abound for Aboriginal communities to have a financial stake in these projects, as well as a say in how they are developed.

In Alberta, Calgary is committed to running 100 per cent on green electricity by 2012 as a means of meeting its commitment to reducing greenhouse gas emissions, making it a contender to be one of Canada's greenest cities.

The wind blowing across the prairies is a powerful force, one the provinces are poised to exploit. Saskatchewan is investing in both wind power and biomass - clean fuel generated from forest waste - while Manitoba is leading the country in the installation of geothermal heat pump installations. It has also made dramatic investments in wind power and boasts the most aggressive biodiesel strategy in Canada.

Hydro Quebec is both awarding contracts to large wind developers and encouraging individuals, homeowners and small businesses to generate clean energy from their own facilities by offering special rates. It is also soliciting bids specifically from First Nations and local communities to produce power at a premium price.

Meanwhile on the east coast, the provinces are studying off-shore wind and tidal power. In the next couple of years Nova Scotia is expecting to produce 20 per cent of its electricity from sustainable sources, while Prince Edward Island is counting on renewable energy to reduce its high dependency on imported fossil fuels. The development of wind power in New Brunswick is accelerating, and Newfoundland as well, is developing wind projects to tap the province's huge potential.

Aboriginal communities are well positioned to participate in these projects across the country because many will be developed in traditional territories. Aboriginal people also recognize the potential of generating clean energy on their own reserve lands and are pressing ahead, developing wind, solar and hydro projects.

GREEN ENERGY TECHNOLOGIES AND OPPORTUNITIES

We are at a time when foundational Indigenous teachings are not treated as "primitive" notions but as "futuristic" thinking.

Renewable energy includes a whole array of different technologies, some still being invented and others revived after being abandoned decades ago when coal and nuclear power came on line.

COMMUNITY ENERGY PLANNING

Communities have an opportunity to determine their own energy goals. By undertaking baseline studies that assess local current and future energy needs, identifying energy efficiency opportunities and analyzing renewable energy options, communities can chart a path to a secure sustainable energy portfolio. Where opportunities present themselves communities may be in a position to generate revenue by selling excess energy to the grid.

CONSERVATION

While not a renewable energy, conservation plays a key role in the green energy sector for, as the old saying goes, "a penny saved is a penny earned". In other words, a watt of electricity not used is a watt of electricity that does not have to be produced. Insulating buildings better, caulking and sealing cracks and installing energy efficient furnaces and appliances can go a long way to saving energy. New buildings can also be constructed to be more energy efficient.

Studies have shown that there are more jobs in such energy efficiency activities than in developing more traditional energy supplies and that these jobs are distributed throughout the country, in small towns as well as large cities.

GRID

The electrical grid system in Canada, with a focus on Ontario

Canada's power grid is one of the largest in the world, and one of the oldest. Consequently, provinces will spend billions over the next few years upgrading and expanding their transmission systems. A major overhaul is needed to make the grid more efficient and able to integrate the huge amount of renewable energy that will be generated over a disperse area instead of by a few, big power plants located centrally.

Ontario has already begun this transformation. The provincially-owned utility, Hydro One, is planning to spend $2.3 billion on transmission and distribution lines over the next three years to hook up wind and solar to the grid. The work is expected to create 20,000 new jobs.

Some of the new transmission lines will run through Aboriginal or treaty territory and First Nations, Métis and Inuit people in those areas want to benefit.

To help with this, 22 First Nation have come together to form their own utility company in order to take part in this massive expansion and upgrading of the provincially-owned power grid.

Lyle Sayers, Chief of Garden River, one of the First Nations that make up the Lake Huron Anishinabek Transmission Co. was quoted in the press as asking, rhetorically, "why are we always getting a little piece of the action? Why can't we be partners?"

New lines to remote, northern parts of the province are also crucial to helping First Nations develop renewable energy projects and phase out the use of diesel fuel by connecting to the provincial grid.

Connecting remote communities currently running on imported diesel and bringing renewables online is also the intent of the Northeast Transmission Line planned for British Columbia. Quebec, on the other hand, is expanding its transmission system, the most expansive in North America, to deliver clean energy to the northern U.S.

SMALL HYDRO

Canada has exploited hydro power from falling or running water for centuries to grind grain and power sawmills. After electricity was first transmitted from Niagara Falls at the turn of the 19th Century, towns and cities located on rivers began producing their own electricity from hydro power. The first hydroelectric generator in Canada was installed near Ottawa in 1882.

Run-of-the-river plants, which require no destructive reservoir behind a dam, are still a viable and sustainable source of power and are being rediscovered. Better for the environment in comparison to large dams, they cause less damage to the local natural habitats and have less of an impact on the flow of silt and nutrients in the river. As the environmental effects of large-scale hydro dams become more understood, and as the number of suitable large-scale sites are exhausted, there has been renewed interest in small-scale hydro. Another advantage of small hydro is that it can be generated locally, enabling remote communities to replace expensive and polluting diesel power to produce their electricity.

WIND POWER

Wind power is also an old technology, and the forbearer of the modern turbine can still be seen standing in old farm yards where they were used to pump water. Today wind power is among the world's fastest growing sources of green electricity, and the potential for continued expansion is enormous. It is estimated that Canada could generate at least 20 per cent of its electricity from wind by 2025. While the wind proportion is currently only one per cent, the number of wind turbines being installed has grown significantly. A two megawatt wind turbine can produce enough electricity to meet the yearly needs of about 500 homes.

Wind power also offers opportunities to create jobs manufacturing, installing and maintaining wind turbines. Communities that have wind farms in their vicinity can benefit from some of these new jobs as well as earning additional revenue from taxes and payment for land leases. In Pincher Creek, Alberta, for instance, wind farms generate more than a quarter of the municipal district's annual revenue and have become a significant employer in the area.

SOLAR POWER

Power can be produced directly from the sun, an infinite source of fuel that is completely free. More energy from the sun reaches the Earth in an hour than the whole world uses in a year. The challenge is harnessing that power and converting it into energy forms more useful to us. This challenge is being met with two types of solar technology: one to produce heat and the other to produce electricity.

THERMAL SOLAR

Thermal solar technology converts the sun's energy into heat, usually to heat water. Solar collectors are positioned so that they are aimed at the sun to collect as much radiant heat as possible. Generally, solar water heaters pump water through pipes located within the panel. The dark collectors absorb the sun's energy and use it to heat the water in the pipes. More than 29 million homes around the world use solar power for hot water and heating. In Canada, solar energy could potentially supply 90 per cent of residential and commercial hot water for less than it would cost to heat water with electricity. Yet Canada has a long way to go to catch up with the rest of the world. Natural Resources Canada provides incentives for Aboriginal communities installing solar thermal technology.

SOLAR PHOTOVOLTAIC

Solar photovoltaic systems convert solar radiation into direct current electricity using semi-conducting cells. The first practical application of photovoltaics was to power orbiting satellites and spaceships, but today the majority of photovoltaic modules generate electricity that is fed into the grid system. The production of photovoltaic panels has doubled every year for the last decade, making it the fastest growing energy technology in the world. Because of this, the technology is constantly improving and prices continue to fall because of large-scale manufacturing.

Solar photovoltaic systems can be mounted either on rooftops of homes, businesses, barns and other structures or built into the walls of buildings. They can also be mounted on the ground, but in Ontario prices paid for electricity from ground-mounted installations earn a lower price than roof-mounted systems in order to protect agricultural and other valuable land. Solar photovoltaic systems are extremely suitable for remote communities unconnected to an electrical grid system. However, prices paid in Ontario for electricity generated by roof-top residential systems fed into the grid are among the highest anywhere. They will cover the cost of the system in a third of its expected lifetime and earn a fair profit after that.

The solar sector has also created thousands of new green jobs in manufacturing, installation, operation and maintenance. About 13,300 people are employed in Germany's solar thermal industry and 26,900 in solar PV.

Solar companies anticipate a significant growth of 101 per cent in the number of full-time equivalents to be employed by the end of 2011.

By the end of 2011, 51 per cent of companies expect to face shortages, once again in the area of installation (78 per cent) followed by systems design and integration (51 per cent), project management (40 per cent), and engineering (40 per cent).[1]

BIOMASS

People have generated energy by burning biological matter from plants such as wood since humans started cooking and huddling around the camp fire to keep warm. Today other sources of biomass are being used to produce power including food crops, grassy and woody plants, and agricultural waste including manure. Northern communities are using forest waste, scraps from lumber mills and the residue from the production of pulp and paper to produce energy, adding value to traditional industries.

Meanwhile, farmers are feeding their waste, including manure, into anaerobic digesters to capture the methane, a particularly potent form of greenhouse gas.

Although burning biomass to create heat or electricity does release carbon dioxide, which is a greenhouse gas, biomass is still considered a renewable technology. This is because the plants used as fuel can quickly be replaced with new plants, which remove carbon from the atmosphere and store it. This is different from fossil fuels, which took thousands of years to form. The carbon in gas and oil are now being released suddenly, and the existing plants can't remove the carbon released fast enough from the atmosphere.

One of the most promising technologies for generating electricity from biomass is the anaerobic digester, which can use both sewage and manure as fuel. In the absence of oxygen, bacteria are able to decompose the biomass and produce a combustible gas, which then can be used instead of natural gas to generate electricity. In Ontario, farmers with anaerobic digesters are selling their electricity to the grid for a price, set under the Green Energy Act.

[1] 2009 Labour Force Survey of the Canadian Solar Industry

LABOUR FORCE

"Regardless of the platform used for literacy and essential skills enhancement for Indigenous communities, strategies used need to be congruent with the current trend of the global marketplace and the present and future requirements of employers" (CBNC, 2006; Greenall & Loizides, 2001; Ontario Ministry of Education, 2006; Voyageur, 2001)

ABORIGINAL LABOUR MARKET

Canada faces a skills shortage that will grow with its aging population. It is well documented that the Aboriginal population is much younger than the population at large and represents the largest untapped labour force in the country.

"In 2006 Aboriginal employment rates were 15.8 per cent below the population at large. At parity, this translates into an additional 88,000 workers for the Canadian economy."[2] "The Aboriginal population is expected to account for 7.4 per cent of working age population growth, 12.7 per cent of labour force growth, and 11.3 per cent of employment growth between 2006 and 2026 in Canada."[3]

The federal government, the business community, provinces, territories, Aboriginal communities and Aboriginal organizations will be coordinating their efforts to improve Aboriginal economic and labour market outcomes in relation to the green energy sector now and in the future.

The green energy sector holds many opportunities that are in line with Aboriginal Peoples unique cultural backgrounds, which holds promise to how the Aboriginal labour force could participate in the green energy working environment.

Models of the green energy workforce may include:

- Hands-on training
- Jobs close to home
- Skills required for green collar jobs range from hands-on construction to administration.

Aboriginal entrepreneurship and community-owned generation

- Continuous skill development and training

PRE-LABOUR FORCE TRAINING

Canada and Aboriginal communities must work together to fill this gap by preparing the Aboriginal community and the green energy sector for the emerging energy market.

"Much of the Aboriginal/non-Aboriginal labour market disparity is linked to education. Approximately 50 per cent of Aboriginal people possess less than a high school diploma, compared to 30 per cent of the general population."[4]

Labour force initiatives must include pre-training education, opportunities to study online for both urban and remote communities and a curriculum that is culturally relevant to the Aboriginal population.

Training courses should include:

1. Culturally relevant curriculum/ learning models that come from cultural and linguistic heritage
2. Support for Indigenous and traditional knowledge as evidence based practice

[2] Aboriginal Labour Force Strategy: Tapping into an Underutilized Pool of Labour Supply

[3] *The Effect of Increasing Aboriginal Educational Attainment on the Labour Force, Output and the Fiscal Balance*, Andrew Sharpe, Jean-François Arsenault, Simon Lapointe and Fraser Cowan May 2009

3. Appreciation of Aboriginal life circumstances
4. Support for community-based partnerships and control
5. Priority recruitment of Aboriginal students and employment strategies that encourage continual and professional training
6. Recognition of native languages and Indigenous knowledge
7. A redefinition of success with evaluation materials and demonstrated results
8. Training to raise awareness of Aboriginal culture for green industry employers to retain Aboriginal employees
9. Pre-employment preparation for Aboriginal people

Skilled trades and apprenticeship are playing an important role in the green energy sector and economy. Green energy and construction projects open up new careers in manufacturing, construction, operation and maintenance of projects such as wind-turbine farms, retrofits, solar-panel installation and transmission-line building.

Skilled trades' people are in demand all across the country. Many green energy projects have been stymied by a lack of qualified personnel to build turbine towers, install solar panels or complete eco retrofits. As the Green Energy and Green Economy Act takes hold in Ontario and spreads, this demand is only going to increase.

"Skilled trades are rewarded for their efforts with good pay. In fact, as an apprentice, you can 'earn while you learn'. The best part, though, is that as a tradesperson you get paid well doing work you enjoy." [1]

[1] www.careersintrades.ca/youth

[4] Aboriginal Labour Force Strategy: Tapping into an Underutilized Pool of Labour Supply

OPPORTUNITIES FOR ABORIGINAL COMMUNITIES, PEOPLE AND BUSINESSES

Prevalent Occupations in the Renewable Energy Sector
Industry Canada, 2009

WIND

- Developer
- Designer or installer
- Research engineer
- Wind assessment consultant
- Regulation consultant
- Turbine maintenance worker
- Electrical maintenance worker
- Manufacturing plant worker
- Technical sales

HYDRO

Small plant developer

- Research engineer or design consultant
- Small hydroelectric plant operator
- Maintenance engineering technician
- Manufacturing plant worker

SOLAR

Designer or installer

- Research engineer
- Assembler
- Technical sales
- Process engineer
- Technician or technologist

GEOTHERMAL

- Designer or installer (supplier)
- Manufacturing plant worker
- Technical sales
- Engineering consultant

BIO-ENERGY

- Retailer or supplier of wood stoves or pellet stoves
- Plant maintenance technician (steam and fuel)
- Technical sales

Our economy, that way in which our people manage their resources, and the relationship of that management to the total organization of our society, are processes completely bound together.We practice strict forms of conservation. Our culture is based on a principle that directs us to constantly think about the welfare of seven generations into the future. Our belief in this principle acts as a restraint to the development of practices which would cause suffering in the future. History of the Haudenosaunee - Part Two Haudenosaunee address before the United Nations

ABORIGINAL PROCUREMENT OPPORTUNITIES

It is of vital importance that Aboriginal communities and green industry understand, evaluate, and facilitate Aboriginal opportunities for procurement opportunities from green energy potential. Understanding the basic shift to a green economy; and organizing to reinvent our communities to meet these challenges is the key to success.

Aboriginal communities need to be involved to recognize the critical benefits of green energies' socio-economic development. Corporations should be ready to reconsider some of their business practices to fully achieve use of the partnership-based model.

Cooperation must be secured from the community while still respecting local traditions, especially in regard to the environment. The protection of traditional land uses such as hunting, fishing and trapping remains a great concern to Aboriginal Peoples.

In order to capitalize on local job creation and sustainable revenue streams for Aboriginal communities, green energy procurement focus is required by Aboriginal communities, from government, and business.

ABORIGINAL ENTREPRENEURSHIP

COMMUNITY POWER

In order for green energy industry and government to succeed in aligning their objectives with Aboriginal communities, they must consider the perspectives of the community, and then determine how the business opportunity can align with the cultural values. This is happening in the green energy sector.

Community power is renewable energy generated locally for local consumption by local owners. This could include everyone from individual farmers with biodigesters next to the barn, co-operatives of concerned citizens with shares in a wind farm, church groups and community centres with solar panels on their roofs, municipalities that decide to dust off their old hydro dams, and First Nations with a lot of land and natural resources but little revenue.

Community-owned power produces financial and social benefits that commercial developers don't always offer. Most important, the earnings of a community power business, whether owned privately by individuals, or publicly by an Aboriginal community

or municipality, tend to stay in the community, rather than accumulating in a head office far away from the source of the power. According to the Federation of Canadian Municipalities, in conventional energy systems, like those that predominate in Ontario, at least 75 cents of each energy dollar leaves the local economy. And while rural, struggling farmers can boost their incomes by leasing their land to wind power companies, the lease payments made to farmers by commercial wind project developers typically pale in comparison to the income farmers could earn if instead they owned the turbines by themselves or in conjunction with other members of their local community.

The Green Energy sector holds promise to help close the socio- economic gap all across Canada that exists between Aboriginal and non–Aboriginal people.

Being involved from this early stage means Aboriginal communities and businesses can form a Social/ Environmental/Economic/Spiritual contract to determine ownership as opposed to imposed implementation of potential green energy projects in their Traditional Territories and beyond. There is open potential for business ownership, green jobs, and the meaningful participation of elders and youth, Nation chiefs and community members, skilled trades and business entrepreneurs in this emerging industry.

The Seventh Fire prophecies speak of a time when we all will have a choice between two paths. The first path is well worn and scorched. The other is less travelled and green. It is up to us as communities and individuals on which path to choose.

Aboriginal communities, individuals and businesses are in a position to be the leaders on of this "Green Revolution."

Community power tends to create more local jobs – three times as many, according to some studies – for the operation, maintenance, administration and management of the renewable energy project. The cost of infrastructure is often reduced with community projects because, by generating electricity close to where a good portion of it will be used, the need to build new high voltage lines is cut and the enormous losses of electricity along those lines are reduced.

As for the social benefits, the proximity and visibility of local power generators raises people's awareness of how energy is produced and consumed, helping to create a culture of conservation. There is also likely less opposition from residents to renewables, such as wind power, if the local community benefits and people living near the power generator have a significant degree of control over where it is situated. Local owners are more accountable to their neighbours and more familiar with areas that need to be protected from development, improving the chances that neither local residents nor the surrounding environment will be adversely affected.

Top 10 action items to help you form a community energy group...

1. Define your organization's mission, vision and values
2. Identify community participants
3. Define key investment expectations - available capacity on the distribution system, analyze the technology, assess resources and conduct site studies
4. Define your organization's structure, (e.g. cooperative, corporation)
5. Apply for a FIT or microFIT contract from the Ontario Power Authority under Ontario's Green Energy and Green Economy Act
6. Contact your local distribution company
7. Consult and plan project
8. Project management and commercial operation
9. Assess the feasibility of generating green power
10. Set a realistic timeline

PROGRAMS AND INCENTIVES

ABORIGINAL ENERGY PARTNERSHIPS PROGRAM

The Province of Ontario will provide support to Aboriginal communities considering renewable generation projects. It will assist in the following three areas:

- Support for community energy plans. A community energy plan will allow Aboriginal communities to determine local interests, needs and opportunities for developing renewable energy conservation, connecting to the grid and reducing reliance on diesel in remote communities
- Support for funding project pre-feasibility and feasibility studies, development of business cases, resource assessment, environmental and technical studies as well as other soft costs for First Nation, Métis and Inuit energy projects
- Support to establish the Aboriginal Renewable Energy Network, an online based centre for sharing of knowledge and best practices related to First Nation, Métis and Inuit green energy projects

FEED-IN TARIFFS AND ABORIGINAL ADDER:

Along with the feed-in tariffs, Aboriginal community projects are eligible in Ontario to receive reduced security deposit requirements and additional payment per kilowatt hour of energy produced by their renewable energy installation. The amount of additional payment (or "adder") depends on the share the Aboriginal community has in the supplier – the higher the share the greater the adder.

THE ABORIGINAL LOAN GUARANTEE PROGRAM

Aboriginal communities have expressed interest in participating in renewable infrastructure, but have identified access to capital as a barrier. Ontario's Aboriginal Loan Guarantee Program is designed to overcome this by guaranteeing up to 75 per cent of an Aboriginal corporation's equity in an eligible project, up to a maximum of $50 million per project.

Loan guarantees would be granted to commercially viable projects following an extensive due diligence process. The criteria would be stringent and the process would ensure that only eligible projects' loans are guaranteed. A project would be required to have:

- Agreements in place to sell or transmit electricity at a pre-determined cost (e.g. power purchase agreements for generation or regulated rates for transmission projects)
- Experienced proponents and business partners with track records in construction and infrastructure operation
- Secured commercial financing arrangements
- Aboriginal communities would be required to create wholly-owned corporations to take on all aspects of the project, such as signing contracts and entering partnership agreements

SUCCESS STORIES

ABOR GROUP

The Abor Group believes in 'Meeting contemporary needs without compromising tomorrow'.

The Abor Group provides services for communities and developers as well as services to help homeowners achieve more energy efficient homes. Abor Group is proud of its native heritage and the knowledge and respect for the planet that emerge as a result of that background.

The Abor Group is one of only six companies in its area that is licensed by the Ontario Government to perform ecoEnergy Audits. The company will help you identify the energy deficiencies in your home and work to devise a plan to make the home more comfortable. From identifying sub-standard insulation in crawl spaces or header to identifying areas in the home that are leaking.

When energy deficiencies are discovered in the house, such as poorly insulated spaces in the attic walls, the core temperature of the home is less likely to be comfortable. Air sealing or draft proofing is designed to minimize the loss of hot or cold air, increasing home comfort while reducing heating and cooling costs. Draft proofing and insulation are low-tech solutions and deliver a short payback time. Investment in draft proofing will pay for itself in savings on an energy bill instantly.

PUKWIS ENERGY COOP

Pukwis Community Wind Park is a 54 MW wind farm joint venture between the Chippewas of Georgina Island First Nation and Windfall Ecology Centre. The joint venture partners have worked together since 2002 when Brent Kopperson and former Chief Hugh 'Buzzy' Big Canoe created an innovative community-wide energy efficiency housing retrofit pilot that is now being replicated in First Nation communities across Ontario with funding from the Ontario Power Authority.

Collaboration on Pukwis began in 2003 and has advanced steadily in accomplishing pre-construction milestones. Pukwis Phase I (20 MW) is now ready to move from feasibility to construction.

Pukwis will ultimately be a joint venture between the Chippewas of Georgina Island First Nation and a community based co-operative, Pukwis Energy Co-operative. The co-operative will be comprised of members from within the Greater Toronto Area (GTA). Project construction will be financed by equity raised within the GTA through a co-operative share offering enabled by the Green Energy Act and by traditional commercial loans backed by a long term power purchase agreement with the Ontario Power Authority.

This means that opportunities will be available for individuals to become members of this community based cooperative and to become investors in Pukwis.

T'SOU-KE NATION

T'Sou-ke Nation is winding up a successful Innovative Clean Energy Fund (ICE) project by hosting about 50 First Nations from across B.C. for two days of information-sharing and celebration.

"With support from the provincial government, T'Sou-ke Nation has put together the largest grid-connected photovoltaic solar energy system operating in British Columbia today," said Iain Black, British Columbia's Minister of Small Business, Technology and Economic Development.

"True to their cultural tradition of sharing knowledge, T'Sou-ke Nation is adding value to this ICE Fund investment by inviting other Aboriginal communities in British Columbia to benefit from this experience."

Almost exactly one year ago, T'Sou-ke Nation received $400,000 from the ICE Fund to build a 75-kilowatt solar photovoltaic installation, with a total project value of $1.25 million, on its traditional territory. The project is now complete, with operating solar power units on the band office, fisheries building and canoe shed. Day4 Energy of Burnaby, one of Canada's leading solar technology companies, supplied the solar panels.

"First Nations have lived on this continent for thousands of years without using fossil fuels," said T'Sou-ke Nation Chief Gordon Planes. "Thanks to the enthusiasm and support of the whole community, we have used our ICE Fund project to demonstrate that First Nations can lead the way towards a renewable energy future."

NA ME RES

Na-Me-Res (Native Men's Residence)

Na-Me-Res provides shelter for 63 homeless men in Toronto. Its objective is to reduce the number of homeless and to prevent those at risk of becoming homeless, by equipping them with the tools of empowerment, self-reliance, and economic independence.

Na-Me-Res fosters and maintains a healthy sense of community, cooperation and self-worth by promoting traditional native culture and values. It endeavors to build a strong foundation for its clients on their road to recovery and self-sufficiency.

In July of 2009, Na Me Res installed its first solar pv system on the roof of Sagatay, a newly renovated building. The details around this installation can be found at www.sagatay.solarvu.net/green/solarVu.php?ac=sagatay.

In the future, Na Me Res plans to provide green energy training opportunities to its clients.

Na Me Res plans to expand its green energy investment to a complete green programming stream for clients of the shelter to gain pride, education, training, and eventual employment.

NEIGHBOURHOOD UNITARIAN UNIVERSALIST CONGREGATION

The Neighbourhood Unitarian Universalist Congregation raised half of the $220,000 cost of installing a 20.91 kw solar photovoltaic system on the roof of its church in Toronto by issuing debentures to friends and supporters. Each of the 110 debentures that were sold for $1000 each will pay five per cent annual interest for up to 20 years. The Congregation has obtained a feed-in tariff contract to sell its solar power to the grid from the Ontario Power Authority for which it will receive 71.3 cents a kilowatt.

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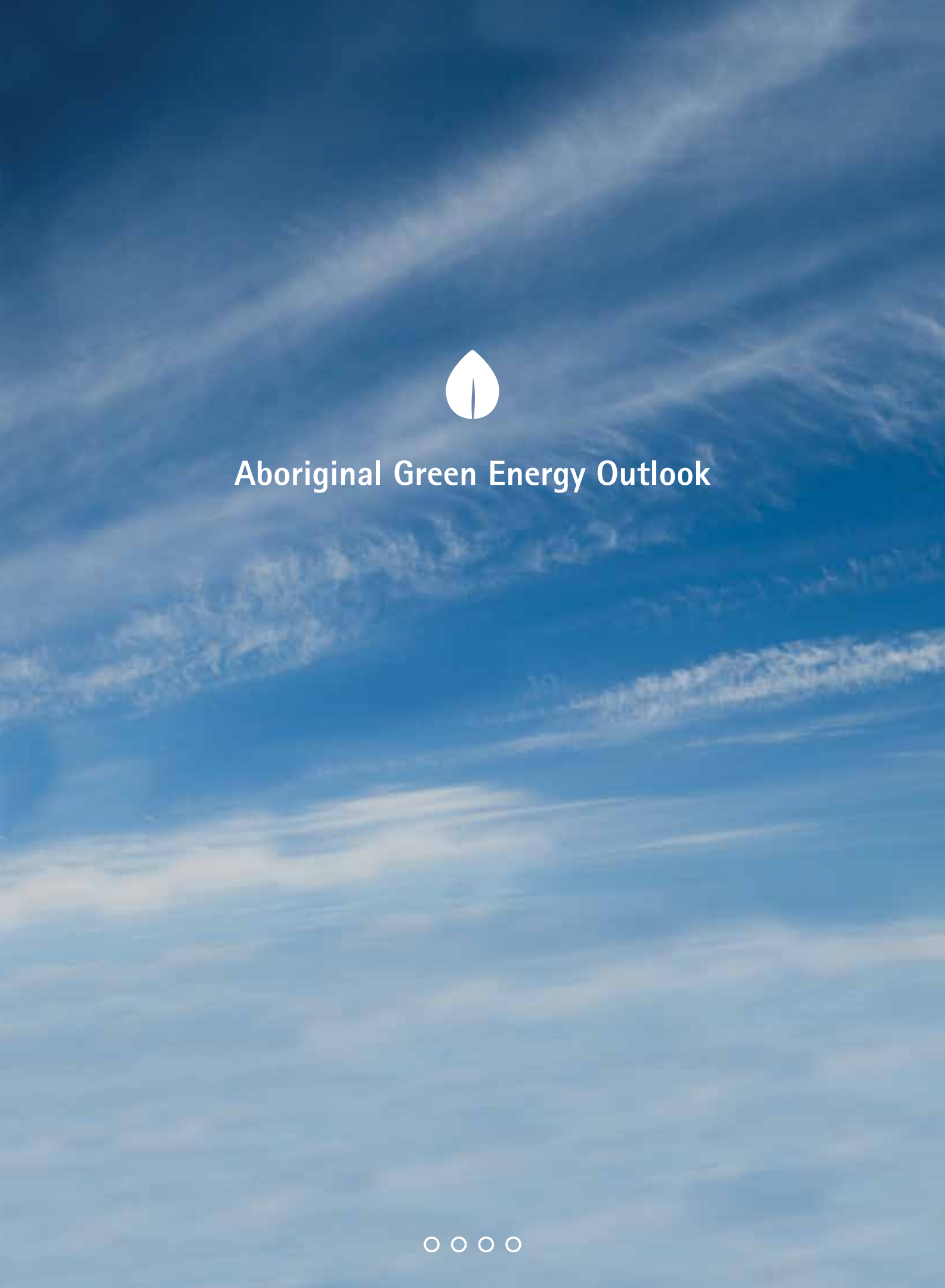

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Indian and Northern Affairs Canada | Affaires indiennes et du Nord Canada

Ressources naturelles Canada | Natural Resources Canada

We wish to thank the Government of Ontario, Ministry of Training, Colleges and Universities for providing the core financial support toward this publication, with the assistance of Natural Resources Canada and Indian and Northern Affairs Canada.