

The following is a preliminary excerpt of the reviewed and updated 2010 version of *An Information Guide on Pursuing Biomass Energy Opportunities and Technologies in British Columbia for First Nations, Small Communities, Municipalities and Industry*. The fully updated version of the complete Guide is expected to be available later this year.

3 Funding Sources

3.1 Introduction

Your main source of income (or savings) will be the sales of energy products, which can be liquid fuels, electricity and/or heat, depending on the technology. In some cases, additional products may be sold, such as extracts or co-products from biofuels production, which can substantially increase the profitability of a project. This expected income will enable you to get funding for your project, or justify the capital expense for new equipment. Small heat applications can be sized to fit the heat requirement of a single building but if heat is to be used by a third party, you need to find a buyer, which will either be a company like a pulp mill, or individual customers for district heating. Talk to your municipality and heat utility if you can sell your heat to them. If you cannot sell your heat directly to the municipality or another company, you may consider setting up a separate organization that deals with the individual contracts with small heat users. Unless you are a municipality selling the heat within its borders, your business may then represent a utility and you may be subject to the [BC Utilities Commission](#) (check with the Commission if you are not sure, www.bcuc.com). See also Section 4.3 for options to sell electricity.

Project funding can be obtained in many different ways and from a variety of sources. Private funding will usually be the main source, sometimes the only one. In addition, there are several governmental programs that support biomass energy projects with grants or loans. Note that grants are usually only given to projects that either demonstrate:

- a new technology that is not yet commercial in Canada, or
- an existing technology in a new application or context, or
- the use of technologies by communities that enjoy access to targeted funding programs.

The sale of emission offsets can also be used to leverage extra income, which may in some cases bring a project over a profitability threshold that is needed to attract the required investment.

The list of funding mechanisms in this Guide represents a snapshot of funding sources at the time of writing (see also Table 3.1 for a quick overview). You should investigate if there are additional programs that are not listed here but which might apply to either your project or to you as the project initiator (e.g., remote communities, First Nations). The sources explained below are therefore only a starting point when considering financing options. Please consult the *Funding Your Community Energy and Climate Change Initiatives* guide from the BC Community Energy Association (www.communityenergy.bc.ca/news/funding-your-community-energy-and-climate-change-initiatives) for contact details on many of the funding mechanisms listed here. The Association will update their funding guide on its website to include new information. Another source of funding information is the Union of BC Municipalities, which maintains a BC grants directory (<http://civicinfo.bc.ca/18.asp>), *Environment Canada Green Source*, a website which lists and explains public and private sector funding sources (see www.ec.gc.ca/ecoaction/default.asp?lang=En&n=910BBE65-1), as well as the *Canadian Environmental Grants Database* (see www.cegn.org/English/grantseekers/generalInfo.html), or pay-for-service websites, such as the *Business Guide to Canadian Government Programs* (www.businessguide.net), the *Small Business Funding Center* (www.grants-loans.org), and the *Canadian Assistance Programs Directory* (www.can-grants.com).

3.2 Energy Service Companies

Another option is available in the heat sector, which is the use of an energy services company (ESCO). Those companies will install, own, and operate a biomass heat system, such that no funding at all is required (apart from maybe minor adaptation and connection costs). Instead, the ESCO will charge for the energy provided, just as any utility would. Such an option is generally only available for smaller systems that heat a single facility or building, but possibly also for district heat. ESCOs offering such services in BC in the biomass heat sector include, for example, Terasen Energy Services, Mawera, or Corix Utilities.

3.3 Private Financing

Bank loans: Most of the funding for a commercial project will usually come from bank financing (new technologies will not have easy access to such capital and may require a grant to complete project funding). Bank loans carry a fairly low interest rate compared with other sources and will often cover around 50% of the financing required. The loans are lower cost because banks are risk averse and will only take on a relatively low level of risk. For example, banks will require that their loan is secured with the primary or first charge on the equipment purchased. They may also want further assurances from other stakeholders, which could be in the form of guarantees or capital contributions. They will also require other parties, such as risk capital providers or equity investors, to co-finance the project. These other funding sources will be expected to take a position behind the banks i.e. in the event of a problem the banks get paid first and other parties will be only paid if there are any funds left over.

Farm Credit Canada (FCC): This corporation offers the Enviro-loan to assist producers to construct, improve or expand operations while implementing sound environmental practices. Projects may include anaerobic digesters or other energy-related projects, and a principal payment is not required until the project is complete – for up to 18 months from the start of construction. Agriculture Minister Gerry Ritz also announced the creation of the so-called Energy Loan, delivered through FCC. This loan (available as of March 1, 2010) is specifically designed to assist producers and agribusiness owners who want to make the move towards producing their own renewable energy, including biogas projects.

Risk capital: There are many technology investors and venture funds available to potentially provide “risk capital” for commercial and new technology projects. As these sources of funds take a higher level of risk this funding is more expensive than a bank loan: risk capital investors will want to see returns on their investment of 15-20%. They may also want to refinance their exposure after some initial years. This is often undertaken once the facility has been operating successfully for a few years; other funders will then be more willing to replace the risk capital.

Investment funds: Companies like Creststreet, the Clean Power Income Fund or Algonquin Power Income Fund have investors that want to specifically profit from the renewable energy market. Their investment may come from tax deductible savings and investment plans. They will come with the perspective that they will want to own all or part of a facility, and may even want to operate them directly. Each investment firm is different and any proposals received will reflect the preferences of their investors.

Renewable energy companies: Several renewable energy development companies exist in Canada. They will approach a community or business with a plan to develop, own and operate the renewable energy project. These companies generally have good experience in the field and will bring their own funding. Many of the benefits of a project will then flow outside the community, but this option is less complicated for locals and does not require a lot of local expertise or dedication to the operational aspects of a bioenergy project. There would be some negotiation but in its simplest form the community would assess the complete package and make a decision to proceed or not.

Community ownership: Community ownership is the option that keeps most benefits of a renewable energy project inside the local community. It can foster support for a project by involving local skilled personnel, and provides income for members of the community who can become co-owners of the facility through shares. Note that community ownership may allow you to do avoid using risk capital, which is very expensive. The return on investment for your project can also be lower (under 10%) for community ownership, whereas such rates do not usually attract any risk capital. The rationale for the lower rate is that the community is often getting many more benefits from the project than simply its output. Community ownership will require a lot of extra work during the development phase of a project, but usually results in a much higher level of support among local stakeholders, which will help the project move ahead much more easily at the later stages. More detail on community ownership and on how to develop a community project can be found in the *Renewable Energy Project Development Guide for North America* by the Commission for Environmental Cooperation.

3.3 Grants and Incentives

Many biomass technologies are at the pilot or pre-commercial stage, or have only been used in other countries. Private investors are therefore often not prepared to bear the full technology risk. The most common way to get over this objection is to secure additional funding sources that will stand in front of the private investors to reduce the private investor risk. This is where several government programs or private foundations may be able to assist. Substantial amounts of funding may be provided with funds from those sources (sometimes 30% or even the full cost). On the other hand, the administrative burden will be increased through reporting requirements, and you may be required to modify the scope of your project to fit specific conditions to make you eligible for such funding. You may also have to team up with other groups, such as research organizations or local interest groups, in order to qualify for grants. Note that grant applications can often only be submitted at specific dates each year, and expect that approvals will take several months to process. Make sure you do not apply for grants too early in the development of your project as grant approvals may only be valid for a limited time and could be revoked if your project does not go ahead as planned. In some cases, the project may cover several areas of interest and you may be able to obtain grants from more than one organization.

When applying for grants, be creative and think about how you can “sell” your project: grant programs usually have a well-defined scope which may not fit your project 100%. By emphasizing specific features, involving particular groups or possibly adding on new aspects to your project, it may turn out to be eligible. If you do not have the necessary in-house experience, it may be worthwhile to involve a consultant to write a funding application, or get help from organizations in the field, such as the BC Sustainable Energy Association, the BC Community Energy Association or an organization similar to yours that has already successfully developed a renewable energy project. The *Northern Development Initiative Trust* provides grant writing support by subsidizing salaries of grant writers (<http://northerndevlopment.bc.ca/community-funding/grant-writing-support>).

Each program has its own mandate and they will often focus on different areas. For example, some programs do not provide funding to assist with project capital costs, but will assist with work preceding the actual investment, such as feasibility studies, developing a business concept/plan, etc. It is important to look at all potential sources and utilize the ones that will assist your project to the greatest degree.

Federal Funding Sources

- *Sustainable Development Technology Canada* (SDTC, www.sdtc.ca) provides grants for up to one-third of the cost of pre-commercial technology projects. SDTC requires that applicants join with partners to form a consortium (consult the SDTC website for more information).

- Infrastructure Canada (www.infrastructure.gc.ca) offers several programs that may be a fit for large biomass energy projects, such as district heating. Note that some of these programs may expire in 2011:
 - *Infrastructure Stimulus Fund* - Program support could be used to funding could be used to provide missing funding that allows a project to proceed, or could be used to accelerate a project. All projects must be completed before March 31, 2011.
 - *Green Infrastructure Fund* – Program that supports large sustainable energy generation and transmission projects, among others.
 - *Gas Tax Fund* – a constant fund, financed through federal gas taxes and made available to municipalities upon certain conditions. Including funding for community energy systems and solid waste management. In BC, Gas Tax funding is administered by the Union of BC Municipalities (see further below). More than \$1.6 billion are available to B.C. up to 2015.
 - *Public-Private Partnerships Canada* (www.p3canada.ca) – available to municipalities and First Nations, this fund has similar objectives as other programs, including green energy.
- Indian and Northern Affairs Canada administers some programs applicable to First Nations:
 - The *First Nation Infrastructure Fund* (www.ainc-inac.gc.ca/ih/ci/fni-eng.asp) supports energy and solid waste management projects. Applications are accepted by September 2010, up to a maximum amount of \$10 million per project.
 - *Aboriginal and Northern Community Action Program* (ANCAP, www.ainc-inac.gc.ca/enr/clc/pra/ovr-eng.asp) supports communities that rely on diesel power generation to improve energy efficiency and adopt alternative energy sources to reduce dependence on diesel fuel, with grants up to \$250,000, up to 50% of project costs.
 - The *Clean Energy Initiative* (<http://ainc-inac.gc.ca/enr/clc/pra/eefc-eng.asp>) provides funds for projects with grants up to \$100,000 where a proven renewable energy component is added to a new or existing (through a retrofit) building in a community
 - The *Large Energy Projects* program component (<http://ainc-inac.gc.ca/enr/clc/pra/lpfc-eng.asp>) provides grants up to \$250,000 (max. 50% of project costs) for renewable and alternative energy projects.
 - The *Aboriginal Business* program (<http://ainc-inac.gc.ca/ece/ab/index-eng.asp>) financially supports the creation of aboriginal businesses, which may include biomass-based energy services.
- Agriculture and Agri-Food Canada offers several programs to support the farming sector:
 - The \$500 million *Agricultural Flexibility Fund* (www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1247082294164&lang=eng) is a five-year fund ending March 31, 2014. Proposals include one-time investments and multi-year initiatives Bioenergy projects are eligible for grants of up to 75% of project costs. Contributions over \$100,000 to for-profit business are repayable and must be repaid within nine years of project completion.
 - The *Developing Innovative Agri-Products* program (www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1240409661030&lang=eng) supports new agricultural product development with up to \$4 million per project.
 - The *ecoAgriculture Biofuels Capital Initiative* (www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1195672401464&lang=eng), extended through September 2012, is a federal \$200 million four-year program that provides repayable contributions for the construction or expansion of transportation biofuel production facilities (minimum annual production capacity 3 million litres for biodiesel and 5 million litres for ethanol). It pays between 8 and 20 ¢ per litre of production capacity. The agricultural producer must contribute at least 5%. Repayment starts in year 4 and continues for six years.
 - The *Canadian Agricultural Loans Act (CALA) Program* (www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1177344219813&lang=eng) provides loans of up to

- \$500,000 for buildings and \$3 million for cooperatives. The money can be used for the purchase of equipment and building modifications.
- *Western Economic Diversification* (WD, www.wd.gc.ca) provides funding for economic development in Western Canada through a number of initiatives:
 - The *Community Futures* network (www.communityfutures.ca) offers relevant programs:
 - Risk-reduced loans up to \$150,000 are offered to small businesses and entrepreneurs in rural areas (Small Business Loans).
 - The 34 BC Community Futures offices also provide access to the Rural Economic Diversification Initiative of BC (REDI-BC), which is a joint initiative between Western Economic Diversification and Community Futures B.C. (www.communityfutures.ca/provincial/bc/REDI/index.php). This initiative will provide \$3 million to support economic development projects in rural B.C. and will be in place until March 31, 2012 (up to \$200,000 per project, up to 60% of total cost). The Initiative targets technology commercialization, trade & investment, and competitiveness.
 - The Western Diversification Program (www.wd.gc.ca/eng/301.asp) focuses on issues like technology innovation and rural diversification, and addresses non-for-profit organizations, including First Nations and municipalities.
 - *Northern Development Initiative Trust* (www.nditrust.ca), an economic development funding corporation for central and northern British Columbia, provides funding to local governments, not-for-profit societies and First Nations to identify and pursue new opportunities for stimulating economic growth and job creation. The trust offers both grants and loans, and has a program specific to the pine beetle problem. Its *Capital Investment and Training Rebate* assists with the costs of start-up companies and its *Economic Diversification Infrastructure* program provides project grants for municipalities, not-for-profits and First Nations, up to 28% of project costs. The *Grant Writing Support* program provides funding from the Cross Regional Account for grant writer positions employed by municipalities, regional districts, and First Nations bands, for 75% of salaries during the first four months each year. Its *Community Halls and Recreation Facilities* program supports expansions and retrofits of such facilities, which can include bioenergy technology, with a \$30,000 grant. See also *Southern Interior Development Initiative Trust* (www.sidit-bc.ca), *Columbia Basin Trust* (www.cbt.org) and *Island Coastal Economic Trust* (www.islandcoastaltrust.ca), as well as the *Nechako-Kitimaat Development Fund Society* (www.nkdf.org), which have similar programs in the remaining areas of BC.
 - *ecoENERGY for Biofuels* (www.ecoaction.gc.ca/ecoenergy-ecoenergie/biofuelsincentive-incipitativsbiocarburants-eng.cfm), administered by Natural Resources Canada, is a program to support the production of biofuels from all biomass feedstocks. At the time this Guide was completed, the program was oversubscribed and no new funding had been committed.
 - The *ecoENERGY for Aboriginal and Northern Communities* Program (www.ainc-inac.gc.ca/enr/clc/praovr-eng.asp) is intended to help improve energy efficiency and adopt alternative energy sources to reduce dependence on diesel fuel. Incentives will be directed at renewable energy and energy efficiency action plans (up to \$15,000) and projects (up to \$250,000), including district heating and home and building heating systems.
 - *EcoAction Community Funding Program* (www.ec.gc.ca/ecoaction/default.asp?lang=En&n=FA475FEB-1) provides funds for community groups. 50% of costs are funded for greenhouse gas emission reduction projects (up to \$100,000, but mostly around \$25,000).
 - *Green Municipal Funds* (GMF, www.sustainablecommunities.fcm.ca/GMF/) is administered by the Canadian Federation of Municipalities. Grants for 50% of the cost of energy planning and

feasibility studies are available (up to \$350,000), but no capital cost assistance for biomass energy projects. Only municipalities are eligible.

- The *CMHC Municipal Infrastructure Lending Program* (www.cmhc.ca/housingactionplan/hemubustco/index.cfm) provides 15-year low-interest loans to municipalities for housing-related infrastructure, including power generation and other utility projects, and thermal waste treatment. The Fund will accept applications by March 2011
- In the coming years, the federal government intends to set up a *Technology Fund* (www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=EADA9B4C-9C01-4621-9A00-BF1B2DBA11E5), based on contributions from industry in compliance with greenhouse gas emission regulations. The fund will be used primarily to finance investments in technology and infrastructure deployment that have a high likelihood of reducing greenhouse gas emissions in the near term. It was not known how this fund would specifically support biomass energy projects in BC when this Guide was completed.

Provincial Funding Sources

The following organizations provide funding in the form of grants and loans for municipalities and First Nations for a broad range of economic development and diversification projects that may include bioenergy projects. Often, projects must demonstrate direct job creation, increased export sales, or an increased property tax base and funding requests must be leveraged with financial contributions from other sources. First Nations should also consider the New Relationship Trust www.newrelationshiptrust.ca. BC Municipalities can also monitor the Ministry of Community & Rural Development website (www.cd.gov.bc.ca/lgd/finance/grants.htm) for new grants available to them. For specific information on available programs see the websites below:

- The *BC Infrastructure Planning Grant Program* (www.cd.gov.bc.ca/lgd/infra/infrastructure_grants/index.htm) provides up to \$10,000 for local governments that can be used for community energy planning and feasibility studies.
- Similar support is also available through the BC Ministry for Energy, Mines and Petroleum Resources' *Community Action on Energy and Emissions* (CAEE) program (www.bcclimateexchange.ca/index.php?p=caee), which funds district energy studies and organic waste diversion programs, among others, to a maximum of \$50,000. Communities and First Nations are eligible to apply. The program is administered through the Fraser Basin Council.
- Likewise administered by the Fraser Basin Council, the *Remote Community Implementation Program* (www.fraserbasin.bc.ca/programs/caee_rci.html) assists BC's remote communities in reducing their dependence on diesel generation through the implementation of community energy efficiency projects and the construction of clean energy systems. Funding between \$25,000 and \$300,000 per project is available, but for less than 100% of project costs. This is funded through the *Remote Community Clean Energy Program* of the BC Ministry for Energy, Mines and Petroleum Resources (www.empr.gov.bc.ca/RET/CommunityEnergySolutions/RCCEP/Pages/default.aspx), which is investing \$20 million into energy efficiency and clean energy in remote communities. Clean energy supply projects that displace diesel generation and are identified in a community energy plan are eligible for funding. Approximately \$6 - \$7 million are being allocated until 2011.
- Under the federal-provincial-municipal Gas Tax Agreement, the *Innovations Fund*, *Strategic Priorities Fund*, and *Regionally Significant Project Fund* provide grants for community energy projects and planning (up to 100% of project costs). Local governments can apply through the Union of BC Municipalities (www.ubcm.ca/EN/main/funding/gas-tax-fund.html).
- *Coast Opportunity Funds* (www.coastfunds.ca) administers the \$58 million (through 2014) Economic Development Fund, which provides financial support for First Nations located in coastal BC area which are also participants of the Fund. Alternative energy and green building

projects that support environmentally sound and sustainable economic development activities and have positive environmental or social impacts, qualify.

- *Towns for Tomorrow* (www.townsfortomorrow.gov.bc.ca) is a BC government program that may cover 80% of energy project costs, to a maximum of \$400,000. Only governments of small communities (under 15,000 people) are eligible. Environmental energy improvement projects, including district heat, qualify under this program.
- The *BC Bioenergy Network* (www.bcbioenergy.ca) acts as a catalyst for deploying near-term bioenergy technologies and supports mission-driven research for the development and demonstration of sustainable technologies to build a world class bioenergy capability for BC. Funds are available to support transformational pilot and full scale demonstration projects and capacity building initiatives that will accelerate bioenergy development in BC. Through its projects, the Network wants to establish Collaborative Development and Demonstration Centres (CDDC's) within the three major value streams of woody biomass, municipal waste, and agri-residues.
- *Municipal Finance Authority of BC* (www.mfa.bc.ca) provides low-interest loans (under 5% annual interest rate at the time this Guide was completed) to BC municipalities, Regional Districts and Hospital Districts. Applications are approved at meetings during spring and fall each year.
- BC Hydro's *Power Smart Sustainable Communities* program (www.bchydro.com/powersmart/ps_communities.html) provides funding for Energy and Emissions Plans (up to 50%), and assists in the process with BC Hydro energy experts. Additional funding is available to create local energy task forces and energy assessments. It also provides 50% of the salary for community energy managers, and funding for pre-feasibility and feasibility studies for district heating systems, as well as capital incentives for the same.
- BC Hydro's *Innovation & Technology* program (www.bchydro.com/powersmart/technology_tips/innovation_technology.html) supports new technologies that reduce electricity use with grants in the commercial, industrial, and residential/community sectors, including community energy systems.
- BC Hydro has a *Remote Community Electrification Program* (contact Nick Hawley, Program Manager, nick.hawley@bchydro.com), which aims at providing electricity to remote communities by extending the power grid or with alternative energy in order to replace diesel generation.
- BC Hydro also contracts for electricity in small communities to supply clusters of between ten and thirty homes, under its *Emerging Technologies Program* (contact Nick Hawley, Program Manager, nick.hawley@bchydro.com). Electricity rates paid will orient themselves by the current cost of diesel generation, facilitating the application of new technologies with high generation costs.
- The \$25 million per year *BC Innovative Clean Energy Fund* (www.tted.gov.bc.ca/ICEFund/About/Pages/default.aspx), administered through the Ministry of Small Business, Technology, and Economic Development, supports pre-commercial energy technology or commercial technologies not currently used in British Columbia. The Fund is populated by a 0.4% levy on final sales of electricity, natural gas, fuel oil, propane and any other product prescribed by regulation as an energy product.

Non-Governmental Funding Sources

Whereas the above are either directly or indirectly government-funded programs, there are also a number of private sources for grants, as well as foundations that may support bioenergy development in BC. These organizations may require charitable status from the applicants (this can possibly be fulfilled by involving either local governments or a registered charitable group). Applicants must often be non-profit organizations, and applications must likely include significant community involvement or broad community benefits to be considered for funding. Applications from smaller communities with fewer

resources available to them may be more likely to be accepted. The following list is only a small subset of potential funding partners:

- The *Green Building Grant* (www.vancity.com/MyCommunity/NotForProfit/Grants/ActingOnClimateChange/GreenBuildingGrant/) is provided through VanCity in partnership with the Real Estate Foundation of British Columbia. The program provides grants of up to \$50,000 per project to charitable organizations, not-for-profit organizations and co-operatives for building renovations and retrofits, among others, which may include a biomass energy system.
- Terasen Gas has an on-going process to accept biogas projects (www.terasengas.com/AboutUs/NewAndOngoingProjects/BiogasProductionRFEOL/). Terasen will pay for pipeline-grade biogas delivered into its gas network, and will also provide up-front financing as equity or even as owner and operator. Arrangements will be negotiated on a case-by-case basis. Proven technologies are the preferred option.
- The *Encana Environmental Innovation Fund* (www.encana.com/responsibility/environment/eif/) invests in new energy technologies against a right to collect royalties upon commercialization. Funding may range from several hundred thousand dollars to a few million.
- The *Vancouver Foundation* (www.vancouverfoundation.bc.ca) may assist charities in implementing resource management elements of local sustainable development plans, as well as climate change and energy projects. The *Victoria Foundation* (www.victoriafoundation.bc.ca) has similar goals on Vancouver Island.
- The *Bullitt Foundation* (www.bullitt.org) provides funding to non-profit groups for education, climate change, forests and other environmental projects (\$25,000 to \$100,000).
- You may want to consult the *Canadian Directory to Foundations & Corporations* for more complete information at www.imaginecanada.ca/node/22 (payable service).

3.4 Additional Income and Incentives

In addition to the above funding sources, which are directed to capital costs and feasibility studies, the following can provide additional revenue or lower costs, thereby increasing the return to stakeholders. Furthermore, some of these sources can generate revenue at the outset of a project, in advance of it being operational, thereby assisting with expenses and reducing borrowing requirements.

They are a source of savings or revenue in addition to the income generated by the sale of electricity and/or heat, and any additional revenue will always assist the profitability of a project and make it more attractive to potential investors.

Emission offsets: The Canadian government has communicated plans to introduce emissions trading for several air pollutants, including greenhouse gases, nitrogen oxides, sulphur dioxide, VOCs and particulate matter. Reduction targets have been set for 2012, and GHG emissions trading is expected to start around that time. Biomass projects may benefit from such trading, but details of the program were not known when this Guide was completed. Please access the government's ecoACTION website (www.ecoaction.gc.ca) for more information.

In BC, the *Pacific Carbon Trust* (www.pacificcarbontrust.ca) currently buys emission reduction offsets from projects that reduce GHG emissions. In the context of this Guide, such projects would be biomass heat or cogeneration projects, since any carbon offsets created from power generation will usually become the property of BC Hydro and can therefore not be sold by the project developer. Instead of to the Trust, offsets can also be sold internationally, generally into voluntary markets. Several organizations are active in the field of carbon offset generation and aggregation and may be able to assist with the marketing and

sales of offsets from biomass energy projects, such as Offsetters (www.offsetters.ca), BlueSource Canada (www.bluesourcecan.com), or Carbon Credit Corp (www.carboncreditcorp.ca). Some organizations, such as municipal governments, may have corporate GHG emission reduction targets. They may then prefer to retain the offsets created, and use them towards their corporate targets, instead of selling them for project finance. In this case, the savings from not having to buy GHG offsets elsewhere could be taken into account when making an internal business case for a biomass energy project.

ecoENERGY for Renewable Power: This is an incentive paid to renewable electricity generators, which amounts to 1 ¢/kWh produced. The program aims at supporting 4,500 MW of power generation in Canada by 2011. You need to apply for this incentive once you are confident that you have solved the siting and technical challenges of your project; the Program requires that generation starts one year after your application has been accepted, although extensions can be granted. The incentive had been fully committed at the beginning of 2010 and it was unclear whether the program will be extended. Only projects of 1 MW electric capacity and larger may apply. A biomass project under 10 MW capacity will be allowed to receive 13 ¢/kWh for its electricity in addition to the incentive, whereas larger projects must remain at 12 ¢/kWh or lower to be eligible. Ecologo certification is required for all biomass projects. The incentive will only be paid out for the first ten years of operation.

Link: www.ecoaction.gc.ca/ecoenergy-ecoenergie/power-electricite/index-eng.cfm

Accelerated write-off: Under Class 43.1, Schedule II of the federal Income Tax Act, renewable energy systems can be written off faster, allowing a company to pay less tax during the first years of operation. This improves economics during the initial years - the phase where risk capital is often needed, which can only be attracted with high returns. Biomass energy equipment costs can be fully written off within the first two years of operation under this scheme.

BC Hydro Standing Offer Program: The Standing Offer Program allows small projects of up to 10 MW_{el} capacity to sell power to BC Hydro at a fixed price and with standard contract terms and conditions, without the need to wait for periodic Calls for Proposals as is the norm for larger-scale project. Currently, these tariffs are between 7 and 9 ¢/kWh, but a review of the program was underway when this Guide was written, which may result in higher tariffs that may allow for biomass power projects to become profitable. An advantageous feature of the program is that BC Hydro will absorb transmission / distribution network upgrade costs for individual projects (up to a certain maximum level). Note that no other benefits, such as renewable energy certificates or emission reduction credits from displaced power generation, can be sold as the rights to their use will be transferred to BC Hydro under this program.

Link: www.bchydro.com/planning_regulatory/acquiring_power/standing_offer_program.html

Development Cost Charges (www.cd.gov.bc.ca/lgd/finance/development_cost_charges.htm) are a method of recovering expenses a municipal government may have incurred for infrastructure related to new urban developments. These charges are applied as one-time charges against residential, commercial, industrial and institutional developments and are usually collected from developers at the time of subdivision approval or at the time of issuing a building permit. They can therefore be used to recover the cost of biomass district heating systems, for example.

Table 3.1 Overview of Funding Sources Relevant to Biomass Energy Projects in BC

Funding Source	Available to:				Project eligibility			Comments
	Municipalities	First Nations	Community groups	Private sector	Commercial	Pre-commercial	Feasibility	
Private Funding and Investment Sources								
Banks	X	X	X	X	X	≤ 50%		Loans
Farm Credit Canada			X	X	X			Loans
Risk Capital		X		X		X		Loans
Investment Funds	X	X	X	X	X			Equity
Renewable Energy Companies	X	X	X	n/a				Work as owner/ operator or as private equity partners
ESCOs	X	X		X	X			Owner/operators, charge utility fee
Encana Env'l Innovation Fund				X		X		Investment against limited IP ownership rights
Foundations	X	X	X					Often only support for planning or education
VanCity Green Building Grant	X	X	X		X			Building retrofit grants up to \$50,000
Federal Funding and Incentives								
SDTC				X		X		Grants. Municipality or First Nation may host a demonstration project
ecoENERGY for renewable power	X	X	X	X	X			Production incentive, oversubscribed
ecoENERGY for biofuels	X	X	X	X	X	X		Production incentive, oversubscribed
ecoENERGY for Aboriginal & Northern Communities	X	X			X		X	Grants for energy planning and project cost.
Infrastructure Canada	X			X	25-50%			Several programs offered, partly through provincial agencies
Indian and Northern Affairs Canada		X			50%		X	Several programs focusing on energy & economic development
Agriculture and Agri-Food Canada	X	X	X	X	X	X		Various programs; grants and loans
First Nation Infrastructure Fund		X			X			Up to \$10 million, based on cost-sharing with federal or municipal government
Community Futures	X	X		X		X		Loans up to \$150,000 and other

Funding Source	Available to:				Project eligibility			Comments
	Municipalities	First Nations	Community groups	Private sector	Commercial	Pre-commercial	Feasibility	
								programs
Western Diversification	X	X		X		50%		Grants
Northern Development Initiative Trust	X	X			28%		X	Also assistance with company start-ups. See also other regional Funds.
Green Municipal Funds	X						X	50% grant for feasibility studies only
CMHC Municipal Infrastructure Loan	X							Low-interest loans
ecoAction Community Funding			X		50%			Max. \$100,000
BC Funding Sources								
UBCM Programs	X							From federal Gas Tax Funds
Infrastructure Planning Grant Program	X						X	Planning and feasibility studies only, up to \$10,000
CAEE	X	X					X	Grants for planning
Remote Community Implementation Program	X	X			X	X		Grants up to \$300,000
Clean Energy Fund	X	X		X		33%		Grants
Municipal Finance Authority	X							Loans
Towns of Tomorrow	X				75-80%			Grants; small communities only
Coast Opportunity Fund		X			X			Grants
BC Hydro SOP	X	X	X	X	X			Guaranteed electricity tariff
PowerSmart for Sustainable Communities	X				50%		X	Grants for planning and implementation
BC Hydro Innovation & Technology Program	X	X	X	X	X	X		Grants
BC Hydro Remote Community Electrification program	X	X			X			Financing for projects displacing diesel generators
BC Hydro Emerging Technologies Program	X	X	X	X		X		Contracts for power generation in remote communities
Terasen Gas – Biogas	X	X	X	X	X			Equity/tariff for biogas sales
BC Bioenergy Network				X		X		Grants, loans, loan guarantees

Note: Please see above for more detailed program descriptions