

COMPTIENTS Nova Scotia Community Feed-In Tariff

Disclaimer

This Guide is intended to assist the public's understanding of the Community Feed-In Tariff program and is not intended to modify or replace the provisions of the 2010 *Renewable Electricity Regulations*.

In the event of any conflict or inconsistency between this guide and the regulations, the regulations prevail.

Message from the Minister

Welcome to the Department of Energy's Guide to the Community Feed-In Tariff program

Inside these pages you will find a wealth of information to help you understand why we are building a more diverse and renewable electricity supply in Nova Scotia and why we have set up the Community Feed-in Tariff system to help us get there in a balanced fashion. The balance is necessary as we encourage new projects in a reasonably low cost fashion while targeting a handful of opportunities to help drive significant economic opportunities- especially in the area of tidal.

The Guide takes you step-by-step through the process of thinking about a project - helping you answer questions such as am I really ready to get into the electricity business - through to planning, applying, financing, building and connecting and finally, operating a renewable electricity generation business.

Running any business is a mixture of risk and reward. And, like any business, the rewards coming from renewable electricity are both tangible and intangible. Run properly, a COMFIT project allows an organization to understand clearly where their revenue will come from (and if plans go well and the resource is as predicted - how much revenue they will make when the turbines run).

It is our hope that the operation will be profitable and that surplus cash will help your organization contribute to more sustainable communities in Nova Scotia. That's the tangible reward. The intangible part is the knowledge that your organization will also be making a small, but important contribution to a better energy future in Nova Scotia.

Honourable Charlie Parker Minister of Energy

Contents



Overview	1
Background	1 1 2 2 2
The COMFIT Program	3 3 4 5
An Overview of the Guide	5 5 6 6
Thinking about Starting a COMFIT Project ?	7
Eligibility Requirements	7 7 9 12 12 12
Planning your Project 1	3
Site Evaluation	13
NSPI System Operator Preliminary Assessment	13
Resource Assessments . Wind . Biomass . In-Stream Tidal .	14 14 15 16

Run-of-the-River Hydroelectricity
Regulatory Permits and Approvals
Small-Scale In-Stream Tidal
Financial and Business Planning
Business Plan



Community/Public Engagement
Aboriginal Engagement
Municipal Consultation and Identification of Municipal By-laws
Understanding Environmental Issues
Understanding Heritage and Archaeological Issues
Tool Kit
Submitting your Application23
Application Overview
General Information
Sections of the Application
Section 1 - Applicant Registration
Section 2 - Ownership Structure
Section 3 - Project Information
Section 4 - Site Information
Section 5 - Technical Information
Section 6 – Business Case and Supporting Information
Section 7 - Community Support and Engagement
Section 8 - Aboriginal Requirements
Section 9 – Environmental Requirements
Section 10 – Special Places, Archaeological, and Heritage Resource
Requirements
Section 11 – Other Permits and Approvals
Section 12 - Affirming Statement
Further Application Information

What do I do after I am Approved ?	31
Contacting Nova Scotia Power Inc.	31
Combined DSIS/Facilities Study Queue	31
Combined DSIS/Facilities Study	31

Appendix	33
Reporting Requirements	. 32
Things to Consider when Building your Project	. 32
Standard Small Generator Interconnection Agreement (SSGIA)	. 31

Арренаіх		55
Provincial and Federal Permits and Approvals Tables	s	33

Overview

Background

The Province of Nova Scotia is taking a bold new direction to make our province greener and cleaner. The *Renewable Electricity Plan* and regulations (April 2010) lay out a clear legal requirement: 25 per cent renewable electricity supply by 2015, using only environmentally friendly sources such as hydro, wind, biomass and tidal. The payoffs are significant and the Community Feed-In Tariff (COMFIT) is one of several programs to achieve this reality.

The purpose of this guide is to explain the COMFIT program and provide information to eligible community groups who are interested in contributing to the renewable energy sector in Nova Scotia. From start to finish, this guide is designed to provide a roadmap for participants on how to take an idea for a COMFIT project and turn it into reality.

Renewable Electricity Plan

The *Renewable Electricity Plan* sets out a detailed path for achieving the target of having 25 per cent of our electricity come from renewable sources by 2015 and establishes an ambitious goal for 2020 to have 40 per cent of Nova Scotia's electricity supply (sales) produced from renewable resources. The motivation for this plan is simple: before we started to increase renewable electricity supplies, nearly 80 per cent of the province's electricity came from coal. The plan moves us from an over-reliance on a single fuel source that has negative impacts on our health and environment to new, local, renewable energy sources. COMFIT is a part of a suite of initiatives to achieve this goal.

Other opportunities include:

- an enhanced net metering program allowing customers to be paid for a modest amount of excess electricity produced from a renewable electricity project
- facilitation support to help communities who want to better understand the technical, financial and regulatory work needed to develop these projects
- feed-in tariffs (FIT) for developmental tidal projects
- a renewable electricity administrator to manage independent power producer (IPP) competitions for medium- and large-scale renewable electricity projects

Legislation and Regulations

The *Electricity Act* was amended in May 2010, providing the legal foundation for access to clean, secure energy produced from our region. These changes made strategy a reality, by allowing for:

 a renewable electricity administrator to oversee contracts for energy purchases by independent power producers





- the development of a feed-in tariff or fixed price for community and developmental tidal array projects
- an enhanced net metering program that credits consumers for the renewable energy they produce.

Regulations

Following the amendments to the *Electricity Act*, draft regulations were released in May 2010 for public comment. A province-wide public consultation process was conducted in June and July 2010 to receive feedback on the regulations. Submissions were received from a broad range of stakeholders, including industry, not-for-profit groups, communitybased groups, and members of the public. This process enabled government to identify issues and gather detailed technical advice prior to finalizing the regulations.

The new *Renewable Electricity Regulations* were enacted in October 2010.

Amendments to the Regulations underwent a period of public consultation in July 2011. Specific amendments regarding the COMFIT program include changes to the equity and ownership requirements for COMFIT-eligible entities, specifically including cooperatives, not-for-profits, Community Economic Development Corporations, and Aboriginal groups. Further information on the amendments can be found at www.nsrenewables.ca.

Directives

In July 2011, the Department of Energy re-released six (6) directives for the COMFIT program after a period of public consultation and review. These directives clarify requirements of the COMFIT program regarding:

- 1. COMFIT Small Wind Projects: Cluster and Distribution
- 2. COMFIT Biomass Eligibility
- 3. COMFIT Approval Conditions
- 4. COMFIT Annual Progress Reports
- 5. COMFIT Renewable Electricity Device Standards
- 6. Timing for CEDIFs to Demonstrate Eligibility for COMFIT

Utility and Review Board

Under the *Renewable Electricity Regulations*, the Nova Scotia Utility and Review Board (UARB) is responsible for setting COMFIT rates. The UARB facilitated a public process led by Synapse Energy Economics, Inc. to determine the rates for COMFIT beginning in November 2010. This process included technical sessions with the UARBs consultant, accepting written submissions from the public, drafting rates, and providing the opportunity for questions and answers. This process concluded with the Board hearing in April 2011.

The UARB set tentative rates for COMFIT projects based on inputs from the Synapse model's recommendations and other intervenors. Rates were determined by considering the cost of the physical assets of a facility and allowances for depreciation, cost of labour and supervision, necessary working capital, organizational expenses, overhead costs not included in the cost of physical assets, costs relating to acquired land, interconnection costs, and return on investment as outlined in Section 19 of the *Renewable Electricity Regulations*.

The financial advisors to the UARB filed compliance rates followed by a period of public consultation before the final rates were released in September 2011. In addition, the UARB will review all COMFIT tariff rates in 2014, three years into the program's operation. Further information on UARB rates can be found at **www.nsrenewables.ca**. **The COMFIT Program**

This guide is intended to help potential proponents work through the stages of a COMFIT project, from just thinking about a renewable energy project through to planning the project, submitting an application, and building and running the project. The Appendix includes more technical matters that give guidance and definition to important legal and regulatory matters.

What it's all About

The COMFIT program is an opportunity to receive an established price per kilowatt hour (kWh) for electricity produced from qualifying renewable resource projects. It is intended to encourage and support the development of renewable electricity projects by community-based groups such as municipalities, First Nations, co-operatives and notfor-profit groups. The focus on community-based projects is designed to ensure that projects are rooted in the community and investment returns remain there.

Projects must be connected to the grid at the distribution level. The province's current distribution capacity is roughly 200 MW, but this changes as new customers are added or removed. Some of the capacity is located in areas that are not well-suited for development. Therefore, it is expected that roughly half that capacity may be available for the development of COMFIT projects, or about 100 MW. Each distribution connection has its own capacity that is set by the size of the electricity demand or minimum annual load that it serves.

The government has a number of reasons for limiting the connections to the distribution level. First and foremost is the natural linkage between the size of the distribution-connect opportunity and community capacity. Distribution capacity is available at varying levels across the province and in every community. The capacity level is equal to the annual minimum load at any particular distribution point. Therefore, all communities have some level of opportunity. By limiting the connections to communities and the distribution level, it also ensures that ratepayers in general will not bear unplanned and uneconomic increases to transmission upgrades or an unacceptable increase in higher-cost COMFIT projects.

Overview

On the plus side, this approach also benefits ratepayers through a reduction in transmission losses, because more of the customer loads are being served at the distribution level rather than coming from long-distance transmission.

This balance between ratepayers, community economic development and sustainability objectives is a critical underpinning of the Province's Renewable Electricity Plan. The plan takes into account the various costs and benefits associated with the COMFIT program and balances them with imports of inexpensive electricity elsewhere and opportunities for Independent Power Producers (IPPs) to compete for opportunities on a larger scale. Each element of the plan needs to be understood in the context of how the whole plan fits together.

2012 Review

The Renewable Electricity Plan provides new programs and opportunities for Nova Scotians. Interest communities, groups and individuals will develop and grow their initial project concepts into comprehensive plans that outline the steps required to achieve these objectives. While government will modify the rules, regulations and processes as necessary, a more formal review of the plan with a specific focus on the COMFIT program will be conducted 18 months after implementation.

Overview

Beginning in 2012, the review will determine whether the regulations are appropriately supporting the target of reaching 25 per cent renewable electricity supply by 2015. The review will also determine whether other objectives such as increased development of renewable electricity projects at community distribution and IPP commercial transmission scales and establishing a more diverse energy mix, including the sustainable use of biomass for electricity generation, are met. The COMFIT program, in particular, is a new opportunity for Nova Scotians to participate in renewable electricity development, and a building block to be used in the creation of sustainable communities. The review will help determine whether the current structure of the COMFIT program is successful in supporting community-based projects.

Who is Involved in the Program?

Department of Energy

The Department of Energy coordinates the COMFIT program and approves applications.

All project applications must be submitted at **www. nsrenewables.ca** and will go through a "onewindow" process that coordinates the application process. In many cases, certain approvals or permits are required before qualifying for COMFIT. Other participating departments include the Office of Aboriginal Affairs, the Department of Agriculture, the Department of Environment, the Department of Fisheries and Aquaculture, the Department of Natural Resources, Service Nova Scotia and Municipal Relations, the Department of Communities, Culture and Heritage, the Department of Economic and Rural Development and Tourism, and the Department of Transportation and Infrastructure Renewal.

The Department of Energy will manage the application process electronically. In all cases, the

Department of Energy will review applications, but in certain cases, other departments may become involved. The application process will coordinate decisions directly related to COMFIT projects but not the permits or approvals normally required for construction projects in general (ie., building permits, stream-crossing permits, etc.). It is advisable to identify all permits and approvals needed to access land and carry out construction early in the planning process.

Nova Scotia Power

Nova Scotia Power's System Operator is responsible for technical interconnections with the distribution system. They also have detailed information on the capacity limit of any particular local distribution system. Therefore, project applicants will need to work with Nova Scotia Power (NSPI) several times throughout the COMFIT process.

Applicants should check with NSPI early on to get an idea if a proposed project is viable and should engage in a level of discussion that is appropriate for the size of the project. Ultimately, a Preliminary Assessment from NSPI is a requirement for the COMFIT application.

Once a project is approved through the "onewindow" process, the applicant will need to contact NSPI to receive permission to officially enter the distribution interconnection queue. A series of studies and activities will be required before the agreement with NSPI, called the Generator Interconnection Agreement, can be signed. A standard power purchase agreement (PPA) for the approved COMFIT rate will be awarded to successful projects.

For more information on interconnection requirements, visit the Nova Scotia Power website at:

http://oasis.nspower.ca/en/home/default/ revisedgenerationinterconnectionprocedures.aspx Confidentiality and Privacy Issues

COMFIT applicants should be aware that the information provided through the "one-window" application process is subject to the *Nova Scotia Freedom of Information and Protection of Privacy Act* (FOIPOP). Certain information may become generally available to the public or be made available to government departments, its agencies, and other entities for the purpose of COMFIT. As FOIPOP protects commercially sensitive information, proponents must clearly demonstrate that they have provided commercially sensitive information in the event that a FOIPOP application is made.

As stated in COMFIT Directive 004, projects that receive FIT Approval must provide the Department of Energy with a completion report within 30 days of grid interconnection as well as annual progress reports. The Directive outlines the information to be included in the report as well as the access and confidentiality provisions made with regard to that information.

An Overview of the Guide

Thinking about Starting a COMFIT project?

This section of the guide provides an overview of what potential applicants should consider when thinking about applying for the COMFIT program.

One of the main considerations is who qualifies for the program:

- municipalities or wholly owned subsidiaries of municipalities
- Mi'kmaq band councils
- co-operatives

- not-for-profits
- community economic development corporations (CEDIFs)

Overview

- universities
- entities that use the heat from combined heat and power biomass facilities

Another major consideration is the projects that qualify for the COMFIT program:

- wind
- biomass combined heat and power (CHP) facilities, where the use of the thermal energy is eligible
- in-stream tidal small scale
- run-of-the-river tidal
- developmental tidal program consisting of instream tidal devices in single units of 0.5 MW or greater or in arrays that are connected to the transmission level. There are no ownership restrictions for eligibility for this FIT. The rate will be set by the UARB at a later date.

Even if you are thinking about a project, it may be useful to register on the website. Registering a project does not commit you to the application process; instead, you will receive early activation of your COMFIT account.

Once you register and the Department verifies your registration, your username and password will be activated. Early activation will help us manage your project as it begins to develop and will allow us to more quickly process your application if you proceed from thinking — to doing.



Planning Your Project

Planning your COMFIT project is a very important step in understanding and being informed of the requirements and approvals needed to make your idea a reality.

This section will focus on everything you need to consider when planning your project, including:

- conducting site evaluations
- preliminary assessments
- resource assessments
- determining regulatory permits, approvals or licenses from the provincial and federal governments, as well as municipal by-laws
- financial and business planning
- community, municipal and aboriginal engagement
- identifying environmental, heritage or archaeological interests
- overview of facilitation program

Submitting your Application

This section will provide guidance on your application, including an overview of the application, requirements, instructions and an overview of the "one-window" process.

What do I do after My Project is Approved?

Once approved, a number of steps are required to connect your COMFIT project.

This section outlines the NSPI connection process, including the interconnection queue and system impact studies. This section also provides some general considerations to take into account when building a project.

Thinking about Starting a COMFIT Project ?

Eligibility Requirements

Who Qualifies?

The COMFIT program is designed to encourage community-based organizations to participate in the development of local renewable energy projects connected at the distribution level and to promote the development of multiple projects over widely dispersed rural areas. The program increases geographical distribution of renewable electricity sources, thereby contributing to our collective energy diversity and security.

The developmental tidal program does not have ownership requirements and a separate feed-in tariff will be set by the UARB at a later date.

The following community-based entities qualify for COMFIT.

These entities, with the exception of municipalities, **must own a majority (51%) of the proposed project** (except for the developmental tidal program and biomass).

Municipalities or Wholly Owned Subsidiaries of Municipalities

Projects must be located within the boundaries of the municipality or the boundaries of an immediately adjacent municipality.

Municipalities can only partner with other municipalities in owning projects, but may contract

with other entities in planning, building or running municipally-owned projects.

For more information, please view Information Bulletin #17-Public-Private Partnering or refer to the Nova Scotia *Municipal Government Act*.

Intergovernmental partnerships can be arranged on a case-by-case basis. Interested proponents should first consult with the Department of Energy or Service Nova Scotia and Municipal Relations (SNSMR), before moving forward with such a project.

Financing opportunities for municipalities are available through the Municipal Finance Corporation (MFC). Municipalities should be aware that approval from the Minister of Service Nova Scotia and Municipal Relations is required to borrow longterm funds from the MFC. Outlining the financing structure is a requirement of the Municipality in the application process. Municipalities should go to: *3.5 Municipal Debenture Process* of the Service Nova Scotia and Municipal Relations Local Government Resource Handbook and contact their Municipal Advisor and SNSMR for details on the debenture process.

Mi'kmaq Band Councils

Mi'kmaq band councils and their business enterprises quality for COMFIT. Projects must be located on reserve lands or on the lands leased or owned by Mi'kmaq business enterprises. The amended Regulations outline further land ownership requirements for Mi'kmaq band councils.

Thinking about Starting

a COMFIT Project?

Intergovernmental partnerships can be arranged on a case-by-case basis. Interested proponents should first consult with the Department of Energy or the Office of Aboriginal Affairs before moving forward with such a project.

Co-operatives

A co-operative is a user-owned and user-controlled business that can be either for-profit or not-forprofit. It is a separate legal entity from the members so that liability is limited to the amount a member contributes to or invests in the co-operative.

To qualify for the COMFIT program, the majority of members must reside in Nova Scotia, with at least 25 members residing in the municipality where the project is located.

Not-For-Profits

A not-for-profit is a corporation operated on the basis that no member, officer, director or employee of the corporation may share in any operating surplus of the corporation.

To qualify for the COMFIT program, the majority of members must reside in Nova Scotia, with at least 25 members residing in the municipality where the project is located.

Community Economic Development Corporations

A Community Economic Development Investment Fund (CEDIF) is a pool of capital, formed through the sale of shares (or units), to persons within a defined community, created to operate or invest in local business. It cannot be charitable, non-taxable, or not-for-profit, and must have at least six directors elected from the fund's defined community. For more information of CEDIF requirements, see the Department of Economic and Rural Development and Tourism.

To qualify for the COMFIT program, the majority of members must reside in Nova Scotia, with at least 25 members residing in the municipality where the project is located.

As outlined in Directive 006, a CEDIF must properly demonstrate to the Department of Energy that they have a least 25 community members as outlined in their project application within one year of FIT Approval or by the time the project begins construction. Further ownership requirements are outlined in the *Renewable Electricity Regulations*.

Universities

The COMFIT program is open to the 11 universities across the province, as outlined in the *University Foundations Act*.

Combined Heat and Power Biomass Facilities

There are no ownership requirements for combined heat and power (CHP) biomass facilities, as long as the heat is consumed or used by the entity or its subsidiary.

COMFIT Directive 002 outlines further determinations regarding biomass CHP eligibility for the COMFIT program. Eligible biomass sources include:

- Primary Forest Biomass used to generate renewable low-impact electricity must be registered with the Department of Natural Resources' (DNR) Registry of Buyers, is subject to the same legislation as the forest industry, and is limited to stem wood only on non-merchantable trees;
- Agricultural Energy Crops/Residues, non-food crops grown specifically for their fuel value, must demonstrate sustainable agricultural practices;

- Sawmill and Wood Processing Residues are preferred over primary forest biomass, but proponents should demonstrate that they have secure arrangements regarding this portion of biomass fuels and are also required to be registered with DNR's Registry of Buyers;
- Farm-based biogas systems should consult with the Departments of Energy and Environment early in their project planning process;
- Liquid, solid and gaseous fuels made from biomass must demonstrate that the materials come from sustainable sources consistent with the EcoLogo[™] definitions, and proponents should consult with the Department of Energy early in the project planning process; and
- Biosolids, sewage sludge, may or may not be eligible for COMFIT. The Department of Energy will work with the Department of Environment to explore this opportunity in the future.

Eligible Technologies and Sizes

The COMFIT program is open to new sources of generation. All new generators using the following low-impact renewable fuel sources are eligible:

- wind
- biomass combined heat and power (CHP)
- small-scale in-stream tidal
- run-of-the-river hydroelectricity
- developmental tidal in single unit of 0.5 MW or greater in arrays.

Standards

There are developing standards and best practices emerging in the renewable energy sector. As these standards become established, the Department of Energy may adopt them for new COMFIT projects. Proponents are encouraged to review the standards associated with their projects, as failure to do so may result in adverse economic impacts. Thinking about Starting a COMFIT Project ?

COMFIT Directive 005 outlines a number of device standards for small and large wind projects (see below). This includes requirements regarding device certification, qualification criteria, siting and zoning, resource assessments as well as turbine height and setbacks. The Minister will use these standards when determining eligibility for the COMFIT program. In cases where no internationally recognized standards have yet been established, eligible entities applying for COMFIT need to be aware of any emerging standards and should comply with them to the greatest degree possible. The standards in effect at the time of the application for a COMFIT approval shall be the ones required for approval.

All projects are also required to meet the appropriate device standards, to obtain the necessary permits, approvals and insurance necessary for their technology. Failure to do so may result in a COMFIT application being denied or a FIT Approval being revoked in accordance with Section 46(1) of the *Renewable Electricity Regulations*.

Additionally, an electrical safety assessment must be carried out by an electrical inspector as part of the interconnection process.

Technologies

WIND

What is Wind Power ?

Wind energy can be converted to electricity with a wind turbine. Wind turbines use the rotational motion of the blades to turn a generator to create electricity. Wind turbines come in a variety of sizes. Large commercialscale turbines can be 120 metres high, with an 80-metre tower and 40-metre blades. These turbines are capable of producing 2 megawatts of power — enough electricity for about 600 homes.

Classes of Wind Turbine Projects

For the purposes of the COMFIT program, there are two classes of wind turbines:

- wind power with a capacity and output of 50 kW or less at a wind speed of 11m/s with a swept area of 200m²; and
- wind power with a capacity greater than 50 kW at a wind speed of 11m/s.

This distinction was made to allow different tariff rates to be established, which ensures that an optimal rate of return is achievable for both small and large wind energy projects.

COMFIT Directive 001 outlines the cluster and distribution requirements of small wind projects.

Things to Consider about Wind Power

Wind is an attractive source of renewable energy thanks to modern technology, which has allowed it to be captured efficiently. Another benefit of choosing wind power is that each turbine only requires a small plot of land to be erected. Wind turbines are also available in a range of sizes, which allows them to serve different purposes, including providing energy for single households or larger businesses and organization; however, it is important to consider that the wind is an intermittent source of energy, meaning that wind turbines do not produce the same amount of electricity all the time due to changing wind speeds. Therefore, it may be necessary to secure alternative sources of energy to be used during periods of time when the wind turbine is not producing a sufficient amount of power.

Recommended Height

The Canadian Wind Energy Association (CanWEA) recommends that when siting a small wind turbine, it should be located a minimum of 100 metres away from the nearest physical object (tree, building), and

the bottom tips of the turbine should be a minimum of 10 metres above the nearest physical barrier. The bottom tips of the turbine should be a minimum of 10 metres above the nearest physical barrier. Further, the swept area for small wind turbines must be less than 200m².

Recommended Setbacks and Distances to Dwellings

CanWEA recommends that the small wind turbine base be no closer to the property line than the height of the wind turbine tower, and that no part of the wind system structure, including guy wire anchors, should extend closer than 3 metres to the property line. In most circumstances, this means that the minimum lot size for most wind generators is onehalf acre.

It is important to note that there may be municipal by-laws that impose minimum setback requirements.

For further information, see Directive 005.

BIOMASS COMBINED HEAT AND POWER (CHP)

What is Biomass ?

Biomass refers to energy resources derived from organic matter, including wood, wood waste, agricultural waste, and other living-cell material that can be burned to produce heat.

Air Quality

In order to be eligible for the biomass CHP COMFIT, all new, refurbished or replaced biomass boilers must be rated to achieve the air emission performance rated in Table 1.

To achieve such performance, it is anticipated that boilers will likely require emission control technology. COMFIT applications for biomass CHP must identify the rated particulate matter emission level, the manufacturer's emission testing method, and the type of pollution control equipment.

Table 1: Rated particulate matter emission numbers upon installation required for eligibility of biomass boilers for the COMFIT		
Size Range (MW input) PM Emission Cap (mg/m ³)*		
0.25 to 1	120	
1 to 3	50	
3 to 10 (upper COMFIT MW)	35	

* Tested under normal operating conditions at standard conditions of 20 degrees celsius, 101.3kPA and 8% oxygen

Further biomass eligibility considerations include:

- existing boilers not subject to alternation must be rated to meet 120mg/m3;
- proponents must report their annual overall efficiency as part of the Biomass Fuel Procurement and Use Plan annual reporting requirements;
- community-based projects are required to be CHP but are permitted to sell excess heat to others;
- industrial, private projects must use the heat themselves on site in an industrial process and may sell surplus to others; and
- other considerations outlined in COMFIT Directive 002.

SMALL-SCALE IN-STREAM TIDAL

What is small-scale in-stream tidal ?

Small-scale in-stream refers to a tidal generation device that is capable of being interconnected with the electrical grid through a distribution system. These tidal projects often use in-stream water turbines to create energy. The water turbines, which have a similar design to wind turbines, are designed to harness the power from tidal currents. Thinking about Starting a COMFIT Project ?

The COMFIT program will apply to in-stream tidal devices with a capacity of .5 MW or less.

RUN-OF-THE-RIVER HYDROELECTRICITY

What is run-of-the-river hydroelectricity ?

Run-of-the-river hydroelectricity is electricity that is generated from flowing water in a river with minimal environmental effect on the river course.

Things to consider about run-of-the-river hydroelectricity:

- Similar to small-scale in-stream tidal, run-ofthe-river hydroelectricity is a reliable source of electricity.
- No reservoir is required for run-of-the-river projects, meaning that installations have little impact on the surrounding ecology.
- Building a small-scale hydro-power project is also a cost-effective energy solution and maintenance fees are relatively small in comparison to other technologies; however, it can be a challenge to identify a suitable site in order to take full advantage of the power generating abilities of the technology.

DEVELOPMENTAL TIDAL PROGRAM

What is developmental tidal?

A developmental tidal array refers to a generation facility that consists of one or more tidal generation devices with a capacity of greater than 0.5 MW each and that is capable of being interconnected with the electrical grid through the transmission system. There are no ownership restrictions for eligibility for this FIT.

Things to consider about developmental tidal:

- Tidal energy is an attractive form of renewable energy, especially in Nova Scotia, home to some of the highest tides in the world.
- One benefit of tidal energy is that tides produce power on a much more continuous and

Thinking about Starting a COMFIT Project?

predictable basis than other forms of renewable energy such as wind or solar power.

• Recent technological developments and improvements, both in design and turbine technology, are increasing the total availability of tidal power.

Still, it is important to consider that tidal development technology is still evolving and the economic costs for research and development of tidal projects can be expensive. There are also environmental costs that need to be considered.

Applications for developmental tidal projects will be accepted once the UARB establishes the developmental tidal rate.

General Considerations

An important part of planning a COMFIT project is determining where the project will be located and who owns the land. Land ownership considerations include whether you own the land, lease it, or want to purchase it. Other issues that need to be considered are municipal by-laws, environmental issues, archaeological and heritage issues, and the use of Crown lands. The COMFIT application will also require the proponent to demonstrate that any Mi'kmaq communities impacted by the project have been engaged, and in addition that the public has been consulted.

More information on application requirements can be found in Section 3.

Registering on the COMFIT Website

To apply for the COMFIT program, you must first register with the Department of Energy through **www.nsrenewables.ca**. You will be required to provide general information about your organization and to create a username and password. This site also provides detailed information on the COMFIT process and general guidance on projects. It is strongly encouraged to register in advance of submitting an application, as the Department of Energy must verify the information provided in your registration before you can complete an application.

What Sort of Time Commitment is Involved?

Many factors can influence how long it takes for a project to get connected to the Nova Scotia Power distribution system. Each project is unique due to location, technology, size and requirements. While smaller projects may take anywhere from one to three years to move from planning to production, larger projects may take up to five (5) years.

As outlined in COMFIT Directive 003, the Minister has established, as a standard requirement, that all projects have an in-service operation within the time frame indicated (below), beginning from the date the application is approved.

Table 2: Project Completion Timeframe		
Technology	Time Frame	
Wind (≤50kW, >50kW)	3 years	
Biomass combined heat/power	4 years	
Small-Scale In-Stream Tidal	5 years	
Run-of-the-River Hydroelectricity	4 years	

This requirement may be extended in extenuating circumstances after application to the Minister for such extension stating the cause and why it was unanticipated at the time of the application. Such an extension will be granted only if there are no other applicants seeking access to the same distribution connect opportunity.

Planning your Project

Site Evaluation

Conducting a site evaluation is an important step in determining the energy capacity of your project at the planned location. The evaluation examines which scale of device would be most practical and economical for your property. If you do not have the expertise in your organization to conduct a site evaluation, it is advisable to contact an experienced professional. Costs for site assessments vary depending on the type and complexity of the renewable electricity technology.

A site evaluation helps to determine if your planned renewable electricity project is viable by analyzing how your system will work, assessing the available resources at your site, recommending a system size based on the available energy resources, and providing an estimate of the cost of the project.

Several common features of site evaluations include:

- overview of project
- description of site
- overview of types of technology
- anticipated energy output, system cost and projected revenue

NSPI System Operator Preliminary Assessment

It is necessary to consult with Nova Scotia Power Inc. (NSPI) System Operator about the distribution level capacity that is available at the location you are considering by having a preliminary assessment conducted. Each distribution connection has its own capacity that is set by the size of the electricity demand or load that it serves.

In order to have a preliminary assessment completed by NSPI, an Interconnection Request must be submitted. The form must be accompanied with a map showing the project location. Once a completed Interconnection Request has been received by NSPI, the proposed project will be placed in a queue.

The preliminary assessment considers the size, type and location of the proposed project and the existing NSPI facilities in place. The assessment report includes information about the existing NSPI system, a preliminary evaluation of various technical criteria, and an order of magnitude cost to build any upgrades identified by the assessment.

The ability of the generating facility to be integrated with the distribution system will be confirmed by the Combined System Impact/Facilities Study. After consulting with NSPI, the proponent will receive the assessment report, which is required in the application submitted through the "onewindow" process. It is important to note that this initial assessment by NSPI is not a guarantee that the capacity indicated will be available at the proposed location for the proposed project.

Please visit the Nova Scotia Power website for more information, including forms and fees.

Resource Assessments

You will need to provide a resource assessment as part of your COMFIT application. While a desktop analysis may be sufficient for your application, a more detailed assessment may be appropriate for your evaluation of the economic viability of your project and for securing funding. Following are descriptions of the resource assessments necessary for each of the renewable technologies.

Wind

It is recommended that proponents consider the four common stages of wind resource assessments for both wind classes:

- initial assessment
- detailed site characterization
- long-term validation of data
- detailed cash flow projections and acquiring financing

While the first stage can be completed by the proponent, with some research and general guidance from someone with a technical background and knowledge about wind energy, the other three stages should be completed by an experienced professional. If you do not have the expertise within your organization to conduct a site evaluation, it is advisable to contact someone who can provide this service. It is also important to understand the requirements of anyone providing capital for your project and to communicate your methods at the beginning, middle, and end of the process to ensure that the appropriate information is provided.

Initial Assessment

The initial assessment involves using existing data from wind resource maps and other weather measurement sites to make an estimated projection of the resource at your proposed project location.

The Nova Scotia Wind Atlas provides an estimation of the wind resource for your given location, which can be searched by address. These maps, used in combination with the technical specifications of the wind turbine(s), can help estimate the electricity power production of a project. It is important to note that detailed production estimates should not be made solely from wind resource maps, as there is a degree of uncertainty in the wind speeds they predict.

Seeking guidance from someone with wind turbine siting experience can make the search for a site much easier. A wind resource expert can guide you through choosing a site that has the best resource potential, taking into account the construction and operation of the turbine and distance from interconnection lines.

The Canadian Wind Energy Association (CanWEA) recommends that a minimum average wind speed of 4.5 metres/second at a height of 30 metres should be used to identify areas with adequate wind speeds for a small wind turbine. This information should be obtained from the Nova Scotia Wind Atlas Map.

Detailed Site Characterization

After determining the preliminary viability of your project through an initial assessment, industry practice is to hire a wind resource expert to undertake a detailed wind resource assessment with wind measurement equipment. This assessment usually requires at least a year's worth of data to determine the feasibility of your project for those providing capital.

It is a generally good business practice to consult with those providing capital for your project about what specific wind resource information they require. Depending on the specific site and its characteristics, it may be appropriate to install several meteorological (Met) towers with anemometers as close to the expected wind turbine as possible. Seeking the expertise of a wind resource professional, either within or hired from outside of your organization, is a critical part of good business planning and ensuring the viability of your project.

Long Term Validation of Data

This stage involves comparing your collected data to long-term weather data, with the help of a consultant, to help determine whether the data represent a low-, medium-, or high-wind year. This may result in an adjustment of long-term production estimates, and will ultimately help you ensure that your production estimates are descriptive of the site and are not inflated due to an abnormally windy year.

Detailed Cash Flow Projections and Acquiring Financing

The projection resulting from your wind resource assessment should provide evidence that your project will be able to cover debts and generate revenue. As you collect more data, it is important 15

to refine your projections, which should be communicated to those providing capital for your project.

Biomass

To assess the viability of your biomass project, you should conduct an analysis of the existing or potential biomass material that you can use. Biomass resources eligible for the COMFIT program include agricultural crops and residues, dedicated energy crops, forestry products and residues, and animal wastes. It is important to remember that the only biomass projects eligible for the COMFIT program are combined heat and power (CHP) facilities.

All biomass project proponents who are using forest-harvested and agricultural operation biomass must include a Fuel Procurement Plan with their application. This plan should outline how you intend to ensure that your proposed fuel supply will meet sustainable harvesting requirements. You must also submit annual reporting of actual biomass fuel procurement to the Department of Natural Resources' Registry of Wood Buyers as a condition of continued COMFIT approval. Section 3 of the application also requires information on your project's compliance with the environmental particulate matter standard, the rated particulate matter emission level, the manufacturer's emission testing method, and the type of pollution control equipment used in your project.

There is an overall cap of new electricity generation from forest biomass at 350,000 dry tonnes above the average amount of primary forest biomass consumed annually in the Province for the years 1995 to 2005.

In-Stream Tidal

It is recommended that proponents consider the four common stages of in-stream tidal resource assessments:

Stage 1: Regional Assessment - Site Screening
Stage 2: Site Assessment - Pre-Feasibility Study
Stage 3: Site Assessment - Full Feasibility Study
Stage 4: Site Assessment - Design Development

Tidal energy production requires care in planning, as project can greatly impact the environment and its users. As such, a resource assessment should be completed by an experienced professional. If you do not have the expertise in your organization to conduct a site evaluation, it is advisable to contact someone who can provide this service. It is also important to understand the requirements of anyone providing capital for your project, and to communicate your methods at the beginning, middle, and the end of the process to ensure that the appropriate information is provided.

Stage 1: Regional Assessment - Site Screening

The purpose of this assessment is to determine a suitable development area for your tidal project. After a potential development area has been identified in a regional assessment and the resource assessment becomes focused on an individual area, the study is considered to have reached the "site assessment" stage.

Stage 2: Site Assessment - Pre-Feasibility Study This stage of the assessment involves conducting an initial assessment of the tidal resource in the identified area.

Stage 3: Site Assessment - Full Feasibility Study

Following the initial assessment, a full feasibility study can be conducted that will result in a detailed economic model. As a part of this process, all project constraints should be identified and assessed in the analysis.

Stage 4: Site Assessment - Design Development After completing this stage, the location of the development area can be determined, and the scale of the device to be installed, should be known.

Various analysis should be conducted throughout the four stages, including an assessment of the size, frequency, and speed of the river flow. These analyses become more specific and detailed as the assessment stages progress.

Run-of-the-River Hydroelectricity

It is recommended that proponents consider the four common stages of run-of-the-river hydroelectricity resource assessments:

Stage 1: Regional Assessment - Site Screening
Stage 2: Site Assessment - Pre-Feasibility Study
Stage 3: Site Assessment - Full Feasibility Study
Stage 4: Site Assessment - Design Development

Run-of-the-river energy production requires care in planning, as projects can greatly impact the environment and its users. As such, a resource assessment should be completed by an experienced professional. If you do not have the expertise in your organization to conduct a site evaluation, it is advisable to contact someone who can provide this service. It is also important to understand the requirements of anyone providing capital for your project and to communicate your methods at the beginning, middle, and end of the process to ensure that the appropriate information is provided.

- Stage 1: Regional Assessment Site Screening The purpose of this assessment is to determine a suitable development area for your run-of-the-river project. After a potential development area has been identified in a regional assessment and the resource assessment becomes focused on an individual area, the study is considered to have reached the "site assessment" stage.
- Stage 2: Site Assessment Pre-Feasibility Study This stage of the assessment involves conducting an initial assessment of the tidal resource in the identified area.
- Stage 3: Site Assessment Full Feasibility Study Following the initial assessment, a full feasibility study can be conducted that will result in a detailed economic model. As a part of this process, all project constraints should be identified and assessed in the analysis.

Stage 4: Site Assessment - Design Development

After completing this stage, the location of the development area can be determined, and the scale of the device to be installed, should be known.

Various analysis should be conducted throughout the four stages, including an assessment of the size, frequency, and speed of the river flow. These analyses become more specific and detailed as the assessment stages progress.

Regulatory Permits and Approvals

Identifying and planning for the correct permits and approvals for your project is an important part of ensuring that you submit a complete application for the COMFIT program. Demonstrating that you have considered all potential issues prevents the need for further information to be requested, which allows your application to be processed more quickly.

This section is designed to get you thinking about the required permits and approvals associated with each technology and to provide you with resources for further information. While the application asks for documentation demonstrating your knowledge of the permits and approval required, you project can only be developed, built, and operated if you apply for, and receive, all applicable permits and approvals.

The Permits and Approvals Tables (see Appendix) serve as an overview of some of the most common provincial and federal permits and approvals required for COMFIT projects, listed by technology. While the tables are not exhaustive, proponents must ensure that all permits and approvals are obtained from the appropriate departments for their specific projects.

Small-Scale In-Stream Tidal

The Nova Scotia government and the federal government have agreed upon a process to ensure that the regulatory process of offshore renewable energy projects is coordinated, efficient, and streamlined as much as possible. A One-Window Standing Committee has been established that allows proponents to meet with member departments to discuss and review a proposed project. Proponents planning tidal projects should contact the Department of Energy early in the process to meet with the One-Window Standing Committee.

For more information contact Sandra Farwell, Manager, Renewable Energy at (902) 424-1700 or **farwelse@gov.ns.ca**.

Financial and Business Planning

As discussed throughout this guide, the economical viability of your proposed project plays a key role in the approval of your application. A number of steps are required to ensure that the project is well-planned and financially sound.

Applicants will be required to provide the following in their COMFIT application:

- resource assessment
- financial viability of project
- projected capital costs of the project, including interconnection costs and cost of the expected sources of capital

Business Plan

A business plan describes your business, its objectives and strategies, the market you are targeting, and the financial forecast for your business. This document is very important in helping to secure external funding and in establishing reasonable financial forecasts.

While business plans may vary in terms of length and scope, most business plans contain common elements.

The following topics should be considered:

Executive Summary

The executive summary provides an overview of the main points contained in your business plan.

It is important to capture the main issues in a concise manner as it is usually the first section that a potential investor or lender will read. The executive summary should include highlights from each of the other sections to explain the basics of your business.

Description of Business Opportunity

This section of the plan covers what your business is all about, including the technology you plan to use. You should indicate in your proposal the nature of the business venture, the industry sector, the vision and main objectives, as well as the business structure (eg., not-for-profit, CEDIF).

The Organization **=**

Providing a description of the organization, including an organizational chart, allows investors to see that your organization has a sufficient amount of skills and experience to succeed in your project.

Operations =

This section of your business plan should outline your operational requirements, including your project requirements, such as size and location.

Financial Forecasts

As part of any business plan, you will need to provide financial projections for your business. Forecasts should run for the next three to five years; however, the first 12 months' forecasts often have the most details, including assumptions of costs and revenues, so investors can clearly see your thinking behind the numbers. Forecasts should include cash flow statements, a profit and loss forecast and a sales forecast.

Things that should be considered in this section include how much capital is needed for the project, what security can be offered to lenders, how you plan to repay loans, sources of revenue and income, as well as forecasts based on a number of scenarios.

Other Information

While not necessarily required, providing an implementation plan and supporting material, such as licenses permits, will enhance your plan.

Community/Public Engagement

Community and public support will be very important to the success of your project. It is critical to find out well in advance if the members of your community generally support the development of your renewable electricity project. Community engagement can provide vital local knowledge, reduce the risk of challenges and delays, and identify how a project can bring value to a community.

CEDIFs have particular community-support requirements specific to their design. For instance, it must have at least six directors elected from the fund's defined community.

For more information on CEDIF requirements, see Economic and Rural Development and Tourism. To qualify for the COMFIT program, the majority of CEDIF members must reside in Nova Scotia, with at least 25 members residing in the municipality where the project is located. A CEDIF must properly demonstrate to the Department of Energy that they have a least 25 community members as outlined in their project application, prior to construction of the project, or within one year of COMFIT approval.

Planning your Project

During the engagement process, it is important to provide sufficient details regarding your proposed project. Identifying important components such as the location, technology and anticipated project development timeline allows community members to provide meaningful input.

At this early stage, an applicant may want to notify nearby landowners of the proposed project location, place a notice in a local newspaper, and/or hold a community meeting. Proof of community/public engagement must be demonstrated and can be done in a number of ways, including:

- a municipal resolution indicating support from the municipality and location where the project is proposed; and
- letters or other written evidence of support for the project from members of the community where the project is proposed.

Aboriginal Engagement

It is important very early in the process to contact the local Mi'kmaq communities to inform them that you are planning a project, and begin a dialogue with them to identify any concerns or interests that may arise. This could include potential Mi'kmaq interest in participation as owners, investors, or suppliers. Applicants should demonstrate an acceptable means to engage those communities.

The COMFIT Mi'kmaq Engagement Guide outlines the Department of Energy's expectations regarding applicants' engagement with the Mi'kmaq of Nova Scotia. The Proponent's Guide: *Engagement with the Mi'kmaq of Nova Scotia* provides guidelines to assist proponents in their engagement with the Mi'kmaq. The guide provides an overview of the principles of engagement and steps to follow when engaging the Mi'kmaq.

Municipal Consultation and Identification of Municipal By-laws

Proponents should meet with the planning office of their local municipality early in the project planning phase, as projects may directly impact local communities with respect to both the building and operation of generation facilities.

Applicants must include a demonstrated knowledge and understanding of the municipal by-laws that apply to their projects and a commitment to comply with them as part of the COMFIT project application.

Such things that may be considered by your local municipality include:

- environmental effects of building and running your project
- project location with respect to infrastructure and servicing
- road access
- traffic management
- municipal service connections, including fire hydrants
- landscaping design of project
- emergency management procedures
- easements or restrictive covenants
- rehabilitation of any temporary disturbance areas and municipal infrastructure that could be damaged during construction

• building code permits and licenses

More information on by-laws and appropriate engagement with municipalities can be obtained from the Union of Nova Scotia Municipalities (UNSM), Service Nova Scotia and Municipal Relations (SNSMR), or your local municipal office.

Understanding Environmental Issues

It is necessary to understand the approvals, permits, and other considerations required to assess the environmental impact of your project. In addition to the environmental aspects uniquely impacting each energy project, you will need to consider the environmental issues commonly associated with any construction project. A completed Environmental Checklist is required as part of the COMFIT application.

Depending on the type and size of your project, you may be required to have an Environmental Assessment (EA) completed by the Department of Environment. In this case you will need to consider the biophysical environment that your project will exist in and what effects your project might have on that environment. This can include issues related to the weather, geological features, surface water, ground water, wetlands, flora and fauna species and habitat, bird strike/bird migration, fish and fish habitat, visual impact assessment, noise levels, and any other foreseeable issues.

More information on EAs is available in the Proponent's Guide to Environmental Assessment, the Proponent's Guide to Wind Power Projects, or by contacting the Department of Environment at:

http://www.gov.ns.ca/nse/ea/.

For more information, visit the Department of

Communities, Culture and Heritage Special Places Protection website.

Tool Kit

The COMFIT Tool Kit consists of a range of materials to educate individuals and groups about the program including a mix of PowerPoint presentations, videos, scenarios and case studies, small group activities, and discussion questions to help potential project proponents understand projected timelines, costs, and complexities.

The COMFIT Tool Kit was developed and tested across Nova Scotia in February and March 2011 by a team led by the Ecology Action Centre. Five pilot sessions were held throughout the province with representatives from community groups, municipalities, and developers. The pilot provided an opportunity to engage with these groups and proved

Service Nova Scotia and Municipal Relations (SNSMR), or your local municipal office.

Understanding Heritage and Archaeological Issues

Demonstrated knowledge of the heritage or cultural impacts of your project is a requirement of your COMFIT application (Section 10). It is important to consult with the Department of Communities, Culture and Heritage while you are planning your project to have a preliminary review.

This review will require you to provide information about the location of your project, as well as the nature of the development. From the preliminary review, you will be told whether or not you will need an environmental screening of your project.

The Canadian Environmental Assessment Act (CEAA) may apply to renewable electricity projects if federal authorities are contemplating certain action or decisions in relation to a project that would enable it to proceed in whole or in part.

A federal environmental assessment may be required when a federal authority provides financial assistance to the proponent; sells, leases or otherwise disposes of federal lands; or issues a permit, license or any other approval as prescribed in the *Law List Regulations*.

The environmental impacts associated with biomass

agricultural biomass. In most cases though, biomass

projects have the potential to affect air quality and natural resources (in the case of forest biomass).

In order to further determine the environmental

of Environment at www.gov.ns.ca/nse/air/ and

ns.ca/natr/forests/ early in the project planning

process.

impacts unique to biomass, contact the Department

the Department of Natural Resources at: www.gov.

It may also be necessary for a federal environmental

assessment to be conducted depending on the

nature and size of the proposed project.

can vary widely depending on the type of biomass

and technology being used. For example, forest biomass has different environmental impacts than

For more information about federal environmental assessments, contact the Canadian Environmental Assessment Agency at **www.ceaa.gc.ca**.

Each proponent must also consider what municipal environmental by-laws might relate to their project.

More information on by-laws and appropriate engagement with municipalities can be obtained from the Union of Nova Scotia Municipalities (UNSM), to be a helpful process—the materials are more community-focused and user-friendly as a result.

The Tool Kit is meant to meet a range of learning needs, from those brand new to the COMFIT to those who have been involved in the renewable energy sector for a long time. The Tool Kit program includes information about business planning, regulatory requirements, resource assessments, land acquisition, financing, governance, and NSPI connection requirements. A training module is used to educate the local leadership participants, which provides them with the sufficient capacity and expertise to then deliver the Tool Kit to proponents in local workshops or through the Internet.

23

Submitting your Application

Application Overview

General Information

If you are applying for multiple projects, you must register each project under a separate account. Each project will receive a separate project number, which can be viewed through our registration and application.

Sections of the Application

The COMFIT application contains 12 sections that must be completed before you can submit your application:

- Applicant Registration
- Ownership Structure
- Project Information
- Site Information
- Technical Information
- Business Case and Supporting Information
- Community Support and Engagement
- Aboriginal Requirements
- Environmental Requirements
- Special Places, Archaeological/Heritage Resource Requirements
- Other Permits and Approvals
- Affirming Statement
- Filling out the application

All applications must be submitted online at: **www.nsrenewables.ca**.

You do not have to fill out the application in a single online session. You can save draft sections of your application, log out, and return to it at a later time.

Mandatory questions are indicated by an asterisk (*) or highlighted in a yellow box. **You must complete all mandatory questions before you can submit your application.**

All sections of the application must be completed in order to submit your application. If you try to submit an incomplete application, you will be notified of what questions or sections need to be completed.

Once a completed application has been submitted, you will not be able to change the information provided. It is recommended that you review the information provided for accuracy.

Section 1 - Applicant Registration

The first step of the COMFIT application process is to become a registered user by completing the Applicant Information section at **www. nsrenewables.ca**. A registered user represents the qualifying entity (primary applicant) applying for the COMFIT program and is authorized by that organization to apply on its behalf. The registered

Submitting your Application

user is also the person who the Department of Energy will make contact with about the COMFIT application.

Once you complete the Applicant Information section, the Department of Energy will verify the information provided. Upon full verification, you will be notified that you can proceed with the rest of your application.

Applicant's Legal Registered Name

The applicant name is the legal name of the qualifying organization.

Business Name

The business name is the registered name under which the primary applicant is operating or doing business (if different from above). For more information, please visit rjsc.gov.ns.ca.

Registry ID Numbers

The seven-digit Registry of Joint Stock Companies ID number issued to the primary applicant.

Physical/Mailing Address

The physical/mailing address is the physical address of the primary applicant, including county, as well as the mailing address, if different than the physical address.

E-mail Address

The e-mail address of the registered applicant, which is the same address used to log-in to the account. Any electronic correspondence will be delivered to this e-mail address.

Telephone Number

The telephone number of the registered user who represents the primary applicant.

Registered User

The registered user is the name of the primary applicant. This person must be authorized to represent the organization or be accountable for all statements and reports made. This information will be verified before any application can move forward.

Username

Applicants may choose a username such as "HRMRenewables." This username will be used to log- in to the website for filing of applications, reports, and other secure transactions.

It is important that applicants understand that anyone who logs in under the username with the password below will be deemed to be an authorized representative of the organization, able to file true information as required by law.

Password

Organizations must choose a password that is at least 8 characters long using a combination of letters and numbers. For example, "45energy78" would qualify as a password but a password consisting of all letters or numbers would not.

Fax Number

The ten-digit fax number of the registered applicant.

Primary Applicant Type

Only one group may be selected at this time. If two or more groups are acting together, but the registration will be under the entity with the largest ownership in the project (the primary applicant type).

Later, in Section 2 of the application, it must be clearly indicated what percentage is held by each partner in the application. The combined percentage of eligible entities (excluding municipalities) must be equal to or greater than 51%.

The primary applicant must be one of the following:

- Cooperative
- Not-for-profit corporate body
- Community Economic Development Corporation (CEDIF)
- Municipality or subsidiary of a municipality
- Mi'kmaq band council
- Combined heat and power biomass facility
- University

Section 2 - Ownership Structure Type of Ownership ■

- Cooperatives
- Not-for-profit corporate bodies
- Community Economic Development
 Corporations
- Municipality or subsidiary of a municipality
- Mi'kmaq band council
- Combined heat and power biomass facility
- University

For more information, visit:

http://www.gov.ns.ca/just/regulations/regs/ elecrenew.htm#TOC2_20.

Majority Ownership

If your project is based on a partnership, you are required to describe how ownership is divided, including the percentage of ownership for each entity. As the community-based entity that qualifies for the COMFIT program, you must own a majority (51%) of the proposed project with the exception of municipalities.

Application

Submitting your

Municipalities, and their subsidiaries, can only partner with other municipalities in owning projects, but may contract with other entities in planning, building, or running municipallyowned projects. For more information, please view Information Bulletin # 17 – Public-Private Partnering or refer to the *Nova Scotia Municipal Government Act*.

Mi'kmaq band councils and their business enterprises qualify for COMFIT. Projects must be located on reserve lands or on the lands leased or owned by Mi'kmaq business enterprises. The amended Regulations outline further land ownership requirements for Mi'kmaq band councils.

Intergovernmental partnerships can be arranged on a case-by-case basis. Interested proponents should first consult with the Department of Energy or Service Nova Scotia and Municipal Relations before moving forward with such a project.

Co-operatives, not-for-profits, and CEDIFs are required to have the majority of their members residing in Nova Scotia, with at least 25 members residing in the municipality where the project is located. COMFIT Directive 006 outlines the timing in which a CEDIF must be formed in order to eligible for FIT Approval. A CEDIF must properly demonstrate to the DOE that they have at least 25 community members as outlined in their project application prior to construction of the project, or within one year of COMFIT approval. For more information on CEDIF requirements, see the Department of Economic and Rural Development and Tourism.

Documentation Required

You are required to provide documentation demonstrating compliance with the ownership structure you have selected as part of your application. Failure to comply with the ownership structure outlined in your application may result in having a FIT Approval revoked.

Section 3 - Project Information

Type of Renewable Electricity Generation Facility ■

Wind

There are two classes of wind turbines that qualify under the COMFIT program. You must state which class you are applying under:

- wind power with a capacity of 50 kW or less
- wind power with a capacity greater than 50 kW

Biomass

You are required to identify the biomass feedstock you will be using and how it will be used, in addition to including a Fuel Procurement Plan that details the anticipated sources for your biomass project, region of harvest, and land tenure type (eg., private, industrial or Crown land). If the project is expected to acquire or consume primary forest products, secondary forest products, or primary forest biomass, you must also be registered with the Department of Natural Resources Registry of Buyers. Agricultural biomass fuels shall only be deemed sustainable if they are grown on a farm registered under the NS Farm Registration Act.

Small-Scale In-Stream Tidal

Small-scale in-stream tidal devices that have a capacity of .5 MW or less and are capable of being interconnected with the electrical grid through the distribution system are eligible under the COMFIT program.

Run-of-the-River Hydroelectricity

Run-of-the-River Hydroelectricity is generated from flowing water in a river with minimal environmental effect on the river course.

Proposed Size of Renewable Electricity Generation Facility

The proposed size of the facility should be provided in MW, eg., 1.0 MW, 2.5 MW, etc.

Technology

You are required to provide the name and model of the proposed technology.

Section 4 - Site Information

Project Location

If the location of your project is not the same as the address provided in the Applicant Information section (the COMFIT Registration), you will need to provide the address here. If the project spans multiple locations or a large rural area, you will need to specify how the project relates to the address provided.

Geographic Coordinates or Property Identification Number ■

You will need to provide either:

 the geographic coordinates of your project location, which can be found by using the address lookup at:

http://www.gov.ns.ca/geonova/home/ default.asp

or

 the Property Identification Number (PID) of your project. PIDs can be found on property maps, which are accessible graphically through computer terminals located in Land Registration Offices throughout Nova Scotia.

For more information, visit:

http://www.gov.ns.ca/snsmr/land/products/ property1.asp.

Land Ownership and Access

You are required to state whether you own the project location or whether you rent, lease, or require access to provincial, federal, or reserve land. If you require the use of any land that you do not own, including accessing the land between your project and the NSPI distribution site, you must provide evidence that you have permission to access the land, including the necessary leases, permits, licenses, etc.

Applicants must also consult with the Nova Scotia Department of Transportation and Infrastructure Renewal (TIR) in order to ensure that surrounding infrastructure (roads, bridges, etc.) is able to support the weight and size of the technology when in transport. Further discussions between proponents and TIR may be necessary if a project is located near highways, railways, or other significant infrastructure.

Section 5 - Technical Information

Submitting your

Preliminary Interconnection Assessment

Application

A preliminary assessment conducted by NSPI is required as part of your application. This assessment includes the distribution level capacity that is available at the location you are considering. It is important to note that this initial assessment by NSPI is not a guarantee that you will receive the indicated available capacity at the proposed location for the proposed project. Please visit NSPI's website for more information at:

http://oasis.nspower.ca/en/home/default/ revisedgenerationinterconnectionprocedures. aspx.

Section 6 – Business Case and Supporting Information

You will need to upload your business case when applying. This should include (but is not limited to) the following components:

- description of resource assessment
- pro forma document to illustrate financial viability at the applicable feed-in tariff rate
- projected capital costs of the project including interconnection costs
- cost of expected sources of capital

Section 7 - Community Support and Engagement

Providing evidence of community support is a requirement of your COMFIT application. You can demonstrate that your project has received community support by providing: a municipal council resolution from the municipality within which the project is to be located, indicating support,

or

 letters or other written evidence of support for the project from members of the community in which the project is to be located

Section 8 - Aboriginal Requirements

You will need to identify any Mi'kmaq communities that will be impacted by your project. You will need to provide documentation demonstrating that you have identified the Mi'kmaq community's concerns or interests, including interests in participation as owners, investors, or suppliers.

For more information about appropriate engagement practices, please review the Proponent's Guide: Engagement with the Mi'kmaq of Nova Scotia at:

http://www.gov.ns.ca/abor/docs/proponantsguide.pdf

COMFIT proponents should consult the COMFIT Mi'kmaq Engagement Guide for COMFIT-specific engagement practices.

Section 9 – Environmental Requirements

Applicants must directly contact the Nova Scotia Department of Environment or Canadian Environmental Assessment Agency regarding any potential provincial or federal regulatory requirements (permits, approvals, etc.) that may be required under environmental legislation.

The Environmental Checklist or the Permits and Approvals Tables (see Appendix) may also assist you with this section of the application.

Permits and Approvals

The proposed project may require one or more of the following provincial permits or approvals respecting the environment:

- Water Approval (under Section 66 of the *Environment Act*)
- Industrial Approval (under Section 66 of the *Environment Act*)
- Environmental Assessment (under Section 49 of the *Environment Act*)
- Please note that this is not an exhaustive list; however, if you require any environmental permits and approvals, you must contact the Department of Environment.

Environmental Statement

Proponents are also required to provide a statement, in addition to a completed copy of the Environmental Checklist, detailing the potential environmental impacts of the proposed renewable electricity project.

Section 10 – Special Places, Archaeological, and Heritage Resource Requirements

The Department of Communities, Culture and Heritage offers an environmental screening process that examines archaeological, paleontological, floral and fauna resources in the area, as well as cemeteries and shipwrecks (where appropriate). This process will identify whether cultural and/or heritage resources may be impacted by your renewable electricity project.

If you are unsure whether the screening process is necessary, you can forward project plans to the Department of Communities, Culture, and Heritage and receive advice on whether a screening is recommended.



If you contacted Communities, Culture and Heritage for an environmental screening, you will need to upload the screening assessment.

Permits and Approvals

The proposed project may require one or more of the following provincial permits or approvals respecting special places, archaeological resources, and/or heritage resources, such as, but not limited to:

- Archaeological Resource Impact Assessment (Category C permit under the *Special Places Protection Act*)
- Heritage Research Permit (under Section 8 of the Special Places Protection Act)

If you require either the Archaeological Resource Impact Assessment or a Heritage Research Permit, you will need to contact Communities, Culture and Heritage.

In addition, if your project requires an Archaeological Resource Impact Assessment due to archaeological or heritage resources that may be affected by your project, you will need to include a plan for completing the testing and assessment (including cost and timing implications for the project) in your COMFIT application.

Section 11 – Other Permits and Approvals

Municipal By-Laws, Permits and Approvals ■ List any identified municipal by-laws, permits, and approvals required for your project. More information can be obtained by contacting your local municipal office.

You can find this information at: www.gov.ns.ca/snsmr/muns/link/.

Municipal Approval

Indicate whether or not your project has received municipal approval.

Other Municipal By-Laws, Permits and Approvals ■

Submitting your

Application

It is important to identify all required permits and approvals to ensure that your COMFIT project is developed without undue delay. List any identified municipal, provincial, and federal permits and approvals that have not been identified in other sections of your application.

Section 12 - Affirming Statement

You must affirm that all information provided in the application is true and complete to the best of your knowledge. If any information provided in the application is inaccurate or incomplete, for whatever reason, the Department of Energy may deny or revoke a Feed-In Tariff Approval.

Further Application Information

One-Window Committee

The Department of Energy will review all applications and communicate with One-Window Committee member departments (as outlined in Section 35 of the *Renewable Electricity Regulations*) throughout the application review process.

In most cases, the Department of Energy will review applications, but in certain cases other Departments may become involved in reviewing sections of the application that pertain to their departments.

The member departments are the Department of Agriculture, the Department of Environment, the Department of Fisheries and Aquaculture, the Department of Natural Resources, Service Nova Scotia and Municipal Relations, the Department of Communities, Culture and Heritage, Department of Economic and Rural Development and Tourism, and the Department of Transportation and Infrastructure Renewal.

Incomplete Application

In the event that an application is incomplete or additional information is required, the applicant will be notified within 90 days after the application is received. The applicant then has 90 days from the date of the request to supply the requested information to the Department of Energy.

Ministerial Approval

All submitted applications that are reviewed and satisfy the requirements of the COMFIT application process are then forwarded to the Minister of Energy for a Feed-In Tariff Approval.

It is the responsibility of all approved projects to meet the requirements of the *Renewable Electricity Regulations*, including obtaining all permits and approvals, diligently pursuing the construction and completion of projects, and providing records for auditing purposes as required.

What do I do after I am Approved ?

Contacting Nova Scotia Power Inc.

In addition to receiving a Feed-In Tariff Approval from the department of Energy, you may be required to meet progression milestones identified by NSPI before a Distribution System Impact Study (DSIS) can be conducted. These milestones include providing information required for the DSIS and paying any deposits associated with the process.

Combined DSIS/Facilities Study Queue

After receiving the Feed-In Tariff Approval and reviewing the Preliminary Assessment from NSPI, you can then contact NSPI and request to be placed in the DSIS queue. Your place in the queue will determine when your DSIS/Facilities Study will be conducted.

Combined DSIS/Facilities Study

NSPI will provide you with the scope and estimated cost of conducting the DSIS/Facilities Study. After you have reviewed this information and pay a deposit, NSPI will complete the study based, in part, on the information provided with your interconnection request. The DSIS/Facilities Study will include a detailed analysis of the impact of your project, including identified technical and operational requirements for connecting your project to the NSPI distribution system. The study will list the cost and time estimates for completing the required additions and upgrades.

Standard Small Generator Interconnection Agreement (SSGIA)

Once you have reviewed and accepted the interconnection requirements and associated costs, the project-specific terms of the SSGIA can be developed. While there are two different SSGIAs that pertain to the COMFIT program, one for projects under 100 kW and another for projects over 100 kW, the common terms outlined in each are:

- scope of project
- inspection, testing, authorization and right of access
- effective date, term, termination, and disconnection
- cost responsibility, milestones, billing and payment
- project milestones

Once the terms of SSGIA have been agreed to, project construction can begin in accordance with the SSGIA. Prior to full commercial operation, commissioning and testing of the project must take place in accordance with the SSGIA.

All questions and applications associated with the interconnection process must be directed to NSPI.

For more information on the NSPI process outlined above, please visit:

http://oasis.nspower.ca/en/home/default/ revisedgenerationinterconnectionprocedures.aspx

Things to Consider when Building your Project

There are several things that should be considered when building your project, in addition to fulfilling the requirements set out by NSPI. It is generally good business practice to become informed of the various factors of building a renewable electricity project, including:

Planning

The first consideration is ensuring that all planning work, such as permits, approvals, land ownership issues, and funding have been obtained before building your project. This step is critical in ensuring that your planned project does not result in construction extensions that can be costly and may affect the status of your COMFIT approval.

Construction Timelines

A similar consideration is to have realistic project construction timelines and plan accordingly, including fully understanding the requirements that NSPI has in order to get your project built and connected to the system. In order to ensure that your project meets deadlines, it is advisable to have a team member with experience in managing largescale projects. In addition, there is a benefit to having a lawyer review construction contracts and tender documents.

Maintenance

Another consideration is the maintenance of your project. Once built, your chosen technology may require repairs and will most likely require regular maintenance. If you do not have the expertise in your organization to conduct maintenance on your system, it is advisable to contact an experienced professional. The construction period is also an excellent time to create a maintenance schedule, based on manuals, design drawings, system specifications, and expert advice. In addition, it is important to understand any warranties that your supplier provides, including terms and conditions.

Educating yourself and understanding these issues will help to ensure that your project is built according to agreement.

Reporting Requirements

COMFIT Directive 004 states that all FIT Approvedprojects must provide the Department of Energy, through **www.nsrenewables.ca**, with a completion report 30 days after being connected to NSPI's distribution grid.

Another reporting requirement is to provide annual reporting through your online account at **www. nsrenewables.ca**. The required information for this reporting includes the cost of the electricity produced, and revenues from the project and operating costs, including information about using Nova Scotia suppliers. Information to be contained within the "Annual Progress Report" is outlined in COMFIT Directive 004.



Appendix

Provincial and Federal Permits and Approvals Tables

The following tables outline the various permits and approvals that may be required for the various COMFITeligible technologies at the provincial and federal level.

It should be acknowledged that these tables do not provide an exhaustive list of permits and approvals, but instead provide a general overview to proponents in order to assist them in thinking about their project(s) from a regulatory perspective.

Wind Provincial

Department	Specifications for when a permit or approval is required	Permit or approval required	Act/Regulations
Environment	Projects of 2MW or more	Environment Assessment	Environment Act, S.49
	Project is to take place in or adjacent to a protected wilderness area	Authorization by the Minister	Wilderness Areas Protection Act, S.11 Wilderness Areas Project Act, S.17 Wilderness Areas Protection Act, S.19
Communities, Culture and Heritage	Project requires development which will potentially disturb or alter the landscape, thereby endangering archaeological sites	Archaeological Resource Impact Assessment	Special Places Protection Act, S.8
	Project requires exploration for, or excavation of, fossils or archaeological sites	Heritage Research Permit	Special Places Protection Act, S.8
	There is an abandoned cemetery at the project site		Cemeteries Protection Act, S.8

34 Appendix

Department	Specifications for when a permit or approval is required	Permit or approval required	Act/Regulations
Natural Resources	Project requires exclusive use of Provincial Crown Land.	Crown Lands Lease	Crown Lands Act, S.16
	Project requires non-exclusive use of Provincial Crown Land.	Permit, Letter of Authority or License	Crown Lands Act, S.16
	Project requires use of Provincial Crown Land for access of project site or for transmission lines.	A Permit for Access Across Crown Land, A Right of Way, or Easement	Crown Lands Act, S.16
	Project requires removal of trees on Crown Land during construction.	A Letter of Authority or Timber License	Crown Lands Act, S.28
	Project requires placement of structures on coastal submerged land.	Coastal Permit	Beaches Regulations, S.5
	Project requires the set-up of test, experimentation equipment or instruments on Provincial Crown Land.	Letter of Authority or License for the short-term use of Crown Land	Crown Lands Act, S.16
	Project requires the establishment or re-establishment of a legal survey, land boundary line or marker on or adjoining Provincial Crown Land.	Survey Order	Crown Lands Act, S.13
	Project requires the use or improvement of any road on Provincial Crown Land.	Permit for Access Across Crown Land, Right of Way, or consent of pre-existing Crown Land Licensee	Crown Lands Act, S.16
	Project involves the potential disturbance of any species listed under the <i>Nova Scotia Endangered</i> <i>Species Act</i> or designed critical habitat	Contact Director of Wildlife, (902) 679-6139	Endangered Species Act, S.13
	Project requires removal or placement of material from a beach, operation of a vehicle on a beach, or the construction or placement of any structure on a beach	Permit	Beaches Regulations, S.5 Beaches Regulations, S.7 Beaches Regulations, S.9
Service Nova Scotia and Municipal Relations	All proponents	Registration (depending on proponent type)	Cooperative Associations Act, S.14 Corporations Registration Act, S.5 Societies Act, S.6

35

Wind Federal

Applicants are advised to contact the following federal government departments about their wind facilities.

Department/ Organization	Permit/Approval/Regulation	Further Information
Canadian Broadcasting Corporation (CBC)	Any proposed wind facility must comply with Radio Advisory Board of Canada and Canadian Wind Energy Association (CanWEA) guidelines.	eoliennes_ windturbines@cbc.ca
Canadian Environment Assessment Agency (CEAA)	A federal environmental assessment may be required when a federal authority provides financial assistance to the proponent; sells, leases or otherwise disposes of federal lands; or issues a permit, license or any other approval as prescribed in the <i>Law List Regulations</i> .	www.ceaa.gc.ca
Environment Canada	If the proposed wind facility is within 80 km of a national weather radar station or impacts migratory birds in any way, Environment Canada should be contacted. Environment Canada holds environmental data that may be of use to the province and applicants.	www.ec.gc.ca
Fisheries and Oceans Canada (DFO)	Decisions about projects in and around water that may affect fish habitats are forwarded to the local conservation authority and may then be referred to DFO.	www.dfo-mpo.gc.ca
Natural Resources Canada (NRCan)	NRCan has an interest in projects related to natural resource development and often develops programs to assist (through funding) in the research and development of energy, forestry and mining initiatives.	www.nrcan-rncan.gc.ca
Parks Canada	If all or part of a proposed wind facility would occur on or over federal land owned by Parks Canada, or if it has the potential to affect a national park, national park reserve, national historic site, historic canal or national marine conservation area, the applicant is advised to contact the office administering the park(s) or site(s) in question.	www.pc.gc.ca
Royal Canadian Mounted Police (RCMP)	All applicants with proposed wind projects should contact the RCMP Mobile Communications Services.	(613) 949-4519 windfarm_coordinator@ rcmp-grc.gc.ca
Transport Canada	Wind turbines must be assessed for lighting and marking requirements in accordance with the <i>Canadian Aviation</i> <i>Regulations</i> . Transport Canada also requires applicants to complete an Aeronautical Obstruction Clearance Form. Also, any project near an airport that may potentially attract birds requires the applicant to contact Transport Canada, Air Transport Atlantic Region.	www.tc.gc.ca/eng/tc- main.htm



Biomass Provincial

Department	Specifications for when a permit or approval is required	Permit or approval required	Act/Regulations
Environment	Projects of 4,000 GJ or more	Environment Assessment	Environment Act, S.49
			Environmental Assessment Regulations, Schedule A
	Project is to take place in or adjacent to a protected wilderness area	Authorization by the Minister	Wilderness Areas Protection Act, S.11
			Wilderness Areas Project Act, S.17
			Wilderness Areas Protection Act, S.19
Communities, Culture and Heritage	Project requires development which will potentially disturb or alter the landscape, thereby endangering archaeological sites	Archaeological Resource Impact Assessment	Special Places Protection Act, S.8
	Project requires exploration for, or excavation of, fossils or archaeological sites	Heritage Research Permit	Special Places Protection Act, S.8
	There is an abandoned cemetery at the project site		Cemeteries Protection Act, S.8
Natural Resources	Project requires exclusive use of Provincial Crown Land	Crown Lands Lease	Crown Lands Act, S.16
	Project requires non-exclusive use of Provincial Crown Land	Permit, Letter of Authority or License	Crown Lands Act, S.16
	Project requires use of Provincial Crown Land to access project site or for transmission lines	A Permit for Access Across Crown Land, A Right of Way, or Easement	Crown Lands Act, S.16
	Project requires removal of trees on Crown Land during construction	A Letter of Authority or Timber License	Crown Lands Act, S.28
	Project requires placement of structures on coastal submerged land	Coastal Permit	Beaches Regulations, S.5
	Project requires the set-up of test, experimentation equipment or instruments on Provincial Crown Lands	Letter of Authority or License for the short-term use of Crown Land	Crown Lands Act, S.16

Department	Specifications for when a permit or approval is required	Permit or approval required	Act/Regulations
Natural Resources (Cont'd)	Project requires the establishment or re-establishment of a legal survey, land boundary line or marker on or adjoining Provincial Crown Land	Survey Order	Crown Lands Act, S.13
	Project requires the use or improvement of any road on Provincial Crown Land	Permit for Access Across Crown Land, Right of Way, or consent of pre-existing Crown Land Licensee	Crown Lands Act, S.16
	Project involves the potential disturbance of any species listed under the <i>Nova Scotia Endangered</i> <i>Species Act</i> or designed critical habitat	Contact Director of Wildlife (902) 679-6139	Endangered Species Act, S.13
	Project requires removal or placement of material from a beach, operation of vehicle on a beach, or the construction or placement of any structure on a beach	Permit	Beaches Regulations, S.5 Beaches Regulations, S.7 Beaches Regulations, S.9
	Project requires harvesting Crown timber as a biomass fuel	Crown Land Timber License or Forest Utilization Volume Agreement	Crown Lands Act, S.5
	Project involves the purchase of Crown timber from a supplier for biomass	Proof of DNR Consent	Crown Lands Act, S.5
	Project uses primary forest origin biomass fuels from owned or controlled forest land	Proof of sustainable forest management	Forests Act, S.7
	Project uses primary forest origin biomass fuels from independent suppliers	Proof of sustainable forest management and compliance with the Nova Scotia Code of Forest Practices by fuel supplier	Forests Act, S.7
	Project uses wood biomass fuels	Registered Wood Buyer	Forests Act, S.19
	Project requires the removal of forest products in a provincial park	Authorization by the Minister	Provincial Parks Act, S.13 Provincial Parks Act, S.17
Service Nova Scotia and Municipal Relations	All proponents	Registration (depending on proponent type)	Cooperative Associates Act, S.14 Corporations Registration Act, S.5 Societies Act, S.6

Biomass



Federal

Applicants are advised to contact the following federal government departments about their biomass facilities:

Department/Organization	Permit/Approval/Regulation	Further Information
Canadian Environment Assessment Agency (CEAA)	A federal environmental assessment may be required when a federal authority provides financial assistance to the proponent; sells, leases or otherwise disposes of federal lands; or issues a permit, license or any other approval as prescribed in the <i>Law List Regulations</i> .	www.ceaa.gc.ca
Canadian Food Inspection Agency (CFIA)	Contact the CFIA if the proposed project uses any forest biomass fuel containing any species of spruce originating from the Brown Spruce Longhorn Beetle Containment Area or from any parcel of private for public land on which a Notice of Prohibition of Movement order has been issued.	www.cfia-acia.agr.ca
Environment Canada	Contact Environment Canada if the proposed facility impacts migratory birds in any way. Environment Canada holds environmental data that may be of use to the province and applicants.	www.ec.gc.ca
Fisheries and Oceans Canada (DFO)	Decisions about projects in and around water that may affect fish habitats are forwarded to the local conservation authority and may then be referred to DFO.	www.dfo-mpo.gc.ca
Natural Resources Canada (NRCan)	NRCan has an interest in projects related to natural resource development and often develops programs to assist (through funding) in the research and development of energy, forestry and mining initiatives.	www.nrcan-rncan.gc.ca
Parks Canada	If all or part of a proposed biomass facility would occur on or over federal land owned by Parks Canada, or if it has the potential to affect a national park, national park reserve, national historic site, historic canal or national marine conservation area, the applicant is advised to contact the office administering the park(s) or site(s) in question.	www.pc.gc.ca

Small-Scale In-Stream Tidal Provincial

Department	Specifications for when a permit or approval is required	Permit or approval required	Act/Regulations
Environment	Projects of 2 MW or more	Environment Assessment	Environment Act, S.49 Environmental Assessment Regulations, Schedule A
	Projects that alter surface watercourse or the flow of water	Water Approvals	Environment Act, S.66 Activities Designation Regulations, S.5
	Project is to take place in or adjacent to a protected wilderness area	Authorization by the Minister	Wilderness Areas Protection Act, S.11 Wilderness Areas Protection Act, S.17 Wilderness Areas Protection Act, S.19
Communities, Culture and Heritage	Project requires development which will potentially disturb or alter the landscape, thereby endangering archaeological sites	Archaeological Resource Impact Assessment	Special Places Protection Act, S.8
	Project requires exploration for, or excavation of, fossils or archaeological sites	Heritage Research Permit	Special Places Protection Act, S.8
Natural Resources	Project requires exclusive use of Provincial Crown Land	Crown Lands Lease	Crown Lands Act, S.16
	Project requires non-exclusive use of Provincial Crown Land	Permit, Letter of Authority or License	Crown Lands Act, S.16
	Project requires use of Provincial Crown Land to access project site or for transmission lines	A Permit for Access Across Crown Land, A Right of Way, or Easement	Crown Lands Act, S.16
	Project requires removal of trees on Crown Land during construction	A Letter of Authority or Timber License	Crown Lands Act, S.28
	Project requires placement of structures on coastal submerged land	Coastal Permit	Beaches Regulations, S.5
	Project requires the set-up of test, experimentation equipment or instruments on Provincial Crown Lands	Letter of Authority or License for the short-term use of Crown Land	Crown Lands Act, S.16



Department	Specifications for when a permit or approval is required	Permit or approval required	Act/Regulations
Natural Resources (Cont'd)	Project requires the establishment or re-establishment of a legal survey, land boundary line or marker on or adjoining Provincial Crown Land	Survey Order	Crown Lands Act, S.13
	Project requires the use or improvement of any road on Provincial Crown Land	Permit for Access Across Crown Land, Right of Way, or consent of pre-existing Crown Land Licensee	Crown Lands Act, S.16
	Project involves the potential disturbance of any species listed under the <i>Nova Scotia Endangered</i> <i>Species Act</i> or designed critical habitat	Contact Director of Wildlife (902) 679-6139	Endangered Species Act, S.13
	Project requires removal or placement of material from a beach, operation of vehicle on a beach, or the construction or placement of any structure on a beach	Permit	Beaches Regulations, S.5 Beaches Regulations, S.7 Beaches Regulations, S.9
	Project has the potential to disturb the flora and fauna located in a provincial park	Authorization by the Minister	Provincial Parks Act, S.13 Provincial Parks Act, S.17
Service Nova Scotia and Municipal Relations	All proponents	Registration (depending on proponent type)	Cooperative Associates Act, S.14 Corporations Registration Act, S.5 Societies Act, S.6

Small-Scale In-Stream Tidal Federal

Applicants are advised to contact the following federal government departments about their in-stream tidal facilities:

Department/Organization	Permit/Approval/Regulation	Further Information
Canadian Environment Assessment Agency (CEAA)	A federal environmental assessment may be required when a federal authority provides financial assistance to the proponent; sells, leases or otherwise disposes of federal lands; or issues a permit, license or any other approval as prescribed in the <i>Law List Regulations</i> .	www.ceaa.gc.ca
Environment Canada	Contact Environment Canada regarding tidal facilities that have potential to affect the quality of Canadian fisheries waters, or that may affect migratory birds. Environment Canada holds environmental data that may be of use to the province and applicants.	www.ec.gc.ca
Fisheries and Oceans Canada (DFO)	Decisions about projects in and around water that may affect fish habitats are forwarded to the local conservation authority and may then be referred to DFO.	www.dfo-mpo.gc.ca
Natural Resources Canada (NRCan)	NRCan has an interest in projects related to natural resource development and often develops programs to assist (through funding) in the research and development of energy, forestry and mining initiatives.	www.nrcan-rncan.gc.ca
Parks Canada	If all or part of a proposed tidal facility would occur on or over federal land owned by Parks Canada, or if it has the potential to affect a national park, national park reserve, national historic site, historic canal or national marine conservation area, the applicant is advised to contact the office administering the park(s) or site(s) in question.	www.pc.gc.ca
Transport Canada	Facilities that will affect a navigable waterway require a <i>Navigable Water Protection Act</i> (NWPA) application. Please note that certain approvals under the <i>Navigable Waters Protection Act</i> trigger the requirement for a federal environment assessment under the <i>Canadian Environmental Assessment Act</i> .	www.tc.gc.ca/eng/tc- main.htm



Run-of-the-River Hydroelectricity Provincial

Department	Specifications for when a permit or approval is required	Permit or approval required	Act/Regulations
Environment	Projects of 10 MW or more	Environment Assessment	Environment Act, S.49 Environmental Assessment Regulations, Schedule A
	Projects that alter surface watercourse or the flow of water	Water Approvals	Environment Act, S.66 Activities Designation Regulations, S.5
	Project is to take place in or adjacent to a protected wilderness area	Authorization by the Minister	Wilderness Areas Protection Act, S.11 Wilderness Areas Protection Act, S.17 Wilderness Areas Protection Act, S.19
Communities, Culture and Heritage	Project requires development which will potentially disturb or alter the landscape, thereby endangering archaeological sites	Archaeological Resource Impact Assessment	Special Places Protection Act, S.8
	Project requires exploration for, or excavation of, fossils or archaeological sites	Heritage Research Permit	Special Places Protection Act, S.8
Natural Resources	Project requires exclusive use of Provincial Crown Land	Crown Lands Lease	Crown Lands Act, S.16
	Project requires non-exclusive use of Provincial Crown Land	Permit, Letter of Authority or License	Crown Lands Act, S.16
	Project requires use of Provincial Crown Land to access project site or for transmission lines	A Permit for Access Across Crown Land, A Right of Way, or Easement	Crown Lands Act, S.16
	Project requires removal of trees on Crown Land during construction	A Letter of Authority or Timber License	Crown Lands Act, S.28
	Project requires placement of structures on coastal submerged land	Coastal Permit	Beaches Regulations, S.5

42

Department	Specifications for when a permit or approval is required	Permit or approval required	Act/Regulations
Natural Resources (Cont'd)	Project requires the set-up of test, experimentation equipment or instruments on Provincial Crown Lands	Letter of Authority or License for the short-term use of Crown Land	Crown Lands Act, S.16
	Project requires the establishment or re-establishment of a legal survey, land boundary line or marker on or adjoining Provincial Crown Land	Survey Order	Crown Lands Act, S.13
	Project requires the use or improvement of any road on Provincial Crown Land	Permit for Access Across Crown Land, Right of Way, or consent of pre-existing Crown Land Licensee	Crown Lands Act, S.16
	Project involves the potential disturbance of any species listed under the <i>Nova Scotia Endangered</i> <i>Species Act</i> or designed critical habitat	Contact Director of Wildlife (902) 679-6139	Endangered Species Act, S.13
	Project requires removal or placement of material from a beach, operation of vehicle on a beach, or the construction or placement of any structure on a beach	Permit	Beaches Regulations, S.5 Beaches Regulations, S.7 Beaches Regulations, S.9
	Project has the potential to affect the flora and fauna located in a provincial park	Authorization by the Minister	Provincial Parks Act, S.13 Provincial Parks Act, S.17
Service Nova Scotia and Municipal Relations	All proponents	Registration (depending on proponent type)	Cooperative Associates Act, S.14 Corporations Registration Act, S.5 Societies Act, S.6



Run-of-the-River Hydroelectricity Federal

Applicants are advised to contact the following federal government departments about their run-of-the-river hydroelectricity facilities:

Department/Organization	Permit/Approval/Regulation	Further Information
Canadian Environment Assessment Agency (CEAA)	A federal environmental assessment may be required when a federal authority provides financial assistance to the proponent; sells, leases or otherwise disposes of federal lands; or issues a permit, license or any other approval as prescribed in the <i>Law List Regulations</i> .	www.ceaa.gc.ca
Environment Canada	Contact Environment Canada regarding run-of-the-river hydroelectricity facilities that have potential to affect the quality of Canadian fisheries waters, or that may affect migratory birds. Environment Canada holds environmental data that may be of use to the province and applicants.	www.ec.gc.ca
Fisheries and Oceans Canada (DFO)	Decisions about projects in and around water that may affect fish habitats are forwarded to the local conservation authority and may then be referred to DFO.	www.dfo-mpo.gc.ca
Natural Resources Canada (NRCan)	NRCan has an interest in projects related to natural resource development and often develops programs to assist (through funding) in the research and development of energy, forestry and mining initiatives.	www.nrcan-rncan.gc.ca
Parks Canada	If all or part of a proposed run-of-the-river hydroelectricity facility would occur on or over federal land owned by Parks Canada, or if it has the potential to affect a national park, national park reserve, national historic site, historic canal or national marine conservation area, the applicant is advised to contact the office administering the park(s) or site(s) in question.	www.pc.gc.ca
Transport Canada	Facilities that will affect a navigable waterway require a <i>Navigable Water Protection Act</i> (NWPA) application. Please note that certain approvals under the <i>Navigable Waters Protection Act</i> trigger the requirement for a federal environment assessment under the <i>Canadian Environmental Assessment Act</i> .	www.tc.gc.ca/eng/tc- main.htm



