



Student Research Grant Program Guidelines

1. Program Purpose

To support post-secondary research that identifies and encourages Value-Added Manufacturing opportunities relating to the diversion of Solid-Waste in Nova Scotia. The Program supports the Province's Solid Waste-Resource Management Strategy and the mandates of Resource Recovery Fund Board Incorporated (RRFB Nova Scotia).

2. Eligible Projects

The program will provide grants to students for Honours Undergraduate and Master's Graduate thesis research to investigate, design and develop:

- 1) materials or products that incorporate solid waste resources (See Appendix A);
- 2) technologies that will facilitate the separation and recovery of solid waste resources; and,
- 3) enhanced market opportunities for solid waste resources and/or recycled materials.

The following conditions must be adhered to:

- Projects must be comprised primarily of original work undertaken to acquire new knowledge with a specific practical application in view; or,
- Projects involving systematic work, using existing knowledge gained from research and/or practical experience that is directed to producing new materials, products or devices that aid the diversion of solid waste from Nova Scotia landfills.

3. Eligible Applicants

Eligible applicants include Undergraduate Honours and Masters Students at Nova Scotia postsecondary institutions. Applicants and/or project activities shall be based in Nova Scotia unless specifically approved by RRFB Nova Scotia.

4. Level of Assistance

- a) Research grants will be available to:
 - 1) Undergraduate students, up to \$8,000
 - 2) Graduate students, up to \$15,000
- b) In addition to the research support, up to \$2,000 of eligible expenses will be considered (ex. laboratory equipment, analysis costs, etc.)
- c) RRFB will provide assistance to a maximum of seventy percent (70%) of eligible costs as determined by the Committee. In some instances, where in the opinion of the Committee the project is of particular strategic value, a higher level of assistance may be offered. It is anticipated that the remaining thirty percent (30%) of projects costs will come from other funding/research sources. The University/College may also contribute through eligible in-kind contributions.
- d) Assistance from the RRFB will be provided in the form of a non-repayable contribution.

5. Eligible Costs

Eligible costs include expenses, stipends¹, operating and limited capital costs considered by the RRFB to be essential to the success of the research undertaking. These expenditures must be incremental, in all respects fair and without fraudulence, and represent fair market value. Contributions in kind from acceptable applicants are

¹ Approved stipend ranges are \$10-\$14 per hour for undergraduates and \$14-\$18 per hour for graduates (depending on the level of experience.)

eligible costs when, in the opinion of the RRFB, they are essential to the project, are incremental, are in all respects fair and without fraudulence, and represent fair market value. The amount of funding available each year is limited.

6. Ineligible Costs

Ineligible costs include land, depreciation, general-purpose vehicles and any other costs not considered essential to the project by the RRFB.

7. Application Assessment and Analysis

Applications must be submitted to the RRFB in writing, using the approved RRFB Student *Research Grant Application Form*. The applicant shall be expected to operate under the principle of full disclosure and provide all information necessary to ensure a complete evaluation of the project. The RRFB may collect and share information with such persons or organizations as RRFB deems necessary (including government agencies, financial institutions and contracted services) with respect to reaching a decision on applications.

The Student Research Grants Committee (the Committee) will assess all applications. Assessments and funding recommendations of the Committee shall be subject to approval by the Board of Directors. All applicants shall be informed of the Board's decision in writing. The letter to successful applicants shall include the terms and conditions of the offer, as well as details on payment and invoicing, records, reviews and audits.

8. Submission Date

Subject to available funding, applications for the RRFB Student Research Grant program are as follows:

- a. Intake 1: Applications must be received by May 31st
- b. Intake 2: Applications must be received by November 30th

9. Reporting

A brief progress report (250 words) will be submitted to the RRFB half way through the project. A final report or a copy of a thesis/publication or conference presentation is expected to be submitted three (3) months after completion of the project.

10. Consent for Collection, Use and Disclosure of Information

RRFB is subject to the *Freedom of Information and Protection of Privacy Act* when collecting, handling and disseminating information revealed by applicants. When the *Act* and these guidelines cannot be read harmoniously, the *Act* supersedes the guidelines.

In addition to the process of information collection (as explained in Section 7), applicant information and project information is available to RRFB personnel and committee members responsible for managing, monitoring and evaluating programs. RRFB will only use and disclose personal information for program planning, evaluation and reviews, in audits and for generating statistics.

RRFB may publish or otherwise disclose in its internal and external communications, including press releases and on its website, information on approved funding application and reports respecting the project for which funding has been approved. The purpose of such communications is to advise and inform the public of projects that are funded by RRFB. The disclosure may include the names, title and affiliation of project leaders, amount of funding and a brief summary of the project.

In all cases, personal information will not be disclosed if the disclosure would result in an unreasonable invasion of the applicant's privacy as determined under the *Act*.

11. Intellectual Property

Intellectual Property (“IP”) includes rights protected by copyright, patent and trademarks, and trade secrets. RRFB does not claim any rights of ownership to IP arising out of research funded wholly or in part by RRFB.

Terms of Access to Research Results and IP

RRFB has the right to access research results and IP developed in the course of research done wholly or in part through use of RRFB funds, including for the purposes of dissemination of research and results and partnering or funding future research based on research and results. RRFB will protect the confidential information disclosed by successful applicants that constitutes a trade secret in accordance with and to the extent provided under the *Freedom of Information and Protection of Privacy Act*.



IP Agreements

In order to protect successful applicants’ rights and the mandate of RRFB, applicants will be held to an IP agreement arising from and relating to RRFB funding. This agreement shall include clauses that address the following:

1. Retention of RRFB’s right to access a successful applicant’s research and results. The terms of access shall be determined based on the considerations set out above and in agreement with the successful applicant.
2. Retention of RRFB’s right to disseminate a successful applicant’s research and results without restrictions.
3. Acknowledgment of RRFB’s right to a non-exclusive license to partner or fund future research based on a successful applicant’s research and results.
4. Applicant retention of proprietary rights, subject to those rights explicitly granted to RRFB.
5. Survival of the IP agreement following the end of the research grant and/or relationship between successful applicants and RRFB.

Appendix A - Nova Scotia Waste Information






The following materials have active recycling markets and these materials are being diverted from Nova Scotia landfills (*please note that this is not a comprehensive list*):

1. Most Organics: Food Waste, Soiled paper products, Yard Waste
2. Paper Products: Corrugated Cardboards, Papers (Office, Newsprint)
3. Some packaging : plastics containers marked   and metal cans
4. Electronics: old computers, cell phones, monitors
5. Scrap Metals/White Goods: Appliances such as fridges, washing machines, dryers, dish washers, etc.

The RRFB does not discourage more value-added opportunities and/or efficiency improvements relating to these materials, however, they are less problematic and given less priority through RRFB's Business Development Programs.

Problematic Materials and/or Materials That Need More Environmentally Friendly Diversion Practices

The following materials are not currently recycled and/or composted in Nova Scotia OR they are not recycled/reused in significant quantities. As a result, they are land-filled or shipped significant distances to markets and therefore represent 'priority materials' for RRFB diversion and Business Development Programs.

1. Construction and Demolition (C&D) Wastes are unwanted materials produced during construction, renovation and demolition. Materials include:
 - a. wood (*clean, engineered, painted/coated and with laminates e.g. plywood, MDF, particle board, melamine or other wood with laminates and/or adhesives/glues e.g counter tops, shelving, etc*);
 - b. wallboard (*clean and painted/coated*);
 - c. asphalt shingles; and
 - d. other: flooring (carpet, vinyl, laminant, etc.), ceiling tiles, plaster, vinyl siding
2. Textiles, such as clothing, fabrics, and some carpets the backing is more problematic to market than the fibre
3. Paper Products: Magazines, wax cardboard, laminated boxboard, milk cartons, TetraPaks
4. Organic materials: Plastic lined boxboard (some frozen food boxes) waxed cardboard, animal waste, etc. still require more/better diversion options.
5. Household hazardous, special wastes and their containers: Disposable diapers, hazardous fluid containers (mostly plastics), motor oil containers, etc.
6. Plastics Less Commonly Recycled' and/or Difficult to Market     
 - a. Plastic containers numbered 3 to 7 e.g. dairy and food packaging, some automotive fluids, some cleaners, etc.
 - b. Plastic film #4 and #2: Shopping bags, packaging wrap (around toilet paper, tissue boxes, insulation wrap, etc.), dry cleaner bags, pallet wrap, etc. Expanded polystyrene #6: Disposable cups, food trays, foam packaging around new products, etc.
 - c. Plastic products # 1 to 7. Toys, furniture, household products (laundry baskets, buckets, etc.), electronic casings

Diversion Quantities

Level	Quantity in Tonnes	Impact on kg/person (913,462)
High	5,000 tonnes or more	5.5 kg/person or more
Medium	1,000 - 4,999 tonnes	1.09 - 5.5 kg/person
Low	100 – 999 tonnes	0.11 - 1.09 kg/person
Nominal	Less than 100 tonnes	Less than .11 kg/person

By 2015, Nova Scotia has committed to achieving a waste goal of 300 kilograms of solid waste per person.



APPLICATION FOR ASSISTANCE
Student Research Grant

<p>1. Name of Applicant/Student</p> <p>Name: _____</p> <p>Current Address: _____ _____</p> <p>City/Town: _____ Province: _____</p> <p>Postal Code: _____</p> <p>Tel: _____</p> <p>Email: _____</p>	<p>2. Education & Background</p> <p>Degree in Progress: _____</p> <p>Institution: _____</p> <p>Department: _____</p> <p>Date Started: _____</p> <p>Expected Completion: _____</p> <p>Previous Degrees: _____ (include Institution) _____</p>
<p>3. Title of Proposed Research: _____</p>	
<p>4. Brief summary of proposed research: (250 words or less) _____ _____ _____ _____ _____ _____ _____</p>	
<p>5. Briefly state how the research is relevant to the Nova Scotia Solid Waste Strategy and/or the mandates of the RRFB? (100 words or less) _____ _____ _____ _____</p>	
<p>6. Estimated Start Date: _____ Estimated Completion Date: _____</p> <p>Is a thesis anticipated?: <input type="checkbox"/> yes <input type="checkbox"/> No Is a conference presentation anticipated?: <input type="checkbox"/> yes <input type="checkbox"/> No</p> <p>If yes, please provide details: _____ _____</p>	

7. **Total Cost of Project:** \$ _____ **Total Request from RRFB*:** \$ _____

**Approved program funding will be provided as a percentage of the total eligible costs, with the maximum program contribution not normally greater than 70% of total costs, unless specifically approved by the RRFB.*

Have other organizations been requested to support the project? yes No

If yes, please provide details

Organization	Funding Amount Requested
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_____	\$ _____
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_____	\$ _____
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8. Please attach a detailed research plan (in Word/PDF format) that includes the following information:

- A detailed description of the project. (The plan should not exceed 20 pages.)
- An explanation of how the project supports the goals of the Provincial *Solid Waste-Resource Management Regulations & Strategy* and/or the mandates of the RRFB. *To view the Strategy, please visit <http://www.gov.ns.ca/nse/waste/strategy.asp>*
- The project's schedule. If applicable, please include project milestones (2 to 3 only) that could be used to trigger payment of any approved program funding.
- A detailed budget that includes expenses, stipends, operating, limited capital costs and a detailed schedule of all wages and salaries paid (including any contracted assistance). Relevant details surrounding all other funding.
- Letters of reference: Two (2) letters of reference should be provided by faculty members or instructors who can comment on the applicant's research ability and potential as well as communication (oral and written) skills.

9. Notice and Consent:

I certify that the information given is, to the best of my knowledge and ability, complete, true and correct and this will also apply to all information given in the future in connection with the review and/or implementation of the project.

I authorize RRFB Nova Scotia to make enquiries of such persons or organizations, to collect and share information with them, as RRFB Nova Scotia deems necessary in order to reach a decision on this application, to administer and monitor the implementation of the project, and to evaluate the results of the project after project completion.

I have read and I understand this Notice and Consent and the RRFB Student Research Program Guidelines. I voluntarily consent to the collection, use and disclosure as described.

Student Name (please print)

Signature

Date

Supervisor/Professor (please print)

Signature

Date

University Administration (please print)

Signature

Date

Applications can be mailed, faxed or emailed to the RRFB

14 Court Street, Suite 305
Truro, Nova Scotia B2N 3H7

Fax: (902) 897-3256
Email: info@rrfb.com