



REQUEST FOR PROPOSAL (RFP)

***BIO-MATERIALS TECHNOLOGY DEPLOYMENT
SAPPI NORTH AMERICA
WESTBROOK MAINE SITE COLLABORATION***

SAPPI NORTH AMERICA

Administered by: Bio-Based Maine
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RFP – Bio-materials Technology Deployment

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REQUEST FOR PROPOSAL

1. Summary and Background

Sappi is a leading global provider of sustainable wood fiber products and solutions. Sappi North America, a subsidiary of the global entity Sappi Limited (JSE), known for innovation and quality, is a preeminent North American producer of coated fine, packaging and release papers, as well as dissolving wood pulp (DWP) and market kraft pulp headquartered in Boston, Massachusetts. Our North American research laboratory and pilot testing facility is located in Westbrook Maine.

Sappi is committed to sustainable operations and the importance of advancing technology in support of our strategy and corporate vision. Sappi's strategic interest includes the area of renewable material development and participation in improved bio-derived solutions. Sappi has been engaged in technology development for a range of bio-based materials and looks to understand further partnering options. That said, our Westbrook, Maine operating facility and its extensive infrastructure provide an opportunity to deploy biomass conversion technologies for the production of marketable bio-materials.

Sappi has been investigating commercial options for deployment in the biorefining space for several years. It is on the basis of this work that we believe technology advancements over the last 5 years have led to more commercially viable options. The intent of this RFP is to solicit information and business proposals for commercially viable technology deployments into our Westbrook, Maine facility.

2. Program Purpose and Description

The business intent of this RFP is to identify technology deployments that represent commercially viable growth opportunities in the bio-materials arena for the state of Maine and Sappi. Proposals will be assessed by Sappi for technical and commercial viability with assistance from technology provider, Bio-based Maine, and other industry experts.

If Sappi determines that a proposed business opportunity is worth pursuing, a confidential technology deployment project agreement will be negotiated by Sappi and the applicable technology provider(s). Sappi will consider a range of business models from the licensing of technology by Sappi to third party own and operate. The overall business objective of this project is an increased utilization of Maine based wood resources processed into higher value bio-based materials for sale into growth markets.

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3. Project Scope

This project will consider any technology aimed at utilizing an increased volume of underutilized wood resources in Maine for production of higher value bio-materials in the form of fibers, fuels, chemicals and/or other advanced materials. The scale of technology deployment will be considered up to 300,000 dry tons of biomass with smaller projects also within scope. Deployment of technology is desired by 2020.

Technology deployment will be integrated into a current operating site, accessing the current infrastructure at the Sappi Westbrook, Maine manufacturing facility. The need for additional infrastructure is possible if necessary. See Appendix A for site infrastructure details. Sappi assumes no responsibility for errors or misinterpretations resulting from the respondent's use of incomplete sets of reference documents.

Before submitting a proposal, each respondent must (a) examine these RFP documents thoroughly and (b) investigate applicable federal, state and local laws, ordinances, rules and regulations that may affect cost, progress or performance of the proposed project.

4. Request for Proposal and Project Timeline

Time line for receipt of proposals and selection of projects is provided below. The proposals shall not exceed 10 pages, single-spaced, 11-point font or larger. Endnotes, process diagrams and staff qualifications and capabilities are not included in the proposal page count.

The proposal must include the following information and sections.

- Proposal Title
- Issuing Company including title, organization, address, e-mail, and phone
- Project point person, address, e-mail, and phone
- List of senior staff assisting on the project; include title and affiliation
- Project Objective and Summary
- Expected project duration from proposal to commissioning
- Introduction with sufficient detail to assess the reasonableness of the proposed technology.
- Summary of market assessment sufficient to assess commercial viability of technology deployment and ROI.
- Feedstock requirements (e.g., softwood chips, hardwood chips, biomass type)

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- Technical approach—this is not required in detail, but should provide a list of key process elements, key equipment and process chemicals, estimated scale, CAPEX and OPEX, references to literature, patents and assumptions.
- A time line – list of project milestones from business assessment to technology commercial commissioning
- Senior staff qualifications
- List of investors and funding round summary for start-up enterprise
- List of Sappi expertise and resource needs to achieve project milestones
- List of company equipment/capabilities relevant to the proposed project
- List of state and federal incentive program relevant to the proposed project

Note: A proposal template is included at the end of the RFP

Timeline:

All proposals in response to this RFP are due no later than **5 pm EST, Friday June 2, 2017**. Submitting proposals before the deadline is strongly encouraged. Sappi expects to commence review of each proposal as soon as the proposal is received.

Sappi expects to complete its evaluation of proposals by Friday June 30, 2017. If additional information or discussions are needed during this time, the company point person will be notified.

Sappi expects to make a decision whether any of the proposals received are considered worthy of further pursuit by July 1, 2017. Sappi will endeavor to notify respondents whose proposals were not selected about this time.

5. Qualifications

A biographical sketch of each senior participant in the project should be included. This should include a publication list with an emphasis on publications most relevant to the project. The biographical sketch and publication list should not to exceed 2 pages for each senior staff person listed. In the biographical sketch, be sure to identify any specific prior experience and skills of relevance to the proposed project.

6. Evaluation Criteria

Sappi will evaluate all proposals based on the following criteria. To ensure consideration for this Request for Proposal, each proposal should be complete and address all of the following criteria:

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- Strategic fit of feedstock: Wood-based feed materials must be incorporated to produce products for sale.
- Overall Technology Viability: proposals must outline the technology proof of concept information that demonstrates Demo or Commercial scale (minimum production of 10TPD). These need to be presented in a clear and organized manner.
- Commercial Viability: proposal must outline the expected scale, CAPEX and OPEX for the technology deployment and market assessment for profitable off-take. Markets considered for off-take include bio-based fibers, fuels, chemicals or advanced materials. Bio-based Maine may be able to assist with market assessment information.
- Time Table: Market deployment of technology completed no later than 2020.
- Right to Operate: the extent to which the proposed technology and provider has freedom to practice.
- Company Organization, Capabilities and Qualifications: demonstrate that the team has the experience, skill and equipment capabilities to carry out the proposed technology deployment.

Sappi will evaluate proposals based on the above criteria. Sappi will evaluate the highest rated proposals for possible negotiation of a confidential technology deployment agreement. It is possible that no proposals will meet the criteria and therefore none will be pursued.

Sappi may conduct such investigations as it deems necessary to assist in the evaluation of any proposal and to establish the responsibility, qualifications and financial ability of the respondent's proposed contractors and other persons and organizations to perform the proposed project.

7. Confidentiality/Disclaimer

Confidentiality:

All information contained in this RFP from Sappi is confidential. Respondents are required to respect the confidentiality of this information. Likewise, all responses to this RFP will be treated as confidential by Sappi.

Please be advised that at Sappi's discretion, questions received and answered may be shared with all parties participating in the RFP process so that all are equally informed. Sappi will not disclose the source of the question, just the question and answer.

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Disclaimer:

This RFP is not an offer to enter into an agreement, but is merely a request for project proposals. Nothing herein or in a respondent's proposal shall be deemed to create a contract by implication, estoppel or otherwise. Sappi is not obligated to award any contract or business to any respondent. Furthermore, any proposal, even if accepted, will be subject to review and negotiation, and no contract or business will be deemed accepted unless and until a definitive agreement is executed between Sappi and the pertinent party.

Sappi reserves the right to amend, adjust, change, enhance, alter, add or delete any aspect of this RFP or the proposed process (in whole or part) at its convenience and without notice to any respondents. Sappi also reserves the right to reject any or all proposals for any reasons whatsoever, to terminate consideration of any or all proposals without restrictions, and to contact and negotiate with persons and/or firms not initially receiving this RFP.

Costs and expenses incurred in connection with developing responses to this RFP are entirely the responsibility of the respondents. Sappi is under no obligation to pay or reimburse any respondent for any such costs or expenses.

8. Submission

Respondents must submit their proposals **electronically by 5 PM (EST), Friday June 2, 2017 to the address below:**

Charlotte Mace
Executive Director – Bio-Based Maine
cmace@biobasedmaine.org
207-699-5792

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Appendix A: Sappi Westbrook Site Infrastructure



North America
Westbrook Operations
89 Cumberland Street
Westbrook, ME 04092



Site General

Existing 24/7 manufacturer offers operations with available on-site services including: equipment and building maintenance, safety and security, snow removal, truck scales, M-F on-site medical, and more.

- Large 200 plus acre industrial site
- Potential for new construction or lease of existing space (subject to applicable zoning rules and other laws and regulations)
- Located within Maine's Greater Portland Region
- Rail service and sidings
- Interstate highway access within 1 mile
- Airport and ocean port within 10 miles

Available Lease Space

- 52,000 sq-ft of warehouse space available for immediate occupancy, which is suitable for light industrial use. Additional space available depending on tenant needs.

Utilities

Electric Power

- Renewable Energy – over 50% of the site's electricity comes from renewable sources, including hydro and biomass
- Electricity is self-generated, reliable, with back-up capabilities
- Available capacity greater than 20MW's

Steam

- Available steam capacity greater than 300,000 lb/hr
- Steam pressures available at 1250, 600, 150, 45, & 10 psig
- Reliable

Natural Gas

- Major pipeline crosses property. Connection to pipeline possible.

Process Water & Waste Water Treatment

- Filtered and treated river water suitable for most process uses



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- Process waste water treatment facility
- Available capacity greater than 5 million gal/day

Appendix A: Sappi Westbrook Site Infrastructure (continued)

Government/Business Tax Incentives

- Projects on this Westbrook site may be eligible for State or Local - Economic Development Incentives, such as: Tax Increment Financing, Equipment Tax Relief Programs or Pine Tree Development Zones. Additional information can be found at: <http://www.maine.gov/decd/index.shtml>
- Other incentives could also be available. Please contact Maine and Company for more information at: www.maineco.org.

RFP – Insert Project Title

GUIDELINES FOR PROPOSAL PREPARATION

PROPOSAL TITLE _____

Issuing Company _____

Project Duration (Acceptance to Commissioning) _____

1. Proposal Summary

- *Describe the proposed technology deployment concept with minimal jargon, and explain how it makes a strong commercial business case.*

2. Technology Business Impact

- *Describe how the concept will meet the RFP stated purpose.*
- *Identify the benefit that would be realized through successful development of the proposed technology. Benefit for Maine’s bio –economy and general economic development.*
- *Explain the concept’s potential to be disruptive compared to existing or emerging technologies.*

3. Proposed Technology Deployment – refer to section 6 for evaluation criteria

- *Describe the planned technical approach, suggested scale to achieve proposals targeted technology deployment.*
- *Describe the background, theory, simulation, modeling, experimental data, or other sound engineering and scientific principles that support the proposed technology deployment..*
- *Clearly identify proven quantitative technical performance at Demo or Commercial Scale and cost targets (both CAPEX and OPEX) for the proposed technology. If applicable, compare the targets to current and emerging technologies.*
- *Provide specific examples of supporting data and/or appropriate patent activity supporting the scientific and technical accomplishment.*
- *Provide data from market assessments conducted to quantify commercial viability of the technology deployment.*
- *Identify any techno-economic challenges to be overcome for the proposed technology to be commercially relevant.*
- *Define the final deliverable(s) for the project. This should include the expected capacity of the operation, the market value of the resultant product and the expected ROI for the program.*

4. Project Timeline

- *The proposal should include a project timeline with key milestones from program acceptance to technology deployment*

RFP – *Insert Project Title*

5. Team Organization, Capabilities and Qualifications

- *Indicate the roles and responsibilities of the organizations and key personnel that comprise the Project Team.*
- *Provide the name, position, and institution of each key team member and describe in 1-2 sentences the skills and experience that he/she brings to the team.*
- *Identify key capabilities provided by the organizations comprising the Project Team and how those key capabilities will be used in the proposed effort.*
- *Identify (if applicable) previous collaborative efforts among team members relevant to the proposal scope.*
- *Identify any specific expertise expected/needed from Sappi or other outside organizations.*

6. Government Incentives

- *Include information on state and federal funding opportunities, itemized by type of funding (tax incentive, financing, grants etc...).*