Alternative and Clean Energy Applied Research Fund (ACE)

Ben Franklin Technology Partners Corporation
FY 2009
REQUEST FOR PROPOSALS

DUE DATES

Submission of an e-mail Notice of Intent to Apply: Friday, March 13, 2009

Submission of a Completed Proposal: Friday, April 10, 2009
Ben Franklin Technology Partners Corporation
Alternative and Clean Energy
Applied Research Fund
FY 2009 Request for Proposals

Period of Performance: Award date to June 30, 2010

Size of Award: Up to $55,000

Eligibility: Technology-based companies, with less than 500 employees in the Commonwealth of Pennsylvania. Projects must be related to alternative/clean energy technology.

Form of Investment: Matching Grant

Company Match: 1-1 {cash is preferred, but in-kind is acceptable}

Directions for Submission: Submit completed Notice of Intent to Apply form, via e-mail to:

tsinger@benfranklin.org

Submit signed hard copy proposal to:

Ben Franklin Technology Partners Corporation
1010 North Seventh Street
Suite 307
Harrisburg, PA 17102
Attn: Terry Singer

and

E-mail an electronic copy (.Doc OR .PDF) to:
tsinger@benfranklin.org

Letter of Intent Due Date: March 13, 2009, by 4:00 pm
Proposal Due Date: April 10, 2009, by noon

Questions: Terry Singer
tsinger@benfranklin.org
717-234-1748

“This project is funded by a grant from the U.S. Small Business Administration (SBA). SBA’s funding should not be construed as an endorsement of any products, opinions, or services. All SBA-funded projects are extended to the public on a nondiscriminatory basis.”
I. **Program Description**

A. **Overview**

The purpose of the ACE is to assess and help accelerate the commercialization of promising alternative and clean energy. The program focus is on technologies being developed by small companies (less than 500 employees) in the Commonwealth of Pennsylvania. The funds will be used to support the costs of applied research activities including, but not limited to:

- Additional technical (laboratory) work to:
  1. Precisely define the performance parameters of the technology (including prototype development)
  2. Buttress the strength of patent applications such that the complete business opportunity can be protected via either additional patent filings or more robust applications
- Additional market and competitive technology research to better identify the best application of a specific technology such that the development effort is better focused on the application that has the highest probability of success
- Further examination/analysis of commercialization path options – licensing/partnering or the formation of a new venture to develop the technology
- Implementation of beta tests
- Development of channel market strategies
- Full-scale commercialization of new products/processes
- Some combination of the above

Projects focusing on the following Alternative Energy Portfolio Standards (AEPS) Tier I energy sources will be accorded priority:

"TIER I ALTERNATIVE ENERGY SOURCE." Energy derived from:

1) Solar photovoltaic energy
2) Wind power
3) Low-impact hydropower
4) Geothermal energy
5) Biologically derived methane gas
6) Fuel cells
7) Biomass energy
8) Coal mine methane

This is a competitive RFP, and multiple awards will be made.
B. Funding & Eligibility

- Awards through the ACE Fund are grants for amounts up to $55,000.
- Awards are made directly to the applicant company. If interested, the BFTP will assist a company in identifying an appropriate Partner (business, university, federal lab, etc) with which to work.
- Sub-awards may be made to Partners, but for any such arrangements the company must show evidence of a signed agreement with the Partner for the specific services stated in the project work plan.
- The company is required to contribute a 1:1 match (cash is preferred, but in kind is acceptable).

C. Use of ACE Funds

ACE funds must be committed for the services identified in the proposal. These funds may be used for personnel, supplies, prototype development, and other direct R&D expenses, as well as technical feasibility assessment, field testing, travel and other efforts related to the project.

ACE funds may not be used for the following:

- The purchase of equipment is not an allowable cost. Please note that SBA defines items of equipment costing less than $5,000 as “supplies” and these items should be identified as such in your budget.
- University Overhead is not an allowable cost. It can be utilized as match but will not be reimbursed under the grant.

ACE funds must be spent before June 30, 2010; therefore, the proposed project should be designed and scaled to be completed accordingly.

D. Economic Impact

The major goal of ACE assistance to a company is to help stimulate economic growth in the Commonwealth of Pennsylvania (“the Commonwealth”) through the successful commercialization of alternative and clean energy technologies. The development of revolutionary new products and/or manufacturing process methods is foreseen as necessary outcomes of this support. Through this support, BFTP seeks to encourage the growth of technology enterprises throughout the Commonwealth. Accordingly, companies awarded funding through this program will be required to complete an annual survey to assess derived economic impact.

II. Program Requirements

1. Partner-Company Agreements

Partnerships are encouraged, particularly with universities or OEMs, but are not required. Prior to award, the company must show evidence of a signed agreement with any Partner with whom it has chosen to work which details which services in the project work plan the Partner will undertake. For example, if a company chooses to work with a university, typically this involves developing a joint
statement of work and agreement involving the university principal investigator (PI),
the university sponsored research office, and the company representative. A joint
statement of the proposed work should accompany the proposal.

2. Intellectual Property
The company retains complete ownership of all technology developed before the
start of ACE funding, as well as any technology developed by its employees during
the project. For new technology developed by the Partner, or collaboratively, by
the company and the Partner, BFTP requires that the company negotiate an agreement
with the Partner regarding ownership rights to any intellectual property developed
by the Partner. Prior to final funding approval, the applicant is required to supply a
copy of the fully executed IP agreement to BFTP. Pursuant to the above provisions,
applicants should refer to “Title 37: Patents, Trademarks, and Copyrights
PART 401—RIGHTS TO INVENTIONS MADE BY NONPROFIT ORGANIZATIONS AND
SMALL BUSINESS FIRMS UNDER GOVERNMENT GRANTS, CONTRACTS, AND
COOPERATIVE AGREEMENTS“; go to: http://ecfr.gpoaccess.gov/cgi/t/text/text-
idx?c=ecfr&tpl=/ecfrbrowse/Title37/37cfr401_main_02.tpl if additional information
is desired.

III. Review Process

Reviews will be performed by a review panel appointed by BFTP and supplemented,
if necessary, by additional independent reviewers with relevant expertise. The
review panel will review proposals from technology, business, and investment
perspectives, and make funding recommendations to BFTP for final approval. As
part of the review process, applicants may be asked to respond to questions from
the reviewers via email and/or to make a presentation.

The evaluation of proposals is expected to be completed approximately 8-10 weeks
from the proposal due date. The schedule below may vary slightly depending on the
volume of proposals received:

- Proposals received April 10, 2009
- Proposal review process (which may include a presentation) April 10 – May 8, 2009
- Awards announced May 8, 2009
- Contracts negotiated/executed May 8 – May 29, 2009

BFTP maintains the confidentiality of proposals. BFTP staff and reviewers sign
non-disclosure agreements. Proposals should include enough information for
reviewers to make informed decisions on the merits of the proposed work. All
proprietary information should be clearly marked.

Both technical and commercialization reviews are made to ensure that proposals
are based on sound scientific and technical principles, that the development and
commercialization scheme is reasonable, and that the proposals are likely to create
positive economic benefits and employment in Pennsylvania. While product
development timelines vary widely, projects demonstrating steady progress toward
timely commercialization and job creation receive priority consideration. And, as
noted earlier, projects that demonstrate partnerships with universities or OEMs and
that are focused on AEPS Tier I technologies, will be accorded priority.
The proposal evaluation criteria include:

- Viable application of alternative/clean energy technology;
- Significance of the commercial opportunity;
- Focus on AEPS Tier I technologies;
- Qualifications of the company project manager;
- Adequacy & achievability of work plan & milestones;
- Near term (3-5 yrs) timeline and requirements for commercialization;
- Work plan that demonstrates the ability to expend all funds no later than June 30, 2010;
- Commitment of a 1:1 cash and/or in-kind match (preference will be shown to applications where the bulk of the match is cash);
- Estimated quantitative regional economic impact of the development (i.e., jobs created/retained, new processes, new products);
- Partnership or participation of university or OEM (if applicable);
- Partners in place/all agreements executed; (Prior to funding, if applicable);
- Ability to build upon an existing project or begin a project quickly;
- Company location (companies located within a Keystone Innovation Zone will be accorded preference).

IV. Post-Award Procedures

A. Funding Agreement
The BFTP Corporation will enter into a funding agreement with the company. Grant proceeds may be disbursed as described below after final execution of the funding agreement. Companies receiving awards through this solicitation will become eligible to receive portfolio-related services from the regional Ben Franklin Technology Partner whose geographical territory within which it resides.

B. Funds Disbursement

1. After execution of the funding agreement, an amount up to 20% of the amount funded may be invoiced immediately to begin work.
2. Funds will be disbursed upon receipt of invoices submitted by the company. (The company is responsible for payments to any Partners.)
3. The company may submit invoices monthly or quarterly, as expenses are incurred, up to a maximum of 90% of the grant amount.
4. The final ten (10) percent may be invoiced together with the final project and expenditure reports which must be received no later than 30 days after the end of the project period.
5. Invoices are normally processed and checks mailed to recipients within three weeks of the receipt of the invoice by BFTP.

C. Reporting

Award recipients are required to submit a final project report and expenditure report at the conclusion of the project period to both the BFTP Corporation and the Ben Franklin Technology Partner regional office. The final project report is a brief narrative description of the project accomplishments as per the milestones.
described in the proposal, and future project plans. The expenditure report requires an accounting for the expenditures of the company and other participating Partners during the project, including match.

D. Project Tracking & Management

BFTP will actively monitor the projects during the funding period. A Ben Franklin Technology Partners regional office contact person will be designated in your grant agreement. This staff person will conduct periodic site visits, and will be available for advice and consultation. Companies are encouraged to contact their designated staff person throughout the project period.

The Commonwealth of Pennsylvania requires an annual performance survey of funded companies. The survey solicits information on the number of jobs created or retained, the number of products commercialized, annual revenues, and the amount of private dollars raised. Companies are required to keep accurate and verifiable records which can be submitted annually. The regional Ben Franklin Technology Partner will survey the company for five successive years following the conclusion of the project period.

V. Timetable & Directions for Proposal Submission

An email of intent must be sent to tsinger@benfranklin.org no later than 4:00pm on Friday, March 13, 2009. The email must include all of the information on the form titled BFTP ACE Fund Notice of Intent to Apply.

Proposals must be received by the BFTP by noon on Friday, April 10, 2009. All project funds must be expended and billed by June 30, 2010.

If you have any questions regarding the RFP, please contact Terry Singer, Program Administrator, tsinger@benfranklin.org; 717-234-1748

A complete submission includes:

- Letter of intent e-mailed to: tsinger@benfranklin.org by 3-13-09
- An electronic submission (.doc or PDF) of the proposal e-mailed to: tsinger@benfranklin.org by 4/10/09
- An original proposal bearing all authorized signatures sent to the address on page 2 of this RFP.
- The proposal must include all items listed on the BFTP ACE Fund Submission Checklist included as the last page of this RFP.
BFTP ACE Fund
Notice of Intent to Apply

Submit this completed form no later than Friday, **March 13, 2009** by 4:00 p.m. to:

Terry Singer, Program Administrator:
   Email: tsinger@benfranklin.org
   Phone: 717-234-1748
   Fax: 717-772-3594

PROPOSAL TITLE:
Name of Principal Contact Person:
Title:
Company:
Address:
City:
State: Zip: Telephone:
E-Mail: Web Site Address:
PROPOSAL COVER PAGE

PROPOSAL TITLE:
Name of Principal Contact Person:
Title:
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Address:
City:
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Participating Organizations:
Name all companies, universities, OEMs and other institutions participating in the project, along with each participating organization’s address and contact information.

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<th>Participating Organization</th>
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If you are unable to identify a Partner at this time but would like to have one, and desire BFTP support to provide liaison to an appropriate resource, please check this box and list the expertise, facilities and/or equipment sought in the space above.

Brief Non-Confidential Project Summary (should be no more than two paragraphs):

Brief Explanation of Commercialization Opportunity (should be no more than two paragraphs):

Amount Requested from BFTP: *
Total Project Budget: *

*Please make sure these amounts match those listed on your project budget sheet.

Disclaimer: The submission of the proposal shall not create any rights on behalf of the submitter, contractual or otherwise. The submission of a proposal does not constitute or create any legally binding or enforceable agreement or commitment on the part of BFTP other than to maintain the confidentiality of proposal information identified as confidential. No past or future action, or course of conduct by BFTP, will give rise to or serve as a basis for any legally enforceable duties or obligations, other than to maintain the confidentiality of proposal information identified as confidential.

Signature of Authorized Official at Applicant Company:
Signature: ___________________________ Date: __________

Type or Print Name and Title:
Partner Name:
Telephone:
Email:
Department:
Mailing Address:
Partner Expertise:
Facilities/Equipment Employed in Project:
Partner Webpage:

If Partner is a University, complete the rest of this page.

Faculty PI:
Sponsored Research Office Contact:
Telephone:
Email:
Mailing Address:
BFTP ACE Fund
PROPOSAL FORMAT

Technical and Commercial Activities

A. Problem Statement. (Address each of the following. Use a maximum of two (2) pages.)

1. Identify the goals and objectives of the project.
2. Describe the present state of the technology that forms the basis of the project.
3. What is limiting in the current technology that makes improved technology desirable?
4. Identify competing technologies and the advantage(s) of the proposed technology.

B. Program of Work. (Address the following. Use a maximum of three (3) pages.)

1. Describe the method(s) you will use to meet the technical goals. Include any preliminary data that support your choice of methodology and the feasibility of the proposed project.
2. Describe in detail the specific work to be carried out. If applicable, specify the role of each participating Partner.
3. Summarize the facilities available to the project, both at the Partner site and at the company work site(s).
4. Describe the roles of all key personnel in the project. Summarize the qualifications of the project’s management and technical team members, showing how their education and work experience qualify them for the project. Append resume/curriculum vitae of each team member. (Please attach resume/CV to the end of the proposal.)

If you have a business plan already prepared, you may insert those sections that address the information requested below.

C. Impact on Company. (Address each of the following. Use a maximum of two (2) pages.)

1. Summarize the nature of the company's business, including major products or services, and describe how the results of this project will affect that business.
2. For existing companies with revenues, provide current gross annual sales figures and projected increases in sales resulting from this project.
3. Project/describe the number of jobs created/retained, new processes/new products developed.

D. Commercialization Activities. (Address each of the following. Use a maximum of two (2) pages.)

1. Identify the target market(s) for the product/process to be developed in the project. Include market size, potential penetration, target customers, and competition. What share of the market does the company expect to capture?
2. Provide a summary marketing plan which will be carried out from now until the product is established. Include personnel, advertising and promotion, pricing policies, sales and distribution strategy, etc.

3. Describe how the company will manufacture or produce the product or service developed in this project. Include any subcontracting and how the company will conduct quality control.

4. Explain how the company plans to fund the commercialization of the product/process.

E. Technical Milestones. Referring to the proposed program of work, list the tasks to be accomplished in priority order in each quarter of the project.

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F. Company/Partner Relationships. For projects involving a Partner please address each of the following. (Use a maximum of one (1) page.)

1. Has a contractual relationship between the company and the Partner been signed? If not, when will a contract be signed?

2. Is there a signed intellectual property agreement between the company and the Partner?

3. Describe any business relationships (e.g., employee, consultant) that the principals, directors, officers, employees or advisors of the applicant firm have with the Partner.
BFTP ACE Fund
BUDGET INSTRUCTIONS AND FORMS

One characteristic of this Fund is that it encourages funding from multiple sources. The budget form is designed to show the amount and nature of the contribution from each source, and how these contributions are expended by the various Partners in the project.

Sources of Funds

A separate column is supplied for each kind of funding source. Complete only those which apply to your project.

Expenditures

Expenditures are categorized as: personnel, equipment, consultants and subcontracts, other direct expenditures, and indirect costs. Each of these should be itemized in the first column on the budget page. Please note the following:

1. Personnel for the project should be listed individually by their place of employment, together with their title and their time allocation to the project. Partner personnel contributions should be itemized under the Consultant/Subcontractor section with the same detail.

2. Equipment may not be purchased with BFTP funds, however, please note that SBA defines items of equipment costing less than $5,000 as “supplies” and these items should be identified as such in your budget. The Fund may, however, be used for the rental of equipment. If funds are needed for this purpose the rental cost should be shown in the BFTP column under Other Direct Costs. If the company contributes equipment to a Partner as an outright gift, the full value of the equipment (less the standard discount) should be listed, under Company In-kind. Equipment on loan to a Partner for a limited time should be valued at its annual equivalent rental cost.

3. Identify consultants and subcontracts.

4. Other direct costs include materials, cost of equipment use, travel directly related to the R&D or to its commercialization, printing, library search fees, etc.

Any materials purchased or manufactured by the company for the project should be listed as expenditures by the company even in the case where they may be subsequently given to the Partner.

5. The company may not include its indirect costs which are supported by its own funds as part of its contribution to a project. However, any party may include any of
its indirect costs which are paid for by federal contract, foundation, or other sources as a contribution to the project.
# BFTP ACE Fund
## Project Proposal Budget

### Company:

<table>
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<tr>
<th>Project Expense Line Items:</th>
<th>BFTP ACE FUNDS</th>
<th>COMPANY MATCH</th>
<th>PARTNER MATCH</th>
<th>FEDERAL MATCH (1)</th>
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(1) For all federal funding, attach award letter(s). If more than one award, combine totals on this page.
BFTP ACE Fund
Submission Checklist

Completed Proposals Must be Received No Later Than:
Noon on Friday, April 10, 2009

☐ Proposal Cover Page
☐ Information about Partners
☐ Proposal Narrative
☐ Technical and Commercial Activities
  ☐ Problem Statement
  ☐ Program of Work
  ☐ Impact on Companies
  ☐ Commercialization Activities
  ☐ Technical Milestones
  ☐ Company -Partner Relationships
☐ Budget Form
☐ Supporting Materials
  ☐ A copy of the company’s most recent financial statements, if available
  ☐ Other requirements as noted throughout this document.

A complete submission includes:

• An electronic submission (.doc or .pdf) e-mailed to: tsinger@benfranklin.org
• A delivered original proposal bearing all authorized signatures
• All items in the checklist above

Deliver proposals to:
Ben Franklin Technology Partners Corporation
1010 North Seventh Street
Suite 307
Harrisburg, PA  17102
Attn: Terry Singer

Questions? Terry Singer
tsinger@benfranklin.org
Phone:  717-234-1748

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1 The Ben Franklin Technology Partners Corporation is a Corporation consisting of the four (4) regional Ben Franklin Technology Partners (BFTPs). The BFTP Corporation manages and oversees projects undertaken jointly by the Ben Franklin Technology Partners network.