



U.S. DEPARTMENT OF ENERGY

Lithium-Ion Battery Recycling Prize

VOUCHER RULES



Preface

The Prize Administrator reserves the right to modify this Official Rules document if necessary and will publicly post any such notifications and notify registered prize participants.

Date	Modification

Contents

Preface	2
1 Introduction.....	4
1.1 Voucher Service Providers.....	5
1.2 Evaluation Entities	5
1.3 Available Voucher Prizes.....	6
2 Voucher Process	7
2.1 Breakthrough Voucher Process	7
2.1 Phase IV Voucher Process.....	7
3 Voucher Use Policies	9
4 Voucher Payments.....	11
4.1 Work with NREL	11
4.2 Work with Other National Labs	11
4.3 Work with a Private Facility	12
5 Apply to Be a VSP or Evaluation Entity.....	13
Appendix: Draft Templates	14
A.1 Work With NREL: Participant Data Sheet	14
A.2 Work With NREL: Statement of Work	15
A.3 Work with NREL - CRADA Template	22
A.4 Work with other National Labs - Statement of Work	33
A.5 Work with other National Labs - Sole Source Justification.....	36

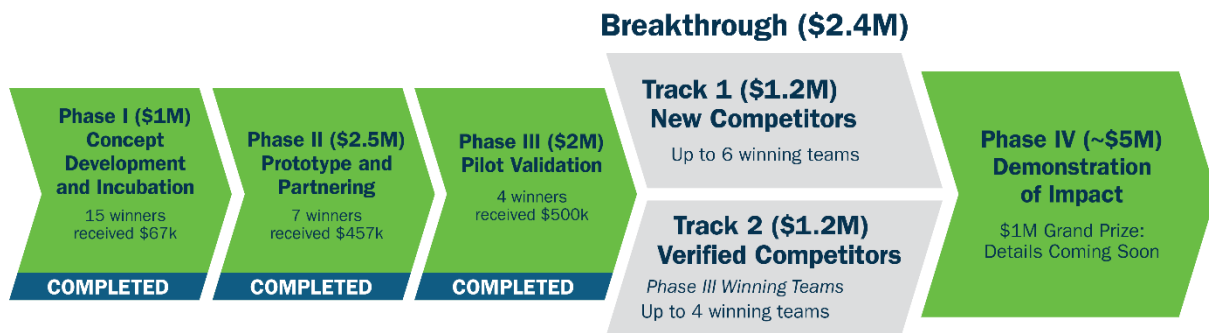
1 | Introduction

The U.S. Department of Energy (DOE) Lithium-Ion Battery Recycling Prize is designed to incentivize American entrepreneurs to develop and demonstrate processes that, when scaled, have the potential to capture and recycle 90% of lithium-based battery technologies in the United States, covering consumer electronics, stationary, and transportation applications. **The continuation of the Lithium-Ion Battery Recycling Prize aims to further the goal of contributing to the recovery target through innovative solutions to current challenges in collecting, sorting, storing, and transporting discarded lithium-ion batteries (LIBs).**

As part of the American-Made program, the Lithium-Ion Battery Recycling Prize is supported by more than 250 organizations, including DOE’s 17 national laboratories, along with professionals from accelerators, incubators, universities, facilities, and industry.

The continuation of this prize encourages collaboration between participating teams and industry members and recyclers through the use of noncash vouchers. These provided vouchers will allow participating teams to access tools, equipment, and expertise at national labs and approved facilities and organizations within the American-Made Network to further develop their winning concepts.

This document provides details about how to use these vouchers. NREL, as the Prize Administrator, will manage administrative activities related to vouchers. For more information on the continuation of the Lithium-Ion Battery Recycling Prize, please [refer to the Official Breakthrough Rules](#).



Breakthrough kicked-off in 2023 with two competition tracks—**Track 1: New Competitors** and **Track 2: Verified Competitors**—lasting approximately 1 year. Track 1 will encourage legal business entities based in the United States to participate in Breakthrough as new competitors with single process ideas, partial solutions or full concept solutions that enable or meet the prize goal. Running simultaneously, Track 2 invites Phase III winners to compete in Breakthrough as verified competitors with unique goals designed to nurture further development of the existing winning concept solutions. Phase III winning teams will be granted up to \$100,000 in noncash vouchers to be used during the Breakthrough competition.

Track 1 and Track 2 Breakthrough winners will be invited to participate in the **Lithium-Ion Battery Recycling Prize Phase IV: Demonstration of Impact** to demonstrate how effectively their solution contributes to establishing infrastructure to move spent or discarded LIBs from consumers to recyclers across all commercial uses. Phase IV participants will receive up to \$100,000 in noncash vouchers to use in Phase IV alongside a pre-identified Evaluation Entity, for a total of ~\$5 million in prizes.

Table 2. Noncash Vouchers

Contest	Track	Prizes
Breakthrough Competition	Track 1: New Competitors	Not applicable.
	Track 2: Verified Competitors	Phase III winning teams will be granted up to \$100,000 in noncash vouchers to be used during the Breakthrough competition.
Phase IV: Demonstration of Impact	Both Track 1 and Track 2	Phase IV participants will receive up to \$100,000 in noncash vouchers to use in Phase IV alongside a pre-identified Evaluation Entity.

1.1 Voucher Service Providers

The approved organizations and facilities within the Network are referred to as Voucher Service Providers (VSPs). VSPs may provide participants with:

- Access to hardware and development tools
- Access to national laboratories, universities, and private laboratories
- Specialized facilities with additive, reductive, and manufacturing support
- Testing and validation capabilities
- Other expert services that may be negotiated between the winners and the lab, organization, or facility.

Private organizations are encouraged to apply with the American-Made Network as soon as possible to become VSPs. Learn more at: <https://americanmadechallenges.org/partner/>

1.2 Evaluation Entities

Evaluation Entities are VSPs specifically identified as LIB recyclers and testing organizations that have demonstrated necessary capabilities and capacity to play a key role in the validation and evaluation of concept solutions. Evaluation Entities will play a key role in Phase IV of the prize, where they will work closely with participants to verify the impact of their submission based on the recovered LIBs or validation of second use.

To become an Evaluation Entity for Phase IV, qualified recyclers must be equipped to handle the assessment of LIB material incoming from teams they intend to work with. For second-use applications, teams can refer to approved testing organizations, which will be posted on HeroX. More information on becoming an Evaluation Entity is available in Section 5.

1.3 Available Voucher Prizes

Breakthrough Competition

The continuation of the Lithium-Ion Battery Recycling Prize will begin with a public **Lithium-Ion Battery Recycling Prize Breakthrough** competition. Breakthrough invites Phase III winners to participate as verified competitors to further develop their concept solutions with the added support of a \$100,000 noncash voucher. Voucher work must support the continued validation and demonstration of their Phase III pilot-scale solutions.

Verified competitors may receive reimbursement for up to two VSPs. To be eligible for voucher support within Breakthrough, Phase III must first register their intent to participate and submit a voucher application.

Phase IV: Demonstration of Impact

In addition, Breakthrough will award \$100,000 in voucher funding to the 10 winning teams selected to advance to **Phase IV**. The Phase IV vouchers funds must be used alongside approved Evaluation Entities.

Phase IV participants may receive reimbursement for only one Evaluation Entity. Phase IV participants must work with the Evaluation Entity identified in their Breakthrough submission. More information is available in Section 2.1.

Table 1. Noncash Vouchers Available

Contest	Track	Prizes
Breakthrough Competition	Track 1: New Competitors	No Vouchers awarded.
	Track 2: Verified Competitors	Phase III winning teams will be granted up to \$100,000 in noncash vouchers to be used during the Breakthrough competition.
Phase IV: Demonstration of Impact	Both Track 1 and Track 2	Phase IV participants will receive up to \$100,000 in noncash vouchers to use in Phase IV alongside a pre-identified Evaluation Entity.

2 | Voucher Process

2.1 Breakthrough Voucher Process

Phase III winners may use noncash vouchers as part of their participation in the Breakthrough competition. The process to apply for and receive voucher funding follows these steps:

- 1) **Register**—To become “verified competitors” and participate in the Breakthrough contest, Phase III winning teams must register online at HeroX and submit their intent to participate within 30 days after the Breakthrough announcement.
- 2) **Connect**—Verified competitors contact VSPs, exchange ideas, and discuss scope and outcomes for using voucher funds.
- 3) **Apply**—Verified competitors must provide an update on the current status and project plan for their Phase III winning concept solution. This update, provided approximately 60 days after the Breakthrough announcement, will include the following voucher information:
 - **Voucher Application:** A finalized negotiated statement of work (SOW) and itemized budget for VSPs you plan to work with, along with finalized contracts and agreement to voucher use terms as outlined in the updated voucher guidelines. The Prize Administrator will provide feedback on whether the SOW contains activities that qualify for voucher work.
 - **Project Plan:** A short written narrative on how the work with VSPs will address Phase III feedback to improve upon the solution.
- 4) **Contract**—Once the approved SOW is in place, teams enter into a formal agreement with the VSP. The format of this agreement may be unique to each VSP. Allowable activities relate to work that is directly in alignment with progressing the solution or product and must adhere to the policies described in this document. Participants and VSPs can renegotiate the SOW and resubmit if they so choose, as participant needs may change over time.
- 5) **Begin Work**—Once the agreement between the participant and VSP is in place, work can begin. The period of performance for all voucher work shall be 12 months or shall end on the date that Breakthrough submissions are due, whichever is shorter. The Prize Administrator will consider a no-cost time extension on a case-by-case basis for work that is scheduled to end before the Breakthrough submission deadline. The VSPs will receive compensation in accordance with the payment process described in Section 4.

2.1 Phase IV Voucher Process

All Breakthrough participants must identify their intended Evaluation Entity as part of the Breakthrough final submission. The process to use Evaluation Entity vouchers follows these steps:

- 1) **Research**—The Evaluation Entity application opens approximately 3 months after the Breakthrough announcement and a list of approved Evaluation Entities will be added to the HeroX website on a rolling basis. Breakthrough participants should review the approved list and determine which organization would best provide verification of their concept solution.
- 2) **Connect**—Participants will initiate contact with Evaluation Entities to exchange ideas and discuss scope and outcomes for verification within Phase IV.

- 3) **Propose**—Participants must identify an Evaluation Entity and describe plans to verify the impact of their proposal based on the recovered LIBs or validation of second use within the Breakthrough final submission.
- 4) **Win & Statement of Work**—Breakthrough winners must prepare a draft SOW for work to be funded by the voucher submitted to the Prize Administrator at BatteryRecyclingPrize@nrel.gov within 30 days of the Breakthrough winner announcement. This statement of work must be finalized (including all negotiations with the Evaluation Entity) within 90 days of the Breakthrough winner announcement. Failure to promptly comply with process requirements and have a negotiated SOW in place by this date may result in forfeit of the voucher.
- 5) **Contract**—Once the approved SOW is in place, teams enter into a formal agreement with the Evaluation Entity. The format of this agreement may be unique to each VSP. Allowable activities relate to work that is directly in alignment with validation and evaluation of the concept solution and must adhere to the policies described in this document.
- 6) **Begin Work**—Once the agreement between the participant and VSP is in place, work can begin. The period of performance for all voucher work shall be 18 months or shall end on the date that Phase IV submissions are due, whichever is shorter. The VSPs will receive compensation in accordance with the payment process described in Section 4.

3 | Voucher Use Policies

The following terms specify the voucher use policy for the Breakthrough contest and Phase III of the prize:

- **Voucher Recipients**—Only Phase III and Breakthrough winners will receive vouchers.
- **Maximum one-half with non-lab VSP**—Within Breakthrough, verified competitors may use a maximum of one-half of their voucher (\$50,000) value at a non-national laboratory VSP and must use at least one-half of voucher funding (\$50,000) at one or more national labs. Voucher funds cannot be split between more than two entities for each voucher. The minimum amount of work with any VSP must be \$10,000.
- **Approved VSP or Evaluation Entity**—Participants may use a voucher only at a VSP or Evaluation Entity that is approved by the Prize Administrator and listed within the American-Made Network. Vouchers are intended to enable participating teams to consult expertise outside of their own organization. Participating teams cannot select the leading business entity of their own team as a VSP or Evaluation Entity. Participating teams may identify partnering entities and other team's leading businesses as VSPs or Evaluation Entities if they have been approved to join the Network.
- **Allowable VSP Work**—All work conducted by the VSPs and funded through vouchers must be exclusively dedicated to advancing the participant's proposed solution in the Battery Recycling Prize. Additionally, funds must be used for prototyping, developing, testing, or validating the innovation. If work is not allowable under this definition, the competing team will not receive reimbursement for the work. When considering whether work will advance a particular solution, the Prize Administrator will look to tangible and measurable outcomes related to advancing the proposed solution. Costs of the work must be reasonable. No alcohol, food, travel, or other personal expenses will be allowed.
- **Allowable Evaluation Entity Work**—Evaluation Entities will receive material for recycling or second use from prize participants, as outlined in the Breakthrough final submission. Evaluation Entities are responsible for validation and evaluation of the concept solutions, and will report on their findings as part of the Phase IV final submission.
- **Best Value Due Diligence**—Participants are solely responsible for engaging VSPs and Evaluation Entities and negotiating scopes of work under the voucher system. Participants must determine which VSPs or Evaluation Entities they will work with and conduct their own due diligence to determine the best value of the technical assistance covered by the voucher. The Prize Administrator staff will not intervene, mediate, or negotiate on behalf of participants for the use of vouchers at any point in this program.
- **Responsibility**—It's the participants sole responsibility to ensure that a facility selected is on the approved facility list on <https://americanmadechallenges.org> and that the voucher SOW is in accordance with the guidelines herein. The participant shall make payments required by the non-lab VSPs or Evaluation Entity at its own risk. The participant is also solely responsible for managing the process and the work products including any changes, delays, risks, conflicts, or disputes. The Prize Administrator will not be part of the contract or agreement between the participant and a non-national lab VSP or Evaluation Entity nor will it be a guarantor of the technical outcomes, work products, or quality of the services offered by a non-national lab VSP or Evaluation Entity. If, for whatever reason, the work is not completed, or a dispute arises, resolution is entirely the responsibility of the participant. The Prize Administrator will not intervene or mediate in such cases and will not bear any costs for dispute resolution among the parties.

- **Protecting Innovation Intellectual Property (IP)**—When working with a non-national lab VSP or Evaluation Entity, participants are solely responsible for ensuring that the facility signs any relevant non-disclosure agreements to protect IP. The participant is also responsible for the payment associated with protecting IP, including any relevant patents.
- **IP-Related Restrictions**—There are some IP restrictions and controls if the voucher payments are processed through Memorandum Purchase Order (MPO) options.
- **Arms-Length Transactions**—The relationship between a participant and VSP should avoid actual conflicts of interest or the appearance of conflicts of interest. A participant and VSP should act independently and should not have any relationship to each other beyond providing services. All parties must be acting in their own self-interest and not be subject to any pressure or duress from the other party.
- **Process Compliance**—All participants agree to adhere to the requirements contained in this document. Failure to follow these requirements may limit Phase II winners' ability to acquire voucher funds.
- **Use or Lose**—Phase III and Breakthrough winners must submit their voucher SOW for Prize Administrator review within the process described in Section 4. Failure to do so may result in forfeiture of voucher funds.
- **No-Cost Time Extension Request**—Verified competitors within the Breakthrough competition may submit a no-cost time extension request to the Prize Administrator should a change in SOW result in a period of performance greater than 12 months and before the Breakthrough submission deadline. The request must be sent to the Prize Administrator at BatteryRecyclingPrize@nrel.gov and must include an updated SOW with tracked changes demonstrating the need for the extension and resulting period of performance updates.

4 | Voucher Payments

Each VSP and Evaluation Entity will follow its own process for contracts and agreements. The participant is responsible for negotiating contracts and agreements with their chosen VSP or Evaluation Entity and ensuring Prize deadlines are considered. Reimbursement of funds will be made at the sole discretion of the Prize Administrator based on the following guidelines.

4.1 Work with NREL

To work with NREL, participants will be required to enter into a Cooperative Research & Development Agreement (CRADA). A signed CRADA gives the Breakthrough participant maximum collaborative flexibility with a national lab and allows additional private funds to be used to expand the SOW. It also defines ownership of any intellectual property developed during voucher-funded work as well as other specifics of the collaboration. In order to enter into a CRADA with NREL, the following documents must be completed:

- **Participant Data Sheet** – To be completed as soon as possible after winning the Phase II Prize, a completed Participant Data Sheet begins the collaboration process. A sample Participant Data Sheet can be found in Appendix B.
- **Statement of Work** – All projects must have a statement of work (SOW) describing the proposed project scope to be covered with the voucher funds. A statement of work template is included in Appendix A2. The SOW should be developed collaboratively by the teams and the lab staff who will be conducting work for them and must include a budget for the proposed work. The SOW must be completed within 4 weeks after winning the Breakthrough Contest.
- **Signed CRADA** – Once the Participant Data Sheet and SOW are complete, NREL's Tech Transfer Office will have teams sign a CRADA. It is expected that the prize participant will accept the CRADA without any changes to the terms and conditions. The sample CRADA is found in Appendix A3. However, depending on timing and what is required by the teams, there may be a delay in getting access to specific equipment or researchers. NREL will do its best to try to expedite requests from Battery Recycling Prize teams as much as possible. Once a CRADA is signed, the Prize Administrator will transfer funds directly to the NREL researcher for use.

NREL will host an informational webinar on CRADAs and partnerships with NREL prior to the Phase IV Final Submission deadline.

4.2 Work with Other National Labs

When working with a national lab other than NREL, the participant must work directly with that lab to complete a draft SOW (Appendix A4) and draft Sole Source Justification (SSJ) document (Appendix A5) that should be submitted to the Prize Administrator at BatteryRecyclingPrize@nrel.gov within 4 weeks after winning the Breakthrough Contest and a final SOW and SSJ by **April 1, 2021**. These files must be submitted to the Prize Administrator (BatteryRecyclingPrize@nrel.gov) with indications of approval by both the participant and the national lab.

Once the Prize Administrator receives this SOW and SSJ, the Prize Administrator will work with the desired lab to complete a Memorandum Purchase Order (MPO). The Prize Administrator will directly transfer the allocated voucher funds to the selected lab to perform the work as specified in the MPO. Once the transfer occurs, the selected national lab must accept the funds to complete the transfer and set up the funding structure for the researchers. The actual timing for each lab funds transfer will depend on the individual labs, but the Prize Administrator will work closely with all selected labs to ensure a smooth and quick funds transfer process. The work under this MPO must be completed within the 12-month period of performance or the remaining time before the Phase III submission deadline, whichever is shorter. For work that exceeds a 12-month period of performance but ends before the Phase III submission deadline, the prize

administrator will consider a no-cost time extension on a case-by-case basis. If work under this MPO is not completed within the period of performance, the funds will be returned to the Prize Administrator.

4.3 Work with a Private Facility

Non-national lab voucher reimbursement process requirements:

- Breakthrough and Phase IV winners hoping to expend voucher funds with a non-lab VSP first negotiate a Voucher SOW and an itemized budget with a VSP. Then the participant must provide documentation of the agreed-upon SOW and the budget to the Prize Administrator. The Prize Administrator will review the application against the standards for work described in this document and may provide feedback and suggested changes to ensure that the SOW describes work that may be reimbursable. Prize Administrator feedback is not a guarantee that work performed by a non-lab VSP will be reimbursed. Once the work is completed, the Prize Administrator will conduct a review of the work and reimburse the Phase II winner in accordance with these guidelines.
- The work is then funded by the Breakthrough and Phase IV winner(s). The Breakthrough and Phase IV winner is also responsible for signing any relevant contracts or agreements with the non-national lab VSP. Once the work is complete, and the Breakthrough and Phase IV winner has paid the VSP, the Breakthrough and Phase IV winner may request reimbursement from the Prize Administrator. The Prize Administrator will review the work against the allowable work, evidence of the completed work, and evidence of payment and compare the invoice for expenses incurred against the planned budget and SOW. Submitting photos, videos, and other documentation is encouraged to help facilitate rapid review and reimbursement. The Prize Administrator will make a determination of whether the funds were expended in compliance with the voucher requirements. Reimbursement of funds will be made at the sole discretion of the Prize Administrator. The Prize Administrator will make only a single payment per non-lab VSP engaged by the Phase II winner. Requests for reimbursement must be made within 30 days of the Phase IV submission deadline. Any remaining balance after all valid voucher invoices are approved will be returned to the NREL prize account.

5 | Apply to Be a VSP or Evaluation Entity

To be approved as a VSP, including a pre-identified Evaluation Entity, private organizations and facilities must first apply on the [American-Made website](#). The following must be described:

- Description of services offered
- Website
- Location of business
- History of business
- Examples of success with previous customers in the area of services that the organization is offering here.

The Prize Administrator, at its sole discretion, determines whether non-national-lab organizations may become an approved VSP. The Prize Administrator will review applications to become an approved VSP, which must establish, at a minimum, that:

- The entity is an incorporated U.S. business that has been in existence for at least 12 months at the time the application is submitted.
- The entity has an active website that describes the organization's capabilities.
- The entity offers capabilities, facilities, and services that are broadly available to interested parties.
- The business entity has a history of success in producing, developing, testing, validating, prototyping, and manufacturing products and solutions.

Eligible VSPs can take their application a step further to become an approved Evaluation Entity to support Phase IV of the prize. Once approved as a VSP, businesses can apply to become approved Evaluation Entities. More information about the Evaluation Entities application will be released prior to the Industry Collaboration Event.

Eligible recyclers must meet all U.S. Environmental Protection Agency and state requirements, specifically requirements for universal and hazardous waste and Resource Conservation and Recovery Act (RCRA) laws and regulations as applicable. The end recycling facility must be located in the United States.

Evaluation Entities are ineligible to compete as prize participants or partners and must be identified as the selected Evaluation Entity in the Breakthrough contest submission package. Evaluation Entities may work with multiple prize participants, as allowed by the capacity of their services and capabilities.

Appendix: Draft Templates

A.1 Work With NREL: Participant Data Sheet

INSERT COPY OF UPDATED PDS OR SEND AS WORD DOCUMENT TO TEAMS WHEN READY. I
COULDN'T PASTE IT IN HERE FOR SOME REASON.

A.2 Work With NREL: Statement of Work

ANNEX A – STATEMENT OF WORK

Notice: By signing the CRADA, the Participant acknowledges in advance that its entity name and the title and non-proprietary abstract of CRADA work are available for public release by the Contractor without further notice.

Project Title:

[Voucher project title – must represent the project]

Non-Proprietary Abstract of CRADA Work:

[One paragraph on the overall goal of the work]

Participant Name and Address:

[Voucher recipient (participant) name and address]

Participant Type: Foreign, University, Small Business, Large Business, State & Local Government, Not-for-Profit [Choose one]

Schedule:

The Period of Performance for this effort is [#] months.

Purpose:

[One sentence on the purpose of the work]

Statement of Work: Task Descriptions, Deliverables, and Estimated Completion Dates

a) Task Descriptions

-

The Participant will perform the following tasks:

Task 1: [Task 1 title here]

[2-5 sentences describing task1]

Task 2: [Task 2 title here]

[2-5 sentences describing task 2]

Task 3: [Task 3 title here]

[2-5 sentences describing task 3]

[Add or remove participant tasks as needed.]

NREL will perform the following tasks:

Task 1: [Task 1 title here]

[2-5 sentences describing task1]

Task 2: [Task 2 title here]

[2-5 sentences describing task 2]

Task 3: [Task 3 title here]

[2-5 sentences describing task 3]

Task X: Other Work

Other work at the direction of the Participant, consistent with the scope and subject to the availability of funding

Task X: CRADA Final Report

Preparation and submission of a final report delivered to NREL's Technology Transfer Office

[A final report is required of all CRADA agreements. Add or remove participant tasks as needed.]

[Add or remove participant tasks as needed.]

b) Deliverables Table:

[All deliverables should plan for completion within 12 months of start of contract. Keep in mind the evaluation criteria for each deliverable can be thought of as a measure of success of the project. They should be SMART (specific, measurable, assignable, realistic and time-related)]

REF	DELIVERABLE and TASK REFERENCE	RESPONSIBILITY	COMPLETION DATE (months from start of contract)
	<p>Description: [Example 1: Participant will ship samples to NREL]</p> <p>Evaluation Criteria: [Example 1: NREL PI will confirm X number of samples were received via email]</p>	le: NREL or Participant or Both	[#] months
	[Add or delete deliverables as needed.]		[#] months
	[Add or delete deliverables as needed.]		[#] months

Funding Table:

[NREL In Kind is the Voucher amount

Participant“in-kind” funds include any labor or resources put forth by the company to the CRADA works scope (e.g. Employee time to prepare samples, cost of materials used in study, etc.). Estimates are okay.]

Estimated Costs	NREL In-Kind	Participant In-Kind	Participant Funds-In	Totals
Year 1	\$ 00.00	\$ 00.00	\$ 00.00	\$ 00.00
Year 2	\$ 00.00	\$ 00.00	\$ 00.00	\$ 00.00
TOTALS	\$ 00.00	\$ 00.00	\$ 00.00	\$ 00.00

Fed Admin Charge on Funds-in	----	----	\$ 00.00	\$ 00.00
------------------------------	------	------	----------	----------

[NREL PI to complete]

DOE Mission Area to benefit from this CRADA: [Select all that apply]

Energy, Environmental Quality, Science, Other (identify)

CRADA benefit to DOE, Participant, and US Taxpayer: [Select all that apply]

Assists laboratory in achieving programmatic scope, adds new capability to the laboratory's core competencies, enhances the laboratory's core competencies, uses the laboratory's core competencies, and/or enhances U.S. competitiveness by utilizing DOE developed intellectual property and/or capabilities.

DOE Program Manager: (Add relevant DOE Program Manager)

The Proposed CRADA will be based upon: DOE Model CRADA, Short Form CRADA,

Multi-lab CRADA, other (identify) Voucher CRADA

Notices to the Parties:

Any communications required by this CRADA, if given by postage, prepaid, first-class U.S. Mail or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the date of receipt of such communication by the addressee, or on the date given if by verified facsimile. Address changes shall be made by written notice and shall be effective thereafter. All such communications, to be considered effective, shall include the number of this CRADA. The addresses, telephone numbers, email, and facsimile numbers for the Parties are as follows:

FORMAL NOTICES AND COMMUNICATIONS, COPIES OF REPORTS

Participant:

Representative Name

Participant name,

address,

email,

phone number

Contractor:

[NREL technology transfer representative name]

Technology Transfer Office

National Renewable Energy Laboratory,

15013 Denver West Parkway, MSRSF056

Golden, CO 80401-3393

Tel: [NREL technology representative transfer phone]

Email: [NREL technology transfer representative email address]

PROJECT MANAGERS, REPORTS, COPIES OF FORMAL NOTICES AND COMMUNICATIONS:

Participant:

Representative Name

Participant name,

address,

email,

phone number

Contractor:

[NREL PI name]

National Renewable Energy Laboratory,

15013 Denver West Parkway, MSRSF033

Golden, CO 80401-3393

Tel: [NREL PI phone number]

Email: [NREL PI email address]

Special Considerations:

[NREL and Participant to complete highlighted yellow questions]

Background Intellectual Property? (e.g., inventions or copyrightable software, etc.):

No Yes; If yes, list: See Appendix B

Is Participant interested in licensing Background Intellectual Property:

No Yes; If yes, please identify any known impediments for such licensing:

(i.e., BIP still in ROI stage, or already exclusively licensed, or has broader applications than scope of CRADA, or in contention right now with another partner. If none, write "NONE.").

None

Are human or animal subjects to be used as part of this CRADA?

No Yes; If yes, before the CRADA can be executed, approvals must be obtained from the Institutional Review Board or the Animal Care and Use Committee.

Have all necessary ES&H and quality (NEPA) reviews been completed?

Yes No

[NREL / TTO to complete the below]

Are there any organizational or personal conflicts of interest associated with this CRADA?

No Yes; If yes, explain:

Contractor maintains on file signed COI certificates for each employee with a substantial role in this CRADA.

Will export controlled information be used or produced?

No Yes; If yes, identify:

How was Fairness of Opportunity determined?

Participant approached laboratory

Participant responded to FBO (Federal Business Opportunity)

Participant was contacted by laboratory after or during broad public announcement (*Supporting documentation is to be maintained in CRADA file.*)

For 100% funds-in CRADAs, the Participant has been notified of other types of technology transfer agreements, such as a Strategic Partnership Projects agreement.

Yes No N/A

Did the Participant require any substantive changes to the laboratory/field-approved DOE Model CRADA or any changes to double-underlined language?

No Yes; If yes, attach copies of the proposed modified articles. If substantively altered, attach Participant's US Competitiveness justification.

Does any Party currently plan to engage a subcontractor(s) to perform any of the work specified herein?

No Yes; If yes, provide subcontractor name(s) and describe portion of work such subcontractor(s) will perform, to the extent these are known at this time.

Additional Special Considerations: [\[Contract-specific considerations. If none, enter "none."\]](#)

A.3 Work with NREL - CRADA Template

American Made Challenges Lithium-Ion Battery Recycling Prize Voucher Program

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

(hereinafter "CRADA") No. CRD-YR-XXXXX

between

Alliance for Sustainable Energy, LLC,

Manager and Operator of the National Renewable Energy Laboratory
under its U.S. Department of Energy Contract No. DE-AC36-08GO28308
15013 Denver West Parkway, Golden, CO 80401

(hereinafter "Contractor")

and

<Name>

<Address>

<City, State, Zip>

(hereinafter "Participant"),

both being hereinafter jointly referred to as the "Parties".

Task Title:

Field of Use:

ARTICLE I: DEFINITIONS

- A. "Government" means the United States of America and agencies thereof.
- B. "DOE" means the Department of Energy, an agency of the United States of America.
- C. "Contracting Officer" means the DOE employee administering the Contractor's DOE contract.
- D. "Generated Information" means information produced in the performance of this CRADA.
- E. "Proprietary Information" means information which is developed at private expense outside of this CRADA, is marked as Proprietary Information, and embodies (i) trade secrets or (ii) commercial or financial information which is considered privileged or confidential under the Freedom of Information Act (5 USC 552 (b)(4)).
- F. "Protected CRADA Information" means Generated Information which is marked as being Protected CRADA Information by a Party to this CRADA and which would have been Proprietary Information had it been obtained from a non-federal entity.
- G. "Subject Invention" means any invention of the Contractor or Participant conceived of or first actually reduced to practice in the performance of work under this CRADA.
- H. "Intellectual Property" means patents, trademarks, copyrights, mask works, Protected CRADA Information and other forms of comparable property rights protected by Federal law and other foreign counterparts.
- I. "Background Intellectual Property" means the Intellectual Property, if any, identified by the Parties in an Annex titled "Background Intellectual Property", which was in existence prior to or is first produced outside of this CRADA, except that in the case of inventions in those identified items, the inventions must have been conceived outside of this CRADA and not first actually reduced to practice under this CRADA to qualify as Background Intellectual Property.

ARTICLE II: STATEMENT OF WORK, TERM, FUNDING AND COSTS

- A. Annex A is the Statement of Work.
- B. Notices: The names, postal addresses, telephone and email addresses for the Parties are provided in the Statement of Work. Any communications required by this CRADA, if given by postage prepaid first class U.S. Mail or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by the addressee, or on the date given if by email. Address changes shall be made by written notice and shall be effective thereafter. All such communications, to be considered effective, shall include the number of this CRADA.
- C. The effective date of this CRADA shall be the latter date of (1) the date on which it is signed by the last of the Parties or (2) the date on which it is approved by DOE. The work to be performed under this CRADA shall be completed within ___ months/years from the effective date.

- D. The Participant's estimated contribution is \$_____, which includes \$_____ funds-in. The Government's estimated contribution, which is provided through Contractor's contract with DOE, is \$_____, subject to available funding.
- E. *[Reserve paragraph if Participant is not providing funding to Contractor.]* For CRADAs that include (non-Federal) funding on a funds-in basis, the Participant shall provide Contractor, prior to any work from being performed, a budgetary resource sufficient to cover the anticipated work that will be performed during the first billing cycle. In addition, the Participant shall provide sixty (60) days of additional funding to ensure that funds remain available for project during subsequent billing cycles. Failure of Participant to provide the necessary advance funding is cause for termination of this CRADA in accordance with the Termination article of this CRADA. A billing cycle is the period of time between billings, usually thirty (30) days. The billing cycle is complete when the customer is billed for services rendered.

ARTICLE III: PERSONAL PROPERTY

All tangible personal property produced or acquired under this CRADA shall become the property of the Participant or the Government, depending upon whose funds were used to obtain it unless identified in the Statement of Work as being owned by the other Party. Personal property shall be disposed of as directed by the owner at the owner's expense. All jointly funded property shall be owned by the Government. The Participant shall maintain records of receipts, expenditures, and the disposition of all Government property in its custody related to the CRADA.

ARTICLE IV: DISCLAIMER

THE GOVERNMENT, THE PARTICIPANT, AND THE CONTRACTOR MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA, OR THE OWNERSHIP, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT. NEITHER THE GOVERNMENT, THE PARTICIPANT, NOR THE CONTRACTOR SHALL BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES ATTRIBUTED TO SUCH RESEARCH OR RESULTING PRODUCT, INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA.

ARTICLE V: PRODUCT LIABILITY

Except for any liability resulting from any negligent acts, or willful misconduct or omissions of Contractor or Government, Participant agrees to hold harmless the Government and the Contractor for all damages, cost and expenses, including attorney's fees, arising from personal injury or property damage as a result of the making, using, or selling of a product, process or service by or on behalf of

the Participant, its assignees or licensees, which was derived from the work performed under this CRADA.

ARTICLE VI: RIGHTS IN SUBJECT INVENTIONS

Wherein DOE has granted the Participant and the Contractor the right to elect to retain title to their respective Subject Inventions.

- A. Each Party shall have the first option to elect to retain title to any of its Subject Inventions and that election shall be made: (1) for the Participant, within 12 months of disclosure of the Subject Invention to DOE or (2) for the Contractor, within the time period specified in its prime contract for electing to retain title to Subject Inventions. However, such election shall occur not later than 60 days prior to the time when any statutory bar might foreclose filing of a U.S. Patent application. The electing Party has one year to file a patent application after such election unless any statutory bar exists. If a Party elects not to retain title to any of its Subject Inventions or fails to timely file a patent application, the other Party shall have the second option to elect to obtain title to such Subject Invention within the time period specified in paragraph B below. For Subject Inventions that are joint Subject Inventions of the Contractor and the Participant, title to such Subject Inventions shall be jointly owned by the Contractor and the Participant.
- B. The Parties agree to assign to DOE, as requested by DOE, the entire right, title and interest in any country to each Subject Invention where the Parties (1) do not elect pursuant to this article to retain/obtain such rights, or (2) elect to retain/obtain title to a Subject Invention but fail to have a patent application filed in that country on the Subject Invention or decide not to continue prosecution or not to pay any maintenance fees covering the Subject Invention. If DOE is granted a patent on Participant's Subject Invention, the Participant may request a non-exclusive license and DOE will determine whether to grant such license pursuant to statutory authority.
- C. The Parties acknowledge that the Government retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States every Subject Invention under this CRADA throughout the world. The Parties agree to execute a Confirmatory License to affirm the Government's retained license.
- D. The Parties agree to disclose to each other each Subject Invention which may be patentable or otherwise protectable under U.S. patent law. The Parties agree that the Contractor and the Participant will disclose their respective Subject Inventions to DOE and each other within two (2) months after the inventor first discloses the Subject Invention in writing to the person(s) responsible for patent matters of the disclosing Party.

These disclosures should be in sufficiently complete technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, and operation of the Subject Invention. The disclosure shall also identify any known actual or potential statutory bars, e.g., printed publications describing the Subject Invention or the public use or "on sale" of the Subject Invention. The Parties further agree to disclose to each other any

subsequently known actual or potential statutory bar that occurs for a Subject Invention disclosed but for which a patent application has not been filed. All Subject Invention disclosures shall be marked as confidential under 35 U.S.C. 205.

- E. The Parties agree to include within the beginning of the specification of any U.S. patent applications and any patent issuing thereon (including non-U.S. patents) covering a Subject Invention, the following statement: "This invention was made under a CRADA (identify CRADA number) between (name the Participant) and (name the laboratory) operated for the United States Department of Energy. The Government has certain rights in this invention."
- F. The Parties acknowledge that DOE has certain march-in rights to any Subject Inventions in accordance with 48 CFR 27.304-1(g) and 15 U.S.C. 3710a(b)(1)(B) and (C).
- G. The Participant shall, at a minimum, retain a paid-up, royalty-free, nonexclusive, non-transferable, license without the right to sublicense, in a limited Field of Use as specified on the first page of this CRADA for any Subject Invention in which the Contractor retains title.

After four (4) years from the end of this CRADA, the Participant license may be revoked or modified by the Contractor to extent necessary to achieve expeditious practical application of the Subject Invention pursuant to an application for an exclusive license by a third party. The Participant license will not be revoked in any field of use or the geographical areas in which the Participant has achieved practical application and continues to make the benefits of the Subject Invention reasonably accessible to the public.

Before revocation or modification of the license, the Contractor will furnish the Participant a written notice of its intention to revoke or modify the license, and the Participant will be allowed thirty (30) days after the notice to show cause why the license should not be revoked or modified. The Participant has the right to appeal to DOE any decision concerning the revocation or modification of its license.

Notwithstanding the license above, the Contractor has sole discretion on whether to exercise any of its rights under this Article including the right to elect to retain title to any of its Subject Inventions and whether and where to pursue patent protection for any of its Subject Inventions.

In addition to the above nonexclusive license, for each Subject Invention of the Contractor, the Participant has the option for six (6) months from the date that the Subject Invention was disclosed to the Participant to choose an exclusive license, for reasonable compensation, in the limited Field of Use as specified on the first page of this CRADA to the Subject Invention.

ARTICLE VII: RIGHTS IN DATA

- A. The Parties agree that they shall have no obligations of nondisclosure or limitations on their use of, and the Government shall have unlimited rights in, all Generated Information produced and information provided by the Parties under this CRADA, except for restrictions and copyright on data provided for in this Article or data disclosed in a Subject Invention disclosure being considered for Patent protection.
- B. PROPRIETARY INFORMATION: Each Party agrees to not disclose Proprietary Information provided by the other Party to anyone other than the Participant, Contractor and its subcontractors (if any) performing work under this CRADA without written approval of the providing Party, except to Government employees who are subject to the statutory provisions against disclosure of confidential information set forth in the Trade Secrets Act (18 U.S.C. 1905). Government employees shall not be required to sign non-disclosure agreements due to the provisions of the above-cited statute.

If Proprietary Information is orally disclosed to a Party, it shall be identified as such, orally, at the time of disclosure and confirmed in a written summary thereof, appropriately marked by the disclosing Party, within ten (10) days as being Proprietary Information.

All Proprietary Information shall be protected for a period of five (5) years from the effective date of this CRADA, unless such Proprietary Information becomes publicly known without the fault of the recipient, shall come into recipient's possession without breach by the recipient of any of the obligations set forth herein, can be demonstrated by the recipient by written record that it is known prior to receipt from disclosing party, is disclosed by operation of law, or is independently developed by recipient's employees who did not have access to such Proprietary Information.

Proprietary Information in tangible form shall be returned to the disclosing Party or destroyed with a certificate of destruction submitted to the disclosing Party upon termination or expiration of this CRADA, or during the term of this CRADA upon request by the disclosing Party. Notwithstanding the foregoing destruction of copies shall not extend to archival copies maintained in computer system backup files, permanent business records, or as may otherwise be required by receiving Party's internal document retention policies.

- C. PROTECTED CRADA INFORMATION: Each Party may designate and mark as Protected CRADA Information any Generated Information produced by its employees, which meets the definition in Article I and, with the agreement of the other Party, so designate any Generated Information produced by the other Party's employees which meets the definition in Article I. All such designated Protected CRADA Information shall be appropriately marked.

For a period of five (5) years from the date Protected CRADA Information is produced, the Parties agree not to further disclose such information and to use the same degree of care and discretion, but no less than reasonable care and discretion, to avoid disclosure, publication or dissemination of such

information to a third party, as the Party employs for similar protection of its own information which it does not desire to disclose, publish, or disseminate except:

- (1) as necessary to perform this CRADA;
- (2) as published in a patent application or an issued patent before the protection period expires;
- (3) as provided in Article X [REPORTS AND ABSTRACTS];
- (4) as requested by the DOE Contracting Officer to be provided to other DOE facilities for use only at those DOE facilities solely for Government use only with the same protection in place and marked accordingly.
- (5) to existing or potential licensees, affiliates, customers, or suppliers of the Parties in support of commercialization of the technology with the same protection in place. Disclosure of the Participant's Protected CRADA Information under this subparagraph shall only be done with the Participant's consent; or
- (6) as mutually agreed to by the Parties in advance.

The obligations of this paragraph shall end sooner for any Protected CRADA Information which shall become publicly known without fault of either Party, shall come into a Party's possession without breach by that Party of the obligations of paragraph above, or shall be independently developed by a Party's employees who did not have access to the Protected CRADA Information. Federal Government employees who are subject to 18 USC 1905 may have access to Protected CRADA Information and shall not be required to sign non-disclosure agreements due to the provisions of the statute.

D. COPYRIGHT: The Parties may assert copyright in any of their respective Generated Information.

The Parties hereby acknowledge that the Government or others acting on its behalf shall retain a nonexclusive, royalty-free, worldwide, irrevocable, non-transferable license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, all copyrightable works produced in the performance of this CRADA, subject to the restrictions this CRADA places on publication of Proprietary Information and Protected CRADA Information.

When a Party writes computer software produced in the performance of this CRADA, the Party will provide the source code, object code, and expanded abstract, and the minimum support documentation needed by a competent user to understand and use the software to DOE's Energy Science and Technology Software Center (ESTSC) via www.osti.gov/estsc. The Party shall inform ESTSC when it abandons or no longer commercializes the computer software. Until such notice to ESTSC, the Government has for itself and others acting on its behalf, a royalty-free, nontransferable,

nonexclusive, irrevocable worldwide copyright license to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government. (narrow license). After the Party owning the Computer Software abandons or no longer commercializes the Computer Software, the Government has for itself and others acting on its behalf, a royalty-free, nontransferable, nonexclusive, irrevocable worldwide copyright license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. (broad license).

The Participant shall, at a minimum, retain a paid-up, royalty-free, nonexclusive, non-transferable, license without the right to sublicense, in a limited Field of Use as specified on the first page of this CRADA to reproduce, prepare derivative works, distribute copies to the public, and perform and display publicly any computer software produced in the performance of this CRADA by the Contractor. This license may be revoked or modified under the same conditions and process as the license for Contractor's Subject Inventions in Article VI(G) of this CRADA.

The Parties agree to place Copyright and other notices, as appropriate for the protection of Copyright, in human-readable form onto all physical media, and in digitally encoded form in the header of machine-readable information recorded on such media such that the notice will appear in human-readable form when the digital data are off loaded or the data are accessed for display or printout.

ARTICLE VIII: U.S. COMPETITIVENESS

The Parties agree that a purpose of this CRADA is to provide substantial benefit to the U.S. economy.

- A. In exchange for the benefits received under this CRADA, the Participant therefore agrees to the following:
- (1) Products embodying Intellectual Property developed under this CRADA shall be substantially manufactured in the United States, and
 - (2) Processes, services, and improvements thereof which are covered by Intellectual Property developed under this CRADA shall be incorporated into the Participant's manufacturing facilities in the United States either prior to or simultaneously with implementation outside the United States. Such processes, services, and improvements, when implemented outside the United States, shall not result in reduction of the use of the same processes, services, or improvements in the United States.
- B. The Contractor agrees to a U.S. Industrial Competitiveness clause in accordance with its prime contract with respect to any licensing and assignments of its Intellectual Property arising from this CRADA, except that any licensing or assignment of its intellectual property rights to the Participant shall be in accordance with the terms of paragraph A of this Article.

ARTICLE IX: EXPORT CONTROL

EACH PARTY IS RESPONSIBLE FOR ITS OWN COMPLIANCE WITH EXPORT CONTROL LAWS AND REGULATIONS. EXPORT LICENSES OR OTHER AUTHORIZATIONS FROM THE U.S. GOVERNMENT MAY BE REQUIRED FOR THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES UNDER THIS AGREEMENT. THE PARTIES ACKNOWLEDGE THAT EXPORT CONTROL REQUIREMENTS MAY CHANGE AND THAT THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES FROM THE U.S. WITHOUT AN EXPORT LICENSE OR OTHER APPROPRIATE GOVERNMENTAL AUTHORIZATION MAY RESULT IN CRIMINAL LIABILITY.

ARTICLE X: REPORTS AND ABSTRACTS

The Parties agree to produce the following deliverables: an initial abstract suitable for public release; and a final report, to include a list of Subject Inventions. It is understood that the Contractor has the responsibility to provide this information at the time of its completion to the DOE Office of Scientific and Technical Information. The Participant agrees to provide the above information to the Contractor to enable full compliance with this Article.

The Parties agree to submit, for a period of five years from the expiration of this CRADA and, upon request of DOE, a non-proprietary report no more frequently than annually on the efforts to utilize any Intellectual Property arising under the CRADA.

The Parties agree that neither will use the name of the other Party or its employees in any promotional activity, such as advertisements, with reference to any product or service resulting from this CRADA, without prior written approval of the other Party.

ARTICLE XI: FORCE MAJEURE

No failure or omission by the Contractor or the Participant in the performance of any obligation under this CRADA shall be deemed a breach of this CRADA or create any liability if the same shall arise from any cause or causes beyond the control of the Contractor or the Participant, including but not limited to the following, which, for the purpose of this CRADA, shall be regarded as beyond the control of the Party in question: Acts of God, acts or omissions of any government or agency thereof, compliance with requirements, rules, regulations, or orders of any governmental authority or any office, department, agency, or instrumentality thereof, fire, storm, flood, earthquake, accident, acts of the public enemy, war, rebellion, insurrection, riot, sabotage, invasion, quarantine, restriction, transportation embargoes, or failures or delays in transportation.

ARTICLE XII: DISPUTES

The Parties shall attempt to jointly resolve all disputes arising from this CRADA. In the event a dispute arises under this CRADA, the Participant is encouraged to contact Contractor's Technology Partnership Ombudsman in order to further resolve such dispute before pursuing third-party mediation or other remedies. If the Parties are unable to jointly resolve a dispute within a reasonable period of time, they agree to submit the dispute to a third-party mediation process that is mutually agreed upon by the Parties. To the extent that there is no applicable U.S. Federal law, this CRADA and performance thereunder shall be governed by the laws of the State of Colorado, without reference to that state's conflict of laws provisions.

ARTICLE XIII: ENTIRE CRADA, MODIFICATIONS AND TERMINATION

This CRADA with its annexes contains the entire agreement between the Parties in performing the research described in the Statement of Work (Annex A) and becomes effective on the later date of either the date the last Party signs the document or receipt of advance funding, if any. Any agreement to materially change any terms or conditions of the CRADA and annexes shall be valid only if the change is made in writing, executed by the Parties hereto, and approved by DOE.

The Contractor enters into this CRADA under the authority of its prime contract with DOE. The Contractor is authorized to and will administer this CRADA in all respects unless otherwise specifically provided for herein. Administration of this CRADA may be transferred from the Contractor to DOE or its designee with notice of such transfer to the Participant, and the Contractor shall have no further responsibilities except for the confidentiality, use and/or nondisclosure obligations of this CRADA.

This CRADA may be terminated by either Party with thirty (30) days written notice to the other Party. If Article II provides for advance funding, this CRADA may also be terminated by the Contractor in the event of failure by the Participant to provide the necessary advance funding.

Each Party will be responsible for its own costs arising out of or as a result of this termination. The obligations of any clause of this CRADA that were intended to survive the expiration of the period of performance, for example, confidentiality, use and/or non-disclosure obligations, shall also survive any termination of this CRADA.

ARTICLE XIV: BACKGROUND INTELLECTUAL PROPERTY

Each Party may use the other Party's Background Intellectual Property identified in an Annex to this CRADA solely in performance of research under the Statement of Work. This CRADA does not grant

to either Party any option, grant, or license to commercialize, or otherwise use the other Party's Background Intellectual Property. Licensing of Background Intellectual Property, if agreed to by the Parties, shall be the subject of separate licensing agreements between the Parties. Each Party has used reasonable efforts to list all relevant Background Intellectual Property, but Background Intellectual Property may exist that is not identified. Neither Party shall be liable to the other Party because of failure to list Background Intellectual Property.

Approval:

FOR CONTRACTOR:

FOR PARTICIPANT:

BY

BY

NAME

NAME

TITLE

TITLE

DATE

DATE

A.4 Work with other National Labs - Statement of Work

STATEMENT OF WORK

(Title of the Project)

VOUCHER SERVICE PROVIDER:

BATTERY RECYCLING PRIZE TEAM NAME:

*(Date of the Statement of Work)

1.0 BACKGROUND

This work is to be conducted in support of the American-Made Challenges Lithium-Ion Battery Recycling Prize. The intent is to connect Phase II winners with Voucher Service Providers that can help accelerate the development of innovative solutions and products. Teams who have won the Phase II Prize are eligible to utilize vouchers at national laboratories to advance their ideas.

2.0 OBJECTIVE (provide the specific objective)

Provide information relating to what you're hoping will be able to accomplish with the help that this VSP will be performing in this scope of work. This should be specific to the goals of the subcontract in the context of the Prize. Do not put specific contract requirements here.

3.0 SCOPE OF WORK (describe the scope of work)

To meet the objective, the scope of the work the VSP shall perform will fall within the following areas:

3.1 The VSP shall be responsible for providing... *In this section, provide information that describes the 'umbrella' vision of the work they will perform. This is not the area to describe specific tasks, but rather in general - what is this VSP expected to do programmatically to meet the team's objective? This section creates the boundaries of what the VSP is expected to accomplish for the team. This section may also explain resources, interrelationships (e.g., amongst team partners), and any constraints, limitations, or risks. If there are option period or phases, the scope for each period or phase should be identified.*

3.2 The VSP shall be responsible for providing...

3.3 The VSP shall be responsible for providing...

4.0 TASKS (high level description of the tasks to be performed)

- 4.1 Task #1- The VSP shall... [In this section, provide detailed information that describes the specific work that the VSP will perform. This should correlate to the deliverables section below, but in this area, the focus is on the work to be performed rather than the item they will produce. If there are option periods or phases, the tasks for each period or phase must be defined. If there are milestones, they can be included in the tasks, or a separate Milestones section can be added, and the subsequent sections renumbered.
- 4.2 Task #2- The VSP shall...
- 4.3 Task #2- The VSP shall...

5.0 REVIEW MEETINGS AND TRAVEL REQUIREMENTS (if required)

Provide any required review meetings (virtual or in person), including the frequency, total number of meetings, duration, location (if not virtual), and participants.

6.0 DELIVERABLES (describe the agreed upon deliverables)

In this section, describe exactly what you expect the VSP will provide, including reporting requirements, and when (either a date or frequency is acceptable, but rather than an actual date, dates relative to the award date are recommended, e.g. “One month from subcontract execution”, because the actual execution date of the subcontract is not known and may be later than estimated.)

Each deliverable should relate to a task or tasks in Section 4.0. The table below is a suggested format for listing deliverables. If there are option periods or phases, a column can be added to indicate the option period or phase number in which the deliverable is due, or separate tables can be used for each option period or phase.

The VSP shall provide the following deliverables by the due date as indicated:

Deliverable No.	Associated Task(s) No.	Deliverable Description	Due Date
6.1			
6.2			
6.3			
6.4			
6.5			
6.6			
6.7			

[The following types of Deliverables are provided as samples, Please add those needed to the list of deliverables (in table above or similar format.)]

Weekly Highlights Report: The VSP shall provide to participants in electronic format, i.e., a brief (1-2 page) description of actions or events. This shall include significant technical developments, key decisions resulting from a meeting or review, or other items of interest to the participants.

Monthly Technical Progress Report: The VSP shall prepare and submit to participants by the *** day of each month a technical progress report. This report shall communicate an assessment of VSP status, explain variances and problems, report accomplishment of performance milestones and/or deliverables, and discuss any other areas of concern or achievement.

Final Technical Report: The VSP shall prepare and submit to participants a final technical report, both in draft and final version. The draft version shall be due *** days prior to the completion date of the subcontract. Participants will have *** days to review the draft version and provide written comments to the VSP. The VSP shall make any corrections or revisions per the participant's written comments no later than the period of performance end date and submit the final version to participants with a reproducible master.

7.0 BUDGET (provide an itemized budget in support of the work mentioned above)

Note – for Phase III, winning teams can utilize up to \$100K worth of vouchers at a national laboratory. They may also choose to split the funding between various laboratories. The budget submission must not exceed \$100K.

8.0 SCHEDULE (provide a project schedule)

A.5 Work with other National Labs - Sole Source Justification

This information supports the contract requirements of non-NREL national laboratory VSPs.

I. DESCRIPTION OF SUPPLIES, EQUIPMENT, OR SERVICES TO BE PROCURED

Provide a brief, non-technical description of the work effort or supplies/equipment. Include significant or specialized character of the work effort or characteristics of the supplies/equipment.

II. PROCUREMENT HISTORY, LONG-RANGE PROCUREMENT OBJECTIVES, AND MARKET RESEARCH

Provide a brief statement of the technical and procurement background of the supplies or services being procured.

Provide a description of the market research conducted and what actions have been taken to develop competition and, if possible, eliminate a non-competitive situation in future procurements of the required supplies/equipment or services. Provide documentation of market research conducted or an explanation describing why market research was not conducted.

III. SCHEDULE REQUIREMENTS

Provide a brief statement for establishing the schedule requirements of the work effort or necessary delivery date for the supplies/equipment. Explain the urgency, if applicable, of the schedule and why only the proposed source can meet this schedule. If appropriate, describe what significant cost savings or other benefits could result in keeping the proposed schedule. If no urgency exists, state so.

IV. JUSTIFICATION

A detailed explanation is required to support the selected justification below. Supporting documentation may also be required. Attach documentation and use additional sheets, as necessary.