Q: Is there a way for me to reach out to interested Industrial Host sites to work with?

A: Yes, there is a Teaming Partner List where interested entities may share their information and reach out to others who are interested in collaborating.

Q: What counts as a letter of support?

A: Letters of support are from organizations involved in the project, as well as non-involved parties who have interest in the project or its outcomes. Among other things, letters of support can document level of interest and/or authorization for the work.

Q: Are FFRDC labs eligible to apply for both lead and subrecipient applicant?

A: FFRDCs (e.g. DOE/National Nuclear Security Administration national laboratories) may participate as a subrecipient; however, DOE will not directly fund National Labs/FFRDCs under this program. Selectees will receive full funding through one agreement with ENWX. Selectees are solely responsible for funding and executing necessary agreements with subrecipients. ENWX and DOE will not be involved in nor assist in these activities. FFRDC effort, in aggregate, shall not exceed 10% of total federal share of the project.

Q: May an industrial host partner/apply with more than one technology developer?

A: Yes, they may. It's important that in the industrial host or that each application meets the requirements for every application.

Q: As a technology developer, is a patent enough to prove I have a viable extraction process? A: Applications will be reviewed based on the published review criteria and eligibility requirements.

Q: How many applications does DOE plan to award? How many awards are expected for Phase 1 and Phase 2? What is a typical Period of Performance for a Phase 1 effort?

A: DOE is anticipating awarding 1-3 projects depending on merit. They may select alternates if there are more meritorious projects than funds currently obligated. Projects begin at the Phase 1 stage and then move into Phase 2. Phase 1 is anticipated to be nine months in duration. Projects should propose timetables appropriate for the technology development and validation (e.g. Phase 1 can be shorter if better suited for the project).

Q: How should we document and verify the fair market value of Ga-containing feed used as inkind cost share?

A: It is the responsibility of the applicant to provide sufficient detail within the application to document and verify cost share. The technical volume should include relevant supplemental information to support the application. DOE reserves the right to require additional or clarifying information regarding the application submissions, the team, and any other matters related to the anticipated funding.

In-kind contributions are those where a value of the contribution can be readily determined, verified, and justified but where no actual cash is transacted in securing the good or service comprising the contribution. Allowable in-kind contributions include but are not limited to the donation of volunteer time or the donation of space or use of equipment.

The prime recipient and subrecipients may not use the following sources to meet its cost share obligations:

- Revenues or royalties from the prospective operation of an activity beyond the project period;
- Proceeds from the prospective sale of an asset of an activity;
- Federal funding or property (e.g., federal grants, equipment owned by the federal government); or
- Expenditures that were reimbursed under a separate federal program.

Project teams may not use the same cash or in-kind contributions to meet cost share requirements for more than one project or program.

Q: What does it mean that "DOE may select alternates if the number of projects meritorious for funding is greater than funds currently obligated to TRACE - Ga"?

A: DOE has some flexibility to obligate more to respond to the need of this opportunity.

Q: For proposal submission, it is required that the lead be a PI affiliated with a university or national lab, or can anyone serve as the team lead?

A: No, this is open to anybody who has an eligible technology or feedstock that can meet the objectives of the program.

Q: What is ideal technology readiness level (TRL) for Phase 1 entry and Phase 1 exit?

A: This funding opportunity does NOT define eligibility based on TRL level. Applications will be evaluated based on the eligibility and review criteria. DOE encourages anyone eligible and able to meet the objective of the opportunity to apply. For this opportunity, DOE is looking for rapid prototyping which aligns with TRL 5 for both entering and exiting Phase 1.

Q: Will there be any future funding solicitations for extracting gallium from coal ash?

A: We are unable to comment on what DOE will do in the future.

Q: Does Cost Share apply to this project?

A: Yes.

Q: Are you interested in any specific feedstock (secondary streams or waste streams, etc.)?

A: The opportunity is to recover gallium from metal processing streams from real industrial operations. Therefore, the feedstock must clearly be a metal processing feedstock, and it is the responsibility of the applicant to ensure this is evident. In addition to evaluating the case made

that the feedstock is a metal processing feedstock, FECM will determine whether applicants have sufficiently developed and de-risked Ga recovery technology for use on the metal processing feedstock and that the developed business plan supports further scale-up and commercialization.

Q: If there is a Gov. shutdown, would that affect the deadline for submitting proposals?

A: We encourage everyone to assume that our timelines are going to stay in place. DOE will adhere to any new guidance that it receives. ENENERGYWERX, as an independent non-federal entity, will continue to engage and communicate updates to you.

Q: What is a typical dollar value for the Phase 1 effort?

A: DOE did not define this because we anticipate technology developers and industrial partners for different feedstocks will have different needs. DOE will evaluate if the dollar value that you propose makes sense for the work that you are proposing to conduct.

Q: Is there any funding limit for FFRDC as subrecipient?

A: The FFRDC effort, in aggregate, shall not exceed 10% of total federal share of the project.

Q: Does the entire feedstock have to come from inside the US?

A: Successful TRACE-Ga projects will restart domestic primary gallium recovery for the first time in almost 40 years. To achieve this objective, the processing operations and processing stream for TRACE-Ga projects must come from inside the U.S. There are no eligibility requirements on the origin of the initial material entering the metal production process. The Phase 2 prototype for TRACE-Ga must be capable of processing 4N (99.99%) Ga at a minimum of 1 MT per year. Applications will be evaluated on the eligibility and review criteria. An eligibility requirement is a description of the potential for scale-up at the initial metal industry processing stream.

Q: What are some prospective metal processing streams for Ga?

A: Aluminum production and zinc refining are two examples of prospective metal processing streams.

Q: Will National Labs be awarded funding directly by DOE via a Work Authorization or will we be awarded through the prime applicant?

A: FFRDCs (e.g. DOE/National Nuclear Security Administration national laboratories) may participate as a subrecipient; however, DOE will not directly fund National Labs/FFRDCs under this program. Selectees will receive full funding through one agreement with ENWX. Selectees are solely responsible for funding and executing necessary agreements with subrecipients. ENWX and DOE will not be involved in nor assist in these activities. FFRDC effort, in aggregate, shall not exceed 10% of total federal share of the project.

Q: Does the metal production stream have to be ongoing, or can it be a historically accumulated pile?

A: TRACE-Ga projects will activate domestic gallium production through recovering gallium as a byproduct from metal processing via novel technology. Therefore, the feedstock must clearly be a metal processing feedstock, and it is the responsibility of the applicant to ensure this is evident. In addition to evaluating the case made that the feedstock is a metal processing feedstock, FECM will evaluate the ability of the technology to integrate into the ongoing operations of the industrial partner, as described in the review criteria. An eligibility requirement is a description of the potential for scale-up at the initial metal industry processing stream and market adoption beyond the initial metal industry processing stream source.

Q: Does the technology be deployed on-site of the industrial partner?

A: The technology needs to be capable of running a continuous 14-day operation on the metal processing stream. DOE is agnostic to other parameters as part of the flowsheets.

Q: Is there the possibility that based on Phase 1 results, DOE will choose not to proceed with Phase 2?

A: Yes.

Q: Can a waste stream be from an industry that is not a metal industry?

A: DOE cannot evaluate this question without more specificity. DOE is requesting Gallium recovered from metal processing streams for this opportunity. It's the responsibility of the applicant to ensure that they justify why the feedstock is clearly a metal processing feedstock.

Q: Can the industrial partner be the same company as the technology developer, i.e. can the applicant be in control of their own metal processing stream?

A: Definitely.

Q: Is it required to partner with National Labs and academia?

A: No.

Q: Is the maximum funding of \$5 million intended to be distributed in total across 1–3 projects, or can each funded project receive up to \$5 million?

A: Each funded project could receive up to 5 million in federal cost share.

Q: Do we need to propose for both Phase 1 and Phase 2 in the first submission?

A: Applicants should present the project plan for the full project, Phase 1 and Phase 2, at once.

Q: Can a National Lab lead or subrecipient on this project?

A: National laboratories and other FFRDCs can only participate as subrecipients.

Q: Can we seek support from government owned/managed sites to use them as host sites?

A: Applications will be evaluated on the eligibility and review criteria. DOE has not defined eligibility requirements on whether entities are public or private. An eligibility requirement is "a letter of support from the industrial partner for the metal processing stream, and any other company, agency, or other party that has ownership/rights to any proposed feedstock materials

or technology, where applicable." Another eligibility requirement is a "description of the potential for scale-up at the initial metal industry processing stream and market adoption beyond the initial metal industry processing stream source." As stated in the review criteria, DOE will determine whether the team has sufficiently "developed a business plan that supports further scale-up and commercialization of the Ga recovery technology." Also, per the review criteria, DOE will also evaluate "the ability of the technology to integrate into the ongoing operations of the industrial partner."

Q: Are Canadian companies eligible to participate? Can technology developer participate from outside the US, such as Australia? If Canadian companies are not permitted to participate directly, can they participate via a registered US subsidiary?

A: Applicants must be organized, chartered, or incorporated (other otherwise formed) under the laws of a particular state or territory of the United States, have majority domestic ownership and control, and have a physical place of business in the United States. Applicants must certify that they are not owned by, controlled by, or subject to the jurisdiction or direction of a government of a Country of Risk and meet the eligibility requirements for this project. DOE defines Country of Risk to include China, Russia, North Korea, and Iran. This list is subject to change.

Q: Can you edit organization information after signing up for the teaming partner list?

A: Yes, please email info@energywerx.org for further information and instructions.

Q: Does the economics of the solution impact the selection decision?

A: Applications will be evaluated on the eligibility and review criteria. The review criteria includes a section on "Technology Integration, Market Opportunity, and Commercialization Potential."

Q: Are national labs eligible to participate as a lead and a partner?

A: National labs and other FFRDCs can only participate as subrecipients.

Q: Is it a 14-day continuous or 50kg in a 14-day window?

A: For Phase 2, the performer tests and validates the Phase 2 prototype, with the industrial partner on their actual (non-simulated) metal industry process stream(s) for recovery of Ga. To validate production at 1 MT per year scale, the prototype must produce at least 50 kg of 4N Ga from a single, successful 14-day campaign of continuous operation with the actual (non-simulated) metal industry process stream. Phase 2 performers must produce 50kg within a single continuous campaign that is no more than 14 days in length.

Q: Is there a production scale targeted in this call? Does the process have to produce xx tons of Ga per year for xx years?

A: For Phase 2, the performer tests and validates the Phase 2 prototype, with the industrial partner on their actual (non-simulated) metal industry process stream(s) for recovery of Ga. To validate production at 1 MT per year scale, the prototype must produce at least 50 kg of 4N Ga

from a single, successful 14-day campaign of continuous operation with the actual (non-simulated) metal industry process stream. The performer demonstrates achieving the milestone by submitting a third-party report that verifies the amount, purity, and composition of the end product.

Q: Could the targeted stream come from a feedstock that is not in full scale operation and expected to be in full scale operation soon?

A: Applications will be evaluated on the eligibility and review criteria. The review criteria states DOE will determine whether the team has sufficiently "developed a project plan to achieve TRACE-Ga objectives." This encompasses developing a prototype that can recover gallium at the required level for each phase. Another review criteria is Technology Integration, Market Opportunity, and Commercialization Potential. Under this criteria, DOE will "Assess the target market(s), the ability of the technology to meet the functionality required by the market, and the ability of the technology to integrate into the ongoing operations of the industrial partner and access the metal processing stream." It's the responsibility of the applicant to present how the technology and metal processing feedstock present a path for a delivering "a prototype that is capable of producing at least 1 metric ton per annum of gallium."

Q: Where can we ask questions that were not answered?

A: Yes, please email <u>info@energywerx.org</u> with any additional questions.