

# REQUEST FOR INFORMATION (RFI)

## Regarding

## Campus Energy Systems Renewal

RESPONSES REQUESTED BY: APRIL 17, 2020

### I. PURPOSE OF THIS REQUEST FOR INFORMATION

With the goal of exploring offerings and expertise in the energy sector, UW Facilities (“UWF”) invites experts, consultants, financial advisors, government/quasi-government teams, or similar parties to respond to this Request for Information (“RFI”) with information, experience, or ideas around planning, building, replacing, and financing district energy systems. As a public entity located in the State of Washington, we are also interested in strategies for addressing de-carbonization, see appendix A for a full listing.

The UW is seeking the input of a variety of experienced and knowledgeable energy suppliers, experts, consultants, operators, etc. to help assess opportunities, formulate plans, and achieve University commitments to sustainability, carbon reduction/elimination, and energy efficiency.

### II. SCOPE

The UW is developing a “campus energy strategy” that includes capital and operational investments within a 10, and 25-year, planning prospect for the sourcing, production, distribution, consumption, recovery and transfer of thermal heating/cooling, and electrical power on our Seattle campus. The UW is targeting development of projects by early 2023, and completion of (at least the first of phased) development by 2028.

Information UWF desires to understand, but is not limited to:

- Energy Procurement and Financing Strategies and Test Cases
- Energy Master Planning Approaches
- Operating and Capital Improvement Solutions
- Consulting and Energy Planning

### III. BACKGROUND (CURRENT PHYSICAL INFRASTRUCTURE)

With an aging central power plant and an eight-mile utility tunnel system, the UW operates and maintains a district energy system (DES) that currently serves 174 UW buildings providing steam to 13.4M SF and chilled water to 7.3M SF throughout the UW Seattle campus.

The current UW DES is fueled with natural gas to produce steam, making the UW central plant the largest source of greenhouse gases (GHG) in the UW's carbon emissions inventory.

### IV. REQUESTED SUBMISSION ELEMENTS

Each Respondent is asked to include the following elements in their submission. If respondents do not have information regarding a particular item, please do not feel obligated to put something in the response category. Also, please feel free to provide additional information that we may not have asked if you feel is relevant and worth considering.

#### A. Respondent Profile:

1. Primary Information Category

Please indicate which category your information and experience ***predominately*** falls within from the following:

- a. Consultant Firm or Individual
- b. Financing
- c. Capital Solutions

2. Executive Summary

- i. Please provide a brief narrative overview of your, or your company's, history, highlights, and accomplishments in the energy sector.

3. Contact Information

- i. Name, business address, telephone number, website address, incorporation location(s), and list of Washington business licenses currently held.

4. Years of Experience

- i. The number of years you/or your company has worked in the energy sector, and in your primary information category.

5. RFI Contact

- i. A primary contact for the Respondent, including name, job title, address, telephone and email address.

6. Expertise: A description of Respondent's business background detailing capabilities, specific areas of expertise, approach, and any other relevant information about Respondent's company and dealings that might be applicable or of interest to UWF.

**B. Experience and case studies (of most interest)**

Please provide a description of your experience with planning and/or creating low-carbon district energy systems, including an example of a current project. UWF would be most interested in large campus environments with a number of challenges in converting old infrastructures, de-carbonizing, converting power sources, leveraging energy providers, etc.

**C. Services**

Please provide descriptions and typical pricing structures for your service offerings and listed by category, if applicable.

**D. Contract Approach**

Please provide a description, or sample, of a "typical" contract that is generally used in procuring your energy approach, including minimum/maximum contract terms (duration), general scope, financing options, limitations or exclusions, etc.

**E. Specific Questions**

Please include responses to the following questions, as applicable:

- a. What research or analysis is required to develop a strategy for the desired scope?
- b. What are the challenges?
- c. What methodologies, tools, and/or resources would you employ in your approach?
- d. What is the overall recommended strategy?
- e. If not already addressed elsewhere in your response, what advice or strategy would you offer to address deep retrofits needed to keep the campus fully energized during the planning and phasing of the "larger plan?" Where would YOU invest your immediate dollars and why?

**V. USE OF RESPONSES**

The responses submitted will be primarily used for UWF and UW executive leadership to understand available options and approaches to renewing the campus energy systems and plan for the eventual de-carbonization of the UW campus. Ideas and examples of ideas will be compiled and contemplated. *This is not a selection, evaluation, or critique of the information or individuals.* Respondents should not expect the UW to make a choice of strategy, options, teams, financing, or other based on this request.

The Responses submitted to this RFI may be used by the UW in the process of preparing a future opportunities for organizations, individuals, teams or similar in our future energy programs and/or projects.

All Respondents will be eligible to participate in future formal contracting opportunities regarding UW energy. A Response to this RFI is not a requirement, or connected to, participating in any future contracting opportunity.

## **VI. SUBMISSIONS: DEADLINE AND HOW TO SUBMIT**

### A. Electronic Submission

Please plan to submit an electronic response by **April 17<sup>th</sup>, 2020, 5pm (PST)**

Respondents are asked to submit their responses to [uwfbuy@uw.edu](mailto:uwfbuy@uw.edu). Please ensure that all files are no larger than 10MB to ensure delivery. Respondents are asked to limit responses to 20 pages (10, 2-sided pages if printed).

### B. Content

UWF is most interested in summary approaches, strategies, programs, innovation, financing, teaming, or similar in abbreviated discussions around energy services on large campuses. We would ask that comprehensive reports, studies, plans, or similar **not** be provided in their entirety unless requested.

UWF may ask for additional material, clarifications, samples or documentations regarding the information submitted.

## **VII. INFORMATION REVIEW SESSIONS**

UWF may request to host information review sessions with the respondents. The information sessions would be to entertain a dialogue and talk through any specific details of any of the submissions. We ask respondents to be willing to participate in such sessions if requested as follow up to your submissions.

## **VII. ANTICIPATED RESPONSE CALENDAR**

- |                                       |  |
|---------------------------------------|--|
| A. Posting of RFI                     | March 16 <sup>th</sup> , 2020, several posting anticipated through April 1st |
| B. Questions from Respondents         | April 6 <sup>th</sup> , 2020   |
| C. Responses to Questions             | April 10 <sup>th</sup> , 2020  |
| D. 1 <sup>st</sup> responses received | April 17 <sup>th</sup> , 2020  |

## **IX. RFI CONTACT INFORMATION**

- A. All questions concerning this RFI should be submitted via email no later than 5 pm (PST), April 10<sup>th</sup>, 2020, prior to the response due date and directed to: [uwfbuy@uw.edu](mailto:uwfbuy@uw.edu) (subject: Energy RFI question)
- B. Responses to any question or inquiry shall be at the UWF's sole discretion.
- C. UWF may, in its sole discretion, issue additional requests or follow ups to this RFI.
- D. Additional requests may be sent to the individual respondents involved.

- E. Oral responses by any UW employee or agent of the UW are not binding and shall not in any way be considered as a commitment by the UW.
- F. If a Respondent finds any inconsistency or ambiguity in the RFI, the Respondent is requested to notify the UW at [uwfbuy@uw.edu](mailto:uwfbuy@uw.edu)

## **IX. CONFIDENTIALITY AND PUBLIC DISCLOSURE**

Respondents shall treat all information obtained from the UW, which is not generally available to the public, as confidential and/or proprietary to the UW. Respondents shall exercise all reasonable precautions to prevent any information derived from such sources from being disclosed to any other person. No other party, including any Respondent, is intended to be granted any rights hereunder. Respondents agree to indemnify and hold harmless the UW, its officials and employees, from and against all liability, demands, claims, suits, losses, damages, causes of action, fines and judgments (including attorney's fees) resulting from any use or disclosure of such confidential and/or proprietary information by any Respondent or any person acquiring such information, directly or indirectly, from the any Respondent.

## **X. RIGHTS AND OPTIONS RESERVED**

In addition to the rights reserved elsewhere in this RFI, the UW reserves and may, in its sole discretion, exercise any or more of the following rights and options with respect to this RFI if the UW determines that doing so is in the best interest of the UW:

1. To decline to consider any response to this RFI ("Response");
2. To cancel the RFI at any time; to elect to proceed or not to proceed with discussions or presentations regarding its subject matter with any Respondent and with firms that do not respond to the RFI; or to reissue the RFI or to issue a new RFI (with the same, similar or different terms);
3. To request or permit, in discussion with any Respondent, any information relating to the subject matter of this RFI that the UW deems appropriate, whether or not it was described in the Response to this RFI;
4. At any time determined by the UW, to discontinue discussions with any Respondent or all Respondents regarding the subject matter of this RFI, and/or initiate discussions with any other Respondent or with vendors that did not respond to the RFI;
5. To do any of the foregoing without notice to Respondents or others, except such notice as the UW, in its sole discretion, may elect to post on the UW web page(s) where this RFI is posted.

This RFI and the information submitted in response are proprietary to the UW and are for exclusive benefit of the UW. Upon submission, responses to this RFI shall become the property of the UW, of which shall have unrestricted use. Responses may be subject to public disclosure under the Washington State Public Records Act. However, a "record that constitutes or reveals a trade secret or confidential

proprietary information" is exempt from access by a requester under that law. Ultimate determination of the application of that exemption cannot be assured, but Respondents are advised to mark clearly any portion(s) of any submittal believed to qualify for that exemption.

By submitting a response, the Respondent is agreeing to these terms.

**-END OF REQUEST-**

## Appendix A

### Current and Proposed Codes and Regulations Related to Campus Heating and Cooling

**Table A1. Current Codes and Regulations Related to Campus Heating and Cooling:**

Code	Effective Date	Brief Description	UW Impact
<b>EPA Title V Air Operating Permit</b>	Current	Source-specific and campus-wide emission monitoring and reporting to EPA and PSCAA, due to size of boilers B-4 & B-7	Source-specific and campus-wide emission monitoring and reporting to EPA and PSCAA applies for various systems, including Power Plant boilers, diesel generators, paint spray booths, dust collectors, crematory, refrigerants. Deviations reported to PSCAA with potential for Notice of Violation and penalties.
<b>WA RCW 70.235.050</b>	Current	State agencies reduce GHG emissions below 2005 baseline by: - 36% by 2035, - 57% by 2050, or 70% below expected state government emissions that year	Conservation and/or fuel switching necessary to meet limits.
<b>WA RCW 70.235.080</b>	Current	Prohibits new uses of HFC refrigerants in various applications beginning in 2020-2024	Starting in 2024, new chillers must not use HFC refrigerant when existing chillers are due for replacement.
<b>RCW 19.27A.200-240 Clean Buildings for Washington (<a href="#">link</a>)</b>	2026	Rulemaking under development. Reduces existing <u>building_site</u> EUI to meet EUI target.	Conservation necessary to meet limits.  Penalties for non-compliance.
<b>Clean Energy Transformation Act (<a href="#">CETA</a>)</b>	Current	Rulemaking under development. Commits WA to electricity supply free of GHG emissions by 2045	To be determined.

<b>2015 Seattle Energy Code</b>	Current	Applies to construction of new buildings and renovations	Historically, UW often uses Total Building Performance approach to make tradeoffs for underperforming components such as glazing area greater than prescriptive code maximum.
<b>City of Seattle Building Tune-Up</b>	Current + Upcoming	Tune-Up compliance dates by bldg size: - 3/1/2019 (200k sf+) - 10/1/2019 (100-199l sf) - 10/1/2020 (70-99k) - 10/1/2021 (50-69k)	Auditing and implementation of conservation measures ongoing.
<b>WA Dept of Ecology – Listing ID 79039: Lake Union / Lake Washington Ship Canal</b>	Current	Water body exceeds WA Ecology water quality standards for temperature, and new or reissued permits cannot allow discharges to exceed critical background conditions by more than 0.3°C (0.54°F).	System ideas such as Deep Lake Water Cooling or sourcing heat from lake during winter must not increase water temperature more than 0.3°C (0.54°F) above natural conditions.
<b>Joint Commission for UWMC</b>	Current		Systems serving UW Medical Center must provide redundancies where required by Joint Commission requirements.
<b>AAALAC for animal vivaria areas</b>	Current		Animal areas must maintain temperature, humidity, noise, and vibration within required levels



**Table A2. Proposed Codes and Regulations Related to Campus Heating and Cooling (as of January 31, 2020):**

Code	Effective Date	Brief Description	UW Impact
<b>2020 HB2311 – Amending state GHG limits...</b>		<p>Proposes revisions to RCW 70.235.050 to require reduction of UW GHG emissions by:</p> <ul style="list-style-type: none"> <li>- 45% below 2005 by <u>2030</u></li> <li>- 70% below 2005 by 2040</li> <li>- 95% below 2005 by 2050</li> </ul>	<p>Speeds up and increases required GHG emission reductions by UW as compared to current RCW 70.235.050.</p> <p>Appears to require actual emission reductions in lieu of carbon offset purchase. Conservation and/or fuel switching necessary to meet limits.</p>
<b>2020 HB2472 – comprehensive measurement of GHG emissions...</b>		<p>Proposes updated emission factors account for upstream and downstream emissions</p>	<p>Will likely increase 2005 baseline emissions and current emissions. Will likely become more difficult to meet 2035 and 2050 reductions per RCW 70.235 (or modifications per HB2311)</p>
<b>2020 SB 5981 – implementing a GHG cap and trade program</b>		<p>Proposes implementing a GHG emission cap-and-trade system</p>	<p>To be determined</p>
<b>2018 Seattle Energy Code</b>		<p>Under development now. Applies to construction of new buildings and renovations.</p>	<p>To be determined.</p>