# **CITY AND COUNTY OF DENVER**

# DEPARTMENT OF GENERAL SERVICES NOTICE OF REQUEST FOR INFORMATION #NWCO2017-001 on behalf of the National Western Center Authority

# NATIONAL WESTERN CENTER CAMPUS ENERGY

# 1. PURPOSE OF THE REQUEST FOR INFORMATION (RFI)

The City and County of Denver, Mayor's Office of the National Western Center, seeks information - with the intent to inform a future solicitation - to select a campus energy partner for the National Western Center (NWC), on behalf of the NWC Authority, as described below. A link to the RFI documents can be found at <a href="www.rockymountainbidsystem.com">www.rockymountainbidsystem.com</a>. RFI documents are attached and available through the point of contact listed in Section 12 by email: <a href="mailto:jeffrey.wylde@denvergov.org">jeffrey.wylde@denvergov.org</a>. The purpose of this RFI is to get input from the marketplace on innovative approaches for developing a technically and financially feasible campus-wide energy system (including both thermal and electrical) for the 250-acre National Western Center in Denver, Colorado (the "Program"). Firms submitting a response to this RFI are asked to clearly articulate feasible financial and technical partnership approaches to meeting energy goals for this unique campus and delivering the anticipated Scope of Services.

The City will share this information with the National Western Center Authority (Authority or NWCA) to inform the Authority's approach to a possible future (Q1 2018) procurement process, wherein the Authority could conduct a competitive Request for Proposal process to identify a campus Energy Partner.

As the City's and Authority's best interests may appear, the Executive Director of the Mayor's Office of the National Western Center reserves the right to waive informalities, to reject any or all proposed approaches, and to seek additional information as deemed necessary for informing further Program planning or processes.

The intent of this RFI is solely to gather information that may or may not be used to inform a future competitive solicitation process. This RFI is not a formal procurement.

# 2. OVERVIEW AND ENERGY GOALS

This Request for Information ("RFI") seeks to identify potential partnership approaches involving experienced energy investment partners who are able and qualified to deliver a campus-wide energy (thermal and electric) program to the National Western Center Authority.

## National Western Center Overview

With a strong culture of innovative sustainable urban development, the City of Denver has established aggressive climate and energy conservation goals, including reducing greenhouse gas (GHG) emissions 80% below 2005 levels by 2050. The City recognizes that large, mixed use and infill development projects

such as the National Western Center offer a critical opportunity to make progress toward these goals by developing diversified and integrated energy systems that maximize efficiency and use of renewable resources.

The City and County of Denver, Colorado State University and Western Stock Show Association (NWC Partners) are transforming the city's historic stock yards and National Western Stock Show site into the National Western Center (NWC). The NWC will be a 250-acre year-round center offering entertainment, education and programming related to food, agriculture, water, energy and health (Figure 1). A Master Plan for the new campus was adopted by Denver City Council in March 2015 (Appendix A), and it outlines an 8-phase plan to construct 3 million square feet of new, flexible facilities supporting expanded capacity for educational, entertainment and cultural programming events. The large-scale event venues that will be constructed at the NWC present a unique opportunity to showcase innovative approaches to energy and sustainability. The NWC is estimated to attract over 2.2 million visitors each year and will be built as an experiential education campus where visitors can learn first-hand about clean energy and energy efficiency.

The Mayor's Office of the National Western Center (NWCO) and Program Manager CH2M are currently overseeing design and construction of Phases 1 & 2 within the Master Plan. Additional buildings and phases will be developed by a combination of the City, Colorado State University, the Western Stock Show Association, the Authority and potentially third-party development partners. See the NWC Master Plan for more details.

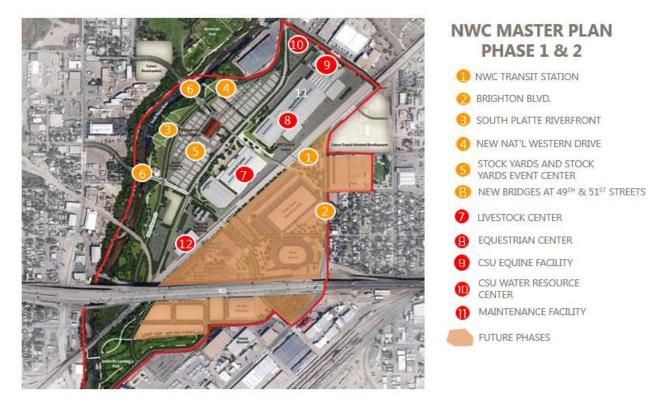


Figure 1: NWC Master Plan Phase 1 & 2

The NWC Master Plan Sustainability and Regeneration Framework recommended that the NWC create a "net zero energy" campus, including energy efficient buildings and development of on-site renewable resources by five years after full build-out. The NWC has a long-term aspiration to meet or exceed this goal. With this RFI, the NWC seeks to understand if a partnership structure exists whereby Phases 1 & 2 of the campus capital build can make significant progress toward this goal with minimal up-front capital investment by the NWC Program and cost-neutral utility rates for the Authority.

The NWC Partners have adopted a Performance Management Framework for the Phase 1 & 2 Capital Build Program that captures minimum targets for what the City can realistically accomplish toward these visionary Master Plan goals within the constraints of current resources and program schedule. Energy-related strategies in the Performance Management Framework include a commitment to building LEED Gold buildings (at a minimum) and "starting the journey toward Net Zero or positive energy." More detail on the Performance Management Framework can be found in Appendix B.

#### 3. NWC AUTHORITY ESTABLISHMENT

The NWC Authority will be established in 1<sup>st</sup> Quarter 2018 as a Colorado nonprofit corporation and will manage campus maintenance and operations, coordinate campus-wide services and sponsorships, and assume responsibility for booking year-round events as the master scheduler. The City will maintain ownership of the NWC property. The Authority will hold a master lease and will utilize a competitive procurement process for contracts, including compliance with City social ordinances.

For the beginning stages of this campus energy partner inquiry process, NWCO is acting as the steward of the Authority to ensure that potential approaches and energy partners are identified early enough to incorporate a campus energy approach into the overall campus infrastructure design. Once established, the Authority will take the lead on any future procurement process (Figure 2). It is anticipated that the Campus Energy Partner will enter into negotiations and sign a long-term contract with the Authority. The Energy Partner may assume ownership, operations and/or maintenance responsibilities of the campus energy system, depending on how the partnership is structured.

It is important to note that while the City and County of Denver is issuing this RFI, it does not anticipate being a signatory of the long-term campus energy contract. NWC Partners (City and County of Denver, Western Stock Show Association, Colorado State University) have agreed that the City should administer the procurement process starting in Fall 2017, before the Authority is established, in order to align with the campus' horizontal design and construction schedule. Once the Authority is established, the RFI Review Committee will share the results of and information gathered through this RFI with the Authority. The Authority may elect to issue an RFP. The Authority may identify its own Committee at this point that is the same or different from the RFI Review Committee. The Authority intends to negotiate a contract for a long-term partnership of mutual benefit between the Authority and the Campus Energy Partner. An agreement between the Energy Partner and the City may also be necessary to coordinate site access and/or construction activities on site at the NWC. At any point, the City or Authority reserve the right to proceed with, terminate, suspend or modify the solicitation process, reject any or all submittals at any time, and waive any informalities, irregularities or omissions in Submitted information.

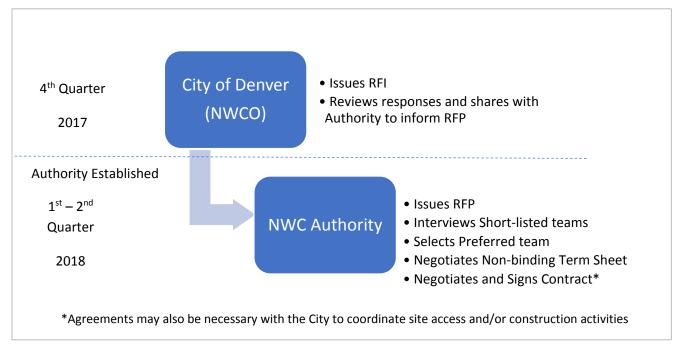


Figure 2: City and Authority Roles in the Energy Partner Selection Process

# Potential Benefits of Campus Partnership with the Authority

In seeking an energy partner approach, the NWC Authority may offer the opportunity to establish a mutually beneficial business relationship that could take the form of an exclusive campus-wide sponsorship with the intent of generating revenues for the NWC Partners or reducing the overall costs to the Authority. Benefits of such an agreement could include logo placement, naming rights, opportunities to showcase a major sustainability initiative, access to the estimated 2.2 million annual NWC visitors for the purposes of brand awareness, or other future business opportunities. The NWC Authority would clarify sponsorship opportunities at the RFP stage of any future procurement.

# 4. COORDINATION OF CONSTRUCTION ACTIVITIES

While a primary long-term operating agreement resulting from a future RFP process is anticipated to be between the Energy Partner and the Authority, an Energy Partner might also need to enter into agreements with the City, Xcel Energy, CSU, the WSSA and/or future development partners (Figure 3). For example, coordination of on-site construction activities with the City would be necessary to ensure that campus energy implementation aligns with the construction scope and schedule for each phase. The City is in the process of hiring a Horizontal Integrated Contractor (HIC), that will be responsible for building campus-wide horizontal infrastructure for Phases 1 & 2. In 2019, the City will likely bid out vertical construction separately for each facility.

An Energy Partner would have to coordinate closely with the City, the HIC and other contractors on construction of the campus energy system, including both energy facilities and corresponding HVAC systems in buildings.

For on-site energy system elements, potential construction scenarios include (but are not limited to) the following:

- 1. A Campus Energy Partner designs and constructs a campus energy system in close coordination with the City and its contractors.
- 2. The City and its Contractors design and construct the campus energy system per specifications developed by the Campus Energy Partner.

Additionally, a Campus Energy Partner would be expected to coordinate closely with Xcel Energy - the local utility - and potentially Metro Wastewater (if sewer heat recovery is included in a proposed campus energy solution).

For CSU's three facilities, the City will deliver CSU "pad ready sites." CSU will however own and operate its own facilities at the NWC. Separate agreements between the Campus Energy Partner and CSU may be necessary if the campus energy system will serve CSU facilities.

For future phases of the NWC (beyond Phases 1 & 2), the Energy Partner would have the opportunity to develop separate agreements with yet-to-be-identified development partners.

If the Energy Partner intends to extend energy agreements to property owners in surrounding communities, the Energy Partner would be responsible for developing those agreements.

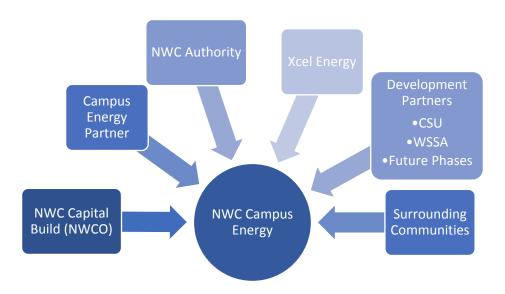


Figure 3: Key players in a NWC Campus Energy Program

# 5. ANTICIPATED SCOPE OF SERVICES

The NWC seeks to implement a campus-wide energy approach that meets or exceeds campus energy goals. Toward that end, the focus of this RFI is to identify possible partnership approaches that would feasibly (from a technical and financial standpoint) deliver the following anticipated scope of services:

- A cost-effective approach to creating a zero-energy campus at the NWC. The NWC is not specifying
  a preferred "mix" of energy technologies or facilities. Rather, it seeks input from potential private
  sector partners about the appropriate mix of thermal and electric energy sources, distribution
  approaches and related technologies that would achieve or make significant progress toward a zeroenergy campus.
- 2. **Design, build, install, finance, own, operate, maintain and manage risk** for (or some combination there-of) the campus energy system (thermal and electric).
- 3. Develop a campus energy system that is **fully interconnected with the utility grid**, but also able to maintain a basic level of service in isolation from the grid, such as during a utility outage. Future partner would be responsible for coordinating with Xcel Energy to ensure grid integration.
- 4. Deliver a **phased, scalable campus energy system** that meets energy demand, operational requirements of and schedule for the NWC Capital Build Phases 1 & 2 (Appendix C) initially, and then can scale appropriately for future phases. The Energy Partner would be responsible for creating connection guidelines for future development partners.
- 5. Negotiate a long-term service level agreement with the NWCA that guarantees multi-system performance while also providing predictability in energy costs, ideally resulting in **neutral or reduced costs for the end users, as compared with business-as-usual**.
- Identify opportunities to maximize community benefits. The ideal partnership would work with the NWCA to explore how the campus energy system could serve the surrounding community as well as the NWC Campus through benefits such as jobs, educational opportunities and/or decreased energy bills.
- 7. **Best practices and targeted reporting strategies** for campus energy development and operations. This would include regular reports to the Authority board and working with CSU on a data sharing agreement to ensure CSU has access to energy data for research purposes.
- 8. Delivery and operation of the campus energy system with on-site elements that help create a sustainability showcase that can serve as an educational experience for National Western Center campus visitors. This could include pilot or demonstration projects, incorporation of energy innovation centers and/or experiential learning opportunities about the campus energy system geared toward visitors and students.

## 6. POTENTIAL CAMPUS ENERGY SOLUTIONS

The NWC will not prescribe a preferred "mix" of energy technologies, sources or facilities to meet campus energy goals. Rather, NWC Partners seek input from private sector partners about the appropriate mix of thermal and electric energy sources, distribution, storage and related technologies that will best meet the Anticipated Scope of Services and align with the NWC Capital Build Program. Based on the information gathered to date, these can be complementary to or in lieu of traditional utility services. These technologies and facilities could include any combination of (but would not be limited to) the following:

- Rooftop Solar
- Offsite Solar
- District thermal energy
- Combined heat and power

- Sewer Heat Recovery two options:
  - Including Delgany pipeline relocation (preferred)<sup>1</sup>
  - o Keeping the Delgany pipeline in place
- Battery Storage
- Central Utility Plant
- Geothermal
- Ground or Air Source Heat Pump
- On Site Wind
- Off Site Wind
- Biofuels
- Battery or other energy storage
- Zero energy buildings
- Microgrid
- Solar Thermal Heating
- Traditional systems
- Small scale demonstration / pilot projects for educational or research purposes

Determination of the final mix of technologies will be a collaborative effort between an Energy Partner and the Authority, taking into account cost-effectiveness, physical site opportunities and constraints, innovation opportunities and consultation with NWC Partners.

## 7. REGIONAL COLLABORATION AND ECONOMIES OF SCALE

In addition to the partnerships among the City, CSU and the WSSA, the NWC has working relationships with several entities and nearby developments that could result in economies of scale for an energy partnership. These include:

- Xcel Energy the NWC is participating in Xcel Energy's Partners in Energy initiative. Xcel has been
  offering technical assistance to the City regarding energy modeling, creation of an Energy Action Plan
  study (Appendix D) and estimating the value of energy efficiency rebates through Xcel's energy
  development assistance program. NWC Partners anticipate a continued relationship with Xcel as the
  campus energy utility. The selected campus energy partner shall anticipate working with Xcel Energy
  and within the City's franchise agreement with Xcel, to the extent possible.
- Metro Wastewater Reclamation District (Metro District) The Metro District is a campus MOU partner and has expressed interest in utilizing the NWC to test and demonstrate new technologies related to the intersection of water, nutrients, and energy. The Metro District's Robert W. Hite Treatment Facility is located 1.5 miles north of the NWC. The Metro District owns and operates the Delgany Interceptors, which run along the riverfront at the NWC, and convey a sizable quantity of Denver's wastewater to the treatment facility. The City and Metro District worked in partnership on a study (Appendix E) that examined relocation of the Delgany Interceptor as well as the potential to use the wastewater flow in this interceptor for site heating and cooling, similar to the Southeast False Creek Neighborhood Energy Utility (Vancouver, BC). The Colorado Department of Public Health and Environment (CDPHE) is interested in reducing the thermal energy of the wastewater discharge to receiving waters during

<sup>&</sup>lt;sup>1</sup> See Appendix E for information about Sewer Heat Recovery and the opportunity to relocate the Delgany Interceptor. Additional work since the Delgany study has narrowed the scope of the Delgany interceptor relocation to a single pipe solution with an estimated project cost of ~\$5m.

winter. Recovery of thermal energy from wastewater for beneficial use is a preferred approach to addressing this emerging aquatic life concern.

- Sun Valley Eco District the NWC, CSU and Sun Valley Eco-District Trust participate together in Mile High ZED, sharing information and coordinating technical expertise related to creating Zero Energy Districts.
- Denver Water Denver Water is an MOU Partner of the NWC and will have a presence in the CSU Water Resources Center doing research, testing water, and supporting water innovation. Denver Water has expressed interest in utilizing the NWC as a "living lab" to test new technologies and practices related to the intersection of water and energy.
- Department of Energy / National Renewable Energy Lab (NREL) The NWC is a member of the Department of Energy's Zero Energy District Accelerator Program and has an MOU with NREL to receive technical assistance.

# 8. AVAILABLE CAPITAL FUNDING

The City and Authority have no capital funds specifically budgeted to implement renewable energy systems at the NWC. The NWC Partners have decided to seek a private sector partner with the expertise and resources to invest in the up-front capital for a campus energy system that would be repaid over time by the NWC Authority through utility bills. Ideally, bringing on an energy partner will help the NWC "overdeliver" on its Performance Management Framework and implement a campus energy system, similar to what is envisioned in the Master Plan.

Also, should Sewer Heat Recovery be part of the campus energy solution, the Metro Wastewater Reclamation District is open to potential financing and service concepts involving the NWC's campus energy partner, for example an Energy Service Agreement (ESA), to operate heat pumps that serve a district thermal energy system at the NWC site. The District's current ESA for its combined heat and power (CHP) program expires early 2020 and is up for renewal. The Metro District's new ESA could be written to include heat recovery equipment at NWC if such an agreement is beneficial to all parties.

The Authority would look to a Campus Energy Partner to propose traditional and/or innovative ways to fund energy system construction and operations. It is anticipated that the Campus Energy Partner would recover its investment through a long term operating agreement with the Authority.

# 9. NWC CAMPUS ENERGY USE

The NWC Partners have undertaken several studies to understand the technical feasibility of establishing a zero-energy campus and of implementing specific technologies, such as Sewer Heat Recovery, at the NWC. See Appendices for more detail. So far, no single study or plan has resulted in a complete energy implementation concept for the NWC. However, each study contributes valuable technical information that can inform a campus energy approach.

The following tables and charts give a snapshot of historic use and future NWC energy projections. **Tables 2 and 3** indicate the City's estimate of total building square footage, projected construction date and heating and cooling demand for each building in Phase 1 & 2. After Phases 1 & 2, the City anticipates that future phases will result in an additional one million square feet of development on the campus. Please note that the NWC is currently at 0% design and therefore the projected energy demand is subject to change. The Energy Partner will be expected to work with Capital Build designers through design development to build maturity of the campus energy model over time.

Table 1: Projected NWC Heating Demand (Phase 1&2); Source: Xcel NWC Energy Action Plan Report

Campus Area	Building Name	Building Type	Facility Area (ft2)	Floor Area (m2)	NWC Development Phase	Develop ment Year	Peak Heating Unit Rate (W/ft2)	EUI - Space Heating and Water Heating (kWh/ft2)	Peak Demand (MW)	Annual Demand (kWh/yr)
Charle Vanda and Charle Vanda	Stock Yard Show Arena	Stadium/Arena	20,100	1,867	1	2020	8.4	14.9	0.2	70,000
Stock Yards and Stock Yards Event Center	Auction Arena	Stadium/Arena	15,000	1,394	1	2020	8.4	14.9	0.1	50,000
	Wash Rack Building	Warehouse	7,680	714	1	2020	2.8	5.6	0	50,000
							8.4	14.9	0.3	
CSU Water Resource Center	Water Resource Center	Office	150,000	13,936	1	2020	5.1	10.2	0.8	2,400,000
Livestock Center	5,000 seat Livestock Arena	Stadium/Arena	130,240	12,100	2	2022	8.4	14.9	1.1	690,000
	Tractor space	Warehouse	1,500	139	2	2022	2.8	5.6	0	1,000
	Suites	Commercial	4,000	372	2	2022	5.1	10.2	0	3,000
	Livestock Hall	Warehouse	231,500	21,508	2	2022	2.8	5.6	0.6	410,000
	Hall Auction Arena	Stadium/Arena	9,550	887	2	2022	8.4	14.9	0.1	50,000
							8.4		1.8	
Equestrian Center	Horsebarn	Warehouse	220,000	20,439	2	2022	2.8	5.6	0.6	390,000
	Equestrian Events Center	Stadium/Arena	100,500	9,337	2	2022	8.4	14.9	0.8	1,260,000
	Exhibition space	Exhibition Hall	3,500	325	2	2022	8.4	14.9	0	40,000
	Tractor space	Warehouse	1,500	139	2	2022	2.8	5.6	0	1,000
	Suites	Commercial	4,000	372	2	2022	5.1	10.2	0	30,000
	Equestrian Arena	Stadium/Arena	86,500	8,036	2	2022	8.4	14.9	0.7	2,260,000
	Covered Indoor Warm Up Area/ Paddocks	Warehouse	48,000	4,459	2	2022	2.8	5.6	0.1	200,00
							8.4	14.9	2.2	
	CSU Equine Facility	Commercial	78,664	7,308	2	2022	5.1	10.2	0.4	1,250,000
Maintenance Facility	Maintenance Building	Office	44,000	4,088	1	2021	5.1	10.2	0.2	700,000
otals 1,156,234			107,420			Ann	ual Demand (kW	h/vr)	9,855,000	

Table 2: Projected NWC Cooling Demand (Phase 1 & 2); Source: Xcel NWC Energy Action Plan Report

	NWC Pha	se 1 & 2 Bu	ıildings a	nd Cool	ing Dema	ınd				
Campus Area	Building Name	Building Type	Facility Area (ft2)	Floor Area (m2)	NWC Development Phase	Develop ment Year	Peak Cooling Unit Rate (W/ft2)	EUI - Cooling and Ventilation (kWh/ft2)	Peak Demand (MW)	Annual Demand (kWh/yr
	Stock Yard Event Center	Stadium/Arena	20,100	1,867	1	2020	0.7	4.1	1	330,000
Stock Yards and Stock Yards Event Center	Auction Arena	Stadium/Arena	15,000	1,394	1	2020	0.6	1.1	0.1	150,000
	Wash Rack Building	Warehouse	7,680	714	1	2020	0.7	4.1	1.9	2,000
								4.1	3	
CSU Water Resource Center	Water Resource Center	Office	150,000	13,936	1	2020	0.7	10.2	0.8	620,000
Livestock Center	5,000 seat Livestock Arena	Stadium/Arena	130,240	12,100	2	2022	0.6	7.4	1.8	970,000
	Tractor space	Warehouse	1,500	139	2	2022	0.7	1.1	0	1,000
	Suites	Commercial	4,000	372	2	2022	0.7	4.1	0.1	1,000
	Livestock Hall	Warehouse	231,500	21,508	2	2022	0.7	1.1	3.1	260,000
	Hall Auction Arena	Stadium/Arena	9,550	887	2	2022	0.6	7.4	0.1	70,000
							0.7	7.4	5.1	
Equestrian Center	Horsebarn	Warehouse	220,000	20,439	2	2022	0.7	1.1	2.9	250,000
	Equestrian Events Center	Stadium/Arena	100,500	9,337	2	2022	0.6	7.4	1.4	750,000
	Exhibition space	Exhibition Hall	3,500	325	2	2022	0.6	7.4	0.1	4,000
	Tractor space	Warehouse	1,500	139	2	2022	0.7	1.1	0	1,000
	Suites	Commercial	4,000	372	2	2022	0.7	4.1	0.1	3,000
	Equestrian Arena	Stadium/Arena	86,500	8,036	2	2022	0.6	7.4	1.2	650,000
	Covered Indoor Warm Up Area/ Paddocks	Warehouse	48,000	4,459	2	2022	0.7	1.1	0.6	50,000
							0.7	7.4	6.3	
	CSU Equine Facility	Commercial	78,664	7,308	2	2022	0.7	4.1	1	330,000
Maintenance Facility	Maintenance Building	Office	44,000	4,088	1	2021	0.7	4.1	0.6	180,000
Totals			1,156,234	107,420			Ann	ual Demand (kW	h/yr)	4,622,000

**Figure 4** provides an overview of the historical energy use for the NWC campus by month to demonstrate seasonal peaks. The January peak reflects the National Western Stock Show event, a 13-day event each January that attracts nearly 700,000 visitors. Currently the Stock Show Complex attracts approximately 250 events each year. Once redeveloped, the campus is anticipated to attract at least 350 events annually and 2.2 million annual visitors. The campus will also support more daily "non-event" visitors and

employees than it does currently. More year-round events and daily visitation are expected to even out the energy use peaks to some extent, although a peak related to the Stock Show will occur each January.

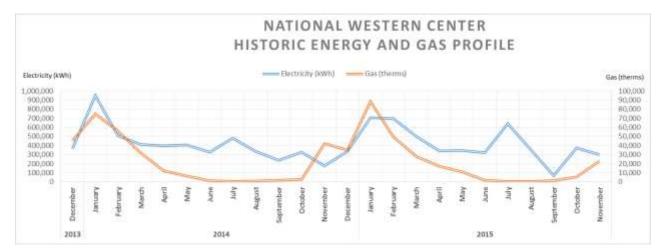


Figure 4: NWC Historic Monthly Energy and Natural Gas Use Profile

# 10. ASSUMPTIONS, SITE AND PROGRAM CONSIDERATIONS

The following NWC Program considerations, site constraints and/or assumptions may be helpful in formulating responses to this RFI.

- Delgany Interceptor The City and Metro Wastewater have identified a feasible alternative alignment
  for the pipes under/adjacent to the new National Western Center Drive (Appendix E). The NWC
  Program and Metro Wastewater have not identified funding for relocating the pipes and would be
  open to considering a sewer heat recovery solution that also incorporates relocation of the pipes.
- Central Utility Plant To the extent that the proposed campus energy solution includes district thermal
  energy and/or a central utility plant, the NWC Capital Build Program will work with the Energy Partner
  to identify a site appropriate for the Central Utility Plant. Final size and siting is subject to further
  design.
- LEED Gold Assume all buildings will be certified as LEED Gold as a minimum standard
- Rooftop Solar To the extent that the proposed campus energy solution includes rooftop solar, the NWC Capital Build Program will work with the Energy Partner to ensure Phase 1 & 2 buildings are "solar ready," as appropriate.
- Rooftop Wind If Rooftop Wind is an element of the overall energy approach, perhaps for demonstration purposes, the NWC Program would work with the Energy Partner to ensure buildings are rooftop wind "ready".

- Community Solar or Wind the NWC site does not have sufficient space to support community solar or wind on-site, but the NWC Partners are open to considering an off-site approach that contributes toward campus renewable energy goals.
- Innovation The City acknowledges that the most cost-effective solution to meeting zero energy campus goals may be relying on off-site renewables. Nevertheless, the City is interested to learn what on-site renewables are feasible and recommended demonstration and education purposes.

## 11.REQUESTED INFORMATION

At this point in time, the City and Authority are specifically interested in responses from firms that would potentially perform the role of Prime and/or Equity Investor in an NWC campus energy partnership, not subcontractors that might deliver a portion of a total campus energy solution. The City and Authority would appreciate as much information as respondents are able to provide. When responding to any of the requested information, please reference the page, section header or number you are responding to, and please state your assumptions clearly.

Responses to this RFI will be shared in confidence with the Authority Board but otherwise kept confidential in accordance with Section 13 Disclaimers.

The following information is requested in your response:

## 1. A Letter of Transmittal

Clearly indicate the single point of contact, mailing address, telephone, and email.

## 2. An Executive Summary

Summarize key highlights of your response in clear and concise language that would be easily understood by persons not having a technical background. The City may distribute the Executive Summary to public officials, interested parties and the public.

## 3. Technical Information

- Considering the historic and projected future energy use, seasonality, and the size, scale and
  nature of venues to be constructed at the National Western Center, the City and Authority would
  be interested to know what combination of technical approaches would be recommended at the
  NWC to cost-effectively meet or exceed NWC campus energy goals and also contribute toward
  creating an innovative education and research campus.
- Assuming LEED Gold facilities, how realistic is it to cost effectively meet 100% of <u>base</u> demand using renewable resources? <u>Peak</u> demand?
- Given the opportunity for Sewer Heat Recovery / District thermal energy on site, would you
  recommend this technology be developed at the NWC, and at what scale (e.g. campus-wide or
  demonstration)?
- Is it feasible to expect that delivery of the campus energy system can align with the NWC Phase 1 & 2 construction schedule (Appendix C)?

- How might the campus energy system be scaled/phased over time to coincide with NWC phasing?
- How could a NWC campus energy system provide broader benefits such as education research, jobs or access to renewable energy?
- Specific examples based on other projects are welcome.

## 4. Partnership Information

- Considering minimal capital is available to contribute toward the campus energy system, and the
  Authority, as a start-up 501(c)3 non-profit, would be unlikely to approve utility rates above
  prevailing market prices, the City and Authority would be interested in understanding how a
  financial partnership could be structured to deliver a campus energy system, such as the one
  you've described in your answer to #3.
- What should the Authority expect in terms of ownership and operating model, type of agreement, initial capital investment, funding/financing sources, key terms, utility rates, length of contract and renewal options?
- How would the partnership engage with Xcel as the utility provider?
- What potential economies of scale or cost savings opportunities exist related to regional partnerships or collaborations such as with other utilities or major redevelopment in the Denver Metro area or in thinking beyond energy to include water/wastewater in a district infrastructure approach?
- Specific examples based on other projects are welcome.

# 5. Team Information

- The City and Authority would be interested in gaining an understanding of the team structure required to deliver the NWC campus energy system and partnership described in #2 and #3, including types of firms, services, and organizational management/structure.
- What role has your firm played/would your firm play in such a partnership?
- Specific examples based on other projects are welcome.

## 6. Additional information

The City and Authority would be interested in any additional information your firm can provide to help shape a future Energy Partner procurement process.

# 12.RFI RESPONSE SUBMITTAL INSTRUCTIONS

Firms submitting responses to this RFI are requested to address as much of the provided information as possible. Responses should be submitted electronically to:

City and County of Denver General Services, Procurement Office 201 W. Colfax, 11<sup>th</sup> Floor Denver, CO 80202 Attn: Jeff Wylde, CPPB Response to RFI - **NWCO2017-001**  Firms may submit inquiries or questions by email to Jeff Wylde, CPPB, Purchasing Agent for the Department at <a href="mailto:jeffrey.wylde@denvergov.org">jeffrey.wylde@denvergov.org</a> with "NWC Campus Energy RFI" in the subject line. All inquiries and questions must be submitted by the deadline listed below. Questions and answers will be summarized and posted online according to the RFI Schedule.

Firms may respond to the RFI in part or in whole. Supplementary information may be included in a separate appendix to your response.

## 13.DISCLAIMERS

No award will result from this RFI. Information submitted by any vendor will be done so voluntarily and with the understanding that a formal solicitation may or may not be issued as a result of, and subsequent to, this RFI.

Authority procurement processes are subject to City and County of Denver social ordinances including but not limited to Article III, Divisions 1 and 3 of Chapter 28 of the Denver Revised Municipal Code, (D.R.M.C.) and the M/WBE Program's Rules and Regulations adopted by the Director of the Division of Small Business Opportunity (DSBO), which will be incorporated any agreement entered into as part of the potential future procurement process.

Any cost information submitted in response to this RFI may be used for the purposes of establishing target budget (as applicable) for fiscal planning purposes. Cost information submitted in response to this RFI will not be considered in connection to any future solicitations and is not binding on either party. Responses to this RFI will be kept confidential as discussed above until any subsequent RFP process is successfully completed, resulting in an executed contract.

The City and Authority reserves the right to contact respondents for additional information at its sole discretion and to issue additional RFIs.

Registration with the Rocky Mountain BidNet is not required to respond to the RFI. However, registration is generally advised in order to receive notice of any future RFP or information associated with this RFI that may be published. Registration is available at: <a href="https://www.rockymountainbidsystem.com">www.rockymountainbidsystem.com</a>

# 14.COST OF DEVELOPING SUBMITTALS

All costs related to the preparation of a response and any related activities are the sole responsibility of the respondent. The City assumes no liability for any costs incurred by respondents throughout this entire selection process.

# 15.SCHEDULE OF RFI ACTIVITIES

RFI Posted	Monday November 20, 2017
Deadline for Questions	Friday December 8, 2017
Written Response for Questions posted	Wednesday December 13, 2017
RFI Submittals Due Date	Wednesday January 10, 2017

## **16.LIST OF APPENDICES**

**Appendix A** – NWC Infrastructure Master Plan: - For reference only - subject to changes as design evolves: <a href="http://bit.ly/2zlL21G">http://bit.ly/2zlL21G</a>

**Appendix B** - Capital Build Performance Management Framework – Sustainability (Attached)

**Appendix C** – NWC Capital Build Phase 1 & 2 Construction schedule. Available online at <a href="https://nationalwesterncenter.com/nwc-wp/wp-content/uploads/2017/10/NWC-Capital-Build-Baseline-Book-Schedule-23Aug2017.pdf">https://nationalwesterncenter.com/nwc-wp/wp-content/uploads/2017/10/NWC-Capital-Build-Baseline-Book-Schedule-23Aug2017.pdf</a>

**Appendix D** – Xcel Energy, Partners in Energy - Energy Action Plan Study for the National Western Center, September 2017 (Available Online at <a href="https://nationalwesterncenter.com/nwc-wp/wp-content/uploads/2017/11/NWC-Energy-Action-Plan.pdf">https://nationalwesterncenter.com/nwc-wp/wp-content/uploads/2017/11/NWC-Energy-Action-Plan.pdf</a> in the 2017 tab)

**Appendix E** – AECOM, Delgany Interceptor, Sewer Heat Recovery and South Platte River Study Alternatives Analyses, July, 2017 (Available Online at <a href="https://nationalwesterncenter.com/nwc-wp/wp-content/uploads/2017/11/Delgany-Alternatives-Analysis-Report\_6-28-2017-FINAL.pdf">https://nationalwesterncenter.com/nwc-wp/wp-content/uploads/2017/11/Delgany-Alternatives-Analysis-Report\_6-28-2017-FINAL.pdf</a> in the 2017 tab)

**Appendix F** – Putman District Infrastructure Report, 2015. Available online at <a href="https://nationalwesterncenter.com/nwc-wp/wp-content/uploads/2017/10/Puttman-District-Infrastructure-Report.pdf">https://nationalwesterncenter.com/nwc-wp/wp-content/uploads/2017/10/Puttman-District-Infrastructure-Report.pdf</a>