New Buildings I 2020 Net Zero Fellowship



#### **OVERVIEW**

Energy Trust of Oregon seeks proposals for the 2020 Net Zero Fellowship from qualified individuals or companies demonstrating excellence in research capabilities and an interest in advancing net-zero energy commercial buildings in Oregon. Energy Trust intends to award a fellowship grant, up to \$50,000, to support net-zero energy research over 12 to 18 months.

Selected fellow will work closely with members of Energy Trust's Net Zero Advisory Panel and Energy Trust and will communicate research results to advance Oregon's growing community of net-zero practitioners. The Net Zero Fellowship aims to address technological, financial, and other market barriers to net-zero buildings and grow the community of practitioners advancing net-zero energy design and construction.

Energy Trust is an innovative, independent nonprofit, dedicated to helping electric and natural gas utility customers in Oregon save energy and generate renewable power. Information about Energy Trust's strategic action plans, policies and programs is available at www.energytrust.org/about. For more information about the 2020 Net Zero Fellowship recipient visit energytrust.org/netzerogrants.

#### **ELIGIBILITY CRITERIA**

Building industry professionals, including, but not limited to, architects, engineers, building science professionals, urban planners, policy professionals and academics, are encouraged to apply. Work must be relevant to Oregon; however, the fellow is not required to be an Oregon resident. Applicants must be eligible to work in the United States and Oregon for the entire duration of the fellowship. Fellows must be available to attend Oregon events to share research, as well as meetings with advisors or Energy Trust as necessary.

## **Application and Selection Process**

To apply, interested individuals or companies should complete and submit all required application materials (see page 3 of this Fellowship Application) to <a href="mailto:newbuildings@energytrust.org">newbuildings@energytrust.org</a> as a combined PDF by the due date indicated in the Timeline below. Complete application submissions will be reviewed and evaluated by the Net Zero Advisory Panel made up of leading Oregon professionals representing various perspectives in the commercial design and construction industry. Applications will be assessed based on overall strength and comprehensiveness, including but not limited to the proposed topic's relevance to Oregon and Energy Trust's goals including without limitation its diversity, equity, and inclusion goals, the quality of the research topic, the applicant's experience and demonstrated capacity to conduct technical research, the topic's potential contribution to greater market advancement, and any other criteria which Energy Trust deems relevant.

For more information on Energy Trust diversity, equity, and inclusion goals see:

https://www.energytrust.org/about/explore-energy-trust/diversity-equity-and-inclusion/

#### Contracting and Allocation of Grant Funding

The selected applicant(s) will be required to execute a written grant agreement with Energy Trust that details the terms and conditions for the fellowship grant funding (sample available in Appendix A to this Fellowship Application). Grant payments will be made based on achievement of incremental milestones as established in the executed grant agreement. No award will be considered a commitment, and no obligations or legal relations shall exist between Energy Trust and any selected applicant until a final and binding written contract has been executed by and between Energy Trust and such selected applicant. Prolonged contract negotiations will not be undertaken; if it appears that contracting negotiations are not proceeding in a timely manner, Energy Trust may opt to terminate the discussions and select another applicant. Any party involved in these contracting discussions can terminate negotiations at any time and for any reason.

#### **Timeline**

The fellowship is expected to follow the schedule below, with potential modifications by Energy Trust:

April-June 2020

June 12, 2020

June-July 2020August 2020

September 2020

Launch, outreach, and communications

Fellowship Applications due to Energy Trust

Application review

Fellowship award notification

Contracting completed and research begins

Energy Trust of Oregon - New Buildings

New Buildings I 2020 Net Zero Fellowship



#### **FELLOWSHIP TOPICS OF INTEREST**

While net-zero buildings have gained traction, widespread adoption requires new research to advance design best practices, costs, technologies and policies. Proposed fellowship research may be any topic relevant to addressing barriers to net-zero commercial construction in Oregon relevant to Energy Trust's goals; potential research topics below are of general interest. Energy Trust New Buildings is interested in research that examines and addresses multiple aspects having to do with adoption of net-zero design and construction.

#### Fellowship topics of interest:

- Cost/Benefit Studies Investigating the incremental costs and specific benefits to owners and occupants that are associated with the performance levels of net-zero energy buildings, including capital and operational costs and benefits.
- Ownership and Occupant Benefits Investigation into the measurable first cost, operational cost, energy savings and nonenergy benefits associated with net-zero energy buildings, and how these can be prospectively estimated to inform the business case.
- Community Empowerment –Empowering communities from within to identify opportunities to plan, develop and finance innovative net zero buildings integral to strengthening communities in Oregon. Identify opportunities to create buildings with healthy indoor environments and low utility costs, and further identify the benefits and costs integral to developing new financial feasibility models.
- **Low-Income Housing** Identify strategies for combined financing and technical design of energy efficiency measures for low-income housing development in Oregon. Provide solutions for common challenges faced by this market sector.
- Modeling Protocols/Advanced Modeling Wide variability in modeling protocols and lack of adequate prototypes for high-performance buildings have resulted in inconsistent data and wide variances between estimated and actual energy use. This drives the need for more detailed and consistent metrics and better building energy modeling methods that can be shared with the design community, as well as better data to ensure comparable results.
- Occupant Engagement Further understanding of building energy management systems and education needed to achieve the optimum level of building performance through occupant engagement for different building types, use types, and occupants.
- Monitoring and Feedback The lack of regular monitoring and feedback data has resulted in missed opportunities for building
  designers, operators and occupants. Improved collection and dissemination of actual performance data through dashboards and
  displays can help inform assumptions made in design, and later inform building system adjustments and influence occupant
  behavior toward additional energy efficiency.
- Advanced Envelope and HVAC Advanced technologies and improved systems need deeper research to demonstrate replicable cost and energy savings. As fundamental new system types emerge, new research is needed to understand interactions with other systems, obtain reliable cost and performance data, and optimize operations.
- **District Scale/Community Based Net Zero Energy –** Opportunities exist to implement net-zero energy at the community, campus and district scale, yet financial, operational and other barriers often prevent this approach from being implemented.
- **Resilience Strategies** Investigation into the relationship between energy efficiency and resilient design; research specifically geared toward technical and financial solutions that address existing industry barriers and may include strategies related to renewable energy and solar storage, or community driven resiliency solutions.

New Buildings I 2020 Net Zero Fellowship

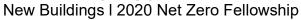


### **APPLICATION REQUIREMENTS**

Applications must be submitted to <a href="mailto:newbuildings@energytrust.org">newbuildings@energytrust.org</a> as a single, combined PDF. Please write using 11 or 12-point font, with one-inch margins. The total combined PDF application should be 10 pages or less (not including optional supplemental materials) and must include the following information. Please make sure to label each section in your application to clearly correspond to the submittal material sections and in the same order as listed below:

Submittal Materials	Descriptions	Requirements
Basic Applicant Information	Provide each of the following;  Name and Contact information (email, phone and address)  Affiliation(s)  Relevant work history and/or Disciplinary field(s)  Educational background  Honors and awards, and/or publications	Resume is acceptable. One page maximum.
Research Overview	Provide each of the following;  Title for proposed research project (20-25-word maximum)  Concise summary of research topic (100-200 words)  Identify any industry partners participating in the research project  List 3-5 main goals / outcomes for research project (1-2 sentences each)  List and clearly describe all deliverables or products associated with this project	All elements required for consideration. Two pages maximum.
Research Statement	Describe the project in more detail, address each of the following:  What is the scope of research?  How will it address net-zero industry challenges or market barriers?  Describe research approach and methodologies.  Describe research goals in more detail.  What is significant or innovative about the research?  If you expect to work with others, what unique value/qualifications do they bring?	Statement limited to one page of text. Up to three relevant figures and images may be included on a separate page.
Research Context	Provide the following:  A summary of the current research landscape that is the focus of the proposed study, including information already developed, examples of relevant literature and sources for further study. Describe the need and how the proposed research will fill important gaps.	Limited to 500 words.
Relevance to Oregon	Provide a statement on the applicability of the research proposal to Oregon.  How does the work support Energy Trust goals? How will this work transform Oregon's commercial building industry toward net-zero design and construction? How will your work benefit Energy Trust customers?  Describe how your research topic furthers the prioritization of diversity, equity and inclusion within the commercial design and construction practice.	Limited to 500 words.
Research Plan	Plan must clearly include each of the following sections:  Project Timeline – Provide a general timeline in which you expect to deliver the work.  Outreach Plan – Describe how you plan to disseminate research results / deliverables to Oregon building industry (please note, Energy Trust may be able to publish documents online, and provide assistance planning events or webinars)  Budget – Include total funding requested and describe to the best of your ability a budget for labor hours and direct expenses associated with this work.	One page maximum.
Personal Impact	<ul> <li>Address the following:</li> <li>Why do you wish to undertake this research project?</li> <li>What specific qualifications, training or experiences will help you serve as a Net Zero Fellow?</li> <li>How do you expect to benefit from the fellowship personally and/or professionally?</li> <li>If selected, how will you address this fellowship with your current employer? Or how will this project fit into your company's current activities?</li> </ul>	Limited to 500 words.

Energy Trust of Oregon - New Buildings





Letters of Recommendation	Provide two letters of recommendation from individuals personally familiar with your work, professional ability and ability to conduct research.	Each letter limited to one page.
Portfolio and/or Supplemental Materials	Provide supplemental materials, such as articles, plans, speeches or similar indicators of your work. The submission of supplemental materials is optional, although a portfolio is strongly encouraged for those whose work has a visual quality.	Optional. Limited to three examples – for a total of 10-25 pages maximum.

To be considered complete for review and evaluation, the submitted application (combined PDF) must include all items listed above (except for those items clearly marked as 'optional').

Application Deadline: June 12, 2020

#### **GOVERNING TERMS AND CONDITIONS**

By submitting an application, applicant represents that it is authorized to submit the application materials, all information provided in the application is true and correct, and applicant explicitly agrees to and accepts the governing provisions as set forth below and elsewhere in this document:

All materials submitted in response to this application shall become the property of Energy Trust and shall not be returned to the applicant.

This application does not constitute an offer to enter into a contract with Energy Trust, nor does it commit Energy Trust to enter into a contract or similar undertaking with applicant. Energy Trust is not bound to enter into a contract with any qualified applicant. Energy Trust reserves the right to suspend or modify the terms of this application or application process at any time in its sole discretion. This includes without limitation the right to cancel or revise this application at any time, vary any timetable or schedule, add or change any application provision discussed herein, waive any nonconformity in submissions received, accept or reject any or all of the items in the submission, or award any ultimate contract in whole or in part as it is deemed in Energy Trust's best interest. No verbal agreement or conversation made or had at any time with any officer, agent, or employee of Energy Trust, nor any oral representation by such party shall add to, detract from, affect or modify the terms of the application, unless specifically included in a written addendum to this application issued by Energy Trust.

Applicant is solely responsible for its own expenses in preparing an application and for any subsequent negotiations. Energy Trust will not be liable to any applicant for any claims, whether for costs or damages incurred by the applicant in preparing the response, loss of anticipated profit in connection with any final contract, or any other matter whatsoever. Applicant waives any right it may have to bring any claim, whether in damages or equity, against Energy Trust, Energy Trust Board of Directors or any of Energy Trust's agents, employees or contractors, with respect to any matter arising out of any process associated with this application.

#### FOR MORE INFORMATION

Please visit energytrust.org/netzerogrants or call 1.877.467.0930.

Energy Trust of Oregon – New Buildings

New Buildings I 2020 Net Zero Fellowship



#### APPENDIX A: SAMPLE DRAFT GRANT AGREEMENT

SAMPLE DRAFT ONLY: This sample draft form of agreement is not an offer and is not meant to create any enforceable obligation. This sample contains a list of standard terms and conditions frequently included in our grant agreements; it is not an exhaustive list and is subject to change. This sample is provided for informational purposes only and does not imply an award, agreement, or offer to contract.

#### **NET ZERO FELLOWSHIP GRANT AGREEMENT**

#### SAMPLE DRAFT ONLY

This Net Zero Fellowship Grant Agreement effective [INSERT DATE] ("Agreement" or "Grant Agreement") is between Energy Trust of Oregon, Inc., an Oregon not-for-profit corporation ("Energy Trust") and [INSERT NAME] (the "Net Zero Fellow"). Energy Trust and Net Zero Fellow are also referred to individually in this Grant Agreement as a "Party" and collectively as "Parties".

**A.** <u>Background</u>: Energy Trust's Net Zero Fellowship ("NZF") aims to address market, technological or policy barriers to net zero buildings and to grow the community of practitioners advancing net zero energy design and construction in Oregon. Energy Trust's NZF seeks to achieve these goals by supporting research that helps to advance Oregon's net zero community.

Net Zero Fellow submitted an NZF application to Energy Trust seeking funding in support of Net Zero Fellow's proposed research plan. Following review by its Net Zero Advisory Panel, Energy Trust selected Net Zero Fellow to receive an NZF grant in support of Net Zero Fellow's research as set forth in this Grant Agreement.

#### B. Form of Grant and Duties of Net Zero Fellow

- 1. Energy Trust agrees to provide Net Zero Fellow a grant of \$[INSERT DOLLAR AMOUNT] (the "Grant") payable in increments as set forth more specifically in *Exhibit A* which is attached and fully incorporated into this Grant Agreement by this reference.
  - 2. Net Zero Fellow shall provide Energy Trust with a completed IRS Form W9.
- 3. The Grant shall be used by Net Zero Fellow exclusively towards the NZF research activities as set forth in *Exhibit A* (collectively, the "Permitted Purposes").
  - 4. Books and records of the Grant expenditures must be maintained and made available for inspection by Energy Trust should it so desire.
- 5. Any portion of the Grant not used for the Permitted Purposes, unless prior written approval has been obtained for any significant variance, shall be repaid by Net Zero Fellow to Energy Trust.
- C. <u>Term and Termination</u>: This Grant Agreement is effective from [INSERT DATE], until [INSERT DATE] unless terminated earlier in accordance with **Section F** below.
- D. Payment Procedures: Energy Trust will pay the Grant to Net Zero Fellow in installments as indicated in the Payment Schedule set forth in *Exhibit A*. Net Zero Fellow shall submit to Energy Trust, at <a href="mailto:accountspayable@energytrust.org">accountspayable@energytrust.org</a>, documentation as detailed in *Exhibit A* confirming that it has met requirements to request Grant funds payments. Energy Trust will remit payment within thirty (30) days of receipt of all required documentation. Such installment payments shall be conditioned upon Energy Trust's determination, in its sole discretion, that (i) any portion of the Grant funds previously provided to Net Zero Fellow have been used only for Permitted Purposes; and (ii) no conditions exist that would warrant termination of this Grant Agreement and recovery of any unspent Grant funds pursuant to **Section E** of this Grant Agreement.
- E. <u>Termination and Survival of Terms</u>: Energy Trust may terminate this Grant Agreement immediately and recover any unspent or improperly spent Grant funds upon written notice delivered to Net Zero Fellow in the event Net Zero Fellow fails to comply with any provision of this Grant Agreement as determined by Energy Trust in its sole discretion. **Sections E, F, G, I, J, K** and any other provisions of this Grant Agreement which by their nature extend beyond the term of this Grant Agreement shall survive termination of this Grant Agreement.

Energy Trust of Oregon - New Buildings

## New Buildings I 2020 Net Zero Fellowship



#### F. Copyright License Agreement:

- 1. Net Zero Fellow hereby grants to Energy Trust the nonexclusive, worldwide, perpetual, irrevocable, royalty-free and sub-licensable right and license to reproduce, distribute, perform and display (publicly or otherwise), and prepare compilations and, subject to the last sentence of this **Section F.1** derivative works based upon, all or any portion of any copyrightable works submitted to Energy Trust by Net Zero Fellow in connection with Net Zero Fellow's **Exhibit A** work under this Grant Agreement, including without limitation, any literary works and any separate copyrightable works, (e.g. charts and graphs) incorporated therein ("Submissions"). If the Submissions were created in the course of the Net Zero Fellow's employer as identified in the Signature area of this Grant Agreement ("Employer") hereby grants to Energy Trust the nonexclusive, worldwide, perpetual, irrevocable, royalty-free, and sublicenseable right an license to reproduce, distribute, perform and display (publicly or otherwise), and prepare compilations and, subject to the last sentence of this **Section F.1** derivative works based upon, the Submissions. Energy Trust may distribute the Submissions in print, digital, electronic or any other format or medium now known or hereafter discovered. For clarity, Energy Trust's right to create derivative works based upon the Submissions does not include the right to modify the substantive content of the Submissions, but does include the right to modify and reformat the Submissions in order to reproduce and distribute the Submissions in differing formats and media consistent with the preceding sentence.
- 2. Net Zero Fellow and, if the Submissions were created in the course of Net Zero Fellow's employment as a "work made-for-hire," Employer (together the "Contributor"), agree not to reproduce, distribute, perform and display (publicly or otherwise) the Submissions or any compilation or derivative work based upon the Submissions prior to Energy Trust's NZF publish date, for which the Submissions is made and to which it is submitted. For clarity, this **Section F.2** does not limit Contributor's right to circulate pre-publication drafts of the Submissions for peer review.
- 3. Net Zero Fellow represents and warrants that (i) the research it develops as outlined in the Submissions are original and authored solely by Net Zero Fellow ((ii) that Net Zero Fellow or Employer, as applicable, has the right and authority to enter into this agreement and to grant the rights granted in this agreement; and (iii) that provision of the Permitted Purposes and Submissions to Energy Trust will not violate rights of others, including rights relating to defamation, contract rights, copyrights, trade secret rights, patent rights, and rights of privacy or publicity.
- 4. To the extent that Net Zero Fellow has any "moral rights" with respect to the Submissions, including any right of inspection or approval of the uses of any Submissions or any portions thereof, Net Zero Fellow agrees to waive and decline to assert such rights, and agrees that Energy Trust may reformat and otherwise modify the Submissions regardless of medium into which the Submissions may be modified and regardless of the effect of such modifications on the integrity of the Submissions; provided that Energy Trust may not modify the substantive content of the Submissions. For clarity, Energy Trust may provide the Submissions as parts of compilations in various formats including, without limitation, ink on paper, Adobe Acrobat (.pdf) format, Microsoft (.doc, .ppt, and .xls), graphics and web formats. Net Zero Fellow hereby grants to Energy Trust and its authorized representatives permission to publicly identify Net Zero Fellow by name as an author of the Submissions and to include biographical information in any materials related to Energy Trust's NZF.
- G. <u>Attribution</u>: Net Zero Fellow shall acknowledge the Energy Trust's NZF Grant contribution in any public statements regarding NZF. The statement shall read: "This research has been supported by an Energy Trust of Oregon, Inc. Net Zero Fellowship grant." In connection with this Grant Agreement, Net Zero Fellow hereby grants Energy Trust and its authorized representatives permission to publicly identify Net Zero Fellow by name as an Energy Trust NZF grant recipient, to provide a general description of Net Zero Fellow's research plan project, and to include information about Net Zero Fellow's personnel performing the research.
- H. Notices: Notices required by this Grant Agreement will be deemed effective (i) if delivered personally, on receipt, (ii) if mailed, three business days after being mailed by U.S. certified mail, return receipt requested, (iii) if sent by facsimile, on generation by the transmitting machine of a confirmation of both successful transmission and receipt, or (iv) if emailed, on confirmation of both successful transmission and receipt. Notice will be given to the persons at the contact information listed below or to such other persons or contact information as may be designated by a party by notice pursuant to this provision.

# Fellowship Application New Buildings I 2020 Net Zero Fellowship



=	
If to Energy Trust:	If to Net Zero Fellow:
Energy Trust of Oregon, Inc.	
421 SW Oak Street, Suite 300	
Portland, Oregon 97204	
Attn: Legal/Contracts	Attn:
Phone:	Phone:
Email:	Email:
J. <u>Indemnification and Limitation of Liability</u> : Net Zero agents, representatives, and affiliates (the "Energy Trust Inc	intended to form a partnership or joint venture between Net Zero Fellow and Energy Trust.  o Fellow will indemnify and defend the Energy Trust and its directors, officers, employees, demnified Parties") and hold them harmless from and against any and all losses, liabilities, costs and expenses, including without limitation interest, penalties, attorney fees, any and all
expenses incurred in investigating, preparing, or defending amounts paid in settlement of any claim or litigation asserter result of or arising from the negligent or wrongful acts or or from any finding, judgment or other determination or settlen Energy Trust is not responsible for any tax liability which many tax in the connection with this Grant Agreement in the connection with the	against any litigation, commenced or threatened, or any claim whatsoever, and any and all ad against, imposed on, or incurred or suffered by any of them, directly or indirectly, as a hissions of Net Zero Fellow, from any breach of this Grant Agreement by Net Zero Fellow, or nent whereby Energy Trust is deemed or considered to be the employer of Net Zero Fellow. By be imposed on the Participant as a result of any Grant Funds. Energy Trust's liability to not shall be limited to any amounts owed Net Zero Fellow under this Grant Agreement. We for any other damages, whether characterized as general, special, direct, indirect,
K. Governing Law and Jurisdiction: Any disputes arising to its principles of conflict of law. The exclusive jurisdiction	ng in connection with this Grant Agreement will be governed by Oregon law, without reference for resolution of such disputes will be Oregon.
	is made and entered into for the sole purpose and legal benefit of the parties, and no other ave any direct or indirect cause of action or claim in connection with, this Grant Agreement.
M. <u>Severability</u> : Should any provision of this Grant Agree remainder of the Grant Agreement will remain in full force a	ement be held by a tribunal of competent jurisdiction to be invalid or unenforceable, the and effect.
of this Grant Agreement, and contains their entire understan	supersedes all other agreements between the parties regarding the particular subject matter nding as to its particular subject matter. This Grant Agreement may not be amended or uthorized representatives of the parties. This Grant Agreement will not be varied, of dealing between the parties or by any usage of trade.
N. <u>Confidentiality/Non-disclosure</u> : [RESERVED]	
	esents and warrants that he or she has been properly authorized by his or her respective their signatures each of the parties does intend and is hereby legally bound under the terms
EXECUTED IN DUPLICATE on the dates indicated below.	
ENERGY TRUST:	NET ZERO FELLOW:
ENERGY TRUST OF OREGON, INC.	[Insert Name]

Energy Trust of Oregon - New Buildings

100 SW Main Street, #1500, Portland, OR 97204 1.877.467.0930 telephone 503.961.7642 fax newbuildings@energytrust.org email

Signature:

Signature:





Print Name:	Print Name:
Title:	Date:
Date:	
	<b>EMPLOYER:</b> (If required pursuant to <b>Section F</b> , an individual authorized to sign on Employer's behalf must also sign here)
	[Insert Employer's Name] Signature of Individual Authorized to Sign on Employer's Behalf:
	Print Name:
	Title:
	Date:

Exhibit A, Research Plan and NZF Grant Payment Schedule Attachments: