



Applicant Guidebook

Oregon Department of Environmental Quality Low-Embodied Carbon Housing Program

Oregon Climate Equity and Resilience Through Action Grant



This document was prepared by Oregon Department of Environmental Quality Built Environment Oregon

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Translation or other formats

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DEQ's Low-Embodied Carbon Housing Program

Through Oregon's federal Climate Equity and Resilience through Action grant, DEQ received \$25.6 million from the to create the Low-Embodied Carbon Housing Program.

The program provides rebates to incentivize development of lower-embodied carbon housing, helping Oregon to meet our climate goals while also addressing the need for more affordable housing.

What rebates are available?

940 total per unit rebates

available in 9 communities across Oregon for 2 low-emboded carbon strategies total rebate may be requested 1 time at project completion

Strate	egy 1: reuse	Strategy 2: s	pace-efficient
210 rebates	\$45,000 per unit	730 rebates	\$20,000 per unit
Medford 55 units Ontario 40 units Pendleton 40 units Portland 55 units Reedsport 20 units		Bend 200 units Eugene 200 units Hood River 150 units Tillamook County 180 units	

What project costs are eligible for the rebates?

There are four types of eligible project costs:

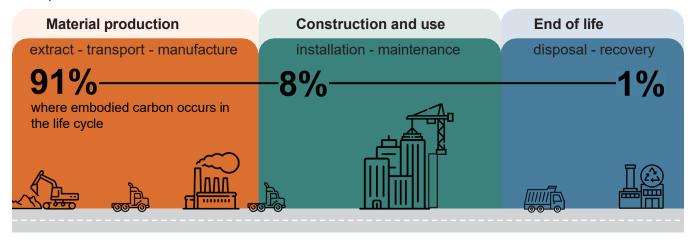
Permit fees
Systems
development
charges
Systems
conversion
material costs

Additional information about the eligible project costs is provided in **Step 3** of the **Step-by-step program guidance** section.

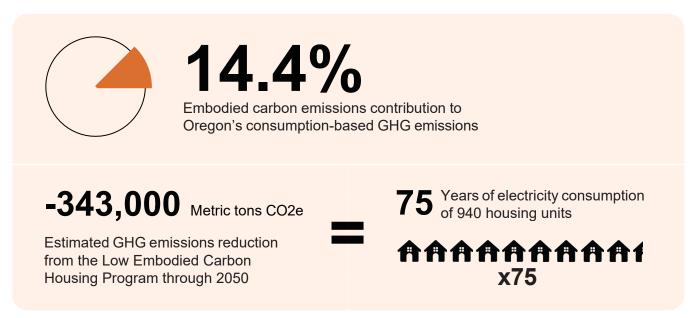
Program overview

What is embodied carbon and why does it matter?

Embodied carbon refers to the greenhouse gas emissions from resource extraction, manufacture, transport, installation, maintenance, disposal and recovery of construction materials. This program is focused on embodied carbon of everything that goes into developing a building before it is occupied and operational.



Embodied carbon of building materials is a significant contributor to Oregon's greenhouse gas emissions. The Low-Embodied Carbon Housing Program will pilot key reduction strategies which are estimated to significantly reduce emissions. <u>Learn more about embodied carbon</u>.



What low-embodied carbon strategies qualify for the rebates?

The Low-Embodied Carbon Housing Program is incentivizing two of the most effective lowembodied carbon strategies: Reuse and Space-efficient. These strategies reduce the climate impact of our housing, as well as provide several additional community benefits. In addition, all projects will be required to reduce the embodied carbon of new materials used by 10%.

Strate	egy 1: reuse	Strategy 2:	space-efficient
210 rebates	\$45,000 per unit	730 rebates	\$20,000 per unit
Projects which convert an existing vacant or underutilized non-		_	ich units do not eas specified below:
	reuse at least 45% of the	Single Room Occupancy	210 sq ft
Projects must reuse at least 45% of the existing structure and envelope. This is calculated according to the formula in Step 3. Rebate Request of the Step-		Studio	420 sq ft
		1-bedroom	800 sq ft
-	Step Program Guidance section.	2-bedrooms	1,000 sq ft
Examples include, but are not limited	3-bedrooms	1,200 sq ft	
o, the upper story(ies) of a downtown retail space, office, or hotel.		to, accessory d	de, but are not limited welling units, duplexes, s, townhomes, and lings.

Reduce embodied carbon of new materials by 10%

In addition to completing one of the primary strategies above, all projects must reduce the embodied carbon of new materials by 10%.

More information about compliance with this requirement is provided in **Step 2.1 Consult with Carbon Leadership Forum** of the **Step-by-Step Program Guidance** section. DEQ has hired Carbon Leadership Forum to develop DEQ-approved pathways for project teams to follow to meet these requirements. Carbon Leadership Forum will also develop resources and provide technical assistance to project teams.

Program requirements

Projects accepted in DEQ's Low-Embodied Carbon Housing Program must demonstrate compliance with the following requirements in order to receive the applicable rebate.

Additional information about each of the requirements and documentation required for compliance is included in the **Step-by-step Program guidance** section.

Requirement 1. Project type and location



Project is reuse

and

Located in Medford, Ontario, Pendleton, Portland, or Reedsport or

Project is space-efficient

and

Located in Bend, Eugene, Hood River, or Tillamook County

Requirement 2. Affordability



- Units will not be used for short-term rentals (<30 days)
- Units must be provided at less than or equal to rent limits for moderate-income projects (120% of the area median income) as defined by Oregon Housing and Community Services

Requirement 3. Build America, Buy America



If applicable, project will comply with federal Build America, Buy America requirements

Requirement 4. Reduce embodied carbon of new building materials by 10%



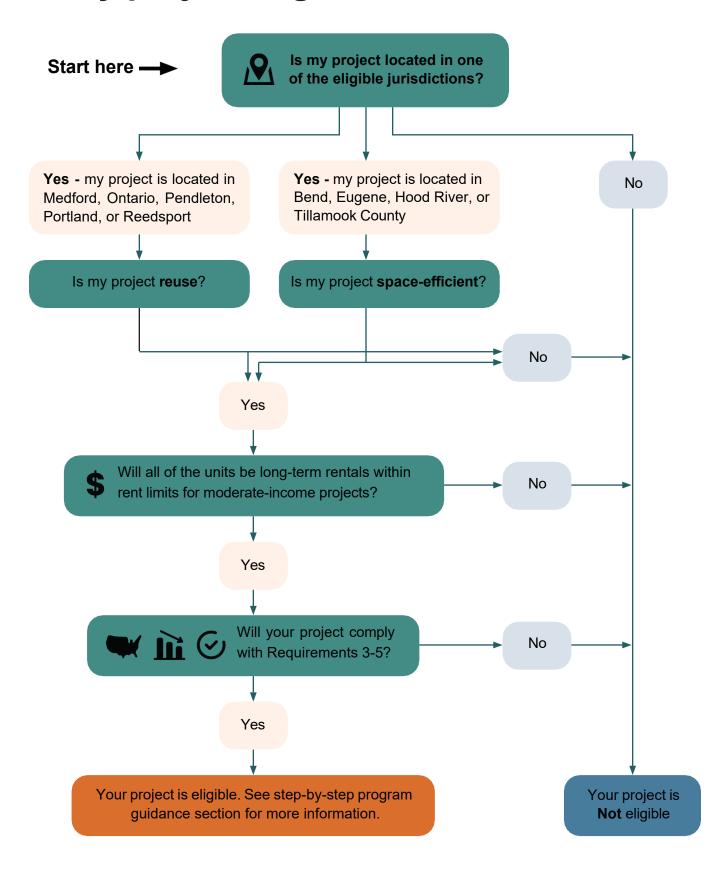
Project will follow a DEQ-approved compliance pathway to reduce embodied carbon of new building materials by 10% (technical assistance to support compliance with this requirement will be available from DEQ's contractor, Carbon Leadership Forum)

Requirement 5. Project completion within implementation period



Project must be completed on or before March 30, 2029

Is my project eligible?



Step-by-step program guidance

To receive the applicable rebate, projects accepted in the Low-Embodied Carbon Housing Program shall complete the following steps. Additional information about each of the requirements and documentation required for compliance is included in the Step-by-step program guidance section.



Step 1. Apply to Program

- 1.1 Qualifying project submits Application
 - > Local jurisdiction reviews Application for completeness, accuracy, and eligibility
 - > DEQ reviews Application for approval
 - > If approved, Applicant is accepted into Program
- 1.2 Applicant enters into Rebate Agreement with DEQ, move to Step 2



Step 2. Project design and construction

- 2.1 Applicant consults with Carbon Leadership Forum to confirm alignment of their design approach and/or selected materials with their intended pathway for compliance
- 2.2 Applicant documents installation of approved materials
 - > Once approved, move to step 3



Step 3. Rebate request

- 3.1 Upon project completion, Applicant submits Reimbursement Request Form and all required supplementary documentation
 - > Local jurisdiction reviews Form for completeness and accuracy
 - > DEQ reviews Form for approval
 - > If approved, rebate is sent to Applicant, move to step 4
 - > If not approved, Applicant corrects and resubmits form

Step 1. Apply to program

1.1 Qualifying project submits enrollment form

Any eligible project may apply for the Low-Embodied Carbon Housing Program by submitting a completed <u>application</u>.

Once submitted, local jurisdiction will review the application for completeness, accuracy, and eligibility.

If determined to be complete and accurate, and the project eligible, DEQ will then review Application for approval.

If approved by DEQ, Applicant moves to Step 1.2

By submitting an application, applicant is attesting that they will comply with all applicable requirements and submit all required compliance documentation. Failure of an applicant to demonstrate compliance will result in rejection of rebate request at project completion and will result in rebate funds being reallocated to another applicant.

Build America, Buy America

Applicant will be asked to indicate whether BABA applies to their project.

In determining BABA applicability, EPA:

- Distinguishes between single- and multi-family housing. Single-family homes are not required to comply with BABA. Multi-family projects are dependent on additional features.
- Distinguishes between public and private projects. Public projects require BABA compliance. Private projects are dependent on additional features.

Additionally, DEQ has received a BABA waiver for projects which receive less than \$250,000 in federal funding. This includes all federal funding, not only those funds received through this Program.

Applicants should review the "Purpose, Time, and Place" test and the flow chart on the next two pages to determine the boundary of their project and if BABA applies to their project.

Click here for additional information on BABA.

BABA, continued

Purpose, time, and place test

The PTP test will help you determine the boundary of your project. This boundary will be important as you evaluate whether your project is required to comply with BABA on the next page.

The PTP test considers whether the activities funded are integrally and proximately related to the whole but also recognizes that many activities are undertaken in segregable phases that are distinct in purpose, time, or place. All three elements must be consistent for the activity to be considered a single "project".

To determine the boundary of your project, review the PTP test and examples below. <u>Click here for additional information on BABA</u>.

Purpose

Is the purpose for the funded activity segregable?

For example, the funded activities include only the residential portion of a mixed-use building. In this case, the project would comprise only the residential component of the project.

Time

Is the timing of the funded activity distinct?

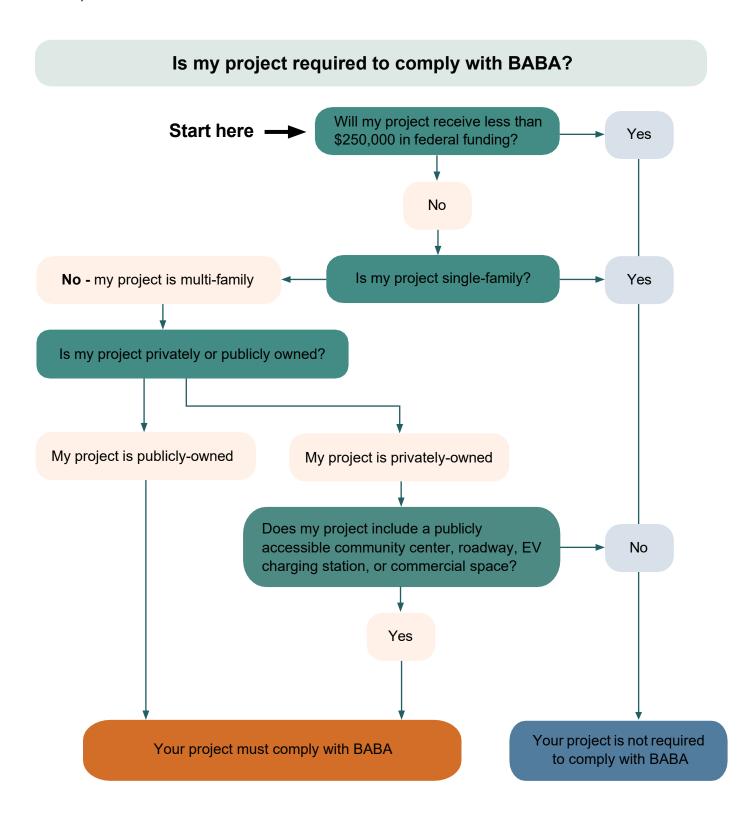
For example, an applicant is building a phased development. Each phase occurs at a separate time, under a separate permit making each phase a separate project.

Place

Is the location of the funded activity distinct?

For example, an applicant is building a project with multiple buildings. Each building has a distinct address and coordinates. In this case, each building would be a separate project.

BABA, continued



1.2 Recipient enters into Rebate Agreement with DEQ

Once accepted in the program, applicant must enter into Rebate Agreement with DEQ. At its discretion, DEQ may extend this timeline or terminate the contracting process.

Rebate funds are subject to terms in the underlying Rebate Agreement and the terms of the Rebate Agreement are **non-negotiable**. Potential applicants should review the Rebate Agreement thoroughly to confirm they are willing and able to accept the terms.

Once Rebate Agreement is executed, Applicant moves to Step 2.

Please note: Applicants may **not** receive technical assistance from Carbon Leadership Forum (as outlined in Step 2.1) until the Rebate Agreement is executed.

Step 2. Project design and construction

2.1 Consult with Carbon Leadership Forum

DEQ has hired Carbon Leadership Forum to develop four DEQ-approved low-embodied carbon material pathways for project teams to follow to meet **Requirement 4. Reduce embodied carbon of building materials by 10**%. Carbon Leadership Forum will also provide resources and technical assistance to support project teams in meeting these requirements. See low-embodied carbon resources on DEQ's Low-Embodied Carbon Housing Program web page for additional details about each compliance pathway.

Pathway 1: Material Short

Demonstrate a greater (20%) embodied carbon reduction in concrete, rebar, insulation, and flooring which equates to an overall reduction of at least 10%.

Pathway 2: Material Select List

Demonstrate a greater (11%) embodied carbon reduction in a longer list of materials which equates to an overall reduction of at least 10%.

Pathway 3: Prescriptive Checklist

Demonstrate compliance with a series of prescriptive items (e.g., structural systems, insulation types, flooring) that together equate to an overall reduction of at least 10%

Pathway 4: Performance/ Innovation

Use Whole Building Life Cycle Assessment to demonstrate an overall project embodied carbon reduction of at least 10%.

Shortlist materials include: cement, concrete, CMUs, rebar, structural steel, steel framing, sawn lumber, structural composite lumber, mass timber, wood sheathing, wood I-joists, insulation, cladding, gypsum board, and flooring.

Upon enrollment in the Low-Embodied Carbon Housing Program, applicant should review the following Carbon Leadership Forum resources (available on DEQ's Low-Embodied Carbon Housing Program web pae) and join a virtual learning meeting hosted by Carbon Leadership Forum:

- Embodied Carbon 101 Video Playlist
- Embodied Carbon and EPD 101 for Housing
- Model Specifications for Housing

In early- to mid-design, applicant is highly encouraged to consult with Carbon Leadership Forum to confirm alignment of their design approach and/or selected materials with their intended pathway for compliance.

2.2 Document installation of approved materials

Over the course of project construction, applicant shall maintain receipts for all rebate-eligible materials that are purchased and installed. At project completion, applicant will demonstrate compliance for all applicable materials as outlined in the table below.

Low-embodied carbon materials	Housing conversion materials	BABA
Required for all projects	Required for Reuse projects seeking reimbursement for materials required to convert non-residential building to housing	Required for any projects which must comply with federal BABA requirements
Applies to: All materials used within a DEQ-approved low-embodied carbon material	Applies to: Any materials required to convert a non-residential building to housing	Applies to: All materials required to demonstrate compliance with Requirement 3. BABA
pathway to demonstrate compliance with Requirement 4. Reduce embodied carbon of building materials by 10%	Some examples include: seismic upgrades, fire sprinklers, envelope, egress, abatement	
Documentation required for reimbursement:	Documentation required for reimbursement:	No direct reimbursement for BABA materials
 Low-Embodied Carbon Material Pathway Form Reimbursement Summary tab in Project Data Form Receipts for materials 	 Reimbursement Summary tab in Project Data Form Receipts for materials 	Projects which are required to comply with BABA shall provide all compliance documentation outlined by federal BABA requirements

Step 3. Rebate request

3.1 Submit Rebate Request Form and all required supplementary documentation

Once project has been completed, applicant must submit a completed Rebate Request Form with all supplementary documents attached to receive reimbursement of eligible project costs.

Project completion is demonstrated by receipt of Certificate of Occupancy issued by Authority Having Jurisdiction. To comply with **Requirement 5. Project completion within implementation period**, Certificate of Occupancy must be dated no later than March 30, 2029.

Eligible project costs for rebates:

1 Permit fees

Fees paid to local jurisdiction to permit your project for construction.

For example: building permit, electrical permit, mechanical permit

3 Low-embodied carbon material costs

Material costs for the low-embodied carbon materials that will be installed in your project. Labor costs cannot be reimbursed.

For example: concrete, gypsum board, insulation, roofing

2 Systems development charges

Charges by your local jurisdiction to offset the costs to City systems.

For example: transportation, water, environmental services

4. Housing conversion material costs

Material costs for any products or materials needed for building upgrades required for the project to be used for residential occupancy.

For example, seismic upgrades, fire sprinkler, envelope, egress, abatement

Available to reuse projects only

Supplementary documents required to be attached to Reimbursement Request Form include:

- Invoice form
- Project data form
- Certificate of Occupancy
- All receipts for eligible project costs for which reimbursement is requested

Invoice form

Applicant must attach a completed invoice form.

Project data form

Applicant must complete all applicable tabs in the Project data form listed in table below for each project type.

Strategy 1: reuse	Strategy 2: space-efficient
Reimbursement Summary Unit Data Reuse	Reimbursement Summary Unit Data

Detailed instructions for how to complete each tab are included in the Project data form.

Certificate of Occupancy

Applicant must attach a copy of the Certificate of Occupancy issued by Authority Having Jurisdiction. Certificate of Occupancy must be dated no later than March 30, 2029.

Receipts for eligible project costs

Applicant must attach a copy of all receipts for which reimbursement is requested. Receipts must match the values in the Reimbursement Summary tab and should be attached as one PDF.

Invoice form, Project data form, and Low-embodied carbon material form may be updated periodically. To ensure applicant is using the current version, applicant should download all forms directly from DEQ's Low-Embodied Carbon Housing Program web page at the time applicant is preparing to submit their reimbursement request.

Frequently asked questions

DEQ maintains and regularly updates a list of Frequently Asked Questions on the <u>Low-Embodied</u> Carbon Housing Program web page.