Shift Zero is an alliance of organizations, each with its own mission and approach to sustainability in the built environment. As an alliance we promote one goal: the equitable adoption of zero net carbon (ZNC) buildings at scale. Today the alliance’s efforts focus within the state of Washington, but may extend past those borders in the future.

Buildings as Climate Solutions

We have come together because Washington state is not decarbonizing its built environment—both new and existing buildings—quickly enough to limit global warming to “well below 2 degrees C above pre-industrial levels,” as outlined in the Paris climate accord. We also recognize that our individual efforts to create more ZNC buildings, while useful, are not as effective as a coordinated, collective advocacy effort. Shift Zero was created to accelerate the transformation of buildings to being part of the climate solution.

1 https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement
Our Purpose

Shift Zero starts from common ground – our alarm about the climate crisis – to work for a common cause: a ZNC built environment for all members of our communities. We draw from the collaborative spirit of integrated design to change how we work together and advocate for policy. Recognizing the urgency to decarbonize, we focus only on impacts that are ambitious, scalable, equitable, and quantifiable:

- Given the right policy catalysts, ZNC Buildings of all types can scale and equitably transform the market. We currently have cost-effective means to build and retrofit ZNC buildings;
- We will unite around our common ground and common cause to speak to policymakers with the power of a collective voice;
- We will advocate for policies, programs, and incentives that produce ZNC buildings;
- We will work creatively and proactively to address historic and ongoing inequities in access to healthy and efficient buildings while minimizing displacement; and
- We will be certain that the benefits of creating ZNC buildings—economic activity, wealth creation, improved health outcomes, jobs and career pathways, and improved living and working conditions—are equitably shared by all members of our communities.
Acknowledgements

We would like to acknowledge:

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Whitaker Jamieson | Sustainable Connection

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Table of Contents

Introduction- Shifting to Zero  6
Beyond Climate Benefits  8
ZNC Market Development  9
Partnerships and Certification Programs  10
Incentive Types and Recommendations  13
Making Incentives Work  15
Code Innovation  17
Glossary of Acronyms  18
Terms  19
Additional Resources  20
Appendix  21
Introduction

Shifting to Zero
In Washington State, buildings account for up to 22 percent of greenhouse gas (GHG) emissions. Reducing GHG emissions that are produced directly or indirectly by buildings is a critical component of combating climate change. Offering incentives, revising codes, and implementing various other policies can help municipalities reach their GHG emissions reduction targets and collectively shift to zero building GHG emissions. This toolkit provides policy makers with material to more effectively champion green building in their area. This toolkit also illuminates which incentives work best for different building types in different contexts, acknowledging the fact that effective incentives are not one-size-fits-all.

Shifting to Zero Net Carbon and zero net energy requires a large jump, not simply small steps. While incremental incentives are valuable, the focus should be on the end goal. With this in mind, incremental steps should be the means, not the ends, of green building incentive policy. The incentive tiers proposed in this toolkit are based on certifications that reach either high efficiency (as defined by Shift Zero) or are ZNC.

Definition of Zero Net Carbon (ZNC) and Energy Efficiency
Shift Zero defines ZNC building (ZNC) as a “highly energy efficient building that produces on-site, or procures, off-site, enough carbon-free renewable energy to meet building operations energy consumption annually. To reach ZNC, these buildings first maximize energy efficiency, then maximize on-site renewable energy generation as practical, and then procure off-site renewable energy that is additional, local, equitable, and legally assigned to the building.” Shift Zero’s definition of highly energy efficient is an EUI (energy use intensity) of 15-25 depending on building types.

What is Zero Net Carbon Building?

STEP 1
Maximize Energy Efficiency
Efficient building construction
Efficient systems and appliances
Operations and maintenance
Change in user behavior

STEP 2
On-site renewable energy
Maximize on-site renewable energy generation where practical

STEP 3
Off-site renewable energy
Procure off-site renewable energy that is additional, local, equitable, and legally assigned to the building.

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3 Ibid. State building emissions have not changed significantly 2010-2013.
4 https://shiftzero.org/what-is-zero-net-carbon-building/ This definition originally came from a white paper from Architecture 2030 in collaboration with RMI and NBI
Municipal Leadership in Climate Change
Local governments are taking an increasingly active role in shaping and driving the next generation of community-based sustainability initiatives. For example, over 145 U.S. cities have committed to the sustainability-oriented Compact of Mayors (formed by Michael Bloomberg, C40 Cities, and ICLEI, among others) and its series of climate action and reporting requirements. And many more local governments nationwide are adopting their own climate change action plans and initiatives with goals to reduce their GHG emissions. Three examples of cities in Washington with Climate Action Plans (CAPs) are Seattle, Bellingham, and Shoreline.

Washington Climate Action Plans

<table>
<thead>
<tr>
<th></th>
<th>2020 Immediate Goal</th>
<th>2030 Intermediate Goal</th>
<th>2050 End Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seattle</td>
<td>Reduce GHG emissions from buildings by 39% from 2008, community wide by 58%</td>
<td>Community wide zero net emissions</td>
<td></td>
</tr>
<tr>
<td>Bellingham</td>
<td>50% of new residential, commercial, and industrial buildings are LEED certified or equivalent</td>
<td>Reduce community GHG emissions 85% and 100% of municipal GHG emissions compared to 2000</td>
<td></td>
</tr>
<tr>
<td>Shoreline</td>
<td>Reduce community wide greenhouse gas emissions by at least 25% below 2007 levels</td>
<td>Reduce community wide greenhouse gas emissions by at least 50% below 2007 level and achieve zero net greenhouse gas emissions from government operations by 2030.</td>
<td>Reduce community wide greenhouse gas emissions by at least 80% below 2007 levels</td>
</tr>
</tbody>
</table>

Another way municipalities have pursued green buildings is by requiring all municipal buildings to be certified by an independent certification programs. In Seattle, all new municipal buildings and major renovations 5,000 square feet or larger are required to achieve LEED Gold certification or better and are expected to be 15 percent more energy efficient than the current code. While this is not an incentive it does highlight an avenue for transitioning to a greener, ZNC built environment through municipalities setting strong examples.

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5 https://www.globalcovenantofmayors.org/about/
6 www.seattle.gov/environment/climate-change/climate-planning/climate-action-plan
8 http://www.shorelinewa.gov/home/showdocument?id=14091
Beyond Climate Benefits

10 Additional Benefits of Zero Net Carbon Building

Beyond combating climate change and global warming, there are numerous benefits and advantages to ZNC buildings.¹⁰

For future inhabitants:
1. ZNC buildings promote comfort, health, and wellbeing of occupants, which is attractive to future inhabitants.
2. ZNC buildings save money in the long run from reduced energy consumption and result in lower utility bills.
3. ZNC buildings are more resilient during emergencies, such as power outages, than traditional buildings because they conserve building heat.

For project stakeholders:
4. Building ZNC improves or maintains competitive advantages as a developer, construction business or designer.
5. ZNC buildings utilize passive strategies that add to the attractiveness of a building. Puget Sound Energy and other utilities offer incentives for building above existing energy codes.

*Martha Rose, president of Martha Rose Construction,*

"the market-rate net-zero homes I build give me a selling edge. My home buyers will experience fresh air and comfort that exceeds most expectations. To top it off, instead of paying an electrical bill, the utility will pay them."

For the community as a whole:
6. ZNC buildings promote learning and productivity. Anyone involved in the design, construction, operations or maintenance timelines serves to gain valuable knowledge and experience about ZNC building practices. People who visit the building will learn how to reduce their energy consumption and develop an interest in learning more about green buildings (assuming educational information is provided).

For municipalities:
7. ZNC buildings reduce GHG emissions, which is critical for limiting global warming.
8. Happier, healthier, less energy cost-burdened residents.
9. Adherence to climate action plan goals.
10. “Buildings have the ability to help clean up the transportation sector through renewable electricity production.”¹¹

¹⁰http://www.parkin.ca/blog/four-benefits-of-net-zero-energy-building/

Justice and Social Equity

Zero net carbon residences can uniquely deliver affordable and healthy housing solutions given their low cost of ownership (owners or tenants will have small to no energy bills) and their high quality of construction. Yet in order to deliver the benefits of ZNC for all communities, three key issues must be prioritized.

- Addressing the loss of affordable housing that continues to accelerate in urban centers, and the implications for social equity in people’s access to high-quality, healthy housing.
- Scaling up financing and technology solutions that enable ZNE to be more rapidly developed (in both existing and new buildings) and therefore accessible in these markets.
- Inspiring communities to adopt an ZNE approach even if it seems unconventional and cost prohibitive at first.”

Zero Net Carbon Market Development

Design and construction of ZNC projects may be viewed as more costly to project stakeholders, but with the right project team the perceived costs of going beyond energy code can be dramatically reduced and often will remain within the normal project cost margins.13

- Incentives help to develop the market by giving projects an edge and by spurring projects that are “setting the bar” for efficient, quality construction
- Technological advances are reducing construction time and cost
- Owners understanding O & M and ROI during the design and construction

In recent years, the added costs have been continuing to decline, and when we consider energy improvements part of an overall process, we often find that the added costs are balanced by long-term savings.

Mandates vs. Incentives

There are two main approaches municipalities can use to develop the market for ZNC buildings. One method is incentives and the other is mandates. Mandates, while potentially useful, can be difficult to pass legislatively if there is strong resistance, and they can also impose significant costs to construction businesses that are not ready for large jumps in industry standards. Using incentives is often the easiest way to push market toward energy efficiency and ZNC buildings. As the industry develops the tools and adopts to the technology required to build ZNC buildings, passing mandates related to ZNC building will be more feasible.


13 https://www.usgbc.org/articles/green-building-costs-and-savings
Partnerships & Certification Programs

Certification programs have been pushing construction and design teams to build beyond code for a long time. Many ZNC buildings are certified in some manner, highlighting their ultra-high energy efficiency, air tightness, thick insulation, and use of on or off-site renewable generation. Green building certification programs and local governments share many interests when it comes to private development and green building—from better resource management to improved indoor air quality, lower building operating costs, reduced infrastructure strain, job creation, and local economic development. To actualize these goals, and to do so efficiently, certification programs and local governments are forming partnerships and finding best practices for working together. The design of each partnership is closely aligned with the particular jurisdiction and addresses local factors such as:

- Climate, sustainability, energy objectives
- Current and projected economic outlook
- Development activity and building stock
- Scope of desired program
- Budget, resources, and stakeholders
- Realm of prospective partners

Some municipalities have developed green building incentive programs that utilize certification programs such as Built Green, LEED, Passive House, and the Living Building Challenge. This allows municipalities to reward building design and construction teams for building above code through an incentive program that is not too troublesome to manage.

Energy Modeling

Energy modeling software is used to predict energy use in a building before it is constructed and occupied. Some programs like Passive House and Built Green require energy modeling for certification. There are multiple energy modeling applications and it is important that the chosen software and protocol for using it do a good job of gauging energy consumption. The certifications listed here have comprehensive modeling guidelines.

Third-Party Verification

Third-party verification (TPV) is used to ensure that a building meets certain requirements of a program through the perspective of a trained, third-party consultant. TPV is a trusted method that adds a layer of certainty to thorough implementation of a program’s protocols.
### Relevant Certification Programs

**Built Green (BG)**
Built Green is a holistic green home certification program of the Master Builders Association of King and Snohomish Counties. In addition to certifying green homes, remodels, apartments, and communities, the program hosts a membership network of companies and individuals involved in the green building industry, and researches and markets the human and environmental benefits of green building. The program is local to Washington state and currently certifies 800-1,100 projects each year in the Puget Sound region. All types of residential projects (single-family, townhome, multifamily, mixed use, and remodel) are eligible for certification. Built Green does not certify projects that are solely commercial. Projects certified by Built Green are third-party verified.

This toolkit recommends Built Green 5-Star and Emerald Star certifications as well as its Net Zero Energy label as these levels will achieve ZNC or Shift Zero’s definition of highly energy efficient, the outcomes this toolkit is focused on. While Built Green 4-Star can achieve this high level of energy efficiency, it does not necessarily.

**Leadership in Energy and Environmental Design (LEED)**
LEED projects earn points by adhering to prerequisites and credits across nine measurements for building excellence. Prerequisites are required elements, or green building strategies, that must be included in any LEED certified project. Credits are optional elements, or strategies that projects pursue to gain points toward LEED certification. Projects can earn recognition at Certified, Silver, Gold, and Platinum levels in order of the most points needed to achieve certification at that level; Platinum is the most difficult to achieve. LEED Platinum is the level this toolkit recommends as an incentive basis as this level generally comes close to or achieves ZNC or highly energy efficient. LEED Gold can get to highly energy efficient, but overall it is not as stringent as Built Green’s 5-Star or Passive House certification in terms of energy efficiency.

**International Living Future Institute (ILFI)**
The following ILFI certifications are recommended by this toolkit as ZNC certifications:

**Net Zero Carbon Building Certification (new construction and renovations)**
This certification requires that one hundred percent of the project’s energy use must be offset by on- or off-site renewable energy on a net annual basis. Projects must achieve a level of energy efficiency as established by the ILFI (this varies from Shift Zero’s definition of energy efficiency). New projects may not include combustion.

**Net Zero Energy Building (NZEB) (new and renovations)**
One hundred percent of the building’s energy needs must be supplied by on-site renewable energy on a net annual basis. No combustion is allowed.

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Living Building Challenge (LBC) (new residential and commercial)
The LBC calls for the creation of building projects that generate all of their own energy with renewable resources, capture and treat all water onsite without the use of chemicals, promote health, remain free of toxins, and operate efficiently with maximum beauty while addressing equity. LBC projects require a twelve-month performance period and are audited by a third-party before they can receive certification.

Petal Certification\(^{15}\)
Petal Certification requires the achievement of at least three of the seven Petals of the LBC, one of which must be the Water, Energy, or Materials Petal. Imperatives 01 - Limits to Growth, and 20 - Inspiration + Education, are also required. This toolkit, with its focus on energy, only recommends incentivizing this certification level if the Energy petal is chosen.

Through optimizing building envelopes via design and implementation and conscientiously accounting for building equipment, Passive House methodology has an established record of delivering buildings of all types which are able to minimize energy consumption while maximizing comfort and quality. Passive House certified buildings are able to deliver structures with energy consumption of:
• 70-80% less than existing buildings; and
• 50% less than current Washington State Energy code.
These reductions are achieved before the inclusion of any renewable energy systems, allowing owners and operators to achieve ZNC status with significantly smaller renewable energy production.

The Passive House approach is based on modeled limits to thermal conditioning and total building energy. Additionally, construction must meet quality assurance benchmarks, including air-tightness levels significantly more stringent than current WA State Energy Code.

Two Passive House certification programs exist, one administered by Passive House Institute US (PHIUS) in Chicago, Illinois,\(^{16}\) and the other administered by Passive House Institute (PHI) in Darmstadt, Germany.\(^{17}\) Currently, PHIUS certification requires more substantive third-party verification for on-site construction quality.

\(^{15}\) https://living-future.org/contact-us/faq/#living-building-challenge-lbc
\(^{17}\) https://www.passivehouse-international.org/index.php?page_id=78
Incentive Types and Recommendations

There are many green building incentives used by various municipalities. They can be put into five categories of incentives: land use, expedited processes, technical assistance, marketing and publicity, and financial incentives.

Expedited Processes
Expedited processes refers to incentives that allow projects to have their plans and or permits reviewed more quickly and/or inspections scheduled sooner than business as usual. Another form of this incentive can be assigning a green permit point-person to the project as soon as it is brought to the municipality’s attention. That person is responsible for making sure the project is following requirements and responding to any concerns or questions the project owners have. Some municipalities have revised their permitting timelines and fee schedules (or offered rebates) to encourage integrated design processes, and in doing so they reward practices known to deliver better design execution and performance outcomes, while promoting efficient and cost-effective adoption of ZNC buildings. This incentive has the largest impact in locations where there are long wait periods involved in the permitting and plan review processes.

Land Use Incentives
Land use incentives allow for exemptions and bonuses from the base zone and code laws. These incentives can vary significantly and include exemptions for overhanging encroachments and bonuses in height, floor area ratio (FAR), density, or lot coverage. Additional incentives may reduce specific code requirements such as parking spots per unit. Frequently, density and floor area ratio (FAR) bonuses are used to encourage developers to build extra units in multifamily apartment or condominium projects and are justified where the projects are being built (urban growth areas) because the projects contain affordable housing units or because they are energy-efficient, green projects.

Technical Assistance
Technical assistance incentives provide a means for industry professionals to learn how to build towards ZNC while working with people that will be checking their designs and construction. This can be a major hurdle for the industry and some municipalities have technical advisory groups that can assist project teams on a variety of aspects. Technical assistance can dramatically shorten the time needed to correct structural plans.

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18 If your municipality lacks the specific knowledge to provide technical assistance for projects, contact Shift Zero and we will provide you with resources and direct technical assistance training.
Marketing Assistance, Recognition, and Publicity Incentives

These incentives can be implemented in a wide variety of ways, however, the goal of marketing assistance, recognition, and publicity incentives is to broadcast to potential clients and the public the involved company’s role in building and designing green buildings. This can have a significant impact for contractors and developers if they are new to the area, adding green or ZNC building to their portfolio, or if they are branching out and building different types of buildings than they typically do.

Financial Incentives

Financial incentives can involve either giving project stakeholders money through direct grants, or subsidizing their costs. Because most municipalities do not have money to offer direct grants, subsidizing upfront costs by reducing permit fees is the most common method for municipalities to provide financial incentives. A well-designed incentive program will leverage existing utility-based incentive programs in order to decrease upfront costs.

While there are municipalities and states outside of Washington that offer financial support to high efficiency builders in the form of grants or subsidies, in Washington state there currently are no financial incentives that offer support to builders.

Zero Net Carbon Incentive Recommendations

Shift Zero has analyzed various markets to determine incentives that are more likely to be effective market drivers. Shift Zero has developed three matrices for urban, suburban and rural markets, showing incentive opportunities with two main tiers, Highly Energy Efficient and ZNC. Incentives also vary depending on the building type, from residential or mixed use. We have also focused on new construction, although have outlined some opportunities for renovations that will be 30% above 2018 Washington State Energy Code. We have included most of the certification programs that meet these targets and are active in Washington. These tiers are aimed at getting projects teams to take their project further toward ZNC.

Green priorities for a municipality are likely to be unique beyond market. We recognize that some municipalities have more or less resources than others and encourage each municipality use these are guidelines and develop a program to drive market transformation and meets their goals. Salmon Safe certification for example could complement energy efficiency to meet a cities low impact development goals. When possible, we encourage offering additional incentives for the deepest green buildings.

Deepest Green: Built Green Emerald Star, International Living Future Institute’s Living Building Challenge

A breakdown of incentives by type is available as well as specific recommendations in the appendix of this toolkit. Also available is a draft Deep Green Incentive Program Ordinance to streamline the adoption process for municipalities. Shift Zero will work with municipalities to help identify what incentives are best suited for each unique area.

19 For example, in Brussels, municipalities/states have given direct financial support to builders in the form of grants or subsidies, up to $10/sq ft to offset early design and development costs.
Making Incentives Work

One-size incentives inherently will not fit all locations. Population, common building types, building production rate, market demand, and more differentiate municipalities considerably. Incentives in rural, suburban, and urban municipalities will need to be tailored to meet the needs of their market to be effective. Shift Zero suggests building an incentive program with concrete plans for the following:

Monitor your program
Incentive program design can be an iterative process. Monitor the effectiveness of specific incentives over time to better understand what the incentives are doing. Engage with stakeholders in the local construction industry and find out what entices them to build ZNC.

Monitor your projects
Include monitoring of the incentivized projects to further understand successes in the field and areas which need further development. This may require cooperation with local utilities and green building programs such as Built Green, ILFI, LEED, PHIUS, and others.

Promote your incentive program
Promote incentives to industry professionals as well as the public to ensure they know about the program and the incentives. Make sure people at relevant city departments know about the incentives, how they work, and when to promote them.

Update your incentive program
Periodically, reevaluate incentive performance. If the market has shifted and the vast majority of building production is ZNC-ready, then perhaps examine retiring the incentives in whole or in part or increase the certification level necessary to obtain the incentives. Note that removing incentives before ZNC buildings become the standard could lead to momentum loss. Shift Zero recommends reviewing the incentive program at least twice during the first two years, and then yearly afterward, subject to the pace of the market shift toward ZNC.

Consider a pilot program
There may be small jurisdictions that would rather experiment with a project or two before committing to a long term implementation strategy. These small jurisdictions have the opportunity to implement incentives on a smaller scale and evaluate the pilot’s success before entering into long term commitments.
Enforcing Building Certification

In order for incentives to have the desired environmental and social impact, there needs to be assurance that those receiving incentives are meeting their obligations. Shift Zero recommends limiting penalty amounts to one to four percent of the building value, which is enough to make non-compliance undesirable, but not so much that it scares builders from attempting to certify their project under an incentive program. Making the fee too large will be disincentive for projects, so preventing the punishment from being larger than five percent of property value is very important if the program is to attract projects.

For incentives involving fee waivers is to add into the program language a section that allows for retroactively charging permit, inspection, and impact fees on buildings that fail to meet their intended certificate. These fees may be enforced in different ways depending on whether the project goes down a prescriptive building path that uses modeling or a performance path that requires at least a year to guarantee that zero net energy is achieved.

Federal, State and Utility Incentives

Federal and State incentives can vary significantly and often utilize tax credits, deductions, and other incentives.

Investor-owned utilities in the Pacific Northwest are mandated by the state Energy Independence Act (I-937) to acquire cost-effective conservation, which allows significant rebates and discounts on energy efficient appliances and fixtures. These energy efficiency programs provide an opportunity for cities to amplify utility incentives with green building program incentives. For example, Puget Sound Energy (PSE) at the beginning of 2018 - began offering new construction incentives of up to $2,000 per residential house if certain appliances, insulation quality/quantity, faucets, shower nozzles, or building methods are used during construction projects. To apply for the PSE’s incentives, projects must use REM-rate energy modeling.\(^\text{20}\)

If a building is highly energy efficient, make sure the builder knows about federal, state, and utility incentives including the local policy for net-metering for distributed generation (this applies to Passive House especially). The website DSIRE, the Database of State Incentives for Renewables & Efficiency, is a helpful for finding any applicable incentives from federal, state, and utility sources.\(^\text{21}\)

There are some incentives that can be applied by the municipality, but only if the local utility is controlled by the municipality. These incentives would be strictly financial and could dramatically impact a project’s cost. An example is reducing water or electric hookup and additional transformer fees for multifamily or mixed use buildings - if the building is ZNC-ready - but these are not typical. Rebates or faster service are usually more feasible options.

\(^\text{20}\) For more information check it out at http://www.remrate.com/
\(^\text{21}\) http://programs.dsireusa.org/system/program?fromSir=0&state=WA
Code Innovation

Innovation in ZNC building is the reason that we now have cost-effective means to build and retrofit buildings for zero carbon at scale. Architects, engineers and builders are constantly pushing the envelope with new designs, materials and technology to make high-performance building more achievable and affordable. While building codes and zoning regulations are adapting to accommodate and encourage greater energy efficiency, it’s not enough to keep up with the pace of innovation in high-performance, nor to meet energy use reductions mandated by state law. This has created persistent barriers to innovation that can slow or even stop the best new technology from being adopted broadly. As a result, it takes a concerted effort for cities and counties to encourage high-performance building as part of their climate action plans.

Fortunately, almost every code contains specific language to ensure that a path for approving innovations remains open, stating that the code “is not intended to prevent the use of alternative materials and methods.” Jurisdictions use variety of alternative compliance paths to approve high performance building innovations, when a design, material or technology doesn’t fit the normal prescriptive path to a permit. Although every project is different, previous use of these alternatives can provide insight and/or precedent to guide code officials and policy makers to ensure that beyond-code innovations does not get stifled.

Building Innovations Database

The Northwest EcoBuilding Guild has created the Building Innovations Database\(^{22}\) to help code officials, the building industry and the public share information about successfully permitted high-performance green building innovations. The Database holds dozens of in-depth case studies with links to source documents including code language, ordinances and supporting data which code officials can learn from and use to support approval of similar projects. It also has in depth profiles on a variety of innovative codes, policies and incentives that have been adopted by jurisdictions seeking to accelerate adoption of high-performance green building.

\(^{22}\)http://www.ecobuilding.org/code-innovations
Glossary of Acronyms

**CAP**: Climate Action Plan. Climate action plans map out future guidelines, steps, actionable items, indicators, and other tasks that should be pursued in order to reduce greenhouse gas emissions in an area, usually specified by what group made the climate action plan.

**EE**: Energy Efficiency.

**FAR**: Floor Area Ratio. The FAR is the amount of floor area of a building compared to the area of the lot. If you have a lot size of 1,000 square feet, and a building on the lot that is 2,000 square feet, it has an FAR of 2. FAR bonuses allow larger and or taller buildings to be built in order to incentivize certain aspects of a building, such as affordable housing, or sustainable building design.

**GHG**: Greenhouse gases. Greenhouse Gas emissions reductions are critical to climate action plans and preventing the climate from warming beyond 1.5 degrees C.

**PSE**: Puget Sound Energy.

**ZNC**: Zero Net Carbon. See terms for definition of Zero Net Carbon.
**Terms**

**Integrated Design Process:** As it pertains to green buildings, an integrated design process brings everyone who will be involved in the project, from the design phase to construction to the actual day-to-day operations, together right from the start of the project to collaborate on how the building should be designed and constructed.\(^\text{24}\)

**Zero Net Carbon:** “A ZNC building (ZNC) is defined as a highly energy efficient building that produces on-site, or procures, off-site, enough carbon-free renewable energy to meet building operations energy consumption annually. To reach ZNC, these buildings first maximize energy efficiency, then maximize on-site renewable energy generation as practical, and then procure off-site renewable energy that is additional, local, equitable, and legally assigned to the building.” \(^\text{25}\)

**Highly Energy Efficient:** Shift Zero’s understanding of what energy efficiency means for ZNC Buildings aligns with Washington State’s mandate to reduce energy use new buildings by 70% by 2031 (compared to a 2006 baseline). For most buildings, this means a site Energy Use Intensity (EUI) of 15-25 kBtu/sf/yr, with the specific target varying depending on building type. \(^\text{26}\)

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\(^\text{25}\) https://shiftzero.org/what-is-zero-net-carbon-building/ this definition originally came from this white paper from Architecture 2030 in collaboration with RMI and NBI

\(^\text{26}\) https://zeroenergyproject.org/build/twelve-steps-affordable-zero-energy-home-construction-design/use-sun-renewable-energy/ This site uses the term net zero energy, whereas Shift Zero uses ZNC to be more inclusive of off-site renewables that are additional while being tied to the property.
Additional Resources

Green Building Ordinances
Examples – King County’s website provides in-state and out-of-state examples of green building ordinances, policies, and resolutions.

Washington State Information – Relevant Building Codes and Incentives
Code Innovations Database - Provides up-to-date information, analysis, and case studies on sustainable building and code compliance.
King County Incentives - A comprehensive list of incentives related to sustainable building, organized by city.
Regional Code Collaborative from King County-Cities Climate Collaboration (K4C) - A collective of King County cities focused on increasing the effectiveness of local government climate action.

Green Building Certification Checklists
Built Green - Built Green is a green home certification program which ensures sustainable residential living spaces within King and Snohomish Counties.
IFLI Zero Carbon Certification and IFLI Zero Energy Certification - Explains the process of certification. The International Living Future Institute (IFLI) does not focus as much on how a building is constructed, so long as it is energy efficient and net zero, certified documentation will be provided.
Living Building Challenge - The LBC Standard is the central document teams use as a guide toward project certification through the International Living Future Institute.
Leadership in Energy and Environment Design (LEED) - A checklist for the most widely used green building certification system in the world.
Passive House Institute U.S. (PHIUS) and Checklist - Details their high performance building standards relating to operating efficiency within the U.S.
PHI International - Explains their global standards on building certification, which is focused on operation-al efficiency of buildings worldwide.

Rocky Mountain Institute/New Buildings Institute Architecture 2030
Getting to Zero: Status Update - Lists and summarizes the growth and trends of close to 500 zero energy projects in the U.S. and Canada.
NW Zero Energy Watchlist - Tracks zero energy buildings based on data gathered from the New Buildings Institute.
Rocky Mountain Institute Home Builder’s Insight - A look into how NZE homes can be successful and occupy a greater portion of the housing market.

Infographics
Types of Green Buildings - How a highly energy efficient building can use and produce energy.

Useful reads
RMI: Looking Beyond California: Zero Energy Housing in the U.S. - A glimpse at the success of NZE homes in the U.S.
Appendix

A. Incentive Opportunities by type

B. Urban Incentive Recommendations

C. Suburban Incentive Recommendations

D. Rural Incentive Recommendations

E. Draft Ordinance of Deep Green Incentive Program (DGIP)
Appendix A.
Incentive Recommendations

Shift Zero has worked with developers, designers, contractors, utilities and dozens of municipalities to identify the most effective incentives for various markets.

<table>
<thead>
<tr>
<th>Expedited Processes</th>
<th>Land Use/Code Departures</th>
<th>Technical Assistance</th>
<th>Marketing Assistance, Recognition, and Publicity</th>
<th>Financial Incentive</th>
</tr>
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<tbody>
<tr>
<td>Full Fast Track: priority intake appointment, expedited plan review, permit, corrections, and inspections</td>
<td>Reduction of parking requirements (up to 100% of parking requirements if sufficient biking storage and frequent transit is nearby)</td>
<td>Initial integrated design assistance</td>
<td>Work with local non-profit to provide marketing assistance (may help with setting up some of the other marketing assistance/recognition/publicity incentives)</td>
<td>Reduction of building permit fees</td>
</tr>
<tr>
<td>Partial Fast Track: expedite some of plan review, permitting, corrections, but maybe not inspections</td>
<td>Density bonus (up to 50%)</td>
<td>Specific design assistance</td>
<td>Work with building owners to sponsor occasional tours (this could be required by city contract if needed)</td>
<td>Reduction of inspection fees</td>
</tr>
<tr>
<td>Expediting a process: Expediting just one aspect of the permit-inspection process</td>
<td>Floor-Area-Ratio (FAR) (up to 3.0)</td>
<td>Whole-process design assistance (goes beyond either Initial or specific aspect assistance)</td>
<td>Brochure of ZNC buildings in city limits/region</td>
<td>Reduction of system development charges</td>
</tr>
<tr>
<td>Point Person: Assigning a point person to handle all issues and provide knowledge of all available incentives to project stakeholders</td>
<td>Setback Allowances (up to all of the way to the lot edge)</td>
<td>Code review committee (Makes sense in places where project owners are pushing boundaries)</td>
<td>Brochure of ZNC buildings in city limits/region</td>
<td>Reduction of stormwater charges (if applicable)</td>
</tr>
<tr>
<td></td>
<td>Allowances for solar resource optimization: Variances such as added shed/gable/roof height and items extending over the edge of the roof, to allow for optimization of available solar resources **</td>
<td>Builder, verifier and/or supply chain education.</td>
<td>Yearly/Monthly/Weekly newsletter from the city (weekly or monthly if there are enough green Buildings)</td>
<td>“Reduction of impact fees- Transportation fees (public streets and roads), Park fees (publicly owned parks, open space, and recreation facilities)”</td>
</tr>
<tr>
<td></td>
<td>Water catchment/treatment system code departures</td>
<td></td>
<td>Publish case study online (as a municipality or in partnership with the certification program.)</td>
<td>Direct grants</td>
</tr>
<tr>
<td></td>
<td>Reduction of green space requirements (up to all of the green space can be built on)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix B

### Urban Incentive Recommendations

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Type of Incentive</th>
<th>Highly Energy Efficient (ZNC not required as part of the certification)</th>
<th>ZNC (required as part of the certification)</th>
<th>Deepest Green (holistic green building beyond carbon)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Residential</td>
<td>Expedited Process</td>
<td>Expedite plan review, permitting, inspections (maybe don't have a point person)</td>
<td>Have a point person for project stakeholders to contact so that processes can be streamlined as much as possible</td>
<td></td>
</tr>
<tr>
<td>Urban Multifamily</td>
<td>Expedited Process</td>
<td>Expedite plan review, permitting, inspections, assign point person at beginning of design phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Residential</td>
<td>Land Use</td>
<td>Eliminate Parking requirements if near transit, allow setback and design departures. Allow ADUs/DADUs beyond current standard regulations.</td>
<td>Eliminate Parking requirements if in dense areas near transit, FAR bonus up to 1.5, density bonus, and setback/design departures. Allow ADUs/DADUs beyond current standard regulations</td>
<td></td>
</tr>
<tr>
<td>Urban Residential</td>
<td>Technical Assistance</td>
<td>Offer initial, specific aspect, or whole process assistance depending on the project owner(s)</td>
<td>Whole-process design assistance</td>
<td></td>
</tr>
<tr>
<td>Urban Residential</td>
<td>Marketing Assistance, Recognition, and Publicity</td>
<td>Publish case study online (as a municipality or in partnership with the certification program), dedicate some city resources toward advocating for media coverage, post on social media about projects, put out signs that emphasize the energy efficiency of the building during construction, plan tours (or require them as part of receiving these incentives), create an award program for green buildings that highlights designer/contractor/project-owners in a newsletter or some other way, develop collateral for the businesses involved that is also used in media posts, case study, award, promoting a tour, a plaque for the home upon completion, and more.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Residential</td>
<td>Financial Incentive</td>
<td>Waive up to 80% applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td></td>
</tr>
<tr>
<td>Urban Multifamily</td>
<td>Land Use</td>
<td>Reduce Parking Requirements up to 100% if near transit and if adequate storage for bikes is available, allow design departures, Density bonus up to 35%, FAR 1.0. Allow ADUs/DADUs beyond current standard regulations</td>
<td>Reduce Parking Requirements up to 100% if near transit and if adequate storage for bikes is available; design review departures, Density Bonus 50%, FAR 2.0. Allow ADUs/DADUs beyond current standard regulations</td>
<td></td>
</tr>
<tr>
<td>Urban Multifamily</td>
<td>Technical Assistance</td>
<td>Whole-process design assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Multifamily</td>
<td>Marketing Assistance, Recognition, and Publicity</td>
<td>Publish case study online (as a municipality or in partnership with the certification program), dedicate some city resources toward advocating for media coverage, post on social media about projects, put out signs that emphasize the energy efficiency of the building during construction, plan tours (or require them as part of receiving these incentives), create an award program for green buildings that highlights designer/contractor/project-owners in a newsletter or some other way, develop collateral for the businesses involved that is also used in media posts, case study, award, promoting a tour, a plaque for the building upon completion, and more.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Multifamily</td>
<td>Financial Incentive</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* If possible, explore opportunities for additional incentives for Deepest Green Building
<table>
<thead>
<tr>
<th>Type of Municipality</th>
<th>Type of Incentive</th>
<th>Highly Energy Efficient (ZNC not required as part of the certification)</th>
<th>ZNC (required as part of the certification)</th>
<th>Deepest Green (holistic green building beyond carbon)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Commercial</td>
<td>Expedited Process</td>
<td>Expedite plan review, permitting, inspections, assign point person at beginning of design phase</td>
<td>Expedite plan review, permitting, inspections, assign point person at beginning of design phase</td>
<td>Expedite plan review, permitting, inspections, assign point person at beginning of design phase</td>
</tr>
<tr>
<td></td>
<td>Land Use</td>
<td>FAR bonus up to 1.5, design departures (solar, green roof/wall, overhang), must offer sufficient bike parking in order for parking requirements to be waived</td>
<td>FAR bonus up to 1.5, design departures (solar, green roof/wall, overhang), must offer sufficient bike parking in order for parking requirements to be waived</td>
<td>FAR bonus up to 1.5, design departures (solar, green roof/wall, overhang), must offer sufficient bike parking in order for parking requirements to be waived</td>
</tr>
<tr>
<td></td>
<td>Technical Assistance</td>
<td>Offer initial, specific aspect, or whole process assistance depending on the project owner(s)</td>
<td>Whole-process design assistance</td>
<td>Whole-process design assistance</td>
</tr>
<tr>
<td></td>
<td>Marketing Assistance, Recognition, and Publicity</td>
<td>Publish case study online (as a municipality or in partnership with the certification program), dedicate some city resources toward advocating for media coverage, post on social media about projects, put out signs that emphasize the energy efficiency of the building during construction, plan tours (or require them as part of receiving these incentives), create an award program for green buildings that highlights designer/contractor/project-owners in a newsletter or some other way, develop collateral for the businesses involved that is also used in media posts, case study, award, promoting a tour, a plaque for the home upon completion, and more.</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
</tr>
<tr>
<td></td>
<td>Financial Incentive</td>
<td>Reduce or waive up to 80% of all fees (development, permit, transportation, park, stormwater if applicable)</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
</tr>
<tr>
<td>Urban Mixed Use</td>
<td>Expedited Process</td>
<td>Expedite plan review, permitting, inspections, assign point person at beginning of design phase</td>
<td>Expedite plan review, permitting, inspections, assign point person at beginning of design phase</td>
<td>Expedite plan review, permitting, inspections, assign point person at beginning of design phase</td>
</tr>
<tr>
<td></td>
<td>Land Use</td>
<td>up to 35% parking reductions, if sufficient bike racks and EV charging spots are available, FAR bonus up to 1.0, Allow ADUs/DADUs beyond current standard regulations</td>
<td>up to 50% parking reductions if sufficient bike/EV storage/parking, FAR bonus up to 2.0  Allow ADUs/DADUs beyond current standard regulations</td>
<td>up to 50% parking reductions if sufficient bike/EV storage/parking, FAR bonus up to 2.0  Allow ADUs/DADUs beyond current standard regulations</td>
</tr>
<tr>
<td></td>
<td>Technical Assistance</td>
<td>Whole-process design assistance</td>
<td>Whole-process design assistance</td>
<td>Whole-process design assistance</td>
</tr>
<tr>
<td></td>
<td>Marketing Assistance, Recognition, and Publicity</td>
<td>Publish case study online (as a municipality or in partnership with the certification program), dedicate some city resources toward advocating for media coverage, post on social media about projects, put out signs that emphasize the energy efficiency of the building during construction, plan tours (or require them as part of receiving these incentives), create an award program for green buildings that highlights designer/contractor/project-owners in a newsletter or some other way, develop collateral for the businesses involved that is also used in media posts, case study, award, promoting a tour, a plaque for the building upon completion, and more.</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
</tr>
<tr>
<td></td>
<td>Financial Incentive</td>
<td>Reduce or waive up to 80% of all fees (development, permit, transportation, park, stormwater if applicable)</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
</tr>
</tbody>
</table>

*If possible, explore opportunities for additional incentives for Deepest Green Building*
## Appendix C
### Suburban Incentive Recommendations

### Building Type and Incentive Types

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Type of Incentive</th>
<th>Highly Energy Efficient (ZNC not required as part of the certification)</th>
<th>ZNC (required as part of the certification)</th>
<th>Deepest Green (holistic green building beyond carbon)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Suburban Residential</strong></td>
<td>Expedited Process</td>
<td>Partial Fast Track</td>
<td>Full fast track while providing a point person</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Land Use</td>
<td>Setback allowances; Allow ADUs/DADUs beyond current standard regulations</td>
<td>Setback allowances to property lines, water catchment/treatment departsures, Allow ADUs/DADUs beyond current standard regulations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical Assistance</td>
<td>Whole-process design assistance (depending on who the project owners are)</td>
<td>Whole-process design assistance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marketing Assistance, Recognition, and Publicity</td>
<td>Work with local non-profits, schedule tours, create marketing material that can be put on city sponsored brochure/tour/social media posts/monthly newsletter/sign sat the construction site, a plaque for the building upon completion, and create an award system if desired</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial Incentive</td>
<td>Waive up to 80% applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td></td>
</tr>
<tr>
<td><strong>Suburban Multifamily</strong></td>
<td>Expedited Process</td>
<td>Full Fast track for buildings beyond quadplexes while alsonproviding a point person (targeting apartment/condo complexes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Land Use</td>
<td>Setback allowances, FAR bonus up to 1.0. Offer parking reductions up to 35%</td>
<td>Setback allowances to property lines. FAR bonus up to 2.0. Offer parking reductions up to 50% and higher if biking storage provided</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical Assistance</td>
<td>Whole-process design assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marketing Assistance, Recognition, and Publicity</td>
<td>Work with local non-profits, schedule tours, create marketing material that can be put on city sponsored brochure/tour/social media posts/monthly newsletter/signs at the construction site, a plaque for the building upon completion, and create an award system if desired</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial Incentive</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suburban Commercial</strong></td>
<td>Expedited Process</td>
<td>Full fast track while providing a point person</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Land Use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical Assistance</td>
<td>Whole-process design assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marketing Assistance, Recognition, and Publicity</td>
<td>Work with local non-profits, schedule tours, create marketing material that can be put on city sponsored brochure/tour/social media posts/monthly newsletter/signs at the construction site, a plaque for the building upon completion, and create an award system if desired</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial Incentive</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suburban Mixed Use</strong></td>
<td>Expedited Process</td>
<td>Full fast track while providing a point person</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Land Use</td>
<td>FAR bonus up to 1.0. Allow ADUs/DADUs beyond current standard regulations</td>
<td>FAR bonus up to 2.0. Setback allowances, height bonuses, right-of-way allowances for solar panels. Allow ADUs/DADUs beyond current standard regulations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical Assistance</td>
<td>Whole-process design assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marketing Assistance, Recognition, and Publicity</td>
<td>Work with local non-profits, schedule tours, create marketing material that can be put on city sponsored brochure/tour/social media posts/monthly newsletter/signs at the construction site, a plaque for the building upon completion, and create an award system if desired</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial Incentive</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* If possible, explore opportunities for additional incentives for Deepest Green Building
## Appendix D
### Rural Incentive Recommendations

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Type of Incentive</th>
<th>Target Certification for ZNC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Residential</td>
<td>Expedited Processes</td>
<td>Highly Energy Efficient (ZNC not required as part of the certification)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEED Platinum, Passive House, BG 5-Star</td>
</tr>
<tr>
<td></td>
<td>Land Use</td>
<td>Setback allowances. Water catchment/treatment departures. Allow ADU/DADUs beyond current standard regulations</td>
</tr>
<tr>
<td></td>
<td>Technical Assistance</td>
<td>Whole-process design assistance</td>
</tr>
<tr>
<td></td>
<td>Marketing Assistance</td>
<td>Offer tours, recognition, a plaque for the building upon completion, highlight in newsletters and online websites/social media</td>
</tr>
<tr>
<td></td>
<td>Financial Incentive</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
</tr>
<tr>
<td>Rural Commercial</td>
<td>Expedited Processes</td>
<td>Highly Energy Efficient (ZNC not required as part of the certification)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEED Platinum, Passive House, BG 5-Star</td>
</tr>
<tr>
<td></td>
<td>Land Use</td>
<td>Setback Allowances; Allowances for solar resource optimization; FAR bonus up to 1.0</td>
</tr>
<tr>
<td></td>
<td>Technical Assistance</td>
<td>Whole-process design assistance</td>
</tr>
<tr>
<td></td>
<td>Marketing Assistance</td>
<td>Recognize and highlight the building (and its stakeholders) when it first opens; put up signs on the construction sign highlighting its energy efficiency; a plaque for the building upon completion, use social media to assist in marketing efforts (if possible).</td>
</tr>
<tr>
<td></td>
<td>Financial Incentive</td>
<td>Waive up to all applicable fees (development, permit, transportation, park, stormwater if applicable)</td>
</tr>
</tbody>
</table>

* If possible, explore opportunities for additional incentives for Deepest Green Building

* ILFI's LBC
* PHIUS+ Source Zero
* BG Emerald Star
* BG Net Zero Energy Label
* PHM Petal Recognition (Energy Petal)
* BG Zero Energy, Zero Carbon, or Petal Recognition (Energy Petal)
* PHIUS+ Source Zero
* BG Emerald Star
Appendix E

Deep Green Incentive Program (DGIP)
Example Legislation based on City of Shoreline’s DGIP.
Legislation has been modified from original for the purposes of this Toolkit.

Definitions.
Zero Net Carbon (ZNC) - refers to a highly energy efficient building that produces on-site, or procures, enough carbon-free renewable energy to meet building operations energy consumption annually.

Deep Green ZNC - refers to projects that achieve ZNC and water efficiency, indoor air quality, and/or materials efficiency that exceeds current Code and typical building practice.

Highly Energy Efficient – refers to buildings that are more energy efficient than required by code and are likely to achieve an Energy Use Intensity (EUI) of 15-25 depending on building type.

With regard to the Deep Green Incentive Program, this definition is divided into tiers based on certification programs as follows:

- Tier 1 (Deep Green ZNC) - International Living Future Institute’s (ILFI) Living Building Challenge™, or Built Green™’s Emerald Star certification
- Tier 2 (ZNC) - ILFI’s Petal Recognition™ utilizing the Energy Petal, or ILFI’s Zero Carbon certification, or ILFI’s Zero Energy certification, or Built Green’s Net Zero Energy Label; and

Preapplication meeting.
A preapplication meeting is required prior to submitting an application for any project requesting departures through the Deep Green Incentive Program to discuss why departures are necessary to achieve certification through International Living Future Institute, Built Green, US Green Building Council, or Passive House Institute US. A representative from the prospective certifying agency(ies) will be invited to the meeting, but their attendance is not mandatory. If the project would not otherwise require a preapplication meeting, the fee for the preapplication meeting will be waived.

Administrative Design Review (Type A).
1. Administrative Design Review approval of departures from the design standards in [APPLICABLE MUNICIPAL CODE] shall be granted by the Director upon their finding that the departure is:
   a) Consistent with the purposes or intent of the applicable subsections; or
   b) Justified due to unusual site constraints so that meeting the design standards represents a hardship to achieving full development potential.
2. Projects applying for the Deep Green Incentive Program by certifying through ILFI’s Living Building Challenge, ILFI’s Petal Recognition (Energy Petal), Built Green Emerald Star, LEED Platinum, Built Green 5-Star, Passive House, ILFI’s Zero Energy, or ILFI’s Zero Carbon program may receive departures from development standards under [APPLICABLE MUNICIPAL CODES] upon the Director’s finding that the departures meet A and/or B above, and as further described under Subchapter [X]. Submittal documents shall include proof of enrollment in the programs listed above.

20.50.400 Reductions to minimum parking requirements.
B. A project applying for parking reductions under the Deep Green Incentive Program may be eligible based on the intended certification. Reductions will be based on the following tiers:
   1. Tier 1 – up to 100% reduction in parking required;
   2. Tier 2 – up to 75% reduction in parking required;
   3. Tier 3 – up to 50% reduction in parking required.
C. In the event that the Director approves reductions in the parking requirement, the basis for the determination shall be articulated in writing.
D. The Director may impose performance standards and conditions of approval on a project, including a financial guarantee.
E. Reductions of up to 50 percent may be approved by the Director for the portion of housing providing low income housing units that are 60 percent of AMI or less as defined by the U.S. Department of Housing and Urban Development.

Subchapter [X]: 20.50.630 – Deep Green Incentive Program (DGIP)
A. Purpose. The purpose of this section is to establish an incentive program for Highly Energy Efficient, Zero Net Carbon, and Deep Green Buildings in [MUNICIPALITY]. The goal of the DGIP is to encourage development that meets the ILFI’s Living Building Challenge, ILFI’s Petal Recognition (Energy Petal), Built Green Emerald Star, LEED Platinum, Built Green 5-Star, Passive House, ILFI’s Zero Energy, or ILFI’s Zero Carbon program by:
   1. encouraging development that will serve as a model for other projects throughout the city and region resulting in the construction of more Highly Energy Efficient, Zero Net Carbon, and Deep Green Buildings; and
   2. allowing for departures from Code requirements to remove regulatory barriers.
B. Project qualification.
   1. Application requirements. In order to request exemptions, waivers, or other incentives through the Deep Green Incentive Program, the applicant or owner shall submit a summary demonstrating how their project will meet each of the requirements of the relevant certification program, such as including an overall design concept, proposed energy balance, and descriptions of innovative systems.
2. **Qualification process.** An eligible project shall qualify for the DGIP upon determination by the Director that it has submitted a complete application pursuant to [MUNICIPAL CODE Administrative Design Review], and has complied with the application requirements of this subsection.

3. The project must be registered with the appropriate third-party certification entity such as the International Living Future Institute, Built Green, US Green Building Council, or Passive House Institute US.

4. Projects requesting departures under the DGIP shall meet the current version of the appropriate certification program, which will qualify them for one of the following tiered packages of incentives:
   a. Tier 1 (Deep Green ZNC)- International Living Future Institute’s (ILFI) Living Building Challenge™, or Built Green™’s Emerald Star certification;
   b. Tier 2 (ZNC)- ILFI’s Petal Recognition™ utilizing the Energy Petal, or ILFI’s Zero Carbon certification, or ILFI’s Zero Energy certification, or Built Green’s Net Zero Energy Label; or

C. **Director’s determination.** All [MUNICIPALITY] Deep Green Incentive Program projects are subject to review by the Director under [MUNICIPALITY CODE]. Any departures from the [MUNICIPALITY] Development Code must be approved by the Director prior to submittal of building permit application.

D. **Incentives.** A project qualifying for the [MUNICIPALITY] Deep Green Incentive Program will be granted the following tiered incentive packages, based on the certification program for which they are applying:

1. A project qualifying for Tier may be granted a waiver of up to 100% City-imposed pre-application and permit application fees. A project qualifying for Tier 2 may be granted a waiver of up to 75% of City-imposed application fees. A project qualifying for Tier 3 may be granted a waiver of up to 50% of City-imposed application fees.
2. Projects qualifying for the DGIP may be granted a reduced Transportation Impact Fee based on a project-level Transportation Impact Analysis.
3. Departures from Development Code requirements when in compliance with [MUNICIPAL CODE].
4. Expedited permit review without additional fees provided in [MUNICIPAL CODE]

E. **Departures from Development Code requirements.** The following requirements must be met in order to approve departures from Development Code requirements:
   1. The departure would result in a development that meets the goals of the [MUNICIPALITY] Deep Green Incentive Program and would not conflict with the
health and safety of the community. In making this recommendation, the Director shall consider the extent to which the anticipated environmental performance of the building would be substantially compromised without the departures.

2. A Neighborhood Meeting is required for projects departing from standards in the [SMALLER RESIDENTIAL ZONES if applicable].

3. Departures from the following regulations may be granted for projects qualifying for the [MUNICIPALITY] Deep Green Incentive Program:
   a. [MUNICIPAL CODE] Residential density limits
      i. Tier 1 – up to 100% bonus for the base density allowed under zoning designation;
      ii. Tier 2 – up to 75% bonus for the base density allowed under zoning designation;
      iii. Tier 3 – up to 50% bonus for the base density allowed under zoning designation

   Minimum lot size of X,XXX square feet is required in all zones with a density maximum in order to request a density bonus. Any additional units granted would be required to be built to the same green building standard as the first.

   b. [MUNICIPAL CODE] Parking requirements:
      i. Tier 1 – up to 75% reduction in parking required under [MUNICIPAL CODE];
      ii. Tier 2 – up to 50% reduction in parking required under [MUNICIPAL CODE];
      iii. Tier 3 – up to 25% reduction in parking required under [MUNICIPAL CODE].

   c. Lot coverage standards, as determined necessary by the Director;

   d. Use provisions, as determined necessary by the Director

   e. Standards for storage of solid-waste containers;

   f. Standards for structural building overhangs and minor architectural encroachments into the right-of-way;

   g. Structure height bonus up to 10 feet for development in a zone with height limit of 35 feet. [POTENTIALLY NOT APPLICABLE IN ALL RESIDENTIAL ZONES, OR MORE LIMITED.] Structure height bonus up to 20 feet for development in a zone with a height limit of 45 feet or greater; and

   h. A rooftop feature may extend above the structure height bonus provided in [MUNICIPAL CODE] if the extension is consistent with the applicable standards established for that rooftop feature within the zone.

F. Compliance with minimum standards.

   1. For projects requesting departures, fee waivers, or other incentives under the Deep Green Incentive Program, the building permit application shall include a report from the design team demonstrating how the project is likely to achieve the elements of the program through which it intends to be certified.

   2. For projects applying for an ILFI certification (Tiers 1 or 2), after construction and within six (6) months of issuance of the Certificate of Occupancy, the applicant or owner must show proof that an LBC Preliminary Audit has been scheduled; such
as a paid invoice and date of scheduled audit. After construction and within twelve months of issuance of Certificate of Occupancy, the applicant or owner must show a preliminary audit report from ILFI demonstrating project compliance with the Place, Materials, Indoor Air Quality, and Beauty/Inspiration Imperatives that do not require a performance period.

3. For projects aiming for Built Green Emerald Star (Tier 2), or 5-Star or the Net Zero Energy Label (Tier 3), after construction and within six (6) months of issuance of the Certificate of Occupancy, the applicant or owner must show proof that the project successfully met Built Green certification by way of the Certificate of Merit from the program.

4. For projects pursuing LEED certification (Tier 3), the applicant or owner must show, after construction and within six (6) months of issuance of the Certificate of Occupancy, that the project has successfully completed the LEED Design Review phase by way of the final certification report.

5. For projects pursuing Passive House (Tier 3), the applicant or owner must show, after construction and within six (6) months of issuance of the Certificate of Occupancy, that the project has successfully obtained the PHIUS certification.

6. No later than two years after issuance of a final Certificate of Occupancy for the project, or such later date as requested in writing by the owner and approved by the Director for compelling circumstances, the owner shall submit to the Director the project’s certification demonstrating how the project complies with the standards contained in this subsection. Compliance must be demonstrated through an independent certification from ILFI or USGBC/Green Building Cascadia Institute (GBCI). A request for an extension to this requirement must be in writing and must contain detailed information about the need for the extension.

   a. For projects pursuing ILFI certification performance-based requirements such as energy and water must demonstrate compliance through certification from ILFI within the two-year timeframe noted above.

   b. For projects pursuing LEED certification, the applicant or owner must show proof of certification by way of the final LEED Construction Review report and LEED Certificate issued by USGBC/GBCI.

7. If the Director determines that the report submitted provides satisfactory evidence that the project has complied with the standards contained in this subsection, the Director shall send the owner a written statement that the project has complied with the standards of the [MUNICIPALITY] Deep Green Incentive Program. If the Director determines that the project does not comply with the standards in this subsection, the Director shall notify the owner of the aspects in which the project does not comply. Components of the project that are included in order to comply with the minimum standards of the [MUNICIPALITY] Deep Green Incentive Program shall remain for the life of the project.

8. Within 90 days after the Director notifies the owner of the ways in which the project does not comply, or such longer period as the Director may allow for justifiable cause, the owner may submit a supplemental report demonstrating that
alterations or improvements have been made such that the project now meets the standards in this subsection.

9. If the owner fails to submit a supplemental report within the time allowed pursuant to this subsection, the Director shall determine that the project has failed to demonstrate full compliance with the standards contained in this subsection, and the owner shall be subject to penalties as set forth in subsection [MUNICIPAL CODE].