City of Issaquah

# Sustainable Building Action Strategy

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**Prepared by:**
City of Issaquah
Office of Sustainability

INTEGRAL GROUP

CITY OF ISSAQUAH WASHINGTON

**Mayor**
Fred Butler

**Council**
Stacy Goodman, Council President

Mary Lou Pauly, Deputy Council President

Eileen Barber

Mariah Bettise

Tola Marts

Bill Ramos

Paul Winterstein

CITY OF ISSAQUAH WASHINGTON

## ACKNOWLEDGEMENTS

**Sustainable Building & Infrastructure Team**
David Fujimoto
Megan Curtis-Murphy
Mary Joe de Beck
Dave Favour
Jen Davis Hayes
Ric Patterson
Shay Weer
Christopher Wright
Bob York

**Consultant Team**
Lexy Relph, Integral Group
Dave Ramslie, Integral Group

**Community Partners and Stakeholders**
Aaron Fairchild, Green Canopy Homes
Jack Hunden, Devco
A-P Hurd, Touchstone
Sam Lai, Green Canopy Homes
Tom Lee, Madison Development Group
Jeff Miller, Quadrant Homes
Terry Phelan, Living Shelter Design
Bob Power, Seacon
John Shaw, American Classic Homes
Rocale Timmons, SECO Development
Spencer Wutherich, Quadrant Homes

Built Green
City of Bellevue
City of Seattle
King County Green Tools
King County Executive's Office
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## EXECUTIVE SUMMARY

The City of Issaquah encourages and inspires sustainable living, which is reflected in its mission and guiding principles and throughout its Comprehensive Plan. The City places a high priority on protecting the environment through sustainable development practices and promotes efforts to improve the environmental performance of the built environment.

Issaquah is a developing City, with a projected population growth of nearly 25,000 people in the next 15 years (2016 Comprehensive Plan). The character and performance of Issaquah's buildings have a significant impact on its economy, natural environment, transportation infrastructure, health, comfort, productivity and livability.

> *Develop an 'action strategy' to assist Issaquah in becoming a regional leader in sustainable building implementation and innovation.*
>
> *2016 City Goal*

In 2016, the City Council formally established a Goal directing the development of a Sustainable Building Action Strategy. This Strategy aims to position Issaquah as a leader in sustainable building through specific, actionable measures focusing on building design, construction, renovation, operation, education, and outreach.

The City has defined leadership in sustainable building in a forward-thinking way that indicates Issaquah's intended commitment to set a high bar, a desire to work collaboratively with all stakeholders, and a disposition to plan strategically for the future.

The Action Strategy identifies five overarching themes that align with City priorities and sustainable building goals:

1. **Walk the Talk and Lead the Way:** A focus on municipal leadership through demonstrated City actions and commitments is crucial to promote and maintain a culture of sustainable building innovation in Issaquah.
2. **Re-Think Car Habitat**: Activities that support a reduced reliance on auto-based trips and a parking dominated landscape, and promote walking, biking, transit, transportation services and other cleaner and more efficient forms of mobility.
3. **Toward Carbon Neutral Buildings:** In alignment with City goals and the King County-Cities Climate Collaboration commitments, Issaquah must implement large-scale strategies to enhance efficiency and reduce the use of fossil fuels.
4. **Connect to the Outdoors:** A consistent City goal is protection and promotion of the natural environment through responsible building, development, land use, and transportation practices and policies.
5. **Foster Innovation:** Innovation is an important driver for development of collaborative and leading solutions to community-wide challenges.

These themes align with twenty-one specific actions which were selected based on their applicability to prioritized building typologies, sustainability benefit, ability to influence and implementation feasibility.

Actions incorporate a range of market transformation approaches (including municipal leadership, regulations, incentives, partnerships, measurement and evaluation, demonstration projects, outreach and education) and outline timing for phasing of implementation through short, medium and longer-term actions.

| Sustainable Building Strategies | |
|---|---|
| **Theme** | **Action** |
| **Walk the Talk and Lead the Way** | 1.1 City Sustainable Building Policy<br>1.2 Resource Conservation Management Initiative<br>1.3 Sustainable Building Public Partnership<br>1.4 Sustainable Design in Subarea Plans<br>1.5 Integrated Capital Design Process<br>1.6 Organizational Capacity Building<br>1.7 Solar and Renewable Energy for Municipal Operations |
| **Re-think Car Habitat** | 2.1 Enhanced Transportation Demand Management<br>2.2 Innovative Parking Solutions<br>2.3 Clean, Shared Mobility Design Elements |
| **Toward Carbon Neutral Buildings** | 3.1 Commercial Energy Code Updates<br>3.2 Energy Code Review Process Improvements<br>3.3 Commercial Energy Benchmarking<br>3.4 Residential Energy Benchmarking<br>3.5 Renewable Energy Programs |
| **Connect to the Outdoors** | 4.1 Shared LID Stormwater Facilities<br>4.2 Resiliency Analysis |
| **Foster Innovation** | 5.1 New Sustainable Design Criteria<br>5.2 Marketing<br>5.3 Incentivize Deep Green Building<br>5.4 Sustainable Building Partnerships<br>5.5 Demonstration Projects |

The Sustainable Building Action Strategy incorporates leading operational practices, provides proactive management of transportation, ensures walkable, bikeable and transit supportive private investment, provides positive branding associated with integration with the natural environment, and fosters a creative, innovative and efficient urban design environment. It is recommended that the City implement this Sustainable Building Action Strategy immediately, starting with early actions and short-term items, which will lay the foundation for a robust, integrated program in support of longer-term community goals.

*Taken together, the strategies outlined in the Sustainable Building Action Strategy provide an action-oriented roadmap that positions Issaquah to benefit from well designed, high-performing buildings that improve health and livability, use resources efficiently, and reduce community impacts through each stage of design, construction and occupancy.*

## INTRODUCTION

The Sustainable Building Action Strategy summarizes actions for Issaquah to implement to realize the benefits of a sustainable approach to building and seeks to establish the City as a regional leader in demonstrating sustainable building practices. A total of 22 actions are identified within five overarching theme areas, applying to eight priority building and facility typologies. Resource requirements, anticipated benefits, and timeframes are identified for each proposed action.

> ***Sustainable building*** *is an integrated approach that focuses on the relationship between the built environment, the natural environment, economic effects, occupants and community in order to improve environmental performance, equity and societal benefits. In short, sustainable building is about healthy, environmentally responsible and high-quality design, construction and operations. It addresses impacts of buildings on their surroundings, the people that inhabit them and the communities in which they are situated.*

### Background

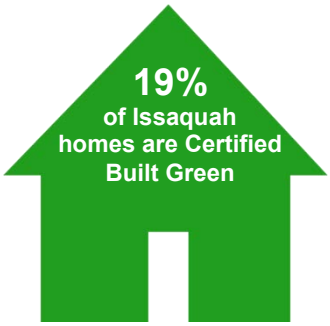
Issaquah is a unique urban area and its position within the surrounding Squak, Cougar and Tiger Mountains and Lake Sammamish contribute to strong community environmental values. It is an important link in the Mountains to Sound Greenway and is home to one of the best performing school districts in the state. At the same time, the community's geography and positioning along the urban growth boundary and interstate 90 manifest significant regional transportation challenges. In several years since the early 2000's the City has been among the top ten fastest growing communities in the state.

The United States Green Building Council (USGBC) notes that buildings are responsible for almost 40% of annual $CO_2$ emissions nationally, higher than both industrial and transportation contributions. Further, in the US, buildings consume approximately 14% of all potable water, and contribute millions of tons of construction waste to landfills each year.

In King County, buildings are the source of an even greater percentage (47%) of greenhouse gas emissions (King County GHG Emissions Inventory, 2012) and because of the pace of development, also contribute significantly to transportation, health and natural area impacts.

Since the 1990s, Issaquah has committed to sustainable building. The City developed 'early adopter' sustainability visions for the Issaquah Highlands and Talus; undertook the Pickering Barn renovation using salvaged, reused and recycled content building materials; and developed the Evergreen Builder's Guide rating system for single family development – all before the U.S. Green Building Council established the LEED rating system.

In the early 2000s, Issaquah continued to advocate for sustainable building with the Idea Home, Fire Station 73 (the first LEED certified fire station in the nation) and through the establishment of the Sustainable Building and Infrastructure Resolution, which promotes environmental responsibility including requirements for implementation of LEED and Built Green standards. The resolution also established partnerships with the School District, seven homebuilders, Port Blakely Communities, Rowley Properties, Microsoft and Life Care Services.




More recently, Issaquah has been praised for high profile projects, including zHome (the first zero-net energy multifamily development in the country) and Fire Station 72. Additionally, the Issaquah Municipal Code addresses several sustainable building provisions, including local options to the Washington State Energy Code. Issaquah is a member of the King County-Cities Climate Collaboration (K4C), working regionally to address the impacts of climate change through collaboration on policies, operations and best practices at a municipal, county and state-wide scale. Amongst medium sized cities in King County, Issaquah can be considered above average in sustainability practices.

In recent years, however, other Cities have further advanced leading practices in sustainable building including:

- Residential solar campaigns in Bellevue, Snoqualmie, Kirkland, Mercer Island, Mukilteo and others;
- A Living Building Challenge ordinance in Seattle
- A Deep Green Incentive Program in Shoreline;
- Sustainable building requirements in Redmond;
- LEED Platinum standards for King County facilities;
- Green permitting, building tune-ups and density bonuses in Seattle, and;
- LEED Gold performance standards in Mercer Island's downtown core.

As the City prepares to accommodate more residents, businesses and amenities, there is a need for an updated set of sustainable building strategies to support the long-term vision for the community to be sustainable, safe and vibrant; improve environmental performance; and preserve natural area functioning.

## Strategy Development Process

The development of the Sustainable Building Action Strategy included consideration of several key components:

- Defining regional leadership
- Evaluating core objectives of multiple City strategies and plans
- Identifying sustainability goals
- Assessing building typologies
- Developing leading themes
- Applying a market transformation approach
- Building strategies, and including alignment, feedback and phasing
- Identifying a measurement, evaluation and adjustment approach

## Regional Leadership

A primary objective of the Sustainable Building Action Strategy is to provide a roadmap of clear, actionable measures which will benefit the community and ultimately demonstrate how Issaquah, through implementation of the strategy, would realize a role as a regional leader in benefiting from sustainable building. The Sustainable Building Action Strategy envisions achievement of this goal by building upon historical accomplishments and alignment with City plans, policies, and sustainability goals:

> *As a regional leader, Issaquah develops strong partnerships, creates innovative policies and takes bold steps to propel the City's Sustainable Building program beyond our community, to improve the region's efforts. The City demonstrates leadership by:*
>
> - *Leading by example with innovative programs and policies, and "Walking the talk" on City projects;*
> - *Thinking holistically about sustainable buildings and infrastructure by integrating the built and natural environment, social equity, health and economics;*
> - *Engaging our community to leverage local expertise, resources and passion;*
> - *Sharing our stories, successes and lessons learned.*

## Sustainability Goals

Issaquah has established a number of environmental and social sustainability goals, as outlined below.

**Climate and Energy:** Develop innovative climate solutions which advance the city toward a carbon neutral community.

**Natural Areas and Open Space:** Preserve and restore open spaces, forests, and natural areas

**Water:** Preserve, protect and restore water resources and riparian habitat

**Mobility:** Prioritize and increase pedestrian, bicycle, transit and non-drive alone mobility.

**Materials Management:** Use and reuse materials productively over their entire lifecycle and avoid toxic chemicals.

**Healthy and Equitable Communities:** Provide for physical, social and mental well-being, and equitable access to services and housing.

Specific details for each goal can be found in Appendix B and include references to the Comprehensive Plan and other established plans. Strategies in this document have been developed to work toward these goals and the associated benefits are identified within each individual action.

The City's current planning documents provide a foundation for most goal areas to be addressed with the Action Strategy. Fundamentally, these are reflected in the Comprehensive Plan.

> **Land Use Element (Goal G):**
>
> - *Be a regional leader by incorporating sustainable development, both public and private, to ensure Issaquah's ability to meet future social, economic and environmental needs through innovative and creative methods. Where possible, the City strives to exceed standards, practices, and methods to ensure that Issaquah grows in a sustainable way.*
> - *Integrate sustainable development criteria, requirements, and development standards into the Municipal Code to ensure that all projects in the City are required to achieve a minimum level of sustainability.*

## Alignment with City Plans and Strategies

This Action Strategy covers a wide range of activities and stakeholders, all related to the built environment. There was a concerted effort to integrate and augment efforts already incorporated into other City plans, policies and strategies. These include the Central Issaquah Plan, Economic Vitality Strategy, Old Town Subarea Plan and several elements of the Comprehensive Plan, as previously noted.

Similarly, a number of common threads run through Issaquah's building-related plans and strategies, underpinning several of the City's core values. Common elements identified in the Comprehensive Plan, Central Issaquah Plan, Economic Vitality Strategy and City Sustainability Indicators, include:

| | |
|---|---|
| Diversity | Diversity is discussed as a priority in the 2014 Sustainable City Report, the 2015 Economic Development Strategic Plan, the Issaquah Comprehensive Plan, and the Central Issaquah Plan. It includes business diversity to ensure a variety of economic drivers, housing diversity and human services to ensure healthy communities, and biodiversity to promote environmental health. Diversity is a key indicator of resilience. |
| Innovation | Innovation is noted as an important driver to develop collaborative solutions to pressing challenges facing Issaquah, including sustainability and climate issues, development and land use regulations and incentives, transportation, economic development and growth, and project financing and approaches. Innovation is particularly emphasized in the Central Issaquah Plan. |
| Community | Community is a keystone element in every major City document. From developing approaches to creating an even better place to work, live, and play, to involving the community in planning decisions. Issaquah's focus is on continuing to build a strong, equitable community. |
| Quality of life | A key planning and land use vision to ensure enhanced quality of life, or livability, for the community. This is addressed in urban development planning documents as well as in sustainability indicators. |
| Natural environment and outdoor recreation | A consistent City objective is protection and promotion of the natural environment through responsible building, development, land use, as well as transportation practices and policies. Natural area recreation is identified as important to economic development, and creation and preservation of open spaces is highlighted in the Central Issaquah Plan. Both are important to Issaquah's sense of place and vitality. |
| Leadership | The concept of regional leadership is implicit, rather than explicit, in most of the City's documents. Through established practices and policies, Issaquah is a role model for other municipalities. This project's objective is to continue to demonstrate regional leadership. |

These elements provided the basis for the themes, or categories, for the Sustainable Building Action Strategy and are woven into the development of the proposed actions.

## Building Typologies

While the potential boundary of this Strategy could be very large, actions focus on priority building typologies. Eleven primary building types are addressed in the action strategies, prioritized by potential scale of impact and the City's ability to influence or implement proposed strategies.

Potential scale of impact was evaluated based on factors including:

- Units or buildings and total square footage in Issaquah
- Incremental opportunity for efficiency

improvement based on current level of efficiency

- Businesses and residents impacted in Issaquah
- Potential for demonstration of leadership
- Market transformation potential

Potential level of influence or ability to effect change was evaluated based on considerations including:

- Whether within City's purview
- Level of stakeholder buy-in
- Financial impact
- Simplicity/complexity
- Integration with other City plans
- Partnership potential

Typologies include residential (single-family, multifamily including mixed-use midrise, affordable), commercial, municipal (City buildings, facilities and infrastructure), and public (fire stations, schools). These were subdivided into new and existing categories to allow for creation of strategies to address new construction as well as operational and process improvements; some project types were combined due to the similarities in approaches.

| Primary Building Typologies | Secondary Building Typologies |
|---|---|
| New public and municipal | Existing commercial |
| Existing public and municipal | Existing infrastructure |
| New multifamily residential/mixed-use | Existing multifamily residential |
| New commercial | New single family housing |
| New infrastructure | Existing single family housing |
| New affordable housing | |

### Strategy Themes

As an action strategy, measures are intended to help drive the City towards community goals. The five main themes each have a long-term view that helps to define the associated actions that will achieve those objectives. Within each of these themes are early action, short, medium and longer-term implementation strategies.

- **Walk the Talk and Lead the Way**: Issaquah is recognized for its innovative leadership in driving early adoption of successful, market transforming approaches to sustainable building.
- **Re-Think Car Habitat:** Issaquah is a thriving, vibrant community with walking, biking, transit and technology driven transportation services that enhance livability with high performing buildings, spaces for amenities and support for diverse communities.
- **Toward Carbon Neutral Buildings:** Issaquah is successfully implementing a ‘roadmap to net zero energy and carbon’, striving for at least an 80% reduction in carbon from 2007 levels by 2050.
- **Connect to the Outdoors:** Issaquah is a city that protects, is connected to, provides views to and is integrated with the natural environment. Issaquah is green and resilient, promoting

health and happiness, extracting carbon, and reducing heat island effects.

- **Foster Innovation:** Issaquah is a thriving community, a regional leader in encouraging innovative approaches to resiliency and sustainability. Developers want to work with Issaquah, businesses want to be in Issaquah and engaged community members incubate programs to support sustainable lifestyles.

## Market Transformation Approach

To make a lasting impact, a market transformational approach was used in the development of the strategies. This model includes both policy-based and programmatic components to drive change through leadership, education, policy and incentives, and is recognized as a strategic way to change the way that current systems work. This approach is regularly applied in energy efficiency markets. At a local level, it is suited to a community such as Issaquah where there are opportunities to implement local actions, but which is situated in a regional context where efforts can be leveraged through partnerships and collaboration.

In addition to clearly articulated goals, common components of market transformation models include:

- Outreach and education
- Municipal leadership
- Demonstration projects
- Policies, codes and regulations
- Incentives
- Partnerships
- Data and reporting

The Sustainable Building Action Strategy incorporates a range of approaches along the market transformation continuum, and includes both internal City process changes and external collaboration. A variety of approaches must be employed for optimization of the market transformation approach, however, there are some goal areas where certain approaches are more applicable than others. For example, within 'Walk the Talk and Lead the Way', the focus is on policy and municipal leadership, whereas 'Foster Innovation' lends itself to outreach, education, establishment of new standards, and partnerships. The applicable approaches are identified with each strategy's implementation description.

## Strategy Development and Stakeholder Engagement

Engagement with both internal and external stakeholder groups was undertaken throughout the development of the strategy to both define and refine the actions and implementation steps.

Interdepartmental City teams collaborated to assess priority building typologies, develop extensive lists of potential strategies, select draft strategies to align with theme areas, and fine-tune strategies for implementation.

Detailed interviews were held with local and regional developers and builders to inform strategies and refine potential implementation steps. Refer to Appendix D for a stakeholder engagement memo summarizing developer feedback.

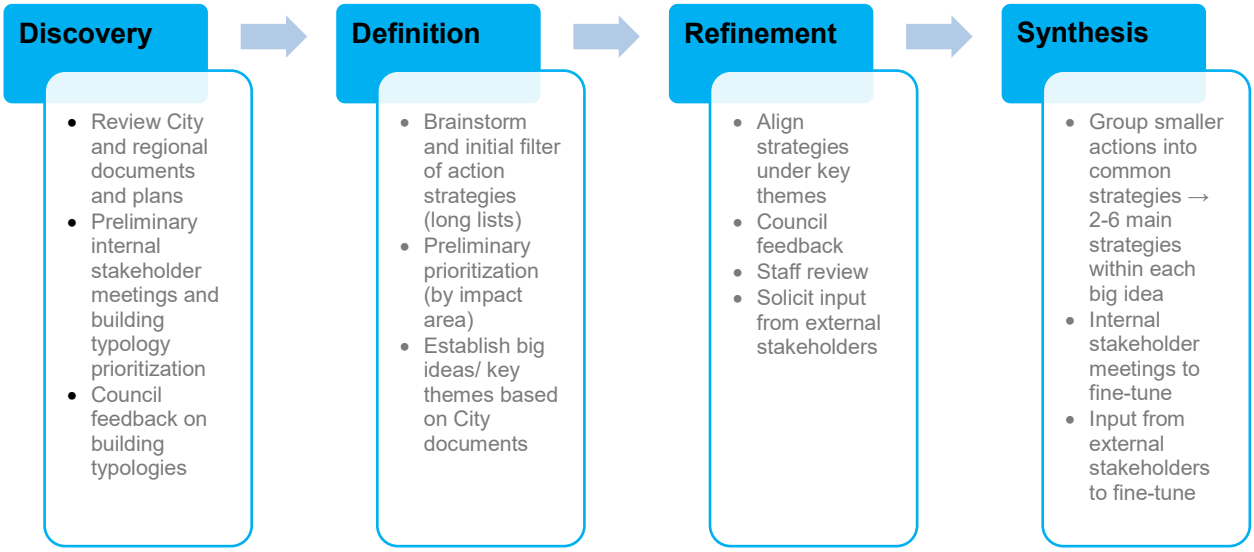
### Cross Laminated Timber

Cross laminated timber (CLT) is a new engineered wood product which allows for structural use in mid and high rise buildings. When replacing concrete and steel construction, CLT reduces the carbon footprint of a building. Its use of small diameter trees can contribute to working forests using sustainable forestry practices, spur economic investment and jobs in rural areas, and connect urban growth with local rural communities.

CLT is sometimes described as a 'disruptive technology' with wide potential in the Pacific Northwest. Forterra notes: *"Cross laminated timber has the potential to address issues from how we reduce greenhouse gas emission by sequestering carbon in buildings with responsibly-sourced materials to offering economic opportunity for our rural towns."*

Photo by Leda Chahim, courtesy of Forterra

The following general approach was used to develop the specific strategies:




## Summary of Proposed Actions

The result of the Action Strategy development process is a set of two to six specific actions within each of the five overarching themes, covering:

- A range of prioritized new and existing building typologies: residential, commercial, public, municipal, and infrastructure; and
- A mix of market transformation approaches: regulatory, incentives, municipal leadership, data and reporting, demonstration projects, outreach and education, and partnerships; and
- All of the City's sustainability goal areas: climate and energy, natural areas and open space, water, mobility, materials management, and healthy and equitable community.

These actions have been selected as having the highest combined potential for sustainability benefit and effective implementation within each of the five themes. They have been developed in collaboration with multiple City departments; are intended to complement and integrate with other priority issues in Issaquah, such as affordable housing, mixed use development, and urban design; and align with other plans and studies underway or planned in the future (such as the Olde Town Subarea plan, Central Issaquah Plan updates, Building Code updates, Stormwater Plan updates).

To optimize City resources and to align with planned projects, strategies are proposed to be implemented at different times. The implementation timing ranges from early actions that set the stage and immediately put the plan into action, to longer-term recommendations that will be planned and implemented as conditions evolve in the community (6+ years from the date of adoption of this document).

- **Early actions** should be performed within a year following adoption of this Action Strategy to set the stage for future actions or align immediately with other City efforts which affect development, such as the development moratorium. These include Subarea Plan evaluations to incorporate sustainable design measures, adopting a new Municipal Sustainable Building Policy, establishing public and private sector Sustainable Building Partnerships and a review of the Transportation Management Action Plan program. Leading practices should be included in City led as well as public and private partnerships in development.
- **Short-term actions** provide foundational strategies which will be critical for ensuring that the Strategy drives toward goals and is successful in the subsequent four years. These actions help ensure community values are reflected the City's own operations, improve City processes, strengthen organizational capacity and deliver programs in the community. Short-term actions include a Resource Conservation Management initiative for City facilities, an Integrated Design capital design processes improvement, Code Review Process Improvement, improving internal capabilities, Renewable Energy projects, establishing new Sustainable Design Criteria and marketing and outreach in the community.
- **Medium-term actions** will require longer lead times for partner coordination and implementation, or are connected to timeframes for related projects. Medium-term actions include initiating an Energy Benchmarking Program, implementing Energy Code updates, establishing a Deep Green Incentive Package, undertaking a Resiliency Analysis and evaluating Shared Low-Impact Development stormwater facilities.
- **Longer-term actions** are recommended where actions may best be achieved with new regional partnerships, require sequential development, have long lead times, or require assessment of development conditions which are likely to have changed in five years. These items should be planned and scheduled for future implementation, but can certainly be implemented earlier where opportunity arises, or a more proactive role is desired (as with shared and district parking, for example).

**Certified Non-residential Buildings in Issaquah**

| Project | Certification Level |
|---|---|
| Blakely Hall | LEED Silver |
| Fire Station 72 | LEED Platinum |
| Fire Station 73 | LEED Silver |
| First Stage | LEED Silver |
| Grand Ridge Elem. | WA High Performance Schools |
| Highmark Medical | LEED Gold |
| High Streets Block 8 | LEED Base |
| IH Safeway | LEED Silver |
| IH Retail | LEED Silver |
| Issaquah High School | WA High Performance Schools |
| J.Boehm Pool | LEED Silver |
| John L. Scott | LEED Gold |
| Timber Ridge | LEED Silver |
| PBC Office | LEED Gold |
| YWCA | LEED Gold, WA Evergreen Development Standard |

The following table summarizes the Action Strategies within each primary theme and identifies the phase in which the bulk of each action strategy's effort is expected to occur. Specific, detailed, actionable steps are presented for each strategy in Appendix A.

## Action Strategies by Theme

| Big Idea Theme | Strategy | Description | Approach | Building Typologies | Early Actions | Short Term (1-2 yrs) | Medium Term (3-5 yrs) | Long Term (6+ yrs) |
|---|---|---|---|---|---|---|---|---|
| **Walk the Talk and Lead the Way** | 1.1 City Sustainable Building Policy | Update the City's Sustainable Building & Infrastructure Policy (2004) to LEED Platinum, and incorporate other approaches for parks and infrastructure. Applies to new construction and major remodels. | Municipal Leadership; Policies | New Municipal; Existing Municipal; Infrastructure & Parks, Affordable Housing | X | | | |
| | 1.2 Resource Conservation Management (RCM) Initiative | Establish a RCM initiative to measure and implement efficiency measures in existing City buildings and facilities. | Municipal Leadership; Data and Reporting | Existing Municipal; Existing Infrastructure | | X | | |
| | 1.3 Sustainable Building Public Partnership | Establish a sustainable development partnership agreement with public sector property owners to align community goals and provide leadership around sustainable building. | Municipal Leadership; Partnerships | New Public | X | X | | |
| | 1.4 Incorporate Sustainable Design in Subarea Planning | Review and incorporate sustainable design (e.g. LEED ND, Built Green Communities) into City development standards and subarea plans. | Policies, Codes & Regulations | New Municipal; New Public; New Commercial; New Multi-family; New Infrastructure | X | X | | |
| | 1.5 Integrative Design | Capital design process improvement to incorporate integrated design principles and practices (multi-stakeholder engagement, sustainable design project goals, early sustainable design charrette, etc.). | Policies; Education & Training | New Municipal; Infrastructure & Parks | | X | | |
| | 1.6 Organizational Capacity Building | Internal education and training program across departments. | Education & Training | All | | X | | |
| | 1.7 Solar and Renewable Energy for Municipal Operations | Provide solar and renewable energy for municipal buildings and facilities. Develop a pathway to 100% renewable electricity by 2025, including a minimum of 15% solar energy. | Municipal Leadership; Policies | New Municipal; Existing Municipal; Infrastructure and Parks | | X | X | |
| | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Re-Think Car Habitat** | 2.1 Enhanced TDM (Transportation Demand Management) | Clarify and update applicability of TMAPs (Transportation Management Action Plans) to address building design and occupancy transportation measures for new construction. | Policies, Codes & Regulations | New commercial, New multifamily | **X** | **X** | | |
| | 2.2 Innovative Parking Solutions | Encourage shared, district-level parking approaches to support increased walk, bike and transit oriented travel. | Partnerships; Incentives; Policies, Codes & Regulations | New commercial, New multifamily | | | | **X** |
| | 2.3 Clean, Shared Mobility Design Elements | Update codes for electric vehicles, bike storage, carpools and shared vehicles. | Policies, Codes & Regulations | New commercial, New multifamily | | | **X** | |
| | | | | | | | | |
| **Toward Carbon Neutral Buildings** | 3.1 Commercial Energy Code | Update City's energy code to reflect best practices in energy efficiency and renewable energy. | Policies, Codes and Regulations | New commercial, new multifamily | | | **X** | |
| | 3.2 Energy Code Review Process Improvements | Work with Department of Commerce and State Energy Office to conduct a 'desk audit' and improve processes around energy code review and compliance. | Partnerships; Education & Training | All | | **X** | | |
| | 3.3 Commercial Energy benchmarking | Establish an energy benchmarking program to measure and report building energy performance to support investments in efficiency and renewable energy. | Data and Reporting; Municipal Leadership; Policies, Codes & Regulations | Existing commercial, Existing municipal / public | | | **X** | **X** |
| | 3.4 Residential Energy Benchmarking | Establishes a home energy performance score (EPS) to inform buyers and motivate energy efficiency retrofits. | Data and Reporting; Partnerships; Outreach, Education & Training; Policies, Codes & Regulations | Existing single family residential | | | | **X** |
| | 3.5 Renewable Energy Programs | Promote residential renewable energy programs through group purchasing, and assess community solar and other renewable energy program options. | Partnerships; Incentives; Outreach, Education & Training | Existing residential, existing and new public | | **X** | | **X** |
| | | | | | | | | |
| **Connect to the Outdoors** | 4.1 Shared LID Stormwater Facilities | Evaluate and implement shared LID storm water facility approaches to improve water quality and increase efficiency of land use. | Partnerships; Incentives | New infrastructure | | **X** | **X** | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 4.2 Resiliency Analysis | Undertake a study of infrastructure and natural areas to assess policy gaps and infrastructure vulnerability for climate preparedness. | Data and reporting; Policies | New infrastructure, New commercial, New multifamily | | | X | X |
| | | | | | | | | |
| **Foster Innovation** | 5.1 New Sustainable Design Criteria | Establish LEED Gold or Built Green 4 Star requirements for new construction that is 20,000 square feet or greater. | Policies, Codes & Regulations; Outreach, Education & Training | New commercial, New multifamily | | X | | |
| | 5.2 Marketing | Promote sustainable building projects in the community and region, celebrate and share successes, partner with sustainable building organizations, developers and property owners. | Outreach; Partnerships | All | | X | | |
| | 5.3 Incentivize Deep Green Building | Adopt a Living Building Ordinance or Deep Green Incentive Package with tiered incentives. | Incentives, Policies, Codes & Regulations | New commercial, New multifamily, New residential | | | X | |
| | 5.4 Sustainable Building Partnerships | Establish a sustainable development partnership agreement with private property owners and developers to establish common goals. | Partnerships; Incentives | New commercial, New multifamily | X | X | | |
| | 5.5 Demonstration Projects | Leverage city projects or development agreements to support, design or develop and promote leading-edge sustainable buildings and technologies. | Demonstration Project | New commercial, New multifamily, New single-family, New municipal / public, New affordable | | | X | X |

Detailed action strategies are presented by theme at the end of this document, with step-by-step guidance provided. For each Action, the following information is provided:

- Overview of intent
- Implementation timeline, outlining key steps
- Building typologies addressed
- Strategy approaches
- Expected outcome and related sustainability benefits, connected to goal areas as well as financial and other community benefits
- Anticipated implementation and internal resource requirements
- Descriptive summary of action
- Anticipated short-term (1-2 years), medium-term (3-5 years), and long-term (6+ years) implementation steps. Early action steps are included under the four Early Action strategies.

### Implementation, Monitoring, Evaluation and Adjustment

To ensure success of the proposed Sustainable Building Action Plan, it is imperative that roles and responsibilities for implementation are incorporated into the work of various departments. A cross-functional team consisting of inter-related disciplines (engineering, planning, sustainability, regional policy, economic development, asset management, etc.) will be necessary for implementation. An implementation oversight team comprising designated staff in the City's Office of Sustainability, Development Services and Economic Development Departments should be established and assigned to oversee the program implementation and ensure collaboration with all City departments.

Key program management elements will include:

- Plan - identify resource needs, project collaborators/leaders, and timelines for each action
- Implement - collaborate with stakeholders to meet the intent of the action
- Monitor and Report - determine the appropriate metrics, collect data, and report results
- Evaluate - analyze the data to determine whether any revisions need to be made
- Adjust - make modifications as required

The implementation team will work to make the Sustainable Building Program the 'path of least resistance' through troubleshooting, process improvements, internal capacity building and communication.

It is recommended that an annual report be provided to the Mayor and City Council. The purpose of the annual report will be to determine progress and milestone achievement and outline areas where updates and adaptations are recommended as conditions change in Issaquah. This report will be designed to help ensure accountability, enhance communication and provide an opportunity to celebrate successes. As the internal and external education and outreach programs are developed, both successes and challenges should be articulated.

# APPENDICES

## A. ACTION STRATEGY DETAILS BY THEME

Detailed information including implementation steps are included by theme for each of the following action strategies.

| Theme | Action |
|---|---|
| **Theme 1:**<br>**Walk the Talk and Lead the Way** | 1.1 City Sustainable Building Policy<br>1.2 Resource Conservation Management Initiative<br>1.3 Sustainable Building Public Partnership<br>1.4 Incorporate Sustainable Design in Subarea Plans<br>1.5 Integrative Design<br>1.6 Organizational Capacity Building<br>1.7 Solar and Renewable Energy for Municipal Operations |
| **Theme 2:**<br>**Re-think Car Habitat** | 2.1 Enhanced Transportation Demand Management<br>2.2 Innovative Parking Solutions<br>2.3 Clean, Shared Mobility Design Elements |
| **Theme 3:**<br>**Toward Carbon Neutral Buildings** | 3.1 Commercial Energy Code<br>3.2 Energy Code Review Process Improvements<br>3.3 Commercial Energy Benchmarking<br>3.4 Residential Energy Benchmarking<br>3.5 Renewable Energy Programs |
| **Theme 4:**<br>**Connect to the Outdoors** | 4.1 Shared LID Stormwater Facilities<br>4.2 Resiliency Analysis |
| **Theme 5:**<br>**Foster Innovation** | 5.1 New Sustainable Design Criteria<br>5.2 Marketing<br>5.3 Incentivize Deep Green Building<br>5.4 Sustainable Building Partnerships<br>5.5 Demonstration Projects |

## THEME 1: WALK THE TALK AND LEAD THE WAY

**Purpose Statement**: Issaquah is recognized for its innovative leadership in driving early adoption of successful, market transformational approaches to sustainable building.

The most impactful action strategies for creating a market transformation environment are those undertaken by the City of Issaquah in its own operations. This section identifies some of the steps needed to ensure success of the action strategy, including:

- Committing to high standards for new projects and ongoing operations
- Communicating the City's commitment to sustainable building
- Setting clear policy goals
- Tracking, reporting, and improving the performance of the City's buildings and operations
- Leading by example, to encourage residents, businesses, and developers to also seek sustainable design and operational excellence
- Collaborating with community members, developers, and public sector partners to commit to and implement best practices and programs
- Implementing a collaborative, multi-disciplinary, integrated design process for all City building and infrastructure projects
- Undertaking continuous internal education and training

This municipal-focused demonstration of commitment to sustainable building will demonstrate leadership and encourage desired behaviors internal to the City and externally in the community.

| Action Strategy | Description |
|---|---|
| 1.1 City Sustainable Building Policy | Update the City's Sustainable Building & Infrastructure Policy (2004) to LEED Platinum, and incorporate other approaches for parks and infrastructure. Applies to new construction and major remodels. |
| 1.2 Resource Conservation Management (RCM) Initiative | Establish a Resource Conservation Management (RCM) initiative to measure and implement efficiency measures in existing City buildings and facilities. |
| 1.3 Sustainable Building Public Partnership | Establish a sustainable development partnership agreement with public sector property owners to align goals and provide leadership around sustainable building. |
| 1.4 Incorporate Sustainable Design in Subarea Planning | Review and incorporate sustainable design (e.g. LEED ND, Built Green Communities) into City |

| | |
|---|---|
| | development standards and subarea plans. |
| 1.5 Integrative Capital Design Process | Update the City's capital design process to incorporate integrated design principles and practices (multi-stakeholder engagement, sustainable design project goals, early sustainable design charrette, etc.). |
| 1.6 Organizational Capacity Building | Dedicate resources for internal education and training programs across departments. |
| 1.7 Solar and Renewable Energy for Municipal Operations | Provide for solar and renewable energy for municipal buildings and facilities. Develop a pathway to 100% renewable electricity by 2025, including a minimum of 15% solar energy. |

**Comprehensive Plan References:** Overarching plan goal; LU Goals G, J

## ACTION 1.1: City Sustainable Building Policy

Update the City's Sustainable Building & Infrastructure Policy (2004) to LEED Platinum, and incorporate other approaches for parks and infrastructure. Applies to new construction and major remodels.


Building Typologies Addressed:

- New and existing municipal buildings, new infrastructure and parks, new affordable housing

Strategy Approaches:

- Municipal leadership
- Policies

Expected Outcomes:

- ✓ **Energy and carbon reduction** through highly efficient design.
- ✓ **Healthy people** by applying nature-rich, healthy design principles.
- ✓ **Leadership through sustainable building design**. Potential projects could include the new City Hall, transit-oriented development, fire stations, public works/parks shops, and affordable housing.
- ✓ **Financial savings** over the long-term through creating highly efficient public buildings.

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal
- **Estimated Financial Investment:** 2-4% additional cost for new buildings, less with early integrated design.
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Parks, Development Services, Public Works Engineering, Public Works Operations, Finance

### Action Summary

An updated Sustainable Building and Infrastructure Policy will lay the foundation for all the other strategies identified in this document, by clearly establishing the City's commitment to sustainability leadership. The proposed updates would include requiring LEED Platinum for new municipal buildings larger than 5,000 sf, and incorporating other approaches for parks and infrastructure.

The aggressive LEED Platinum target reflects changes in the building landscape since the original policy was adopted, and provides a leadership position for municipal projects both within the development community and regionally. Additional rating system options and tools (SITES, ENVISION, KC Sustainable Building Scorecard) will be incorporated into the updated policy, reflecting the diversity of types of projects managed by the City, such as parks and infrastructure, and providing project type-specific protocols.

Successful projects built following the adoption of the 2004 policy include City buildings, parks, and

infrastructure, as well as City-supported projects:

- J.Boehm Pool - LEED Silver Certified
- Fire Station 72 - LEED Platinum Certified
- Fire Station 73 – LEED Silver Certified
- Skate Park - Evaluating KC Sustainable Building Scorecard
- Central Park Pad 1 - Evaluating SITES
- Rainier Boulevard – Phase I - LID pervious asphalt & raingarden demonstration project
- Rainier Boulevard – Phase II - Pervious asphalt and raingardens
- YWCA Issaquah Family Village - LEED Gold Certified
- zHome - Built Green Emerald Star Certified, Salmon-Safe Certification, International Living Future Institute Net Zero Energy Building Petal recognition, WaterSense New Home Certification

As the application of LEED becomes more widespread, the capability of design teams to implement measures in a cost-effective way continues to improve. When there is a project-wide commitment to LEED early in the design process, there is typically less than a 0.5% cost premium for achieving LEED Gold - but potential efficiencies diminish if LEED is an afterthought, rather than part of an integrated design process. LEED Platinum can carry 2-4% in design, construction and certification costs, which can be minimized through early integrated planning and creative design approaches. Although LEED requires some initial investment, the rating system is well aligned with the City's goals and provides for operational savings and a healthier and more productive work environment for employees and customers.

### Action Steps

➔ **Early Action: Adopt a new Sustainable Building Policy**

- Update the City's 2004 policy to reflect current market conditions and leadership goals.
  - Refer to policies adopted by regional municipalities
  - Indicate applicable standards and rating systems for different project types
  - Identify goals for public-private projects and agreements
  - Outline objectives for City purchases of renewable energy
  - Policy guidance on city operations (Resource Conservation Management Initiative)

➔ **Short-term/Medium term - 1-5 years: Implement Policy**

- Use the guidelines outlined in the policy to inform new City building projects, redevelopments, remodels and operations.

➔ **Long-term – 6+ years: Review Policy**

- Review the policy to determine whether market conditions and City goals have changed.
- Propose updates and adopt new policy.

## ACTION 1.2: Resource Conservation Management (RCM) Initiative

Establish a Resource Conservation Management (RCM) initiative to measure and implement efficiency and renewable energy measures in existing City buildings and facilities.


Building Typologies Addressed:

- Existing municipal buildings, existing infrastructure

Strategy Approaches:

- Municipal Leadership
- Data and Reporting

Expected Outcomes:

- ✓ **Water and energy savings** through data tracking, analysis, and response
- ✓ **Carbon reduction** through renewable energy purchases and installations
- ✓ **Financial savings** through reduction in consumption and identification of optimization opportunities
- ✓ **Operational improvements** through a systematic, ongoing facility resource tracking and improvement program
- ✓ **Improved asset management** and identification of cost-effective capital investments
- ✓ **Improved budget analysis and planning**
- ✓ **Occupant comfort and productivity**
- ✓ **Leverage of grants and incentives** (such as those available through Puget Sound Energy)

Anticipated Implementation Requirements:

- **Staffing Resources:** Substantial (Additional .5 FTE)
- **Estimated Financial Investment:** Facility management software ($5,000-$20,000), optional investment grade audits ($50,000), plus staff.
- **Lead Department:** Facilities
  **Participating departments and partnering organizations:** Sustainability, Finance, Public Works Engineering, Public Works Operations

### Action Summary

Establish a Resource Conservation Management (RCM) initiative for city facilities and infrastructure including retrofits, operational practices, occupant behavior, data collection, tracking and reporting. RCM is an approach which considers the performance of existing buildings and facilities from a resource perspective (energy, solid waste, water, wastewater, stormwater pollution prevention). An RCM initiative involves multiple departments and seeks to increase building performance to reduce energy, water and sewer costs through capital and program measures.

RCM programs are an established best practice promoted by the State Energy Office and have been in place for years in many cities, school districts and agencies, and frequently provide a return on investments and capture substantial utility rebates and incentives.

Implementation of this strategy may take several forms, including hiring, contracting or designate roles within the organization. An RCM approach may be combined with a more extensive asset management function to effectively address facility needs through their life-cycle. The primary components of a RCM program are:

- Data collection
- Plan preparation
- Facility and operations optimization
- Occupant education
- Tracking and reporting

Savings achieved through the RCM initiative may be redirected to deferred maintenance, support capital investments or cover staff costs.

As a part of the approach, the City should consider establishing targets for renewable energy and begin installations as well as purchasing of renewable energy for City operations. Puget Sound Energy's Green Direct program, for example, allows municipalities and large corporate customers to buy into a new wind farm to provide renewable energy for City operations. Several cities including Kirkland, Redmond, Snoqualmie, Mercer Island, Sammamish and King County currently purchase green power for some portion of their energy needs.

### Action Steps

➔ **Short-term - 1-2 years: Establish Program**

- Form an RCM team and appoint an RCM team/program manager.
- Work with multiple departments to determine current data collection efforts and processes:
  - Identify synergies and confirm gaps
  - Determine need for software purchase or customization to meet RCM goals
  - Collect and synthesize data
- Develop an RCM program plan.
- Conduct audits to identify and recommend conservation measures based on data analysis. Secure grant funding.
- Track and report resource consumption

➔ **Medium-term – 3-5 years: Implement and Monitor Resource Consumption**

- Implement capital and behavioral measures.
- Continue to track and report resource consumption.

➔ **Long-term – 6+ years: Update Plan**

- Continue to track and report resource consumption.
- Review and update plan.

## ACTION 1.3: Sustainable Building Public Partnership

Establish a sustainable development partnership agreement with public sector property owners to align goals and provide leadership around sustainable building.


Building Typologies Addressed:

- New public buildings, new infrastructure

Strategy Approaches:

- Municipal leadership
- Partnerships

Expected Outcomes:

✓ **Alignment** of City and public sector agencies around community goals
✓ **Increased implementation** of sustainable building in public projects
✓ **Regional leadership** through collaboration with other agencies to achieve City and K4C goals

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Development Services, Economic Development, Public Works Engineering, Washington State Department of Commerce

### Action Summary

The proposed public sector partnership would be an extension of the City's Sustainable Building and Infrastructure Policy.

Following the 2004 Sustainable Building Resolution, City partners included Rowley Properties, Issaquah School District, Port Blakely Communities, Life Care Services and Microsoft. Projects with City participation were required to meet LEED requirements, and were provided with technical assistance and incentives toward achieving certification.

This updated partnership strategy would be an expansion of previous efforts, with outreach to potential partners to identify possible projects, communicate City efforts, find synergies, and work toward common goals. Potential partners could include:

- Issaquah School District
- Eastside Fire and Rescue
- King County (Metro, Department of Natural Resources and Parks)
- Washington State Parks
- Washington State Department of Natural Resources

- Washington State Department of Fish and Wildlife
- Washington State Department of Transportation
- Sound Transit
- Sammamish Plateau Water
- King County Library System
- Bellevue College
- City land development projects

### Action Steps

➔ **Early Action: Establish partnerships for near term projects**

- Create a full inventory of planned and potential projects.
- Connect with public sector partners on upcoming projects.
- Align goals and formalize partnership.

➔ **Short-term - 1-2 years: Support partners and projects**

- Provide technical support and other assistance to partners.

➔ **Medium-term – 3-5 years: Project collaboration**

- Track and report preliminary progress.

➔ **Long-term – 6+ years: Review and evaluate progress**

- Continue to track and report progress.
- Identify additional collaboration opportunities.

## ACTION 1.4: Incorporate Sustainable Design in Subarea Planning

Review and incorporate sustainable design (e.g. LEED ND, Built Green Communities) into City development standards and subarea plans.


Building Typologies Addressed:

- New municipal, new public, new commercial, new multi-family, new infrastructure

Strategy Approaches:

- Policies, Codes & Regulations

Expected Outcomes:

- ✓ **Improved environmental performance** of design standards, including energy and carbon reduction, water use reduction, stormwater treatment and mobility
- ✓ **Alignment and integration of strategies** in subarea plans

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate
- **Lead Department:** Development Services
  **Participating departments and partnering organizations:** Sustainability, Public Works Engineering

### Action Summary

As part of the current review and update of subarea plans and design standards, continue to work with City departments to ensure that sustainability measures are integrated into all the plans and standards. Additionally, coordinate interdepartmentally to ensure that sustainable building strategies presented in this document align with plans and standards and address potential areas of conflict.

Referenced sustainable building standards are primarily derived from LEED for neighborhood design (LEED ND) and other approaches such as Living Building, Built Green, and EcoDistricts. Based upon an initial review, many sustainable building measures identified in the reference materials are collectively addressed in City documents. This effort includes a gap analysis to determine any elements that are not included, or could be strengthened.

### Action Steps

➔ **Early Action: Review sustainable design standards**

- Conduct a comparative analysis of sustainable design standards and those in the Central Issaquah Plan.
- Update and incorporate sustainable design standards in concert with updates to the Central Issaquah Plan.

➔ **Short-term - 1-2 years: Incorporate sustainability into City plans and standards**

- Review and incorporate sustainable design standards into Olde Town Subarea design and development standards.
- As part of ongoing efforts, continue to work with departments to ensure that sustainability measures are clearly and consistently incorporated and reviewed during design review.

➔ **Medium-term – 3-5 years: Monitor and report**

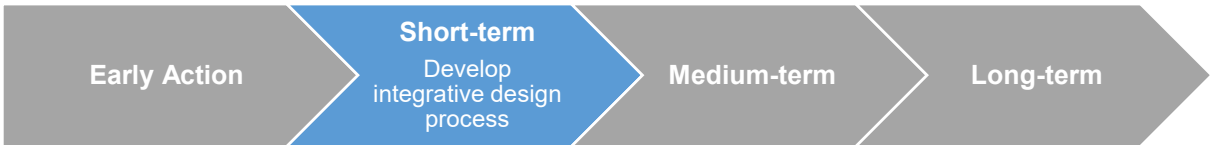
- Monitor projects to track implementation alignment with plans and standards.
- Work with departments to modify implementation or standards as necessary.

➔ **Long-term – 6+ years: Update plans**

- As plans are renewed and revised, revisit sustainability to ensure that the most current measures are integrated into the City's plans and standards.

## ACTION 1.5: Integrative Capital Design Process

Update the City's capital design process to incorporate integrated design principles and practices (multi-stakeholder engagement, sustainable design project goals, early sustainable design charrette, etc.).




Building Typologies Addressed:

- New municipal; new infrastructure and parks

Strategy Approaches:

- Policies, Codes & Regulations
- Education & Training

Expected Outcomes:

- ✓ **Improved capital design process** aligned with city goals and objectives
- ✓ **Resource efficiencies** through multi-stakeholder design, identifying synergies, establishing sustainable design approaches early in projects
- ✓ **Adoption of leading practices** in municipal capital project management
- ✓ **Increased attention to social equity** in capital project implementation
- ✓ **Financial savings** through optimized design, identification of synergies, reduction of duplication

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal
- **Estimated Financial Investment:** $7,500 - $12,500 for process improvement
- **Lead Department:** Executive
  **Participating departments and partnering organizations:** All departments should be included.

### Action Summary

Integrated, or integrative, design is an approach which brings together design goals and design specialties which are often otherwise considered separately or not concurrently. Life cycle cost analysis, historic preservation, urban design and aesthetics, building performance, operations and maintenance, security, site performance and integration, social equity, budgetary performance, and other considerations may be effectively addressed through an integrated design approach.

As it applies to sustainable building, an integrated design process means an approach to project design that seeks to achieve high performance on a wide variety of well-defined environmental and social goals while staying within budgetary and scheduling parameters. It relies on a multidisciplinary and collaborative team whose members make decisions together based on a shared vision and holistic understanding of the project. It is an iterative process that follows the design through the entire project life, from pre-design through operation.

This strategy would include a review of goals, policies and procedures and one or more capital design process improvement events to review, update and standardize the design process. The work is related

to and supportive of the updates to the Capital Improvement Plan planning process. Related tools and components include:

- Review and update of internal policies and procedures
- Establish city-wide sustainable building goals
- Incorporate multi-stakeholder engagement on capital projects
- Incorporate a social equity assessment tool
- Sustainable design charrette on all new buildings and large capital projects
- Incorporate sustainability statement of intent on all projects
- Implement integrative capital design process
- Internal education program
- Review and optimize capital design process

### Action Steps

➔ **Short-term - 1-2 years: Develop integrative design plan and start roll-out**

- Assign a champion
- Implement a process improvement event covering the current capital design process. Work with interdepartmental teams to identify potential project types and related stakeholders.
- Develop an integrated design plan for the identified project types. Include formal goal setting, communication and reporting procedures that would occur in the process, set at specific stages of design.
    - Include sustainability goals in the project RFP.
    - Typically, a multi-stakeholder goal-setting work session will occur early in the design process.
    - A second meeting will occur before major design decisions have been made, in order to optimize design elements and ensure that the project is on track to meet the team's goals.
- Begin to implement on key projects; refine process.

➔ **Medium-term – 3-5 years: Implement new capital design process City-wide**

- Continue capital design process implementation for all applicable City projects.
- Solicit feedback and make process improvements.

➔ **Long-term – 6+ years: Review and update capital plan**

- Using case studies and feedback, review plan and process, and make adjustments.

## ACTION 1.6: Organizational Capacity Building

Dedicate resources for internal education and training programs across departments.


Building Typologies Addressed:

- All

Strategy Approaches:

- Education & Training

Expected Outcomes:

✓ **Increased knowledge, awareness and capacity for implementation** through dedicated internal skill-building related to sustainable building, and enhanced communication and coordination with developers and builders.

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal
- **Estimated Financial Investment:** $10,000 annual training budget
- **Lead Department:** Human Resources
  **Participating departments and partnering organizations:** Sustainability, Development Services, Economic Development, Finance, Public Works Engineering, Public Works Operations, Parks, Facilities

### Action Summary

Several of the sustainable building strategies require education and training for new processes, policies and code updates and to effectively support new programs, augment project management and ensure efficient development review processes. Elements of this strategy include:

- Sustainable building capacity and knowledge survey of staff to identify training needs and gaps
- Include sustainable building/LEED certification as a preferred qualification
- Develop integrated training and education program and budget
- Prioritize sustainable building training in work plans
- Support a mix of internal and external training opportunities

### Action Steps

➔ **Short-term - 1-2 years: Survey staff and develop a training plan and budget**

- Communicate sustainable building action strategy goals and initiatives to all staff.
- Undertake a staff survey to determine sustainable building capabilities and needs.

- Develop a training plan and develop training opportunities.
- Review positions for applicability of sustainable building expertise.

➔ **Medium-term – 3-5 years: Evaluation and tracking**

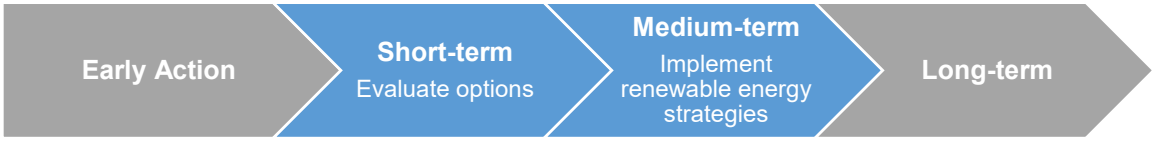
- Evaluate department position requirements and align with development plans.
- Develop and implement an effective internal communication pathway for sharing successes and lessons learned.
- Track skills and education related to sustainable building.
- Evaluate effectiveness of efforts to-date.

➔ **Long-term – 6+ years: Update program**

- Review, revise and update the education program to expand sustainable building learning opportunities.

## Action 1.7: Solar and Renewable Energy for Municipal Operations

Provide solar and renewable energy for municipal buildings and facilities. Develop a pathway to 100% renewable electricity by 2025, including a minimum of 15% solar energy.




Building Typologies Addressed:

- New and existing municipal buildings
- New and existing facilities and infrastructure

Strategy Approaches:

- Municipal Leadership
- Data and Reporting
- Policies

Expected Outcomes:

✓ **Energy and carbon reduction** through renewable energy purchases and installations
✓ **Leadership** through established renewable energy goals
✓ **Leverage of grants and incentives** (such as those available through Puget Sound Energy)

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate
- **Estimated Financial Investment:** Solar installation is approximately $7/watt installed ($3/panel + $4 installation).
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Development Services, Finance, Executive, Public Works Engineering, Public Works Operations, Facilities, Puget Sound Energy

### Action Summary

The City has a goal to reduce greenhouse gas emissions by 25% by 2020, 50% by 2030, 80% by 2050, compared to 2007 baseline. Additionally, the City's King County City's Climate Collaboration Joint Climate Commitments encourages cities to track and reduce emissions specifically from government operations. In conjunction with strategy 1.2, the Resource Conservation Management (RCM) Initiative, Issaquah should pursue the use of renewable energy for government operations, including the installation of solar panels.

To lead the way toward its GHG reduction goals, the City should commit to use 100% renewable electricity by 2025, including a minimum of 15% from solar energy sources. This will include an initial analysis and creation of a roadmap to determine feasibility and a pathway toward 100% renewable energy. This strategy will analyze both onsite renewable energy, including the installation of solar panels, and the purchase of offsite options.

### Action Steps

➔ **Short-term - 1-2 years:  Evaluate renewable energy options**

- Perform a technical analysis in conjunction with the Resource Conservation Management Initiative to determine potential energy sources, siting and feasibility.
- Work with Puget Sound Energy, Department of Commerce and other partners to explore renewable energy options.
- Determine a roadmap for 100% renewable electricity by 2025.

➔ **Medium-term – 3-5 years: Implement renewable energy roadmap**

- Negotiate power purchase agreements and install renewable energy at predetermined sites.
- Engage staff, perform training and market achievements in community

➔ **Long-term – 6+ years: Track and report progress**

- Monitor, track and report performance
- Continue ongoing maintenance and operations

## THEME 2: RE-THINK CAR HABITAT

**Purpose Statement**: Issaquah is a thriving, vibrant community with walking, biking, transit and technology driven transportation services that enhance livability with high performing buildings, spaces for amenities and support for diverse communities.

Mobility is a priority issue for Issaquah. Incorporating transportation options into building planning, development and operation presents a valuable opportunity for the City to support a transition from a car-oriented suburban community to a more compact urban center. Investments in building-related car habitat will help the community to take advantage of emerging mobility services, reduce pollution generating surfaces, improve management of transportation related impacts from growth and development, help ensure efficient use of land, align with transit investments, and incorporate walkable and bikeable elements into planned urban areas.

| Strategy | Description |
|---|---|
| 2.1 Enhanced TDM (Transportation Demand Management) | Clarify and update applicability of TMAPs (Transportation Management Action Plans) to address building design and occupancy transportation measures for new construction. |
| 2.2 Innovative Parking Solutions | Encourage shared, district-level parking approaches to support increased walk, bike and transit oriented travel. |
| 2.3 Clean, Shared Mobility Design Elements | Update codes for electric vehicles, bike storage, carpools and shared vehicles. |

**Comprehensive Plan Reference:** LU Goal J; T Goals B, F, G, H, I, K, L

## ACTION 2.1: Enhanced Transportation Demand Management (TDM)

Clarify and update applicability of TMAPs (Transportation Management Action Plans) to address building design and occupancy transportation measures for new construction.


Building Typologies Addressed:

- New commercial, new multifamily

Strategy Approaches:

- Policies, Codes & Regulations

Expected Outcomes:

- ✓ **Energy and carbon reduction** through reducing single occupant vehicle usage and drive-alone trips
- ✓ **Financial savings** for developers through potential for reducing parking
- ✓ **Social Equity** through improved access to public transportation and non-motorized options

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal - Moderate
- **Estimated Financial Investment:** $10,000 - $12,000 for code analysis and program update
- **Lead Department:** Development Services and Sustainability
  **Participating departments and partnering organizations:** Public Works Engineering, King County Department of Transportation, Sound Transit

### Action Summary

Transportation Management Action Plans (TMAPs) go beyond traffic mitigation to a more comprehensive approach that includes both building design and building operations related to occupant travel.

Issaquah currently has code relating to transportation management plans, but established criteria or program directive to implement and enforce these plans is limited or unclear. As noted in the code, a TMAP "is a contract between the City and a property owner or manager or an employer or group of employers stating that the employer(s) will provide education, opportunities, and employee incentives for ride-sharing, parking incentives and other transportation alternatives. The (TMAP) also addresses the responsibility of the property owner or manager or employer(s) for monitoring the success of the (TMAP), and reporting the annual results to the City."

This strategy recommends a review and update of the ordinance, revision of related implementation tools (such as menus, templates and procedures) and establishing a TMAP process that includes implementation, monitoring and enforcement for ongoing compliance. In addition, the update would clarify applicability to both commercial and multifamily residential projects.

### Action Steps

➔ **Early Action: Review TMAP program and update ordinance**

- Review code and current program, including gaps, challenges, successes, and best practices.
- Analyze measures, potential impacts and implementation considerations.
- Develop options including TMAP menus and templates.
- Update code provisions and amend implementation and tracking procedures.

➔ **Short-term - 1-2 years:  Implement program**

- Train internal staff on program and tools.
- Develop and roll out updated program to development community.

➔ **Medium-term – 3-5 years: Optimize program implementation**

- Perform ongoing outreach to developers to communicate plan requirements.
- Continue to work with developers, building owners and managers to develop and implement plans.
- Track and report progress.
- Streamline internal program implementation, incorporate into City trip reduction or other programs.

➔ **Long-term – 6+ years: Update TMAP program**

- Review successes and challenges.
- Update TMAP program.

## ACTION 2.2: Innovative Parking Solutions

Encourage shared, district-level parking approaches to support increased walk, bike and transit oriented travel.


Building Typologies Addressed:

- New commercial, new multifamily

Strategy Approaches:

- Partnerships
- Incentives
- Policies, Codes & Regulations

Expected Outcomes:

- ✓ **Energy and carbon reduction** through reduced vehicle trips.
- ✓ **Reduction in pollution generating surfaces** and more efficient use of land.
- ✓ **Financial savings** for developers through shared parking options and optimized parking requirements.

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate - Substantial
- **Estimated Financial Investment:** Depends upon scope.
- **Lead Department:** Executive
  **Participating departments and partnering organizations:** Public Works Engineering, Development Services, Economic Development, Sustainability

### Action Summary

Develop approaches (incentives, requirements, potential City roles) at the area or district-level as opposed to the parcel or individual business level to reduce car related habitat, facilitate walk, bike and transit-friendly design, ensure efficient use of land, reduce pollution generating impervious surfaces, and provide for avenues for other development related goals such as affordable housing, mixed use, sustainable buildings and urban design elements. Aim to reduce surface parking, and consider long-term phased approaches that respond to changing market conditions as density increases and transit improves. In the near term, work would be aligned with the Central Issaquah Parking Study.

Potential approaches include:

- Undertake a district-/neighborhood-level parking study.
- Identify shared parking incentives.
- Incorporate Transportation Management Action Plan measures (including Transportation Demand Management, shared vehicles, transportation services, transit, bike share and bike facilities) into individual site and shared parking requirements to manage demand.
- Evaluate options for a coordinated approach to parking implementation and determine the

appropriate role for the City or other facilitating/coordinating entity.

- Identify and incorporate, where appropriate, centralized, district and shared parking into Central Issaquah or other subareas.
- Review and update City parking goals to provide right-sized parking for current market needs, with flexibility to convert parking as transit options improve over time.

### Action Steps

➔ **Short-term - 1-2 years: Monitor opportunities**

- Review parking study recommendations currently underway with Central Issaquah.

➔ **Medium-term – 3-5 years: Evaluate opportunities**

- Evaluate opportunities and market conditions.
- Work with developers and internal City staff to identify opportunities.

➔ **Long-term – 6+ years: Implement strategies**

- Evaluate options for district-level parking approaches, conduct a study(ies), review opportunities and make recommendations.
- Perform outreach to developers.
- Implement strategies.

## ACTION 2.3: Clean, Shared Mobility Elements

Update codes for electric vehicles, bike storage, carpools and shared vehicles.


Building Typologies Addressed:

- New commercial, new multifamily

Strategy Approaches:

- Policies, Codes & Regulations

Expected Outcomes:

✓ **Energy and carbon reduction** through encouraging alternative transportation modes.

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal
- **Lead Department:** Development Services
  **Participating departments and partnering organizations:** Public Works Engineering, Sustainability, King County Metro

### Action Summary

The Issaquah Municipal Code currently addresses minimum requirements for bicycle parking, and allows a parking reduction offset for providing EV charging stations. Other items are not addressed; some measures are beginning to be adopted on an individual project basis, such as transportation network company pickup/drop-off areas. The objective of this strategy is to strengthen the City's commitment to sustainable transportation through code alignment with market conditions and sustainable transportation elements.

Specific sustainable transportation elements include, but are not limited to:

- Car share parking
- Covered, secure bike parking
- Changerooms, lockers, and showers
- Electric vehicle charging stations or infrastructure

### Action Steps

➔ **Short-term - 1-2 years: Recommend municipal code modifications**

- Undertake a gap analysis of the code to determine the extent to which individual sustainable transportation elements are being utilized or demanded in individual projects.
- Evaluate code options to determine where modifications should be made to provide incentives or disincentives, made more stringent, mandated at a minimum threshold where they don't currently exist, or be identified as an option.

➔ **Medium-term – 3-5 years: Implement municipal code modifications**

- Undertake code updates and perform outreach to developers.
- Establish internal permit review processes to determine compliance.
- Track and report data.

➔ **Long-term – 6+ years: Review and recommend municipal code modifications**

- Examine market conditions, successes and challenges, and alignment with City goals, and make recommendations for further modifications.

## THEME 3: TOWARD CARBON NEUTRAL BUILDINGS

**Purpose Statement**: Issaquah is successfully implementing a 'roadmap to net zero energy and carbon', striving for at least an 80% reduction in carbon from 2007 levels by 2050.

As part of the King County-Cities Climate Collaboration, Issaquah is demonstrating regional leadership in working to address the impacts of climate change. The collaboration aims to coordinate and enhance the effectiveness of local government climate and sustainability action.

In addition to municipal leadership actions identified under 'Walk the Talk and Lead the Way', the City can encourage reduction in energy and carbon through implementing energy code requirements, working with City staff, businesses, and residents to tap the market to monitor energy consumption, report data and encourage retrofits, and promoting alternative energy solutions.

| Action Strategy | Description |
|---|---|
| 3.1 Commercial Energy Code Updates | Update the City's energy code to reflect best practices in energy efficiency and renewable energy. |
| 3.2 Energy Code Review Process Improvements | Work with Department of Commerce and State Energy Office to conduct a 'desk audit' and improve processes around energy code review and compliance. |
| 3.3 Commercial Energy Benchmarking | Establish an energy benchmarking program to measure and report building energy performance to support investments in efficiency and renewable energy. |
| 3.4 Residential Energy Benchmarking | Establishes a home energy performance score (EPS) to inform buyers and motivate energy efficiency retrofits. |
| 3.5 Renewable Energy Program | Promote residential renewable energy programs through group purchasing, and assess community solar and other renewable energy program options. |

**Comprehensive Plan Reference:** LU Goal F, T Goal B

## ACTION 3.1: Commercial Energy Code Updates

Update the City's energy code to reflect best practices in energy efficiency and renewable energy.


Building Typologies Addressed:

- New commercial, new multifamily, new public and municipal

Strategy Approaches:

- Policies, Codes & Regulations

Expected Outcomes:

✓ **Energy and carbon reduction** through adoption of leading efficiency requirements beyond the base state commercial energy code.
✓ **Providing for alignment with regionally recognized approaches** to enhanced energy codes.

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate
- **Estimated Financial Investment:** Depends upon staff implementation or consultant technical support. Development costs vary depending upon project type.
- **Lead Department:** Development Services
  **Participating departments and partnering organizations:** Building, Sustainability, City of Seattle, Department of Commerce

### Action Summary

The city currently reviews and updates the building code with updates to the International Building Code by the state on a 3-year cycle. For residential building codes, City has the option to adopt alternative components, such as those in the appendices adopted at the state level, or for commercial buildings (including multifamily and mixed use), the City may pursue adoption of specific codes for commercial buildings at the local level.

The most recent update by Issaquah incorporated the 2015 Washington state code update. These code changes at the State offered significant efficiency advances in a number of areas, making the new energy code one of the highest performing in the country.

The intent of this strategy is to identify other measures that are applicable to Issaquah building types, are recognized and familiar in the region and that improve energy efficiency. There are currently regionally-specific code elements adopted in the City of Seattle or developed through the Regional Code Collaboration that improve minimum building performance beyond the State code levels, while reflecting market conditions and practical application in Issaquah projects.

### Action Steps

➔ **Short-term - 1-2 years: Review and research**

- Work with internal staff and external developers to understand opportunities and challenges

related to implementation of the most recent commercial energy code.

- Collaborate with other regional municipalities that are considering or have adopted amendments beyond the base Washington State Code.

➔ **Medium-term – 3-5 years: Code updates**

- Determine whether there are supplemental items that would provide significant benefit toward City goals beyond state code. Identify and evaluate requirements for local implementation.
- Review, recommend and incorporate into the code update. Adopt the updated Washington State Energy Code per usual approach (2018).

➔ **Long-term – 6+ years: Monitor and report**

- Continue to perform regular code updates based on State code adoption timelines.
- Work with developers and owners to determine success of additional code requirements.

## ACTION 3.2: Energy Code Review Process Improvements

Work with Department of Commerce and State Energy Office to conduct a 'desk audit' and improve processes around energy code review and compliance.


Building Typologies Addressed:

- All

Strategy Approaches:

- Partnerships
- Education & Training

Expected Outcomes:

✓ **Energy and carbon reduction** through ensuring consistent application of the energy code
✓ **Improved permitting processes** through operational optimization and internal capacity building

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal
- **Lead Department:** Development Services
  **Participating departments and partnering organizations:** Building, Sustainability, Department of Commerce, State Energy Office

### Action Summary

The Washington State Energy Code is complex to both review and enforce. This strategy offers an opportunity to work with the Department of Commerce to streamline the review and inspection process by City staff by examining current practices and determining opportunities for optimization and education. Additional training and support may be identified to help improve efficiency and building performance in the City.

### Action Steps

➔ **Short-term - 1-2 years: Review and improve current code compliance process**

- Collaborate with the Department of Commerce to understand code requirements and undertake a review of internal processes.
- Identify potential synergies, opportunities for streamlining and education.
- Implement process improvements.

➔ **Medium-term/long-term – 3+ years: Repeat for future code updates**

- With every update, review new compliance requirements and determine how to ensure that City staff are able to efficiently implement new code elements.

## ACTION 3.3: Commercial Energy Benchmarking

Establish an energy benchmarking program to measure and report building energy performance to support investments in efficiency and renewable energy.


Building Typologies Addressed:

- New and existing municipal buildings (Phase 1)
- New and existing public, commercial and multifamily buildings (Phase 2)

Strategy Approaches:

- Municipal leadership
- Data and reporting
- Policies, codes, regulations

Expected Outcomes:

✓ **Energy and carbon reduction** through identification of savings opportunities – direct alignment with 'roadmap to net zero'. The US EPA found that "organizations benchmarking consistently in Portfolio Manager have achieved average energy savings of 2.4% per year."

✓ **Financial savings** through identification of savings opportunities to prioritize energy optimization projects that will reduce operational budgets.

Anticipated Implementation Requirements:

- **Staffing Resources:** Substantial
- **Estimated Financial Investment:** Depends upon approach with other jurisdictions – website, help center, training, report writing and analysis, enforcement.
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Economic Development, Building, Department of Commerce, Smart Buildings Center, Puget Sound Energy, King County Cities Climate Collaboration (K4C), Other jurisdictions

### Action Summary

The purpose of a benchmarking and disclosure policy is to increase access to building performance data and motivate investment in efficiency upgrades and undertaking other actions that save energy and reduce carbon emissions. This aligns with the principle that 'you can't manage what you don't measure'.

The King County-Cities Climate Collaboration's Building Energy Benchmarking Subcommittee recommended including the following components:

1. **Public Building Benchmarking and Disclosure**. Require annual energy benchmarking and reporting for all city and county buildings and campuses of buildings that are:
   - 20,000 square feet or greater;

- An office, library, or public safety building with a floor area of 5,000 square feet or greater;
- Leased buildings greater than 20,000 square feet where the city or county is the sole occupant and controls the building utility accounts.

2. **Commercial/Multifamily Building Benchmarking and Disclosure**. Outline a program of voluntary annual energy benchmarking and reporting for commercial and multifamily buildings with floor area of 20,000 square feet or greater within the jurisdiction, then move to a future mandatory policy.

### Action Steps

➔ **Short-term - 1-2 years: Partner Collaboration**

- Collaborate with Department of Commerce, Smart Buildings Center, and K4C to identify opportunities for support and funding.
- Undertake the basic components of a municipal building inventory and tracking in coordination with the RCM initiative.

➔ **Medium-term – 3-5 years: Phase I and 2 – Municipal building benchmarking, Voluntary public, commercial and multifamily building benchmarking and disclosure**

- Collect, analyze and report on data for municipal buildings in conjunction with the Resource Conservation Management initiative on a regular basis.
- Work with existing building owners and new commercial/multifamily developers to develop an energy benchmarking and disclosure program.
- Collaborate with Seattle to identify strategies for encouraging owners to opt-in.
- Perform outreach to new building developers to ensure that their buildings will be ready to report energy consumption.

➔ **Long-term – 6+ years: Phase 3 - Consider implementing mandatory reporting requirements**

- Using the results of the previous phases, evaluate the potential for requiring energy benchmarking and disclosure for all commercial and multifamily properties in Issaquah.

## ACTION 3.4: Residential Energy Benchmarking

Establishes a home energy performance score (EPS) to inform buyers and motivate energy efficiency retrofits.


Building Typologies Addressed:

- New and existing single family residential

Strategy Approaches:

- Municipal leadership
- Data and reporting
- Policies, codes, regulations

Expected Outcomes:

✓ **Energy and carbon reduction** through identification of savings opportunities – direct alignment with 'roadmap to net zero'.

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate
- **Estimated Financial Investment:** Depends upon implementation and partnerships.
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Building, Sustainability, Built Green, King County Cities Climate Collaboration

### Action Summary

Energy benchmarking can be applied to residential properties so that homes are given a home energy performance score (EPS), similar to miles per gallon (MPG) for a car, that would provide useful information to homeowners and homebuyers about operational greenhouse gas emissions, energy use and costs. The information would likely be phased for implemented on sale or resale and disclosed to potential house buyers. Incentives and program partnerships with utilities, Master Builders and others could extend the program more rapidly to existing homes.

A City-wide residential energy benchmarking program would provide homeowners with valuable information about their properties, inform total cost of ownership and support decision making about investments in efficiency upgrades. Energy benchmarking would also use the marketplace to encourage energy performance as an attribute in selling a home. The City's housing stock includes both older homes and newer homes that are considerably more energy efficient, including 19% certified Built Green. A benchmarking program could consider comparing homes of similar ages to provide context for the energy performance score.

Residential energy benchmarking programs are beginning to be implemented across the country, with phased roll-outs. In the northwest, Portland has recently adopted a program. Locally, the program could be implemented in partnership with Built Green or others.

### Action Steps

➔ **Short-term - 1-2 years:  Review and research**

- Identify municipalities currently implementing this program and review their program implementation strategies, standards and results.

➔ **Medium-term – 3-5 years: Develop program recommendation**

- Track the success of other municipalities' programs to determine opportunities, challenges, and benefits.
- Perform outreach to stakeholders and partnering organizations to determine benefits and drawbacks of such a program.
- Evaluate applicability to Issaquah and prepare a recommendation for a residential energy benchmarking program, whether phases, and whether optional or mandatory.

➔ **Long-term – 6+ years: Consider program implementation**

- Roll-out program. Invest in significant marketing, community engagement and education.
- Identify municipalities currently implementing this program and review their program implementation strategies, standards and results.

## ACTION 3.5: Renewable Energy Programs

Promote residential renewable energy programs through group purchasing, and assess community solar and other renewable energy program options.


Building Typologies Addressed:

- New and existing municipal and public buildings
- Existing multifamily residential

Strategy Approaches:

- Outreach and education
- Municipal leadership
- Partnerships

Expected Outcomes:

✓ **Carbon reduction** through residential programs and community awareness
✓ **Social equity** promoted through affordable community solar program opportunities

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal - Substantial
- **Estimated Financial Investment:** $10,000 - $30,000 for Solarize Campaign, Community Solar dependent upon design and partners.
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Building, Public Works Engineering, Northwest SEED, Puget Sound Energy, Department of Commerce

### Action Summary

Renewable energy reduces pollution and resource use, while encouraging ongoing investment in energy sources other than fossil fuels. To achieve the City's greenhouse gas reduction goals, renewable energy should be integrated into the City at the residential, business, community and regional level.

This strategy identifies potential renewable energy programs and recommends additional research on other renewable energy technologies or programs that may be applicable in Issaquah including photovoltaic panels, solar thermal, small scale anaerobic biodigestion or green power purchase agreements to increase renewable energy production and demonstrate innovative projects.

Potential solar energy programs include:

- SolSmart Designation: This is a Department of Energy program that recognizes communities that are "open for solar business". Technical support and expertise would help reduce permitting and planning barriers to solar installation and increase community engagement.
- Solarize NW: This is a regionally-proven turn-key program that provides education on solar and opportunities to save time and money on solar installation through group purchase. This

is often a community-driven program supported by the municipality.

- Community Solar: This is a way for residents who can't or don't want to purchase their own solar systems to add solar to the grid and receive the benefits that come with owning solar panels, but at a size and cost that works for them. Participants pay the upfront costs for the solar installation and then become an owner-investor, and get paid for the energy produced by the array.

### Action Steps

➔ **Short-term - 1-2 years: Research opportunities and build relationships**

- Undertake community engagement to identify interests and opportunities with residents and businesses.
- Implement programs as soon as possible to take advantage of existing incentive programs.
- Work with non-profit partners and internal departments to address barriers to solar installation such as permitting, planning, financing and zoning

➔ **Medium-term – 3-5 years: Implement programs**

- Determine potential funding for programs and partnerships for renewable energy projects and community solar.
- Continue to roll out programs to community.

➔ **Long-term – 6+ years: Track and report progress**

- Implement community solar program.
- Monitor program successes and report results.

## THEME 4: CONNECT TO THE OUTDOORS

**Purpose Statement**: Issaquah is a city that protects, is connected to, provides views to, and is integrated with the natural environment. Issaquah is green and resilient, promoting health and happiness, extracting carbon, and reducing heat island effects.

A common theme in many of Issaquah's plans and visioning documents is the importance of the City's connection to nature. The preservation of green space, views of mountains, and protection of salmon are priorities.

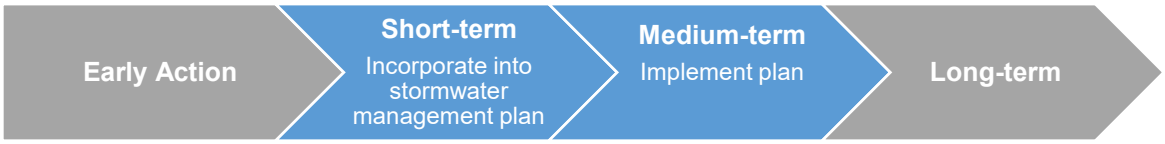
The built environment connects to nature in many ways, particularly through infrastructure and neighborhood plans.

| Action Strategy | Description |
|---|---|
| 4.1 Shared LID Stormwater Facilities | Evaluate and implement shared LID storm water facility approaches to improve water quality and increase efficiency of land use. |
| 4.2 Resiliency Analysis | Undertake a study of infrastructure and natural areas to assess policy gaps and infrastructure vulnerability for climate preparedness. |

**Comprehensive Plan Reference**: LU Goal A, B, H; Community Goal P

## ACTION 4.1: Shared LID Stormwater Facilities

Evaluate and implement shared LID storm water facility approaches to improve water quality and increase efficiency of land use.




Building Typologies Addressed:

- New infrastructure

Strategy Approaches:

- Partnerships
- Incentives

Expected Outcomes:

- ✓ **Improved stormwater management**, both on constrained sites and in areas where urban design functions limit low impact development (LID) approaches.
- ✓ **Increased resilience to major storm events**
- ✓ **Development incentive for sustainable approach**

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate
- **Estimated Financial Investment:** Incorporate into Stormwater Management Plan
- **Lead Department:** Public Works Engineering
  **Participating departments and partnering organizations:** Development Services Department, Office of Sustainability, Public Works Operations

### Action Summary

The goal of this strategy is to identify and evaluate opportunities for district-level shared low impact development (LID) stormwater facilities to improve management of stormwater quality and quantity. A shared LID facility approach may help address constrained sites and urban design standards as well as reduce load on existing infrastructure and provide incentives for building. Ideally, this would be considered in sub-area panning, but evaluated in the context of the City's Stormwater Plan update, or a companion analysis.

There are examples of shared stormwater facilities in the City, including the Issaquah Highlands, as well as other communities in the region. The City recently updated stormwater development requirements (December 2016) to require LID analysis, require or encourage LID and make it easier for LID projects to proceed. However, City subarea plan urban design standards can effectively exempt application of LID in the Central Issaquah Plan area as well as other subareas. The City's stormwater management plan is anticipated to be update in 2018.

### Action Steps

➔ **Short-term - 1-2 years: Update City-wide stormwater management plan**

- Incorporate opportunities for considering shared LID facilities in sub-area plans.

- Begin updates to the Stormwater Plan using city and grant funding anticipated in 2018.

➔ **Medium-term – 3-5 years: Undertake outreach and implement plan**

- Evaluate opportunities for developing shared LID facilities
- Work with developers in areas where shared facilities are a potential option.
- Fund and develop shared LID capital infrastructure projects in alignment with the stormwater management plan and integrative design process.

➔ **Long-term – 6+ years: Monitor, report, and update**

- Continue implementation.
- Track challenges and opportunities related to LID and the implementation of the plan.
- Determine whether updates should be incorporated.

## ACTION 4.2: Resiliency Analysis

Undertake a study of infrastructure and natural areas to assess policy gaps and infrastructure vulnerability for climate preparedness.


Building Typologies Addressed:

- New and existing infrastructure, new commercial, new multifamily

Strategy Approaches:

- Municipal leadership
- Policies and planning

Expected Outcomes:

✓ **Improved resilience in operations to natural disasters and extreme storm events**
✓ **Long-term financial savings** through risk mitigation

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate
- **Estimated Financial Investment:** $40,000 - 60,000. Potential grant assistance.
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Public Works Engineering, Public Works Operations, King County

### Action Summary

This strategy will help the City integrate climate change preparedness into the City's operations and maintenance of infrastructure and natural resources as well as the provision of public services. The resiliency analysis will first evaluate policy gaps in City plans such as the Emergency Management Plan, Comprehensive Plan, Stormwater Management Plan, Water Systems Plan, and others.

Two strategies are suggested through regional experience: 1) conduct vulnerability assessments and implement infrastructure operation and maintenance programs that consider full life-cycle costs and climate change impacts in asset management; and 2) integrate estimates of the magnitude and timing of climate change impacts into capital project planning, siting, design, and construction.

### Action Steps

➔ **Short-term - 1-2 years: Review regional efforts**

- Review regional efforts, such as King County work and local plans relating to hazard mapping and emergency response.

➔ **Medium-term – 3-5 years: Assess and plan**

- Perform a resiliency gap analysis and vulnerability assessment on City plans. Consider the implications of densification in the central areas of Issaquah.

- Identify opportunities for new and existing infrastructure and natural systems.
- Prioritize capital projects for potential resilience upgrades, and include in long term budgeting and plans.

➔ **Long-term – 6+ years: Implement upgrades**

- Implement resiliency plans for infrastructure and natural systems.

## THEME 5: FOSTER INNOVATION

**Purpose Statement**: Issaquah is a thriving community, recognized as a regional leader in encouraging innovative approaches to resiliency and sustainability. Developers want to work with Issaquah, businesses want to be in Issaquah, and engaged community members incubate grassroots programs to support sustainable lifestyles.

This theme aims to encapsulate innovation by the City, as well as ensuring that innovative approaches to sustainable building by developers and the community are encouraged and supported. Potential strategies included here are:

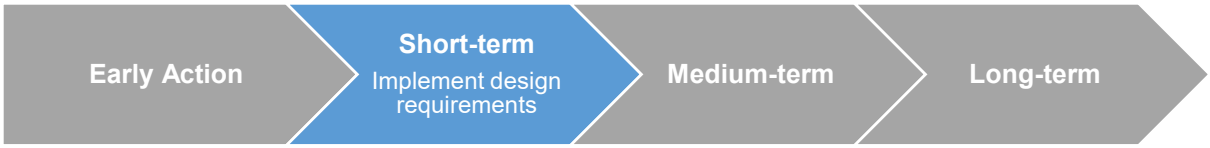
- Establishing a high sustainability standard for new building across Issaquah
- Flexible with allowing leading-edge design approaches
- Actively engaging the Issaquah community to promote sustainable practices through outreach and marketing
- Identifying opportunities for demonstration projects of new regionally-appropriate technologies
- Partnering with businesses and developers to pursue common sustainability goals

| Action Strategy | Description |
|---|---|
| 5.1 New Sustainable Design Criteria | Establish LEED Gold or Built Green 4 Star requirements for new construction that is 20,000 square feet or greater. |
| 5.2 Marketing | Promote sustainable building projects in the community and region, celebrate and share successes, partner with sustainable building organizations, developers and property owners. |
| 5.3 Incentivize Deep Green Building | Adopt a Living Building Ordinance or Deep Green Incentive Package with tiered incentives. |
| 5.4 Sustainable Building Partnerships | Establish a sustainable development partnership agreement with private property owners and developers to establish common goals. |
| 5.5 Demonstration Projects | Leverage city projects or development agreements to support, design or develop and promote leading-edge sustainable buildings and technologies. |

**Comprehensive Plan Reference:** LU Goal A, F, G, I, H; T Goal B, L, M; U Goal G; EV Goal D

## ACTION 5.1: New Sustainable Design Criteria

Establish LEED Gold or Built Green 4 Star requirements for new construction that is 20,000 square feet or greater.




Building Typologies Addressed:

- New commercial, new mixed use, new multifamily mid-rise

Strategy Approaches:

- Policies, Codes & Regulations
- Outreach, Education & Training

Expected Outcomes:

- ✓ **Energy and carbon reduction and resource conservation** through quantifiable, proven sustainable design measures
- ✓ **Increased building performance, occupant comfort and healthy indoor environments**
- ✓ **Development of supportive resources for successful adoption of standards**

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate - Substantial
- **Estimated Financial Investment:** Estimated 0.25% - 0.50% of total project cost.
- **Lead Department:** Development Services
  **Participating departments and partnering organizations:** Sustainability, Economic Development, Built Green, US Green Building Council (USGBC)

### Action Summary

This strategy would establish standards for larger new commercial and mixed use residential developments (greater than 20,000 square feet) to meet a LEED Gold (primarily non-residential) or Built Green 4 Star (primarily multifamily residential and mixed-use) level. Projects eligible for both would have the option to select the applicable standard. Affordable housing would meet Evergreen Sustainable Development Standard (ESDS), which is currently required by the state.

LEED Gold has become fairly standard, and several measures in LEED are incorporated into projects in the region as a result of state code requirements and local district plans. At the same time, these standards provide for measures which are not widely addressed by code. By implementing requirements in line with well-established LEED and Built Green programs, the City utilizes a known, industry accepted and third party verified standard. LEED and Built Green provide a menu driven approach which allow for design and implementation flexibility for developers outside of specific code requirements. Consultant experience indicates that potential cost increase to developers would be 0.25% - 0.50% of total project cost with full certification (this includes certification fees, design and consulting fees, and any construction premiums).

Note that project teams have seen increases in LEED implementation costs when the project team is inexperienced, or LEED decisions are made midway through or late in design. Cost efficiencies are best achieved when the design team has expertise in sustainable design, a multi-stakeholder integrated

design process is applied, and LEED goals and project elements are initiated in the schematic design phase.

Experienced design teams can meet LEED Gold requirements for no additional construction costs; however, certification fees and additional design team coordination fees are required to process an application through USGBC/GBCI.

Built Green certification is not a significant cost premium, and has been successfully implemented in the Issaquah Highlands for single family and multifamily residential projects.

Evergreen Sustainable Development Standard is a Washington State standard for affordable housing projects and is required for projects receiving funding through the Housing Trust Fund.

Applying the requirement to buildings over a size threshold of 20,000 square feet takes advantage of efficiencies of scale for larger projects and smaller projects will not be unreasonably burdened with additional coordination and design tasks. A 20,000 square foot minimum will help to ensure that the majority of larger new commercial and multifamily projects, such as the mid-rise developments planned for Central Issaquah, would see increased performance.

Three potential pathways are proposed to accommodate different project types and developer goals:

- Pathway 1: LEED Gold, certified by the USGBC/GBCI for applicable commercial, multifamily residential and mixed use projects. All costs of certification would be the applicant's responsibility.
- Pathway 2: Built Green 4 Star, certified by Built Green for applicable multifamily residential and mixed use projects. All costs of certification would be the applicant's responsibility.
- Pathway 3: Evergreen Sustainable Development Standard for projects that are primarily affordable housing.

Alternative Pathway

- Certification equivalency: LEED or Built Green equivalency would be provided and evaluated for conformance by the City. Documentation would be submitted by a LEED AP (LEED Accredited Professional) or equivalent approved reviewer, contracted by the developer and provided to the City. The City would need to dedicate resources to establish documentation requirements and procedures, and evaluate and verify compliance with the standard.

### Action Steps

➔ **Short-term - 1-2 years: Program development and implementation**

- Develop internal resource requirements and processes.
- Evaluate phasing subarea or project type.
- Stakeholder engagement.
- Develop program standards and policy adoption.
- Identify and bundle potential incentives applicable to developers opting for full certification.
- Communicate intent and timing of program rollout to developers.
- Appoint City liaisons to work with developers.
- Track and report progress of certification programs in Issaquah.

➔ **Medium-term – 3-5 years: Continue to implement program**

- Implement program and monitor process to determine optimizations.

- Continue to optimize internal processes and provide City staff with training.
- Work with developers to ensure they understand the requirements and benefits.
- Track and report.

➔ **Long-term – 6+ years: Evaluate and adjust program**

- Evaluate implementation results, developer feedback and project performance
- Track and report.

## ACTION 5.2: Marketing

Promote sustainable building projects in the community and region, celebrate and share successes, partner with sustainable building organizations, developers and property owners.


Building Typologies Addressed:

- All

Strategy Approaches:

- Outreach, Education & Training
- Partnerships

Expected Outcomes:

- ✓ **Municipal leadership and increased community adoption** of sustainable building practices through demonstration and communication of successes
- ✓ **Support market awareness of sustainability practices** by developments in the community, provide for positive branding of community and projects around sustainability values.

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal
- **Estimated Financial Investment:** $5,000 – 10,000.
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Communications, Development Services, Economic Development, King County, Puget Sound Energy, Built Green, US Green Building Council

### Action Summary

This strategy provides for the development of a marketing and communications plan that would allow the City to celebrate and share successes with the community, promote positive investments by developers in the community and to invite partnerships to leverage reach.

To encourage more sustainable building, City would strive to actively recruit high quality, sustainability oriented developers to the City, celebrate the work of sustainable building currently in the City, and provide an opportunity to demonstrate Issaquah's leadership throughout the region.

The City would prepare a marketing and communications plan to showcase Issaquah as the place to build and live sustainably. Potential communication and marketing tools could include:

- Case Studies
- Conference presentations
- News media/Interviews
- City website, newsletter and social media
- Leveraging partner resources - joint events, promotion opportunities, newsletters (Built

Green, King County)

- Opportunities for joint marketing with projects that are Built Green or LEED certified.
- Promotion of public and private partner efforts
- Education of tenants and new residents

### Action Steps

➔ **Short-term - 1-2 years: Develop marketing and outreach strategy**

- Develop a marketing and communication plan, identifying specific goals, messaging and strategies that will be used in marketing activities.
- Initiate partnerships with current builders in Issaquah to collaborate on reporting successes, optimizing relationships, and determining opportunities for future projects.
- Collect and publish case studies, testimonials and results (data).
- Perform outreach and connect with regional sustainability oriented developers.

➔ **Medium-term – 3-5 years: Implement marketing and outreach strategy**

- Ongoing implementation of the marketing plan - consider separate approaches for businesses and residents, inviting input from the community.
- Provide education to local developers about sustainable building techniques that are proven to work in Issaquah.

➔ **Long-term – 6+ years: Continue marketing and outreach strategy**

- Optimize and operationalize communications strategy.

## ACTION 5.3: Incentivize Deep Green Building

Adopt a Living Building Ordinance or a Deep Green Incentive Package to incentivize deeply sustainable projects and allow for code deviations if aligned with the ordinance.


Building Typologies Addressed:

- New commercial, new multifamily, new residential

Strategy Approaches:

- Incentives
- Policies, Codes & Regulations

Expected Outcomes:

✓ **Energy and carbon reduction and resource conservation** through deep green design measures

✓ **Development of a limited number of leading edge projects**

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate
- **Estimated Financial Investment:** Depends on incentives offered.
- **Lead Department:** Development Services
  **Participating departments and partnering organizations:** Sustainability, Economic Development, Public Works Engineering, Public Works Operations, International Living Future Institute, Built Green

### Action Summary

This strategy recommends the adoption of a Living Building Ordinance, similar to an ordinance implemented in the City of Seattle, or a Deep Green Incentive Package, similar to an ordinance adopted in the City of Shoreline.

The Living Building Ordinance provides for deviations and code departures for projects certifying at very high levels as under the International Living Future Institute's (ILFI) Living Building Challenge, a standard which exceeds LEED and other similar standards.

Shoreline's Deep Green Incentive Package includes tiered incentives (Tier I (highest level)- full Living Building, Tier II - Built Green Emerald Star or Living Building 'Petal' Recognition, Tier III - Net Zero and LEED Platinum). An ordinance locally would provide incentives for deeply sustainable projects and allow for code deviations if aligned with the ordinance.

Built Green Emerald Star (established as a result of the City's zHome project), LEED Platinum, Living Building, and Net Zero all represent the leading edge of sustainable building design standards. Encouraging these types of projects in the private sector fosters innovation in clean energy, healthy design, support for certified sustainably managed forests (such as those on Tiger Mountain) and provides an opportunity for innovation in Issaquah in the built environment.

Possible incentives would be reviewed to determine applicability. These could include:

- Development Fee waivers/Stormwater waivers
- Priority Review/Green Concierge
- Mixed Use exemption
- Technical Assistance

### Action Steps

➔ **Short-term - 1-2 years: Track regional progress on Deep Green Incentive programs**

- Monitor regional ordinances including City of Seattle and City of Shoreline.
- Work with any potential projects to help inform the development of City's program.

➔ **Medium-term – 3-5 years: Implement Deep Green program**

- Using regional examples of successful ordinances as templates; review, create and adopt an Ordinance that would immediately encourage deep green building practices through incentives and code departures, where applicable.
- Undertake outreach campaign to ensure that landowners, purchasers, and developers are aware of the Ordinance.
- Identify potential projects and collaborate with the developers and owners to determine how to apply the Ordinance in its early phase.
- Provide education and training to City staff so they are equipped to address the Ordinance.
- Work with developers to encourage and build deep green projects.

➔ **Long-term – 6+ years: Update Ordinance**

- Track and report on project successes and challenges.
- Revise incentives and internal processes as needed.
- Update Ordinance if required.

## ACTION 5.4: Sustainable Building Partnerships

Establish a sustainable development partnership agreement with private property owners and developers to establish common goals.


Building Typologies Addressed:

- New commercial, new multifamily

Strategy Approaches:

- Partnerships
- Incentives
- Municipal leadership

Expected Outcomes:

✓ **Alignment of private sector development with community goals** through voluntary participation, establishing commitments and applying transparent, verifiable standards

✓ **Municipal leadership** through community collaboration to achieve change on a large scale

Anticipated Implementation Requirements:

- **Staffing Resources:** Minimal
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Development Services Economic Development, Executive, Private sector partners

### Action Summary

The objective of this strategy is to create a sustainable development partnership agreement (or other structure) with major Issaquah property owners and developers that would establish common goals for sustainable development. The agreements could be coupled with deep green code departure allowances, technical assistance, or other incentives. Additional City efforts could include facilitating connections for the community with green contractors, or partnering with other organizations to develop a sustainable development business district such as a 2030 District approach.

The City has established sustainability goals in a number of guiding documents including the Comprehensive Plan, Central Issaquah Plan, Central Issaquah Design and Development Standards as well as urban design guidelines for Talus and the Issaquah Highlands developments. In addition, the City has subsequently entered into a number of development agreements, which contain some sustainable development provisions, but which provide for varying, generally very limited and inconsistent levels of community sustainability benefit. Partnership agreements could provide more realistic and effective sustainability measures and provide alignment with other strategies, through collaboration between developers and the City. Expectations for future partnership agreements could also be identified.

### Action Steps

➔ **Early Action: Establish partnerships for near term projects**

- Connect with private sector partners on upcoming projects.
- Determine options for types of partnerships.

➔ **Short-term - 1-2 years: Perform outreach and identify potential partners**

- Identify potential partners for sustainable development partnership agreements or collaborations.
- Work with developers and landowners to assess the status of sustainability terms of existing partnership agreements and report on results.
- Provide recommendations for potential partnerships.

➔ **Medium-term – 3-5 years: Develop partnership agreements**

- Develop and support partnership agreements that aggressively seek to achieve leading edge sustainability in the built environment.
- Track and report on all projects that are initiated during this time.

➔ **Long-term – 6+ years: Collaborate with partners**

- Continue work with partners on active projects.
- Track and report.

## ACTION 5.5: Demonstration Projects

Leverage city projects or development agreements to support, design or develop and promote leading-edge sustainable buildings and technologies.


Building Typologies Addressed:

- New commercial, new multifamily, new single-family, new municipal, new public, new affordable

Strategy Approaches:

- Municipal leadership
- Partnerships
- Demonstration Projects

Expected Outcomes:

✓ **Energy and carbon reduction and resource conservation** through innovative strategies and technologies

✓ **Municipal leadership** for projects applied to City buildings

Anticipated Implementation Requirements:

- **Staffing Resources:** Moderate – Substantial
- **Estimated Financial Investment:** Unknown at this time.
- **Lead Department:** Sustainability
  **Participating departments and partnering organizations:** Development Services, Economic Development

### Action Summary

Issaquah has a strong foundation in supporting and building regional demonstration projects. The Pickering Barn renovation, Fire Station 73, the Idea Home, zHome and Fire Station 72 are projects which received regional or national recognition for leading ideas and innovation practices. The City has several potential projects or sites that could be used to implement new ideas and technologies to help raise awareness, achieve environmental benefits for the community and demonstrate leadership in the region once again. For example, the awareness and use of cross laminated timber (CLT) is relatively low in the Pacific Northwest, while the potential economic and environmental benefits may be significant and could benefit from demonstration. Projects could either be owned and operated by the City or developed in partnership with another public or private entity. Example sites include Talus Parcel 9, 7th & Juniper, TOD sites, parks and infrastructure.

### Action Steps

➔ **Short-term - 1-2 years: Track Projects**

- Identify and track potential projects and sites within the City that could incorporate

sustainable building design and innovative technologies.

- Incorporate leading sustainable design standards into City sponsored or supported projects.
- Review and update city policy on city owned or controlled land and potential for demonstration projects.

➔ **Medium-term – 3-5 years: Research and Plan**

- Research cutting edge technologies and grant opportunities to support the City's efforts.
- Begin design and development of demonstration projects on city controlled parcels.
- Select demonstration project and incorporate integrated design techniques into the planning process.

➔ **Long-term – 6+ years: Implement**

- Implement demonstration project

## B. Sustainability Goal Areas

| Goal Area | Targets | Reference |
|---|---|---|
| **Climate and Energy**<br><br>Develop innovative climate solutions which advance the city toward a carbon neutral community. | Reduce greenhouse gas emissions: 25% by 2020, 50% by 2030 and 80% by 2050, from a base year of 2007. | Comprehensive Plan (LU-F3), County-wide Planning Policies |
| | Achieve net-zero GHG emissions in new buildings by 2030. Design and build 'green buildings' to minimize energy and carbon impacts. | Joint City-County Climate Commitments (K4C) |
| | Reduce energy use in existing buildings: 25% below 2012 levels by 2030. Support energy efficiency retrofits of existing buildings which will not be redeveloped in the short term. | Joint City-County Climate Commitments (K4C), Comprehensive Plan (LU-F6) |
| | Reduce impacts of climate through education, incentives, policies and regulations that require reduction and mitigation of greenhouse gas and CO2e emissions in all land uses and by providing incentives for innovative climate solutions. | Comprehensive Plan (LU-F4) |
| **Natural Areas and Open Space**<br><br>Preserve and restore open spaces, forests, and natural areas | Achieve and maintain an overall tree canopy coverage of at least 50% of total land within Issaquah for reasons such as, but not limited to, offsetting the urban heat island effects, sequestering carbon dioxide emissions, and creating an inviting pedestrian environment. | Comprehensive Plan (LU Goal B) |
| | Conserve productive forest resource lands and ensure that forest practices use best management practices to protect water quality, habitat, and viewscape of forested hillsides. | Comprehensive Plan (LU-L2) |
| **Water**<br><br>Preserve, protect and restore water resources and riparian habitat. | Reduce water usage. Conserve 6% per household by 2020 from 2010 levels, corresponding to approximately 141 gallons per equivalent residential unit or 170,000 gallons per day on an average basis. | City Water System Plan |
| | Restore and enhance riparian habitat for salmon and other native wildlife. | Stream and Riparian Areas Restoration Plan, Central Issaquah Plan |
| | Minimize stormwater runoff and improve stormwater quality. | Stormwater Plan |
| | Ensure protection of the Lower Issaquah Valley Aquifer from adverse impacts of development and activities. | Comprehensive Plan (LU-D4) |
| **Mobility**<br><br>Prioritize and increase pedestrian, bicycle, transit and non-drive alone mobility. | Achieve a non-drive alone (NDAT) rate of 32.3% and 11.5 vehicle miles traveled (VMT) by 2020. | Central Issaquah Plan, City CTR Plan |
| | Increase in non-motorized mode split by 10% in the Central Issaquah Plan area and 3% in the rest of the City. | Central Issaquah Plan, City CTR Plan |
| | For passenger vehicles and light trucks, reduce GHG emissions intensity of fuels by 15% below 2012 levels by 2030. | Joint City-County Climate Commitments (K4C) |
| | Prioritize the inclusion of non-motorized and transit oriented mobility improvements and design elements recognizing their carbon reduction benefits. | Comprehensive Plan (T Goal B, T-F2) |
| | Increase availability and use of pedestrian, cyclist, and other non-motorized vehicle transportation modes. | Comprehensive Plan, Central Issaquah Plan |
| **Materials Management**<br><br>Use and reuse materials | Reduce landfill-bound waste generation. Achieve a 55% diversion rate by 2015, 70% by 2020, and zero waste of resources by 2030. | Joint City-County Climate Commitments (K4C), Draft Solid Waste Plan |

| | | |
|---|---|---|
| productively over their entire lifecycle and avoid toxic chemicals. | Incorporate materials of low toxicity and optimize indoor air quality. | Comprehensive Plan (U-G4, in part) |
| | Use of local, renewable, and recycled materials and products in new construction, renovations, and operations. | Comprehensive Plan (G-G1, in part) |
| **Healthy and Equitable Community**<br><br>Provide for physical, social and mental well-being, and equitable access to services and housing. | Ensure a connected development pattern that enhances community access and promotes physical, social and mental well-being so that all people can live healthier and more active lives. | Comprehensive Plan (LU Goal J) |
| | Establish innovative development regulations which result in diverse housing needed to meet the growing demand for moderate and low cost housing and to create a jobs-housing balance. | Comprehensive Plan (LU-I1) |
| | Address opportunities to reduce risk and enhance resilience to natural hazards including climate change. | Joint City-County Climate Commitments (K4C) |

## Goals Addressed by Theme

| | | Walk the Talk & Lead the Way | Re-think Car Habitat | Toward Carbon Neutral Buildings | Connect to the Outdoors | Foster Innovation |
|---|---|---|---|---|---|---|
| **Primary Sustainability Goal Areas Addressed** | **Overarching Regional Leadership** | X | X | X | X | X |
| | **Climate and Energy** | X | X | X | | X |
| | **Natural Areas and Open Space** | | | | X | X |
| | **Water** | | | | X | X |
| | **Mobility** | | X | | | X |
| | **Materials Management** | X | | | | X |
| | **Healthy and Equitable Community** | X | X | X | X | X |

## C. Estimated Resource Requirements

| Theme | Strategy | Description | Staffing Resources<br>Minimal (<250 hrs)<br>Moderate (>250-1,000 hrs)<br>Substantial (>1,000 hrs) | Estimated Financial Investment | Early Actions | Short Term (1-2 yrs) | Medium Term (3-5 yrs) | Long Term (6+ yrs) |
|---|---|---|---|---|---|---|---|---|
| **Walk the Talk and Lead the Way** | 1.1 City Sustainable Building Policy | Update the City's Sustainable Building & Infrastructure Policy (2004) to LEED Platinum, and incorporate other approaches for parks and infrastructure. Applies to new construction and major remodels. | Minimal | Estimated 2-4% additional cost for new buildings. | X | | | |
| | 1.2 Resource Conservation Management (RCM) Initiative | Establish a RCM initiative to measure and implement efficiency measures in existing City buildings and facilities. | Substantial<br>Additional .5 FTE | Facility management software ($5,000-20,000), investment grade audit ($50,000), plus staff. | | X | | |
| | 1.3 Sustainable Building Public Partnership | Establish a sustainable development partnership agreement with public sector property owners to align goals and provide leadership around sustainable building. | Minimal | - | X | X | | |
| | 1.4 Incorporate Sustainable Design in Subarea Planning | Review and incorporate sustainable design (e.g. LEED ND, Built Green Communities) into City development standards and subarea plans. | Minimal - Moderate | - | X | X | | |
| | 1.5 Integrative Design | Capital design process improvement to incorporate integrated design principles and practices (multi-stakeholder engagement, sustainable design project goals, early sustainable design charrette, etc.). | Minimal | $7,500 – 12,500 for process improvement. | | X | | |
| | 1.6 Organizational Capacity Building | Internal education and training program across departments. | Minimal | $10,000 annual training budget. | | X | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1.7 Solar and Renewable Energy for Municipal Operations | Provide solar and renewable energy for municipal buildings and facilities. Develop a pathway to 100% renewable electricity by 2025, including a minimum of 15% solar energy. | Moderate | To be determined based upon pathway analysis. | | X | X | |
| | | | | | | | | |
| **Re-Think Car Habitat** | 2.1 Enhanced TDM (Transportation Demand Management) | Clarify and update applicability of TMAPs (Transportation Management Action Plans) to address building design and occupancy transportation measures for new construction. | Minimal - Moderate | $10,000 – 12,000 for code analysis & program update. | X | X | | |
| | 2.2 Innovative Parking Solutions | Encourage shared, district-level parking approaches to support increased walk, bike and transit oriented travel. | Moderate - Substantial | Depends upon scope. | | | | X |
| | 2.3 Clean, Shared Mobility Design Elements | Update codes for electric vehicles, bike storage, carpools and shared vehicles. | Minimal | - | | | X | |
| | | | | | | | | |
| **Toward Carbon Neutral Buildings** | 3.1 Commercial Energy Code | Update City's energy code to reflect best practices in energy efficiency and renewable energy. | Moderate | Depends upon staff implementation or consultant technical support.<br>Development costs vary depending upon project type. | | | X | |
| | 3.2 Energy Code Review Process Improvements | Work with Department of Commerce and State Energy Office to conduct a 'desk audit' and improve processes around energy code review and compliance. | Minimal | - | | X | | |
| | 3.3 Commercial Energy benchmarking | Establish an energy benchmarking program to measure and report building energy performance to support investments in efficiency and renewable energy. | Substantial | Depends upon approach w/ other jurisdictions – website, help center, training, report writing and analysis, enforcement. | | | X | X |
| | 3.4 Residential Energy Benchmarking | Establishes a home energy performance score (EPS) to inform buyers and motivate energy efficiency retrofits. | Moderate | Depends upon implementation and partnerships. | | | | X |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 3.5 Renewable Energy Programs | Promote residential renewable energy programs through group purchasing, and assess community solar and other renewable energy program options. | Minimal - Substantial | $10,000-$30,000 for Solarize Campaign; Community Solar dependent upon design and partners | | X | | X |
| | | | | | | | | |
| **Connect to the Outdoors** | 4.1 Shared LID Storm Water Facilities | Evaluate and implement shared LID storm water facility approaches to improve water quality and increase efficiency of land use. | Moderate | Incorporate into Storm Water Master Plan update | | X | X | |
| | 4.2 Resiliency Analysis | Undertake a study of infrastructure and natural areas to assess policy gaps and infrastructure vulnerability for climate preparedness. | Moderate | Depends upon approach | | | X | X |
| | | | | | | | | |
| **Foster Innovation** Inspire, Engage, Motivate & Support | 5.1 New Sustainable Design Criteria | Establish LEED Gold or Built Green 4 Star requirements for new construction that is 20,000 square feet or greater. | Moderate - Substantial | Estimated 0.25% - 0.50% of total project cost. | | X | | |
| | 5.2 Marketing | Promote sustainable building projects in the community and region, celebrate and share successes, partner with sustainable building organizations, developers and property owners. | Minimal | $5,000 – 10,000 | | X | | |
| | 5.3 Incentivize Deep Green Building | Adopt a Living Building Ordinance or Deep Green Incentive Package with tiered incentives. | Moderate | Depends on incentives offered. | | | X | |
| | 5.4 Sustainable Building Partnerships | Establish a sustainable development partnership agreement with private property owners and developers to establish common goals. | Minimal | - | X | X | | |
| | 5.5 Demonstration Projects | Leverage city projects or development agreements to support, design or develop and promote leading-edge sustainable buildings and technologies. | Moderate - Substantial | Unknown at this time. | | | X | X |

## D. External Stakeholder Engagement Memo

Date: 3.16.17

Project: Issaquah Sustainable Building Action Strategy

Phase: Strategy Development & Stakeholder Engagement

### Executive Summary

As part of the development of the Sustainable Building Action Strategy, regional developers were interviewed between September 2016 and March 2017 to gain insight into their experiences and preferences for the types of actions that could be implemented by the City of Issaquah to have the greatest opportunity for creating positive change. In particular, the objective of the interviews was to determine action strategies that would be 'win-win', supporting City, developer, and community goals.

Developers interviewed reported having a high level of fluency and experience in sustainable building, and plan to continue to pursue green development in the region because they believe in making decisions that are right for their business and communities. Interviewees indicated that additional incentives and educational programs would help to further sustainable design, as would demonstrated commitment from the City to streamline efforts to make green design decisions, such as early stakeholder engagement and inter-team integrated permit processes.

A variety of potential incentives – primarily non-financial tradeoffs – were identified as being the most appealing to developers, but they must be on the scale of development and applied consistently and predictably. Additional regulatory requirements in Issaquah were considered to be a disincentive to project development, given the current level of requirements (both municipal and state-level).

Overall, the most important consideration was financial. Developers need to ensure that the measures they employ in a project will meet the budget or be offset by incentives, and that the market is sophisticated enough to value a project's sustainable measures. The City can help by streamlining developer's efforts, so they can invest less time and money in entitlement, design, and permitting processes, and more in making positive change in their buildings. The City will be demonstrating commitment to long-term sustainability through neighborhood master plans that incorporate district-wide structural and social elements toward community and environmental goals.

### Interviewees

Prior to the preparation of the 90% draft document, a list of regional developers was identified as potential voluntary interviewees, and representatives from nine companies were interviewed. Participants included a range of builders:

- Many had experience building in Issaquah, but some did not (though they had other regional experience);
- The level of sustainability measures included in typical projects ranged widely – some were newer to green building design, others were committed to it through their practice; some regularly applied for green building certifications, and others included sustainability elements on a project-specific basis;
- Most worked at small- to medium-sized development organizations; and
- Project types included single family and multifamily residential, affordable housing, commercial, and mixed use.

The interviewees were:

- Tom Lee, Madison Development Group
- Jack Hunden, Devco

- Bob Power, Seacon
- John Shaw, American Classic Homes
- Rocale Timmons, SECO Development
- Terry Phelan, Living Shelter Design
- Aaron Fairchild and  Sam Lai, Green Canopy Homes
- A-P Hurd, Touchstone
- Jeff Miller and Spencer Wutherich, Quadrant Homes

## APPROACH

Interviews were organized as follows: clarify project intent and objective of interview and connection to other City efforts underway; discuss participant's background; and then ask questions tailored to each participant's expertise and background. Typical discussion topics included their experience and opinions about sustainability goals, as well as potential internal City process improvements, incentives, and regulatory measures, as applicable to the interviewee:

- Sustainable building market conditions, opportunities, and challenges
- Recommendations for increasing regional sustainable building and working toward City goals
- Green building certification programs
- Energy code
- Energy benchmarking and disclosure programs
- Sustainable transportation programs and parking
- Incentives
- Sustainability in affordable housing projects

## AGGREGATED FINDINGS

General sustainability

- All the developers are implementing sustainability at some level on most or all of their projects, for both developer-owners and developer-sellers. The rationale for green design varies, depending on whether the developer will continue to maintain the property and pay or pass-through utilities, and whether the occupants (tenants or purchasers) have specific interests, such as indoor bike parking and Ziipcar parking.
- Many developers are often 'building to LEED Gold' or 'building to Built Green 4-Star' but not certifying, because the sustainability components make business sense, but the certification itself is not always valued.
- Most builders agreed that project teams should know how to build green in this region.
- The majority of developers agree that appropriate measures should be project-specific, based on the site conditions and market demand, rather than expecting a one-size-fits-all approach to have appropriate results.
- Generally, developers believed that sustainability measures need to be either cost-neutral or result in savings in order to be electively pursued.
- The market demand for sustainability is very location- and market-specific. For example, a focus on salmon (e.g. SalmonSafe certification) works well in Issaquah because people connect salmon to the City and its environs. High efficiency HVAC systems will not have the same marketing value.
- Several developers indicated that 'beyond code' work presented a business advantage.
- In general, with the exception of certain 'deep green' single family home developers, there is still minimal perception of added value of sustainability to tenants and purchasers. It seems to

builders that overall consumer awareness is not as advanced as the construction industry's sustainability commitment and practices, so there is a value disconnect, which means that 'green' doesn't typically result in higher rents or purchase prices.

Regulatory requirements and certification programs

- The majority of interviewees indicated their opinion that there are already a lot of regulations, requirements, and fees in place regionally, and in particular, in Issaquah. Additional regulations could be off-putting to developers who have the opportunity to build in other less-constrained municipalities.
- On the other hand, several people indicated that certain requirements – such as a City-wide commitment to LEED Gold or Built Green 4 star – would clearly demonstrate leadership.
- The Washington state energy code is now very stringent and it is getting more difficult to implement optimizations. Any code additions would potentially place a burden on a development team as they try to weigh different priorities and determine whether their approach meets multiple sets of requirements. Detailed research would need to be done to ensure that additional code elements did not have unintended consequences in other areas.
- There was almost full consensus that requiring full LEED certification would be a disincentive to doing business in Issaquah, due to the cost, timing, coordination, and complexity. A simplified equivalency – which could be achieved through the developer having a LEED AP submit a report – did not feel onerous to them. Requiring Built Green, however, is not as complicated, and there is a successful Issaquah precedent for this. Therefore, it depends on the project type.
- In support of a mandatory building certification, several developers noting that requiring Built Green meant that all builders were on a level playing field.
- Several interviewees noted that requirements made it harder to meet their bottom line, and there would be tradeoffs – for example, if deep green measures were required, a developer might not be able to offer as many affordable housing units within the same project budget.
- The recommendation was made that if LEED were to be required, the City should consider offering some sizeable benefits in exchange.

Incentives

- Incentives should be on the scale of the project budget to have meaningful impact. Projects are driven by the pro forma.
- Several interviewees indicated that incentives must be clear, well-advertised, and consistently applied.
- Several interviewees suggested that Issaquah consider implementing a program similar to Redmond's, where points are accumulated toward a menu of potential tradeoffs.
- Suggested successful incentives included:
- Programs similar the multifamily tax exemption for affordable housing in Seattle;
- Expedited permitting and other programs that streamline project approval, construction, and occupancy;
- Trade-offs between requirements, for example reducing requirements for ground-floor retail in exchange for building deep green;
- Providing options for selecting sustainable elements on a per-project basis;
- Government programs such as Freddie Mac/Fannie Mae 0.5% credits are incredibly valuable – advertise these to developers;
- Density bonuses (height or FAR for mixed use or multifamily), or relaxing minimum lot sizes (single family); and
- Waiving impact and permit fees.

- Flexibility is important. Be willing to discuss project-appropriate options and consider non-financial tradeoffs. For example, an additional height allowance could make rooftop photovoltaics more effective. A Living Building ordinance or deep green incentive package is appealing.
- Consider relaxing parking requirements on a per-project basis to encourage alternative transportation, but only if that approach aligns with the developer's parking study results and the bank's lending criteria.
- Ensure that incentives cannot be bought as an alternative.

Benchmarking and disclosure

- Developers are aware of Seattle's benchmarking and disclosure project, but most do not see this as a priority right now.
- Developer-owners monitor their own resource consumption and have a self-interest in ensuring that their properties are performing efficiently. A requirement (or an option) to report this to the City adds a layer of time and complexity for something that does not appear to provide obvious benefits to them.
- Ensure that the smaller properties, or lower income projects, are not adversely impacted as a result of increased regulations.

Priorities and considerations for Issaquah and region

- Engage the community (and key City staff stakeholders) EARLY using an integrative design process early in the project so that they are part of the development from day one. It is difficult and can be contentious if the neighbors aren't integrated from the beginning.
- Consider dedicating mitigation fees to hyperlocal projects that will benefit the immediate project community, for a win-win.
- Ensure that the City is not over-regulated in a way that will stifle economic development. When it becomes too difficult, builders will look to other local communities.
- Ensure that the City can commit to promised incentives within the timeframes, such as expedited permitting that definitely occurs within 3 months (or 6, as established early on) and that the departments are all on the same page. Developers need to be able to stay on schedule – or accelerate the schedule – in order to be financially successful. What are the penalties on the City's end for not meeting obligations?
- Find the 'win-win' opportunities that meet sustainability goals, meet other City goals, meet developer goals, and meet community goals.
- The market may not be fully aligned with sustainability/affordability objectives. Find the ways that pencil out for builders now but work toward goals.
- The City needs to drive long-term sustainability by encouraging transit-oriented development, even before the transit is fully developed. Commit to large-scale change through neighborhood design for lower-impact communities, particularly in terms of transportation, which is a major contributor to carbon emissions. There is a greater potential to create market transformational change on a district-scale than on a per-parcel scale.

## ATTACHMENT: INTERVIEW QUESTIONS TEMPLATE

Sustainable Building Action Strategy - Issaquah

Developer Interview Questions

Goals:

1) Understand market opportunities and barriers to adoption of high performing sustainable development standards;

2) Obtain input on potential measures that can be undertaken by the City to accelerate sustainable development

Name and Title of Interviewee:

Company:

Introduction: The City of Issaquah is developing strategies to increase adoption of sustainable construction and development practices throughout the city, by both public and private developers. We're looking for your honest input.

The City is considering demonstrating its own commitment by building new municipal projects at highly performing levels, such as LEED Platinum, sharing lessons learned, improving processes, documenting results, supporting marketing, building partnerships, and developing incentives. The City would also build a foundational program for staff to support and streamline permitting for sustainable projects. High priority focus areas are energy, storm water, and transportation.

Interviewee Background and General Input:

1. What is your level of development experience in Issaquah?
2. Do you develop and hold projects (maintain ownership) or primarily develop/turnover?
3. Does your company have plans for future development in Issaquah?
4. What is your company's experience with sustainable building? What has been your approach?
5. How do you see sustainability influencing the market in which you are developing?
6. What opportunities do you see? Barriers or challenges?

Specific Feedback - Potential Approaches

7. Some cities are requiring that new construction be LEED Gold or Built Green 5 Star certified.
    a. Do you have experience building to LEED Gold or Built Green 5 Star standards?
    b. If so, are there lessons learned that you would apply to future buildings and/or that you want the City to know about?
    c. If not, are there elements that make you nervous about having to implement LEED Gold?
    d. What resources would you like to see to help you meet LEED Gold certification?

8. One option for improving energy performance is to adopt energy code provisions similar to those in Seattle for Issaquah building types. Do you have experience with Seattle's code? What challenges do you see for designers and contractors to meet those code requirements?
9. Another option is to establish a building energy benchmarking program, for owners to evaluate

energy performance for larger buildings (generally > 20,000 sf).

a. Is building performance something of interest to you?

b. Are your projects currently designed and operated to track and respond to energy performance?

10. To expand use of transportation options, well designed transportation management measures have been shown to reduce vehicle trips and increase options for residents and tenants. These may include items such as occupant education, ridesharing incentives, parking for car-share vehicles, transit pass incentives, secure bike parking, unbundling parking, or other similar measures.

a. How could such measures best be implemented in your projects?

b. If measures were successful, how would they affect your projects? How would it affect parking plans?

11. Some cities offer incentives for adhering to "deep-green" sustainability standards (e.g.: Living Building Challenge, Net Zero Energy, Built Green Emerald Star), which of the following would be most attractive? (why?)

a. Code departures (setbacks, lot coverage, height, utilities)
b. Density bonus (20% / 50% / 75%)
c. Expedited permit review
d. No affordable housing (10-20% required in some zones)
e. Parking reductions (20% / 35% / 50% / 100% / no structured parking)
f. Professional project marketing and promotion
g. Technical consulting services
h. Permit fee reductions (50% / 75% / 100%)
i. City provided regional storm water management facilities
j. Utility connection fees

12. What other incentives would be appealing?

Closing Feedback

13. If the City could take one action to increase the adoption of sustainable building practices in Issaquah, what would that be?

14. Are there specific sustainability measures you see as having particularly strong appeal (for you as developer, owner/operator, or for occupants)?

15. Which are most important issues to consider for a market area such as Issaquah?

Additional questions as time allows:

What sustainable concepts/techniques do you wish the market would support? (might give us an idea of what things are out there that we might want to incentivize if it's helps us get to the next level of efficiency/carbon footprint/etc.)

What does the current market demand as it relates to sustainability practices in development?

The City is also developing a Housing Strategy which also addresses affordability. As time allows, regarding affordable housing:

1) What are the deterrents to building (affordable) housing?
2) If the City could take one action to help the provision of affordable housing, what would that be?