

What is an Integrative Process?

Integrative Process is a framework for practicing in a highly interactive way, using a co-learning process. This kind of process is essential for achieving both cost efficiencies and highly effective green building performance.

Integrative Process Standard for Design and Construction of Sustainable Buildings and Communities

ANSI Consensus National Standard Guide 2.0



King County

Department of
Natural Resources and Parks
Solid Waste Division

An inclusive process to update the King County Green Building Ordinance

When King County needed to update an expiring green building ordinance, the County purposely decided the policy development would be holistic, inclusive, thorough and forward-thinking. In essence, the County followed an integrative process for the policy development. The end result is a robust yet flexible green building ordinance that has wide support among stakeholders and is well-integrated with related King County policies and the King County Strategic Plan. At the same time, it advances greater progress in green building leadership.

History & Background

Understanding the Context

King County has long been recognized for leadership in green building and sustainable development. Situated in one of the most progressive regions in the country, the County has played a clear role in developing an evolving vision of what sustainability means for this region through policy mechanisms, a legacy of collaboration with industry and outside stakeholders, and demonstrating leadership by 'walking the talk' with internal county operations.

A prime example of this leadership is the County's Green Building and Sustainable Development Executive Order in 2001, codifying the policy with legislation passed in 2005 as Ordinance 15118, and then renewed in 2008 as Ordinance 16147 (KCC Chapter 18.17). These both included numerous measures that at the time pushed the green building envelope – primarily for how the County designed, built, operated, and reported on county-owned projects.

The ordinance was set to expire at the end of 2013, and while it was expected that at least some of the elements of the ordinance would be carried on throughout the sunset date, the County saw the pending expiration as an opportunity to maintain and deepen their leadership role. Furthermore, they saw a need to clarify some of the key measures around minimum performance standards and recalibrate the ordinance to be more responsive to the diverse needs of all County divisions. For example, some divisions were ready to do more, while others were more focused on building internal capacity to more

consistently meet the 2008 requirements. Finally, the time was right to create congruency with other policy initiatives around sustainability.

Goals

One of the most distinctive attributes of how the County handled this update was that early on, they set goals about product content, desired outcomes, and process.

Specifically, the goals for what the Green Building Ordinance (GBO) update would contain and accomplish included the following:

- Holistic and flexible ordinance addressing the many sizes, scales, and complexities of planning, design, construction, operations and maintenance of projects in the County
- Support County leadership into the future, i.e. no sunset date, flexibility in rating systems, higher achievements)
- Congruency with other County policy initiatives, specifically:
 - [King County Strategic Plan](#)
 - [King County Comprehensive Plan](#)
 - [King County Strategic Climate Action Plan](#)
 - [King County Energy Plan](#)
 - [King County Equity and Social Justice Initiative](#)
 - [Environmental Preferable Purchasing Initiative](#)
 - [Stormwater Management Plan and National Pollution Discharge Elimination System \(NPDES\)](#)
 - [KingStat](#) and [AIMS High Performance Measures](#)

The goal for how they would arrive at this final product and desired outcomes was to use an inclusive and integrative process from the start.

GBO Stakeholders

Disciplines

- Architectural, engineering and design practitioners
- Waste haulers
- Contractors
- Historic preservation specialists
- Sustainable building consultants

KC Departments

- Community and Human Services
- Executive Services
- Natural Resources and Parks
- Permitting and Environmental Review
- Public Health
- Transportation

External Stakeholder Participation

- Executive Office
- Seattle Department of Planning and Development
- Construction Materials Recycling Association
- Built Green
- Northwest Eco Building Guild
- Stewardship Partners
- Cascadia Green Building Council
- Housing Development Consortium
- Regional Code Collaboration
- Sustainable Cities Task Force

Integrative Process

The King County Green Building Team (GBT), an interdivisional group made up of representatives responsible for green building within their Division/Department was charged with the GBO update. The King County GreenTools program, part of the King County Solid Waste Division (SWD), supports the GBT and facilitated the process, and the Department of Natural Resources and Parks (DNRP) Deputy Director sponsored the work. The GBT knew that an effective process was critical to the development of meaningful policy that would have broad buy-in and accomplish the forward-thinking goals they'd identified. The GBT was well versed with the Integrative Process (IP), having been trained in the application of IP to building projects. The opportunity to apply a whole systems approach to policy development was therefore exciting, but not daunting. GBT members have a long standing track record of green building leadership, and sought to raise the bar. IP provided a framework of creating clear goals, conducting discovery, establishing desired results, facilitating an inclusive process, and coming to agreement on how to achieve those results, that had many synergies with their existing approach to policy development.

The members of the GBT and GreenTools staff were also had been recently engaged in initiatives related to the GBO – both in terms of content¹ and process². This meant that the team heading the effort had a comprehensive context of how the GBO intersected with other sustainability initiatives, but also had successful

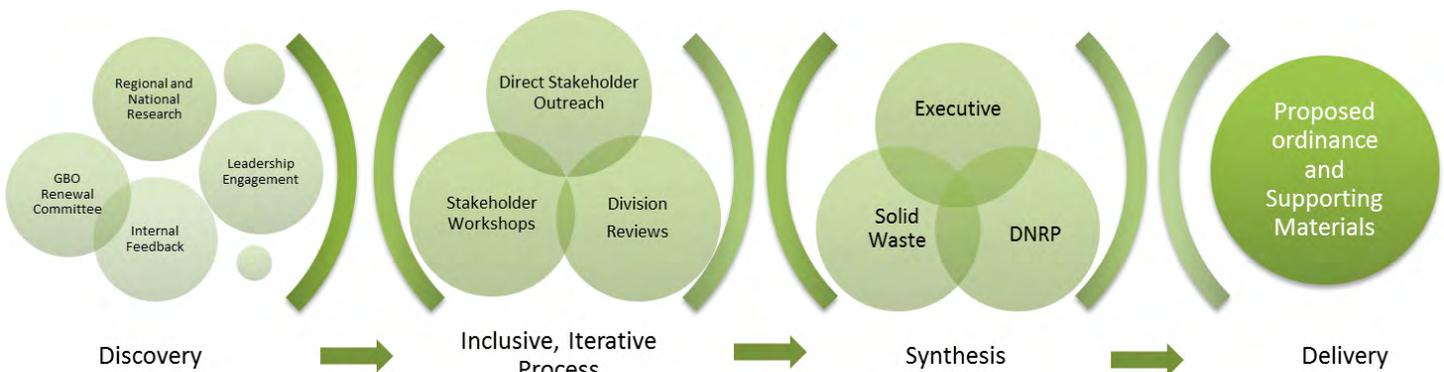
process examples to leverage.

All together, the entire process took over a full year, involved over a hundred stakeholders, multiple rounds of review by County divisions, and over a dozen revisions before arriving at the final product.

Discovery

GreenTools conducted an extensive discovery process over the summer of 2012, beginning with research of green building ordinances in jurisdictions outside of King County. Examples of dozens of other ordinances reviewed included Washington DC, the City and County of Los Angeles, San Francisco, and the City of Redmond, which is right in King County. Most of the ordinances reviewed included a private sector component, ranging from incentives to requirements.

To do some internal analysis the GBT convened an internal Green Building Ordinance Renewal Committee tasked with surveying and collecting feedback from Divisions/Departments on the existing ordinance and suggestions for the renewal. This committee offered efficiencies in that members were already recognized for their understanding of green building issues and how they impact their division's work. Furthermore, these individuals were already seen as advocates within the division who would be able to easily gather feedback from their colleagues on what was working, and what wasn't working. In addition, an electronic survey was done asking County project managers and staff for their feedback.



Bringing Integrative Process to Policy Development

Key Questions Addressed at Stakeholder Workshops

- What have been the greatest challenges with implementing the current Green Building Ordinance (GBO)?
- (For private sector group) What has been the greatest challenge with building to LEED-Gold?
- What are the greatest opportunities for King County to position itself in a leadership role through the GBO update?
- How should the GBO address and measure performance?
- What resources/data is needed to build support for raising the bar with the next update?
- What incentives are needed for increased market development in unincorporated King County?

Engaging the leadership to grant authority to this critical upfront work both legitimized the discovery phase and gave confidence to those involved. To do so the GBT prepared a briefing paper as background information for management. This briefing paper outlined key issues that the team felt needed executive and leadership level guidance before they invested time developing the content of the ordinance. The issues addressed questions related to:

- the overarching scope and intent of the ordinance;
- if and how to streamline the ordinance with other related policies;
- how to institutionalize green building practices;
- what kinds of minimum requirements, accountability, reporting requirements, and enforcement should be considered;
- what certification types and levels should be included;
- how to obtain more quantitative data
- how to address existing facilities; and
- how the ordinance would interplay with community and land use planning scale responsibilities of the Department of Permitting and Environmental Review (DPER).

The Executive Office responded enthusiastically to this briefing paper, providing support and direction to the GBT to develop a GBO that would maintain King County's leadership in green building.

Inclusive, Iterative Process

The GBT and GreenTools identified relationships with all of the internal stakeholders, and invited them to participate in the process. This is consistent with a foundational concept of the integrative process, 'Engage Everyone Early.' To develop the list of external stakeholders, the team identified all of the different disciplines that might have direct, upstream or downstream impacts or involvement with the GBO concepts. The GreenTools team also relied on community partnerships with organizations like Built Green, Cascadia Green Building Council and the Northwest Eco Building Guild to engage membership participation. A broad

list of representatives, from these groups were identified to be involve in the process, making sure that all voices would have an opportunity to be heard. Because the County sees their leadership role as one that extends into the community, they recognized that the voices of the community were critical to the process. Furthermore, the team recognized that the region is a hotbed of green building thought leaders and practitioners, and this local private sector perspective would give the County the insights on how the GBO could be both progressive and realistic at the same time.

Stakeholder workshops

In October 2012 the GreenTools team hosted two meetings to solicit input from internal and external stakeholders on updating the ordinance. The team targeted outreach to key staff including county Capital Improvement Program (CIP) project managers and Department of Permitting and Environmental Review (DPER) staff as well as consultants who work with the County representing the private building sector, residents and community members, cities and private companies doing business in unincorporated King County. The stakeholder meetings served as a venue for the County to provide an overview of the current ordinance, present the broader context of how a renewed ordinance could help improve the sustainability of the built environment, and most importantly, to hear recommendations for improving community-wide green building and sustainable development efforts.

The first meeting, held on October 1, 2012 at King Street Center in Seattle brought together stakeholders representing a focus on King County capital improvement projects, operations and maintenance of county facilities and private sector commercial construction. Over 60 percent of attendees at this meeting were private sector participants, representing a range of technical experience in design, construction, engineering, landscaping and green building consulting. The rest of attendees were King County representatives from multiple divisions.



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Kirkland TOD Project

One of the County's goals was that the GBO be flexible enough to support complex county projects, like the Kirkland Transit Oriented Development (TOD) project, with multiple types of construction and sources of funding while accomplishing the County's objectives. In case of this project the County Transit owned parking garage will use the Sustainable Infrastructure Scorecard for certification while the affordable housing is using the Evergreen Sustainable Development Standard, and the market rate housing and mixed use buildings will use Built Green 4 Star. Multi-jurisdictional projects with multiple land owners are more common as cities, counties, and the private sector partner on TODs to make complex projects happen.



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Bringing Integrative Process to Policy Development

The second stakeholder meeting was held on October 17, 2012 at the Department of Permitting and Environmental Review in Renton. The focus of this meeting was to address building development that is permitted in unincorporated areas of King County, including new construction and renovation of single family housing, agricultural and forestry land uses, historic preservation, and rural areas. Three additional County agencies assisted in this meeting; Department of Permitting and Environmental Review (DPER), Water and Land Resource Division (WLRD) and Historic Preservation Program (HPP), as they both provide direct support and resources on these focus issues. Attendees represented a range of backgrounds and expertise, 30 percent of which were representatives from private sector consulting or small businesses. The Master Builders Association's nonprofit BuiltGreen program of King and Snohomish Counties was also represented.

As a result of these outreach meetings, an extensive list of suggestions was developed. The GreenTools team prepared a summary of both workshops and delivered to the County Green Building Ordinance Renewal Committee.

In addition to the stakeholder meetings the team sought out groups who could leverage existing relationships to make sure the outreach was as comprehensive as possible. For example, The County Department of Community and Human Services (DCHS) was tapped to consult and meet with the Housing Development Consortium, an entity comprised of affordable housing developers, funders and providers. By building off existing trusted relationships, the affordable housing community felt empowered to identify their own policy recommendation for inclusion in the GBO. WLRD and HPP also worked tirelessly to reach their stakeholders in unincorporated areas to ensure their needs were heard. The result of this direct and targeted engagement is now evident in the historic preservation element of the new GBO and stormwater management minimum requirements.

Further research and vetting process with divisions

A key feature of the Integrative Process is the series of built-in feedback loops designed to keep everyone engaged as the concept develops and evolves. When IP is applied to a building design, this means the project team meets regularly to reconfirm progress on goals, identify issues and further iterate the design. For policy development, such as the GBO, this meant over seven iterations of the GBO draft, with thorough reviews from all divisions involved. Because the divisions were seeing the full GBO draft rather than just commenting on portions relevant to them, it allowed them to understand the full picture. In turn, they were better positioned to offer feedback that was responsive to everyone's needs while also ensuring their recommendations still represented their needs and goals.

As expected, the review and vetting process with divisions revealed some issues that required focused research to bring additional depth or clarity to justify or edit the content. In designing this extensive review process, the team had anticipated this and prepared their internal team and a consultant team to be ready to quickly mobilize and respond to research requests as needed and formed subcommittees around specific policy areas needing further analysis. The team prepared research briefs on the following topics and staff presented the findings to the inquiring division or departments to ensure all questions had been answered:

- Code barriers to the Living Building Challenge
- Costs (and benefits) of LEED Platinum certification
- Low Impact road development and fire lane requirements
- Construction and demolition debris generated from single family construction
- Costs of adding bike racks and showers to commercial projects
- Identifying synergies between the Evergreen Sustainable Development Standard and LEED for affordable housing projects

Bringing Integrative Process to Policy Development

Higher Standards

The new GBO sets the bar higher in several key ways:

- Higher rating levels
- Alternative rating systems
- Minimum performance requirements
- Infrastructure to track performance
- Includes affordable housing, TOD, and historic preservation
- Developing green codes

Synthesis

The thorough stakeholder engagement process yielded an updated draft with broad buy-in and support. The next step in the journey was to work the GBO up the internal county chain, refining and synthesizing as needed. This iterative review process began with a division level review across the county, then up to the Solid Waste Division, the Department of Natural Resources and Parks, and finally to the Executive.

Along the way numerous briefings were done at the Green Building Team and up and down the chain to discuss clarifications and changes. The team was able to draw from firsthand feedback and insights gathered during the stakeholder process, as well as the research prepared during the discovery phase to justify policy content.

After extensive review, a final proposed ordinance was agreed on.

Delivery

The Executive proposed ordinance was transmitted to the King County Council in July 2013. The ordinance was also fortunate to earn the support of a Council sponsor. The Council unanimously passed the final ordinance on December 9, 2013.

Highlights of the key policy elements are described below.

Key Elements

The County felt that they clearly met their internal goals of conducting an inclusive and integrated process – but in the end, did it help them achieve their overarching goals for what the ordinance would contain and achieve as outcomes? The following details the key elements of the final ordinance, which includes both incremental changes and some major steps forward – and all were designed with these goals in mind.

Rating System Requirements

Rating system requirements have been one of the core components of the ordinance, beginning with its first issuance in 2005, directing county departments and offices to seek the highest LEED certification level that was achievable and cost effective. The 2008 GBO brought more specificity instructing eligible county projects to achieve LEED-Gold certification, and also broadened the scope to include infrastructure projects not eligible for LEED, instructing those projects to use the newly developed King County Sustainable Infrastructure Scorecard.

The 2013 GBO has followed along the same path of the 2008 update, requiring deeper green and offering a broader set of standards. Specifically, the new LEED goal is Platinum for all applicable new construction projects. All LEED eligible major remodels and renovations will plan for achieving Gold. Likewise, the GBO goes beyond simply requiring use of the Sustainable Infrastructure Scorecard, adding a similar goal of Platinum. With all of these deeper green requirements, the GBO outlines how and when projects should assess the upfront costs and ongoing operational and maintenance savings associated with the targeted certification goal, providing parameters for when cost constraints may dictate that projects strive for a lower certification level. These guidelines support responsible stewardship of public funding and maximize public services.

In addition to the Sustainable Infrastructure Scorecard, the new version added the following five alternative green building rating systems to broaden the set of tools available for projects: Built Green 4 Star, Evergreen Sustainable Development Standard, Sustainable Sites, Salmon Safe, and the Living Building Challenge. The intent of this was to create capacity for projects to demonstrate leadership by pursuing a better fit or more progressive rating system than LEED or the Scorecard, while not penalizing them by requiring them to do it in addition to LEED or the Scorecard. It is also worth noting that all but Sustainable Sites were developed in this region.



Bringing Integrative Process to Policy Development

Policy Integration

In order to integrate the GBO fully into County process, all of the following County policies expressly informed the content of the new GBO and individual requirements were aligned with requirements in other policies, plans and programs:

- [King County Comprehensive Plan](#)
- [King County Strategic Plan](#)
- [Equity and Social Justice Initiative](#)
- [Historic Preservation Program](#)
- [Affordable Housing](#)
- [Energy Plan](#)
- [Strategic Climate Action Plan](#)
- [Environmental Preferable Purchasing Program](#)
- [Solid Waste Comprehensive Plan](#)
- [Surface Water Design Manual Standard/NPDES](#)

Minimum Performance Requirements

The updated version of the GBO added minimum performance requirements for energy, emissions, stormwater management and diverting construction and demolition materials. The intent of adding performance requirements was to go beyond the “check the box” thinking that sometimes comes along with rating systems and focus on desired outcomes. This also ensures that LEED and Scorecard projects, even at the highest certification level, achieve priority policy initiatives. For example, in the 2008 GBO a project could achieve LEED Gold certification, but still miss the mark on energy optimization or C&D diversion.

Furthermore, these minimum performance requirements helped streamline the GBO with some of the recent related policy initiatives, such as:

- the energy and climate goals and performance requirements as defined in the King County Strategic Climate Action Plan, K.C.C. 18.25;
- the King County Surface Water Design Manual Standards and requirements; and
- the King County Comprehensive Plan’s goal of zero waste of resources by 2030.

Reporting

The updated GBO includes a continuation of the reporting requirements established in the 2008 Ordinance, with some criteria modifications to clarify and streamline criteria with other County sustainability initiative requirements. The intent is to create efficiencies in data collection and storing process. On an annual basis, all divisions responsible for capital improvement projects or facilities management will provide data for all projects to help measure the costs, benefits and impacts from green building and sustainable development strategies. Project managers are required to report on both projections as well as actual impacts in areas such as energy, water, GHG emissions, construction and demolition diversion, and transportation impacts. This highlights the County’s commitment to performance as well

as the value of learning from real data, rather than relying solely on projections, to help inform future projects.

Consistent with the goal of finding congruency with other policy initiatives, the Executive will also report annually on progress, using criteria for green building metrics that are consistent with the annual Environmental Sustainability Report on Climate, Energy, Green Building and Environmentally Preferred Purchasing Programs and the SCAP.

Inclusion of affordable housing

The 2013 GBO took a major step in extending green building requirements beyond County projects to affordable housing projects funded by King County. This extension of county accountability was achieved through the collaborative and iterative efforts of the DCHS staff working closely with the affordable housing stakeholders to identify elements that would incent rather than burden projects to build green. The outcome was to require projects financed by the County to certify using the state’s Evergreen Sustainable Development Standard (ESDS) – a rating system that affordable housing developers are already familiar with – rather than forcing them to use an additional certification which would add duplication and redundancy to their workload. Furthermore, the affordable housing projects will not be subject to the reporting or minimum requirements that other projects are, minimizing the level of effort even further. This was an affirmative decision empowered and directed by the affordable housing community, in efforts to recognize their achievements in incorporating green building efforts in low income and workforce housing development.

Developing Greener Codes

The team recognized that success of the GBO depended on much more than just the content and its successful passage as policy. Moving into implementation, its success will require a system of ‘soft infrastructure’ to ensure understanding and support of the GBO goals and requirements.



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The new GBO directs the Department of Planning Environmental Review, to develop a green building handbook for staff to prepare and participate in trainings on green building techniques and permitting procedures, and also develop a LBC Demonstration Ordinance. Preparing the permitting agency to understand and be ready for permit requests for the highest performing building systems under LBC, will reduce barriers for all projects regardless the rating system used. In tandem, the GBO also directs the department to participate in the existing Regional Code Collaborative (RCC) effort to unify building codes throughout the county at a deeper green level. This streamlined approach benefits anyone that builds in multiple jurisdictions, whether it be private developers or the County itself who has buildings and infrastructure in numerous cities.

This direction will in effect help create an implementation framework that values and strengthens the role that DPER plays for one of its biggest customers – King County – in addition to other public and private customers relying on their services to build and develop more sustainably.

Addressing Transit Oriented Development

As shown in the Kirkland example, TOD projects present many complexities for applying green building standards, flexibility in rating system use addresses this issue. Transit related TOD projects are specifically included in the GBO requirements and have to follow the same standards and conduct a rating system analysis like other building and infrastructure projects addressed in the ordinance.

Historic Preservation

A new focus on historic preservation acknowledges the benefits of preserving and maintaining existing structures as a green building strategy, but goes much deeper in recognizing the cultural importance of these structures to the region. The new GBO directs the County to leverage the work done to

develop the Sustainable Infrastructure Scorecard, and develop a special version for renovating listed historic facilities. The directive, and the work behind it, also reflects the understanding that much of the County's historic structures are on rural, agricultural lands, and that in many cases they are not buildings.

Moving Forward

The passage of the updated GBO is momentous and cause for celebration indeed - it puts King County again at the forefront of policy leadership, calls to attention key issues and solutions relevant to other cities and counties across the country, and shows that thoughtful and engaged processes result in meaningful products. But even more so, its passage signifies the beginning of much work to be done to ensure successful implementation. This is just the beginning. Translating the ordinance into actionable steps means the County will need to train up their staff, customize and develop tools and hone skills. Tracking and analyzing results will give the County the ability to fine tune their approach to meeting the ordinance requirements, but it requires a framework to gather the data, communicate the meaningful outcomes, and a process for making decisions. Furthermore, as policy mechanisms such as ordinances and codes embrace and require deep green commitments, it demands new thinking around how incentives and other 'carrot' mechanisms can target and promote the next round of even deeper green actions.

This is exciting work not only because of the results that this hard work will produce in King County in ensuring the goals of the GBO are achieved, but because the County has always believed in the value of replicable models and the power of leveraging its own tools and resources to raise the bar elsewhere. As the County dives in deep to the implementation phase of public policy, they will be finding solutions, answering questions, and piloting projects that others with fewer resources can look to and learn from.



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This material will be provided in alternate formats upon request.

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References

Final Ordinance

- [Green Building Ordinance No. 17709](#) as adopted by King County Council

Research Briefs

- [King County Code Hurdles related to the Living Building Challenge; 2/3/13](#)
- [King County GreenTools Briefing Memo: Costs and Benefits Associated with Building to LEED Platinum; 11/13/12 and 8/1/13](#)
- [C&D Tonnage Generated by New Construction & Renovation in Rural King County](#)
- [GBO Research Request; 3/3/13](#)
- [GHG Impacts of End of Trip Bike Commute Facilities; 3/27/13](#)
- [South Kirkland Park & Ride Certification Analysis: Green Building Certification Feasibility Report, 1/5/12](#)
- [LEED Requirements for Government Owned Projects](#)

Stakeholder Materials

- [Green Building Ordinance Stakeholder Meeting Summary; 10/24/12](#)



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- 1) The [Strategic Climate Action Plan](#) (SCAP) which addresses building as a source and solution for climate change
 - 2) The Regional Code Collaboration which involved a robust stakeholder engagement process to create a unified, holistic approach to advocating for a regional green building code.