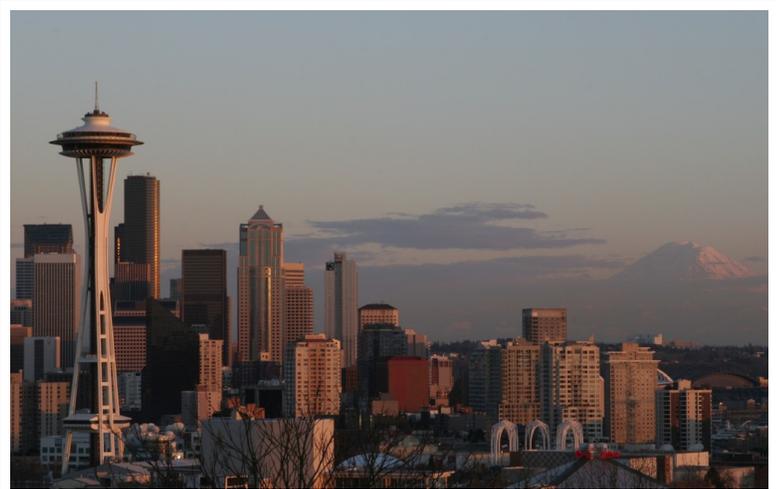


SEATTLE: SETTING THE STANDARD

An Overview of the Seattle Code Enforcement Process

Introduction

Seattle is America's most sustainable large city, according to the Natural Resources Defense Council's [Smarter Cities Project](#). The overall top spot also includes first-place finishes in two individual categories: green building and energy production and conservation. This result should come as no surprise. Seattle has a long history of promoting building energy efficiency. In 1976, the city established an energy conservation policy, which identified conservation as a "first priority energy resource". Seattle adopted the [Seattle Energy Code](#) in 1980, mandatory for all residential and commercial buildings. Since then, it has updated and revised the code regularly to incorporate advances in energy efficiency.



Courtesy of Flickr Creative Commons, [Credit](#)

While energy efficiency programs in many states and cities lost momentum after the energy crises of the 1970s, Seattle and its municipal utility, [Seattle City Light](#), have maintained a steadfast commitment to energy efficiency. Today, as the focus of the codes community shifts toward improving compliance to maximize energy savings, the Seattle [Department of Planning and Development's](#) (DPD) experience with code enforcement can help inform the code implementation process in cities nationwide.

Process Overview

DPD conducts a multistep plan review and inspection process for energy code compliance. DPD's energy and mechanical team offers a voluntary pre-submittal code interpretation conference for the project design team (primarily for complex or unusual projects), allowing designers to raise questions and gain a detailed understanding of the requirements. Following a preliminary screening by in-take staff to ensure that applications are complete, energy code plan reviewers examine all drawings and return them to the project design team with a correction list, indicating specific areas of noncompliance and incomplete information. After the design team makes the necessary corrections, DPD issues a construction permit. On-site inspections then verify that each phase of construction corresponds with the approved plans.

Best Practices and Lessons Learned

Seattle does not take compliance for granted. While this might not seem like a revelation, it is the guiding principle of the city's enforcement process—and a lesson learned firsthand.

Following the adoption of the energy code in 1980, DPD began hiring an energy code plan review staff. During that first six-month period, though, it permitted architects and engineers to demonstrate compliance using their professional stamps. After examining plan revisions submitted for these projects, DPD found many cases in which the initial design did not com-

SEATTLE: SETTING THE STANDARD

ply with the code. For the project design teams, it was not an issue of carelessness or lack of concern for energy code provisions. Rather, they lacked the necessary expertise, which led to confusion, misinterpretation, and widespread compliance failure. It became clear to DPD that self-certification was not a viable option, so it launched a thorough plan review process.

This type of enforcement strategy is designed to mitigate as many potential issues as possible during the design phase, when making corrections is less costly and time-consuming than during construction. Yet cities across the nation rely on self-certification, either for expediency's sake or due to the absence of sufficient resources for enforcement. Seattle's experience suggests that self-certification cannot provide the same level of energy savings or emissions reductions. Moreover, their plan review process offers a replicable framework for establishing a successful enforcement program.

First, energy code enforcement requires a full commitment from the city, measured in labor force and resources, not promises and "green" initiatives. Seattle has made a concerted effort to prioritize energy efficiency. DPD has five staff members who conduct energy code plan reviews for multifamily and nonresidential projects (structural plan reviewers determine energy code compliance for single-family projects). Its building, mechanical, and electrical inspectors incorporate energy conservation into their regular work. DPD responds to complaints, encourages questions, and makes itself available to the design and construction community. Every city acknowledges its budgetary constraints, but few accept that enforcement does not just happen; a city only gets back what it puts in.

Outreach and training are also integral to the enforcement process. While project design teams must be responsible for compliance, it is not prudent to assume they will educate themselves fully on the requirements of the code. DPD is proactive in its approach, supplying a variety of resources, including [Client Assistance Memos](#) (CAMs), handouts in multiple languages, and a technical hotline to clarify code requirements. The overarching goal of this strategy is to avoid ambiguity and alleviate problems during the plan review stage. DPD believes that putting in the work upfront saves time and energy later.

After each code update, DPD staff offer training sessions for the building community, organized by topic: building envelope, mechanical, and lighting. These sessions cover what is new and different in the Code, as many of the attendees have been building to the Seattle Energy Code for years. It gives them a chance to hear DPD's interpretation of the Code. The staff also trains local trade association chapters and other specialty groups upon request. For their part, staff members and inspectors receive training after each update, as well, and meet weekly to discuss code issues. These activities ensure that everyone is on the same page and that DPD presents consistency in enforcement and code corrections.

Conclusion

Seattle's strong code enforcement foundation allows it to push the envelope for energy code adoption. Washington State is currently in the middle of its 2009 code update cycle and is considering many provisions that are in the 2006 Seattle Energy Code. State adoption should occur in November, at which time Seattle will prepare local amendments to achieve additional energy savings. All code updates will go into effect on July 1, 2010. As per [Resolution 30280](#), the Seattle Energy Code will strive to achieve 20 percent greater efficiency over the most current ASHRAE 90.1 standard. For more information on the Code adoption and plan review processes, please contact [John Hogan](#) or [Robby Liem](#) at the [Department of Planning and Development](#).

All information for this resource was collected by Kym Carey and Eric Plunkett during an interview with Seattle staff on August 4, 2009 and using city, state, and national online resources.

OCEAN is an online resource of the Building Codes Assistance Project

For more information, please visit us at: www.bcap-ocean.org



A joint initiative of the Alliance to Save Energy (ASE), the Natural Resources Defense Council (NRDC), and the American Council for an Energy Efficient Economy (ACEEE)



1850 M St. NW Suite 600 | Washington, DC | www.bcap-ocean.org