

CITY OF SEATTLE MAYOR'S GREEN BUILDING TASK FORCE

Task Force Meeting

Tuesday, December 2, 2008, 2:00 pm – 5:30 pm

Seattle Downtown Central Library, 1000 4th Avenue

Washington Mutual Foundation Room (Level 4, Room 1)

MEETING SUMMARY

Prepared by Triangle Associates, Inc.

Attendance

| Green Building Task Force | | | | |
|---------------------------|-----------|---|-----------|--------------------------|
| Last | First | Organization | Committee | In Attendance? |
| Adelstein | Aaron | Master Builders Association/Built Green | New | ✓ |
| | | Coldwell Banker Bain, Assoc., JMR Consulting, Member, Seattle King-County Association of Realtors | | ✓ |
| Anderson | Jolene | | Existing | |
| Awad | Ash | McKinstry | Existing | Matt Wegworth |
| Barber | Kent | Keithly Barber Associates, Inc. | Existing | <input type="checkbox"/> |
| Bendix | Richard | Homestreet Bank | Existing | <input type="checkbox"/> |
| Brombaugh | Rachel | ShoreBank Enterprise Cascadia | Existing | ✓ |
| Brooker | Kathleen | Historic Seattle | Existing | ✓ |
| Chase | Patricia | International Sustainable Solutions | New | <input type="checkbox"/> |
| | | Genesee Fuel & Heating, Board member, Washington Oil Marketers Association | | <input type="checkbox"/> |
| Clark | Steve | | Existing | |
| Dinndorf | Jerry | Associated General Contractors | New | ✓ |
| Dolwick | Carrie | NW Energy Coalition | New | <input type="checkbox"/> |
| Drummond | Susan | Foster Pepper, PLLC | New | ✓ |
| Drury | Kim | Energy Consultant | Existing | ✓ |
| Dunn | Liz | Dunn+Hobbs | New | <input type="checkbox"/> |
| | | Building Construction Trades Council (BCTC) | | <input type="checkbox"/> |
| Elwell | Chris | | New | |
| Fairchild | Aaron | Greenworks Realty | Existing | ✓ |
| Finley | Scott | Atmosphere IEM, Inc. | Existing | ✓ |
| Frank | Kari-Lynn | NAIOP | New | ✓ |
| Frankel | Mark | New Buildings Institute | New | ✓ |
| Gent | Stan | Seattle Steam | Existing | ✓ |
| Gregory | Bert | Mithun | New | <input type="checkbox"/> |
| Gunter | Christian | Kennedy Associates | Existing | ✓ |
| Happel | Richard | University Mechanical Contractors | Existing | <input type="checkbox"/> |
| Hoerler | Dusty | Sound Alliance | Existing | ✓ |
| Horn | Don | US General Services Administration | New | ✓ |
| Howe | Douglas | Touchstone Corporation | New | ✓ |
| | | King County Department of Natural Resources | | ✓ |
| Humphreys | Beth | | Existing | |

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| Last | First | Organization | Committee | In Attendance? |
| Jhaveri | Arun | Certified Sustainable Development Professional | Existing | <input type="checkbox"/> |
| Jonlin | Duane | NBBJ | New | <input type="checkbox"/> |
| Kauffman | Rod | BOMA Seattle-King County | Existing | ✓ |
| Lesley-Lloyd | Karen | Tenant's Union of Washington State | Existing | ✓ |
| Littel | John | Pacific NW Council of Carpenters | Existing | ✓ |
| Lopez | Jim | King County Executive's Office | Existing | <input type="checkbox"/> |
| Lowe | Marco | Triad Development | New | ✓ |
| Mackintosh | Joanne | American Society of Home Inspectors | Existing | ✓ |
| Mann | Kelly | Urban Land Institute - Seattle | New | ✓ |
| Marseille | Tom | Stantec Consulting | New | <input type="checkbox"/> |
| McCumber | Mary | Futurewise | New | ✓ |
| McLennan | Jason | Cascadia GBC | New | <input type="checkbox"/> |
| Mitra | Anindita | American Planning Association | New | <input type="checkbox"/> |
| Powers | John | Colliers International | New | <input type="checkbox"/> |
| Price | Stan | Northwest Energy Efficiency Council | Existing | ✓ |
| Pryde | Curt | Pryde-Johnson | New | <input type="checkbox"/> |
| Purcell | Paul | Beacon Development Group | New | ✓ |
| Putnam | Cynthia | Putnam Price Group, Inc. | Existing | ✓ |
| Richmond | Lisa | AIA Seattle | New | <input type="checkbox"/> |
| Schuster | Mark | The Schuster Group | New | ✓ |
| Shirley | Cal | Puget Sound Energy | Existing | <input type="checkbox"/> |
| Southard | Patti | King County GreenTools | New | ✓ |
| Stolarski | Bob | Puget Sound Energy | New | <input type="checkbox"/> |
| Tierney | Tom | Seattle Housing Authority | Existing | ✓ |
| Trafton | Chuck | WA Land Title Association | Existing | ✓ |
| Vasquez | Pedro | Jones Lang LaSalle Americas Inc. | Existing | <input type="checkbox"/> |

| City of Seattle | | | |
|-----------------|----------|--------------------|----------------|
| Last | First | Department | In Attendance? |
| Antonoff | Jayson | Seattle DPD | ✓ |
| Atwood | Glenn | Seattle City Light | ✓ |
| Dobrovolny | Peter | Seattle DPD | ✓ |
| Eichel | Amanda | Seattle OSE | ✓ |
| Harris | Jess | Seattle DPD | ✓ |
| Howard | Sandy | Seattle DPD | ✓ |
| Indig | Harry | Seattle DPD | ✓ |
| Lail | Jennifer | Seattle DPD | ✓ |
| Mann | Mike | Seattle OSE | ✓ |
| Simmons | Jill | Seattle OSE | ✓ |
| Sugimura | Diane | Seattle DPD | ✓ |
| Traxler | Maureen | Seattle DPD | ✓ |

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| Consultant Staff | | | |
|------------------|---------|------------------------------|----------------|
| Last | First | Organization | In Attendance? |
| Blair | Ellen | Triangle Associates | ✓ |
| Bonham-Carter | Claire | EDAW | ✓ |
| Erickson | Peter | Cascadia Consulting Group | ✓ |
| Grodnik | Ann | Seattle Northwest Securities | ✓ |
| Grogan | Stephen | ECONorthwest | ✓ |
| Kern | Michael | Triangle Associates | ✓ |

| General Public (<i>several in attendance, none signed up to speak</i>) | | | |
|--|----------|-----------------------|----------------|
| Last | First | Organization | In Attendance? |
| Blazej | Radim | Caron Architecture | ✓ |
| Cunningham | Celina | Rep. Jay Inslee staff | ✓ |
| Ridolfi | Callie | Ridolfi Engineers | ✓ |
| Walbaum | Markus | Terra Matters | ✓ |
| Wright | Jennifer | | ✓ |

Meeting Purpose

The purpose of this meeting was to discuss how the City of Seattle is coordinating its efforts with regional climate initiatives, review all of the policy options under consideration for new and existing buildings, and have small group discussions about the policy options.

Welcome and Updates

Facilitator Michael Kern of Triangle Associates opened the meeting and noted there would be time available at the end of the meeting for public comment. Michael reviewed the agenda and meeting materials.

Mike Mann, Acting Director of the City of Seattle Office of Sustainability and Environment (OSE), and Diane Sugimura, Director of the City of Seattle Department of Planning and Development (DPD), thanked the Green Building Task Force members for their participation. Diane reminded the Task Force of the main goals of the Mayor's Green Building Capital Initiative:

- At least 20% increase in energy efficiency by 2020 for existing buildings
- Meeting the intent of the 2030 Challenge goals for new buildings
- Create job opportunities in the green economy
- Save Seattle residents and businesses money on energy costs

Diane said that after the Mayor reviews City staff's recommendations, City Council will review any policies that would require Council approval, such as code changes.

Jayson Antonoff, DPD, provided the following updates about information requests from the Existing Buildings and New Buildings Committees:

- The City will provide information as soon as possible to the Task Force about the volume of permit activity for different sizes of projects (perhaps an estimate based on permit fees).

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- Seattle City Light (SCL) will provide information by the January 13, 2009 Green Building Task Force meeting about power it buys and sells and about SCL rate structures. The City of Seattle is working with Seattle City Light to consider if potential changes to rate structures could serve as policy.

Jayson reported online comment boards would be set up on the Task Force website by the end of the week to facilitate communication among Task Force members who want to interact in a more in-depth manner than is possible at Task Force and Committee meetings. He said there will be a separate comment board for each topic discussed at the day's meeting, and that Task Force members may request comment boards for additional topics.

Jayson said that in addition to the online comment boards, comments may be submitted on behalf of individuals or Task Force member constituencies via e-mail to himself or Amanda Eichel, OSE, or by formal letter. He said comments will be accepted until December 31, 2008 (this deadline was later extended to January 7, 2009). There will be another comment period once City staff's draft recommendations are presented in January 2009.

Amanda reported that the City will provide by January 13, 2009 the results of a "wedge" analysis to determine the level of energy efficiency improvement that is expected as a result of existing programs and market trends.

Synchronizing Seattle's Efforts with Western Climate Initiative, Governor's Climate Action Team, and Priorities for a Healthy Washington

Jill Simmons, OSE, provided a brief overview of the City of Seattle's efforts to synchronize its climate protection and energy efficiency activities with the Western Climate Initiative, the Washington Climate Action Team, and Priorities for a Healthy Washington. Jill's PowerPoint presentation is available on the Green Building Task Force website.

In response to a question, Jill offered to email a link to the final recommendations from the 2008 Washington Climate Action Team.

Jayson said that (per Resolution 30280) the City's policy is for the Seattle Energy Code to achieve energy savings up to 20% better than the current version of ASHRAE Standard 90.1 for commercial buildings. However, that position may be open to negotiation if Standard 90.1 and the WA State Energy Code undergo significant improvements in their next updates. Committee members discussed whether it is feasible to achieve much more efficiency with code. A Committee member said that federal code may soon overtake City code in stringency. Another Committee member said that code needs to be flexible enough on elements such as what equipment to use to avoid making building renovations impossible.

Policy Options under Consideration for New Buildings

Claire Bonham-Carter, EDAW, provided a brief review of each policy option that the City asked the New Buildings Committee to consider, as well as four policy options that the Committee asked to be

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added to its work plan. Claire's PowerPoint presentation is available on the Green Building Task Force website. Jayson noted that the four policy options proposed by the Committee had received less thorough analysis than those that were teed up by the City due to time constraints.

Jayson summarized the input he had heard from the New Buildings Committee on each policy option as follows:

Green Investment Fund

The Committee said it would take more money than is feasible for this policy option to have a major impact on energy efficiency, although a Green Investment Fund could serve to reward and encourage especially innovative projects. The public utility tax was suggested as a source of funding.

Green Building Feebate

The Committee liked the reward aspect of a feebate but not the prospect of raising fees for developers. There was discussion of how to craft a revenue-neutral mechanism, but no resolution was reached. The Committee suggested that a feebate policy might complement an update to the energy code as a way to incentivize projects that go far beyond code.

Density Bonus

The Committee noted this would be easy to implement, since the City already has a density bonus policy. The Committee was interested in the land use reform aspect of this policy option, including its potential to reduce transportation impacts. The Committee was concerned that a density bonus policy can be applied only in select areas of the City and therefore may not have the reach of other policies. The Committee was also concerned that since the density bonus is already used to support several policy goals, it may not be able to absorb energy efficiency as an additional goal.

"Priority Green" Permitting

The Committee said that expedited permitting with schedule assurances would encourage a great deal of participation in a Priority Green permitting program. The Committee acknowledged that a Priority Green policy might be useful for only a few years, because as more and more developers take advantage of it, the policy will afford them with less and less of a competitive advantage.

Green Building Performance Standards

The Committee said that a variety of third party standards would need to be accepted to avoid creating a monopoly for a single third party standard.

Building Code Updates

The Committee expressed support for building codes that would, in the long term, promote broader sustainability goals rather than focusing exclusively on energy efficiency. However, they cautioned that this as a very significant undertaking, and is probably not the most effective way of meeting the energy goals of this Committee.

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Energy Code Updates

The Committee indicated that the current economic downturn is not a good time for Seattle to pursue an energy code model that is fundamentally different than that of the State. The Committee felt Seattle can still take a leadership role while aligning its energy code with that of the State and other local jurisdictions. The Committee does not think it is appropriate to include embodied energy in the energy code at this time. Confirming actual building performance is important to the Committee, but developers should not be held responsible for the behavior of building tenants. Performance based code compliance based on energy modeling should be encouraged to provide developers with flexibility; this could be phased in as a requirement beginning with larger, more complex projects where the cost is not as large a factor.

Beyond Individual Buildings: District Energy/Waste Heat

The Committee proposes that the City investigate this approach further to see if it is viable.

Continuous Monitoring and Disclosure of Building Performance

The Committee raised this issue at several of its meetings but does not think monitoring and disclosure should be part of code.

Raising/Restructuring Energy Rates to Encourage Efficiency

The Committee suggested that raising energy rates might be the simplest, most straightforward tool for encouraging energy conservation. However, Committee members expressed concern that doing so could penalize successful businesses and low income groups, and that it would be difficult to determine the appropriate threshold and slope for the higher rates.

Innovation Review Board

The Committee suggested the creation of an Innovation Review Board to help projects through apparent code conflicts and to review innovative approaches to energy efficiency that may not be code-compliant. The membership of such a board and the board's authority to override code would need to be determined.

Policy Options under Consideration for Existing Buildings

Peter Erickson, Cascadia Consulting Group, provided a brief review of each policy option that the City asked the Existing Buildings Committee to discuss. Amanda summarized the input she had heard from the Existing Buildings Committee on each policy option. Peter's and Amanda's PowerPoint presentation is available on the Green Building Task Force website.

Small Group Discussions on Policy Options

To facilitate small group discussion, each of six tables in the room was assigned a topic for discussion. The City provided a list of questions associated with each topic. Michael invited each Task Force member to move to a table with a topic of interest for a small group discussion. He said that Task Force members were free to move from table to table if they wished to participate in more than one small group discussion.

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In response to comments from several Task Force members, Jayson and Amanda agreed that the topic regarding plug load and occupant behavior should also include education.

A spokesperson for each small group reported on the group's discussion to the full Task Force. The discussion topics, associated discussion questions, and key points of discussion are below.

1. Voluntary versus Mandatory Approaches

- Can a voluntary approach meet the Mayor's 20% efficiency goal?
- Which policy elements, if any, should be mandatory for new and existing buildings?
- How could we best measure whether voluntary components are successful?
- If phasing is considered, at what point should mandatory measures replace (or reinforce) voluntary policies?

Key points of discussion

- An all voluntary approach will not meet the Mayor's goal.
- Both voluntary (incentives) and mandatory policies are probably necessary.
- Mandatory policy is easier to implement for new buildings than existing buildings.
- Most potential energy savings are in existing buildings.
- Incentives need to reduce the payback period for investment in energy efficiency to 2-3 years.
- Homeowners need to be educated about the return on investment for energy efficiency measures to make voluntary policy more effective
- With increased participation, the cost of energy efficiency measures will come down.
- City policy should not harm the special aesthetics of certain buildings, for example historical buildings.
- Affordable housing must be maintained.

2. Beyond Individual Buildings: District Energy/Waste Heat

- What role should the City play in facilitating, incentivizing, constructing or operating these systems?
- Should City mandates or incentives consider the source of energy rather than on-site consumption levels when setting efficiency targets?
- What are the appropriate next steps for assessing the viability of thermal solutions?

Key points of discussion

- It only makes sense to consider a district energy system that is based on waste heat, combined heat and power, or low carbon energy sources.
- The City can incentivize customers to use district energy, incentivize businesses to deliver district energy, and could own the pipe system outright or as a public/private partnership. The City could also coordinate district utilities.
- If buildings are not mandated to participate in a district energy system one building could override the energy savings of all of the others.

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- The source of energy and on-site consumption levels are both important when setting efficiency targets.
- As a next step, the City should consider what future opportunities will be lost by continuing to construct electrically heated buildings now that cannot be easily converted to hydronic systems over their life span.
- The group had several suggestions for further study and analysis, including conducting an inventory of significant thermal sources and loads in the City, and it suggested that the City conduct a pilot project.

3. Continuous Monitoring & Disclosure of Building Performance

- Is monitoring and disclosure a priority for all buildings sectors (single family residential, multifamily, and non-residential)?
- Should expectations for performance disclosure be different for newly completed vs. existing buildings?
- What is the most appropriate tool/standard for measuring performance (in each sector)?
- Who should have access to monitoring data and how should information be disclosed?
- Should monitoring focus on occupant behavior or building performance (or both)?

Key points of discussion

- Monitoring and disclosure are very important because 1) they would provide more information and transparency at points of financial transaction, whether leasing or point of sale; and 2) they will help people understand the actual performance of their buildings and allow for comparison among buildings.
- It is difficult to manage what cannot be measured.
- All buildings should be subject to a similar rigor of monitoring and disclosure. New buildings need to be tested to make sure performance meets design expectations.
- A checklist is the most appropriate tool for residential buildings, and a performance rating, like Energy Portfolio Manager, is the most appropriate tool for commercial buildings.
- Information should be disclosed to the parties involved in financial transactions such as leasing and sale.
- Monitoring should focus on both behavior and performance.
- If a new building does not perform as designed, incentives should be withheld, but the developer should not be charged penalties.

4. Financing Options, Revenue Sources and Repayment Considerations

- Should the City be in the business of financing efficiency, or should this be a private sector function?
- Of the two options considered for repayment of funds (on-bill financing, property tax assessment, lien on property), which makes the most sense for the residential sector? Non-residential?
- Is there a funding source or repayment mechanism the City has not considered that should be on the table?

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- Are you aware of private sources of capital that the city should pursue in support of this initiative?

Key points of discussion

- The City should not be a lender, but it can partner with private financial institutions. Private institutions have the necessary financial expertise and systems in place.
- The return on investment is not enough to interest most private financial institutions without City involvement.
- The City can provide assistance with communication, outreach, program development, and risk underwriting.
- The repayment options considered by the Existing Buildings Committee, including on-bill financing for property tax or utility bills, assume a public lender. With a private lender, repayment would be regular cash flow repayment.
- The City can refer to ShoreBank Cascadia's financing program for septic systems on Hood Canal for an example of private sources of capital.
- If the utilities, SCL and Puget Sound Energy (PSE), add an additional tariff/cost premium to rates, the City could use that money for a loan pool and leverage it to get foundation and private equity participation in the loan pool.

5. Addressing Occupant Behavior/Plug Load

- Should occupant behavior be addressed separately from (or in conjunction with) building envelope?
- What are the best policy options for addressing occupant behavior?
 - Is it more critical to provide information, incentives or price signals?
 - How effective is "peer pressure" in eliciting behavior change?
- How could existing City programs (e.g. Climate Action Now!, City Light conservation programs) be exploited to address conservation behavior?

Key points of discussion

- Occupant behavior and plug load are separate issues and should be discussed separately. Plug loads can be affected by technical issues such as the efficiency of appliances and whether it is possible to switch off outlets.
- Occupant behavior should be an important area of focus separate from building envelope.
- The City can support several good programs that address occupant behavior, including PSE, SCL, and Building Owners and Managers Association (BOMA) programs. The City should continue to reach out to the King County Association of Realtors to raise awareness with new homebuyers.
- The Mayor needs to reach out to business leaders to encourage energy efficiency awareness campaigns in the workplace.
- Regarding plug loads, PSE's and SCL's existing incentives need to be better promoted, and the City needs to support Resource Conservation Manager programs and BOMA's programs.
- The City could sponsor an awareness campaign about "phantom loads," the power that equipment draws even when it is turned off.

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- The City should promote better labeling of appliances and equipment with energy use information.
- The City should encourage PC power management for the commercial sector.

6. Prioritizing Incentive Dollars: Existing versus New Construction

- Should there be a need to prioritize scarce resource, how should the City approach this decision?
- Are incentives for new construction more critical than those for upgrades to existing buildings?
- Are there particular sectors or classes of buildings that should receive priority for funding?

Key points of discussion

- Incentive dollars should be invested where they can effect the greatest energy savings.
- Priority Green permitting is a good policy to implement early.
- Code will drive initial energy efficiency in new buildings. It will be important to incentivize building owners/operators to maintain the energy savings.
- It would be helpful to have incentives for more programs. Resource Conservation Manager programs and something similar to PSE's program for efficient operation should be applied in Seattle.

Wrap-Up

Public Comment

There was no public comment.

Open Discussion on New or Existing Building Issues

There was no open discussion of new or existing building issues.