

**Minutes**  
**Governor's Energy Efficiency Work Group**  
**30-May-08**

**Attendance**

**Members:** Bill Edmonds, co-chair (NW Natural), Clark Brockman, co-chair (SERA Architects), Dave Vanthof (Governor's office), Jim Edelson (Interfaith Power & Light), David Cohan, (NW Energy Efficiency Alliance), Gina Franzosa (Cascadia Green Building Council), Tom Konicke (McKinstry & Co.), Markus Stoffel (Novafutura), Myron Burr (Siltronic), Phil Ermer (Hewlett Packard), Charlie Stephens (sustainability consultant), Fred Gordon (Energy Trust of Oregon), Sean Penrith (Earth Advantage), Tom O'Connor (Oregon Municipal Electric Utilities Association, for Dick Wandersheid), Bob Simonton (Oregon University System), Jeff Bumgarner (Pacifcorp), Jeremiah Bauman (Environment Oregon), Susan Steward (BOMA), Al Durgan (Steelworkers) by phone connection, Michael Armstrong, Glenn Montgomery (Earth Advantage), Tom Payne (Oregon Home Builders Association), Jon Chandler (Oregon Home Builders Association), Jeremiah Bauman (Environment Oregon), Lauren Shepton (for Joe Barra, PGE), Jim Slusher (Mid-Columbia Community Action Council),

**State agency liaisons:** John Kaufmann, (Oregon Dept. of Energy), Lee Sparling (OPUC), Mark Long (Building Codes Division), Cameron Smith (Governor's Office), Jennifer Wetherbee (Oregon Dept. of Energy), Elin Shepard (Dept. Administrative Services), Andrea Simmons (Building Codes Division), Dan Elliott (Dept. of Housing and Community Services), Tamara Brickman (Office of Budget and Management), Jordan Palmeri (DEQ), Ann Hanus (Oregon Dept. of Energy)

**Other:** Steve Bicker (NW Natural), Andrea Simmons (Building Codes Div.), Dick Harmon (Industrial Areas Foundation), Lisa Logie (Oregon Rural Electric Cooperative Association), Libby Ticker (Daily Journal of Commerce), Tom Hudson (Green Building Services)

For the press, Bill Edmonds and Clark Brockman will speak on behalf of the group. This is just a brainstorming session. The "Bucket List" doesn't mean anything more than that at this time.

***Water Conservation***

Grey water re-use within buildings. BCD met with vice-chair of Plumbing Board. Boards may be able to do it. Mark Long – proposals to go before the plumbing board June 20<sup>th</sup> for residential buildings. Also putting together for rainwater re-use within and external to building, both residential and non-residential. Clark – believes there will be legislation to define greywater – there is model code language already written for this. BCD will develop matrix of potential uses and regulatory path for each.

Myron – Oregon Business Council focusing on water policy now. Will provide summary to ODOE. What is the linkage to CO2? Clark – there is a lot of energy used to store, treat and move water, so there are savings if you move less.

Jeremiah – Legislation tied to outreach of water conservation to tell the public about changes in re-use/recycling of water. Also, possible legislation for stormwater management.

Dave – this is a crossover issue with Water task force. Should be vetted with them.

David – how much water goes to each use, and how much energy is used?

Charlie – most energy in this area is for wastewater treatment.

Jim Edelson – agriculture is the largest user of water in the Northwest. Need to address that issue.

Dave VH – H2O will have lead on those water policy issues.

Clark – one way to bound our work is buildings.

Bill – Gina, Jeremiah, Charlie, will work to put together something on wastewater.

### ***New Performance Buildings***

Another subgroup (Clark, Gina) has been working on proposal for high-performance state buildings, i.e. LEED Gold. Failed last session, will be working on it again.

Architecture 2030. Buildings have a larger carbon footprint than either industry or transportation. Half of nation's energy, 75% of electricity. 20% of existing building stock will be demolished in the next 20 years. 75% of the remaining buildings will undergo major renovations. Goal is to make buildings in operation carbon neutral by 2030. Goal is to do operational piece first. To achieve carbon neutrality, they should be 80% carbon neutral on-site and 20% carbon-neutral off-site with offsets. Federal buildings are on this timeline.

David – what about baseline? Clark – based on EIA (CBECS and RBECS) Buildings now should be 50% better than CBECS database. Oregon code is already better than CBECS (need to find out how much better).

Charlie – is the 55% better based on source energy or site energy? At source level renewables are penalized. Savings need to be at source level, but work is performed at site level. Jim – Climate Registry uses regional average.

Clark – not every building can be net-zero on site.

Phil – where does energy go to? Tom Konicke – Lighting first, then cooling (commercial); water heating, heating, lighting (residential).

Bill – carbon neutrality depends on what comes over the wire.

Fred – Need to tackle RD&D piece before we can do this 2030 correctly. Utilities have to figure out how to make money in this world. May not be this legislative session.

Jim E. – two types of legislation. Let cap-and-trade deal with source energy, we should focus on site energy.

Charlie – if we're going to achieve carbon neutrality, you're going to have to shut down coal plants. Only time energy use has declined historically has been when there's been an economic downturn. So these actions need to be connected so there's and actual reduction in carbon emissions.

Dave – That's front-and-center about reducing emissions. That's the cap-and-trade group. This group should be looking at complementary measures to reduce load.

Bill – we should concentrate our energy around the site. Can't create carbon neutrality at the site.

Fred – the least efficient way to use renewables is to scatter them around on energy. Research could show ways to make them proximate to the building to reduce distribution and transmission costs.

Jeremiah – focus here should be on zero net energy rather than carbon neutrality to avoid that issue.

Lee – do 2030 goals apply to entire building stock, or new buildings? Utilities need to know how much energy is needed by customers. Doesn't know what aggregate energy use would look like.

Fred – commercial savings estimates would reduce growth, but not reduce utility load.

Charlie – we don't have time to get this perfect. We need to get something out there, and then work to improve it.

Mark – will have to give agency or board clear direction. BCD is not the decision maker, the boards are. May need to be given tools to accomplish the goals.

Jon – set target makes him nervous. This focuses on new. Existing is where the bigger savings are, as well as the financial obstacles, etc. Targets can also be an impediment.

David Cohan – agrees about existing buildings. Building O&M is huge. Retrofits and remodels is on construction side. Question for Mark, can we go through legislature to tell boards to meet certain goals. Mark – there are examples of that.

Michael Armstrong – on existing buildings side, Portland is looking more at information side, i.e. ratings.

Jim – believe legislature needs to give direction. Provide incentives, requirements for state buildings, with code following by a few years. Without those legislative goals, it won't happen.

Jon – doesn't believe you need targets. Will want off-ramps, exclusions, etc. Setting of target is easy, getting there is the hard part.

Jeremiah – thinks state should set out clear paths, so cap-and-trade isn't the only thing we're relying on.

Mark – we set goal of 15% savings in 2004, and it was helpful.

Michael – 2030 has interim targets.

Phil – target would encourage innovators to develop products to help meet the goal, Also agrees there may need to be an off-ramp.

Phil – how does 2030 affect industrial buildings? Clark – building follows the rule, process is excluded.

Gina – NPDS permitting is an example of setting a goal. Allowed cities time to plan on how to meet the goal. Breaking down code for innovative approaches is good idea.

Sean – will need to bring creative financing to the table.

David – thinks goals are necessary. Need something to drive it, or it will wither away.

Charlie – this year Oregon is spending about \$4 billion more for energy than we did five years ago. Most of it is exported out of the state. We could do a lot better keeping that capital here working for us.

Myron – performance standards for power plants? Is that something we want to consider in this committee? Dave VH – this group doesn't need to do it.

### ***Energy Performance Certificates***

Sean – investment in remodeling project has to translate into value. Trying to get insurance and mortgage industry to finance green buildings, they want it independent of a brand (i.e., independent of Earth Advantage). Also, no way to reflect retrofit improvements in new homes. UK requires Performance Certificate to list home for sale. Takes about 18 minutes. HERS uses REMRATE (which requires 5.5 hours to be in the house). So pilot will use three different approaches – deemed savings with feedback from utility history, walk through, . Goal is to be in the house for 75 minutes. Working with

ETO to provide EPC for anyone who wants one. Want to have EPC recognized by Multiple Listing Service. Need performance metric and dashboard in the home.

Dan Elliott – Energy escrow. Add E to PITI.

Jim Slusher – realtors were first people to block this 15 years ago.

Jon – needs complementary financing package.

Dave – what would be proposed legislatively?

Charlie – high performance homes are easy. Code homes, can you just assign default rating. But the biggest place is existing houses.

John Kaufmann – needs to apply to all buildings, not just the “green ones.”

Tom O’Connor – could it be simplified rating, based on code it was built to, and efficiency work that was added?

Sean – the third sample approach in the pilot – based on zip code, he can tell more.

Dan – has to hit every house. Main goal of sustainability, all economic backgrounds need to be included.

Fred – this is the Philosopher’s Stone. Needs to be do-able, affordable, non-litigable. If legislation, don’t pick winners, provide flexibility.

Jeremiah – give ODOE rulemaking authority to develop it over two or three years.

Phil – \$/sq.ft. might be included as well.

David – sees need for simplification. But side-by-side homes can vary by factor of 2 or 3. If goal is to provide incentive, don’t oversimplify.

Charlie – UK is more serious about climate reductions than the US. They’re using this. The question is how quickly you can use it. Challenges a subgroup to find a way to do it.

Michael – looking at requiring a performance rating at time of sale. Hearings on the 12<sup>th</sup> and 17<sup>th</sup>. Sequencing may be less than ideal.

Bill – bunch of city programs wouldn’t be as good as a state program.

Bob Simonton – seismic has a similar rating. Converted logarithmic rating to percent chance of collapse.

Al – may be hard in '09 session because of cost factors.

### ***Market Transformation***

Bill – is there a legislative way to do market transformation better?

David – you can buy a market. Utilities moved from T12 to T8. Expensive. Or you can regulate a market. Cheaper, but politically more difficult. Or work upstream with manufacturers, rather than end users, by showing them value. Hired consultant to work with manufacturers to go to U=0.35 window ten years ago. Also worked with volume retailers. No incentives to builders or home buyers. As volume increased, prices went down. Market share went to 70% in three years, now 85%. For this EEWG, provide incentives, don't be too specific. If you want to talk money, tax credits are the only way. But is that a good use of money? Leveraging is more targeted, cost-efficient.

Bill – doesn't hear any big barriers. Need to be careful about tinkering with legislation.

David – yes, just set system up so market sends the right signals. i.e., remove barriers to rational market choices, but don't specify what should be done.

Bill – that may put this to bed for this group.

### ***Ban the Bulb?***

Fred – set performance standard for bulbs between 2012-2020. The PNW sold 19 million CFLs last year. If that happens for 7 years, we're out of sockets. Pulled out of incentives and sold more last year without the incentive. Even if law isn't perfect, the PNW led the curve. Thinks legislation would be least valuable.

Bill – who's done this? Can we, or are we pre-empted by the feds.

John – States are pre-empted. California is exempted because their law preceded federal law.

David – gray area. Federal law applies to manufacture, so it's gray whether state may have authority to regulate sale.

Charlie – Fred's history of CFLs is quite instructive. CFLs were not reliable 15 years ago. That's not true today. There are going to be issues of cost and performance because we hurried it along. But it's urgent.

Bill – I think the wind is out of that sail. As Fred said, the tree is about to hit the ground. Great name, ban the bulb, but not worth our time.

### ***Next Steps***

Go through the buckets as see what needs to be addressed. Low income, IRP/cost-effectiveness, etc. Co-chairs will go through to see what hasn't been dealt with. Then break up within the meetings.

Gina – water conservation, stormwater, public buildings will be separate discussions outside of this group.

Phil – can agenda include one-liner of what will be discussed.

David – legislative concept? Dave VH – doesn't want great detail before vetted somewhat with Governor.

Clark – give Dave concept list with a few bullet points.