

Bucket List

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BUCKET 1 – EXISTING BUILDINGS

Ratings/audits/improvements

- Require energy audit or energy improvements at time of sale (or time of re-siding) for existing buildings.
- Home energy rating or Energy Performance Certificate (EPC) should be done for each home.
- Require energy rating for all existing commercial buildings. Require buildings below minimum threshold to upgrade until they meet the minimum. Direct OPUC/ETO or utilities to create revolving loan funds for low-interest loans.
- Identify most energy-inefficient homes and create special ETO/utility programs to improve them.
- Direct ODOE to evaluate availability of fuels for space heating and prepare a plan to ensure that space heating needs will be met in the future.
- Low-income households represent 20-25 percent of all Oregon households. Low-income dwelling should be made as energy-efficient as possible and customers should have access to effective energy and carbon efficiency devices, appliances and control technology. Low-income households need to be part of the solution in meeting carbon reduction goals. Need a funding mechanism.
- Expand programs that promote efficient furnaces.
- There are no incentives now for measures that are more cost-effective than solar. Even windows are more cost-effective.

Financing

- Tax increment financing (Berkeley CA, Cambridge MA). Local government establishes local improvement district, issues bonds to extend low interest financing for owners invest in efficiency improvements; property taxes are raised to pay off bonds. Taxes stay with the property, not the owner. Owner is revenue neutral, city has guaranteed revenue stream (taxes). This should enable local government to do hundreds of millions of dollars of financing. Preliminary look is that legislative tweaks would be needed. Also, Measures 5 and 9 put cap on taxes that may limit ability to use this. Legislative ideas should be enabling, not restrictive, so it can be adapted as we learn more about how it works. Get commercial player in the loop to take advantage of tax credits through lease arrangement.

- Less-cost-effective measures should be bundled with more cost-effective measures to maximize savings and prevent having to go back later to do more efficiency measures as energy costs rise.
- Require all utilities (IOUs and consumer-owned utilities) to offer on-bill financing or “pay-as-you-save” (PAYS) financing. On-bill financing is attached to homeowner, PAYS is attached to the meter, meaning it’s an individual tariff. This concept must be coupled with independent certification and disconnection for nonpayment. Utility guarantees revenue stream in order to attract private financing. Provision in existing statute for utility to go to OPUC to ensure investment is guaranteed in rates (ORS 757.247). (See concept paper)
- Loan guarantees backed by the state: Loan guarantee to expand energy efficiency mortgages. Could also be used for incenting new energy production facilities and energy efficiency in commercial buildings. (See concept paper)
- How to grow ESCO model and leverage more private financing? How can we use energy savings as collateral to pay up front, so you don’t need a lien? Clinton Foundation partnered with five major banks and several ESCOs. ESCOs provide investment grade audits, M&V and savings guarantees to attract investors. (HB 3612 last session allows ODOE to develop list of qualified ESCOs for state agencies.)
- Help and direct cities to perform like ESCOs. It can leverage other funds, create scale, reduce risks and lift the investment onus off of building owners. Make it an opt-out model, not opt-in. Building owners have high discount rates and are often unwilling to invest in EE. However, they are not being asked to make the investment, so they should be required to opt-out rather than encouraged to opt-in. Burden should be on the low-performers, not the high-performers.
- Fund energy improvements in existing housing by charging a hookup or permit fee on new homes that exceed tight energy budget/capacity limits (i.e., make new homes offset added load by paying for efficiency in existing homes).
- Look at PERS for funding energy efficiency upgrades, ensuring rate of return they’re looking for.
- OECDD community investments should be tied to sustainability goals.
- Allow private entities to purchase carbon credits from energy efficiency upgrades.
- Bonds backed by energy savings for high-performance buildings.
- Revise/streamline SELP to be more effective in financing energy efficiency upgrades.
- Streamlined packaging for customers. M&V slows it down.

BUCKET 2 – NEW BUILDINGS (HIGH PERFORMANCE BUILDINGS AND CODES)

High performance buildings / Codes

- New buildings – establish a goal of zero net energy by 2030. (California has a similar initiative in process.)
- Establish a high performance building standard to lead the way ahead of code (perhaps as standard for tax credits – RETC and BETC). Allow cities to adopt high-performance standard as code. New public buildings to meet high performance standard.
- Set energy budget or energy capacity limits for new homes. Charge hookup or permit fee to exceed limits, to fund efficiency offsets in existing housing.
- Establish a per capita energy consumption target (similar to Europe). Easier to understand than a percentage reduction.
- Make codes more dynamic, so you know where they're going in the future. Know that they're fossil-fuel neutral by 2030. Set goals beyond political cycles.
- Require BCD to adopt a more stringent energy code every three years. Determine the stringency increases in advance to provide long-term predictability/stability for market actors.
- Eliminate min/max restriction in Oregon energy code to allow local jurisdictions to adopt more stringent codes. Adopt green building option that communities can adopt, rather than going through separate processes.
- Codes should be performance based, not intent based on what you say you're going to do.
- Get better handle on enforcement of existing code. Needs money.
- Require code adoption boards to use 30 years as acceptable payback for envelope and other durable measures.
- Reduce threshold for AIA stamp from 100,000 to 20,000 sq. ft.
- For tax purposes, reclassify buildings that meet or exceed LEED Gold standards (including points for energy).
- Create a central point for distributing information about green building at the state level, so municipalities or private developers in smaller municipalities have somewhere to go to learn more about what they can do. This info center might also be helpful to any state agency that is responsible for building or maintaining buildings or leasing space. It could be simply a website and a staff person, but ideally it would be a website and staff person plus a team of people made of appropriate individuals from all state agencies whose purview includes green building topics such as building codes, stormwater management, water conservation and wastewater management, etc. The team would provide a coordinated and comprehensive body of knowledge.

Public buildings

- SEED (new state buildings) is great, but 20% savings number may not be high enough – raise to 30%. Appears requirements may not be obligatory.
- In public sector, the people who pay the bills are different than those who do efficiency projects. Accountability for paying and for doing things need to be linked.
- Agencies aren't able to make full use of incentives. BETC or utility incentives come in as cash, but aren't included in limitation, so it doesn't affect how agencies make decisions.
- More formalized path for performance contracting by state agencies. Pre-qualified list of vendors. ESPC can help with finance piece. However, if poorly performed, it can be a bad experience.
- Add assistance for biomass studies.
- State procurement policies should require purchase of energy efficient equipment.
- Require all public buildings to be carbon neutral by 2030.
- Require LEED in new public buildings (specify minimum number of energy points).

CO2 emissions & building efficiency

- Ties fast track approval and loans to reducing CO2 emissions.
- Use voluntary emission offsets to reward mitigation in the built environment as part of compliance obligation. Use set-asides to stimulate additional revenue as catalyst.
- Match energy efficiency goals with CO2 emission goals.

BUCKET 3 – INDUSTRIAL

- Increase BETC to 50% for industrial efficiency (or authorize ODOE to modify its rules to allow 50% BETC for some industrial efficiency measures).
- Align capital and incentives for industrial efficiency. Auction revenues, electric utility will be point of regulation, if free allowance they will go to utility. If industrial customer invests in efficiency reduces load on electric utility, free allowances should be shared with industrial customer who can convert them into cash.
- Get teams of specialists into facilities take look at whole systems and systems integration.
- State program to recognize companies or individuals that do good.
- BETC also has recycling element, but limited to materials that don't go back into the original process. Expand so it is included.

- Allow industry to self-direct the renewable energy portion of PacifiCorp's [and PGE's] public purpose charge to energy efficiency.
- Allow industry to self-direct the Renewable Adjustment Clause to on-site energy efficiency. (The Renewable Adjustment Clause is designed to recover the costs of meeting the state-mandated Renewable Portfolio Standard).
- Strengthen and streamline BETC and ETO programs.
- HP tries to rank-order cost-effective measures. This concept can be used to evaluate the different ideas put forth by the EEWG.
- Make sure co-generation has appropriate incentives, so they can be fired up when prices rise.
- Benefits from industrial projects must flow to the industrial customer, not the utility, under cap-and trade. (**CROSS-OVER ISSUE**)

BUCKET 4 – UTILITY

Utility

- Require reduction in demand. How do we get to no-growth or reductions in load, close-out coal plants? Establish an energy efficiency performance standard by limiting load or setting energy savings targets for utilities.
- How can we squeeze more out of the current model (public purpose charge)?
- Direct utility/PUC cost-effectiveness perspective to take a long-term perspective and integrate carbon issues for IRP purposes. (Process starts with IRP, not cost-effectiveness. If goal is to reduce carbon emissions, cost-effectiveness would flow from that.)
- Direct ETO/utility/PUC cost-effectiveness perspective to take a long-term perspective and integrate carbon issues for efficiency programs, and to bundle non- cost-effective measures with cost-effective ones so that the package is cost-effective. This may require legislative directive to ensure it happens.
- Change IRP to an Integrated Systems Plan. Broaden traditional boundaries.
- Remove utility disincentives. Decouple earnings from sales.
- Partnerships with utilities and Higher Ed.
- Net metering in all utility service territories.
- Direct OPUC to require electric and gas utilities to develop plans to incorporate into existing plans two natural gas scenarios: (1) no growth in supply, and (2) reduction in supply.
- Require utilities to analyze customers and identify biggest consumers and offer specific programs to reduce their consumption.

- Require OPUC to use inverted block rates to encourage large users to reduce consumption. Set initial block low to ensure equity.
- Expand utility programs that promote efficient furnaces.

Smart grid – (Eliminated from consideration. Huge investments will be made. Technology is still experimental. Timing is not ready for mandate or wide deployment at this time. More R&D and pilot programs are needed, and this already is happening.)

- ~~Every home should have a dashboard, be connected to smart grid. Develop smart grid policies, develop the market, figure the right strategy forward.~~
- ~~Investigate/incent/require use of peak demand management technologies.~~

BUCKET 5 – OUTREACH, RD&D, AND MARKET TRANSFORMATION

Education/outreach

- Statewide awareness campaign to educate customers on energy issues. New York is getting 94MW of peak demand from simple awareness campaign.
- Introduce energy education into school curriculum.
- Direct OSU to create a “Factor 10” engineering program.
- One-stop kiosk?
- Set up model homes demonstrating exotic technologies.

RD&D, market transformation (policy)

- Spend more on R&D. It needs to be leveraged with state or utility resources.
- We need to get a better way to get new technologies perfected and into the market. There’s a gap between R&D and dissemination. Someone with more money can take more risks. Build supply curve by wading into markets and trying stuff. Innovation and commitment go in parallel, not one after the other. Tax credits are not the main way to move technologies forward. More cash and bodies would help.
- Establish Energy Efficiency Portfolio Standard or “job corps” program.

Market Transformation (specific)

- Ban incandescent bulbs. Tax them like cigarettes. Use revenues for further conservation.
- Build markets for new technologies like LED lighting and CFLs, and move incandescent lamps off the market.

- Expand state-regulated appliance efficiency standards to cover additional products adopted by California (this can be done administratively). Work with Congressional delegation to amend EPACT and NAECA at federal level.
- Hard to find qualified contractors for advanced work in rural areas (duct work, heat pumps).
- Increased funding for on-site solar. Look at RETC and ETO renewables funding.
- Prohibit CCRs banning solar energy systems, clothes lines, etc.

BUCKET 6 – WATER CONSERVATION

- Change codes to allow re-capture and re-use of graywater.