

Bucket List

25-April-2008

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.

Financing

- Look at PERS for funding energy efficiency upgrades, ensuring rate of return they're looking for.
- OECD community investments should be tied to sustainability goals.
- Tax increment financing (City of Berkeley). City issues bond; owners invest in efficiency, lowering energy costs; property taxes are raised to pay off bonds. Owner is revenue neutral, city has guaranteed revenue stream (taxes). Thus ability to do hundreds of millions of dollars of financing. However, Measure 5 and 9 put cap on taxes that may limit ability to use this. What can the state do to ensure cities can run the financing they want to get this money. Another mechanism to finance improvement of existing buildings is to finance through the utilities, but it needs to be tied to the buildings.
- Loan guarantees backed by the state.
- Use "pay-as-you-go" structure.
- 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.
- Bonds backed by energy savings for high-performance buildings.
- Fund energy improvements in existing housing by charging a hookup or permit fee on homes that exceed energy budget/capacity limits.

BUCKET 2 – HIGH PERFORMANCE BUILDINGS AND CODES

High performance buildings

- 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.
- Reduce threshold for AIA stamp from 100,000 to 20,000 sq. ft.
- Establish a per capita energy consumption target (similar to Europe). Easier to understand than a percentage reduction.
- For tax purposes, reclassify buildings that meet or exceed LEED Gold standards (including points for energy).

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.
- 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).

Codes

- 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.
- 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.
- 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.
- Get better handle on enforcement of existing code. Needs money.
- 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.
- Require code adoption boards to use 30 years as acceptable payback for envelope and other durable measures.

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 – UTILITY AND INDUSTRIAL

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.
- Industrial savings program.
- 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.
- 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.

Utility

- Remove utility disincentives. Decouple earnings from sales.
- Partnerships with utilities and Higher Ed.
- Energy savings targets for utilities, funded by conservation tariff or increase in the public purpose charge.
- 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.

Smart grid

- 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 4 – 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.

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 EPCACT and NAECA at federal level.
- Water conservation is connected to energy efficiency. Tackle grey water use.
- Hard to find qualified contractors for advanced work in rural areas (duct work, heat pumps).
- Look at RETC again. Not enough for solar.