

Maryland Energy

ADMINISTRATION

Powering Maryland's Future

***Maryland – From The Bottom to the Top
Through LEGISLATION/REGULATION***

Walt Auburn, Director of Energy Efficiency

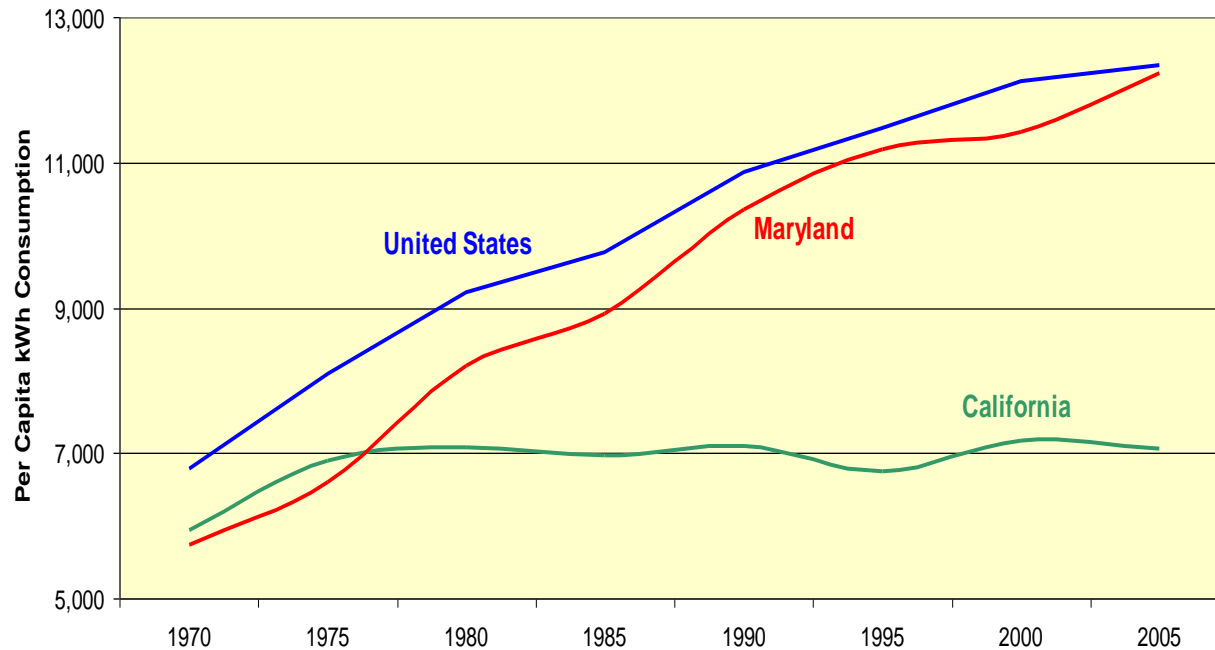
Maryland Energy Administration

April 19, 2012

From the Bottom to the Top in Maryland

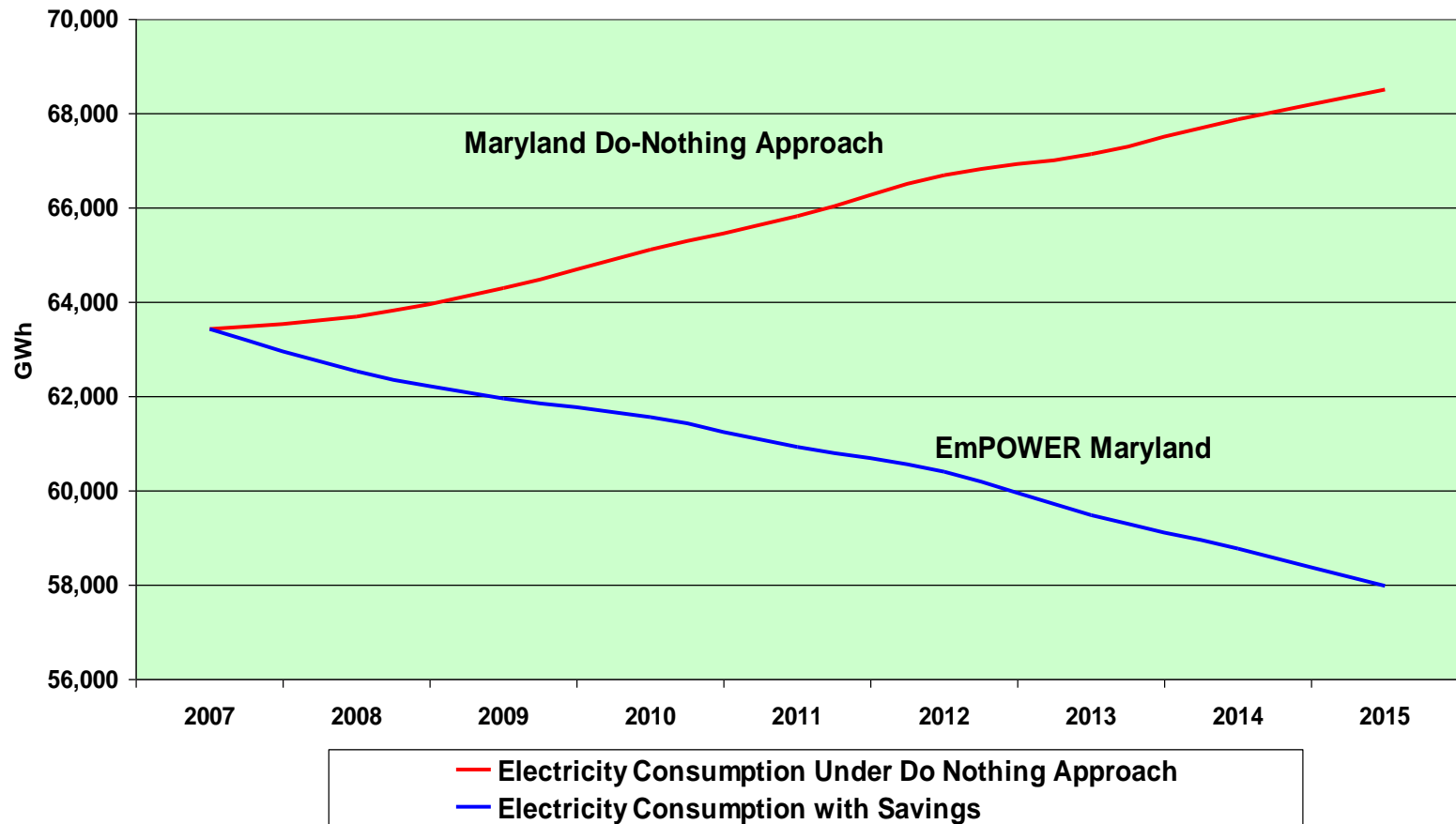
- How does a state move from an ACEEE ranking of 47th in utility energy efficiency expenditures to the top 10 in less than 6 years? (2005 to 2011) **MD has #1 EERS Goal**
- Answer:
- Deregulate
- Fix Utility rates for 4 to 6 years
- Take the Cap off all at once
- Have an election for Governor
- Create legislation to fix the problem
- Re-build EE expertise and businesses to implement EE

Maryland Electricity Consumption per Capita Soared without EE programs

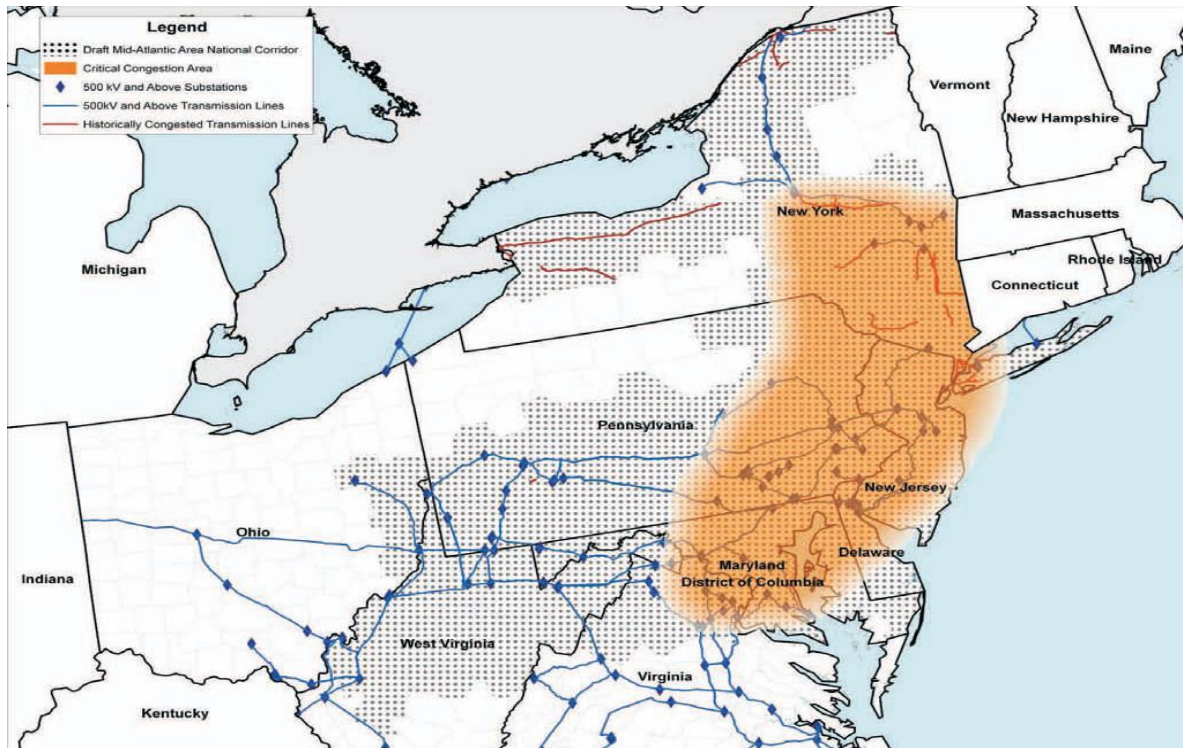


Source: EIA and US Census

Electricity Savings or Shortfall? Which to Choose?



Maryland Faced Blackouts As Early as 2011



A Bit of History – Legislation/Regulation then attempts at More Legislation to Fix the Regs

- Maryland implemented energy efficiency programs in the late 1980's and 1990's in the Public Service Commission set of statutes: 7-211.
- De-regulation occurred in 1999- which separated the power production from the traditionally integrated utility operation
- As a result of de-regulation, consumer prices were held constant for 4 to 6 years; however, market prices rose dramatically.
- When caps on prices came off – consumer and business prices rose 50% to 90% in one year – created political firestorm.

Early Legislative Attempts – 2001 to 2007

- A dedicated Maryland Senator along with environmental stakeholders attempted in 6 legislative years to pass a public benefits fund to be administered by the Maryland Energy Administration.
- None of the attempts passed.
- PSC had regulatory authority during the 1990's and beyond to establish any program or service that the Commission deemed appropriate and cost effective to encourage and promote the efficient use and conservation of energy
- During the 1999 to 2007 period the PSC did not require utilities to establish energy efficiency programs

Residential Rates Increase 80% in One Year – EmPOWER Legislation Passes in 2008

- Election of current Governor O'Malley in 2007, in the aftermath of 80% increases in Baltimore Gas and Electric Company's residential rates results in creation of the EmPOWER Maryland legislation in 2008.
- Governor O'Malley champions energy and environmental programs includes a Renewable Energy Portfolio standard, Healthy Air Act, and Climate Action Plan
- Legislation passes in April 2008 and requires PSC and Utilities to develop an initial 3 year plan by September 2008.

EmPOWER Maryland Energy Efficiency Act

- Codified bold energy efficiency goal to reduce state-wide consumption and peak demand 15% per capita by 2015 from a 2007 baseline.
- When implemented, EmPOWER Maryland will
 - Keep the lights on, while avoiding the need to build at least 3 large fossil fuel power plants;
 - Saves households roughly \$16/month or \$190/year by reducing electricity consumption; and
 - Add 8,000 new “green collar” jobs to the Maryland economy by 2015 (ACEEE '08)

Investor, Municipal and Electric Coops Involvement in EmPOWER MD

- The Act gave the Public Service Commission the specific direction to establish electricity and peak demand reduction goals for the 4 investor-owned utilities and the largest coop.
- The remaining 7 munis and one coop were told to file EE plans but none have done so to date. This group represents only 2.5% of electricity consumption in the state.

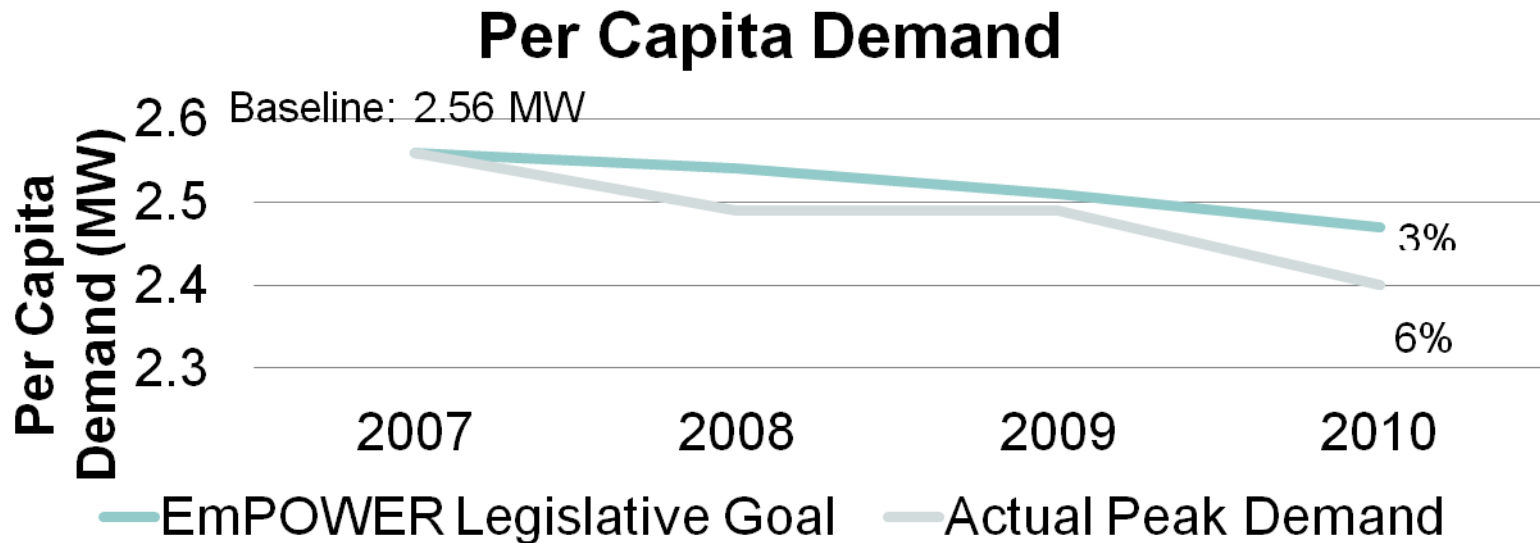
The Maryland Energy Administration, Public Service Commission Staff and Stakeholder Develop Work groups in 2008

- PSC and MEA staff led work groups to establish format for program filings including program descriptions, participants and cost benefit analysis
- MEA has special role to review and design and adequacy of the utility plans (MEA meets with each utility to improve the plans)

Ahead on EmPOWER Peak Demand Goal

Energy Efficiency

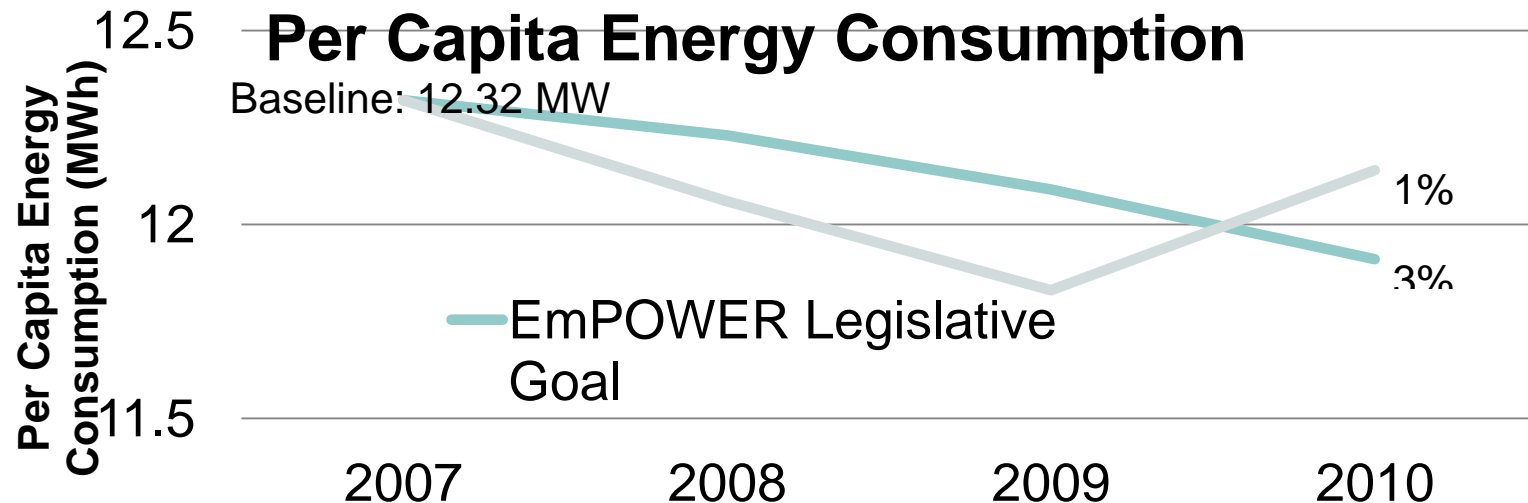
- 15% by 2015



More to Do on EmPOWER Consumption Goal

Energy Efficiency

- 15% by 2015



- Over 270,000 Marylanders have taken advantage of EmPOWER programs.
- The measures they've implemented will save over \$2 B in energy costs.

Where Do We Stand after 3 Years of EE Programs?

Utilities: Significantly Underperforming

Utilities are achieving less than 25% of the 2011 EmPOWER Maryland goal.

Utility	Q2 2011 PTD Energy Savings – Wholesale Level (MWh)	2011 Utility Targets (MWh)	Percent of 2011 Utility Targets Achieved	2011 EmPOWER Maryland Energy Savings Goal (MWh)	Percent of 2011 EmPOWER Goal Achieved
Potomac Edison	33,277	109,955	30.3%	122,664	27.1%
BGE	500,677	1,015,612	49.3%	2,052,948	24.4%
Delmarva Power	25,014	149,288	16.8%	205,846	12.2%
Pepco	115,977	588,628	19.7%	685,738	16.9%
SMECO	27,414	68,627	39.9%	94,229	29.1%
Total	702,359	1,932,110	36.4%	3,161,425	22.2%



Greater Progress is Not Only Realistic, but Reality in Other States with Greater Investments

- Leading states are achieving 1.5 to 2 percent electricity savings annually.
- Such states are also investing significantly more in energy efficiency programs than Maryland utilities.

Maryland Utility Energy Efficiency Spending—Per Capita Comparison

	2010 Spending (Actual)	2010 Energy Savings (MWh)	2010 Energy Savings (% of Sales)	2011 Spending (Forecast)
Maryland	\$14.31	387,452	0.6%	\$26.63
Massachusetts	45.60	625,000	1.4%	82.80
Vermont	60.20	114,000	2%	70.60
Connecticut	48.30	423,000	1.4%	43.60

New 3 Year Planning Cycle for EmPOWER – 2012 to 2014

- Work groups assemble in the fall of 2010 to begin preparation for a year long process culminating in the filing of new utility plans in September 2011.
- Fall of 2011 – rounds of comments and hearings with the PSC, Utilities and stakeholders
- New/modified approved programs by the PSC in Dec. 2011
- Not all programs approved --- still more items under review

MEA's Role to Challenge the PSC/Utilities to Do More!

- MEA has pushed for work group interaction on all residential, low-income, commercial and industrial programs over the last 4 years.
- MEA provides written comments on all utility programs and testifies at PSC hearings.
- MEA helped coordinate a meeting with the Governor and utility executives to “break the log jam” on expanded programs to hit the 2015 target (2011).
- MEA requested the PSC direct the utilities to submit additional programs in 2012 to hit goal.

Maryland Can Do More

- Bolder and more innovative programs needed in 2012-14
- PSC should:
 - Adopt policy of incentives and penalties
 - Declare clear and consistent cost-effectiveness measurement
 - Cost of conserved energy
 - TRC
 - PSC should approve new and enhanced utility programs:
 - New programs: CVR, CHP, and financing initiatives
 - Program enhancements: higher rebates for appliances and whole-house improvements, sector-focused C&I marketing, multifamily efficiency program

Structural Changes—Incentive and Penalty Policy

- ACEEE: Seven of 10 top-performing states have incentives, penalties, or both to ensure efficiency goals are met
- To change utilities' culture of mediocrity, PSC should adopt incentive and penalty policies
- Policy mechanism should include:
 - ✓ Rewards for superior performance
 - ✓ Penalties for not meeting minimum savings targets

New/Modified Utility Programs to Reach Goal

- Utilities should:
 - Adopt new programs: conservation voltage reduction, combined heat and power, and financing initiatives
 - Enhance existing programs: increase rebates for appliances and whole-house improvements, more marketing to C&I by sector

MEA's Role: Pilot Test Program Strategies – the Scale Up via Utility Programs

- MEA has piloted an number of different energy efficiency program strategies outside utility rate payer funding.
- Programs included multifamily, increased rebates for appliances and residential retrofits(via ARRA – federal stimulus and Regional Greenhouse Gas Funds)
- MEA either enhances existing utility programs or launches new programs – MEA has more flexibility to test program designs
- Uses EM&V contractor to verify program design, costs and energy savings

EmPOWER Maryland: High Expectations --

- Maryland is running towards the goal --- but must hit 2% plus in electricity savings reductions to meet the goal --- jury is still out!
- Legislation set the high bar – now the regulators are working to hit the goal.
 - (We are working very hard and everyone is very stressed but mostly still civil)

Maryland Energy Administration

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