



Maryland - Taking Control Of Its Energy Future

Malcolm Woolf, Director
Maryland Energy Administration
May 6, 2008



Maryland's Energy Goals

- Affordable
- Reliable
- Clean Energy

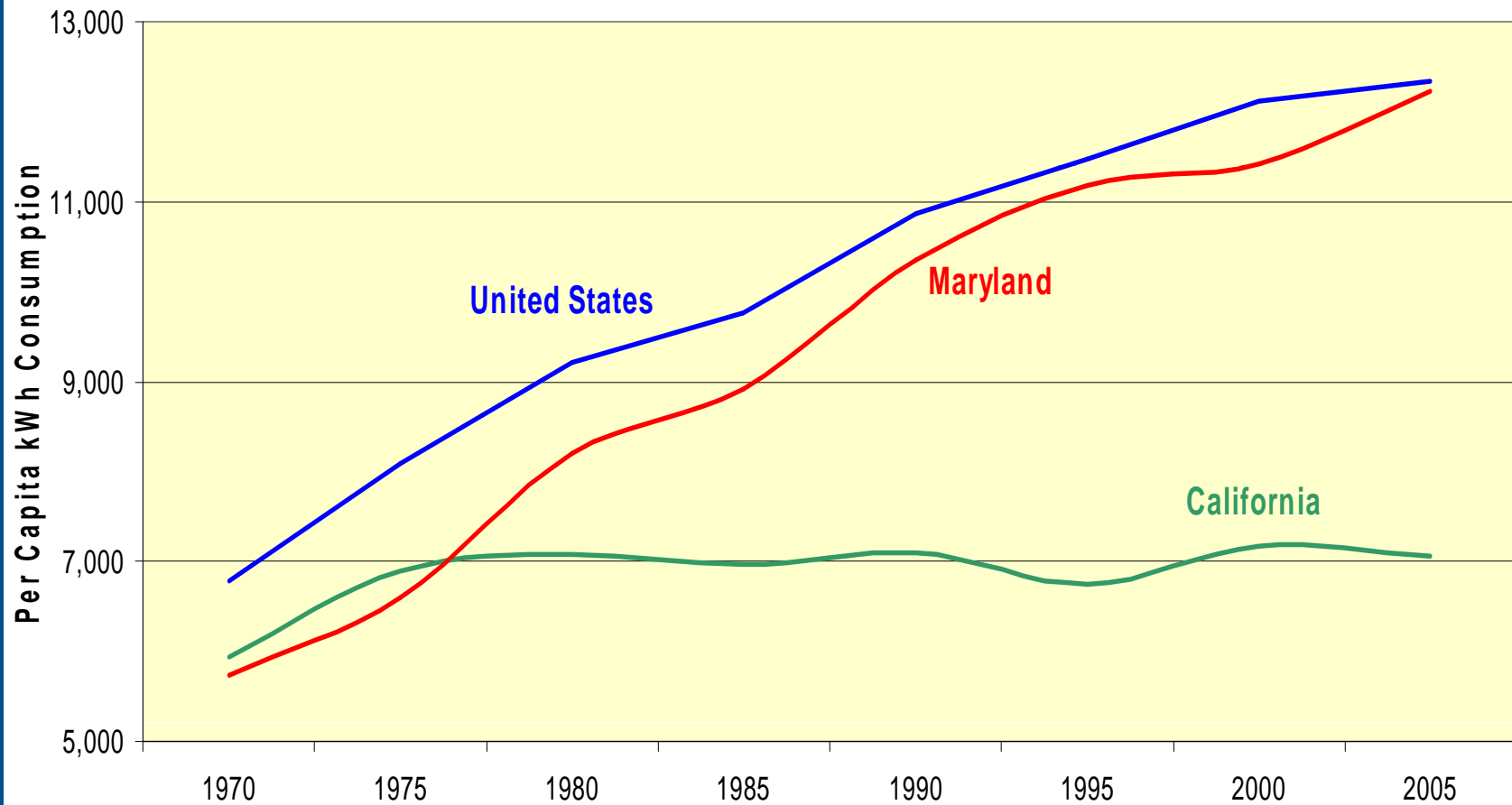
Electricity – Simply Too Expensive

Residential Electricity Prices – Cents per kilowatt-hour

State	Nov '06	Nov '07
Delaware	13.4	13.68
New Jersey	12.17	13.79
Maryland	9.91	12.55
Pennsylvania	10.1	11.1
D.C.	8.99	10.58
Nat'l Average	10.18	10.69
So. Atl. Region	9.75	10.1
Virginia	8.47	8.62
West Virginia	6.43	6.69

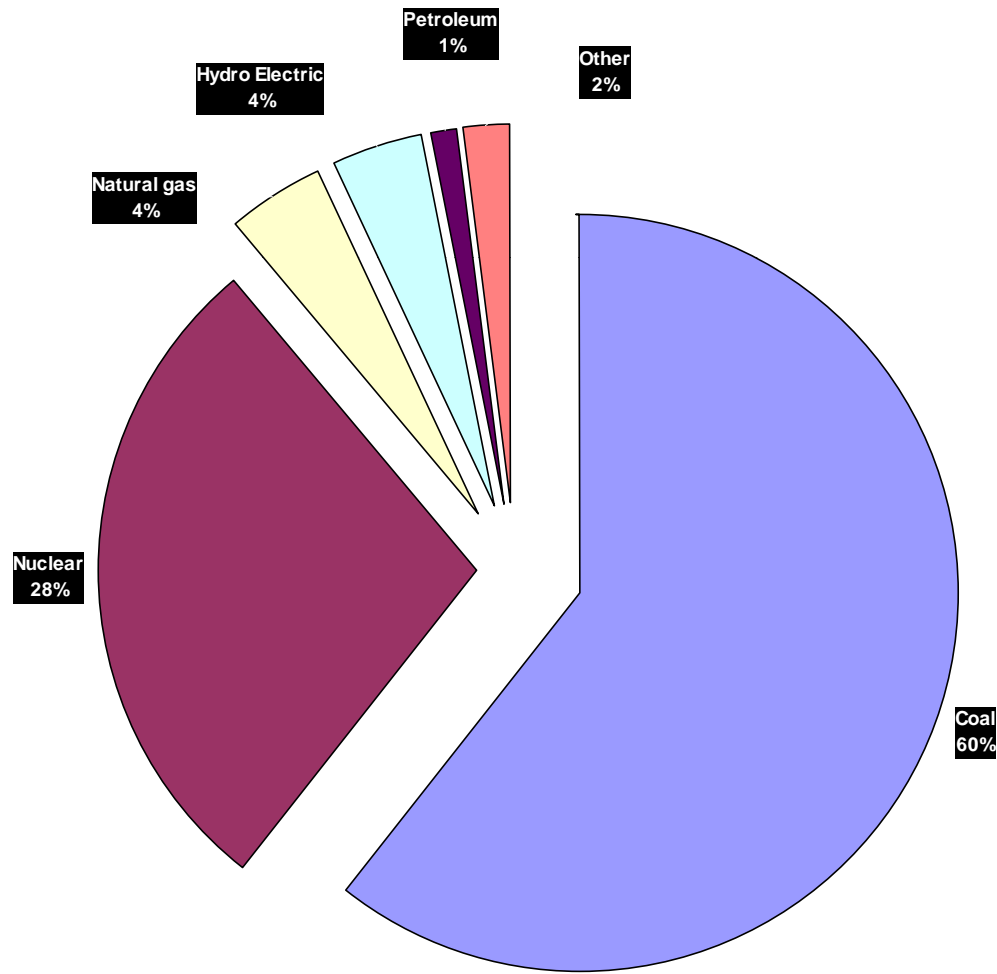
Source: U.S. Energy Information Agency, 2007

Electricity Demand Continues to Soar



Source: EIA and US Census

Limited Fuel Diversity – 90% from Coal and Nuclear

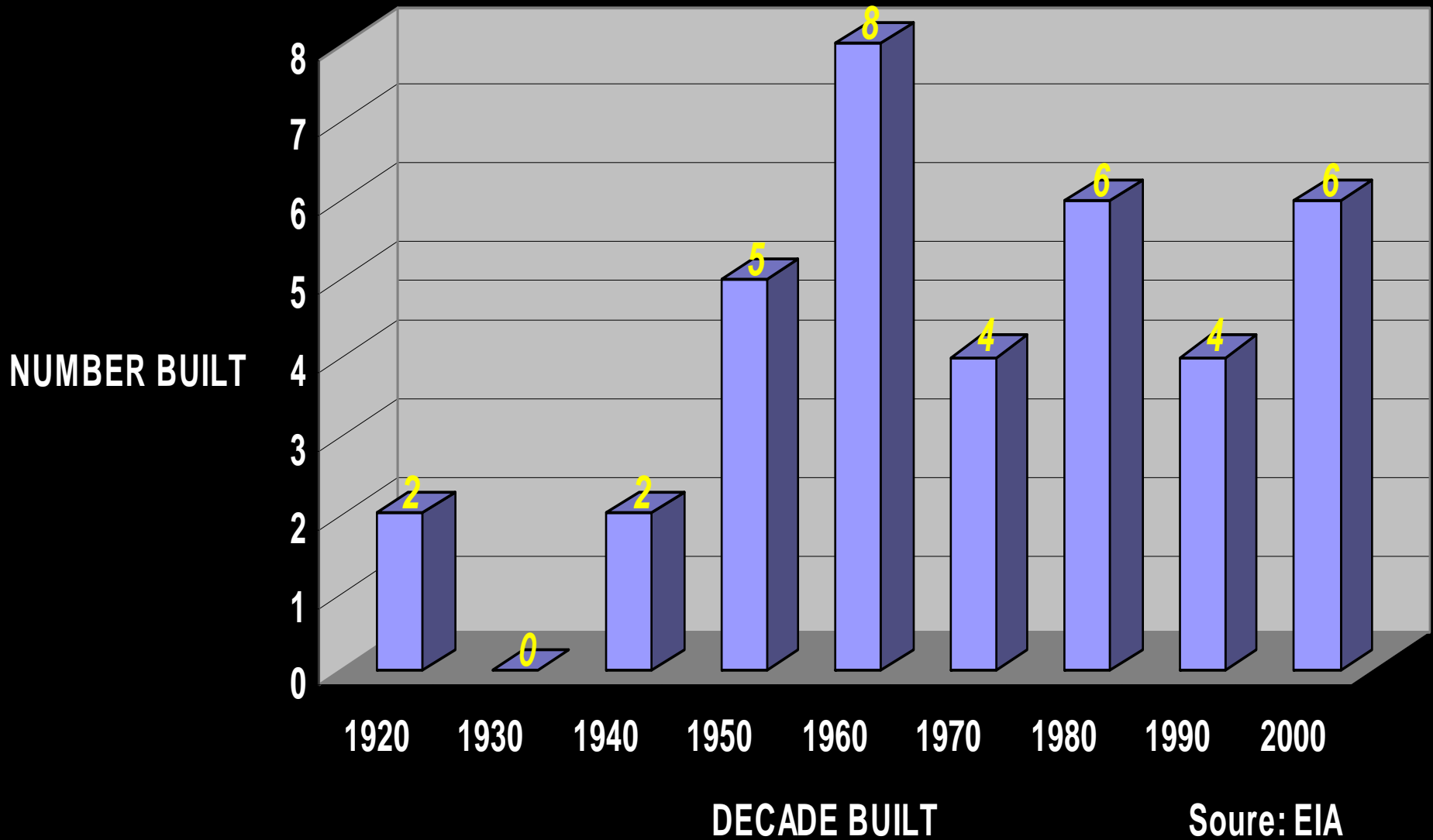


*Other capacity includes renewable generators, as well as waste, chemical and other miscellaneous generation sources.

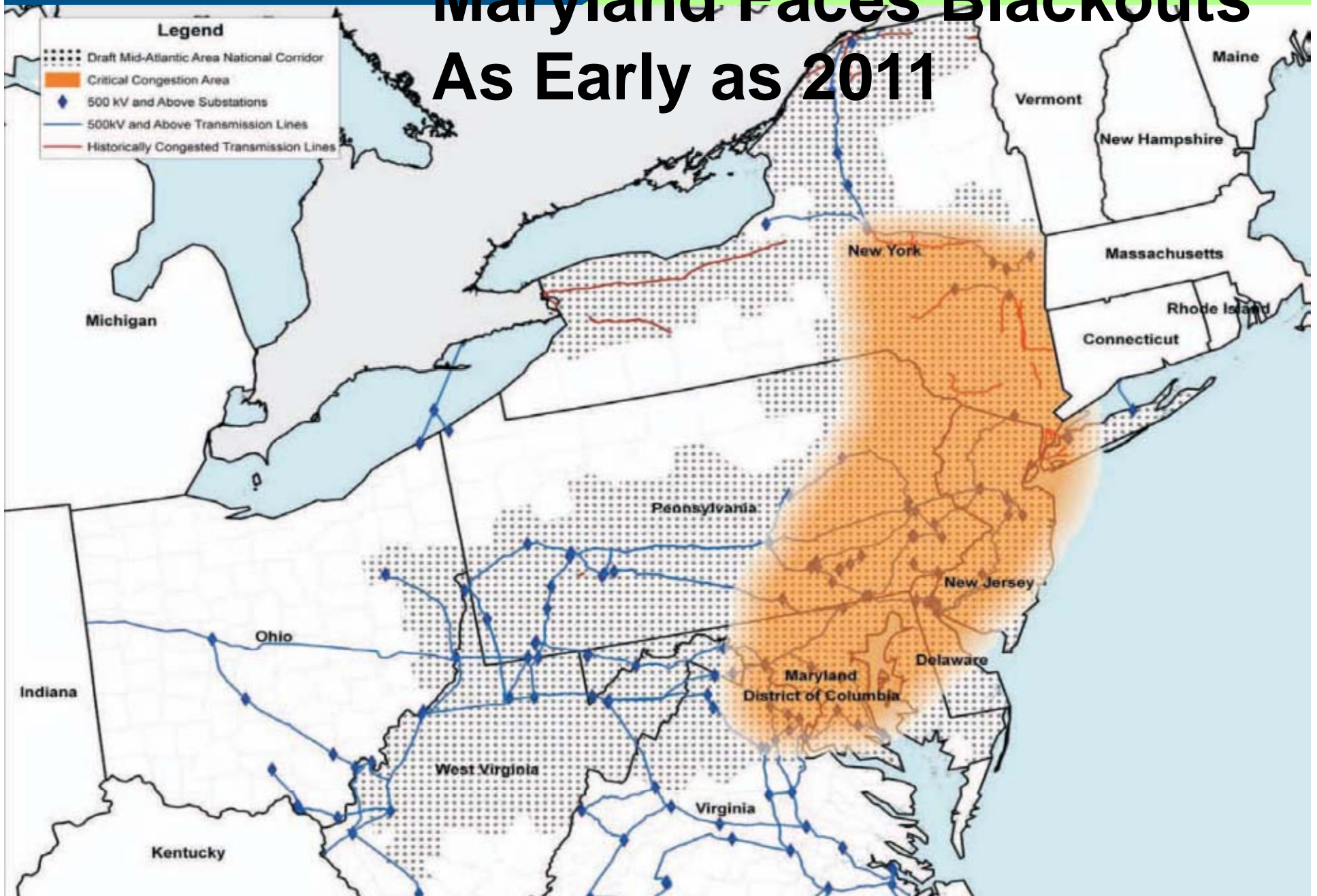
Sources: Energy Information Administration and PJM, 2006 State of the Market Report, Volume II

46% of Maryland's Power Plants are 37 years or older

Number of Maryland Power Plants Built Each Decade



Maryland Faces Blackouts As Early as 2011



Source: U.S. Department of Energy, 2007

Climate and Environmental Challenges

- **Climate** – Maryland is particularly vulnerable, 3rd most exposed to sea level rise (behind FL and LA),
- **Environmental** – Most of Maryland's population lives in areas that fail to meet EPA's health based air quality standards.

Even Governors Can't Repeal Law of Supply and Demand

- Maryland needs to increase supply and decrease demand.
- Deregulated electricity market; limited tools to incentivize new generation.
- Fastest, cheapest way to keep lights on and bills down – energy efficiency.

Least Expensive Kilowatt Is One Not Needed

- Energy efficiency can be deployed fast
- Technology available at local hardware store – with exciting emerging technologies (smart meters/smart grid)
- Least cost option
 - For example, BGE recently proposed energy efficiency plan at cost of 2.5 cents per kw versus 11 cents per kw residential rate.

2004 Per Capita Utility Spending on Energy Efficiency

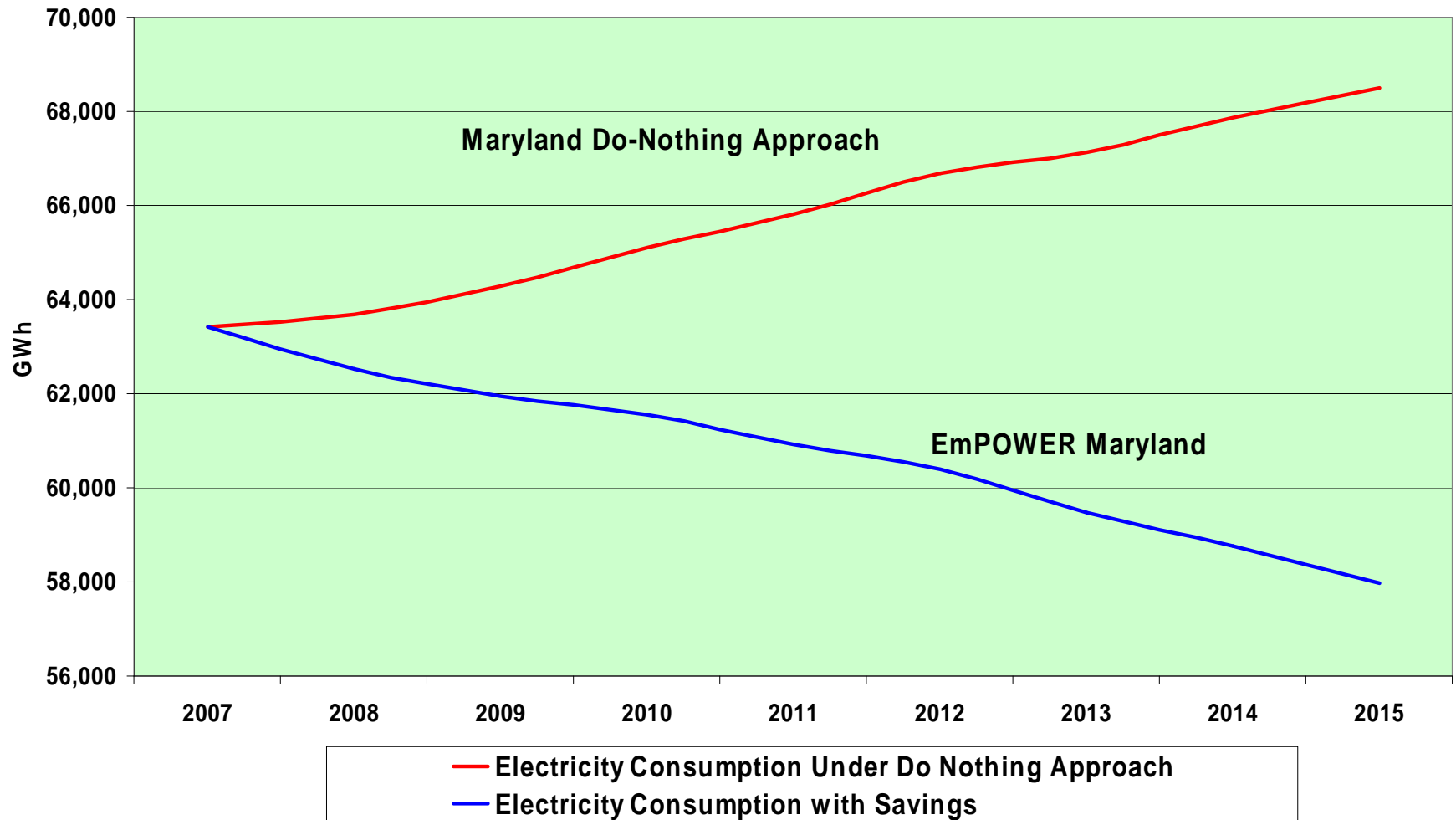
Vermont	\$ 22.54
Connecticut	\$ 16.60
New Jersey	\$ 10.68
California	\$ 10.60
New York	\$ 7.63
U.S. Average	\$ 4.93
West Virginia	\$ 0.55
Pennsylvania	\$ 0.28
Maryland	\$ 0.01
Virginia	\$ 0.00

Source: State Energy Efficiency Scorecard for 2006, ACEEE

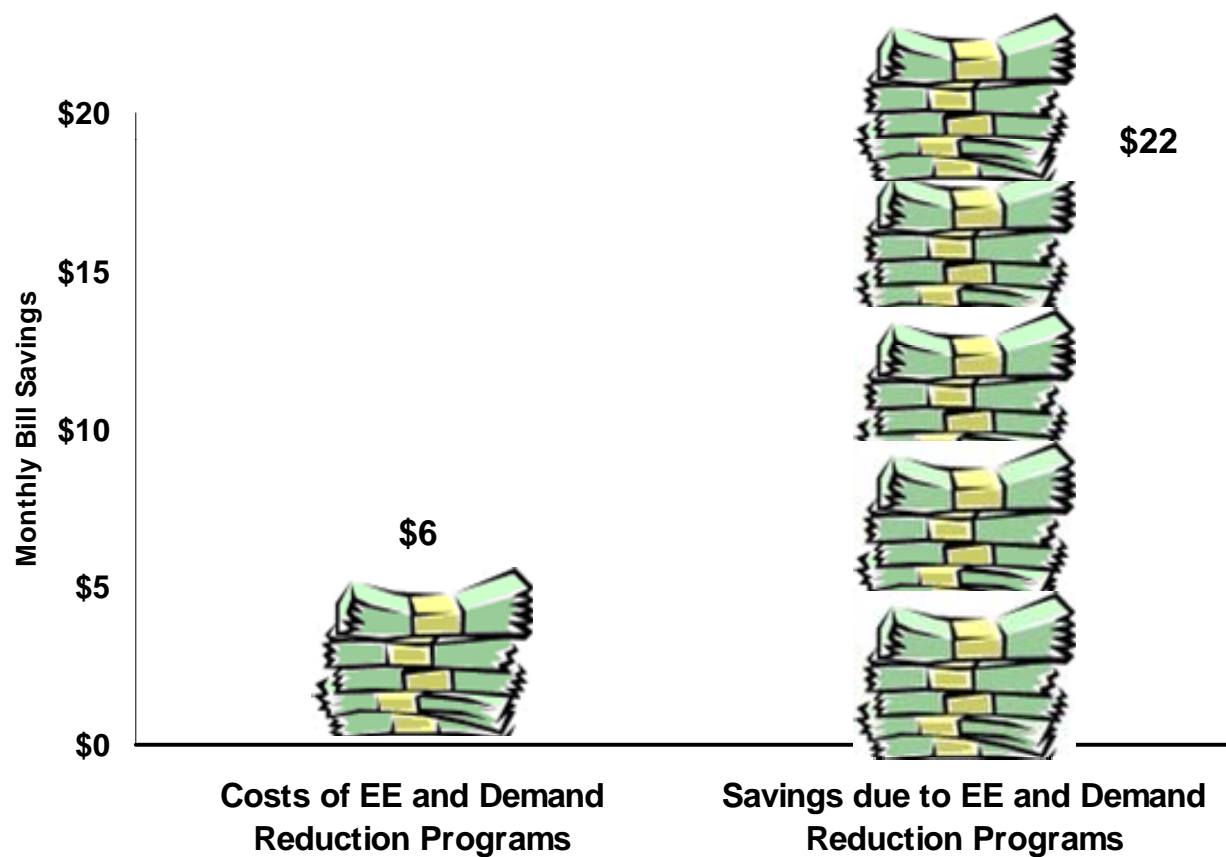
EmPOWER Maryland Energy Efficiency Act

- Codified bold but achievable energy efficiency goal to reduce state-wide consumption and peak demand 15% per capita by 2015.
- When implemented, EmPOWER Maryland will
 - Keep the lights on, while avoiding the need to build at least 3 large fossil fuel power plants;
 - Save 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)

Electricity Savings or Shortfall?



Energy Efficiency Saves Money



EmPOWER Maryland – Shared Implementation Strategy

Goal - 15% Statewide Reduction by 2015

- Utilities' Responsibility
 - 10% Per Capita Reduction in Consumption
 - 15% Reduction in Peak Demand
- State's Responsibility
 - Leave No Marylander Behind
 - Capture Additional 5% Savings

Jumpstarting Utility Energy Efficiency Programs

- Early consultation with Energy Office re implementation strategies
- Rate recovery if PSC determines cost effective
- Comprehensive three-year planning cycle
- Interim milestones and annual updates

Jumpstarting State Programs – Md Strategic Energy Investment Fund

- Invests proceeds from upcoming RGGI auction
 - Does not rely on general funds or ratepayer surcharges;
 - Expect between \$80-\$140 million annually
- Energy Fund will allow Maryland to invest in:
 - Residential energy efficiency programs
 - Renewable energy
 - Targeted programs for low-income residents with no cost for participation
 - Climate change programs
- Energy efficiency plus rate relief will save Marylanders an average of \$8.74 a month

High Performance Buildings Act

- Green Buildings have many benefits:
 - More energy efficient;
 - Better air quality; and
 - Improved health, comfort and productivity
- Maryland will lead by example, by
 - Mandating new State buildings over 7,500 sq. ft. meet LEED Silver rating in 2009 and
 - Requiring new schools meet LEED Silver rating in 2010 (and paying half of any cost increases)

Taking Control of our Energy Future

- There is no “silver bullet,” but these measures work together as a “silver buckshot” to lower our bills, keep the lights on and empower us to take control of our energy future.



For more information, please
contact the
Maryland Energy Administration:

- 410-260-7655 or 800-72-ENERGY
- www.energy.state.md.us

