

Public Input Sessions

March 2-5, 2009

DELAWARE ENERGY PLAN 2009-2014

Delaware's 5 Year Energy Plan

- Governor's Energy Advisory Council is required by 29 Del. Code Chapter 80 to revise the plan every 5 years
- **Members represent:**
Cabinet Committee on Energy, Public Service Commission, Public Advocate, Weatherization Assistance Program Policy Advisory Council, 9 members representing: electricity transmission; electricity distribution; electricity generation; agriculture and/or agribusiness; municipal utilities; renewable energy; innovative energy technology; transportation fuels and environmental interests, DNREC, DDA, DeIDOT and DEDO.

Energy Plan Guiding Principles

- ① Increasing energy end-use efficiency and conservation
- ② Reducing the environmental impacts (footprint) of energy used and generated in Delaware
- ③ Reducing energy used for transportation
- ④ Maximizing clean energy economic development opportunities
- ⑤ Maintaining and improving the reliability and security of Delaware's energy systems
- ⑥ Minimizing energy-related costs and impacts on Delaware citizens

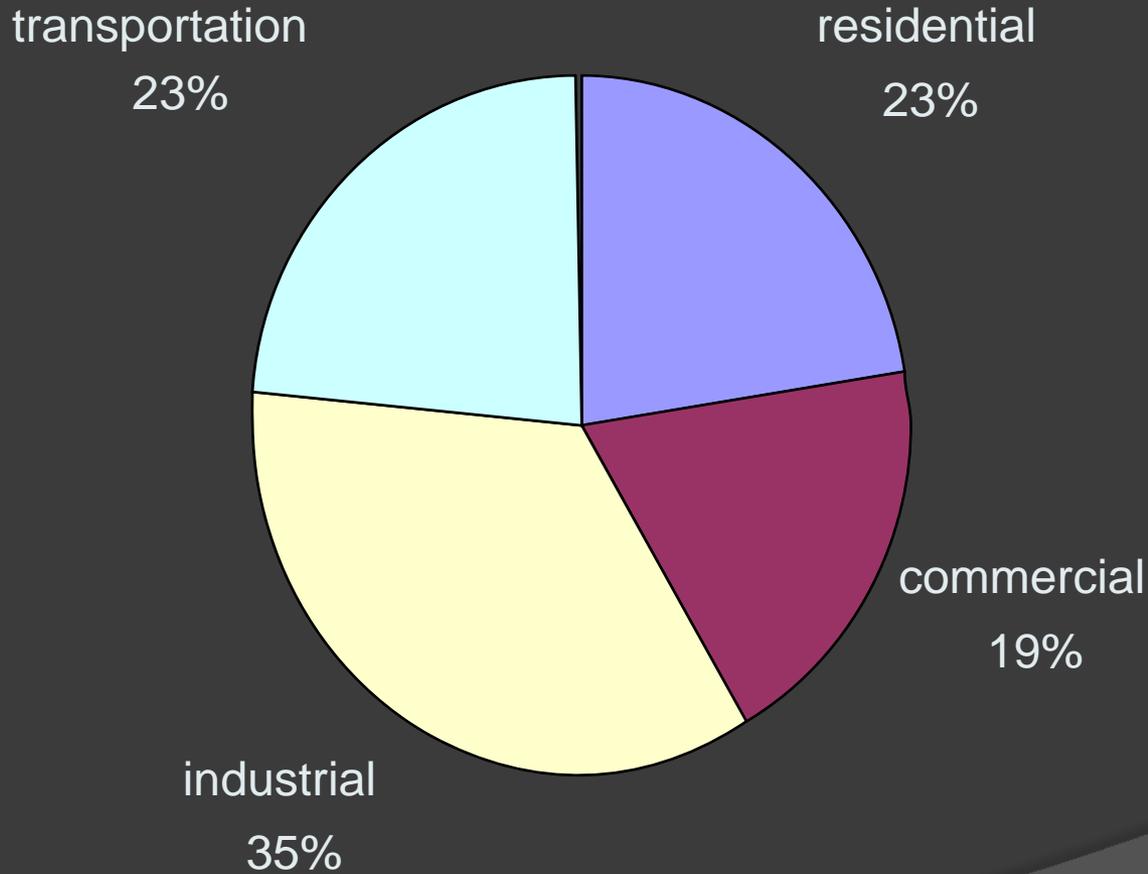
Delaware's Energy Challenges and Issues

- ① *Increasing Energy Demand*
- ② *Increased and Variable Energy Cost*
- ③ *Environmental Issues & Climate Change*

Survey Responses: Issues with more than 50% of their Rankings as “Most Important”

- Localized Heating and Electricity Generation (64%)
- Energy Efficiency (59%)
- Environmental Impact of Electricity Generation (55%)
- Residential Energy Cost (54%)
- Electricity Generation (52%)
- Transportation-related Energy Use (51%)

Delaware Energy Use by Sector, 2005



2006 Per Capita Energy Use

Delaware	353 million BTU
Pennsylvania	317 million BTU
New Jersey	301 million BTU
Maryland	259 million BTU
Massachusetts	230 million BTU
New York	204 million BTU
Rhode Island	204 million BTU

Source: U.S. Energy Information Administration

Potential Annual Savings

2006: Delawareans spent \$3.6 billion on energy

Matching PA (11% use reduction) = \$400 million saved

Matching NJ (17% reduction) = \$600 million saved

Matching MD (27% reduction) = \$940 million saved

Matching NY or RI (42% reduction) = \$1.5 billion saved

Vehicle Miles Travelled in Delaware

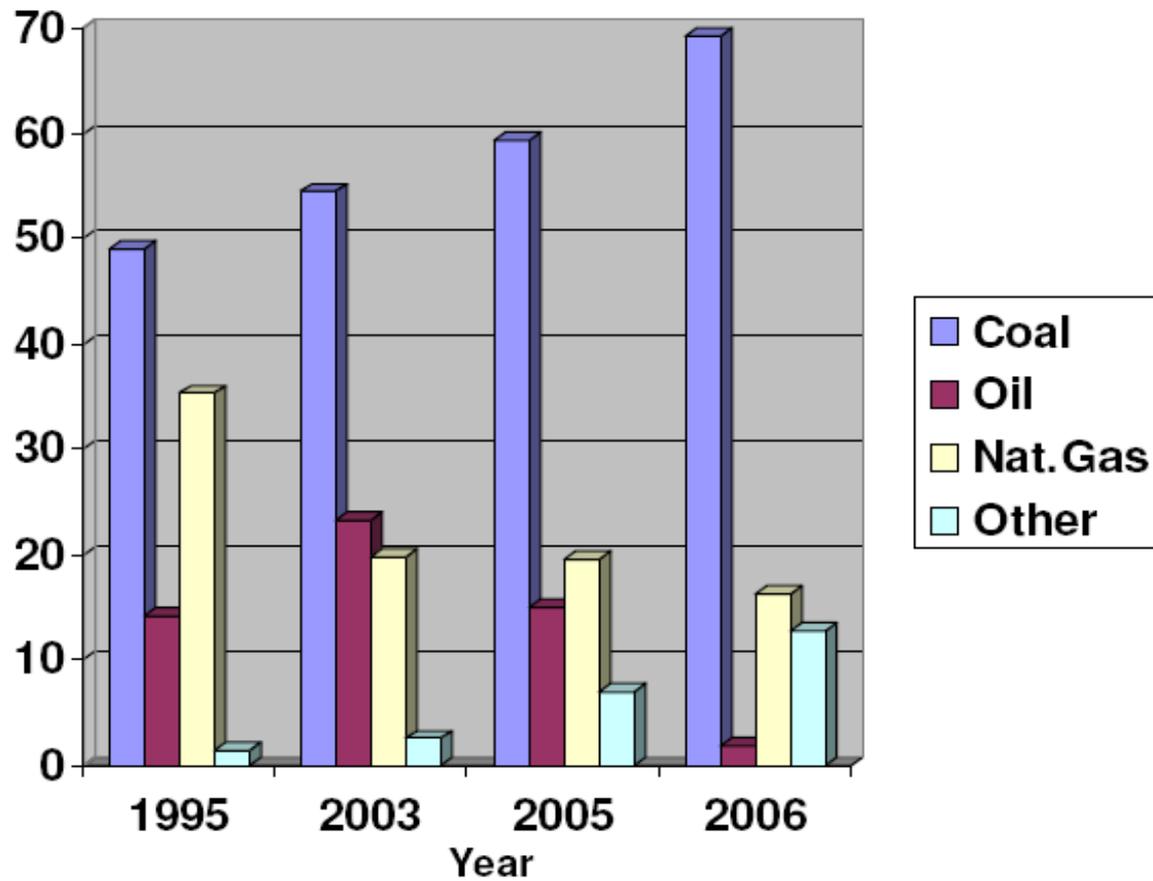


2005 Vehicle Miles Traveled per Person

Delaware	11,312
New York	7,139
Rhode Island	7,781
New Jersey	8,527
Pennsylvania	8,736
Maryland	10,105
Montana	11,889

Source: Climate Analysis Indicators Tool (CAIT US) Version 3.0.
(Washington, DC: World Resources Institute, 2009).

In-State Electricity Generation by Source Type (%)

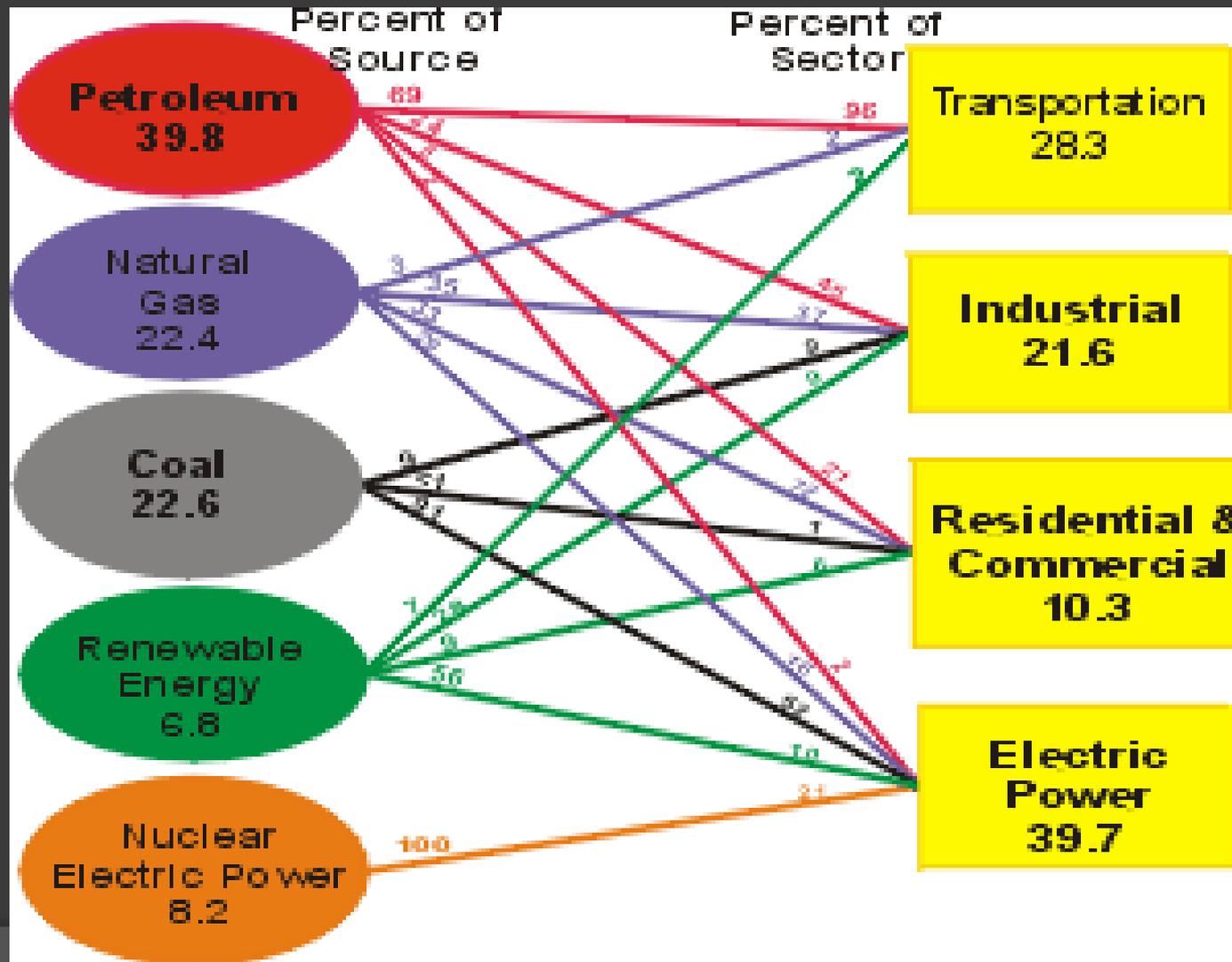


2006 Renewable Net Generation

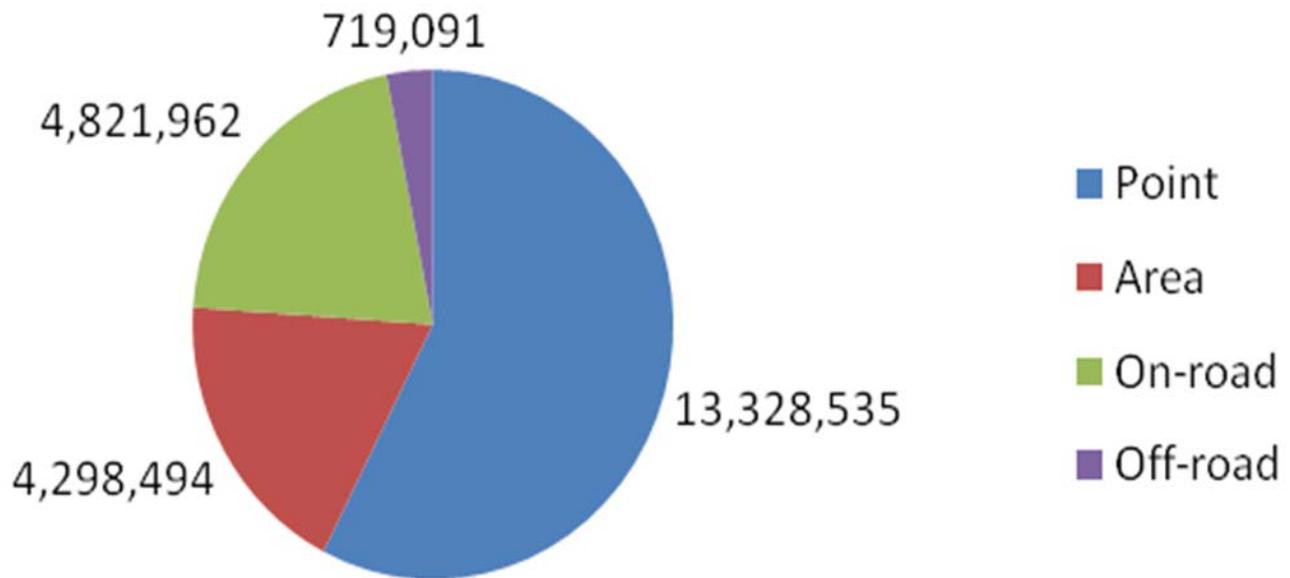
Delaware	<.5 thousand MWH
Pennsylvania	5,322 thousand MWH
New Jersey	952 thousand MWH
Maryland	2,734 thousand MWH
New York	29,951 thousand MWH
Rhode Island	155 thousand MWH

Source: U.S. Energy Information Administration

Primary Energy Consumption by Source & Sector, 2006



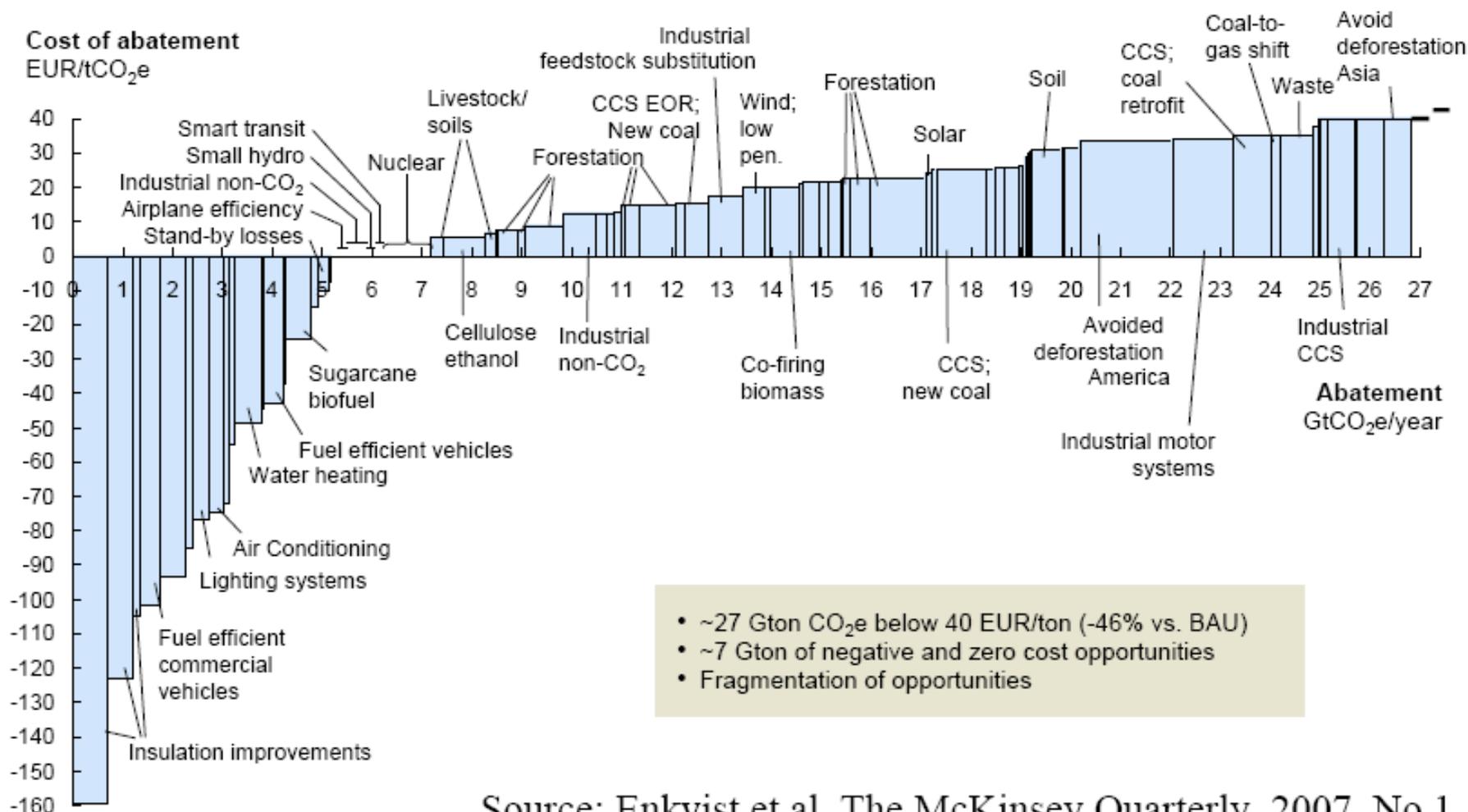
2005 Emissions of CO2 Equivalents, Delaware



Source: DNREC Air Quality Management Section, emissions in tons

Global cost curve of GHG abatement opportunities beyond business as usual

2030



Source: Enkvist et al, The McKinsey Quarterly, 2007, No.1

Recommendations to Reduce Energy Use through Energy Efficiency and Conservation

- General Recommendation
- Building Codes for Energy Efficiency
- Residential Energy Use Reduction
- State Government Energy Use Reduction
- Industrial Energy Use Reduction
- Energy Education & Outreach
- Recommendations under the purview of the Sustainable Energy Utility

Recommendations to Reduce Transportation Energy Use

- Reducing Vehicle Miles Travelled
- Increasing Vehicle Efficiency/Reducing Energy Use per Mile
- Reducing the Impact of Land Use on Energy Use

Reducing the Environmental Footprint of Delaware's Energy Use Recommendations

- The Need to Address Climate Change
- Increasing Renewable Energy Use
- Improving Existing Energy Facilities

Clean Energy Economic Development Recommendations

- General Recommendations
- Technology Specific Recommendations
- Emerging Technology Pilot Projects

Transmission & Distribution System Recommendations

General Recommendations

Energy Planning Governance Recommendation

General Recommendation

Next Steps

Comments can be submitted until
March 12, 2009

Comments can be submitted electronically
to: DNREC_EnergyPlan@state.de.us

Council will vote on the final report on
March 26, 2009