

Kentucky Energy and Climate Action Plan Update

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Kentucky Energy and
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Overview

- 2008 Governor's Energy Strategy
- 2011 Kentucky Climate Action Plan
- 2013 President Obama Climate Action Plan
- Conclusions

2008 Governor's Energy Strategy

- 7 Point Strategy
- Multi-sector approach
- 20% reduction in GHG emissions from 1990 levels by 2025
- Residential and commercial EE improvement
- Cleaner fossil fuel usage
- **Diversification of electric and transportation energy**
- Integration of agriculture and energy economies
- **Establish an Alternative Transportation Fuels Standard**

Alternative Transportation Fuels Standard

- Transition away from foreign petroleum
- Displace 60% of imports
- Utilize biomass, hybrid technology, CNG
- Strategies 1, 3 & 4

Strategy One

- **Improve EE in RCI and Transportation Fleet**
- 18% offset of demand by 2025
- 2% attributed to transportation EE programs
- Savings of 500 million gallons of fuel/yr
- Hybrids, Plug-in Hybrids, Fuel Efficient fleet
- 30% improvement in fuel economy of state fleet by 2015 and 50% by 2015
- Right sizing

DEP Fleet

- 249 vehicles serving 700 employee drivers across the Commonwealth
- DEP has taken multiple steps in recent years to support the Governor's Energy Plan by:
 - Joining the Green Fleets of the Bluegrass
 - Reducing its overall fleet
 - Adding hybrids and EVs to fleet
 - Raising fleet efficiency from 15 mpg to 17.5 mpg
 - "Right sizing" the fleet







Strategy Three

- Increase Production of Biofuels
- Ethanol and Biodiesel
- Goal – 20% of transportation fuel needs by 2025
- Establish a RFS
- Create incentives

Strategy Four

- ◉ Develop Coal-to-Liquids Industry
- ◉ Dedicated research and development
- ◉ Goal – Utilize 50 million tons/yr of coal to produce 4 billion gallons of fuel/yr by 2025

2011 Kentucky Climate Action Plan

- KCAPC convened January 2010
- 5 Technical Workgroups:
 - Energy Supply
 - Residential, Commercial and Industrial
 - **Transportation and Land Use**
 - Agriculture, Forestry and Waste
 - Cross-Cutting Issues
- 46 multi-sector policy recommendations
- Projected reductions of 1,316 MMtCO₂e at a average cost of \$8.80/tCO₂e by 2030
- Plan finalized November 2011

Transportation and Land Use

- 11 policy options:
 - Livability and Connectivity
 - Transportation and Transit Management
 - Alt Fuels
 - Freight Movement
 - Clean Vehicles
- 62 MMtCO₂e by 2030
- \$7.8 Billion in estimated savings
- Cost to implement: -\$126/tCO₂e

President's Climate Agenda

- Announced June 25, 2013
- Cut carbon dioxide emissions in America.
- Prepare the U.S. for impacts of climate change.
- Lead international efforts to address global climate change.
- Includes efficiency initiatives for buildings and appliance standards.
- Contains provisions for climate change adaptation.
- Targets carbon dioxide emissions from both new and existing fossil fuel power plants.
- **Building a 21st Century Transportation Sector**

21st Century Transportation Sector

- Increase Fuel Economy Standards
 - Heavy Duty – MY 2014-2018
 - Passenger Vehicles – 54.5 MPG by 2025
- Developing and Deploying Technologies
 - RFS – biofuels
 - Advanced batteries and fuel cells
 - Cleaner fuels – Tier 3

Conclusions

- Discussion on GHGs has evolved significantly in last 5 years
- Robust development of strategies focusing on energy conservation
- Still very political – No mandatory measures in Kentucky
- Implementation is difficult but much has been accomplished by various agencies

Thank You

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