

# Appendix C

## KCAPC Selected Priority Policy Options for Further Analysis

Table 1

### Agriculture, Forestry, and Waste Management Technical Work Group

#### Summary List of Recommended Priority Policy Options for Analysis

| Option #                                       | Proposed Option Name  | Sub-Option #<br>From Catalog of<br>State Actions |
|--|---|--|
| <b>Proposed Tier 1 Options and Sub-Options</b> |   |  |
| AFW-1  | Forestry Management for Carbon Sequestration  | 6.5  |
| AFW-2  | Expanded Use of Biomass Feedstocks for Electricity, Heat, and Steam Production            | 1.1, 8.2   |
| AFW-3  | On-Farm Energy Production and Efficiency Improvements                                     | 5.1  |
| AFW-4  | In-state Liquid/Gaseous Biofuels Production   | 1.2, 8.7, 10.5                                   |
| AFW-5  | Soil Carbon Management  | 3.1  |
| AFW-6  | Increase Productivity of Abandoned and Reclaimed Lands                                    | 4.5  |
| AFW-7  | Reforestation, Afforestation, and Restoration of Mined Lands and Other Non-forested Lands | 6.10, 6.4  |
| AFW-8  | Advanced MSW Reuse, Recycling, and Organic Waste Management Programs                      | 8.1, 9.2   |
| AFW-9  | Landfill Methane Energy Programs  | 9.3  |

**Table 2**

**Energy Supply Technical Work Group**

**Summary List of Recommended Priority Policy Options for Analysis**

| Option #                                       | Proposed Option Name   | Sub-Option #<br>From Catalog of<br>State Actions |
|--|--|--|
| <b>Proposed Tier 1 Options and Sub-Options</b> |  |  |
| ES-1   | Biomass Development and Efficiency Improvements at Existing Power Plants   | 3.3, 3.2   |
| ES-2   | Demand-Side Energy Efficiency and Management Programs [Limit to utility based programs- balanced addressed by RCI-3]   | 2.8, 2.10  |
| ES-3   | Advanced Fossil Fuel Technology (IGCC, CCSR, Advanced Pulverized Coal, CFB, Natural Gas Combined-Cycle) Incentives, Support. or Requirements   | 3.1  |
| ES-4   | CCSR Enabling Policies, R&D, Infrastructure, and Incentives Including Enhanced Oil Recovery Using CO <sub>2</sub>  | 5.1, 5.2, 5.3, 5.4                               |
| ES-5   | Pricing Strategies to Promote Efficiency and Renewables, Including Net Metering, Feed-In-Tariff, Interconnection Rules, Inclined Rates, Demand-Side Management, and Examination of the Standard Rate Structure | 2.6, 6.2, 2.17, 2.16                             |
| ES-6   | New Nuclear Energy Capacity  | 3.6  |
| ES-7   | Renewable Energy Incentives and Barrier Removal, Including CHP   | 2.2, 2.3, 2.4, 2.9, 2.1, 1.8                     |
| ES-8   | Technology Research and Development (not including CCSR or Wind Potential Study)   | 1.5, 2.12, 2.15, 2.18                            |
| ES-9   | Promote Wind Energy in Kentucky  | 2.14   |
| ES-10  | Shale Gas Development, Natural Gas Transportation Infrastructure, and Gas-to-Liquids Incentives, Support or Requirements   | 4.7, 4.8, and part of 4.5                        |
| ES-11  | Smart Grid, Including Transmission and Distribution Efficiency   | 6.8, 6.1, 6.3                                    |
| ES-12  | Coal to Liquids Incentives, Support, or Requirements   | 4.5  |

CCSR = carbon capture and storage or reuse; CFB = circulating fluidized bed; CHP = combined heat and power; CO<sub>2</sub> = carbon dioxide; IGCC = integrated gasification combined cycle; R&D = research and development.

**Table 3**

**Residential, Commercial and Industrial Technical Work Group**

**Summary List of Recommended Priority Policy Options for Analysis—Draft**

| Option #                                       | Proposed Option Name  | Sub-Option #<br>From Catalog of<br>State Actions                         |
|--|---|--|
| <b>Proposed Tier 1 Options and Sub-Options</b> |   |  |
| RCI-1  | Improve building codes for energy efficiency, coupled with improved energy code training and enforcement (new construction focus)   | 2.1, 2.2, 2.17   |
| RCI-2  | Promote, encourage, and incentivize “beyond-code” efficiency in all building characteristics and systems that impact energy consumption (retrofit focus)  | 2.6, 2.7, 2.8, 2.13, 2.18, 2.21, 2.22, 3.3, 6.4, 6.5, 6.7, 6.8, 6.9, 9.4 |
| RCI-3  | Expand utility DSM programs (beyond EERS) for electricity   | 1.1, 1.3   |
| RCI-4  | Develop and implement comprehensive education, outreach, and marketing, including consumer awareness, school curriculum, truth-in-advertising, technical information and support (e.g., how to do GHG inventories), rationales for action, etc. | 4.1, 4.2, 4.3, 4.6, 6.6, 8.5   |
| RCI-5  | Financing programs and incentives for energy efficiency and CHP (PBF, revolving loans, etc.)  | 1.4, 1.9, 1.10, 1.13, 1.15, 6.2, 9.5, 9.6                                |
| RCI-6  | Financing programs, incentives, policies, and research for conversion to RE or low-carbon energy sources  | 5.2, 5.6, 5.8, 6.1, 8.1  |
| RCI-7  | Government Lead by Example (GLE) in highly efficient state and local government buildings   | 1.11, 2.3, 2.11, 2.12, 2.20, 5.7, 9.1, 9.2                               |
| RCI-8  | Training and education for builders, contractors, and building operators  | 2.9, 2.10  |
| RCI-9  | Building commissioning and recommissioning, including energy tracking and benchmarking, and implement a building energy labeling program  | 2.15, 2.19   |
| RCI-10   | Implement advanced metering technologies and associated policies for greater load management, customer control, awareness, price signaling, etc.  | 2.16, 4.4, 5.3, 6.10   |

CHP = combined heat and power; DSM = demand-side management; EERS = energy efficiency resource standard; GHG = greenhouse gas; PBF = public benefit fund; RE = renewable energy.

**Table 4**

**Transportation and Land Use Technical Work Group**

**Summary List of Recommended Priority Policy Options for Analysis**

| Option #                                       | Proposed Option Name  | Sub-Option #<br>From Catalog of State<br>Actions   |
|--|---|--|
| <b>Proposed Tier 1 Options and Sub-Options</b> |   |  |
| TLU-1  | Bike and Pedestrian Comprehensive Plan and Infrastructure Development   | 5.7 includes 5.20  |
| TLU-2  | Brownfield Redevelopment, Downtown Revitalization and Location Efficient Strategies                                     | 4.3 includes 4.1, 4.4, 4.5, 4.9, 4.10  |
| TLU-3  | Transit and Transportation System Management  | 5.1 includes 5.17, 5.18, 8.3, and 5.2 includes 5.5 and 6.22                                      |
| TLU-4  | Expand Transit Infrastructure (Rail, Bus, Bus Rapid Transit)  | 5.4  |
| TLU-5  | Education and Outreach for Vehicle Maintenance, Idle Reduction, and Co-Driving, and Promote Alternative Modes of Travel | 5.23 includes 1.7, 2.9, 10.3, 6.23   |
| TLU-6  | Land Use, Zoning, Tax, and Building Code Reform, and Connectivity   | 4.6 includes 5.19  |
| TLU-7  | Parking Management and Ride Sharing   | 5.11 includes 5.10, 6.6 (6.6 includes 6.5 and 6.8)   |
| TLU-8  | Initiatives to Promote Strategies to Move Freight in More GHG-Efficient Ways  | 9.1 includes 9.3, 9.4, 9.5, 8.10, 12.15, 12.4 (12.4 is a bundle that includes 12.8, 12.9, 12.10) |
| TLU-9  | Promote Consumption of Locally Produced Goods and Services  | 9.6  |
| TLU-10   | Promote Use of Alternative Fuels  | 3.4, 3.5, 3.6, 12.3  |
| TLU-11   | Promote Use of Clean Vehicles   | 3.8, 3.9   |

**Table 5**

**Cross-Cutting Issues Technical Work Group**

**Summary List of Recommended Priority Policy Options for Analysis—Draft**

| Option #                                       | Proposed Option Name  | Sub-Option #<br>From Catalog of State Actions  |
|--|---|--|
| <b>Proposed Tier 1 Options and Sub-Options</b> |   |  |
| CCI-1  | Greenhouse Gas (GHG) Emission Inventories, Forecasts, Reporting, and Registry   | 1.1 GHG emissions inventory (formerly 1.1 consolidated into 1.3)<br>1.2 GHG emissions forecasting (formerly 1.2 consolidated into 1.3)<br>1.3 GHG emissions reporting (formerly 2.1 consolidated into 1.3)<br>1.4 GHG registry (formerly 3.1 consolidated into 1.3)  |
| CCI-2  | Public Education and Outreach   | 2.1 Comprehensive education and outreach process (formerly 4.1–4.6 and 4.10 consolidated into 4.12)<br>2.2 Fund climate change and solution research (formerly 4.8)  |
| CCI-3  | Adaptation and Vulnerability  | 3.1 Develop a state climate change vulnerability assessment and adaptation plan (formerly 5.1 and 5.2 consolidated into 5.3)   |
| CCI-4  | Statewide GHG Emission Reduction, Energy Intensity, and Energy Efficiency Goals and Targets                             | 4.1 Conduct a broad stakeholder and public process to develop state GHG emission reduction, energy intensity, and energy efficiency goals (formerly 6.1 and 6.2 consolidated into 6.3)   |
| CCI-5  | State and Local Government GHG Emission Reduction, Energy Intensity, and Energy Efficiency Activities (Lead by Example) | 5.1 Establish goals and targets and develop incentives for energy-saving actions for state-owned or -operated facilities and fleets (formerly 7.1, 7.10, and 7.11 consolidated into 7.14)<br>5.2 Assign or create a multi-agency body to coordinate ongoing state climate efforts (formerly 7.2, 7.3, and 7.13 consolidated into 7.15)<br>5.3 Require state programs funded with state bonding to meet state energy efficiency and GHG targets (formerly 7.5 and 7.6 consolidated into 7.16) |
| CCI-6  | Local GHG Emission Reduction, Energy Intensity, and Energy Efficiency Actions   | 6.1 Develop a climate action tool kit for local government, institutions, and individuals (formerly 8.1, 8.2, 8.4, and 8.5 consolidated into 8.7)  |

| Option #                                       | Proposed Option Name  | Sub-Option #<br>From Catalog of State Actions   |
|--|---|---|
| <b>Proposed Tier 1 Options and Sub-Options</b> |   |   |
| CCI-7  | Financial Policies  | <p>7.1 Recognizing that some policy decisions to reduce GHG emissions will have costs, develop long-term funding to implement KCAPC-adopted actions (re-drafted former 9.1)</p> <p>7.2 Establish a framework and funds to be used by public-private partnerships to improve energy efficiency and intensity (formerly 8.6)</p>  |
| CCI-8  | Conduct an Impact Analysis of Federal GHG Constraints on Kentucky | <p>8.1 Conduct a state vulnerability and opportunity assessment and adaptation plan for federal carbon constraints, including a study of the implications of market-based systems on KY (formerly 4.9, 12.1, and 12.2 consolidated into 12.3)</p> <p>8.2 Form a regional climate action group or consortium with surrounding coal states to help meet climate regulations (formerly 7.7, 7.8, and 7.9 consolidated into 7.17)</p> |