



Intelligent Energy Choices for Kentucky's Future

**Kentucky's 7-Point Strategy for
Energy Independence**

Kentucky's 21st Century Challenge

- Energy increase 40% by 2025
- Clean, reliable, affordable energy
- Improve energy security
- Diverse portfolio
- Reduce CO₂ emissions
- Provide economic prosperity

Kentucky Must Act Now

- Address climate change
- U.S. does not control prices, supply, or demand
- Electricity infrastructure requires major rebuilding
- Energy independence is important to national security

Future Vision

- Reduce CO₂ emissions
- Eliminate need for imported oil
- Ensure reasonable energy costs
- Create jobs and grow the economy



The Energy Plan Document

- Guidance and planning
- Suggestions and goals
- Builds on previous legislation
 - HB 299 (2006), HB 1 (2007), SB 196 (2007), SB 83 (2008), HB 2 (2008)
- A working document
 - No specific legislation proposed
 - No funding

Framework Initiatives

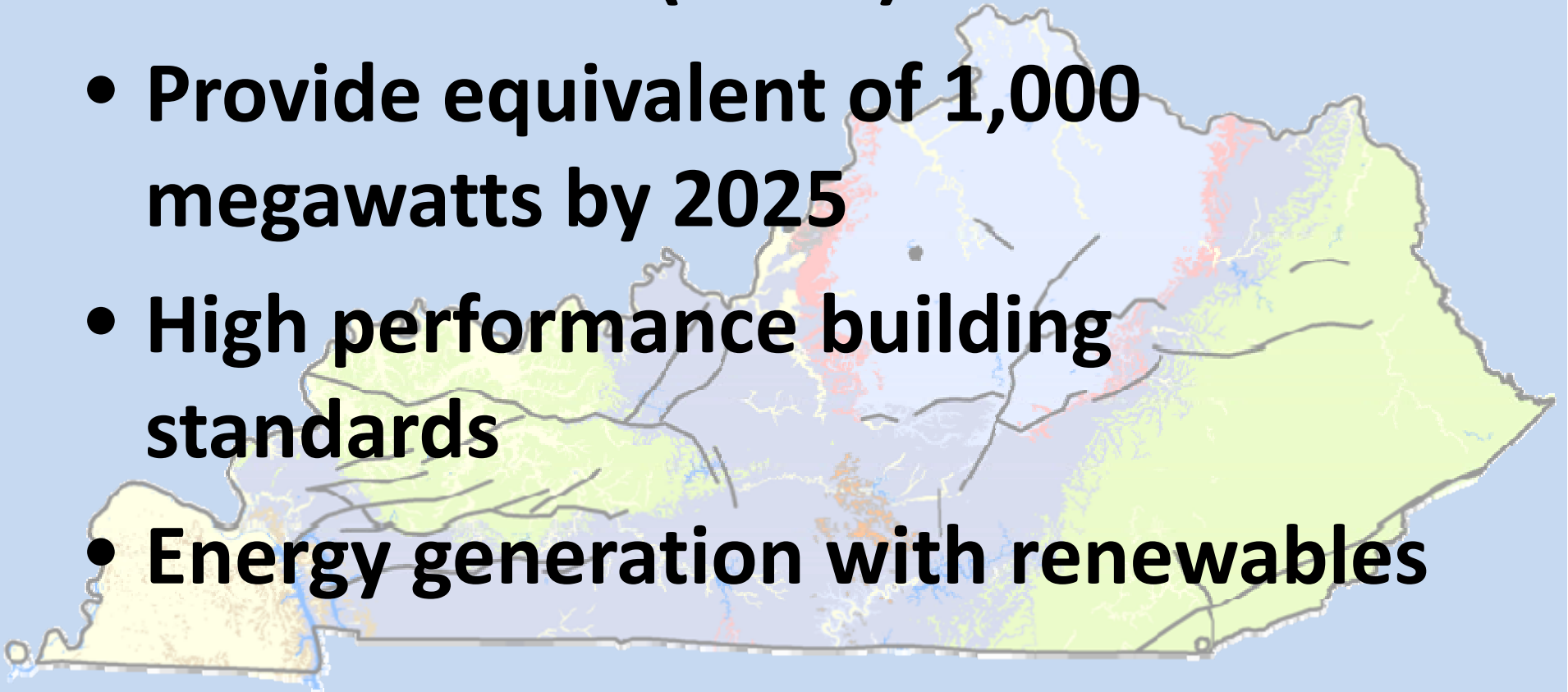
- **Renewable and Efficiency Portfolio Standard (REPS)**
 - Key: 25% by 2025
- **Alternative Transportation Fuel Standard (ATFS)**
 - Key: 60% by 2025

Strategy 1: Energy Efficiency (REPS, ATFS)

- **Homes, buildings, industries, and transportation fleet (plug-in hybrids)**
- **Efficiency will offset at least 18% of Kentucky's projected 2025 energy demand**
- **Efficiency is fast, clean, and cost effective to reduce GHG**

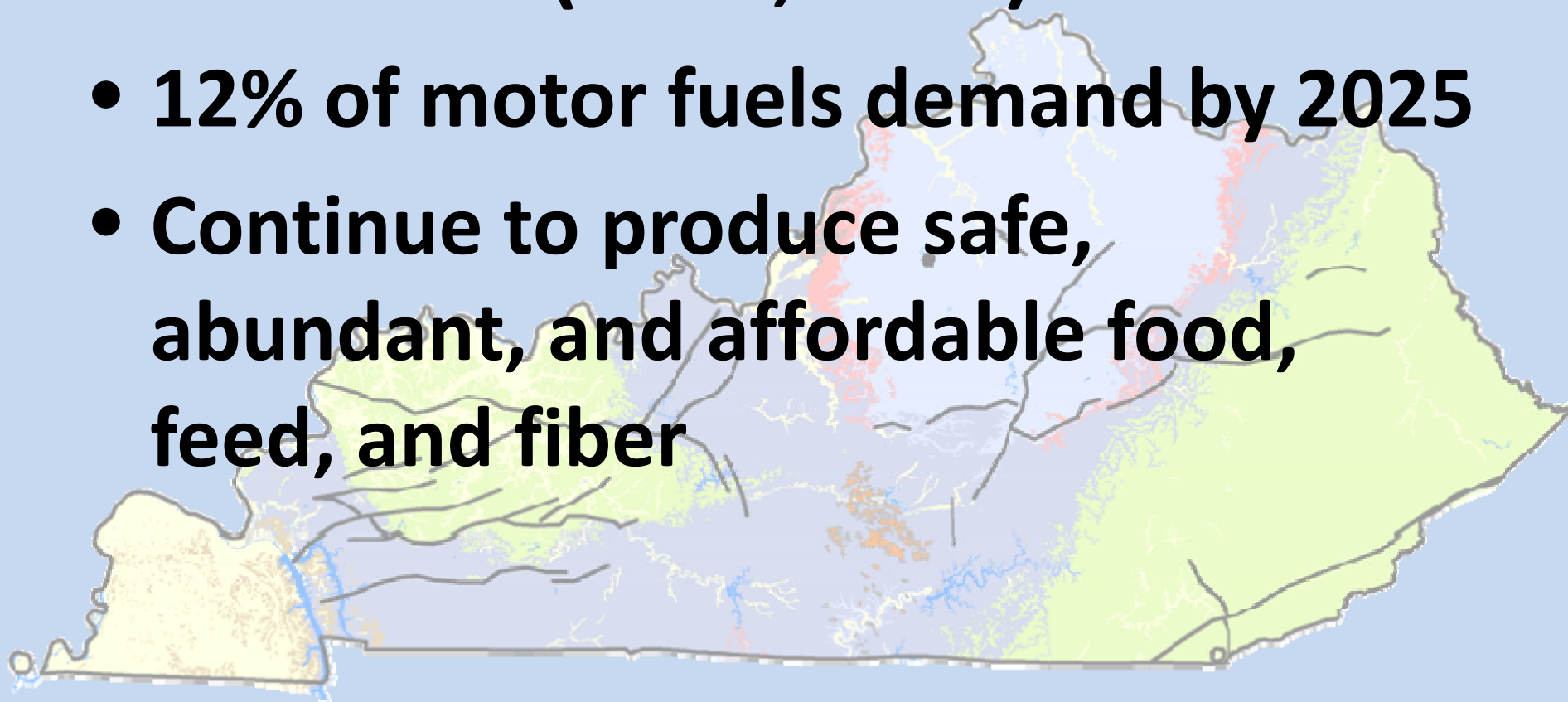
Strategy 2: Biofuels & Renewables (REPS)

- **Provide equivalent of 1,000 megawatts by 2025**
- **High performance building standards**
- **Energy generation with renewables**



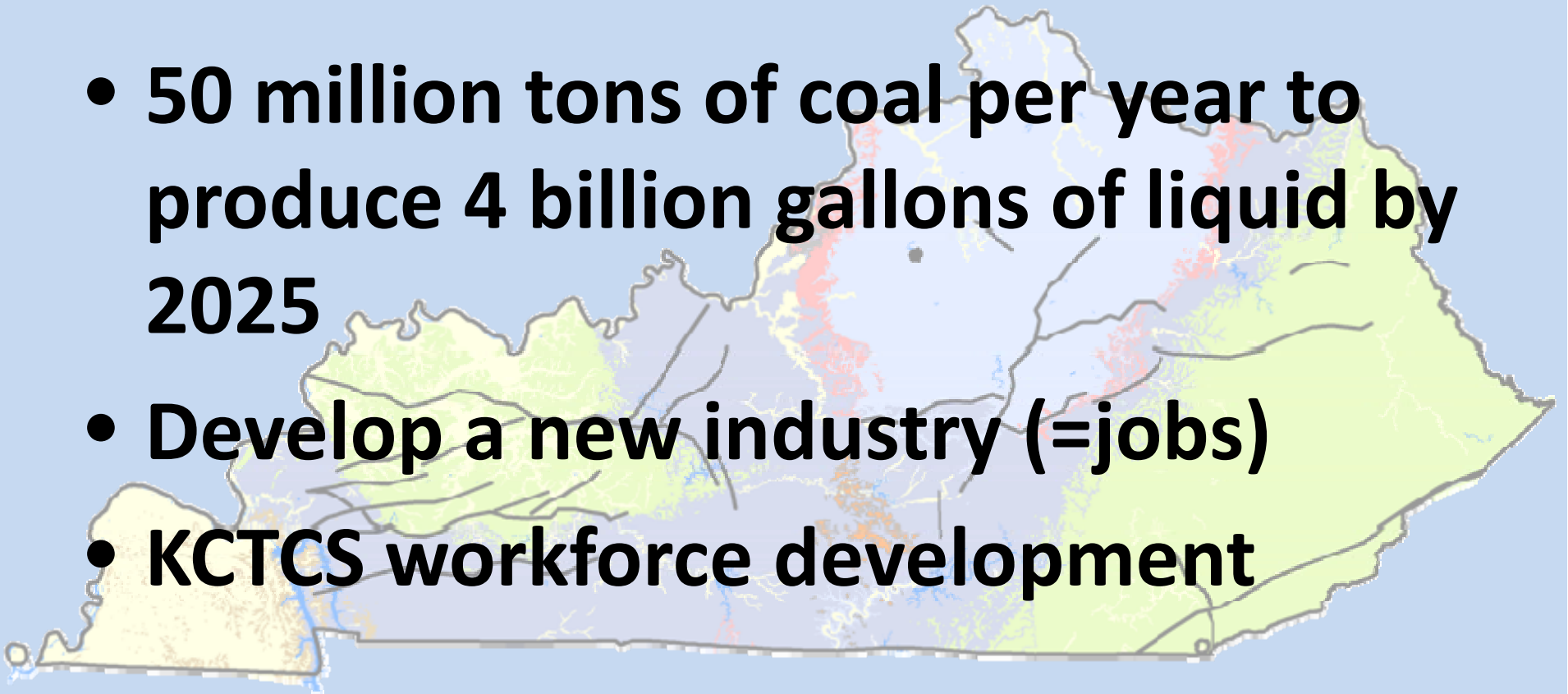
Strategy 3: Biofuels Production (REPS, ATFS)

- **12% of motor fuels demand by 2025**
- **Continue to produce safe, abundant, and affordable food, feed, and fiber**



Strategy 4: Coal to Liquids (ATFS)

- 50 million tons of coal per year to produce 4 billion gallons of liquid by 2025
- Develop a new industry (=jobs)
- KCTCS workforce development

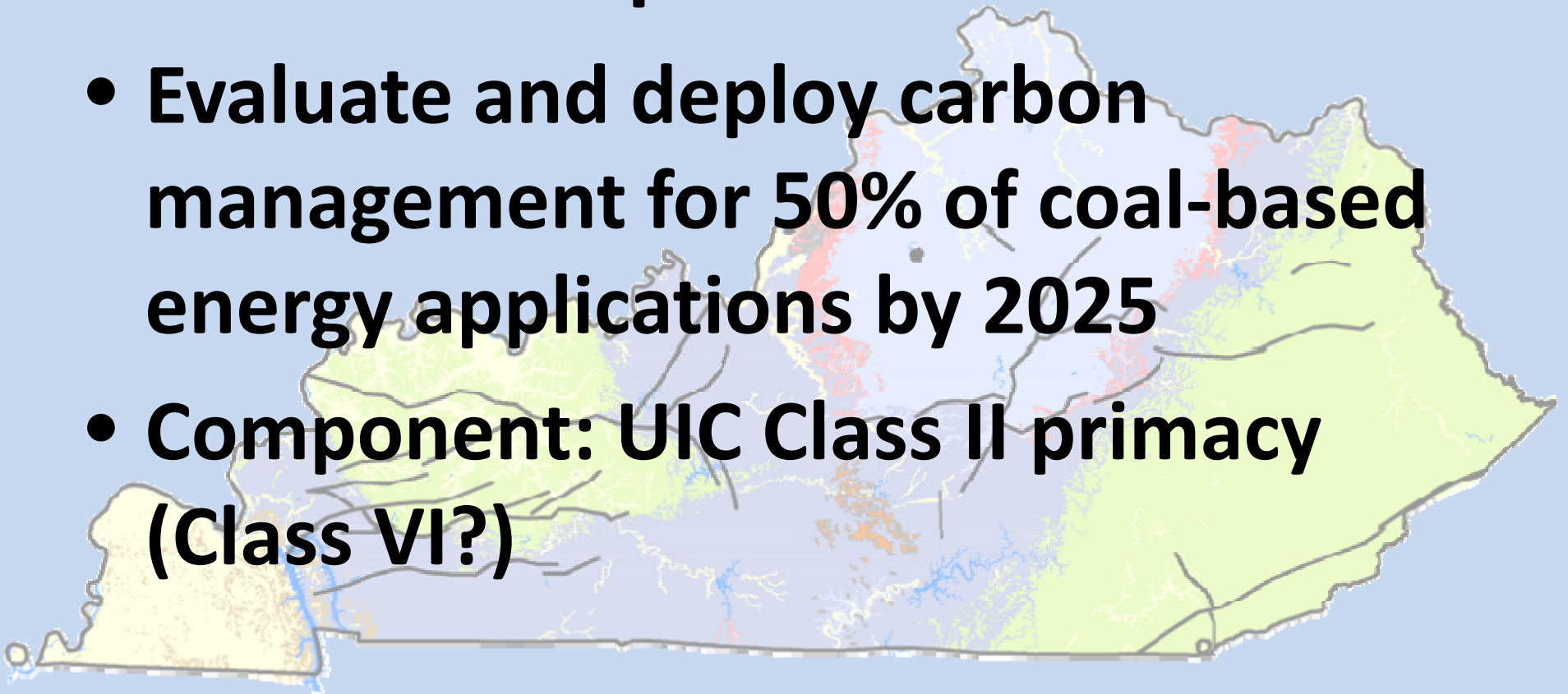


Strategy 5: Natural Gas and CTG

- 100% of annual natural gas requirement by 2025
- Develop current resources and infrastructure
- Augment with SNG from coal gasification

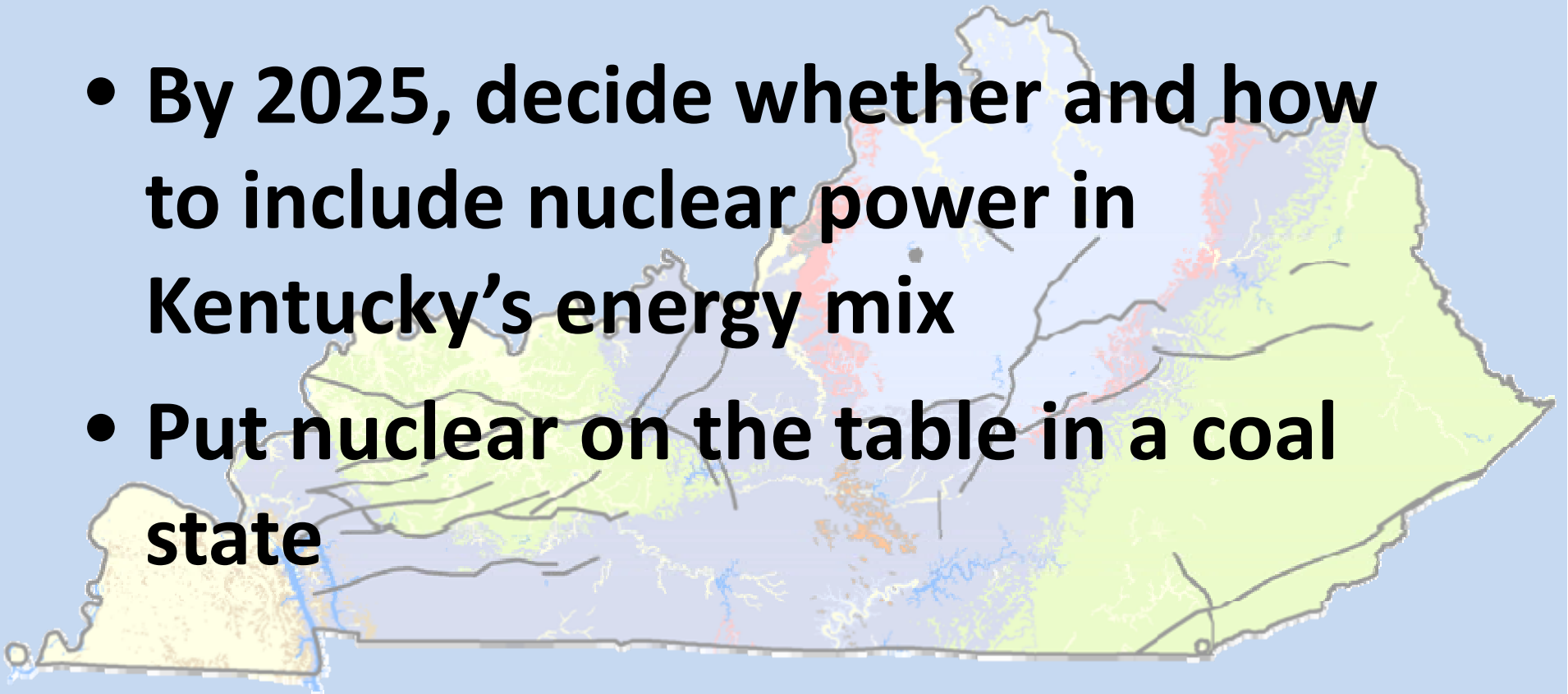
Strategy 6: Carbon Capture and Sequestration

- Evaluate and deploy carbon management for 50% of coal-based energy applications by 2025
- Component: UIC Class II primacy (Class VI?)



Strategy 7: Nuclear Power

- By 2025, decide whether and how to include nuclear power in Kentucky's energy mix
- Put nuclear on the table in a coal state



2025 Accomplishments

- Provide 30k to 40k new jobs
- Kentucky energy independence from imported oil
- 4 billion gallons of liquid fuels
- 135 Bcf/yr syngas
- Reduce *per capita* CO₂ emissions by 50%
- Optimize renewables
- Maintain current *per capita* energy consumption

Resources

- Copy of plan may be downloaded:

energy.ky.gov

