

Kentucky's Energy Resources

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Kentucky Energy Summit

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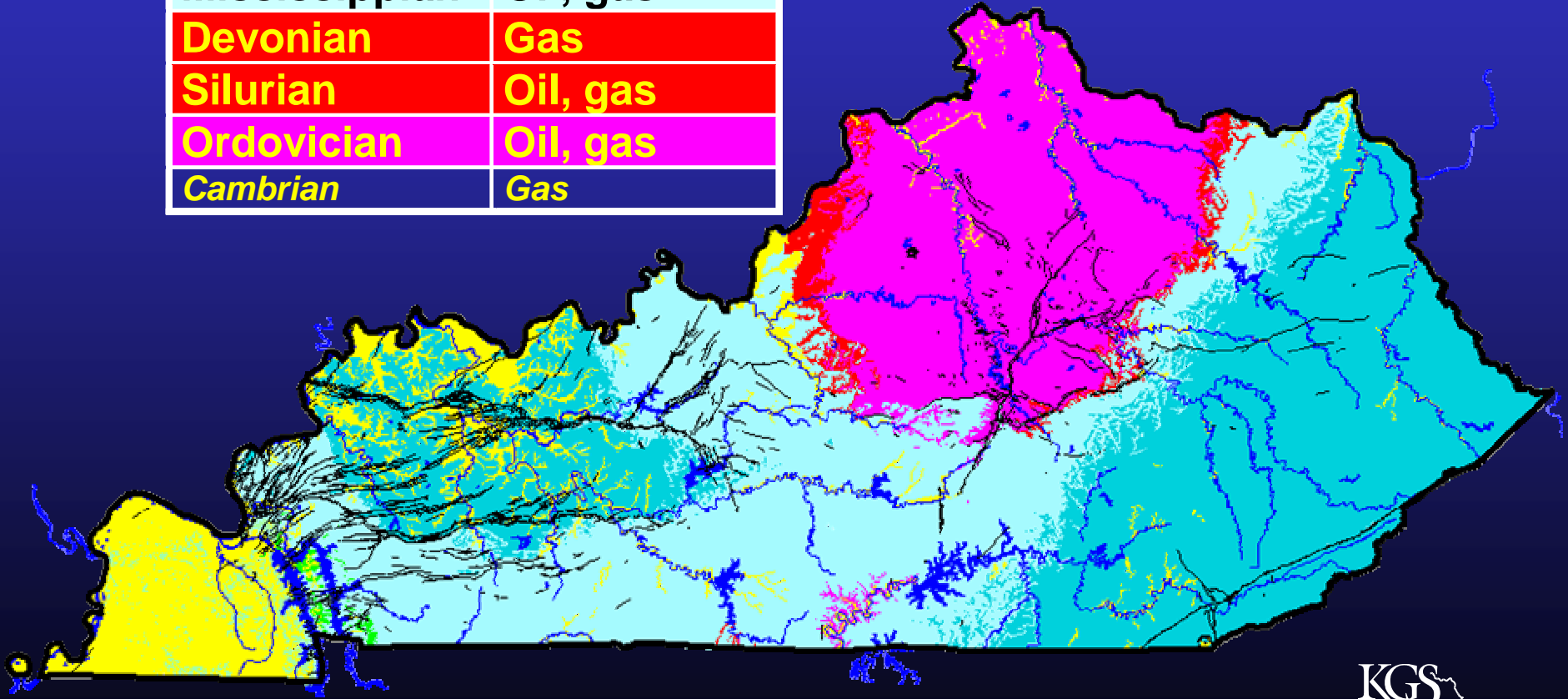


Kentucky's Fossil Fuel Resources

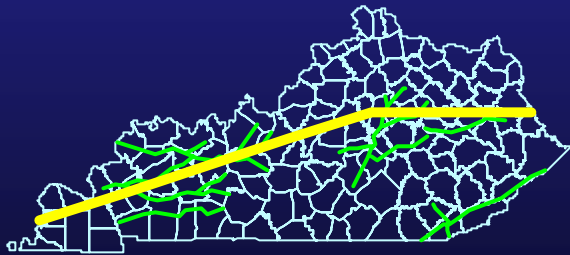
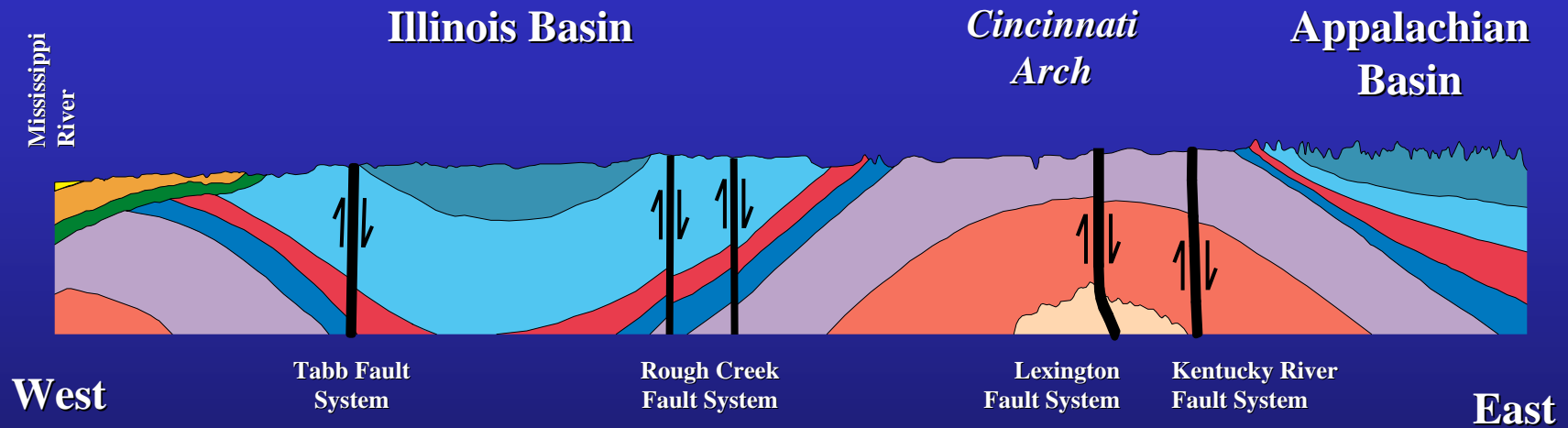
- **Coal-** **EKCF 53 B/11 B**
 WKCF 36 B/20 B
- **Natural Gas-** **124 TCF**
- **Oil-** **2.0 B**
- **Tar Sands-** **3 billion barrels**
- **Coal Bed Methane-** **1 TCF**
- **Oil Shale-** **125 billion barrels**

Kentucky Geology

Geology	Resource
Pennsylvanian	Coal, oil, gas
Mississippian	Oil, gas
Devonian	Gas
Silurian	Oil, gas
Ordovician	Oil, gas
Cambrian	Gas

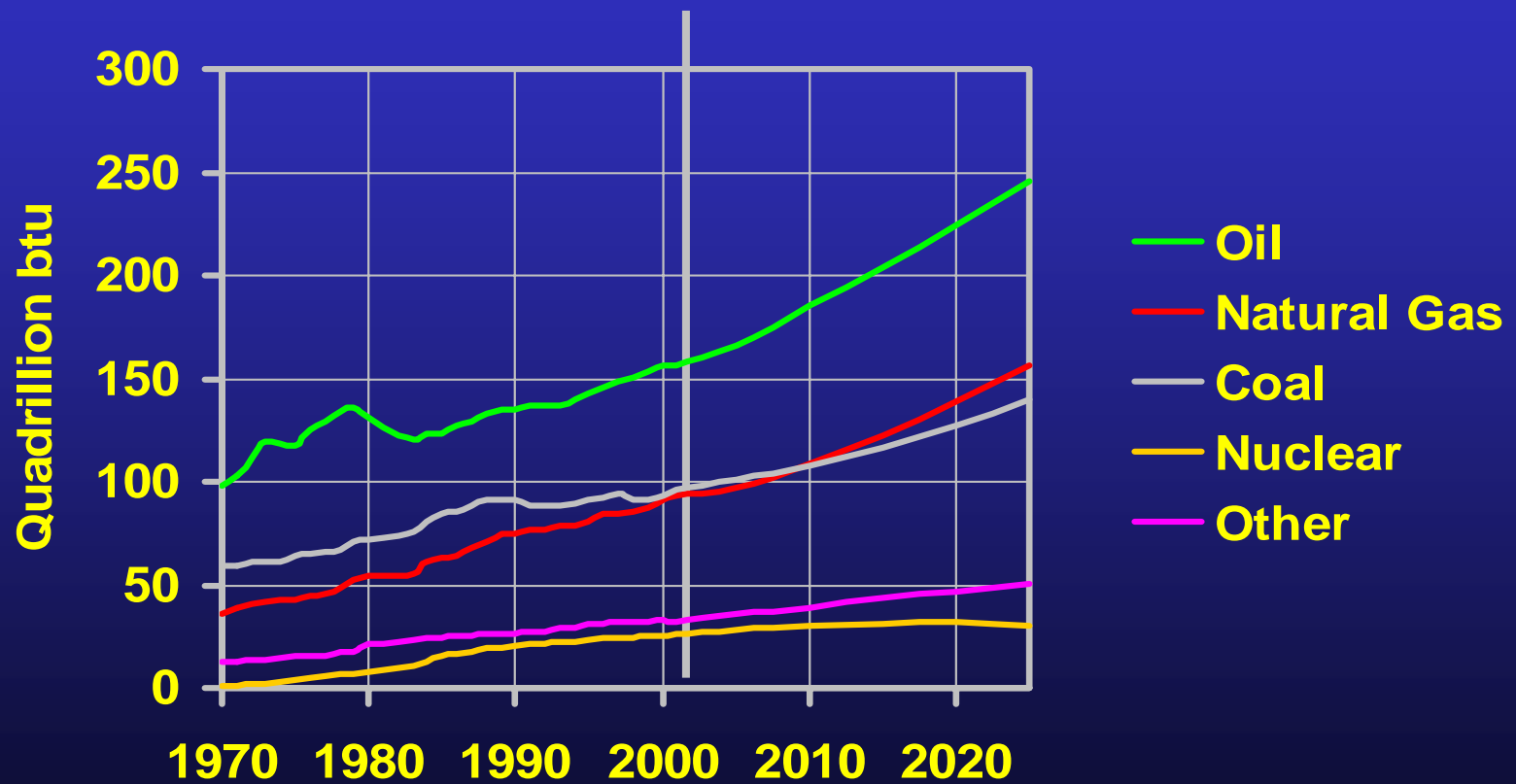


Kentucky Geology

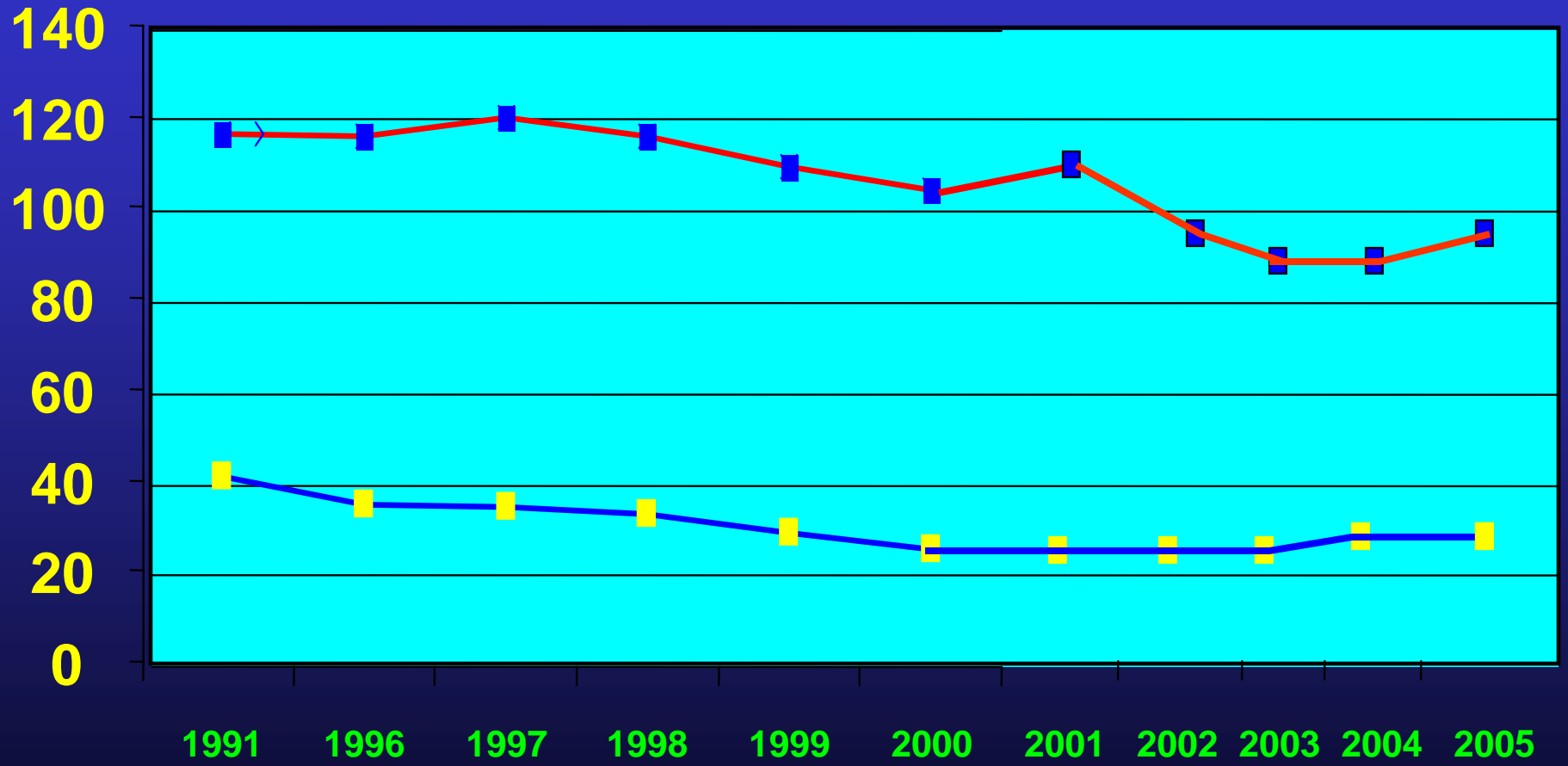


Two major basins separated by an arch.

World Energy Consumption



Kentucky Coal Production

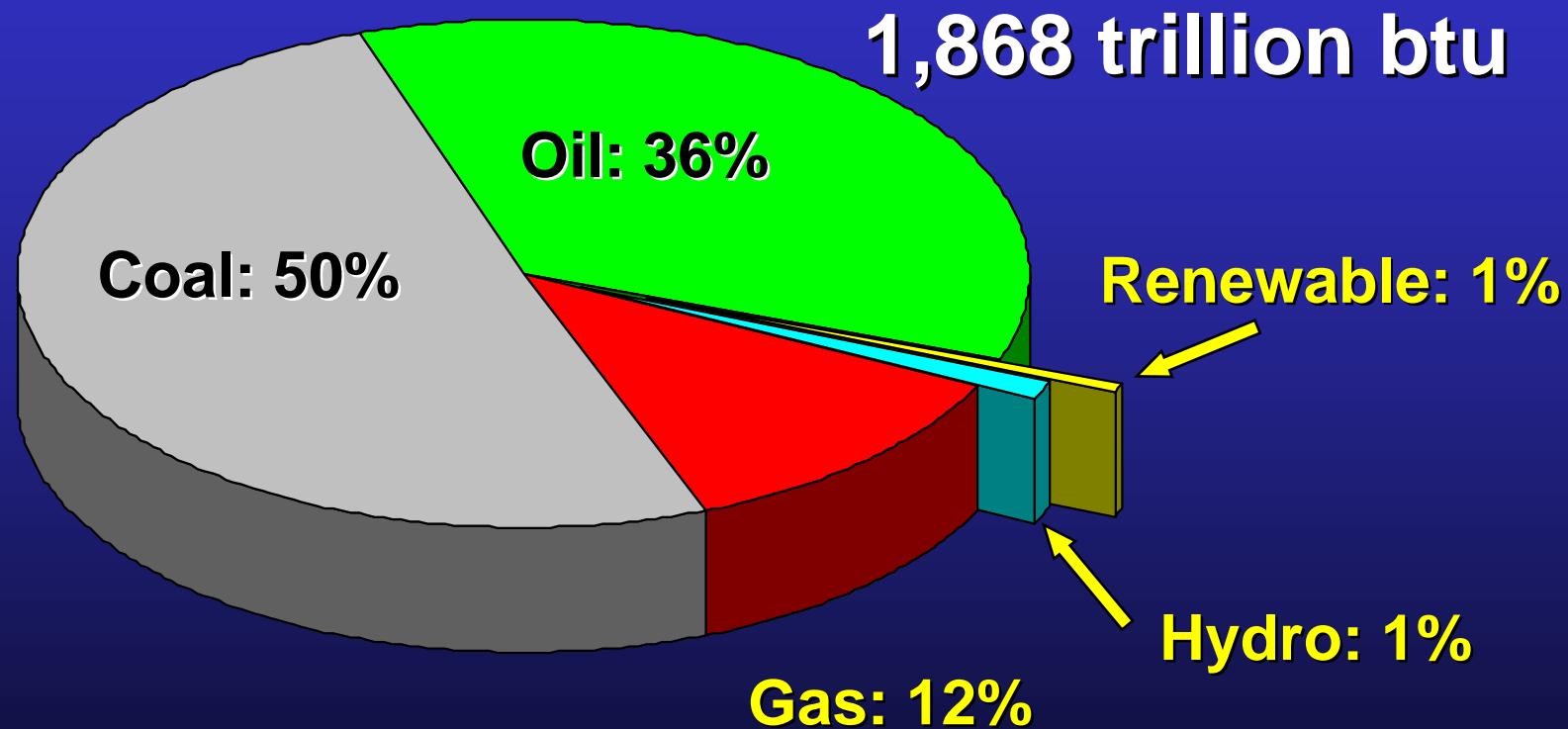


■ Eastern KY

■ Western KY

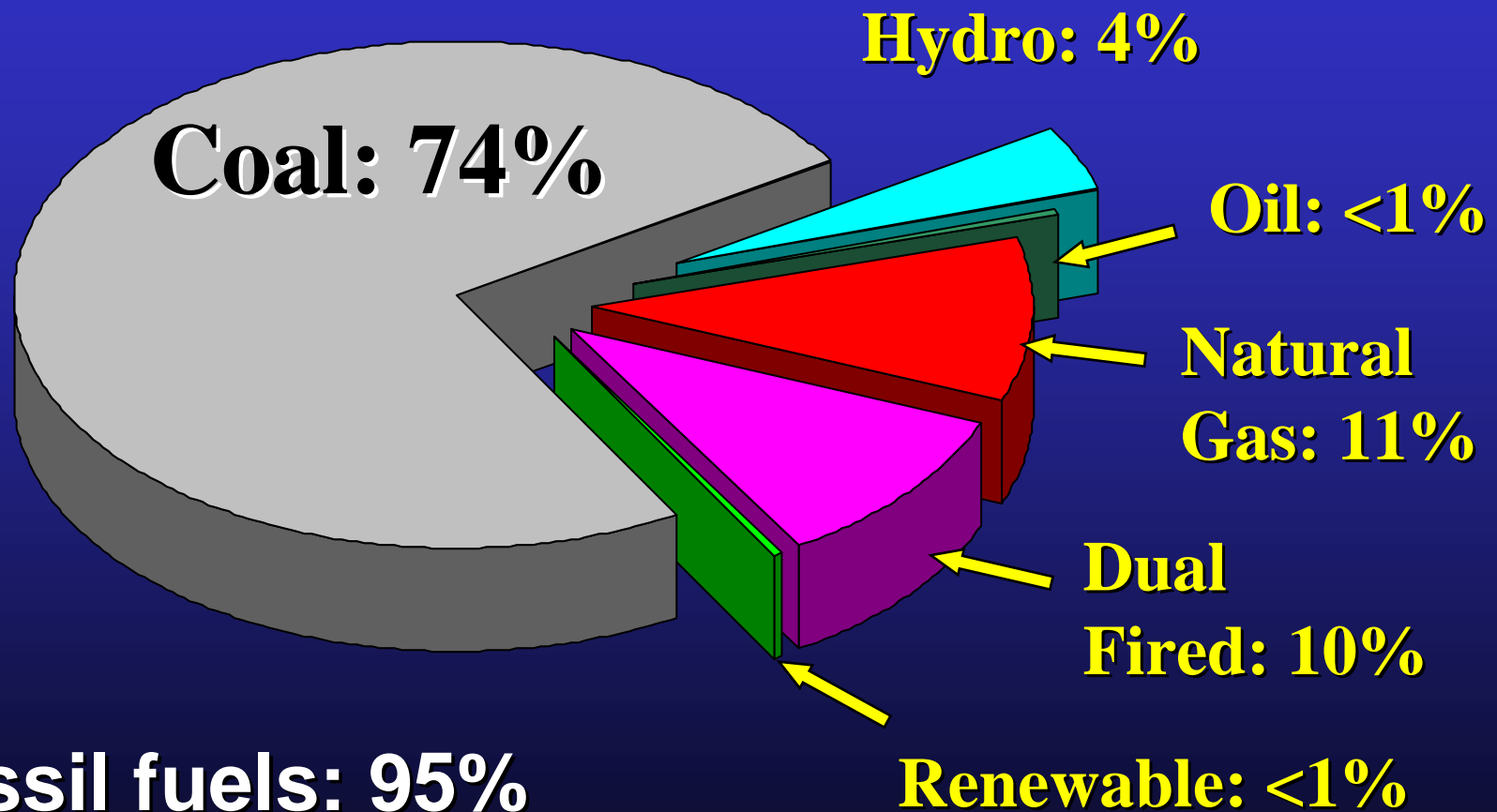


Kentucky Energy Consumption



Fossil fuels: 98%

Kentucky Electricity Generation



Kentucky Coal Fields

\$4.3 B Industry

\$184 M Sev. Tax

125 M tons

\$759 M wages

**Western KY
Coal Field**

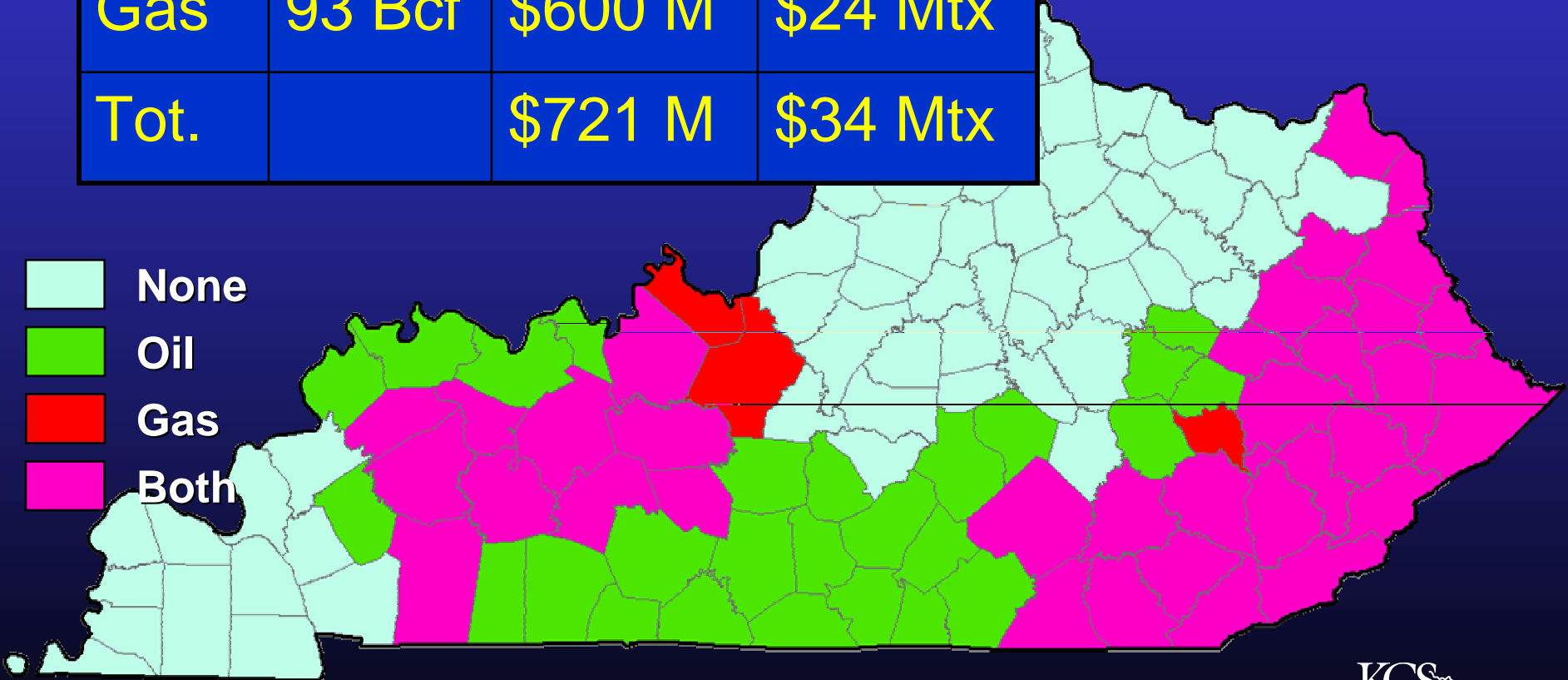
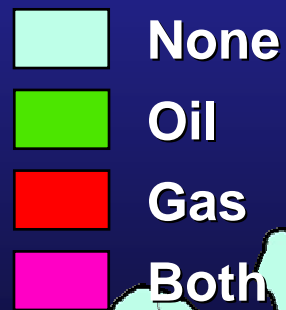
50 mi

80 km

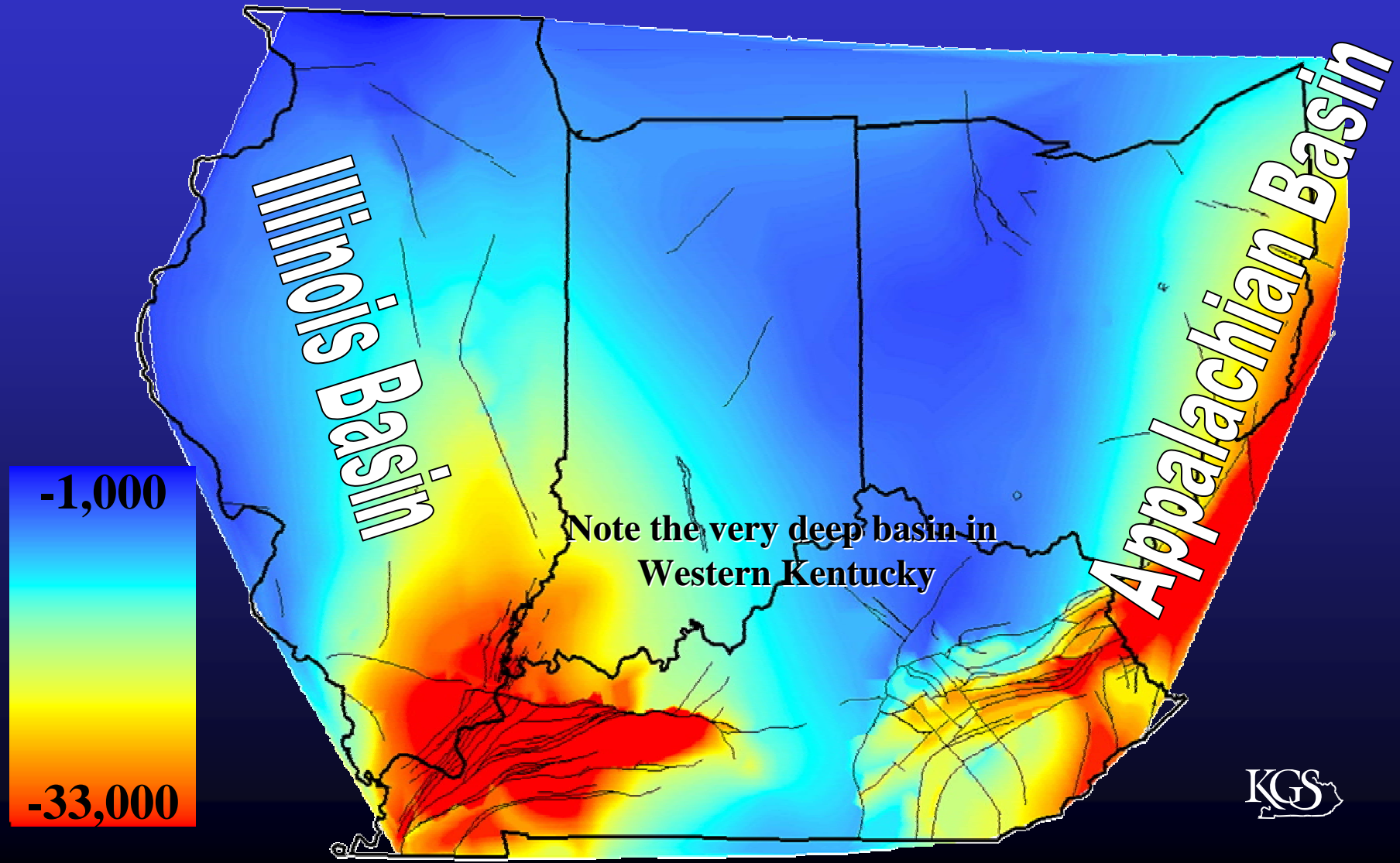
**East KY
Coal Field**

Oil & Gas Production 2005

Oil	2.5 Mb	\$121 M	\$5 M tx
Gas	93 Bcf	\$600 M	\$24 Mtx
Tot.		\$721 M	\$34 Mtx

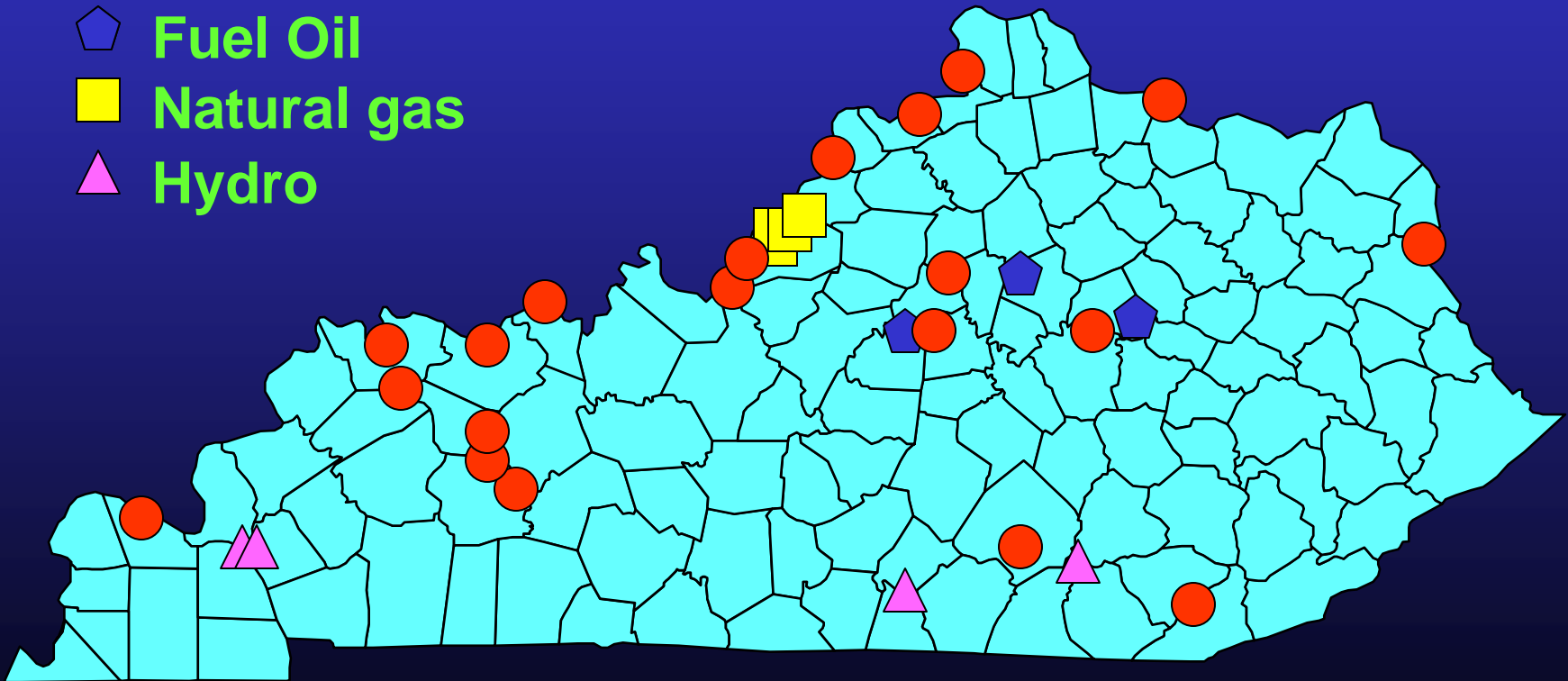


Structure: Top Basement



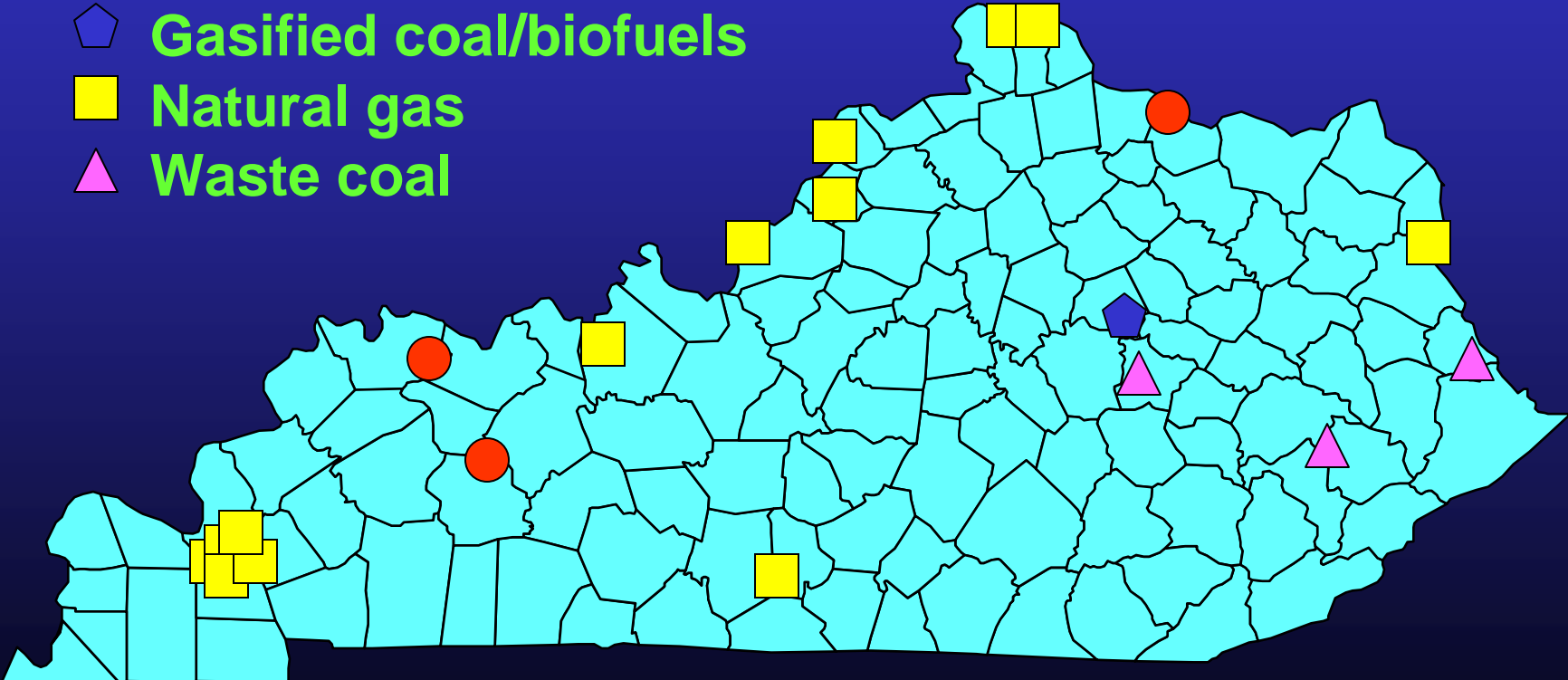
Kentucky Power Plants

- Coal
- ◆ Fuel Oil
- Natural gas
- ▲ Hydro



Proposed Power Plants and Expansion

- Coal
- ◆ Gasified coal/biofuels
- Natural gas
- ▲ Waste coal



Historic Oil and Gas Production

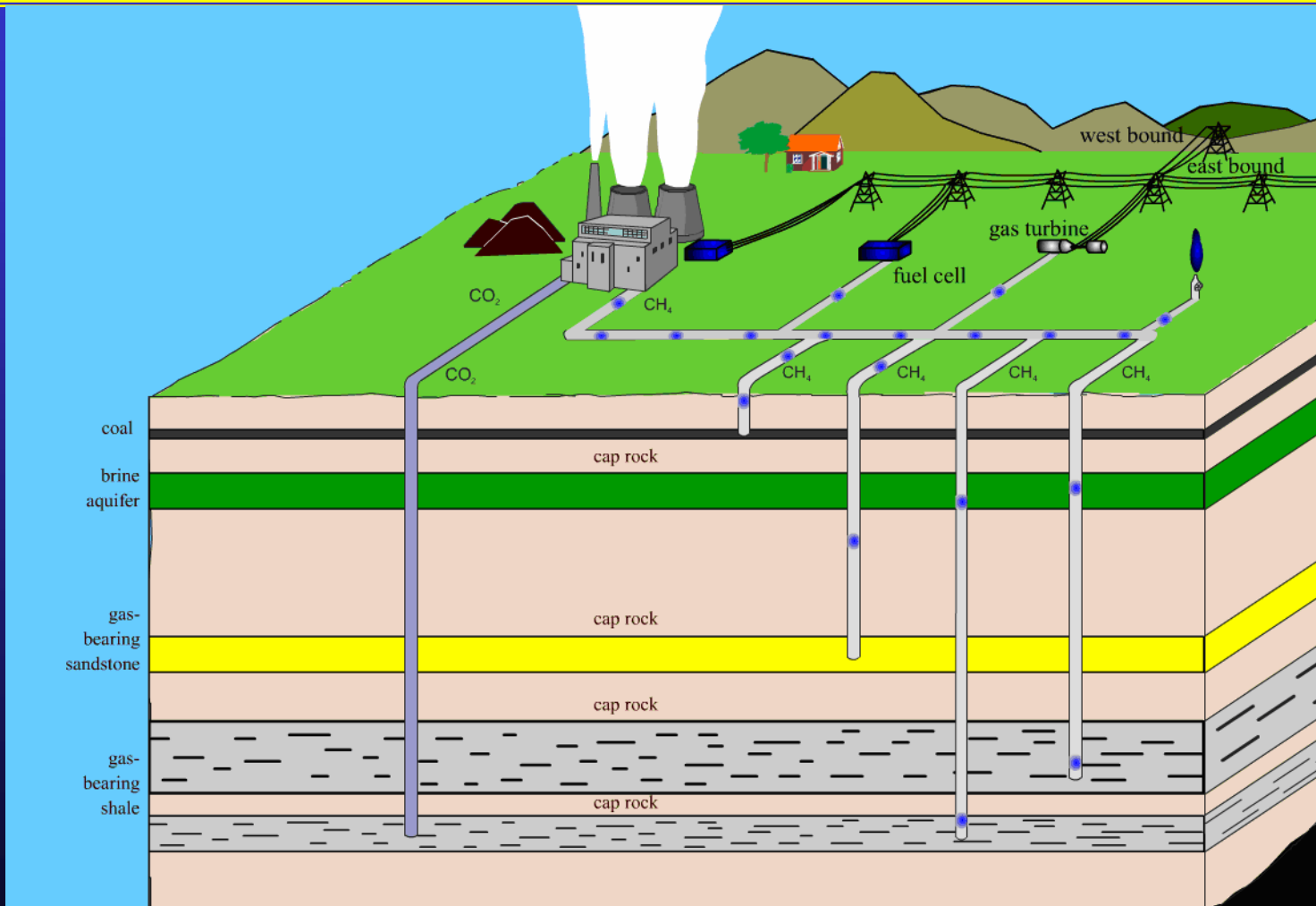


With incentives and access to CO₂, Kentucky could double oil production by 2020.

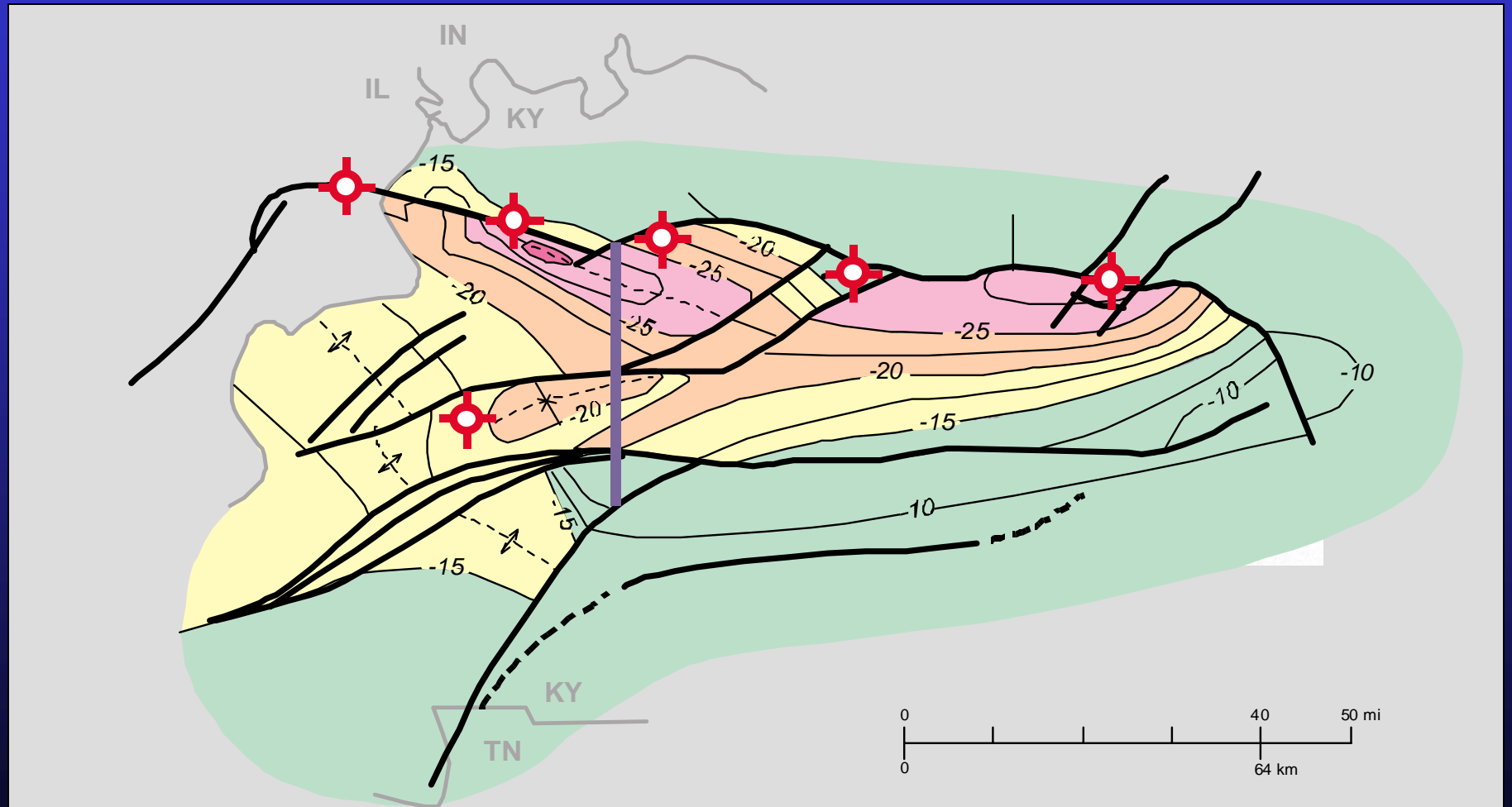




Carbon Sequestration and FutureGen

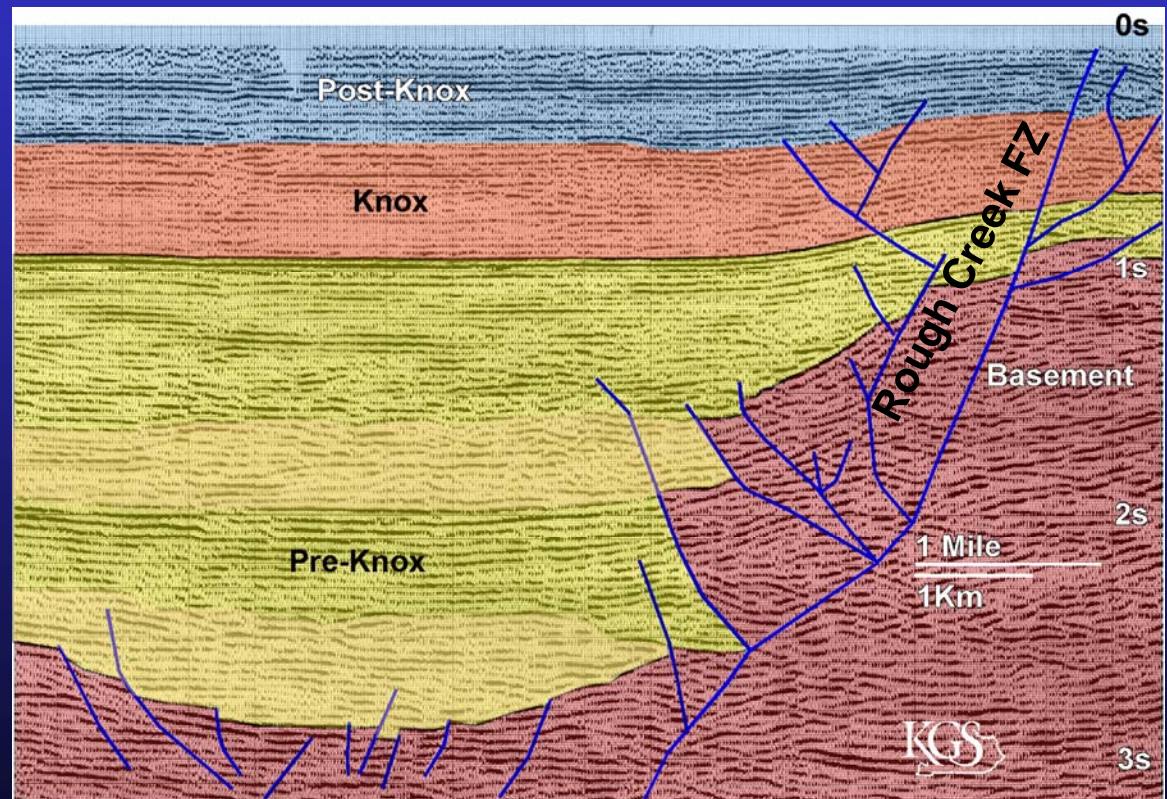


Rough Creek Graben, Western Kentucky



Gas Potential of the Cambrian: North Edge Eastern Rough Creek Graben

- Upper Section
 - Mounded reflectors:
fan deposits
 - reservoir facies
 - depth: 14,000 ft.
 - thickness: 2400 ft.
- Lower Section
 - fan deposits
 - depth: 21,000 ft
 - thickness: 3600 ft



Thank You!

