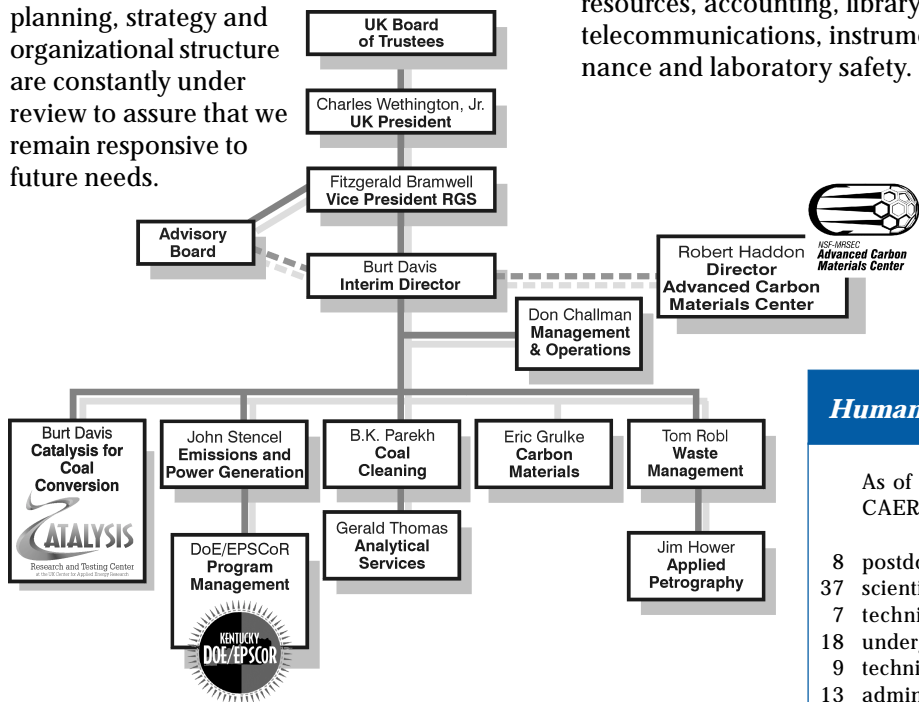


Organization

MISSION AND PURPOSE

The Center's broad mission statement is to: conduct basic and applied research designed to generate information on the character and use of Kentucky's energy resources; ascertain the associated environmental impacts; and produce, test and evaluate new technologies in the Kentucky regional setting. The University of Kentucky provides the environment for the pursuit of these goals, which further defines the aims of teaching and instruction, and public service in all of the Center's endeavors.

The technology needs of Kentucky are shared by other states and other nations, and the fulfillment of the Center's mission is best served by extending its activities into the national and international arenas. The translation of these objectives into meaningful research presents a constantly changing scene, as technologies advance and are supplanted, and as needs and priorities change. As a consequence, the Center's forward planning, strategy and organizational structure are constantly under review to assure that we remain responsive to future needs.



MANAGEMENT AND STAFFING

The CAER is one of 13 multidisciplinary research centers reporting to the Vice President for Research and Graduate Studies, Fitzgerald Bramwell. The Center's internal structure is shown in the organization chart below. It consists of five core research divisions: Carbon Materials, Catalysis, Coal Cleaning, Power Generation and Emissions, and Waste Management. The Analytical Services and Applied Petrography groups house the Center's main analytical equipment and provide support to research and services internal and external to the CAER. Finally, the Management and Operations Group is responsible for centralized administrative and technical support, including services for human resources, accounting, library, computing, telecommunications, instrument maintenance and laboratory safety.



CAER Advisory Board Members/Affiliations

Robert Addington
Addington, Inc.

Rocky Adkins
Kentucky State Representative

David E. Boswell
Kentucky State Senator

Frank Burke
CONSOL Inc.

David Drake
East Kentucky Power Cooperative

Timothy Golden
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Mary Vore
Graduate Center for
Toxicology,
University of Kentucky

Judy Wornat
Dept. of Mechanical &
Aerospace Engr.,
Princeton University

Human Resources

As of 6/30/99, total
CAER staff = 107

- 8 postdoc. researchers
- 37 scientists/engineers
- 7 technicians
- 18 undergrad. students
- 9 technical support
- 13 admin./facilities staff
- 8 grad. students
- 7 faculty

FINANCIAL RESOURCES

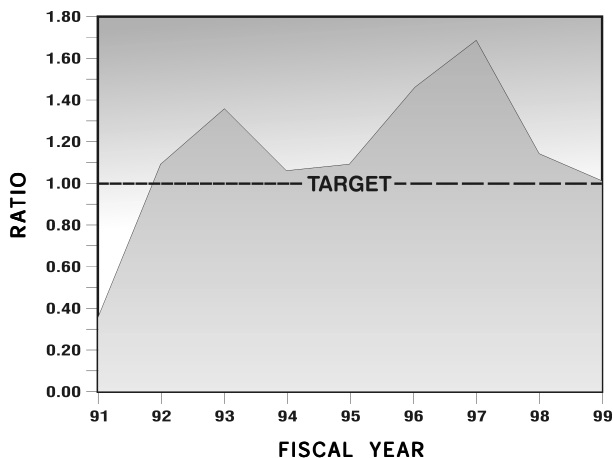
State Funding

As we approach the millennium, the Center for Applied Energy Research has been in operation for over two decades. This achievement is in large part the product of a sustained financial investment by the Commonwealth of Kentucky. The state contributed about \$4.2 million in the preceding two fiscal years (FY 97-98 and 98-99) to support the CAER (the exact numbers are given in the financial statement appearing in the appendices). The funds were expended to cover the Center's direct costs for programs of research, teaching and instruction, and public service. The funds were also used to cover the Center's indirect costs for administration, facilities and research infrastructure. The approximate split of state resources devoted to direct and indirect costs was about 50/50.

Extramural Funding

Over the past eight years, the CAER has pursued a strategy of taking the state's investment and using it to leverage extramural funds from the federal government and industry for projects of relevance to Kentucky. Our leverage target has been (and remains) one of achieving at least a dollar for dollar match of state research funds to extramural funding. This strategy has paid off significant dividends: over the past ten years, a total of \$37.1 million in grants and contracts was awarded to the Center. We have met or exceeded our target in every year since 1991. In FY 97-98 and 98-99, the Center's

Leverage of State Dollars



revenue stream was augmented by approximately \$2.4 million and \$2.6 million, respectively. At the same time, indirect costs in the amount of \$786,365 in FY 97-98 and \$636,461 in FY 98-99 were contributed to the university. Counting both state

and extramural funds, the total budget for CAER during the FY 98-99 was just under \$7 million dollars.

The emergence of the CAER as a strong competitor for grants and contracts is the product of several factors: successful initiatives in promoting the Center; the recognized high quality and experience of our staff; extensive research facilities; and the ability to offer cost-sharing - a consideration of increasing importance to funding agencies. Notwithstanding these factors, our success hinges on the ability to generate promising new ideas and approaches of interest to clients, and advancing a steady effort of proposal writing and submission. The success rate for proposal submissions over the past eight years has been about one in four, and while this rate can be considered exceptional - the norm for universities is closer to 10 percent - it still requires a healthy output of proposals to maintain funding levels. Last year, the Center's proposal output was 18: the ten-year running average is about 33 proposals per year. Thirteen new multi-year projects were awarded in FY 97-98; ten in FY 98-99.

Proposals Submitted and Funded FY90-99

