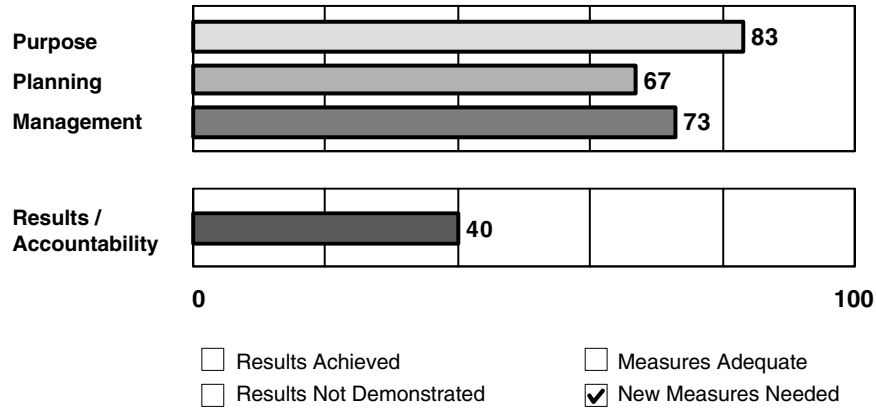


**Program: Fuel Cells (Stationary)**

**Agency:** Department of Energy

**Bureau:** Fossil Energy



**Key Performance Measures**

**Year Target Actual**

Long-term Measures: Capital cost of fuel cell generating equipment (\$/kW)	2000		\$4500
	2002		\$1000-1500/kw
	2015	\$400/kw	
Long-term Measures: Fuel conversion efficiency (% of heat in fuel converted to electricity)	2002	50- 60%	53%
	2015	70-80%	
Annual Measure: Measures under development			

**Rating: Adequate**

**Program Type:** Research and Development

**Program Summary:**

The Fossil Energy Fuel Cell program conducts research and development on stationary fuel cells that are intended to generate electricity for the existing electricity system (grid power) or for on-site use (distributed generation).

The relatively high scores in strategic planning, program design and management reflect changes in response to external reviews. The program was recently revamped to:

1. Establish new long-term outcome-oriented measures;
2. Implement a new strategic approach that focuses on commercialization through the use of competitive research teams; and
3. Establish specific management tracking systems.

Additional findings:

4. While the predecessor programs have successfully developed products for specialized markets (such as back-up power for data centers), the results scores are relatively low because the Department has not completed development of annual performance measures.
5. Some programs are reaching completion (e.g. molten carbonate fuel cell demonstration).

In response to these findings, the Administration will:

1. Work to establish specific annual performance measures tied to long term goals; and
2. Redirect funds from programs that are reaching completion to more long-term laboratory research efforts (e.g. new materials for high temperature seals, novel methods to make hydrogen available (fuel reforming) to the cells, new approaches to sulfur capture or tolerance.)

**Program Funding Level (in millions of dollars)**

<u>2002 Actual</u>	<u>2003 Estimate</u>	<u>2004 Estimate</u>
58	47	45