

**INDUSTRIAL TECHNOLOGIES  
INDUSTRY SECTOR  
(Dollars in Thousands)**

**ENERGY EFFICIENCY SCIENCE INITIATIVE**

**Mission:** The Energy Efficiency Science Initiative (EESI) seeks to identify and fund “bridging” research, development and Demonstration (RD&D) that falls between fundamental exploratory science and pre-commercial applied RD&D.

**Executive Summary:** By stimulating RD&D that maximizes synergies among different research fields, technologies, investigator communities, and end-use applications, this initiative expands EERE’s RD&D activities among energy efficiency technologies. It also cuts across traditional energy end-use sectors by emphasizing distributed power generation applications for industrial and buildings systems, transportation, and stationary power.

**Context**

Corporate Context

This initiative expands on existing cooperative efforts with the Office of Fossil Energy in areas such as natural gas-fueled turbine and fuel cell technologies, combined heat, power and cooling applications, hydrogen production, and carbon emission sequestration. This effort also involves coordination with the Office of Science in pursuing follow-on research in areas critical to energy efficiency and clean energy development, such as basic biosciences, plant genetics, photo emission, heat transfer, new materials, catalysts, and computational science.

Market Context

The awards are generally small, and universities, small businesses, national labs (not as the lead), and industry (as appropriate) are all eligible to participate in this initiative.

**Management Strategy:** In FY 2001, this program completed its second year. Projects funded to date have been performed in collaboration with academia in partnership with the National Laboratories. As a result of a slow start for this new program in FY 2000, the project performers funded in FY 2000 and FY 2001 have continued work into FY 2001 and FY 2002, respectively. Due to the need to accommodate higher priority activities, no additional funds will be requested in FY2003.

**II. A. Funding Table: ENERGY EFFICIENCY SCIENCE INITIATIVE**

Program Activity	FY 2001 Comparable	FY 2002 Comparable	FY 2003 Request	\$ Change	% Change
Energy Efficiency Science Initiative . . . . .	\$ 3,828	\$4,000 <sup>a</sup>	\$ 0	\$ (4,000)	-100.0%
Total, Energy Efficiency Science Initiative .	\$ 3,828	\$ 4,000	\$ 0	\$ (4,000)	-100.0%

**II. B. Laboratory and Facility Funding Table: ENERGY EFFICIENCY SCIENCE INITIATIVE**

	FY 2001	FY 2002	FY 2003	\$ Change	% Change
All Other . . . . .	\$ 3,828	\$ 4,000	\$ 0	\$ (4,000)	-100.0%
Total, Energy Efficiency Science Initiative . .	\$ 3,828	\$ 4,000	\$ 0	\$ (4,000)	-100.0%

<sup>a/</sup> Does not yet reflect FY 2002 Interior and Related Agencies Appropriation (P.L. 107-63) language directing that 50 percent of Energy Efficiency Science Initiative funds for FY 2002 (\$2,000,000), and beyond, be made available to the DOE Fossil Energy Research and Development account.

### III. Performance Summary: ENERGY EFFICIENCY SCIENCE INITIATIVE

Program Activity	FY 2001	FY 2002	FY 2003
<b>Energy Efficiency Science Initiative</b>	<b>Energy Efficiency Science Initiative</b> <p>As part of the continuing initiative to support R&amp;D to bridge the gap between fundamental exploratory science and pre-commercial applied R&amp;D, EERE conducted a follow-on strategic visioning workshop (e-vision 2001). This workshop built on the tremendous technology possibilities identified during e-vision 2000, and will broaden the understanding of the proposed options for the Nation's energy future. In succeeding years, it is expected that the e-vision workshops will be conducted biennially. Up to 5 research projects were awarded as a follow-on to recommendations from e-vision 2000. Additionally, funded approximately 10 to 20 cooperative agreements with research and development teams, which are being led by universities and include industrial, national laboratory and other partners. The cooperative agreements focus on industrial sector fundamental strategic R&amp;D, as contained in the visions and roadmaps for the nine Industries of</p>	<b>Energy Efficiency Science Initiative</b> <p>In collaboration with the DOE Office of Fossil Energy, a single award solicitation will be issued to address technology gaps between exploratory science and pre-commercial applied R&amp;D. (\$4,000)</p>	<b>Energy Efficiency Science Initiative</b> <p>No activities. (\$0)</p>

<b>Program Activity</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>
the Future. (\$3,891)			
<b>TOTAL, ENERGY EFFICIENCY SCIENCE INITIATIVE</b>	<b>\$3,828</b>	<b>\$4,000</b>	<b>\$0</b>