

# Industries of the Future in Danger of Losing Funding

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MORGANTOWN — If a federal proposal to cut industry-specific research passes, West Virginia's **Industries of the Future** program could be significantly affected.

Five years ago, **Weirtec**, the research and development (R&D) arm of **Weirton Steel**, had more than 70 researchers.

Now it has four.

**GrafTech International's** R&D center in Parma, Ohio has gone from more than 600 scientists to fewer than 100. **Dow Chemical** in South Charleston is cutting R&D, too. The list goes on.

As competition expands from regional or national to global, R&D — especially research aimed at cost reduction — has become increasingly important. Unfortunately, it's also often one of the first things to go.

That trend helps explain the success of West Virginia's **Industries of the Future** program (IOF-WV). Program supporters said that makes a threat to its funding both puzzling and unfortunate.

Established in 1997, IOF-WV was the first state version of a federal **Department of Energy** program aimed at increasing efficiency in energy-intensive industries.

According to **Carl Irwin**, IOF-WV director, the program identifies R&D needs in seven sectors of West Virginia industry — aluminum, chemicals/polymers, forestry, glass, metal-casting, mining and steel — with an eye to energy and resource efficiency. Another IOF area, "cross-cutting technologies," looks for projects with benefits to more than one industry.

The program links the industries with researchers at **West Virginia University** or in national labs or private companies and provides grant-writing support. In the

past five years, 27 competitive proposals have drawn about \$11 million.

This isn't corporate welfare, though, Irwin pointed out. Industries matched the \$11 million with about \$7 million in corporate cost-share.

IOF-WV activities range from projects with quick payback to multi-year development of new technologies.

Results have been dramatic. **Weirton Steel's** costs have dropped by \$8 per ton. An assessment of **Bayer Corp.'s** New Martinsville operation identified potential energy savings of up to \$1.4 million a year. **HK Casting** in Weston might have folded in 2001 without IOF help in establishing new uses for spent foundry sand that previously cost \$28 per ton for disposal. With the completion of current projects, IOF-WV claims \$1 billion in benefits to the West Virginia economy.

Nationally, IOF reports cumulative savings of about three "quads" of energy. That's more than 500 million barrels of crude oil — two months' worth of imports or, at a conservative estimate of \$26 per barrel, \$13 billion.

Be clear: These energy savings are not one-time benefits but are permanent and ongoing. They have significant additional benefits of cleaner air, lower product prices for consumers, lower energy prices through reduced demand and improved competitiveness of U.S. industries.

Now, though, IOF funding has been threatened. This fiscal year, national IOF's budget is \$52 million for industry-specific research and \$34 million for cross-cutting research.

For fiscal 2004, the administration proposes cutting industry-specific funding by more than half, to \$24 million, while keeping cross-cutting technologies funding flat.

If the administration's proposal succeeds, the effect on IOF-WV would be significant. According to Irwin, at least 70 percent of the program's federal funding has come from that industry-specific pot of money.

In addition, he said, it's much easier to recruit partners for industry-specific projects.

Irwin is especially concerned about the future of two major industry-specific research projects that are now just part way through multiple years of funding.

Sens. **Robert C. Byrd** and **John D.**

**Rockefeller IV**, both D-W.Va., have taken an interest in IOF-WV, although Irwin does not yet know what they will do to support the program. Other IOF state programs are working with their delegations to preserve program funding as well.

Meanwhile, IOF-WV is preparing for change. A brainstorming session with 200 industry representatives generated a list of 147 potential future projects, about half of which are cross-cutting. IOF-WV will continue shepherding efficiency projects at some level even if the administration's budget cut succeeds.