Examples of Ideas that have Reached Commercial Markets

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- **Lenox Polymers** are specialty performance resins created from pulp mill waste (black liquor). The non-toxic, renewable-source resins have applications including foundry resins for metal casting, wood particulate binders (for plywood and particle board), and compression molding polymer systems. By using lignin, the natural glue that holds together tree fibers, Lenox Polymers save petrochemical resources and are free of formaldehyde, phenol, and styrene.
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Notable Achievements

- More than 500 inventions have received financial support from DOE, with nearly 25% reaching the marketplace.
- Cumulative sales have reached nearly $710 million.
- Cumulative energy savings of 0.6 quad have resulted.

Access to Resources and Expertise

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The Office of Industrial Technologies (OIT) — Industries of the Future

DOE’s Office of Industrial Technologies (OIT) encourages industry wide efforts to boost resource productivity through a process called Industries of the Future. The process, which focuses on energy- and resource-intensive materials and processing sectors, accelerates research and development of advanced technologies identified as priorities by industry. Participants in the process represent the agriculture, aluminum, chemicals, forest products, glass, metal casting, mining, petroleum, and steel industries. Together with the Industrial Assessment Centers, Best Practices in industrial plant motor, steam, and air systems, NICE³, and Inventions and Innovation programs, OIT assists inventors, small business, and industry in developing and implementing near-, medium- and long-term, energy efficient and environmentally beneficial technology.

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Mail Stop EE-24
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, D.C. 20585
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Produced for the U.S. Department of Energy (DOE) by the National Renewable Energy Laboratory, a DOE national laboratory.

DOE/GO-10099-811 June 1999

Printed with a renewable-source ink on paper containing at least 50% wastepaper, including 20% postconsumer waste
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