



INTERNATIONAL
T R A D E
ADMINISTRATION

Energy Efficiency and Sustainability in the Forest Products Sector

Resource Guide for Manufacturers

September 14, 2010
Richmond, VA



SMART 
Sustainable Manufacturing
American Regional Tours

Sustainable Manufacturing Initiative

U.S. Department of Commerce

<http://www.manufacturing.gov/sustainability>

The Sustainable Manufacturing Initiative (SMI) aims to identify U.S. industry's most pressing sustainable manufacturing challenges and coordinate public and private sector efforts to address these challenges.

Sustainable Business Clearinghouse

Department of Commerce, SMI

<http://trade.gov/competitiveness/>

sustainablemanufacturing/Resource_clearinghouse.asp

The Sustainable Business Clearinghouse is a searchable database that provides U.S. companies with a central portal for information on programs and resources that can assist them in enhancing their competitiveness and profitability in environmentally sustainable ways.

Manufacturing Extension Partnership

National Institute of Standards and Technology

<http://www.nist.gov/mep/>

The National Institute of Standards and Technology's Manufacturing Extension Partnership (MEP) is America's #1 resource for helping U.S. manufacturers use innovation to grow their profitability as they compete for customers in the global marketplace. MEP's nationwide network of field staff serve as trusted business advisors focused on solving manufacturers' challenges and identifying opportunities for growth.

Genedge Alliance

<http://www.vpmep.org/>

Genedge Alliance is a network affiliate of NIST-MEP the MEP. Genedge Alliance field offices are located throughout Virginia. They provide a mix of process improvements and growth solutions in achieving better productivity, performance, and profitability, specializing in Lean Six Sigma, Lean Enterprise, Innovation & Business Growth, Quality Management Systems, Lean Supply Chain, and Engineering & Technical.

Quick Reference Guide to Growth Financing

NIST, Manufacturing Extension Partnership

<http://www.nist.gov/mep/loader.cfm?csModule=security/getfile&PageID=1521886>

This guide is intended to provide small manufacturers with a better understanding of the range of financial options and resources that may be available to help them to meet their particular financial needs. The guide includes information on a variety of government loan programs, tax incentives, debt and investment options, and other capital enhancement and access strategies.

Save Energy Now Program

Department of Energy, Industrial Technologies Program

<http://www1.eere.energy.gov/industry/saveenergynow/index.html>

Save Energy Now is a national initiative that aims to drive a reduction of 25% or more in industrial energy intensity in 10 years. To achieve this ambitious goal, ITP is partnering with Save Energy Now LEADER Companies and Save Energy Now ALLY Organizations.

Software Tools

Department of Energy, Industrial Technologies Program

<http://www1.eere.energy.gov/industry/bestpractices/software.html>

The Industrial Technologies Program (ITP) offers a collection of free software tools to help you identify and analyze energy system savings opportunities in your plant or industrial facility. Learn more and download the tools to assess the energy situation at your plant and improve the efficiency of your motor-driven, process heating, and steam systems, as well as data centers.





Forest Products Industries of the Future

Department of Energy, Industrial Technologies Program

<http://www1.eere.energy.gov/industry/forest/portfolio.html>

The Industrial Technologies Program (ITP) provides cost-shared funding to selected R&D projects that address industry-defined priorities as well as national goals for energy and the environment. Projects focus on potentially high-payoff technologies that are too risky or costly to attract adequate private funding. The Forest Products portfolio seeks to reduce energy intensity in the forest products industry.



State Incentives and Resource Database

Department of Energy, Industrial Technologies Program
http://www1.eere.energy.gov/industry/states/state_activities/incentive_search.aspx

The State Incentives and Resource Database can help commercial and industrial managers seeking to make energy efficiency upgrades in their facilities find the financial and technical incentives, tools, and resources they need. Search the database for resources available in your area. Search results can be filtered by program sponsor, resource type, industrial systems type, and/or energy type.

Database of State Incentives for Renewables & Efficiency (DSIRE)

North Carolina Solar Center and Interstate Renewable Energy Council (IREC)

<http://www.dsireusa.org>

DSIRE is a comprehensive source of information on state, local, utility and federal incentives and policies that promote renewable energy and energy efficiency. Established in 1995 and funded by the U.S. Department of Energy, DSIRE is an ongoing project of the N.C. Solar Center and the Interstate Renewable Energy Council.

Energy Policy Act (EPAAct) of 2005, Energy Efficient Commercial Buildings Deduction

http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US40F&re=1&ee=1

<http://www.lightingtaxdeduction.org/>

The federal Energy Policy Act of 2005 established a tax deduction for energy-efficient commercial buildings applicable to qualifying systems and buildings placed in service from January 1, 2006, through December 31, 2007. This deduction has been extended through 2013. It allows owners to deduct the entire cost of lighting and building upgrades in the year the upgrades are made.

The National Association of Energy Service Companies

www.naesco.org

The goal of the National Association of Energy Service Companies (NAESCO) is to promote efficiency as the first priority in a portfolio of economic and environmentally sustainable energy resources and to encourage customers and public officials to think energy efficiency first when they are making energy resource procurement or energy policy choices.

U.S. Commercial Service

U.S. Department of Commerce

<http://trade.gov/cs/>

The U.S. Commercial Service is the trade promotion arm of the U.S. Department of Commerce's International Trade Administration. U.S. Commercial Service trade professionals in over 100 U.S. cities and in nearly 80 countries help U.S. companies get started in exporting or increase sales to new global markets. U.S. Commercial Service services include: market intelligence, trade counseling, business matchmaking and trade advocacy.

Virginia Environmental Excellence Program

Virginia Department of Environmental Quality

<http://www.deq.state.va.us/veep/>

VEEP was established to encourage superior environmental performance through the development and implementation of environmental management systems and pollution prevention efforts. VEEP drives environmental excellence by encouraging facilities within the Commonwealth that have strong environmental records to go above and beyond their legal requirements. VEEP members earn recognition and are potentially eligible to utilize specific regulatory and administrative flexibilities.

Virginia Pollution Prevention Site Assessments

Virginia Department of Environmental Quality

<http://www.deq.virginia.gov/p2/>

The Virginia Department of Environmental Quality provides pollution prevention site visits that can help your facility decrease waste production and water and energy use.

Virginia Information Source for Energy (VISE)

Virginia Department of Environmental Quality

<http://www.deq.virginia.gov/p2/vise/homepage.html>

This site houses information on financial incentives at the local, state and federal levels for industrial and residential energy efficiency and renewable energy. It also provides information on popular energy issues.

Virginia Export Forest Products Directory

Virginia Department of Agriculture and Consumer Services

<http://www.vdacs.virginia.gov/international/export.shtml>

The Office of International Marketing helps Virginia companies develop profitable export opportunities throughout the world for agricultural, food and forest products. This directory contains a listing of wood products suppliers and manufacturers located in Virginia and is designed for use by international buyers of wood products.

Green Suppliers Network

U.S. EPA and NIST MEP

<https://www.greensuppliers.gov/gsn/home.gsn>

The Green Suppliers Network works with large manufacturers to engage their suppliers in low-cost technical reviews to identify strategies for improving process lines and using materials more efficiently. The Lean and Clean Advantage targets and eliminates the root causes of waste. The result—a stronger bottom line.

Lean Manufacturing and the Environment

U.S. EPA

<http://epa.gov/lean/>

While lean manufacturing streamlines businesses and saves them money, many of these money-saving techniques also have environmental benefits. This site provides links to resources and guides to help you incorporate environmental principles into existing Lean programs to maximize their economic and environmental benefits.

E3: Economy, Energy and Environment

U.S. EPA

<http://www.epa.gov/greensuppliers/e3.html>

Operating under the umbrella of the Green Suppliers Network, E3 is a coordinated federal and local technical assistance initiative to help manufacturers adapt and thrive in a new business era focused on sustainability. The program provides technical assessments of production processes and training in four key areas: lean, clean, energy, greenhouse gas emissions. Depending on the processes of a company, either large or small, the assessments and training target opportunities to: maximize energy efficiency, reduce environmental wastes, identify opportunities for reducing carbon emissions, promote sustainable manufacturing practices and growth, and reduce business costs.

Virginia Department of Business Assistance

<http://www.dba.virginia.gov/>

The Virginia Department of Business Assistance (VDBA) provides a one-stop-service for technical assistance related to business formation, access to capital, and workforce development. VDBA works with existing businesses as they grow their workforce and mentors entrepreneurs from ideas to launching their first business venture.

Virginia Small Business Financing Authority (VSBFA)

Virginia Department of Business

Assistance

http://www.vdba.virginia.gov/financing_business.shtml

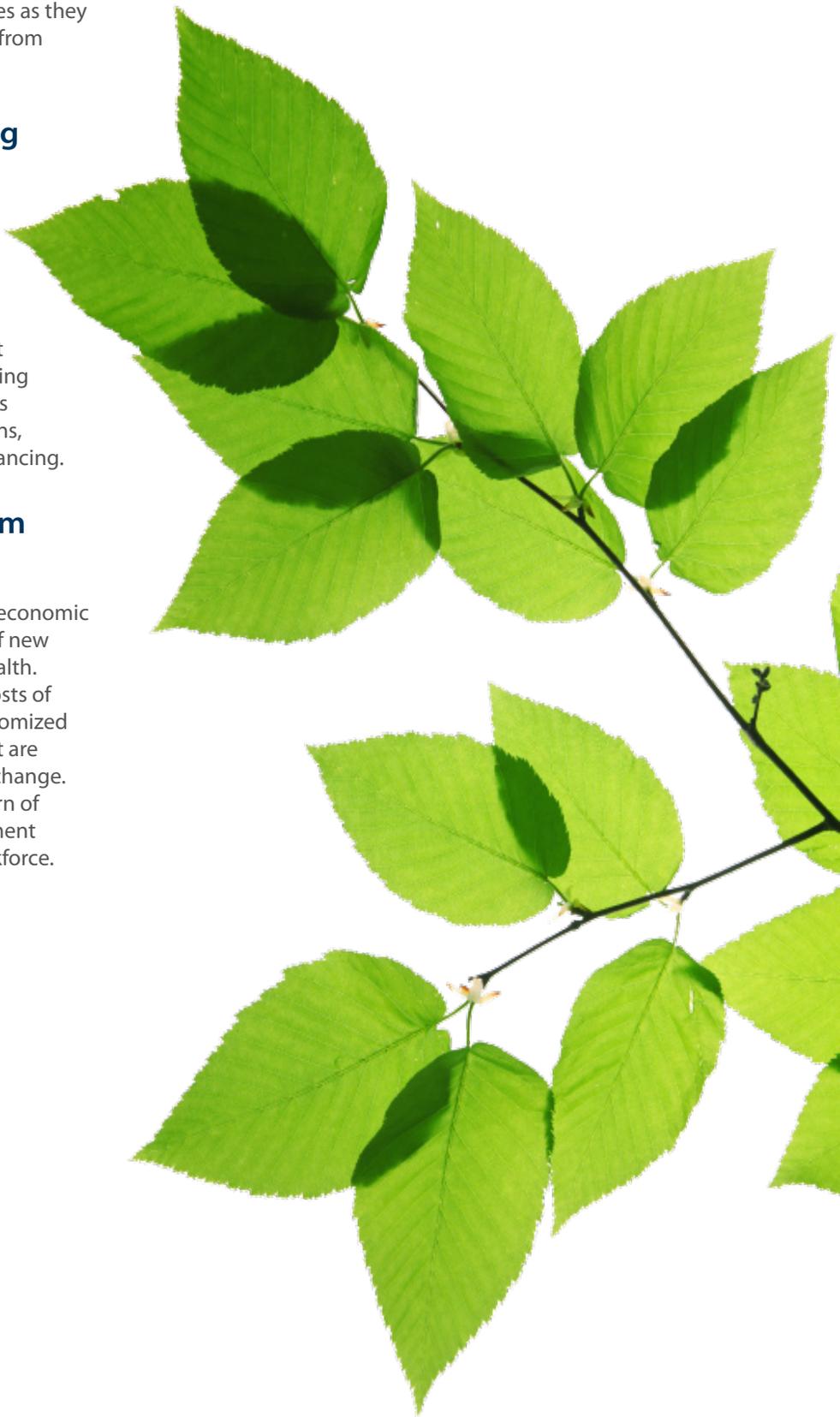
VSBFA is the Commonwealth's economic development financing arm. VSBFA provides debt financing assistance to Virginia's established, existing businesses, its entrepreneurs, as well as businesses looking to expand into Virginia. It offers direct loans, loan guaranties, loan loss insurance, and bond financing.

Virginia Jobs Investment Program

Virginia Department of Business Assistance

<http://www.vdba.virginia.gov/vjip.shtml>

The Virginia Jobs Investment Program (VJIP) is an economic development incentive supporting the creation of new jobs and investment throughout the Commonwealth. The program offsets the recruiting and training costs of new and expanding companies by providing customized services and funding to qualifying companies that are creating new jobs or experiencing technological change. The program specifically addresses the top concern of existing businesses as well as economic development prospects -- finding and developing a skilled workforce.



Energy Efficiency and Sustainability in the Forest Products Sector Research and Publications

American Forest & Paper Association: 2010 AF&PA Sustainability Report
<http://www.afandpa.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=1402>

Agenda 2020: Forest Products Industry Technology Roadmap
http://www.agenda2020.org/PDF/Forest_Products_Industry_Tech_RM-043010.pdf

U.S. Department of Energy, Energy Efficiency and Renewable Energy, Forest Products Technologies:
Public Private Partnerships Produce R&D Results
<http://www1.eere.energy.gov/industry/forest/pdfs/forestsucceses.pdf>

U.S. EPA, Energy Trends in Selected Manufacturing Sectors
<http://www.epa.gov/sectors/pdf/energy/report.pdf>

Kramer, Klaas Jan, et al., Ernest Orlando Lawrence Berkeley National Laboratory, Energy Efficiency
Improvement and Cost Saving Opportunities for the Pulp and Paper Industry: An Energy Star Guide for
Energy and Plant Managers
http://www.energystar.gov/ia/business/industry/downloads/Pulp_and_Paper_Energy_Guide.pdf

U.S. EPA, 2002, Profile of the Pulp and Paper Industry
<http://www.epa.gov/compliance/resources/publications/assistance/sectors/notebooks/pulppasn.pdf>

U.S. EPA: 2008 Sector Performance Report
http://www.epa.gov/ispd/pdf/2008/forest_products_bw.pdf

Jacobs and Institute of Paper Science and Technology at Georgia Institute of Technology:
Pulp and Paper Industry Energy Bandwidth Study
http://www1.eere.energy.gov/industry/forest/pdfs/doe_bandwidth.pdf

World Business Council for Sustainable Development: The Sustainable Forest Products Industry
Carbon and Climate Change
<http://www.wbcsd.org/DocRoot/oNvUNPZMuugn75jrL8KS/sfpi-carbon-climate.pdf>

