Manufacturing Energy and Carbon Footprint References

AMO (Advanced Manufacturing Office), EERE (Energy Efficiency and Renewable Energy). 2012. Consider Installing High-Pressure Boilers with Backpressure Turbine-Generators. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/steam22_backpressure.pdf

AMO (Advanced Manufacturing Office), EERE (Energy Efficiency and Renewable Energy). 2012. Improving Steam System Performance: A Sourcebook for Industry, Second Edition. DOE-GO 102012-3423. Prepared by National Renewable Energy Laboratory, Golden, CO, Lawrence Berkeley National Laboratory, Washington, DC, and Resource Dynamics Corporation, Vienna, VA. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/steamsourcebook.pdf

AMO (Advanced Manufacturing Office), EERE (Energy Efficiency and Renewable Energy). 2012. "Manufacturing Energy and Carbon Footprints." U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/rd/footprints.html

Beck, Theodore R. 2001. "Electrolytic Production of Aluminum." Case Western Reserve University. Last modified May 2008. http://electrochem.cwru.edu/encycl/art-a01-al-prod.htm

Bell, Arthur. HVAC Equations, Data, and Rules of Thumb. 2nd ed. United States: McGraw Hill, 2007.

BTP (Buildings Technology Program), EERE (Energy Efficiency and Renewable Energy. 2009. 2009 Buildings Energy Data Book. Prepared by D&R International, Inc, Silver Spring, MD. U.S. Department of Energy. http://buildingsdatabook.eren.doe.gov/docs/DataBooks/2009 BEDB Updated.pdf

EERE (Energy Efficiency and Renewable Energy). 2003. *Improving Compressed Air System Performance: A Sourcebook for Industry*. DOE-GO-102003-1822. Prepared by Lawrence Berkeley National Laboratory, Washington, DC, and Resource Dynamics Corporation, Vienna, VA. U.S. Department of Energy.

http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/compressed_air_sourcebook.pdf

- EIA (U.S. Energy Information Administration). 1999. "Glossary for the Manufacturing Sector." U.S. Department of Energy. http://www.eia.doe.gov/emeu/efficiency/mecs_glossary.htm
- EIA (U.S. Energy Information Administration). 2005. "2002 Manufacturing Energy Consumption Survey Methodology and Data Quality: Survey Design, Implementation, and Estimates." U.S. Department of Energy. http://www.eia.doe.gov/emeu/mecs/mecs2002/methodology_02/meth_02.html
- EIA (U.S. Energy Information Administration). 2006. "Form EIA-906, EIA-920, and EIA-923 Databases." U.S. Department of Energy. http://www.eia.doe.gov/cneaf/electricity/page/eia906-920.html
- EIA (U.S. Energy Information Administration). 2007. "2006 Manufacturing Energy Consumption Survey Form EIA-846." U.S. Department of Energy. http://www.eia.doe.gov/emeu/mecs/mecs2006/EIA-846A 2006.pdf
- EIA (U.S. Energy Information Administration). 2008. "Voluntary Reporting of Greenhouse Gases." U.S. Department of Energy. http://www.eia.doe.gov/oiaf/1605/
- EIA (U.S. Energy Information Administration). 2009. "Manufacturing Energy Consumption Survey (MECS): 2006 Energy Consumption by Manufacturers -- Data Tables." U.S. Department of Energy. http://www.eia.doe.gov/emeu/mecs/mecs2006/2006tables.html
- EIA (U.S. Energy Information Administration). 2010. *Annual Energy Review 2009*. DOE/EIA-0384 (2009), U.S. Department of Energy. http://www.eia.gov/totalenergy/data/annual/archive/038409.pdf

EIA (U.S. Energy Information Administration). 2010. *Monthly Energy Review November 2010*. DOE/EIA-0035(2010/11), U.S. Department of Energy.

http://www.eia.gov/totalenergy/data/monthly/archive/00351011.pdf

Elliott, R. N., and S. Nadal. 2003. *Realizing Energy Efficiency Opportunities in Industrial Fan and Pump Systems*. A034, American Council for an Energy-Efficient Economy. http://aceee.org/research-report/a034

EPA (U.S. Environmental Protection Agency). 2002. *Technology Characterization: Gas Turbines*. Prepared by Energy Nexus Group, Arlington, VA. U.S. Environmental Protection Agency. http://www.stsm.ir/resources/10301-09101387135242Technology%20Characterization%20Gas%20Turbines.pdf

EPA (U.S. Environmental Protection Agency). 2007. "Emissions and Generation Resource Integrated Database (eGRID), eGRID2007 Version 1.1." U.S. Environmental Protection Agency. Last modified May 10. http://www.epa.gov/cleanenergy/egrid

EPA (U.S. Environmental Protection Agency). 2009. "Glossary of Climate Change Terms." U.S. Environmental Protection Agency. Last modified June 14. http://www.epa.gov/climatechange/glossary.html

EPA (U.S. Environmental Protection Agency). 2009. "Mandatory Greenhouse Gas Reporting Rule." U.S. Environmental Protection Agency, 40 CFR Part 98. Last modified August 30. http://www.epa.gov/ghgreporting/basic-info/index.html

EPA (U.S. Environmental Protection Agency). 2010. *Inventory of U.S. Greenhouse Gas Emissions and Sinks:* 1990-2008. U.S. Environmental Protection Agency.

http://www.epa.gov/climatechange/Downloads/ghgemissions/508 Complete GHG 1990 2008.pdf

Gates Corporation. 2009. *Improving Motor System Efficiency with High Efficiency Belt Drive Systems*. Gates Corporation.

http://www.gates.com/ptPartners/file display common.cfm?thispath=Gates%2Fdocuments module&file=motors wp final.pdf

Giraldo, Luis, and Barry Hyman. "Energy End-Use Models for Pulp, Paper, and Paperboard Mills." *Energy* 20(10): 1005-19.

Granade, Hannah Choi, Jon Creyts, Anton Derkach, Philip Farese, Scott Nyquist, and Ken Ostrowski. 2009. *Unlocking Energy Efficiency in the U.S. Economy*. McKinsey & Company.

http://www.mckinsey.com/client service/electric power and natural gas/latest thinking/unlocking energy efficiency in the us economy

Hooper, Frederic A., and Ronald D. Gillette. 1999. "How Efficient is Your Steam Distribution System?" Steam Conservation Systems. www.swopnet.com/engr/stm/steam_dist_eff.html

IEA (International Energy Agency). 2006. *Light's Labour's Lost: Policies for Energy Efficient Lighting*. Paris: International Energy Agency.

http://www.iea.org/publications/freepublications/publication/light2006.pdf

IEA (International Energy Agency). 2007. *Tracking Industrial Energy Efficiency and CO₂ Emissions*. Paris: International Energy Agency. http://www.iea.org/textbase/nppdf/free/2007/tracking emissions.pdf

IPCC (Intergovernmental Panel on Climate Change). 2007. *Climate Change 2007*. Intergovernmental Panel on Climate Change, Fourth Assessment Report.

http://www.ipcc.ch/publications and data/publications and data reports.htm#1

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2004. *Energy Loss Reduction and Recovery in Industrial Energy Systems*. Prepared by Energetics, Incorporated,

Columbia, MD. U.S. Department of Energy.

http://www1.eere.energy.gov/manufacturing/intensiveprocesses/pdfs/reduction roadmap.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2004. *Energy Use, Loss and Opportunities Analysis: U.S. Manufacturing & Mining*. Prepared by Energetics, Incorporated, Columbia, MD, and E3M, Incorporated, North Potomac, MD. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/intensiveprocesses/pdfs/energy_use_loss_opportunities_analysis.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2005. Estimating Motor Efficiency in the Field. DOE/GO-102005-2021. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/estimate_motor_efficiency_motor_systemts2.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2005. *Replace V-Belts with Cogged or Synchronous Belt Drives*. DOE/GO-102005-2060. U.S. Department of Energy.

http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/replace_vbelts_motor_systemts5.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2005. *Test for Pumping System Efficiency*. DOE/GO-102005-2158. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/test_pumping_system_pumping_systemts4.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2006. Improving Pumping System Performance: A Sourcebook for Industry, Second Edition. DOE-GO 102006-2079. Prepared by Lawrence Berkeley National Laboratory, Berkeley, CA, Resource Dynamics Corporation, Vienna, VA, and the Alliance to Save Energy, Washington, DC. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/pump.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2006. *Low-Temperature Reduction of Alumina Using Fluorine-Containing Ionic Liquids*. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/industries-technologies/aluminum/pdfs/ionicliquids.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2008. Improving Process Heating System Performance: A Sourcebook for Industry, Second Edition. DOE-GO 102008-2429. Prepared by Lawrence Berkeley National Laboratory, Berkeley, CA, and Resource Dynamics Corporation, Vienna, VA. U.S. Department of Energy and Industrial Heating Equipment Association.

http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/process_heating_sourcebook2.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2008. *Waste Heat Recovery: Technology and Opportunities in U.S. Industry*. Prepared by BCS, Incorporated, Laurel, MD. U.S. Department of Energy.

http://www1.eere.energy.gov/manufacturing/intensiveprocesses/pdfs/waste_heat_recovery.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2009. *Combined Heat and Power: A Decade of Progress, A Vision for the Future*. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/distributedenergy/pdfs/chp_accomplishments_booklet.pdf

ITP (Industrial Technologies Program), EERE (Energy Efficiency and Renewable Energy). 2010. *BestPractices Steam Specialist Qualification Training*. U.S. Department of Energy.

Motor Challenge. 1996. *Buying an Energy-Efficient Electric Motor*. DOE/GO-10096-314. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/mc-0382.pdf

Motor Challenge. 1997. *Determining Electric Motor Load and Efficiency*. DOE/GO-10097-517. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/10097517.pdf

OIT (Office of Industrial Technologies), EERE (Energy Efficiency and Renewable Energy). 2000. *Overview of Energy Flow for Industries in Standard Industrial Classifications 20-39.* 71563-00. Prepared by Arthur D. Little, Inc., Cambridge, MA. U.S. Department of Energy. http://steamingahead.org/library/adlittle.pdf

OIT (Office of Industrial Technologies), EERE (Energy Efficiency and Renewable Energy). 2001. *Assessment of the Market for Compressed Air Efficiency Services.* DOE/GO-102001-1197. Prepared by XENERGY, Inc., Burlington, MA. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/newmarket5.pdf

OIT (Office of Industrial Technologies), EERE (Energy Efficiency and Renewable Energy). 2002. Steam System Opportunity Assessment for the Pulp and Paper, Chemical Manufacturing, and Petroleum Refining Industries. Prepared by Resource Dynamics Corporation, Vienna, VA. U.S. Department of Energy. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/steam_assess_mainreport.pdf

OIT (Office of Industrial Technologies), EERE (Energy Efficiency and Renewable Energy). 2002. *United States Industrial Electric Motor Systems Market Opportunities Assessment*, Prepared by Xenergy, Inc., Burlington, MA. U.S. Department of Energy and Oak Ridge National Laboratory. http://www1.eere.energy.gov/manufacturing/tech_deployment/pdfs/mtrmkt.pdf

Ozalp, Nesrin, and Barry Hyman. 2007. "Allocation of Energy Inputs Among the End-Uses in the US Petroleum and Coal Products Industry." *Energy* 32 (8): 1460-70.

Ozalp, Nesrin, and Barry Hyman. 2006. "Energy End-Use Model of Paper Manufacturing in the US." *Applied Thermal Engineering* 26 (5-6): 540-8.

Ozalp, Nesrin. 2008. "Energy and Material Flow Models of Hydrogen Production in the U.S. Chemical Industry." *International Journal of Hydrogen Energy* 33(19): 5020-34.

Platts. 2004. "HVAC: Fans." Platts. http://www.reliant.com/en_US/Platts/PDF/P_PA_32.pdf

Roth, Kurt W., Detlef Westphalen, John Dieckmann, Sephir D. Hamilton, and William Goetzler. 2002. Energy Consumption Characteristics of Commercial Building HVAC Systems, Volume III: Energy Savings Potential. Prepared by TIAX LLC, Cambridge, MA. U.S. Department of Energy, Building Technologies Program.

http://apps1.eere.energy.gov/buildings/publications/pdfs/commercial initiative/hvac volume3 final report.pdf

Shipley, Anna, Anne Hampson, Bruce Hedman, Patti Garland, and Paul Bautistia. 2008. *Combined Heat and Power: Effective Energy Solutions for a Sustainable Future*. ORNL/TM-2008/224. Prepared by Oak Ridge National Laboratory, Oak Ridge, TN, SENTECH, Inc., Bethesda, MD, and Energy and Environmental Analysis, and ICF, International Company, Arlington, VA. U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Industrial Technologies Program. http://www1.eere.energy.gov/manufacturing/distributedenergy/pdfs/chp_report_12-08.pdf

Sustainability Victoria. 2009. *Energy Efficiency Best Practice Guide Industrial Refrigeration*. Prepared by Climate Managers. Sustainability Victoria.

http://www.resourcesmart.vic.gov.au/documents/BP Refrigeration Manual.pdf

U.S. Census Bureau. 2007. "North American Industry Classification System (NAICS)." U.S. Census Bureau. http://www.census.gov/eos/www/naics/