

BIOMASS POWER REFERENCES

Adams, P.W.R., and K. Lindegaard. (2016). A Critical Appraisal of the Effectiveness of UK Perennial Energy Crops Policy since 1990. *Renewable and Sustainable Energy Reviews* 55 (March): 188–202. doi:10.1016/j.rser.2015.10.126.

Alexander, P., Dominic, M. & Mark., D.A. R.. (2015). Evaluating Potential Policies for the UK Perennial Energy Crop Market to Achieve Carbon Abatement and Deliver a Source of Low Carbon Electricity. *Biomass and Bioenergy* 82 (November): 3–12. doi:10.1016/j.biombioe.2015.04.025.

AMPERE. (2014). *AMPERE Database*. Retrieved from: <https://secure.iiasa.ac.at/web-apps/ene/AMPEREDB/dsd?Action=htmlpage&page=about#regiondefs>.

Bassam, N. (2010). *Handbook of Bioenergy Crops*. Washington: Earthscan.

BioFuture Platform. (2019). *BioFuture Platform : Home*. Retrieved from BioFuture Platform: Kickstarting a global, advanced bioeconomy: <http://biofutureplatform.org/>

Black & Veatch. (2012). *Cost and Performance Data for Power Generation Technologies*. Prepared for the National Renewable Energy Laboratory. Black & Veatch Holding Company. Retrieved from <https://www.bv.com/docs/reports-studies/nrel-cost-report.pdf>

Crawford, M. (2012). *Fluidized-Bed Combustors for Biomass Boilers*. American Society of Mechanical Engineers. Available at: <https://www.asme.org/engineering-topics/articles/boilers/fluidized-bed-combustors-for-biomass-boilers>.

DEA. (2012). *Technology Data for Energy Plants Generation of Electricity and District Heating, Energy Storage and Energy Carrier Generation and Conversion*. Danish Energy Agency and Energinet.dk. Retrieved from: https://www.energinet.dk/SiteCollectionDocuments/Danske%20dokumenter/Forskning/Technology_data_for_energy_plants.pdf

DeCicco, J. Danielle, M., Liu, Y. Heo, J, Krishnan,R., Kurthen, A. & Wang, L. (2016). Carbon Balance Effects of U.S. Biofuel Production and Use. *Climatic Change* 138 (3–4): 667–80. doi:10.1007/s10584-016-1764-4.

Ecofys. (2018). *Energy transition within 1.5°C*. A disruptive approach to 100% decarbonization of the global energy system by 2050. Ecofys- A Navigant Company. Retrieved from: <https://www.navigant.com/-/media/www/site/downloads/energy/2018/navigant2018energytransitionwithin15c.pdf>

EIA, US. (2016). *Capital Cost Estimates for Utility Scale Electricity Generating Plants*. Washington: US Department of Energy Retrieved on 25 November from : https://www.eia.gov/analysis/studies/powerplants/capitalcost/pdf/capcost_assumption.pdf.

EIA. (2015). *Updated Capital Cost Estimates for Utility-scale Electricity Generating Plants*. Washington: U.S. Energy Information Administration. Retrieved from <http://www.eia.gov/forecasts/capitalcost/>.

El Bassam, N. (2010). *Handbook of Bioenergy Crops: A Complete Reference to Species, Development and Applications*. London ; Washington: Earthscan.

Equinor. (2018). *Energy Perspectives 2018, Long-term macro and market outlook*. Equinor. Retrieved from: <https://www.equinor.com/en/news/07jun2018-energy-perspectives.html>

Evans, A., Vladimir, S. & Evans, T.J. (2010). Sustainability Considerations for Electricity Generation from Biomass. *Renewable and Sustainable Energy Reviews* 14 (5): 1419–27. doi:10.1016/j.rser.2010.01.010.

Fagernas, L. J. (2006). *Bioenergy in Europe: Opportunities and Barriers*. Vuorimiehentie: Julkaisija-Utgivare.

GBEP. (2011). *The Global Bioenergy Partnership Sustainability Indicators For Bioenergy*. Rome: The Global Energy Partnership.

GBEP. (2019). *Working together for Sustainable Development*. The Global Bioenergy Partnership. Retrieved from: <http://www.globalbioenergy.org/aboutgbep/history/en/>

Greenpeace. (2015). *World Energy [R]evolution, a Sustainable World Energy Outlook* Retrieved from: <http://www.greenpeace.org/international/Global/international/publications/climate/2015/Energy-Revolution-2015-Full.pdf>.

Gu, H.& Bergman, R.D. (2017). Cradle-to-Grave Life Cycle Assessment of Syngas Electricity from Woody Biomass Residues. *Wood and Fiber Science*. Retrieved on 15 February 2019 from: <https://wfs.swst.org/index.php/wfs/article/view/2539>

IEA and NEA (2010). *Projected Costs of Generating Electricity – edition 2010*. Organisation for Economic Co-operation and Development - International Energy Agency and Nuclear Energy Agency. France. Retrieved from : <http://www.worldenergyoutlook.org/media/weowebiste/energymodel/ProjectedCostsofGeneratingElectricity2010.pdf>

IEA. (2012). *Technology Roadmap - Bioenergy for Heat and Power*. International Energy Agency. Retrieved from: http://www.iea.org/publications/freepublications/publication/2012_Bioenergy_Roadmap_2nd_Edition_WEB.pdf.

IEA. (2016). *Energy Technology Perspectives 2016 - Towards Sustainable Urban Energy Systems*. International Energy Agency. Available at: <http://www.iea.org/etp/IEEJ>. (2018). *IEEJ Outlook 2018 - Prospects and challenges until 2050 - Energy Environment and Economy*. Institute of Energy Economics, Japan. Tokyo.

IEA. (2017a). *Energy Technology Perspectives 2017 : Catalysing energy technology transformations*. International Energy Agency. Paris. Retrieved from : <https://www.iea.org/etp2017/>

IEA. (2017b). *Technology Roadmap: Delivering Sustainable Bioenergy*. Paris: International Energy Agency.

IEA. (2017c). *IEA Bioenergy Response to Chatham House report “Woody Biomass for Power and Heat: Impacts on the Global Climate”*. Retrieved from www.ieabioenergy.com: <http://www.lfpdc.lsu.edu/publications/bits/2018/20180914c-IEA-Bioenergy-Response-to-Chatham-House-report.pdf>

IEA. (2018). *World Energy Outlook 2018*. International Energy Agency (IEA). Retrieved from: <https://webstore.iea.org/world-energy-outlook-2018>

IEA (2019). *Energy Prices and Taxes – Quarterly Statistics – First Quarter 2019*. International Energy Agency. OECD/IEA, Paris.

IEEJ. (2018). *IEEJ Outlook 2019 – Energy transition and a thorny oath for 3E challenges*. The Institute of Energy Economics Japan. Retrieved from: <https://eneken.ieej.or.jp/data/8122.pdf>

Immerzeel, D. J., Verweij, P. A., van der Hilst, F., & Faaij, A. P. C. (2014). Biodiversity impacts of bioenergy crop production: a state-of-the-art review. *GCB Bioenergy*, 6(3), 183–209. Retrieved from: <http://doi.org/10.1111/gcbb.12067>

IPCC. (2014). Intergovernmental Panel on Climate Change, and Ottmar Edenhofer, eds. *Climate Change 2014: Mitigation of Climate Change: Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. New York, NY: Cambridge University Press.

IRENA. (2014). *Global Bioenergy Supply and Demand Projections: A Working Paper for REmap 2030*. International Renewable Energy Agency. Retrieved from: http://www.irena.org/REMAP/IRENA_REmap_2030_Biomass_paper_2014.pdf.

IRENA. (2016). *Renewable Energy Statistics 2016*. International Renewable Energy Agency. Retrieved from: http://www.irena.org/DocumentDownloads/Publications/IRENA_RE_Statistics_2016.pdf.

IRENA. (2018). *Renewable Energy Statistics 2018*; Retrieved on 15 November 2018 from <https://www.irena.org/publications/2018/Jul/Renewable-Energy-Statistics-2018>. Abu Dhabi: IRENA.

IRENA. (2018a). *Global Energy Transformation : A Roadmap to 2050*; Retrieved on 15 November 2018 from https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2018/Apr/IRENA_Report_GET_2018.pdf

IRENA. (2018b). *Power Generation Costs in 2017*; retrieved on 25 November 2018 from <https://www.irena.org/publications/2018/Jan/Renewable-power-generation-costs-in-2017>. Abu Dhabi: IRENA.

IRENA. (2018c). IRENA : *Renewable Energy Topic; featured Dashboard*. Retrieved from: <http://resourceirena.irena.org/gateway/dashboard/>

IRENA. (2019). *Global energy transformation: The REmap transition pathway* (Background report to 2019 edition), International Renewable Energy Agency, Abu Dhabi.

Johansson, V. L. (2018, November 28). Biomass in the electricity system: A complement to variable renewables or a source of negative emissions? *Energy*, *168*, 532-541. doi:doi.org/10.1016/j.energy.2018.11.112

JRC. (2012). *Study on the State of Play of Energy Efficiency of Heat and Electricity Production Technologies*. Luxembourg: European Commission Joint Research Centre. Retrieved from: <https://setis.ec.europa.eu/system/files/4.Efficiencyofheatandelectricityproductiontechnologies.pdf>.

JRC. (2013). *The JRC-EU-TIMES Model: Assessing the Long-Term Role of the SET Plan Energy Technologies*. Luxembourg: Joint Research Center, European Commission. Retrieved from: <http://publications.jrc.ec.europa.eu/repository/handle/JRC85804>.

Koornneef, J. Junginger, M. & Faaij, A. (2007). Development of Fluidized Bed combustion—An Overview of Trends, Performance and Cost. *Progress in Energy and Combustion Science* *33* (1): 19–55. doi:10.1016/j.pecs.2006.07.001.

Lazard. (2018). *Lazard's Levelized Cost of Energy Analysis - Version 12.0*; New York: Lazard. Retrieved from : <https://www.lazard.com/media/450773/lazards-levelized-cost-of-energy-version-120-vfinal.pdf>

LBNL. (2016). *Renewables Portfolio Standards Resources*. Lawrence Berkeley National Laboratory. Retrieved from: <https://emp.lbl.gov/projects/renewables-portfolio>.

Liu, H. Y. (2014). Comparative Evaluation of Biomass Power Generation Systems in China Using Hybrid Life Cycle Inventory Analysis. *The Scientific World Journal*. Retrieved from : <https://www.hindawi.com/journals/tswj/2014/735431/>, pp.1-14.

Masanet, E., Chang, Y., Gopal,A.R., Larsen, P, Morrow,W.R., Sathre, R., Shehabi, A. & Zhai, P. (2013). Life-Cycle Assessment of Electric Power Systems. *Annual Review of Environment and Resources* 38 (1): 107–36. doi:10.1146/annurev-environ-010710-100408.

NRDC. (2018). *Our Forests Aren't Fuel*. Natural Resources Defense Council. Retrieved on 24/3/2019 from: <https://www.nrdc.org/resources/our-forests-arent-fuel>.

NREL. (2011). *Life Cycle Assessment Harmonization*. National Renewable Energy Laboratory. Retrieved from: <http://en.openei.org/apps/LCA/>.

Pehnt, M. (2006). Dynamic Life Cycle Assessment (LCA) of Renewable Energy Technologies. *Renewable Energy* 31 (1): 55–71. doi:10.1016/j.renene.2005.03.002.

Perilhon, C., D. Alkadee, G. Descombes, & Lacour, S. (2012). Life Cycle Assessment Applied to Electricity Generation from Renewable Biomass. *Energy Procedia* 18: 165–76. doi:10.1016/j.egypro.2012.05.028.

Rajvanshi, A. K. (1986). Biomass Gasification. *Alternative Energy in Agriculture., II:82–102*. Boca Raton, Fla: CRC Press. Retrieved from: <http://www.nariphaltan.org/gasbook.pdf>.

Ram M., Bogdanov D., Aghahosseini A., Gulagi A., Oyewo A.S., Child M., Caldera U., Sadovskaia K., Farfan J., Barbosa LSNS., Fasihi M., Khalili S., Dalheimer B.,Gruber G., Traber T., De Caluwe F., Fell H.-J., Breyer C. (2019). *Global Energy System based on 100% Renewable Energy –Power, Heat, Transport and Desalination Sectors*. Study by Lappeenranta University of Technology and Energy Watch Group, Lappeenranta, Berlin, March 2019. Retrieved from: http://energywatchgroup.org/wp-content/uploads/EWG_LUT_100RE_All_Sectors_Global_Report_2019.pdf

Ram M., Bogdanov, D., Aghahosseiniu, A., Oyewo, A.S., Gulagi, A., Child, M., Fell, H.K., Breyer, C. (2017). *Global Energy System based on 100% Renewable Energy – Power Sector.*, Study by Lappeenranta University of Technology and Energy Watch Group. Lappeenranta, Berlin, November 2017.

REN21. (2015). *Renewables 2015 Global Status Report*. Available at: http://www.ren21.net/wp-content/uploads/2015/07/REN12-GSR2015_Onlinebook_low1.pdf.

REN21. (2018). *Renewables 2018 : Global Status Report*. Paris: REN21 Secretariat. Retrieved from : http://www.ren21.net/wp-content/uploads/2018/06/17-8652_GSR2018_FullReport_web_final_.pdf

Schmidt T. S., R. Born, & M. Schneider (2012). Assessing the costs of photovoltaic and wind power in six developing countries. *Nature Climate Change* 2. 548 – 553.

Searchinger, T., Heimlich, R., Houghton, R.A., Dong, F., Elobeid, A., Fabiosa, J. Tokgoz, S., Hayes, D. & Yu, T.H. (2008). Use of U.S. Croplands for Biofuels Increases Greenhouse Gases Through Emissions from Land-Use Change. *Science* 319 (5867): 1238–40. doi:10.1126/science.1151861.

Shen, X. K. (2015). The Comparative Life Cycle Assessment of Power Generation from Lignocellulosic Biomass. *Sustainability*, 12974-12987.

Sussams, L. & Leaton, J. (2017). *Expect the Unexpected : the Disruptive Power of Low-carbon Technology*. Carbon Tracker Initiative. London.

Toensmeier, E.. (2016). *The Carbon Farming Solution: A Global Toolkit of Perennial Crops and Regenerative Agriculture Practices for Climate Change Mitigation and Food Security*. White River Junction, Vermont: Chelsea Green Publishing.

Tsiropoulos I., Tarvydas, D. & Zucker, A. (2018). *Cost of development of low carbon energy technologies - Scenario-based cost trajectories to 2050*. Luxembourg: European Commission.

Turconi, R., Alessio, B. & Thomas, A. (2013). Life Cycle Assessment (LCA) of Electricity Generation Technologies: Overview, Comparability and Limitations. *Renewable and Sustainable Energy Reviews* 28 (December): 555–65. doi:10.1016/j.rser.2013.08.013.

UNEP. (2007). *Technical Study Report on Biomass Fired Fluidized Bed Combustion Boiler Technology for Cogeneration*. UNEP-DTIE Energy Branch. Retrieved from: http://www.unep.org/climatechange/mitigation/Portals/93/documents/EnergyEfficiency/FBC_30_sep_2007.pdf.

WBA. (2016). *WBA Global Bioenergy Statistics 2016*. World Bioenergy Association. Retrieved from <http://www.worldbioenergy.org/content/wba-global-bioenergy-statistics-2016>.

World Bank. (2016). *Arable Land*. Retrieved from World Bank Data: <https://data.worldbank.org/indicator/AG.LND.ARBL.HA.PC?end=2013&start=2013&view=bar>

Yakima County Public Works. (2003). *Review of Biomass Fuels and Technologies*. Retrieved from: http://www.southernregion.fs.fed.us/woodybiomass/documents/Yakima_County_Biomass_Report.p

Yang, Q. Z. (2018). Hybrid life-cycle assessment for energy consumption and greenhouse gas emissions of a typical biomass gasification power plant in China. *Journal of Cleaner Production*, Retrieved from: <https://www.sciencedirect.com/science/article/pii/S0959652618327550>. pp.661-671.

Zucaro, A., Annachiara, F., Massimo, F., Simone, B., Riccardo, B. & Angelo, F. (2015). Comparative Attributional Life Cycle Assessment of Annual and Perennial Lignocellulosic Feedstocks Production under Mediterranean Climate for Biorefinery Framework: Comparative LCA of Lignocellulosic Feedstocks Production. *Integrated Environmental Assessment and Management* 11 (3): 397–403. doi:10.1002/ieam.1604.