Reading list for Biofuels for Transportation, TKMJ31, 2026

Compulsory literature

Books

Baumann, H, and A-M Tillman, (2004) *The Hitch Hiker's Guide to LCA: An Orientation in Life Cycle Assessment Methodology and Application* Studentlitteratur
A self-guide to life-cycle assessment. Useful to read "Chapters 1 (LCA in a Nutshell), 3 (Goal and Scope Definition), and 4 (Inventory Analysis).

Additional literature

Books

Börjesson, P., Tufvesson, L., Lantz, M., (2010) *Life cycle assessment of biofuels in Sweden* Lund University

Dominik Rutz & Rainer Janssen, (2008) *Biofuel Technology Handbook*
http://www.isibang.ac.in/~library/onlinerz/resources/Biofuel_Technology_Handbook_version2_

European Commission, (2015) *The impact of biofuels on transport and the environment, and their connection with agricultural development in Europe*
ISBN: 9789282363294
The book is ordered by European Commission and provides an overview of biofuels production and consumption and of related policies worldwide. It also contains analysis and discussion of key aspects affecting the overall sustainability of biofuels; including their impact on agricultural markets, emissions from indirect land-use change, and greenhouse gas emissions.
http://dx.doi.org/10.2861/775

IEA, (2004) *Biofuels for Transport: An International Perspective* Paris : OECD Publishing, 2004.
ISBN: 9789264015135
This book is published in 2004, so some of the information may be outdated. However, it contains useful information about the technical basics of biofuel production from several types of biomass (particularly chapter 2).
https://www.cti2000.it/Bionett/All-2004-004%20IEA%20biofuels%20report.pdf

IEA Bioenergy: Task 41, (2020) *Advanced Biofuels – Potential for Cost Reduction*
https://task39.sites.olt.ubc.ca/files/2020/02/Advanced-Biofuels-Potential-for-

Cost-Reduction-Final-Draft.pdf

Mittelbach, M. and Remschmidt, C., (2006) *Biodiesel: The Comprehensive Handbook* Boersedruck GMBH
Learn about biodiesel production processes.

Tuner, M., (2016) *Combustion of Alternative Vehicle Fuels in Internal Combustion Engines*
Report within project "A pre-study to prepare for interdisciplinary research on future alternative transportation fuels", financed by The Swedish Energy Agency

Worldwatch Institute, (2006) *Biofuels for Transport: Global Potential and Implications for Energy and Agriculture*

Articles

Börjesson, P., Good or bad bioethanol from a greenhouse gas perspective – What determines this? *Applied Energy* 2009
doi:10.1016/j.apenergy

Börjesson, P., Mattiasson, B., Biogas as a resource-efficient vehicle fuel *Trends in Biotechnology* 2008
doi:10.1016/j.tibtech

Müller-Langer, Franziska, Stefan Majer, and Sinéad O'Keeffe, Benchmarking Biofuels—a Comparison of Technical, Economic and Environmental Indicators *Energy, Sustainability and Society* 2014
https://doi.org/10.1186/s13705-014-0020-x