



## **Literature for MESS41, Energy and Sustainability applies from autumn semester 2014**

Literature established by The Board of the Lund University Centre for  
Sustainability Studies on 2013-11-19 to apply from 2014-08-31

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See appendix.

**Appendix**  
**Reading list MESS41 Energy and Sustainability, 7.5 credits**  
*Energi och hållbarhet*

Litteraturlista fastställd av LUCSUS styrelse den 2013-11-19.

The literature represents a sampling of recent, relevant, and geographically diverse articles and reports from reputable academic journals and research organizations.

***Overview/trends:***

IEA (2008) World Energy Outlook 2012. (Executive summary) (12 pages) Online at: <http://www.worldenergyoutlook.org/publications/weo-2012/#d.en.26099>

IIASA (2012) Global Energy Assessment: Toward a Sustainable Future. (312 pages, to be skimmed). <http://www.iiasa.ac.at/Research/ENE/GEA>

***Conventional generation*** (i.e., oil, coal, nuclear, biofuels)

Sailor, W.C., Bodansky, D., Braun, C., Fetter, S., van der Zwaan, B (2000) A Nuclear Solution to Climate Change? *Science*, 288, 5469, 1177-78.

Skea, J., Lechtenbo, S., Asuka, J. (2013) Climate policies after Fukushima: three views. *Climate Policy*. 13(1), 36–54.

DeCarolis, J. F., Keith, D. W., Jacobson, M. Z., Masters, G. M. (2001) The real cost of energy. *Science*, 294, 5544, 1000-1003. (Note: two articles)

Tilman, D. et al. (2009) Beneficial Biofuels—The Food, Energy, and Environment Trilemma. *Science* 325, 17 July 270-271.

Fargione, J. et al. (2008) Land Clearing for Biofuel Carbon Debt. *Science* 319, 29 Feb. 1235-1237.

Searchinger, T. et al. (2008) Use of U.S. Croplands for Biofuels Increases Greenhouse Gases Through Emissions from Land-Use Change. *Science* 319, 29 Feb. 1238-1239.

Scharlemann, J.P.W. & Laurance W. F. (2008) How Green are Biofuels? *Science* 319, 4 Jan. 43-44.

McIntyre, R. (2009) Algae's powerful future. *The Futurist*. 25-32 (March April).

Goldemberg, J. (2007) Ethanol for a Sustainable Energy Future. *Science* 315, 9 Feb. 808-810.

***Alternatives*** (i.e., solar, wind, geothermal, hydro)

Lewis, N. Toward cost-effective solar energy use. (2007) *Science*, 315, 798-801. (9 Feb.).

Marinova, D., & Balaguer, A. (2009) Transformation in the photovoltaics industry in Australia, Germany and Japan: Comparison of actors, knowledge, institutions and markets. *Renewable Energy* 34, 461-464.

Jacobson, M. Z., & Masters, G.M. (2001) Exploiting wind versus coal. *Science*, 293, 5534, 1438.

Lu, X., McElroya, M. B., Kiviluoma, J. (2009) Global potential for wind-generated electricity. *Proceedings of the National Academy of Sciences (PNAS)*, 106, 27, 10933–10938.

McElroy, *et al.* (2009) Potential for wind-generated electricity in China. *Science*, 325, 1378-1380 (11 Sept).

Hähnlein, S., Bayer, P., Ferguson, G., Blum, P. (2013) Sustainability and policy for the thermal use of shallow geothermal energy. *Energy Policy*, 59, 914-925.

***Others:***

Moriarty, P. & Honnery, D. (2009) Hydrogen's role in an uncertain energy future. *Energy Policy*, 34, 31-39.

Jacoby, M., Chalk, S.B. Romm, (2005) Competing visions of a hydrogen economy (debate article). *Chemical & Engineering News*. 83, 34, 30-35 (22 Aug.).

Hammons, T. J. (2008) Integrating renewable energy sources into European grids. *Electrical Power & Energy Systems*. 30, 462-475.

Thomson, D. & Khare, A. (2008) Carbon Capture and Storage (CCS) Deployment – Can Canada Capitalize on Experience? *Journal of Technology Management and Innovation*. 3, 4, 111-118.

Goldberg, D., Takahashi, T., Slagle, A. L. (2008) Carbon dioxide sequestration in deep-sea basalt. *Proceedings of the National Academy of Sciences (PNAS)*, 105, 29, 9920–9925.

Livieratos, S., Vogiatzaki, V-E., Cottis, P. (2013) A Generic Framework for the Evaluation of the Benefits Expected from the Smart Grid. *Energies*. 6, 988-1008; doi:10.3390/en6020988.

***Global South:***

Sagar A. D. & Kartha, S. (2007) Bioenergy and sustainable development? *The Annual Review of Environment and Resources*. 32. 131-167.

Amigun, B., Musango J. K., & Stafford, W. (2011) Biofuels and sustainability in Africa. *Renewable and Sustainable Energy Reviews*. 15, 1360-1372.

Clancy, J. Ummer F., Shakya, I. & Kelkar, G. (2007) Appropriate gender-analysis tools for unpacking the gender-energy-poverty nexus. *Gender & Development*. 15, 241-257.

Mulugetta, Y. (2008) Human capacity and institutional development towards a sustainable energy future in Ethiopia. *Renewable and Sustainable Energy Reviews*. 12, 1435-1450.

Ejigu, M. (2008) Toward energy and livelihoods security in Africa: smallholder production and processing of Bioenergy as a strategy. *Natural Resources Forum*. 32. 152-162.

***Energy Governance:***

Lund, P.D. (2007) Effectiveness of policy measures in transforming the energy system. *Energy Policy*. 35, 627-639.

Lesser, J. A. (2008) Design of an economically efficient feed-in tariff structure for renewable energy development. *Energy Policy*. 36. 981-990.

Ringel, M. (2006) Fostering the use of renewable energies in the European Union: the race between feed-in tariffs and green certificates. *Renewable Energy*. 31, 1-17.

Palm, J. (2006) Development of sustainable energy systems in Swedish municipalities: A matter of path dependency and power relations. *Local Environment*. 11(4), 445-457.

Sandén, B. A., & Azar, C. (2005) Near-term technology policies for long-term climate targets—economy wide versus technology specific approaches. *Energy Policy*. 33, 1557-1576.

Gujba, H., Thorne, S., Mulugetta, Y., Rai, K., Sokona Y. (2012) Financing low carbon energy access in Africa, *Energy Policy*. 47, 71-78.

***Reference/Supplemental materials: (not for literature seminars)***

Boyle, et al. (eds) 2003. *Energy Systems and Sustainability*. Oxford: Oxford University Press  
(reference copies in Amanda's office)

2013 Energy Information Administration (US DOE) International Energy Outlook. Online at: <http://www.eia.gov/forecasts/ieo/>

International Energy Agency (2009) Lessons learned from the energy policies of IEA countries: Key cross-cutting issues 2007/2008. IEA information paper. [http://www.iea.org/textbase/publications/free\\_new\\_Desc.asp?PUBS\\_ID=2140](http://www.iea.org/textbase/publications/free_new_Desc.asp?PUBS_ID=2140)  
(Note: 90 pages. To be used as a general overview)

Generation type/topics: International Energy Agency <http://www.iea.org/topics/>

Shafiee, S Topal, E. (2009) When will fossil fuel reserves be diminished? *Energy Policy* 37, 181-189.

