Resume: Gunnar S. Eskeland, born December 27th, 1959

Professor of Economics, Sparebanken Vest Chair, since 2008.

NHH, Norwegian School of Economics. Teaches, inter alia, courses in Environmental Economics and Climate Change Economics, at the master level.

Also: Senior Researcher, SNF; Energy and Climate, and CenSES, Research Director

Education: Norwegian School of Economics and Business Administration

MBA, 1984, ABD, 1986. Ph. D. (Dr. Oecon), 2001.

Dissertation: PhD; Taxing Bads by Taxing Goods: Environmental protection under optimal taxation (committee: A. Sandmo, G. Asheim, V. Christiansen). Licenciate thesis: Cruise games: strategic competion in tourism markets.

Eskeland's PhD thesis in optimal taxation theory develops normative principles for how an economy is guided towards environmental protection, efficiency, and equity.

Employment and Experience:

1984-86, Kloster Shipowning Company (Vard), 1986-88, SNF, Statoil Scholar, 1988 to 2003. The World Bank Research Dept. World Development Report team, 2003: Institutions for Sustainable Development; 2003-08: Research Director CICERO, Center for Climate and Environmental Research, Oslo;

Fields of expertise: Public finance and welfare economics, development economics, environmental economics, climate change and policy, shipping and transport economics, energy economics, fiscal decentralization, contract theory and institutions

Areas of application/countries: Energy and environmental economics, shipping and transport economics, public finance, climate policy and negotiations, company and asset valuation, public expenditures, institutional economics; Argentina, Bolivia, Brazil, Chile, Colombia, El Salvador, Indonesia, India, Kenya (residency), Mexico, Namibia, Norway, Sweden, Russia, USA, Europe.

Languages: Spanish and English fluently, in addition to Scandinavian (mother tounge) and some German.

Referee for Journals (sample): American Economic Review, Energy Journal, Energy Economics, European Economic Review, Journal of Public Economics, Journal of Development Economics, Journal of Transport Economics and Policy, Journal of Economic Behavior and Organization, Journal of Environmental Economics and Management, Public Choice, World Bank Economic Review, World Bank Research Observer

Research Grants, lead and WP management (sample): World Bank research committee; EU: ADAM; Sweden: Expertgruppen, CLIPORE; Norway NRC: CELECT; ICEPS; CenSES; INTREPED. Commercial partners: Hydro, Statkraft, Statnett, BK, BKK, NVE, Min o Environment, Transport Norway, Institute of Transport Economics (TOI). NordSTar, Nordic Center of Excellence, HyFiTransport; CenSES, World Bank, UNDP.

Outreach: Eskeland writes about environment and climate policy, public finance, energy and transport also in broader for a, typically about monthly op-eds in national newspapers.

Publications: peer-reviewed academic journals

Eskeland, G.S., & Jiménez, E. (1992). Policy Instruments for Pollution Control in Developing Countries. *World Bank Research Observer* 7(2):145–69. http://wbro.oxfordjournals.org/content/7/2/145.abstract

Eskeland, G.S. (1994) A Presumptive Pigovian Tax: Complementing Regulation to Mimic an Emission Fee. *World Bank Economic Review* 8(3):373–94. http://www.jstor.org/discover/10.2307/3989955?uid=374966131&uid=3739584&uid=2134&uid=2&uid=3739256&uid=5912280&sid=21104292109503

Eskeland, G.S., Alberini, A., Krupnick, A., & McGranahan, G. (1996). Determinants of Diarrheal Disease in Jakarta. *Water Resources Research* 32(7):2259–69.

Eskeland, G.S., Ostro, B., Sánchez, J. M., Aranda, C. (1996). Air Pollution and Mortality: Results from a Study of Santiago, Chile. *Journal of Exposure Analysis and Environmental Epidemiology* 6 (1).

Eskeland, G.S. & Feyzioglu, T. (1997). Rationing Can Backfire: The "Day without a Car" in Mexico City." *The World Bank Economic Review* 11(3): 383–408. http://elibrary.worldbank.org/doi/pdf/10.1093/wber/11.3.383

Eskeland, G.S. & Feyzioglu, T. (1997). Is Demand for Polluting Goods Manageable? An Econometric Study of Car Ownership and Use in Mexico. *Journal of Development Economics* 53(2):423–45.

http://www.sciencedirect.com/science/article/pii/S0304387897000175

Eskeland, G.S. (1997). Air Pollution Requires Multipollutant Analysis: The Case of Santiago, Chile. *American Journal Agricultural Economics* 79(5):1636–41. http://www.jstor.org/stable/1244395

Eskeland, G.S., Jiménez, E. & Liu, L. (1998). Prices that Clear the Air: Energy Use and Pollution in Chile and Indonesia. *The Energy Journal* 19(3):85–106. http://www.jstor.org/discover/10.2307/41322797?uid=374966131&uid=3739584&uid=2&uid=3739256&uid=5912280&sid=21104292109503

Eskeland, G.S. & Xie, J. (1998) Acting Globally while Thinking Locally: Is the Global Environment Protected by Transport Emission Control Programs? *Journal of Applied Economics* 1(2):385–411.

(Earlier version at http://www.worldbank.org/research/workingpapers)

Eskeland, G.S., Sánchez, J. M., Feyzioglu, T. & Ostro, B. (1999) Air Pollution and Health Effects: A Study of Medical Visits among Children in Santiago, Chile. *Environmental Health Perspectives* 107(1):69–73.

Eskeland, G.S. & Harrison, A. E. (2003) Moving to Greener Pastures? Multinationals and the Pollution-haven Hypothesis. Journal of Development Economics, _vol 70, pp 1-23. http://ideas.repec.org/a/eee/deveco/v70y2003i1p1-23.html

- Eskeland, G.S., Eigen-Zucchi, C. & Shalizi, Z. (2003) Institutions Needed for More than Growth. *Finance & Development*, 2003, 40(2), 42-43 http://search.proquest.com/docview/209400553/fulltextPDF
- Eskeland, G.S., Gan, Lin & Kolshus, H. H. (2005) Green electricity market development: lessons from Europe and the U.S. *Energy Policy*, 35: pp. 144.155. http://www.sciencedirect.com/science/article/pii/S0301421505002867
- Eskeland, G.S. & Filmer, D. (2007) Autonomy, Participation and Learning: Findings from Argentine Schools, and implications for Decentralization. *Education Economics*. 15, 1, 103-127. http://ideas.repec.org/a/taf/edecon/v15y2007i1p103-127.html
- Eskeland, G.S. & Mestl, H. E. (2009) Richer and healthier, but not Greener? Choices concerning household energy use in India. *Energy Policy*, 37(8), 3009-3019 http://www.sciencedirect.com/science/article/pii/S0301421509002080
- Eskeland, G.S. & Harstad, B. (2010) Trading for the future: Signaling in permit markets". Journal of Public Economics, 2010, 94 (9-10), pp 749-760. http://www.sciencedirect.com/science/article/pii/S0047272710000277
- Eskeland, G.S. & Mideksa, T. (2010) Electricity demand in a changing climate. *Mitigation and Adaptation Strategies for Global Change*, 2010, 15(8), 877-897 <u>http://link.springer.com/article/10.1007%2Fs11027-010-9246-x</u>
- Eskeland, G.S., Linnerud, K. & Mideksa, T. (2011) The Impact of Climate Change on Nuclear Power Supply" *Energy Journal*, 2011, vol 32, no1 http://www.iaee.org/en/publications/ejarticle.aspx?id=2411
- Eskeland, G.S., Mideksa, T & Rive, N. (2011) Europe's climate goals and the electricity sector. Energy Policy, Elsevier, vol. 41(C), 200-211. https://ideas.repec.org/a/eee/enepol/v41y2012icp200-211.html
- Eskeland, G.S. (2012) Electrification of transport: Which emissions are ours? Economist (*Sosialøkonomen*, Norwegian, Oktober).
- Eskeland, G.S. & Kvamsdal, S. (2015) Natural resources and economists. Economist, 2015, book review.
- Eskeland, G.S., Lindstad, H. (2015) Low carbon maritime transport: How speed, size and slenderness amounts to Substantial Capital Energy Substitution. Transportation Research Part D Article accepted for publication: 4-OCT-2015
- Eskeland, G.S., Lindstad, Psaraftis, H., Sandaas, I. & Strømman, A. (2015) Maritime shipping and emissions: A three-layered, damage-based approach. 2015. *Ocean Engineering*, 110, 94-101.
- Eskeland, G.S., Lindstad, H. (2015) Low carbon maritime transport: How speed, size and slenderness amounts to Substantial Capital Energy Substitution. 2015. *Transportation Research Part D* 41, 244-256.
- Eskeland, G.S., Lindstad, H. E., (2016) Environmental regulations in Shipping: Policies leaning towards globalization of scrubbers deserve scrutiny. *Transportation Research Part D* 47, 67-76.
- Eskeland, G.S., Lindstad, H. (2016) Environmental Taxation of Transport. *The International Journal on Green Growth and Development* 2:2, 51-86. ISSN 2393-9567.

Eskeland, G.S., Ni, Y., Giske, J. & Hansen, J. P. (2016) The global potential for carbon capture and storage from forestry. *Carbon Balance and Management*, 11:3. Springer.

Lindstad, H., E., Eskeland. G., S., Rialland, A., 2017. *Batteries in Offshore Support vessels - Pollution, climate impact and economics*. Accepted for Transportation Research Part D

Books, chapters, working papers, and other journals, conferences

Eskeland, G. S. & Shanta, D. Taxing Bads by Taxing Goods:Pollution Control with Presumptive Charges. *Directions in Development Series*, The World Bank, Washington, D. C., USA. http://infohouse.p2ric.org/ref/22/21761.pdf

Eskeland, G.S., Litvack, J. & Rodden, J. editors. (2003). Fiscal Decentralization and the Challenge of Hard Budget Constraints. MIT Press, Cambridge, Mass. http://mitpress.mit.edu/books/fiscal-decentralization-and-challenge-hard-budget-constraints

World Development Report, 2003. Sustainable Development. Team member, with Zmarak Shalizi as Director.

http://wdronline.worldbank.org/worldbank/a/c.html/world_development_report_2003/abstract/WB.0-8213-5150-8.abstract

EU's ADAM project. Book chapters, lead author and coauthor. Books edited by: Hulme and Neufeldt: Cambridge University Press, 2010. *Making Climate Change work for Us*

- Chapter: Transforming the European Energy System; Eskeland et al.
- Chapter: What can social science tell us about meeting the challenge of climate change. Anthony Patt w. Eskeland and other coauthors. Biermann and Pattberge and Zelli, 2010. *Climate governance beyond 2012*.
- Chapter: Technological change: the role of nonstate actors. Alfsen, Eskeland, Linnerud.

Leadership in climate policy: is there a role for early, unilateral emission reductions? NHH Discussion paper series no 6, 2013. Presented Vigo, Florence, Oslo, Bergen. https://www.youtube.com/watch?v=VtMsEs-x-Jc http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2295963

A von Thünen Model of the Commute. Paper presented at Annual Conference of Economics, Stavanger, January 2013.

85 grams. Vehicle taxation and emissions in Norway by 2020. https://www.toi.no/getfile.php/Publikasjoner/T%C3%98I%20rapporter/2013/1264-

1013/1264-2013-elektronisk.pdf

Agalemeration and the Commute, Forekormatet, Pargen, ian 6, 2015

Agglomeration and the Commute. Forskermøtet, Bergen, jan 6, 2015. Environmental Taxation in Transport. GGKP Working Paper 05/2015, also presented, GGKP Third Annual Conference, Venice, Italy, 29-30 January 2015.

Reducing Cost and Environmental Impacts through Hybrid Power Options. With Haakon Lindstad, Hans Jørgen Mørch, Harilaos Psaraftis, Inge Sandaas. WMTC 106 2015.

A Crowded City: Agglomeration and Mobility in Urban Development. With Somik Lal, World Bank, mimeographed.