



Universiteit  
Leiden

The Netherlands

## **Measuring sustainability: an elaboration and application of the system of environmental-economic accounting for Indonesia**

Pirmana, V.

### **Citation**

Pirmana, V. (2022, June 8). *Measuring sustainability: an elaboration and application of the system of environmental-economic accounting for Indonesia*. Retrieved from <https://hdl.handle.net/1887/3307830>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3307830>

**Note:** To cite this publication please use the final published version (if applicable).

## References

## References

- Agras, J., and Chapman, D. (1999). A dynamic approach to the Environmental Kuznets Curve hypothesis. *Ecological Economics*, 28(2), 267-277
- Akenji L, Bengtsson M. (2014). Making sustainable consumption and production the core of sustainable development goals. *Sustainability*. 2014;6(2):513–529
- Akita, Takahiro (2000). Integrating Environmental and Economic Accounts, in *Green GDP Estimates in China, Indonesia, and Japan: An Application of the UN Environmental and Economic Accounting System*. Takahiko Akita and Yoichi Nakamura Eds, the United Nations University, the Institute of Advanced Studies, Tokyo, Japan
- Aktekin, D.E and Budak, H. (2021). The Validity of the Environmental Kuznets Curve Hypothesis in E7 Countries: A Panel data Analysis, in *Discussions between Economic Agents: Panel Data Analysis*, Akyay Ucan Eds, Iksad Publications.
- Allen, D., and Webber, D. (2010). Environmental Kuznets curves: mess or meaning? *International Journal of Sustainable Development & World Ecology*, 17(3), 198-207.
- Alfsen, K. H. and Greker, M. (2007). From Natural Resources and Environmental Accounting to Construction of Indicators for Sustainable Development. *Ecological Economics*, 61, pp. 600-610.
- Alisjahbana, A., Yusuf, A.A. (2000a). Trial Estimates of the 1990 and 1995 System of Integrated Environmental and Economic Accounting, the United Nations University/Institute for Advanced Studies, Tokyo.
- Alisjahbana, A., Yusuf, A.A. (2000b). Indonesia's Genuine Savings Rates: 1980 – 1997, the United Nations University/Institute for Advanced Studies, Tokyo.
- Alisjahbana, A., Yusuf, A.A. (2004). *Green Accounting and Sustainable Development in Indonesia*. UNPAD Press.
- Alisjahbana, A.S., Yusuf, A. A., Anna, Z., Kadarisman, A., Maulana, N., Larasati, W., Megananda; (2018). *Menyongsong SDGs Kesiapan Daerah-daerah di Indonesia* (2nd ed.). Bandung: Unpad Press.
- Alisjahbana, Armida Salsiah, & Murniningtyas, E. (2018). *Tujuan pembangunan berkelanjutan di Indonesia : konsep, target dan strategi implementasi* (2nd ed.). Bandung: Unpad Press.
- Andreoni, J., & Levinson, A. (2001). The simple analytics of the environmental Kuznets curve. *Journal of Public Economics*, 80(2), 269–286. doi:10.1016/s0047-2727(00)0011
- Anielski, M., Wilson, S. (2005). *Counting Canada's natural capital: assessing the real value of Canada's ecosystem services*, Prepared by the Pembina Institute for the Canadian Boreal Initiative.

## References

- Aoki-Suzuki, C.; Bengtsson, M.; Hotta, Y. (2012) International comparison and suggestions for capacity development in industrializing countries: Policy application of economy-wide material flow accounting. *J. Ind. Ecol.* 2012, 16, 467–480.
- Appannagari, D.R.R. (2017) Environmental Pollution Causes and Consequences: A Study. *North Asian International Research Journal of Social Science and Humanities*, 3, 151-161.
- Asici, A. Atil. (2013). Economic growth and its impact on the environment: A panel data analysis. *Ecological Indicators*, 24, 324–333.
- Awasthi M.K. et al. (2018) Mitigation of Global Warming Potential for Cleaner Composting. In: Varjani S., Parameswaran B., Kumar S., Khare S. (eds) *Biosynthetic Technology and Environmental Challenges. Energy, Environment, and Sustainability*. Springer, Singapore. [https://doi.org/10.1007/978-981-10-7434-9\\_16](https://doi.org/10.1007/978-981-10-7434-9_16)
- Badan Pusat Statistik (BPS), various years, Integrated System of Environmental-Economic Accounts of Indonesia [online]. Indonesia Central Bureau of Statistics. Available at:
- Bann, C. Natural capital accounting and the Sustainable Development Goals. *WAVES Policy Briefing*. 2016, 1, 1–8.
- Basarir, A., & Arman, H. (2013). Sustainable development and environmental Kuznets Curve in GCC countries. In *Proceedings of the 13th International Conference on Environmental Science and Technology*, Athens, Greece, September 5 (Vol. 7).
- Beck, K. A., & Joshi, P. (2015). An analysis of the environmental Kuznets curve for carbon dioxide emissions: evidence for OECD and Non-OECD countries. *European Journal of Sustainable Development*, 4(3), 33-33.
- Bello, M.O., Solarin, S.A., Yen, Y.Y. (2018). The impact of electricity consumption on CO<sub>2</sub> emission, carbon footprint, water footprint and ecological footprint: the role of hydropower in an emerging economy. *J. Environ. Manag.* 219, 218–230.
- Bolt, J., & van Zanden, J. L. (2020). Maddison style estimates of the evolution of the world economy. A new 2020 update. *Maddison-Project Working Paper WP-15*, University of Groningen, Groningen, The Netherlands.
- Bolt, K., Matete, M., Clements, M. (2002). *Manual for Calculating Adjusted Net Savings*. Environment Department, World Bank, Washington DC.
- Borowy, I. (2014). *Defining Sustainable Development for Our Common Future: A History of the World Commission Environment and Development [Brundtland Commission]*. London: Routledge.
- Brolinson, H., Sörme, L., Palm, V., Tukker, A., Hertwich, E., Wadeskog, A., Sverige, Naturvårdsverket, (2010). *Methods to assess global*

- environmental impacts from Swedish consumption: synthesis report of methods, studies performed and future development. Naturvårdsverket, Stockholm
- Campbell, C (2019). “Lithium-ion Battery Cells: Cathodes and Costs” <https://thedeepdive.ca/lithium-ion-battery-cells-cathodes-and-costs/>
- Castellani, V., Beylot, A., & Sala, S. (2019). Environmental impacts of household consumption in Europe: comparing process-based LCA and environmentally extended input-output analysis. *Journal of Cleaner Production*, 117966.
- Chen et al. (2021). “Environmental and Economic Impact of Electric Vehicle Adoption in the U.S.”
- Chrysolite, H., Utami, A.F., Mahardika, D., Wijaya, A. (2019). Looking Past the Horizon: the Case for Indonesia ' S Long-Term Strategy for Climate Action. <https://files.wri.org/s3fs-public/looking-past-horizon.pdf> [Accessed 15 Nov. 2019]
- CIM (2014) CIM Definition Standards for Mineral Resources & Mineral Reserves.
- Costanza, R., de Groot, R., Sutton, P., van der Ploeg, S., Anderson, S.J., Kubiszewski, I., Farber, S., Turner, R.K. (2014). Changes in the global value of ecosystem services. *Glob. Environ. Chang.* <https://doi.org/10.1016/j.gloenvcha.2014.04.002> [Accessed 15 Nov. 2019]
- Danish, Ulucak, R., Klan, S. (2020). Determinants of the ecological footprint: role of renewable energy, natural resources, and urbanization. *Sustainable Cities and Society* 54, 101996. <https://doi.org/10.1016/j.scs.2019.101996>.
- Darwanto, Nenik Woyanti, Purbayu Budi Santosa, Hadi Sasana, Imam Ghozali. (2019). The Damaging Growth: An Empiric Evidence of Environmental Kuznets Curve in Indonesia
- Dasgupta, Susmita, Benoit Laplante, Hua Wang, and David Wheeler. (2005). “Confronting the Environmental Kuznets Curve.” In *Economics of the Environment: Selected Readings*, 5th edition, edited by R. Stavins, 399–422. New York: W.W. Norton.
- Dasgupta, P. (2007). Measuring Sustainable Development: Theory and Application. *Asian Development Review*, 24(1), 1–10.
- De Bruyn, S., Ahdour, S., Bijleveld, M., de Graaff, L., Schep, E., Schroten, A., Vergeer, R. (2018). *Environmental Prices Handbook 2017*, CE Delft.
- De Bruyn, S., Bijleveld, M., de Graaff, L., Schep, E., Schroten, A., Vergeer, R., Ahdour, S. (2018). *Environmental Prices Handbook EU28 Version - Methods and numbers for valuation of environmental impacts*. CE Delft.

## References

- Delft University of Technology., n.d. Ecocosts 2007 LCA data on emissions and materials depletion.
- Dietzenbacher, E. (2002) Interregional multipliers: Looking backward, looking forward. *Reg. Stud.* 36 (2): 125–136
- Dinda, S. (2004). Environmental Kuznets curve hypothesis: a survey. *Ecological economics*, 49(4), 431-455. doi:10.1080/09535314.2012.761179
- Domingo, E.V., and Lopez-Dee, E.E.P. (2007). Valuation methods of mineral resources. 11th Meeting of the London Group on Environmental Accounting, Johannesburg, 26-30 March.
- Doucette T. R., McCulloch M.D., (2011). “Modeling the prospects of plug-in hybrid electric vehicles to reduce CO2 emissions”, *Applied Energy*, 88 (7), pp. 2315- 2323.
- Edens, B.; de Haan, M.; Shenau, S. (2011). Initiating a SEEA Implementation Program—A First Investigation of Possibilities. United Nations Department of Economic and Social Affairs, Statistics Division. Sixth Meeting of the UN Committee of Experts on Environmental Economic Accounting, New York, ESA/STAT/AC.238, UNCEEA/6/19. <http://unstats.un.org/unsd/envaccounting/ceea/meetings/UNCEEA-6-19.pdf> (accessed on 17 June 2018).
- Endl, A., Berger, G., & Sedlacko, M. (2012). Renewing the commitment for SD: stock-taking of international and European SD objectives and goals pre-Rio+ 20. European Sustainable Development Network, Quarterly Report, April, [http://www.sd-network.eu/quarterly%20reports/report%20files/pdf/2012-March\\_Renewing\\_the\\_commitment\\_for\\_SD.pdf](http://www.sd-network.eu/quarterly%20reports/report%20files/pdf/2012-March_Renewing_the_commitment_for_SD.pdf)
- ERIA (2020). “The Influence on Energy and the Economy of Electrified Vehicle Penetration in ASEAN”. ERIA Research Project Report 2020, No. 14.
- European Commission, International Monetary Fund, Organisation for Economic Cooperation and Development, United Nations and World Bank. (2003). Handbook of national accounting: integrated environmental and economic accounting 2003, Studies in Methods, Series F, No. 61, Rev. 1. <http://unstats.un.org/unsd/envaccounting/seea2003.pdf>
- European Environment Agency. (2014). Costs of air pollution from European industrial facilities 2008–2012 —, EEA Technical Report. <https://doi.org/10.2800/23502>
- Galli, A., Kitzes, J., Niccolucci, V., Wackernagel, M., Wada, Y., Marchettini, N., 2012. Assessing the global environmental consequences of economic growth through the Ecological Footprint: a focus on China and India. *Ecol. Indicat.* 17, 99–107.

- <https://doi.org/10.1016/j.ecolind.2011.04.022>.
- Gough, A. (2018). Sustainable Development and Global Citizenship Education: Challenging Imperatives. In I. Davies, L-C. Ho, D. Kiwan, C. Peck, A. Peterson, E. Sant, & Y. Waghid (Eds.), *The Palgrave handbook of global citizenship and education*. London:Palgrave.
- Grossman, G.M. and A. B. Kruger (1991). Environmental Impacts of the North American Free Trade Agreement, NBER Working Paper, No: 3914.
- Haas G, Geier U, Frieben, B, Köpke U (2005) Estimation of environmental impact of conversion to organic agriculture in Hamburg using the Life-Cycle-Assessment method. Institute of Organic Agriculture, University of Bonn. Organic eprints. Available at: <http://orgprints.org/13935>
- Hamilton, K., Atkinson, G. (2006). Wealth, welfare and sustainability: Advances in measuring sustainable development, *Wealth, Welfare and Sustainability: Advances in Measuring Sustainable Development*. [https://doi.org/10.1111/j.1467-8276.2008.01192\\_2.x](https://doi.org/10.1111/j.1467-8276.2008.01192_2.x) [Accessed 15 Nov. 2019]
- Hamilton, K., Clemens, M. (1999). Genuine savings rates in developing countries. *World Bank Econ. Rev.* <https://doi.org/10.1093/wber/13.2.333> [Accessed 15 Nov. 2019]
- Hanif, N., Arshed, N., Aziz, O., 2019. On interaction of the energy: human capital Kuznets curve? A case for technology innovation. *Environment Development and Sustainability*. <https://doi.org/10.1007/s10668-019-00536-9>.
- Hasnan, Baber (2016). Sustainable Development Impossible without Shift in Economic Paradigm. *Advances in Management*, vol. 9, no. 3, *Advances in Management*.
- Hassan, S.T., Xia, E., Khan, N.H., Mohsin, S., Shah, A., 2018. Economic growth, natural resources, and ecological footprints: evidence from Pakistan. *Environ. Sci. Pollut. Control Ser.* 26, 2929–2938.
- Hawkins, T. R., Singh, B., Majeau-Bettez, G. & Strømman, A. H. (2013). “Comparative environmental life cycle assessment of conventional and electric vehicles”, *Journal of Industrial Ecology* 17(1), 53–64.
- Hertwich, E.G., van der Voet, E., Tukker, A. (2010). *Assessing the Environmental Impacts of Consumption and Production. Priority Products and Materials, A Report of the Working Group on the Environmental Impacts of Products and Materials to the International Panel for Sustainable Resource Management*.
- Hidemichi, F., & Shunsuke, M. (2011). Is environmental Kuznets Curve supported to Sector-Level CO<sub>2</sub> Emission? Empirical Study for 10 Industries in OECD Countries. Graduate School of Environmental

## References

- Studies, Tohoku University.
- Hienuki, S. (2017). "Environmental and Socio-Economic Analysis of Naphtha Reforming Hydrogen Energy Using Input-Output Tables: A Case Study from Japan". *Sustainability* 2017, 9, 1376.
- Hoekstra, R. (2019). *Replacing GDP by 2030*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108608558>
- Hussen, A. (2019). *Principles of Environmental Economics and Sustainability* (4th ed.). Milton: Routledge. <https://doi.org/10.4324/9781351109116>
- IUCN.(2013). *Beyond GDP: Measuring Progress Towards a Green Economy*. IUCN Environmental Economics Occasional Paper Series on GDP as an Insufficient Tool for Measuring Progress Towards a Green Economy.
- Ivanova, D., Stadler, K., Steen-Olsen, K., Wood, R., Vita, G., Tukker, A., Hertwich, E.G.,(2016). Environmental impact assessment of household consumption. *J. Ind. Ecol.*20, 526e536.
- Jin-nan, W., Fang, Y., Hong-qiang, J., & Dong, C. (2018). *A Framework of Pollution-Based Environmental and Economic Accounting for China*. Chinese Academy for Environmental Planning, Beijing, 100012
- Jungbluth N., Nathani C., Stucki M. and Leuenberger M. (2011) Environmental impacts of Swiss consumption and production: a combination of input-output analysis with life cycle assessment. *Environmental studies* no.1111. ESU-services Ltd. & Rütter+Partner, commissioned by the Swiss Federal Office for the Environment (FOEN), Bern, CH, retrieved from: [www.esu-services.ch/projects/iaa/or](http://www.esu-services.ch/projects/iaa/or) [www.umwelt-schweiz.ch](http://www.umwelt-schweiz.ch).
- Kahuthu, A. (2006). Economic Growth and Environmental Degradation in a Global Context. *Environment, Development and Sustainability*, 8(1), 55–68. doi:10.1007/s10668-005-0785-3
- Kalimeris, P., Bithas, K., Richardson, C., & Nijkamp, P. (2020). Hidden linkages between resources and economy: A "Beyond-GDP" approach using alternative welfare indicators. *Ecological Economics*, 169, 106508.
- Kara, Orkide Nur (2019) "Environmental and economic sustainability of Zero-Emission Bus transport" University of Twente.
- Karabelli, D., Kiemel, S., Singh, S., Koller, J., Ehrenberger, S., Mieke, R., . . . Birke, K. P. (2020). Tackling xEV Battery Chemistry in View of Raw Material Supply Shortfalls. *Frontiers in Energy Research*, 8, 331. Retrieved from
- Karplus, Valerie., Sergey Paltsev and John Reilly, (2010), Prospects for plug-in hybrid electric vehicles in the United States and Japan: A general equilibrium analysis, *Transportation Research Part A: Policy and Practice*, 44, (8), 620-641.



- Karsch, N. M. (2019). Examining the validity of the environmental Kuznets curve. *Consilience*, (21), 32-50.
- Khaing, S. S. (2014). "Economic and Social Progress toward Achieving the Millennium Development Goals (MDGs) and the Prospect in Post MDGs Architecture"
- Kim and Mishra, 2021. E-mobility: "Transition to Sustainable Transport" in Susantono, Bambang; Guild, Robert. 2021. *Creating Livable Asian Cities*. © Asian Development Bank. <http://hdl.handle.net/11540/13613>
- Kitzes, J., Peller, A., Goldfinger, S., and Wackernagel, M. (2013). "Current methods for calculating national ecological footprint accounts." *Science for Environment and Sustainable Society*, 4(1), 1–8.
- Kosak, Eric (2018). "Peeking Behind Tesla's Cost of Materials Curtain" retrieved from <https://cleantechnica.com/2018/07/22/peeking-behind-teslas-cost-of-materials-curtain/>
- Le, Thai-Ha; Chang, Youngho; Park, Donghyun. 2016. *Governance, Vulnerability to Climate Change, and Green Growth: International Evidence*. © Asian Development Bank. <http://hdl.handle.net/11540/8830>. License: CC BY 3.0 IGO.
- Leitmann, J. (2009), *Investing in a More Sustainable Indonesia: Country Environmental Analysis*, CEA Series, East Asia and Pacific Region. Washington, DC: The World Bank.
- Lestari, Nina Indriati (2020) *OECD Green Growth Policy Review of Indonesia 2019 Indonesia's Effort to Phase Out and Rationalise Its Fossil-Fuel Subsidies*, *Bulletin of Indonesian Economic Studies*, 56:1, 133-135, <https://doi.org/10.1080/00074918.2020.1742959>
- Li, V., Lang, G. (2010). China's "Green GDP" experiment and the struggle for ecological modernisation. *J. Contemp. Asia*. <https://doi.org/10.1080/00472330903270346> [Accessed 15 Nov. 2019]
- Liu, L. (2009). Sustainability: Living within One's Own Ecological Means. *Sustainability*, 1(4), 1412–1430. doi:10.3390/su1041412
- March, R. (2015) *Greening GDP: Overcoming Challenges in Natural Capital Accounting*. Ph.D. Thesis, Bard College, Dutchess, NY, USA, May 2015.
- March, Rochele (2016). *Greening GDP: Overcoming Challenges in Natural Capital Accounting*. Lambert Academic Publishing.
- Margono, B.A., Potapov, P. V., Turubanova, S., Stolle, F., Hansen, M.C. (2014). Primary forest cover loss in indonesia over 2000-2012. *Nat. Clim. Chang*. <https://doi.org/10.1038/nclimate2277> [Accessed 10 Dec. 2019]
- Mase, Takayuki (2020) "Impacts of producing electrically driven vehicles on Japan industrial output", 27th International Input-Output Association

## References

- Conference.
- Mathis Wackernagel, & Bert Beyers. (2019). *Ecological Footprint: Managing your biocapacity budget*. New Society Publishers: Global Ecological Footprint Network.
- Mebratu, D., 1998. Sustainability and sustainable development: historical and conceptual review. *Environ. Impact Assess. Rev.* 18, 493–520. [https://doi.org/10.1016/S0195-9255\(98\)00019-5](https://doi.org/10.1016/S0195-9255(98)00019-5).
- Melaina, M., B.B., Joshua Eichman, Eric Wood, Dana Stright, Venkat Krishnan, David Keyser, Trieu Mai, and Joyce McLaren, National Economic Value Assessment of Plug-In Electric Vehicles: Volume 1. 2016, National Renewable Energy Laboratory
- Miller, Ronald E.; Blair, Peter D. (2009). *Input-Output Analysis: Foundations and Extensions*. Cambridge, , GBR: Cambridge University Press
- Mitlin, D., (1992). Sustainable development: a guide to the literature. *Environ. Urban.* 4 SRC-B, 111–124. <https://doi.org/10.1177/095624789200400112>
- Monserate, Zambrano. M. A., Ruano, M. A., Ormeño-Candelario, V., & Sanchez-Loor, D. A. (2020). Global ecological footprint and spatial dependence between countries. *Journal of Environmental Management*, 272, 111069. doi:10.1016/j.jenvman.2020.111069
- Mor, S., & Singh, G. (2019). Does Growth Affect Environment? Evidence from the World. *Journal of International Economics*, 42-49.
- Motoryna, T. (2012). Scope for using financial accounting data for the purposes of the system of national accounts. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, (263), 109-115.
- Muralikrishna, I. V., Manickam, V. (2017). *Environmental Management: Science and Engineering for Industry*, First. Ed. Butterworth-Heineman.
- Nahman, A.; Mahumani, B.K.; de Lange, W.J. (2016). Beyond GDP: Towards a Green Economy Index. *Dev. South. Afr.* 2016, 3, 215–233.
- Naidu, S. (2017). *Implementation of System of Environmental-Economic Accounting in the Pacific: Achievements and Lessons*; United Nations Economic and Social Commission for Asia and the Pacific (ESCAP): Bangkok, Thailand.
- Nguyen, Hoa Thi (2018). *Input-output analysis for sustainable economic-environmental system management in Vietnam*. Osaka University Knowledge Archive.
- Nicolai, S.; Hoy, C.; Berliner, T.; Aedy, T. (2015). *Projecting Progress: Reaching the SDGs by 2030*. In *Development Progress Research Report*; ODI: London, UK.
- Obst, C., Vardon, M., (2014). Recording environmental assets in the national accounts. *Oxford Rev. Econ. Policy*.

- <https://doi.org/10.1093/oxrep/gru003>
- OECD (2019), OECD Green Growth Policy Review of Indonesia 2019, OECD Environmental Performance Reviews, OECD Publishing, Paris
- Olawumi, T.O., Chan, D.W.M., 2018. A scientometric review of global research on sustainability and sustainable development. *J. Clean. Prod.* 183, 231–250. <https://doi.org/10.1016/j.jclepro.2018.02.162>
- Palm, V. and Larsson, M. (2007). Economic instruments and the environmental accounts. *Ecological economics*, 61, pp. 684-692.
- Pata, U.K., 2020. Renewable and non-renewable energy consumption, economic complexity, CO<sub>2</sub> emissions and ecological footprint in the US: testing the EKC hypothesis with a structural break. *Environ. Sci. Pollut. Control Ser.* <https://doi.org/10.1007/s11356-020-10446-3>
- Pata, U.K., Aydin, M., Ilham Haous (2021). Are natural resources abundance and human development a solution for environmental pressure? Evidence from top ten countries with the largest ecological footprint. *Resources Policy* 70, 101923. <https://doi.org/10.1016/j.resourpol.2020.101923>
- Pearce, D.W., Atkinson, G.D. (1993). Capital theory and the measurement of sustainable development: an indicator of “weak” sustainability. *Ecol. Econ.* [https://doi.org/10.1016/0921-8009\(93\)90039-9](https://doi.org/10.1016/0921-8009(93)90039-9)
- Peng, J et al. (2020). Exploring Potential Pathways toward Energy-Related Carbon Emission Reduction in Heavy Industrial Regions of China: An Input–Output Approach. *Sustainability*, 12, 2148.
- Perman, R., Ma, Y., McGilvray, J., Common, M. (2011). *Natural resource and environmental economics*. Fourth ed. Pearson Addison Wesley.
- Perman, R., & Stern, D. I. (2003). Evidence from panel unit root and cointegration tests that the environmental Kuznets curve does not exist. *Australian Journal of Agricultural and Resource Economics*, 47(3), 325-347.
- Peters, G.P. Andrew, R.M. and Karstensen, J. (2016). *Global environmental footprints: A guide to estimating, interpreting and using consumption-based accounts of resource use and environmental impacts*. Nordic Council of Ministers.
- Pezzey, John and Michael A. Toman (2003). Progress and Problems in the Economics of Sustainability. Chapter 4 in *The International Yearbook of Environmental and Resource Economics*. Edited by Tom Tietenberg and Henk Folmers. Northampton, MA: Edward Elgar, 2002/2003. ISBN: 9781840649499.
- Pezzey, John. (1992). *Economic Analysis of Sustainable Growth and Sustainable Development*. Washington D.C.: World Bank. Environment Department Working Paper No. 15. Published as

## References

- Sustainable Development Concepts: An Economic Analysis, World Bank Environment Paper No. 2, 1992.
- Pincheira, R., & Zuniga, F. (2021). Environmental Kuznets curve bibliographic map: a systematic literature review. *Accounting & Finance*, 61, 1931-1956.
- Pirmana, V., Alishjahbana, A.S., Yusuf, A.A., Hoekstra, R.; Tukker, A. (2021). "Environmental costs assessment for improved environmental-economic account for Indonesia". *Journal of Cleaner Production*• Vol. 280, Part 1, 20 January 2021, 124521
- Pirmana, V., Alisjahbana, A.S., Hoekstra, R., Tukker, A. (2019). Implementation barriers for a system of environmental-economic accounting in developing countries and its implications for monitoring sustainable development goals. *Sustain.* <https://doi.org/10.3390/su11226417>
- Prados de la Escosura, L. (2018). Well-Being Inequality in the Long Run.
- Proops, John., & Safonov, Paul. (2004). *Modeling in Ecological Economics: Current Issues in Ecological Economics*. Massachusetts, USA: Edward Elgar Publishing, Inc.
- Qnovo (2016). "The Cost Components of a Lithium Ion Battery" retrieved from <https://qnovo.com/82-the-cost-components-of-a-battery>
- Ramesh, Vany. (2014). The Time is Ripe for Green Accounting. *International Journal of Management and Social Science Research Review*, Vol.1, Issue.5, Nov - 2014.
- Raworth, K. (2012). *A Safe and Just Space for Humanity: Can We Live Within the Doughnut?* Oxfam. UK.
- Raymond, Leigh. (2004). Economic Growth as Environmental Policy? Reconsidering the Environmental Kuznets Curve. *Journal of Public Policy*, 24(3), 327-348.
- Repetto, R., Magrath, W., Wells, M., Beer, C., Rossini, F. (1989). Wasting assets: natural resources in the national income accounts. *Wasting assets Nat. Resour. Natl. income accounts*.
- Revindo, M.D. and Alta, A. (2020). "Trade and Industry Brief". *Seri Analisis Ekonomi*, LPEM, Universitas Indonesia. Retrieved from <https://www.lpem.org/wp-content/uploads/2020/01/TIB-Januari-2020.pdf>
- Ribeiro, Ana Filipa de Castro Martins Oliveira (2020). "Electric cars impact in the economic growth and the CO<sub>2</sub>: case of European Union". *Dissertação de Mestrado*. Universidade de Lisboa. Instituto Superior de Economia e Gestão.
- Rousmasset, J., Burnett, K. & Wang, H. (Red.). (2008). *Environmental Resources and Economic Growth. China's Great Economic Transformation*, 250-283. Cambridge University Press.

- Ruggerio, C. A. (2021). Sustainability and sustainable development: A review of principles and definitions. *Science of the Total Environment*, 786, 147481. doi:10.1016/j.scitotenv.2021.1
- Sachs, J.; Schmidt-Traub, G.; Kroll, C.; Durand-Delacere, D.; Teksoz, K. (2017). *SDG Index and Dashboards Report 2017*; Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN): New York, NY, USA..
- Sakti, A., Michalek, J.J., Fuchs, E.R.H., Whitacre, J.F. (2015). "A techno-economic analysis and optimization of Li-ion batteries for light-duty passenger vehicle electrification". *J.Power Sources* 273, 966–980
- Salim, Emil (2010). Paradigma Pembangunan Berkelanjutan, in Iwan Jaya Azis et al., Eds. *Pembangunan Berkelanjutan, Peran dan Kontribusi Emil Salim*, Kepustakaan Populer Gramedia, Jakarta
- Sanf elix, Javier, Cristina De la R ua, Jannick H. Schmidt, Maarten Messagie, and Joeri Van Mierlo. (2016). "Environmental and Economic Performance of an Li-Ion Battery Pack: A Multiregional Input-Output Approach" *Energies* 9, no. 8: 584. <https://doi.org/10.3390/en9080584>
- Sartori, S., Da Silva, F.L., De Souza Campos, L.M., 2014. Sustainability and sustainable development: a taxonomy in the field of literature. *Ambient. e Soc.* 17, 1–22. <https://doi.org/10.1590/1809-44220003490>.
- Schroer, K. (2007). On monetary valuation of environmental degradation in the framework of the System of Environmental-Economic Accounting. Discussion paper. Federal Statistical Office Germany Environmental-Economic Accounting (EEA).
- Seroa Da Motta, R., Ferraz Do Amaral, C.A. (2000). Estimating timber depreciation in the Brazilian Amazon. *Environ. Dev. Econ.* <https://doi.org/10.1017/s1355770x00000097>
- Shen J.Y., Hashimoto, Y. (2004) Environmental Kuznets curve on country level: evidence from China. Discussion Papers in Economics and Business 04-09. Osaka University, Graduate School of Economics and Osaka School of International Public Policy (OSIPP), Osaka
- Shmelev, Stanislav Edward (2010): *Environmentally Extended Input–Output Analysis of the UK Economy: Key Sector Analysis*. University of Oxford, Oxford, QEH Working Paper Series-QEHWPS183.
- Sirag, A., Matemilola, B. T., Law, S. H., & Bany-Arifin, A. N. (2018). Does environmental Kuznets curve hypothesis exist? Evidence from dynamic panel threshold. *Journal of environmental economics and policy*, 7(2), 145-165.
- Smith , R. (2007). Development of SEEA 2003 and its implementation. *Ecological Economics*, 61, pp. 592-599.
- Sonis M, Hewings G, Guo J. (2000). A new image of classical key sector analysis: minimum information decomposition of the leontief inverse.

## References

- Econ Syst Res 12(3):401–423.
- Stadler, K., Wood, R., Bulavskaya, T., Södersten, C.J., Simas, M., Schmidt, S., Usubiaga, A., Acosta-Fernández, J., Kuenen, J., Bruckner, M., Giljum, S., Lutter, S., Merciai, S., Schmidt, J.H., Theurl, M.C., Plutzer, C., Kastner, T., Eisenmenger, N., Erb, K.H., de Koning, A., Tukker, A. (2018). EXIOBASE 3: Developing a Time Series of Detailed Environmentally Extended Multi-Regional Input-Output Tables. *J. Ind. Ecol.* <https://doi.org/10.1111/jiec.12715> [Accessed 11 Sept. 2019]
- Steen, B. (2015). EPS 2015d:1 Including and excluding climate impacts from secondary particles. Report No. 2015:4a and 2015:4b.
- Stern, D.I. (2018) The Environmental Kuznets Curve. Reference Module in Earth Systems and Environmental Sciences, Elsevier. <https://doi.org/10.1016/B978-0-12-409548-9.09278-2>.
- Sterling, S. (2010). Learning for resilience, or the resilient learner? Towards a necessary reconciliation in a paradigm of sustainable education. *Environmental Education Research*, 16, 511-528. DOI: 10.1080/13504622.2010.505427.
- Stiglitz, J., J. Fitoussi and M. Durand (2018), *Beyond GDP: Measuring What Counts for Economic and Social Performance*, OECD Publishing, Paris.
- Tasriah, Etjih (2021). *Implementation of System of Environmental-Economic Accounting in SISNERLING Indonesia*, BPS, Jakarta.
- The Nature Conservancy (2018). *The Science of Sustainability – Exploring a Unified Path for Development and Conservation*.
- Tsiropoulos, D. Tarvydas, N. Lebedeva (2018). *Li-ion batteries for mobility and stationary storage applications– Scenarios for costs and market growth”* Publications Office of the European Union, Luxembourg
- Tukker, A et al. (2006) *Environmental Impact of Products (EIPRO). Analysis of the life cycle environmental impacts related to the final consumption of the EU-25*. Technical Report.
- Tukker, A. and Dietzenbacher, E., 2013. *Global Multiregional Input–Output Frameworks: An Introduction and Outlook*. *Econ. Syst. Res.* 25, 1–19.
- Tukker, A. and Jansen, B. (2006). *Environment Impacts of Products – A Detailed Review of Studies*. *Journal of Industrial Ecology*, 10: 159–182.
- Tukker, A. and Vivanco, DF. (2018) *Input-output analysis and resource nexus assessment in Routledge Handbook of the Resource Nexus*.
- Tukker, A., A. de Koning, R. Wood, S Moll and M. Bouwmeester (2013). *Price Corrected Domestic Technology Assumption—A Method To Assess Pollution Embodied in Trade Using Primary Official Statistics Only. With a Case on CO<sub>2</sub> Emissions Embodied in Imports to Europe*. *Environ. Sci. Technol.* 2013, 47, 4, 1775-1783



- U.S. Bureau of the Census. (2008). Pollution Abatement Costs and Expenditures (PACE) Survey, <https://www.epa.gov/environmental-economics/pollution-abatement-costs-and-expenditures-2005-survey> [Accessed 11 Sept. 2019]
- Unit Kerja Presiden Bidang Pengawasan dan Pengendalian Pembangunan (Indonesia), author. (2014). Cetak biru satu data untuk pembangunan berkelanjutan. Jakarta: Unit Kerja Presiden Bidang Pengawasan dan Pengendalian Pembangunan
- United Nation. System of Environmental Economic Accounting. 2016. Available online: <http://unstats.un.org/unsd/envaccounting/seea.asp> (accessed on 4 November 2018).
- United Nations (2019). Assessing the linkages between global indicator initiatives, SEEA Modules and the SDG Targets
- United Nations (2020). World economic situation and prospects. New York
- United Nations and European Central Bank (2014). Handbook of National Accounting: Financial Production, Flows and Stocks in the System of National Accounts
- United Nations Committee of Experts on Environmental-Economic Accounting (2016). Broad-Brush Analysis of SEEA Relevant SDG Indicators; New York, 22–24 June 2016. [https://unstats.un.org/unsd/envaccounting/ceea/meetings/eleventh\\_meeting/lod11.htm](https://unstats.un.org/unsd/envaccounting/ceea/meetings/eleventh_meeting/lod11.htm).
- United Nations Environment Programme (UNEP) (2010), “Assessing the environmental impacts of consumption and production: priority products and materials”, available at: [www.unep.org/resource-panel/documents/pdf/Priority Products and Materials\\_Report\\_Full.pdf](http://www.unep.org/resource-panel/documents/pdf/Priority-Products-and-Materials-Report-Full.pdf)
- United Nations Environment Programme (UNEP) (2015) Sustainable consumption and production global edition: a handbook for policymakers.
- United Nations Statistics Division (2007), Global Assessment of Environment Statistics and Environmental-Economic Accounting.
- United Nations Statistics Division (2007). Global Assessment of Environment Statistics and Environmental-Economic Accounting; UNSD: New York, NY, USA.
- United Nations Statistics Division (2012). Revision of the System of Environmental-Economic Accounting (SEEA) SEEA Central Framework; UNSD: New York, NY, USA.
- United Nations Statistics Division (2014) “Global Assessment of Environmental-Economic Accounting and Supporting Statistics 2014 Global Assessment of Environmental-Economic Accounting and Supporting Statistics 2014,” no. March, 2014.
- United Nations Statistics Division (2015). Global Assessment of

## References

- Environmental-Economic Accounting and Supporting Statistics 2014; UNSD: New York, NY, USA.
- United Nations Statistics Division (2015a). SEEA and Transforming Global and National Statistical Systems for Monitoring SDG Indicators. In Proceedings of the Tenth Meeting of the UN Committee of Experts on Environmental Economic Accounting, New York, NY, USA, 24–26 June 2015.
- United Nations Statistics Division (2015b). The SEEA as the Statistical Framework in Meeting Data Quality Criteria for SDG Indicators; UNSD: New York, NY, USA, 2015.
- United Nations Statistics Division (2017). SDG Indicators Metadata; UNSD: New York, NY, USA.
- United Nations Statistics Division (2018). Global Assessment of Environmental-Economic Accounting and Supporting Statistics 2017. UNSD, Mar-2018.
- United Nations Statistics Division (2018). Global Assessment of Environmental-Economic Accounting and Supporting Statistics 2017; UNSD: New York, NY, USA.
- United Nations, European Commission, Food and Agricultural Organization of the United Nations, Organization for Economic Co-operation and Development, World Bank. (2014). System of environmental-economic accounting 2012: Experimental Ecosystem Accounting, White cover publication. <https://seea.un.org/content/seea-central-framework-1> [Accessed 15 Nov. 2019]
- United Nations, European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, World Bank (2003) Handbook of National Accounting - Integrated Environmental and Economic Accounting 2003 (SEEA 2003), Final draft edition. The Statistical Commission of the United Nations, New York.
- United Nations. Economic Social Commission for Western Asia (2009). Framework for Environmental Economic Accounting in the ESCWA Region. New York: United Nations
- UNU/IAS (2000). Green GDP Estimates in China, Indonesia, and Japan: An Application of the UN Environmental and Economic Accounting System. Takahiko Akita and Yoichi Nakamura Eds, the United Nations University, the Institute of Advanced Studies, Tokyo, Japan
- Vardon, M.; Lange, G.M.; Johansson, S. (2015). Achievements and Lessons from the Waves First 5 Core Implementing Countries; World Bank: Washington, DC, USA.
- Vare, P. & Scott, W. (2007). Learning for a change exploring the relationship between education and sustainable development. Journal of Education



- for Sustainable Development, 1, 191-198.
- Vincent, J., Casteneda, B. (1997). Economic Depreciation of Natural Resources in Asia and Implications for Net Savings and Long-Run Consumption. Harvard - Institute for International Development. Development Discussion Paper No. 614  
<https://ideas.repec.org/p/fth/harvid/614.html>
- Vollebergh, H. R., Melenberg, B., & Dijkgraaf, E. (2008). Identifying Environmental Kuznets Curves: The Case of SO<sub>2</sub> and CO<sub>2</sub> emissions.
- Wackernagel, M., Beyers B (2019) Ecological footprint – managing our biocapacity budget. New Society Publishers, Gabriola Island BC, Canada, ISBN 978-086-571-911-8.
- Wade, Robert Hunter. (2017). Global growth, inequality, and poverty: the globalization argument and the "political" science of economics. In: Ravenhill, John, (ed.) Global political economy. Oxford University Press, Oxford, UK, pp. 319-355. ISBN 9780198737469
- Wang, S., Yang, F., Wang, X., Song, J. (2017). A Microeconomics Explanation of the Environmental Kuznets Curve (EKC) and an Empirical Investigation. Polish Journal of Environmental Studies, 26(4), 1757-1764.
- Watson D, Acosta-Fernandez J, Wittmer, Gravgaard Pedersen O (2013) Environmental pressures from European consumption and production. A study in integrated environmental and economic analysis. EEA technical report 2/2013
- WCED (1987). Our Common Future. World Commission on Environment and Development, Oxford University Press, Oxford.
- Weisz, H & Schandl, H. (2008) Materials Use across World Regions, Journal of Industrial Ecology, vol 12, no. 5-6
- White, B. and M. Patriquin (2003) "A Regional Economic Impact Modeling Framework" Paper Presented to the XII World Forestry Congress, September 21-28, Québec City, Canada.
- Wiedmann, T., Lenzen, M. (2018). Environmental and social footprints of international trade. Nature Geosci 11, 314–321.  
<https://doi.org/10.1038/s41561-018-0113-9>
- Wiedmann, T., Lenzen, M., Turner, K. and Barrett, J. (2007). Examining the global environmental impact of regional consumption activities — Part 2: Review of input–output models for the assessment of environmental impacts embodied in trade. Ecological Economics 61 (1): 15-26.
- Winebrake, J.J., E. Green, and Edward Carr. (2017) "Plug-in electric vehicles: economic impacts and employment growth," preliminary final report, energy and environmental research associates.
- Winebrake, J.J., E. Green, and EPRI (2009), Regional Economic Impacts of Electric Drive Vehicles and Technologies: Case Study of the Greater

## References

- Cleveland Area. EPRI and The Cleveland Foundation: Palo Alto, CA.
- Wood, R; Neuhoﬀ, K; Moran, D; Simas, M; Grubb, M; Stadler, K; (2019) The structure, drivers and policy implications of the European carbon footprint. *Climate Policy* 10.1080/14693062.2019.1639489.
- World Bank (2009). New environmental analysis for a sustainable Indonesia. <http://www.worldbank.org/en/news/press-release/2009/11/18/new-environmental-analysis-sustainable-indonesia>
- World Bank (2016). *Natural Capital Accounting*; World Bank: Washington, DC, USA.
- World Bank (2021). *World Development Indicators*.
- World Bank, n.d. *Industrial Pollution Projection System (IPPS)*. <https://datacatalog.worldbank.org/dataset/wps1431-ippss-pollution-intensity-and-abatement-cost/resource/7972b102-9c7b-4146-8df2> [Accessed 11 Sept. 2019]
- World Bank. (1994). *Economy-Wide Policies and the Environment: emerging lessons from experience*. Washington DC.
- World Bank. (1997). *Five years after Rio: innovations in environmental policy*. Washington DC.
- World Bank. (2006). *Where is the Wealth of Nations? Measuring Capital for the 21st Century*. Washington DC. <https://openknowledge.worldbank.org/handle/10986/7505>
- World Bank. *Natural Capital Accounting and Policy Costa Rica*. (2017). Available online: [https://www.wavespartnership.org/sites/waves/files/kc/Costa%20Rica%20offer%20doc\\_FINAL.pdf](https://www.wavespartnership.org/sites/waves/files/kc/Costa%20Rica%20offer%20doc_FINAL.pdf) (accessed on 25 May 2018)
- Xia, G., Wang, J., Lei, M., Xie, J., Gao, M., Zhou, H. (2006). *International Experiences with Environmental and Economic Accounting* Washington DC.
- Yang, Z., Slowik, P., Lutsey, N., & Searle, S. (2016). *Principles for effective electric vehicle incentive design*. International Council on Clean Transportation. Retrieved from <http://www.theicct.org/principles-for-effective-EV-incentive-design>
- Yuniarti, P.I. (2013). *An Indicator for Sustainable Development in Indonesia: Genuine Net Saving*. *Rev. Indones. Econ. Bussiness* Vol 4.
- Yustisia, D., and Sugiyarto, C. (2014). Analisis empiris Environmental Kuznets Curve (EKC) terkait orientasi energi. *Jurnal Ekonomi & Studi Pembangunan*, 15(2), 161-170.
- Yusuf, A. A., and Pirmana, V. (2009). *Estimates of the Green Domestic Product 2004-2007 and Green Regional Domestic Product 2005 for Indonesia*. Report to the State Ministry of the Environment, Jakarta.
- Yusuf, A.A., (2015). *Estimates of the “Green” or “Eco” Regional Domestic Product of Indonesian Provinces for the Year 2005*. *Econ. Financ.*

- Indonesia. <https://doi.org/10.7454/efi.v58i2.45>
- Zall'e, O., 2018. Natural resources and economic growth in Africa: the role of institutional quality and human capital. *Resour. Pol.* 62, 616–624. <https://doi.org/10.1016/j.resourpol.2018.11.009>.

## References