

DAFTAR PUSTAKA

- (The) Association of Indonesia Automotive Industries [GAIKINDO], 2017. President recognizes automotive industry's huge contribution to national economy. <https://www.gaikindo.or.id/en/president-recognises-automotive-industrys-huge-contribution-to-national-economy/> (accessed 5 June 2019).
- (The) Association of Indonesia Automotive Industries [GAIKINDO], 2019. indonesian-automobile-industry-data <https://www.gaikindo.or.id/indonesian-auto-mobile-industry-data/> (Accessed 19 July 2019)
- (The) Association of Indonesia Automotive Industries [GAIKINDO], 2019. Government policy on future automotive technology – Indonesia. https://www.gaikindo.or.id/wp-content/uploads/2019/07/01.-Dirjen-Ilmate_-Sesi-Siang-GOVERNMENT-POLICY-ON-FUTURE-AUTOMOTIVE-TECHNOLOGY-GIIAS-Conference-240719.pdf
- (The) World Bank [World Bank], 2019. Indonesia country data of GDP, Population, GNI per capita, etc. <https://data.worldbank.org/country/ID> (Accessed 3 March 2019)
- Ahanchian, M., and Biona, J.B.M., 2014, Energy demand, emissions forecasts and mitigation strategies modeled over a medium-range horizon: The case of the land transportation sector in Metro Manila, *Energy Policy*, vol. 66, pp. 615-629.
- Akbari, F., Mahpour, A., Ahadi, M.R., 2020. Evaluation of Energy Consumption and CO2 Emission Reduction Policies for Urban Transport with System Dynamics Approach. *Environ. Model. Assess.* 25, 505–520. <https://doi.org/10.1007/s10666-020-09695-w>

- Allen, H., Millard, K., Rahman, M.S.U., Barlow, T., 2015. A study on potential use of compressed natural gas (CNG) in public transport in Indonesia. Transport Research Laboratory Report https://www.researchgate.net/publication/2809-44628_A_Study_on_Potential_Use_of_Compressed_Natural_Gas_CNG_in_Public_Transport_in_Indonesia
- Amlin, S., 2013, Simulation of greenhouse gas cap-and-trade systems with Energy 2020, In: Qudrat-Ullah, H. (ed.), *Energy Policy Modelling in the 21st Century*, Springer, New York, USA, pp. 107-122.
- Anable, J., Brand, C., Tran, M., Eyre, N., 2012, Modelling transport energy demand: A socio-technical approach, *Energy Policy*, vol. 41, pp. 125-138
- Barisa A., Rosa, M., 2018. A system dynamics model for CO₂ emission mitigation policy design in road transport sector. *Energy Procedia*, 147, 419–427.
- BPS, 2019, Statistik Ekonomi dan Perdagangan, <https://www.bps.go.id/subject/8/ekspor-impor.html#subjekViewTab3>
- Chambliss, S., Bandivadekar, A., 2014. Opportunities to reduce vehicle emissions in Jakarta. International Council on Clean Transportation (ICCT), Washington, DC. <https://theicct.org/publications/opportunities-reduce-vehicle-emissions-jakarta>
- Chaolin Gu, Xinyue Ye, Qiwen Cao, Weihua Guan, Chong Peng, Yutong Wu and Wei Zhai, 2020. System dynamics modelling of urbanization under energy constraints in China. *Sci Rep* **10**, 9956 <https://doi.org/10.1038/s41598-020-66125-3>
- Chrysolite, H., Rissman, J., 2017. A tool for designing a policy package to achieve Indonesia's climate targets: Summary of methods and data used in the Indonesia energy policy simulator. World Resources Institute. https://wriorg.s3.amazonaws.com/s3fs-public/indonesia-eps-tech-note_0.pdf
- Dargay, J., Gately, D., Sommer, M., 2007., Vehicle Ownership and Income Growth, Worldwide: 1960-2030, *The Energy Journal*, Vol. 28, No. 4, pp. 143-170.

- Dargay, J., Gately, D., Sommer, M., 2014. Vehicle ownership and income growth, worldwide: 1960–2030. *The Energy Journal*, 28(4), 143–170.
- Deendarlianto, Widyaparaga, A., Sopha, B.M., Budiman, A., Muthohar, I., Chandra Setiawan, I., Lindasista, A., Soemardjito, J., Oka, K., 2017. Scenarios analysis of energy mix for road transportation sector in Indonesia. *Renewable and Sustainable Energy Reviews*, 70(2), 13–23.
- Deendarlianto, Widyaparaga, A., Widodo, T., Handika I., Chandra Setiawan, I., Lindasista, A., 2020. Modelling of Indonesian road transport energy sector in order to fulfill the national energy and oil reduction targets. *Renewable Energy*, 146, 504–518.
- Dhakap, S., Schipper, L., 2005. Transport and environment in Asian cities: Reshaping the issues and opportunities into a holistic framework. *International Review for Environmental Strategies*, 5, 399–424.
- Dharfizi, A.D.H., Ghani, A.B.A., Islam, R., 2020. Evaluating Malaysia's fuel diversification strategies 1981–2016. *Energy Policy* 137, 111083.
- Dimaratos, A., Triantafyllopoulos, G., Ntziachristos, L., Samaras, Z., 2017, Real-world emissions testing on four vehicles. <https://theicct.org/publications/real-world-emissions-testing-four-vehicles>
- Dimitrovski, A., Tomsovic, K. dan Ford, A., 2007a, Comprehensive Long Term Modeling of the Dynamics of Investment and Network Planning in Electric Power Systems, pp. 235-264.
- Dulal, H.B., Shah, K.U., Sapkota, C., Uma, G., Kandel, B.R., 2013. Renewable energy diffusion in Asia: Can it happen without government support? *Energy Policy*, 59, 301–311.
- Dyner, I., dan Larsen, E. R., 2001, From planning to strategy in the electricity industry, *Energy Policy*, 29(13), pp. 1145-1154.
- Ediger, V.S. and Çamdalı, U., 2007, Energy and exergy efficiencies in Turkish transportation sector 1988–2004, *Energy Policy*, vol. 35, issue. 2, pp. 1238–1244

- Erahman, Q.F., Reyseliani, N., Purwanto, W.W., Sudibandriyo, M., 2019. Modeling future energy demand and CO₂ emissions. *Energies*, 12(16), e3168. <https://doi.org/10.3390/en12163168>
- ESDM, 2012, *2012 Handbook of Energy & Economic Statistics of Indonesia*, - <https://www.esdm.go.id/assets/media/content/content-handbook-of-energy-economic-statistics-of-indonesia-2012-dcexnjb.pdf>
- ESDM, 2017, *Perpres No 22 tahun 2017*, - <http://jdih.esdm.go.id/peraturan/Perpres%2022%20Tahun%202017.pdf>
- Fan, F., Lei, Y., 2016, Decomposition analysis of energy-related carbon emissions from the transportation sector in Beijing, *Transp Res Part D* 42, pp. 135–145.
- Fiddaman, S., 2002, Exploring policy options with a behaviour climate-economy model, *System Dynamics Review*, vol. 18(2), pp. 243-267.
- Ford, A., 1996, System Dynamics and the Electric Power Industry, *System Dynamics Review*, vol. 13(1), pp. 57-85.
- German, J., 2015. Hybrid vehicles: Technology development and cost reduction. International Council on Clean Transportation (ICCT), Washington, DC. https://theicct.org/sites/default/files/publications/ICCT_TechBriefNo1_-_Hybrids_July2015.pdf
- Government of Indonesia, 2013. Peraturan pemerintah No. 41 tahun 2013 tentang perubahan atas peraturan pemerintah no. 145 tahun 2000 tentang kelompok barang kena pajak yang tergolong mewah yang dikenakan pajak penjualan atas barang mewah. Government of Indonesia, Jakarta.
- Government of Indonesia, 2016. Nationally Determined Contribution (NDC) Pertama Republik Indonesia. Government of Indonesia, Jakarta.
- Government of Indonesia, 2017a. Indonesia third national communication under the United Nations framework convention on climate change. Government of Indonesia, Jakarta. https://unfccc.int/sites/default/files/resource/8360571_Indonesia-NC3-2-

[%20National%20Communication%20-%20Indonesia%20-%20editorial%20refinement%2013022018.pdf](#)

Government of Indonesia, 2017b. Presidential regulation on general planning for national energy. Government of Indonesia, Jakarta.

Government of Indonesia, 2019. Peraturan pemerintah no. 73 tahun 2019 tentang perubahan atas peraturan pemerintah no. 41 tahun 2013 tentang kelompok barang kena pajak yang tergolong mewah yang dikenakan pajak penjualan atas barang mewah. Government of Indonesia, Jakarta.

Gunningham, N., 2013. Managing the energy trilemma: The case of Indonesia. *Energy Policy*, 54, 184–193.

Haddad, M.G., Mansour, C.J. & Afif, C, 2018. Future Trends and Mitigation Options for Energy Consumption and Greenhouse Gas Emissions in a Developing Country of the Middle East Region: a Case Study of Lebanon's Road Transport Sector. *Environ Model Assess* **23**, 263–276
<https://doi.org/10.1007/s10666-017-9579-x>

Hawksworth, J., Chan, D., 2015. The world in 2050: Will the shift in global economic power continue? PricewaterhouseCoopers
<https://www.pwc.com/gx/en/issues/the-economy/assets/world-in-2050-february-2015.pdf>

Humphrey, J., Memedovic, O., 2003. The global automotive industry value chain: What prospects for upgrading by developing countries. United Nations Industrial Development Organization (UNIDO), Vienna.
<https://open.unido.org/api/documents/4851890/download/UNIDO-Publication-2003-4851890>

IEA/ECMT., 2005. Making Cars More Fuel Efficient: Technology for Real Improvements on the Road, OECD Publishing, Paris,
<https://doi.org/10.1787/9789282103449-en>.

IPCC, 2006. Chapter 2.3: Mobile combustion. 2006 IPCC Guidelines for National Greenhouse Gas Inventories, 1–78.

Irawan, M.Z., Belgiawan, P.F., Widyaparaga, A., Budiman, A., Muthohar, I., Sopha, B.M., 2018. A market share analysis for hybrid cars in Indonesia.

Case Studies on Transport Policy, 6, 336–341.
<https://doi.org/10.1016/j.cstp.2017.09.003>

Jaccard, M. 2009. Combining Top-Down and Bottom-Up in energy economy models, *Chapter 13 in: International Handbook on the Economics of Energy*, Edward Elgar, Cheltenham, UK.

Jia, S., Mao, B., Liu, S., Sun, Q., 2010, Calculation and Analysis of Transportation Energy Consumption Level in China, *Journal of Transportation Systems Engineering and Information Technology*, vol. 10, Issue 1, pp. 22-27.

Johnson, L., Adams, S., 2012. Transport Outlook 2012. International Transport Forum, Paris. <https://irtad.itf-oecd.org/transport-outlook-2012-seamless-transport-greener-growth>

Kreuzer, F.M., Wilmsmeier, G., 2014. *Energy efficiency and mobility: A roadmap towards a greener economy in Latin America and the Caribbean*. United Nations, New York, NY.

Kumar, S., 2016, Assessment of renewables for energy security and carbon mitigation in Southeast Asia: the case of Indonesia and Thailand. *Appl Energy* 163, pp. 63–70.

Lavee, D., Becker, N., 2009. Cost-benefit analysis of an accelerated vehicle-retirement programme. *Journal of Environmental Planning and Management*, 52(6), 777–795.

Leung, H.K., 2016. Indonesia's summary transport assessment. Asian Development Bank, Manilla. <https://www.adb.org/publications/indonesia-summary-transport-assessment>

Li, Y., Chang, Y., 2019. Road transport electrification and energy security in the Association of Southeast Asian Nations: Quantitative analysis and policy implications. *Energy Policy*, 129, 805–815.

Liao, S.-Y., Chen, C.-C. and Hsu, C.-S. 2018. The Non-Linear Relationship between Electricity Consumption and Temperature in Taiwan: An Application for STR (Smooth Transition Regression) Model. *Modern Economy*, 9, 587-605. <https://doi.org/10.4236/me.2018.94038>.

- Ligterink, Norbert, 2017. Real-word vehicle emissions, International Transport Forum Discussion Paper, No. 2017-06, Organisation for Economic Co-operation and Development (OECD), International Transport Forum, Paris
- Luqi Wang, Zebin Zhao, Xiaoxia Wang, Xiaolong Xue. Transportation decarbonization pathways and effect in China: A systematic analysis using STIRPAT-SD model, *Journal of Cleaner Production*, Volume 288, 2021, 125574, ISSN 0959-6526, <https://doi.org/10.1016/j.jclepro.2020.125574>.
- McGarvey, B., Hannon, B., 2004, *Dynamic Modeling for Business Management: An Introduction*, Springer-Verlag New York Inc, New York.
- Medlock, K.B., Soligo, R., 2002. Car ownership and economic development with forecasts to the year 2015. *Journal of Transport Economics and Policy*, 36(2), 163–188.
- Ministry of Transport [Indonesia], 2019. Balai Pengujian Laik Jalan dan Sertifikasi Kendaraan Bermotor: Uji Tipe <https://bpljskb.hubdat.dephub.go.id/infos> (Accessed 10 July 2019).
- Ministry of Energy and Mineral Resources [Indonesia], 2015. Regulation No. 12 Year 2015 on the revision of Regulation No. 32 Year 2008 concerning the provision, utilization and commerce of biofuels as alternatif fuels; 2013. Ministry of Energy and Mineral Resources, Jakarta.
- Ministry of Energy and Mineral Resources [Indonesia], 2018. Handbook of energy and economic statistics of Indonesia. Ministry of Energy and Mineral Resources, Jakarta. <https://www.esdm.go.id/assets/media/content/content-handbook-of-energy--and-economic-statistics-of-indonesia-2018-final-edition.pdf>
- Ministry of Industry [Indonesia], 2018a. Making Indonesia 4.0. <https://www.kemenperin.go.id/download/19347> (accessed 11 November 2019).
- Ministry of Industry [Indonesia], 2018b. Electric vehicle study: Energy saving up to 80%. <https://kemenperin.go.id/artikel/19877/Studi-Mobil-Listrik:-Hemat-Energi-Hingga-80-Persen> (Accessed 15 September 2019).

- Mittal, S., Hanaoka, T., Shukla, P.R., Masui, T., 2015. Air pollution co-benefits of low carbon policies in road transport: A sub-national assessment for India. *Environmental Research Letters*, 10(8), e085006. <https://iopscience.iop.org/article/10.1088/1748-9326/10/8/085006/meta>
- Morrow, W.R., Gallagher, K.S., Collantes, G., Lee, H., 2010, Analysis of policies to reduce oil consumption and greenhouse-gas emissions from the US transportation sector, *Energy Policy*, vol. 38, Issue 3, pp. 1305-1320.
- Naill, R. 1973, *The Discovery Life Cycle of a Finite Resource: A Case Study of U.S. Natural Gas, in Toward Global Equilibrium*, Pegasus Communications, Waltham, MA.
- NEDO Japan, 2017. The Japanese policy and NEDO activity for future mobility. <https://www.nedo.go.jp/content/100873093.pdf> (Accessed 5 July 2019).
- Posada, F., Wagner, D.V., Bansal, G., Fernandez, R., 2015. Survey of best practices in reducing emissions through vehicle replacement programs [White Paper]. International Council on Clean Transportation (ICCT), Washington, DC. <https://theicct.org/publications/survey-best-practices-reducing-emissions-through-vehicle-replacement-programs>
- Praetorius , B., and Schumacher , K., 2009, Greenhouse gas mitigation in a carbon constrained world: The role of carbon capture and storage. *Energy Policy*, vol. 37, pp. 5081–5093.
- Riyanto, R., Nuryakin, C., Riyadi, S.A., Massie, N.W.G., 2020. Estimating the total cost of ownership (TCO) of electrified vehicle in Indonesia (*LPEM-FEB UI Working Paper 043*).
- Sara Al-Osaimi, K. J. Sreekanth, Ruba Al-Foraih, Sara Al-Kandari, 2020. Trends in road transportation fuel consumption and carbon emissions: a scenario analysis using system dynamic modelling, *International Journal of Sustainable Energy*, 39:4, 349-361, [DOI: 10.1080/14786451.2019.1696343](https://doi.org/10.1080/14786451.2019.1696343)

- Schipper, L., Fabian, H., Leather, J., 2009, Transport and Carbon Dioxide Emissions: Forecasts, Options Analysis, and Evaluation, *ADB Sustainable Development Working Paper Series*, ADB, Manila.
- Shepherd, S.P., 2014, A review of system dynamics models applied in transportation, *Transportmetrica B: Transport Dynamics*, 2 (2), pp. 83 - 105.
- Singh, S. and Uma Devi, G, 2020. System Dynamics Simulation Modeling of Transportation Engineering, Energy, and Economy Interaction for Sustainability', *Lecture Notes in Civil Engineering*, 69 (August 2018), pp. 379–401. [Doi: 10.1007/978-981-15-3742-4_24](https://doi.org/10.1007/978-981-15-3742-4_24).
- Solaymani, S., and Kari, F., 2014, Impacts of energy subsidy reform on the Malaysian economy and transportation sector, *Energy Policy*, vol. 70, pp. 115-125.
- Solaymani, S., Kari, F., 2014, Impacts of energy subsidy reform on the Malaysian economy and transportation sector. *Energy Policy* 70, pp. 115–125.
- Steg, L. and Gifford, R., 2005, Sustainable transportation and quality of life, *Journal of Transport Geography*, vol. 13, issue. 1, pp. 59-69
- Sterman, J.D., 2000, *Business Dynamics: Systems Thinking and Modeling for a Complex World*, Irwin McGraw-Hill, Boston.
- Sugiyono, A., Anindhita, Boedoyo, M.S., Adiarso (Editor), 2014, *Outlook Energi Indonesia 2014*, Badan Pengkajian dan Penerapan Teknologi, Jakarta.
- Ullah, H.Q., 2013, Understanding the dynamics of electricity generation capacity in Canada: a system dynamics approach, *Energy*, pp. 285-294.
- Ullah, H.Q., 2014, *Better Decision Making in Complex, Dynamics Tasks*, Springer, New York, USA.
- Ullah, H.Q., 2015, Modelling and Simulation in Service of Energy Policy, *The 7th International Conference on Applied Energy*, Energy Procedia, pp. 2819-2835

- Ummu Sulaim Arrumaisho and Yos Sunitiyoso, 2019. A System Dynamics Model for Biodiesel Industry in Indonesia', *The Asian Journal of Technology Management (AJTM)*, 12(2), pp. 149–162. [Doi: 10.12695/ajtm.2019.12.2.6](https://doi.org/10.12695/ajtm.2019.12.2.6).
- UNFCCC, 2016, *First Nationally Determined Contribution of Republic of Indonesia*, https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/First%20NDC%20Indonesia_submitted%20to%20UNFCCC%20Set_November%20%202016.pdf
- Uwe Tietge, Peter Mock, Vicente Franco, Nikiforos Zacharof., 2017, From laboratory to road: Modeling the divergence between official and real-world fuel consumption and CO₂ emission values in the German passenger car market for the years 2001–2014, *Energy Policy*, vol.103, pp. 212-222.
- Yunqiang Xue, Lin Cheng, Kuang Wang, Jing An, Hongzhi Guan, 2020. System Dynamics Analysis of the Relationship between Transit Metropolis Construction and Sustainable Development of Urban Transportation - Case Study of Nanchang City, China. *Sustainability*, MDPI, Open Access Journal, vol. 12(7), pages 1-25, April. <https://ideas.repec.org/a/gam/jsusta/v12y2020i7p3028-d343557.html>
- Zarifi, F., Mahlia, T.M.I, Motasemi, F., Shekarchian, M., Moghavvemi, M., 2013, Current and future energy and exergy efficiencies in the Iran's transportation sector, *Energy Conversion and Management*, vol. 74, pp. 24–34.
- Zhang, M., Li, H., Zhou, M., Mu, H., 2011, Decomposition analysis of energy consumption in Chinese transportation sector. *Appl Energy*, vol. 88, issue. 6, pp. 2279–2285.