

DAFTAR PUSTAKA

- Alifa, N. P., Adelin, A., Mufti, A.A. 2024. Material Flow Analysis of Plastic Waste for Circular Economy Potential: A Case Study of Wijaya Kusuma and Sidomakmur Waste Banks in Metro City. *Indonesian Journal of Social Technology*, Vol 5, No 10
- Ayadi, O., Shadid, R., Bani, A., Alrbai, M., Abu, M., Balah, N.A. 2022. Experimental Comparison Between Monocrystalline, Polycrystalline, and Thin-Film Solar System under Sunny Climatic Conditions. *Energy Reports* 8, 218-230.
- Azizi, D. D. S. A., Hanfiah, M. M., Woon, K. S. 2023. Material Flow Analysis in WEEE Management for Circular Economy: A Content Review on Applications, Limitations, and Future Outlook. *Sustainability* 2023, 3505.
- Benghanem, M., Haddad, S., Alzahrani, A., Mellit, A., Almohamadi, H., Khushaim, M., Aida, M. S. 2023. Evaluation of the Performance of Polycrystalline and Monocrystalline PV Technologies in a Hot and Arid Region: An Experimental Analysis. *Sustainability* 15, 14831.
- Chatzigeorgiou, N.G., Theocharides, S., Makrides, G., Georghiou, G.E. 2024. A Review on Battery Energy Storage System: Application, Developments, and Research Trends of Hybrid Installations in the end-user sector. *Journal of Energy Storage* 86, 111192.
- Chen, P.H., Chen, W. S., Lee, C. H., Wu, J. Y. 2023. Comprehensive Review of Crystalline Silicon Solar Panel Recycling: From Historical Context to Advance Techniques. *Sustainability* 16, 60.
- Dewan Energi Nasional Sekretariat Jenderal. 2022. *Evaluasi Capaian Bauran Energi Nasional Tahun 2022*. Jakarta: Dewan Energi
- Dominguez, A., & Geyer, R. 2019. Photovoltaic Waste Assessment of Major Photovoltaic Installations in the United States of America. *Renewable Energy* Vol 133, 1188-1200.
- Granata, G., Altimari, P., Pagnanelli, F., De Greef, J. (2022). Recycling of Solar Photovoltaic Panels: Techno-Economic Assessment in Waste Management Perspective. *Journal of Cleaner Production* Vol 363, 132384
- Gurel, E., TAT, M. 2017. SWOT Analysis: A Theoretical Review. *The Journal of International Social Research*. Vol 10, 51
- International Renewable Energy Agency. (2024). *World Energy Transitions Outlook 2024: 1.5 °C pathway (Executive Summary)*. Abu Dhabi: IRENA.
- Karagoz, S. C., Gundogdu, T. K., Sarialtin, H., Celiktas, M. S. 2025. Separation and Purification Technology 361:131373



- Kementerian Lingkungan Hidup dan Kehutanan. 2021. Peraturan Menteri Lingkungan Hidup dan Kehutanan Republik Indonesia Nomor 4 Tahun 2021 tentang Daftar Usaha dan/atau Kegiatan yang Wajib Memiliki Amdal, UKL-UPL, atau SPPL. Berita Negara Republik Indonesia Tahun 2021 Nomor 172.
- Lase, I. S., Bashirgonbadi, A., Rhijn, F. V., Dewulf, J., Ragaert, K., Delva, L., Roosen, M., Brandsma, M., Langen, M., Meester, S. D. 2022. *Waste Management* 153, 249-263
- Lisperguer, R. C., Ceron. E.M., Higuier, J., Martin, R. 2020. Environmental Impact Assessment of Crystalline Solar Photovoltaic Panels End of Life phase: Open and Closed-Loop Material Flow Scenarios. *Sustainable Production and Consumption* 23 page 157-173.
- Mahmoudi, S., Huda, N., Behnia, M. 2020. Photovoltaic waste assessment: Forecasting and screening of emerging waste in Australia. *Resources, Conservation, and Recycling Vol* 146 page 192-205
- Mahmoudi, S., Huda, N., Behnia, M. 2020. Environmental impacts and economic feasibility of end of life photovoltaic panels in Australia: A comprehensive assessment. *Journal of Cleaner Production* 260 page 1 -20
- McGregor, J. 2023. The Case for Solar Panel Reuse in Australia Waste = Opportunity. The Blue Tribe Company.
- Mulazzani, A., Eleftheriadis, P., & Leva, S. 2022. *Recycling c-Si PV modules: A review, a proposed energy model and a manufacturing comparison. Energies*, 15(22), 8419. <https://doi.org/10.3390/en15228419>
- Ngeh, H., Tembo, F., & WALDE, Z. 2024. Analyzing the Strengths, Weaknesses, Opportunities, and Threats (SWOT) of Plastic Waste Management in Cameroon. *International Research Journal of Innovations in Engineering and Technology*, 08(06), 158–165.
- Piedrahita, A., Cardenas, L. M., Zapata, S. 2025. Solar Panel Waste Management: Challenges, Opportunities, and the Path to a Circular Economy. *Energies*. 18, 1844
- Pemerintah Republik Indonesia. 2014. Peraturan Pemerintah Republik Indonesia Nomor 79 Tahun 2014 tentang Kebijakan Energi Nasional. Lembaran Negara Republik Indonesia Tahun 2014 Nomor 300.
- Pemerintah Republik Indonesia. 2022. *Peraturan Presiden Republik Indonesia Nomor 112 Tahun 2022 tentang Percepatan Pengembangan Energi Terbarukan untuk Penyediaan Tenaga Listrik*. Lembaran Negara Republik Indonesia Tahun 2022 Nomor 181.



- Pemerintah Republik Indonesia. 2021. Peraturan Pemerintah Republik Indonesia Nomor 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup. Lembaran Negara Republik Indonesia Tahun 2021 Nomor 31.
- Pemerintah Republik Indonesia. 2020. Peraturan Pemerintah Republik Indonesia Nomor 27 Tahun 2020 tentang Pengelolaan Sampah Spesifik. Lembaran Negara Republik Indonesia Tahun 2020 Nomor 180.
- Pemerintah Republik Indonesia. 2014. Peraturan Pemerintah Republik Indonesia Nomor 101 Tahun 2014 tentang Pengelolaan Limbah Bahan Berbahaya dan Beracun. Lembaran Negara Republik Indonesia Tahun 2014 Nomor 333.
- Pemerintah Republik Indonesia. 2009. Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup. Lembaran Negara Republik Indonesia Tahun 2009 Nomor 140.
- Pemerintah Republik Indonesia. 2008. Undang-Undang Republik Indonesia Nomor 18 Tahun 2008 tentang Pengelolaan Sampah. Lembaran Negara Republik Indonesia Tahun 2008 Nomor 69.
- Pemerintah Republik Indonesia. 2020. Undang-Undang Republik Indonesia Nomor 11 Tahun 2020 tentang Cipta Kerja. Lembaran Negara Republik Indonesia Tahun 2020 Nomor 245.
- Pranadi, A. D., Suhud, M., Istiqomah, M., Safrudin, A., Nugroho, A., Tumiwa, F., Darmoyono, I. 2024. Kajian Biaya Pengelolaan Limbah PLTS di Indonesia. Mentari PT PLN (Persero). (2021). Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) 2021–2030. Jakarta: PT PLN (Persero). Diakses tanggal 20 Januari 2024 dari <https://web.pln.co.id/>
- PT PLN (Persero). (2025). Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) 2025–2034. Jakarta: PT PLN (Persero). Diakses tanggal 20 Januari 2024 dari <https://web.pln.co.id/>
- PT PLN (Persero). 2024. Sustainable Report PLN 2023. Jakarta: PT PLN (Persero). Diakses tanggal 20 Januari 2024 dari <https://web.pln.co.id/>
- Purnamasari, D. M. 2023. The Analysis of Formal and Informal Sector on Lead Acid Battery: A System Dynamics Approach. *Journal of Industrial Engineering and Engineering Management*, 8(2), 45-53.
- Rahman, M.M dan Chowdhury, F.N. (2023). Recycling of Solar PV Panels in Bangladesh along with South and South East Asia. *Green and Sustainable Chemistry* page 1-6
- Ramadhanti, R., & Mardiah, A. N. R. (2022). SWOT Analysis for Waste Management Recommendation of Bojong Village, Bogor Regency. *International Journal for Disaster and Development Interface*, 2(1). <https://doi.org/10.53824/ijddi.v2i1.10>



- Rahardjo, S & Utomo, A. H. 2021. Comparative Study of Electronic Waste Management in Developed Countries and Indonesia. *Andalasian International Journal*, Vol 1, No. 01
- Rekioua, Dj. 2023. Energy Storage Systems for Photovoltaic and Wind Systems: A Review. *Energies* 2023, 16, 3893
- Rimantho, D., Hidayah, N. Y., Saputra, A., Chandra, A., Rizkiya, A. N., Nashifah, G., Fitriyani, P., Weshah, D. M. P. 2022. Material Flow Analysis for Assessing the Sustainability Solid Waste Management Strategy
- Rohman, K. P., Warlina, L., & Awatara, I. G. P. D. 2024. Performance Intelligence of Sustainable Waste Management through SWOT Analysis at the 3R Waste Management Site in Subang Antapani, Bandung. *Jurnal Penelitian Geografi (JPG)*, 12(2).
- Rubino, A., Granata, G., Moscardini, E., Baldassari, L., Altimari, P., Toro, L., Pagnanelli, F. (2020). Development and Techno-Economic Analysis of an Advanced Recycling Process for Photovoltaic Panels Enabling Polymer Separation and Recovery of Ag and Si. *Energies* Vol 13, 6690.
- Salazar-Echeagaray, T., Rodriguez, F., Armendariz, M., Ortiz, L., Chilan, J., Moran, A., Paucar, M., Puerta, J., Molina, D., Guio, C. 2023. Towards Sustainable WEEE Management: Challenges, Insights and a Strategic Framework.
- Sapathy, R. K., & Pamuru, V. 2021. Off-grid Solar Photovoltaic Systems. *Solar PV Power Design, Manufacturing and Applications from Sand to Systems* page 267-315. Academic Press.
- Samsurizal, Mauriyaya, K.T., Fikri, M., Pasra, N., Christiono. (2021). Pengenalan Pembangkit Listrik Tenaga Surya (PLTS). Institut Teknologi PLN.
- Satori, M., Hindersah, H., Burhanudin, H., Januarita, R., Purnamasari, P., Hernawati, R., Patricia, V. M., Miftahadi, M. F. (2024). Material Flow and Economic Analysis of Wantilan Recycling Center Promoting Circular Economy Principles. *Jurnal Presipitasi* Vol 21 No. 3, hal 722-733
- Shukir, S. S., 2021. Solar Energy Batteries-A Critical Review. *Journal of Instrumentation and Innovation Sciences*. Vol 6, 3.
- Singh, R., & Mondal, P. 2025. Insights into the Recycling of Discarded Solar Panels: Challenges and Future Outlook. *Sustainable Materials and Technologies* 45: e01481.
- Supriyono, P., Girawan, B.A., Pribadi, J.S., Santoso, A. (2023). Analisis Performa PLTS *Off Grid* untuk Sistem Desalinasi Metode Osmosis Terbalik. *Infotekmesin* Vol. 14 hal 50-55
- Sutikno, T., Arsadiando, W., Wangsupphaphol, A., Yudhana, A., Facta, M. 2022. A Review of Recent Advances on Hybrid Energy Storage System for Solar Photovoltaics Power Generation. *IEEE Access*



- Tas, M. P. M., & Sark, W. G. J. H. M. 2023. Experimental Repair Technique for Glass Defects of Glass-Glass Photovoltaic Modules - A Techno-Economic Analysis. *Solar Energy Materials and Solar Cells* 257:112397.
- Texas Instrument. Reliability Terminology. Diakses 08 Juli 2025 dari <https://www.ti.com/support-quality/reliability/reliability-terminology.html>
- Wu, C., Li, B., Zhang, S., Zhao, J., Tong, J., Fang, X. (2019). Spent Lead-Acid Battery.
- Yulianti, W. K. 2024. Keputusan Konsumen dalam Pemilihan Jasa Pengelolaan Limbah B3. *Cerdika: Jurnal Ilmiah Indonesia*, 4(8), 690-696.
- Zele, S., Joshi, A., Gogate, N., Marathe, D., Shitole, A. 2024. Experimental Investigation on Utilization of Crushed Solar Panel Waste as Sand Replacement in Concrete. *Solar Energy* 269 112338.
- Zuliana, A., Triadi, I. 2024. Perbandingan Regulasi Pengelolaan Limbah Pembangkit Listrik Tenaga Surya di Indonesia, Eropa, dan Amerika. *TERANG: Jurnal Kajian Ilmu Sosial, Politik, dan Hukum* Vol 1 No. 2 Hal 189-204.