

DAFTAR PUSTAKA

- [1] 'Konsumsi Listrik Masyarakat Meningkat, Tahun 2023 Capai 1.285 kWh/Kapita', ESDM. Accessed: May 30, 2025. [Online]. Available: <https://www.esdm.go.id/id/media-center/arsip-berita/konsumsi-listrik-masyarakat-meningkat-tahun-2023-capai-1285-kwh-kapita>
- [2] 'Konferensi Pers Capaian 2023, Konsumsi Listrik Per Kapita Lebih Target', ESDM. Accessed: May 30, 2025. [Online]. Available: <https://www.esdm.go.id/id/media-center/berita-unit/konferensi-pers-capaian-2023-konsumsi-listrik-per-kapita-lebih-target>
- [3] Kementerian Lingkungan Hidup dan Kehutanan, 'Laporan Inventarisasi Gas Rumah Kaca (GRK) dan Monitoring, Pelaporan, Verifikasi (MPV) 2023', Kementerian Lingkungan Hidup, Jakarta, 2830–2923, Jan. 2024. [Online]. Available: <https://drive.google.com/file/d/1VuXLCjBI9QJGrVEKOF6qp1I5lCO0pSDO/view?usp=sharing>
- [4] PT PLN (Persero), 'Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) 2021-2030', PT PLN (Persero), Jakarta, 2021.
- [5] Kementerian Energi dan Sumber Daya Mineral, 'Menteri ESDM Ungkap Strategi Penuhi Target Bauran Energi dari EBT', Kementerian Energi Dan Sumber Daya Mineral, Jakarta, Siaran Pers 25.Pers/04/SJI/2024, Jan. 2024. [Online]. Available: <https://www.esdm.go.id/id/media-center/arsip-berita/menteri-esdm-ungkap-strategi-penuhi-target-bauran-energi-dari-ebt>
- [6] Kementerian Pekerjaan Umum dan Perumahan Rakyat, 'Kinerja BUMD Air Minum Tahun 2023', Kementerian Pekerjaan Umum dan Perumahan Rakyat, Jakarta, 2023.
- [7] D. Herliyanso and O. A. Rozak, 'Perencanaan Sistem Pembangkit Listrik Tenaga Surya Off-grid Sebagai Suplai Daya Listrik Perpustakaan Universitas Pamulang', *ELECTRICES*, vol. 5, no. 1, pp. 20–29, May 2023, doi: 10.32722/ees.v5i1.5612.
- [8] B. E. Kodo, F. J. Likadja, and E. R. Mauboy, 'Perancangan Pembangkit Listrik Tenaga Surya (PLTS) Off- Grid pada Area Perkebunan Desa Bismarak', *J. Tek. Elektro*, vol. 1, no. 1, 2024.
- [9] R. Rahman, 'Analisis Perencanaan Pembangkit Listrik Tenaga Surya Offgrid Untuk Rumah Tinggal Di Kota Banjarbaru'.
- [10] D. F. Silalahi, A. Blakers, M. Stocks, B. Lu, C. Cheng, and L. Hayes, 'Indonesia's Vast Solar Energy Potential', *Energies*, vol. 14, no. 17, p. 5424, Aug. 2021, doi: 10.3390/en14175424.
- [11] N. F. Pratiwi, A. Pudir, and W. B. Mursanto, 'Perancangan PLTS Atap On Grid Kapasitas 163,8 kWp untuk Suplai Daya Industri Tekstil', 2022.
- [12] 'Global Solar Atlas'. Accessed: Aug. 15, 2025. [Online]. Available: <https://globalsolaratlas.info/map?c=1.103371,104.038467,11&s=1.103082,104.03837&m=site>

- [13] 'Cara kerja, Manfaat & Pemasangan Panel Surya', SUN ENERGY. Accessed: Aug. 07, 2024. [Online]. Available: <https://sunenergy.id/blog/panel-surya>
- [14] 'What are solar cells and how do they work? – Electricity – Magnetism'. Accessed: Aug. 15, 2025. [Online]. Available: <https://www.electricity-magnetism.org/what-are-solar-cells-and-how-do-they-work/>
- [15] 'Pengembang Solar Energy Residensial #1 di Indonesia', SUN Terra. Accessed: Mar. 11, 2025. [Online]. Available: <https://www.sunterra.id/id/blog>
- [16] M. S. Zuhri, J. Jamaluddin, S. D. Ayuni, and I. Anshory, 'BESS Revolutionizes Renewable Stability in Indonesia: BESS Merevolusi Stabilitas Energi Terbaru di Indonesia', *Indones. J. Innov. Stud.*, vol. 25, no. 3, p. 10.21070/ijins.v25i3.1158-10.21070/ijins.v25i3.1158, Jun. 2024, doi: 10.21070/ijins.v25i3.1158.
- [17] 'Energi Surya', Renewable Energy Indonesia. Accessed: May 20, 2025. [Online]. Available: <https://renewableenergy.id/energi-surya/>
- [18] Politeknik Negeri Bali, 'Desain & Perhitungan PLTS'.
- [19] admin, 'Solar Inverters, What Are They And How Do They Work?', Deege Solar. Accessed: May 31, 2025. [Online]. Available: https://www.deegesolar.co.uk/solar_inverters/
- [20] 'SUN-5/6/8/10/12K-SG04LP3-EU Inverter Company, Supplier | Deye Inverter Technology'. Accessed: Aug. 15, 2025. [Online]. Available: <https://www.deyeinverter.com/product/hybrid-inverter-1/sun5-6-8-10-12ksg04lp3.html>
- [21] N. Ketjoy, W. Chamsa-ard, and P. Mensin, 'Analysis of factors affecting efficiency of inverters: Case study grid-connected PV systems in lower northern region of Thailand', *Energy Rep.*, vol. 7, pp. 3857–3868, Nov. 2021, doi: 10.1016/j.egyr.2021.06.075.
- [22] C.-Y. Park *et al.*, 'Inverter Efficiency Analysis Model Based on Solar Power Estimation Using Solar Radiation', *Processes*, vol. 8, no. 10, p. 1225, Oct. 2020, doi: 10.3390/pr8101225.
- [23] P. Lusi, L. L. H. Andrew, A. Liebman, and G. Tack, 'Interaction Between Coordinated and Droop Control PV Inverters', in *Proceedings of the Eleventh ACM International Conference on Future Energy Systems*, Jun. 2020, pp. 325–336. doi: 10.1145/3396851.3397749.
- [24] 'Parallell connection of axpert and infinisolar modelh', Power Forum - Renewable Energy Discussion. Accessed: Aug. 15, 2025. [Online]. Available: <https://powerforum.co.za/topic/3047-parallell-connection-of-axpert-and-infinisolar-modelh/>
- [25] B. Anto, Dahliyusmanto, Firdaus, and Jahrizal, 'Sistem Sumber Tenaga Listrik Berbasis Baterai Untuk Usaha Jajanan Kuliner Bergerak', *Pros. Semin. Has. Penelit. Dan Pengabd. Kpd. Masy.*, p. 11.
- [26] 'BU-409b: Charging Lithium Iron Phosphate', Battery University. Accessed: May 20, 2025. [Online]. Available: <https://batteryuniversity.com/article/bu-409b-charging-lithium-iron-phosphate>

- [27] 'Sel baterai LiFePO4 - Baterai Legend', Legend Battery. Accessed: Aug. 15, 2025. [Online]. Available: <https://legendbatteries.com/id/product/lifepo4-battery-cell>
- [28] N. Seghers, 'Ideal Depth of Discharge for LiFePO4 Batteries'. Accessed: May 20, 2025. [Online]. Available: <https://cleversolarpower.com/depth-of-discharge-lifepo4-batteries/>
- [29] charles.z, 'Difference Between a 48 Volt Lithium Ion Battery and a 51.2V LiFePO4 Battery', menred-ess.com. Accessed: May 20, 2025. [Online]. Available: <https://menred-ess.com/difference-between-a-48-volt-lithium-ion-battery-and-a-51-2v-lifepo4-battery/>
- [30] R. H. Byrne, T. A. Nguyen, D. A. Copp, B. R. Chalamala, and I. Gyuk, 'Energy Management and Optimization Methods for Grid Energy Storage Systems', *IEEE Access*, vol. 6, pp. 13231–13260, 2018, doi: 10.1109/ACCESS.2017.2741578.
- [31] 'FIGURE 7. Battery 3-stage charging (bulk charge, absorb charge, and...)', ResearchGate. Accessed: Aug. 15, 2025. [Online]. Available: https://www.researchgate.net/figure/Battery-3-stage-charging-bulk-charge-absorb-charge-and-float-charge_fig9_319281880
- [32] 'Guide for LiFePO4 Voltage Chart & SOC 12V/24V/48V', PowMr. Accessed: May 20, 2025. [Online]. Available: <https://powmr.com/blogs/news/lifepo4-voltage-chart-and-soc>
- [33] C. Chen, H. Ma, and Y. Wang, 'The Progress and Future Prospects of Lithium Iron Phosphate Cathode Materials', *Highlights Sci. Eng. Technol.*, vol. 3, pp. 31–42, Jul. 2022, doi: 10.54097/hset.v3i.690.
- [34] 'DOMAE MCB 1P 63A C 230V 4500A'. Accessed: Aug. 15, 2025. [Online]. Available: <https://eshop.se.com/id/domae-mcb-1p-63a-c-230v-4500a-dom11336sni.html>
- [35] 'Implementasi Pengujian Karakteristik Miniatur Circuit Breaker Berdasarkan SNI'.
- [36] Schneider Electric, 'Circuit Breakers Tripping Curves', Schneider Electric, Technical Datasheet. [Online]. Available: <https://www.se.com/ww/en/>
- [37] L. Latifah, I. Irman, and R. Ruskardi, 'Penentuan Tipe Miniature Circuit Breaker 4A Untuk Instalasi Rumah Tinggal Melalui Pengujian Kinerjanya', *J. ELIT*, vol. 2, no. 1, pp. 43–51, Apr. 2021, doi: 10.31573/elit.v2i1.215.
- [38] J. Jamaaluddin, I. Anshory, and S. D. Ayuni, 'Analysis of Overcurrent Safety in Miniature Circuit Breaker with Alternating Current', *J. Electr. Technol. UMY*, vol. 5, no. 2, pp. 68–73, Dec. 2021, doi: 10.18196/jet.v5i2.12508.
- [39] 'Sizing the DC Disconnect for Solar PV Systems | Greentech Renewables'. Accessed: Aug. 07, 2025. [Online]. Available: <https://www.greentechrenewables.com/article/sizing-dc-disconnect-solar-pv-systems>
- [40] GSES, 'Sizing DC Isolators with AS/NZ 5033:2014 - Changes in Amendment 2', GSES. Accessed: Aug. 07, 2025. [Online]. Available: <https://www.gses.com.au/a-guide-to-as-nzs-50332014-amendment-2-changes-to-isolator-sizing/>

- [41] 'DC Isolator For Solar Panels | Free Delivery Over \$500'. Accessed: Aug. 15, 2025. [Online]. Available: <https://pvconnections.com.au/product-category/system-isolation-and-protection/dc-isolation/>
- [42] mmlidigi, 'Understanding DC MCCBs and DC MCBs: Similarities and Essential Differences | BENY New Energy', Beny New Energy | BENY Electric. Accessed: Aug. 07, 2025. [Online]. Available: <https://www.beny.com/understanding-dc-mccbs-and-dc-mcbs-similarities-and-essential-differences/>
- [43] 'DC Molded Case Circuit Breakers 1000V - China Suntime Electric'. Accessed: Aug. 15, 2025. [Online]. Available: <https://www.chinasuntime.com/dc-mccb/dc-molded-case-circuit-breakers-1000v.htm>
- [44] 'Glass Fuse T5 (1A-250V) | Flux Electronix'. Accessed: Aug. 15, 2025. [Online]. Available: <https://fluxelectronix.com/shop/glass-fuse-t5-1a-250v/>
- [45] 'How to Properly Fuse Your Solar System', Renogy United States. Accessed: Apr. 16, 2025. [Online]. Available: <https://www.renogy.com/blog/how-to-fuse-your-solar-system/>
- [46] 'Acti 9 iPF K 40 modular surge arrester - 1 pole + N - 340V'. Accessed: Aug. 15, 2025. [Online]. Available: <https://eshop.se.com/id/acti-9-ipf-k-40-modular-surge-arrester-1-pole-n-340v-a9l15687.html>
- [47] R. Santopietro, 'The Importance of Photovoltaic Surge Protection for Solar Systems', Raycap Industrial Surge Protection Devices and Lightning Strike Protection. Accessed: Apr. 16, 2025. [Online]. Available: <https://www.raycap.com/the-importance-of-photovoltaic-surge-protection-for-solar-systems/>
- [48] 'The Surge Protection Device (SPD) - Electrical Installation Guide'. Accessed: Apr. 16, 2025. [Online]. Available: [https://www.electrical-installation.org/enwiki/The_Surge_Protection_Device_\(SPD\)](https://www.electrical-installation.org/enwiki/The_Surge_Protection_Device_(SPD))
- [49] R. Mubarak, R. N. Prasetyono, and Z. Alfariqhi, 'Analisis Sistem Grounding Menggunakan Elektroda Ground Rod Jenis Tembaga Pada Gedung A dan D di Universitas Peradaban', *J. Telecommun. Electron. Control Eng. JTECE*, vol. 4, no. 2, pp. 100–107, Jul. 2022, doi: 10.20895/jtece.v4i2.708.
- [50] Z. G. Datsios and P. N. Mikropoulos, 'Safe grounding system design for a photovoltaic power station', in *8th Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion (MEDPOWER 2012)*, Cagliari, Italy: Institution of Engineering and Technology, 2012, pp. 62–62. doi: 10.1049/cp.2012.2041.
- [51] V. A. Konusarov, E. A. Shutov, and T. E. Turukina, 'Grounding Systems for Power Supply Facilities', *Energy Power Eng.*, vol. 11, no. 01, pp. 1–14, 2019, doi: 10.4236/epe.2019.111001.
- [52] International Electrotechnical commission, *Low-voltage electrical installations. Part 5-54: selection and erection of electrical equipment: Earthing arrangements and protective conductors*. Geneva: International Electrotechnical commission, 2011.
- [53] 'IEC 60364-4-41:2005+AMD1:2017 CSV'. Accessed: Jun. 02, 2025. [Online]. Available: <https://webstore.iec.ch/en/publication/60169>

- [54] Direktorat Jenderal Ketenagalistrikan and Kementerian ESDM Republik Indonesia, 'Persyaratan Umum Instalasi Listrik 2011 (PUIL 2011_,' Kementerian Energi dan Sumber Daya Mineral Republik Indonesia, Jakarta, Standard PUIL 2011, 2011.
- [55] Chima Clement, 'Skin Effect in Electrical Conductors: Any Commercially Viable Solution?', 2014, doi: 10.13140/RG.2.1.2368.7920.
- [56] R. Maher, A. El-Faraskoury, M. A. Attia, and A. Emarah, 'Investigation of cable current carrying capacity improvement and its effects on transmit power between Egypt and Saudi Arabia project', *E-Prime - Adv. Electr. Eng. Electron. Energy*, vol. 8, p. 100579, Jun. 2024, doi: 10.1016/j.prime.2024.100579.
- [57] I. R. Aprillia, I. F. Akmalia, D. A. Wulandari, and S. Sujito, 'REKONFIGURASI SALURAN UDARA PADA PENYULANG JARINGAN TEGANGAN MENENGAH UNTUK MENGURANGI DROP TEGANGAN DI PT. PLN (PERSERO) ULP PACET', *J. Inform. Dan Tek. Elektro Terap.*, vol. 12, no. 1, Jan. 2024, doi: 10.23960/jitet.v12i1.3782.
- [58] 'Kenali 5 Jenis Kabel Yang Sering Digunakan Beserta Fungsinya'. Accessed: Jun. 03, 2025. [Online]. Available: <https://www.wilsoncables.com/id/news/jenis-jenis-kabel>
- [59] B. Irwanto *et al.*, 'PEMANFAATAN TEKNOLOGI MEMBRAN REVERSE OSMOSIS (RO) UNTUK PENGOLAHAN AIR BERSIH DI KAMPUNG NELAYAN, DESA KEDUNGPANDAN, KECAMATAN JABON, KABUPATEN SIDOARJO', *J. Terap. Abdimas*, vol. 8, no. 2, p. 203, May 2023, doi: 10.25273/jta.v8i2.14573.
- [60] 'Deionizer System Screen (SISETA).', ResearchGate. Accessed: Aug. 15, 2025. [Online]. Available: https://www.researchgate.net/figure/Deionizer-System-Screen-SISETA_fig11_336588288
- [61] 'Apa itu Reverse Osmosis? - Pure Aqua, Inc.' Accessed: Apr. 29, 2025. [Online]. Available: <https://pureaqua.com/what-is-reverse-osmosis/>