

DAFTAR PUSTAKA

- [1] Badan Pengkajian dan Penerapan Teknologi (BPPT), *Outlook Energi Indonesia 2021 Perspektif Teknologi Energi Indonesia: Tenaga Surya untuk Penyediaan Energi Charging Station*. 2021.
- [2] Tim Sekretariat Jenderal Dewan Energi Nasional, *Outlook Energi Indonesia 2022*. 2022.
- [3] P. Indonesia, “PP No. 79 Thn 2014.” pp. 1–36, 2014.
- [4] IESR, “Deep decarbonization of Indonesia’s energy system : A pathway to zero emissions,” 2021.
- [5] “Solar resource maps of Indonesia,” *World Bank Group*, 2021. <https://solargis.com/maps-and-gis-data/download/indonesia> (accessed Jun. 11, 2022).
- [6] H. Damayanti, F. Tumiwa, and M. Citraningrum, “Residential Rooftop Solar Potential in 34 Provinces in Indonesia,” *Iesr*, no. 20, pp. 1–16, 2019, [Online]. Available: <https://iesr.or.id/download/iesr-technical-note-residential-rooftop-solar-potential-in-34-provinces-id-pdf>
- [7] Tim Sekretaris Jenderal Dewan Energi Nasional, “Indonesia Energy Outlook 2019,” *J. Chem. Inf. Model.*, vol. 53, no. 9, pp. 1689–1699, 2019.
- [8] A. Rachmi, B. Prakoso, Hanny Berchmans, I. Devi Sara, and Winne, *Panduan Perencanaan dan Pemanfaatan PLTS atap di Indonesia*. 2020.
- [9] S. G. Ramadhan and C. Rangkuti, “Perencanaan Pembangkit Listrik Tenaga Surya Di Atap Gedung Harry Hartanto Universitas Trisakti,” pp. 1–11, 2016.
- [10] I. D. G. Y. P. Pratama, I. N. S. Kumara, and I. N. Setiawan, “Potensi Pemanfaatan Atap Gedung Pusat Pemerintahan Kabupaten Badung untuk PLTS Rooftop,” *J. SPEKTRUM*, vol. 5, no. 2, pp. 119–128, Dec. 2018, doi: 10.24843/SPEKTRUM.2018.V05.I02.P15.
- [11] “UGM dan PT Agra Surya Energy Jalin Kerja Sama | Universitas Gadjah Mada.” <https://ugm.ac.id/id/berita/21677-ugm-dan-pt-agra-surya-energy-jalin-kerja-sama> (accessed Oct. 08, 2021).
- [12] E. M. Saber, S. E. Lee, S. Manthapuri, W. Yi, and C. Deb, “PV (photovoltaics) performance evaluation and simulation-based energy yield



- prediction for tropical buildings,” *Energy*, vol. 71, pp. 588–595, 2014, doi: 10.1016/j.energy.2014.04.115.
- [13] R. Darussalam, A. Rajani, K. Kusnadi, and T. D. Atmaja, “Pengaturan Arah Azimuth Dan Sudut Tilt Panel Photovoltaic Untuk Optimalisasi Radiasi Matahari, Studi Kasus: Bandung - Jawa Barat,” vol. V, pp. SNF2016-ERE-31-SNF2016-ERE-36, 2016, doi: 10.21009/0305020606.
- [14] F. Rosyada, “Perancangan Sistem Energi Tenaga Surya Pada Bangunan Gedung Pusat Universitas Gadjah Mada Melalui Integrasi Photovoltaic Terhadap Bangunan,” 2015.
- [15] O. S. E. Saputra, “Rancangan Sistem Pembangkit Listrik Tenaga Surya (Plts) Sebagai Komponen Pendukung Green Building Pada Gedung,” 2015.
- [16] A. Mansur, “Analisa Kinerja Plts on Grid 50 Kwp Akibat Efek Bayangan Menggunakan Software Pvsyst,” *Transmisi*, vol. 23, no. 1, pp. 28–33, 2021, doi: 10.14710/transmisi.23.1.28-33.
- [17] M. Baqir and H. K. Channi, “Analysis and design of solar PV system using Pvsyst software,” *Mater. Today Proc.*, vol. 48, pp. 1332–1338, 2021, doi: 10.1016/j.matpr.2021.09.029.
- [18] E. Nur’aini, “Analisis Keberlanjutan Rancang Bangun Integrasi PLTS dalam Bangunan Hijau Kompleks Kantor Bupati Wonogiri,” 2021.
- [19] R. Nurdin, “Analisis Teknoekonomi serta Dampak Lingkungan Penerapan PLTS Atap untuk Kawasan Industri Studi Kasus Kawasan Industri Pesawat Terbang PT. Dirgantara Indonesia,” 2022.
- [20] D. Irawan, “Analisis Potensi Pembangkitan Listrik dengan Menggunakan Fotovoltaik di Atap Gedung Kampus Universitas Gadjah Mada Bagian Barat,” 2016, Accessed: Aug. 01, 2022. [Online]. Available: <http://etd.repository.ugm.ac.id/penelitian/detail/107732>
- [21] E. A. Karuniawan, “Simulasi dan Analisis PLTS Sistem On-Grid pada Gedung Pusat Studi Lingkungan Hidup dengan Skema Kebijakan PLTS Atap,” 2019.
- [22] F. I. Wicaksana, “Analisis Performansi PV Monocrystalline dan Thin Film pada Co-Working Space Innovative Academy Hub Berbasis Simulasi,”



- 2020, Accessed: Aug. 01, 2022. [Online]. Available: <http://etd.repository.ugm.ac.id/penelitian/detail/195675>
- [23] S. R. Wenham, M. A. Green, M. E. Watt, and R. Corkish, *Applied Photovoltaics*, 2nd editio. Routledge, 2013.
- [24] R. A. Messenger and J. Ventre, *Photovoltaic Systems Engineering*, 2nd editio. CRC Press, 2004.
- [25] A. H. Smets, K. Jäger, O. Isabella, R. van Swaaij, and M. Zeman, *Solar energy: the physics and engineering of photovoltaic conversion, technologies and systems*. Cambridge, England: UIT Cambridge, 2016.
- [26] ABB, “Technical Application Papers No.10. Photovoltaic Plants,” *Tech. Appl. Pap.*, vol. 10, no. 10, p. 107, 2010, [Online]. Available: [http://www04.abb.com/global/seitp/seitp202.nsf/c71c66c1f02e6575c125711f004660e6/d54672ac6e97a439c12577ce003d8d84/\\$file/vol.10.pdf](http://www04.abb.com/global/seitp/seitp202.nsf/c71c66c1f02e6575c125711f004660e6/d54672ac6e97a439c12577ce003d8d84/$file/vol.10.pdf). v
Diakses: 30 Agustus 2021
- [27] “Instructions | PVEducation.” <https://www.pveducation.org/pvcdrom/welcome-to-pvcdrom/instructions> (accessed Oct. 10, 2022).
- [28] “Solar Off Grid Rooftop System | Nirvana foundation.” <https://www.nirvanafoundation.com/solar-grid-rooftop-system.html> (accessed Jan. 18, 2023).
- [29] “PLTS On Grid - Rumah Solar Raina.” <https://rumahsolarraina.com/jasa-pelayanan/pembangkit-listrik-tenaga-surya-on-grid/> (accessed Jan. 18, 2023).
- [30] A. Khaligh and O. C. Onar, *Energy harvesting: Solar, wind, and ocean energy conversion systems*. CRC Press, 2017. doi: 10.1201/9781439815090/ENERGY-HARVESTING-ALIREZA-KHALIGH-OMER-ONAR.
- [31] J. Doucet, D. Eggleston, and J. Shaw, “DC/AC Pure Sine Wave Inverter,” *MQP Terms ABC*, pp. 1–41, [Online]. Available: http://www.koreadefence.net/data/board_notice/1277519639-47.pdf
- [32] T. L. Gurupira, “Evaluation and optimisation of photovoltaic (PV) plant



- designs,” no. March, p. 1 138, 2018.
- [33] C. E. Council, “Grid-Connected Solar PV Systems: Design Guidelines for Accredited Installers,” vol. January, no. 6, pp. 0–18, 2013.
- [34] N. Sugiarta, “Energy Yield of a 1.3 kWp Grid-Connected Photovoltaic System Design: Case for a Small House in Bali,” *Matrix J. Manaj. Teknol. dan Inform.*, vol. 10, no. 1, pp. 19–25, 2020, doi: 10.31940/matrix.v10i1.1838.
- [35] N. M. Kumar *et al.*, “Operational performance of on-grid solar photovoltaic system integrated into pre-fabricated portable cabin buildings in warm and temperate climates,” *Energy Sustain. Dev.*, vol. 57, pp. 109–118, 2020, doi: 10.1016/j.esd.2020.05.008.
- [36] Kiran Krishna Dhandale, “IRJET- A Review of Design, Manufacturing of Grid Tied PV Inverter and its Impact on Site Performance, Reliability and Safety,” *Irjet*, vol. 8, no. 5, pp. 4672–4696, 2021.
- [37] O. Prakash, V. Victor, D. Dung, P. Mishra, and R. Kumar, “Simulating rooftop solar arrays with varying design parameters to study effect of mutual shading,” *Energy Sustain. Dev.*, vol. 68, pp. 425–440, 2022, doi: 10.1016/j.esd.2022.04.010.
- [38] S. Ekici and M. A. Kopru, “Investigation of PV system cable losses,” *Int. J. Renew. Energy Res.*, vol. 7, no. 2, pp. 807–815, 2017, doi: 10.20508/ijrer.v7i2.5660.g7062.
- [39] H. Hanifi *et al.*, “Loss analysis and optimization of PV module components and design to achieve higher energy yield and longer service life in desert regions,” *Appl. Energy*, vol. 280, no. April, p. 116028, 2020, doi: 10.1016/j.apenergy.2020.116028.
- [40] L. M. Putranto, T. Widodo, H. Indrawan, M. Ali Imron, and S. A. Rosyadi, “Grid parity analysis: The present state of PV rooftop in Indonesia,” *Renew. Energy Focus*, vol. 40, no. March, pp. 23–38, 2022, doi: 10.1016/j.ref.2021.11.002.
- [41] D. RIZKASARI, “Optimasi Penempatan PLTS On-Grid di Gedung Dinas Pekerjaan Umum, Perumahan dan Energi Sumber Daya Mineral (PUP-



- ESDM) Provinsi Daerah Istimewa ...,” 2020.
- [42] J. Kneifel and D. Webb, *Life Cycle Costing Manual for the Federal Energy Management Program*. 2022. [Online]. Available: <https://nvlpubs.nist.gov/nistpubs/hb/2022/NIST.HB.135e2022-upd1.pdf>
- [43] Pv. SA, “Tutorial PVSYST 7 Grid-Connected,” 2019.
- [44] Meteoronorm *et al.*, “Meteoronorm Handbook part II: Theory,” *Bern, Switz.*, no. March, p. 80, 2020.
- [45] A. Allouhi, S. Rehman, M. S. Buker, and Z. Said, “Up-to-date literature review on Solar PV systems: Technology progress, market status and R&D,” *J. Clean. Prod.*, vol. 362, no. January, p. 132339, 2022, doi: 10.1016/j.jclepro.2022.132339.
- [46] B. Ramadhani, *Instalasi Pembangkit Listrik Tenaga Surya Dos & Don ' ts*. Jakarta, 2018.
- [47] H. Wirth, “Recent facts about photovoltaics in Germany,” *Fraunhofer ISE*, p. 92, 2017, [Online]. Available: <http://pschuetzenduebe.webclient5.de/wp-content/uploads/130912-Recent-Facts-PV-Germany.pdf>
- [48] JA Solar, “Datasheet JAM72S20-MR-455.”
- [49] Canadian Solar, “Datasheet CS3W-455MS.”
- [50] Longi Solar, “Datasheet LR5-66HPH-500.”
- [51] Trina Solar, “Datasheet TSM-DE18M(II).” 2022. [Online]. Available: www.trinasolar.com
- [52] The German Solar Energy Society, *Planning and Installing Photovoltaic System*, 2nd ed. London, 2008.
- [53] Huawei Solar, “Datasheet Inverter SUN2000-36KTL.” [Online]. Available: www.huawei.com/
- [54] Sungrow, “Datasheet Inverter SG36KTL-M.” 2017. [Online]. Available: www.sungrowpower.com
- [55] Menteri Keuangan Republik Indonesia, “Peraturan Menteri Keuangan Republik Indonesia Nomor 26/PMK.010/2022 Tentang Penetapan Sistem Klasifikasi Barang Dan Pembebanan Tarif Bea Masuk Atas Barang Impor.” 2022.



- [56] A. Sangwongwanich, Y. Yang, D. Sera, and F. Blaabjerg, "Lifetime Evaluation of Grid-Connected PV Inverters Considering Panel Degradation Rates and Installation Sites," *IEEE Trans. Power Electron.*, vol. 33, no. 2, pp. 1125–1236, Feb. 2018, doi: 10.1109/TPEL.2017.2678169.
- [57] A. Walker *et al.*, "Model of Operation-and-Maintenance Costs for Photovoltaic Systems, Technical Report NREL/TP-5C00-74840," *Nrel*, no. June, 2020.
- [58] N. Darghouth, J. McCall, D. Keyser, A. Aznar, and C. Gokhale-Welch, "Distributed Photovoltaic Economic Impact Analysis in Indonesia," no. February, p. 34, 2020, [Online]. Available: <https://www.osti.gov/servlets/purl/1602706/>
- [59] T. Curtis *et al.*, "Best Practices at the End of the Photovoltaic System Performance Period Best Practices at the End of the Photovoltaic System Performance Period," no. February, 2021.
- [60] International Renewable Energy Agency (IRENA), *Renewable Power Generation Costs in 2021*. 2022. [Online]. Available: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2018/Jan/IRENA_2017_Power_Costs_2018.pdf

