UNIVERSITAS
GADJAH MADA
**Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan
Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building**
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

ABB SACE "Photovoltaic Plants." (2014). *Technical Application Papers No.10*.

African Union. (2021). *Is energy transition the answer to Africa's Climate Change and Socio-Economic Development? What will it take for Africa to reach net-zero emissions?* https://au.int/en/pressreleases/20211109/energy-transition-answer-africas-climate-change-and-socio-economic

Aggarwal, S. (2020). Pathways To Net Zero Carbon Buildings In Reach Around The World Today. *Forbes*. https://www.forbes.com/sites/energyinnovation/2020/01/29/pathways-to-net-zero-carbon-buildings-in-reach-around-the-world-today/?sh=5c2489623b40

Ahirwar, P., Kori, A. K., & Kapoor, S. (2021). Pre-Installation Analysis via "PVsyst" "HOMER Pro" to Design Simulate a 50kWp Solar Grid-Tied PV System for Rural Area Electrification, India. *2021 5th International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques, ICEECCOT 2021 - Proceedings*, 388–394. https://doi.org/10.1109/ICEECCOT52851.2021.9708056

Attia, S. (2018). Net Zero Energy Buildings (NZEB): Concepts, Frameworks and Roadmap for Project Analysis and Implementation. Dalam *Net Zero Energy Buildings (NZEB) : concepts, frameworks and roadmap for project analysis and implementation*. Elsevier. http://www.sciencedirect.com:5070/book/9780128124611/net-zero-energy-buildings-nzeb?via=ihub=

Babatunde, A. A., & Abbasoglu, S. (2015). Evaluation of field data and simulation results of a photovoltaic system in countries with high solar radiation. *Turkish Journal of Electrical Engineering & Computer Sciences, 23*, 1608–1618. https://doi.org/10.3906/elk-1402-313

Badan Perencanaan Pembangunan Daerah (Bappeda), & Badan Penelitian dan Pengembangan Daerah (Litbangda) Kabupaten Magelang. (2021). *Kajian Lingkungan Hidup Strategis (KLHS) Perubahan Rencana Pembangunan*

UNIVERSITAS
GADJAH MADA
**Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan
Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building**
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Jangka Menengah Daerah (RPJMD) Kabupaten Magelang Tahun 2019 - 2024.

Badan Pusat Statistik Kabupaten Magelang. (2017). Kabupaten Magelang Dalam Angka 2017. Dalam *2017*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2018a). *Kabupaten Magelang Dalam Angka 2018*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2018b). *Statistik Daerah Kabupaten Magelang 2018*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2019a). *Kabupaten Magelang Dalam Angka 2019*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2019b). *Statistik Daerah Kabupaten Magelang 2019*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2020a). *Kabupaten Magelang Dalam Angka 2020*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2020b). *Statistik Daerah Kabupaten Magelang 2020*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2021a). *Kabupaten Magelang Dalam Angka 2021*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2021b). *Statistik Daerah Kabupaten Magelang 2021*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2022a). *Kabupaten Magelang Dalam Angka 2022*. https://magelangkab.bps.go.id/

Badan Pusat Statistik Kabupaten Magelang. (2022b). *Statistik Daerah Kabupaten Magelang 2022*. https://magelangkab.bps.go.id/

Badan Pusat Statistika. (2023, Agustus 1). *Juli 2023 inflasi Year on Year (y-on-y) sebesar 3,08 persen. Inflasi tertinggi terjadi di Merauke sebesar 5,21 persen*. https://www.bps.go.id/pressrelease/2023/08/01/1956/juli-2023-inflasi-year-on-year--y-on-y--sebesar-3-08-persen--inflasi-tertinggi-terjadi-di-merauke-sebesar-5-21-persen.html.

Standar Nasional Indonesia 8395:2017, (2017).

UNIVERSITAS GADJAH MADA
Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Bagaskara, A., Kurniawan, D., Bintang, H. M., Julion, R., Shahnaz, S., Firdausi, N., Diah, H., Christian, P. J., Citraningrum, M., & Tumiwa, F. (2023). *Indonesia Solar Energy Outlook 2023 The emergence of solar PV in fueling Indonesia's energy transition*.

Bank Mandiri. (2023). *BMRI 2023 Q2 Presentation*. https://www.bankmandiri.co.id/documents/38265486/0/BMRI+2023+Q2+Presentation.pdf/8a81e605-7cfb-766b-eb6e-f84e0d648a20?t=1693558431364

Bansal, H., Yawle, S., & Suhane, P. (2017). Design and Economic Analysis of Stand Alone Solar PV Energy System by using HOMER and PVsyst Software. Dalam *International Journal of Research* (Nomor 2).

Baqir, M., & Channi, H. K. (2021). Analysis and design of solar PV system using Pvsyst software. *Materials Today: Proceedings*, *48*, 1332–1338. https://doi.org/10.1016/j.matpr.2021.09.029

Belussi, L., Barozzi, B., Bellazzi, A., Danza, L., Devitofrancesco, A., Fanciulli, C., Ghellere, M., Guazzi, G., Meroni, I., Salamone, F., Scamoni, F., & Scrosati, C. (2019). A review of performance of zero energy buildings and energy efficiency solutions. *Journal of Building Engineering*, *25*, 100772. https://doi.org/10.1016/J.JOBE.2019.100772

Boedoyo, M. S. (2013). Potensi dan Peranan Plts Sebagai Energi Alternatif Masa Depan di Indonesia. *Jurnal Sains dan Teknologi Indonesia*. https://www.researchgate.net/profile/m-boedoyo/publication/277916035_potensi_dan_peranan_plts_sebagai_energi_alternatif_masa_depan_di_indonesia/links/55769f6d08aeb6d8c01af43f/potensi-dan-peranan-plts-sebagai-energi-alternatif-masa-depan-di-indonesia

Bogacka, M., Pikoń, K., & Landrat, M. (2017). Environmental impact of PV cell waste scenario. *Waste Management*, *70*, 198–203. https://doi.org/10.1016/J.WASMAN.2017.09.007

Boxwell, M. (2012). *Solar Electricity Handbook A simple, practical guide to solar energy: how to design and install photovoltaic solar electric systems*. Greenstream Publishing. www.GreenstreamPublishing.com

UNIVERSITAS
GADJAH MADA
**Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan
Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building**
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Celik, I., Song, Z., Phillips, A. B., Heben, M. J., & Apul, D. (2018). Life cycle analysis of metals in emerging photovoltaic (PV) technologies: A modeling approach to estimate use phase leaching. *Journal of Cleaner Production*, *186*, 632–639. https://doi.org/10.1016/J.JCLEPRO.2018.03.063

Chenni, R., Matagne, E., & Khennane, M. (2011). Study of Solar Radiation in View of Photovoltaic Systems Optimization. *Smart Grid and Renewable Energy*, *02*(04), 367–374. https://doi.org/10.4236/SGRE.2011.24042

Curtis, T. L., Buchanan, H., Heath, G., Smith, L., & Shaw, S. (2021). *Solar Photovoltaic Module Recycling: A Survey of U.S. Policies and Initiatives*. www.nrel.gov/publications.

Curtis, T. L., Buchanan, H., Smith, L., & Heath, G. (2030). *A Circular Economy for Solar Photovoltaic System Materials: Drivers, Barriers, Enablers, and U.S. Policy Considerations*. www.nrel.gov/publications.

Dinas Pekerjaan Umum Sumber Daya Air dan Penataan Ruang Provinsi Jawa Tengah. (2021). *Rata-Rata Suhu Udara, Kelembaban, Tekanan Udara, Kecepatan Angin, Curah Hujan, dan Penyinaran Matahari Kabupaten Magelang*.

Direktorat Jenderal Energi Baru Terbarukan dan Konservasi Energi - Kementerian Energi Sumber Daya Mineral. (2021). *Public Hearing Revisi Peraturan Menteri Tentang PLTS Atap*. https://ebtke.esdm.go.id/post/2023/01/10/3396/public.hearing.revisi.peraturan.menteri.tentang.plts.atap

Direktorat Jenderal Pengendalian Perubahan Iklim, & Kementerian Lingkungan Hidup dan Kehutanan. (2016). *Perubahan Iklim, Perjanjian Paris, dan Nationally Determined Contribution*.

Diwania, S., Agrawal, S., Siddiqui, A. S., & Singh, S. (2020). Photovoltaic–thermal (PV/T) technology: a comprehensive review on applications and its advancement. *International Journal of Energy and Environmental Engineering*, *11*(1), 33–54. https://doi.org/10.1007/S40095-019-00327-Y/TABLES/2

UNIVERSITAS
GADJAH MADA
**Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan
Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building**
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Duffie, J. A., Beckman, W. A., & Blair, Nate. (2020). *Solar engineering of thermal processes, photovoltaics and wind* (Fifth). Wiley.

Dwi, M., Ramadhan, C., Aji, P., Sidiq, R., Ulfa, A. N., Ahmad, R. Z., & Putra, J. T. (2021). Perancangan Pembangkit Listrik Tenaga Surya (PLTS) pada Kolam Budidaya di Daerah Sentono Menggunakan Software Pvsyst. *JUPITER (Jurnal Pendidikan Teknik Elektro)*, *6*(2), 18–30. http://e-journal.unipma.ac.id/index.php/JUPITER/article/view/10519

E. A. Karuniawan. (2021). Analisis Perangkat Lunak PV syst, PV Sol, dan HelioScope dalam simulasi Fixed Tilt Photovoltaic. *Mercubuana*, *12*, 100–105. https://doi.org/10.22441/jte.2021.v12i3.001.

Endriatno, N., Sudarsono, S., Sudia, B., Imran, A. I., Aminur, A., & Aksar, P. (2019). Analisis Potensi Energi Matahari di Kota Kendari. *DINAMIKA : Jurnal Ilmiah Teknik Mesin*, *11*(1), 19. https://doi.org/10.33772/djitm.v11i1.9055

Energy Agency, I., & Nations Environment Programme, U. (2020). *GlobalABC Roadmap for Buildings and Construction Towards a zero-emission, efficient, and resilient buildings and construction sector*. www.iea.org

European Union. (2019). *OVERVIEW | Zero-Energy Buildings: does the definition influence their design and implementation?* https://build-up.ec.europa.eu/en/resources-and-tools/articles/overview-zero-energy-buildings-does-definition-influence-their-design

Google Earth. (2023). *Lokasi Dinas Pendidikan Dan Kebudayaan Kabupaten Magelang*. https://www.google.com/maps/place/Dinas+Pendidikan+Dan+Kebudayaan+Kabupaten+Magelang/data=!4m2!3m1!1s0x2e7a8c6297a95c19:0x9405aeaa5837892b?gl=ID&hl=id.

Hapsari, M. A., & Subiyanto, S. (2020). Fuzzy AHP based optimal design building-attached photovoltaic system for academic campus. *International Journal of Photoenergy*, *2020*. https://doi.org/10.1155/2020/6508329

Harb, S., Kedia, M., Zhang, H., & Balog, R. S. (2013). Microinverter and string inverter grid-connected photovoltaic system - A comprehensive study.

UNIVERSITAS
GADJAH MADA
**Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan
Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building**
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Conference Record of the IEEE Photovoltaic Specialists Conference, 2885–2890. https://doi.org/10.1109/PVSC.2013.6745072

Harkouss, F., & Côte, U. (2018). *Optimal design of net zero energy buildings under different climates Optimal design of net zero energy buildings under different climates. Mechanical engineering [physics.class-ph]. COMUE*. https://theses.hal.science/tel-01891916

Hidayat, F., Winardi, B., & Nugroho, A. (2018). Analisis Ekonomi Perencanaan Pembangkit Listrik Tenaga Surya (PLTS) Di Departemen Teknik Elektro Universitas Diponegoro. *TRANSIENT*, *7*.

https://amper.md/. (2020). *Datasheet Inverter "X."* https://amper.md/wp-content/uploads/2020/05/gw50-60k-mt.pdf.

https://d2fp8gxcp7iq0s.cloudfront.net/. (2023). *Datasheet Panel Surya "X."* https://d2fp8gxcp7iq0s.cloudfront.net/documents/wFKGHa5yWLpSHiu7gCpA0zqKaGdJccitimCGKRgG.pdf .

https://ebtke.esdm.go.id. (2022). *Aplikasi Pelayanan dan Pelaporan PLTS Atap.* https://ebtke.esdm.go.id/simantaps/faq

https://ergisnodiffusion.com. (2023). *Thin Film Photovoltaics*. https://ergisnodiffusion.com/thin-film-photovoltaics.

https://goodwe-inverter.hu/. (2020). *Dataseheet Inverter "Y."* https://goodwe-inverter.hu/wp-content/uploads/SMT-LVSMT.pdf.

https://list.solar. (2021). *PVSyst Review: Pros and Cons of PV system design software package*. https://list.solar/news/pvsyst-review/

https://rollsbattery.com. (2023). *Datasheet Baterai*. https://rollsbattery.com/battery/s12-95agm-re/.

https://shopee.co.id/. (2023). *Harga SCC*. https://shopee.co.id/product/239556532/20812599081?gclid=CjwKCAjwxOymBhAFEiwAnodBLHBLOQpkLjjXb3nYWb35X7u0sFYx_FMTFVH7SwhbYEEvM5HsNgIkPRoCs20QAvD_BwE.

https://solinved.com. (2016). *Datasheet SCC MPK*. https://solinved.com/wp-content/uploads/2022/03/MPK-usersmanual.pdf.

UNIVERSITAS GADJAH MADA
Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

https://tokopedia.com. (2023a). *Harga Baterai*. https://tokopedia.link/DG8I1EvB0Cb.

https://tokopedia.com. (2023b). *Harga Inverter "X."* https://tokopedia.link/BJK8lFbD0Cb.

https://tokopedia.com. (2023c). *Harga Inverter "Y."* https://tokopedia.link/6iJX8WwD0Cb.

https://tokopedia.com. (2023d). *Harga Panel Surya "X."* https://tokopedia.link/JCbzlKzE0Cb.

https://tokopedia.com. (2023e). *Harga Panel Surya "Y."* https://tokopedia.link/MF01RDTE0Cb.

https://www.enfsolar.com. (2022). *Datasheet Panel Surya "Y:* https://www.enfsolar.com/pv/panel-datasheet/crystalline/47504?gclid=Cj0KCQjwib2mBhDWARIsAPZUn_l0aVItAnoqE3H25e0kKW1QTOyEI3GsxpYv-- .

Indonesia Clean Energy Development. (2020). *Panduan Perencanaan dan Pemanfaatan PLTS Atap di Indonesia*.

Indonesia.go.id. (2023). *Indonesia.go.id - Kini Beli PLTS Atap Bisa Dicicil*. https://indonesia.go.id/kategori/berita/2849/kini-beli-plts-atap-bisa-dicicil?lang=1

Institute for Essential Services Reform. (2023). *Pemprov Jateng Genjot Pemanfaatan PLTS Atap di Lingkungan Pemda - IESR*. https://iesr.or.id/pemprov-jateng-genjot-pemanfaatan-plts-atap-di-lingkungan-pemda

Institute of Electrical and Electronic Engineering. (2000). IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems. *IEEE Std 929-2000*, i-. https://doi.org/10.1109/IEEESTD.2000.91304

International Renewable Energy Agency (IRENA), & International Energy Agency Photovoltaic Power Systems (IEA-PVPS). (2016). *End-of-life Management Solar Photovoltaic Panels*. https://www.irena.org/publications/2016/Jun/End-of-life-management-Solar-Photovoltaic-Panels

UNIVERSITAS
GADJAH MADA
**Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan
Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building**
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Iskandar, H. R. (2020). *Praktis Belajar Pembangkit Listrik Tenaga Surya*. Deepublish.

Jones, R. (2015). Observing classroom behavior: A qualitative study. *Educational Research Quarterly*, *39*(2), 123–145.

Kalogirou, S. A. (2014). *Solar Energy Engineering Processes and Systems Second Edition* (2 ed.). Elsevier Inc. http://store.elsevier.com/

Kementerian Energi Sumber Daya Mineral. (2012). *Matahari Untuk PLTS di Indonesia*. https://www.esdm.go.id/id/media-center/arsip-berita/matahari-untuk-plts-di-indonesia#:~:text=Potensi%20energi%20surya%20di%20Indonesia,dimanfaatkan%20baru%20sekitar%2010%20MWp. https://www.esdm.go.id/id/media-center/arsip-berita/matahari-untuk-plts-di-indonesia

Permen ESDM No. 26 Tahun 2021 tentang PLTS Atap, Pub. L. No. 26 (2021).

Kementrian Energi Sumber Daya Mineral. (2021). *Kerja Sama Setjen DEN, Bank Mandiri, dan PT LEN Dukung Pemanfaatan PLTS Atap di Indonesia*. https://www.esdm.go.id/id/media-center/arsip-berita/kerja-sama-setjen-den-bank-mandiri-dan-pt-len-dukung-pemanfaatan-plts-atap-di-indonesia

Kumar, R., Rajoria, C. S., Sharma, A., & Suhag, S. (2020). Design and simulation of standalone solar PV system using PVsyst Software: A case study. *Materials Today: Proceedings*, *46*, 5322–5328. https://doi.org/10.1016/j.matpr.2020.08.785

Kumar, R., & Rosen, M. A. (2011). A critical review of photovoltaic–thermal solar collectors for air heating. *Applied Energy*, *88*(11), 3603–3614. https://doi.org/10.1016/J.APENERGY.2011.04.044

Kumar, S., Upadhayaya, P., & Kumar, A. (2019). *Performance Analysis of Solar Energy Harnessing System Using Homer Energy Software and PV Syst Software*. IEEE, 2019 2nd International Conference on Power Energy, Environment and Intelligent Control (PEEIC).

Latif, N. N., Sihana, & Suryopratomo, K. (2022). *Simulasi dan Analisis Sistem Pembangkit Listrik Tenaga Surya Atap Terhubung Jaringan untuk Suplai*

UNIVERSITAS GADJAH MADA
Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Kebutuhan Listrik Rumah Tangga 900 VA di Kota Pekalongan. http://etd.repository.ugm.ac.id/penelitian/detail/208656

Lee, G. R., Frearson, L., & Rodden, P. (2011). *An Assessment Of Photovoltaic Modelling Software Using Real World Performance Data*. www.catprojects.com.au

Lemay, A. C., Wagner, S., & Rand, B. P. (2023). Current status and future potential of rooftop solar adoption in the United States. *Energy Policy*, *177*, 113571. https://doi.org/10.1016/J.ENPOL.2023.113571

Manurung, J. P., & Boedoyo, M. S. (2022). Life Cycle Assessment pada Solar Photovoltaics: Review. *Jurnal Penelitian Sains Teknologi*, *13*(1), 20–27. http://journals2.ums.ac.id/index.php/saintek

Messenger, R. A., & Ventre, J. (2004). *Photovoltaic Systems Engineering 2nd Edition* (2 ed.). References - Scientific Research Publishing. https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=125677

Modeste, K. N., & Reiter, S. (2019). *Net Zero Energy Buildings and Low Carbon Emission, a Case of Study of Madagascar Island*. https://doi.org/10.5772/intechopen.90854

Mohammadi, S. A. D., & Gezegin, C. (2022). Design and Simulation of Grid-Connected Solar PV System Using PVSYST, PVGIS and HOMER Software. *International Journal of Pioneering Technology and Engineering*, *1*(01), 36–41. https://doi.org/10.56158/jpte.2022.24.1.01

Mohammed, B. U., Wiysahnyuy, Y. S., Ashraf, N., Mempouo, B., & Mengata, G. M. (2023). Pathways for efficient transition into net zero energy buildings (nZEB) in Sub-Sahara Africa. Case study: Cameroon, Senegal, and Côte d'Ivoire. *Energy and Buildings*, *296*, 113422. https://doi.org/10.1016/J.ENBUILD.2023.113422

Morshed, M. S., Ankon, S. M., Chowdhury, M. T. H., & Rahman, M. A. (2015, November 2). Designing of a 2kW stand-alone PV system in Bangladesh using PVsyst, Homer and SolarMAT. *2015 International Conference on Green*

UNIVERSITAS
GADJAH MADA
**Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan
Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building**
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Energy and Technology, ICGET 2015. https://doi.org/10.1109/ICGET.2015.7315090

Niyonteze, J. D. D., Zou, F., Norense Osarumwense Asemota, G., Bimenyimana, S., & Shyirambere, G. (2020). Key technology development needs and applicability analysis of renewable energy hybrid technologies in off-grid areas for the Rwanda power sector. *Heliyon*, *6*(1). https://doi.org/10.1016/J.HELIYON.2020.E03300

Pal, D., Koniki, H., & Bajpai, P. (2016). Central and Micro Inverters for Solar Photovoltaic Integration in AC grid. *National Power Systems Conference (NPSC)*.

Panggabean, B. T. G. B. (2021). Civil Law Commons, Commercial Law Commons, Constitutional Law Commons, Contracts Commons, Criminal Law Commons, and the International Law Commons Recommended Citation Recommended Citation Panggabean. *Kesiapan Indonesia dalam Memenuhi Nationally Determined Contribution*, *1*. https://scholarhub.ui.ac.id/dharmasisyaAvailableat:https://scholarhub.ui.ac.id/dharmasisya/vol1/iss1/21

Pemerintah Kabupaten Magelang-Dinas Lingkungan Hidup. (2017). *Kajian Lingkungan Hidup Strategis Revisi RTRW Kab Magelang Tahun 2011-2031*.

Perusahaan Listrik Negara. (2021, Juli). *Penetapan Penyesuaian Tarif Tenaga Listrik*. https://web.pln.co.id/statics/uploads/2023/06/ttl-Juli-September-2023.jpg.

Phap, V. M., & Hang, L. T. T. (2020). Comparison of Central Inverter and String Inverter for Solar Power Plant: Case Study in Vietnam. *Journal of Nuclear Engineering & Technology*, *9*(3), 11–23. https://doi.org/10.37591/JONET.V9I3.3538

Pharne, I. D., & Bhosale, Y. N. (2013). A review on multilevel inverter topology. *Proceedings of 2013 International Conference on Power, Energy and Control, ICPEC 2013*, 700–703. https://doi.org/10.1109/ICPEC.2013.6527746

UNIVERSITAS GADJAH MADA
Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Precup, R.-E., & Kamal, T. (2019). *Power Systems Solar Photovoltaic Power Plants Advanced Control and Optimization Techniques* (S. Z. Hassan, Ed.). Springer Nature Singapore Pte.Ltd. http://www.springer.com/series/4622

Peraturan Presiden Republik Indonesia Nomor 22 Tahun 2017 Tentang Rencana Umum Energi Nasional (RUEN), (2017).

Pusat Penelitian dan Pengembangan Teknologi Ketenagalistrikan, E. B. T. dan K. E.-K. E. S. D. dan M. (2023). *E-SMART | Home*. https://p3tkebt.esdm.go.id/esmart/

Ramadhani, A., Ulfiana, A., & Mafendro, Y. (2022). *Analisis Perancangan Sistem PLTS Terhubung Jaringan PLN di Gedung A Teknik Mesin Politeknik Negeri Jakarta Menggunakan Software PVsyst 7.2*. https://prosiding.pnj.ac.id/index.php/sntm/article/view/170/171

Rekstad, J., Martínez-Rodríguez N. L., Belaidi, A., & Platzer-Björkman, C. (2020). Performance analysis of thin-film photovoltaic technologies under low irradiance conditions. *Solar Energy*, *205*, 331–342.

Reza, S., Shiblee, A. A. F., Mawla, R., Jein, J. N., & Rahman, M. M. (2018). *Design and Analysis of Solar PV System for Marine Fishing Trawlers in Bangladesh; Design and Analysis of Solar PV System for Marine Fishing Trawlers in Bangladesh*.

Rout, K. C., & Kulkarni, P. S. (2020, Februari 1). Design and Performance evaluation of Proposed 2 kW Solar PV Rooftop on Grid System in Odisha using PVsyst. *2020 IEEE International Students' Conference on Electrical, Electronics and Computer Science, SCEECS 2020*. https://doi.org/10.1109/SCEECS48394.2020.124

Salim, H. K., Stewart, R. A., Sahin, O., & Dudley, M. (2019). Drivers, barriers and enablers to end-of-life management of solar photovoltaic and battery energy storage systems: A systematic literature review. *Journal of Cleaner Production*, *211*, 537–554. https://doi.org/10.1016/J.JCLEPRO.2018.11.229

Saliman, H., Suliestyah, & Putra, D. (2019). View of Kajian Penggunaan Life Cycle Cost, Life Cycle Saving, dan Payback Period untuk Menganalisis Keekonomian Pembangkit Listrik Tenaga Surya. *Indonesian Mining and*

UNIVERSITAS GADJAH MADA
Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Energy Journal, *2*(2). https://e-journal.trisakti.ac.id/index.php/imej/article/view/9178/6480

SansPower. (2020). *Panel Surya: Jenis-Jenis Dan Rekomendasi Pemilihan*. https://www.sanspower.com/jenis-jenis-panel-surya-yang-bagus.html

Saputro, P. H., Juwita, & Hidayat, Z. (2022). *Pemanfaatan Pembangkit Listrik Tenaga Surya (PLTS) Sebagai Alat Penerangan Rumah Tangga Di Desa Air Naga Galang Kota Batam*. Media Sains Indonesia.

Sari, D. A. K., Wijaya, F. D., & Ali, H. R. (2022). View of Optimization of Hybrid Power Plant System in Enggano Island. *Jurnal Nasional Teknik Elektro dan Teknologi Informasi*, *11*(2). https://jurnal.ugm.ac.id/v3/JNTETI/article/view/3849/1662

Sekretariat Jenderal Dewan Energi Nasional. (2022). *Outlook Energi Nasional Indonesia*.

Sekretariat Jenderal Dewan Energi Nasional, & Nasional, E. (2019). *Laporan Kinerja Sekretariat Jenderal Dewan Energi Nasional*.

Silva, J. L. de S., Costa, T. S., Melo, K. B. de, Sako, E. Y., Moreira, H. S., & Villalva, M. G. (2020). *A Comparative Performance of PV Power Simulation Software with an Installed PV Plant*. IEEE.

Smets, A., Jäger, K., Isabella, O., Swaaij, R. A. van, & Zeman, M. (2015). *Solar energy The physics and engineering of photovoltaic conversion, technologies and systems*. UIT Cambridge.

Smith, J. (2018). The role of social media in marketing. *Journal of Marketing*, *23*(1), 45–58.

Sneij, J., & Vilar, D. (2013). *The HOMER Simulation Tool PROS & CONS ECREEE Regional Training of Trainers Workshop: HOMER software for RE project design*.

T. Huld, S. Renné, & R. Perez. (2013). PVsyst: software for modeling photovoltaic systems. *IEEE Journal of Photovoltaics*, *3*(1), 1–9.

Tang, M., Liu, S., Zhou, Z., Chen, Y., Li, Y., Li, X., & Li, J. (2017). Efficiency enhancement of monocrystalline silicon solar cells by optimizing the front grid

UNIVERSITAS GADJAH MADA
Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

and Al2O3 passivation layer. *Materials Science in Semiconductor Processing*, *60*, 149–155.

Tawalbeh, M., Al-Othman, A., Kafiah, F., Abdelsalam, E., Almomani, F., & Alkasrawi, M. (2021). Environmental impacts of solar photovoltaic systems: A critical review of recent progress and future outlook. *Science of The Total Environment*, *759*, 143528. https://doi.org/10.1016/J.SCITOTENV.2020.143528

Temiz, M., & Javani, N. (2020). Design and analysis of a combined floating photovoltaic system for electricity and hydrogen production. *International Journal of Hydrogen Energy*, *45*(5), 3457–3469. https://doi.org/10.1016/j.ijhydene.2018.12.226

Tim Sekretaris Jenderal Dewan Energi Nasional. (2019). *Indonesia Energy Out Look 2019*.

Torcellini, P., Grant, R., Taylor, C., Punjabi, S., Diamond, R., Colker, R., Moy AECOM, G., & Kennett, E. (2015). *A Common Definition For Zero Energy Buildings*.

United States Environmental Protection Agency. (2023, Juni 20). *Solar Panel Recycling*. https://www.epa.gov/hw/solar-panel-recycling.

Utami, S. S., Faridah, Perdamaian, L. G., Budiarto, R., Salis, F. R., Yanti, R. J., Ridwan, M. K., Avoressi, D. D., Fela, R. F., Suroso, D. J., Effendy, N., & Luckyarno, Y. F. (2021). *Menuju Bangunan Zero Energy Di Indonesia*. Gadjah Mada University Press. https://play.google.com/books/reader?id=f3RPEAAAQBAJ&pg=GBS.PA237

van Zalk, J., & Behrens, P. (2018). The spatial extent of renewable and non-renewable power generation: A review and meta-analysis of power densities and their application in the U.S. *Energy Policy*, *123*, 83–91. https://doi.org/10.1016/J.ENPOL.2018.08.023

Wang, X., Gao, X., & Wu, Y. (2023). Comprehensive analysis of tropical rooftop PV project: A case study in nanning. *Heliyon*, *9*(3), e14131. https://doi.org/10.1016/J.HELIYON.2023.E14131

UNIVERSITAS
GADJAH MADA
**Studi Kelayakan Desain Pembangkit Listrik Tenaga Surya Atap pada Gedung Kantor Dinas Pendidikan dan
Kebudayaan Kabupaten Magelang Sebagai Upaya Menuju Konsep Net Zero Energy Building**
Khalifatun Nisa Amini, Dr. Eng. Ir. M. Kholid Ridwan, S.T., M.Sc., IPU., GP; Prof. Dr.Eng. Ir. Wahyu Wilopo S.T., M.E
Universitas Gadjah Mada, 2023 | Diunduh dari http://etd.repository.ugm.ac.id/

Wisnubroto, K. (2023, Februari 11). *Merangsang Kontribusi Industri Pasang PLTS Atap*. Indonesia.go.id. https://www.indonesia.go.id/kategori/editorial/6865/merangsang-kontribusi-industri-pasang-plts-atap?lang=1

Zheng, J., Guo, Y., Huang, H., Sun, H., & Zhang, J. (2016). Investigation of electrical and photovoltaic properties of polycrystalline silicon solar cells. *Applied Surface Science*, *378*, 416–420.

Zulkifli, Wilopo, W., & Ridwan, M. K. (2020). *Analisis Kinerja PLTS Rooftop On Grid Pada Gedung Pemerintah dalam Skema Ekspor Impor Energi Studi Kasus : Gedung Kantor Setjen KESDM - Jakarta*. http://etd.repository.ugm.ac.id/penelitian/detail/191384