

## DAFTAR PUSTAKA

- Aboutalebi, P., Garrido, A. J., Garrido, I., Nguyen, D. T., & Gao, Z. (2024). Hydrostatic stability and hydrodynamics of a floating wind turbine platform integrated with oscillating water columns: A design study. *Renewable Energy*, 221. <https://doi.org/10.1016/j.renene.2023.119824>
- Adam Theoyana, T., Pranowo, W. S., & Rtdk, A. (n.d.). *KARAKTERISTIK ARUS PASANG SURUT DI SELAT BADUNG, BALI*.
- Ajiwibowo, H., & Pratama, M. B. (2022). Hydrodynamic model and tidal current energy potential in lepar strait, indonesia. *International Journal of Renewable Energy Development*, 11(1), 15–25. <https://doi.org/10.14710/ijred.2022.37028>
- Al-Rawajfeh, M. A., & Gomaa, M. R. (2023a). Comparison between horizontal and vertical axis wind turbine. *International Journal of Applied Power Engineering*, 12(1), 13–23. <https://doi.org/10.11591/ijape.v12.i1.pp13-23>
- Al-Rawajfeh, M. A., & Gomaa, M. R. (2023b). Comparison between horizontal and vertical axis wind turbine. *International Journal of Applied Power Engineering*, 12(1), 13–23. <https://doi.org/10.11591/ijape.v12.i1.pp13-23>
- Anggraini, T. S., & Santoso, C. (2023). Development of ocean renewable energy model in indonesia to support eco-friendly energy. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, 48(M-3–2023), 1–5. <https://doi.org/10.5194/isprs-archives-XLVIII-M-3-2023-1-2023>
- Arvirianty. (2019, February 26). *PLTB Jeneponto & Asa Energi Terbarukan Pembangkit Listrik*. CNBC Indonesia. <https://www.cnbcindonesia.com/news/20190226084905-4-57582/pltb-jeneponto-asa-energi-terbarukan-pembangkit-listrik>
- Bahaj, A. S., Batten, W. M. J., & McCann, G. (2007). Experimental verifications of numerical predictions for the hydrodynamic performance of horizontal axis marine current turbines. *Renewable Energy*, 32(15), 2479–2490. <https://doi.org/10.1016/j.renene.2007.10.001>
- Bard, J. (2010). *ORECCA-A European Coordination Action on Offshore Renewable Energy Conversion Platforms*. <https://www.researchgate.net/publication/259784495>
- Bir, G. S., Lawson, M. J., & Li, Y. (2011). *Structural Design of a Horizontal-Axis Tidal Current Turbine Composite Blade*. <http://www.osti.gov/bridge>
- BMKG. (2025, January 3). *Prakiraan cuaca dan arus laut wilayah perairan Jeneponto*. BMKG. <https://maritim.bmkg.go.id>

BPPT. (2018, April 1). *Miliki Banyak Selat, Energi Arus Laut Sangat Potensial Dikembangkan di Indonesia*. ESDM. <https://www.esdm.go.id/id/media-center/arsip-berita/miliki-banyak-selat-energi-arus-laut-sangat-potensial-dikembangkan-di-indonesia>

Cahyono, A. (2023, December 4). *Gelar Oceanovation, Kementerian ESDM Dukung Inovasi Potensi Energi Wilayah Laut*. ESDM. [https://www.esdm.go.id/id/media-center/arsip-berita/gelar-oceanovation-kementerian-esdm-dukung-inovasi-potensi-energi-wilayah-laut#:~:text=Kementerian%20ESDM%20melalui%20Balai%20Besar,gelombang%20laut%20\(2%20GW\)](https://www.esdm.go.id/id/media-center/arsip-berita/gelar-oceanovation-kementerian-esdm-dukung-inovasi-potensi-energi-wilayah-laut#:~:text=Kementerian%20ESDM%20melalui%20Balai%20Besar,gelombang%20laut%20(2%20GW)).

Chaudhary, H., Gupta, P., & Kesari, J. P. (2021). A Review on Tidal Energy. *International Research Journal of Engineering and Technology*. [www.irjet.net](http://www.irjet.net)

Chozas, J. F., Kramer, M. M., Sørensen, H. C., & Kofoed, J. P. (n.d.). *Combined Production of a full-scale Wave Converter and a full-scale Wind Turbine-a Real Case Study* (Issue 1).

Coles, D., Angeloudis, A., Goss, Z., & Miles, J. (2021). Tidal stream vs. Wind energy: The value of cyclic power when combined with short-term storage in hybrid systems. *Energies*, 14(4). <https://doi.org/10.3390/en14041106>

El Beshbichi, O., Xing, Y., & Ong, M. C. (2022). Comparative dynamic analysis of two-rotor wind turbine on spar-type, semi-submersible, and tension-leg floating platforms. *Ocean Engineering*, 266. <https://doi.org/10.1016/j.oceaneng.2022.112926>

Ellabban, O., Abu-Rub, H., & Blaabjerg, F. (2014). Renewable energy resources: Current status, future prospects and their enabling technology. In *Renewable and Sustainable Energy Reviews* (Vol. 39, pp. 748–764). Elsevier Ltd. <https://doi.org/10.1016/j.rser.2014.07.113>

El-Shahat, S. A., Li, G., & Fu, L. (2020). Dynamic loading characterization of a horizontal axis tidal current turbine. *Ocean Engineering*, 211. <https://doi.org/10.1016/j.oceaneng.2020.107561>

Fajar Setiawan, Viv Djanat Prasita, & Supriyatno Widagdo. (2021). PERGERAKAN ARUS PERMUKAAN LAUT SELAT BALI BERDASARKAN PARAMETER ANGIN DAN CUACA. *Jurnal Riset Kelautan Tropis (Journal Of Tropical Marine Research) (J-Tropimar)*, 1(2), 25. <https://doi.org/10.30649/jrkt.v1i2.25>

Feng, Q., Zhao, X., Fan, D., Cai, B., Liu, Y., & Ren, Y. (2019). Resilience design method based on meta-structure: A case study of offshore wind farm. *Reliability Engineering and System Safety*, 186, 232–244. <https://doi.org/10.1016/j.ress.2019.02.024>

- G Tureah. (2025, February 6). *The Country of Perpetual Potential: Indonesia's Barriers in Renewable Energy Transition*. CHICAGO POLICY REVIEW. <https://chicagopolicyreview.org/2025/02/06/the-country-of-perpetual-potential-indonesias-barriers-in-renewable-energy-transition/>
- Global Wind Energy Council*. (2019). [www.gwec.net](http://www.gwec.net)
- Hernández Brito, J. (2015). *PROJECT FINAL REPORT Grant Agreement number: 288192 Project Acronym: TROPOS Project Title: "Modular Multi-use Deep Water Offshore Platform Harnessing and Servicing Mediterranean, Subtropical and Tropical Marine and Maritime Resources."* <http://www.troposplatform.eu>
- Indonesia-Energy-Transition-Outlook-2023*. (n.d.).
- Karimirad, M., & Michailides, C. (2015). Dynamic analysis of a braceless semisubmersible offshore wind turbine in operational conditions. *Energy Procedia*, 80, 21–29. <https://doi.org/10.1016/j.egypro.2015.11.402>
- Kelautan, K., & Perikanan, D. (n.d.). *Laporan Kinerja Tahun 2021*.
- Krogstad, P. Å., & Lund, J. A. (2012). An experimental and numerical study of the performance of a model turbine. *Wind Energy*, 15(3), 443–457. <https://doi.org/10.1002/we.482>
- Kurniawan, A., Azmiwinata, M., Pratama, M. B., & Kusuma, C. (2024). Tidal current power in Capalulu strait, North Maluku: A feasibility study. *International Journal of Renewable Energy Development*, 13(3), 375–385. <https://doi.org/10.61435/ijred.2024.60132>
- Li, W., Wang, S., Moan, T., Gao, Z., & Gao, S. (2024). Global design methodology for semi-submersible hulls of floating wind turbines. *Renewable Energy*, 225. <https://doi.org/10.1016/j.renene.2024.120291>
- Loupatty, G. (2013). KARAKTERISTIK ENERGI GELOMBANG DAN ARUS PERAIRAN DI PROVINSI MALUKU. *Barekeng*.
- Magagna, D., & Monfardini, R. (2016). *JRC Ocean Energy Status Report 2016 Edition Technology, market and eco-nomic aspects of ocean ener-gy in Europe*. <https://doi.org/10.2760/509876>
- Manwell, J. F., McGowen, J. G., & Rogers, A. L. (2004). *WIND ENERGY EXPLAINED THEORY, DESIGN AND APPLICATION SECOND EDITION* “A very comprehensive and well-organized treatment of the current status of wind power.” In *THE INTERNATIONAL JOURNAL OF ELECTRICAL ENGINEERING EDUCATION* (Vol. 41, Issue 2). [www.wiley.com/go/wind\\_energy](http://www.wiley.com/go/wind_energy)

McTiernan, K. L., & Sharman, K. T. (2020). Review of Hybrid Offshore Wind and Wave Energy Systems. *Journal of Physics: Conference Series*, 1452(1). <https://doi.org/10.1088/1742-6596/1452/1/012016>

Mehmood, N., Liang, Z., & Khan, J. (n.d.). *Harnessing Ocean Energy by Tidal Current Technologies*. <https://www.researchgate.net/publication/264851747>

Musial, W., & Ram, B. (2010). *Large-Scale Offshore Wind Power in the United States: Assessment of Opportunities and Barriers*, NREL (National Renewable Energy Laboratory). <http://www.osti.gov/bridge>

Nasab, N. M., Kilby, J., & Bakhtiyarfard, L. (2021). Case study of a hybrid wind and tidal turbines system with a microgrid for power supply to a remote off-grid community in New Zealand. *Energies*, 14(12). <https://doi.org/10.3390/en14123636>

Pambudi, N. A., Ulfa, D. K., Nanda, I. R., Gandidi, I. M., Wiyono, A., Biddinika, M. K., Rudiyanto, B., & Saw, L. H. (2025). The Future of Wind Power Plants in Indonesia: Potential, Challenges, and Policies. In *Sustainability (Switzerland)* (Vol. 17, Issue 3). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/su17031312>

Paradede, R. (2023, December 15). *Ocean Current Energy in Maluku Drives Energy Transition in the Islands*. Kompas. <https://www.kompas.id/baca/english/2023/12/15/en-pengembangan-energiarus-laut-di-maluku-dorong-transisi-energi-wilayah-kepulauan>

Pearre, N., & Swan, L. (2020). Combining wind, solar, and in-stream tidal electricity generation with energy storage using a load-perturbation control strategy. *Energy*, 203. <https://doi.org/10.1016/j.energy.2020.117898>

Pérez-Collazo, C., Greaves, D., & Iglesias, G. (2015). A review of combined wave and offshore wind energy. In *Renewable and Sustainable Energy Reviews* (Vol. 42, pp. 141–153). Elsevier Ltd. <https://doi.org/10.1016/j.rser.2014.09.032>

Sojo, M., & Auer Acciona Energía, G. (2014). *Marine Renewable Integrated Application Platform Deliverable D1.12 Final Summary Report Deliverable D1.12 Final Summary Report Grant Agreement number: 241402 Project acronym: MARINA Project title: Marine Renewable Integrated Application Platform Funding scheme: Large scale integrated project Date of latest version of Annex I against which the assessment will be made*. [www.marina-platform.info](http://www.marina-platform.info)

Sun, H., Gao, X., & Yang, H. (2020). A review of full-scale wind-field measurements of the wind-turbine wake effect and a measurement of the wake-interaction effect. In *Renewable and Sustainable Energy Reviews* (Vol. 132). Elsevier Ltd. <https://doi.org/10.1016/j.rser.2020.110042>

Supriyadi, E. H. R. S. I. P. R. A. (2023). Karakteristik Arus Laut Permukaan di Selat Bali dan Laut Flores menggunakan HF Radar. *Repository IPB*.

Wattimena, M. C., & Salamena, G. G. (2022). KARAKTERISTIK ANGIN PERMUKAAN DI TELUK AMBON, MALUKU. *Jurnal Laut Pulau: Hasil Penelitian Kelautan*, 1(2), 19–36. <https://doi.org/10.30598/jlpvol1iss2pp19-36>

Weather Spark. (2024, June 15). *Climate and Average Weather Year Round in Jenepono*. WeatherSpark. <https://weatherspark.com/y/133112/Average-Weather-in-Jenepono-Indonesia-Year-Round>

*Wind energy in Europe*. (2018).

Yin, D., Indergård, R., Lie, H., & Braaten, H. (n.d.). *Tow-out of A Semi-submersible Floating Offshore Wind Turbine*.

Zheng, C. W., Li, C. Y., Pan, J., Liu, M. Y., & Xia, L. L. (2016). An overview of global ocean wind energy resource evaluations. In *Renewable and Sustainable Energy Reviews* (Vol. 53, pp. 1240–1251). Elsevier Ltd. <https://doi.org/10.1016/j.rser.2015.09.063>

**Zulfi Maftukhosyi, 2025**

***DESAIN DAN ANALISIS PENGARUH LOKASI GEOGRAFIS TERHADAP  
EFISIENSI DAYA SISTEM OFFSHORE HYBRID WIND – TIDAL TURBINE  
DIBANDINGKAN SISTEM KONVENTIONAL DI PERAIRAN INDONESIA***

UPN Veteran Jakarta, Fakultas Teknik, S1 Teknik Perkapalan

[[www.upnvj.ac.id](http://www.upnvj.ac.id)-[www.library.upnvj.ac.id](http://www.library.upnvj.ac.id)-[www.repository.upnvj.ac.id](http://www.repository.upnvj.ac.id)]