

DWICA WULANDARI

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PROFESSIONAL SUMMARY

Dedicated and results-oriented environmental engineer and researcher with extensive experience in life cycle assessment (LCA), environmental sustainability, and climate change research. Currently undertaking a PhD at the Tyndall Centre for Climate Change Research at the University of Manchester, with a focus on bioenergy, sustainable development and climate impact assessment. Proven track record as a full-time lecturer at the University of Indonesia and as a consultant for leading organisations, including UNICEF and PT Pertamina Persero. Skilled in leading research projects, conducting environmental analyses, and presenting findings at international conferences. Committed to advancing sustainable practices and contributing to global efforts to combat climate change.

WORK HISTORY

LCA Reviewer | PMG Asia, Singapore 05/2022 -08/2022

National Consultant | UNICEF 11/2021 - 11/2022
National Consultant for Strengthening national safely managed sanitation monitoring systems for SDG

Lecturer | University of Indonesia - Jakarta, Indonesia 10/2019 - 07/2022

Life Cycle Assessment (LCA) Analyst | PT Pertamina Persero 05/2019 - 10/2019

Thesis Worker | Akzo Nobel Chemistry AB - Stenungsund, Sweden 01/2018 -08/2018

Environmental Consultant | Ministry of Public Works and Housing - Jakarta, Indonesia 09/2013 - 12/2014

SKILLS

- Carbon Accounting
- Sustainability Assessment
- Science Communication
- Science Writing
- Life Cycle Assessment
- Greenhouse Gas (GHG) Reporting
- Energy Modelling
- Project and Research Management

EDUCATION

Tyndall Center For Climate Change Research, University of Manchester - Manchester
09/2022 - Current

Ph.D.: Environmental Engineering focusing on biomass availability assessment and bioenergy potential in Indonesia

Chalmers University of Technology, Gothenburg - Gothenburg, Sweden
08/2016 - 08/2018

Master of Science: Industrial Ecology

University of Indonesia
09/2012 - 09/2013

Master of Engineering: Environmental Engineering

University of Indonesia - Depok
08/2008 - 08/2012

Bachelor of Engineering: Environmental Engineering

CONFERENCES, PUBLIC ENGAGEMENT AND TRAININGS

- **Best Poster Award** at Co-created Futures Conference, Manchester , UK (2025)
- **Speaker** at 32nd CIRP Life Cycle Engineering Conference, Manchester, UK (2025)
- **Speaker** at Creative Climate Workshops in Primary Schools by Geologise Theatre, Manchester, UK (2025)
- SHAREscape 2025: Site visits and impact forum by Supergen Bioenergy, Leeds, UK (2025)
- **Poster Presenter** at World Sustainable Energy Day: Young Energy Researchers Conference, Austria (2024)
- **Poster Presenter** at ECR Net Zero Conference, Birmingham, UK (2024)
- **Speaker** at Pint of Science in Manchester, UK (2023)
- Early Career Researcher Supergen Energy Conference, London, UK (Sep 2023)
- **Poster Presenter** PGR Environmental Conference, Chester, UK (Sep 2023)
- International Summer School in Global Just Transition, Newcastle, UK (Jun 2023)
- ECR Net Zero Conference, Manchester, UK (Nov 2022)
- Engineering for Development Summer School, ETH Zurich, Switzerland (Jun 2016)
- Engineering for Development Winter School, ETH Zurich, Switzerland (Jan 2015)
- Summer School in Freshwater Ecosystems, ETH Zurich, Switzerland (Sep 2013)

AWARDS, ACCOMPLISHMENTS, AND HONOURS

- LPDP Scholarship for Doctoral Degree (Jul 2021)
- Adelbert Foreign Student Hospitality Foundation (Jan 2017)
- Swedish Institute Study Scholarship, Swedish Institute (Aug 2016)
- Fast Track Program Graduate with Cum Laude, University of Indonesia (Aug 2013)

PUBLICATIONS

1. Cindy Priadi, **Dwica Wulandari**, Iftita Rahmatika, Setyo Sarwanto Moersidik. (2014). Biogas Production in the Anaerobic Digestion of Paper Sludge. *APCBEE Procedia*, **9**, 65–69. Published by Elsevier (journal now discontinued).

<https://doi.org/10.1016/j.apcbee.2014.01.012>

2. Cindy Priadi, **Dwica Wulandari**, Iftita Rahmatika, Setyo Sarwanto Moersidik. (2014). Biogas Production in the Anaerobic Digestion of Paper Sludge. *Energy Procedia*, **47**, 250–256. Published by Elsevier. <https://doi.org/10.1016/j.egypro.2014.01.224>
3. Cindy Priadi, Iftita Rahmatika, **Dwica Wulandari**, Chihiya. (2014). *Paper Sludge Sequential Reuse for Mesophilic Biogas Production and Digestate Composting*. Presented at the 14th IWA World Conference on Anaerobic Digestion, 9–12 October 2014, Chile.
4. Maisarah, S. Adityosulindro, **Dwica Wulandari**. (2021). Utilization of Wild Algae Biomass as Biosorbent for Removal of Heavy Metal Zinc (Zn^{2+}) from Aqueous Solution. *IOP Conference Series: Earth and Environmental Science*, **824**. 6th International Conference on Climate Change, 25 May 2021, Surakarta, Indonesia (Virtual). Published by IOP Publishing Ltd.
5. Jeremy Kohlitz, Freya Mills, Osha Ombasta, Ni Nyoman Sri Natih Sudhiastiningsih, **Dwica Wulandari**, Inas Imtiyaz, Cindy Priadi, Maraita Listyasari, Juliet Willetts. (2021). *Climate Impacts on Household Sanitation and Responses: Data from Low-Income Urban Areas in Indonesia*. Published by Loughborough University.
6. Andre Susilo, Djoko M. Hartono, Muhammad Angga Kusuma, **Dwica Wulandari**. (2022, July). Analysis of Potential RDF Resources from MSW Landfills in Major Cities of Indonesia. *Jurnal Presipitasi: Media Komunikasi dan Pengembangan Teknik Lingkungan*, **19** (2), 330–340. Published by Universitas Diponegoro.
7. Dasi Agung Ospaman, Nuraziz Handika, **Dwica Wulandari**. (2022, August 3). *Life Cycle Assessment of Lightweight Beam Concrete Made from Oil Palm Shell Coarse Aggregate*.
8. Juliet Willetts, Cindy Priadi, Osha Ombasta, **Dwica Wulandari**, Inas Imtiyaz, Ni Nyoman Sri Natih Sudhiastiningsih, Jeremy Kohlitz, Freya Mills, Maraita Listyasari. (2022, October). Co-developing Evidence-Informed Adaptation Actions for Resilient Citywide Sanitation: Local Government Response to Climate Change in Indonesia. *Environment and Planning B: Urban Analytics and City Science*, **49**(8), 2129–2150. Published by SAGE Publications. <https://doi.org/10.1177/23998083221094742>
9. Rezza Prisandy, **Dwica Wulandari**, Abdul Kodir. (2023). *Indonesia Carbon Market Development Report: A Guide for Indonesian Companies and Policymakers to Seize Carbon Trading Opportunities*. Doctrine UK. Retrieved from <https://www.doctrineuk.org/publications>
10. Fikri Dinegoro, Djoko M. Hartono, **Dwica Wulandari**, Dwi Ajeng Sarasputri, Dasi Agung Ospaman. (2024, February 21). Comparison of the Environmental Impacts of Aquaponics and Hydroponics Using the LCA Method in Bogor, Indonesia. *AIP Conference Proceedings*, **3001**(1). Published by AIP Publishing.
11. **Wulandari, D.**, Welfle, A., Gallego Schmid, A., & Lea-Langton, A. (2025). Bioenergy for Net Zero Transition: Assessing Biomass Resources in Indonesia. *Procedia CIRP*, **135**, 1302–1307. <https://doi.org/10.1016/j.procir.2025.01.094>
12. **Wulandari, D.** "Bioenergy for Net Zero Transition: Assessing Biomass ..." *Energy Reports*, 2025, doi:10.1016/j.egy.2025.4354.