

Lugas Raka Adrianto

Technical Program Manager · Data Products, Enterprise Software & Sustainability
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Technical Program and Product Manager with 10+ years of experience delivering enterprise software, environmental data platforms, and sustainability programs. At Siemens, lead sustainability initiatives (Scope 3 emissions, carbon accounting, circularity) across a \$1B+ building technology portfolio and own a cloud-based asset management product supporting \$5M+ in annual service revenue. Experienced in translating business and regulatory requirements into product roadmaps, data solutions, and cross-functional delivery. PhD engineer and MBA candidate with hands-on experience in AI-enabled workflow automation. CSM and CSPO Certified.

EXPERIENCE

Sustainability Program Manager, Siemens | Zug, Switzerland **Sep 2023 – Present**

- Scale eco-design adoption to 80% across a \$1B+ product portfolio, contributing to the corporate framework enabling 690+ Mt CO₂e in customer-avoided emissions by automating life cycle accounting (LCA) workflows and aligning roadmaps across Product, R&D, Engineering, Supply Chain Operations, and external partners.
- De-risk portfolio compliance against European climate policies (CSRD, ESPR), translating complex environmental regulations into technical product specifications and agile sprint backlogs for cross-functional engineering teams.
- Cut upstream Scope 3 emissions by 23% across priority supplier categories, establishing science-based carbon accounting protocols, deploying supplier emissions tracking models, and negotiating decarbonization roadmaps.
- Accelerate internal program delivery cycles and competitor benchmarking, architecting and deploying agentic GenAI internal tools that automated sustainability data ingestion pipelines.
- Reduced operational resource intensity across target product lines, achieving a 17% cut in resource footprint, by pivoting to product-led circular business models, scaling circular product features, and engineering closed-loop material workflows.

Product Manager, Asset Management Tool, Siemens | Zug, Switzerland **Jun 2025 – Present (Concurrent)**

- Enabled \$5M+ in annual service revenue across 50+ enterprise installations in Germany and the US, directing the multi-year roadmap and feature backlog for a cloud-based smart asset management SaaS platform.
- Modernized service analytics infrastructure, partnering with engineering teams on data architectures, API integrations, and cloud migration roadmaps to deliver real-time operational reporting.

Lead Researcher, Sustainability Impact Modeling, ETH Zurich & Empa | Zurich, Switzerland **Jan 2019 – Sep 2023**

- Led a multi-partner research consortium program building shared environmental data models for 200+ electronics/ICT and materials products with 10+ research and industrial partners, increasing data availability and transparency by 30%.
- Architected scalable environmental data pipelines that accelerated impact assessments by 50%; managed external technical dependencies across partner organizations, including data standards, ingestion quality, review cycles.
- Built international consensus on prospective life-cycle assessment methodologies, convening 100+ global stakeholders across academia, industry, and policy by organizing and chairing a dedicated scientific symposium.
- Informed international resource policy benchmarks, contributing quantitative impact models directly to the UN Global Resources Outlook 2024 and authoring 10+ peer-reviewed publications.

Sustainability Data Analyst & LCA Consultant, Wienerberger | Leuven, Belgium **Jul 2021 – Dec 2021**

- Conducted carbon accounting for waste-derived building materials, identifying strategic recommendations to business units on 10-30% carbon reduction pathways and waste optimization strategies; Work published in a peer-reviewed journal.

Energy R&D Engineer Intern, Électricité de France (EDF) | Paris, France **Mar 2018 – Sep 2018**

- Cut technology R&D evaluation cycles by 40%, benchmarking 50+ energy conversion technologies to support strategic roadmaps for waste-to-energy routes with 75% CO₂ reduction potential.

Consultant, ICON | Stockholm, Sweden and New York, USA **Sep 2016 – Sep 2017**

- Enabled a \$5M+ profit opportunity for a US telecom through fiber-optic network expansion models.
- Projected 60% urban emissions reduction from EV deployment across 2 cities and formulated go-to-market strategies.

Account Manager, Dow | Jakarta, Indonesia **Apr 2015 – Aug 2016**

- Delivered \$4M+ in revenue growth by formulating and executing a targeted go-to-market plan for sustainable adhesive solutions across Southeast Asia.

Project Engineer Consultant, World Bank | Bandung, Indonesia **Jul 2014 – Dec 2014**

- Modeled and optimized carbon capture systems with state-owned utility enterprises and the World Bank, achieving >90% theoretical capture efficiency in power plant decarbonization scenarios.

EDUCATION

MBA Business Administration (part-time), Imperial College London UK	2026 – 2028 (expected)
PhD Environmental Engineering, ETH Zurich Switzerland	2023
MSc Mechanical Engineering, École Polytechnique & KTH France & Sweden	2018
BSc Chemical Engineering, ITB Bandung Indonesia	2014