

# Sustainability Report

Universitas Pertamina

2024





Universitas  
**Pertamina**

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# Forewords

Since its establishment in 2016, Universitas Pertamina has committed itself wholeheartedly to the principles of sustainability across its tridharma functions of education, research, and community service/outreach. Our vision is to be a world-leading campus, focusing on technology and business in energy, poised to make significant contributions to the sustainable development goals (SDGs) and national economic growth.

This report highlights several milestones achieved during 2023 and part of 2022, underscoring our dedication to the SDGs. These milestones not only reflect our academic rigor but also our proactive integration of sustainability into every facet of university life. SDGs are not merely ideals but are embedded in our academic curriculum through mandatory courses and are integral to our research and community outreach efforts.

In January 2024, Universitas Pertamina established the Sustainability Center, aimed at enhancing governance on sustainability and serving as a center of excellence for collaborative partnerships with stakeholders locally and globally. This initiative underscores our commitment to fostering sustainable practices and innovations.

Moreover, we pride ourselves on promoting inclusivity, offering high-quality education, and championing digitalization and governance transparency. These achievements have been pivotal in positioning Universitas Pertamina as a strategic hub for energy transition, an education center of excellence, and an expert pool serving Indonesia and the Asia-Pacific region.

As a young university, we are steadfast in our mission to lead by example and drive meaningful change towards a sustainable future. We look forward to continuing our journey towards excellence and sustainability, guided by our commitment to academic integrity and societal impact.



Prof. Dr. Ir. Wawan Gunawan A. Kadir, M.S., IPU  
Rector, Universitas Pertamina

## Reporting Period Note

The year stated in the title of this Sustainability Report refers to the year of publication, while the data presented primarily reflect the **2023 academic year**, unless otherwise specified.

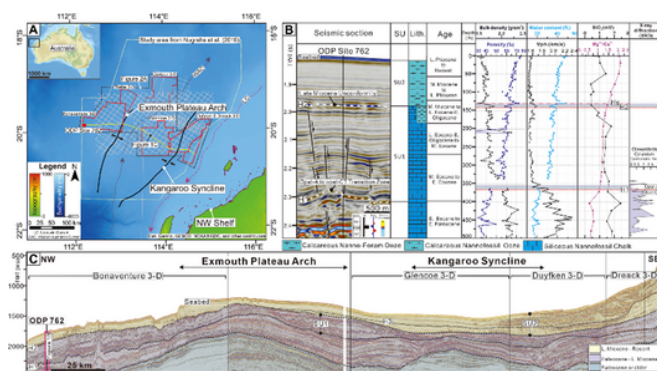


# University Research on SDGs

Universitas Pertamina is committed to advancing the United Nations' Sustainable Development Goals (SDGs) through impactful research that addresses pressing global challenges. Research and higher education institutions worldwide are recognized as key actors in accelerating progress toward the 2030 SDG. At Universitas Pertamina, research plays a central role in supporting the achievement of the SDGs. By tackling global challenges through innovative science and practical solutions, our faculty members demonstrate how academic research can directly contribute to sustainable development whether by protecting marine ecosystems, ensuring access to clean water, or advancing affordable and clean energy.

To highlight this commitment, we asked three of our researchers to share their work in the context of the SDGs and explain how their research contributes to a more sustainable future.

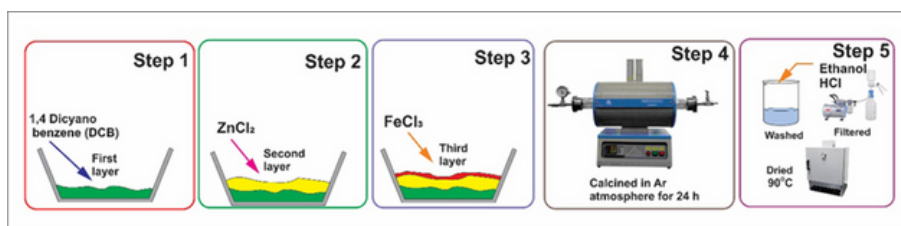
## How does their research support our university in Sustainable Development Goals?



**Dr. Harya Dwi Nugraha**

Author of paper: *Diagenetic priming of submarine landslides in ooze-rich substrates.*

I study how the seafloor can become unstable and collapse, causing massive submarine landslides. These events often occur silently, without earthquakes, as sediments weaken through natural diagenetic processes. By analyzing seismic images, drilling samples, and chemical data, my research identifies where and why such failures may happen. This relates to SDG 14, because submarine landslides can damage marine ecosystems, destroy undersea infrastructure, and even generate tsunamis threatening coastal communities. I hope this research helps governments, industries, and communities design safer offshore infrastructure, plan marine activities wisely, and strengthen early warning systems. Such progress is only possible through partnerships across universities, research centers, government, and industry.



**Dr. Nonni Soraya Sambudi**

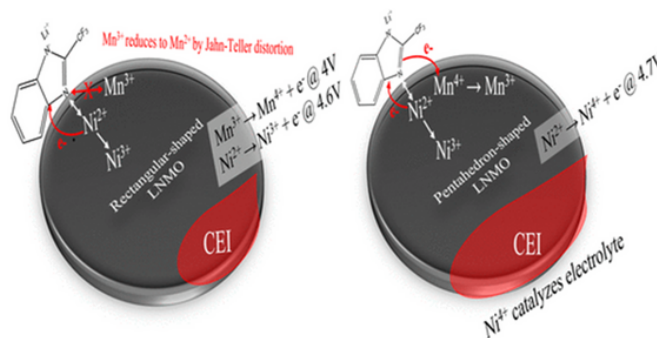
Author of paper: *Fabrication of hybrid covalent triazine framework-zinc ferrite spinel to uplift visible light-driven photocatalytic organic pollutant degradation*

My research develops a hybrid photocatalyst by combining covalent triazine frameworks (CTF) with zinc ferrite spinel ( $\text{ZnFe}_2\text{O}_4$ ), achieving up to 95% efficiency in degrading toxic dyes such as methylene blue. This work supports SDG 6: Clean Water and Sanitation by addressing industrial wastewater challenges—particularly from textile factories that consume millions of liters of freshwater and release harmful effluents. Our solar-driven catalyst offers a sustainable solution: it produces no secondary pollutants, remains stable after multiple cycles, and works effectively under natural sunlight. Through collaboration with national and international partners, we aim to scale this technology for real-world water treatment and sustainable water management.



### Ir. Sylvia Ayu Pradanawati, Ph.D

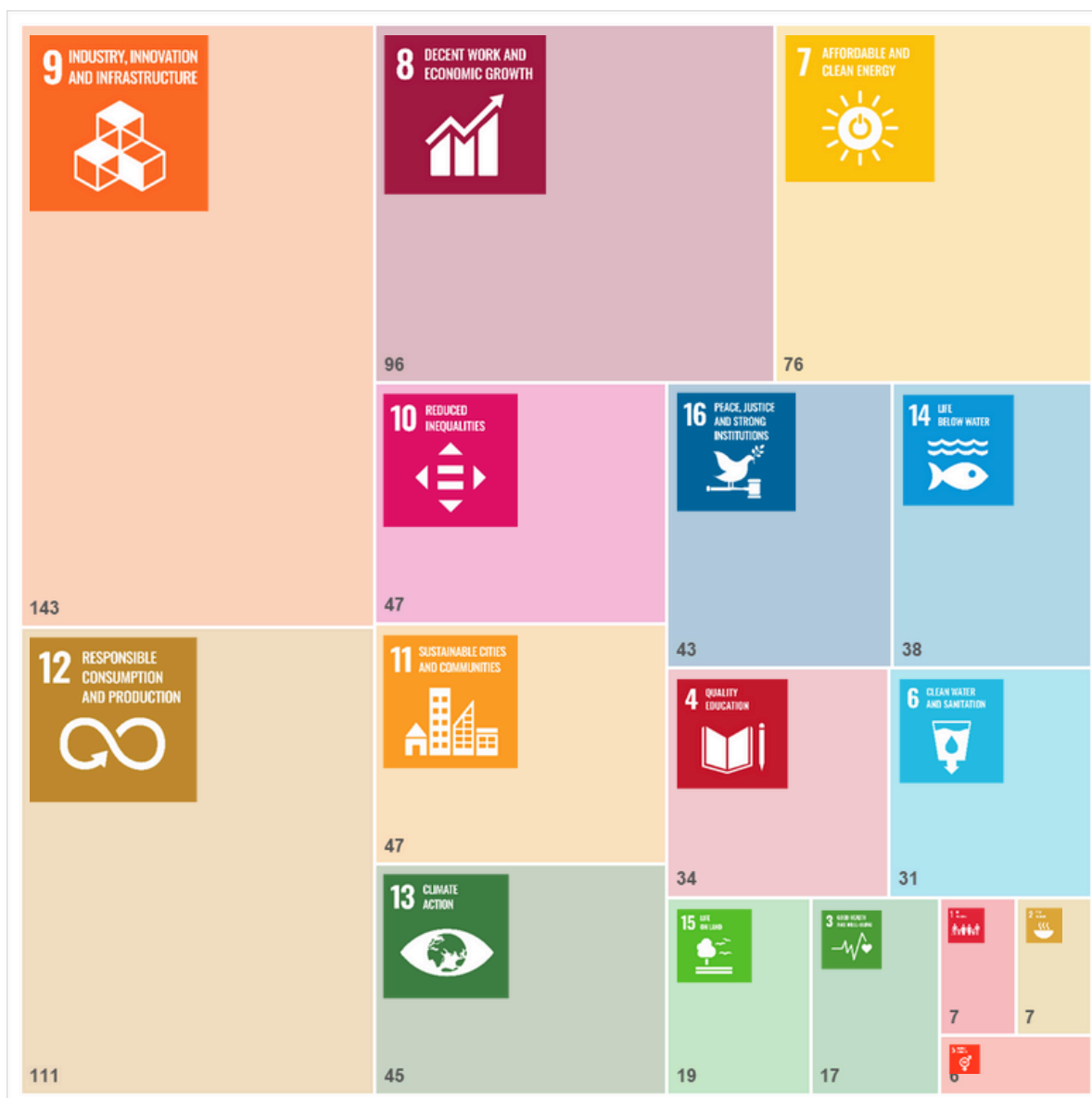
Author of paper: *Failure Mechanisms of High-Voltage Spinel LiNi<sub>0.5</sub>Mn<sub>1.5</sub>O<sub>4</sub> with Different Morphologies: Effect of Self-Regulation by Lithium Benzimidazole Salt Additive.*



Since 2011, my research has focused on developing safe, low-cost, and practical synthesis methods for advanced energy storage. In this study, we examined how lithium salt additives improve the surface chemistry of LNMO spinel cathodes, stabilizing high-voltage batteries by reducing gas evolution and structural distortion. This contributes to SDG 7: Affordable and Clean Energy, as cobalt-free and nickel-lean LNMO materials can make batteries cheaper, safer, and more sustainable. Stronger, more reliable batteries are critical to accelerating renewable energy adoption and electric mobility. Through collaboration across universities, research institutes, and industry, we aim to scale innovations that make clean energy more accessible globally.

### Our research contribution to the SDGs

The diagram below provides a snapshot of the number of research papers published in 2023 that address one or more of the SDGs.





## To end poverty in all its form everywhere



373

of 3713 students received financial aid  
enabling them to pursue higher  
education



74%

students who received financial aid  
graduated on time in 2023

## Research

### *Targeted fuel-subsidy reform to protect low-income households*

Understanding which policy levers best protect low-income households during energy-price reform is vital for poverty reduction (SDG 1). A 2023 study co-authored by Eka Puspitawati (Universitas Pertamina) surveyed B40/M40 households and analyzed 105 valid responses to identify the drivers of effective fuel-subsidy restructuring. The cross-sectional survey, conducted door-to-door in Selangor, Johor, and Kuala Lumpur, used multiple linear regression to test key explanatory factors. The findings indicate that efficient targeting is the strongest predictor of reform effectiveness, followed by social protection measures such as cash transfers, while governance and administrative capacity, along with effective publicity and communication, also contribute significantly

### Number of Publications

In 2023 academic year we already published

7

publications around poverty



# Operations

## Providing holistic support for student well-being

Universitas Pertamina advances its contribution to poverty alleviation and equitable access to education through comprehensive financial aid and social protection systems for students facing economic hardship. To reduce disparities and strengthen the resilience of vulnerable populations, the University offers both full and partial scholarships designed as a safety net for students from low-income backgrounds. Flagship initiatives such as the *Sobat Bumi 3T* and *Ujung Negeri Scholarships* specifically target students from remote and underdeveloped regions (3T: *Tertinggal, Terdepan, Terluar*), contributing to a reduction in the north-south divide in access to higher education.



Complementary schemes, such as the BAZMA Scholarship—supported by Pertamina’s zakat fund—and the YOM Scholarship, funded by the parent foundation, extend financial empowerment to students from low-income backgrounds, ensuring sustained academic participation and achievement. Beyond tuition assistance, Universitas Pertamina strengthens its social protection measures by addressing broader dimensions of student well-being. Housing initiatives, including Rumah Hasbi—a free residence for economically disadvantaged male students—and dedicated dormitory access for scholarship recipients, provide secure living conditions that mitigate vulnerability and foster a stable learning environment.

# Initiatives

## Empowering local communities through enterprise support

Universitas Pertamina contributes to poverty reduction and inclusive regional growth by strengthening the resilience of low-income communities through entrepreneurial support. The *Inkubasi Bisnis Lanjutan* program provides a targeted combination of seed funding, mentorship, and business networks to early-stage local enterprises, functioning as a form of development support that enhances access to economic resources and fosters sustainable livelihoods. By integrating direct financial empowerment with capacity-building, the program enables small enterprises to expand operations, generate employment, and increase household income, thereby supporting poverty alleviation at the community level.



This approach promotes equitable distributional outcomes by ensuring that vulnerable groups can access the tools and opportunities necessary for sustainable economic advancement. In addition, the program nurtures innovation, strengthens community-led initiatives, and establishes a localized social protection mechanism that functions as a safety net for those at risk of exclusion. Through this initiative, Universitas Pertamina advances its mission as an entrepreneurial university while aligning with global efforts toward poverty eradication and inclusive development.





## To end hunger, achieve food security and improved nutrition and promote sustainable agriculture

### Research

#### *Optimizing nutrition facility locations in Iloilo City*

Placing services where families can reach them most easily strengthens child nutrition (SDG 2). A 2022 study published in Jurnal Sistem dan Manajemen Industri, co-authored by Adji Chandra Kurniawan (Universitas Pertamina), applies a Maximum Covering Location Problem (MCLP) to determine optimal locations for Operation Timbang (OPT) Plus facilities. Using barangay-level demand data and road-network distances, the model—implemented in AMPL/CPLEX—identifies community centers and playgrounds as priority sites that maximize service coverage. Sensitivity analyses indicate that expanding service radii or increasing the number of facilities significantly enhances reach, providing city planners with a clear, data-driven basis to prioritize high-need areas, reduce travel barriers, and allocate resources more efficiently.

#### Number of Publications

In 2023 academic year we already published

# 7

publications around hunger



## 52 tons

of solid waste produced across campus during 2023 academic year



## 9 tons

of the total solid waste generated are composed of food waste



# Operations

## Sustainable and inclusive food provision on campus

Universitas Pertamina advances food security and sustainable consumption by operating two on-campus cafeterias governed by strict standards of food governance. Through a structured evaluation system managed under the university's asset management unit, all food vendors are required to comply with criteria related to food safety, nutrition quality, affordability, and environmental responsibility. This includes commitments to sustainable packaging, effective food supply chain management, and the reduction of food and material waste, thereby supporting long-term food nutrition improvement on campus.



In line with inclusive development goals, the university prioritizes partnerships with local food entrepreneurs and smallholder food producers, providing them with access to the university's food marketplace. This approach contributes to strengthening local food value chains, enhancing agricultural productivity linkages, and fostering inclusive economic growth while diversifying healthy food options for the student community. By integrating sustainability criteria with community participation, Universitas Pertamina ensures that campus food provision contributes to resilient systems of agricultural management and equitable development outcomes

# Initiatives

## Supporting students facing food insecurity

Universitas Pertamina addresses the challenge of food insecurity among students by implementing targeted support systems that ensure access to adequate nutrition as part of a broader commitment to food security and well-being. The flagship initiative, *Berbagi Berkah*, led by the Islamic Spirituality Student Club, distributes basic food packages and provides financial assistance to vulnerable students, reducing the risk of malnutrition and undernutrition within the campus community.



By coupling immediate relief with peer-to-peer solidarity, the program strengthens social responsibility and cultivates a culture of empathy, recognizing the links between hidden hunger, academic performance, and mental health. The initiative also contributes to building awareness of broader food governance issues, encouraging students to critically engage with challenges related to food poverty, food value chains, and the equitable distribution of food resources.



## To ensure healthy lives and promote well-being for all at all ages

### Research

#### *Experiences of hospitalized COVID-19 patients amid information overload*

Understanding how patients cope with illness and “infodemic” pressures is central to SDG 3 (Good Health & Well-being). A 2022 qualitative study—co-authored by Morissan (Universitas Pertamina)—used grounded-theory interviews with recently discharged COVID-19 patients to explore their hospital experiences under intense media information flows. Patients described mixed emotions: negative states (feeling close to dying, anxiety about family, stress, psychological disturbance amplified by alarming news) alongside positive states (optimism, reframing thoughts, and feeling supported by clinicians and relatives). Family contact—even indirect—and attentive care from nurses and doctors bolstered resilience, while deliberate news avoidance helped some manage fear. The study highlights actionable priorities for health systems: integrate psychosocial support into COVID-19 care pathways, provide clear and consistent communication to counter information overload, facilitate safe family engagement, and train staff in basic mental-health first aid. These steps can protect patients’ mental well-being during future outbreaks.

#### Number of Publications

In 2023 academic year we already published

**17**

publications around health and well-being

### Policy

#### *Smoke-free campus for healthier environment*

Universitas Pertamina is committed to promoting a clean and healthy environment by implementing a comprehensive smoke-free campus policy. This commitment was formalized in 2017 through a joint declaration involving multiple institutions within the Pertamina Simprug complex, including the Pertamina Foundation, Pertamina Corporate University, Pertamina Women’s Association, Pertamina Training Consulting, and PT Patra Jasa.

The declaration designates the entire Universitas Pertamina Simprug area as a smoke-free zone, with the objective of reducing exposure to secondhand smoke, preventing tobacco-related diseases, and fostering a culture of health and shared responsibility. Aligned with national public health priorities and SDG 3 (Good Health and Well-being), this policy underscores the University’s leadership in building a safe, sustainable, and wellness-driven academic ecosystem for students, staff, and the wider community.



# Initiatives

## Empowering student well-being through holistic health education and support

Universitas Pertamina recognizes that student success is deeply linked to emotional, psychological, and social well-being. In response, the university has taken a comprehensive approach to student health—integrating mental health support, emotional resilience-building, and reproductive health education into its campus life.

Through the UPVISOR program, led by the Directorate of Student Affairs, students engage in interactive sessions that address sensitive but vital topics, including bullying, sexual harassment, emotional health, and reproductive rights. For instance, Webinar UPVISOR #7: STOP BULLYING & SEXUAL HARASSMENT provided students with the knowledge and tools to identify and respond to harmful behaviors while promoting a culture of respect and consent.



Alongside these efforts, Universitas Pertamina provides dedicated counseling services, where students can seek support for stress, anxiety, academic pressures, and personal challenges. Regular workshops and mental health campaigns further help students develop emotional awareness and coping strategies, creating a safe and supportive environment for learning and growth.

# Outreach

## Expanding access to health services through strategic partnerships

Universitas Pertamina contributes to strengthening health systems and advancing inclusive health by developing strategic collaborations with local and national providers that address both preventative and responsive needs. In partnership with Lions Club South Jakarta and Indonesian Red Cross (Palang Merah Indonesia) in Jakarta, the university organized regular blood donation drives, supporting public health and reducing risks associated with preventable deaths.



To improve on-campus access, Universitas Pertamina launched a dedicated health clinic in collaboration with Pertamina Jaya Hospital (Rumah Sakit Pertamina Jaya), ensuring that students and staff can obtain timely medical services and reducing systemic barriers to essential care. Complementing these initiatives, the Social Security Administering Body (BPJS) Health Awareness Program was implemented to enhance understanding of health policy and health insurance rights, empowering personnel to better navigate the national system of social determinants of health.

Together, these initiatives reinforce the university's commitment to universal access to care, extending the reach of health services and contributing to improved psychological well-being, resilience, and life expectancy within the campus community and its wider ecosystem.





## To ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



902

students enrolled in its undergraduate programs in the 2023 academic year



4.3%

of first year student identified as first-generation students

## Research

### Free SNBT exam simulations to widen equitable access

Helping high-school students adapt to Indonesia's new 2023 SNBT format advances SDG 4 (Quality Education). A 2023 community-service paper—co-authored by Universitas Pertamina lecturers (Ludovika Jannoke, Meredith Susanty, Weny Astuti, Tirta Rona Mayangsari, Harya Dwi Nugraha)—reports free, online SNBT simulations run on Moodle and promoted via Instagram to reach students who could not afford private cram schools. Two waves (April–May 2023) drew 519 participants from 347 high schools across Java, Sumatra, Sulawesi, and Kalimantan. Participant feedback showed strong satisfaction with the site's usability, question quality, and the team's responsiveness. The initiative improved exam familiarity, time management, and confidence—practical steps toward fairer university entry pathways. The program was supported by UPERaisal (Internal Research Grant) 2023 and demonstrates Universitas Pertamina role in reducing educational barriers through scalable, tech-enabled outreach.

### Number of Publications

Number of Publications

In 2023 academic year we already published

34

publications around education



# Outreach

## Community education and social responsibility

Students from UP's Geophysical Engineering Student Association (HMTGF Orthonorm) lead community sessions that make science approachable for children through games, simple experiments, and creative activities. Facilitators scaffold concepts—such as waves, energy, and Earth processes—into playful challenges that build curiosity, teamwork, and problem-solving. Activities are delivered in schools and community centers, using low-cost materials and clear step-by-step guidance so teachers and volunteers can replicate them.



## Digital literacy outreach for high school students



Universitas Pertamina extends quality education beyond campus by mentoring high-school learners on safe, ethical, and effective digital practices. Through the Generasi Cakap Digital program at Public High School 1 of Leuwisadeng, student mentors deliver short lectures, guided practice, and interactive discussions on privacy, misinformation, cyber-etiquette, and responsible content creation. Sessions emphasize practical skills—verifying sources, setting secure accounts, and evaluating online risks—so participants can apply what they learn immediately.

# Initiatives

## Community-oriented events and engagement



Public lectures, seminars, and discussion forums hosted by Universitas Pertamina are open to stakeholders, institutional partners, and the general public. These events feature speakers from national and international academic institutions and provide a platform for knowledge exchange on pressing social, technological, and environmental topics. Universitas Pertamina actively collaborates with industry leaders to conduct seminars and professional workshops through the Cipta Karsa course. This course exemplifies the university's approach to community empowerment, strengthening the university's role in preparing individuals to navigate complex and evolving global landscapes.



## To achieve gender equality and empower all women and girls

### Research

#### *Confucian legacies and misogyny in South Korea*

A 2023 study by Bernadine Grace Alvania Manek (Universitas Pertamina) shows how Confucian-era norms of chastity and patriarchy still shape modern sexism in South Korea. Using discourse-power analysis, the paper links historical narratives to today's online hate, anti-feminist politics, and persistent gaps in women's work and pay. Policy takeaway: legal reforms must be paired with norm change—gender-responsive education, consistent public communication, and institutional supports (care-work reconciliation, wage equity)—to counter enduring biases.

#### Number of Publications

In 2023 academic year we already published

6

publications around gender equality



**42.8%**

of graduates in  
2023 academic year  
are female



**38.8%**

of female graduates  
earn degree from  
STEM fields



**54.1%**

of female graduates  
earn degree from  
Social Science fields



**28.2%**

of senior academics  
represented by  
female



# Initiatives

## Women mentoring and empowerment programs

Universitas Pertamina advances gender equality by offering tailored mentoring and engagement for female students through its spiritual and academic units. Programs like Kajian Kemuslimahan provide structured spaces for dialogue on spirituality, ethical conduct, community service, and women’s leadership.



These activities strengthen confidence, peer support, and practical skills—helping participants thrive academically and contribute as organizers, facilitators, and student leaders. By embedding inclusive values in co-curricular life and ensuring safe, women-centered learning environments where appropriate, the university fosters agency and participation that extend from campus into the wider community.

## Support for Women in Underrepresented Fields

Universitas Pertamina expands opportunities for women in STEM by collaborating with institutions such as Institut Teknologi Bandung. Joint activities— including the “Women in Science, Engineering, and Technology” webinar —connect students with researchers, industry professionals, and alumni who share practical guidance on academic progression, research engagement, and career pathways.



These exchanges strengthen mentorship networks, widen access to internships and laboratories, and encourage cross-institutional projects. By positioning women within global scientific communities and highlighting inclusive practices in recruitment and leadership, the university helps cultivate a more diverse, resilient STEM talent pipeline.





## To ensure availability and sustainable management of water and sanitation for all



14.32 L

water consumption per person per day during  
academic year 2023

## Research

### *Sugarcane waste into clean-water solutions*

Researchers from Universitas Pertamina—Paramita Jaya Ratri and Nila Tanyela Berghuis\*—turn sugarcane bagasse into a green adsorbent that removes toxic lead [Pb(II)] from polluted water. By modifying bagasse-lignin with a simple, low-cost process, the team achieves up to ~96% lead removal in bench tests—far better than raw lignin—while relying on an abundant local residue. The material can be packed into cartridge filters or used as a polishing step in small treatment units, offering an affordable, practical option for communities near mining, plating, or battery-recycling areas where heavy-metal risks are high. Because production can be established near sugarcane regions, the approach supports local supply chains and green jobs, reduces agricultural waste, and advances a circular economy. This work demonstrates how Universitas Pertamina’s bio-based innovation can help expand access to safe water, lower treatment costs, and protect public health.

### Number of Publications

Number of Publications

In 2023 academic year we already published

31

publications around clean water and sanitation

# Operations

## Access to safe and free drinking water

Universitas Pertamina provides free drinking water to all students, staff, and visitors through stations located at strategic points on campus, including the Griya Legita Building and the Rectorate Building. This initiative ensures inclusive access to safe drinking water while also reducing the use of single-use plastic bottles. It highlights the university's commitment to fostering a healthy and sustainable learning environment where hydration needs are met without financial or environmental burden.



## Promoting water efficiency across campus



Universitas Pertamina advances responsible water management by embedding conservation cues into daily routines. Visual reminders placed near toilets, sinks, and mirrors prompt students and staff to turn taps off promptly, limit unnecessary use, and report leaks.

These low-cost behavioral nudges complement technical measures—such as automated pump systems that balance distribution and lower energy demand—creating a practical, campus-wide approach to water stewardship. By aligning everyday habits with operational efficiency, the university reduces avoidable consumption while strengthening a culture of shared responsibility.

# Outreach

## Empowering local communities through enterprise support



Through the LIGHT UP, student-led outreach program, Universitas Pertamina engages communities to build water resilience and environmental literacy by delivering rainwater-harvesting training, establishing neighborhood collection systems, and conducting collaborative research with local authorities (including the Jakarta Forestry and Parks Department and Ligarmukti Village) to improve river quality and protect local springs, while student-led actions in Sukaluyu Village, Bogor (LIGHT UP 2023) advanced clean water access, hygiene awareness, and waste management—together strengthening local capacity for sustainable water use and demonstrating the university's role in fostering environmental stewardship beyond its campus.





## To ensure access to affordable, reliable, sustainable and modern energy for all

### Research

#### *Water-in-salt electrolyte for safer, hotter aluminum-ion batteries*

Advancing affordable, reliable, and safer energy storage, a 2023 study—co-authored by Sylvia Ayu Pradanawati and Faizal Fatah (Universitas Pertamina)—tests a water-in-salt  $\text{AlCl}_3$  electrolyte for aluminum-ion batteries and compares it with a conventional 1 M  $\text{AlCl}_3$  solution. The water-in-salt formulation delivers more stable redox behavior from room temperature to 50 °C, suppresses hydrogen evolution that degrades electrodes, and shows good ionic conductivity at operation temperatures. Microscopy and EDS indicate less anode/cathode deterioration with water-in-salt, pointing to longer cycle life and better safety at elevated temperatures. Because aluminum is abundant and low-cost, this electrolyte-electrode pairing offers a pathway to lower-cost storage with improved thermal tolerance—highly relevant for tropical climates and grid/off-grid renewables. The work underscores Universitas Pertamina's contribution to safer, cost-effective storage that supports the expansion of clean energy systems

### Number of Publications

In 2023 academic year we already published

# 76

publications around clean energy



## 5,203 GJ

of total energy used in  
our university during  
2023 academic year



## 56 GJ

of clean energy  
produced from low-  
carbon sources



# Operations

## Expanding renewable energy and reducing emissions

To contribute to Indonesia's vision of achieving Net Zero Emissions by 2060, Universitas Pertamina is embedding low-carbon economy practices into campus operations. Solar panels installed on the Griya Legita building supply renewable electricity that offsets grid consumption and reduces carbon emissions, reinforcing the university's role in advancing sustainable growth and resource efficiency.

Looking ahead, Universitas Pertamina has outlined plans to adopt smart energy management systems and expand the use of renewable energy across its facilities. The integration of green building standards and environmentally friendly infrastructure supports both carbon offset initiatives and long-term energy efficiency targets. These measures demonstrate a holistic commitment to circular economy approaches, sustainable campus design, and inclusive economic development that align institutional energy use with global climate goals.



Live demonstrations guided students through panel orientation and tilt to maximize irradiance, simple daily load calculations (Wh), battery sizing, and how to read basic performance indicators (voltage, current, approximate power) to understand the link between system design, weather conditions, and energy output. Beyond technical literacy, the training emphasized energy-saving behavior and load-priority management so that small PLTS systems can be used more effectively in everyday life. With active involvement from lecturers, university students, teachers, and pupils, the program builds an inclusive learning network, nurtures student leadership as clean-energy ambassadors on campus, and strengthens local capacity to plan, install, and maintain household-scale solar systems. The expected outcomes include not only improved technical knowledge but also tangible adoption—such as mini-PLTS projects for school lighting and device charging, plus ideas for replication at home and in surrounding communities—contributing to a more sustainable energy transition.

## Outreach

### Promoting clean energy beyond the campus

Universitas Pertamina, through its Community Engagement Program, organized a Solar Home System (PLTS) installation training for students at Citra Alam High School to expand renewable-energy awareness and hands-on skills at the school level. The activity was designed as a field-based practicum: participants learned the functions of core components (solar panels, charge controllers, batteries, inverters, and protection devices), basic electrical safety, and step-by-step installation—from neat wiring and mounting to commissioning and routine maintenance.





# To promote inclusive and sustainable economic growth, employment and decent work for all

## Research

### *Capital structure and scale as drivers of bank value in ASEAN*

Understanding what lifts banks' market value matters for productive investment and jobs. A 2023 study in Jurnal Ekonomi—co-authored by Universitas Pertamina researchers—analyzed 82 listed Southeast Asian banks (2018–2022) using panel regression to test the roles of financial distress, capital structure, and firm size. The common-effects model shows no significant effect of financial distress, while both Debt-to-Equity (DER) and Total Assets (size) have significant positive associations with firm value; the model's modest  $R^2$  (~4.7%) also signals additional drivers beyond these levers. Practical guidance follows: optimize leverage with stable funding, scale assets productively (lending to the real economy while managing NPLs and efficiency), and track complementary value drivers (profitability, governance, risk, diversification) to sustain performance. The findings support SDG 8 by highlighting balance-sheet strategies that strengthen credit intermediation, enterprise growth, and decent work across the region.

## Policy

### *Recognition of Labour Rights*

Universitas Pertamina safeguards labor rights and ensures equitable treatment across all employment categories. The university recognizes and supports trade unions and guarantees protections for both permanent and outsourced staff. Institutional policy mandates that outsourced employees receive comparable benefits, working conditions, and equal pay for work of equal value, reinforcing fair employment and decent work standards. A structured, confidential grievance mechanism enables employees to contest performance appraisals, disciplinary actions, or other workplace issues through transparent, time-bound procedures that strengthen accountability. To drive continuous improvement, the university conducts regular employee satisfaction surveys to assess well-being, gather feedback, and identify development needs; findings inform decisions and refine policies on employment protection, job quality, and workplace safety. Through transparent communication and active staff engagement, Universitas Pertamina fosters an inclusive, safe, and sustainable work environment.

## Number of Publications

In 2023 academic year we already published

**96**

publications around work and economic growth





## To build resilient infrastructure, promote sustainable industrialization and foster innovation

### Research

#### *Machine-learning auto-picking to strengthen seismic innovation*

Accelerating, standardizing, and scaling earthquake signal analysis is core to resilient infrastructure and innovation. A 2022 study in *Jurnal Geofisika*—by Yosua H. Lumban Gaol and Sandy K. Suhardja (Universitas Pertamina)—builds a Python-based Artificial Neural Network (ANN) to automate P-wave first-arrival picking, benchmarking it against manual picks and the classic STA/LTA approach. Trained and tested on BMKG waveform data (2019) and synthetic signals, the tool achieves small pick errors across low- and higher-noise cases; results improve further when simple pre-filtering is applied, highlighting a practical preprocessing step for real-time pipelines. The innovation cuts analysis time, reduces operator subjectivity, and offers a reproducible module that national monitoring centers can scale for faster hypocenter solutions and early situational awareness. Actionable guidance—embed ML auto-picking in routine workflows, standardize filtering, and expand diverse training data—can lift accuracy and robustness system-wide, advancing SDG 9 through digital innovation in hazard monitoring.

#### Number of Publications

In 2023 academic year we already published

# 143

publications around industry, innovation, and infrastructure





## To reduce inequality within and among countries

### Research

#### *Membership dynamics for more inclusive energy governance*

Understanding how international organizations design membership can reduce power asymmetries “among countries” (SDG 10). A 2023 study—by Indra Kusumawardhana (Universitas Pertamina)—analyzes OPEC’s flexible membership scheme and Indonesia’s 2017 invitation to reactivate its membership using in-depth interviews with Indonesia’s OPEC representatives. The analysis identifies three drivers: Indonesia’s perceived neutrality that can ease bargaining frictions; OPEC’s desire to signal diversity by including a member with different attributes; and historical ties reflecting Indonesia’s past contributions. For SDG 10, the implication is clear: more inclusive, representative forums—with options for suspension/reactivation or graduated participation—can broaden middle-income voices, temper dominance by major producers, and support fairer burden-sharing in energy governance. Actionable guidance: embed flexible membership pathways, set representation/diversity goals, and formalize roles for neutral brokers to narrow negotiation gaps between producer and consumer blocs. This work underscores Universitas Pertamina contribution to equitable participation in global institutions.

#### Number of Publications

In 2023 academic year we already published

# 47

publications around inequalities



# Policy

## Non-discriminatory and anti-harassment policy

Universitas Pertamina embeds principles of equality and fairness into its administrative and academic systems, ensuring decisions are free from discriminatory policies and practices. Rector's regulations governing staff recruitment and student admissions emphasize merit and potential, reflecting an institutional commitment to political inclusion and equitable access. The university enforces strict anti-discrimination and anti-harassment measures through codes of ethics and operational guidelines that explicitly prohibit actions based on race, gender, religion, disability, or socio-economic status. This framework reduces risks of social exclusion and prevents economic marginalization within the academic community. To guarantee accountability, a dedicated Student Code of Ethics Enforcement Committee oversees compliance and addresses violations. By institutionalizing these protections, Universitas Pertamina strengthens its role in reducing inequality, upholding human dignity, and fostering a diverse academic environment where respect, opportunity, and inclusion are consistently prioritized.

Universitas Pertamina ensures that principles of diversity, equity, and inclusion are systematically embedded within its governance structure. Specific responsibilities are delegated to vice rectors and senior administrators to oversee inclusive admissions, strengthen student welfare, and guide infrastructure planning that prevents social exclusion. Institutional frameworks such as the Governance Standard and Facility Standard serve as formal policies against discriminatory practices, establishing clear mandates for accessibility and fairness. These regulations function as a form of social protection policy, ensuring equitable participation for all members of the academic community.

# Operations

## Inclusive access through facilities and infrastructure



Live demonstrations guided students through panel orientation and tilt to maximize irradiance, simple daily load calculations (Wh), battery sizing, and how to read basic performance indicators (voltage, current, approximate power) to understand the link between system design, weather conditions, and energy output. Beyond technical literacy, the training emphasized energy-saving behavior and load-priority management so that small PLTS systems can be used more effectively in everyday life. With active involvement from lecturers, university students, teachers, and pupils, the program builds an inclusive learning network, nurtures student leadership as clean-energy ambassadors on campus, and strengthens local capacity to plan, install, and maintain household-scale solar systems. The expected outcomes include not only improved technical knowledge but also tangible adoption—such as mini-PLTS projects for school lighting and device charging, plus ideas for replication at home and in surrounding communities—contributing to a more sustainable energy transition.





## To make cities inclusive, safe, resilient and sustainable

### Research

#### *Agent-based routing with drones for faster post-disaster mapping*

Rapid, reliable mapping after eruptions is essential for safe, resilient cities. A 2023 study in Jurnal Logistik Indonesia—by Rahmad Inca Liperda (Universitas Pertamina) and collaborators—builds an agent-based simulation that integrates ground vehicles and drones, accounting for road/bridge conditions and depot locations around Mount Merapi. The model (AnyLogic) tests 27 scenarios and shows that bridge damage drives longer processing and completion times, with effects varying by depot location. It identifies Depot 7 as best on processing time when bridges are intact or damaged in KRB II & III; Depot 3 is best under KRB III-only damage, while Depot 8 consistently yields the shortest completion time. The takeaway for urban disaster logistics: site hubs with resilient access and viable alternate routes, and combine drone + ground assets to sustain mapping speed when infrastructure is disrupted—practical design guidance for PDNA and emergency operations that strengthens urban preparedness and recovery.

#### Number of Publications

In 2023 academic year we already published

# 47

publications around sustainable cities and communities



# Policy

## Promoting sustainable mobility and green infrastructure

Universitas Pertamina promotes sustainable urban transportation by providing facilities that reduce dependence on private vehicles and help mitigate congestion. Dedicated bicycle parking areas, integrated pedestrian walkways, and campus-adjacent public transport stops encourage low-emission commuting and healthier mobility options for the academic community. A 500-meter pedestrian path equipped with ramps ensures inclusiveness for persons with disabilities and the elderly, reinforcing access to essential basic services.



The university also implements remote working and compressed workweek schemes, lowering commuting frequency and reducing its overall environmental footprint. These initiatives align with the development of sustainable buildings and green infrastructure, embedding inclusiveness into campus design and operations. By integrating mobility planning with resource-efficient infrastructure, Universitas Pertamina demonstrates a strong commitment to advancing sustainable cities and human settlements in line with SDG 11.

## Initiatives

### Inclusive access through facilities and infrastructure

Universitas Pertamina strengthens its role in sustainable human settlements by ensuring that academic, cultural, and recreational resources function as inclusive basic services for both students and surrounding communities.

Universitas Pertamina strengthens its role in sustainable human settlements by ensuring that academic, cultural, and recreational resources function as inclusive basic services for both students and surrounding communities. The university library and digital platforms provide open access to theses, journals, and publications, advancing citizen participation in knowledge-sharing and supporting lifelong learning. These measures expand equitable access to education and contribute to more sustainable and informed urban communities.



Green spaces across the campus act as shared public areas that improve air quality, encourage environmental awareness, and foster social interaction. By embedding green space into campus planning, the university reduces its ecological footprint while strengthening community well-being. At the same time, cultural heritage is preserved through organizations such as the traditional arts group (UKM Kesenian Daerah) and choir (UKM Paduan Suara), alongside involvement in initiatives like Jakarta Language Ambassador 2023. Together, these efforts foster inclusiveness, enhance cultural resilience, and align Universitas Pertamina with SDG 11's vision of sustainable cities and human settlements.

Universitas Pertamina provides inclusive and free access to its E-Library platform, offering digital academic resources such as books, journals, and theses authored by students and faculty. This initiative supports equitable access to knowledge, encourages lifelong learning, and promotes academic collaboration—reflecting the university's contribution to sustainable, informed communities in line with SDG 11.

## To ensure sustainable consumption and production patterns

### Research

#### *Lean Six Sigma to cut production waste in instant noodles*

Improving resource efficiency on factory floors is central to SDG 12 (Responsible Consumption & Production). A 2023 study in *KAIZEN: Management Systems & Industrial Engineering Journal*—co-authored by Resista Vikaliana (Universitas Pertamina)—analyzes flour overuse and defects at a major noodle manufacturer using a Lean Six Sigma (DMAIC) approach with SIPOC, cause-effect analysis, and FMEA. The assessment pinpoints three critical sources of waste on the line—roll press, cutting, and frying—with the highest risk priority at the roll press (RPN 384), followed by cutting (RPN 252) and frying (RPN 180). Actionable fixes include tighter dough-thickness control and sensing, routine cleaning and auto-lubrication at cutters, and temperature/sensor maintenance and oil-level checks at fryers. These low-cost process controls reduce raw-material loss, defect rework, and downtime—translating into lower environmental footprint and higher yield without major capex—demonstrating how Universitas Pertamina-linked research drives practical waste prevention and circularity in food manufacturing.

#### Number of Publications

In 2023 academic year we already published

111

publications around responsible consumption and production



# Policy

## Reducing single-use plastics and promoting reusables

To minimize plastic waste on campus, Universitas Pertamina issued a formal directive restricting the use of bottled water (AMDK) in all internal events and activities. This policy encourages the use of refillable containers, reducing reliance on disposable plastic packaging. Alongside this, the university promotes the minimization of other single-use items across departments, aiming to foster behavioral change in everyday campus operations. These actions contribute to reducing the university's carbon footprint and support a culture of conscious consumption and sustainable campus living.

## Strengthening ethical sourcing and hazardous waste handling

Universitas Pertamina emphasizes ethical sourcing in its procurement practices, ensuring that materials and food products are obtained responsibly. It has also established strict protocols for handling and disposing of hazardous waste (B3), including proper labeling, storage, and third-party disposal services. This includes managing chemical waste from laboratories in compliance with environmental regulations. The temporary hazardous waste storage facility reflects the institution's commitment to environmental safety and responsible consumption. These efforts help minimize risks to human health and protect terrestrial ecosystems, aligning with broader sustainability goals.

# Initiatives

## Responsibility through sustainability reporting

Universitas Pertamina strengthens its commitment to corporate sustainability and responsible resource management through the publication of its 2023 Sustainability Report. This document presents initiatives in education, energy, waste reduction, and community development, while also highlighting actions related to solid waste management, resource recycling, and contributions to the low-carbon economy.

By incorporating elements of life cycle assessment and monitoring the university's environmental footprint, the report enhances institutional accountability and supports progress on SDG 12. Furthermore, it showcases Universitas Pertamina's role in international dialogues on the circular economy and nature-based solutions. Through transparent reporting, the university not only advances a culture of openness but also encourages green consumption and sustainable practices that underpin long-term environmental stewardship.



## To take urgent action to combat climate change and its impacts

### Research

#### *Solar PV for lower-carbon community buildings in Dumai*

Cutting building emissions is central to climate action. A 2023 case study in Jurnal Presipitasi—by Nia Armelia Putri, Ari Rahman, and I Wayan Koko Suryawan (Universitas Pertamina)—assessed the Dumai Islamic Centre Mosque and used the Analytic Hierarchy Process (AHP) to choose a practical rooftop solar option. The team identified polycrystalline panels as optimal on criteria of efficiency, power, O&M, and price, and recommended roof placement to maximize sun exposure and output. Calculations indicate a carbon-emission reduction of ~57.7 kg CO<sub>2</sub>e per day (~21,057.95 per year), about 12.8% below baseline consumption—evidence that on-site PV can materially shrink a large public building's footprint. Beyond the numbers, the paper highlights co-benefits—cost savings, energy independence, and community education—positioning mosques as visible leaders for climate stewardship. This provides actionable guidance for cities: select technology with multi-criteria screening, prioritize unobstructed rooftops, and back deployments with supportive local policies and financing to accelerate carbon reductions across civic facilities.

#### Number of Publications

In 2023 academic year we already published

# 45

publications around climate change



# Initiatives

## Strengthening climate education and awareness

Universitas Pertamina actively advances climate change mitigation and adaptation through education, research, and community-focused programs on climate risk, adaptation strategies, and early warning systems. A flagship effort was the International Symposium on “The Role of Blue Carbon in REDD+ and NDC,” held on 19 December 2022 at Universitas Pertamina in collaboration with the Pertamina Foundation and ECADIN. Bringing together experts, policymakers, and youth, the symposium examined how blue-carbon ecosystems can reduce emissions and safeguard coastal biodiversity, fostered multi-stakeholder dialogue, and aligned campus initiatives with Indonesia’s national climate commitments—demonstrating nature-based solutions as a practical pathway toward SDG 13.



## Strengthening climate education and awareness

To strengthen resilience against climate-related hazards, Universitas Pertamina developed HydroGeo-UPER, a real-time hydrogeological monitoring platform for river basins and urban catchments. The platform collects and disseminates key environmental data—such as river water levels, rainfall intensity, and flood risks—to support early warning systems and disaster preparedness.

Accessible to the public via [sungai.universitaspertamina.ac.id](http://sungai.universitaspertamina.ac.id), HydroGeo-UPER empowers local communities, researchers, and authorities with reliable data to anticipate and respond to hydrometeorological disasters.



# Outreach

## Fostering grassroots action through NGO collaboration

Environmental education efforts are further supported through partnerships with NGOs. Through the #TemanBumi program with KitaBisa.com and Pertamina Foundation, the university promotes accessible, donation-based climate action. Another initiative with KeMANGTEER supports mangrove reforestation to strengthen coastal ecosystems and reduce emissions. These programs expand public awareness, empower youth, and highlight the role of nature-based solutions in climate adaptation







## To conserve and sustainably use the oceans, seas and marine resources

### Research

#### *Diagenetic priming of submarine landslides in ooze-rich seabeds*

Reducing marine geohazards protects coastal communities, ecosystems, and seabed infrastructure—core to SDG 14. A 2023 paper in *Geology*—co-authored by Harya D. Nugraha (Universitas Pertamina)—integrates 3D seismic, geochemical, and petrophysical data from the Exmouth Plateau (NW Australia) to show how silica diagenesis and changing ocean/tectonic conditions precondition calcareous ooze to fail even on very low-angle slopes. The team identifies stratigraphic weak layers and a regional failure surface, demonstrating that fluid expulsion during opal-A → opal-CT conversion can trap overpressure beneath low-permeability horizons, priming multiple large slides. Crucially, they demonstrate that potential slide surfaces in ooze successions can be mapped before failure, improving submarine hazard assessment. For practice: incorporate diagenetic state and overpressure indicators into marine planning, avoid routing cables/pipelines across preconditioned zones, and prioritize monitoring of fluid migration and weak layers to lower risk to biodiversity and blue-economy infrastructure

#### Number of Publications

In 2023 academic year we already published

# 38

publications around life below water



# Initiatives

## Building community capacity for freshwater sustainability

Universitas Pertamina facilitated training programs on water management systems that promoted sustainable irrigation while minimizing nutrient runoff and conserving freshwater linked to coastal habitats. These sessions provided local leaders with practical knowledge and tools to integrate traditional ecological knowledge and community-based conservation approaches. By enhancing local advocacy for sustainable water use and its connection to fisheries and marine ecosystems, the initiative strengthened resilience against ocean acidification and marine pollution, contributing to more effective coastal management and long-term protection of aquatic resources.



The activity mobilized students from both universities in hands-on planting and environmental education, reinforcing the role of youth in marine conservation. Local participation by the Tourism Awareness Group (POKDARWIS) further promoted community-based conservation and coastal ecotourism, highlighting the integration of traditional ecological knowledge with sustainable practices.



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**PEMATERI 2: Hec-Ras 2D Modelling**  
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Dosen Teknik Sipil Universitas Pertamina

**PEMATERI 3: Basic DualSPHysics**  
TEUKU MUHAMMAD RASYID, Ph.D.  
Dosen Teknik Sipil Universitas Pertamina

# Outreach

## Restoring coastal ecosystems through student and community participation

In May 2023, Universitas Pertamina collaborated with Universiti Teknologi PETRONAS and Nusantara Regas to implement a mangrove rehabilitation program on Untung Jawa Island. A total of 200 mangrove seedlings were planted to restore coastal habitats, mitigate erosion, and enhance marine biodiversity as part of broader coastal management efforts.

## Empowering sustainable aquaculture through community innovation

Universitas Pertamina works with local communities to strengthen sustainable aquaculture practices that protect marine biodiversity and contribute to a resilient marine economy. A flagship initiative, the Light Up Karangreja program, integrates youth and community participation in eco-friendly aquaculture and coastal ecotourism. The program addresses marine debris and coastal pollution by transforming seafood byproducts into valuable resources. Through community education on recycling techniques—such as converting shells, fish waste, and other organic materials into crafts or compost—the initiative advances circular economy solutions while reducing nutrient runoff. These activities not only mitigate marine pollution but also generate alternative livelihoods, creating income opportunities for artisanal fishers and households in Karangreja Village.



## To sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

### Research

#### *Detergent risk in island groundwater—protecting land–sea ecosystems*

Safeguarding small-island aquifers is vital for biodiversity and community health at the land–sea interface (SDG 15). A 2022 case study in Jurnal Presipitasi—co-authored by I Wayan Koko Suryawan (Universitas Pertamina)—found detergent (LAS) in all 11 wells on Kodingareng Lompo Island (0.005–2.98 mg/L), with many residents drinking well water >350 days/year for decades, raising cumulative exposure. Three respondents showed  $RQ > 1$  (unsafe), the average  $RQ = 0.3363$ , and the mean concentration (0.696 mg/L) exceeded Indonesia's  $\leq 0.05$  mg/L drinking-water limit; a safe concentration  $\sim 0.0407$  mg/L and safe intake  $\sim 2.88$  L/day were identified for high-risk individuals. To reduce risks while protecting soils, vegetation, and nearshore habitats, communities and local authorities should (1) control household greywater (separate drains, choose/limit detergents), (2) install simple pre-treatment (grease traps, sand/char filters) before infiltration, (3) enforce setback distances between washing areas and wells, and (4) monitor routinely against the  $\leq 0.05$  mg/L standard—practical steps that cut pollutant loads, safeguard freshwater–terrestrial ecosystems, and protect islanders' health

#### Number of Publications

In 2023 academic year we already published

# 19

publications around life on land



# Outreach

## Preserving land ecosystems and biodiversity

In May 2023, Universitas Pertamina joined the Indonesian Social Leaders Expo to support the "Aksi Sobat Bumi" initiative, promoting ecosystem restoration and community empowerment. These activities include planting high carbon-absorption tree species such as nyamplung, kepuh, and meranti at the UGM Forestry Arboretum, reinforcing efforts to protect the habitats of endemic species including the proboscis monkey and orangutan.



## Strengthening conservation through monitoring and research

Universitas Pertamina, in partnership with Pertamina Foundation, conducts long-term monitoring across terrestrial and inland biodiversity hotspots to inform land conservation and habitat restoration. In the Pertamina Hulu Mahakam landscape, natural corridors were developed for the proboscis monkey (*Nasalis larvatus*), reducing habitat fragmentation and supporting ecological resilience.

Complementary surveys at PT Badak NGL recorded 32 orangutan nests, generating evidence for improved management of threatened and endangered species within adjacent forest and wetland mosaics.

Further assessments extend to the UGM Pertamina Forest (Blora–Ngawi) and align with a Blue Carbon Initiative that supports ex-situ conservation of Timor deer, while tracking endemic fauna—including small-clawed otters and long-tailed macaques—in Bontang and the Mahakam system. Community-based conservation and inclusive outreach remain central, strengthening stewardship, mitigating human–wildlife conflict, and sustaining species richness. Together, these actions advance sustainable land management and protect critical habitats in line with SDG 15.

## Biodiversity Education and Sustainable Land Stewardship

Environmental awareness and education are central to Universitas Pertamina's biodiversity-inclusive mission across terrestrial and inland ecosystems. Through community service and outreach, the university strengthens public understanding of ecosystem preservation, ecological resilience, and sustainable land management. In collaboration with Universiti Teknologi PETRONAS, students at SMPN 285 Jakarta joined ecosystem-focused learning that paired a Mini English Camp with mangrove planting on Pulau Untung Jawa—supporting habitat restoration, protecting tree cover, and reducing land degradation and coastal erosion.

To advance sustainable development, UPERESEARCH applies the Supply Chain Operations Reference (SCOR) framework to evaluate and improve tourism–village supply chains. This research aligns land use with conservation outcomes, promotes ecotourism and community-based conservation, and mitigates habitat loss and fragmentation while fostering local economic resilience.



**To promote peaceful and inclusive societies, provide access to justice for all, and build effective, accountable institutions at all levels**

## Research

### *Internal audit capacity to prevent corruption and build strong institutions*

Strengthening integrity systems is central to SDG 16: Peace, Justice and Strong Institutions. A 2023 article in the *International Journal of Progressive Sciences and Technologies*—by Christine Sri Marnani (Universitas Pertamina) and co-authors—assesses the role and capability of Indonesia's Government Internal Supervisory Apparatus (APIP) through a qualitative literature review. The study highlights that as APIP capability and SPIP (Government Internal Control System) maturity increase, internal audit functions shift from compliance checking to a strategic partnership that prevents, detects, and investigates fraud—especially corruption—while improving transparency, accountability, and safeguarding state assets. In practice, this means embedding risk management, early-warning systems, and solution-oriented audit work across ministries and local governments, aligned with the national bureaucratic-reform agenda. The findings directly support SDG 16 by showing how capable, independent internal oversight reduces corruption opportunities and strengthens public-sector performance—key ingredients for effective, accountable institutions.

### Number of Publications

In 2023 academic year we already published

# 43

publications around peace, justice, and institutions



# Policy

## Anti-Corruption and Whistleblowing Policy

Universitas Pertamina upholds integrity through a university-wide anti-corruption framework. Under Rector Regulation No. 0010/2017 (Gratification Control), faculty, staff, and their immediate families are strictly prohibited from requesting, receiving, or offering gifts, money, or other benefits—directly or indirectly—to/from stakeholders, in line with national law and institutional ethics. Enforcement is supported by CAROLINE (E-CARE), a secure, anonymous whistleblowing channel that protects reporters from retaliation. All allegations of bribery, gratification, or misconduct are handled confidentially by the Internal Supervisory Unit, ensuring transparent and accountable governance.

# Operation

## Promoting democratic governance and representation



Universitas Pertamina upholds democratic governance through elected academic and student representation. As mandated by the University Statute (Article 33, 2023), the Senate—composed of faculty-elected members—is the highest academic body, elected every five years; the current Chair (2023–2028) is Prof. Dr. Ir. Made Emmy Relawati. Each of the six faculties also has its own Senate for faculty-level academic decisions.

On student governance, while a BEM is not yet formalized, the university formed BAPEMBEM (2023), which convened a Student Congress themed “The Spirit of Collaboration to Strengthen the Existence and Integrity of Students.”

# Initiatives

## Neutral, multi-stakeholder forum for policy dialogue



Universitas Pertamina advances SDG 16 by hosting the Indonesian Economic Review (IER)—a neutral, cross-sector forum where government, industry, academics, and students debate national priorities using evidence, not partisanship. The 2022 edition, themed “The Role of the Young Generation to Achieve SDGs,” focused on digital-economy governance and featured speakers from the Ministry of Communication and Informatics, the national cyber incident team, and industry. IER strengthens transparent dialogue, accountable decision-making, and youth civic participation, affirming UP’s role as a neutral convener.



## To strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

# Initiatives

## Policy support through collaborative governance

Universitas Pertamina actively contributes to sustainable policy formulation through strategic collaborations with governmental bodies and international institutions. As part of a joint initiative with the Bogor City Government, DLH Bogor, ICLEI, and the World Bank, the university conducted an institutional capacity assessment to support local sustainable governance. Further extending its policy impact, faculty member Mega Mutiara Sari served as an expert consultant for the Advancing Indonesia's Lightning Market to High Efficient Technologies (ADLIGHT) project under Indonesia's Ministry of Energy and Mineral Resources, advocating for the adoption of energy-efficient lighting systems nationwide. These partnerships reflect Universitas Pertamina's role in shaping evidence-based policies that align with global sustainability agendas.



## Driving sustainability dialogue through cross-sectoral engagement

Universitas Pertamina advances SDG 17 by convening international cooperation and international collaboration across academia, industry, government, and civil society to accelerate green development aligned with Agenda 2030. The 2022 ICO-SEID served as a multi-stakeholder platform for knowledge transfer, diffusion of low-carbon solutions, and capacity building on renewable energy and efficiency, strengthening policy dialogues and governance frameworks that support sustainable development goal\* implementation.





## Policy support through collaborative governance



To deepen international partnership, the university established a trilateral collaboration with the University of Tokyo and Kyushu University focused on joint research, innovation, and regional cooperation for the energy transition. The partnership includes exchanges, workshops, and shared data initiatives to bolster a Sustainability Center that links science to policy and industry practice—functioning as a campus hub for public-private partnership (PPP) with measurable outcomes tracked through SDG indicator and monitoring tool development, thereby enhancing statistical capacity for tracking progress toward Indonesia's NZE targets and broader SDGs.

## Outreach

### Building Local Capacity for Sustainable Development

Universitas Pertamina advances SDG 17 by extending international cooperation principles to local communities through targeted capacity building and knowledge transfer. In 2023, the International Relations department delivered SDG workshops at SMK Islamiyah Depok, emphasizing energy-saving practices, responsible consumption, and green development.



Universitas Pertamina advances SDG 17 by extending international cooperation principles to local communities through targeted capacity building and knowledge transfer. In 2023, the International Relations department delivered SDG workshops at SMK Islamiyah Depok, emphasizing energy-saving practices, responsible consumption, and green development. The program enabled the diffusion of practical solutions, fostered youth partnerships with educators and civil society, and aligned community action with Agenda 2030 and the SDGs. To sustain outcomes, the university is developing simple indicator sets and monitoring tool prototypes for schools to support tracking progress on behavior change and resource efficiency, reinforcing a collaborative, evidence-based pathway to local implementation.

# Acknowledgements

This report was made possible through the dedication and collaboration of our alumni, staff, and managers who each contributed their expertise at different stages of the process.

**Afdal Huda** (Sustainability Inventory and Reporting Staff) led the project on a day-to-day basis, undertook the main drafting and layout of the report, and coordinated contributions across the team. Thanks for **Rahma Audia Pertiwi** (Sustainability Intern), who assisted in layouting, and **M. Fath Arroikhan** (Sustainability Magister Staff), who helped refine and revise the overall narration.

**Amanda Prasetya** (Sustainability Intern) carefully proofread and checked all the narration. Special thanks go to our contributors—**Devi Maharani** (Alumni), **Rifdah Tsabitah** (Alumni), **Ayu Shimma Dyanna** (Sustainability Intern), and **Rima Shallu Zevita** (Sustainability Intern)—for collecting data and drafting initial narrations for several SDGs. We also thank **Nyoman Setiana** (Alumni), who prepared infographics of numerical data and contributed initial draft narrations.

Additional contributions came from **Ade Cahyaning Palupi** (Sustainability Intern), who calculated the number of publications using our SDG Research tools.

This project was guided and steered with oversight from **Ariyanti Sarwono** (International Partnership Manager), who supervised the narrations, and **Gede Widia Pratama Adhyaksa** (Sustainability Center Manager), who reviewed the entire report and approved all final contents.





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