





COMPANY PROFILE

PT. Prasadha Pamunah Limbah Industri

Integrated Environmental Waste Management Services



Vision

PPLI commits to be a leading environmental services provider in Indonesia, by using our highly qualified and experienced resources.

Mission

PPLI's mission is to be the premier Integrated Environmental Waste Management Services Provider in Indonesia, with the commitment to minimize our customer's environmental risks.



PPLI
Home Base Facility



3 Globes Express:
"Employees" - "Stakeholders"
"The Earth to be Inherited to The Future"



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About PPLI

PT. Prasadha Pamunah Limbah Industri (PPLI) is an Indonesian company that has been in operation since 1994 providing collection, recycling, treatment and disposal services for hazardous waste and non-hazardous waste.

PPLI is 95% owned by DOWA and 5% by the Government of Indonesia through the Ministry of State Owned Enterprises. PPLI holding company, DOWA Eco-System Co. Ltd., is a company dedicated to environmental management and recycling, and a wholly owned subsidiary company of DOWA Holdings Co. Ltd. The Group was established in 1884 as a mining and metal smelting/refining company in Japan. DOWA Eco-System business is centered on resource recycling, waste management, soil remediation and environmental consultation.

BUSINESS MILESTONE

1994

Established

First and only licensed waste management facility in Indonesia

2000

Acquired by MAEH group

MAEH 95%: BUMN 5%

2000 - 2006

Successful Turnaround and Commencement of Capacity Upgrade to improve facilities and increase capacity

2007 - 2008

Significant Capital Investment

Capacity Upgrade completed Collection Depots and Transfer Stations in strategic geographic locations across Indonesia Improved Services and Additional Service

2009 - Onwards

MAEH acquired by DOWA Eco-System

DOWA Eco-System Co. Ltd. is a subsidiary company of Dowa Holdings Co. Ltd.
Established in October 2006 in order to focus more specifically on Environmental Management & Recycling. Dowa was originally established in Japan in 1884 as a mining & metal smelting/refining company.

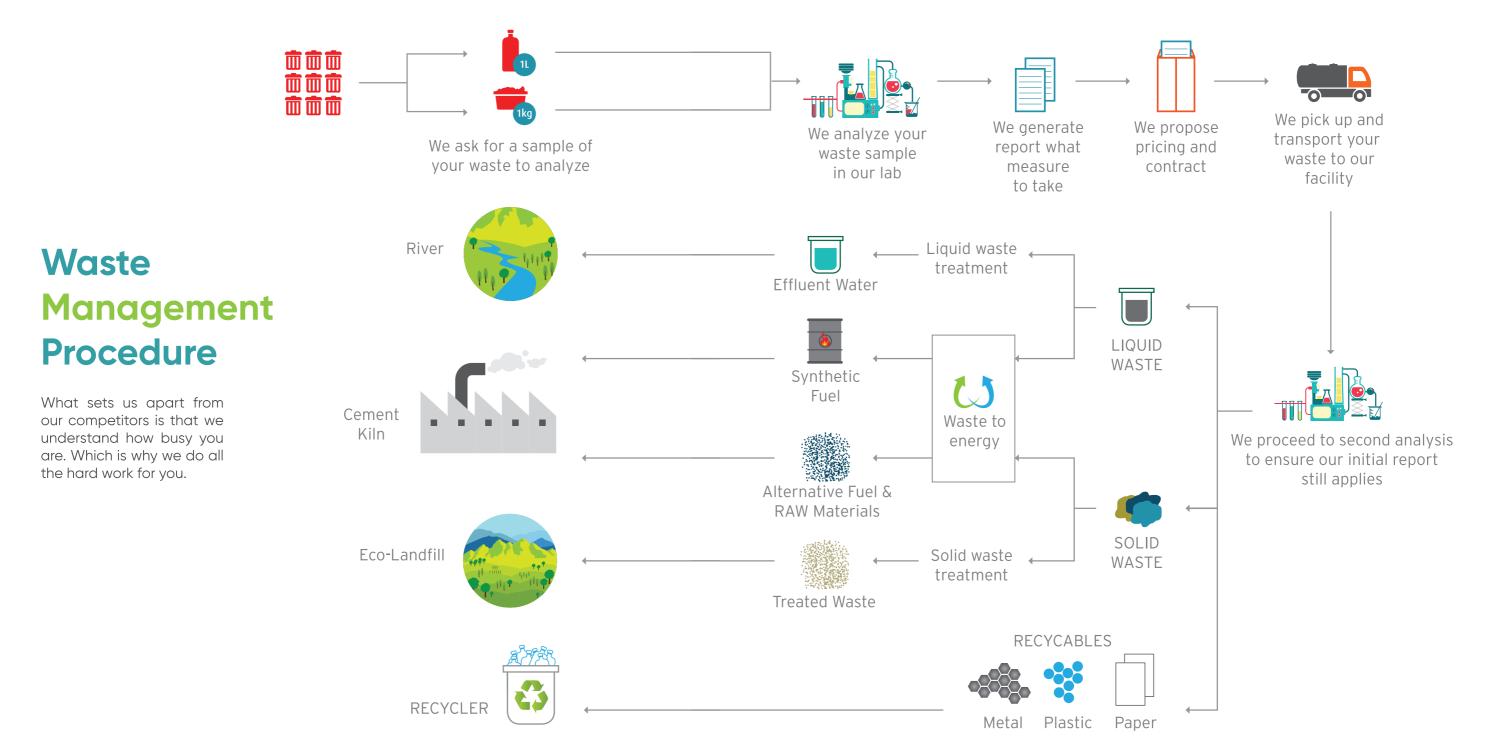
DOWA Environmental Management & Recycling Division has the broad-based expertise and high level of technology that allows the recapture of over twenties (20) different metals, including gold and silver, derived from the refinement techniques developed in the metal mining and metal smelting/refining industry.

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Why PPLI

- **A.** PPLI offers a broad, very comprehensive and fully permitted range of waste treatment and disposal solutions. This gives PPLI flexibility and the ability to offer customers a 'one-stop shop' for all their waste needs.
- **B.** Our services result in cleaner environments, better living conditions, healthier communities, and sustainable business activities.
- **C.** PPLI provides cost-effective and customized solutions to best meet your needs. Your satisfaction is our highest priority.
- **D.** PPLI is responsible for site closure and post closure care for 30 years.
- E. Continuous Improvement Cultures. We take pride in our full compliance to Indonesia's regulation. PPLI achieved Third Party Accreditation of its Management System ISO 14001, OHSAS 18001, ISO / IEC 17025 by KAN, Laboratory Accreditation by Ministry of Environment, SMK3 and ISO 9001 Management System.
- **F.** PPLI believes in 4R: Reduce, Reuse, Recycle and Recovery. By implementing 4R concept, we contribute to a better Indonesia.





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Pre-Acceptance Process

PPLI operates a fully integrated technical services laboratory in Klapanunggal, Bogor which is equipped with a modern physical and chemical laboratory, fully accredited by KAN to ISO 17025 Laboratory Testing, and registered as an Environmental Laboratory by Ministry of Environment.



and analyzed at PPLI Laboratory to determine the appropriate handling method and treatment process for the customers' waste materials. PPLI also offers special testing services to customers upon request.

The technical services laboratory also ensures that both PPLI and the customer are well informed of the precautions and constituents of their waste, thus assuring responsible environmental and safety management for waste handling, transportation, and treatment and disposal in compliance with the Laws of Indonesia.

Analytical research and testing programs are also carried out at the laboratory, to assist in developing new treatment services for our customers. Treatment and disposal costs are calculated based on the results of the pre-acceptance laboratory analysis. Quotations and Service Agreement are sent to customers together with the results of the analysis. Before collecting waste from the customers, the scope of services is agreed and a PPLI Service

Our waste reception procedure guarantees that the waste is properly treated and disposed, and ensures that the whole process is thoroughly recorded, documented and transparent. As part of our commitment to continuous improvement, we have implemented a fully integrated Operations and Laboratory Information Management System (OLIMS) which provides customers and regulators the necessary confidence and guarantees our ability to track individual waste packages from the customers' premises until final treatment and disposal.

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Waste **Transportation**

All incoming and outgoing vehicles are monitored using CCTV, GPS & manifest documentation, and waste



I. Packaging, Labeling and Securing Waste for Transportation

PPLI staff provide services in packaging, labeling and container security to ensure waste is ready for collection, and transportation can be arranged in compliance with the Laws of Indonesia.

Waste Manifests are completed by PPLI staff prior to dispatch, in accordance with the relevant transport and environmental regulations.

II. Customer Services Group

We realize the importance placed on the provision of quality customer service in our business today and into the future.

PPLI's Customer Service Group (CSG) is dedicated to achieving the highest level of customer services. The CSG performs many aspects of coordination including assisting in technical or administrative matters as well as receiving feedback from customers.

III. Collection and Transportation

The collection services are scheduled, based on needs of the customer. PPLI staff coordinate with the customer to arrange suitable collection frequencies.

PPLI operates a broad range of transportation equipment in order to best meet the demands of its customers. Our fleet comprises the full range of vehicles:

Hook lift truck

Crane truck

Vacuum truck

Prime movers for long distance haulage

Drum vans

Gull wings

Flat decks, and

20' and 40' semi trailers suitable for sea containers, bulk xontainers of

varying sizes, roll - off boxes, and ISO and blow tanks.

PPLI can also manufacture customized containers, lift and load certified, to meet specific customer needs. Waste containers come in variety of sizes and types. Examples include:

Roll of boxes (open and closed of various volume capacity)

Compact or boxes for waste compaction prior to shipment

ISO tanks of various sizes

1.5 Lugger boxes (open and closed)

Larger closed drilling mud / rock cuttings boxes

Hazardous Waste

Transportation Breakthrough







Loading at Nambo Station, Bogor

As part of the progress and development in environmental and logistics industry, PT. PPLI is now implementing transportation of hazardous waste with railways transportation mode.

This breakthrough is initiated by PT. PPLI, PT. Kereta Api Indonesia (KAI) and PT. Kereta Api Logistik (KALOG) to reduce the burden on the highway waste transportation while reducing the level of congestion. The initial departure of the hazardous waste transport begins from Kalimas Station, Surabaya, East Java towards Nambo Station, Bogor, West Java to be treated and processed at PPLI integrated waste management facilities nearby in Klapanunggal, Bogor.

This type of transportation will be regularly carried out twice a week with a total of 10 Twenty-Foot Equivalent Unit (TEUs) of 5 Flat Carriage (GD) or 180 Tons equivalent for each departure. The target of hazardous waste railway transportation is coming from waste generator company from eastern part of Java Island, focusing in East Java and Central Java.

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Liquid Waste Treatment



Most industrial processes generate liquid wastes in various amounts. The liquid wastes may be hazardous or non-hazardous depending on the type of processes and raw material. We are able to treat various types of liquid wastes containing a high degree of contamination. The treatment process incorporates both physical and chemical reaction processes as well as biological process.

Waste liquid treatment processes include:

- Chemical precipitation, coagulation, and flocculation
- Dissolved Air Floatation
- Filter Press solids removal
- Biological sequenscing batch reactors
- Activated carbon polishing
- Engineered wetlands

Once the liquid waste has been treated using a variety of treatment process, it passes through the lined engineered wetlands, before final testing, and discharges in batches via discharge pipeline.

Solid Waste Treatment

PPLI offers a stabilization treatment for solid waste delivered in non-stable form. Hazardous waste cannot be landfilled until it is certain that the waste is physically and chemically stable.

The stabilization process involves various forms of chemical pre-treatment, followed by mixing with portland cement, fly ash, absorbent clay, water, and other reagents in varying proportions to create a stable substance. Once stabilized, the end product is deposited safely into the eco-landfill.



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Waste-to-Energy

We believe in energy recovery. Taking it one step forward, we have developed facilities that enable us to convert select waste into reusable energy. We are able to convert liquid waste into synthetic fuels through a process called fuels blending and solid waste into AFR (Alternative Fuel and Raw Materials).

Waste materials with a calorific value, are carefully blended, following stringent controls on the blending process, to ensure no adverse chemical reactions. These blended materials are manufactured into an alternative fuel, which is delivered by PPLI under strict control procedures, to a third party user and processor, a cement kiln, located closed by.

The high temperature $(1,200 - 1,400^{\circ}C)$ and long retention times inside a cement kiln ensure that all organic waste is completely destroyed, while being utilized as alternative fuel and/or alternative raw materials. The alternative fuel is used to displace virgin fossil fuels such as coal and oil, in the manufacture of cement, hence creating an environmentally-beneficial use for waste.

This energy recovery facilities have been in operation since 1994 and are the only fully-permitted facilities in Indonesia.





Eco - Landfill

PPLI's modern hazardous and non-hazardous waste eco-landfill is engineered and operated by professionals to meet Indonesian, World Bank, US-EPA and EU standards.

The methods and materials used in this service guarantee that hazardous and non-hazardous waste are properly managed and permanently secure. High level environmental monitoring and audit systems are utilized to provide confidence in the long term security of the disposal facilities. Our closure and post closure plans are fully funded to provide long-term assurances.

A fully permitted Class 1 Eco-Landfill has been in service at PPLI Cileungsi since 1994. A Class 2 Eco-Landfill has been in operation since 2007.

We are currently developing a system in our Eco-Landfill that would enable us to convert the methane gas produced by the waste into electricity which would empower all PPLI's facilities.

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Site Services

We have a fully equipped site services team, capable of meeting the demands of customers on a variety of site related projects. Our experienced site services team, has been supporting in drilling projects, oil, gas and geothermal, and site-related services at industrial customer's premises since 1994. They are available 24/7 to meet the demands of the projects.

The current range of site services projects includes:

- Contaminated land clean up, removal, and restoration
- Sludge removal and restoration
- Segregation
- Sludge pumping and clean up
- Transportation of drilling mud cuttings
- Design and construction of lined sludge or mudpits
- Oil Sludge transfer and transport for disposal
- Acid cleaning of heat ex changers
- Logistics and total waste management on remote shorebases
- Onsite water and waste water treatment
- Decon work and tank cleaning
- Asbes tos removal



Advanced Waste Treatment

-ESIKUCTION UNIT

As our commitment as a Total Waste Management services company, we have also developed special treatment for difficult waste streams, including, but not limited to: lithium batteries, mercury lamps, PCB transformers, accumulatorabatteries, ozone depleting substances, asbestos abatement and lab chemicals.



Company Profile





Our Drilling Waste Management Services are a customer focused and solution-driven approach for oil, gas and geothermal energy sector drilling projects which optimizes the design, delivery, and management of drilling waste in an integrated menu of services, tailored to suit the specific needs of the customers.

Products, equipment, technology, and services are delivered by highly trained and qualified personnel. Engineered and designed to properly handle most Drill Cuttings Waste encountered offshore and onshore in today's challenging drilling environment, 24 hours a day.

Zero Discharge Project Summary

- Zero discharge at drilling location due to sensitive area
- Contain SOBM contaminated drill cuttings and fluids
- Transfer drill cuttings, drilling liquid waste, mud and spills, pit cleaning sludge and ship back to shore safely, reliably and in an environmentally friendly way (zero spills)
- Avoid impairment of drilling operations and ensure the system can be installed and use in offshore oilfield service conditions



Mobile Evaporator

Mobile Evaporator is as a powerful unit that is capable of treating industrial wastes which contain high Total Dissolved Solids and Chemical Oxygen Demand.

The principle of the mobile evaporator unit is on site distillation process. Separation is conducted depending on the difference in boiling point. Waste water containing high Total Dissolved Solids and Chemical Oxygen Demand is heated using a recycling heat system unit to be evaporated and condensed as distilled water. During this process, the remaining concentrates that are unable to be evaporated are collected in separate containment for further treatment in disposal facility.

The mobile evaporator can treat a large volume of waste water with very high process efficiency, which is surely much higher than some other separation equipment. In addition, it requires less consumable materials that are normally used in filtration or membrane separation process. Once the expected efficiency is not achieved, chemical cleaning is conducted to retain the process efficiency.

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PPLI is actively support and improve the education of the next generation. PPLI aids the local educational institutions by providing additional teachers and donates educational materials and facilities. PPLI has a well-established Apprenticeship Program with strong links to local technical colleges.



Essential as a part of our contribution to a sustainable society, PPLI is committed to monitoring and maintaining harmonious relationships and support for the local community and strive to be a socially responsible company. PPLI seeks to continuously improve its Social Responsibility Program in the Key Areas of Environment, Health Services, Education, Economics and infrastructure, Youth and Sports Activities, and Religious Activities.



PPLI recognizes the importance of sports in society and seeks to provide active encouragement in improving sports skills and competitiveness, to encourage physical fitness, the "Will to Win" and the "CAN DO" spirit



PEMERINTAH KABUPATEN BOGOR DINAS KESEHATAN **PUSKESMAS PEMBANTU DESA NAMBO** UPTD PUSKESMAS KECAMATAN KLAPANUNGGAL JI. Lebakpasar - Asem, Desa Nambo, Kab. Bogo

PPLI understands that cultural and religious aspects are very important as part of community spiritual of life, and fully supports and donates to local cultural, traditional and religious events and religious facilities by building a Function Hall for those activities.





As a form of company environmental sustainability program, PPLI participates in the conservation of the Javanese Eagle. The Javanese eagle is believed to be the inspiration for the emblem of the Garuda state, and the Elang Loji area in Mount Halimun Salak National Park is seen as the most ready to conserve Javanese eagles which are close to the main facilities of PT. PPLI in Klapanunggal, Bogor

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PPLI Business Network

PPLI facilities in Bogor were designed and built in response to the increasing concern over environmental degradation in Indonesia caused by rapid industrialization in the absence of the infrastructure and enforcement to protect the environment. PPLI continues to invest and expand its facilities with Transfer Stations being added in strategic geographic locations across Indonesia, and new services developed to meet customer needs.

SMO1 Sumatera Operation

Jl. Kartika Sari No. 16 C Rumbai - Pekanbaru

Mobile : 62-811-8284-546

BTS Batam Transfer Station

Kawasan Pengelolaan Limbah Industri Jl. Raya Pelabuhan Kabil Desa Air Cargo Gudang No. 7

Batam, Indonesia Phone : (62-778) 711-393 Fax : (62-778) 711-697

SMO2 Palembang Operation

Jl. Alamsyah Ratu Perwira Negara, Kel Karang Jaya Kec. Gandus Palembang – Sumatera Selatan Mobile : 0811-1161-071

CTY Cilegon Transport Yard

Jl. Raya Merak Km. 115 Cilegon 42436 Mobile : 62-811-1976-407

CTS Cibitung Transfer Station

Jl. Kalimantan Kawasan Industri MM2100 Blok A No. 1 Cibitung, Bekasi

West Java, Indonesia
Phone : (62-21) 8998-1901
Fax : (62-21) 8998-1902

LTS Lamongan Transfer Station

Lamongan Shorebase

Jl. Raya Daendels Km. 64-65 - Desa

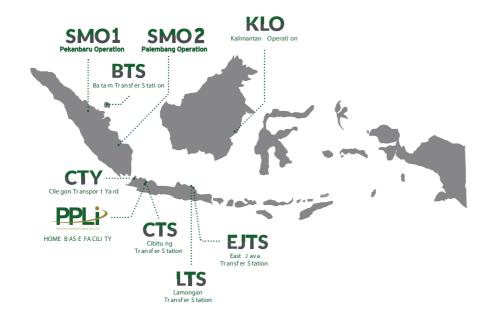
Kemantren

Kabupaten Lamongan East Java, Indonesia

EJTS East Java Transfer Station

Jl. Berbek Industri Raya IV No. 9 Kawasan Industri Berbek Sidoarjo East Java, Indonesia

Phone : (62-31) 843-0907 Fax : (62-31) 843-0908



KLO Kalimantan Operation Office

JI. Proklamasi RT 32 No. 38 Manggar 76116 Balikpapan Timur, Kalimantan Timur Phone : (62–542) 743–521

Friorie : (62-542) 743-532 Fax : (62-542) 743-532

PPLI Sector of Clients

Oil and Gas Companies
Oil and Gas Services Companies
Mining Companies
Pulp and Paper Industries
Textile Industry
Plastics Industry

Chemical, Machine and Metal Industries

Automotive Industry
Electronic Industry
Consumer Goods
Food and Beverages Industries
Health and Hospitality Industries
Government

Other General Services

Testimonials

JOB Pertamina - Medco Tomori Sulawesi

Andreas Krisbayu R. - HSE Senoro Drilling & Completion

"This is just a way to show our gratitude towards PPLI for willing to go the extra mile. Fantastic service and all-around professional. A pleasure to work with."

PT. Seamless Pipe Indonesia Jaya

Dedi Kuntjoro - HSE Manager

"Our chemical wastes are properly treated with haste. For those of you who are searching for an excellent waste management company, look no further than PPLI."

PT. Danone Indonesia

Roly Mahendra - Supply Chain Director

"The various products we produce daily make a competitive waste management a necessity for us. PPLI offers a wide-range of waste management solution that we don't need to look for other vendors. PPLI really is a one-stop solution for all our waste!"

PT. Loreal Indonesia

Sindu Sirat - Senior Manager

"Indonesian believe in us to supply them with products that make them more beautiful. We believe in PPLI to manage our chemical waste. I can, without hesitation, recommend PPLI to whoever is considering their services".

PT. East Jakarta Industrial Park (EJIP)

Hitoshi Yagi - President Director

"EJIP has now been serviced by PPLI for many years, and we are as happy with their services as when we started."

Premier Oil Natuna Sea BV

Lenny Desiana - Base Superitendent

"As an oil drilling company, we have tons of waste we're responsible to dispose of. We chose PPLI as our waste management and couldn't be happier!"

Salamander Energy (Bangkanai) Limited Kim McCormack – Drilling Support Specialist

"On behalf of Salamander Energy Indonesia, we would like to extend our gratitude to PPLI and the PPLI staff involved in the Salamander projects for their dedication and contribution during the 2 onshore and 1 offshore projects taking almost 3 years. Salamander Energy would like to thank PPLI for their assistance in allowing us to be a Greener Company and achieve Compliance with Government Laws and Regulations. PPLI trained field staff performed well for us, particularly on our onshore operation where conditions were very difficult. The Balikpapan PPLI office was very professional in the way they handled all our requests for additional material etc. Thank you very much PPLI for a job well done, Indonesia is a shade greener due to all your efforts."

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PT. PRASADHA PAMUNAH LIMBAH INDUSTRI

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Sampoerna Strategic Square South Tower 18 Floor Jl. Jend. Sudirman Kav. 45-46 South Jakarta 12930

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