



Course Name

Waste to Energy

Background

Indonesia generates approximately 190,000 tons of waste every day, most of which is organic waste. Twenty percent of the 25,000 tons of daily plastic waste ends up in rivers and coastal waters. As a result, GOI has decided to accelerate the development of Waste Processing into Electricity based on Environmentally Friendly Technologies (PLTSa) through waste management.

The Waste to Energy Short Term Award is targeted at Government of Indonesia (GOI) officials and private sector representatives involved in the development and oversight of Waste to Energy (WTE) projects. The aim is to analyse commercial viability of different types of WTE operations, study the feasibility of Public Private Partnership (PPP) models and benchmark ways to attract private sector investment. The course will also explore policies and regulations that affect the planning, preparation and operations of WTE plants to respond to Indonesia's waste management challenges. The course also aims to improve inter-agency collaboration in determining projects to be funded and financing/contracting models to be applied.

The following learning objectives were identified through consultations with the Australian Embassy in Jakarta. The objectives will be finalised during the pre-course workshop to match the participants' individual learning objectives. The participants will apply the knowledge in their work through an Award Project, an individual or small group project focusing on a specific WTE-related topic (pre-feasibility study in WTE or an integrated waste management topic).

Learning objectives:

The course will focus on the following learning objectives:

- Understand current laws, policies, regulations (incl. regulatory and environmental assessments) relevant for WTE planning, preparation and operations
- Discuss WTE priorities (improving waste management, public health, social and environmental considerations (including displaced persons), improving aesthetics, generating power) and risks (pollution from incinerator – smoke and toxic ash waste)
- Analyse the requirements for functioning waste management system, and the potential role that WTE technology can play in that context (feasibility studies, upstream waste collection, role of local government, quantifying the calorific value of waste in determining the viability)
- Understand infrastructure investment and investors' economic perspectives in WTE (feasibility studies, commercial viability, life cycle, risk management, sale of power, suitability of different types of WTE facilities)
- Explore how the roles of public regulators and administrators intersect and how public and private sector roles could be mutually complementary in WTE
- Analyse feasibility of PPP in WTE and compare lessons learned
- Learn about Australian waste collection and WTE technologies and capabilities and connect with a range of relevant Australian industry stakeholders
- Analyse financial management of WTE sites/facilities
- Explore waste collection and WTE solutions and technologies, their environmental and economic benefits and current/potential utilisation in Indonesia and Australia



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- Analyse the role of different stakeholders in WTE operations (local governments, central government agencies, private sector, NGOs, consumers, PLN etc.) and discuss options for stakeholder relationship management
- Develop networks between individuals and organisations to improve collaboration and identify business opportunities in the sector

To achieve these outcomes, the proposed short course offers a structured learning process for participants that will utilise a range of learning methodologies, such as classroom sessions; case studies; Australian government (state-level) agencies, professional associations and other relevant agencies; discussion and planning sessions; simulations and role plays; networking events; an in-depth course project. Participants are required to develop an Award Project as a method to implement learning. The course will be delivered by Griffith University in Queensland (with a stopover in Sydney).

Dates and location

The award is delivered over a 2-week period in Australia. The program is divided into three parts: pre-course workshop in Indonesia, in-Australia program and a post-course workshop in Indonesia. Attendance in the whole three parts of the course is **compulsory**. The course is scheduled as below:

- A 3-day pre-course Workshop in Indonesia: **location and date TBC subject to COVID-19 situation**
- A 2-week short course in Brisbane (with a stopover in Sydney), Australia: **date TBC subject to COVID-19 situation**
- A 3-day post-course Workshop in Indonesia: **location and date TBC subject to COVID-19 situation**

Participants

- Government of Indonesia representatives (staff to Echelon III) with minimum four years' experience and a relevant role in developing policies/regulations related to WTE from the following Indonesian government ministries:
 - i. Ministry of Agrarian Affairs and Spatial Planning / National Land Agency
 - ii. Ministry of Finance
 - iii. Ministry of National Development Planning (BAPPENAS)
 - iv. Ministry of Environment and Forestry
 - v. Ministry of Energy
 - vi. Coordinating Ministry of Maritime Affairs and Investment
 - vii. Coordinating Ministry of Economic Affairs, including the Committee for Acceleration of Priority Infrastructure Delivery
 - viii. Ministry of Home Affairs
 - ix. Ministry of Public Works and Public Housing
 - x. Ministry of State-Owned Enterprises
 - xi. Investment Coordination Board BKPM
- Representatives from local/regional governments involved in planning and implementation of WTE operations, specifically the 12 priority WTE plants as identified in Perpres 35/2018 and additional 16 cities that are planning to develop feasibility assessments
- Representatives from State Owned Enterprises involved in waste management and/or WTE operations
- Private sector representatives working in waste management and/or WTE
- NGO representatives focusing on waste management and/or WTE



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- Have (preferably) a bachelor's degree with minimum diploma (D3) qualification in a relevant field
- Be endorsed by your current manager / supervisor
- Be committed to preparing and implementing an Award Project as part of the course
- Applicants are expected to have professional working proficiency in English. The applicants' English language competency is part of the selection process. The assessment of language competency is based on a phone interview and any additional evidence provided by the applicant (proof of studies or living in an English-speaking country, working in an English-speaking environment, completion of studies in English, language courses or language tests)

Women and people with disability are strongly encouraged to apply.

Gender equity will be a consideration and encouraged but not a constraint, given that participants are selected through a competitive selection process.

Participants will be identified through a competitive process whereby there is a call for applications; applicants submit an online application which is reviewed by Independent Panel Reviewers, Australia Awards and the Australian Embassy to explore motivation and other demonstrated competencies to ensure commitment and interest in the study program.

Applicants shall submit their application forms directly through **online application** by **Tuesday, 30 June 2020**.

Please prepare documents below when submitting:

- Copy of KTP
- Latest academic certificate (Ijazah)
- Recommendation letter from supervisor/Business partner (for Business owner/Director)
- Proof of English (e.g. overseas education certificate, training certificate, TOEFL IELTS, etc.)

The selection panel will convene to select up to 25 participants. The short-listed participants will be informed of the outcome by end of **July 2020**.