UTM UNIVERSITI TEKNOLOGI MALAYSIA | Malaysia-Japan International Institute of Technology (MJIIT)

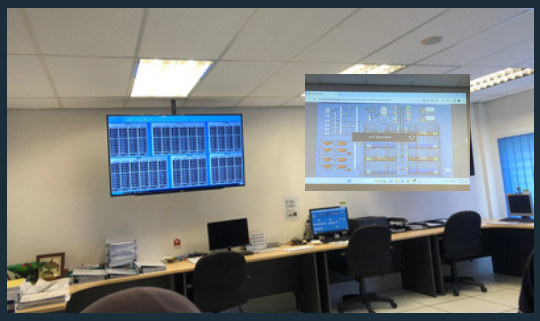
INDAH WATER

Larana, Inc

INDAH WATER KONSORTIUM (IWK) SDN BHD ORGANISES VARIOUS PROGRAMMES AND INITIATES, AS WELL AS BUSINESS PLANS OUTLINED IN ITS STRATEGIC TRANSFORMATION JOURNEY TO CREATE BETTER ENVIRONMENT AND MAINTAIN GOOD PUBLIC HEALTH FOR ALL MALAYSIANS. THESE INITIATIVES ALSO INVOLVE CRUCIAL STAKEHOLDERS PARTICULARLY THE MEDIA AND YOU TO TAKE INTEREST IN WHAT WE ARE DOING FOR OUR COMMUNITIES AND THE FUTURE GENERATION .

ENGINEERING SERVICES

Primary treatment methods like Imhoff tanks and community septic tanks are widely used in Malaysia, whereas low-cost secondary systems like oxidation ponds are prone to unreliability. Large metropolitan areas also make use of individual septic tanks (IST). In Malaysia, there are said to be more than a million separate septic tanks.These tanks release an effluent that is still very organic material-rich after only a partial sewage treatment. This might lead to issues with the environment and public health, especially in cities.The standardization of plant types is expected to contribute to the long-term efficiency of Malaysia's sewage system.



Biogas is produced in IWK's sewage treatment plants with Anaerobic Digester system. biogas is one of the sources of renewable energy that can generate electricity. Currently, there are 6 sewage treatment plants in IWK with the capability to produce 10,000 m3/day, with the potential to generate 20 MW hour/day.

IWK prepares its annual Green House Gases (GHG) carbon reporting, nationwide soil sampling studies, Internal Environmental Auditing and Post EA Monitoring as part of being a responsible sustainable water and environmental service company. Now, we offer similar services for companies who seek for such services and recognition on environmental efforts to reduce carbon footprint and also EIA reports for sewerage.

Water Reclamation Plant

GTMP, stemming from the Eleventh Malaysia Plan (2016-2020), aims to boost Malaysia's sustainable growth through green economy and technology. It targets six key areas: Energy, Manufacturing, Transportation, Building, Waste, and Water, for impactful socioeconomic and environmental changes.Within GTMP, Indah Water Konsortium Sdn. Bhd. (IWK) focuses on the Water Sector. By 2030, the goal is to recycle 100% of sludge (biosolids) and 33% of treated effluent. IWK adopts a waste-to-wealth approach, producing green by-products (biosolids, bioeffluent, and biogas) while curbing greenhouse gas emissions.To achieve the 100% sludge reuse target, IWK promotes biosolids for non-food crop land application to Local Authorities and industries, reducing waste in landfills and GHG emissions. Additionally, biosolids can be converted into various materials like clay and cement. Efforts also extend to promoting the reuse of treated wastewater (bioeffluent) from sewage treatment plants. This reduces pressure on raw water resources. With continued focus on green initiatives, recycling rates are expected to rise.

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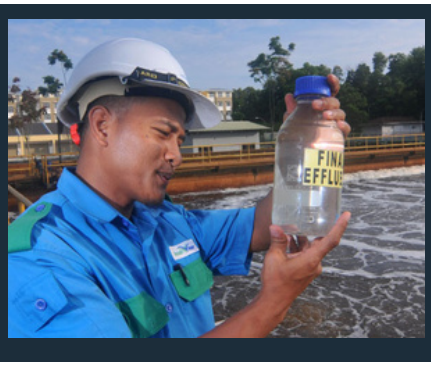

"Wastewater doesn't have to be wasted. After treatment, it can be repurposed. IWK produces 5,092 MLD of treated bioeffluent, equivalent to about 2,000 Olympic-sized swimming pools, before releasing it safely. There's great potential for reclaiming non-revenue water and using treated effluent in industries and businesses. Water is vital in manufacturing worldwide, from production to cleaning. Industries can use treated bioeffluent, reducing reliance on raw water for human consumption. Efforts include using effluent for landscaping and reusing 10% of treated effluent in Pantai 2 STP."

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Reference 1: https://iwk.com.my/other-businesses
Reference 2: https://customerportal.iwk.com.my/