



Non-revenue water needs a national strategy

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Association of Water and Energy Research Malaysia (AWER) stands by our projections of loss of revenue modelling. National Water Services Commission (Span) has released a press statement to counter our study. We would like to clarify to member of public on the non-revenue water (NRW) calculation.

Comparing the financial modelling done by the World Bank, that actually refers to the average tariff and NRW recorded in certain countries, AWER's financial modelling used official statistics, that are the NRW and lowest tariffs in each state instead of the average tariff (used by the World Bank).

The use of the average tariff is higher in value compared to that using the lowest tariff. In Malaysia, the lowest tariff is also said to be of very low value and it does not recover both capital expenditure (Capex) and operational expenditure (Opex) in the water treatment and supply for every cubic metre. Therefore, this is in actual fact a very low estimate of the loss of revenue.

The World Bank has also published a report comparing NRW between developed and developing nations. In their 2006 report, the average NRW recorded for developing nations is 35 percent and developed nations recorded NRW at 15 percent.

Malaysia aspires to be developed nation by year 2020 and AWER is proposing to keep our national NRW levels at 20 percent. This is actually higher than the 15 percent average NRW recorded by developed nations and it is achievable. We never requested that Malaysia achieve zero percent NRW.

AWER proposes a task force to be formed to prepare a detailed NRW reduction plan. It is important to plan rather than to leave it to the water operators to decide on the way forward in reducing NRW levels. The plan should be divided as following:

Step 1: Identification of critical, sub-critical, and non-critical areas through a NRW monitoring system. This will allow the government and water operators to plan to tackle the 'lower hanging fruits' first, that is the critical areas. The savings from these locations can definitely assist in reducing the NRW in the sub-critical and non-critical areas. The classification of criticalness will be based the on results of NRW monitoring in each supply area. Each state will have different target as the NRW values vary.

Step 2: As the technical regulator, Span is also entitled to determine the types of replacement materials and other technical specifications in water services. Without a detailed regulation on NRW monitoring and the types of replacements that should be carried out, water operators will definitely put up their own varying NRW solution systems.

There should be a common stand in this across the board, to ensure a proper and equitable cost can be estimated for NRW reduction. Therefore, technical standards or regulations must be developed through the task force.

Step 3: To prevent escalated costs claimed by water operators, all water operators must be licensed and regulated under Water Services Industry Act (WSIA) 2006. This further supports the need for Sabah and Sarawak to be regulated under WSIA 2006.

This also means that Span will regulate the water operators. Span needs to audit all Capex and Opex of licensed water operators to ensure there is no element of bloated costs. Pengurusan Aset Air Berhad (PAAB) will be financing the development of all water services infrastructures to minimise the impact to tariff. The Asset-Light Model

approach is vital in ensuring NRW reduction takes place while ensuring an equitable tariff.

Step 4: Span should monitor NRW achievements of water operators based on targets set on NRW reduction. Span should also constantly publish water operators' NRW achievements to inform the public of the service quality of water operators. This will keep all levels of users informed and be assured that the water quality and services are constantly monitored.

The table on the right outlines NRW achievements by selected Asian cities that records NRW levels below 20 percent as published in the Asian Green City Index by Siemens. Densely populated areas will give quick returns as the connection per kilometre is high. This will improve the overall NRW achievements for the whole state. Eventually, savings from these densely populated areas can be used to carry out NRW reduction programmes for other locations.

In short, NRW needs a proper national plan and strategy. All water operators must be licensed and regulated under WSIA 2006 to ensure the Asset-Light Model can be implemented to reduce the impact to the tariffs, while at the same time reducing NRW levels.

Awer hopes that relevant agencies will take our suggestion into consideration so that Malaysia can achieve better NRW targets.

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