

22.3.2022

Media Release

by DATO' IR. JASENI MAIDINSA  
CEO, PBA Holdings Bhd and PBAPP

### **305 LCD: PER CAPITA DOMESTIC WATER CONSUMPTION IN PENANG REACHED AN ALL-TIME HIGH IN 2021**

- **Due to the “Covid-19 socioeconomic culture”, more Penangites consumed more water at home than ever before.**
- **Domestic water consumption accounted for 64% of the total consumption of water in Penang in 2021.**

PENANG, Tuesday, 22.3.2022: Per capita domestic water consumption in Penang was recorded at 305 LCD (litres/capita/day) for 2021. This is the first time Penang has breached the 300-LCD mark since Perbadanan Bekalan Air Pulau Pinang Sdn Bhd (PBAPP) started reporting this statistic in 1999.

The primary cause was Malaysia’s “Covid-19 socioeconomic culture”. Since more people were compelled to stay at home during a series of Movement Control Orders (MCOs) and work from home (WFH), they naturally consumed more water at home.

PBAPP also understands that more people used more water to maintain good hygiene in 2021, so as to minimise the risks of virus infections.

Nevertheless, the 305 LCD statistic is a matter of concern for PBAPP, due to the following reasons:

- In 2018 (a pre-pandemic year), Penang’s per capita domestic consumption was already at 278 LCD, the second highest in Malaysia after Perlis\*. Other Malaysians were reportedly consuming an average of 200-210 LCD, while the global average was 140-150 LCD\*\*.

- Domestic water consumption accounted for 64% of the total consumption of 860 MLD (million litres per day) in Penang in 2021. This means the people of Penang used significantly more water at home than all Penang factories, hotels, retail outlets and business premises combined.
- Historical data shows that per capita domestic consumption had increased by 19.6%, from 255 LCD in 2000 to 305 LCD in 2021 (*Please refer to Appendix A*). Projecting ahead, Penang's per capita domestic consumption may reach 333 LCD (or higher) by 2030, if left unchecked.
- With water demand projections in mind, PBAPP is already planning to invest hundreds of millions of ringgit for water supply engineering projects to ensure water supply sufficiency until 2030. However, increasingly higher per capita domestic consumption will force PBAPP to revise its plans and undertake even more projects to meet future water demand.
- There is a direct relationship between the price of water and domestic consumption (*Please refer to Appendix B*). The higher the water rates, the lower is the domestic consumption. For Penang, with the lowest water rates, the per capita domestic consumption is the highest, whilst Singapore with the highest water rates has the lowest per capita domestic consumption.

## WATER DEMAND MANAGEMENT

### 1. RAISING THE VALUE OF WATER

There is a proven way of “tackling” or “moderating” per capita domestic consumption in Penang. It requires a “water conservation surcharge” (WCS) or a tariff review.

PBAPP introduced the WCS in 2010 at RM0.24 per 1,000 litres (only for domestic consumption above 35,000 litres per month). Per capita domestic consumption was reduced from 291 litres/capita/day (LCD) in 2010 to 285 LCD in 2011.

In 2013, PBAPP increased the WCS value to RM0.48 per 1,000 litres (only for domestic consumption above 35,000 litres per month). In 2015, PBAPP reviewed water tariffs in Penang. Per capita domestic consumption dropped from 295 LCD in 2015 to 276 LCD in 2017.

## 2. WATER SAVING DEVICES

While PBAPP may have no choice but to raise the value of water to reduce Penang's abnormally high domestic water consumption in the short-term, we believe that there is a better and more sustainable way for the long-term.

- **Mandatory installation of Water Saving Devices (WSDs) in new development projects.**

Penang is the first state in Malaysia to require WSDs (tap fittings, shower fittings, toilet cisterns and urinals) to be installed in all new projects. The Penang State Executive Council approved PBAPP's proposal for the mandatory installation of WSDs on 28.11.2017. Currently it is being enforced by MBPP, MBSP and PBAPP.

WSDs automatically reduce water consumption by 14% to 87%. WSDs also include washing machines and dish washers that are water efficient, as recommended by SPAN in their "Water Efficient Product Labelling Scheme".

Penang's WSD regulation will have a huge impact on water conservation in a water stressed state. Essentially, all new buildings will automatically regulate water consumption. The "automated" nature of the WSDs will help to reduce the per capita domestic consumption significantly in the long run.

On behalf of PBAPP, I would like to reiterate that we understand why per capita domestic consumption in Penang hit 305 LCD in 2021, due to Covid-19. Nevertheless, this is a "global" pandemic scenario. So, to ensure the sustainability of water supply, should use water more wisely at home in 2022.

Thank You.

\* "Peninsular Malaysia and FT Labuan Water and Sewerage Statistics 2019"  
– SPAN

\*\* "The Malaysian Water Industry Status and Outlook Report 2021/21" – MWA

---

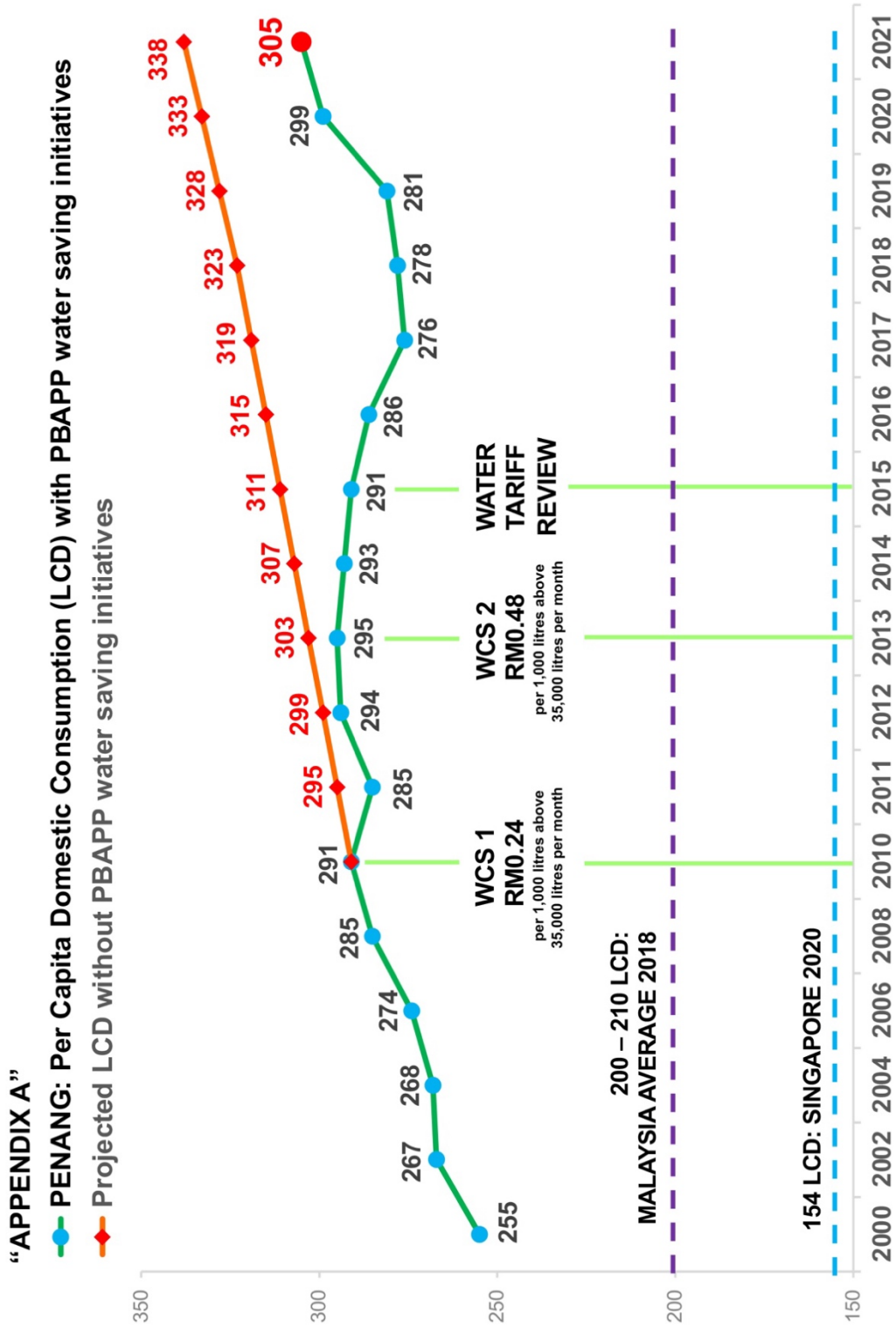
Issued by : Syarifah Nasywa bt Syed Feisal Barakbah  
Corporate Communications Unit  
Email : syarifah@pba.com.my



**PBA**

Perbadanan Bekalan Air  
Pulau Pinang Sdn Bhd  
199901001061 (475961-X)

Memenuhi segala keperluan bekalan air anda  
Meeting all your water supply needs





# PBA

Perbadanan Bekalan Air  
Pulau Pinang Sdn Bhd  
199901001061 (475961-X)

Memenuhi segala keperluan bekalan air anda  
Meeting all your water supply needs

## “APPENDIX B”

### DOMESTIC WATER TARIFFS VS. PER CAPITA DOMESTIC CONSUMPTION



(Please refer to Appendix A)

SOURCE : MWIG 2019, except for Penang (PBAPP, 2021) and Singapore (PUB, 2021)