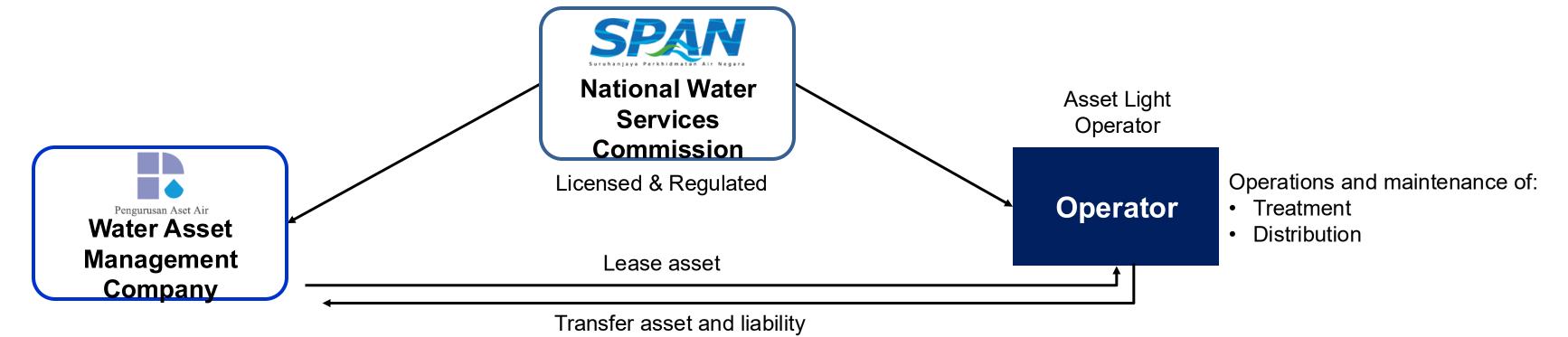


# WATER SUPPLY SERVICES

## **Licensing Financing Model: Asset Light**



#### WATER ASSET MANAGEMENT COMPANY

- PAAB non-profit national water asset holding company funded by Federal Government
- Can seek additional funds from capital market
- Cheaper cost of fund (AAA rating)
- Efficient asset and facilities management
- Licensed by SPAN with specific KPIs
- To enable operators achieve full cost recovery

#### **Operator must:**

- Must adopt Regulatory Water Accounting (RWA)
- Submit 3 years rolling and 30 years long term business plan
- Meet KPI targets approved in the business plan
- Financial facilities are only for operators whom migrated to this regime

### Planning, Monitoring & Review of Operators

- 3 years rolling business plan
- 30 years long term business plan

- Policy Objectives & Development Goals
- Water supply and demand
- Sewerage Catchment Strategy
- Tariff review

#### KPI set based on:

- operational services
- water and effluent quality
- financial

# National Non-Revenue Water (NRW) Reduction Programme | 11th & 12th Malaysia Plans |



CONCEPT

# Approach 1: Targeted upgrades for high-NRW states

Implementation of the NRW project for selected scope of work funded through direct grant.



PARTICIPATING STATES

States with NRW levels 40% and above: Pahang, Kelantan, Kedah, Perlis, Sabah, Sarawak, and F.T Labuan



**PROJECT SCOPE** 

#### **Selected Scope**

- 1. SIV meter installation/replacement
- 2. Consumer meter replacement
- 3. Service reservoir rehabilitation/replacement
- 4. GIS development

# Approach 2: Performance-based incentives for low-NRW states

Incentives are offered via reimbursement mechanism to promote continuous NRW reduction efforts by water operators — 50% for meeting targets, 75% for doubling results.

States with NRW levels below 40%: Selangor, Johor, Negeri Sembilan, Melaka, Terengganu, Perak, and Pulau Pinang.

#### **Holistic NRW Scope**

- 1. GIS development
- 2. Establishment of District Metering Zones (DMZ)
- 3. Hydraulic modelling
- 4. Pressure Management
- 5. Active leakage detection and repair
- 6. Meter installation and replacement
- 7. Pipe replacement
- 8. Development of monitoring systems



FUNDING ALLOCATION

RM535 million (grant)

RM1.371 billion (matching grant)



Water Supply Department (JBA)

**National Water Services Commission (SPAN)** 

# SEWERAGE SERVICES

# **IWK's Corporate Structure and Stakeholders**









Ministry of Energy Transition and Water Transformation (PETRA)





National Water Services Commission (SPAN)

Regulates all entities in water supply and sewerage services industry



Department of Environment (DOE)

Oversees environmental protection and ensures sustainable management of the environment



**Ministry of Natural Resources and** 

**Environmental Sustainability (NRES)** 

Federal Lands Commissioner (FLC)

Owns all sewerage Reserve Lands



Indah Water Konsortium Sdn Bhd (IWK)

National Sewerage Operator

IWK has been entrusted
with operating and
maintaining a modern,
efficient sewerage system
for all Malaysians under
an Asset Light Model

- Since its inception, IWK
has been providing
sewerage services for 30
years. Starting from
March 2022, IWK has
been operating as
Service Licensee (SL)
while continuing its
obligation as a
Concession holder until
2034



Sewerage Services
Department
(JPP)

Implements Large Scale
Central Sewage Treatment
Facilities

**REGULATORS** 

Hands over completed Sewerage Treatment Facilities for Operations and Maintenance

Regulates Sewerage Services

Regulates Effluent Discharges

Facilitates the leasing of sewerage land to IWK

# **Trends in Sewerage Capex Allocation**



- Implementation of New Centralised Sewage Treatment Facilities together with Pipelines are funded from 5
  year Government Development Budget.
  - This is a Federal Government allocation and Projects are implemented via Tendering Process and upon completion to be handed over to IWK for Operations



- Upgrading/Refurbishment of takeover of private Existing Sewage Treatment Facilities funded by Developers Contribution
  - Any new property development that connects to existing facilities are required to pay 1% of property value as sewerage contribution fund. This custodian of this fund is the National Water Services Commission and this fund is given to IWK to carry out all refurbishment and upgrading works.



- Implementation of Water Reclamation Facilities via BOT mode
  - Private Sector are invited via RFPs to implement and sell reclaim water to offtakers



- Implementation of Green Initiatives vis PFI
  - Private Sectors are invited to participate in Green Initiatives through RFPs and payment is made on agreed terms OR cost savings are shared where the Private Sector enjoys the recovery of investment and operations through the savings.

# **BOT Model for Sustainable Reclaimed Water Development**

Proposed Salient Terms of the PFI Model via BOT (Build, Operate & Transfer)

- 1 Guaranteed off taker required
- Right to use the land to implement the WRP for the entire BOT period
- Penalty for non-compliance of PFI model
- Offtake payment to IWK/water operator by off taker. IWK then pays BOT project proponent with agreed tariff during the entire BOT period
- Step up tariff is granted over the BOT period
- Fixed monthly payment (capex) and bulk sales rate (opex) = tariff RM/m3
- Non-recourse financing where a dedicated SPV is required
- Currently Business-to-Business (B2B) engagement. However, Class License by SPAN may be required in the future