



# Engineering Environmental Social Governance (ESG) for the Nation

Keynote Address presented by:

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**Tokoh Kejuruteraan Negara 2023**



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MATRADE Hall,  
MATRADE Exhibition & Convention Centre





# United Nation : UN Water/Climate Change

- IWRM started earlier in 1990s adopted formally in 2015 under MDG
- Integrated Water Resources Management (IWRM) – EPU/ASM (WST 2020)
- Integrated River Basin Management (IRBM) – JPS Malaysia
- State Champion : **LUAS for Selangor** (most active) – With Executive Power under Enakmen LUAS 1999
- Other initiatives : Kedah/Sabah



# Rancangan Malaysia ke-12 (2020-2025)

- Water Sector Transformation 2040 under EPU – 12<sup>th</sup> Malaysia Plan (2020-2025)
- EPU appointed ASM to carry out above Study (report completed by ASM)
- IWRRM play major role (Note : 3 years Covid-19/political uncertainties may have caused delay in implementation?)
- Can ESG, driven by Bursa Malaysia (currently for Public Listed Co) go hand-in-hand with IWRRM?



# SUSTAINABLE DEVELOPMENT GOALS

**1** NO POVERTY

**2** ZERO HUNGER

**3** GOOD HEALTH AND WELL-BEING

**4** QUALITY EDUCATION

**5** GENDER EQUALITY

**6** CLEAN WATER AND SANITATION

**7** AFFORDABLE AND CLEAN ENERGY

**8** DECENT WORK AND ECONOMIC GROWTH

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

**10** REDUCED INEQUALITIES

**11** SUSTAINABLE CITIES AND COMMUNITIES

**12** RESPONSIBLE CONSUMPTION AND PRODUCTION

**13** CLIMATE ACTION

**14** LIFE BELOW WATER

**15** LIFE ON LAND

**16** PEACE, JUSTICE AND STRONG INSTITUTIONS

**17** PARTNERSHIPS FOR THE GOALS

  
SUSTAINABLE DEVELOPMENT GOALS

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**ZERO  
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**LIFE  
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**PEACE, JUSTICE AND  
STRONG INSTITUTIONS**



**PARTNERSHIPS  
FOR THE GOALS**

**E**

**S**

**G**





**ENVIRONMENT**

**ESG**

**SOCIAL**

**GOVERNANCE**

# ENVIRONMENT



# SOCIAL



# GOVERNANCE





# EMPHASIS : WATER & STRONG INSTITUTIONS

- Environment – NO. 6 WATER
- Social – NO 6 WATER
- Governance – NO 16 PEACE, JUSTICE AND STRONG INSTITUTIONS



# ESG Policy and Sustainability Framework



PENGERANG ENERGY COMPLEX SDN BHD

## ESG Policy

### Our ESG mission

We aim to develop and own the PEC project with the environment and people in mind, aligning ourselves with the global sustainability standards.

### Our ESG vision

We aim to have zero safety incidents at the workplace and high energy efficiency in our daily operations.

### Our ESG Commitment



## Sustainability Framework



**Health and Safety**  
Occupational health and safety management system in place to ensure wellbeing of our employees across value chain.

**Community**  
Conducting community development to improve welfare and living standards through support, counselling and continuous socialisation.

**People**  
Development and empowerment of our people by creating a safe, inclusive and learning centric organisation.



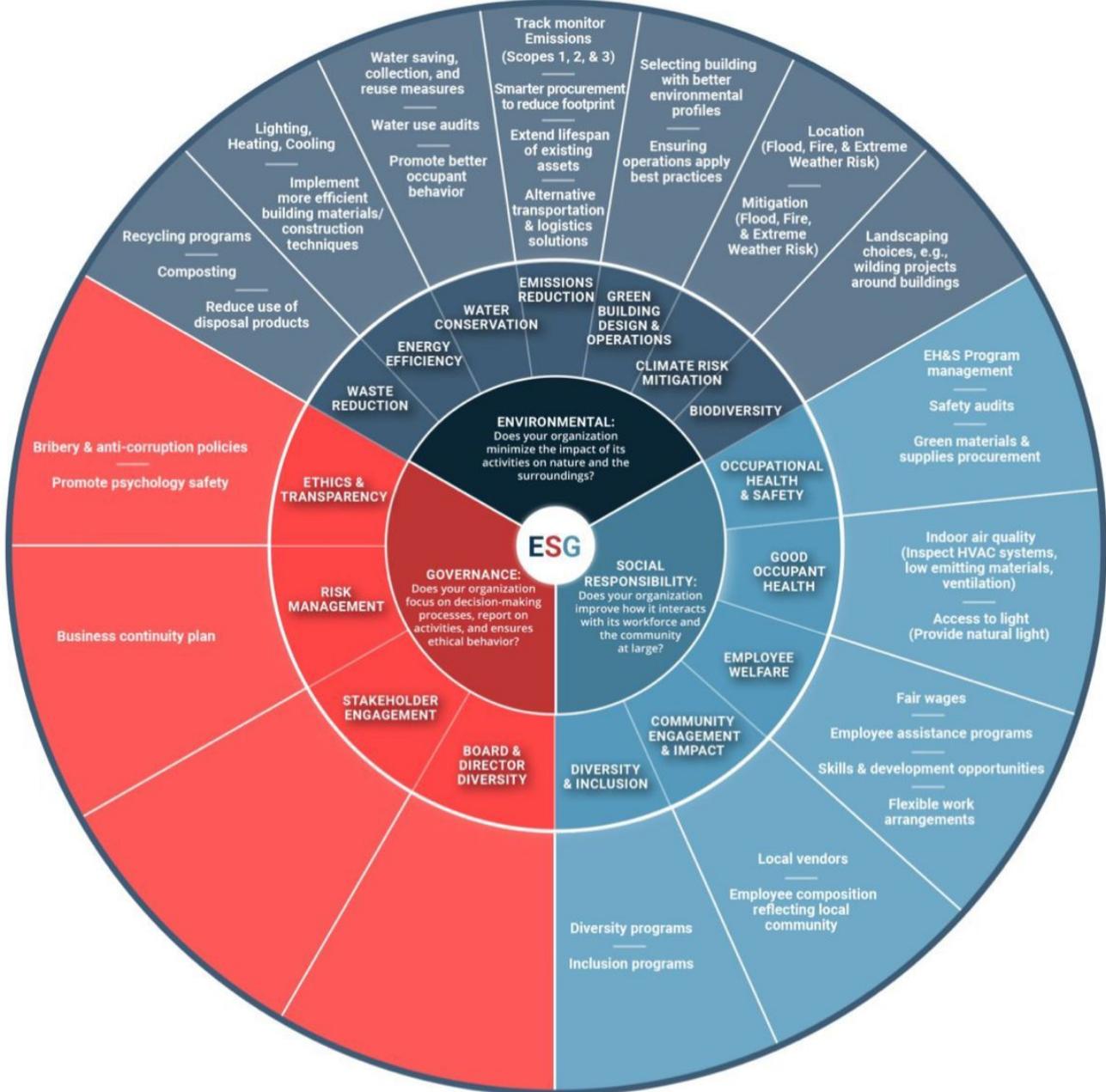
**Transparency & Reporting**  
Clear reporting structure and communication

**Ethical Business & Compliance**  
Compliance with business code of conduct, policies and guidelines

**Risk Management**  
Regular monitoring and management of financial, operational and technological risks across our facilities



# What is ESG?





# SDG No 6 – Clean Water & Sanitation

- Experience from Thames Water
- SDG Report 2021



## Our Purpose

To deliver life's essential service, so our customers, communities and the environment can thrive



## Our plan to turnaround Thames Water's performance

### Fix the basics

- Build a stronger leadership team
- Focus on reducing complaints, leakage and pollutions
- Embed a performance-driven mindset
- Be open and honest, take responsibility and empower teams to take ownership
- Understand asset performance and risk

### Raise the bar

- Simplify programmes to invest in customers, operations, people, assets and planning
- Ruthlessly prioritise and focus on delivery
- Use data to make insight-driven decisions
- Find innovative ways to deliver faster and more efficiently
- Drive continuous improvement in all areas

### Shape the future

- Become trusted custodians of the environment and add long-term value for customers and stakeholders
- Deliver a brilliant PR24 plan and establish our Vision 2050
- Invest in sustainable technologies to protect water supplies, enhance rivers and achieve net zero carbon
- Promote a diverse skillset, building a pipeline of new talent for Team Thames



# Lembaga Urus Air Selangor

- Engineering (E)
- Social (S)
- **Governance (G)**



## POLISI IRBM DI SELANGOR



**POLISI 1:Memastikan Air Mencukupi**



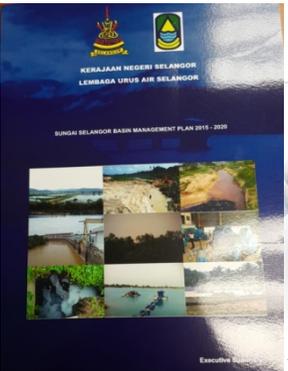
**POLISI 2:Memastikan Air Bersih**



**POLISI 4 : Pemuliharaan Alam Sekitar**



**POLISI 3: Perlindungan Daripada Banjir**



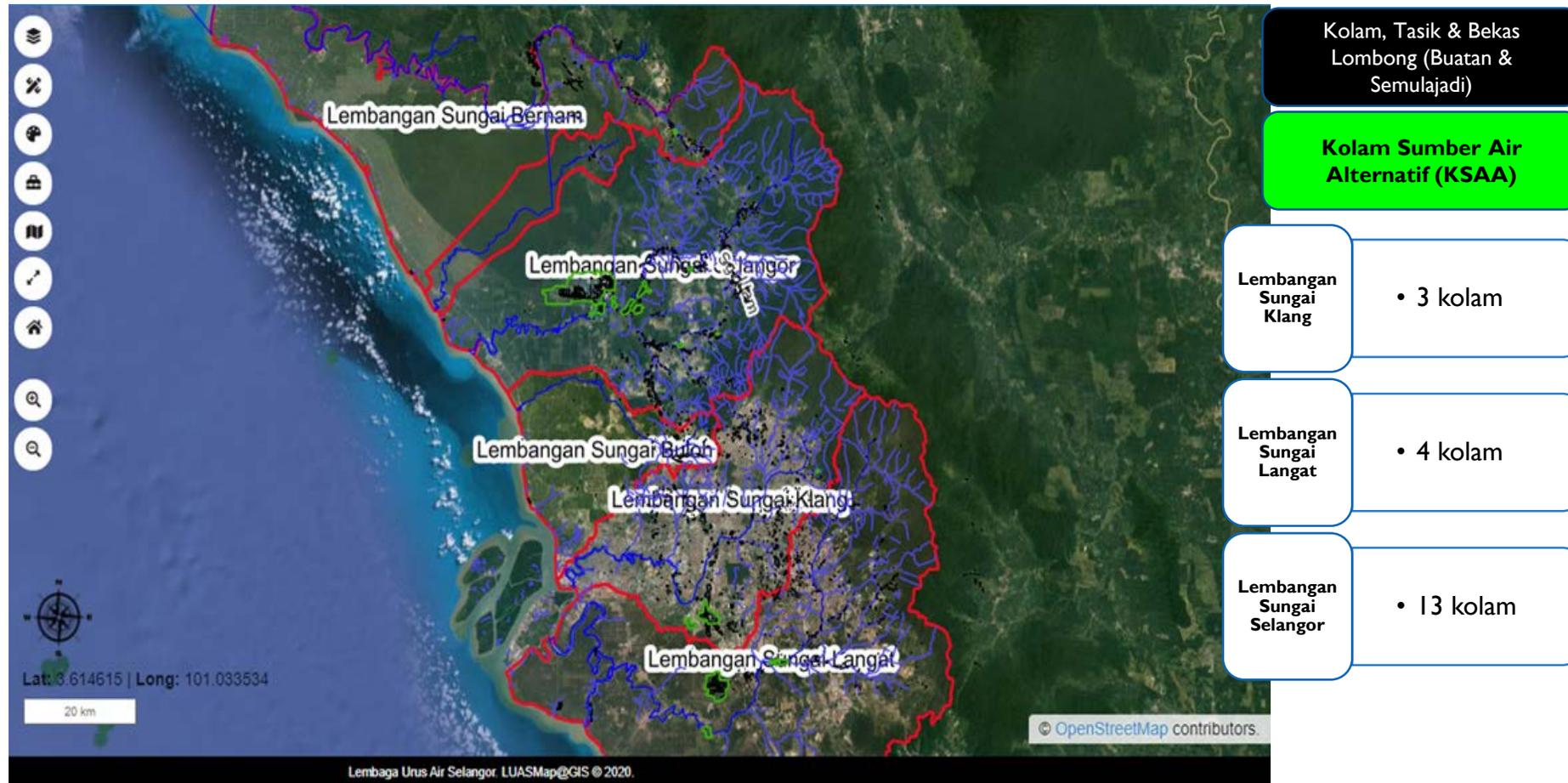


# Improved Water Governance

- Legislation – Enakmen LUAS 1999
- Surveillance – Patrol & Drone Monitoring
- Enforcement
- Inter-Agencies Coordination



## 2- KOLAM DAN BEKAS LOMBONG YANG DIWARTAKAN



- 20 kolam dan bekas lombong yang telah diwartakan pada tahun 2009 di bawah Seksyen 48 Enakmen LUAS 1999 sebagai Zon Perlindungan
- Mengurangkan kebergantungan kepada Empangan

# JUMAH ISIPADU KOLAM BEKAS LOMBONG DAN TEBATAN BANJIR

Lembangan	Bil. Kolam	Jumlah Isipadu (m <sup>3</sup> )
Sungai Klang	20	10,377,539.50
Sungai Selangor	30	6,964,065.00
Sungai Langat	30	16,814,872.16
<b>JUMLAH</b>	<b>80</b>	<b>34,156,476.66</b>

Mengambil kira pengeluaran sebanyak 500 JLH, anggaran jumlah ini mampu bertahan untuk tempoh 2 bulan.

## 4 - KEBOLEHDAPATAN SUMBER AIR BUMI NEGERI SELANGOR



Hasil laporan Kajian Kebolehdapatan Sumber Air Bumi Negeri Selangor yang telah disiapkan pada tahun 2015 mendapati kebolehdapatan sumber air bumi di Negeri Selangor adalah sebanyak 2373 MLD. Berikut adalah pecahan mengikut lembangan:

LEMBANGAN	KEBOLEHDAPATAN AIR BUMI (MLD)
Sg. Selangor	810
Sg. Klang	630
Sg. Langat	860

\* Nota: Baki 73 MLD terletak di dalam lain – lain lembangan

Manakala Hasil laporan Kajian Water Allocation Plan Negeri Selangor yang telah disiapkan pada tahun 2019 mendapati jumlah abstrak air bumi yang direkodkan hanyalah sebanyak 48 MLD bersamaan dua (2) peratus daripada kebolehdapatan sumber air bumi sedia ada

# Strong Implementing Agencies – For Example State-owned Developer

- Pembinaan LRA Sg Rasau (1400 Mld)
- Using ex-mining ponds for raw water storage
- River Cleaning under Landasan Lumayan Sdn Bhd
- State as Stakeholders
- LUAS in Jawatankuasa Induk
- Selangor Maritime Gateway (SMG)
- Flood Retention Ponds – potential as Water Resource for industrial uses





# Who enforce ESG in Malaysia?

- Trade/Industry/Business – Bursa Malaysia (for Public Listed Company)
- Voluntary presently – mainly to facilitate Green Funding/Green Sukuk – required ESG Report for Multinational Companies/SMEs
- Current Practice – GLCs/Companies prepare Joint Annual Report/ESG Report or Separate ESG report





# Centralised Water Ministry : God-sent

- One (1) Regulator for raw water and treated water like UK for both Central and local governance
- SPAN 1 – Water Services – existing
- SPAN 2 – Water Resources ??
- In Selangor : Air Selangor and LUAS
- Option for Federal : 1. Create one (1) water resources regulator/Commission; 2. SPAN extended services to include water resources; 3. Federalisation of Water??? Bipartisan approach??
- What about other States, especially the economically backward?



# THANK YOU



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## **BOARD OF ENGINEERS MALAYSIA**

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