



# Sustainable Development Goals (SDG)

## **ACTION BY WATER**

**PROFESSIONALS** who are key players towards implementation of national policies that should result from the ambitious 2030 Agenda

# Sustainable Development Goals

*SDG*


# SDG 6

- ▷ Ensure access to water and sanitation for all
- ▷ 8 water-related targets within SDG 6
- ▷ The adoption of these Targets provides guidance to all governments to revise, if appropriate, their policies to address effectively the water and sanitation challenges.

**6.1** SAFER DRINKING WATER FOR ALL



**6.2** SANITATION FOR ALL



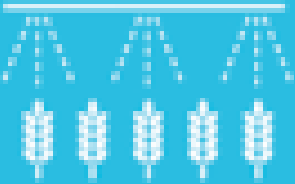
**6.3** BETTER WATER QUALITY



**6.B** MORE LOCAL PARTICIPATION



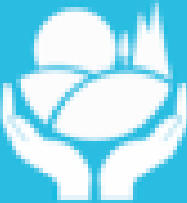
**6.4** MORE EFFICIENT WATER USE



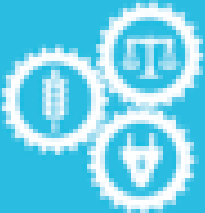
**6.A** INTERNATIONAL COOPERATION



**6.6** HEALTHIER ECOSYSTEMS



**6.5** INTEGRATED WATER MANAGEMENT



# Millennium Development Goals MDGs

- UN-led
- 8 goals and 21 targets, focusing on poverty reduction
- Relevant to low income countries
- 2 water and sanitation targets under MDG 7
- 3 core indicators on water and sanitation
- Monitoring through household surveys

# Sustainable Development Goals SDGs



- Country-led
- 17 goals and 169 targets, focusing on the three pillars of sustainable development
- Relevant to all countries
- 8 water and sanitation targets under SDG 6
- 11 core indicators on water and sanitation
- Monitoring by national authorities, feeding into regional and global reporting



# Water – Wastewater

*... and their relations*

**THE SDGS ARE INTERCONNECTED:**

**GOOD WASTEWATER MANAGEMENT MEANS**

**MORE CLEAN ENERGY, MORE SUSTAINABLE**

**LIVING AND HEALTHIER ECOSYSTEMS.**



UN WATER  
**22 MARCH**  
**WORLD WATER DAY**







# Wastewater Reuse

*how and why?*

# Water & Wastewater

Source: Dato' Seri Ir Dr Zaini Ujang

	Access	Efficiency	Sustainability
 <b>2014</b> <b>CURRENT</b> <b>POSITION</b>	<b>95%</b> Population served with clean water <sup>1</sup> <hr/> <b>41Mn PE</b> Sewage connected <sup>3</sup>	<b>36%</b> Non-revenue water <sup>1</sup> <hr/> <b>211 liters</b> Water consumption per capita per day <sup>1</sup>	<b>2%</b> Annual freshwater withdrawals of total <sup>2</sup> <hr/> <b>19,397 m<sup>3</sup></b> Renewable internal freshwater resources, per capita <sup>2</sup>
 UK	99% <hr/> 135 Mn PE	25% <hr/> 260 liters	7% <hr/> 2,244 m <sup>3</sup>
 Japan	97% <hr/> 210 Mn PE	7% <hr/> 170 liters	19% <hr/> 3,382 m <sup>3</sup>
 Singapore	100% <hr/> 12 Mn PE	5% <hr/> 150 liters	32% <hr/> 110 m <sup>3</sup>

1 Suruhanjaya Perkhidmatan Air Negara; GWI Global Water Market 2017

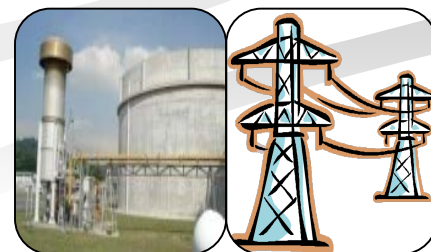
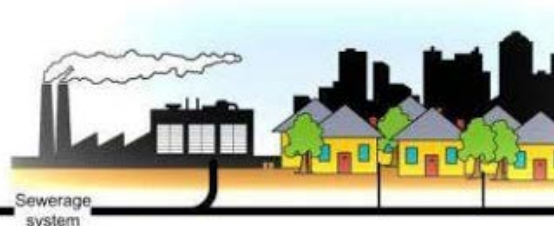
2 WorldBank, FAO and AquaSTAT. Data for 2015

3 Eleventh Malaysia Plan 2015-2020. Includes population covered by grids and septic tanks, value from 2015; GWI Global Water Market 2017

# Malaysia Sewerage Sector

## EXPECTED OUTCOMES

1. **Generate Revenue** from trade effluent treatment services towards a holistic and sustainable sewerage sector
2. Transformation of current **Sewerage Utility Waste Model** to **Sustainable Resource Recovery Model** over the long term.
3. Establish **Holistic Watershed Management** and Eco friendly approach in **Wetland for Wastewater Treatment**.
4. Improve Malaysia **Water Efficiencies** via **Bio-effluent Recycling**.
5. Spur **Green Economy & Green Technology** industry.





# GREEN TECHNOLOGY MASTER PLAN MALAYSIA 2017 - 2030



NEW ERA  
FOR  
SEWERAGE  
SERVICES



Treated effluent for  
non-potable  
and industrial usage

Utilization of sewage  
sludge for crops and  
harvesting of bio-  
product

Biogas & biofuel as  
renewable energy  
towards green  
technology  
application

DID YOU KNOW THAT...

**80%** OF ALL THE WORLD'S  
**WASTEWATER**  
FLOWS BACK INTO THE RIVERS AND OCEANS  
WITHOUT BEING TREATED?



UN WATER  
22 MARCH  
WORLD  
WATER  
DAY

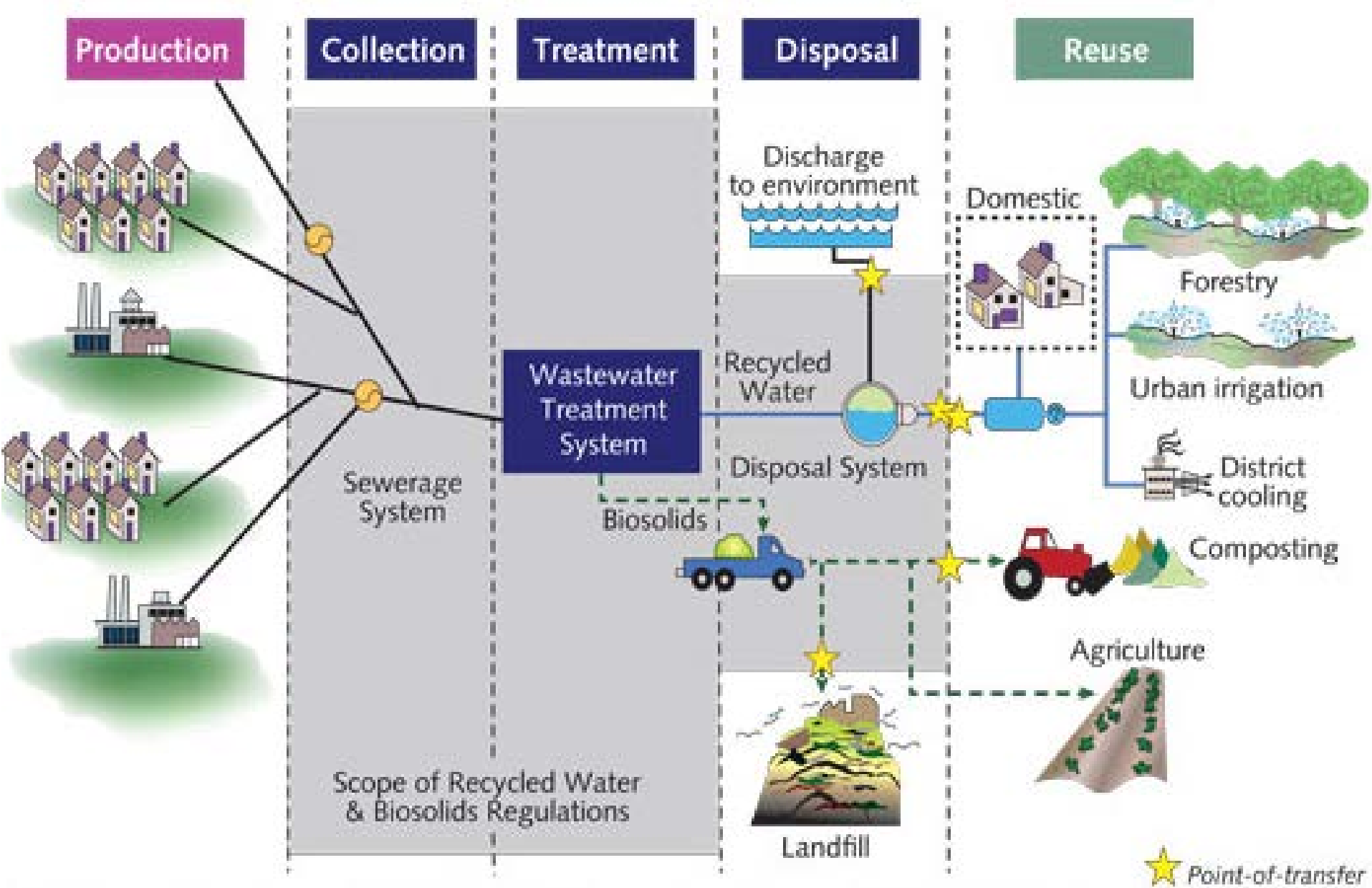


*No longer appropriate to consider treated wastewater as a waste that requires disposal but rather as resource that can be put to beneficial usage*

# Manage Water to Sustain People and Environment

- ▷ Water, sanitation and hygiene are sustainable
- ▷ Inequalities in access eliminated
- ▷ Sustainable use of freshwater resources
- ▷ Increased water productivity
- ▷ Reduce both urban population with untreated industrial wastewater
- ▷ Increase urban and industrial wastewater reuse safely
- ▷ Reduce nutrient pollution from agricultural activities

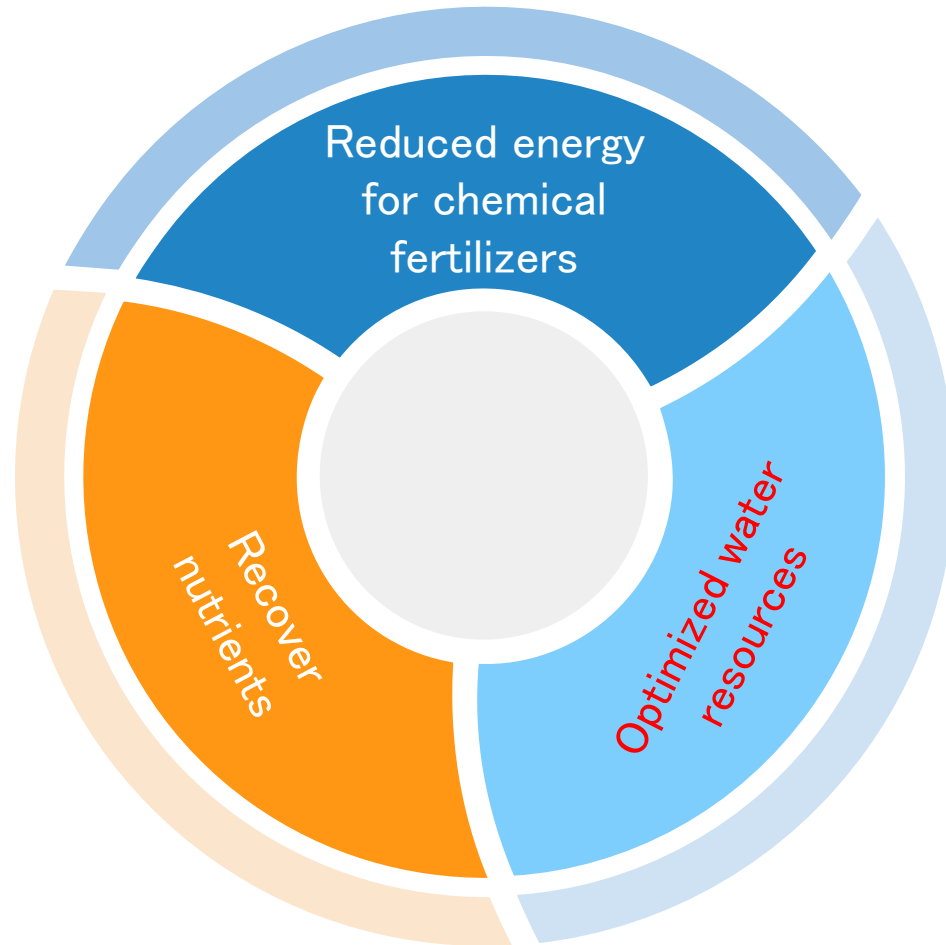
Improved water quality  
& wastewater management  
by 2030



## Wastewater reuse pathway



# Benefits of wastewater reuse





Treated effluent should be made suitable as it is economical for augmenting traditional water supplies



95%

Water that enters the home goes down the drain  
daily

# Conclusion

- ▷ The progress of sustainable development is bound by how well wastewater and water are managed
- ▷ Environmental dignity and harmony are both essential to be preserved for future generation hence SDG serves as a global guideline for us all

Thank you