Eco-strategy

Reduce and Reuse: Overcoming Water Scarcity and Drought

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Stockholm World Water Week
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TN50: Feedback on Energy, GreenTech & Water

	2017	2030*	2050
RE in Energy Mix	18.4%	25%	
EEV (energy efficient vehicle)	32.6%	-	
EEV + EV (electric vehicle)	-	100%	
CO Emission (metric tons/capita/year)	8	6	
Energy Efficiency	<2%	15%	
Treated Wastewater Recycling	<1%	35%	
Freshwater extraction rate	2%	15%	
% Green Manufacturing SME	10%	50%	
Green Building	244	1750	
Sanitary Landfill/Non-Sanitary Landfill	14/147	50%	
Solid Waste Recycling Rate	17.5%	50%	

* Targets in Green Tech Master Plan 2017-2030

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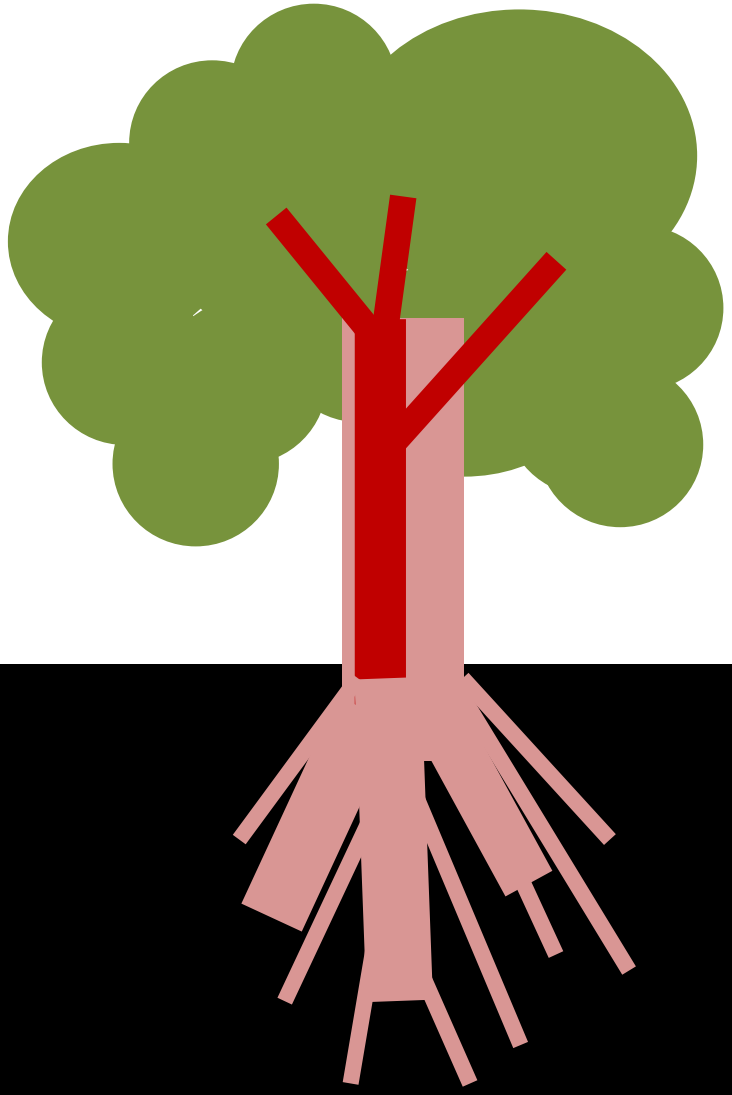
ECO-CULTURE
Vision
ECO-STRATEGY
OUTCOMES
Operational excellence
Tactics
ECO-TOOLS



Tangible Outcomes

- Quality of life
- Public health
- Green economic growth
- Social development
- Political stability
- Public happiness

Sustainable Development Indicators

Intangible Outcomes

- Teamwork, ukhuwah
- Knowledge culture
- Integrity, passion
- Entrepreneurship
- Happiness
- Taqwa, amal soleh etc

Eco-culture
Barakah
Synergy
Paradise

River dream projects

VALUE CREATION

RIVER ECONOMY

FOOD RESOURCES

DRINKING WATER SOURCES

RECREATION

TRANSPORTATION

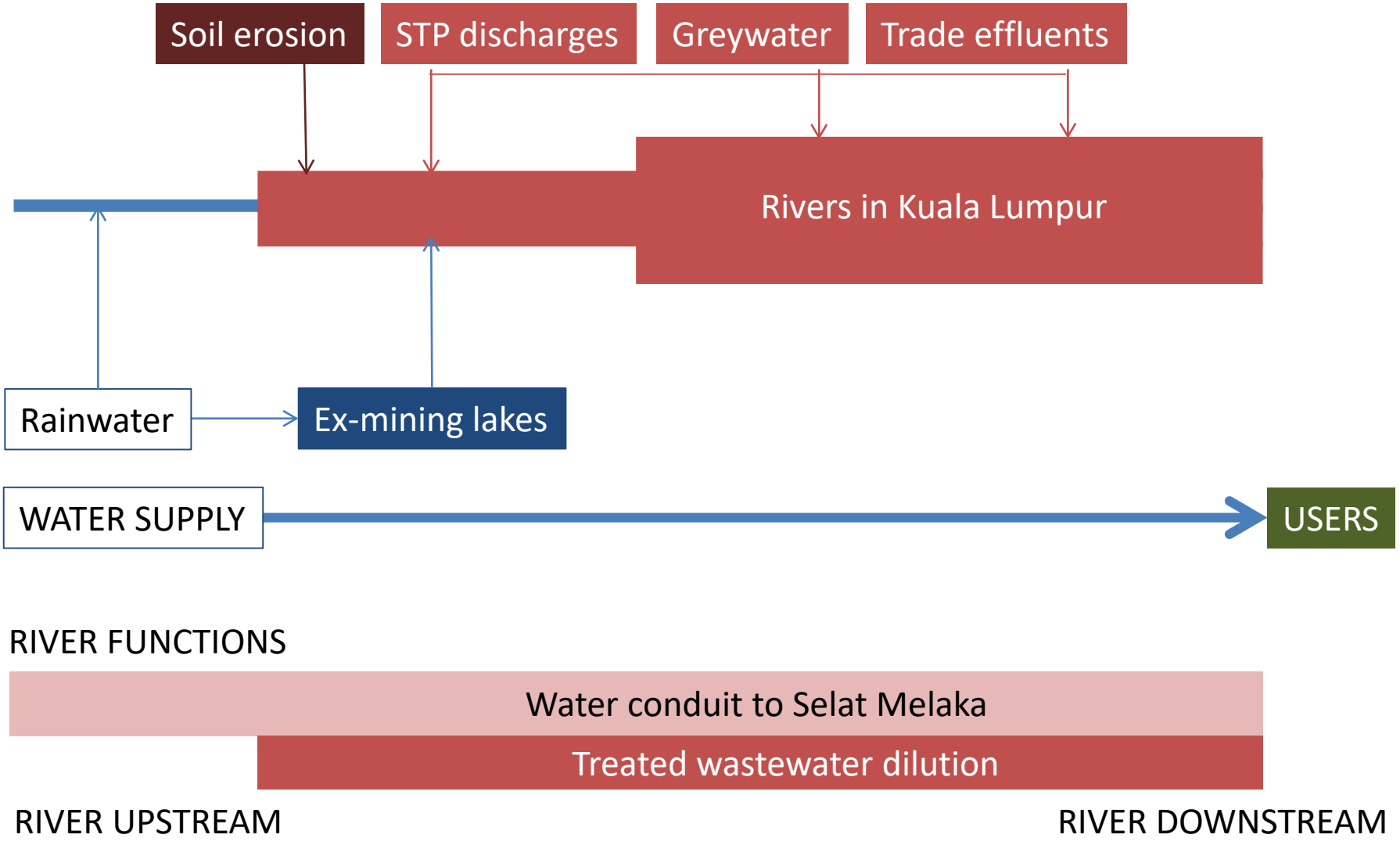
FLOOD MITIGATION

POLLUTION DILUTION

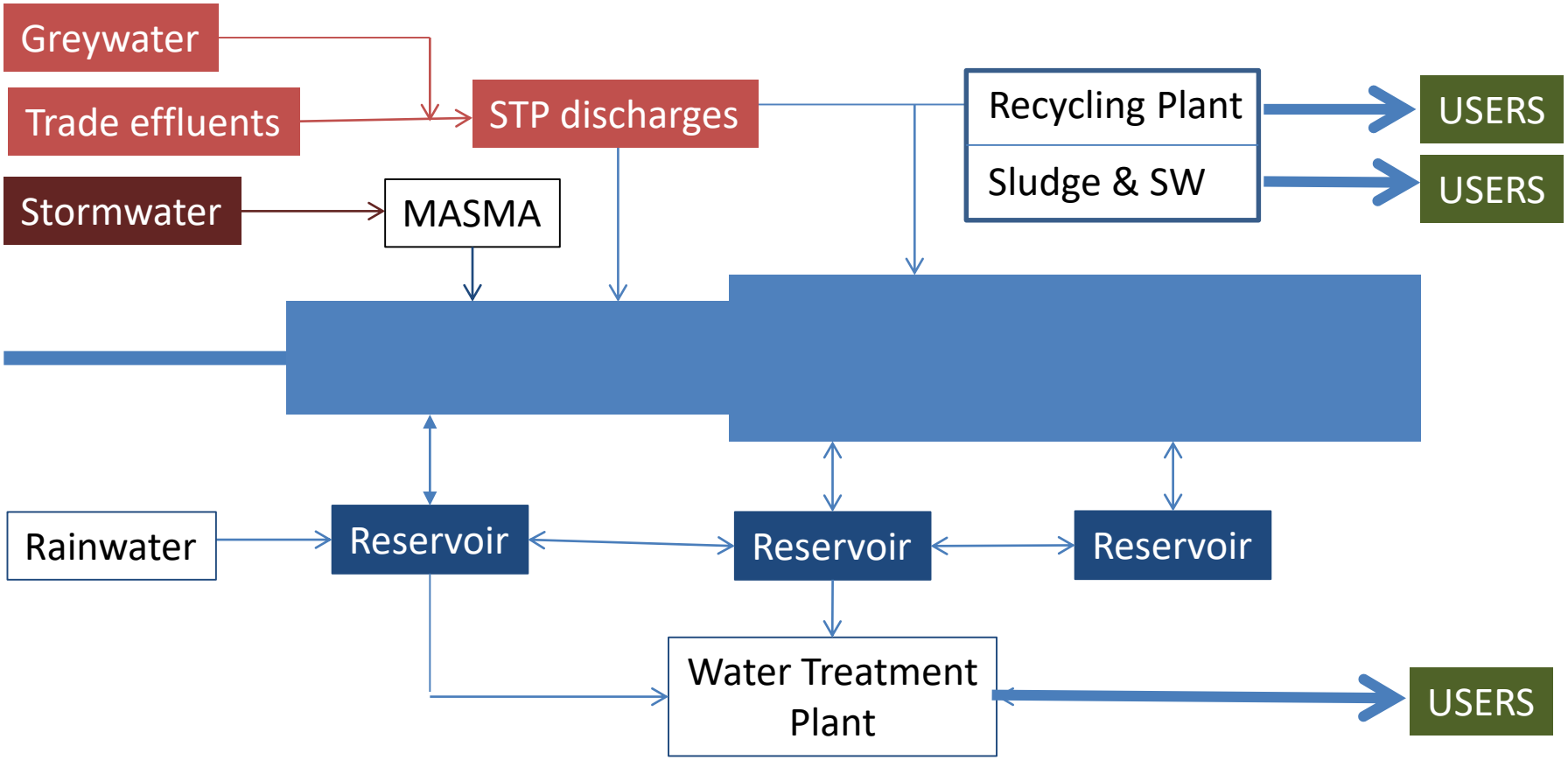
EFFLUENT RECEIVER

UTILIZATION

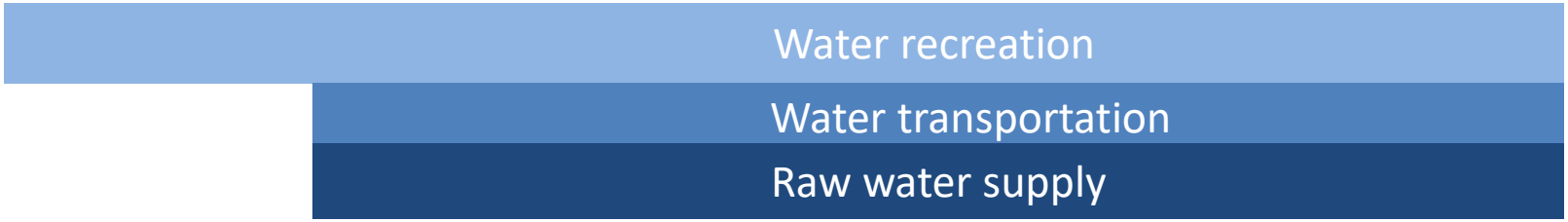
Water cycle in Kuala Lumpur, 2015



Water cycle in Kuala Lumpur, 2020



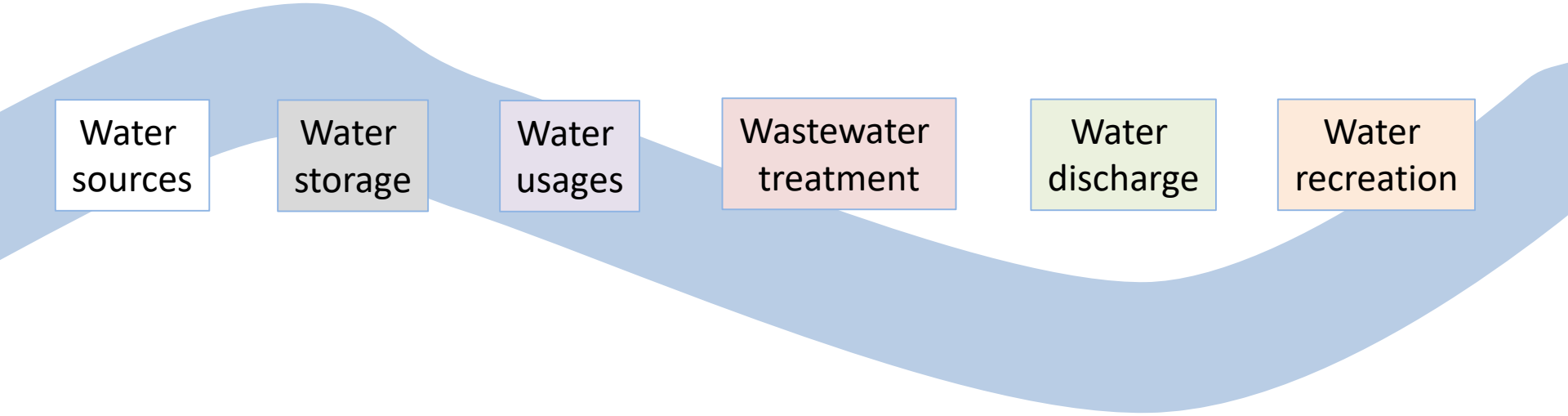
RIVER FUNCTIONS



RIVER UPSTREAM

RIVER DOWNTREAM

Water augmentation?

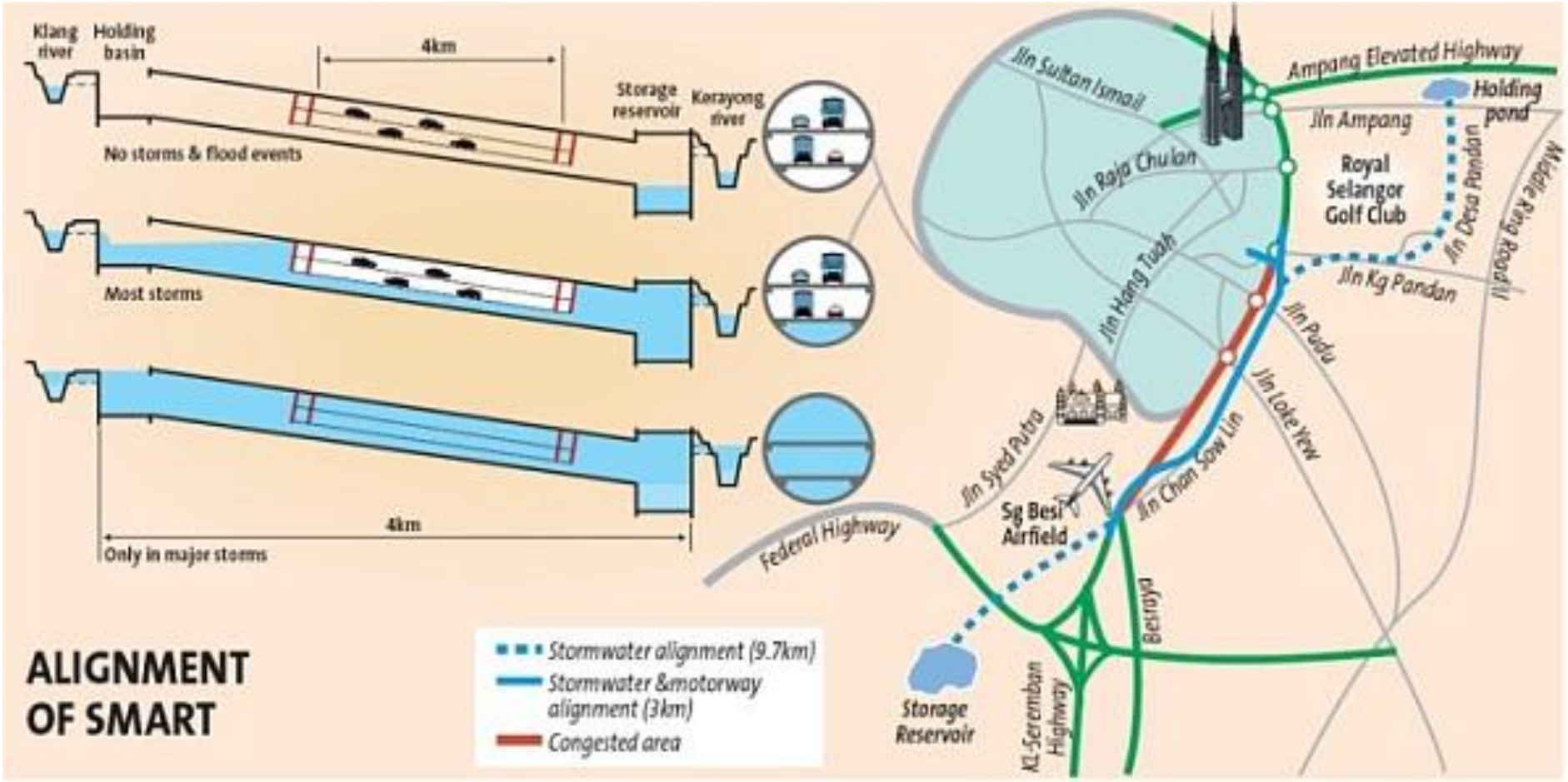


Water sources	Water storage	Water usages	Wastewater treatment	Water discharge	Water recreation
Underground storage	Small dams	Conservation initiatives	Closed loop system	Underground storage	Lowland ponds
Young forest	Lowland ponds	Sustainable tariff	Biomass utilization	Closed loop system	River rehabilitation
New catchment	SMART tunnel	Recycling scheme	Energy generation	Lowland ponds	Eco tourism

Lake Garden Kuala Lumpur

ENTRY / EXIT POINTS

SMART (Storm water Management And Road Tunnel), Kuala Lumpur (since May 2007)



Solving two problems the Smart way

By PRAKASH DANIEL
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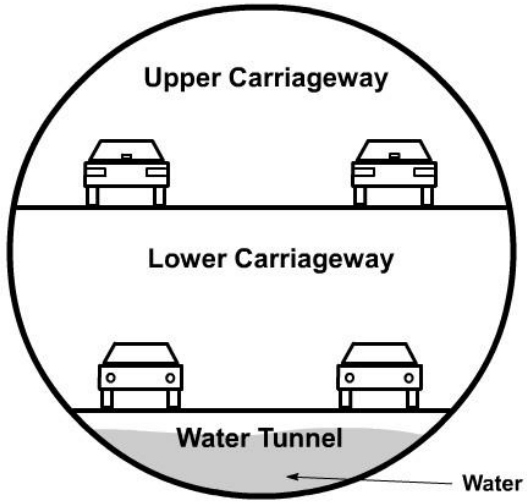
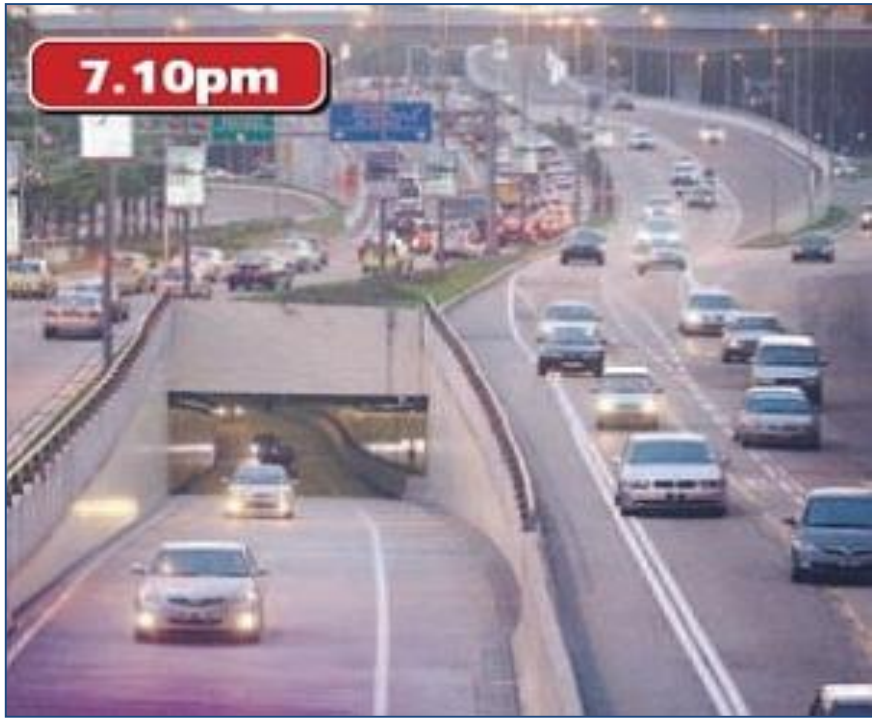
MALAYSIA has many highways and expressways. But imagine if one built underground could double up as a flood diversion channel during seasonal monsoon rains? Can a tunnel big enough in diameter and long enough be built to house such an engineering feat in Kuala Lumpur?

The answer is 'Yes'. What started out as a vision in 2003 became a reality when the Stormwater Management And Road Tunnel (Smart), an engineering marvel built by MMC Gamuda Joint Venture was completed in 2007. Since then, the first-in-the-world motorway-cum-flood-

venience of having Smart as a flood prevention solution and as an alternative route to the city centre. Now when the motorway is closed for maintenance works or during a flood operation, commuters feel the inconvenience but realise how Smart has once more helped keep Kuala Lumpur streets dry.

Smart, a project by two Government agencies namely the Department of Irrigation and Drainage and Works Ministry, was designed and built by local companies with a local workforce who





From Planning to DNA

PLAN what?

IMPLEMENT how?

STRATEGY how?

IMPROVE how?

HABIT

CULTURE

Artifacts, thinking, systems, SOP, ritual, teamwork, life style, endowment, etc

DNA

From Planning to Outcomes

Blue Ocean ERRC Grid

Blue Ocean Strategy

ELIMINATE

- Downstream river pollution
- Defaulters in environmental services payment
- Environmental gangsters

RAISE

- Environmental awareness
- Local environmental tech, IP
- Pollution prevention, 3R
- Green Unit Thrusts
- Public participation

REDUCE

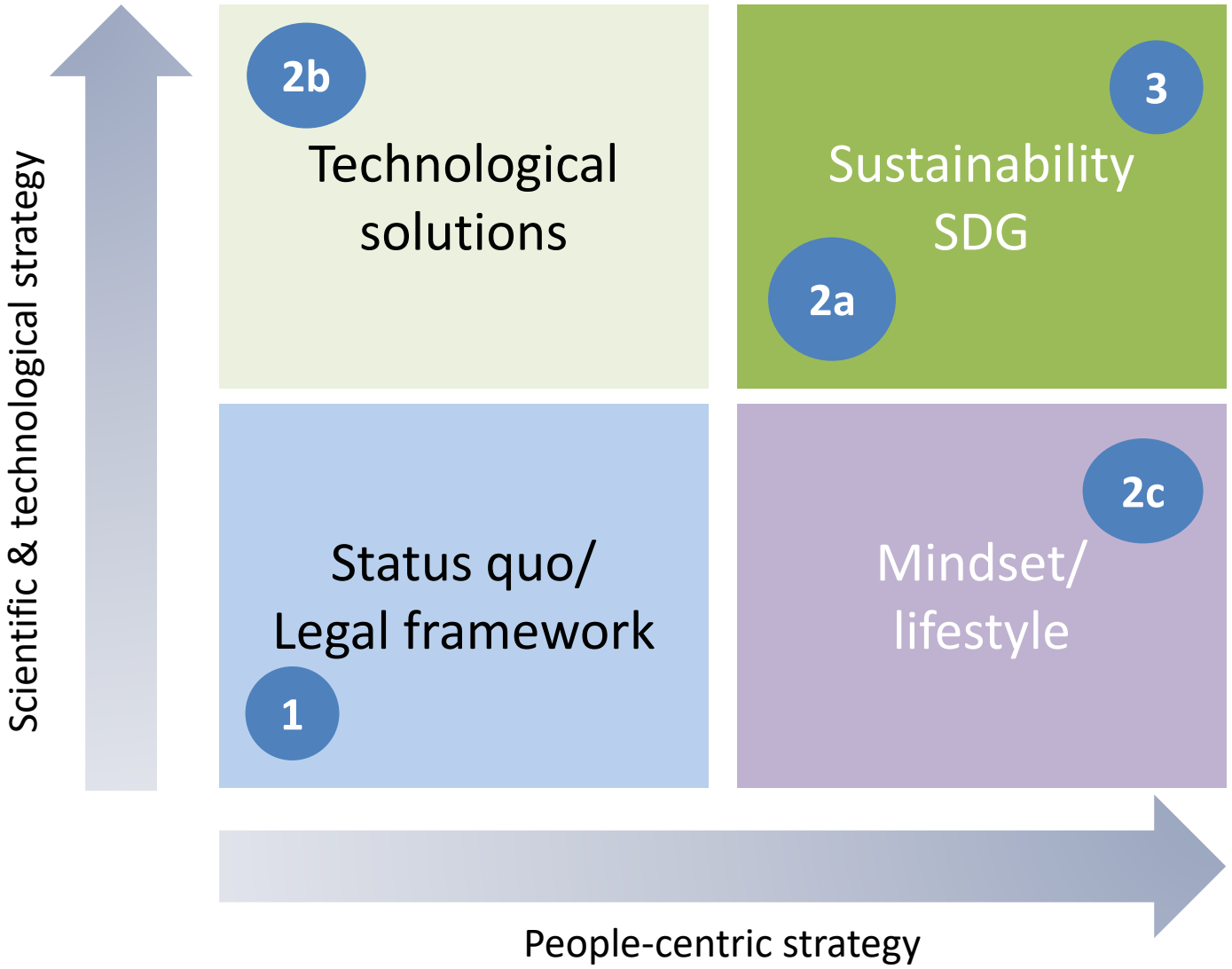
- Pollution emission nationwide
- Ecological footprint
- Environmental subsidy
- Regulatory incompliance
- Reduce water scarcity
- Centralization of policy making

CREATE

Green-Growth

- Eco-culture
- **Education-focus**
- Local expertise-niche
- Low carbon footprint
- Public well-being
- Economic growth

Understand eco-strategy for deliverology of SDG



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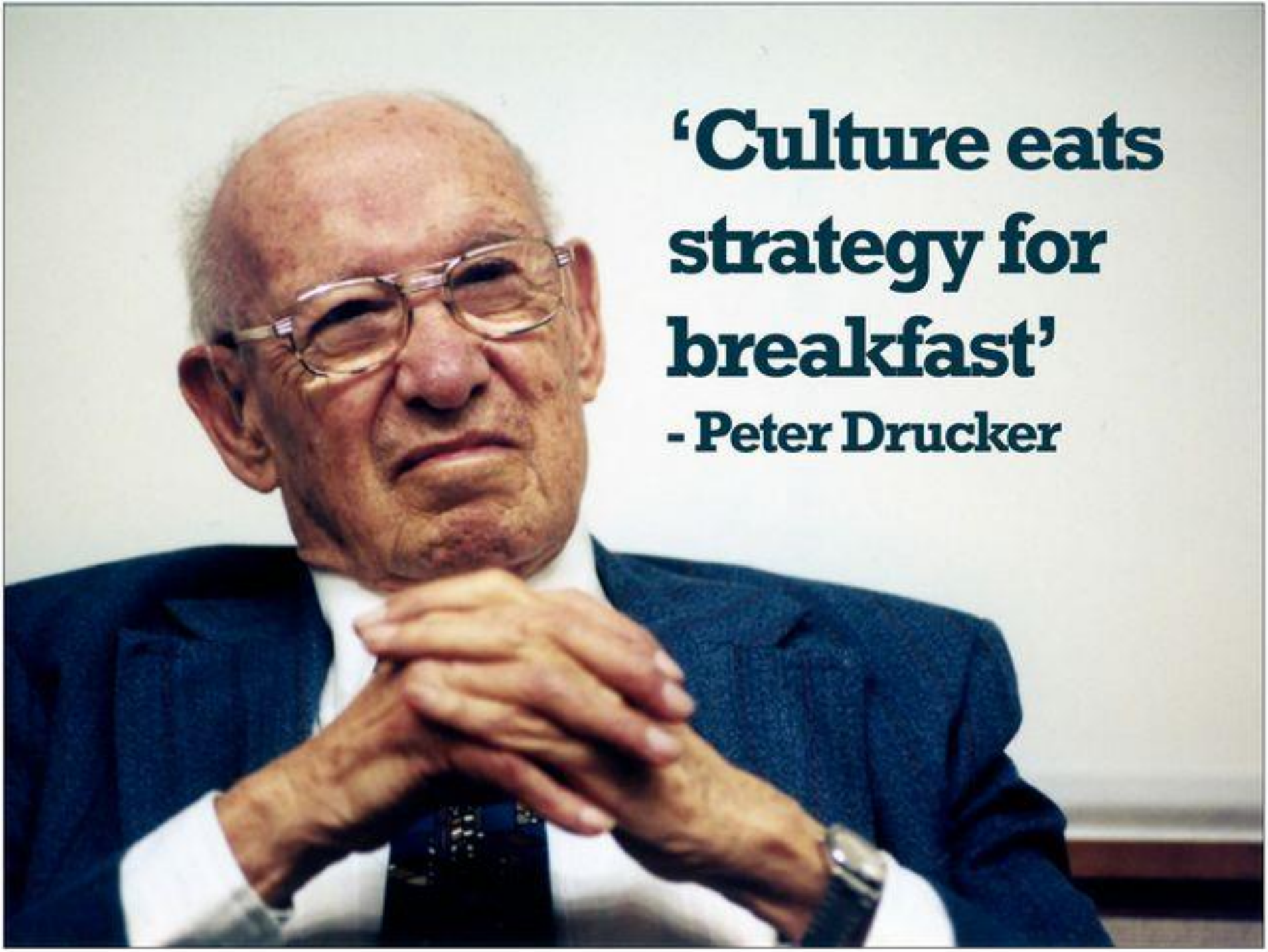
‘Culture eats strategy for breakfast’
- Peter Drucker