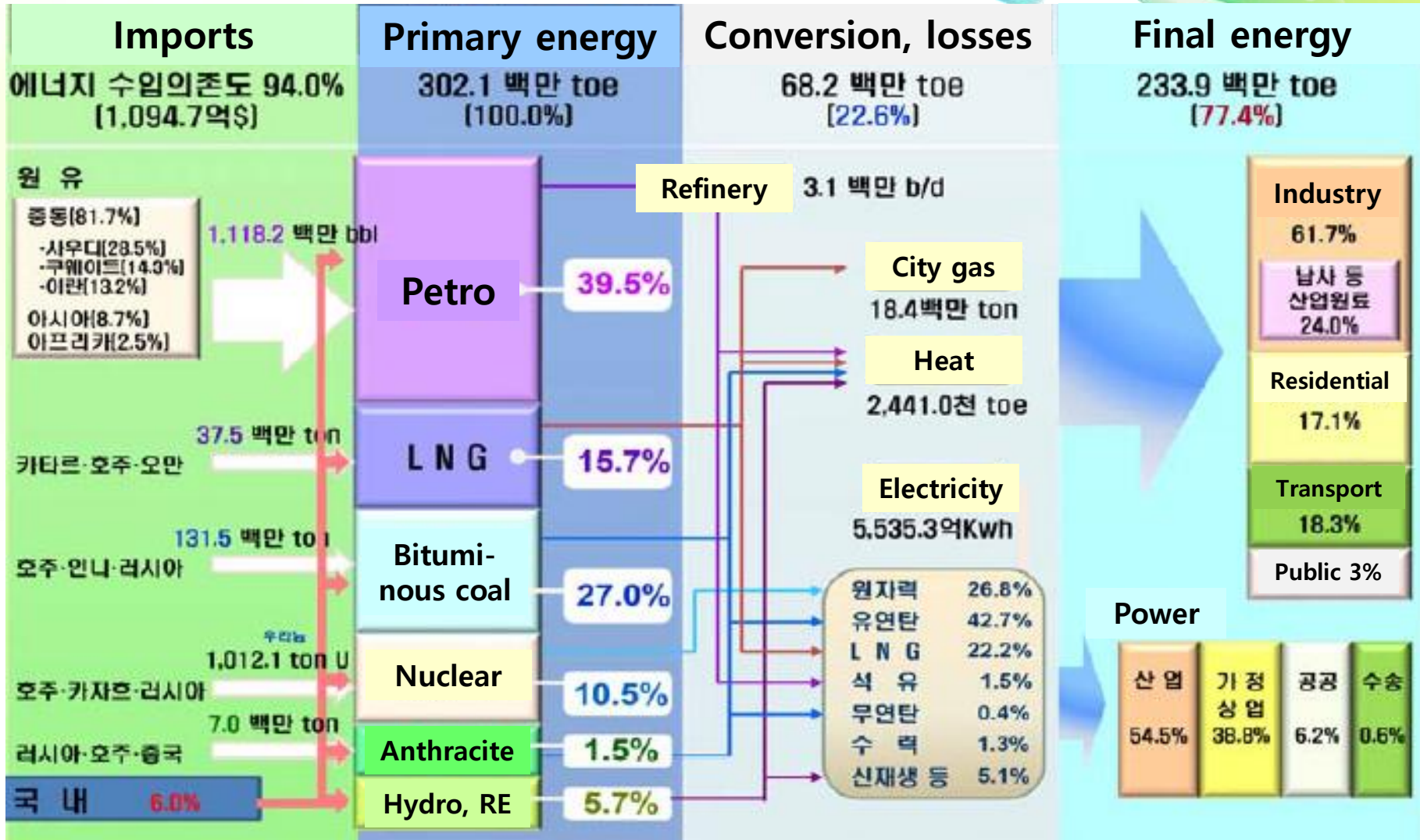


*Seminar on Sustainable Urban Development and Climate Change*  
*AIT, Bangkok, Thailand*

# **Efficient resource management for sustainable urban systems**

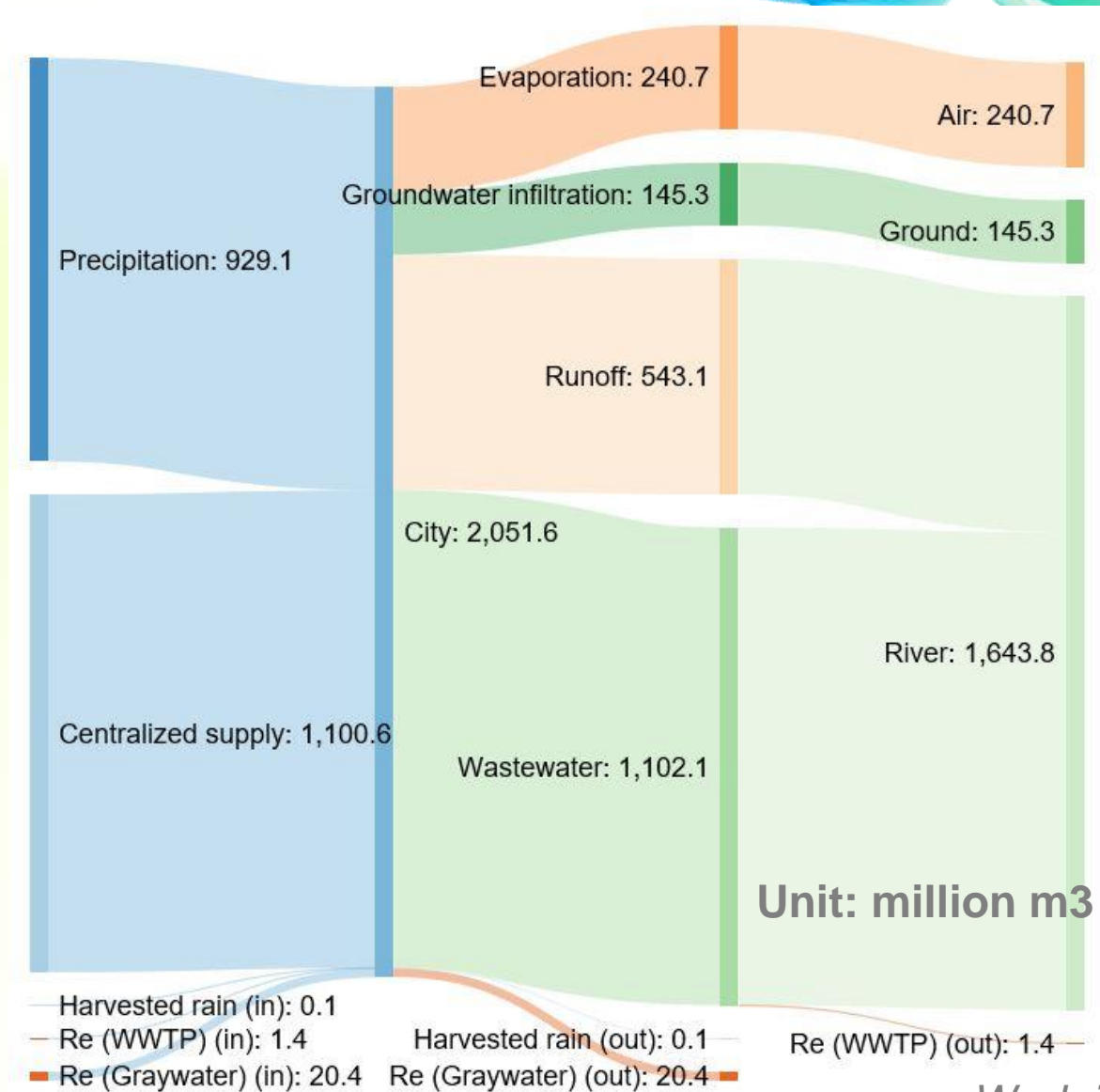
Graduate School of Energy and Environment  
(Green School), Korea University  
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# Energy balance of Korea, 2017



Source: KEEI, 2018

# Water metabolism of Seoul



*Work in progress*

# Changes in plastic waste trade, 2017-2018

## Exports

Top 10	2017	2018*	
<b>Total</b>	<b>44,837</b>	<b>13,479</b>	<b>-57%</b>
Vietnam	11,629	6,152	-9%
Malaysia	4,320	2,859	15%
Thailand	293	2,280	2,903%
China	25,192	1,419	-93%
Indonesia	180	217	51%
Taiwan	313	150	-48%
Czech	674	116	-74%
Hong Kong	1,712	99	-93%
Egypt	0	54	540%
Philippines	16	54	979%

## Imports

Top 10	2017	2018*	
<b>Total</b>	<b>23,337</b>	<b>40,425</b>	<b>211%</b>
Japan	10,058	14,542	150%
US	994	6,994	2,078%
China	2,621	4,203	319%
Vietnam	4,037	2,070	-25%
Taiwan	811	1,804	353%
Netherlands	577	1,527	662%
Germany	122	1,355	1,710%
Belgium	715	959	92%
Saudi	366	719	235%
Philippines	811	712	42%

Source: K-stat (unit: 1,000 USD); 2018 data(Jan-Aug)