



# Energy Data on Commercial/Residential Sectors of HKC

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3. Data Collection

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1. MEELS Programme

# I. About the Database

1. Introduction
2. Data presentation
3. Data collection

# HKEEUD @ [www.emsd.gov.hk](http://www.emsd.gov.hk)

## Energy End-use Data and Consumption Indicators

### Hong Kong Energy End-use Data

#### Set of Data

▶ [Hong Kong Energy End-use Data 2020](#)

[PDF format (2.19MB)]

▶ [Hong Kong Energy End-use Data 2019](#)

[PDF format (2.60MB)]

▶ [Hong Kong Energy End-use Data 2018](#)

[PDF format (3.60MB)]

▶ [Hong Kong Energy End-use Data 2017](#)

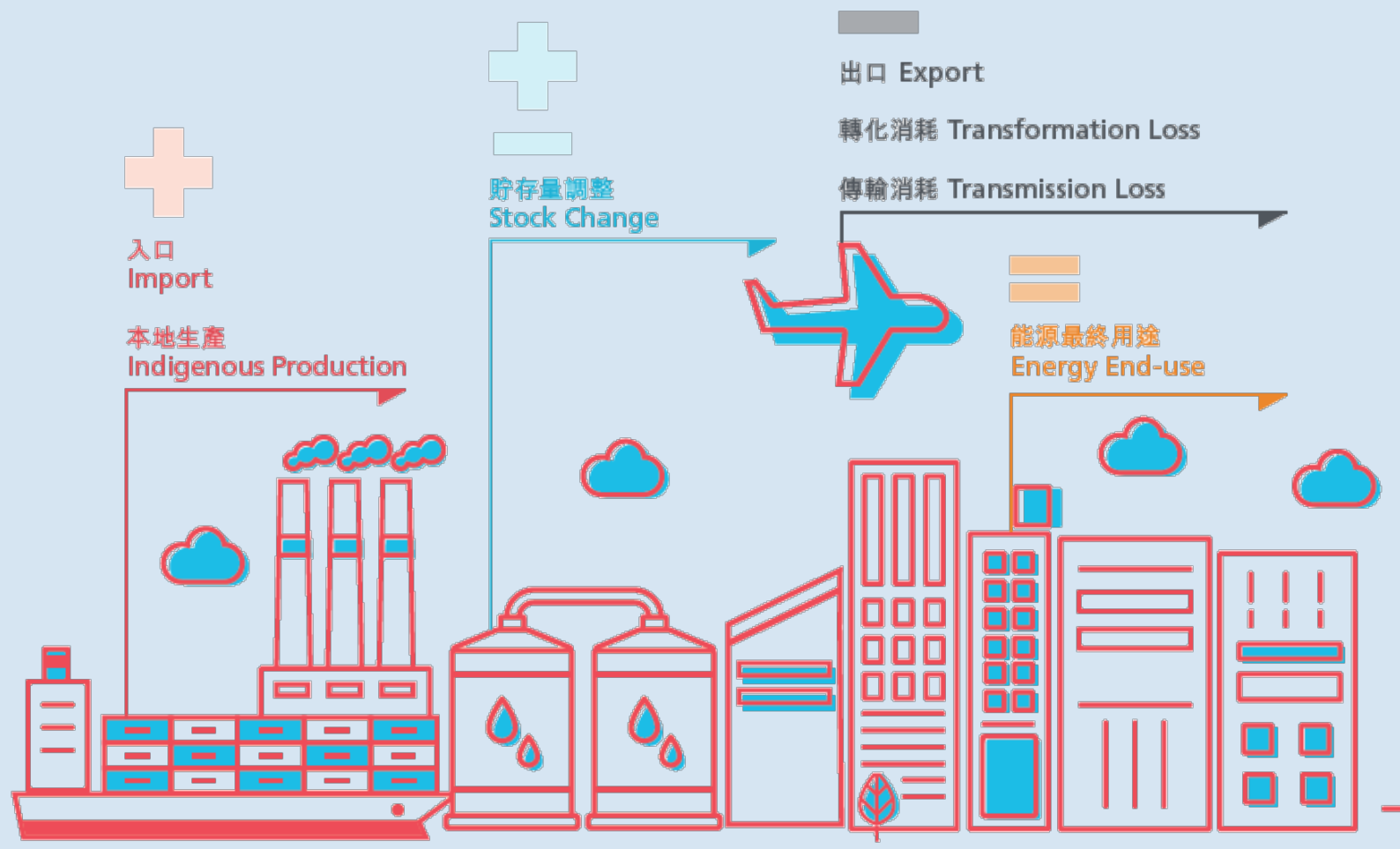
[PDF format (7.70MB)]

▶ [Hong Kong Energy End-use Data 2016](#)

[PDF format (3.02MB)]

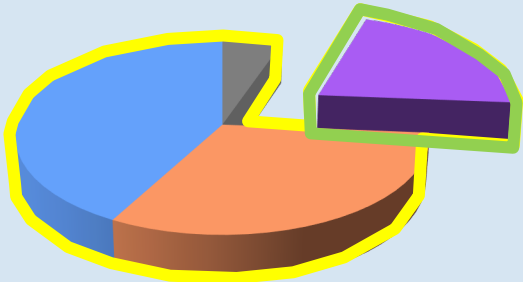


# Energy End-Use



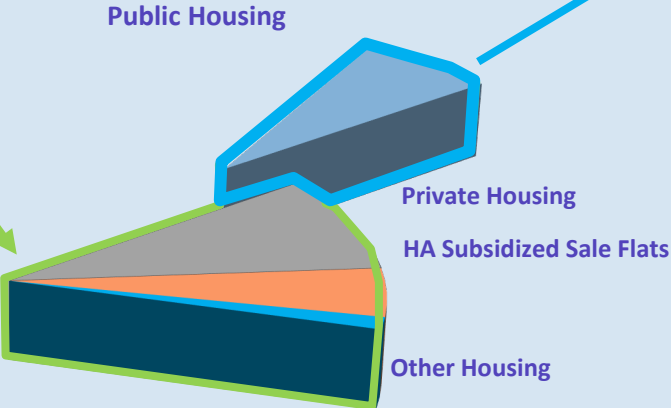
# Hong Kong Energy End-use Data – Fuel Type, User Type & End-uses

by Sector



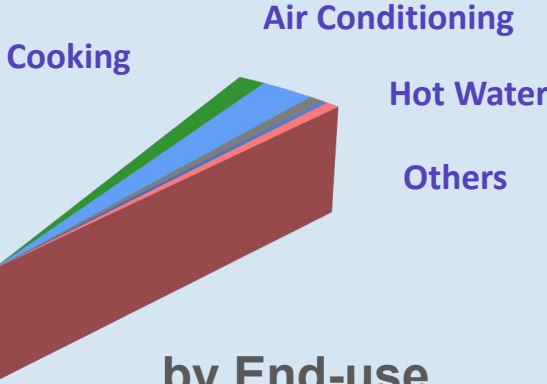
■ Industrial   ■ Residential   ■ Transport   ■ Commercial

by Segment

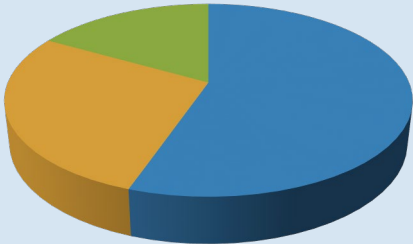


Public Housing  
Private Housing  
HA Subsidized Sale Flats  
Other Housing

by End-use

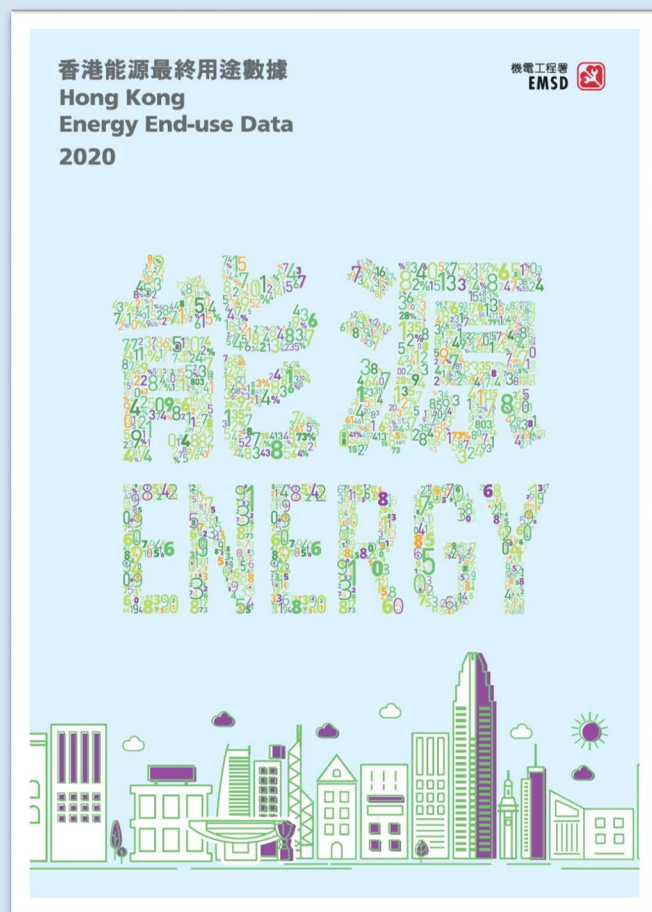


by Fuel Type



■ Electricity   ■ Oil & Coal   ■ Town Gas & LPG

# Energy Data – Both Macro and Micro Data



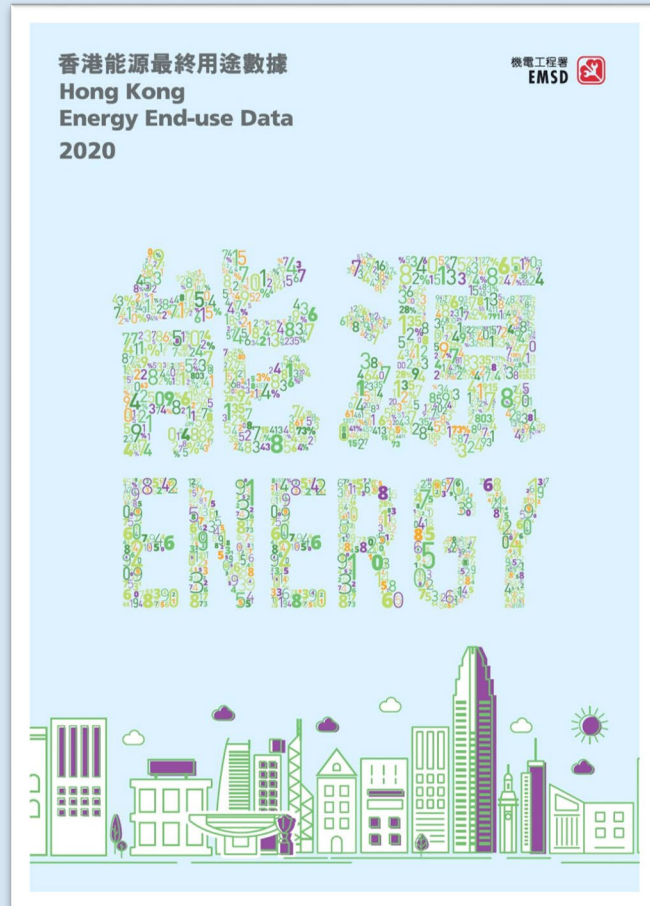
公共房屋組別所有能源使用按最終用途劃分

Total Energy Consumption in Public Housing Segment by End-use

單位 Unit: 太焦耳 Terajoule

	煮食 Cooking	空氣調節 Air Conditioning	熱水 Hot Water	照明 Lighting	冷凍 Refrigeration	辦公室設備 Office Equipment	洗衣 Laundry	其他 Others	總計 Total
2008	4,467	2,620	3,567	952	1,825	1,421	-	599	15,451
2009	4,546	2,801	3,566	963	1,863	1,505	-	671	15,915
2010	4,661	2,870	3,557	947	1,818	1,558	-	742	16,152
2011	4,735	2,931	3,564	942	1,763	1,642	-	841	16,418
2012	4,786	3,029	3,543	970	1,725	1,794	-	995	16,844
2013	5,055	2,883	3,651	823	1,544	1,573	-	1,035	16,565
2014	5,043	3,496	3,851	775	1,495	1,489	-	1,168	17,316
2015	4,863	3,580	3,847	691	1,349	1,338	-	1,235	16,902
2016	4,881	3,758	4,055	633	1,226	1,231	-	1,320	17,105
2017	4,718	3,829	4,020	571	1,055	1,082	791	550	16,617
2018	4,855	3,783	4,095	570	1,054	1,080	790	549	16,776

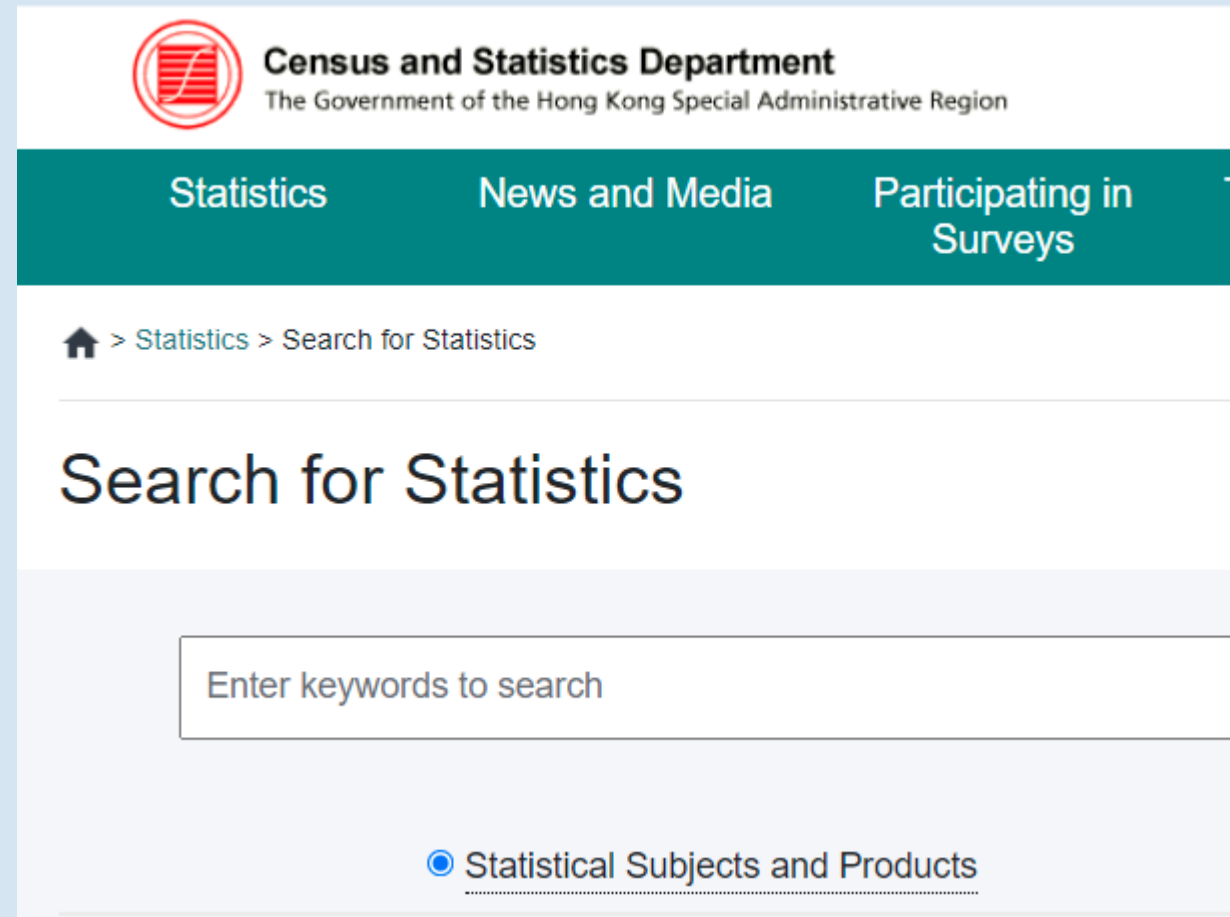
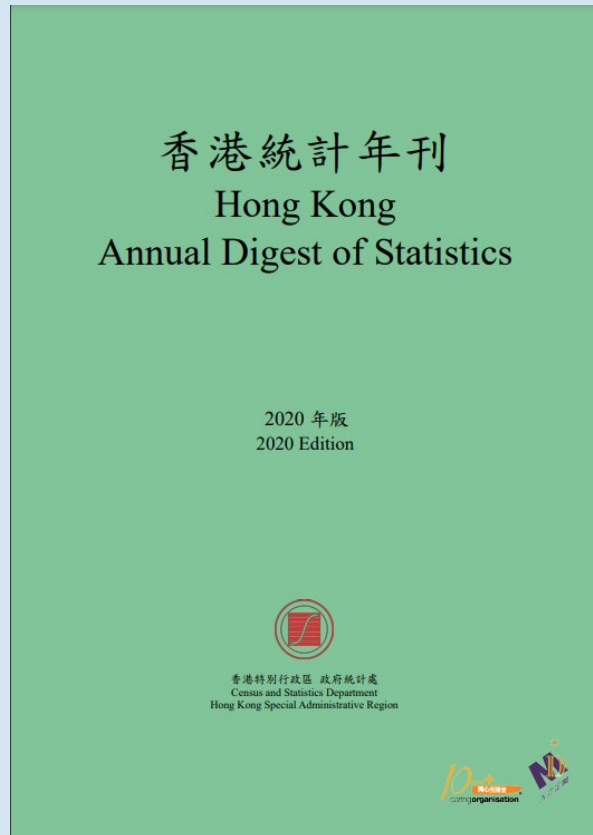
# Compilation of the database



# HOW?



# Source of Macro Energy Data and Activities Data



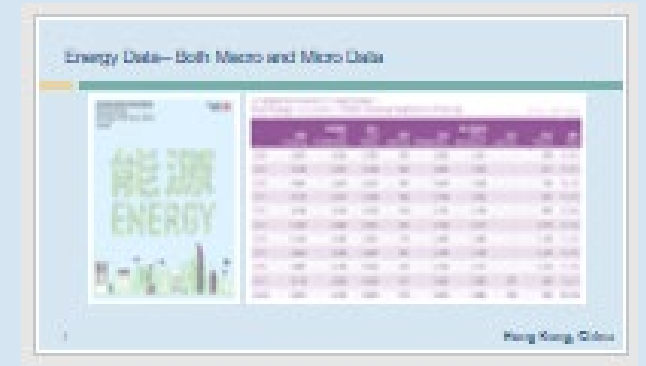
# Survey for Consumption per Unit Activity



Quantity  
Appliance

ENERGY LABEL 能源標籤	
more efficient 效益較高	Grade 1 級
1	
2	
3	
4	
5	
less efficient 效益較低	
Annual Energy Consumption (kWh)(Cooling) 每年耗電量(十五小時製冷) <small>Based on 1000 kWh operation 以每年耗電 1000 kWh 計算</small>	420
Cooling Capacity (kW) 製冷量(千瓦)	2.54
Refrigerant 製冷劑	R410A
Room Air Conditioner 空調機	
Brand 品牌:	ABC 某某牌
Model 型號:	HK1234
Reference Number / Year 參考編號 / 年份:	UI-C180123 / 2018 UI-C180123-17

Appliance  
Consumption



Grossing Up  
Household  
Number



Hong Kong, China

「住宅供電」收費		按金金額 \$1,000.00
用電期由: 由 16/02/2019 至 15/03/2019 (28 日)	電表號碼	上上次讀數
3033832	24014	23742
讀表日期: 15/04/2019		
本期收費		
基本電費		\$179.34
燃料電費:		
16/02/2019-28/02/2019 126 度, 每度 23.4 仙		29.48
01/03/2019-15/03/2019 146 度, 每度 22.6 仙		33.00
燃料費特別折扣	每度 -2.3 仙	-8.26
地租及牌照特別折扣	每度 -2.3 仙	-8.26
電費折扣計劃		-50.00
		\$179.30
賬目總覽		
上期結單總數		\$173.12
繳費 (28/02/2019) - 多繳		-173.00
本期收費		179.30
總數		179.42
撥入下月賬款		-0.42
請付此賬		\$179.00

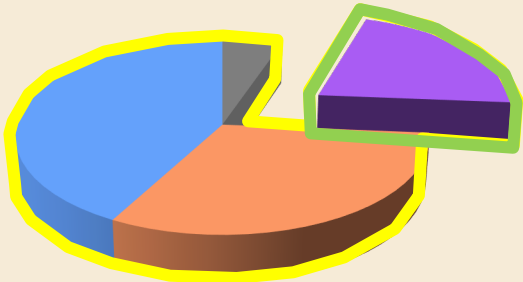
Cross-check  
Energy Bill

## II. Commercial and Residential Consumption Data of HKC

1. Commercial Sector data
2. Residential Sector data

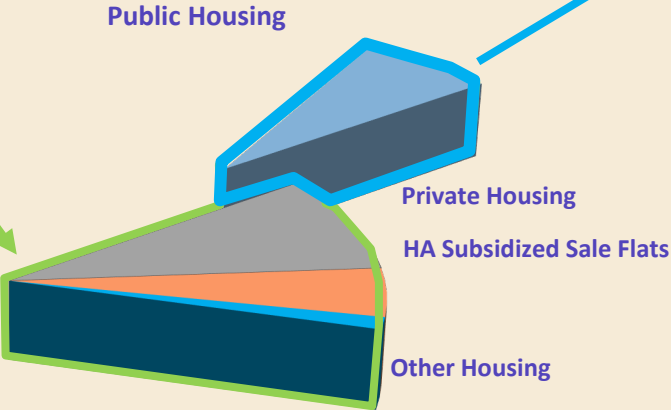
# Hong Kong Energy End-use Data – Fuel Type, User Type & End-uses

by Sector



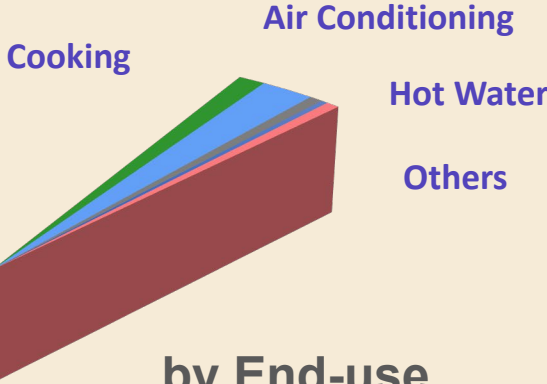
■ Industrial   ■ Residential   ■ Transport   ■ Commercial

by Segment



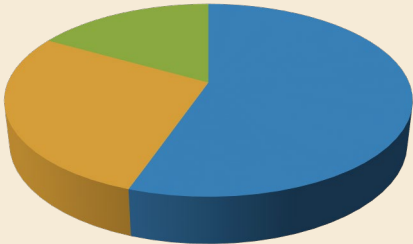
Public Housing  
Private Housing  
HA Subsidized Sale Flats  
Other Housing

by End-use



Air Conditioning  
Hot Water  
Others

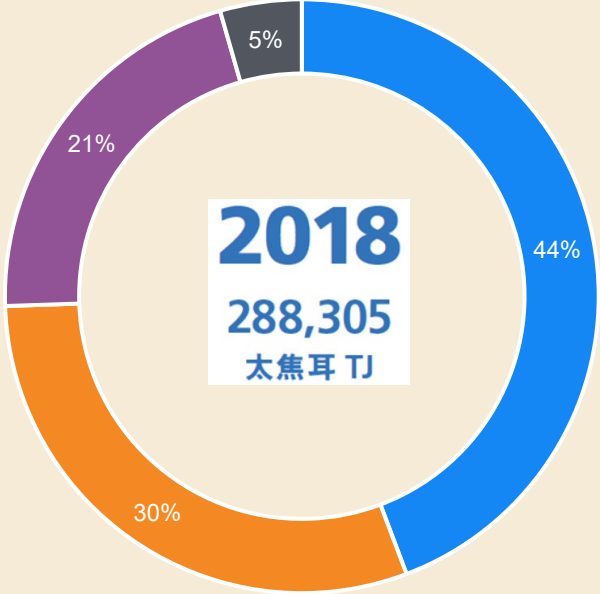
by Fuel Type



■ Electricity   ■ Oil & Coal   ■ Town Gas & LPG

# Hong Kong Energy End-use Data

## by Sector



Commercial Sector 44%

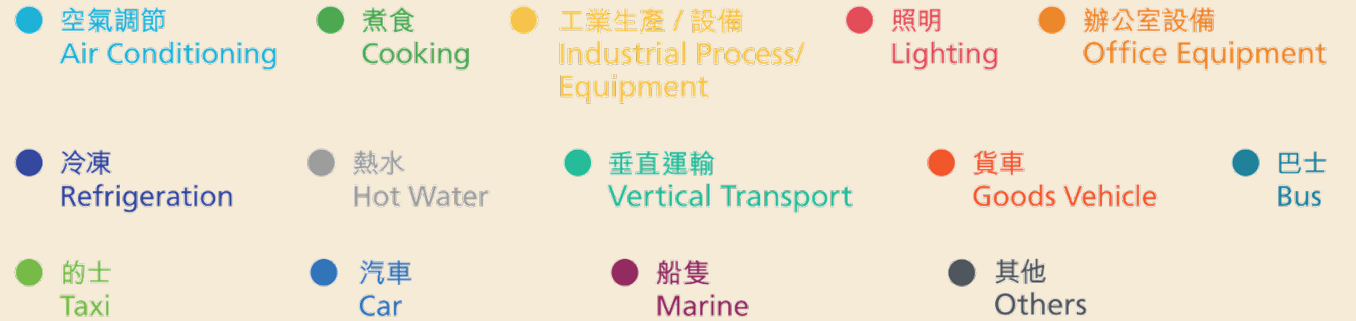
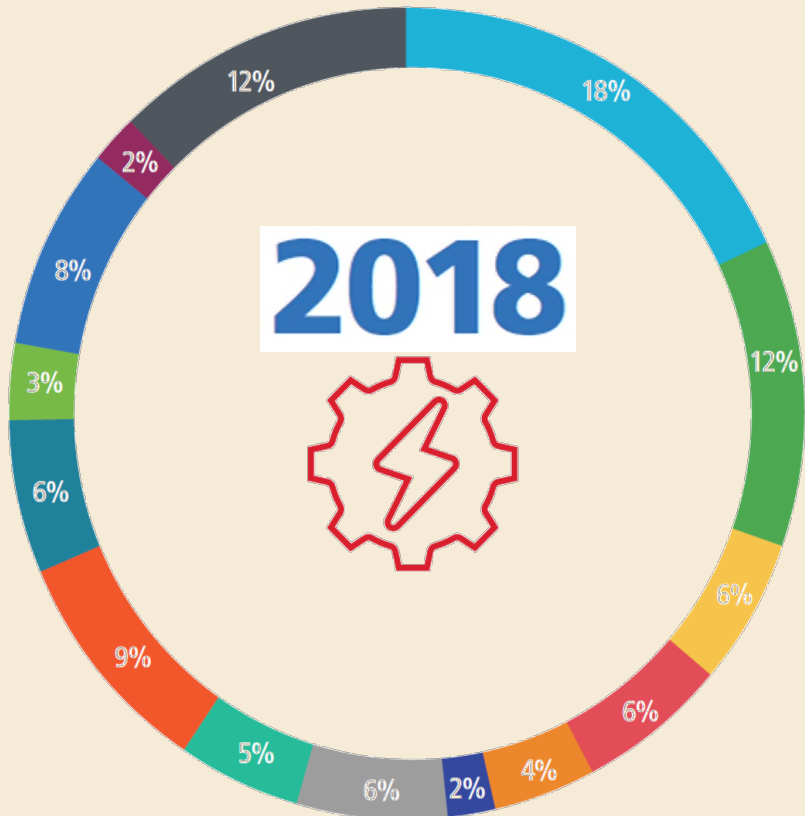
Transport Sector 30%

Residential Sector 21%

Industrial Sector 5%

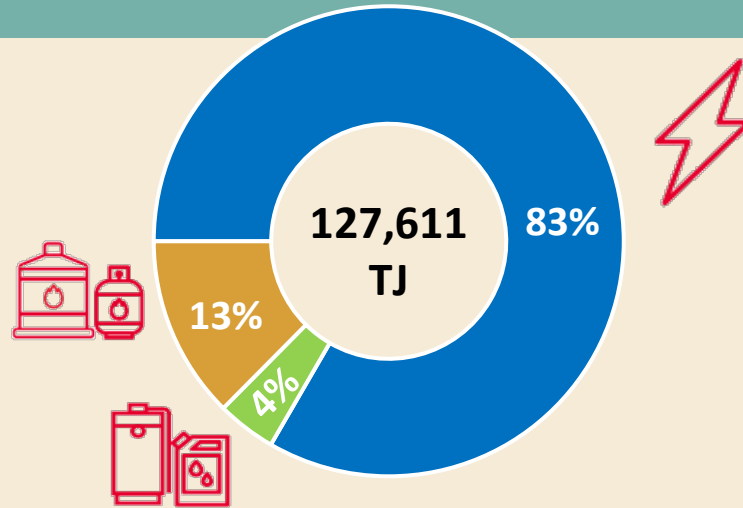
# Hong Kong Energy End-use Data

## by End-use

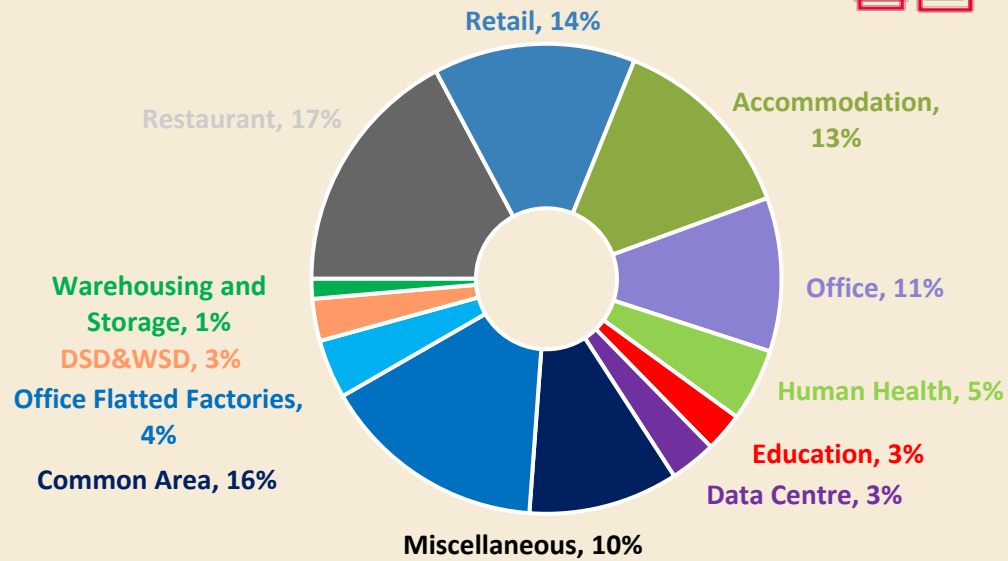


# Commercial Sector

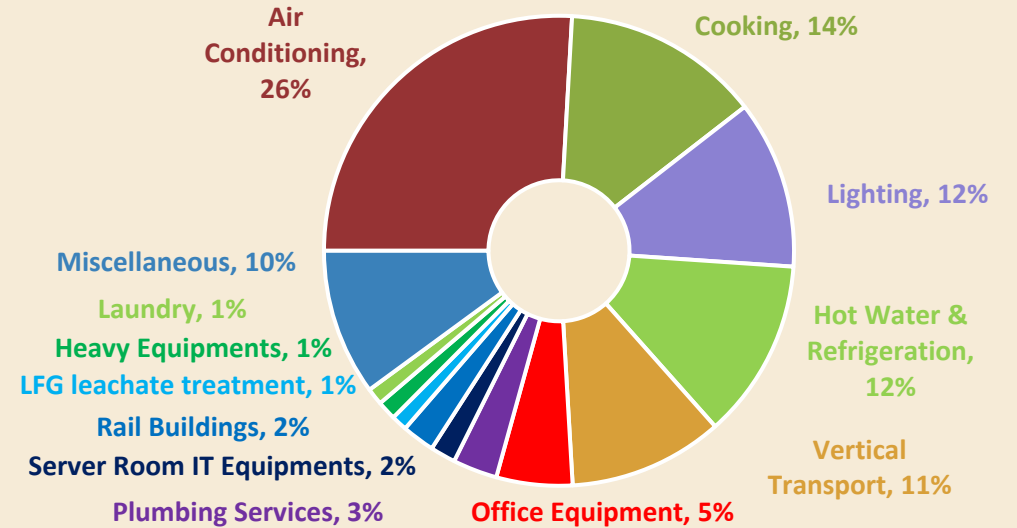
## Fuels



## Segments

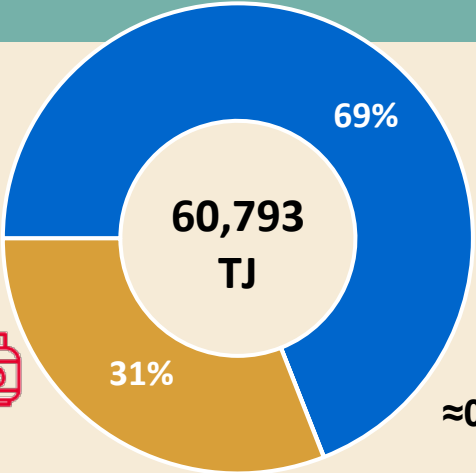


## End-uses

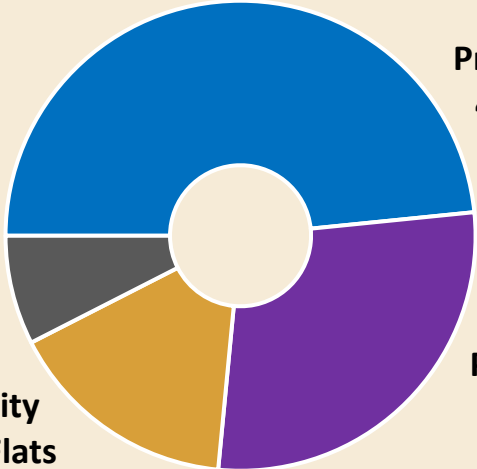


# Residential Sector

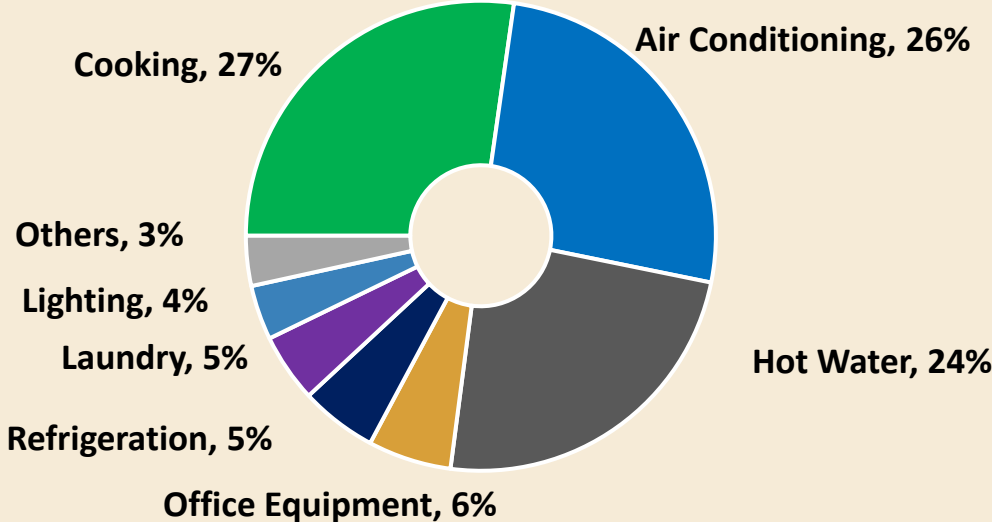
Fuels



Segments



End-uses





# III. Case Study: Tracking of Energy Performance

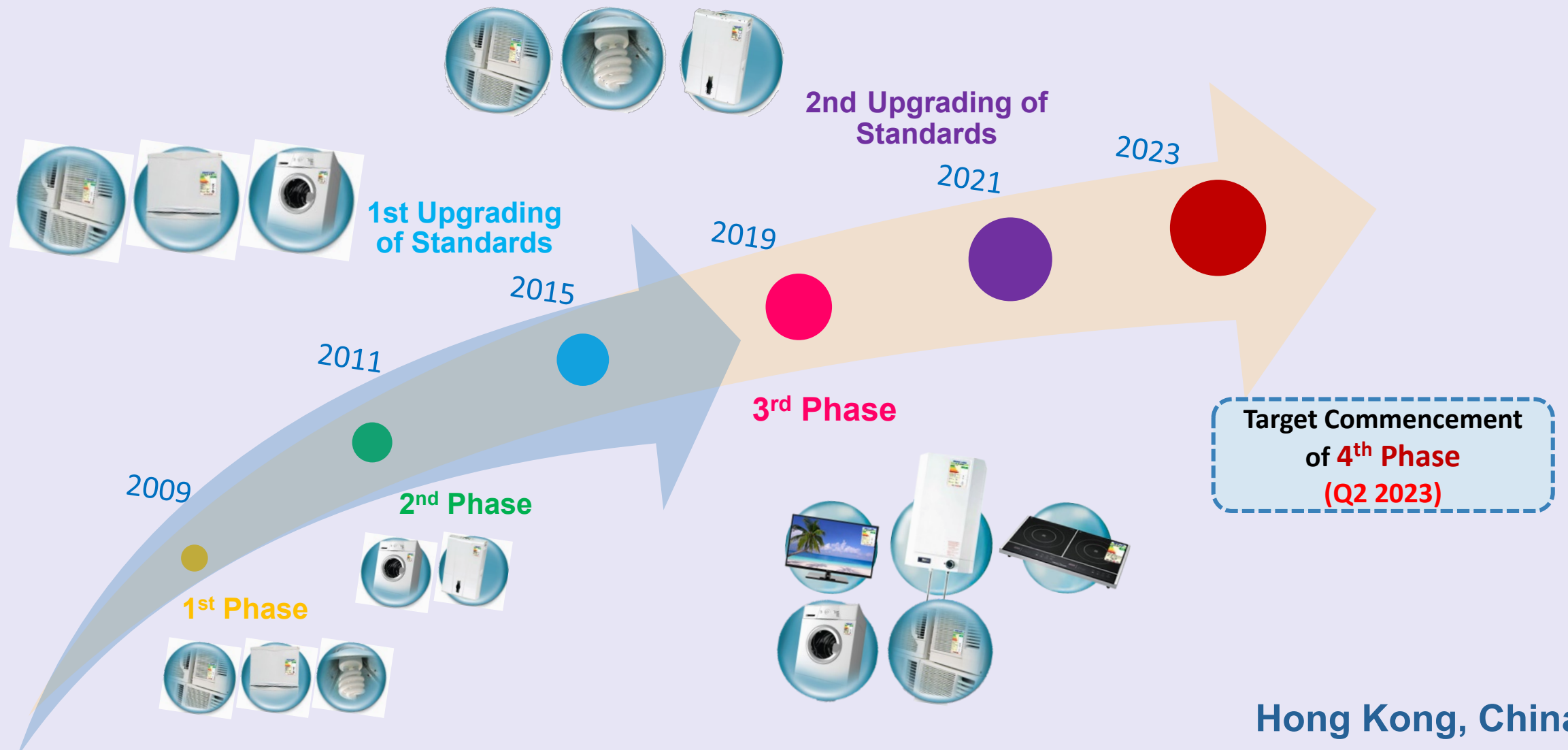
## 1. MEELS Programme

# Case Study

- Mandatory Energy Efficiency Labelling Scheme (MEELS)

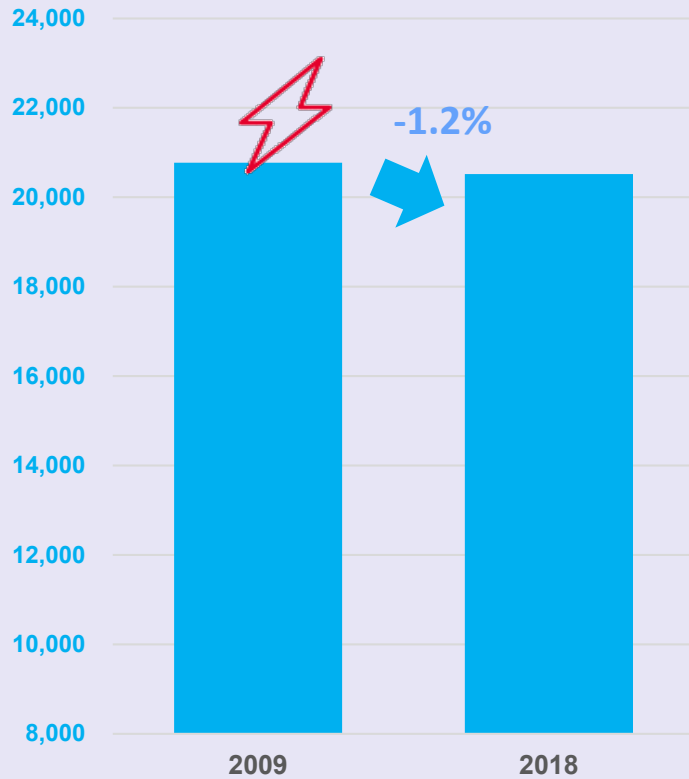


# Mandatory Energy Efficiency Labelling Scheme (MEEELS)

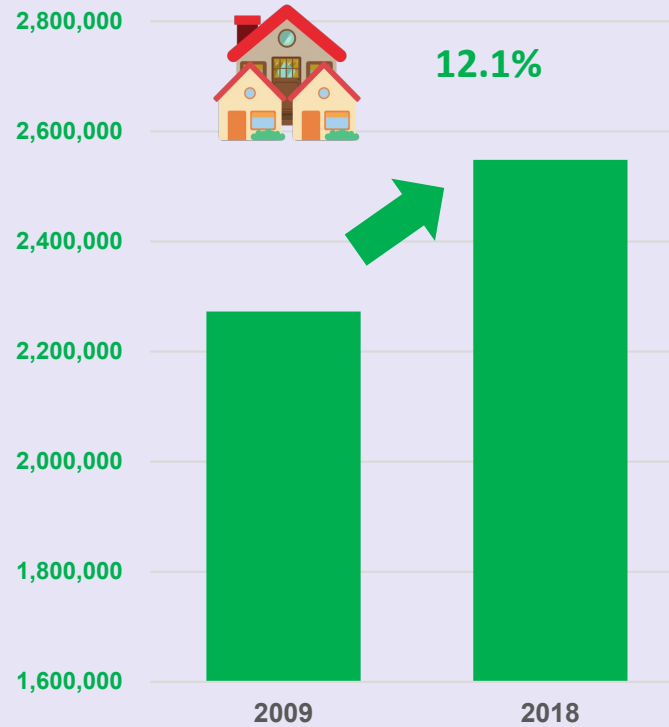


# Electricity Consumption of MEELS Appliances vs Household Number

MEELS Appliances Consumption (TJ)

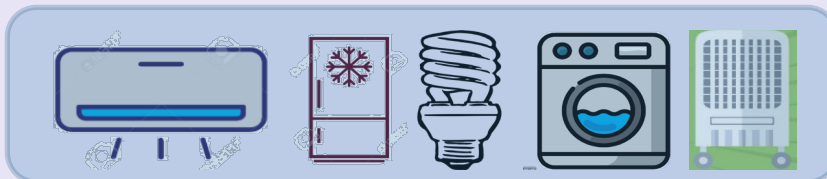
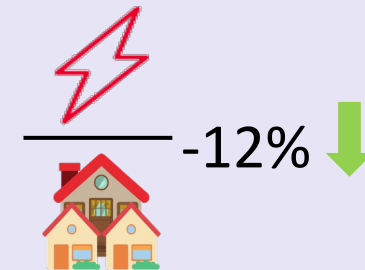


Household Number



## Findings:

1. Electricity consumption of five appliances under MEELS programme decrease slightly by 1.2%
2. Appliance consumption per household decreased substantially by around 12%



# THANK YOU

## *Hong Kong Energy End-use Data (HKEEUD)*

[https://www.emsd.gov.hk/en/energy\\_efficiency/energy\\_end\\_use\\_data\\_and\\_consumption\\_indicators/hong\\_kong\\_energy\\_end\\_use\\_data/data/index.html](https://www.emsd.gov.hk/en/energy_efficiency/energy_end_use_data_and_consumption_indicators/hong_kong_energy_end_use_data/data/index.html)

