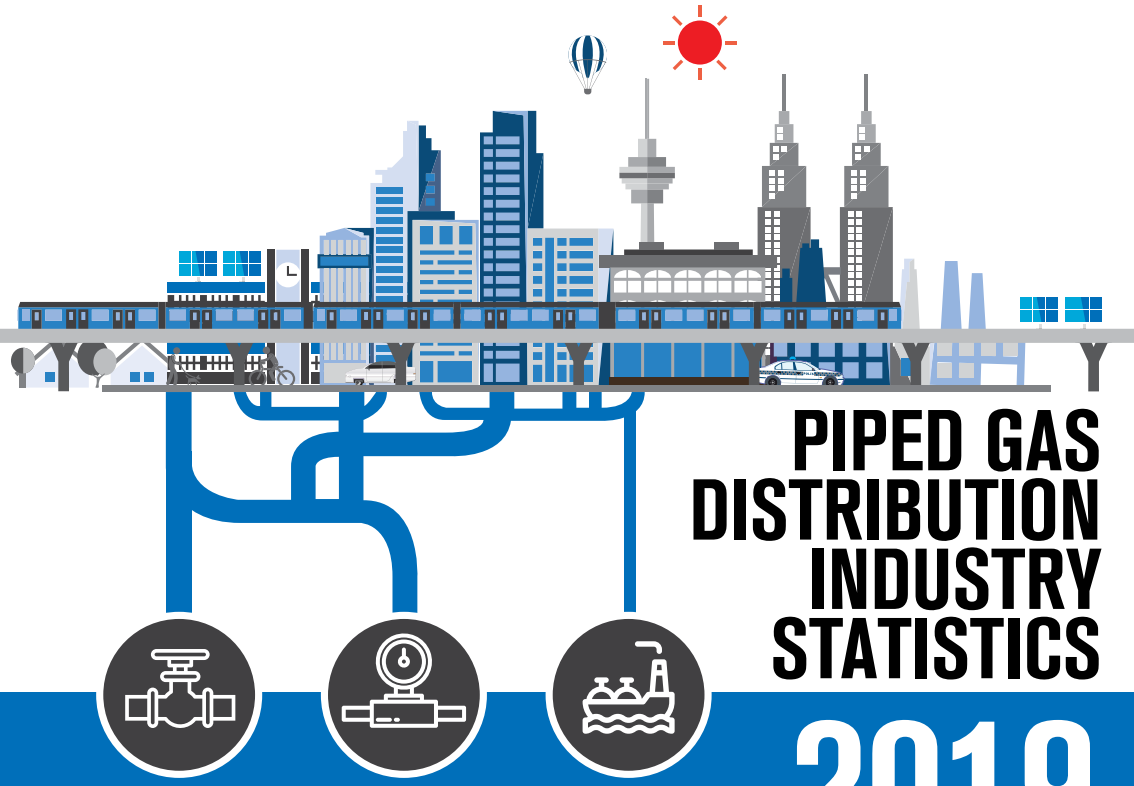
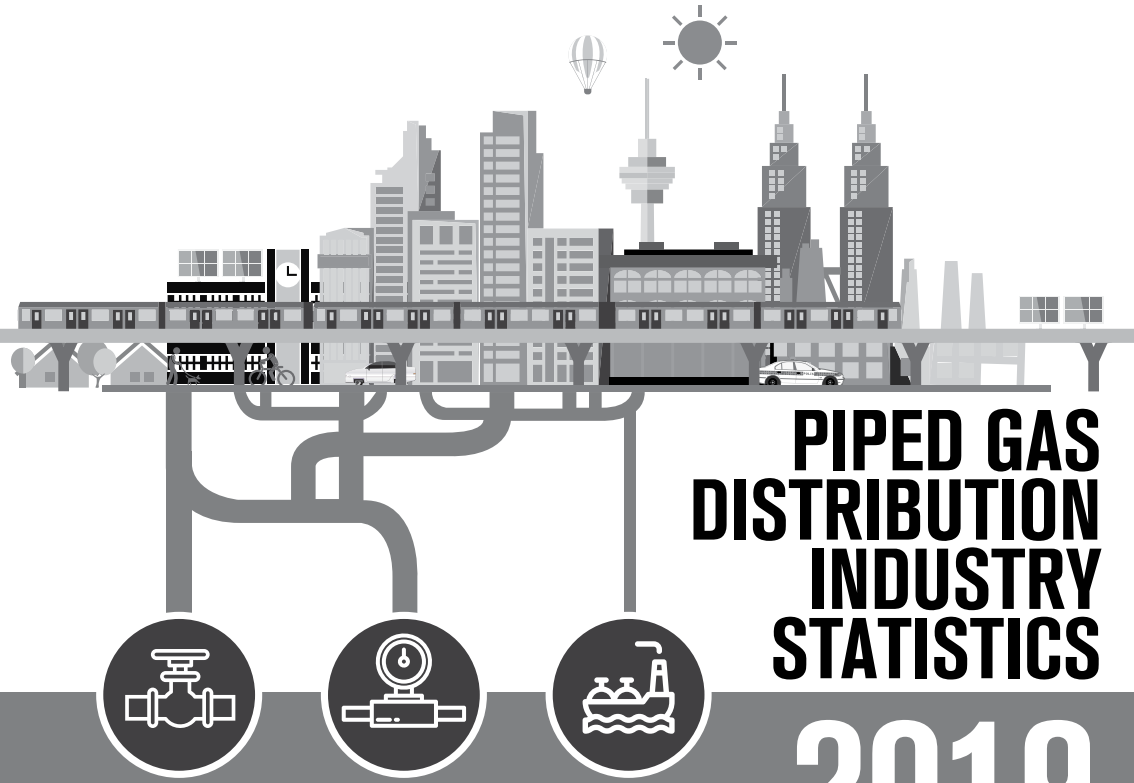
Suruhanjaya Tenaga
Energy Commission



PIPED GAS DISTRIBUTION INDUSTRY STATISTICS

2019

Be Energy smart



PIPED GAS DISTRIBUTION INDUSTRY STATISTICS

2019

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PREFACE

The Energy Commission was established on 1 May 2001, under the Energy Commission Act 2001. The Commission became fully operational in 2002 and is responsible for regulating the electricity and piped gas supply industries in Peninsular Malaysia and Sabah, delicately balancing the priorities of energy providers and the needs of consumers. The Commission is committed in ensuring reliable, safe and cost effective supply of electricity and piped gas to all its consumers.

The Commission also acts as the focal point for energy data and statistics in Malaysia, therefore the publication of Piped Gas Distribution Industry Statistics, amongst other publications falls under the responsibility of the Commission.

1

BACKGROUND

1 BACKGROUND

1.1 GAS SUPPLY ACT 1993

The Government introduced the Gas Supply Act 1993 (Act 501) and Gas Supply Regulations 1997 to regulate piped gas supply and utilisation activities. The main objective is to protect the interests of the consumers and the public who are affected by the supply activities whilst at the same time ensuring continued viability of the gas supply businesses. Act 501 prescribes the administrative and technical standards in the aspects of safety, reliability, economy, efficiency and quality.

In Act 501, gas is defined as Natural Gas (NG), Liquefied Natural Gas (LNG) or Liquefied Petroleum Gas (LPG). NG means hydrocarbon gas mixture consisting primarily of methane, LNG gas means natural gas in its liquefied state and LPG comprises a mixture of hydrocarbon gases which are primarily propane and butane at various proportions and stored in liquid form. Other types of gases, such as oxygen, nitrogen and acetylene used in the industrial sector are not covered by Act 501.

The act shall apply to delivery of gas in relation to LNG from the connection flange of the loading arm at the regasification terminal, NG received from a gas processing plant or an onshore gas terminal, NG imported into Malaysia through pipelines excluding pipelines upstream of a gas processing plant or an onshore gas terminal, from the international border to the transmission or distribution pipelines, or a piping system and to any gas appliance in the premises of a consumer, and from the filling connection of a storage tank or cylinder specifically used for reticulation or delivery of gas to any gas appliance in the premises of a consumer. Presently, Act 501 is only applicable in the Peninsula and Sabah.

1.2 FUNCTIONS OF THE ENERGY COMMISSION UNDER ACT 501

1.2.1. To ensure a licensee satisfies all reasonable demands for gas through pipelines.
1.2.2. To ensure a licensee could finance the provision of gas supply services.
1.2.3. To protect the interests of consumers of gas supplied through pipelines in respect of:
   i. The prices charged and the other terms of supply.
   ii. The continuity of supply.
   iii. The quality of the gas supply services provided.
1.2.4. To regulate the composition, pressure, purity and volume of gas supplied through pipelines.
1.2.5. To promote efficiency and economy to supply gas through pipelines and the efficient use of gas supplied through pipelines.
1.2.6. To enable Third Party Access (TPA) and promote healthy competition in the gas market which would increase the market efficiency of the gas market.
1.2.7. To protect the public from dangers arising from the distribution of gas through pipelines or from the use of gas supplied through pipelines.
1.2.8. To enable persons to compete effectively in the supply of gas through pipelines.
1.2.9. To investigate any accident or fire involving any gas pipelines or installations.

1.3 GAS SPECIFICATIONS

1.3.1 PENINSULAR MALAYSIA

Table 1: Average Composition of Natural Gas Supplied by Gas Malaysia Berhad

Gas Composition	MT-JDA Gas [Mole (%)]	Kerteh [Mole (%)]
CH_4	84.72	94.56
C_2H_6	4.86	2.41
C_3H_8	1.49	0.36
iC_4H_{10}	0.06	0.09
nC_4H_{10}	0.04	0.06
$iC_5H_{12}+$	0.06	0.02
$nC_5H_{12}+$	0.02	0.01
$C_6H_{14}+$	0.02	0.02
CO_2	7.00	1.47
N_2	1.75	1.00

Table 2: Typical Characteristics of Natural Gas Supplied by Gas Malaysia Berhad

Natural Gas Property	MT-JDA	Kerteh
Specific Gravity	0.67	0.59
Gross Calorific Value, [kcal/Sm3]	36.90	37.93
Burning Velocity, [m/s]	N/A	N/A
Upper Flammability Limit, [%]	15.4	15.4
Lower Flammability Limit, [%]	4.5	4.5
Auto-ignition Temperature, [°C]	537	537
Theoretical Air Requirement, [m3/m3]	N/A	N/A

Table 3: Average Liquefied Petroleum Gas Composition in the Peninsula

Gas	Mole (%)
C_3H_8	30.0
iC_4H_{10}	35.0
nC_4H_{10}	35.0

Table 4: Typical Liquefied Petroleum Gas Characteristics

Specific Gravity	0.55 @ 15°C; water =1
Gross Calorific Value, [kcal/Sm^3]	28,058
Burning Velocity, [m/s]	0.46
Upper Flammability Limit, [%]	15
Lower Flammability Limit, [%]	5
Auto-ignition Temperature, [°C]	>410
Theoretical Air Requirement, [m^3/m^3]	28.81

1.3.2 SABAH AND LABUAN

Table 5: Average Composition of Natural Gas Supplied by Sabah Energy Corporation

Gas Composition	Mole (%) Kota Kinabalu, Sabah	Mole (%) Labuan
CH_4	92.47	80.99
C_2H_6	3.49	6.11
C_3H_8	1.42	4.19
iC_4H_{10}	0.30	1.12
nC_4H_{10}	0.33	0.39
iC_5H_{12}+	0.14	0.60
nC_5H_{12}+	0.11	0.42
C_6H_{14}+	0.30	0.39
CO_2	1.36	3.44
N_2	0.08	1.29

Table 6: Typical Characteristics of Natural Gas Supplied by Sabah Energy Corporation

NgC	Kota Kinabalu, Sabah	Labuan
Specific Gravity	0.61	0.61
Gross Calorific Value, [kcal/Sm^3]	9,536.58	9,536.58
Burning Velocity, [m/s]	>0.39	>0.39
Upper Flammability Limit, [%]	14.0	14.0
Lower Flammability Limit, [%]	4.0	4.0
Auto-ignition Temperature, [°C]	>630	>630
Theoretical Air Requirement, [m^3/m^3]	9.87	9.87

1.4 GAS DISTRIBUTION SYSTEM

Figure 1: Regions with Natural Gas Distribution Pipeline Networks in the Peninsula

Table 7: Areas with Natural Gas and LPG Supply in the Peninsula by Gas Malaysia Berhad

Type of Gas	Region			
	North	Central	South	East
Natural Gas	Kamunting, Kulim, Parit Buntar, Nibong Tebal, Prai, Kangar, Seri Manjung, Sungai Petani, Sitiawan, Lumut, Tronoh, Padang Terap, Chuping, Kuala Ketil, Kuala Nerang, Padang Terap, Arau, Bukit Minyak, Mak Mandin, Simpang Ampat, Lahat, Meru, Ipoh, Chemor, Klebang, Silibin, Pengkalan, Jelapang, Bemban and Hutan Melintang.	Kuala Lumpur, Petaling Jaya, Batu Caves, Selayang, Shah Alam, Klang, KLIA, Sepang, Salak Tinggi, Puchong, Banting, Nilai, Balakong, Sungai Buloh, Bangi, Dengkil, Kajang, Cheras, Teluk Panglima Garang, Beranang, Bestari Jaya, Jeram, North Port, Bandar Sultan Sulaiman, Pandamaran, Ijok, Seri Kembangan, Semenyih, Kundang, Rawang, West Port, Port Klang, Meru, Subang Jaya, Kapar, Putrajaya, Cyberjaya, Damasara, Subang Jaya, Sepang, Serdang, Enstek, Kelana Jaya dan Pulau Indah.	Pasir Gudang, Tanjung Langsat, Tebrau, Tampoi, Larkin, Plentong, Senai, Kulai, Ayer Hitam, Kluang, Senawang, Cheng, Seremban, Alor Gajah, Ayer Keroh, Lipat Kajang, Tangga Batu, Batu Berendam, Bukit Rambai, Seremban 2, Sendayan, Masai, Pegoh, Yong Peng, Jasin, Sri Gading, Parit Raja, Tongkang Pechah, Kempas, Permas Jaya and Lipat Kajang.	Gebeng, Teluk Kalong, Kamaman, Kerteh, Gambang and Kuantan Port.
LPG	Kangar, Sungai Dua, Bukit Mertajam, Tanjung Tokong, Prai, Ipoh, Setiawan, Teluk Intan, Taiping, Kampar, Alor Setar, Kulim, Jitra, Sungai Petani.	Kuala Lumpur, Ampang, Selayang, Kepong, Cheras,Batu Caves, Mont Kiara, Setapak, Shah Alam, Klang, Puchong, Kajang, Semenyih, , Kuala Selangor, Banting, Puncak Alam, Jenjarom, Seri Kembangan, Rawang, Bandar Baru Bangi, Subang Jaya, Sepang, Damansara and Petaling Jaya.	Johor Bahru, Plentong, Tampoi, Masai, Skudai, Tebrau, Kulai, Nusa Bestari, Bukit Indah, Nusajaya, Iskandar Puteri, Bandaraya Melaka, Peringgit, Alor Gajah, Seremban, Senawang, Nilai, Bahau, Lukut and Kuala Pilah.	Kuantan.

Figure 2: Areas with Natural Gas Supply in Sabah and Labuan

Areas with natural gas supply in Sabah and Labuan are limited to the Kota Kinabalu Industrial Park (KKIP) and Labuan as shown in Figure 2.

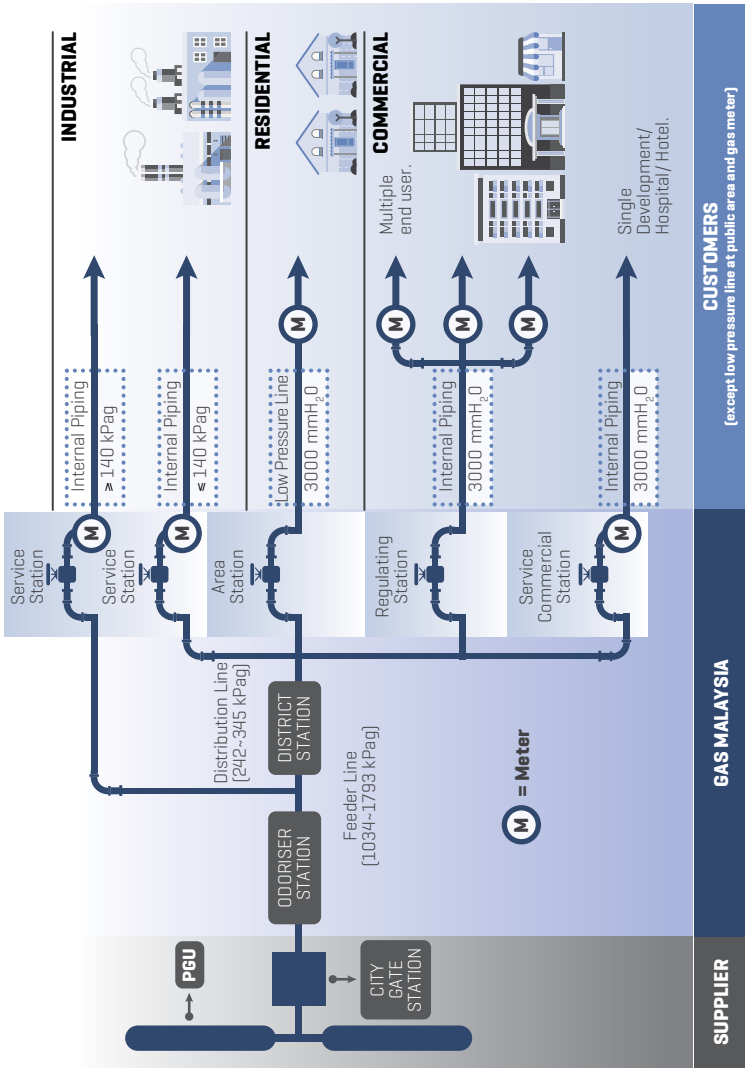


Figure 3: Typical Natural Gas Distribution System

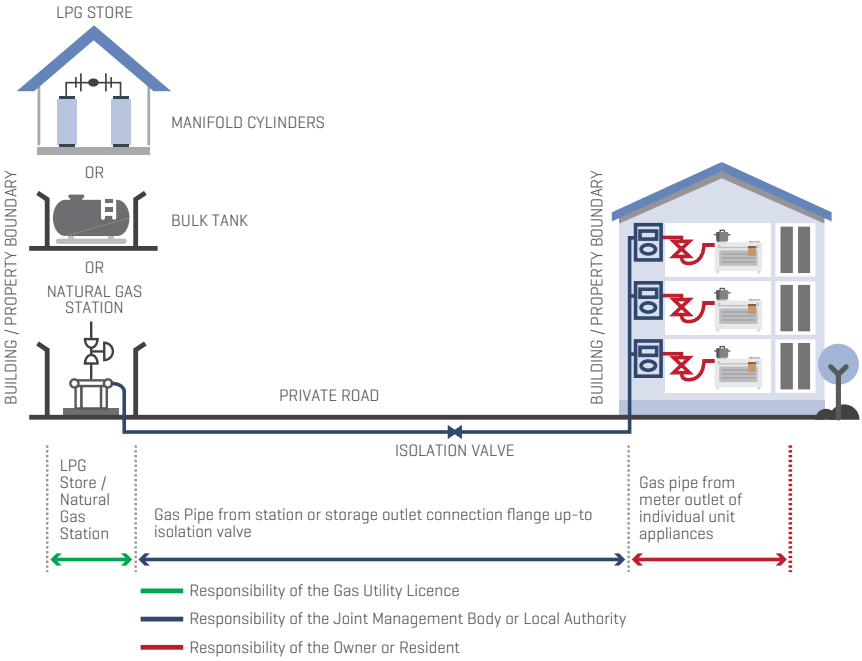


Figure 4: Natural Gas Piping System for Supply to Residential Users

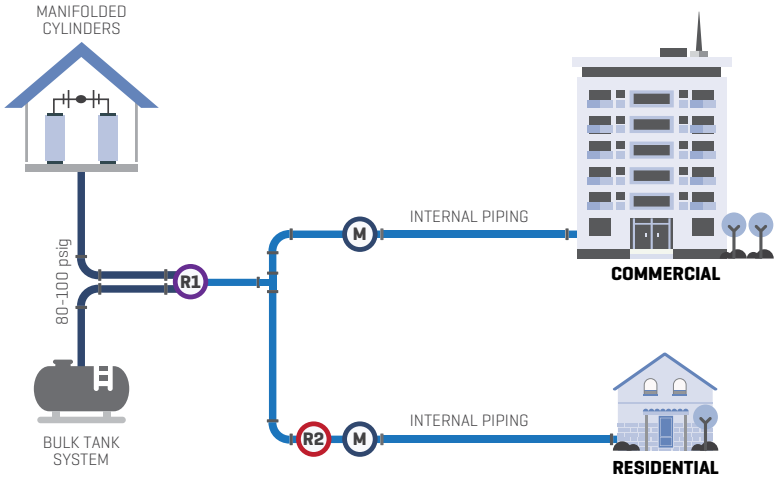
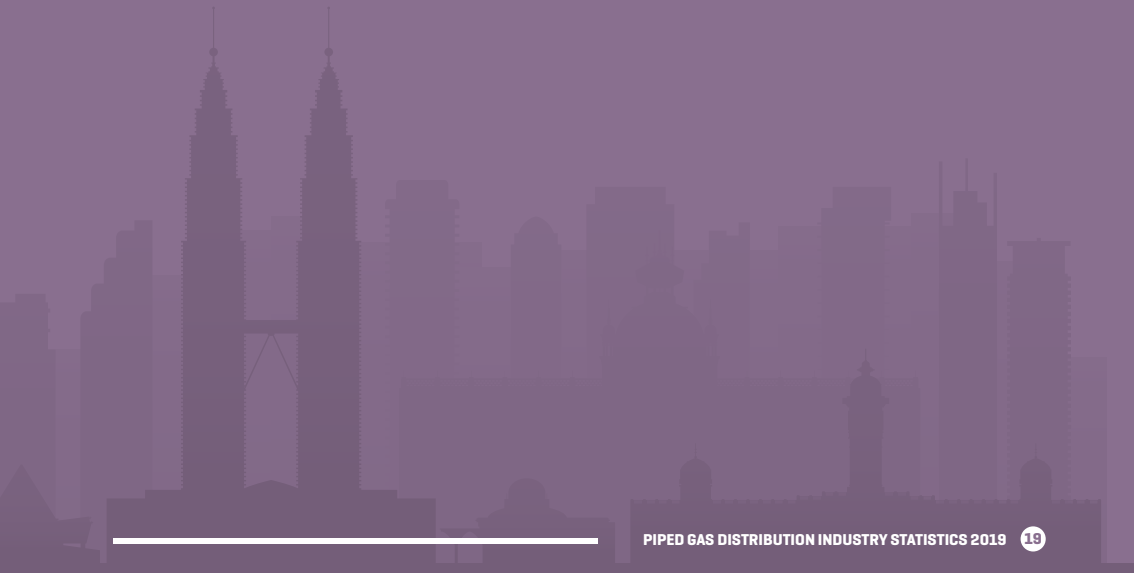


Figure 5: Typical LPG Distribution System

2

PIPED GAS SUPPLY AND CONSUMPTION



2 PIPED GAS SUPPLY AND CONSUMPTION

2.1 NATURAL GAS SUPPLY IN THE PENINSULA AND SABAH

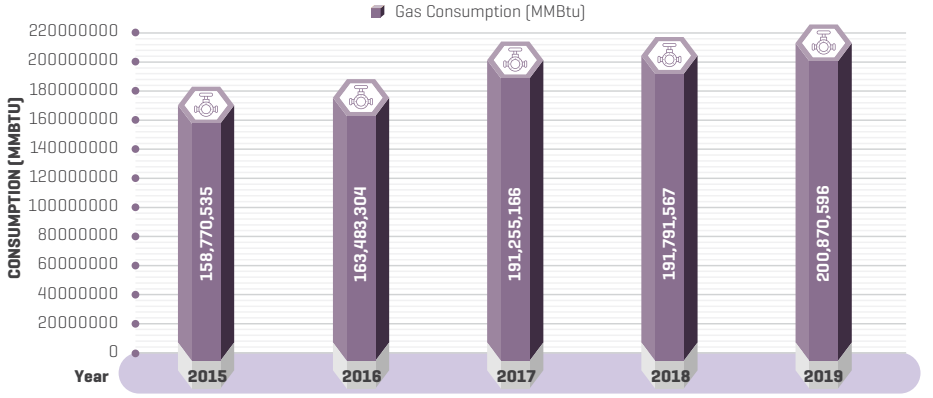


Figure 6: Total Natural Gas Consumption in the Peninsula

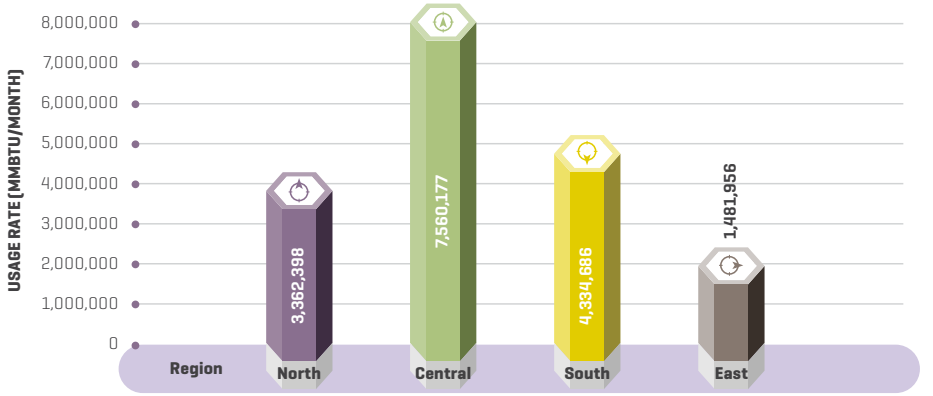


Figure 7: Average Monthly Natural Gas Consumption According to Region in the Peninsula

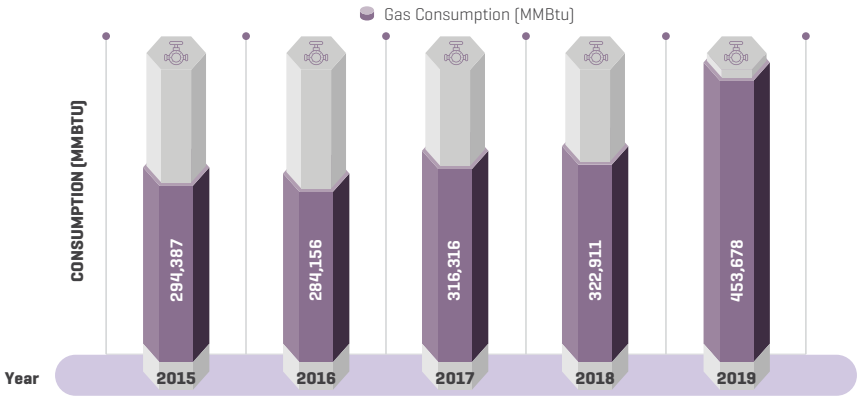


Figure 8: Natural Gas Consumption in Sabah and Labuan

Table 8: Natural Gas Consumption in the Peninsula by Region and Number of Customer

	Year 2019			
Type of Gas	**North**	**Central**	**East**	**South**
Average Monthly Natural Gas Usage Rate (MMBtu/month)	3,362,398	7,560,177	4,334,686	1,481,956
City Gates	13	10	11	6
Industrial Customers	166	478	247	42
Commercial Customers	0	1,054	2	0
Residential Customers	0	12,620	0	0

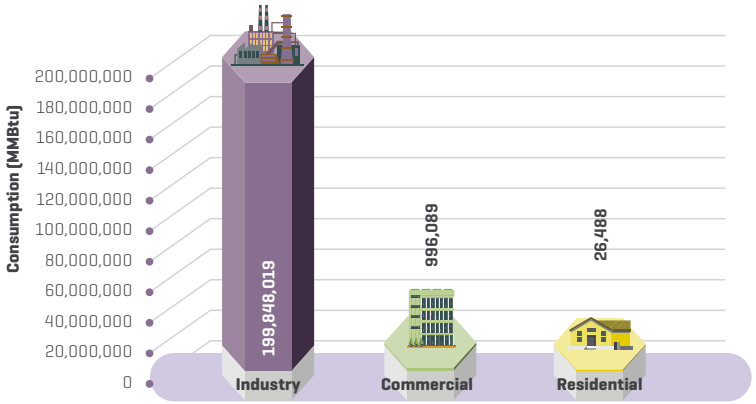


Figure 9: Natural Gas Consumption by User Category in the Peninsula in 2019

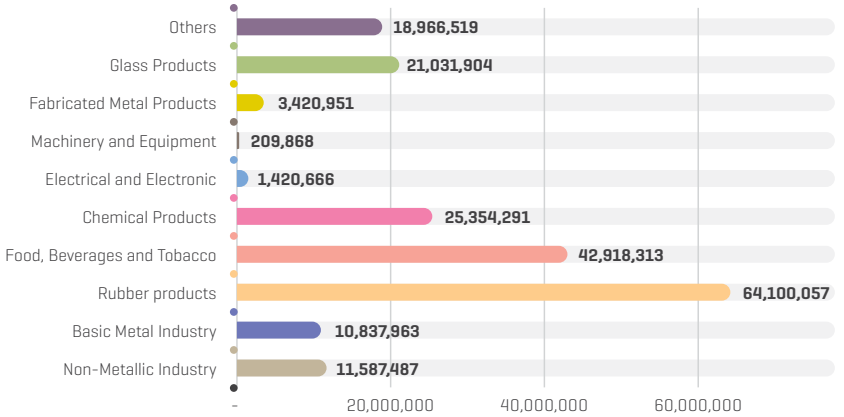


Figure 10: Natural Gas Consumption (MMBtu) by Industry Sub-Sectors in the Peninsula in 2019

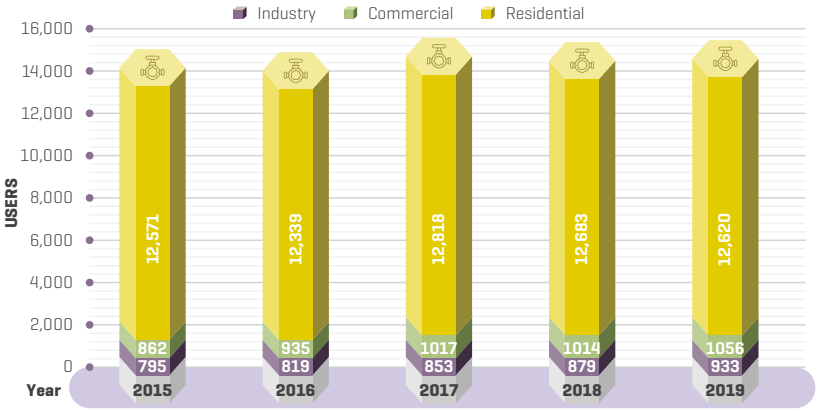


Figure 11: Number of Natural Gas Users in the Peninsula

Figure 12: Number of Natural Gas Users in Sabah and Labuan

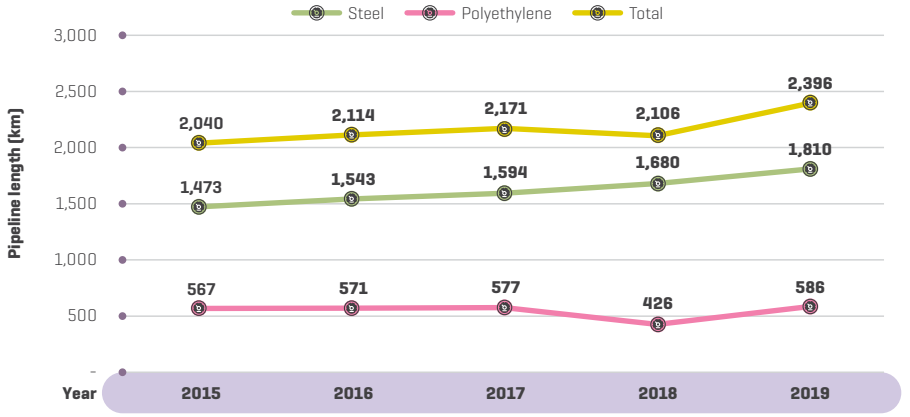


Figure 13: Length of Natural Gas Pipelines in Operation in the Peninsula

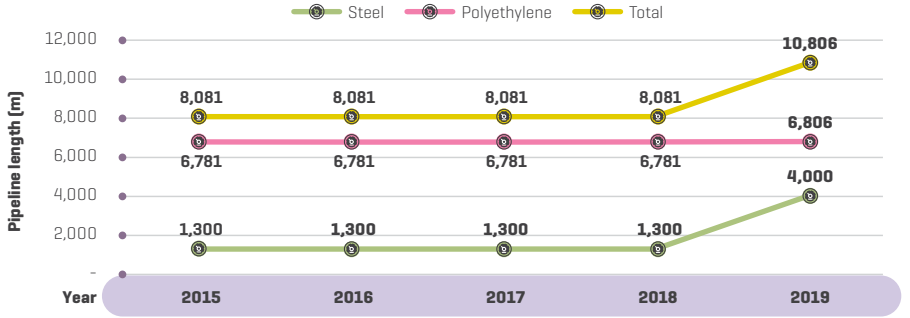


Figure 14: Length of Natural Gas Pipelines in Operation in Sabah

2.2 LIQUEFIED PETROLEUM GAS SUPPLY IN THE PENINSULA

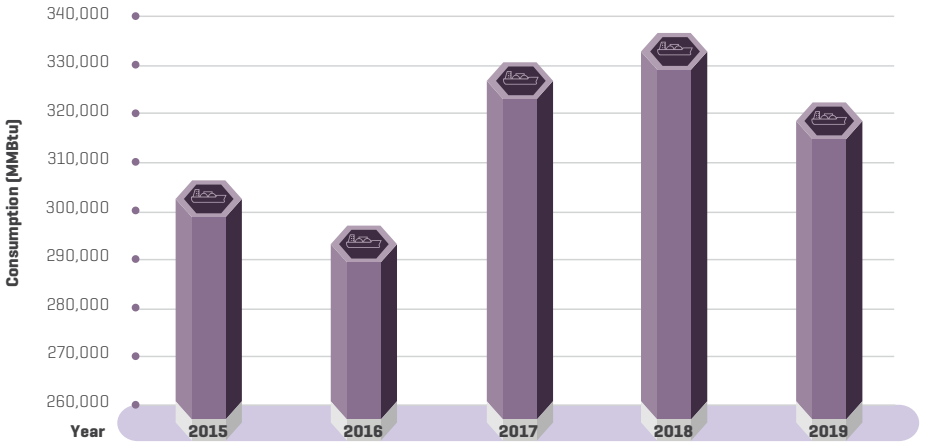


Figure 15: Liquefied Petroleum Gas Consumption in the Peninsula

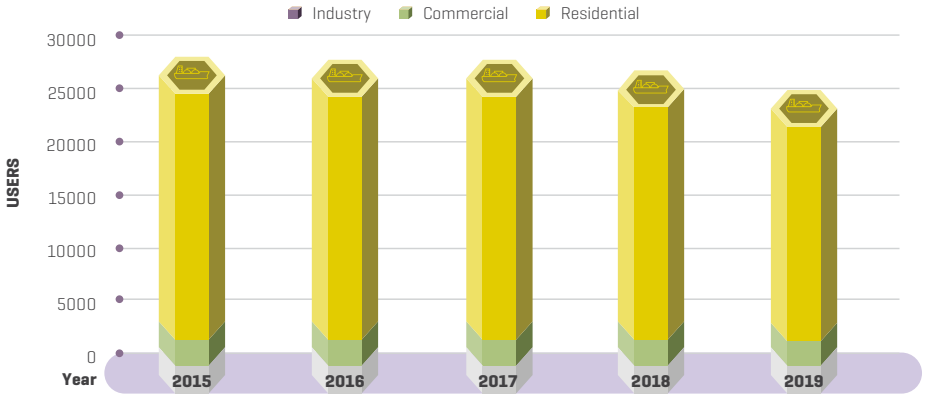


Figure 16: Number of Liquefied Petroleum Gas Users in the Peninsula by Sector

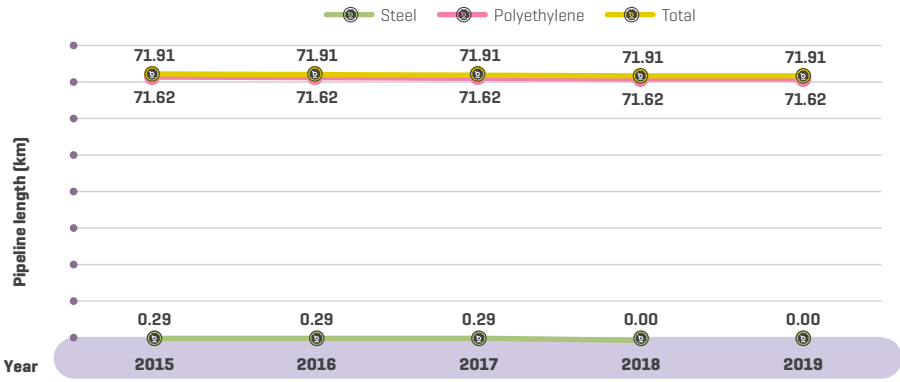


Figure 17: Length of Liquefied Petroleum Gas Piping Systems in the Peninsula

3.0 SUPPLY RELIABILITY AND SERVICE QUALITY

3.1 PERFORMANCE INDICATORS OF GAS MALAYSIA BERHAD

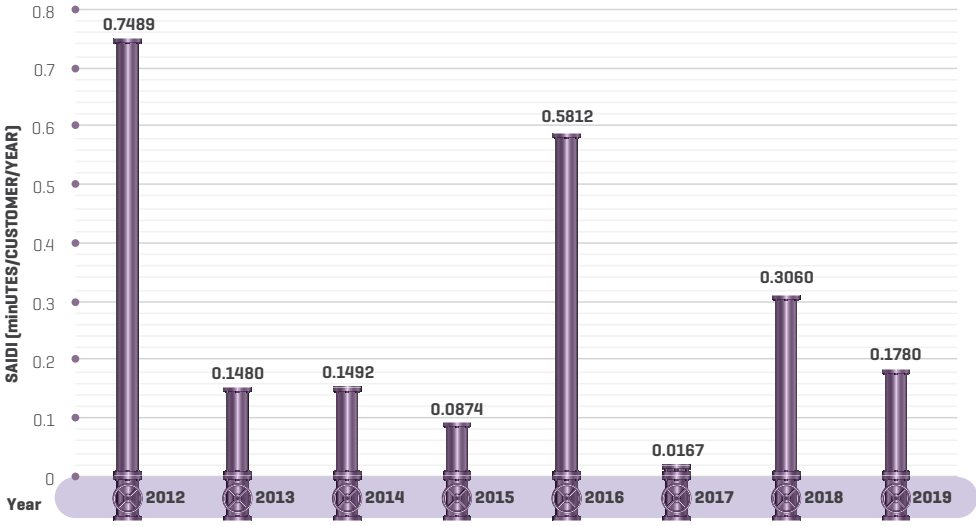


Figure 18: Gas Malaysia Berhad's System Average Interruption Duration Index (SAIDI)

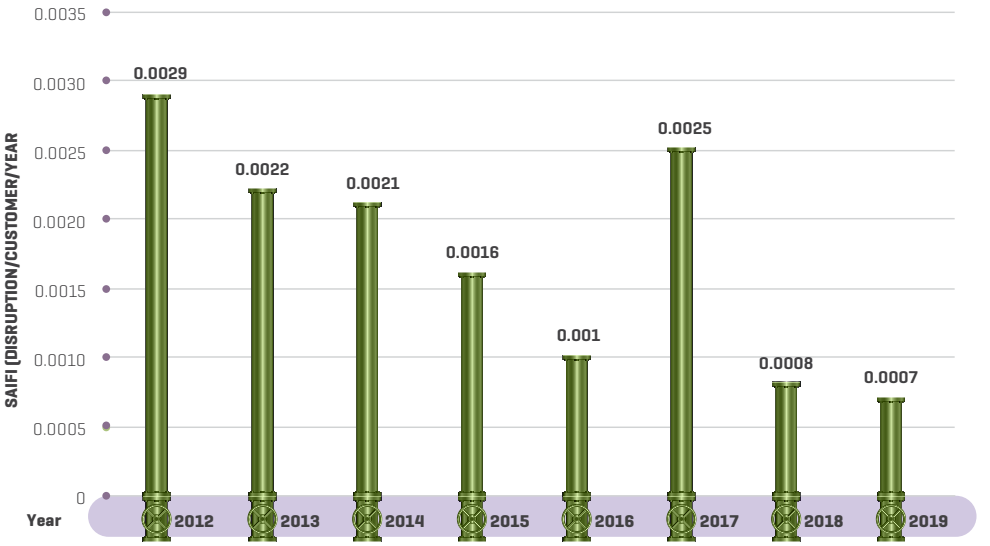


Figure 19: Gas Malaysia Berhad's System Average Interruption Frequency Index (SAIFI)

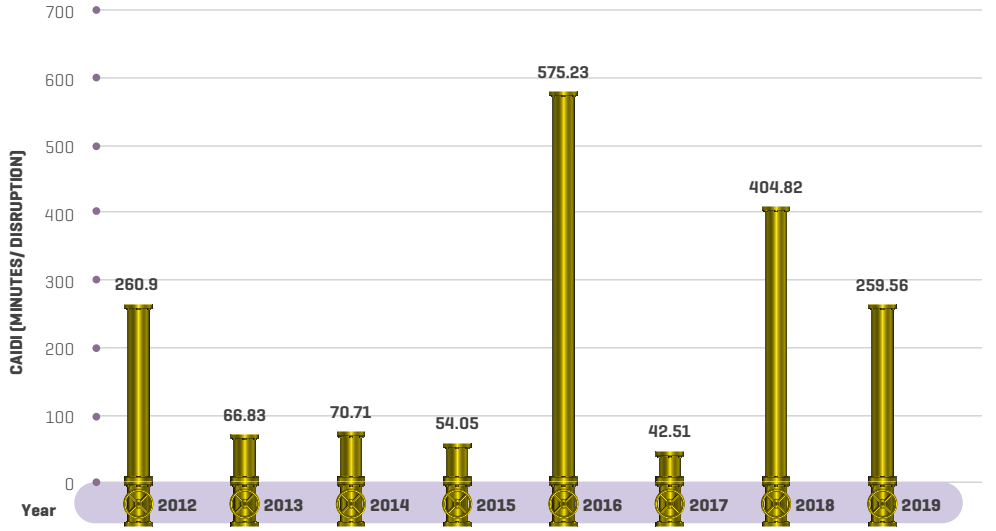


Figure 20: Gas Malaysia Berhad's Customer Average Interruption Duration Index (CAIDI)

Note:

Lower reading of SAID, SAIFI and CAIDI indicates better performance.

3

SUPPLY RELIABILITY AND SERVICE QUALITY

3 SUPPLY RELIABILITY AND SERVICE QUALITY

3.1 GAS MALAYSIA BERHAD CLIENT'S CHARTER PERFORMANCE

Table 9: Complaints

Item	Client's Charter	Complaint Received	Complied to Client's Charter	Percentage of Compliance(%)
Written Complaint	Five (5) working days after complaint is received	0	0	N.A.
Complaint and Inquiry via the Telephone	24 hours after the call is made	1	1	100

Table 10: Bill Payment

Item	Client's Charter	Complaint Received	Complied to Client's Charter	Percentage of Compliance(%)
Bill Accuracy	Five (5) working days	0	0	N.A.

Table 11: Deposit Refund

Refund Type	Customer	Client's Charter	No. of Service Termination	Complied to Client's Charter	Percentage of Compliance(%)
Deposit	Industry	Returned within one (1) month	5	0	N.A.
		Returned within two (2) months		5	100
	Commercial	Returned within one (1) month	0	0	N. A.
		Returned within two (2) months		0	N. A.
	Residential	Returned within two (2) months	1,365	1,312	96

Table 12: Bank Guarantee Refund

Refund Type	Client's Charter	No. of Bank Guarantee	Complied to Client's Charter	Percentage of Compliance(%)
Bank Guarantee	Released within one (1) month	8	2	25
	Released within Two (2) months		6	75

Table 13: Emergency Response

Item	Client's Charter	No. of Call Received	Complied to Client's Charter	Percentage of Compliance(%)
Emergency Response	To send emergency response team within 90 minutes after a call is received	268	268	100

Table 14: Third Party Supervision

Item	Client's Charter	No. of Permits Issued	Complied to Client's Charter	Percentage of Compliance(%)
Third Party Supervision	Written notice at least three (3) days before commencement of work	14,792	14,792	100

Table 15: Identification of Gas Pipeline Location

Item	Client's Charter	No. of Requests for Pipeline Location Information	Complied to Client's Charter	Percentage of Compliance(%)
Identification of Gas Pipeline Location	Four (4) days after application is received	688	688	100

Table 16: Planned Disruptions

Item	Client's Charter	No. of Planned Disruptions	Complied to Client's Charter	Percentage of Compliance(%)
Planned Disruptions	Customer will be notified at least 48 hours before disruption begins	Nil	N.A.	N.A.

Table 17: Replacement of Gas Meters

Item	Client's Charter	No. of Gas Meters Changed	Complied to Client's Charter	Percentage of Compliance(%)
Replacement of Gas Meters	Gas meter will be replaced three (3) days after completion of investigation	38	38	100

3.2 SABAH ENERGY CORPORATION CLIENT'S CHARTER PERFORMANCE

Table 18: Complaints

ITEM	CLIENT'S CHARTER	COMPLAINTS RECEIVED	COMPLIED TO CLIENT'S CHARTER	PERCENTAGE OF COMPLIANCE (%)
WRITTEN COMPLAINT	Five (5) working days after the complaint is received	0	0	100
COMPLAINT AND INQUIRY VIA THE TELEPHONE	24 hours after the call is made	0	0	100

Table 19: Bill Payment

ITEM	CLIENT'S CHARTER	COMPLAINTS RECEIVED	COMPLIED TO CLIENT'S CHARTER	PERCENTAGE OF COMPLIANCE (%)
BILL ACCURACY	Five (5) working days	0	0	100

Table 20: Deposit Refund

REFUND TYPE	CUSTOMER	CLIENT'S CHARTER	NO. OF SERVICE TERMINATIONS	COMPLIED TO CLIENT'S CHARTER	PERCENTAGE OF COMPLIANCE (%)
DEPOSIT	Industry	Returned within one (1) month after service termination	0	0	100

Table 21: Emergency Response

ITEM	CLIENT'S CHARTER	NO. OF CALLS RECEIVED	COMPLIED TO CLIENT'S CHARTER	PERCENTAGE OF COMPLIANCE (%)
EMERGENCY RESPONSE	To send an emergency response team within 45 minutes after a call is received	**0**	**0**	**100**

Table 22: Third Party Supervision

ITEM	CLIENT'S CHARTER	NO. OF PERMITS ISSUED	COMPLIED TO CLIENT'S CHARTER	PERCENTAGE OF COMPLIANCE (%)
THIRD PARTY SUPERVISION	Written notice at least four (4) days before commencement of work	**0**	**N.A.**	**N.A.**

Table 23: Identification of Gas Pipeline Location

ITEM	CLIENT'S CHARTER	NO. OF REQUESTS FOR PIPELINE LOCATION INFORMATION	COMPLIED TO CLIENT'S CHARTER	PERCENTAGE OF COMPLIANCE (%)
IDENTIFICATION OF GAS PIPELINE LOCATION	Four (4) days after application is received	**0**	**0**	**N.A.**

Table 24: Planned Disruptions

ITEM	CLIENT'S CHARTER	NO. OF PLANNED DISRUPTIONS	COMPLIED TO CLIENT'S CHARTER	PERCENTAGE OF COMPLIANCE (%)
PLANNED DISRUPTIONS	Customer will be notified at least 48 hours before disruption begins	**3**	**3**	**100**

Table 25: Replacement of Gas Meters

ITEM	CLIENT'S CHARTER	NO. OF GAS METERS CHANGED	COMPLIED TO CLIENT'S CHARTER	PERCENTAGE OF COMPLIANCE (%)
REPLACEMENT OF GAS METERS	Gas meter will be replaced three (3) days after completion of the investigation	**3**	**3**	**100**

4

NATURAL GAS TARIFF AND LIQUEFIED PETROLEUM GAS PRICES

4 NATURAL GAS TARIFF AND LIQUEFIED PETROLEUM GAS PRICES

4.1 NATURAL GAS PRICES TO GAS UTILITY LICENSEE IN THE PENINSULA

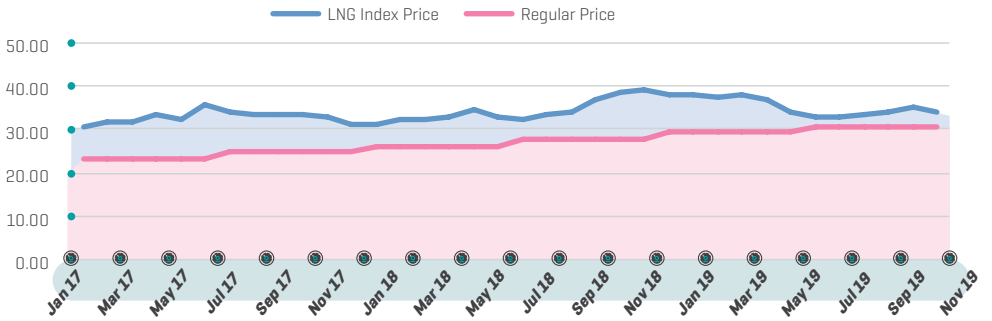


Figure 21: Natural Gas Prices to Gas Utility License in the Peninsula, 2017-2019

4.2 NATURAL GAS TARIFF BY CATEGORY IN THE PENINSULA, 2017-2019

Table 26: Natural Gas Tariff in the Peninsula, 2017

Tarif Category	User Category	Range of Gas Consumption (MMBtu)	Tarif	
			Jan 2017 - Jun 2017	Jul 2017 - Dec 2017
A	Domestic User	0	19.26	18.64
B	Commercial	0 - 600	24.86	24.52
C	Commercial and Industrial	601 - 5000	24.99	24.66
D	Industrial	5001 - 50,000	25.24	24.92
E	Industrial	50,001 - 200,000	26.33	26.07
F	Industrial	200,001 - 750,000	26.33	26.07
L	Industrial	750,000 and above	27.21	26.99
Average (RM/MMBtu)			**26.71**	**26.46**

Table 27: Natural Gas Tariff in the Peninsula, 2018

Tarif Category	User Category	Range of Gas Consumption (MMBtu)	Tarif	
			Jan 2018 - Jun 2018	Jul 2018 - Dec 2018
A	Domestic User	0	23.92	23.80
B	Commercial	0 - 600	30.40	30.50
C	Commercial and Industrial	601 - 5000	30.55	30.65
D	Industrial	5001 - 50,000	30.84	30.96
E	Industrial	50,001 - 200,000	32.10	32.26
F	Industrial	200,001 - 750,000	32.10	32.26
L	Industrial	750,000 and above	33.12	33.32
Average (RM/MMBtu)			**32.52**	**32.69**

Table 28: Natural Gas Tariff in the Peninsula, 2019

Tarif Category	User Category	Range of Gas Consumption (MMBtu)	Tarif	
			Jan 2019 - Jun 2019	Jul 2019 - Dec 2019
A	Domestic User	0	23.72	25.44
B	Commercial	0 - 600	30.58	32.32
C	Commercial and Industrial	601 - 5000	30.74	32.48
D	Industrial	5001 - 50,000	31.04	32.78
E	Industrial	50,001 - 200,000	32.38	34.12
F	Industrial	200,001 - 750,000	32.38	34.12
L	Industrial	750,000 and above	33.46	35.20
Average (RM/MMBtu)			**32.92**	**34.66**

4.3 NATURAL GAS PRICES IN THE PENINSULA

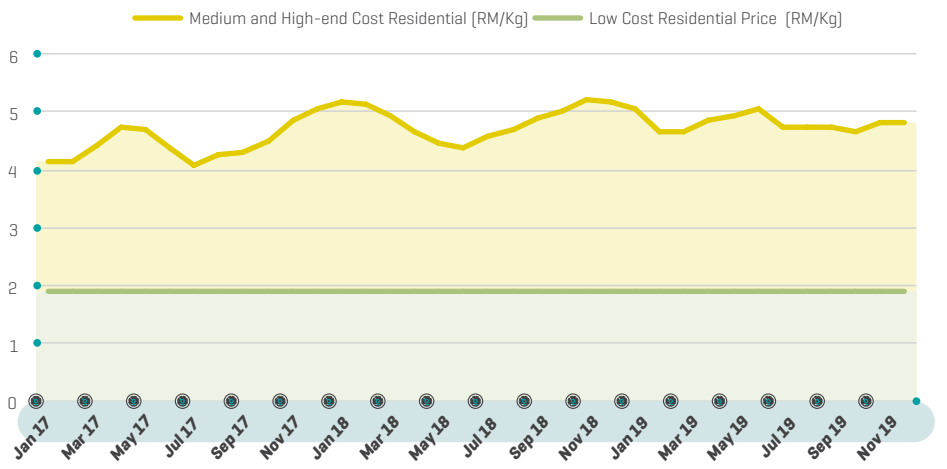


Figure 22: Natural Gas Tariff in the Peninsula, 2019

4.4 NATURAL GAS PRICES IN SABAH AND LABUAN

Prices of natural gas supplied in Sabah and Labuan are based on the *Gas Sales and Purchase Agreement* signed by the licensee (SEC) and also based on the principle of willing buyer willing seller without the interventation of the Government.

5

FINANCIAL PERFORMANCE OF GAS UTILITY LICENSEE IN THE PENINSULA

5 FINANCIAL PERFORMANCE OF GAS UTILITY LICENSEE IN THE PENINSULA

Key Financial Ratios (%) 2017

	Formula	Group	Company
Formula	Group	Company	24.86
Return on Fixed Asset	Net Profit / (Non Current Asset - Accumulate Depreciation)	15.18%	14.74%
Return on Equity	Net Profit / Shareholder's Equity	18.48%	17.94%

Source: Gas Malaysia Berhad 2017 Annual Report

Key Financial Ratios (%) 2018

	Formula	Group	Company
Return on Sales	Operating Profit / Net Sales	3.77%	3.79%
Return on Fixed Asset	Net Profit / (Non Current Asset - Accumulate Depreciation)	13.21%	12.72%
Return on Equity	Net Income / Shareholder's Equity	17.61%	17.13%

Source: Gas Malaysia Berhad 2019 Annual Report

Key Financial Ratios (%) 2019

	Formula	Group	Company
Return on Sales	Operating Profit / Net Sales	N/A	3.1 %
Return on Fixed Asset	Net Profit / (Non Current Asset - Accumulate Depreciation)	N/A	12.40 %
Return on Equity	Net Income / Shareholder's Equity	N/A	16.40 %

Source: Gas Malaysia Berhad 2018 Annual Report

Note:
Operating profit = Operating Revenue – Cost of Goods (COGS) – Operating Expenses
Net Sale = sum of a companys gross sales minus its returns, allowances, and discounts

6

GAS LICENSEES

6 GAS LICENSEES

6.1 GAS UTILITY LICENCE

Table 29: List of Licensees

Type of Gas	Licensee	Effective Date	Validity
Natural Gas	Gas Malaysia Berhad	1 September 1998	30 Years
LPG	Gas Malaysia Berhad	15 December 2000	20 Years
Natural Gas	Sabah Energy Corporation	1 September 1998	30 Years

6.2 PRIVATE GAS LICENCE

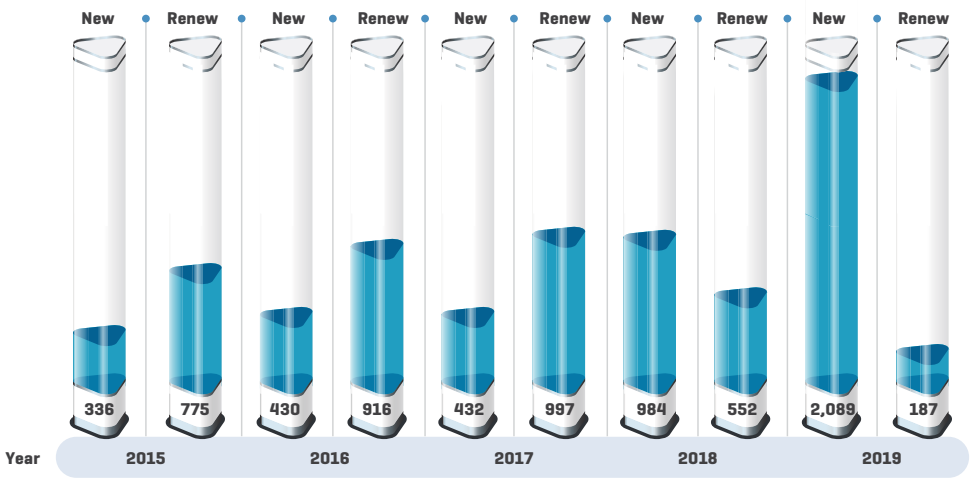
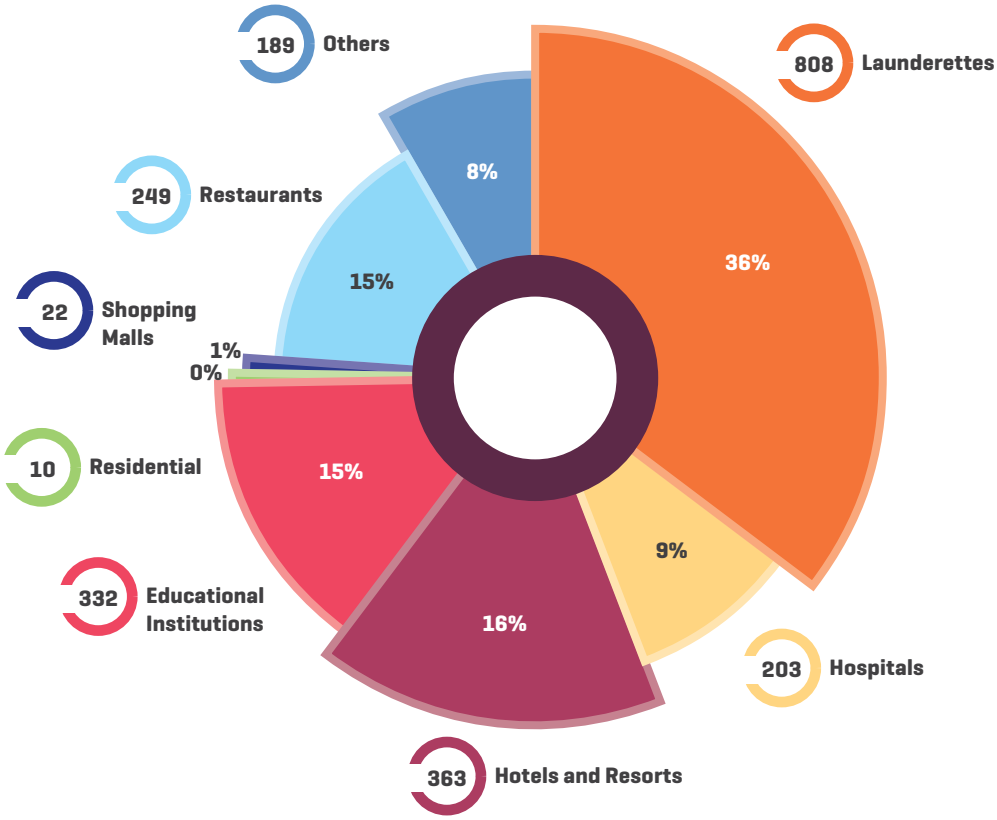


Figure 23: Number of Private Gas Licenses from 2015-2019



Total of 2,176 Private Gas Licenses in 2019.

Figure 24: Number of Private Gas Licenses by User Category in 2019

7

GAS RETICULATION SYSTEM APPROVALS

7 GAS RETICULATION SYSTEM APPROVALS

7.1 ISSUANCE OF APPROVAL TO INSTALL (ATI) AND APPROVAL TO OPERATE (ATO)

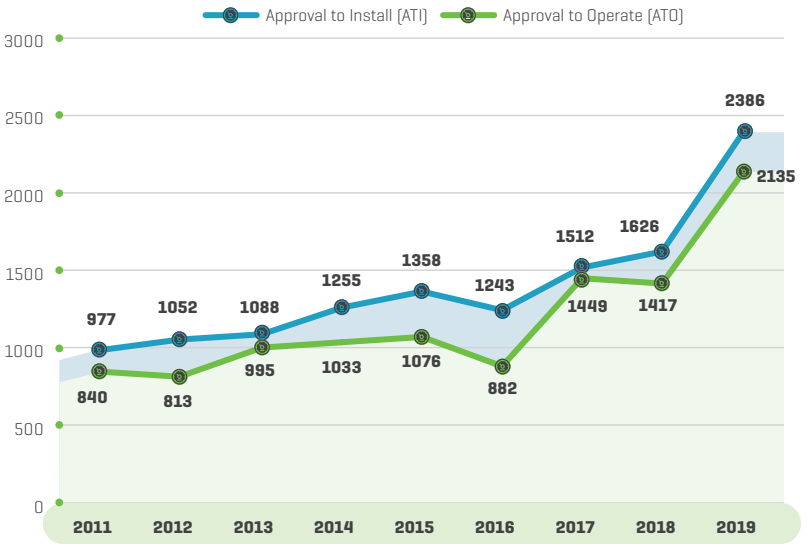


Figure 25: ATI and ATO Issued from 2011 to 2019

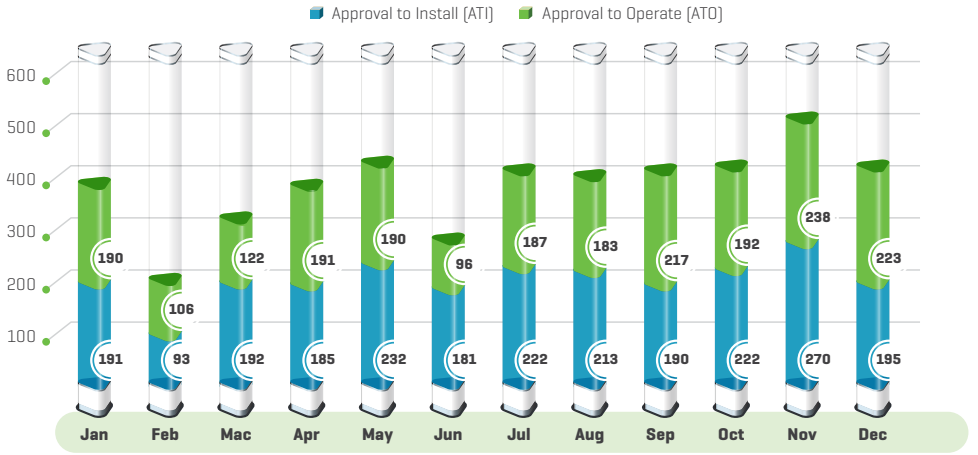


Figure 26: ATI and ATO Issued in 2019

7.2 ISSUANCE OF ATI AND ATO FOR LAUNDERATTE

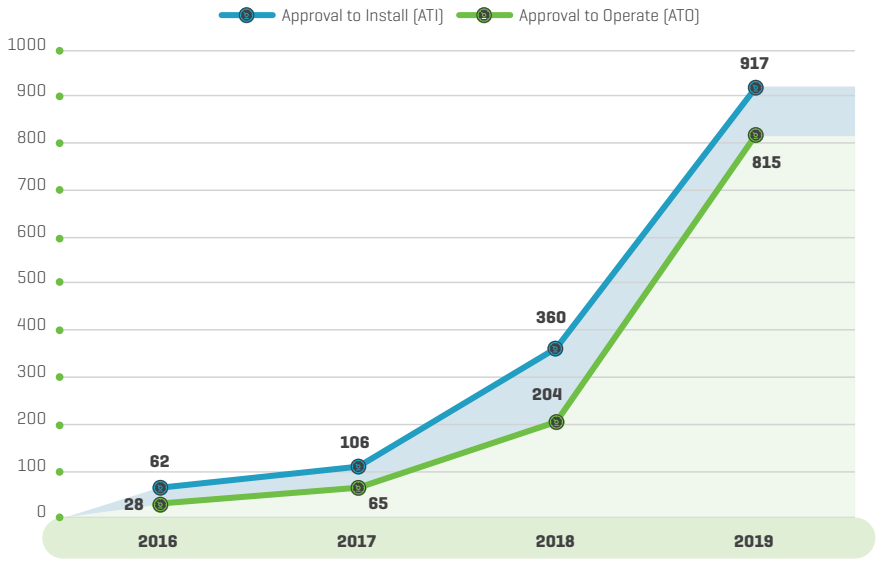
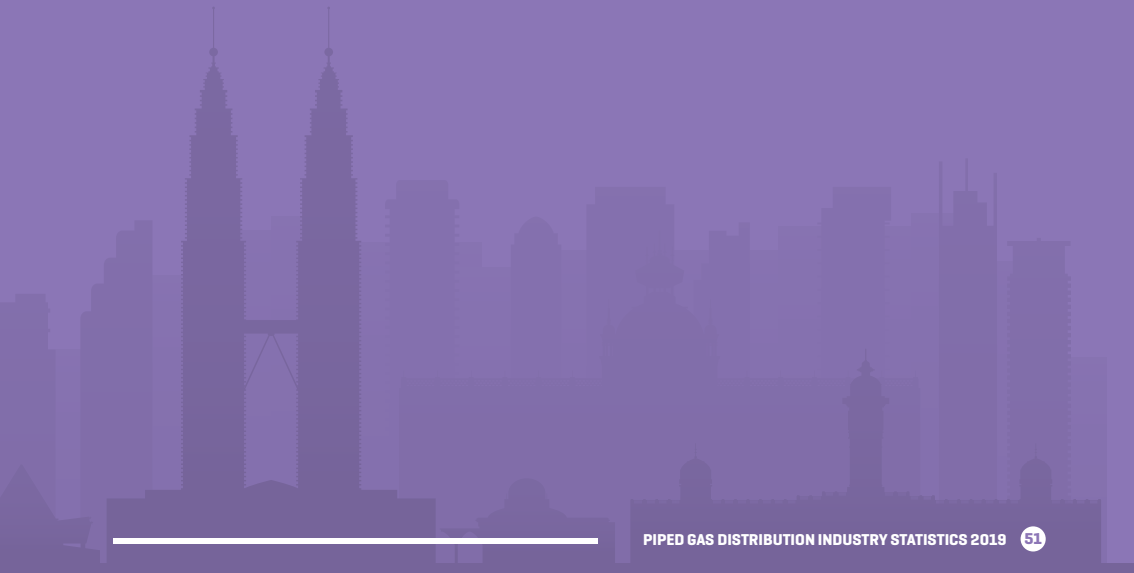


Figure 27: ATI and ATO for Launderattes Issued from 2016 – 2019

8

GAS FITTING, GAS APPLIANCES AND EQUIPMENT APPROVALS



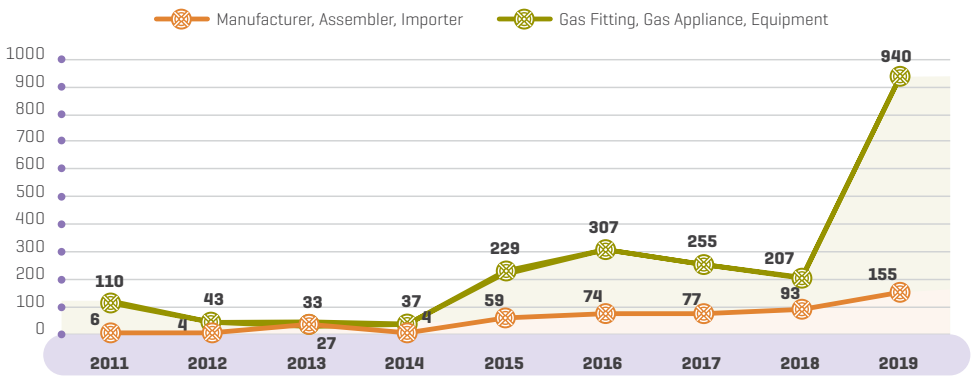


Figure 28: Approvals Issued to Assemble, Manufacture or Import Gas Fittings, Gas Appliances and Equipment from 2011-2019

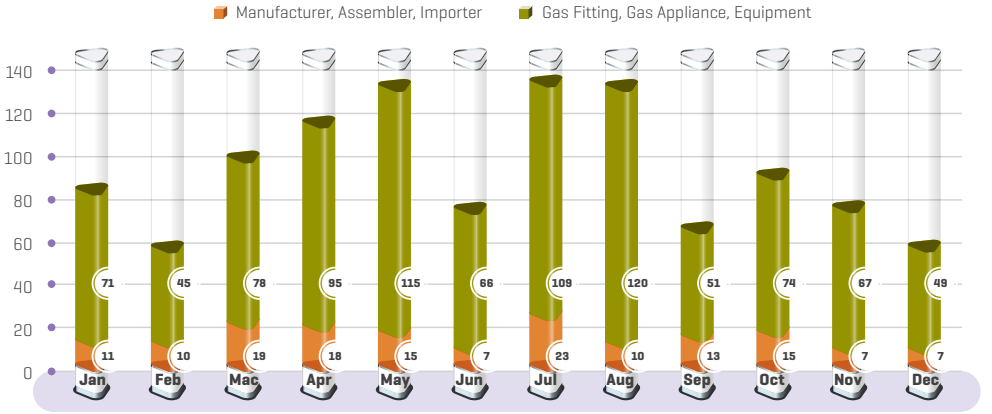


Figure 29: Approvals Issued for Gas Fittings, Gas Appliances and Equipment Per Month in 2019

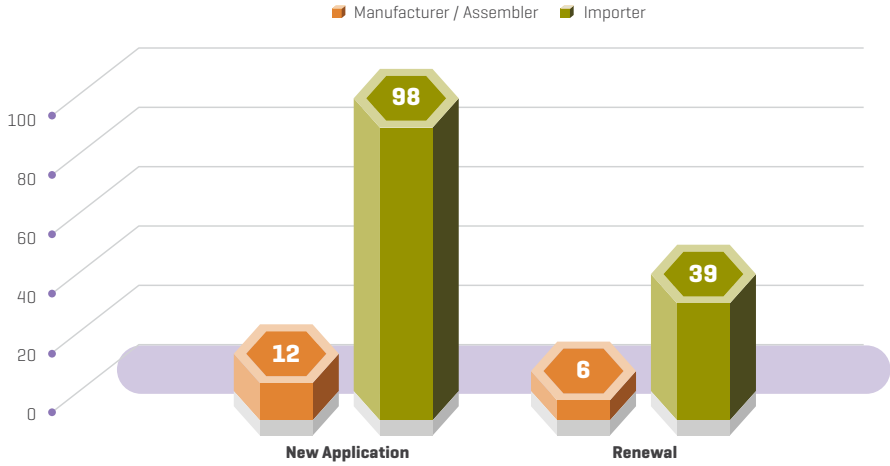


Figure 30: Approvals Issued for Manufacturers, Assemblers and Importers for Gas Fittings, Gas Appliances and Equipment in 2019

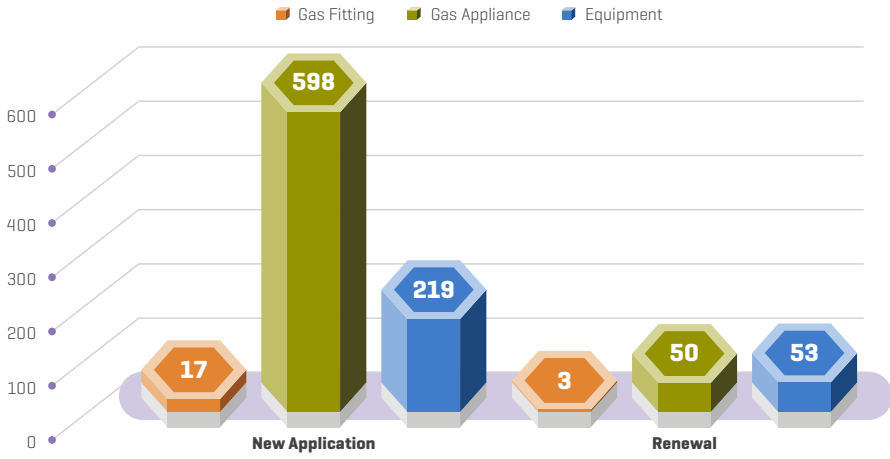


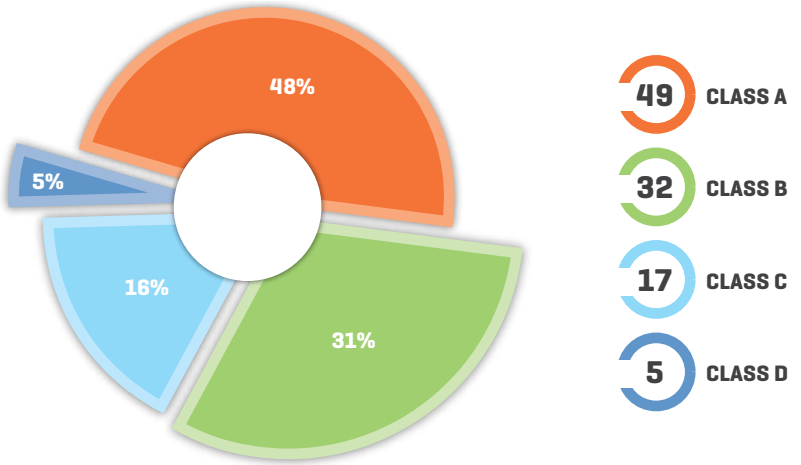
Figure 31: Approvals Issued According to Equipment, Gas Appliances and Fittings in 2019

9

COMPETENCY

9 GAS RETICULATION SYSTEM APPROVALS

9.1 REGISTRATION OF GAS CONTRACTORS



A total of 103 contractors was registered in 2019.

Figure 32: Gas Contractor Registrations in 2019

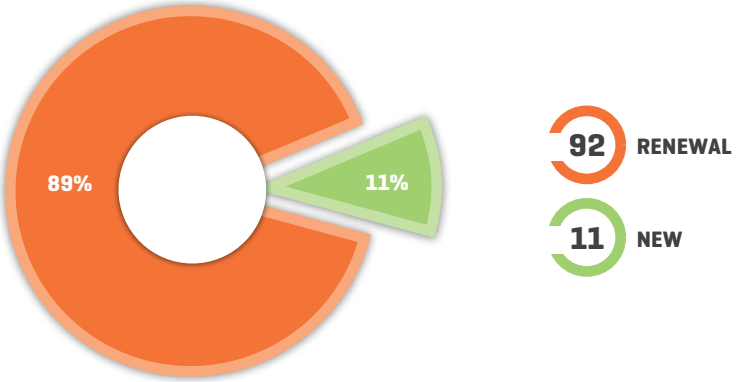
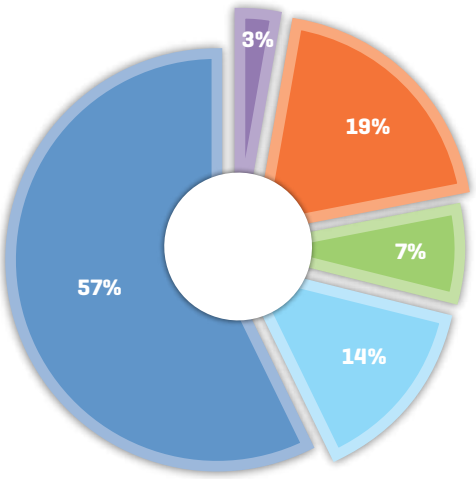


Figure 33: Categories of Gas Contractor Registrations in 2019

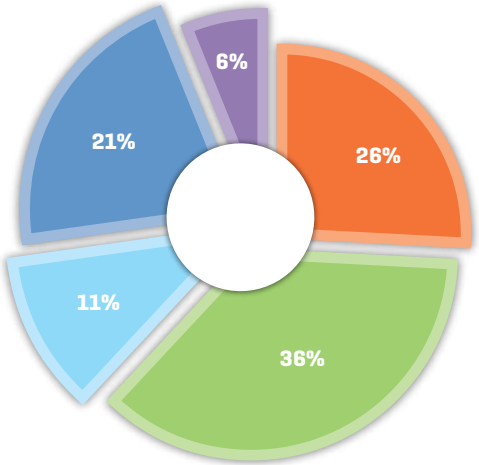
9.2 GAS COMPETENT PERSONS



1	Gas Engineers
8	Gas Engineering Supervisors
3	Gas Fitters Class I
6	Gas Fitters Class II
24	Gas Fitters Class III

A total of 42 Gas Certificates of Competency had been issued and the overall recipients of the Gas Certificates of Competency until 2019 is 1,106.

Figure 34: Number of Gas Certificates of Competency Issued in year 2019



24	Gas Engineers
101	Gas Engineering Supervisors
137	Gas Fitters Class II
42	Gas Fitters Class III
81	Gas Fitters Class III

Figure 35: Gas Certificates of Competency Renewals in 2019

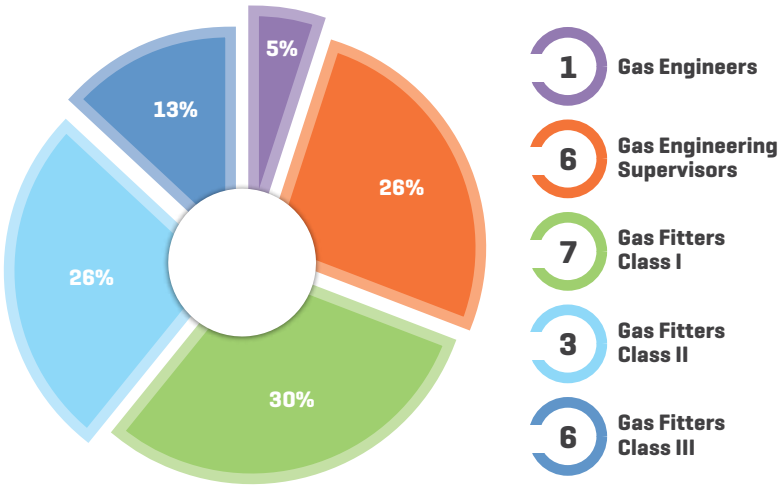


Figure 36: New Gas Competent Person Registrations in 2019

9.3 REGISTRATION OF GAS CONTRACTORS

Table 30: Gas Competency Examination and Interview Sessions from 2017 - 2019

Session	2017	2018	2019
Written exam	0	1	0
Interview	34	25	24

Table 31: Gas Competency Examination and Interview Candidates from 2017 – 2019

Session	2017	2018	2019
Written exam	0	17	0
Interview	81	59	66

10

GAS TRAINING INSTITUTIONS

10 GAS TRAINING INSTITUTIONS

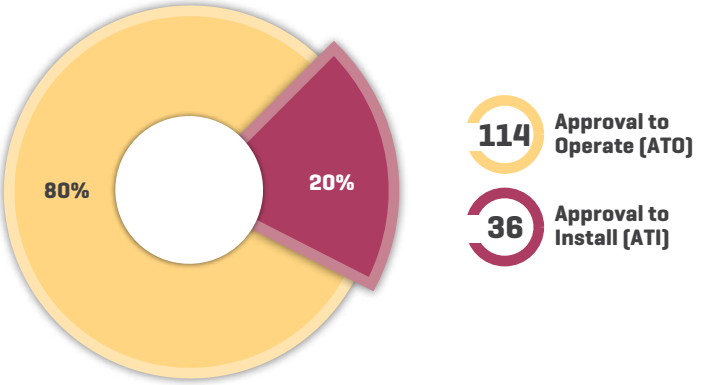
Table 32: Accredited Gas Institutions

Name and Address of Institution	Contact Information	Course Offered	Study Mode
INSTITUT KEMAHIRAN MARA (IKM) Jalan Teroka Off Jalan Datin Halimah, Karung Berkunci 848, 80990 Johor Bharu, Johor.	Tel : 07-2370001 / 07-2361129 Fax : 07-2364289 Website : www2.ikm.edu.my/jb	i. Gas Fitter Class I	Full Time
UTM MPRC INSTITUTE FOR OIL & GAS Block N29A, Lengkuk Suria, Faculty of Petroleum and Renewable Energy Engineering, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor.	Tel : 07-5535653 Fax : 07-5545667 Website : http://www.utm.my/mprc/	i. Gas Engineer/ Supervisor ii. Gas Fitter Class I iii. Gas Fitter Class II iv. Gas Fitter Class III	Part Time

11

INSPECTIONS COMPLIANCE TO GAS SUPPLY ACT AND REGULATIONS

11 INSPECTIONS COMPLIANCE TO GAS SUPPLY ACT AND REGULATIONS



Total of 150 inspections conducted for the issuance of ATI and ATO.

Figure 37: Inspections Conducted for the Issuance of Approval to Install (ATI) and Approval to Operate (ATO)

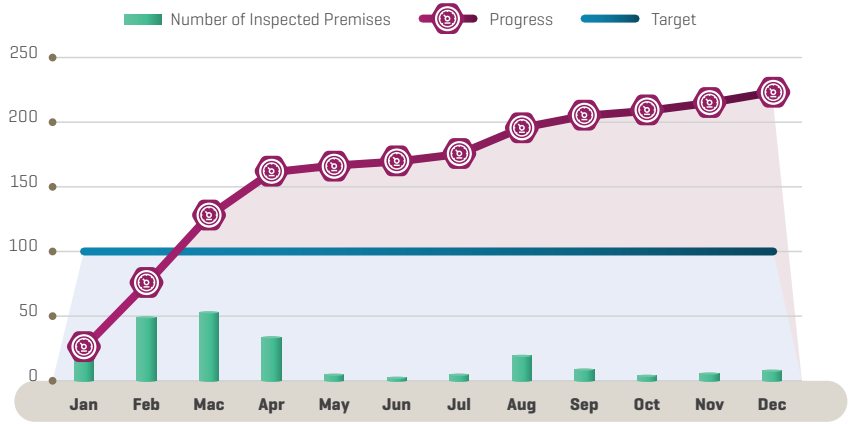
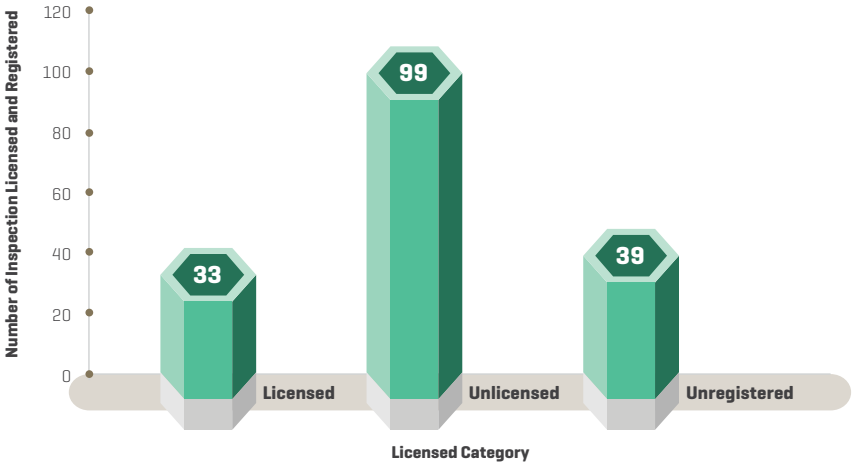
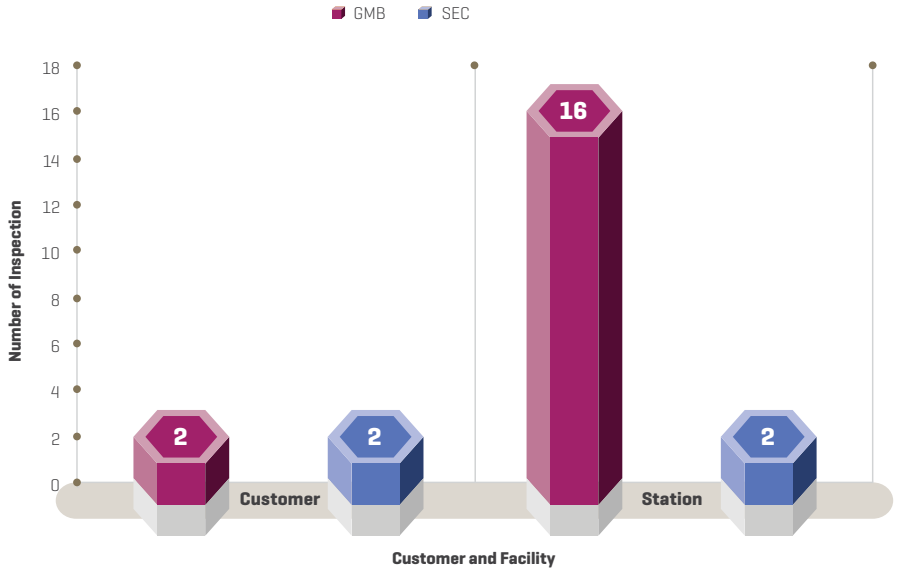


Figure 38: Gas Safety Inspections Conducted in 2019 with Priority Given to Launderettes, Hotels, Hospitals and Restaurants



Total of 171 safety inspections for Private Gas Licence.

Figure 39 : Safety Inspection in 2017 for Private Gas Licence



Total of 22 safety inspections for customer and facility owned by Gas Utility Licence.

Figure 40 : Safety Inspection in 2017 for Customer and Facility Owned by Gas Utility Licence

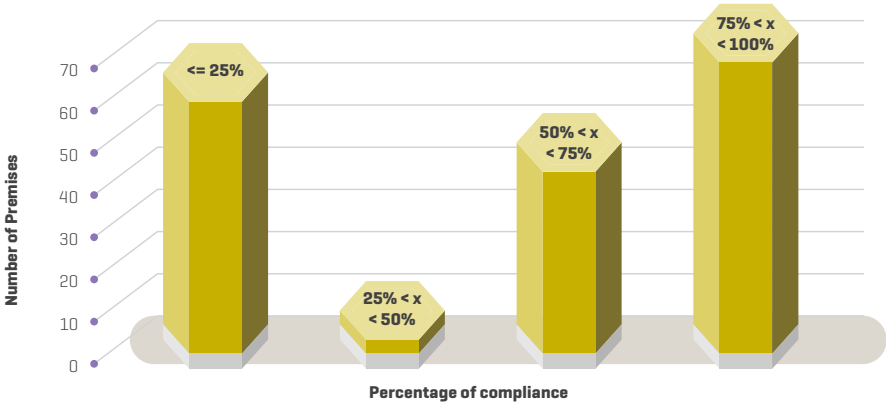
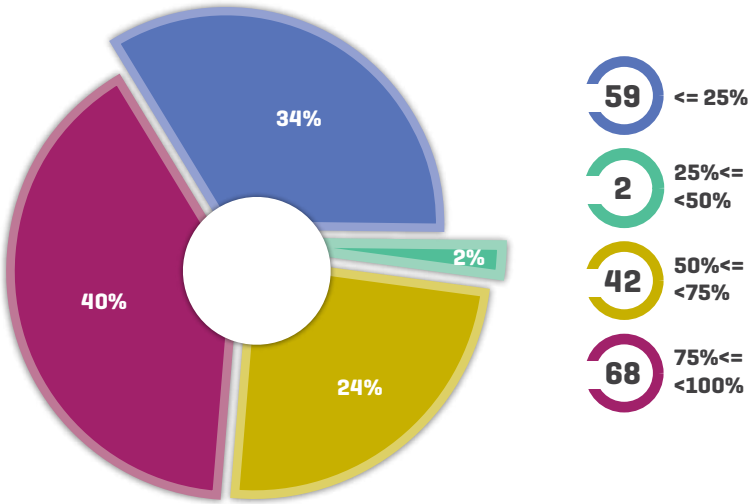


Figure 41 : Safety Inspection in 2017 for Customer and Facility Owned by Gas Utility Licence



Total of 171 safety inspections for customer and facility own by Gas Utility Licence.

Figure 42 : Safety Inspection in 2017 for Customer and Facility own by Gas Utility Licence

12

NEW GUIDELINES OR CIRCULARS ISSUED IN 2019

12 NEW GUIDELINES OR CIRCULARS ISSUED IN 2019

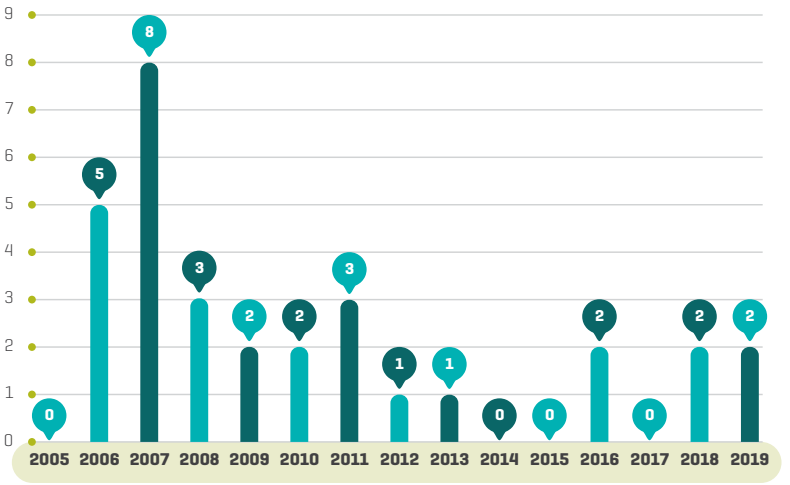
Table 33: New Guidelines or Circulars Issued in 2019

No.	Reference Number	Title	Objective
1	GP/ST/No.20/2019	Guideline On Gas Installations At Launderettes and Premises Using Similar Installations	To get certificate of approval for measuring gas equipment issued by the National Metrology Institute of Malaysia (NMIM) under Weight and Measures Act 1972

13

GAS ACCIDENTS

13 GAS ACCIDENTS



Total of 31 gas accidents that were reported to the Energy Commission.

Figure 43: Number of Gas Accidents That Were Reported to the Energy Commission from 2005 to 2019

13.1 COMPARISON OF CAUSES OF ACCIDENTS EVERY FIVE (5) YEARS

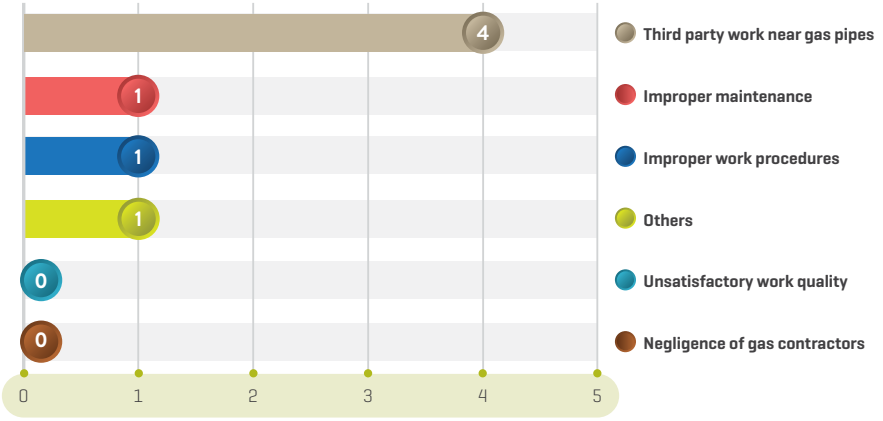


Figure 44: Causes of Gas Accidents from 2010 to 2014

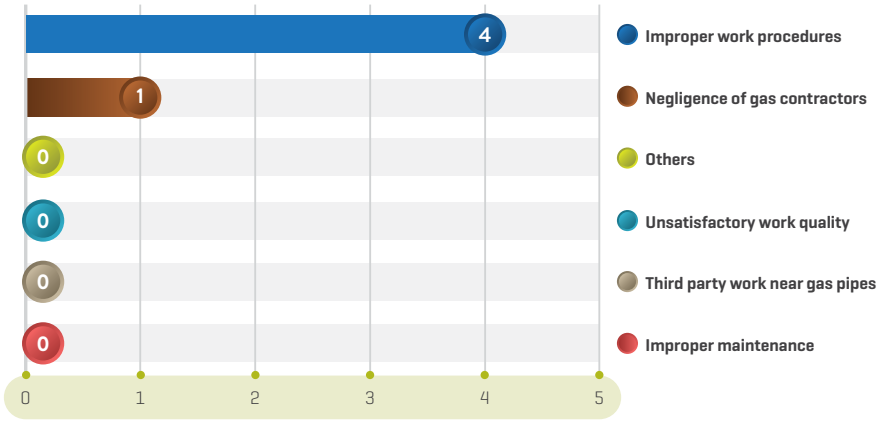


Figure 45: Causes of Gas Accidents from 2015 to 2019

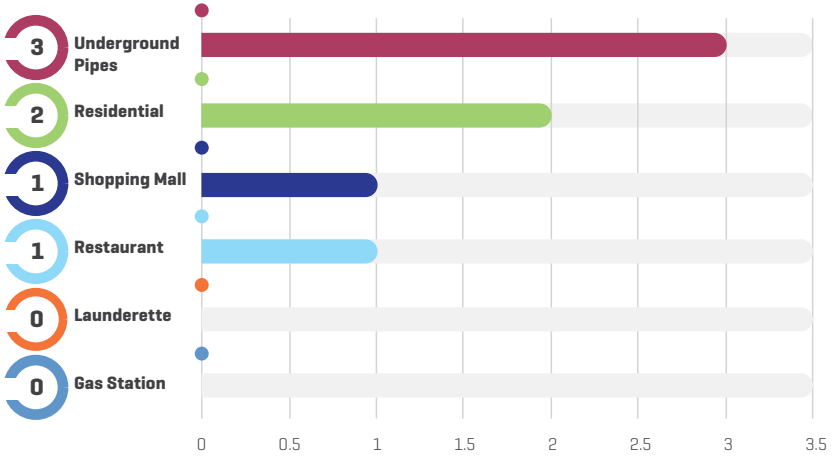


Figure 46: Location of Gas Accidents from 2015 to 2019

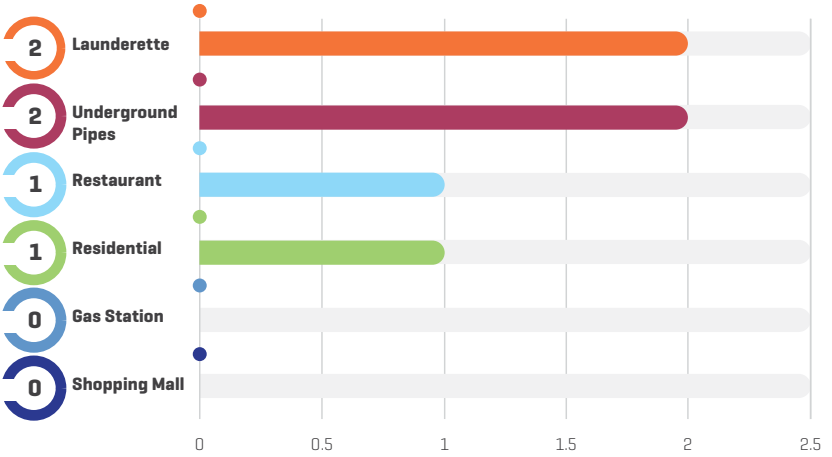


Figure 47: Location of Gas Accidents from 2015 to 2019

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GAS UTILITY LICENSEES CONTACT INFORMATION

GAS UTILITY LICENSEES CONTACT INFORMATION

GAS MALAYSIA BERHAD

HEADQUARTERS

Address:
No. 5, Jalan Serendah 26/17,
Seksyen 26, Peti Surat 7901,
40732 Shah Alam, Selangor.
Tel : 03 5192 3000
Fax : 03 5192 6766
Website : www.gasmalaysia.com

OCC Hotline: **1-800-88-9119 or 1-800-5656**

OCC Email : **orc@gasmalaysia.com**

OCC = **Operations Control Centre**

REGIONAL OFFICES

SOUTH
PLO 343, Jalan EmasTiga,
Kawasan Perindustrian Pasir
Gudang, 81700 Pasir Gudang,
Johor.
Tel : 07 252 2314
Fax : 07 252 2561

EAST
Lot 104,
Gebeng Industrial Area,
26080 Kuantan,
Pahang.
Tel : 09 583 6340
Fax : 09 583 6339

NORTH
No. 27, Jalan Todak 4,
Pusat Bandar Seberang Jaya,
13700 Seberang Jaya,
Pulau Pinang.
Tel : 04 398 1727/1757
Fax : 04 398 2636

DISTRICT OFFICES

SELANGOR
Bangi
No. 30,
Jalan 4/12B,
43650 Bandar Baru Bangi,
Selangor.
Tel : 03 8922 1191/1192
Fax : 03 8922 1190

SELANGOR
Shah Alam
No. 1, Jalan 13/15,
Sekyen 13,
40000 Shah Alam,
Selangor.
Tel : 03 5511 9914
Fax : 03 5511 9912

PERAK
Seri Manjung
9 PSN PM7,
Pusat Bandar Seri Manjung,
32040 Seri Manjung,
Perak.
Tel : 04 976 8400
Fax : 04 976 0625

KUALA LUMPUR
Jalan Gurney
No. 20, Jalan Gurney,
54100 Kuala Lumpur.
Tel : 03 9206 7800
Fax : 03 9287 4282

WP PUTRAJAYA
Putrajaya
No. 1, Jalan P9 B/1,
Precinct 9,
62250 Putrajaya.
Tel : 03 8888 5264/5224
Fax : 03 8888 3990

NEGERI SEMBILAN
Senawang
No. 34, Jalan Bunga Raya 9,
Pusat Perniagaan Senawang,
Taman Tasik Jaya,
70400 Seremban,
Negeri Sembilan.
Tel : 06 678 1995/5348
Fax : 06 678 6937

JOHOR
Kluang
No. 9, Jalan 53B,
Taman Kluang Barat
86000 Kluang, Johor.
Tel : 07 771 2105
Fax : 07 777 2108

SABAH ENERGY CORPORATION SDN. BHD.

HEADQUARTERS

Address:
1st, 2nd & 3rd Floors,
Wisma Bandaraya, Jalan Mesjid Lama,
Locked Bag No. 2,
88990 Kota Kinabalu,
Sabah.
Tel : 088 311290/299
Fax : 088 311361
Website : www.sabahenergycorp.com

REGIONAL OFFICE

LABUAN UNIT
Saguking Warehouse D8,
P. O. Box 80244,
87012 Labuan,
Wilayah Persekutuan.
Tel : 087 418 060/417 162
Fax : 087 413 877

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ENERGY COMMISSION CONTACT INFORMATION

ENERGY COMMISSION CONTACT INFORMATION

HEADQUARTERS

SURUHANJAYA TENAGA
No. 12,
Jalan Tun Hussein,
Precinct 2,
62100, Putrajaya.

REGIONAL OFFICES

Address	Phone No.& Fax
PULAU PINANG, KEDAH & PERLIS Tingkat 10, Bangunan KWSP, 13700 Seberang Jaya, Butterworth, Pulau Pinang.	**Tel** : 04 - 398 8255 **Fax** : 04 - 390 0255
PERAK Tingkat 1, Bangunan KWSP, Jalan Greentown, 30450 Ipoh, Perak.	**Tel** : 05 - 253 5413 **Fax** : 05 - 255 3525
KELANTAN & TERENGGANU Tingkat 6, Bangunan KWSP, Jalan Padang Garong, 15000 Kota Bharu, Kelantan.	**Tel** : 09 - 748 7390 **Fax** : 09 - 744 5498
PAHANG Tingkat 7A, Menara Zenith, Jalan Putra Square 6, 25200 Kuantan, Pahang.	**Tel** : 09 - 514 2803 **Fax** : 09 - 514 2804
JOHOR Suite 18A, Aras 18 Menara ANSAR 65 Jalan Trus 80000 Johor Bharu, Johor.	**Tel** : 07 - 224 8861 **Fax** : 07 - 224 9410
PANTAI BARAT NEGERI SABAH Tingkat 7, Bangunan BSN, Jalan Kemajuan, 88000 Kota Kinabalu, Sabah.	**Tel** : 088 - 232 447 **Fax** : 088 - 232 444
PANTAI TIMUR NEGERI SABAH Tingkat 3, Wisma Sabah KM12, W.D.T. No. 25, 90500 Sandakan, Sabah.	**Tel** : 089 - 666 695 **Fax** : 089 - 660 279

Address	Phone No.& Fax
NEGERI SEMBILAN & MELAKA Tingkat 3, Wisma Perkeso, Jalan Persekutuan, MITC, 75450 Ayer Keroh, Melaka.	**Tel** : 06 - 231 9594 **Fax** : 06 - 231 9620

NOTES

SURUHANJAYA TENAGA *(ENERGY COMMISSION)*
No.12, Jalan Tun Hussein, Precinct 2
62100 Putrajaya, Malaysia.

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+603 - 8888 8637
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