



STATISTIK INDUSTRI
BEKALAN ELEKTRIK MALAYSIA
**STATISTICS OF ELECTRICITY
SUPPLY INDUSTRY IN MALAYSIA**

EDISI / EDITION 2005

www.st.gov.my


STATISTIK INDUSTRI BEKALAN ELEKTRIK MALAYSIA / STATISTICS OF ELECTRICITY SUPPLY INDUSTRY IN MALAYSIA

EDISI / EDITION 2005

Suruhanjaya Tenaga
(Energy Commission)

13th Floor, Menara TH Perdana
1001 Jalan Sultan Ismail
50250 Kuala Lumpur, Malaysia

Tel : 603-2612 5400
Fax : 603-2693 7791
Email : info@st.gov.my
Url : www.st.gov.my



Disediakan oleh:
Jabatan Perbekalan Elektrik
Suruhanjaya Tenaga

Prepared By:
Electricity Supply Department
Energy Commission

Diterbitkan oleh/Published by:
Suruhanjaya Tenaga
(Energy Commission)

Tingkat 13, Menara TH Perdana
1001 Jalan Sultan Ismail
50250 Kuala Lumpur

Tel : 603-2612 5400
Fax : 603-2693 7791
Email : info@st.gov.my

www.st.gov.my

Forward

Profil Negara
Country Profile

Peta Malaysia
Map of Malaysia

Kadar Tarif Di Malaysia
Tariff Rates in Malaysia

Statistik Tenaga Nasional Berhad (TNB)
Statistics of Tenaga Nasional Berhad (TNB)

Statistik Sabah Electricity Sdn. Bhd (SESB)
Statistics of Sabah Electricity Sdn. Bhd (SESB)

Statistik Perbadanan Pembekalan Letrik Sarawak (SESCO)
Statistics of Sarawak Electricity Supply Corporation (SESCO)

Senarai Penjana Kuasa Bebas
List of Independent Power Producers (IPPs)

Senarai Penjana Kuasa Menggunakan Sumber Tenaga Yang Boleh Diperbaharui
List of Small Renewable Energy Power Producers(SREP)

Senarai Pengagih Elektrik
List of Electricity Distributors

Senarai Co-Generators Utama
List of Major Co-Generators

Senarai Penghantar Elektrik
List of Electricity Transmitter

Statistik Penjanaan Persendirian
Statistics of Self-Generation

Statistik Dan Maklumat Lain Yang Penting Untuk Industri Bekalan Elektrik
Other Important Statistics and Information of the Electricity Supply Industry

Alamat Perhubungan
Key Contacts

Disediakan Oleh : **Jabatan Perbekalan Elektrik Suruhanjaya Tenaga**
Prepared By : *Electricity Supply Department Energy Commission*

The Energy Commission was established under the Energy Commission Act 2001 to regulate the electricity supply and piped gas supply industries in Peninsular Malaysia and Sabah. While in Sarawak, the state Chief Electrical Inspectorate is the regulator of the electricity supply industry under the Electricity Ordinance of Sarawak.

The electricity supply service in Malaysia is basically vertically integrated with three main electricity utilities operating generation, transmission, distribution and supply activities in three different parts of the country, i.e. Tenaga Nasional Berhad(TNB) in Peninsula, Sabah Electricity Sdn. Bhd. (SESB) in Sabah and Sarawak Electricity Supply Corporation(SESCO) in Sarawak. Besides those power stations owned by the three main utilities and their wholly owned subsidiaries, there are 18 investor-owned independent power producers supplying power to the three main utilities. There are also several mini utilities generating electricity or purchasing power from the main utilities for their own use and supply the excess power to consumers within certain dedicated areas such as Petronas Gas Bhd. generates electricity by co-generation and supplies to customers within the Gebeng and Kerteh petrochemical industrial areas and Genting Utilities Sdn Bhd purchases electricity from TNB for the use of its group of companies and to supply to other consumers in Genting Highlands area.

A massive tsunami in the Indian Ocean hit some countries in South Asia and South East Asia on 26 December 2004 and caused serious destruction to the

coastal areas of these countries. However the power stations along the coastline of Peninsular Malaysia were not hit by the tsunami and hence the security of the grid system was not affected.

The total installed generation capacity in the country at the end of 2004 was 20,660 MW with a plant mix of 58.4% gas turbine and combined cycle, 18.4% coal, 2.5% oil/gas thermal, 10.3% hydro, 7.5% diesel and the remaining others such as biomass and co-generation.

In the year 2004, the total electricity generated was 96,060 GWh with a generation mix of gas (66.5%), coal (23.5%), hydro (5.8%) and the rest diesel and biomass. The three main utilities, i.e. TNB, SESB and SESCO, generated 48% of the energy while the investor-owned independent power producers (excluding the wholly owned subsidiaries of utilities such as TNB Janamanjung which owns a 2100 MW coal fired power station in Lumut) contributed 47% with the remaining been produced by co-generation and self-generation.

The number of customers of the 3 main utilities as at the end of 2004 was 6.7 million of which 83.4% was domestic customers followed by commercial (15.5%), industrial (0.4%) and the rest (0.7%).

The maximum demand of the grid system in Peninsula was 12,023MW recorded in the month of May 2004. While in Sabah and Sarawak the maximum demands were 481MW and 685MW respectively.

In the Peninsula the SAIDI of TNB reduced from 167.6 minutes in the year 2003 to 129.0 minutes in the year 2004. In Sarawak, SESCO had shown impressive improvement in reliability of supply with the SAIDI reduced from 421 minutes in year 2003 to 327 minutes in the year 2004. While in Sabah the SAIDI of SESB increased from 1,729 minutes in the year 2003 to 2,594 minutes in the year 2004.

The Small Renewable Energy Programme (SREP) which was launched in year 2001 to encourage private sector to undertake small power generation project using renewable resources has not been progressing well due to a number of factors such as uncertainty in long term fuel supply and challenges in securing loans for financing the projects. In order to promote and increase the use of renewable energy in Malaysia, better incentives and more conducive environment need to be established.

Area	329,733 sq.km
Climate	- Tropical Type - Average temperature between 20°C to 32°C - Average rainfall of about 3540 mm per annum
Population	25.1 ^P million with a multi racial community comprising Malays, Chinese, Indians, Kadazans, Bajaus, Muruts, Kelabits, Dayaks, Ibans and others
Labour force	10.6 million ^P
Real GDP	RM248.0 billion ^P (+7.1% ^P)
Nominal Per Capita Income	RM16,538 ^P
Real GNP	RM232.2 billion ^P (+7.2% ^P)
Nominal GNP	RM 423.1 billion ^P (+13.8% ^P)
Current Account Balance	56.6 billion ^P (+13.4% ^P of GNP)*
Foreign Reserves	RM 253.5 billion ^P (8.0 months of retained imports)*
Gross National savings	37.1 ^P (as % of GNP)*
Total Electricity Generation	96,060 GWh
Total Electricity Consumption	81,390 GWh
Per Capita Electricity Consumption	3,180 kWh
Average Price of Electricity :	
Peninsular Malaysia	23.5 sen per kWh
Sabah	25.3 sen per kWh
Sarawak	26.5 sen per kWh

*P : Preliminary *At end of December 2004*

PETA MALAYSIA MAP OF MALAYSIA

Kadar Tarif Di Malaysia *Tariff Rates in Malaysia*



TARIFF RATES OF TENAGA NASIONAL BERHAD

No	Tariff Category	Unit	Rates	Promotional Discount*
1.	Tariff A – Domestic Tariff			
	For the first 200 units per month	sen/kWh	21.80	Nil
	For the next 800 units per month	sen/kWh	25.80	Nil
	For additional units per month	sen/kWh	27.80	Nil
	Minimum monthly charge	RM	2.50	
2.	Tariff B – Low Voltage Commercial Tariff			
	For all units	sen/kWh	28.80	-4
	Minimum monthly charge	RM	6.00	
3.	Tariff C1 – Medium Voltage General Commercial Tariff			
	For each kilowatt of maximum demand per month	RM/kW	17.30	Nil
	For all units	sen/kWh	20.80	-4
	Minimum monthly charge	RM	500.00	
4.	Tariff C2 – Medium Voltage Peak/Off-Peak Commercial Tariff			
	For each kilowatt of maximum demand per month during the Peak Period	RM/kW	25.70	Nil
	For all units during the Peak Period	sen/kWh	20.80	-4
	For all units during the Off-Peak Period	sen/kWh	12.80	Nil
	Minimum monthly charge	RM	500.00	
5.	Tariff D – Low Voltage Industrial Tariff			
	For all units	sen/kWh	25.80	-4
	<i>Specially for customers who qualify</i>			
	For all units	sen/kWh	23.80	-4
	Minimum monthly charge	RM	6.00	
6.	Tariff E1 – Medium Voltage General Industrial Tariff			
	For each kilowatt of maximum demand per month	RM/kW	17.30	Nil
	For all units	sen/kWh	19.80	-4
	<i>Specially for customers who qualify</i>			
	For each kilowatt of maximum demand per month	RM/kW	3.20	Nil
	For all units	sen/kWh	18.80	-4
	Minimum monthly charges	RM	500.00	
7.	Tariff E2 – Medium Voltage Peak / Off-Peak Industrial Tariff			
	For each kilowatt of maximum demand per month during the Peak Period	RM/kW	21.70	Nil
	For all units during the Peak Period	sen/kWh	20.80	-4
	For all units during the Off-Peak Period	sen/kWh	12.80	Nil
	<i>Specially for customers who qualify</i>			
	For each kilowatt of maximum demand per month during the Peak Period	RM/kW	18.40	Nil
	For all units during the Peak Period	sen/kWh	18.80	-4
	For all units during the Off-Peak Period	sen/kWh	10.80	-4
Minimum monthly charges	RM	500.00	Nil	

TARIFF RATES OF TENAGA NASIONAL BERHAD

No	Tariff Category	Unit	Rates	Promotional Discount*
8.	Tariff E3 – High Voltage Peak / Off-Peak Industrial Tariff			
	For each kilowatt of maximum demand per month during the Peak Period	RM/kW	20.80	Nil
	For all units during the Peak Period	sen/kWh	19.80	-4
	For all units during the Off-Peak Period	sen/kWh	11.80	Nil
	<i>Specially for customers who qualify</i>			
	For each kilowatt of maximum demand per month during the Peak Period	RM/kW	16.20	Nil
	For all units during the Peak Period	sen/kWh	17.80	-4
	For all units during the Off-Peak Period	sen/kWh	9.80	Nil
	Minimum monthly charges	RM	500.00	
9.	Tariff F – Low Voltage Mining Tariff			
	For all units	sen/kWh	21.80	-4
	Minimum monthly charge	RM	100.00	
10.	Tariff F1 – Medium Voltage General Mining Tariff			
	For each kilowatt of maximum demand per month	RM/kW	12.00	Nil
	For all units	sen/kWh	17.80	-4
	Minimum monthly charge	RM	100.00	
11.	Tariff F2 – Medium Voltage Peak / Off-Peak Mining Tariff			
	For each kilowatt of maximum demand per month during the Peak Period	RM/kW	17.00	Nil
	For all units during the Peak Period	sen/kWh	17.80	-4
	For all units during the Off-Peak Period	sen/kWh	9.80	Nil
	Minimum monthly charge	RM	100.00	
12.	Tariff G – Public & Street Lighting Tariff			
	For all units (including maintenance)	sen/kWh	17.30	Nil
	For all units (excluding maintenance)	sen/kWh	10.80	Nil
13.	Tariff G1 – Neon Light & Floodlight Tariff			
For all units	sen/kWh	11.80	Nil	

N.B

1. Consumers whose consumption for the month exceed 10 percent of the average monthly consumptions over the previous 6 months, are eligible for the promotional discount for that particular month.
2. 'Specially for consumers who qualify' means industrial customers with electricity cost exceeding 5% of the total cost of production of their products.

3. Low Voltage : Below 6.6kV
Medium Voltage : 6.6KV to 66kV
High Voltage : Exceeding 66kV
4. Peak Period : 0800 hours to 2200 hours
Off-Peak Period : 2200 hours to 0800 hours

TARIFF RATES OF TENAGA NASIONAL BERHAD
RATES FOR TOP UP AND STANDBY SERVICES

Tariff Class	Unit	Top up	Rates	
			Standby	
			Firm	Non-Firm
1. Tariff C1 - Medium Voltage General Commercial Tariff Maximum Demand Charge For all Units	RM/kW/month sen/unit	17.30 20.80	25.00	9.30
2. Tariff C2 - Medium Voltage Peak/Off-Peak Commercial Tariff Maximum Demand Charge For all units during the Peak Period For all units during the Off-Peak Period	RM/kW/month sen/unit sen/unit	25.70 20.80 12.80	25.00	10.50
3. Tariff E1 - Medium Voltage Peak/Off-Peak Industrial Tariff Maximum Demand Charge For all Units <i>Special for customers who qualify</i> Maximum Demand Charge For all Units	RM/kW/month sen/unit RM/kW/month sen/unit	17.30 19.80 13.20 18.80	25.00	8.80 6.70
4. Tariff E2 - Medium Voltage Peak/Off-Peak Industrial Tariff Maximum Demand Charge For all units during the Peak Period For all units during the Off-Peak Period <i>Special for customers who qualify</i> Maximum Demand Charge For all units during the Peak Period For all units during the Off-Peak Period	RM/kW/month sen/unit sen/unit RM/kW/month sen/unit sen/unit	21.70 20.80 12.80 18.40 18.80 10.80	25.00	8.70 7.30
5. Tariff E3 - High Voltage Peak/Off-Peak Industrial Tariff Maximum Demand Charge For all units during the Peak Period For all units during the Off-Peak Period <i>Special for customers who qualify</i> Maximum Demand Charge For all units during the Peak Period For all units during the Off-Peak Period	RM/kW/month sen/unit sen/unit RM/kW/month sen/unit sen/unit	20.80 19.80 11.80 16.20 17.80 9.80	25.00	7.60 5.90

TARIFF RATES OF TENAGA NASIONAL BERHAD
RATES FOR TOP UP AND STANDBY SERVICES

Tariff Class	Unit	Top up	Rates	
			Standby	
			Firm	Non-Firm
6. Tariff F1 - Medium Voltage General Mining Tariff Maximum Demand Charge For all Units	RM/kW/month sen/unit	12.00 17.80	25.00	4.80
7. Tariff F2 - Medium Voltage Peak/Off-Peak Mining Tariff Maximum Demand Charge For all units during the Peak Period For all units during the Off-Peak Period	RM/kW/month sen/unit sen/unit	17.00 17.80 9.80	25.00	6.70

TARIFF RATES FOR SABAH ELECTRICITY SENDIRIAN BERHAD (SESB)

No	Tariff Category	Unit	Rates
1.	Domestic 0-40 units per month 41-200 units per month Above 200 units per month Minimum monthly charge	sen/kWh sen/kWh sen/kWh RM	24 16 28 5.00
2.	Commercial Class 1 0-1,000 units per month Above 1,000 units per month Minimum monthly charge	sen/kWh sen/kWh RM	32 27 15.00
3.	Commercial Class 2 (For consumers with maximum demand above 500 kW) Maximum demand charge per month All units per month Minimum monthly charge	RM/kW sen/kWh RM	15.00 25 1,000.00
4.	Industrial Class 1 0-2,000 units per month Above 2,000 units per month Minimum monthly charge	sen/kWh sen/kWh RM	32 26 15.00
5.	Industrial Class 2 (For consumers with maximum demand above 500 kW) Maximum demand charge per month All units per month Minimum monthly charge	RM/kW sen/kWh RM	15.00 20 1,000.00
6.	Public Lighting All units per month	sen/kWh	30

TARIFF RATES FOR WILAYAH PERSEKUTUAN LABUAN TARIFF STRUCTURE AND RATES

No	Classifications	Unit	Rates
1.	Domestic (DM) 0-40 kWh per month 41-200 kWh per month 201- above kWh per month Minimum charge	sen/kWh sen/kWh sen/kWh RM	24 16 28 5.00
2.	Low Voltage Commercial (B) For all units Minimum Charge	sen/kWh RM	24 6.00
3.	Medium Voltage General Commercial (C1) For each kilowatt of maximum demand per month All units Minimum charge	RM/kW sen/kWh RM	12.00 18 500.00
4.	Medium Voltage Peak/Off Peak Commercial (C2) For each kilowatt of maximum demand per month during the peak period All units during the peak period All units during the off-peak period Minimum charge	RM/kW sen/kWh sen/kWh RM	19.00 18 8 500.00
5.	Low Voltage Industrial Tariff (D) For all units Minimum charge	sen/kWh RM	21 6.00
6.	Medium Voltage General Industrial (E1) For each kilowatt of maximum demand per month All units Minimum charge	RM/kW sen/kWh RM	12.00 16 500.00
7.	Medium Voltage Peak / Off-Peak Industrial (E2) For each kilowatt of maximum demand per month during the peak period All units during the peak period All units during the off-peak period Minimum charge	RM/kW sen/kWh sen/kWh RM	17.00 16 8 500.00
8.	Low Voltage Mining (F) For all units Minimum charge	sen/kWh RM	19 100.00
9.	Medium Voltage Mining (F1) For each kilowatt of maximum demand per month All units Minimum charge	RM/kW sen/kWh RM	12.00 16 100.00
10.	Public Lighting All units	sen/kWh	30

TARIFF RATES FOR SARAWAK ELECTRICITY SUPPLY CORPORATION (SESCO)

No	Tariff Category	Unit	Rates
COMMERCIAL			
1.	Tariff C1 (Applicable to consumer taking commercial supply whose estimated monthly consumption does not exceeds 100,000 kWh) 0-100 units per month 101-5000 units per month Above 5000 units per month Minimum monthly charge	sen/kWh sen/kWh sen/kWh RM	40 34 30 10.00
2.	Tariff C2 (Generally available on application to consumer taking commercial supply whose estimated monthly consumption exceeds 100,000 kWh) Maximum demand price Energy Price Minimum monthly charge	RM/kW sen/kWh RM/kW	12.00 25 12.00
3.	Tariff C3 (Generally available on application to consumer taking commercial supply whose estimated monthly consumption exceeds 100,000 kWh) PEAK PERIOD (0700 hours-2400 hours) Maximum demand price Energy Price OFF-PEAK PERIOD (0000 hours-0700 hours) Energy Price Minimum monthly charge	RM/kW sen/kWh sen/kWh RM/kWh	20.00 25 10 20.00
INDUSTRIAL			
4.	Tariff I1 (Applicable to consumer taking industrial supply whose estimated monthly consumption does not exceeds 100,000 kWh) 0-100 units per month 101-3000 units per month Above 3000 units per month Minimum monthly charge	sen/kWh sen/kWh sen/kWh RM	40 30 21 10.00
5.	Tariff I2 (Industrial available on application to consumer taking industrial supply whose estimated monthly consumption exceeds 100,000 kWh) Maximum demand price Energy Price Minimum monthly charge	RM/kW sen/kWh RM/kW	12.00 17 12.00

TARIFF RATES FOR SARAWAK ELECTRICITY SUPPLY CORPORATION (SESCO)

No	Tariff Category	Unit	Rates
6.	Tariff I3 (Generally available on application to consumer taking industrial supply whose estimated monthly consumption exceeds 100,000 kWh) PEAK PERIOD (0700 hours-2400 hours) Maximum demand Price Energy Price OFF-PEAK PERIOD (0000 hours-0700 hours) Energy Price Minimum monthly charge	RM/kW sen/kWh sen/kWh RM/kW	20.00 17 10 20.00
DOMESTIC			
7.	Tariff D (Applicable to consumer taking domestic supply) 0-100 units per month 101-400 units per month Above 400 units per month Minimum monthly charge	sen/kWh sen/kWh sen/kWh RM	34 29 33 5.00
PUBLIC LIGHTING			
8.	Tariff PL (Applicable to consumer taking lighting supply) Energy Price Minimum monthly charge	sen/kWh RM	47 10.00



Statistik Tenaga Nasional Berhad (TNB)
Statistics of Tenaga Nasional Berhad (TNB)

	2000	2001	2002	2003	2004
A. Jualan Tenaga (GWj) (Sales of Energy (GWh))					
(1) Domestik (Domestic)	9,093	10,315	10,939	11,765	12,530
(2) Komersial (Commercial)	14,747	16,196	17,032	18,367	19,967
(3) Industri (Industrial)	29,818	30,754	31,371	33,440	35,732
(4) Lampu Awam (Public Lighting)	527	590	629	663	682
(5) Perlombongan (Mining)	69	67	64	56	54
(6) Eksport (Export)	7	5	19	193	605
(7) Lain-lain (Others)	-	-	-	-	-
Jumlah (Total)	54,261	57,927	60,054	64,484	69,570

	2000	2001	2002	2003	2004
B. Campuran Penjanaan (GWj) (Generation Mix (GWh))					
(1) Hidro (Hydro)	5,971	4,992	4,444	4,032	4,656
(2) Gas (Gas)	23,223	22,826	* 21,636	16,719	15,859
(3) Arangbatu (Coal)	4,038	6,238	8,953	7,599	6,129
(4) Minyak (Oil)	1,424	1,600	3,573	330	185
(5) Distillate (Distillate)	29	235	-	-	13
(6) Diesel (Diesel)	-	-	-	-	-
(7) Lain-lain (Others)	-	-	-	-	-
Jumlah (Total)	34,685	35,891	38,606	28,680	26,842

* Termasuk penjanaan menggunakan distillate
Inclusion of generation using distillate

	2000	2001	2002	2003	2004
C. Bilangan Pengguna (No. of Consumers)					
(1) Domestik (Domestic)	4,186,799	4,354,125	4,569,628	4,788,255	5,009,377
(2) Komersial (Commercial)	792,887	821,801	862,826	903,981	940,359
(3) Industri (Industrial)	21,235	21,483	21,382	21,317	21,249
(4) Lampu Awam (Public Lighting)	26,158	26,439	27,793	37,391	39,071
(5) Perlombongan (Mining)	49	42	45	32	31
(6) Lain-lain (Others)	-	-	-	-	-
Jumlah (Total)	5,027,128	5,223,890	5,481,674	5,750,976	6,010,087

	2000	2001	2002	2003	2004
D. Kapasiti Penjanaan (MW) (Generation Capacity (MW))					
(1) Hidro (Hydro)	1,891	1,874	1,911	1,911	1,911
(2) Gas Turbine & Combined Cycle	3,266	3,427	3,302	3,430	3,156
(3) Arangbatu (Coal)	600	1,524	1,447	1,421	-
(4) Conventional Thermal (Oil/Gas)	1,426	1,405	1,396	1,402	574
(5) Diesel (Diesel)	-	-	-	-	-
(6) Lain-lain (Others)	-	-	-	-	-
(7) Jumlah Penjanaan (Total Generation)	7,183	8,230	8,056	8,164	5,641
(8) Kebolehdapatan Keseluruhan (Overall Availability(%))	86	N/A	N/A	85	83
(9) Kos Penjanaan (sen/kWj) (Cost Of Generation)(sen/kWh)					
a) Penjanaan Sendiri (Own Generation)	10.60	10.89	11.25	10.20	9.3
b) Tenaga Dibeli (Energy Purchased)	15.55	14.84	15.26	14.95	N/A
c) Kos Keseluruhan- (a) & (b) (Overall Cost - (a) & (b))	12.76	12.70	13.05	11.69	N/A

	2000	2001	2002	2003	2004
E. Keupayaan Sistem Penghantaran (Transmission System Capacity)					
(1) Talian/Kabel Sistem Penghantaran (km) (Transmission System Lines/Cables (km))					
i. 500 KV	* 715	* 890	* 890	* 890	* 890
ii. 275 KV	5,425	5,574	5,736	6,103	6,180
iii. 132 KV	8,420	9,576	9,164	9,943	10,161
iv. 66 KV	316	346	346	171	171
(2) Pencawang Penghantaran (Transmission Substations)					
i. Bilangan (Number)	366	374	349	@ 407	366
ii. Keupayaan (MVA) (Capacity (MVA))	48,973	51,033	56,673	61,335	65,476
(3) Prestasi (Performance)					
a) Bilangan Kejadian Pelantikan (Number of Incidents of Trippings)	176	117	118	418	104
b) Tenaga Yang Tidak Dibekal (Unsupplied Energy (MWh))	3,129	2,789	3,662	2,734	9,232

	2000	2001	2002	2003	2004
F. Keupayaan Sistem Pengagihan (Distribution System Capacity)					
(1) Talian/Kabel Sistem Pengagihan (km) (Distribution System Lines/Cables)					
i. Talian (Overhead Lines)	# 6,371	174,479	359,920	328,731	378,282
ii. Kabel (Underground Cables)	175,762	220,536	228,804	273,700	315,197
(2) Pencawang Pengagihan (Distribution Substations)					
i. Bilangan (Number)	45,948	45,987	47,483	48,916	50,509
ii. Keupayaan (MVA) (Capacity (MVA))	35,083	38,191	41,231	41,954	44,579
(3) Prestasi (Performance)					
Bilangan Gangguan Bekalan (Number of Interruption of Supply)	51,964	47,296	31,328	27,047	29,932

	2000	2001	2002	2003	2004
G. Pencapaian Prestasi (Performance Highlights)					
(1) Kehendak Maksimum (MW) (Maximum Demand (MW))	9,712	10,060	10,783	11,329	12,023
(2) Jumlah Unit Penjanaan (GWj) (Total Units Generated (GWh))	34,685	35,891	38,606	28,680	26,842
(3) Jumlah Unit Jualan (GWj) (Total Units Sold (GWh))	54,261	57,927	60,054	64,484	69,570
(4) Hasil Jualan Elektrik (RM Juta) (Sales of Electricity (RM million))	12,751	13,453	14,097	15,050	16,224
(5) Kapasiti Penjanaan Terpasang (MW)** (Installed Generation Capacity (MW))	7,183	8,230	8,055	8,163	5,641
(6) Jumlah Kakitangan (Total Number of Employees)	22,301	23,063	23,589	24,124	24,887
(7) Hasil Jualan Setiap Kakitangan (RM Juta) (Revenue Per Employee (RM million))	0.57	0.58	0.60	0.62	0.65
(8) Unit Jualan Setiap Kakitangan (GWj) (Units Sold Per Employee (GWh))	2.43	2.51	2.55	2.67	2.80
(9) Kapasiti Penjanaan Setiap Kakitangan (MW) (Generation Capacity Per Employee (MW))	0.32	0.36	0.34	0.34	0.23
(10) Jumlah Unit Pembelian (GWj) (Total Units Purchased (GWh))	27,740	28,817	31,391	43,200	39,007
(11) Jumlah Unit Eksport (GWj) (Total Units Exported (GWh))	7	5	19	193	605
(12) Jumlah Unit Impot (GWj) (Total Units Imported (GWh))	13	5	9	0.4	-
(13) Overall System Average Interruption Duration Index (SAIDI) (minutes/customer/year)	351	281	149	114	156

N.B.

- * 693.6km dikendalikan pada voltan 275kV
693.6km operated at 275kV
- ** Kapasiti penjanaan TNB Generation Sdn. Bhd. dan TNB Hidro Sdn. Bhd.
Generation capacities of TNB Generation Sdn. Bhd. and TNB Hidro Sdn. Bhd.
- # Tidak termasuk talian atas voltan rendah
Excluding LV overhead lines
- @ Termasuk 43 Pencawang Pengguna
@ Including 43 Consumer's Substation
- Tahun yang ditunjukkan adalah tahun kewangan
Years indicated are financial years

Data di atas adalah data untuk tempoh tahun kewangan syarikat. Data untuk kalendar berbeza sedikit daripada data di atas.
The data shown above is for financial year of the company. The data for calendar year differs slightly from the above data.



Statistik Sabah Electricity Sdn. Bhd. (SESB)
Statistics of Sabah Electricity Sdn. Bhd. (SESB)

	2000	2001	2002	2003	2004
A. Jualan Tenaga (GWj) (Sales of Energy (GWh))					
(1) Domestik (Domestic)	643	646	691	725	801
(2) Komersial (Commercial)	740	766	839	874	950
(3) Industri (Industrial)	499	564	622	699	771
(4) Lampu Awam (Public Lighting)	31	29	30	34	35
(5) Perlombongan (Mining)	-	-	-	-	-
(6) Eksport (Export)	-	-	-	-	-
(7) Lain-lain (Others)	-	-	-	-	-
Jumlah (Total)	1,913	2,005	2,182	2,332	2,557

B. Campuran Penjanaan (GWj) (Generation Mix (GWh))					
(1) Hidro (Hydro)	491	461	437	453	450
(2) Gas (Gas)	159	258	388	471	466
(3) Arangbatu (Coal)	-	-	-	-	-
(4) Minyak (Oil)	-	-	-	-	-
(5) Distillate (Distillate)	-	-	-	-	-
(6) Diesel (Diesel)	414	420	427	477	478
(7) Lain-lain (Others)	-	-	-	-	-
Jumlah (Total)	1,064	1,139	1,252	1,401	1,394

	2000	2001	2002	2003	2004
C. Bilangan Pengguna (No. of Consumers)					
(1) Domestik (Domestic)	242,309	252,869	261,447	265,795	280,325
(2) Komersial (Commercial)	43,198	45,142	46,797	47,550	49,888
(3) Industri (Industrial)	2,681	2,628	2,613	2,598	2,628
(4) Lampu Awam (Public Lighting)	2,224	2,342	2,524	2,672	2,959
(5) Perlombongan (Mining)	-	-	-	-	-
(6) Lain-lain (Others)	-	-	-	-	-
Jumlah (Total)	290,412	302,981	313,381	318,585	335,800

D. Kapasiti Penjanaan (MW) (Generation Capacity (MW))					
(1) Hidro (Hydro)	66	66	66	66	66
(2) Gas (Gas)	104	104	104	104	104
(3) Arangbatu (Coal)	-	-	-	-	-
(4) Minyak (Oil)	-	-	-	-	-
(5) Distillate (Distillate)	-	-	-	-	-
(6) Diesel (Diesel)	300	311	302	290	290
(7) Lain-lain[Bekalan Elektrik Luar Bandar - Diesel & Hidro-Mini] (Others[Rural Electrifications - Diesel & Mini-Hydro])	*2	*6	*6	*6	*6
(8) Jumlah Penjanaan (Total Generation)	472	487	478	466	466
(9) Kebolehdapatan Keseluruhan (Overall Availability(%))	N/A	N/A	82.32	83.50	78.4
(10) Kos Penjanaan(sen/kWj) (Cost Of Generation)(sen/kWh)					
a) Penjanaan Sendiri (Own Generation)	16.50	13.90	18.10	17.62	21.02
b) Tenaga Dibeli (Energy Purchased)	30.78	26.70	26.70	23.35	25.79
c) Kos Keseluruhan- (a) & (b) (Overall Cost - (a) & (b))	24.16	21.04	21.04	20.9	39.15

*Hidro-mini (Mini-hydro)

	2000	2001	2002	2003	2004
E. Keupayaan Sistem Penghantaran (Transmission System Capacity)					
(1) Talian/Kabel Sistem Penghantaran (km) (Transmission System Lines/Cables (km))					
i. 500 KV	-	-	-	-	-
ii. 275 KV	-	-	-	-	-
iii. 132 KV	497	542	542	1,870	1,227
iv. 66 KV	123	123	123	122	123
(2) Pencawang Penghantaran (Transmission Substations)					
i. Bilangan (Number)	17	17	17	23	26
ii. Keupayaan (MVA) (Capacity (MVA))	1,005	1,005	1,005	1,410	2,258
(3) Prestasi (Performance)					
a) Bilangan Kejadian Pelantikan (Number of Incidents of Trippings)	46	N/A	31	22	25
b) Tenaga Yang Tidak Dibekal (Unsupplied Energy (MWh))	1,000	2,153	548	660	573

	2000	2001	2002	2003	2004
F. Keupayaan Sistem Pengagihan (Distribution System Capacity)					
(1) Talian/Kabel Sistem Pengagihan (km) (Distribution System Lines/Cables)					
i. Talian (Overhead Lines)	11,593	12,056	13,020	13,500	*4,987
ii. Kabel (Underground Cables)	1,184	1,220	1,281	1,400	*455
(2) Pencawang Pengagihan (Distribution Substations)					
i. Bilangan (Number)	4,012	4,411	4,453	4,196	4,687
ii. Keupayaan (MVA) (Capacity (MVA))	1,496	1,433	2,296	2,265	2,500
(3) Prestasi (Performance)					
Bilangan Gangguan Bekalan (Number of Interruption of Supply)	10,361	10,442	9,457	10,083	14,308

* 33 dan 11kV Sistem sahaja (Only 33 and 11kV)

	2000	2001	2002	2003	2004
G. Pencapaian Prestasi (Performance Highlights)					
(1) Kehendak Maksimum (MW) (Maximum Demand (MW))	373	366	391	448	481
(2) Jumlah Unit Penjanaan (GWj) (Total Units Generated (GWh))	1,064	1,139	1,252	1,401	1,394
(3) Jumlah Unit Jualan (GWj) (Total Units Sold (GWh))	1,913	2,005	2,182	2,332	2,557
(4) Hasil Jualan Elektrik (RM Juta) (Sales of Electricity (RM million))	474	496	598	591	640
(5) Kapasiti Penjanaan Terpasang (MW) (Installed Generation Capacity (MW))	472	487	478	466	466
(6) Jumlah Kakitangan (Total Number of Employees)	2,033	2,062	2,097	2,096	2,084
(7) Hasil Jualan Setiap Kakitangan (RM Juta) (Revenue Per Employee (RM million))	0.23	0.24	0.29	0.28	0.31
(8) Unit Jualan Setiap Kakitangan (GWj) (Units Sold Per Employee (GWh))	0.94	0.97	1.04	1.11	1.23
(9) Kapasiti Penjanaan Setiap Kakitangan (MW) (Generation Capacity Per Employee (MW))	0.23	0.24	0.23	0.22	0.22
(10) Jumlah Unit Pembelian (GWj) (Total Units Purchased (GWh))	1,235	1,365	1,457	1,583	1,863
(11) Jumlah Unit Eksport (GWj) (Total Units Exported (GWh))	-	-	-	-	-
(12) Jumlah Unit Impot (GWj) (Total Units Imported (GWh))	-	-	-	-	-
(13) Overall System Average Interruption Duration Index (SAIDI)	2,048	2,279	1,779	1,729	2,594



Statistik Perbadanan Pembekalan Letrik Sarawak (SESCO)
Statistics of Sarawak Electricity Supply Corporation (SESCO)

PERBADANAN PEMBEKALAN LETRIK SARAWAK (SESCO)
SARAWAK ELECTRICITY SUPPLY CORPORATION (SESCO)

	2000	2001	2002	2003	2004
A. Jualan Tenaga (GWj) (Sales of Energy (GWh))					
(1) Domestik (<i>Domestic</i>)	669	742	805	864	919
(2) Komersial (<i>Commercial</i>)	918	972	1,025	1,107	1,165
(3) Industri (<i>Industrial</i>)	1,257	1,321	1,381	1,463	1,553
(4) Lampu Awam (<i>Public Lighting</i>)	30	32	37	37	41
(5) Perlombongan (<i>Mining</i>)	-	-	-	-	-
(6) Eksport (<i>Export</i>)	-	-	-	-	-
(7) Lain-lain (<i>Others</i>)	-	-	-	-	-
Jumlah (Total)	2,874	3,067	3,248	3,471	3,678

	2000	2001	2002	2003	2004
B. Campuran Penjanaan (GWj) (Generation Mix (GWh))					
(1) Hidro (<i>Hydro</i>)	479	503	388	454	371
(2) Gas (<i>Gas</i>)	1,249	1,175	1,460	1,449	1,438
(3) Arangbatu (<i>Coal</i>)	-	-	-	-	-
(4) Minyak (<i>Oil</i>)	266	249	124	-	-
(5) Distillate (<i>Distillate</i>)	-	-	-	-	-
(6) Disel (<i>Diesel</i>)	109	176	319	499	251
(7) Lain-lain (<i>Others</i>)	-	-	-	-	-
Jumlah (Total)	2,103	2,103	2,291	2,402	2,060

N.B. Tahun yang ditunjukkan adalah tahun kewangan
Years indicated are financial years

PERBADANAN PEMBEKALAN LETRIK SARAWAK (SESCO)
SARAWAK ELECTRICITY SUPPLY CORPORATION (SESCO)

	2000	2001	2002	2003	2004
C. Bilangan Pengguna (No. of Consumers)					
(1) Domestik (<i>Domestic</i>)	270,299	284,711	302,571	323,659	336,439
(2) Komersial (<i>Commercial</i>)	49,631	51,899	53,993	56,069	58,259
(3) Industri (<i>Industrial</i>)	775	814	831	838	867
(4) Lampu Awam (<i>Public Lighting</i>)	3,468	3,800	4,150	4,437	4,783
(5) Perlombongan (<i>Mining</i>)	-	-	-	-	-
(6) Lain-lain (<i>Others</i>)	-	-	-	-	-
Jumlah (Total)	324,173	341,224	361,545	385,003	400,348

	2000	2001	2002	2003	2004
D. Kapasiti Penjanaan (MW) (Generation Capacity (MW))					
(1) Hidro (<i>Hydro</i>)	101	101	101	101	101
(2) Gas (<i>Gas</i>)	291	291	289	288	274
(3) Arangbatu (<i>Coal</i>)	-	-	-	-	-
(4) Minyak (<i>Oil</i>)	68	75	50	-	-
(5) Distillate (<i>Distillate</i>)	-	-	-	-	-
(6) Disel (<i>Diesel</i>)	91	92	117	171	170
(7) Lain-lain (<i>Others</i>)	-	-	-	-	-
(8) Jumlah Penjanaan (<i>Total Generation</i>)	551	559	557	560	545
(9) Kebolehdapatan Keseluruhan (<i>Overall Availability(%)</i>)	N/A	N/A	N/A	N/A	N/A
(10) Kos Penjanaan (sen/kWj) (<i>Cost Of Generation (sen/kWh)</i>)					
a) Penjanaan Sendiri (<i>Own Generation</i>)	12.08	13.02	11.48	12.16	14.0
b) Tenaga Dibeli (<i>Energy Purchased</i>)	12.83	12.2	15.83	11.81	10.7
c) Kos Keseluruhan- (a) & (b) (<i>Overall Cost - (a) & (b)</i>)	12.36	12.68	13.2	12.02	12.3

PERBADANAN PEMBEKALAN LETRIK SARAWAK (SESCO)
SARAWAK ELECTRICITY SUPPLY CORPORATION (SESCO)

		2000	2001	2002	2003	2004
E.	Keupayaan Sistem Penghantaran (Transmission System Capacity)					
(1)	Talian/Kabel Sistem Penghantaran (km) (Transmission System Lines/Cables (km))					
	i. 500 KV	-	-	-	-	-
	ii. 275 KV	765	765	765	765	765
	iii. 132 KV	128	135	136	136	138
	iv. 66 KV	-	-	-	-	-
(2)	Pencawang Penghantaran (Transmission Substations)					
	i. Bilangan (Number)	15	17	17	17	18
	ii. Keupayaan (MVA) (Capacity (MVA))	3,240	3,251	3,251	3,251	3,491
(3)	Prestasi (Performance)					
	a) Sistem Minit (System Minutes)	N/A	26	37	2	21
	b) Bilangan Kejadian Pelantikan (Number of Incidents of Trippings)	53	30	34	21	9
	c) Tenaga Yang Tidak Dibekal (Unsupplied Energy (MWh))	N/A	225	517	17.5	269
F.	Keupayaan Sistem Pengagihan (Distribution System Capacity)					
(1)	Talian/Kabel Sistem Pengagihan (km) (Distribution System Lines/Cables)					
	i. Talian (Overhead Lines)	13,958	14,525	15,208	16,072	16,790
	ii. Kabel (Underground Cables)	3,111	3,353	3,553	3,757	4,173
(2)	Pencawang Pengagihan (Distribution Substations)					
	i. Bilangan (Number)	5,256	5,532	5,554	6,249	6,893
	ii. Keupayaan (MVA) (Capacity (MVA))	3,596	3,855	3,933	4,200	4,668
(3)	Prestasi (Performance)					
	Bilangan Gangguan Bekalan (Number of Interruption of Supply)	N/A	6,004	4,167	6,590	4,244

PERBADANAN PEMBEKALAN LETRIK SARAWAK (SESCO)
SARAWAK ELECTRICITY SUPPLY CORPORATION (SESCO)

		2000	2001	2002	2003	2004
G.	Pencapaian Prestasi (Performance Highlights)					
(1)	Kehendak Maksimum (MW) (Maximum Demand (MW))	554	574	604	643	685
(2)	Jumlah Unit Penjanaan (GWj) (Total Units Generated (GWh))	2,103	2,103	2,291	2,402	2,060
(3)	Jumlah Unit Jualan (GWj) (Total Units Sold (GWh))	2,874	3,067	3,248	3,471	3,678
(4)	Hasil Jualan Elektrik (RM Juta) (Sales of Electricity (RM million))	759	812	864	927	977
(5)	Kapasiti Penjanaan Terpasang (MW) (Installed Generation Capacity (MW))	551	559	557	560	545
(6)	Jumlah Kakitangan (Total Number of Employees)	2,046	2,029	2,025	2,028	2,058
(7)	Hasil Jualan Setiap Kakitangan (RM Juta) (Revenue Per Employee (RM million))	0.37	0.40	0.43	0.46	0.47
(8)	Unit Jualan Setiap Kakitangan (GWj) (Units Sold Per Employee (GWh))	1.40	1.51	1.60	1.71	1.79
(9)	Kapasiti Penjanaan Setiap Kakitangan (MW) (Generation Capacity Per Employee (MW))	0.27	0.28	0.28	0.28	0.26
(10)	Jumlah Unit Pembelian (GWj) (Total Units Purchased (GWh))	1,245	1,451	1,506	1,657	1,840
(11)	Jumlah Unit Eksport (GWj) (Total Units Exported (GWh))	-	-	-	-	-
(12)	Jumlah Unit Impot (GWj) (Total Units Imported (GWh))	-	-	-	-	-
(13)	Overall System Average Interruption Duration Index (SAIDI)	859	731	611	421	327



Senarai Penjana Kuasa Bebas
List of Independent Power Producers (IPPs)

PENJANA KUASA BEBAS
INDEPENDENT POWER PRODUCERS (IPPs)

Bil (No.)	Nama Pelesen (Licensee)	Jenis Loji (Type of Plant)	Kapasiti Berlesen (MW) (Licensed Capacity (MW))	Unit Penjanaan (GWj) (Units Generated (GWh))	Unit Jualan (GWj) (Units Sold (GWh))	Tarikh Lesen Dikeluarkan (Date of Issue of Licence)
1.	YTL Power Generation Sdn. Bhd. (a) Paka, Terengganu (b) Pasir Gudang, Johor	2x404MW (Combined Cycle) 1x404MW (Combined Cycle)	808 404	 7,622	 7,469	 7-4-1993
2.	Genting Sanyen Power Sdn. Bhd. Kuala Langat, Selangor	1x762MW (Combined Cycle)	762	5,485	5,215	1-7-1993
3.	Segari Energy Ventures Sdn. Bhd. Lumut, Perak	2x651.5MW (Combined Cycle)	1,303	7,262	7,139	15-7-1993
4.	Powertek Bhd. Alor Gajah, Melaka	4x110MW (Gas Turbines)	440	113	99	1-12-1993
5.	Port Dickson Power Bhd. Tanjung Gemuk, Port Dickson	4x110MW (Gas Turbines)	440	168	163	1-12-1993
6.	Projass Engineering Sdn. Bhd.	17MW (Mini Hydro)	17	12	11	1-4-1994
7.	ARL Tenaga Sdn. Bhd. Melawa, Sabah	4x12.5MW (Diesel Engines)	50	142	134	14-6-1994
8.	Musteq Hydro Sdn. Bhd. Sg. Kenerong, Kelantan	2x10MW (Mini Hydro)	20	84	84	18-11-1994
9.	Serudong Power Sdn. Bhd. Tawau, Sabah	3x12MW (Diesel Engines)	36	250	217	31-3-1995
10.	Stratavest Sdn. Bhd. Sandakan, Sabah	4x16MW (Diesel Engines)	64	405	391	1-10-1996

PENJANA KUASA BEBAS
INDEPENDENT POWER PRODUCERS (IPPs)

Bil (No.)	Nama Pelesen (Licensee)	Jenis Loji (Type of Plant)	Kapasiti Berlesen (MW) (Licensed Capacity (MW))	Unit Penjanaan (GWj) (Units Generated (GWh))	Unit Jualan (GWj) (Units Sold (GWh))	Tarikh Lesen Dikeluarkan (Date of Issue of Licence)
11.	Powertron Resources Sdn. Bhd. Karambunai, Sabah	4x30MW (Gas Turbines)	120	878	871	6-2-1997
12.	TNB Generation Sdn. Bhd. **	6,145MW (Various types of thermal plants)	6,145	20,029	19,368	1-9-1997
13.	Sandakan Power Corporation Sdn. Bhd. Sandakan, Sabah	4x8.5MW (Diesel Engines)	34	148	141	29-11-1997
14.	TNB Janamanjung Sdn. Bhd. **	3x700MW (Coal)	2100	12,290	11,177	21-5-1998
15.	Teknologi Tenaga Perlis Consortium Sdn. Bhd. Kuala Sungai Baru, Perlis	1x650MW (Combined Cycle)	650	5,328	5,268	26-8-1998
16.	Nur Generation Sdn. Bhd. Kulim High-Tech Industrial Park, Kedah	2x110MW (Combined Cycle)	*	*	*	17-9-1998
17.	Pahlawan Power Sdn. Bhd. Stesen Janakuasa Melaka, Tanjung Keling, Melaka.	1x334MW (Combined Cycle)	334	2,268	2,239	26-5-1999
18.	TNB Hidro Sdn. Bhd. **	1910MW (Hydro)	1,910	4,992	4,927	1-9-2000
19.	Prai Power Sdn. Bhd. Daerah Seberang Perai Tengah Pulau Pinang	1x350MW (Combined Cycle)	350	2,114	2,069	9-2-2001

PENJANA KUASA BEBAS
INDEPENDENT POWER PRODUCERS (IPPs)

Senarai Penjana Kuasa Menggunakan Sumber
 Tenaga Yang Boleh Diperbaharui
List of Small Renewable Energy Power Producers (SREP)

Bil (No.)	Nama Pelesen (Licensee)	Jenis Loji (Type of Plant)	Kapasiti Berlesen (MW) (Licensed Capacity (MW))	Unit Penjanaan (GWj) (Units Generated (GWj))	Unit Jualan (GWj) (Units Sold (GWj))	Tarikh Lesen Dikeluarkan (Date of Issue of Licence)
20.	GB3 Sdn. Bhd. Lumut, Perak	1x640MW (Combined Cycle)	640	4,246	4,170	7-08-2001
21.	Panglima Power Sdn. Bhd. Alor Gajah, Melaka	1x720MW (Combined Cycle)	720	5,578	5,073	7-08-2001
22.	Kapar Energy Ventures Sdn Bhd	2x300MW (Thermal) 2x300MW, 2x500MW (Coal) 2x110MW (Gas Turbines)	2,420	4,906	4,579	1-07-2004
23.	Sejingkat Power Corporation Sdn. Bhd. Kuching, Sarawak ***	100MW (Coal)	100	640	N/A	N/A
24.	Sarawak Power Generation Sdn. Bhd. Bintulu, Sarawak ***	2x110MW (Combined Cycle)	220	1,200	N/A	N/A

* Dalam Pembinaan (Under Construction)

** Anak Syarikat TNB (Wholly Owned Subsidiaries of TNB)

*** Anak Syarikat SESCO (Wholly Owned Subsidiaries of SESCO)

PENJANA KUASA MENGGUNAKAN SUMBER TENAGA
YANG BOLEH DIPERBAHARUI
RENEWABLE ENERGY POWER PRODUCERS

Senarai Pengagih Elektrik
List of Electricity Distributors

Bil (No.)	Nama Pelesen (Licensee)	Jenis Loji (Type of Plant)	Kapasiti Berlesen (MW) (Licensed Capacity (MW))	Jenis Bahan Api (Energy Sources)	Unit Penjanaan (GWj) (Units Generated (GWj))	Unit Jualan (GWj) (Units Sold (GWj))	Tarikh Lesen Dikeluarkan (Date of Issue of Licence)
1.	Bumibiopower Sdn. Bhd. Pantai Remis, Perak	Turbin Stim (Steam Turbines)	6	Tangkai Buah Sawit (Empty Fruit Bunch)	*	*	13-10-2001
2.	Jana Landfill Sdn. Bhd. Air Hitam Sanitary Landfill Seri Kembangan, Selangor.	Turbin Gas (Gas Turbines)	2	Landfill Gas	861	861	13-10-2001
3.	Palm Energy Sdn. Bhd. Kwantas Oil Sdn Bhd Jalan Kwantas, Lahat Datu, Sabah.	Turbin Stim (Steam Turbines)	8	Sisa Sawit (Waste from Palm Oil)	*	*	6-9-2003
4.	TSH Bio Energy Sdn. Bhd. Km 65, Jalan Tawau-Kunak, Tawau, Sabah.	Turbin Stim (Steam Turbines)	10	Sisa Sawit (Waste from Palm Oil)	*	*	14-10-2003
5.	Potensi Gaya Sdn. Bhd. Sungai Burong Palm Oil Mill, Km 44, Tawau-Lahad Datu Highway, Tawau, Sabah.	Turbin Stim (Steam Turbines)	6	Tangkai Buah Sawit (Empty Fruit Bunch)	*	*	14-10-2003
6.	Alaf Ekspresi Sdn. Bhd. Apas Balung Mill, Tawau-Lahat Datu Highway, Km 35, Locked Bag 28, Borneo Samudra, 91009 Tawau, Sabah.	Turbin Stim (Steam Turbines)	7	Sisa Sawit (Waste from Palm Oil)	*	*	14-10-2003

* Belum Beroperasi
Not Operated Yet

SENARAI PENGAGIH ELEKTRIK
LIST OF ELECTRICITY DISTRIBUTORS

Bil (No.)	Nama Pelesen (Licensee)	Kawasan Bekalan (Area of Supply)	Kapasiti Dileesen (MW) (Licensed Capacity (MW))	Tarikh Lesen Dikeluarkan (Date of Issue of Licence)
1.	Syarikat Elektrik Pulau Ketam 62-K, Jalan Dua, Pulau Ketam, 42490 Port Klang, Selangor	Bagan Teo Chew, Pulau Ketam, Selangor	1.2	30-10-1985
2.	Gopeng Berhad No 1A, Persiaran Seri Raia, Taman Seri Raia, 31300 Kampung Kepayang, Perak.	Gopeng Tin Mine Area, Gopeng, Perak.	1.2	12-03-1988
3.	Sabah Forest Industries Sdn. Bhd. No. 10, Jalan Jeti, Kompleks SFI, WDT 31, 89859 Sipitang, Sabah.	Sabah Forest Industries Complex, Sabah	57.7 *	12-05-1993
4.	Kuatan Port Consortium Sdn. Bhd. Wisma KPC, KM 25, Tanjung Gelang, Peti Surat 199, 25720 Kuantan, Pahang.	Kuantan Port Authority Area, Pahang.	3.5	10-06-1994
5.	MTBE Malaysia Sdn. Bhd. Lot 111, Kawasan Perindustri Gebeng, Peti Surat 1, Balok, 26080 Kuantan, Pahang	Supply to Polypropylene Malaysia Sdn. Bhd. Gebeng Industrial Estate, Pahang.	5.6	15-06-1995
6.	Berjantai Tin Dredging Berhad P.O. Box 208, 45600 Batang Berjantai, Selangor.	Tin Mine Area	2.2	18-08-1995
7.	Sunway Pyramid Sdn. Bhd. Lot LL1.10 Sunway Pyramid, No. 3, Jalan PJS 11/15, Bandar Sunway, 46150 Petaling Jaya, Selangor.	Sunway Pyramid Shopping Complex, Selangor.	9.5 @	01-11-1995
8.	Gas District Cooling (KLIA) Sdn. Bhd. Level 46, Tower 1, Petronas Twin Tower, Kuala Lumpur City Centre, 50088 Kuala Lumpur.	KLIA, Sepang, Selangor	60.0 *	03-01-1996
9.	EPE Distribution Sdn. Bhd. No. 45-8 & 47-8, The Boulevard, Mid Valley City, Lingkaran Syed Putra, 59200 Kuala Lumpur.	Putra LRT Corridor, Kuala Lumpur.	100.0	27-03-1996
10.	Seseni Energy Services Sdn. Bhd. 76, Lorong Mamanda 1, Ampang Point, 68000 Ampang, Selangor.	Stadium Merdeka Redevelopment Area Kuala Lumpur.	40.0 #	27-06-1996

SENARAI PENGAGIH ELEKTRIK
LIST OF ELECTRICITY DISTRIBUTORS

Bil (No.)	Nama Pelesen (Licensee)	Kawasan Bekalan (Area of Supply)	Kapasiti Dileesen (MW) (Licensed Capacity (MW))	Tarikh Lesen Dikeluarkan (Date of Issue of Licence)
11.	Profound Heritage Sdn. Bhd. Lot 2, 1st Floor, Lorong Grace Square, Jalan Pantai Sembulan, 88100 Kota Kinabalu, Sabah.	Sutera Harbour Resort, Sabah.	38.0 *	01-10-1996
12.	Wirazone Sdn. Bhd. Level 13A, Block 3B, Plaza Sentral, Jalan Stesen Sentral 5, 50470 Kuala Lumpur.	KL Sentral Development Area, Kuala Lumpur.	60.0 @	09-10-1996
13.	Bandar Utama City Corporation Sdn. Bhd. 1, Persiaran Bandar Utama, Bandar Utama, 47800 Petaling Jaya, Selangor	1 Utama Shopping Complex, Selangor	100.0 @	01-03-1997
14.	Petronas Methanol (Labuan) Sdn. Bhd. Kawasan Perindustri Ranca-Ranca, P.O.Box 80079, 87010 W.P. Labuan, Sabah.	Kompleks Petronas Methanol (Labuan) Kawasan Perindustri Ranca-Ranca	12.8 *	01-03-1997
15.	Kelang Port Authority Beg Berkunci 202, Jalan Pelabuhan Utara, 42005 Pelabuhan Klang, Selangor.	Klang Port Authority Area, Port Klang, Selangor	5.8	25-03-1997
16.	Jaya Jusco Stores Bhd. (Ulu Kinta, Perak) 4th & 5th Floor, Wisma JUSCO, Jalan 3/27A, Seksyen 1, Bandar Baru Wangsa Maju, 53300 Kuala Lumpur.	Jaya Jusco Shopping Complex, Ipoh, Perak.	2.0	01-8-1997
17.	Pengkalan Bekalan Kemaman Sdn. Bhd. Peti Surat 64, 24007 Kemaman, Terengganu.	Pengkalan Bekalan Kemaman Area, Terengganu.	0.4	03-12-1997
18.	See Sen Chemical Bhd. PT 3940, Kawasan Perindustri Teluk Kalong, 24000 Kemaman, Terengganu.	Kawasan Perindustri Teluk Kalong, Kemaman, Terengganu.	6.0 *	03-12-1997
19.	Cryovac (M) Sdn. Bhd. Lot 115, Gebeng Industrial Estate, Peti Surat 30, Balok, 26080 Kuantan, Pahang.	Gebeng Industrial Estates, Pahang.	3.5	04-02-1998
20.	Malaysia Airports (Sepang) Sdn. Bhd. 3rd & 4th Floor, Airport Management Centre, KL International Airport, 64000 KLIA, Selangor.	KLIA, Sepang, Selangor.	46.0	14-02-1998

SENARAI PENGAGIH ELEKTRIK
LIST OF ELECTRICITY DISTRIBUTORS

Bil (No.)	Nama Pelesen (Licensee)	Kawasan Bekalan (Area of Supply)	Kapasiti Dilesen (MW) (Licensed Capacity (MW))	Tarikh Lesen Dikeluarkan (Date of Issue of Licence)
21.	Petronas Gas Bhd. - CUF Kerteh Centralized Utility Facilities(CUF), Integrated Petrochemical Complex, KM 105, Jalan Kuantan/Kuala Terengganu, 24300 Kertih, Kemaman, Terengganu.	Integrated Petrochemical Complex, Kerteh, Terengganu.	210.0 *	28-05-1998
22.	Petronas Gas Bhd. - CUF Gebeng Centralized Utility Facilities(CUF), Integrated Petrochemical Complex, Lot 139A, Gebeng Industrial Area, Phase 111, 26080 Kuantan, Pahang.	Integrated Petrochemical Complex, Gebeng Industrial Area, Pahang.	105.0 *	28-05-1998
23.	K.K.I.P. Power Sdn. Bhd. No. G21 & G22, KKIP Amenity Centre, Lot 11B, Export Oriented Industrial Zone Phase 1, Kota Kinabalu Industrial Park, Jalan Sepangar, Menggatal, 88450 Kota Kinabalu, Sabah.	Kota Kinabalu Industrial Park, Sabah.	210.0	15-06-1998
24.	Nur Distribution Sdn. Bhd. Central Control Building(CCB), Lot 30, Jalan Hi-Tech 4, Kulim Hi-Tech Park, 09000 Kulim, Kedah.	Kulim Hi-Tech Park, Kedah.	440.0	17-09-1998
25.	C3 Power Sdn. Bhd. Block F, Lot 51, Ground Floor, Jati Commercial Centre, P.O. Box 80737, 87017 F.T. Labuan, Sabah	Temporary Settlement in some areas in Labuan, Sandakan and Semporna.	5.9	13-07-1999
26.	Shell Refining Company (FOM) Berhad Sdn. Bhd. Batu 1, Jalan Pantai, 71000 Port Dickson, Negeri Sembilan.	Integrated Petrochemical Complex, Port Dickson.	35.0 *	10-08-1999
27.	Gas District Cooling (KLCC) Sdn. Bhd. Level 46, Tower 1, Petronas Twin Tower, Kuala Lumpur City Centre, 50088 Kuala Lumpur.	KLCC DCS/Co Generation Plant, Persiaran KLCC, Jalan Ampang	40.0 *	30-08-2000
28.	Jaya Jusco Stores Bhd. Taman Maluri, Cheras Taman Maluri Cheras, 56100 Cheras, Kuala Lumpur.	Taman Jaya Maluri, Cheras, Kuala Lumpur.	3.4	02-10-2000
29.	Genting Utilities & Services Sdn. Bhd. Tingkat 24, Wisma Genting, Jalan Sultan Ismail, 50250 Kuala Lumpur.	Genting Highlands Area, Pahang.	48.0	17-10-2000
30.	Gas District Cooling (M) Sdn. Bhd. Universiti Teknologi Petronas, Tronoh, Perak Level 46, Tower 1, Petronas Twin Towers, Kuala Lumpur City Centre, 50088 Kuala Lumpur.	Kampus University Technology Petronas Ipoh, Perak.	8.4 *	10-03-2001

SENARAI PENGAGIH ELEKTRIK
LIST OF ELECTRICITY DISTRIBUTORS

Bil (No.)	Nama Pelesen (Licensee)	Kawasan Bekalan (Area of Supply)	Kapasiti Dilesen (MW) (Licensed Capacity (MW))	Tarikh Lesen Dikeluarkan (Date of Issue of Licence)
31.	TCL Industries (M) Sdn. Bhd. Plot No: 4248, Teluk Kalong Industrial Estate, 24007 Kemaman, Terengganu.	Teluk Kalong Industrial Estate, Kemaman, Terengganu.	7.0 *	15-09-2003
32.	Ikano Corporation Sdn. Bhd. No. 2, Jalan PJU 7/2, Mutiara Damansara, 47800 Petaling Jaya, Selangor.	Mutiara Damansara, Selangor.	7.9	23-12-2003
33.	Jaya Jusco Stores Sdn. Bhd. Mukim Pulai, Johor 4th & 5th Floor, Menara Kausar, Jalan 3/27A, Seksyen 1, Bandar Baru Wangsa Maju, 53300 Kuala Lumpur	Jaya Jusco Shopping Complex, Mukim Pulai, Johor.	3.1	28-02-2004
34.	Makmuran Sdn. Bhd. Mile 2 1/2, Jalan Ulu Patikang, 89008 Keningau, Sabah.	Supply to Veracity Corporation Sdn Bhd (for wood processing activities)	1.8 *	27-03-2004

NB # Projek Pembangunan Belum Mula
Project Development Not Commenced Yet

* Menjana Elektrik Secara Co-Gen
Generate Electricity by Co-Generation

@Loji Co-Generation Belum Beroperasi
Co-Generation Plant Not Opeationed Yet



Senarai *Co-Generators* Utama
List of Major Co-Generators

SENARAI CO-GENERATORS UTAMA LIST OF MAJOR CO-GENERATORS

Bil (No.)	Nama Pelesen (Licensee)	Kapasiti (MW) (Capacity (MW))	Jenis Lesen (Type of Licence)	Bahan Api (Fuels)	Penjanaan (MWj) (Generation (MWh))
1.	Sabah Forest Industries Sdn. Bhd. Sipitang, Sabah.	57.7	Awam (Public)	Sisa Kayu/Disel (Wood/Diesel)	307,687
2.	Perwaja Steel Sdn. Bhd. Tanjung Berhala, Kemaman, Terengganu.	9.5	Persendirian (Private)	Haba Buangan Proses Perindustrian (Waste Heat From Industrial Process)	31,651
3.	Bernas Production Sdn. Bhd. Sekinchan, Selangor.	0.2	Persendirian (Private)	Bahan Buangan Pertanian (Agriculture Waste)	#
4.	Lembaga Padi Dan Beras Negara, Sg. Ranggung (Ulu Dedap), Kg. Gajah, Perak.	0.7	Persendirian (Private)	Bahan Buangan Pertanian (Agriculture Waste)	658
5.	Padiberas Nasional Bhd Changkat Lada, Kg. Gajah, Perak.	0.7	Persendirian (Private)	Bahan Buangan Pertanian (Agriculture Waste)	307
6.	Consolidated Plantations Bhd. Tennamaran, Batang Berjuntai, Selangor	4.7	Persendirian (Private)	Bahan Buangan Pertanian (Agriculture Waste)	3,658
7.	Consolidated Plantations Bhd. Nova Scotia Palm Oil Mill, Batu 5, Jalan Maharaja Lela, 36009 Teluk Intan, Perak.	3.4	Persendirian (Private)	Bahan Buangan Pertanian (Agriculture Waste)	2,781
8.	Gas District Cooling (M) Sdn. Bhd. Kuala Lumpur City Centre (KLCC)	40.0	Awam (Public)	Gas Asli (Natural Gas)	136,231
9.	Gas District Cooling (KLIA) Sdn. Bhd. Kuala Lumpur International Airport, Sepang, Selangor.	60.0	Awam (Public)	Gas Asli (Natural Gas)	244,924
10.	See Sen Chemical Bhd. Kawasan Perindustrian Telok Kalong, Kemaman, Terengganu.	6.0	Awam (Public)	Haba Buangan Proses Perindustrian (Waste Heat From Industrial Process)	29,247

SENARAI CO-GENERATORS UTAMA LIST OF MAJOR CO-GENERATORS

Bil (No.)	Nama Pelesen (Licensee)	Kapasiti (MW) (Capacity (MW))	Jenis Lesen (Type of Licence)	Bahan Api (Fuels)	Penjanaan (MWj) (Generation (MWh))
11.	Public Holdings Sdn. Bhd. Jalan Ayer Hitam, Mukim Dengkil, Sepang, Selangor.	1.8	Persendirian (Private)	Gas Asli (Natural Gas)	N/A
12.	Tractors Malaysia (1982) Sdn. Bhd. Kampung Puchong, Daerah Petaling, Selangor.	1.3	Persendirian (Private)	Gas Asli (Natural Gas)	1,402
13.	Profound Heritage Sdn. Bhd. Sutera Harbour Resort, Kota Kinabalu, Sabah.	38.0	Awam (Public)	Disel/Gas Asli (Diesel/ Natural Gas)	#
14.	TCL Industries (M) Sdn. Bhd. Telok Kalong Industrial Area, Kemaman, Terengganu.	7.0	Awam (Public)	Haba Buangan Proses Perindustrian (Waste Heat From Industrial Process)	7,047
15.	Malaysian Mosaics Bhd. Batu 3, Mukim Kluang, Jalan Batu Pahat, Kluang, Johor.	4.2	Persendirian (Private)	Gas Asli (Natural Gas)	#
16.	Malaysian Newsprint Industries Sdn. Bhd. Lot 3771, Jalan Lencongan Mentakab-Temerloh 28400 Mentakab, Pahang.	79.2	Persendirian (Private)	Minyak (Oil)	287,843
17.	Titan Petrochemicals (M) Sdn. Bhd. Plo 312, Jalan Tembaga 4, Pasir Gudang Industrial Estate, Pasir Gudang, Johor.	56.0	Persendirian (Private)	Gas Buangan Proses Perindustrian (Waste Gas From Industrial Process)	277,137
18.	Titan Petrochemicals (M) Sdn. Bhd. PLO 8, Tanjung Langsung Industrial Park, Mukim Sg. Tiram, Johor Bharu, Johor.	42.6	Persendirian (Private)	Gas Asli (Natural Gas)	112,512
19.	Shell Refining Company (FOM) Bhd. Batu 1, Jalan Pantai, Port Dickson, Negeri Sembilan.	35.0	Awam (Public)	Gas Buangan Proses Perindustrian (Waste Gas from Industrial Process)	138,662
20. (*)	Bandar Utama City Corp. Sdn. Bhd. No. 1, Pesiaran Bandar Utama, Petaling Jaya.	50.0	Awam (Public)	Gas Asli (Natural Gas)	-

SENARAI CO-GENERATORS UTAMA
LIST OF MAJOR CO-GENERATORS

Bil (No.)	Nama Pelesen (Licensee)	Kapasiti (MW) (Capacity (MW))	Jenis Lesen (Type of Licence)	Bahan Api (Fuels)	Penjanaan (MWj) (Generation (MWh))
21. (*)	Wirazone Sdn. Bhd. Kuala Lumpur Sentral Development, Brickfields Kuala Lumpur.	12.0	Awam (Public)	Gas Asli (Natural Gas)	-
22. (*)	CCM Chemicals Sdn. Bhd. Pasir Gudang Works, Plot 411, Kaw. 4, Jalan Perak Satu, Pasir Gudang, Johor.	15.0	Persendirian (Private)	Gas Asli (Natural Gas)	-
23. (*)	Amoco Chemical (Malaysia) Sdn. Bhd. Lot 116, Gebeng Industrial Estate, P.O. Box 11, Balok, 26080 Kuantan, Pahang.	21.6	Persendirian (Private)	Gas Asli (Natural Gas)	-
24. (*)	Seseni Energy Services Sdn. Bhd. Plaza Merdeka, Jalan Stadium, Kuala Lumpur.	8.8	Awam (Public)	Gas Asli (Natural Gas)	-
25.	Petronas Methanol (Labuan) Sdn. Bhd. Kompleks Petronas Methanol (Labuan), Kawasan Perindustrian Ranca-Ranca,	12.8	Awam (Public)	Gas Asli (Natural Gas)	63,119
26.	Petronas Gas Bhd. Kertih, Terengganu.	210.0	Awam (Public)	Gas Asli (Natural Gas)	1,228,540
27.	Petronas Gas Bhd. Gebeng, Kuantan, Pahang.	105.0	Awam (Public)	Gas Asli (Natural Gas)	593,032
28.	Tian Siang Oil Mill (Perak) Sdn. Bhd. Lot 2161, Batu 21, Jalan Beruas, Padang Gajah, 32700 Beruas, Perak.	1.8	Persendirian (Private)	Bahan Buangan Pertanian (Agriculture Waste)	92
29.	Central Sugars Refinery Sdn. Bhd. Batu Tiga, 40000 Shah Alam, Selangor	9.2	Persendirian (Private)	Disel/MFO (Diesel/MFO)	22,135
30.	BASF-Petronas Chemicals Sdn. Bhd. Lot 139, Kawasan Perindustrian Gebeng, 26080 Kuantan, Pahang	27.4	Persendirian (Private)	Gas Asli (Natural Gas)	70,527

SENARAI CO-GENERATORS UTAMA
LIST OF MAJOR CO-GENERATORS

Bil (No.)	Nama Pelesen (Licensee)	Kapasiti (MW) (Capacity (MW))	Jenis Lesen (Type of Licence)	Bahan Api (Fuels)	Penjanaan (MWj) (Generation (MWh))
31.	Gas District Cooling (M) Sdn. Bhd. Universiti Teknologi Petronas Tronoh, Perak	8.4	Awam (Public)	Gas Asli (Natural Gas)	24,880
32. (*)	Penfibre Sdn. Bhd. Lot 109-114 Kawasan Perindustrian Bebas Prai Zon 1, 13600 Prai, Pulau Pinang	35.4	Persendirian (Private)	Gas Asli (Natural Gas)	-
33.	Nibong Tebal Paper Mill Sdn Bhd. 886, Jalan Bandar Baru, Sg. Kecil, 14300 Nibong Tebal S.P.S.Pulau Pinang.	0.8	Persendirian (Private)	Habuk Kayu (Wood Dust)	225
34.	Gas District Cooling (Putrajaya) Sdn. Bhd. Plot 201, Putrajaya Precint 2, Wilayah Persekutuan, Putrajaya.	10.7	Persendirian (Private)	Gas Asli (Natural Gas)	6,099
35.	Makmuran Sdn. Bhd. Batu 2 1/2, Jalan Ulu Patikang Keningau, Sabah.	1.8	Awam (Public)	Biomass (Wood)	N/A
36. (*)	Petronas penapisan (Melaka) Sdn. Bhd. Kompleks Petronas Penapisan Melaka, Mukim Sungai Udang, 76300 Melaka	120	Persendirian (Private)	Gas Asli (Natural Gas)	-

SENARAI CO-GENERATORS UTAMA LIST OF MAJOR CO-GENERATORS

Senarai Penghantar Elektrik List of Electricity Transmitter

N.B.

1. (*)	Belum beroperasi (<i>Not in operation yet</i>)	
2. #	Tiada aktiviti penjanaan (<i>No Generation activities</i>)	
3.	a) Jumlah kapasiti projek utama dilisen (<i>Total capacity of major projects licensed</i>)	
	- Awam (<i>Public</i>)	652.5 MW
	- Persendirian (<i>Private</i>)	446.2MW
	Jumlah (<i>Total</i>)	1,098.7 MW
	b) Jumlah kapasiti projek utama dalam perancangan (<i>Total capacity of major projects Planned</i>)	
	- Awam (<i>Public</i>)	70.8 MW
	- Persendirian (<i>Private</i>)	192.0 MW
	Jumlah (<i>Total</i>)	262.8 MW
	c) Jumlah kapasiti projek dalam operasi (<i>Total capacity of major projects in Operation</i>)	
	- Awam (<i>Public</i>)	581.7 MW
	- Persendirian (<i>Private</i>)	254.2 MW
	Jumlah (<i>Total</i>)	835.9 MW
4.	a) Lesen Awam - Pemegang lesen menjana elektrik untuk kegunaan sendiri dan membekal kepada orang lain. <i>Public Licence - The licensee generates for his own use and for supply to other persons</i>	
	b) Lesen Persendirian - Pemegang lesen menjana elektrik untuk kegunaan sendiri. <i>Private Licence - The licensee generates for his own use only.</i>	

SENARAI PENGHANTAR ELEKTRIK
LIST OF ELECTRICITY TRANSMITTERS

Statistik Penjanaaan Persendirian
Statistics of Self-Generation

Bil (No.)	Nama Pelesen (Licensee)	Kapasiti (MW) (Capacity (MW))	Tarikh Lesen Dikeluarkan (Date of issue of Licence)
1	Labuan Beaufort Interconnection Sdn. Bhd. Lantai 37, Bangunan Tabung Haji 201, Jalan Tun Razak, 50400 Kuala Lumpur	60	13-03-1990

STATISTIK PENJANAAN PERSENDIRIAN
STATISTICS OF SELF-GENERATION

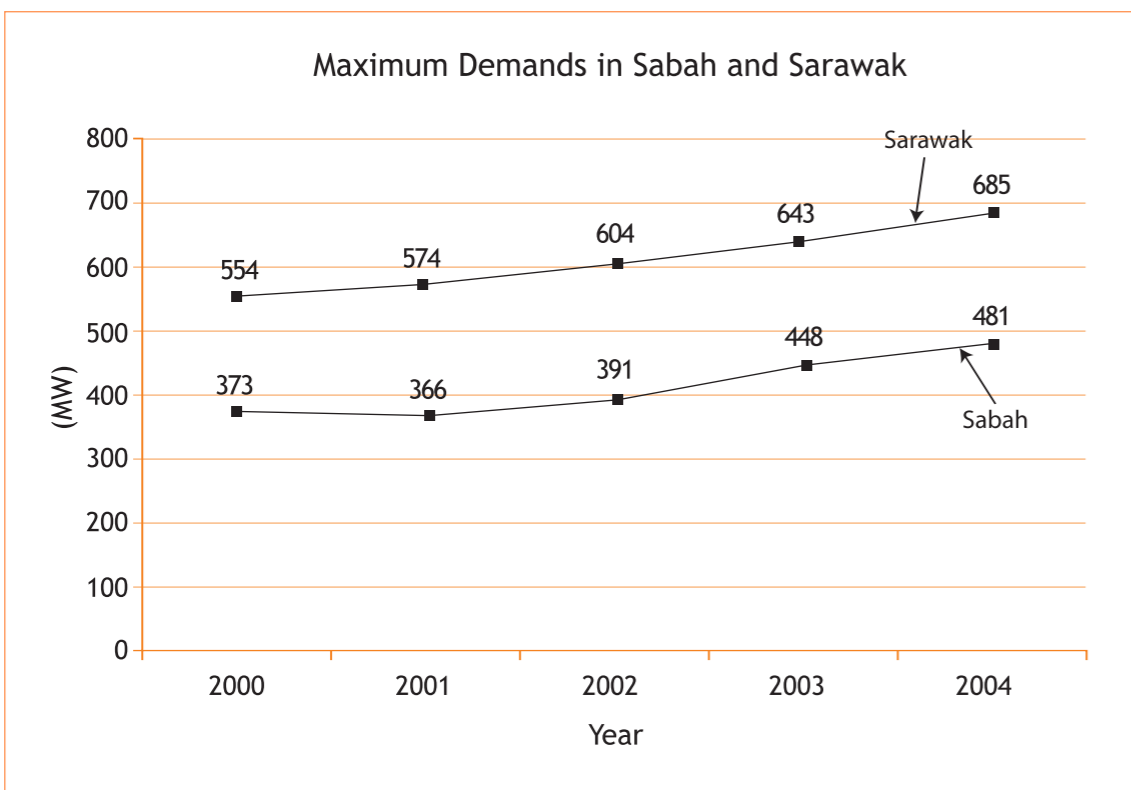
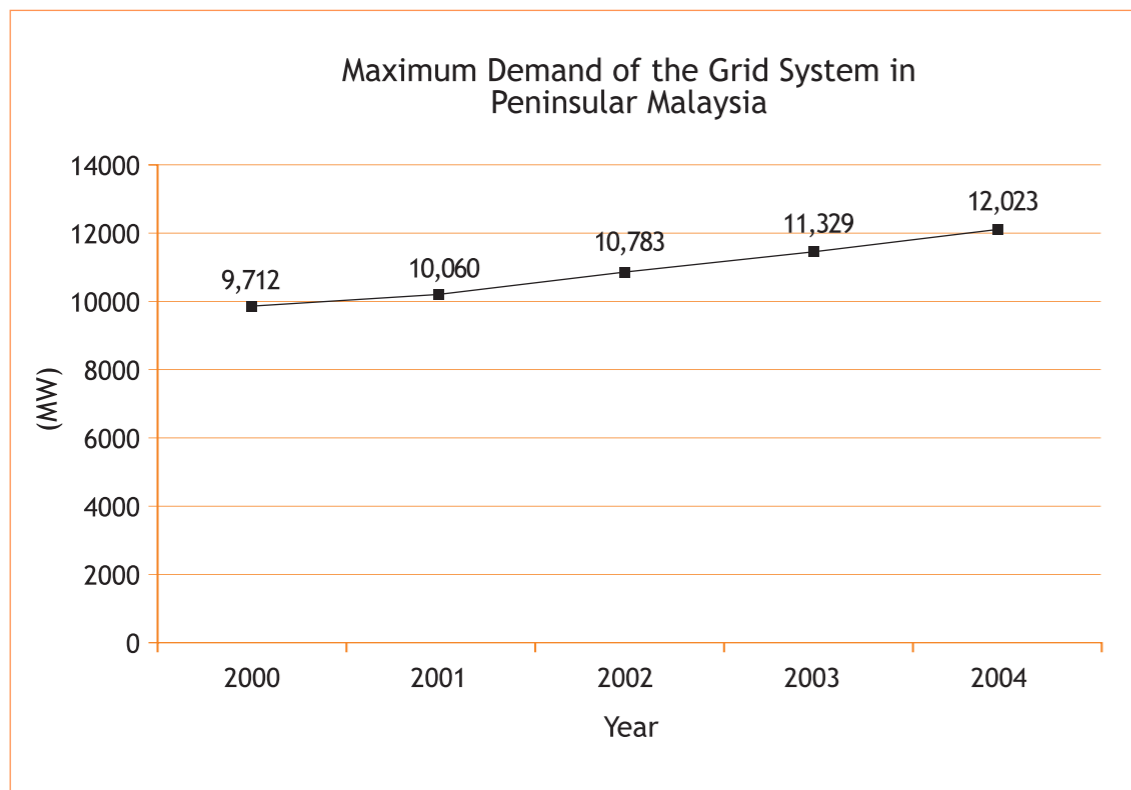
Statistik Dan Maklumat Lain Yang Penting Untuk
Industri Bekalan Elektrik

*Other Important Statistics and Information of the
Electricity Supply Industry*

Bilangan Lesen Penjanaan Persendirian (No. of Self-Generation Licences)	Kapazität Janakuasa Mengikut Jenis Loji (MW) (Generation Plant Mix (MW))				
	Gas (Gas)	Disel (Diesel)	Biomass (Biomass)	Lain-lain (Others)	Jumlah (Total)
1,485	5	782	317	49	1,153

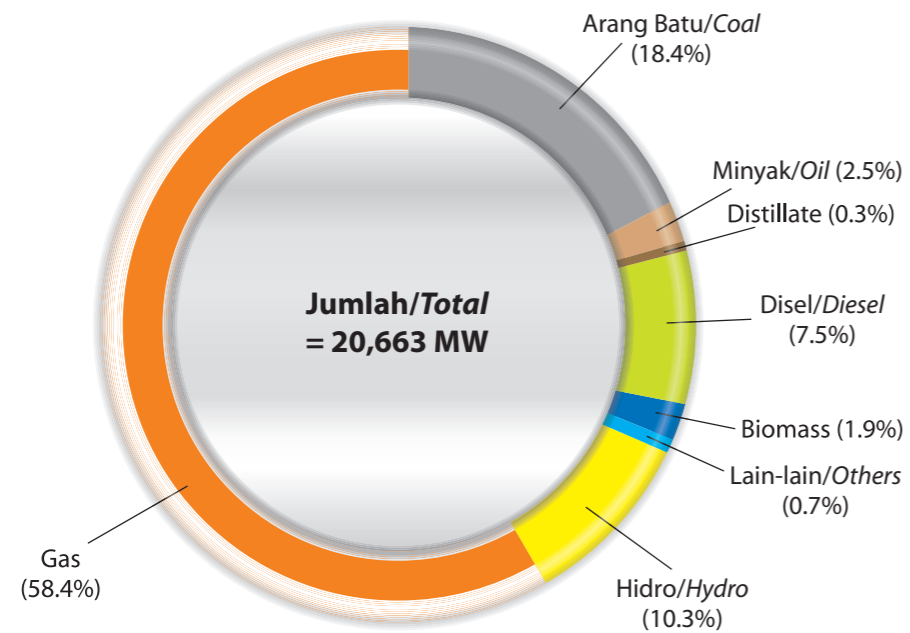
STATISTIK DAN MAKLUMAT LAIN YANG PENTING UNTUK
INDUSTRI BEKALAN ELEKTRIK
**OTHER IMPORTANT STATISTICS AND INFORMATION
OF THE ELECTRICITY SUPPLY INDUSTRY**

STATISTIK PROJEK YANG TELAH DILULUSKAN OLEH SCORE
MENGIKUT SUMBER TENAGA
**STATISTICS OF APPROVED PROJECTS ACCORDING TO
ENERGY SOURCES**

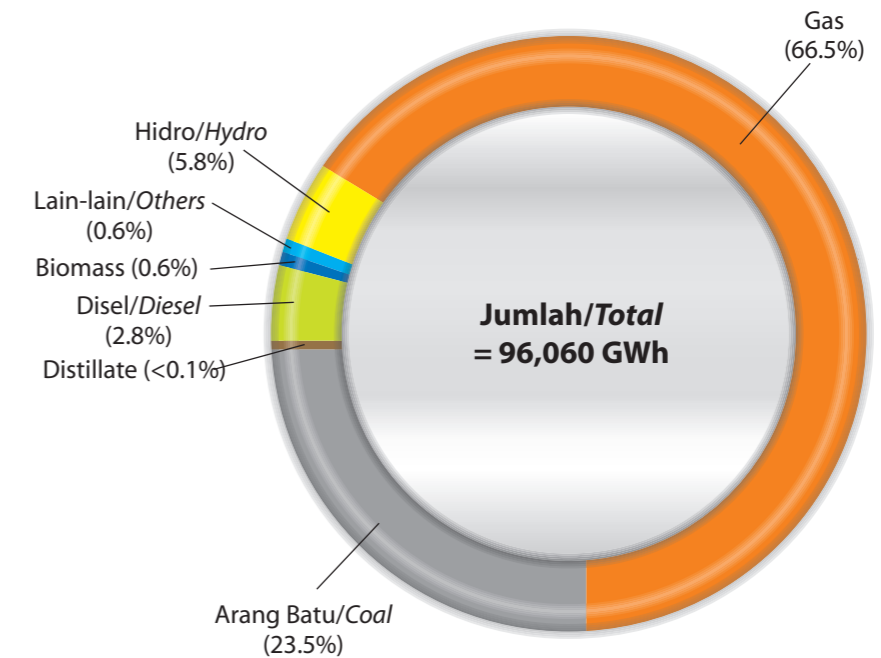


Bil (No.)	Jenis-Jenis Sumber Tenaga (Energy Sources)	Permohonan Diluluskan (Application Approved)	Kapasiti Penjanaan (MW) (Generation Capacity (MW))	Kapasiti Disambung Ke Grid (MW) (Grid Connected Capacity (MW))	Peratus (Percentage) (%)
1.	Biomass Tangkai Sawit (Empty Fruit Bunch) Sisa Kayu (Wood Chips) Sekam Padi (Rice Husk) Sisa Pepejal (Municipal Solid Waste) Campuran (Mix)	27	214.7	175.6	53.9
		1	6.6	6.6	2.0
		2	12.0	12.0	3.7
		1	5.0	5.0	1.5
		3	19.2	19.2	5.9
2.	Gas Landfill (Landfill Gas)	5	10.2	10.0	3.1
3.	Hidro Mini (Mini Hydro)	26	101.2	97.4	29.9
4.	Angin & Solar (Wind & Solar)	0	0.0	0.0	0.0
Jumlah (Total)		65	368.9	325.8	100%

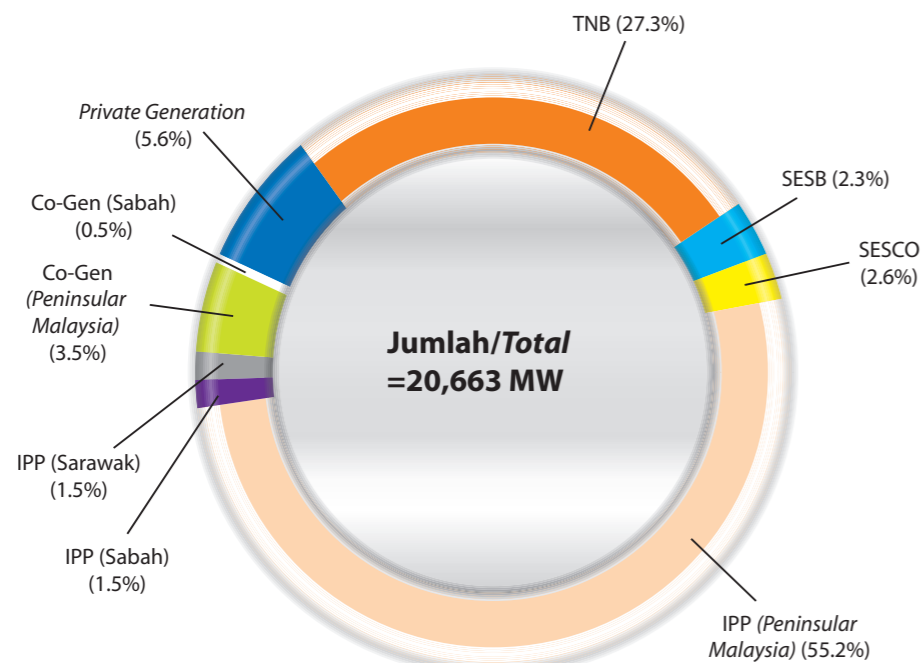
Kapasiti Penjanaan Mengikut Jenis Loji
Generation Plan Mix



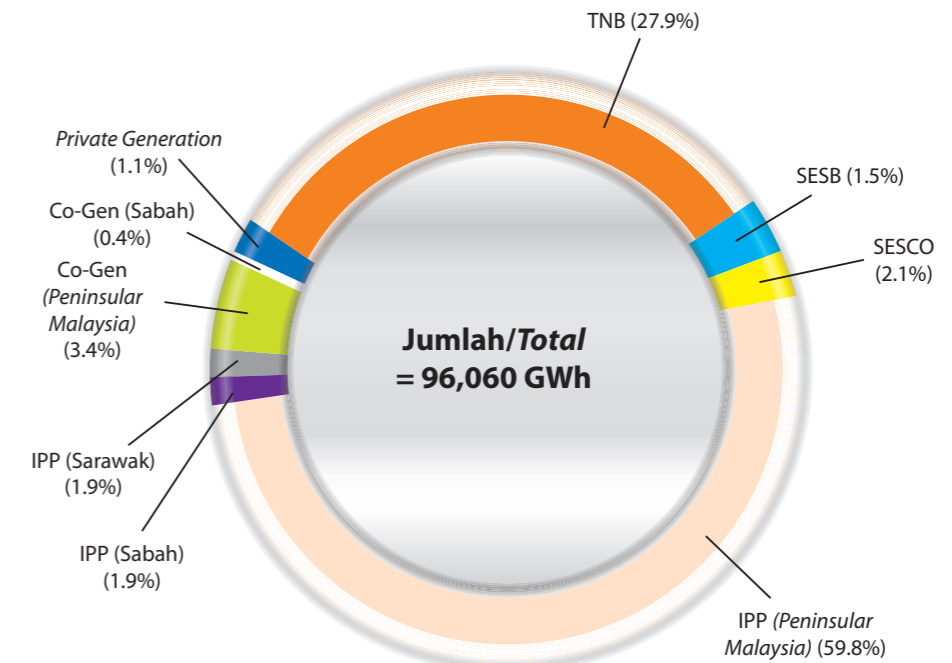
Penjanaan Mengikut Sumber Bahanapi Di Malaysia
Generation Mix in Malaysia



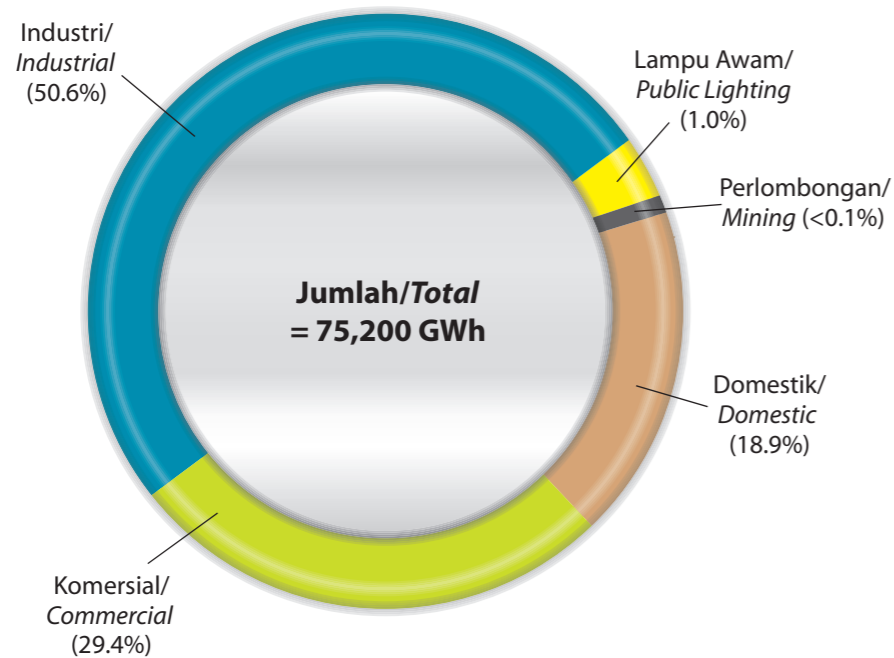
Kapasiti Penjanaan Penjana-Penjana Besar
Generation Capacity of Major Power Producers



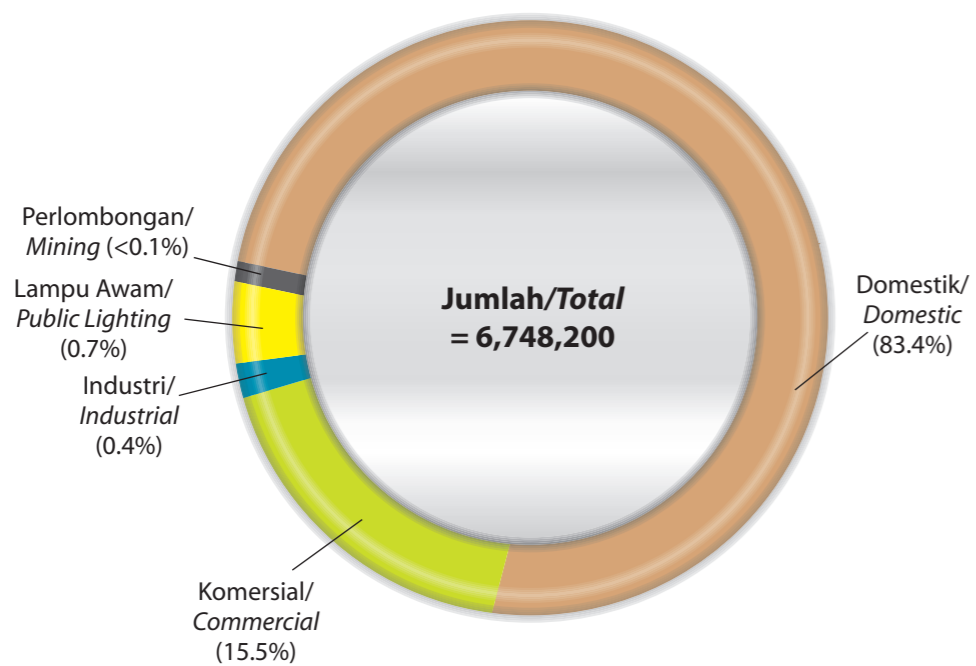
Penjanaan Oleh Penjana-Penjana Besar di Malaysia
Generation by Major Power Producers in Malaysia



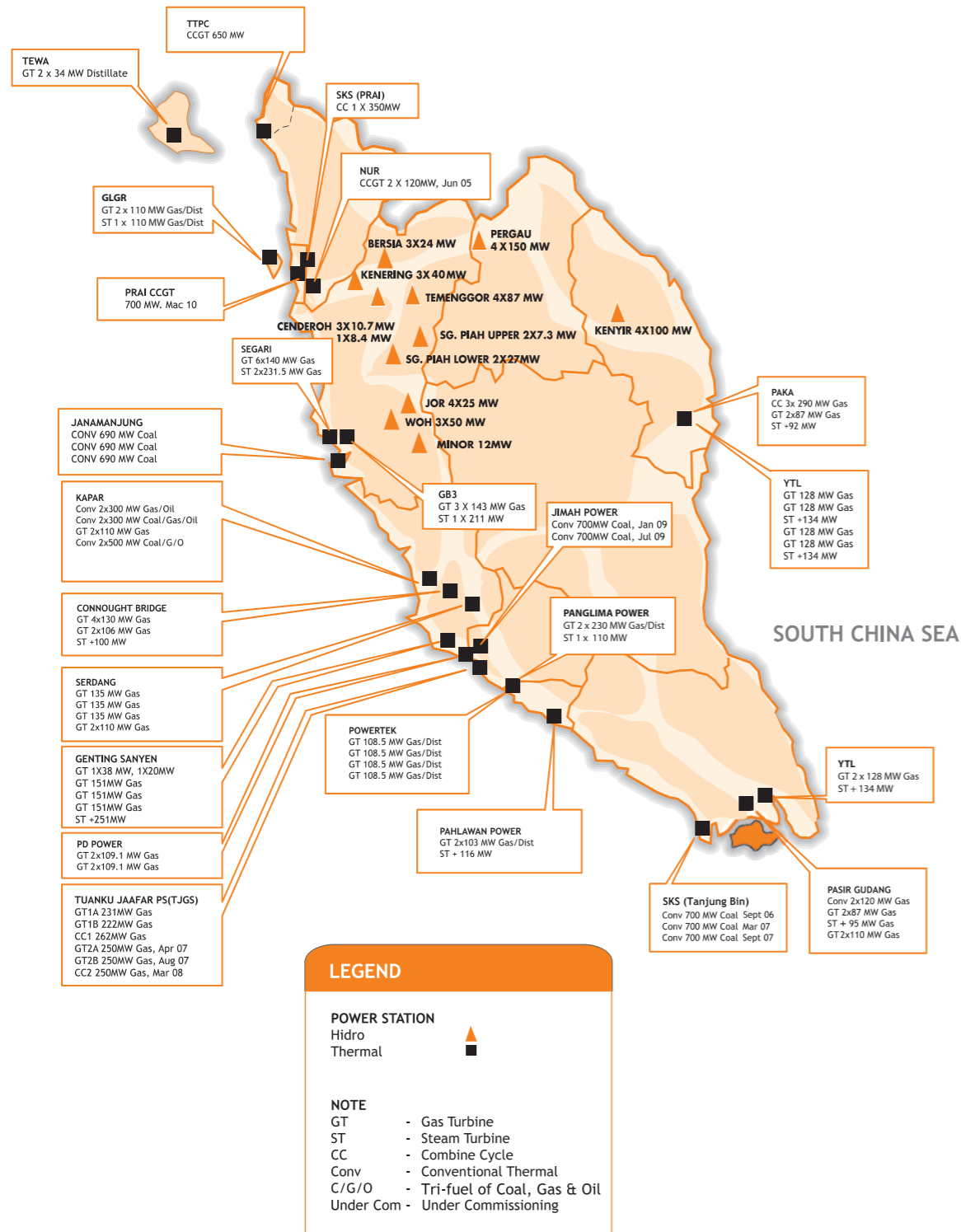
Jualan Tenaga TNB, SESB dan SESCO Mengikut Sektor
Sales of Electricity of TNB, SESB and SESCO According to Sectors



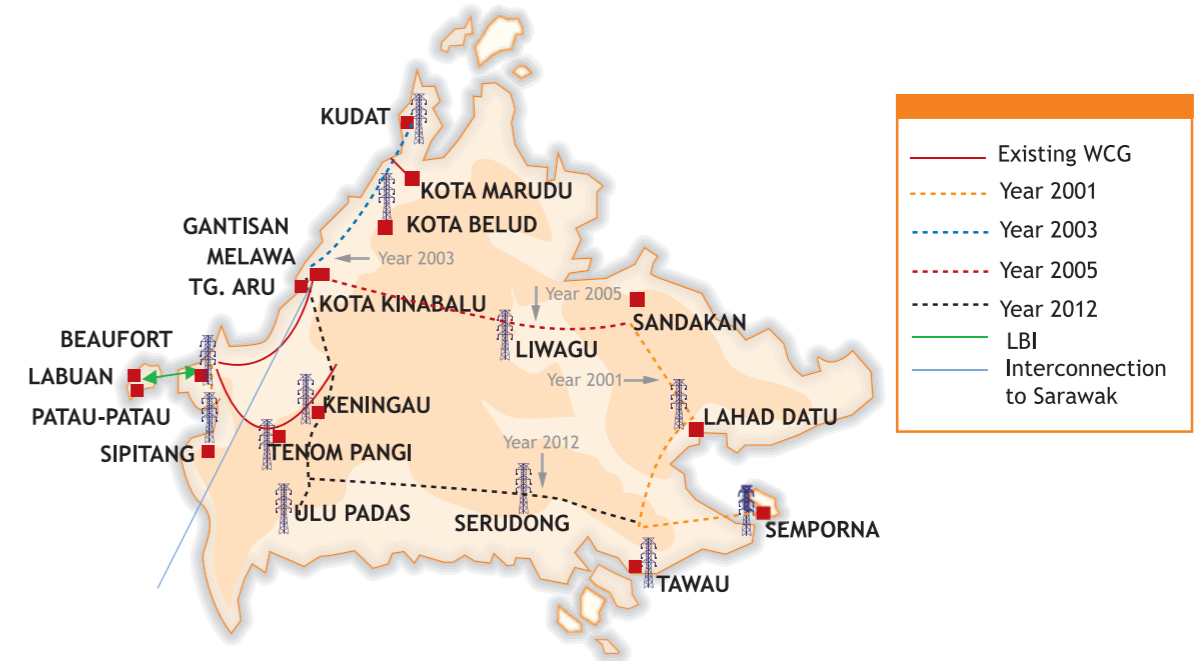
Bilangan Pengguna TNB, SESB dan SESCO Mengikut Sektor
Electricity Consumer of TNB, SESB and SESCO According to Sectors



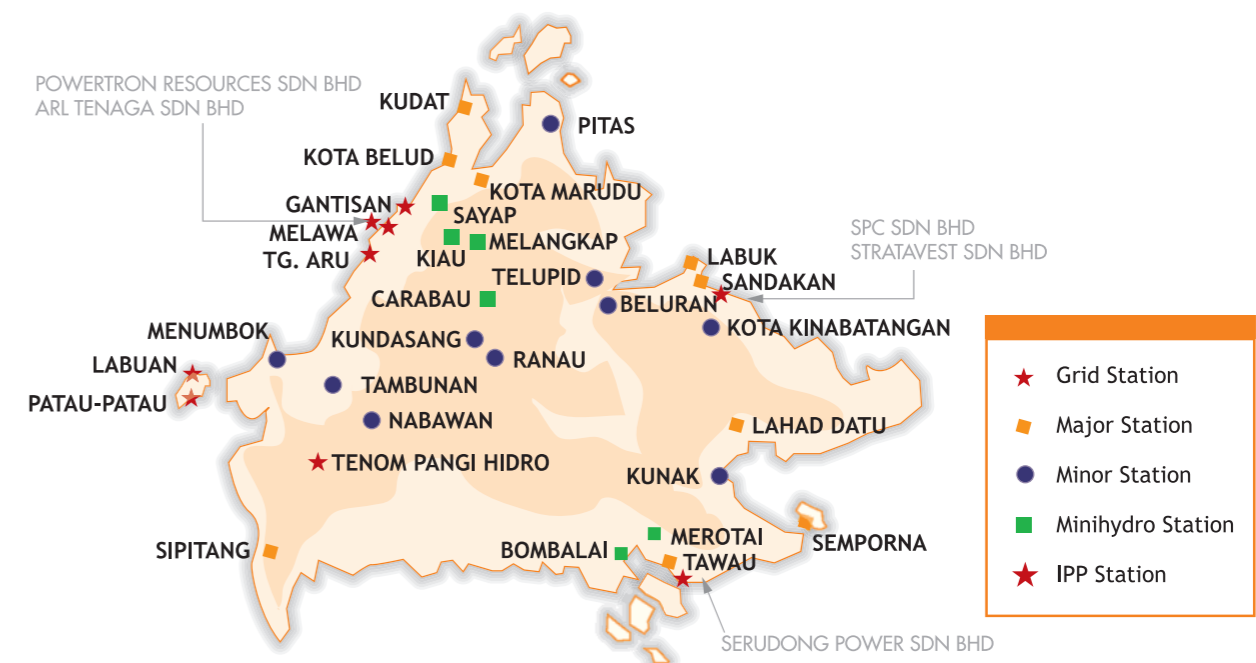
STESEN JANAKUASA UTAMA DI SEMENANJUNG MALAYSIA MAJOR GENERATION STATIONS IN PENINSULAR MALAYSIA



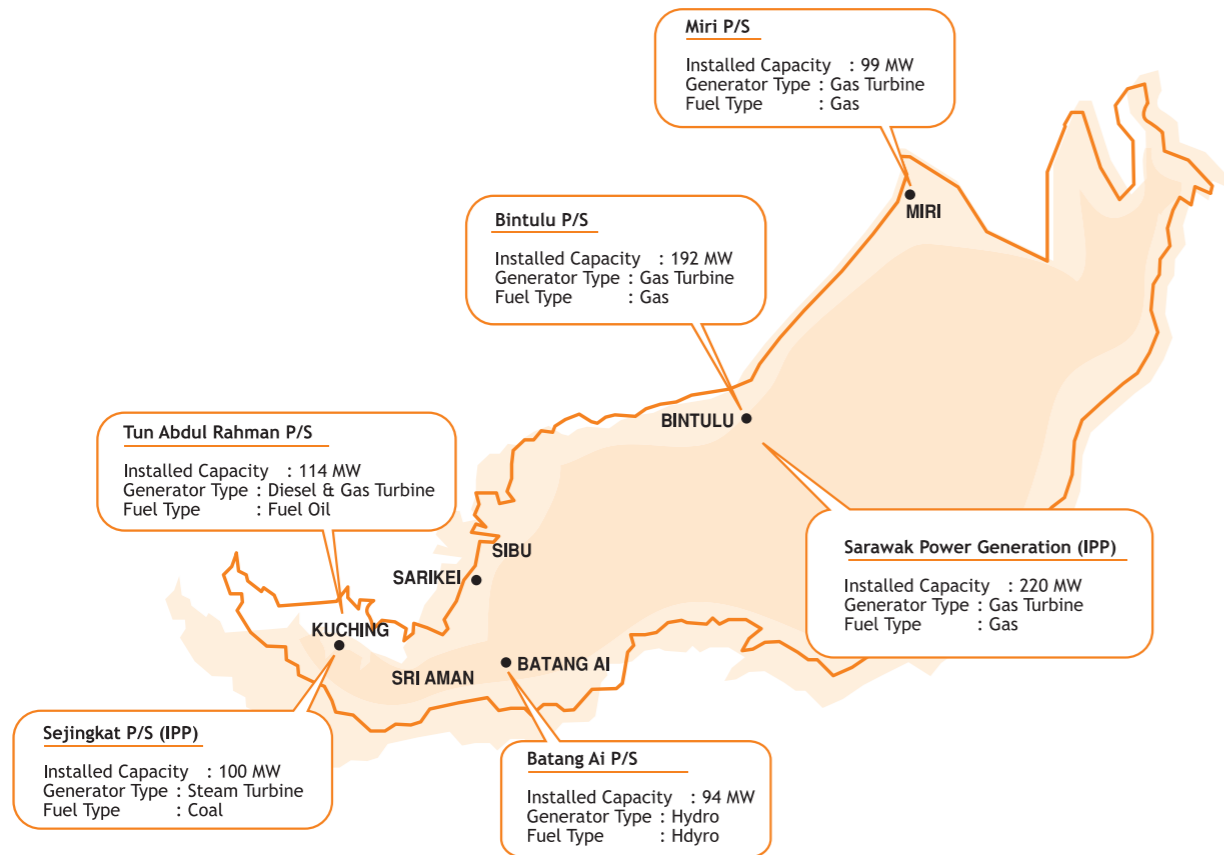
SISTEM GRID DI SABAH GRID SYSTEM IN SABAH



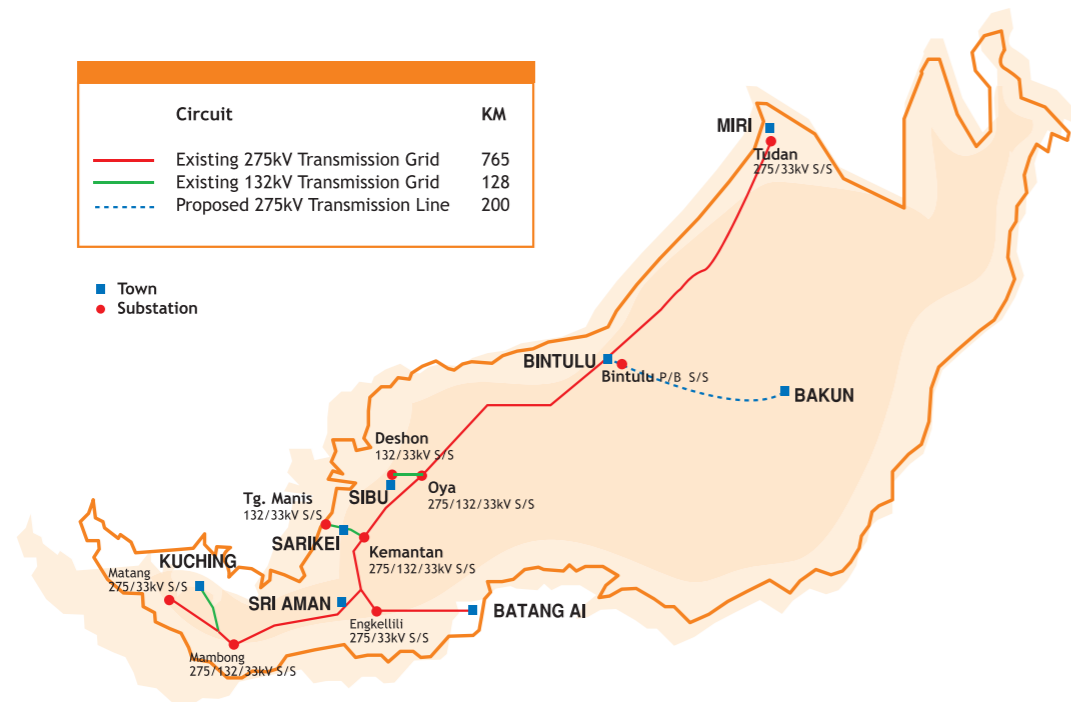
SISTEM JANAKUASA UTAMA DI SABAH MAJOR GENERATION STATION IN SABAH



STESEN JANAKUASA UTAMA DI SARAWAK MAJOR GENERATION STATIONS IN SARAWAK



SISTEM GRID DI SARAWAK GRID SYSTEM IN SARAWAK



Alamat Perhubungan
Key Contacts Government, Ministries And Departments

ALAMAT PERHUBUNGAN
**KEY CONTACTS GOVERNMENT, MINISTRIES
AND DEPARTMENTS**

**MINISTRY OF ENERGY, WATER AND
COMMUNICATIONS**

Blok E4/5, Government Complex Parcel E
Federal Government Administrative Centre
62668 Putrajaya.
Tel : (603) 8883 6000
Fax : (603) 8889 3712

MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY

Block 10, Government Offices Complex
Jalan Duta, 50592 Kuala Lumpur
Tel : 03-6203 3022
Fax : 03-6201 2337

MINISTRY OF FINANCE

Ministry of Finance Complex, Precint 2
Federal Government Administrative Centre
62592 Putrajaya
Tel : 03-8882 3000
Fax : 03-8882 3893

**MINISTRY OF PLANTATION INDUSTRIES AND
COMMODITIES**

6-8th Floor, Menara Dayabumi
Jalan Sultan Hishamuddin
50654 Kuala Lumpur
Tel : 03-2274 7511
Fax : 03-2274 5014

**MINISTRY OF ENTREPRENEURIAL AND
COOPERATIVE DEVELOPMENT**

22-26th Floor, Bangunan Medan Mara
Jalan Raja Laut
50652 Kuala Lumpur
Tel : 03-2698 5022
Fax : 03-2691 7623

ENERGY COMMISSION

Level 13, Menara TH Perdana
1001 Jalan Sultan Ismail
50250 Kuala Lumpur
Tel : 03-2612 5400
Fax : 03-2691 4584

MALAYSIAN INDUSTRIAL DEVELOPMENT AUTHORITY

Level 6, Plaza Sentral
Jalan Stesen Sentral 5
Kuala Lumpur Sentral
50470 Kuala Lumpur
Tel : 03-2267 3633
Fax : 03-2274 7970

ECONOMIC PLANNING UNIT

Block B5 & B6
Federal Government Administrative Centre
62502 Putrajaya
Tel : 03-8888 3333
Fax : 03-8888 3817

STATISTICS DEPARTMENT

Aras 8, Block C6
Parcel C, Federal Government Administrative Centre
62514 Putrajaya
Tel : 03-8885 7000
Fax : 03-8888 9250

**MALAYSIA EXTERNAL TRADE DEVELOPMENT
CORPORATION**

7th Floor, (West Wing)
Wisma Sime Darby
Jalan Raja Laut, 50350 Kuala Lumpur
Tel : 03-2694 7259
Fax : 03-2694 7363

TENAGA NASIONAL BERHAD

No. 129, Jalan Bangsar
Peti Surat 11003
50730 Kuala Lumpur
Tel : 03-2282 5566/2296 5566
Fax : 03-2282 6754

TNB GENERATION SDN. BHD

Bangunan Penjanaan, Ibu Pejabat
No. 129, Jalan Bangsar
Peti Surat 11003
50730 Kuala Lumpur
Tel : 03-2284 0680/2284 0711
Fax : 03-2282 1073

POWERTEK BERHAD

Level 43, Menara MAXIS
Kuala Lumpur City Centre
50088 Kuala Lumpur
Tel : 03-2381 6666
Fax : 03-2381 6677

GENTING SANYEN POWER SDN. BHD.

22nd Floor, Wisma Genting
Jalan Sultan Ismail
50250 Kuala Lumpur
Tel : 03-2031 1393
Fax : 03-2152 4032

ARL TENAGA SDN. BHD.

Mezzanine Floor, Wisma Ali Bawal 2
No. 11, Jalan Tandang
46050 Petaling Jaya
Selangor
Tel : 03-7784 0476
Fax : 03-7783 8485

SARAWAK ELECTRICITY SUPPLY CORPORATION

Wisma SESCO, Petra Jaya
93673 Kuching
Sarawak
Tel : 082-441 188
Fax : 082-444 433

SABAH ELECTRICITY SDN. BHD.

Wisma SESB
Jalan Tuanku Abdul Rahman
88673 Kota Kinabalu
Sabah
Tel : 088-282 699
Fax : 088-223 320

PORT DICKSON POWER BHD.

Suite 16.3W, 16th Floor, West Wing,
Wisma Sime Darby, Jalan Raja Laut
50350 Kuala Lumpur
Tel : 03-2715 3838
Fax : 03-2715 3939

YTL POWER GENERATION SDN. BHD.

8th Floor, Menara ING
84, Jalan Raja Chulan
50200 Kuala Lumpur
Tel : 03-2732 0551
Fax : 03-2732 0560

SEGARI ENERGY VENTURES SDN. BHD.

Level 12, Block 3B
Plaza Sentral
Jalan Stesen Sentral 5
50470 Kuala Lumpur
Tel : 03-2263 3388
Fax : 03-2263 3322

PROJASS ENGINEERING SDN. BHD.

605, 6th Floor, Block B
Pusat Dagangan Phileo Damansara II
No. 15, Jalan 16/11, Off Jalan Damansara
46350 Petaling Jaya, Selangor
Tel : 03-7958 7534
Fax : 03-7958 7536

MUSTEQ HYDRO SDN. BHD.

15th Amcorp Tower, Amcorp Trade Centre
No 18, Jalan Persiaran Barat
46050 Petaling Jaya
Selangor
Tel : 03-7957 7781
Fax : 03-7957 4793

SERUDONG POWER SDN. BHD.

Lot 8-05, Level 8, Menara Milenium
8, Jalan Damanlela
Damansara Heights
50490 Kuala Lumpur
Tel : 03-2093 8818
Fax : 03-2093 7818

RANHILL POWERTRON SDN. BHD.

32nd Floor, Empire Tower
No 182, Jalan Tun Razak
50400 Kuala Lumpur
Tel : 03-2171 2020
Fax : 03-2171 1180

STRATAVEST SDN. BHD.

15th Amcorp Tower, Amcorp Trade Centre
No 18, Jalan Persiaran Barat
46050 Petaling Jaya
Selangor
Tel : 03-7957 7781
Fax : 03-7957 4793

**TEKNOLOGI TENAGA PERLIS CONSORTIUM
SDN. BHD.**

5th Floor, East Wing & Centrelink
Wisma Consplant 2
No. 7, Jalan SS 16/1
47500 Subang Jaya, Selangor
Tel : 03-5632 3633
Fax : 03-5631 3270

NUR GENERATION SDN. BHD.

Suite 29.3, 29th Floor
Menara Haw Par, Jalan Sultan Ismail
50250 Kuala Lumpur
Tel : 03-2020 6710
Fax : 03-2026 4373

ALAMAT PERHUBUNGAN KEY CONTACTS GOVERNMENT, MINISTRIES AND DEPARTMENTS

SANDAKAN POWER CORPORATION SDN. BHD.

Lot D20, 2nd Floor, Damai Plaza Phase III
Jalan Kayu Manis
88300 Kota Kinabalu, Sabah
Tel : 088-269 831/2
Fax : 088-267 517

TNB JANAMANJUNG SDN. BHD.

Level 9B, Menara PKNS-PJ
No. 17, Jalan Yong Shook Lin
46050 Petaling Jaya, Selangor
Tel : 03-7626 1900
Fax : 03-7625 6900

PAHLAWAN POWER SDN. BHD.

Level 43, Menara MAXIS
Kuala Lumpur City Centre
50088 Kuala Lumpur
Tel : 03-2381 6666
Fax : 03-2381 6677

TNB HIDRO SDN. BHD.

Stesen-Stesen Janaelektrik Sg. Perak,
Bersia, Beg Berkunci 9
33300 Gerik, Perak
Tel : 05-791 2026 / 27
Fax : 05-791 1315

PANGLIMA POWER SDN. BHD.

Level 43, Menara MAXIS
Kuala Lumpur City Centre
50088 Kuala Lumpur
Tel : 03-2381 6666
Fax : 03-2381 6677

KAPAR ENERGY VENTURES SDN. BHD.

Level 12, Block 3B
Plaza Sentral, Jalan Stesen Sentral 5
50470 Kuala Lumpur
Tel : 03-2263 3388
Fax : 03-2263 3333

JIMAH ENERGY VENTURES SDN. BHD.

Lot 5.2, Level 5, Wisma Antah
Changkat Semantan
Damansara Heights
50490 Kuala Lumpur
Tel : 03-2095 1922
Fax : 03-2095 0922

PRAI POWER SDN. BHD.

Level 12, Block 3B
Plaza Sentral, Jalan Stesen Sentral 5
50470 Kuala Lumpur
Tel : 03-2263 3388
Fax : 03-2263 3333

GB3 SDN. BHD.

Level 12, Block 3B
Plaza Sentral, Jalan Stesen Sentral 5
50470 Kuala Lumpur
Tel : 03-2263 3388
Fax : 03-2263 3333

TANJUNG BIN POWER SDN. BHD.

Suite 27-7, The Boulevard
Lingkaran Syed Putra Mid Valley City
59200 Kuala Lumpur
Tel : 03-2287 1266
Fax : 03-2287 4266