8. IMR REPORT

VITAL FACTOR CONSULTING
Creating Winning Business Solutions

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16 January 2024

The Board of Directors
Solar District Cooling Group Berhad
No 25, Jalan Kajang Perdana 3/2
Taman Kajang Perdana
43000 Kajang
Selangor, Malaysia

Dear Sirs and Madams

Independent Assessment of the Building Management System and Solar Thermal Industries in Malaysia

We are an independent business consulting and market research company based in Malaysia. We commenced our business in 1993 and, among others, our services include the provision of business plans, business opportunity evaluations, commercial due diligence, feasibility studies, financial and industry assessments and market studies. We have also assisted in corporate exercises since 1996, having been involved in initial public offerings, takeovers, mergers and acquisitions, and business regularisations for public listed companies on the Bursa Malaysia Securities Berhad (Bursa Securities) where we acted as the independent business and market research consultants. Our services for corporate exercises include business overviews, independent industry assessments, management discussion and analysis, and business and industry risk assessments.

We have been engaged to provide an independent assessment of the above industry for inclusion in the prospectus of Solar District Cooling Group Berhad for the listing of its shares on the ACE Market of Bursa Securities. We have prepared this report independently and objectively and have taken all reasonable consideration and care to ensure the accuracy and completeness of the report. It is our opinion that the report represents a true and fair assessment of the industry within the limitations of, among others, the availability of timely information and analyses based on secondary and primary market research as at the date of this report. Our assessment is for the overall industry and may not necessarily reflect the individual performance of any company. We do not take any responsibility for the decisions, actions or inactions of readers of this document. This report should not be taken as a recommendation to buy or not to buy the securities of any company.

Our report may include information, assessments, opinions and forward-looking statements, which are subject to uncertainties and contingencies. Note that such statements are made based on, among others, secondary information and primary market research, and after careful analysis of data and information, the industry is subject to various known and unforeseen forces, actions and inactions that may render some of these statements to differ materially from actual events and future results.

Yours sincerely

Wong Wai Ling
Director

Wong Wai Ling has a Bachelor of Arts degree from Monash University, Australia and a Graduate Diploma in Management Studies from the University of Melbourne, Australia. She has more than 20 years of experience in business consulting and market research including assisting companies in their initial public offerings and listing of their shares on Bursa Malaysia Securities Berhad.

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Date of Report: 16 January 2024

INDEPENDENT ASSESSMENT OF THE BUILDING MANAGEMENT SYSTEM AND SOLAR THERMAL INDUSTRIES IN MALAYSIA

1. INTRODUCTION

- Solar District Cooling Group Berhad together with its subsidiaries (SDCG Group) is mainly involved in the provision and maintenance of building management systems (BMS), solar thermal systems and energy saving services in Malaysia, which shall form the focus of this report. SDCG group also provides maintenance services for other systems and equipment.

- All gross domestic product (GDP) referred to in this report is nominal GDP unless mentioned otherwise. All data and information in the report refer to Malaysia unless stated otherwise.

2. BUILDING MANAGEMENT SYSTEM INDUSTRY

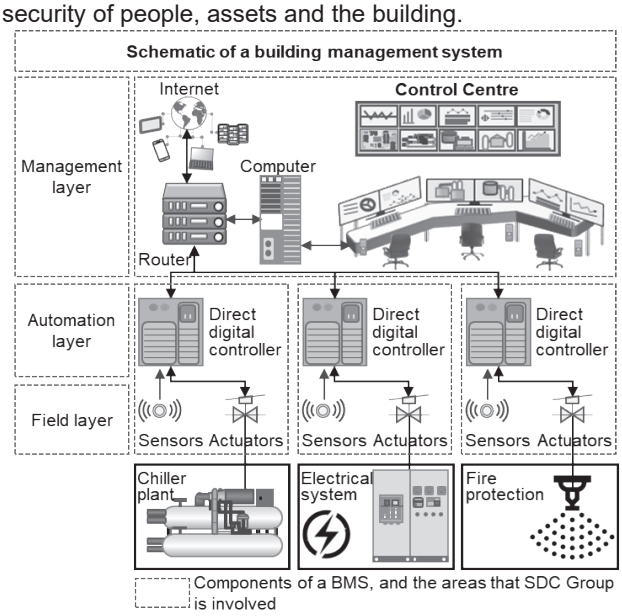
2.1 Overview

- A building management system (BMS), also known as building automation system, is a process control system that links all the mechanical, electrical and process utility (plumbing, sewerage and gas) (MEP) into a centralised control and management system within the building, where people can monitor, control and manage linked machinery, equipment and devices installed in the building.

- The common MEP equipment found in high-rise residential and office, commercial, institutional and large manufacturing buildings connected to the BMS include the following systems:
  - air conditioning and mechanical ventilation (AVMV);
  - electrical and lighting;
  - backup power supply;
  - renewable energy;
  - communication equipment;
  - plumbing and sewerage;
  - fire protection
  - security and access; and
  - elevators and escalators.

- The main functions of the BMS are to optimise the performance of these attached systems, enhance the comfort of occupants and visitors, improve building operations, energy and cost efficiency, and ensure the safety and security of people, assets and the building.

- A BMS system is divided into three main layers, namely:
  - **management layer** which comprises a master controller to control the entire BMS, and storage, display and input devices for human interaction with the BMS;
  - **automation layer** comprises all the direct digital controllers to control each equipment or group of equipment;
  - **field layer** comprising sensors to provide input monitoring and measurement data, and actuators that initiate an action to the connected equipment such as a chiller plant.



- BMS is commonly used in the following buildings including:
  - **high-rise commercial buildings** such as purpose-built offices, serviced apartments, shopping centres and hospitality properties;
  - **institutional buildings** such as healthcare and education centres; and
  - **industrial buildings**, excluding the plant, machinery and equipment involved in manufacturing or processing activities.

- SDCG Group is involved in systems integration of BMS mainly for commercial, institutional, leisure and hospitality, and industrial buildings.

2.2 Demand dependencies

2.2.1 Economy and building construction industry

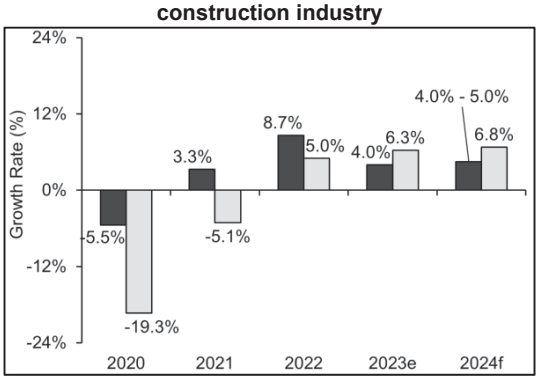
- GDP measures the gross value added to the output of goods and services in a country or sector during a specified period. Real GDP is a measure of "real" changes in output over time, due to changes in the quantity of goods and services produced, rather than changes in their prices due to inflation or deflation.

- As BMS is installed in newly constructed buildings as well as retrofitted in existing buildings, continuing growth in the construction activities will continue to provide opportunities for operators within the BMS industry. As such, the overall performance of the economy of Malaysia, as well as the performance of the construction industry would impact operators such as SDCG Group.

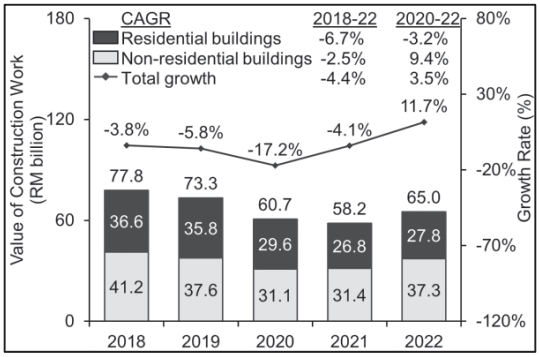
- In 2022, the real GDP of Malaysia grew by 8.7%, driven by domestic demand and an improved labour market resulting from the increase in household spending, investment and tourism, as well as robust external demand. For the first 9 months (9M) of 2023, the real GDP of Malaysia grew by 3.9% compared to 9M 2022, mainly attributed to the expansion in domestic demand, continued improvement in labour market conditions, as well as higher tourism and construction activities. These factors were offset by the weaker external demand which affected production and exports of goods. *(Source: Bank Negara Malaysia (BNM))*

- In 2022, the real GDP of the construction (comprising building, civil engineering and specialised construction) industry grew by 5.0%, following a broad-based pickup in activities across all construction subsectors, particularly the non-residential buildings and specialised construction subsectors *(Source: BNM)*. For 9M 2023, the real GDP of the construction industry in Malaysia grew by 7.0% compared to 9M 2022.

Real GDP of Malaysia economy and construction industry



Value of construction work completed for building construction



e = estimated; f = forecast; CAGR = compound annual growth rate (Source: Department of Statistics Malaysia (DOSM), Ministry of Finance)

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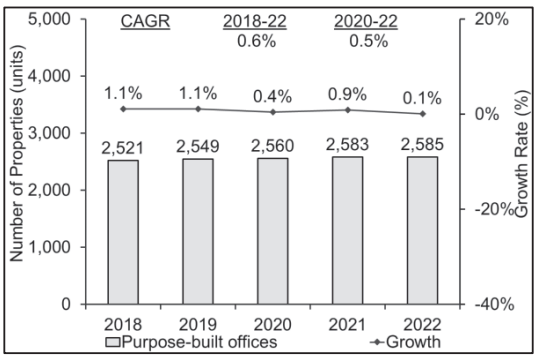
- In 2022, the value of construction work completed for building construction recorded a growth of 11.7%, which was contributed by 18.7% and 3.4% growth from the non-residential and residential subsectors respectively. The non-residential subsector rebounded strongly on the back of faster progress of large commercial real estate and industrial projects *(Source: BNM)*. Nevertheless, both of these subsectors have not recovered to pre-COVID-19 levels.

- For the 9M 2023, the value of construction work completed for building construction grew by 4.5% compared to the 9M 2022, which was contributed by 4.8% and 4.1% growth from the non-residential and residential subsectors respectively *(Source: DOSM)*. The continuing growth in the construction industry particularly for building construction will help sustain and provide opportunities for operators involved in the BMS industry.

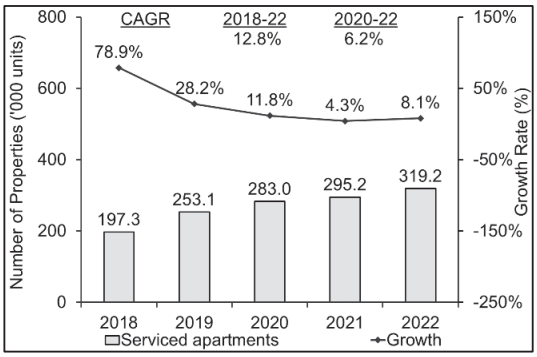
2.2.2 Supply of commercial properties

- Generally, BMS is used in high-rise commercial properties and this includes purpose-built offices and service apartments. The following section assesses the respective supply of these types of buildings in Malaysia. The existing supply of commercial properties forms the base addressable market while future supply provides growth opportunities to operators in the BMS industry.

Existing supply of purpose-built offices



Existing supply of serviced apartments



(Source: National Property Information Centre (NAPIC))

- Between 2020 and 2022, the existing supply of purpose-built offices and serviced apartments grew at a CAGR of 0.5% and 6.2% respectively. As of the third quarter of (Q3) 2023, the existing supply of purpose-built offices and serviced apartments grew by 0.5% and 16.6% respectively, compared to Q3 2022 *(Source: NAPIC)*.

- Between 2020 and 2022, the future supply of purpose-built offices and serviced apartments grew at a CAGR of 12.0% and 0.6% respectively. As of Q3 2023, the future supply of purpose-built offices grew by 2.6% while serviced apartments declined by 9.8% compared to Q3 2022 *(Source: NAPIC)*.

Future supply of selected high-rise commercial properties

	Purpose-built offices (units)	Serviced apartments (units)
2018	89	277,162
2019	66	300,032
2020	63	300,846
2021	56	320,522
2022	79	304,489
CAGR (2018-22)	-2.9%	2.4%
CAGR (2020-22)	12.0%	0.6%
Q3 2022	76	307,772
Q3 2023	78	277,506
Growth (Q3'22-23)	2.6%	-9.8%

Future supply= incoming supply + planned supply
(Source: NAPIC)

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3. SOLAR THERMAL INDUSTRY

3.1 Overview

- Solar represents one of the renewable energy sources. Solar energy is available in two forms, namely solar photovoltaic (PV) energy where sunlight is converted to electricity in the form of direct current, while solar thermal energy involves harnessing the heat from the sun for heating purposes. There are several applications of solar thermal energy including:
  - heating of water to produce hot water;
  - heating of water and through the use of a heat exchanger to produce chilled water for cooling in an enclosed space;
  - heating of water to produce hot air in an enclosed space;
  - heating of water to produce super-heated steam (above 100 degrees Celsius) to drive steam turbines to generate electricity; and
  - heating of water to produce steam (at 100 degrees Celsius) for industrial use such as pasteurisation and sterilisation.

- SDCG Group is mainly involved in solar thermal energy for heating liquid to provide hot water.

- For solar thermal technology, the selection of the type of solar collectors is determined by the intended application's temperature requirements, which are summarised in the table below:

Temperature range	Common application	Common solar collectors
Low-temperature heat (below 150°C)	Heating and cooling of enclosed space, industrial process heat, drying, boiling, pasteurising, sterilising	Evacuated tube solar collectors, flat plate solar collectors
Medium-temperature heat (150°C to 400°C)	Distilling, nitrate melting, dyeing, compression	Evacuated tube solar collectors, parabolic trough collectors
High-temperature heat (above 400°C)	Power generation	Concentrated solar power towers, solar dish collectors

Solar thermal technology can operate as stand-alone systems, or integrated with other heating systems, irrespective of the primary heat source such as electricity, diesel, liquified petroleum gas (LPG) and natural gas. SDCG Group provides solar thermal hot water systems on a standalone basis, as well as based on a hybrid system that integrates with boiler systems which use either diesel, LPG or electricity. SDCG Group uses evacuated tube solar collectors in their solar thermal systems operations.

3.2 Malaysia's solar thermal-related policies and incentives

- In Malaysia, the Government has initiated several policies relating to solar thermal:

  - **The Malaysia Energy Efficiency and Solar Thermal Application Project (MAEESTA)** is a national initiative which was introduced in 2014 and supported by the Government of Malaysia. It was implemented by local experts together with the United Nations Industrial Development Organization (UNIDO) for the development of thermal energy efficiency and application of solar thermal in industries in Malaysia. This project was completed on 30 June 2022. Throughout the project, UNIDO has provided technical support and expertise to 16 companies and six facilities where they have saved 351,055 megawatt-hours of energy amounting to approximately RM26.3 million per year. *(Source: Ministry of Science, Technology and Innovation)*

- **National Energy Policy (2022-2040) (NEP)** was launched in 2022 to enhance macroeconomic resilience and energy security, achieve social equitability and affordability, and ensure environmental sustainability. **Low Carbon Nation Aspiration 2040 (LCNA)** was introduced by NEP which seeks to transform the primary energy supply to renewable energy sources. LCNA has outlined targets such as energy efficiency savings of 11% for the industrial and commercial sectors, 10% for the residential sector by 2040, and 17% renewable energy used in total primary energy supply, as well as initiatives to enhance demand-side management and energy efficiency. *(Source: Economic Planning Unit)*

- The first part of the **National Energy Transition Roadmap** was launched on 27 July 2023, which identified six energy transition levers including energy efficiency, renewable energy, hydrogen, bioenergy, green mobility, and carbon capture, utilisation and storage, to facilitate Malaysia's transition to clean energy and outlines the Malaysia Government's proposed catalyst projects under each lever. Some catalyst projects include regulation of energy-intensive users, buildings and products under the proposed Energy Efficiency and Conservation Act, and energy audit exercise by railway operators to identify current consumption baseline and potential energy savings. *(Source: Ministry of Economy)*

- Malaysia has introduced several renewable energy and energy-efficient related incentives, which are as follows:

  - The Malaysia Investment Development Authority (MIDA) has introduced green technology tax incentives in 2014 to strengthen the development of green technology which, among others, includes renewable energy and energy efficiency.

    . **Green Investment Tax Allowance (GITA)** of 100% or 60% on capital expenditure for qualifying green technology projects for business or own consumption, or purchase of qualifying green technology assets from 1 January 2024 to 31 December 2026. GITA applies to projects relating to, among others, green hydrogen, integrated waste management and renewable energy. Some of the qualifying GITA assets include green buildings, renewable energy system, energy efficiency and qualifying assets approved by the Minister of Finance.

    . **Green Income Tax Exemption (GITE)** of 70% on statutory income for qualifying green services activities from 1 January 2024 to 31 December 2026. GITE applies to renewable energy, energy efficiency, electric vehicles, green buildings, green data centres, green certification and verification as well as green townships.

  - The **Green Technology Financing Scheme (GTFS)** was a special financing scheme introduced by the Malaysian Government in 2010 to support the development of green technology projects. Under Budget 2024, the Malaysia Government continues to support the development of green businesses with the reinstatement of the GTFS 4.0 up to RM1.0 billion for the period until 31 December 2025. (*Source: Ministry of Finance)*

3.3 Demand dependencies

3.1.1 Supply of hotels and hospitals

- Solar thermal hot water systems are largely used in hotels and hospitals as these two sectors are major users of hot water. Between 2020 and 2022, the existing supply of hotels grew at a CAGR of 1.0%, while the future supply of hotels declined at an average annual rate of 11.2%. As of Q3 2023, the existing supply of hotels grew by 0.2%, while future supply of hotels declined by 7.9% compared to Q3 2022 *(Source: NAPIC).*

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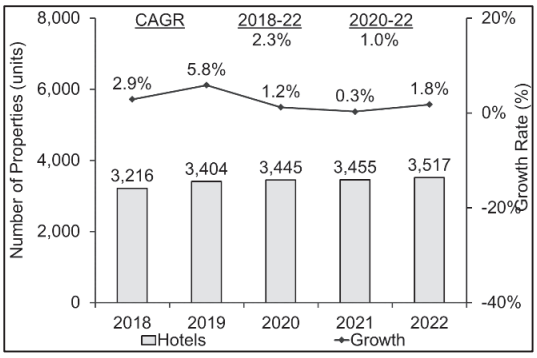
Existing supply of hotels



Future supply of hotels in Malaysia

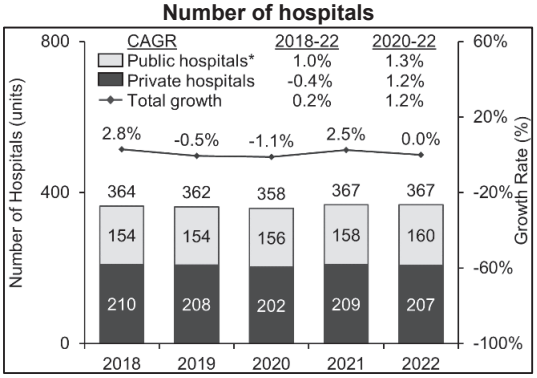
	Hotels (units)
2018	158
2019	188
2020	223
2021	231
2022	176
CAGR (2018 - 2022)	2.7%
CAGR (2020 - 2022)	-11.2%
Q3 2022	177
Q3 2023	163
Growth (Q3 2022 - 2023)	-7.9%

Future supply= incoming supply + planned supply (Source: NAPIC)

- SDCG Group is involved in providing energy performance services which involves the installation of solar thermal hot water systems that are integrated with existing boiler hot water systems in public hospitals in Malaysia. As such, the existing number of establishments provides the addressable markets for the installation of solar thermal hot water systems.

- The number of public hospitals grew by 1.3% from 158 in 2021 to 160 in 2022, while the number of private hospitals declined by 1.0% from 209 in 2021 to 207 in 2022. The number of hospitals would provide opportunities for the solar thermal industry.

Number of hospitals

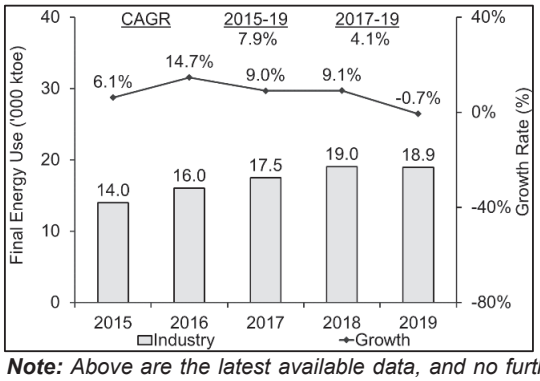


Note: Includes hospitals and special medical institutions under MOH, as well as army and university hospitals (Source: Ministry of Health (MOH))*

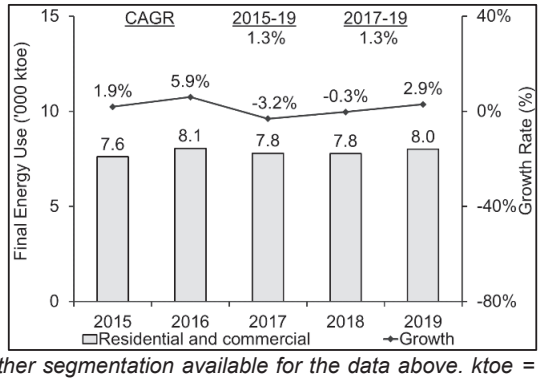
4. ENERGY LANDSCAPE IN MALAYSIA

- Energy efficiency involves using less energy to perform the same task or produce the same result. It provides the quickest and most cost-effective to address the energy supply security issue and energy-related environmental issues. Energy efficiency is the primary driver of the emergence of BMS and solar thermal technologies, where the demand arises as a result of the energy landscape in Malaysia.

Final energy use by industrial



Final energy use by residential and commercial

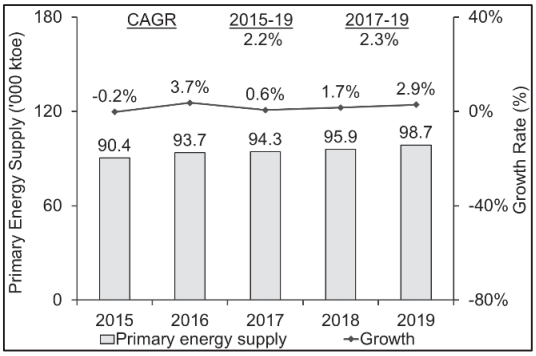


Note: *Above are the latest available data, and no further segmentation available for the data above. ktoe = kilotonnes of oil equivalent; industrial = refers to energy used within industrial sector covering manufacturing, mining and construction; residential and commercial = refers to energy used within household, commercial sectors, government buildings and institutions (Source: Energy Commission of Malaysia (EC))*

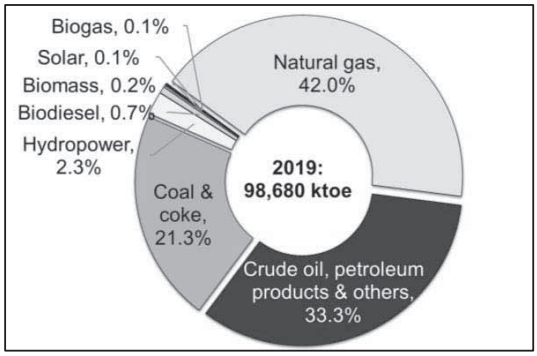
- In 2019, Malaysia's industrial sector accounted for 28.5% of the total final energy demand, while the residential and commercial sectors collectively accounted for 12.0% of the total final energy demand *(Latest available data. Source: EC)*. Between 2015 and 2019, final energy use by industrial sector grew at a CAGR of 7.9% to approximately 18,900 ktoe in 2019, while final energy use by residential and commercial sectors collectively grew at a CAGR of 1.3% to approximately 8,000 ktoe in 2019.

- Between 2015 and 2019, energy intensity for final energy consumption grew at a CAGR of 1.5%, implying the heavier usage of energy to produce a unit of GDP over time *(Latest available data. Source: EC)*.

Total primary energy supply



Total primary energy supply by fuel types



Note: *Above are the latest available data. ktoe = kilotonnes of oil equivalent (Source: EC)*

- Between 2015 and 2019, Malaysia's total primary energy supply grew at a CAGR of 2.2% to 98,700 ktoe, driven by strong economic and industrial growth as well as rapid urbanisation.

- Fossil fuels comprise oil, gas and coal. In 2019, fossil fuels were the dominant energy source for Malaysia, where natural gas constituted the largest portion of the primary energy supply at 42.0%, followed by crude oil, petroleum products and others, as well as coal and coke, at 33.3% and 21.3% respectively. Renewables, comprising hydropower, bioenergy and solar, constitutes 3.4% of the total primary energy supply in 2019.

- Between 2015 and 2019, the ratio of energy used to total primary energy supply increased from 57.6% to 67.4%, indicating the energy demand outpacing the available energy supply. Additionally, the high reliance on fossil fuels could lead to higher greenhouse gas emissions, further exacerbating environmental issues such as climate change. As a result, the Malaysian Government introduced the National Energy Transition Roadmap in 2023 to shift from an energy system dominated by the use of fossil fuels towards a system based on clean and renewable energy sources. The roadmap aims to improve energy efficiency, reduce carbon emissions, and accelerate innovation to commercialise hydrogen technology.

5. ENERGY PERFORMANCE SERVICES

- In 2013, the Malaysian Government initiated energy performance contracting to promote energy efficiency in government buildings. The energy performance contracting concept is based on an agreement between the government, as the building owner, and an energy services company (ESCO). Under this arrangement, the ESCO covers the initial capital cost to implement the energy efficiency improvement. Payment to ESCO is based upon the agreed sharing value between the ESCO and the building owner from the guaranteed savings achieved. After the agreement ends, the ownership of all the equipment and systems installed at the facility will be transferred to the building owner. All ESCOs are required to register with the Ministry of Finance and EC to carry out energy performance contracting projects in government buildings under the Green Technology Services Code. *(Source: EC)*

- The Malaysian Government including the MOH has been actively implementing high-impact energy projects, either through conventional methods or energy performance contracting in the MOH facilities especially its hospitals, given hospital buildings are one of the high-energy users in the country. These projects involved the replacement of less efficient equipment with more energy-efficient chillers, light-emitting diode lighting, and installation of the solar thermal hot water system utilising green technologies to reduce energy consumption.

- In 2022, there were 137 public hospitals and 11 special medical institutions under MOH. As of December 2021, MOH implemented a total of 32 energy projects through energy performance contracting. In 2022, an additional 12 energy projects were implemented through energy performance contracting, bringing the cumulative number as of December 2022 to 44. *(Source: MOH).* SDCG Group is involved in providing energy performance services to the concession companies that are providing hospital support services for public hospitals. The concessionaires engaged SDCG Group as a subcontractor to carry out energy efficiency work related to the installation of hybrid solar thermal hot water systems, and for some contracts, retrofitting of fluorescent lighting to LED lighting.

6. COMPETITITIVE LANDSCAPE

- The following are some of the selected companies which are involved in BMS or solar thermal industries in Malaysia, listed in descending order of revenue. The selection criteria of companies were based on the provision of BMS or solar thermal services in Malaysia. These companies may also be involved in other business activities. This list is used to indicate the performance of some of the operators in the industry and is not exhaustive.

Company	FYE [1]	Rev [2] (RM'000)	GP [2] (RM'000)	GP Margin	NP/(NL) [2] (RM'000)	NP/(NL) Margin
SDCG Group	**Dec-22**	**18,648**	**10,678**	**57.3%**	**5,184**	**27.8%**
Operators involved in the provision of BMS services						
Metronic Engineering S/B [3]	Jun-22	39,589	13,688	34.6%	1,448	3.7%
Azbil Malaysia S/B [4]	Dec-22	20,004	8,408	42.0%	392	2.0%
Pegasus Automation S/B	Dec-22	17,561	9,840	56.0%	3,247	18.5%
ADF Technologies S/B	Jun-22	12,993	9,050	69.7%	4,768	36.7%
SDCG Group	**Dec-22**	**12,659** [5]	**6,891** [5]	**54.4%**		
Optergy S/B	Jun-22	10,862	3,736	34.4%	1,342	12.4%
M & C Engineering [6]	Jun-22	6,420	4,763	74.2%	(1,038)	(16.2%)
Neostruxure Systems S/B	Dec-22	2,321	1,037	44.7%	(177)	(7.6%)
Operators involved in the provision of solar thermal systems						
Solartech Sales and Service S/B	Sep-22	20,463	3,274	16.0%	194	0.9%
BWS Sales & Services S/B	Jun-22	14,640	4,308	29.4%	958	6.5%
SDCG Group	**Dec-22**	**5,545** [7]	**3,664** [7]	**66.1%**		
Aqua Solar Technology S/B	Dec-22	4,453	n.a.	n.a.	(157)	(3.5%)
Solar-mate S/B [8]	Jun-23	3,568	817	22.9%	309	8.7%

FYE = financial year ended; Rev = revenue; GP = gross profit; NP = net profit after tax; NL = net loss after tax; S/B = Sdn Bhd; n.a. = information not available

(1) Latest available audited financial information from the Companies Commission of Malaysia and SDCG Group.
(2) At Group or company level, which may also include other business activities, products or services.
(3) A subsidiary of Metronic Global Berhad, a listed entity on Bursa Securities.
(4) A subsidiary of Azbil Corporation, a listed entity on the Tokyo Stock Exchange.
(5) Revenue and GP contributed by the BMS segment.
(6) M & C Engineering and Trading Sdn Bhd is a subsidiary of AWC Berhad, a listed entity on Bursa Securities.

(7) Revenue and GP contributed by solar thermal systems and energy saving services segment.
(8) A subsidiary of Waterco Limited, a listed entity on the Australian Stock Exchange.

- Some of the operators are multinational corporations with entities in Malaysia, which are mainly focused on the supply of systems, equipment, parts and components for BMS. These include:
  - ABB Malaysia Sdn Bhd and its group of companies, which are subsidiaries of ABB Ltd, a listed entity on the SIX Swiss Exchange and the Nasdaq Stockholm;
  - Honeywell Automation & Controls Sdn Bhd and its group of companies, which are subsidiaries of Honeywell International Inc., a listed entity on The Nasdaq Stock Market LLC;
  - Johnson Controls (M) Sdn Bhd and its groups of companies, which are subsidiaries of Johnson Controls International Plc., a listed entity on the New York Stock Exchange.
  - Schneider Electric Industries (M) Sdn Bhd and its group of companies, which are subsidiaries of Schneider Electric SE, a listed entity on Euronext Paris; and
  - Siemens Malaysia Sdn Bhd and its group of companies, which are subsidiaries of Siemens AG, a listed entity on the Frankfurt Stock Exchange.

  These companies have local partners who are responsible for, among others, distribution or systems integration or installation, repair and maintenance of systems, equipment and components for BMS in Malaysia.

7. BARRIERS TO ENTRY

- The barriers to entry for the BMS and solar thermal industries are mainly predicated by the need for technical and specialised skills, and track record. Regulatory requirements are mainly focused on registration with the Construction Industry Development Board of Malaysia (CIDB) in the relevant grade and scope of activities, and the EC as an ESCO to be involved in specified areas relating to energy efficiency initiatives.

- There are no onerous regulatory requirements governing the entry of new players into the industry except for the above registrations, and as service providers, the capital requirements are low. In some cases, service providers may fund the initial capital cost and recover their cost through recurrent payments over a certain agreed period. The industry is represented by a substantial number of domestic small and medium-sized companies. As of 16 January 2024, the number of operators would provide some indication of the level of barriers to entry:
  - There were 6,307 local mechanical and electrical (M&E) contractors registered with the CIDB focusing on building automation systems, of which 1,335 of them are Grade 7 contractors.
  - There were 616 local M&E contractors registered with CIDB as hot water system contractors, of which 223 of them are Grade 7 contractors; and
  - There were 328 ESCO registered with the EC.

  (Sources: CIDB and EC)

8. MARKET POSITION

- There are no publicly available statistics on the market size for the provision of BMS and solar thermal systems, therefore it is not possible to derive market share for SDCG Group. The following is used as a proxy to provide an indication of a market segment served by SDCG Group:

		SDCG Group	
2022	**Total Number [a]**	**Number of EPS contracts [b] (1)**	**Proportion of Total Number (2)**
Number of public hospitals	160 (3)	7	4%

EPS = energy performance service; Source: (a) MOH; (b) SDCG Group.
(1) Number of EPS contracts between SDCG Group and concessionaires of public hospitals as of 31 December 2022.
(2) ((b) divided by (a)) multiplied by 100%.
(3) Includes 137 hospitals and 11 special medical institutions (under MOH), and 12 army and university hospitals.

9. INDUSTRY CONSIDERATION FACTORS

Building management system

- BMS are commonly provided for high-rise commercial, institutional and industrial buildings. As a result, the demand for BMS industry is dependent upon, among others, the performance of the building construction industry, as well as the existing and future supply of buildings as a platform for business sustainability and growth.

- A growing construction industry will provide opportunities for the implementation of BMS. For 9M 2023, the value of building construction work completed grew by 4.5% compared to 9M 2022. For 9M 2023, the real GDP of the construction industry in Malaysia grew by 7.0% compared to 9M 2022. Overall, in 2023, the real GDP of the construction industry in Malaysia is estimated to grow by 6.3% and is forecasted to grow by 6.8% in 2024 *(Source: Ministry of Finance)*.

- The existing supply of commercial properties provides an indication of the potential market requiring retrofitting, while future supply indicates the need for the installation of BMS in the construction of new buildings. As of Q3 2023, the existing supply of purpose-built offices and serviced apartments grew by 0.5% and 16.6% respectively compared to Q3 2022. Meanwhile, the future supply of purpose-built offices grew by 2.6% while serviced apartments declined by 9.8% compared to Q3 2022.

- As the BMS industry is reliant on the building construction industry, operators in the industry would be subject to the risks inherent in the construction industry which include, among others, general economic conditions, and business and consumer sentiments which may affect the general demand for property investment and construction activities.

Solar thermal systems and energy performance services

- The Malaysian government has introduced several policies and incentives to promote renewable energy adoption and energy efficiency, driven by environmental concerns and global commitments to combat climate change. Solar power projects are being developed to harness Malaysia's natural resources.

- Energy performance contracting was one of the key initiatives to improve energy efficiency. In 2022, there were 160 public hospitals, including 137 hospitals and 11 special medical institutions under MOH, and 12 army and university hospitals. As of December 2022, MOH has implemented a total of 44 energy projects through energy performance contracting *(Source: MOH)*, providing opportunities to service the remaining public hospitals and special medical institutions with solar thermal and energy performance services. In addition, private hospitals may also serve as potential targets for solar thermal and energy performance services.

Environmental sustainability

- The trend towards environmental sustainability and the drive to reduce the carbon footprint associated with commercial and industrial activities, coupled with potential cost savings, will contribute to the increasing demand for energy saving services and energy-efficient solar thermal systems within buildings. Some of the government policies relating to renewable energy under the National Energy Transition Roadmap include an increase in the target for renewable energy installed capacity from 40% in 2040 to 70% by 2050, scaling up the installation of solar systems in government buildings, and the establishment of electricity exchange systems to allow cross-border renewable energy trade *(Source: Ministry of Economy)*. Between 2020 and 2022, the total number of Green Building Index (GBI) certified buildings in Malaysia grew at a CAGR of 6.5% from 563 projects in 2020 to 638 projects in 2022. As of 30 September 2023, there were 662 GBI-certified buildings and 1,168 registered GBI projects in Malaysia. *(Source: Vital Factor analysis)*