



SEGI ASTANA SDN BHD

ASEAN GREEN BOND

PROPOSED MEDIUM-TERM NOTE FACILITY OF RM415.0 MILLION

SECOND OPINION REPORT

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RAM'S ENVIRONMENTAL BENEFIT ASSESSMENT

Climate change represents a fundamental threat to the planet and society and is already transforming life on Earth. The effects of climate change are wide-ranging and can be seen everywhere in our biosphere. The 2015 Paris Climate Accord ("COP21") sets a global action plan for the 197 participating governments to limit global warming to well below 2°C above pre-industrial levels (2 Degree Scenario). In addition, these countries have also committed to United Nation's 17 Sustainable Development Goals that could transform the world by addressing areas of critical importance for the planet and society.

The ultimate objective of green bond/sukuk is to facilitate financing towards environmentally-friendly solutions that can help mitigate the effects of climate change and/or create value for surrounding ecosystem. RAM's Green Bond assessment incorporates a subjective assessment of the project's contributions towards a low carbon, sustainable future. In addition, transparency and disclosure strength of the Green Bond is also a key consideration.

RAM Environmental Benefit Tier-1

- Project is an important component of low carbon future and has clear, demonstrable environmental benefits.
- Project directly contributes towards substantial and sustainable reductions of greenhouse gas emissions.

RAM Environmental Benefit Tier-2

- Project is aligned towards a low carbon future and has some demonstrable environmental benefits.
- Project directly contributes towards improvements in greenhouse gas emissions.

RAM Environmental Benefit Tier-3

- Project has minimal contribution towards a low carbon future and has minimal demonstrable environmental benefits.
- Project indirectly contributes to the broader environment and is focused on asset-level environmental improvements.

Projects that do not conform to the long-term vision of 2 Degrees Scenario reaffirmed under COP21 is not assigned an Environmental Benefit Rating.

SECOND OPINION ON GREEN BOND

Segi Astana Sdn Bhd (“Segi Astana” or the “Issuer”) is an incorporated joint venture company between WCT Holdings Berhad (“WCT” or the “Group”) and Malaysia Airport Holdings Berhad (“MAHB”) set up for the development of gateway@klia2. The Proposed Medium-Term Note Facility of RM415 million (“Proposed ASEAN Green Bond”) shall be used to refinance the outstanding RM400 million Medium-Term Notes, including any accrued interest thereto and repay related company’s advances which were entirely used to finance the construction and development costs of gateway@klia2 integrated complex in Sepang, Selangor of Malaysia. The integrated complex has been certified as Leadership in Energy & Environmental Design (“LEED”) Silver. The building was opened to the public on 2 May 2014.

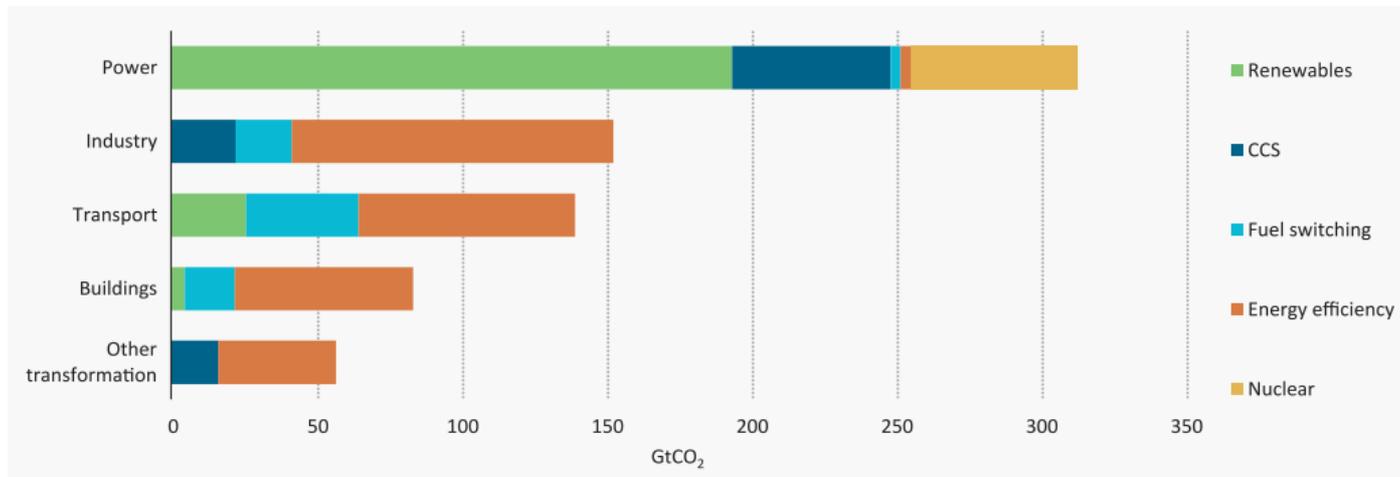
Overall, Segi Astana’s Green Bond Framework is aligned to the transparency and disclosure requirements of the ASEAN Green Bond Standards (“ASEAN GBS”) and the globally recognised Green Bond Principles (“GBP”). Equally important, financing for green-certified buildings are explicitly recognised under the ASEAN GBS. The issuer’s Green Bond Framework is clearly defined and provides clarity on important aspects of utilisation of proceeds, project evaluation and selection, management of proceeds and reporting commitments. Green building certification systems play an important role in defining green in the buildings sector. The rating systems provide a systematic and objective framework for measuring environmental performance and green building design. The gateway@klia2 integrated complex has been certified as **LEED Silver** by EAG Consulting Sdn Bhd, a member of the U.S. Green Building Council.

The integrated complex is a key infrastructure component of the Kuala Lumpur International Airport 2. The shopping complex is equipped with **green features** that help improve its environmental performance thereby reducing impact on the climate. This includes a wide range of energy-efficiency measures, installation of rainwater harvesting system, centralised waste disposal system etc. In addition, the Issuer also has a **tenant engagement program** to ensure the occupants play an active role in the building’s sustainability management.

Integrated with the Kuala Lumpur International Airport 2 (“KLIA2”) airport terminal, gateway@klia2 stands to benefit from the airport’s growing traffic. The shopping complex functions as a **commercial activity center** serving domestic and international tourists as well as employees working at the airport.

2 Degrees Scenario, or 2DS is reaffirmed in the Paris Agreement during the 21st U.N. Framework Convention on Climate Change (“UNFCCC”) Conference of the Parties (“COP21”). The goal is to limit global temperature rise to 2 degrees Celsius when compared against pre-industrial levels. The International Energy Agency (“IEA”) has identified the industries where the reductions in carbon emissions should be targeted to achieve this goal by 2050.

Cumulative CO₂ reductions by sector and technology in the 2DS to 2050



Key point : A portfolio of low-carbon technologies is needed to reach the 2DS; some solutions will be broadly applicable, while others will need to target specific sectors.

(Source: Energy Technology Perspectives 2015, International Energy Agency)

Building on from IEA’s study, RAM’s Environmental Benefit assessment essentially tiers projects based on their overall contributions towards the 2DS. The top tiered projects comprise technologies that decarbonize the energy system. In comparison, green or high-performance buildings have a lower marginal impact towards the fulfillment of the 2DS. Based on an overall assessment of the project and Green Bond Framework, **RAM has assigned the Segi Astana’s Proposed ASEAN Green Bond a Tier-3 Environmental Benefit.**



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1. SCOPE AND OBJECTIVES

Segi Astana Sdn Bhd (“Segi Astana” or the “Issuer”) is an incorporated joint venture company between WCT Holdings Berhad (“WCT” or the “Group”) and Malaysia Airport Holdings Berhad (“MAHB”) set up for the development of gateway@klia2. The Proposed Medium-Term Note Facility of RM415 million (“Proposed ASEAN Green Bond”) shall be used to refinance the outstanding RM400 million Medium-Term Notes, including any accrued interest thereto and repay related company’s advances which were entirely used to finance the construction and development costs of gateway@klia2 integrated complex in Sepang, Selangor of Malaysia. Located between the drop-off point and Kuala Lumpur International Airport 2 (“KLIA2”) Main Terminal Building, the integrated complex has approximately 350,000 square feet of retail space that spans over 4 levels. In addition, the building also functions as an integrated transportation hub that serves KLIA Express train, taxis, rented cars, buses and private transport.

RAM Consultancy Services Sdn Bhd (“RAM”) has been appointed to provide a second party opinion on the Issuer’s Green Bond Framework. The review covers an assessment of the Issuer’s Green Bond Framework against the disclosure requirements of **ASEAN Green Bond Standards**¹ (“ASEAN GBS”) and the sustainability responsibilities of the Issuer. Launched on 8 November 2017, the **ASEAN GBS** is developed based on the globally-recognised **Green Bond Principles** (“GBP”) established by the International Capital Markets Association (“ICMA”).

The assessment includes a high-level review of public domain information and internal documents provided by the Issuer. The assessment is also supported by discussions with management and a site visit to the integrated complex. RAM did not undertake an audit or other assurance activities to ascertain the validity and accuracy of the information provided. This assessment does not include an opinion on the creditworthiness and financial performance of the bond.

2. CORPORATE PROFILE

Segi Astana, a jointly-owned entity of WCT and MAHB, was formed on 1 October 2010. The majority shareholder, WCT, is responsible for the overall management of the Issuer. The Issuer was awarded a 25-year concession to build and operate the integrated complex from August 2011, with an option by the Issuer to extend the concession for another 10 years. The complex opened to the public on 2 May 2014. The table below provides a brief description on the background of the two shareholders.

Table 1: Shareholders of Segi Astana

Shareholders	Ownership	Description
WCT Holdings Berhad (through WCT Land Sdn Bhd) ²	70%	<ul style="list-style-type: none">Listed on the Main Board of Bursa Malaysia, the Group is an investment holding company with principal business activities in engineering and construction, property development and investment and management activities.The Group’s major shareholders³ comprise Tan Sri Desmond Lim (19.57%)⁴, Lembaga Tabung Haji (9.39%) and AmanahRaya Trustees Berhad (6.32%)
Malaysia Airport Holdings Berhad	30%	<ul style="list-style-type: none">A public listed company in the Main Board of Bursa Malaysia, MAHB’s business operations are focused on the operations, management and maintenance of airports.The company’s major shareholders⁵ comprise Khazanah Nasional Berhad (36.71%), Citigroup Nominees Sdn Bhd (9.65%) and Amanahraya Trustees Berhad (7.74%).

¹ The ASEAN GBS is developed by the ASEAN Capital Markets Forum. Established in 2004, the ASEAN Capital Market Forum comprises capital market regulators from 10 ASEAN Countries. The standard applies to issuance of ASEAN Green Bonds. Similar to the GBP, the ASEAN GBS has four core components; (i) Use of Proceeds (ii) Process for Project Evaluation & Selection (iii) Management of Proceeds and (iv) Reporting.

² WCT Land Sdn Bhd is a wholly owned subsidiary of WCT Holdings Berhad.

³ WCT Holdings Berhad 2016 Annual Report – Analysis of Shareholdings as at 31 March 2017 (page 202)

⁴ Deemed by virtue of his interest in Dominion Nexus Sdn Bhd. Tan Sri Desmond Lim Siew Choon is the Non-Executive Chairman of Malton Berhad.

⁵ Malaysia Airport Holdings Berhad 2016 Annual Report – Statement of Shareholdings as at 31 March 2017 (page 362)

3. REVIEW OF GREEN BOND FRAMEWORK

The focus areas reviewed are grouped under the following four principles which are embedded in **ASEAN GBS**: (3.1) Utilisation of Proceeds (3.2) Project Evaluation & Selection (3.3) Management of Proceeds and (3.4) Reporting Commitments.

Please refer to Appendix 1 for the External Review checklist developed for **ASEAN GBS**.

3.1. Utilisation of Proceeds

The proceeds from the Proposed ASEAN Green Bond will be exclusively used to: (i) **refinance** the outstanding Medium-Term Notes Programme guaranteed by Danajamin Nasional Berhad⁶ of RM400.0 million, including any accrued interest thereto; (ii) repay related company's advances; and (iii) defray any fees and expenses in relation to the Medium-Term Notes facility. The outstanding Medium-Term Notes Programme were issued on 10 January 2012 to finance the construction and development of gateway@klia2 integrated complex.

Broadly defined, green projects refer to innovative climate-friendly projects that help to deliver clear environmental benefits. The growth and development of built environment⁷ has a huge influence on the climate and natural environment. Buildings, in particular are long-lived assets that can have a myriad of interconnected impacts on the surrounding ecosystem. Green Building, or also known as sustainable or high-performance building, aims to incorporate design measures and processes that are environmentally sound and resource-efficient throughout the life-cycle of the building⁸. Certified green buildings are explicitly recognised as a green project under the **ASEAN GBS**.

Table 2: Green Building under ASEAN Green Bond Standards

ASEAN GBS	
4.1.5 (x)	Use of proceeds – green buildings which meet regional, national or internationally recognised standards or certifications.

In June 2017, the gateway@klia2 integrated complex has achieved a **LEED Silver certification** under the LEED (Leadership in Energy and Environmental Design) rating system certification established by the U.S. Green Building Council⁹.

3.2. Project Evaluation & Selection

Green building certification systems play an important role in defining green in the buildings sector. The rating system provide a systematic and objective framework for measuring environmental performance and green building design. The process typically requires an on-site assessment by an independent third-party certifier or assessor.

LEED certification is an internationally-recognised green building rating system developed by the U.S. Green Building Council in 1998. The certification provides a science-based assessment on the sustainability attributes of the building in the following seven key areas;

- i. Sustainable Sites
- ii. Water Efficiency
- iii. Energy and Atmosphere
- iv. Materials and Resources
- v. Indoor Environmental Quality
- vi. Innovation in Design
- vii. Regional Priority Credits

⁶ Jointly owned by Ministry of Finance Incorporated (50%) and Credit Gurantee Corporation Malaysia Berhad (50%), Danajamin functions as a financial guarantor for financially viable companies to access the Private Debt Securities (PDS) market.

⁷ Man-made surroundings

⁸ United States Environmental Protection Agency – Green Building

⁹ Established in 1993, the U.S. Green Building Council is a non-profit organisation focused on promoting on sustainability in building design, construction and operation.

LEED has become one of the world’s most widely used green building rating system, with more than 92,000 projects participating in LEED across 165 countries and territories¹⁰. LEED uses a point-based system during the evaluation process. Points are awarded if a specific building criteria has been met. The certification levels are;

Table 3: LEED Certification Levels

Certification	Points
Certified	40 – 49
Silver	50 – 59
Gold	60 – 69
Platinum	80+

The Proposed ASEAN Green Bond is a one-off issuance intended **only** for gateway@klia2. To manage the LEED certification exercise, WCT appointed an external sustainability service provider - EAG Consulting Sdn Bhd¹¹. In June 2017, the gateway@klia2 integrated complex was awarded 57 points of a maximum of 110, giving the building a LEED Silver Certification status. The building was rated under the LEED 2009 Core and Shell certification.

The management of gateway@klia2 is committed to play its part in helping to create an environmentally sustainable future via proper energy and resource management. The integrated complex comprises several green features. In addition, the green initiatives are managed by two different departments: (i) Mechanical & Engineering Department; and (ii) Housekeeping Department.

3.3. Management of Proceeds

The net proceeds from the Proposed ASEAN Green Bond will **be used immediately** to (i) **refinance** the outstanding Medium-Term Notes Programme guaranteed by Danajamin Nasional Berhad of RM400.0 million, including any accrued interest thereto; (ii) repay related company’s advances; and (iii) defray any fees and expenses in relation to the Medium-Term Notes facility.

3.4. Reporting Commitments

Transparency in reporting is an important characteristic of green bond. Issuers are encouraged to establish a formal process to communicate the **Use of Proceeds Reporting** and **Impact Reporting**. The Issuer has committed to report annually the following via the website of gateway@klia2 (<http://gatewayklia2.com.my/>);

Table 4: Segi Astana’s Reporting Commitments for gateway@klia2

Use of Proceeds Reporting	<ul style="list-style-type: none"> ▪ All proceeds will be immediately used to repay the outstanding Medium-Term Notes Programme and related company’s advances.
Impact Reporting	<ul style="list-style-type: none"> ▪ Energy Use Intensity (kWh per square meter) ▪ Carbon Emissions (metric tons of CO₂ per square meter) ▪ Water Intensity (cubic meter per square meter) ▪ Sale of Recyclable Items (Kg)

Impact reporting serves to illustrate the climate and environmental benefits of the project. For green building projects, data on energy intensity, carbon emissions and water intensity are commonly used indicators to evaluate the environmental impact. Issuer’s reporting commitments are consistent with the requirements of **ASEAN GBS**.

¹⁰ U.S. Green Building Council website as at 13 November 2017. Link: <https://new.usgbc.org/leed>

¹¹ EAG Consulting is a registered company in Malaysia and a member of U.S. Green Building Council. The company provides a range of services related to sustainability in the built environment.

Carbon emissions is a core impact indicator for green bond reporting. However, there are varying carbon accounting methodologies that can be adopted. As a measure of additional transparency, RAM encourages the Issuer to provide information on the methodology and emission conversion factors used to calculate carbon emissions. Where possible, the Issuer is encouraged to report energy consumption forecasts that have been developed. This allows a comparison between the actual climate impact of the project with initial projections.

4. SUSTAINABILITY ASSESSMENT

4.1. Growth of Green Buildings in Malaysia

According to the International Energy Agency (“IEA”) Transition to Sustainable Buildings report, buildings represents the **largest energy consuming sector globally**. As a result, they are responsible for roughly one-third of global carbon emissions. Therefore, energy and emission-friendly buildings are vital components for the development of sustainable and low carbon future. The 2 Degrees Scenario¹² require an estimated 77% reduction¹³ in total CO₂ emissions in the buildings sector by 2050.

During the COP21, a total of 197 countries signed the Paris Climate Accord to strengthen the global response to combat climate change. As a participant of the **Paris Climate Accord**, Malaysia has made the commitment to reduce its carbon intensity level of Gross Domestic Product by 45% by the year 2030 as compared with the 2005 level (emissions in the base year: 288,663 Gg CO₂ eq¹⁴).

Malaysia has undertaken a multitude of mitigation and adaption strategies in order to achieve its emission reduction targets. Under the 11th Malaysia Plan (2016-2020), **building energy efficiency** has been identified as a key driver to achieve a sustainable future in Malaysia. Measures detailed out include (i) the provision of grants for energy audits and energy management for commercial buildings; and (ii) energy audits, management and retrofit of government office buildings and hospitals.

Further, Malaysia has developed several **national green rating tools** for buildings. The Malaysian Institute of Architects (“PAM”) and the Association of Consulting Engineers Malaysia (“ACEM”) developed the **Green Building Index (“GBI”)** in 2009. The rating tool was developed to customise sustainable design features based on the country’s tropical climate and current social, infrastructure and economic development. Another Malaysian green building tool was developed in 2013 - the **Green Real Estate (“GreenRE”)**. The tool is the product of collaboration between the Real Estate and Housing Developers’ Association (“REDHA”) and the Ministry of Energy, Green Technology and Water (“KETTHA”). The GreenRE rating tool assesses the building’s performance with respect to energy efficiency, water efficiency, environmental protection, and indoor environmental quality and carbon emissions.

4.2. Group-Level Assessment

The section provides a high-level sustainability assessment of the shareholders. With a 70% ownership in Segi Astana, WCT is the major shareholder and parent company of the Issuer. Therefore, this assessment is focused on WCT’s sustainability management measures.

WCT currently has a land bank of approximately 924 acres in Malaysia. The Group’s portfolio of property assets includes townships, high-rise residences, luxury homes, industrial properties, integrated commercial developments etc. The Group also owns and operates three shopping malls and one hotel.

Based on a review of the 2016 Annual Report’s Sustainability Statement, RAM notes WCT has made a corporate commitment to integrate key economic, environmental and social considerations in its business approach. Tan Sri Marzuki bin Mohd Noor, the **Senior Independent Non-Executive Director**, has been identified to spearhead the implementation of the Group’s sustainability strategy. The Group has also identified several **priority sustainability**

¹² 2DS, or the 2 Degrees Scenario is the goal reaffirmed in the Paris Agreement during the 21st U.N. Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP21). The target is to limit global temperature rise to 2 degrees Celsius when compared against pre-industrial levels.

¹³ Compared against 2010 levels

¹⁴ Intended Nationally Determined Contribution report of the Government of Malaysia

themes that are material to the company; sustainable procurement, construction waste management, occupational health & safety and community investment.

The Group currently maintains ISO standards such as **ISO 14001 Environmental Management System, ISO 9001 Quality Management System** and **OHSAS 18001**. RAM opines ISO standards help reaffirm a company’s commitment towards managing environmental and social challenges. The standards help create a compliance program that ensures consistency in practices and processes. Further, the ISO re-certification process requires a reassessment of the implementation of the management system. The process includes a close examination of documentations relating the management system, completion of internal audits and effectiveness levels of corrective and preventive actions undertaken. Given the stringent requirements for maintaining ISO standards, RAM opines WCT has a high level of sustainability readiness to support the gateway@klia2 project.

As measure of best practice, RAM encourages WCT to further enhance its sustainability strategy and disclosures. To this end, RAM opines it is important for corporations to develop a holistic and integrated sustainability strategy that encompasses; (i) long term sustainability vision, objectives and commitments (ii) regular and systematic consultation with identified stakeholders on important sustainability issues (iii) a robust governance and accountability mechanism to operationalise sustainability (iv) identification of key systems and processes to manage sustainability and (v) regular reporting of performance indicators against established targets.

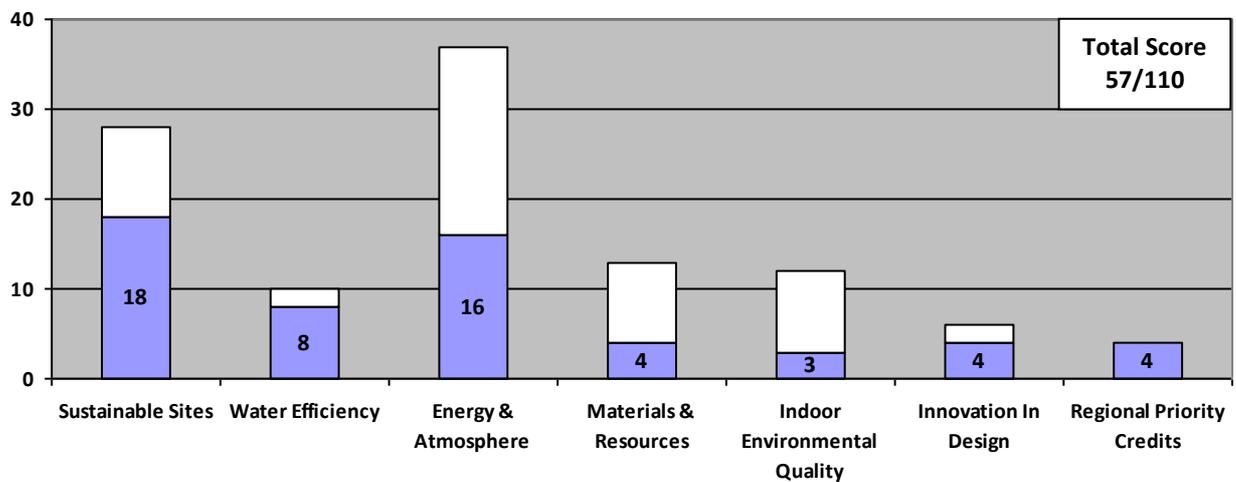
RAM carried out a high-level media scan of WCT and gateway@klia2 in the web domain. There were no reported controversies pertaining environment, social and governance practices of the organisation.

MAHB, the minority shareholder of Segi Astana, has been a strong proponent of sustainability. The airport operator has an overarching sustainability framework that drives the organisation. A dedicated sustainability team has been established and the company’s initiatives are aligned with selected United Nations 17 Sustainable Development Goals. As a signatory to the Aviation Industry Commitment to Action on Climate Change, MAHB also aspires to create a carbon-neutral growth pathway in its operations.

4.3. Sustainability Management of Green Building

The LEED rating system provides a prescriptive framework for identifying feasible and measurable sustainable design measures that can be incorporated throughout the building lifecycle. The diagram below summarises gateway@klia2’s LEED certification performance scores. The shaded areas represent the individual component scores achieved by the building with respect to the predetermined criteria in the LEED rating system. Please refer to Appendix 4 for details of the assessment. The Issuer represented that the LEED certification will provide a sound baseline for management to **further evaluate improvement opportunities** that can be applied to gateway@klia2 in the future.

Diagram 1: LEED Certification Scorecard for gateway@klia2



Sustainable design features help to improve the building's environmental footprint and ensure efficient use of resources. The integrated complex comprises the following **green features**:

- i. Energy efficiency measures that include lighting and fan power reductions, heat recovery, demand-controlled ventilation, thermal envelope improvements etc.
- ii. Rainwater harvesting system for internal usage.
- iii. Centralised waste disposal system that uses vacuum suction. This contributes to energy savings when transporting waste to the bin centre.
- iv. Dedicated areas for collection and storage for recycling.
- v. CO₂ sensors at the shopping complex to ensure proper regulation of CO₂ levels inside the building.
- vi. Sensor lights installed at the carpark to reduce energy consumption

Currently, the shopping complex's **green initiatives are managed by two different departments**. The Mechanical & Engineering Department is responsible for the implementation of energy saving initiatives whilst the Housekeeping Department spearheads the recycling initiatives at the building.

The Issuer has developed **Guidelines for Energy Efficiency and Sustainability** for the tenants of the building. The guideline is intended to provide actionable strategies and practices that can be used to improve energy efficiency and resource consumption. In addition, the Issuer represented that building management performs **quarterly environmental audits** on the tenants. RAM opines an active tenant engagement program can help to broaden the awareness levels on the importance of going green. More importantly, tenant education and behavior modification are vital to create an effective sustainability management program for buildings.

As a measure of best practice, RAM encourages the Issuer to establish measurable conservation targets (especially energy and water) for the building. Long term goals provide a reference point against which performance is measured. In addition, target-setting can provide valuable insights into the design, implementation and evaluation of the building's environmental action plans. RAM opines clearly defined targets can also help the Issuer to prioritise actions and investments into energy, emissions and resource savings. Examples of commonly-used targets for buildings include percent savings or reductions, desired energy use intensity target, etc.

In addition to green features, truly sustainable buildings also ought to **improve the wellbeing** of tenants, customers and visitors. To this end, the Issuer has embarked on the following initiatives;

- i. 97 security guards have been hired to ensure safety and security of tenants and visitors.
- ii. The building is designed to improve accessibility for less-abled persons.
- iii. Community-focus activities conducted at the integrated complex. Past initiatives include art exhibitions, orphanage visit and hosting a charity event.
- iv. Satisfaction surveys carried out at gateway@klia2 to solicit feedback on mall-related facilities, transportation hub, F&B outlets and shopping outlets. Target group for the survey includes passengers, shoppers and tenants.

4.4. Bond Positive Impact Creation

The following section is a high-level assessment of the potential sustainable benefits that can be derived from Segi Astana's gateway@klia2 integrated complex. RAM opines the integrated complex will contribute towards (i) lower climate impact and (ii) stimulate local economic development.

Buildings generally consume significant amount of energy and produce CO₂ emissions during their long life-span. Given their significant impacts, green buildings can be an effective strategy to **reduce the threat of climate change**. Incorporating sustainable design and engineering measures in buildings can substantially transform the built environment to be more climate-friendly. As a result, green buildings make an important contribution towards Sustainable Development Goal 11: Sustainable Cities and Communities. The gateway@klia2 integrated complex is a green building that has been certified as LEED Silver. The LEED rating system requirements provide a sound guideline for the Issuer to improve the building performance and managing climate impact. According to the U.S. Green Building Council, the average LEED certified building uses 32% less electricity when compared to a conventional building and saves 350 metric tons of CO₂ on an annual basis.

The gateway@klia2 shopping complex is integrated with the Kuala Lumpur International Airport 2 (“KLIA2”) terminal. The shopping complex has approximately 350,000 square feet of retail space that spans over 4 levels. In addition, the shopping complex is also connected to the local transportation network that includes the KLIA Express Train, taxis, rented cars, buses and private transport. In 2016, KLIA2 handled 27.1 million passenger movements. Combined with the Kuala Lumpur International Airport Main Terminal¹⁵, the airport currently caters to more than 60 airlines that serve more than 130 direct destinations¹⁶. With passenger traffic from various parts of the world, KLIA is **one of the most highly transited airports in Southeast Asia**. Airports are increasingly being viewed as an important node that drives economic and social progress. As a key transport infrastructure asset, RAM opines the gateway@klia2 shopping complex makes a vital contribution to the local economic development. Integrated with the KLIA2 airport terminal, gateway@klia2 stands to benefit from the airport’s growing traffic. The shopping complex operates 24/7 as a **commercial activity center** serving domestic and international tourists as well as employees working at the airport. Further, the shopping complex also provides **direct and indirect employment opportunities** in the retail outlets, food & beverage services and mall maintenance. As at November 2017, there are 108 active tenants at the shopping complex. In this regard, gateway@klia2 helps to contribute towards Sustainable Development Goal 8: Decent Work & Economic Growth.

¹⁵ The KLIA Main Terminal Building is directly connected to the KLIA2

¹⁶ Malaysian Airport Holdings Berhad 2016 Annual Report – page 56 & 57

APPENDIX 1

APPENDIX 1 – ASEAN GBS EXTERNAL REVIEW FORM

ASEAN Green Bond / ASEAN Green Bond Programme External Review Form

(modified by RAM from the Green Bond / Green Bond Programme External Review Form
by the International Capital Markets Association (“ICMA”).

This checklist provides a broad overview of the Issuer’s framework against the requirements of the
ASEAN Green Bond Standards.)

Section 1. Basic Information

1. **Issuer name:** Segi Astana Sdn Bhd (“Segi Astana”)
2. **Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:** Segi Astana Green Bond
3. **Completion date of this form:** 22 November 2017
4. **ASEAN Issuer:** Yes No
5. **Location of eligible Green Project:**

<input type="checkbox"/> Brunei	<input type="checkbox"/> Myanmar
<input type="checkbox"/> Cambodia	<input type="checkbox"/> the Philippines
<input type="checkbox"/> Indonesia	<input type="checkbox"/> Singapore
<input type="checkbox"/> Lao PDR	<input type="checkbox"/> Thailand
<input checked="" type="checkbox"/> Malaysia	<input type="checkbox"/> Vietnam

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the ASEAN GBS:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (*if applicable*)

Please refer to Second Opinion Report on Segi Astana ASEAN Green Bond prepared by RAM Consultancy Services Sdn Bhd.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (if applicable):

The proceeds from the Green Bond will be exclusively used to: (i) refinance the outstanding Medium-Term Notes Programme guaranteed by Danajamin Nasional Berhad of RM400.0 million, including any accrued interest thereto; (ii) repay related company's advances; and (iii) defray any fees and expenses in relation to the Medium-Term Notes facility. The outstanding Medium-Term Notes were issued on 10 January 2012 to finance the construction and development of gateway@klia2 integrated complex.

In June 2017, the gateway@klia2 integrated complex has achieved a **LEED Silver certification** under the LEED (Leadership in Energy and Environmental Design) rating system certification established by the U.S. Green Building Council¹⁷. The certification attained is based on the LEED 2009 Core and Shell Development criteria.

1. Use of proceeds categories as per ASEAN GBS:

- | | |
|--|--|
| <input type="checkbox"/> Renewable energy | <input type="checkbox"/> Energy efficiency |
| <input type="checkbox"/> Pollution prevention and control | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input type="checkbox"/> Clean transportation |
| <input type="checkbox"/> Sustainable water and waste water management | <input type="checkbox"/> Climate change adaptation |
| <input type="checkbox"/> Eco-efficient products, production technologies and processes | <input checked="" type="checkbox"/> Green buildings which meet regional, national or internationally recognised standards or certifications. |
| <input type="checkbox"/> Other (please specify): | |

If applicable please specify the environmental taxonomy, if other than ASEAN GBS:

2. Overall comment on specific Green Projects to which the ASEAN Green Bond proceeds will be allocated (if applicable):

All proceeds will be exclusively used (i) **refinance** the outstanding Medium-Term Notes Programme guaranteed by Danajamin Nasional Berhad of RM400.0 million, including any accrued interest thereto; (ii) repay related company's advances; and (iii) defray any fees and expenses in relation to the Medium-Term Notes facility. The outstanding Medium-Term Notes Programme were issued to finance the construction and development of gateway@klia2 integrated complex.

¹⁷ Established in 1993, the U.S. Green Building Council is a non-profit organisation focused on promoting on sustainability in building design, construction and operation.

3. Overall comment on the environmental benefits of the Green Projects:

The gateway@klia2 integrated complex is a green building that has been certified as LEED Silver. Buildings generally consume significant amount of energy and produce CO₂ emissions during their long life-span. Given their significant impacts, green buildings can be an effective strategy to **reduce the threat of climate change**. Incorporating sustainable design and engineering measures in buildings can substantially transform the built environment to be more climate-friendly.

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

The LEED certification is an internationally-recognised green building rating system developed by the U.S. Green Building Council in 1998. LEED has become one of the world's most widely used green building rating system, with more than 92,000 projects participating in LEED across 165 countries and territories. The Proposed Green Bond is a one-off issuance intended **only** for the LEED-certified gateway@klia2.

1. Overall comment on the environmental sustainability objectives of the issuer:

The issuer is committed to play its part in helping to create an environmentally sustainable future via proper energy and resource management of gateway@klia2 integrated complex.

2. Evaluation and selection

- | | |
|---|--|
| <input type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input checked="" type="checkbox"/> Other (please specify): <u>The LEED certification exercise provides reasonable assurance that the building is green.</u> |

3. Overall comment on the eligibility criteria, exclusion criteria or any other process to identify and manage potentially material risks associated with the Green Projects:

External verifier, EAG Consulting Sdn Bhd, was appointed to certify the building against the requirements of LEED. The LEED components provide a sound framework for the issuer to identify and evaluate environmental factors that are important for buildings.

The integrated complex comprises several green features. The green initiatives are managed by two different departments of Segi Astana: (i) Mechanical & Engineering Department; and (ii) Housekeeping Department.

4. Information on responsibilities and accountability of evaluation criteria

- | | |
|--|--|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (please specify): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

The proceeds from the Green Bond will **be used immediately to** (i) **refinance** the outstanding Medium-Term Notes Programme guaranteed by Danajamin Nasional Berhad of RM400.0 million, including any accrued interest thereto; (ii) repay related company's advances; and (iii) defray any fees and expenses in relation to the Medium-Term Notes facility.

1. Tracking of proceeds:

- Green Bond proceeds segregated or tracked by the issuer in a systematic manner
 - Credited into a sub-account
 - Moved to a sub-portfolio
 - Other (please specify):
- Disclosure of intended types of temporary investment instruments for unallocated proceeds
 - Other (please specify): Proceeds will be immediately used to repay. No tracking of proceeds required.

2. Additional disclosure:

- Allocations to future investments only
- Allocation to individual disbursements
- Disclosure of portfolio balance of unallocated proceeds
- Allocations to both existing and future investments
- Allocation to a portfolio of disbursements
- Other (please specify): Proceeds will be immediately used to repay. No tracking of proceeds required.

4. REPORTING

Overall comment on section (if applicable):

The Issuer has committed to report annually the following via the website of gateway@klia2: (i) Energy Use Intensity (kWh per square meter); (ii) Carbon Emissions (metric tons of CO2 per square meter); (iii) Water Intensity (cubic meter per square meter); and (iv) Sale of Recyclable Items (Kg).

1. Commitment to make the following publicly available on a website designated by the Issuer:

- | | | | |
|---|------------------------------|-----------------------------|---|
| i) Process for project evaluation | ■ Yes | <input type="checkbox"/> No | |
| ii) Use of proceeds | ■ Yes | <input type="checkbox"/> No | |
| iii) External review report on the process of project evaluation (if any) | ■ Yes | <input type="checkbox"/> No | <input type="checkbox"/> Not Applicable |
| iv) External review report on the internal tracking method and allocation of funds (if any) | <input type="checkbox"/> Yes | <input type="checkbox"/> No | ■ Not Applicable |

2. Commitment to appoint a third party to verify internal tracking method and allocation of funds from proceeds Yes No Not Applicable

3. Use of proceeds reporting:

- Project-by-project On a project portfolio basis
- Linkage to individual bond(s) Other (please specify):
- Information reported:**
 - Allocated amounts GB financed share of total investment
 - Other (please specify): 100% used to repay.
- Frequency:**
 - Annual Semi-annual
 - Other (please specify): One-off. The drawdown is one off only.

4. Impact reporting:

- Project-by-project On a project portfolio basis
- Linkage to individual bond(s) Other (please specify): Related to the gateway@klia2 shopping complex.
- Information reported (expected or ex-post):**
 - GHG Emissions / Savings Energy Savings
 - Other ESG indicators (please specify): Water intensity and Sale of Recyclable Items.
- Frequency:**
 - Annual Semi-annual
 - Other (please specify):

5. Means of Disclosure

- Information published in financial report Information published in sustainability report
- Information published in ad hoc documents Other (please specify): Website of gateway@klia2 (<http://gatewayklia2.com.my/>)
- Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

Website of gateway@klia2 (<http://gatewayklia2.com.my/>)

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | <input checked="" type="checkbox"/> Not Applicable |

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE ASEAN GBS

- (i) **Consultant Review:** An Issuer can seek advice from consultants and/or institutions with recognised expertise in environmental sustainability or other aspects of the issuance of ASEAN Green Bonds, such as the establishment/review of an Issuer’s ASEAN Green Bonds framework. “Second party opinions” may fall into this category.
- (ii) **Verification:** An Issuer can have its ASEAN Green Bonds, associated ASEAN Green Bonds framework, or underlying assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may focus on alignment with internal standards or claims made by the Issuer. Evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria.
- (iii) **Certification:** An Issuer can have its ASEAN Green Bonds or associated ASEAN Green Bonds framework or use of proceeds certified against an external green assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties/ certifiers.
- (iv) **Rating:** An Issuer can have its ASEAN Green Bonds or associated ASEAN Green Bonds framework rated by qualified third parties, such as specialised research providers or rating agencies. Green bond ratings are separate from an Issuer’s environmental, social and governance rating as they typically apply to individual securities or ASEAN Green Bonds frameworks/programmes.

APPENDIX 2

APPENDIX 2 – LIST OF DOCUMENTS REVIEWED

No.	Document
1	LEED Certification Review Report
2	Tenant Guidelines for Energy-Efficiency and Sustainability
3	Green Building Activity
4	gateway@klia2 CSR Program
5	gateway@klia2 Customer Satisfaction Survey Report
6	Standard Operating Procedure for Waste Disposal
7	2016 WCT Holdings Berhad Annual Report
8	Organisation Chart of Segi Astana
9	Green Bond Framework of Segi Astana
10	2016 Malaysian Airports Holdings Berhad Annual Report
11	2016 Malaysian Airports Holdings Berhad Sustainability Report

APPENDIX 3



GATEWAY@KLIA2 MALL SEPANG, SELANGOR

Sepang, Malaysia

HAS FULFILLED THE REQUIREMENTS OF THE LEED GREEN BUILDING RATING SYSTEM CERTIFICATION ESTABLISHED BY THE U.S. GREEN BUILDING COUNCIL AND VERIFIED BY GREEN BUSINESS CERTIFICATION INC.

LEED 2009
CORE AND SHELL DEVELOPMENT

SILVER

June 2017

A handwritten signature in black ink that reads "Mahesh Ramonjam".

MAHESH RAMANUJAM, PRESIDENT & CEO, U.S. GREEN BUILDING COUNCIL,
PRESIDENT & CEO, GREEN BUSINESS CERTIFICATION INC.

Attachment 2 Page 1 of 1

APPENDIX 4

APPENDIX 4 – LEED CERTIFICATION REVIEW REPORT



LEED Certification Review Report

This report contains the results of the technical review of an application for LEED® certification submitted for the specified project. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council® (USGBC®). The LEED certification program is administered by the Green Business Certification Inc. (GBCI®).

KLIA2 Integrated Complex

Project ID 1000014313
Rating system & version LEED-CS v2009
Project registration date 04/08/2011



Certified (Silver)

CERTIFIED: 40-49, SILVER: 50-59, GOLD: 60-79, PLATINUM: 80+

LEED 2009 CORE AND SHELL

ATTEMPTED: 57, DENIED: 1, PENDING: 0, AWARDED: 57 OF 110 POINTS

Category	Points	Status
SUSTAINABLE SITES	18 OF 28	
SSp1 Construction Activity Pollution Prevention	Y	
SSc1 Site Selection	1 / 1	
SSc2 Development Density and Community Connectivity	0 / 5	
SSc3 Brownfield Redevelopment	0 / 1	
SSc4.1 Alternative Transportation-Public Transportation Access	6 / 6	
SSc4.2 Alternative Transportation-Bicycle Storage and Changing Room	0 / 2	
SSc4.3 Alternative Transportation-Low-Emitting and Fuel-Efficient V	3 / 3	
SSc4.4 Alternative Transportation-Parking Capacity	2 / 2	
SSc5.1 Site Development-Protect or Restore Habitat	0 / 1	
SSc5.2 Site Development-Maximize Open Space	1 / 1	
SSc6.1 Stormwater Design-Quantity Control	0 / 1	
SSc6.2 Stormwater Design-Quality Control	1 / 1	
SSc7.1 Heat Island Effect, Non-Roof	1 / 1	
SSc7.2 Heat Island Effect-Roof	1 / 1	
SSc8 Light Pollution Reduction	1 / 1	
SSc9 Tenant Design and Construction Guidelines	1 / 1	
WATER EFFICIENCY	8 OF 10	
WEp1 Water Use Reduction-20% Reduction	Y	
WEc1 Water Efficient Landscaping	4 / 4	
WEc2 Innovative Wastewater Technologies	0 / 2	
WEc3 Water Use Reduction	4 / 4	
ENERGY AND ATMOSPHERE	16 OF 37	
EAp1 Fundamental Commissioning of the Building Energy Systems	Y	
EAp2 Minimum Energy Performance	Y	
EAp3 Fundamental Refrigerant Mgmt	Y	
EAc1 Optimize Energy Performance	6 / 21	
EAc2 On-Site Renewable Energy	0 / 4	
EAc3 Enhanced Commissioning	2 / 2	
EAc4 Enhanced Refrigerant Mgmt	2 / 2	
EAc5.1 Measurement and Verification-Base Building	3 / 3	
EAc5.2 Measurement and Verification-Tenant Submetering	3 / 3	
EAc6 Green Power	0 / 2	
MATERIALS AND RESOURCES	4 OF 13	
MRp1 Storage and Collection of Recyclables	Y	
MRc1 Building Reuse-Maintain Existing Walls, Floors and Roof	0 / 5	
MRc2 Construction Waste Mgmt	0 / 2	
MATERIALS AND RESOURCES	CONTINUED	
MRc3 Materials Reuse	0 / 1	
MRc4 Recycled Content	2 / 2	
MRc5 Regional Materials	2 / 2	
MRc6 Certified Wood	0 / 1	
INDOOR ENVIRONMENTAL QUALITY	3 OF 12	
IEQp1 Minimum IAQ Performance	Y	
IEQp2 Environmental Tobacco Smoke (ETS) Control	Y	
IEQc1 Outdoor Air Delivery Monitoring	0 / 1	
IEQc2 Increased Ventilation	0 / 1	
IEQc3 Construction IAQ Mgmt Plan-During Construction	1 / 1	
IEQc4.1 Low-Emitting Materials-Adhesives and Sealants	0 / 1	
IEQc4.2 Low-Emitting Materials-Paints and Coatings	1 / 1	
IEQc4.3 Low-Emitting Materials-Flooring Systems	0 / 1	
IEQc4.4 Low-Emitting Materials-Composite Wood and Agrifiber Products	0 / 1	
IEQc5 Indoor Chemical and Pollutant Source Control	0 / 1	
IEQc6 Controllability of Systems-Thermal Comfort	0 / 1	
IEQc7 Thermal Comfort-Design	1 / 1	
IEQc8.1 Daylight and Views-Daylight	0 / 1	
IEQc8.2 Daylight and Views-Views	0 / 1	
INNOVATION IN DESIGN	4 OF 6	
IDc1.1 Innovation in Design	1 / 1	
IDc1.2 Innovation in Design	0 / 1	
IDc1.2 Innovation in Design - Solid Waste Mgmt Policy	1 / 1	
IDc1.2 Innovation in Design	0 / 1	
IDc1.3 Innovation in Design: Site Development - Maximize Open Space	1 / 1	
IDc1.3 Innovation in Design	0 / 1	
IDc1.4 Innovation in Design	0 / 1	
IDc1.4 Innovation in Design	0 / 1	
IDc1.5 Innovation in Design	0 / 1	
IDc1.5 Innovation in Design	0 / 1	
IDc2 LEED® Accredited Professional	1 / 1	
REGIONAL PRIORITY CREDITS	4 OF 4	
WEc1 Water Efficient Landscaping	1 / 1	
WEc3 Water Use Reduction	1 / 1	
EAc1 Optimize Energy Performance	1 / 1	
EAc5.2 Measurement and Verification-Tenant Submetering	1 / 1	
TOTAL	57 OF 110	

ABOUT RAM

RAM Consultancy was incorporated on 31 May 2000 as a wholly-owned subsidiary of RAM Holdings Berhad. RAM Consultancy Services provides specialised services for public sector agencies and private sector businesses. These services leverage on RAM Group's expertise and resources developed over the years in Sustainability Rating, Green Bonds, Sustainability Reporting, Credit Rating, Risk Management Advisory, Strategic Business Advisory and Economics Consultancy. On 11 August 2017, RAM Consultancy was approved to be a registered observer of the Green Bond Principles developed by ICMA. RAM Consultancy is the first ASEAN-based organisation to be admitted to the list of observers.

RAM Holdings was set-up by Bank Negara Malaysia (Central Bank of Malaysia) in November 1990 as Malaysia's first credit rating agency to spearhead the development of the Malaysian debt capital market. This has been highly successful as the Malaysian debt capital market has grown to be the largest debt capital market in developing economies.

Over the last 27 years, RAM Holdings and its wholly-owned subsidiary, RAM Rating Services Berhad, has facilitated the raising of more than USD260 billion of funding in the form of both bonds and sukuk (Islamic bonds) that have primarily funded the many world class infrastructure in Malaysia. RAM Ratings is consistently voted as one of the leading credit rating agency in Asia and is currently the global market leader in Islamic Finance. In May 2016, RAM Ratings became one of six founding signatories to sign on to the United Nations-supported Principles for Responsible Investment's ("UN-PRI") *Statement on ESG in Credit Ratings*.

The RAM Group (comprising RAM Holdings, RAM Ratings, RAM Solutions and RAM Consultancy) have extensive experience in project finance structures and comprehensive knowledge of issues influencing the Malaysian and regional financial markets. RAM's network of clients includes domestic and international financial institutions, investors, corporates, government and public agencies. For more information, please visit <https://www.ram.com.my/home/>



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