Introducing

carbonScore

malaysiaGBC

WORLD GREEN BUILDING COUNCIL

ADVANCING NET ZERO

CarbonScore Task Force | 19 October 2022

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WORLD GREEN BUILDING COUNCIL

ADVANCING NET ZERO

Contents

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UNFCCC | Nationally Determined Contributions

•United Nations Framework Convention on Climate Change [UNFCCC] - has near universal membership (197 Parties) and is the parent treaty to the Paris Agreement 2015 and 1997 Kyoto Protocol

•It's main aim is to limit global average temperature rise this century as close as possible to 1.5 degrees Celsius

•COP 26 UN Climate Change Conference in Glasgow, UK - November 2021 Malaysia committed publicly to reduce its economy-wide carbon intensity (against GDP) **45% by 2030** as compared to 2005 levels

•**CarbonScore** aligns with the country's ultimate goal of achieving **carbon neutrality by 2050**

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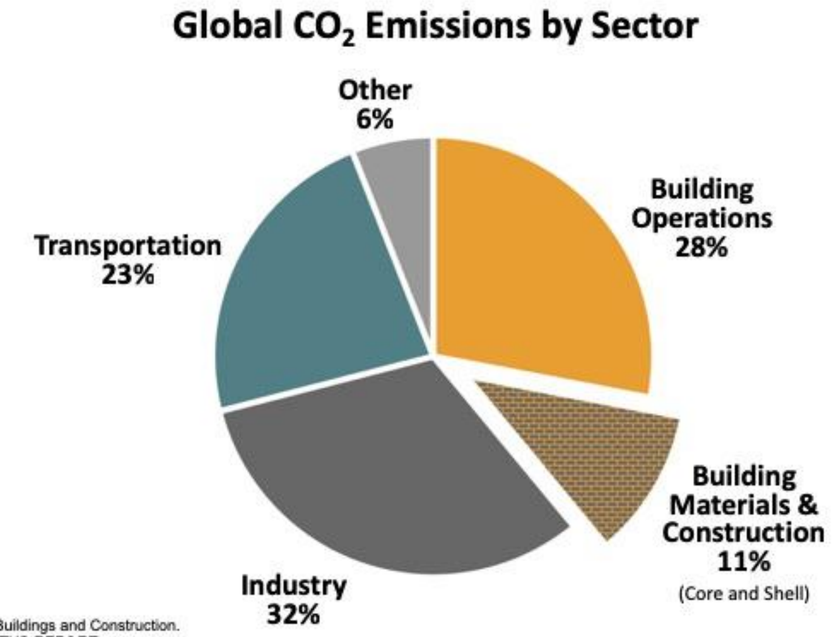
Introduction | Beyond Green Buildings

Buildings generate over 40% of total annual global CO_2 emissions. Cities are responsible for over 70% of global energy consumption.



Source:
Global Alliance for Buildings and Construction.
2018 GLOBAL STATUS REPORT.

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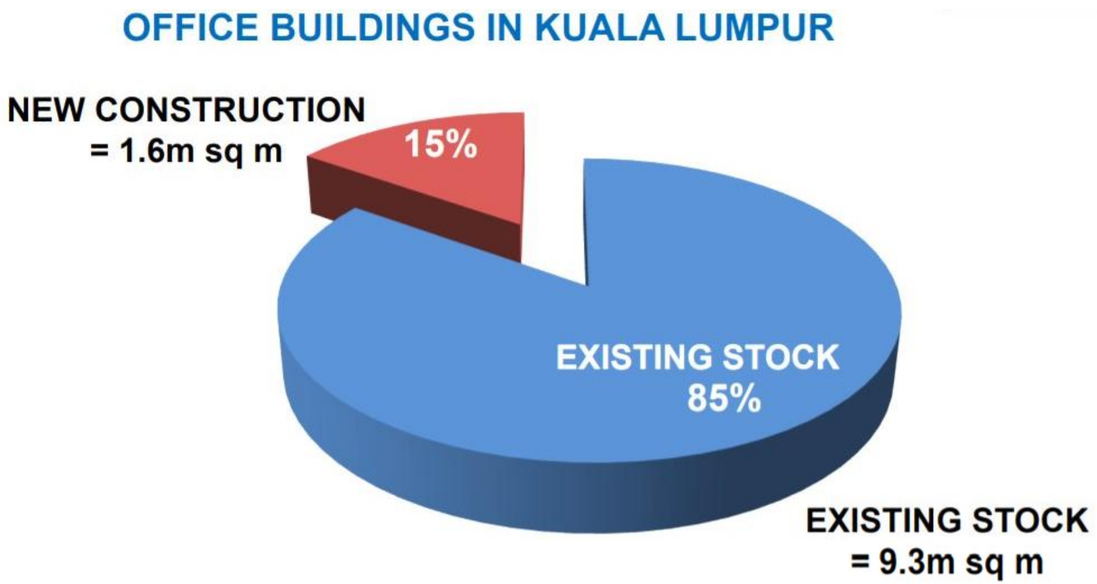
Introduction | Beyond Green Buildings

- Existing buildings comprise more than 85% of our built environment

- We need to encourage retrofits and quickly accelerate the uptake of enhanced environmental performance

- As of 2022, certified **green buildings** comprise less than 0.1% of Malaysia's total building stock



Source : KL Draft Structure Plan, 2000

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Introduction | Beyond Green Buildings

Why Buildings?

- Global building stock will double in area by 2060.
- we expect to add **2.48** trillion square feet (230 billion m^2) of new floor area to the global building stock
- equivalent of adding an entire New York City every month for 40 years or a new KL every week…

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Introduction | Beyond Green Buildings

Green Buildings are a comprehensive environmental benchmark

energy efficiency | indoor environmental quality | sustainable site planning & management

materials & resources | water efficiency

Zero Carbon Buildings specifically focus on reducing *building-related* CO_2 *emissions*, reflecting the increased urgency of global efforts to mitigate climate change

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Project Description | Mission Statement

- **CarbonScore** makes the invisible, actionable.
- **CarbonScore** is a report card/health check
- **CarbonScore** is for ALL Malaysian buildings

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Project Description | Definitions

CarbonScore is a scale of building energy related CO_2 emissions from 0 to 100 where:

- **0 is BAU & 100 is a zero carbon building**
- **CarbonScore does not go below 0**
- **CarbonScore above 100 represents a Carbon Negative Building**

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Project Description | Definitions

CarbonScore certifications account for the following elements:

i) **Operational Carbon** from Energy Consumption

ii) **Embodied Carbon** from Construction Materials / Activities

iii) Emissions from Associated **Transportation**

iv) On-site **Renewable Energy** Generation

v) Purchased Carbon **Offsets** (qualified)

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Project Description | Programs

Tier 1 | **CarbonScore**

Public Certification

Tier 2 | **CarbonScore+**

Verified Carbon Reporting

Online CO_2 Calculator

Available Free to Public via Self Declaration

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CarbonScore | Public Certification

Proof of Concept

Rapidly accelerating public awareness

of building-related CO_2 emissions

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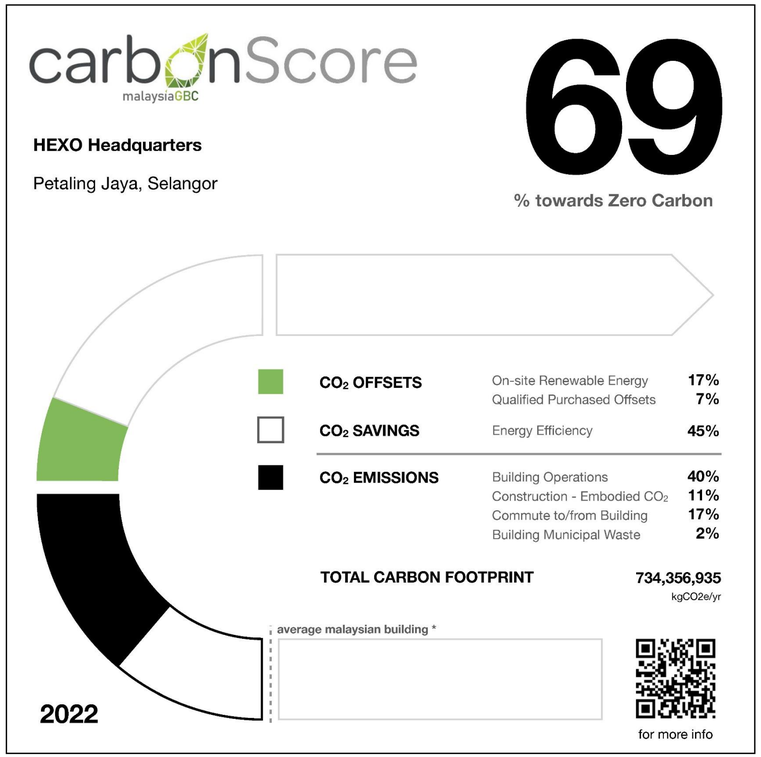
CarbonScore | Public Certification

- Targeting universal public adoption via individual building owners, institutions, local authorities, etc…
- Optimised for use directly by building owners & facilities managers no need for 3rd party consultants
- Universal compatibility with all building types
- Seamless integration with existing green building rating tools.



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CarbonScore + | Verified CO_2 Reporting

- Complies with *established* international CO_2 accounting standards -
  GHG Protocols, ISO 14064, World Resources Institute (WRI), Verra.org, CDP Global, etc…
- Specifically designed to align with the more rigorous CO_2 reporting requirements of Listed Companies, Financial institutions, Large-scale Developers, Manufacturers & Multinationals
- Satisfies demand for statutory carbon reporting, SDG & ESG commitments.
- Verified by an accredited **CarbonScore Auditor [CSA]**

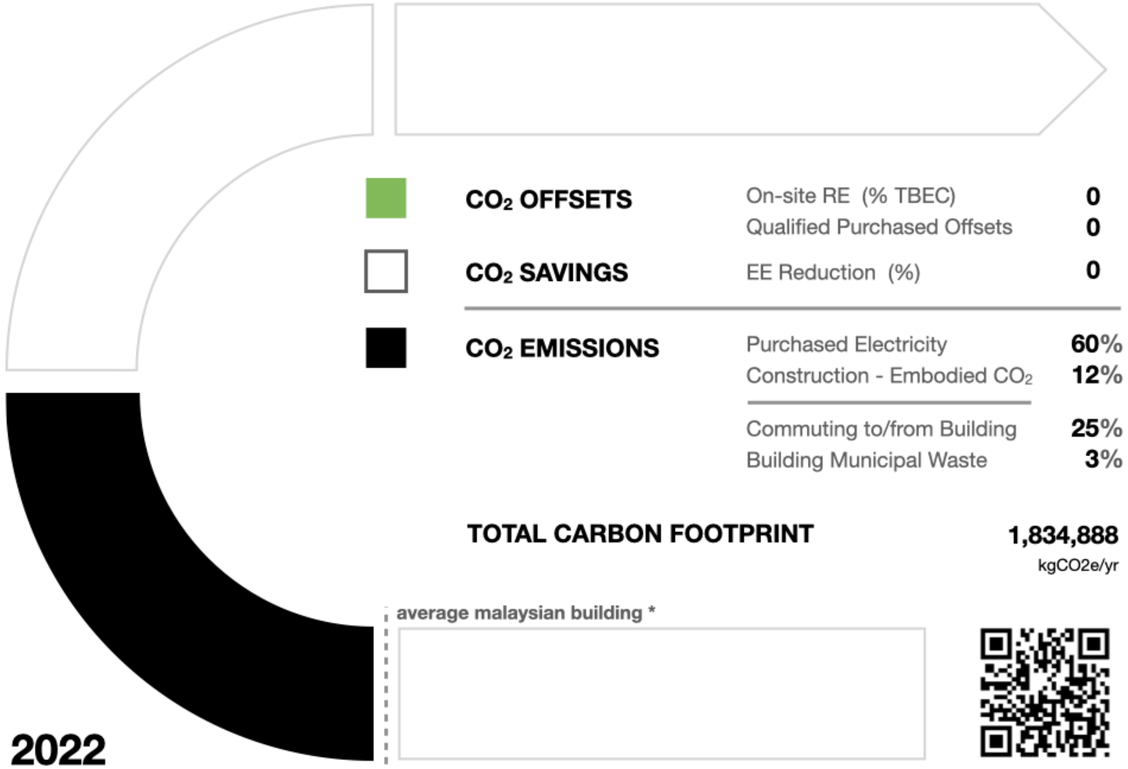
carbonScore

0

Average Office Building

Malaysia

% towards Zero Carbon Building



CO_2 OFFSETS	On-site RE (% TBEC)	0
	Qualified Purchased Offsets	0
CO_2 SAVINGS	EE Reduction (%)	0
CO_2 EMISSIONS	Purchased Electricity	60%
	Construction - Embodied CO_2	12%
	Commuting to/from Building	25%
	Building Municipal Waste	3%

TOTAL CARBON FOOTPRINT 1,834,888 kgCO2e/yr

average malaysian building *

for more info

2022

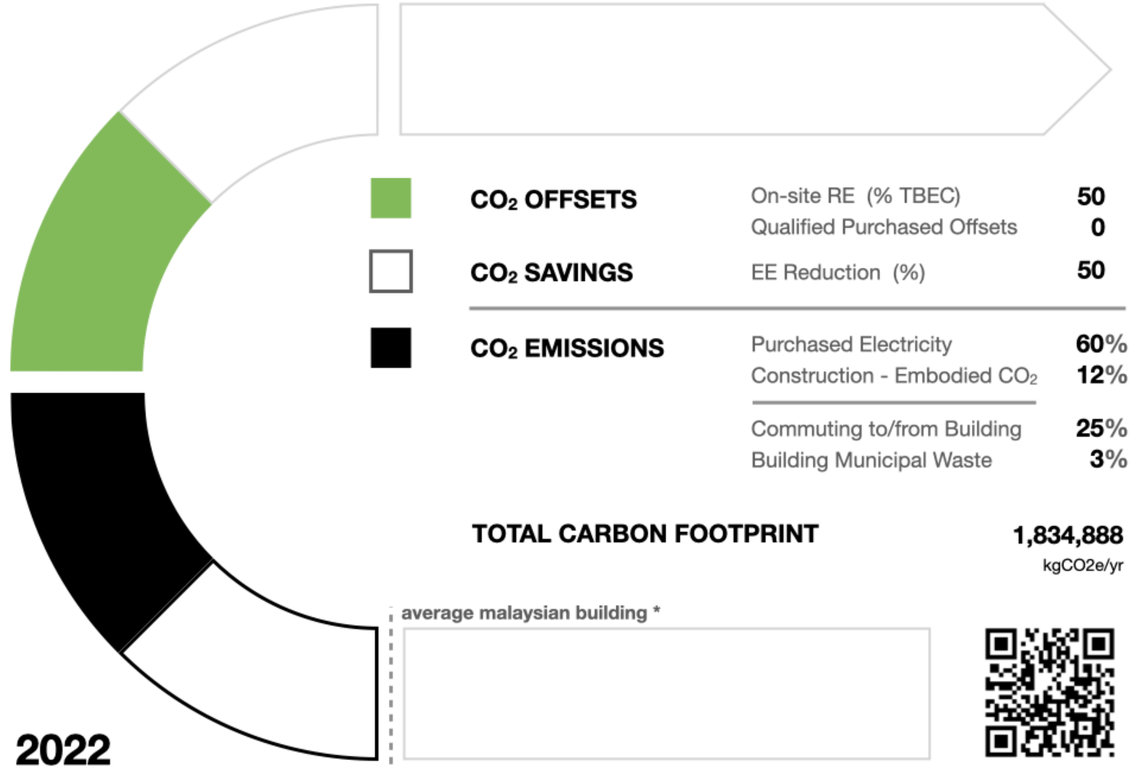
carbonScore

100

Zero Carbon Building

Malaysia

% towards Zero Carbon Building



CO_2 OFFSETS	On-site RE (% TBEC)	50
	Qualified Purchased Offsets	0
CO_2 SAVINGS	EE Reduction (%)	50
CO_2 EMISSIONS	Purchased Electricity	60%
	Construction - Embodied CO_2	12%
	Commuting to/from Building	25%
	Building Municipal Waste	3%

TOTAL CARBON FOOTPRINT 1,834,888 kgCO2e/yr

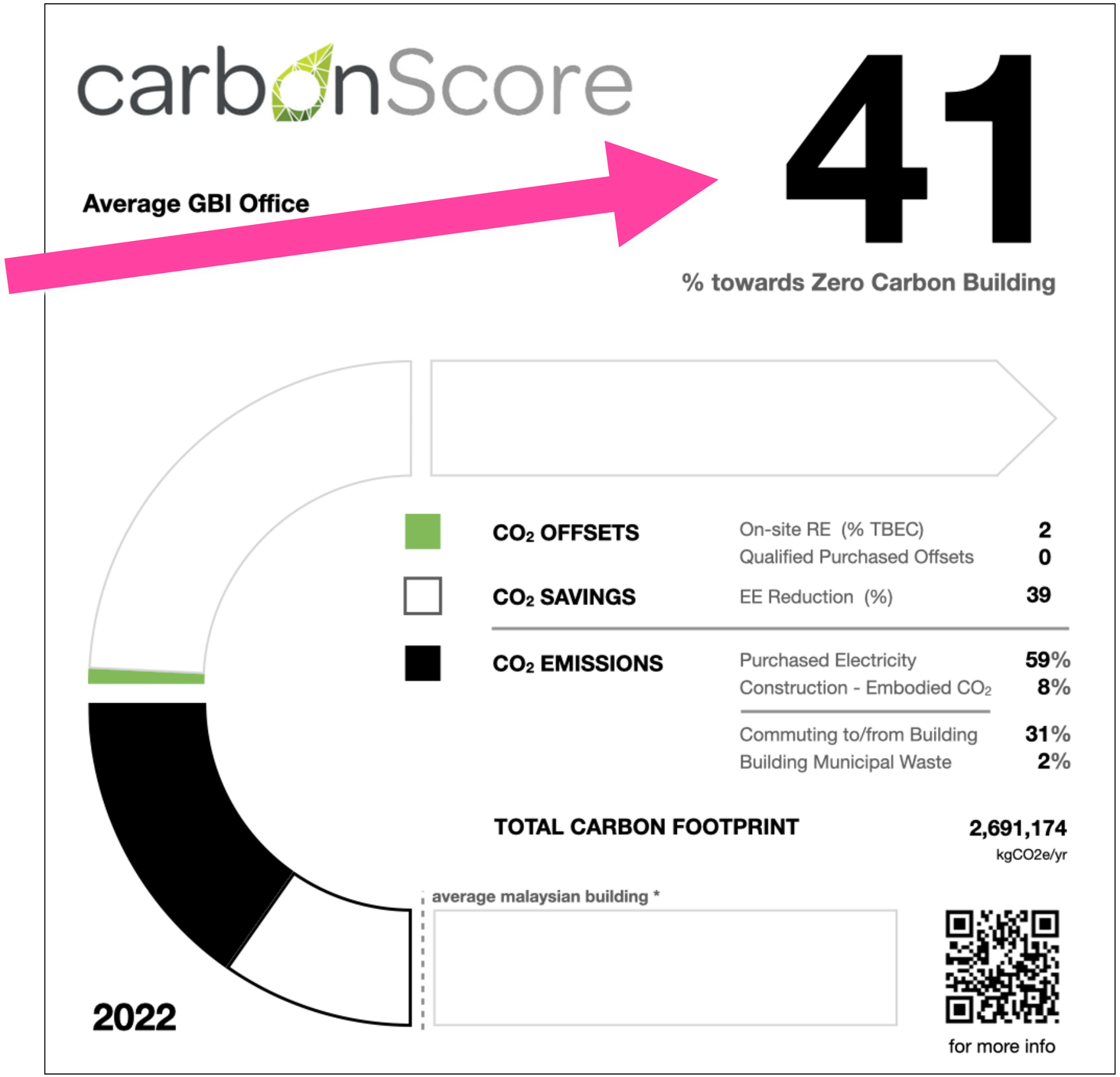
average malaysian building *

for more info

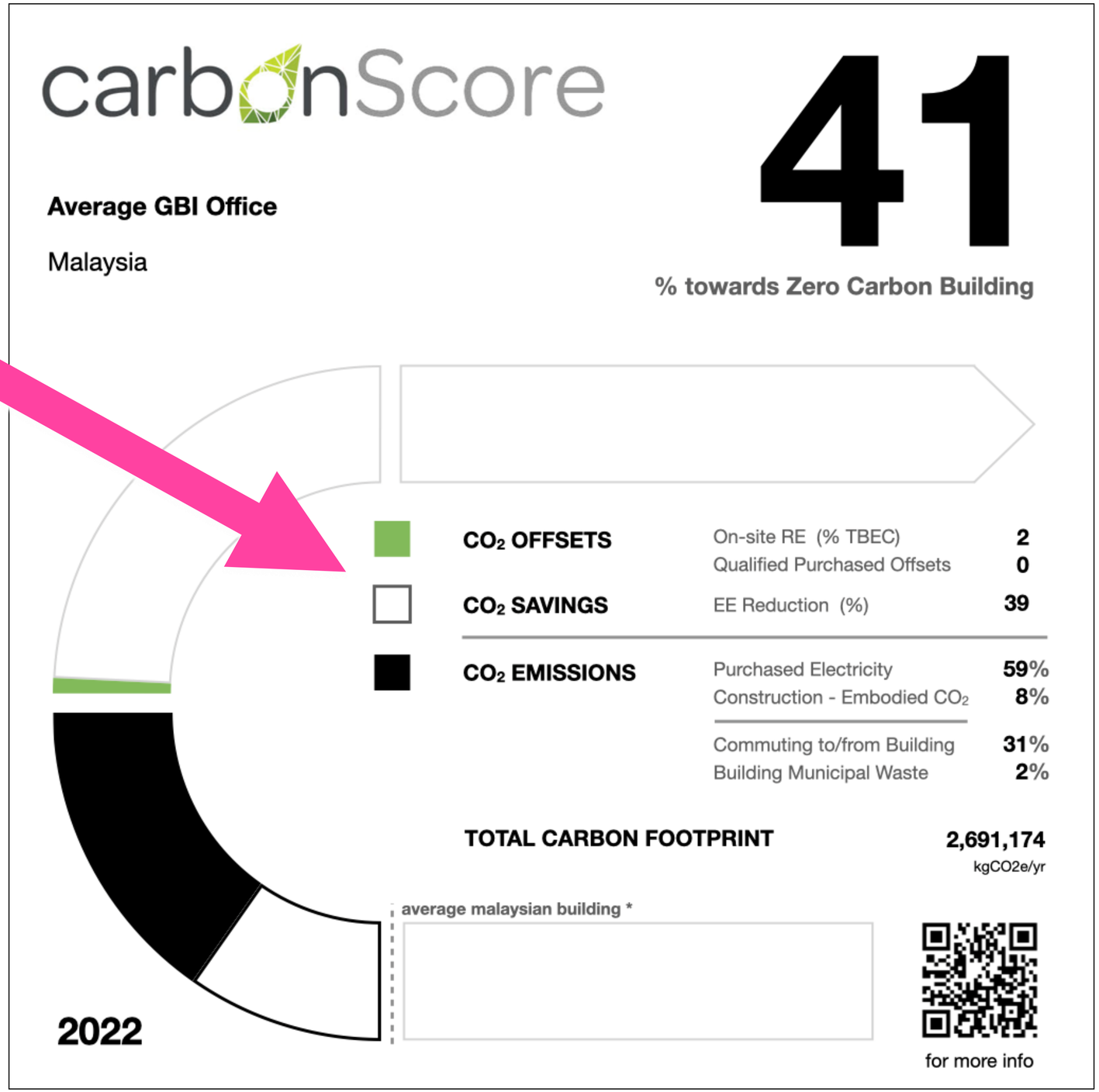
2022

CarbonScore

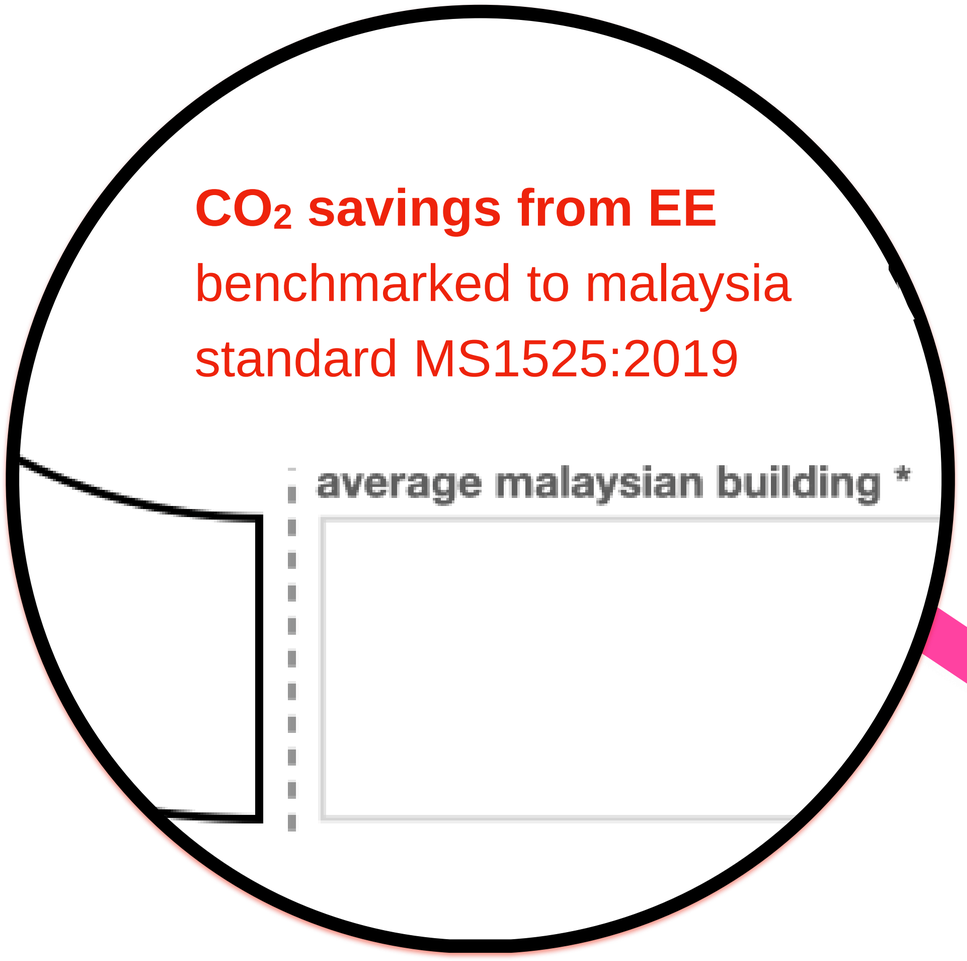
a scale of building-related CO_2 emissions from 0 to 100 where 0 represents *business-as-usual* and 100 is a **zero carbon building**



separate indicators show the contributions from Energy Efficiency [EE], On-site Renewable Energy [RE] & Qualified CO_2 Offsets that together comprise the total **CarbonScore**



CO_2 savings from EE
benchmarked to malaysia
standard MS1525:2019



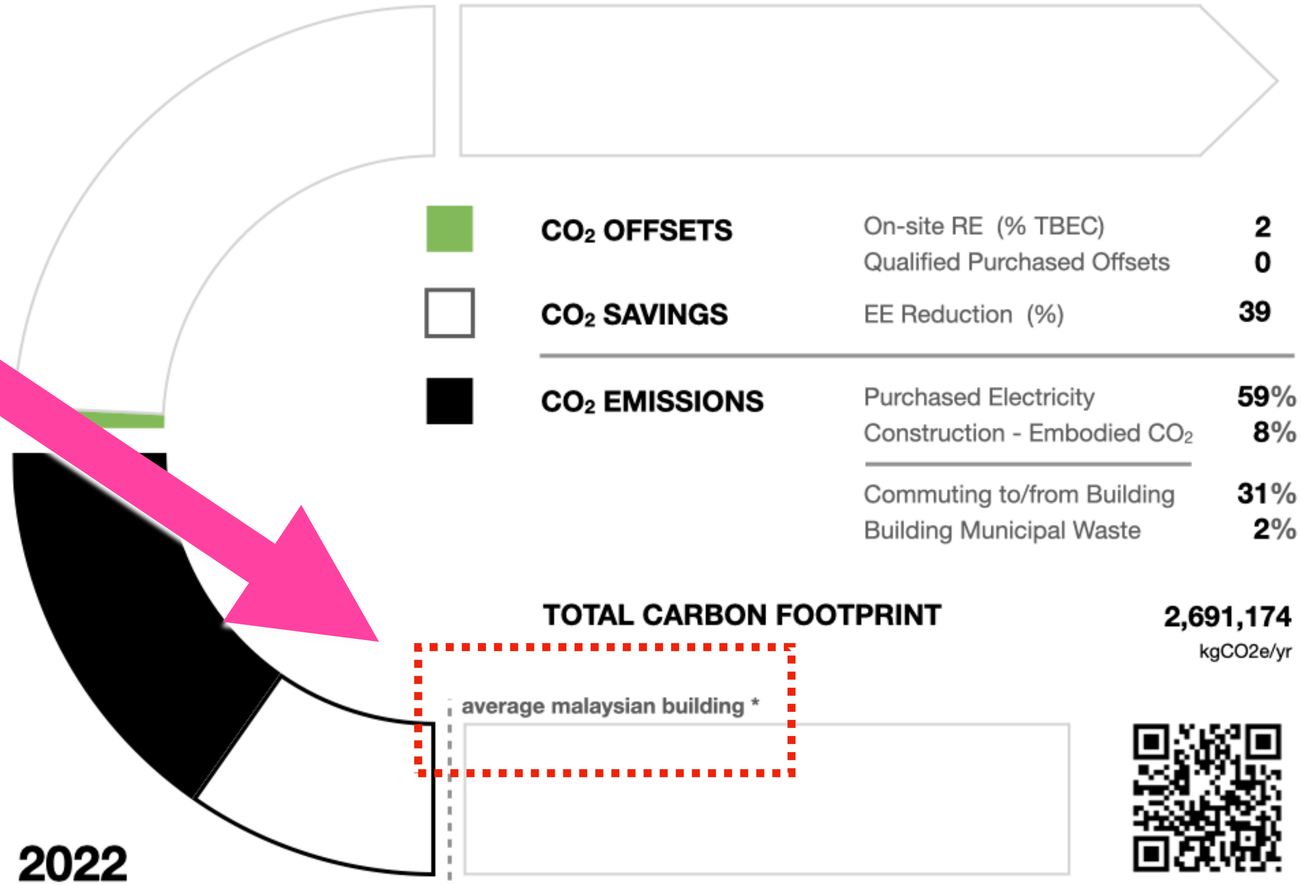
carbonScore

Average GBI Office

Malaysia

41

% towards Zero Carbon Building

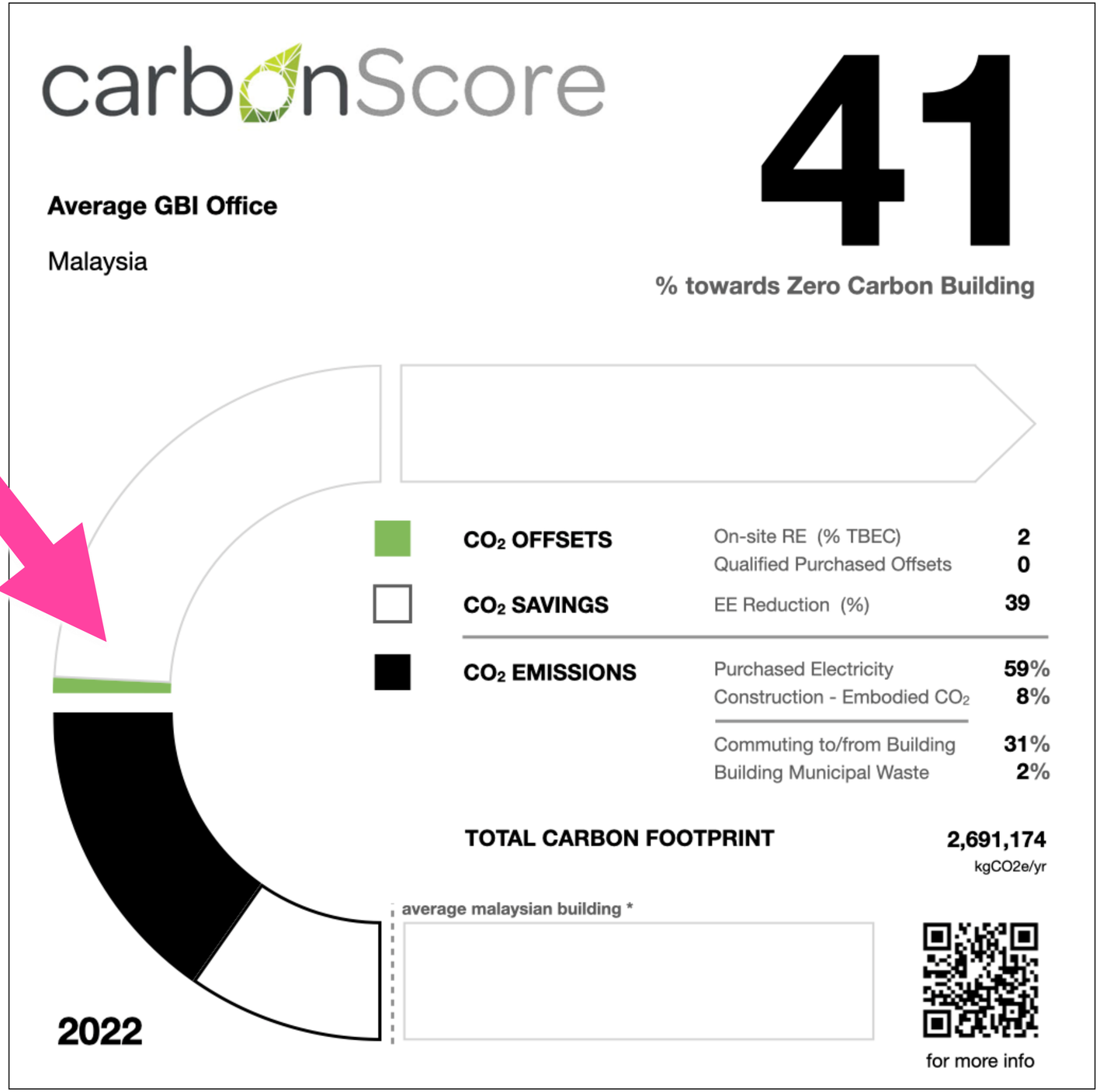


CO_2 OFFSETS	On-site RE (% TBEC)	**2**
	Qualified Purchased Offsets	**0**
CO_2 SAVINGS	EE Reduction (%)	**39**
CO_2 EMISSIONS	Purchased Electricity	**59%**
	Construction - Embodied CO_2	**8%**
	Commuting to/from Building	**31%**
	Building Municipal Waste	**2%**

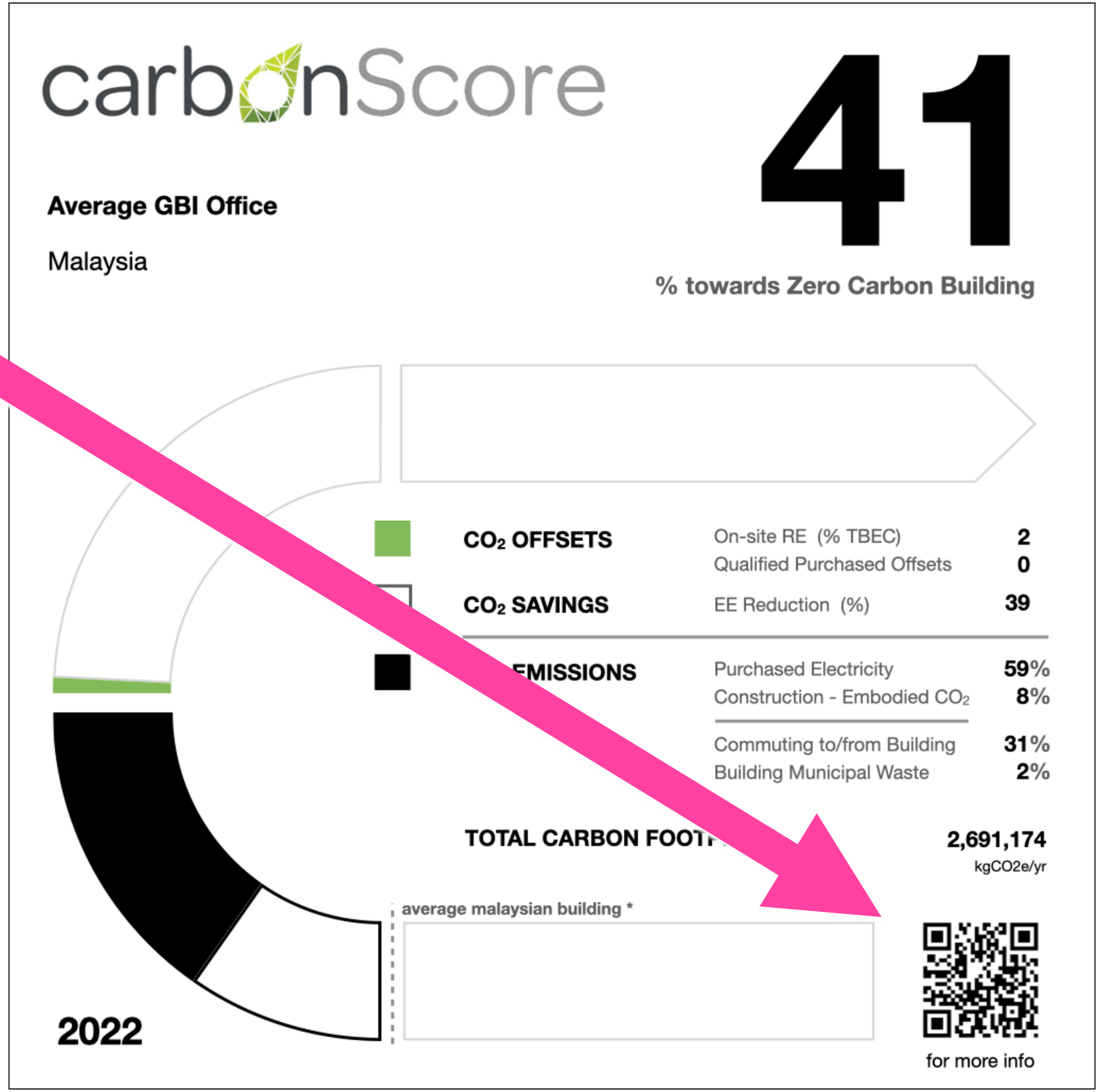
TOTAL CARBON FOOTPRINT **2,691,174** kgCO2e/yr

for more info

graphic representation of the building's **overall CO_2 footprint** showing total building-related emissions as well as removals from energy efficiency building performance and on-site renewable energy generation



QR Code links to a **Project Data Sheet** with additional technical data and infographics further describing the building's environmental performance



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Case Study | 57 Green Buildings

green building index

Scope: **57** GBI-rated Office Buildings

GBI Ratings: **34** certified, **10** Silver, **9** Gold, **4** Platinum

GBI Tools: **50** Non-residential New Construction, **7** Non-residential Existing Building

Certification: **39** Completion & Verification Assessment, **18** Renewal Verification Assessment

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WORLD GREEN BUILDING COUNCIL

ADVANCING NET ZERO

Case Study | 57 Green Buildings

Tier 1 | **CarbonScore**

Basic Certification

pilot projects / case studies

Tier 2 | **CarbonScore+**

Verified Carbon Reporting Standard

Online CO_2 Calculator

Available Free to Public via Self Declaration

carbonScore

54 % towards Zero Carbon

GBI Silver Office #01
Sarawak

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	54%	
CO_2 EMISSIONS	Purchased Electricity	46%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	36%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		722,163	kgCO2e/yr

average malaysian building *

for more info

2022

carbonScore

54 % towards Zero Carbon

GBI Gold Office #04
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	54%	
CO_2 EMISSIONS	Purchased Electricity	46%	
	Construction - Embedded CO_2	11%	
	Commuting to/from Building	36%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		3,468,203	kgCO2e/yr

average malaysian building *

for more info

2018

carbonScore

32 % towards Zero Carbon

GBI Certified Office #07
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	32%	
CO_2 EMISSIONS	Purchased Electricity	68%	
	Construction - Embedded CO_2	11%	
	Commuting to/from Building	36%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		5,525,384	kgCO2e/yr

average malaysian building *

for more info

2014

carbonScore

28 % towards Zero Carbon

GBI Certified Office #10
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	27%	
CO_2 EMISSIONS	Purchased Electricity	73%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	31%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		1,203,109	kgCO2e/yr

average malaysian building *

for more info

2015

carbonScore

22 % towards Zero Carbon

GBI Certified Office #13
Selangor

CO_2 OFFSETS	On-site Renewable Energy	2%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	20%	
CO_2 EMISSIONS	Purchased Electricity	78%	
	Construction - Embedded CO_2	11%	
	Commuting to/from Building	33%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		613,016	kgCO2e/yr

average malaysian building *

for more info

2015

carbonScore

48 % towards Zero Carbon

GBI Silver Office #31
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	48%	
CO_2 EMISSIONS	Purchased Electricity	52%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	42%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		4,606,228	kgCO2e/yr

average malaysian building *

for more info

2020

carbonScore

48 % towards Zero Carbon

GBI Certified Office #34
Putrajaya

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	48%	
CO_2 EMISSIONS	Purchased Electricity	52%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	42%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		2,661,252	kgCO2e/yr

average malaysian building *

for more info

2022

carbonScore

68 % towards Zero Carbon

GBI Silver Office #37
Putrajaya

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	67%	
CO_2 EMISSIONS	Purchased Electricity	33%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	46%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,078,343	kgCO2e/yr

average malaysian building *

for more info

2017

carbonScore

58 % towards Zero Carbon

GBI Gold Office #40
Putrajaya

CO_2 OFFSETS	On-site Renewable Energy	6%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	52%	
CO_2 EMISSIONS	Purchased Electricity	48%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	46%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,586,627	kgCO2e/yr

average malaysian building *

for more info

2014

carbonScore

57 % towards Zero Carbon

GBI Platinum Office #43
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	2%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	55%	
CO_2 EMISSIONS	Purchased Electricity	45%	
	Construction - Embedded CO_2	11%	
	Commuting to/from Building	28%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		3,714,048	kgCO2e/yr

average malaysian building *

for more info

2016

carbonScore

32 % towards Zero Carbon

GBI Certified Office #02
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	32%	
CO_2 EMISSIONS	Purchased Electricity	68%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	36%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		875,044	kgCO2e/yr

average malaysian building *

for more info

2017

carbonScore

102 % towards Zero Carbon

GBI Certified Office #05
Selangor

CO_2 OFFSETS	On-site Renewable Energy	22%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	80%	
CO_2 EMISSIONS	Purchased Electricity	20%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	8%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		80,728	kgCO2e/yr

average malaysian building *

for more info

2014

carbonScore

33 % towards Zero Carbon

GBI Silver Office #08
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	33%	
CO_2 EMISSIONS	Purchased Electricity	67%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	8%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		2,188,460	kgCO2e/yr

average malaysian building *

for more info

2014

carbonScore

28 % towards Zero Carbon

GBI Certified Office #11
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	27%	
CO_2 EMISSIONS	Purchased Electricity	73%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	31%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		2,166,005	kgCO2e/yr

average malaysian building *

for more info

2015

carbonScore

26 % towards Zero Carbon

GBI Certified Office #14
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	26%	
CO_2 EMISSIONS	Purchased Electricity	74%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	31%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		1,154,261	kgCO2e/yr

average malaysian building *

for more info

2015

carbonScore

26 % towards Zero Carbon

GBI Certified Office #32
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	26%	
CO_2 EMISSIONS	Purchased Electricity	74%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	31%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		6,072,822	kgCO2e/yr

average malaysian building *

for more info

2021

carbonScore

50 % towards Zero Carbon

GBI Certified Office #35
Putrajaya

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	50%	
CO_2 EMISSIONS	Purchased Electricity	50%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	39%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		1,146,194	kgCO2e/yr

average malaysian building *

for more info

2022

carbonScore

45 % towards Zero Carbon

GBI Gold Office #38
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	46%	
CO_2 EMISSIONS	Purchased Electricity	55%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	37%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		23,649,057	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

33 % towards Zero Carbon

GBI Certified Office #41
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	33%	
CO_2 EMISSIONS	Purchased Electricity	67%	
	Construction - Embedded CO_2	11%	
	Commuting to/from Building	28%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		4,986,999	kgCO2e/yr

average malaysian building *

for more info

2015

carbonScore

32 % towards Zero Carbon

GBI Certified Office #44
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	32%	
CO_2 EMISSIONS	Purchased Electricity	68%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	28%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		3,867,475	kgCO2e/yr

average malaysian building *

for more info

2016

carbonScore

53 % towards Zero Carbon

GBI Gold Office #03
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	52%	
CO_2 EMISSIONS	Purchased Electricity	47%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	31%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		3,441,948	kgCO2e/yr

average malaysian building *

for more info

2022

carbonScore

31 % towards Zero Carbon

GBI Certified Office #06
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	30%	
CO_2 EMISSIONS	Purchased Electricity	70%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	31%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		3,441,946	kgCO2e/yr

average malaysian building *

for more info

2022

carbonScore

26 % towards Zero Carbon

GBI Certified Office #09
Penang

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	26%	
CO_2 EMISSIONS	Purchased Electricity	74%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	39%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		119,434	kgCO2e/yr

average malaysian building *

for more info

2014

carbonScore

26 % towards Zero Carbon

GBI Certified Office #12
Putrajaya

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	26%	
CO_2 EMISSIONS	Purchased Electricity	74%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	39%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		1,404,567	kgCO2e/yr

average malaysian building *

for more info

2015

carbonScore

46 % towards Zero Carbon

GBI Gold Office #15
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	46%	
CO_2 EMISSIONS	Purchased Electricity	54%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	31%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		99,513	kgCO2e/yr

average malaysian building *

for more info

2016

carbonScore

55 % towards Zero Carbon

GBI Certified Office #33
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	55%	
CO_2 EMISSIONS	Purchased Electricity	45%	
	Construction - Embedded CO_2	11%	
	Commuting to/from Building	39%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,835,770	kgCO2e/yr

average malaysian building *

for more info

2022

carbonScore

51 % towards Zero Carbon

GBI Certified Office #36
Putrajaya

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	51%	
CO_2 EMISSIONS	Purchased Electricity	49%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	39%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,765,371	kgCO2e/yr

average malaysian building *

for more info

2022

carbonScore

36 % towards Zero Carbon

GBI Silver Office #39
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	36%	
CO_2 EMISSIONS	Purchased Electricity	64%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	28%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		3,657,749	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

53 % towards Zero Carbon

GBI Gold Office #42
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	6%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	47%	
CO_2 EMISSIONS	Purchased Electricity	53%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	28%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,155,891	kgCO2e/yr

average malaysian building *

for more info

2016

carbonScore

55 % towards Zero Carbon

GBI Gold Office #45
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	5%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	50%	
CO_2 EMISSIONS	Purchased Electricity	50%	
	Construction - Embedded CO_2	11%	
	Commuting to/from Building	33%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,599,009	kgCO2e/yr

average malaysian building *

for more info

2016

carbonScore

64 % towards Zero Carbon

GBI Certified Office #16
Sabah

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	64%	
CO_2 EMISSIONS	Purchased Electricity	36%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	36%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		83,545	kgCO2e/yr

average malaysian building *

for more info

2018

carbonScore

63 % towards Zero Carbon

GBI Silver Office #19
Melaka

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	63%	
CO_2 EMISSIONS	Purchased Electricity	37%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	34%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		202,251	kgCO2e/yr

average malaysian building *

for more info

2018

carbonScore

47 % towards Zero Carbon

GBI Gold Office #22
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	46%	
CO_2 EMISSIONS	Purchased Electricity	53%	
	Construction - Embedded CO_2	12%	
	Commuting to/from Building	27%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		8,925,696	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

50 % towards Zero Carbon

GBI Silver Office #25
Kedah

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	50%	
CO_2 EMISSIONS	Purchased Electricity	50%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	39%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		168,652	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

73 % towards Zero Carbon

GBI Platinum Office #28
Selangor

CO_2 OFFSETS	On-site Renewable Energy	19%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	54%	
CO_2 EMISSIONS	Purchased Electricity	46%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	32%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		1,062,244	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

48 % towards Zero Carbon

GBI Platinum Office #46
Selangor

CO_2 OFFSETS	On-site Renewable Energy	4%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	44%	
CO_2 EMISSIONS	Purchased Electricity	56%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	36%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		1,343,020	kgCO2e/yr

average malaysian building *

for more info

2017

carbonScore

28 % towards Zero Carbon

GBI Certified Office #49
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	28%	
CO_2 EMISSIONS	Purchased Electricity	72%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	36%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		4,812,096	kgCO2e/yr

average malaysian building *

for more info

2017

carbonScore

42 % towards Zero Carbon

GBI Silver Office #52
Selangor

CO_2 OFFSETS	On-site Renewable Energy	2%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	40%	
CO_2 EMISSIONS	Purchased Electricity	60%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	31%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,834,266	kgCO2e/yr

average malaysian building *

for more info

2018

carbonScore

46 % towards Zero Carbon

GBI Certified Office #55
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	46%	
CO_2 EMISSIONS	Purchased Electricity	54%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	32%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		315,374	kgCO2e/yr

average malaysian building *

for more info

2016

carbonScore

33 % towards Zero Carbon

Average GBI Office - Certified
Malaysia

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	32%	
CO_2 EMISSIONS	Purchased Electricity	68%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	33%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		2,372,948	kgCO2e/yr

average malaysian building *

for more info

2022

carbonScore

35 % towards Zero Carbon

GBI Silver Office #17
Johor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	35%	
CO_2 EMISSIONS	Purchased Electricity	65%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	34%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		135,648	kgCO2e/yr

average malaysian building *

for more info

2018

carbonScore

37 % towards Zero Carbon

GBI Silver Office #20
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	37%	
CO_2 EMISSIONS	Purchased Electricity	63%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	34%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		214,125	kgCO2e/yr

average malaysian building *

for more info

2018

carbonScore

82 % towards Zero Carbon

GBI Platinum Office #23
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	12%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	70%	
CO_2 EMISSIONS	Purchased Electricity	30%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	8%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		146,125	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

11 % towards Zero Carbon

GBI Certified Office #26
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	11%	
CO_2 EMISSIONS	Purchased Electricity	89%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	28%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		857,035	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

28 % towards Zero Carbon

GBI Certified Office #29
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	28%	
CO_2 EMISSIONS	Purchased Electricity	72%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	33%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		6,067,275	kgCO2e/yr

average malaysian building *

for more info

2020

carbonScore

61 % towards Zero Carbon

GBI Gold Office #47
Selangor

CO_2 OFFSETS	On-site Renewable Energy	19%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	42%	
CO_2 EMISSIONS	Purchased Electricity	58%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	46%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		1,560,294	kgCO2e/yr

average malaysian building *

for more info

2017

carbonScore

41 % towards Zero Carbon

GBI Certified Office #50
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	41%	
CO_2 EMISSIONS	Purchased Electricity	59%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	28%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,013,434	kgCO2e/yr

average malaysian building *

for more info

2017

carbonScore

32 % towards Zero Carbon

GBI Silver Office #53
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	32%	
CO_2 EMISSIONS	Purchased Electricity	68%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	36%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		4,994,288	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

10 % towards Zero Carbon

GBI Certified Office #56
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	10%	
CO_2 EMISSIONS	Purchased Electricity	90%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	28%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		5,504,115	kgCO2e/yr

average malaysian building *

for more info

2016

carbonScore

47 % towards Zero Carbon

Average GBI Office - Silver
Malaysia

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	46%	
CO_2 EMISSIONS	Purchased Electricity	53%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	33%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		2,950,651	kgCO2e/yr

average malaysian building *

for more info

2022

carbonScore

34 % towards Zero Carbon

GBI Certified Office #18
Johor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	34%	
CO_2 EMISSIONS	Purchased Electricity	66%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	36%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		173,820	kgCO2e/yr

average malaysian building *

for more info

2018

carbonScore

39 % towards Zero Carbon

GBI Certified Office #21
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	39%	
CO_2 EMISSIONS	Purchased Electricity	61%	
	Construction - Embedded CO_2	11%	
	Commuting to/from Building	29%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		152,456	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

1 % towards Zero Carbon

GBI Certified Office #24
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	1%	
CO_2 EMISSIONS	Purchased Electricity	99%	
	Construction - Embedded CO_2	10%	
	Commuting to/from Building	30%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		2,886,360	kgCO2e/yr

average malaysian building *

for more info

2015

carbonScore

23 % towards Zero Carbon

GBI Certified Office #27
Johor

CO_2 OFFSETS	On-site Renewable Energy	6%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	17%	
CO_2 EMISSIONS	Purchased Electricity	83%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	34%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,492,456	kgCO2e/yr

average malaysian building *

for more info

2019

carbonScore

29 % towards Zero Carbon

GBI Certified Office #30
Selangor

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	29%	
CO_2 EMISSIONS	Purchased Electricity	71%	
	Construction - Embedded CO_2	9%	
	Commuting to/from Building	31%	
	Building Municipal Waste	3%	
TOTAL CARBON FOOTPRINT		1,377,208	kgCO2e/yr

average malaysian building *

for more info

2020

carbonScore

49 % towards Zero Carbon

GBI Certified Office #48
Putrajaya

CO_2 OFFSETS	On-site Renewable Energy	0%	
	Qualified Purchased Offsets	0%	
CO_2 SAVINGS	Energy Efficiency	49%	
CO_2 EMISSIONS	Purchased Electricity	51%	
	Construction - Embedded CO_2	8%	
	Commuting to/from Building	40%	
	Building Municipal Waste	2%	
TOTAL CARBON FOOTPRINT		1,773,182	kgCO2e/yr

average malaysian building *

for more info

2017

carbonScore

1 % towards Zero Carbon

GBI Certified Office #51
Kuala Lumpur

CO_2 OFFSETS	On-site Renewable Energy	1%	
	Qualified Pur

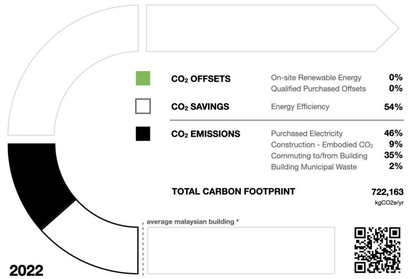
carbonScore malaysiaGBC

GBI Silver Office #01

Sarawak

54

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	54%
CO_2 EMISSIONS	Purchased Electricity	46%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	35%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		722,163 kgCO2e/yr

average malaysian building *

2022

for more info

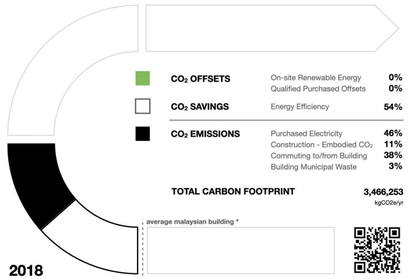
carbonScore malaysiaGBC

GBI Gold Office #04

Selangor

54

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	54%
CO_2 EMISSIONS	Purchased Electricity	46%
	Construction - Embodied CO_2	11%
	Commuting to/from Building	38%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		3,466,253 kgCO2e/yr

average malaysian building *

2018

for more info

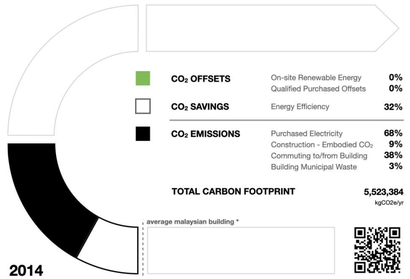
carbonScore malaysiaGBC

GBI Certified Office #07

Selangor

32

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	32%
CO_2 EMISSIONS	Purchased Electricity	68%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	38%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		5,523,384 kgCO2e/yr

average malaysian building *

2014

for more info

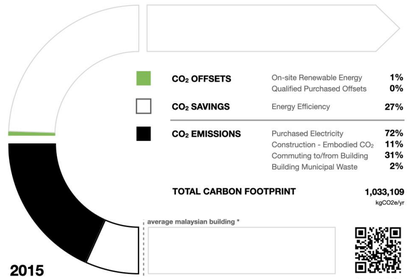
carbonScore malaysiaGBC

GBI Certified Office #10

Kuala Lumpur

28

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	27%
CO_2 EMISSIONS	Purchased Electricity	72%
	Construction - Embodied CO_2	11%
	Commuting to/from Building	31%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,033,109 kgCO2e/yr

average malaysian building *

2015

for more info

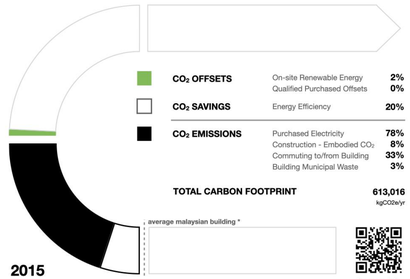
carbonScore malaysiaGBC

GBI Certified Office #13

Selangor

22

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	2%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	20%
CO_2 EMISSIONS	Purchased Electricity	78%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	33%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		613,016 kgCO2e/yr

average malaysian building *

2015

for more info

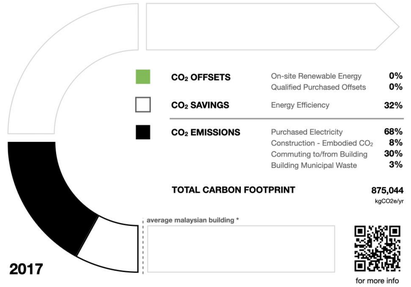
carbonScore malaysiaGBC

GBI Certified Office #02

Selangor

32

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	32%
CO_2 EMISSIONS	Purchased Electricity	68%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	30%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		875,044 kgCO2e/yr

average malaysian building *

2017

for more info

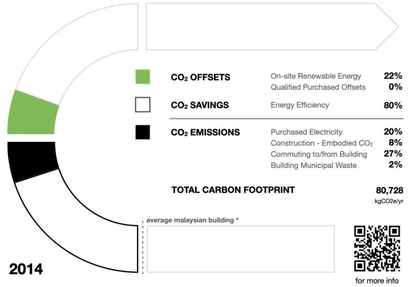
carbonScore malaysiaGBC

GBI Certified Office #05

Selangor

102

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	22%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	80%
CO_2 EMISSIONS	Purchased Electricity	20%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	27%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		80,728 kgCO2e/yr

average malaysian building *

2014

for more info

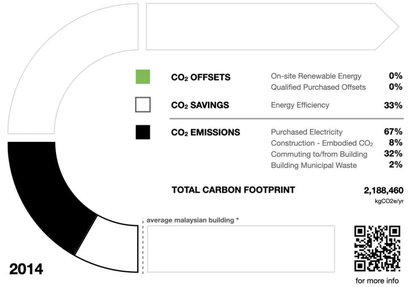
carbonScore malaysiaGBC

GBI Silver Office #08

Selangor

33

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	33%
CO_2 EMISSIONS	Purchased Electricity	67%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	32%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		2,188,460 kgCO2e/yr

average malaysian building *

2014

for more info

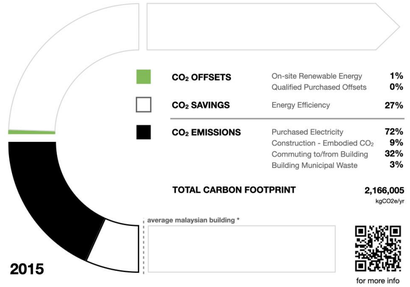
carbonScore malaysiaGBC

GBI Certified Office #11

Kuala Lumpur

28

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	27%
CO_2 EMISSIONS	Purchased Electricity	72%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	32%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		2,166,005 kgCO2e/yr

average malaysian building *

2015

for more info

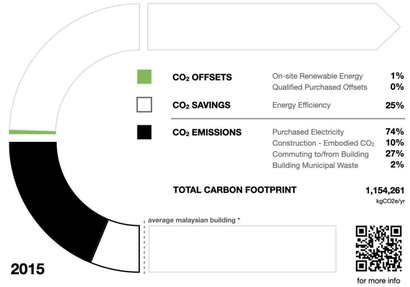
carbonScore malaysiaGBC

GBI Certified Office #14

Kuala Lumpur

26

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	25%
CO_2 EMISSIONS	Purchased Electricity	74%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	27%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,154,261 kgCO2e/yr

average malaysian building *

2015

for more info

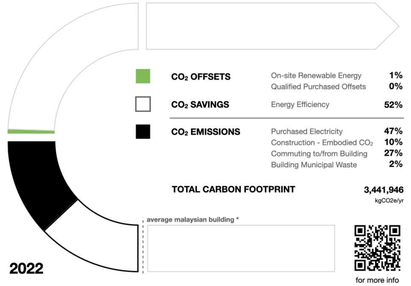
carbonScore malaysiaGBC

GBI Gold Office #03

Kuala Lumpur

53

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	52%
CO_2 EMISSIONS	Purchased Electricity	47%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	27%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		3,441,946 kgCO2e/yr

average malaysian building *

2022

for more info

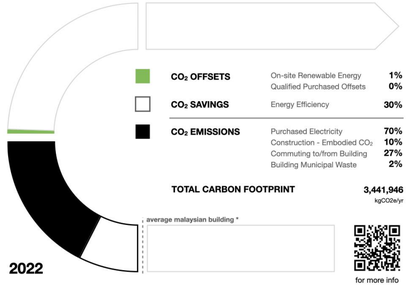
carbonScore malaysiaGBC

GBI Certified Office #06

Kuala Lumpur

31

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	30%
CO_2 EMISSIONS	Purchased Electricity	70%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	27%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		3,441,946 kgCO2e/yr

average malaysian building *

2022

for more info

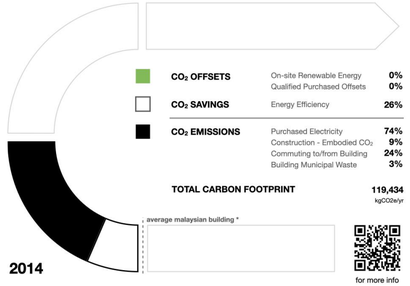
carbonScore malaysiaGBC

GBI Certified Office #09

Penang

26

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	26%
CO_2 EMISSIONS	Purchased Electricity	74%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	24%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		119,434 kgCO2e/yr

average malaysian building *

2014

for more info

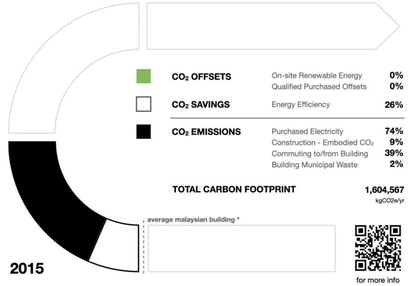
carbonScore malaysiaGBC

GBI Certified Office #12

Putrajaya

26

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	26%
CO_2 EMISSIONS	Purchased Electricity	74%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	39%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,604,567 kgCO2e/yr

average malaysian building *

2015

for more info

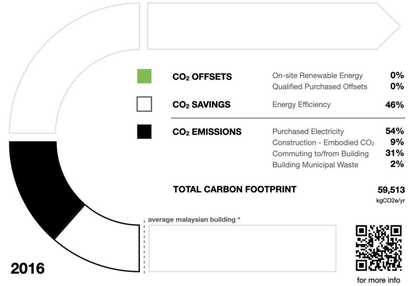
carbonScore malaysiaGBC

GBI Gold Office #15

Selangor

46

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	46%
CO_2 EMISSIONS	Purchased Electricity	54%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	31%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		59,513 kgCO2e/yr

average malaysian building *

2016

for more info

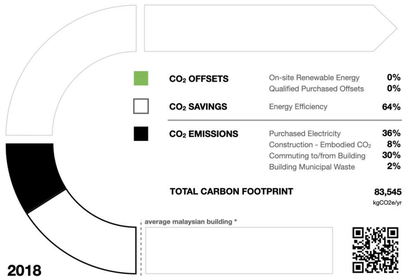
carbonScore malaysiaGBC

GBI Certified Office #16

Sabah

64

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	64%
CO_2 EMISSIONS	Purchased Electricity	36%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	30%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		83,545 kgCO2e/yr

average malaysian building *

2018

for more info

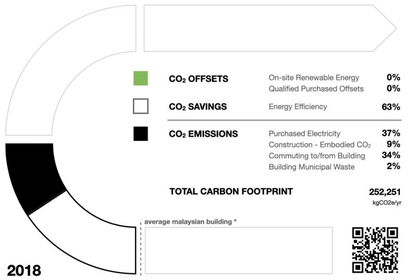
carbonScore malaysiaGBC

GBI Silver Office #19

Melaka

63

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	63%
CO_2 EMISSIONS	Purchased Electricity	37%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	34%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		252,251 kgCO2e/yr

average malaysian building *

2018

for more info

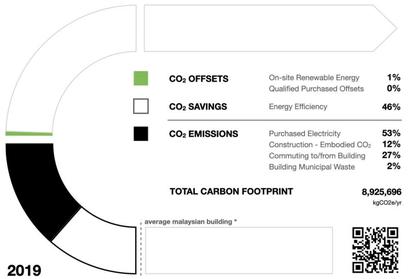
carbonScore malaysiaGBC

GBI Gold Office #22

Kuala Lumpur

47

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	46%
CO_2 EMISSIONS	Purchased Electricity	53%
	Construction - Embodied CO_2	12%
	Commuting to/from Building	27%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		8,925,696 kgCO2e/yr

average malaysian building *

2019

for more info

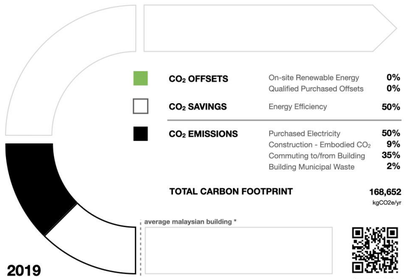
carbonScore malaysiaGBC

GBI Silver Office #25

Kedah

50

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	50%
CO_2 EMISSIONS	Purchased Electricity	50%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	35%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		168,652 kgCO2e/yr

average malaysian building *

2019

for more info

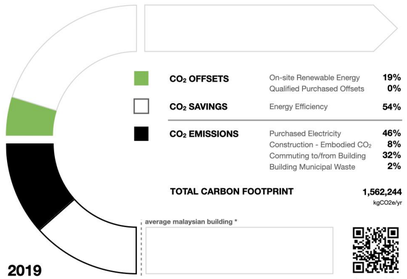
carbonScore malaysiaGBC

GBI Platinum Office #28

Selangor

73

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	19%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	54%
CO_2 EMISSIONS	Purchased Electricity	46%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	32%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,562,244 kgCO2e/yr

average malaysian building *

2019

for more info

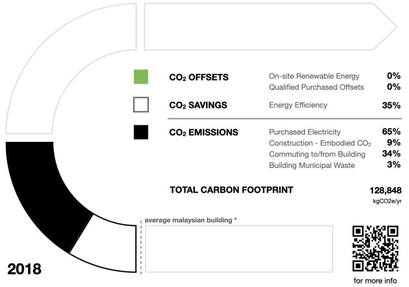
carbonScore malaysiaGBC

GBI Certified Office #17

Johor

35

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	35%
CO_2 EMISSIONS	Purchased Electricity	65%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	34%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		128,848 kgCO2e/yr

average malaysian building *

2018

for more info

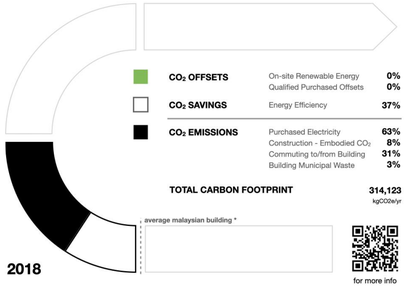
carbonScore malaysiaGBC

GBI Silver Office #20

Selangor

37

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	37%
CO_2 EMISSIONS	Purchased Electricity	63%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	31%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		314,123 kgCO2e/yr

average malaysian building *

2018

for more info

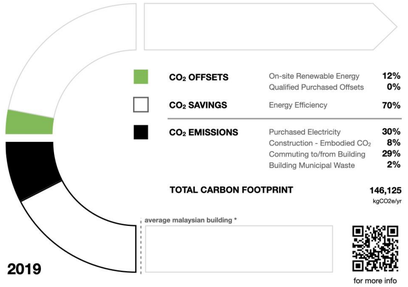
carbonScore malaysiaGBC

GBI Platinum Office #23

Kuala Lumpur

82

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	12%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	70%
CO_2 EMISSIONS	Purchased Electricity	30%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	29%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		146,125 kgCO2e/yr

average malaysian building *

2019

for more info

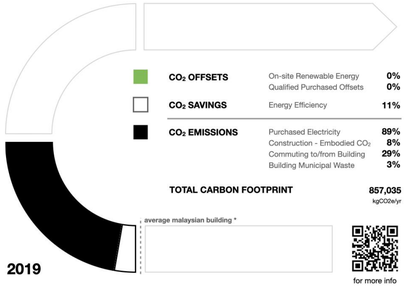
carbonScore malaysiaGBC

GBI Certified Office #26

Kuala Lumpur

11

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	11%
CO_2 EMISSIONS	Purchased Electricity	89%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	29%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		857,035 kgCO2e/yr

average malaysian building *

2019

for more info

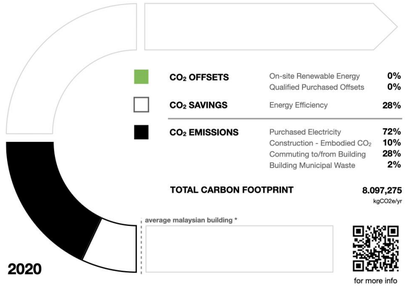
carbonScore malaysiaGBC

GBI Certified Office #29

Selangor

28

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	28%
CO_2 EMISSIONS	Purchased Electricity	72%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	28%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		8,097,275 kgCO2e/yr

average malaysian building *

2020

for more info

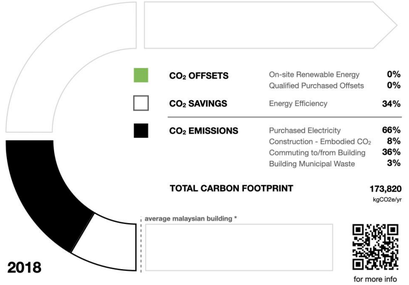
carbonScore malaysiaGBC

GBI Certified Office #18

Johor

34

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	34%
CO_2 EMISSIONS	Purchased Electricity	66%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	36%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		173,820 kgCO2e/yr

average malaysian building *

2018

for more info

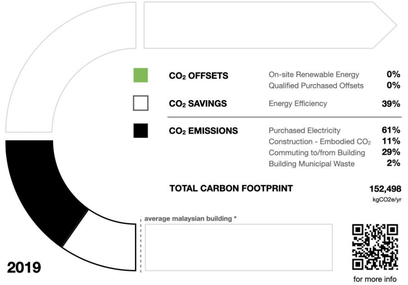
carbonScore malaysiaGBC

GBI Certified Office #21

Kuala Lumpur

39

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	39%
CO_2 EMISSIONS	Purchased Electricity	61%
	Construction - Embodied CO_2	11%
	Commuting to/from Building	29%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		152,498 kgCO2e/yr

average malaysian building *

2019

for more info

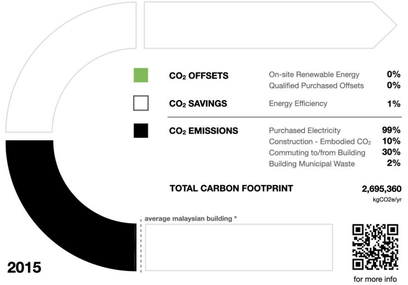
carbonScore malaysiaGBC

GBI Certified Office #24

Kuala Lumpur

1

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	1%
CO_2 EMISSIONS	Purchased Electricity	99%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	30%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		2,695,360 kgCO2e/yr

average malaysian building *

2015

for more info

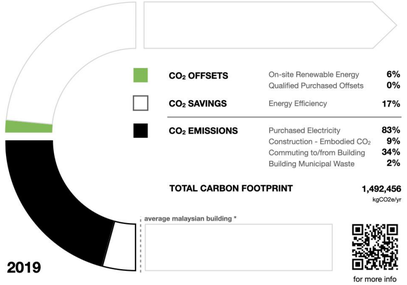
carbonScore malaysiaGBC

GBI Certified Office #27

Johor

23

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	6%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	17%
CO_2 EMISSIONS	Purchased Electricity	83%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	34%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,492,456 kgCO2e/yr

average malaysian building *

2019

for more info

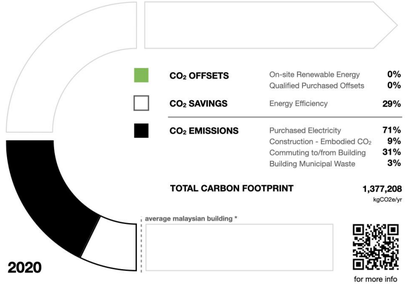
carbonScore malaysiaGBC

GBI Certified Office #30

Selangor

29

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	29%
CO_2 EMISSIONS	Purchased Electricity	71%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	31%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		1,377,208 kgCO2e/yr

average malaysian building *

2020

for more info

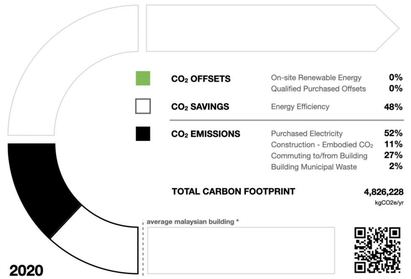
carbonScore malaysiaGBC

GBI Silver Office #31

Kuala Lumpur

48

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	48%
CO_2 EMISSIONS	Purchased Electricity	52%
	Construction - Embodied CO_2	11%
	Commuting to/from Building	27%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		4,826,228 kgCO2e/yr

average malaysian building *

2020

for more info

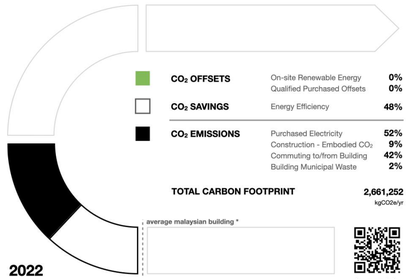
carbonScore malaysiaGBC

GBI Certified Office #34

Putrajaya

48

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	48%
CO_2 EMISSIONS	Purchased Electricity	52%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	42%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		2,661,252 kgCO2e/yr

average malaysian building *

2022

for more info

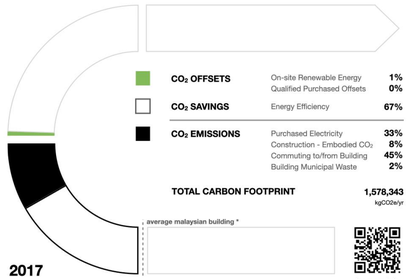
carbonScore malaysiaGBC

GBI Silver Office #37

Putrajaya

68

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	67%
CO_2 EMISSIONS	Purchased Electricity	33%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	45%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,578,343 kgCO2e/yr

average malaysian building *

2017

for more info

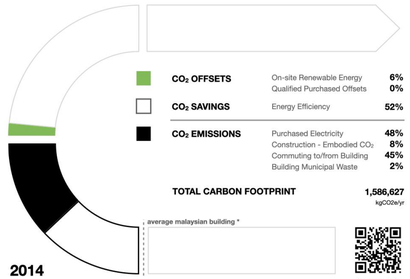
carbonScore malaysiaGBC

GBI Gold Office #40

Putrajaya

58

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	6%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	52%
CO_2 EMISSIONS	Purchased Electricity	48%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	45%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,586,627 kgCO2e/yr

average malaysian building *

2014

for more info

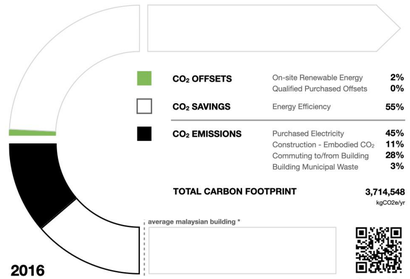
carbonScore malaysiaGBC

GBI Platinum Office #43

Kuala Lumpur

57

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	2%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	55%
CO_2 EMISSIONS	Purchased Electricity	45%
	Construction - Embodied CO_2	11%
	Commuting to/from Building	28%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		3,714,548 kgCO2e/yr

average malaysian building *

2016

for more info

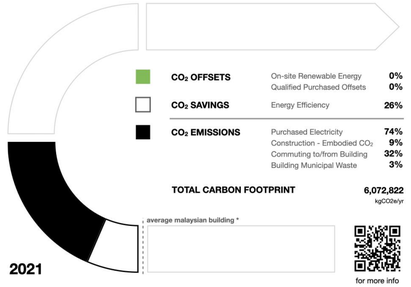
carbonScore malaysiaGBC

GBI Certified Office #32

Selangor

26

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	26%
CO_2 EMISSIONS	Purchased Electricity	74%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	32%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		6,072,822 kgCO2e/yr

average malaysian building *

2021

for more info

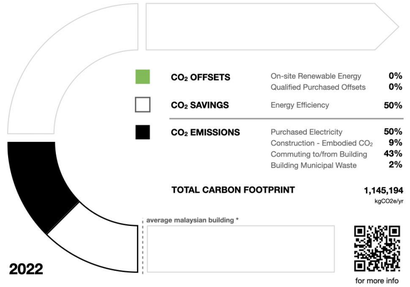
carbonScore malaysiaGBC

GBI Certified Office #35

Putrajaya

50

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	50%
CO_2 EMISSIONS	Purchased Electricity	50%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	43%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,145,194 kgCO2e/yr

average malaysian building *

2022

for more info

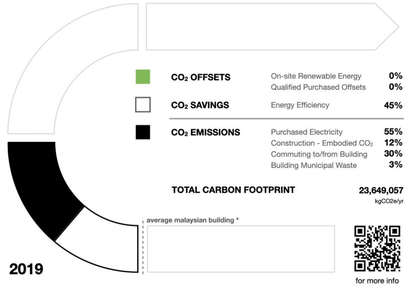
carbonScore malaysiaGBC

GBI Gold Office #38

Kuala Lumpur

45

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	45%
CO_2 EMISSIONS	Purchased Electricity	55%
	Construction - Embodied CO_2	12%
	Commuting to/from Building	30%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		23,649,057 kgCO2e/yr

average malaysian building *

2019

for more info

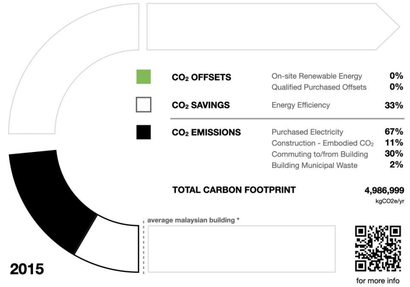
carbonScore malaysiaGBC

GBI Certified Office #41

Kuala Lumpur

33

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	33%
CO_2 EMISSIONS	Purchased Electricity	67%
	Construction - Embodied CO_2	11%
	Commuting to/from Building	30%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		4,986,999 kgCO2e/yr

average malaysian building *

2015

for more info

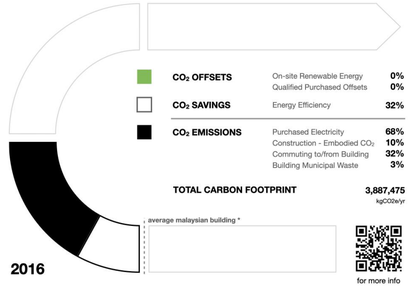
carbonScore malaysiaGBC

GBI Certified Office #44

Kuala Lumpur

32

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	32%
CO_2 EMISSIONS	Purchased Electricity	68%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	32%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		3,887,475 kgCO2e/yr

average malaysian building *

2016

for more info

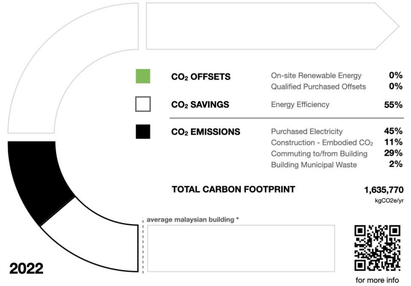
carbonScore malaysiaGBC

GBI Certified Office #33

Kuala Lumpur

55

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	55%
CO_2 EMISSIONS	Purchased Electricity	45%
	Construction - Embodied CO_2	11%
	Commuting to/from Building	29%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,635,770 kgCO2e/yr

average malaysian building *

2022

for more info

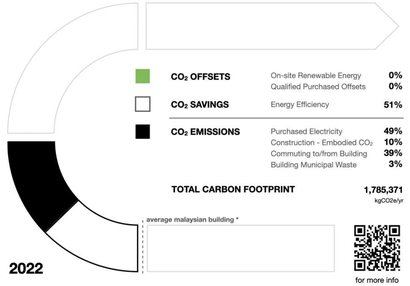
carbonScore malaysiaGBC

GBI Certified Office #36

Putrajaya

51

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	51%
CO_2 EMISSIONS	Purchased Electricity	49%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	39%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		1,785,371 kgCO2e/yr

average malaysian building *

2022

for more info

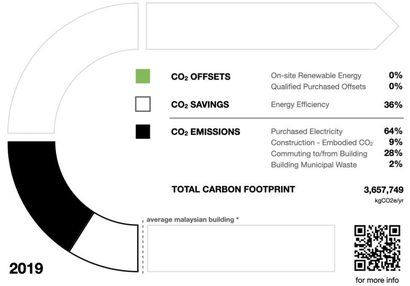
carbonScore malaysiaGBC

GBI Silver Office #39

Kuala Lumpur

36

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	36%
CO_2 EMISSIONS	Purchased Electricity	64%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	28%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		3,657,749 kgCO2e/yr

average malaysian building *

2019

for more info

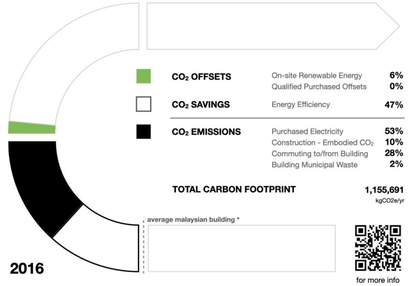
carbonScore malaysiaGBC

GBI Gold Office #42

Kuala Lumpur

53

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	6%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	47%
CO_2 EMISSIONS	Purchased Electricity	53%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	28%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,155,691 kgCO2e/yr

average malaysian building *

2016

for more info

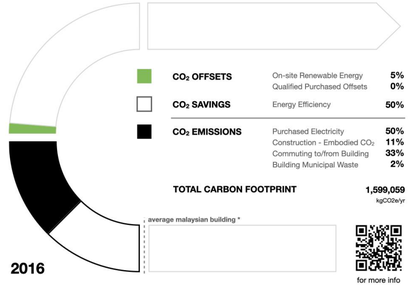
carbonScore malaysiaGBC

GBI Gold Office #45

Kuala Lumpur

55

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	5%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	50%
CO_2 EMISSIONS	Purchased Electricity	50%
	Construction - Embodied CO_2	11%
	Commuting to/from Building	33%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,599,059 kgCO2e/yr

average malaysian building *

2016

for more info

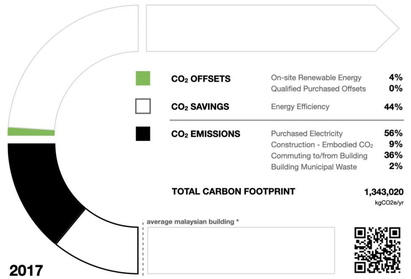
carbonScore malaysiaGBC

GBI Platinum Office #46

Selangor

48

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	4%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	44%
CO_2 EMISSIONS	Purchased Electricity	56%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	36%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,343,020 kgCO2e/yr

average malaysian building *

2017

for more info

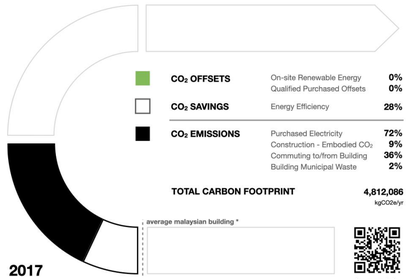
carbonScore malaysiaGBC

GBI Certified Office #49

Selangor

28

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	28%
CO_2 EMISSIONS	Purchased Electricity	72%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	36%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		4,812,086 kgCO2e/yr

average malaysian building *

2017

for more info

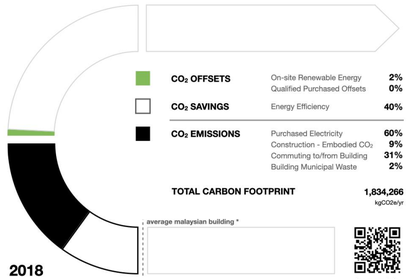
carbonScore malaysiaGBC

GBI Silver Office #52

Selangor

42

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	2%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	40%
CO_2 EMISSIONS	Purchased Electricity	60%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	31%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,834,266 kgCO2e/yr

average malaysian building *

2018

for more info

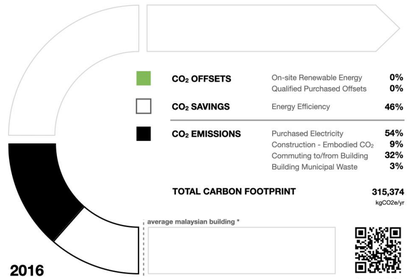
carbonScore malaysiaGBC

GBI Certified Office #55

Kuala Lumpur

46

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	46%
CO_2 EMISSIONS	Purchased Electricity	54%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	32%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		315,374 kgCO2e/yr

average malaysian building *

2016

for more info

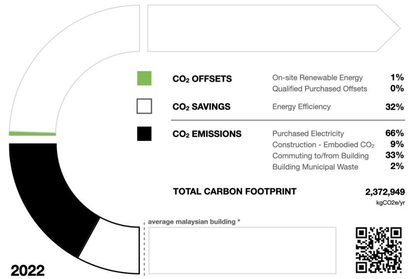
carbonScore malaysiaGBC

Average GBI Office - Certified

Malaysia

33

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	32%
CO_2 EMISSIONS	Purchased Electricity	66%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	33%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		2,372,949 kgCO2e/yr

average malaysian building *

2022

for more info

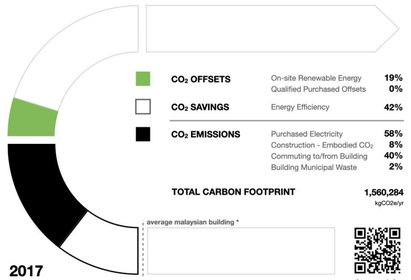
carbonScore malaysiaGBC

GBI Gold Office #47

Selangor

61

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	19%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	42%
CO_2 EMISSIONS	Purchased Electricity	58%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	40%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,560,284 kgCO2e/yr

average malaysian building *

2017

for more info

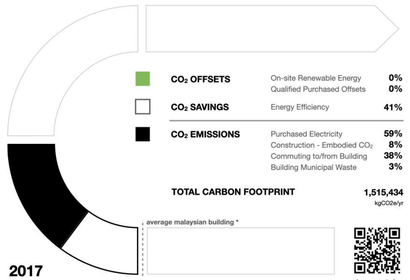
carbonScore malaysiaGBC

GBI Certified Office #50

Selangor

41

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	41%
CO_2 EMISSIONS	Purchased Electricity	59%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	38%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		1,515,434 kgCO2e/yr

average malaysian building *

2017

for more info

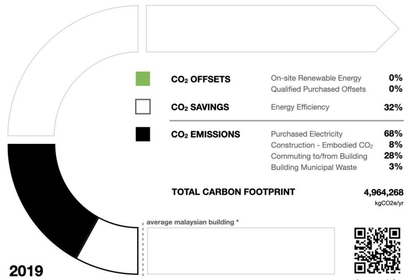
carbonScore malaysiaGBC

GBI Silver Office #53

Kuala Lumpur

32

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	32%
CO_2 EMISSIONS	Purchased Electricity	68%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	28%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		4,964,268 kgCO2e/yr

average malaysian building *

2019

for more info

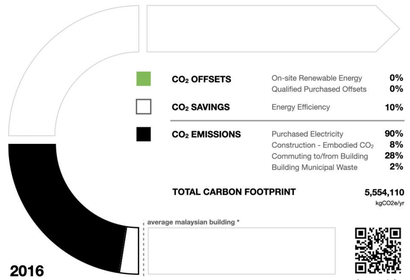
carbonScore malaysiaGBC

GBI Certified Office #56

Kuala Lumpur

10

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	10%
CO_2 EMISSIONS	Purchased Electricity	90%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	28%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		5,554,110 kgCO2e/yr

average malaysian building *

2016

for more info

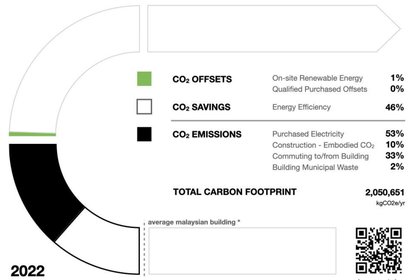
carbonScore malaysiaGBC

Average GBI Office - Silver

Malaysia

47

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	46%
CO_2 EMISSIONS	Purchased Electricity	53%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	33%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		2,050,651 kgCO2e/yr

average malaysian building *

2022

for more info

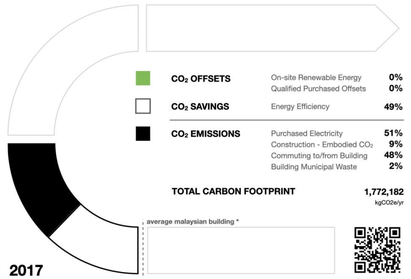
carbonScore malaysiaGBC

GBI Certified Office #48

Putrajaya

49

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	49%
CO_2 EMISSIONS	Purchased Electricity	51%
	Construction - Embodied CO_2	9%
	Commuting to/from Building	48%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		1,772,182 kgCO2e/yr

average malaysian building *

2017

for more info

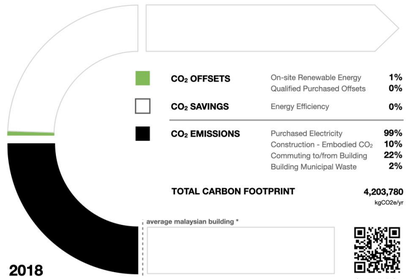
carbonScore malaysiaGBC

GBI Certified Office #51

Kuala Lumpur

1

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	1%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	0%
CO_2 EMISSIONS	Purchased Electricity	99%
	Construction - Embodied CO_2	10%
	Commuting to/from Building	22%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		4,203,780 kgCO2e/yr

average malaysian building *

2018

for more info

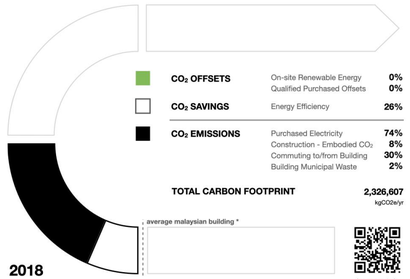
carbonScore malaysiaGBC

GBI Certified Office #54

Kuala Lumpur

26

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	26%
CO_2 EMISSIONS	Purchased Electricity	74%
	Construction - Embodied CO_2	8%
	Commuting to/from Building	30%
	Building Municipal Waste	2%
TOTAL CARBON FOOTPRINT		2,326,607 kgCO2e/yr

average malaysian building *

2018

for more info

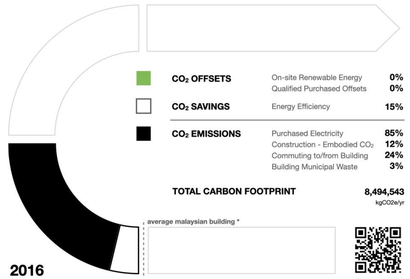
carbonScore malaysiaGBC

GBI Certified Office #57

Kuala Lumpur

15

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	0%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	15%
CO_2 EMISSIONS	Purchased Electricity	85%
	Construction - Embodied CO_2	12%
	Commuting to/from Building	24%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		8,494,543 kgCO2e/yr

average malaysian building *

2016

for more info

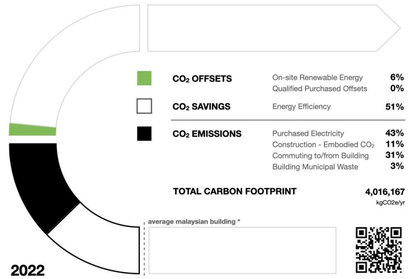
carbonScore malaysiaGBC

Average GBI Office - Gold & Platinum

Malaysia

57

% towards Zero Carbon



CO_2 OFFSETS	On-site Renewable Energy	6%
	Qualified Purchased Offsets	0%
CO_2 SAVINGS	Energy Efficiency	51%
CO_2 EMISSIONS	Purchased Electricity	43%
	Construction - Embodied CO_2	11%
	Commuting to/from Building	31%
	Building Municipal Waste	3%
TOTAL CARBON FOOTPRINT		4,016,167 kgCO2e/yr

average malaysian building *

2022

for more info

Case Study | 57
Green Buildings

Highest Score: **102** % towards zero carbon building

Contribution from Energy Efficiency:
80 %

Contribution from Renewable Energy:
22 %

CO_2 Emissions Reduction:
322,912 kgCO2e/yr

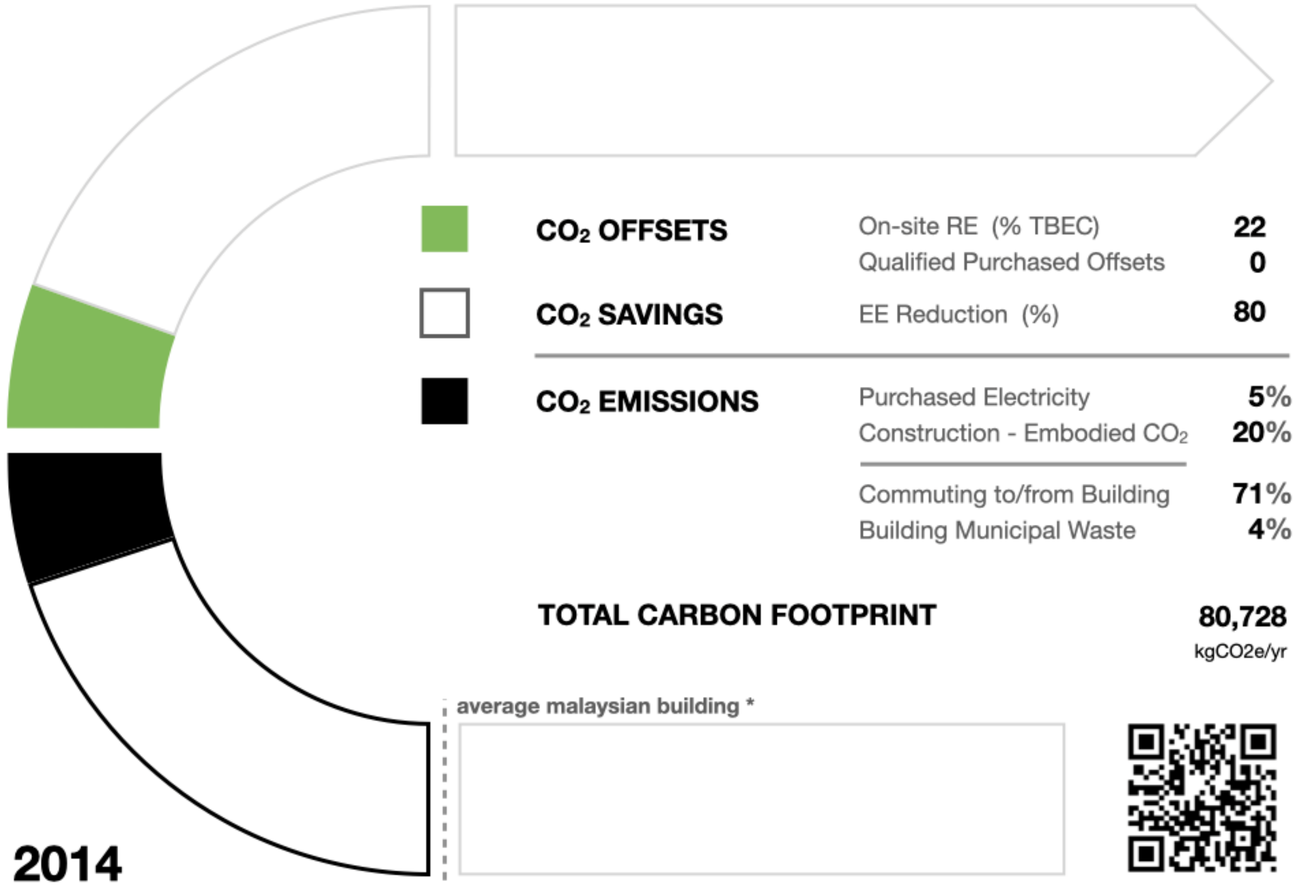
carbonScore

GBI Certified Office #05

Selangor

102

% towards Zero Carbon Building



CO_2 OFFSETS	On-site RE (% TBEC)	**22**
	Qualified Purchased Offsets	**0**
CO_2 SAVINGS	EE Reduction (%)	**80**
CO_2 EMISSIONS	Purchased Electricity	**5%**
	Construction - Embodied CO_2	**20%**
	Commuting to/from Building	**71%**
	Building Municipal Waste	**4%**

TOTAL CARBON FOOTPRINT **80,728** kgCO2e/yr

average malaysian building *

2014

for more info

Case Study | 57
Green Buildings

Lowest Score: **1** % towards zero carbon building

Contribution from Energy Efficiency:
0 %

Contribution from Renewable Energy:
1 %

CO_2 Emissions Reduction:
42,462 kgCO2e/yr

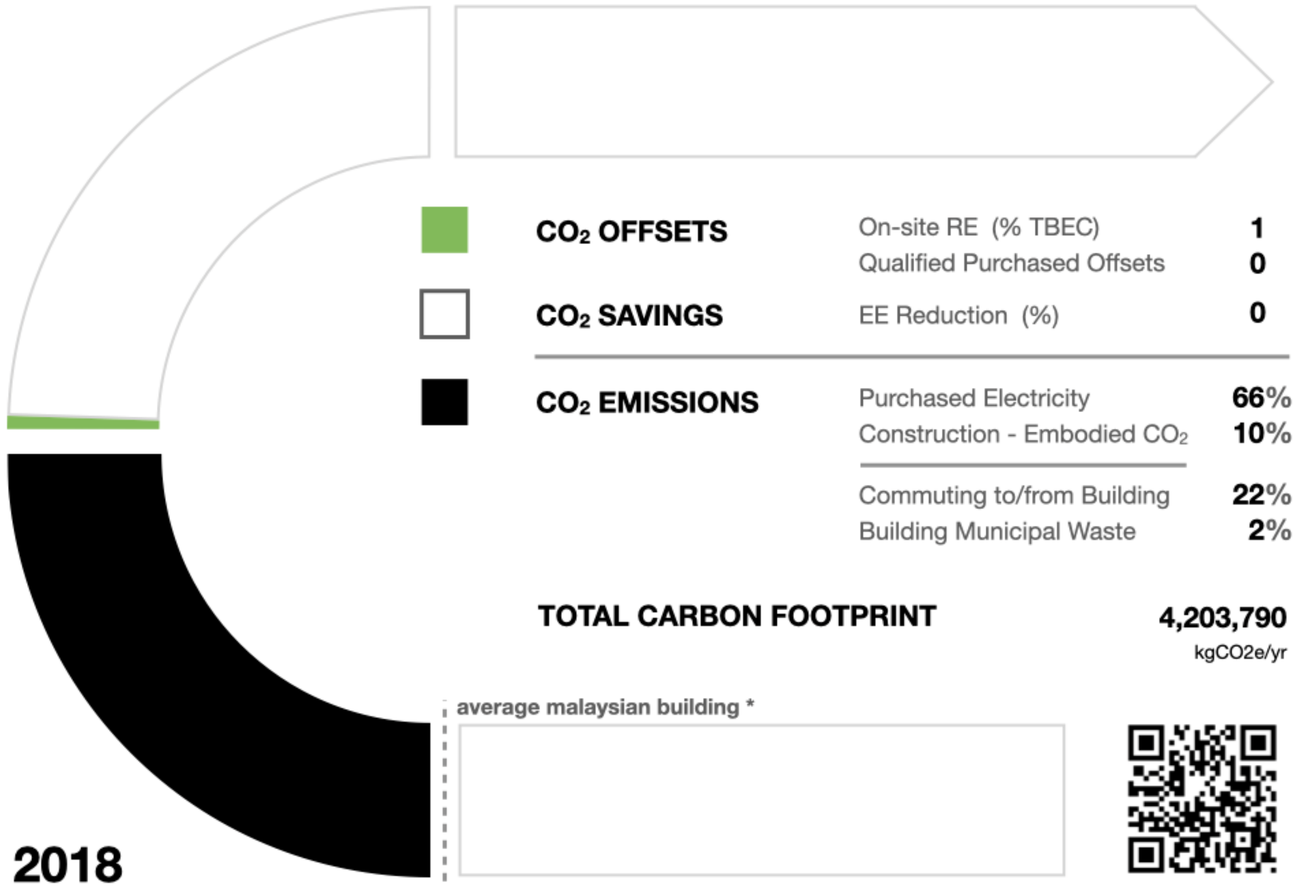
carbonScore

1

GBI Certified Office #51

Kuala Lumpur

% towards Zero Carbon Building



for more info

Case Study | 57
Green Buildings

Average Score: **41** % towards zero carbon building

Contribution from Energy Efficiency:
39 %

Contribution from Renewable Energy:
2 %

Average CO_2 Emissions Reduction:
1,870,138 kgCO2e/yr

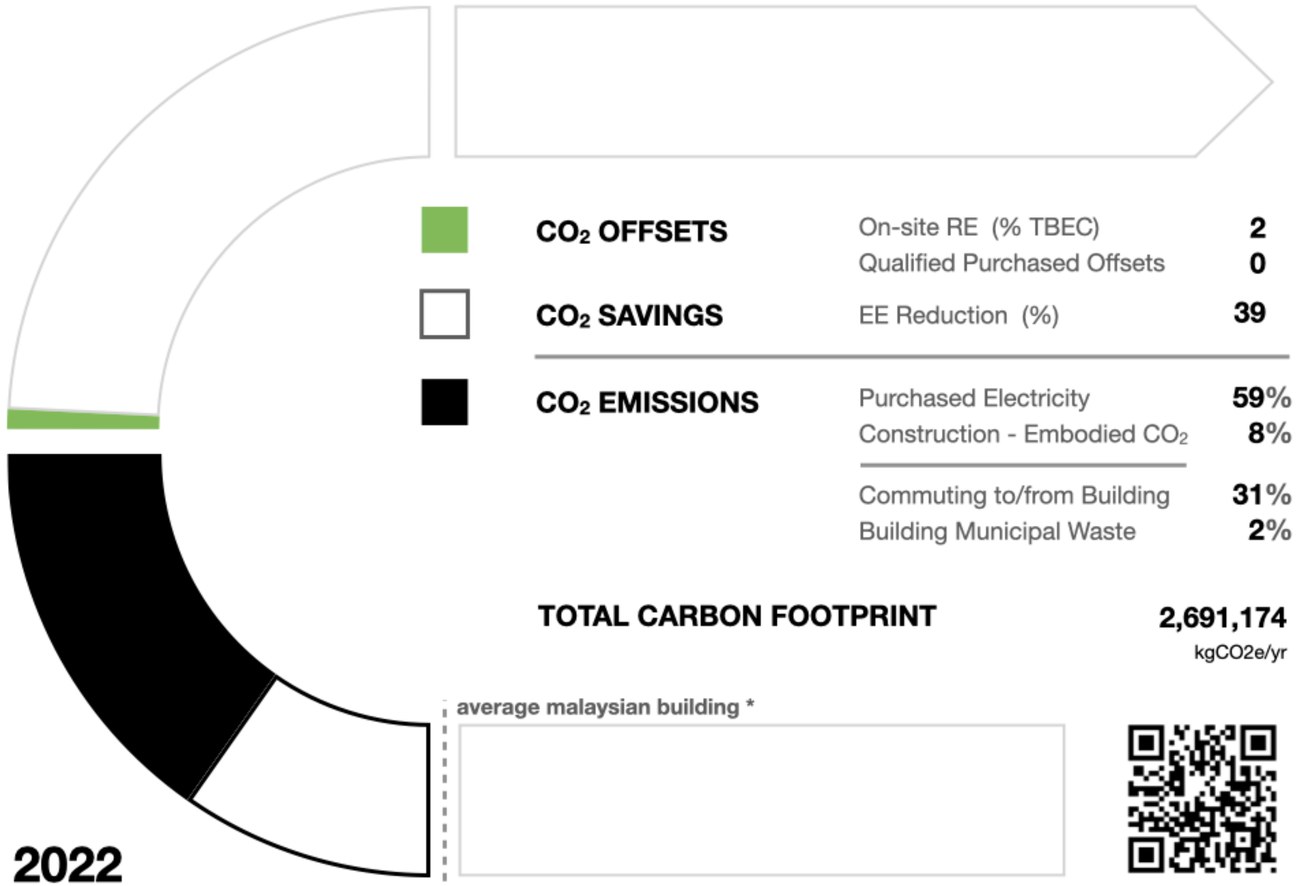
carbonScore

41

% towards Zero Carbon Building

Average GBI Office

Malaysia



CO_2 OFFSETS	On-site RE (% TBEC)	**2**
	Qualified Purchased Offsets	**0**
CO_2 SAVINGS	EE Reduction (%)	**39**
CO_2 EMISSIONS	Purchased Electricity	**59%**
	Construction - Embodied CO_2	**8%**
	Commuting to/from Building	**31%**
	Building Municipal Waste	**2%**

TOTAL CARBON FOOTPRINT **2,691,174** kgCO2e/yr

average malaysian building *

2022

for more info

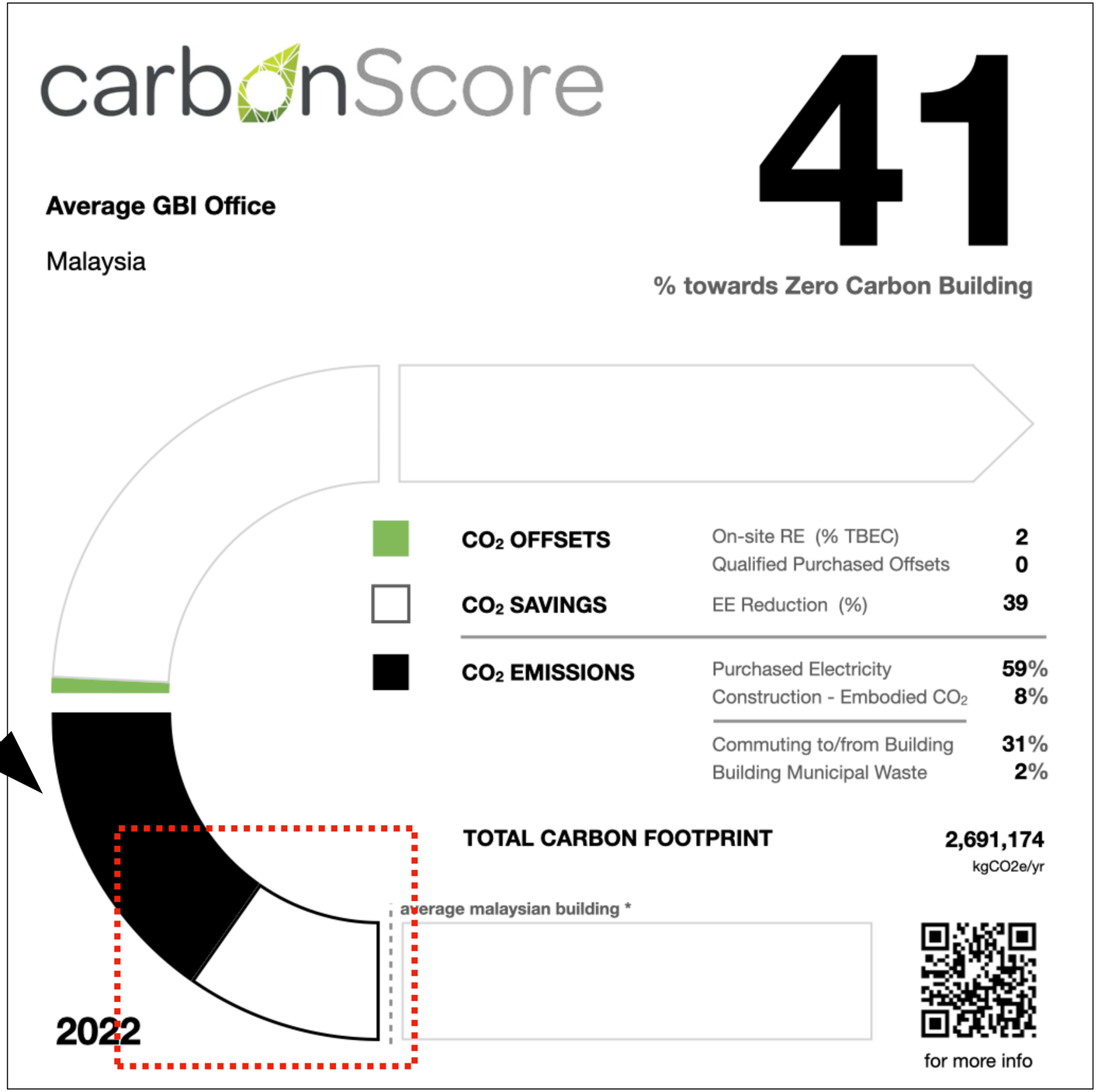
Case Study | 57
Green Buildings

Average Score: **41** % towards zero carbon building

Contribution from Energy Efficiency:
39 %

Contribution from Renewable Energy:
2 %

Average CO_2 Emissions Reduction:
1,870,138 kgCO2e/yr



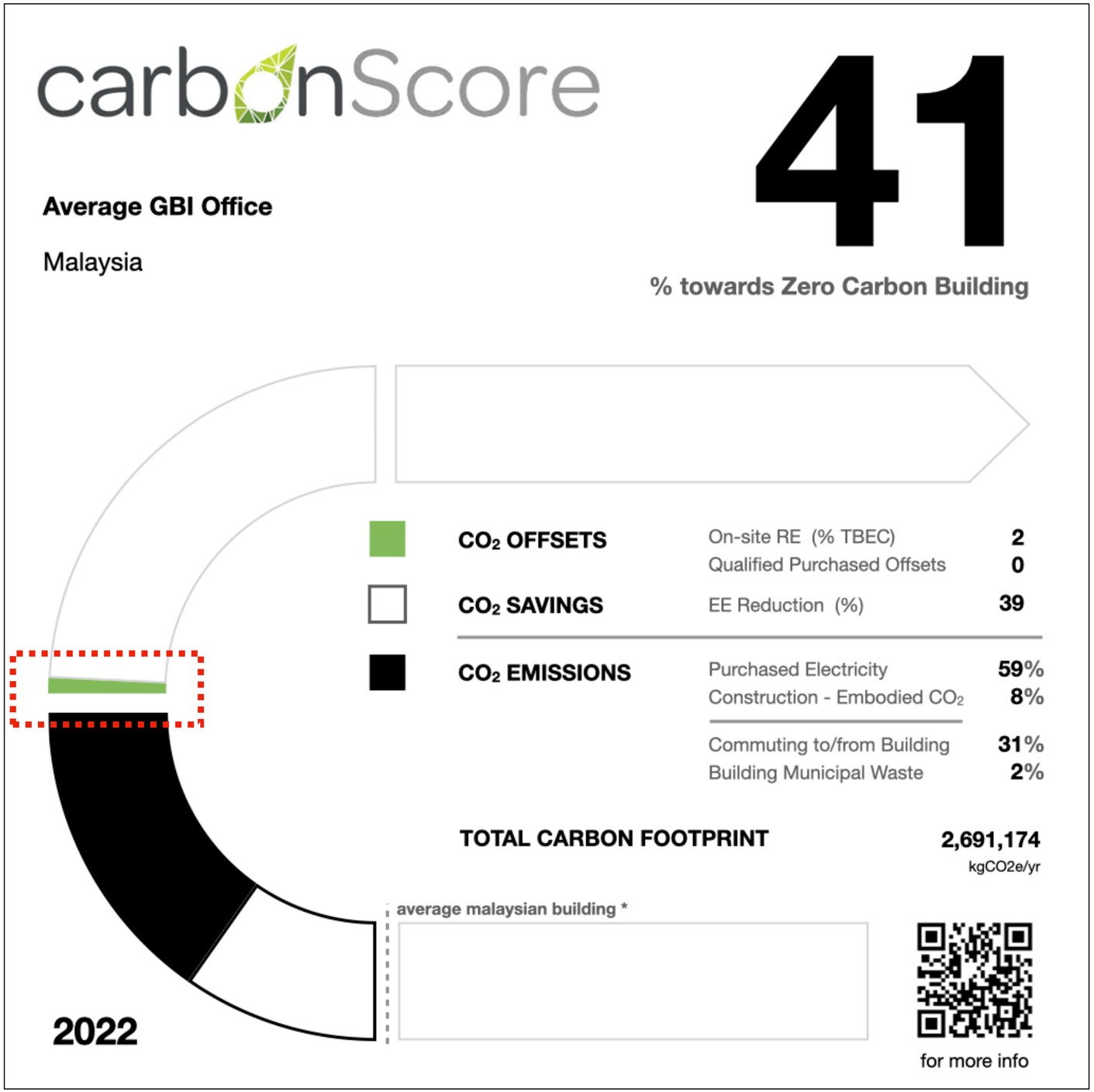
Case Study | 57
Green Buildings

Average Score: **41** % towards zero carbon building

Contribution from Energy Efficiency:
39 %

Contribution from Renewable Energy:
2 %

Average CO_2 Emissions Reduction:
1,870,138 kgCO2e/yr



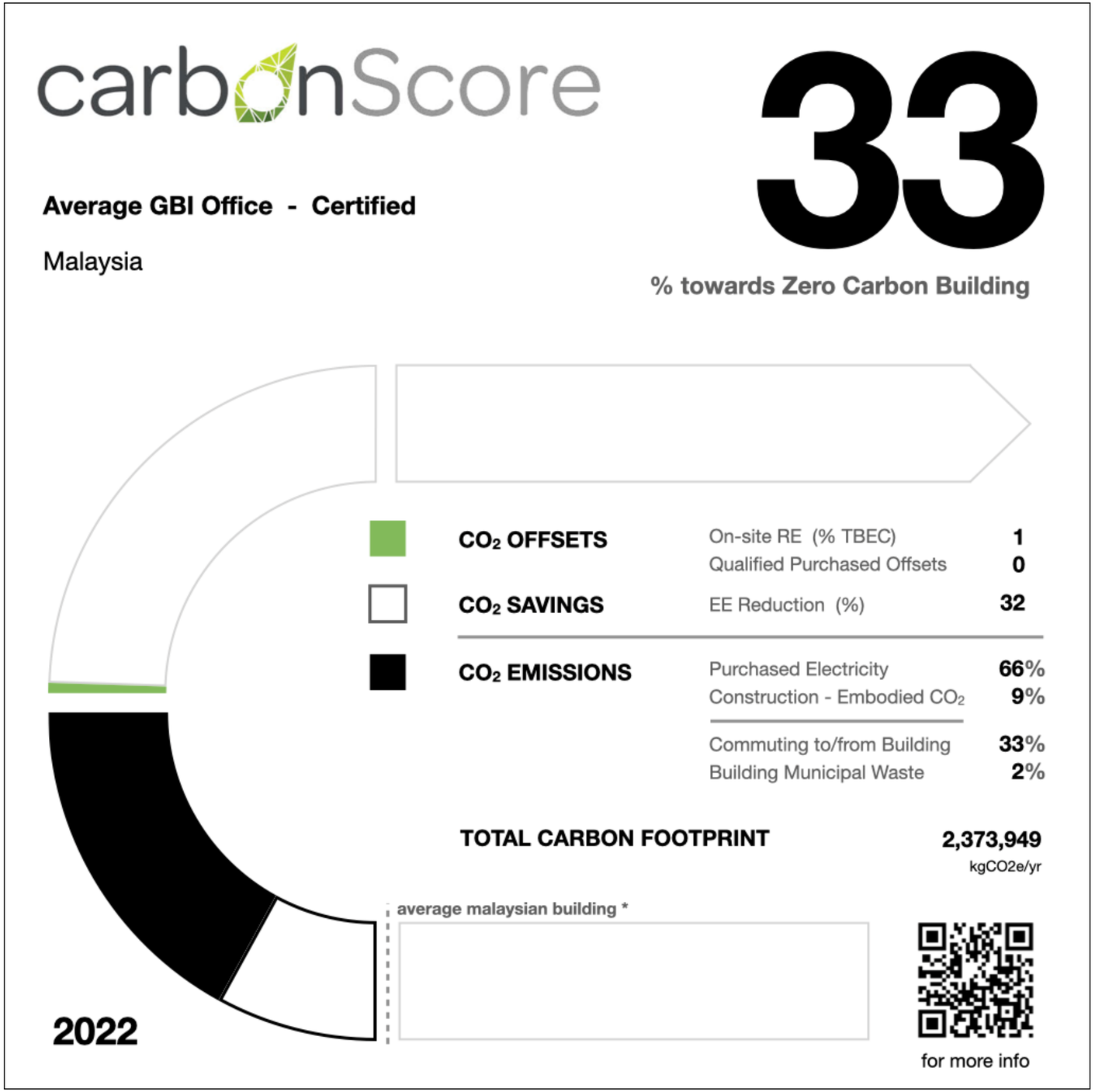
Case Study | 57
Green Buildings

GBI ‘Certified’: **33** % towards zero carbon building

Contribution from Energy Efficiency:
32 %

Contribution from Renewable Energy:
1 %

Average CO_2 Emissions Reduction:
1,151,807 kgCO2e/yr



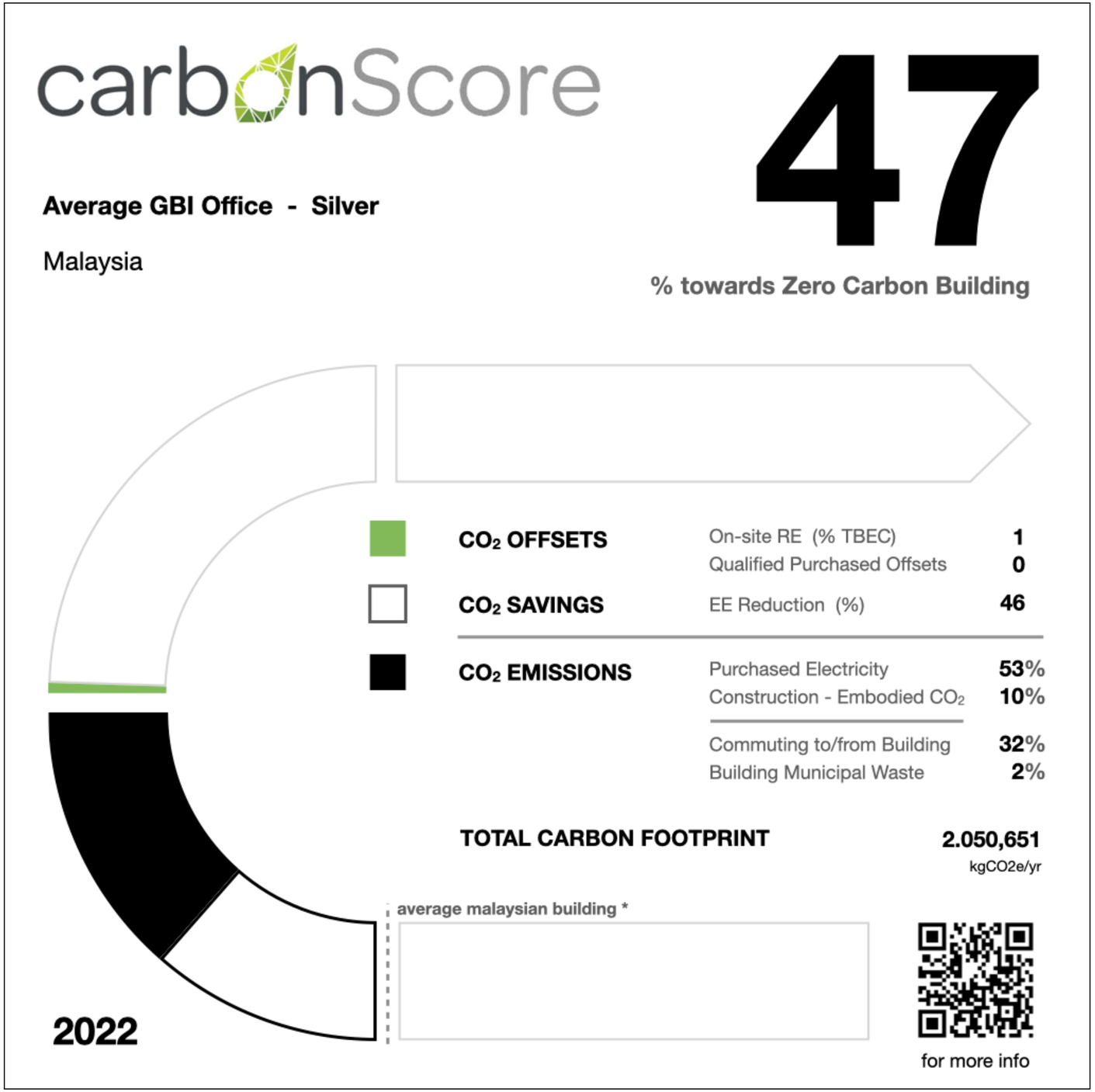
Case Study | 57
Green Buildings

GBI ‘Silver’: **47** % towards
zero carbon building

Contribution from Energy Efficiency:
46 %

Contribution from Renewable Energy:
1 %

Average CO_2 Emissions Reduction:
1,818,502 kgCO2e/yr



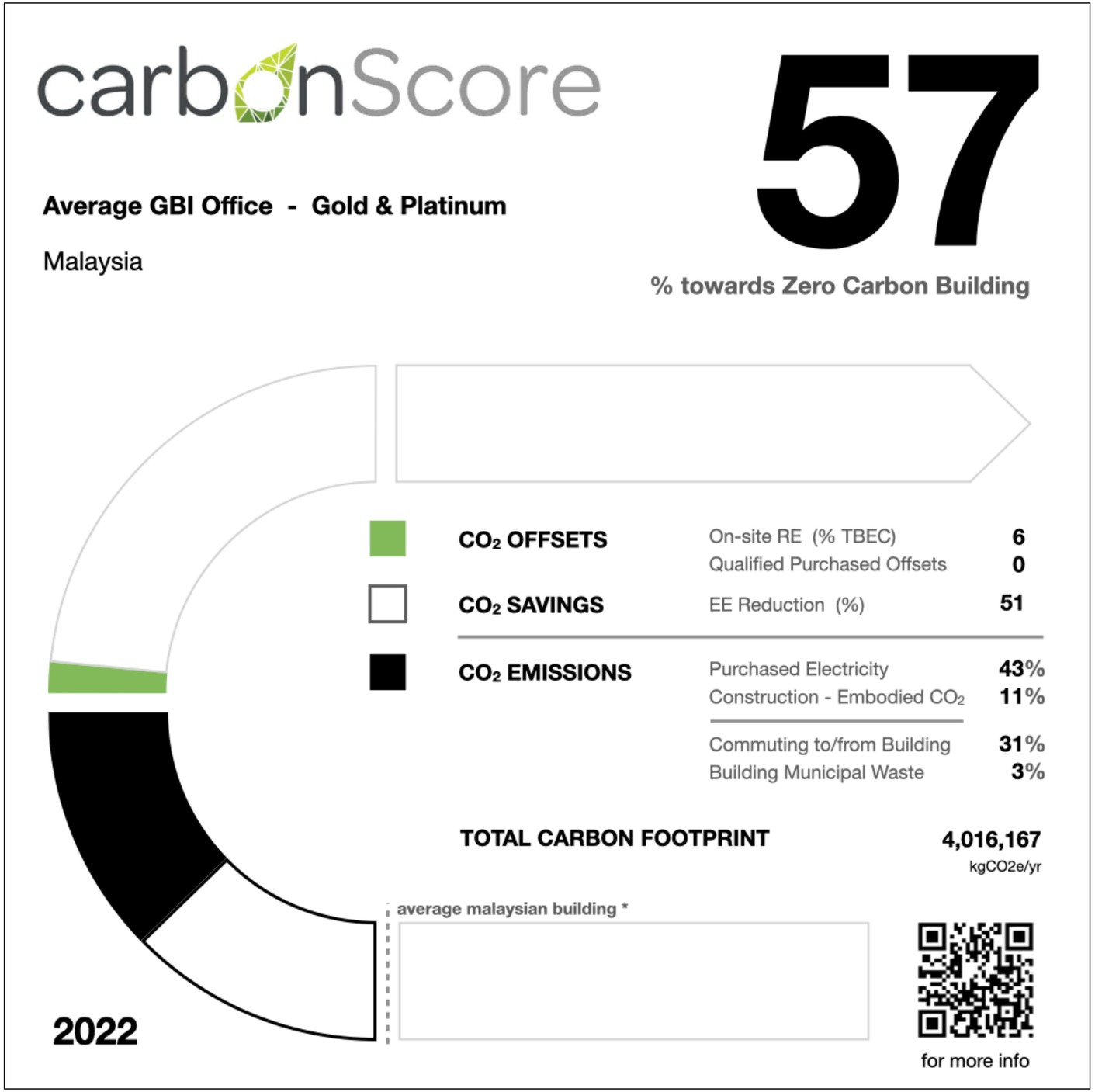
Case Study | **57**
Green Buildings

GBI ‘Gold & Platinum’: **57** % towards zero carbon building

Contribution from Energy Efficiency:
51 %

Contribution from Renewable Energy:
6 %

Average CO_2 Emissions Reduction:
3,029,740 kgCO2e/yr



carbonScore

malaysiaGBC

WORLD GREEN BUILDING COUNCIL

ADVANCING NET ZERO

5 Pilot Projects | Towards Zero Carbon

- **UniKL Sustainable Energy Living Lab** Selangor
- **Malaysia Pavilion | EXPO 2020** Dubai
- **Menara MBJB** Johor Bharu
- **IOI City Mall** Putrajaya
- **University of Technology Sarawak** Sibu

IOI City Mall

Phase One

IOI City Mall

Phase One

Project Location: **Putrajaya, Malaysia**

Project Size: **211,472** m^2

Typology: **Shopping Mall**

Constructed: **2014**

IOI City Mall

Phase One

Client: **IOI CITY MALL SDN BHD**

Contractor: **AL-AMBIA SDN BHD**

Architect: **PI ARCHITECT**

M&E Engineer: **KTA TENAGA SDN BHD**

C&S Engineer: **JURUTERA PERUNDING PRIMAREKA SDN BHD**

ESD Consultant: **BGREEN CONSULTANCY SDN BHD**

QS: **BAHARUDDIN ALI & LOW SDN BHD**

Landscape Architect: **WDI DESIGN SDN BHD**

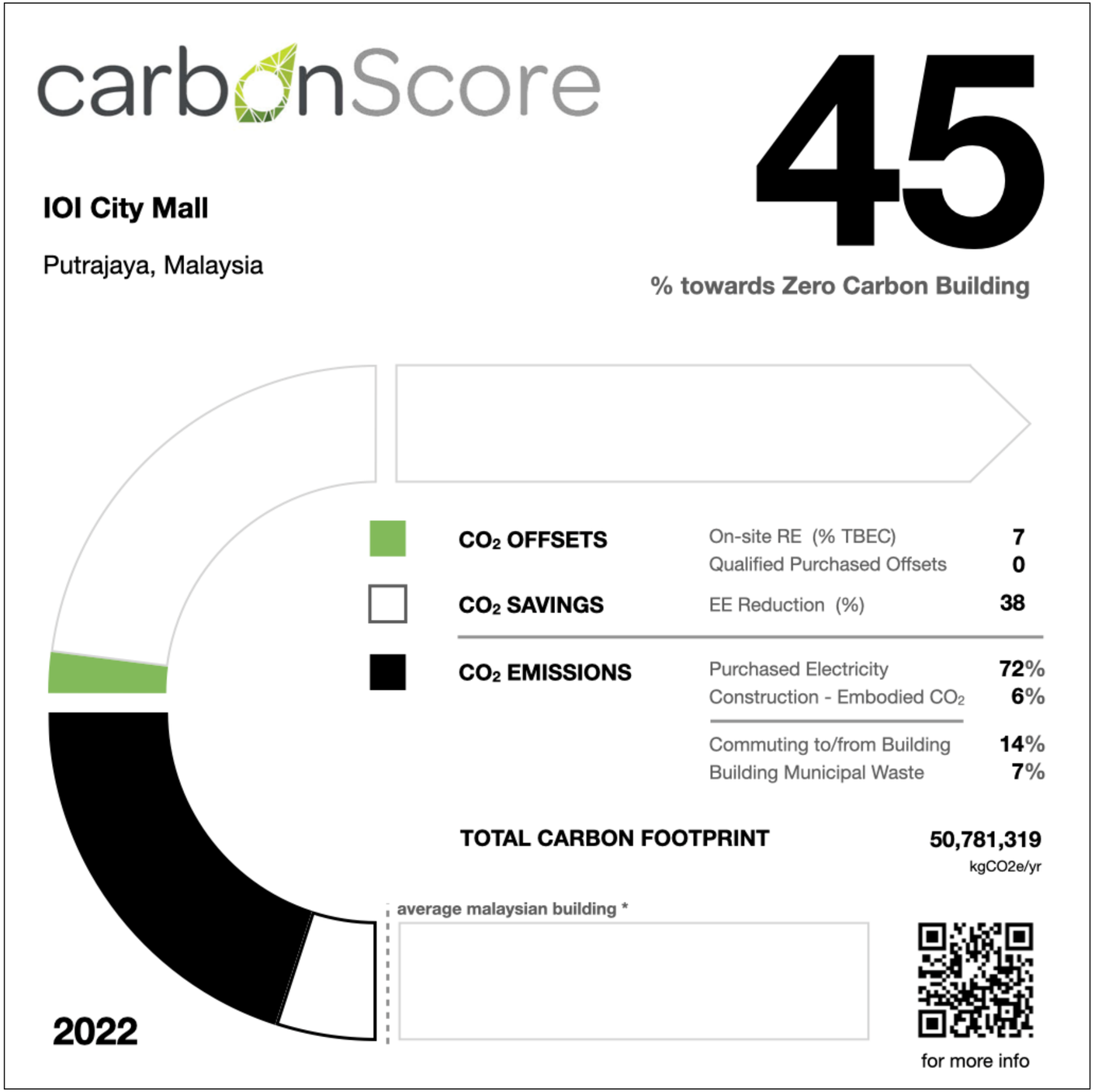
IOI City Mall
Phase One

CarbonScore: **45** % towards zero carbon building

Contribution from Energy Efficiency & CO_2 Reduction:
38 %

Contribution from Renewable Energy:
7 %

CO_2 Emissions Reduction:
41,548,352 kgCO2e/yr



IOI City Mall

Phase One

Energy Efficiency

BEI: **286** kWh/m^2/yr

Energy Savings: **38** %

compared to the MS1525 performance baseline for Malaysian high-intensity retail buildings

IOI City Mall

Phase One

Thermal Mass Storage

Accounts for: **50** % of cooling capacity

reduces peak demand &
Increases overall system efficiency

IOI City Mall

Phase One

Renewable Energy

Installed Capacity: **3,564** kWp

% of TBEC: **7.3** %

UTS

University of Technology Sarawak

University of Technology Sarawak

UTS

Project Location: **Sibu, Sarawak**

Project Size: **30,639** m^2

Typology: **University**

Constructed: **2013**

University of Technology Sarawak
UTS

Client: **EDUSAR RESOURCES SDN BHD**

Contractor: **NAIM ENGINEERING SDN BHD**

Contractor: **HOCK PENG FURNITURE & GENERAL CONTRACTOR SDN BHD**

Architect: **AKI MEDIA**

M&E Engineer: **PERUNDING TEKNIKAL**

C&S Engineer: **JURUTERA MINSAR CONSULT SDN BHD**

ESD Consultant: **EXERGY MALAYSIA SDN BHD**

QS: **JURUUKUR BAHAN TEMA SDN BHD**

Commissioning Specialist: **PUREAIRE SDN BHD**

University of Technology Sarawak

UTS

CarbonScore: **59** % towards zero carbon building

Contribution from Energy Efficiency & CO_2 Reduction:

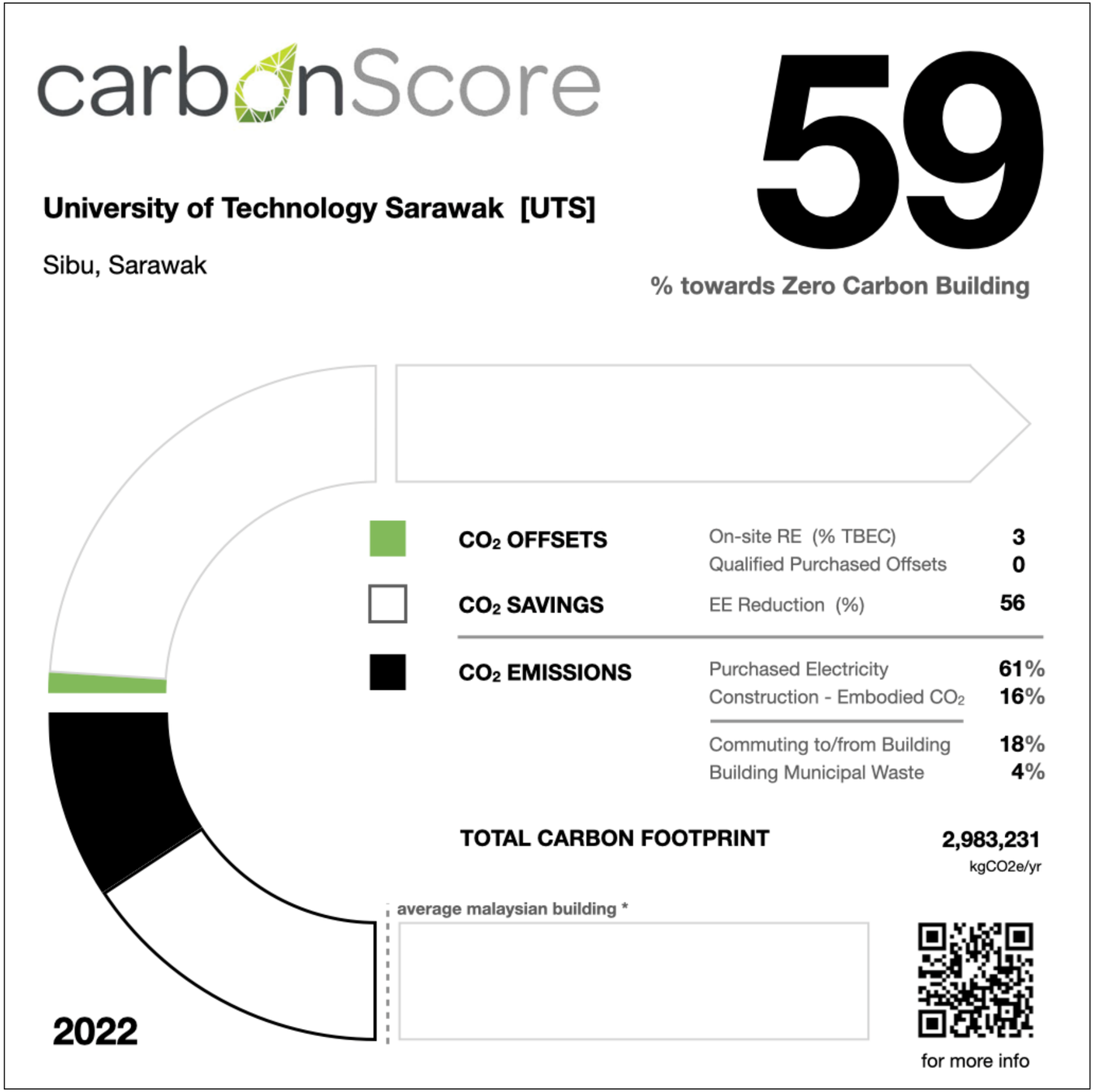
56 %

Contribution from Renewable Energy:

3 %

CO_2 Emissions Reduction:

4,292,942 kgCO2e/yr



University of Technology Sarawak

UTS

Energy Efficiency

BEI: **87** kWh/m^2/yr

Energy Savings: **56** %

compared to the MS1525 performance baseline for Malaysian university buildings

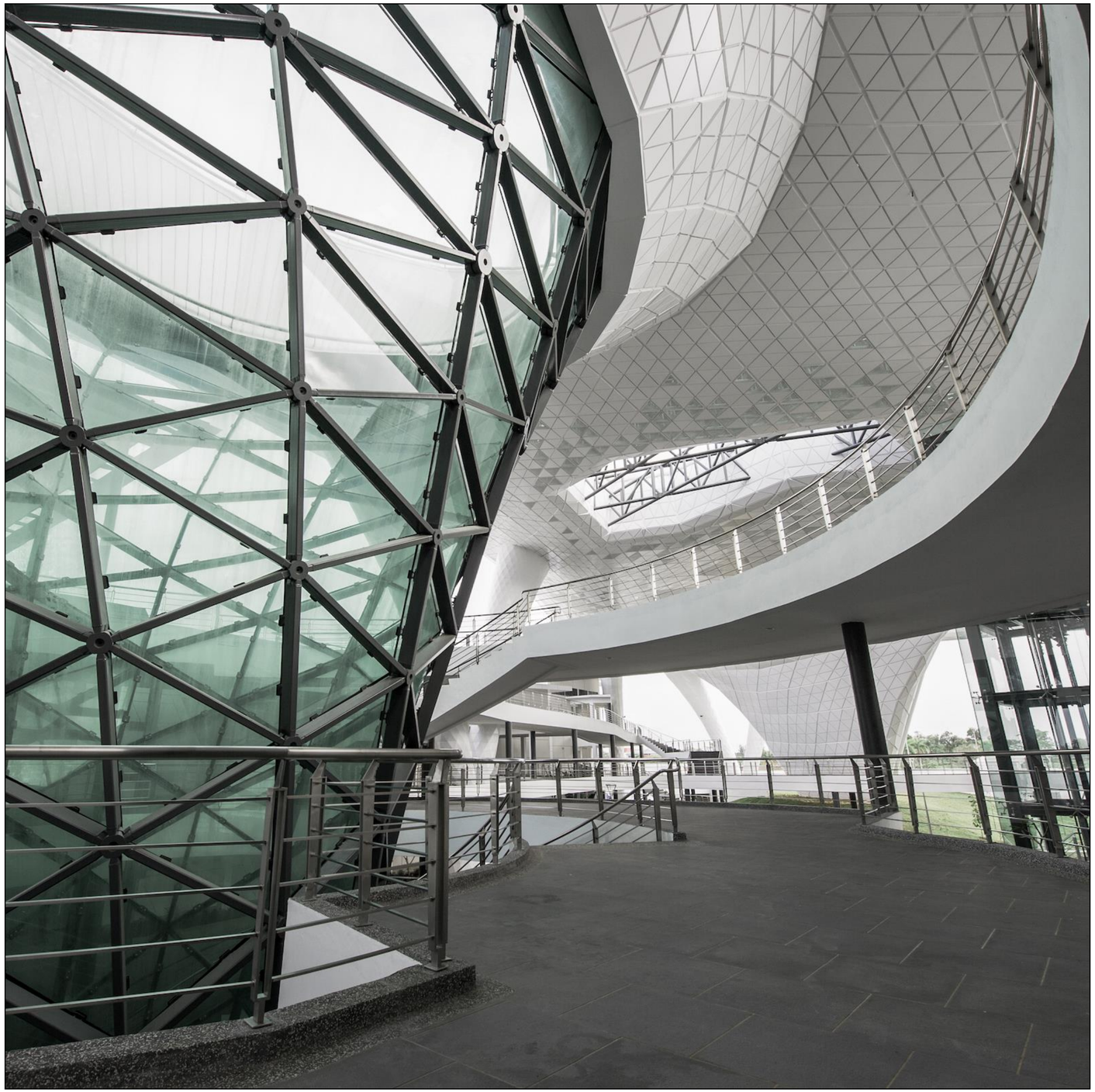
University of Technology Sarawak

UTS

Energy Efficient Lighting

extensive daylighting strategy with photo sensor & motion sensor-controlled lighting

96 % of NLA



University of Technology Sarawak

UTS

Renewable Energy

Installed Capacity: **106** kWp

% of TBEC: **4.1** %

carbonScore

Available 1st Quarter 2023 | CarbonScore

Public Certification

Available 2023 | CarbonScore+

Verified Carbon Reporting

Available 1st Quarter 2023 | Online CO2 Calculator

Available Free to Public via Self Declaration

For more information please contact

mcs@mgbc.org.my

malaysiaGBC

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ADVANCING NET ZERO