



Frequently Asked Questions (FAQs)

on Malaysia Reference Price (MRP)
January 2024

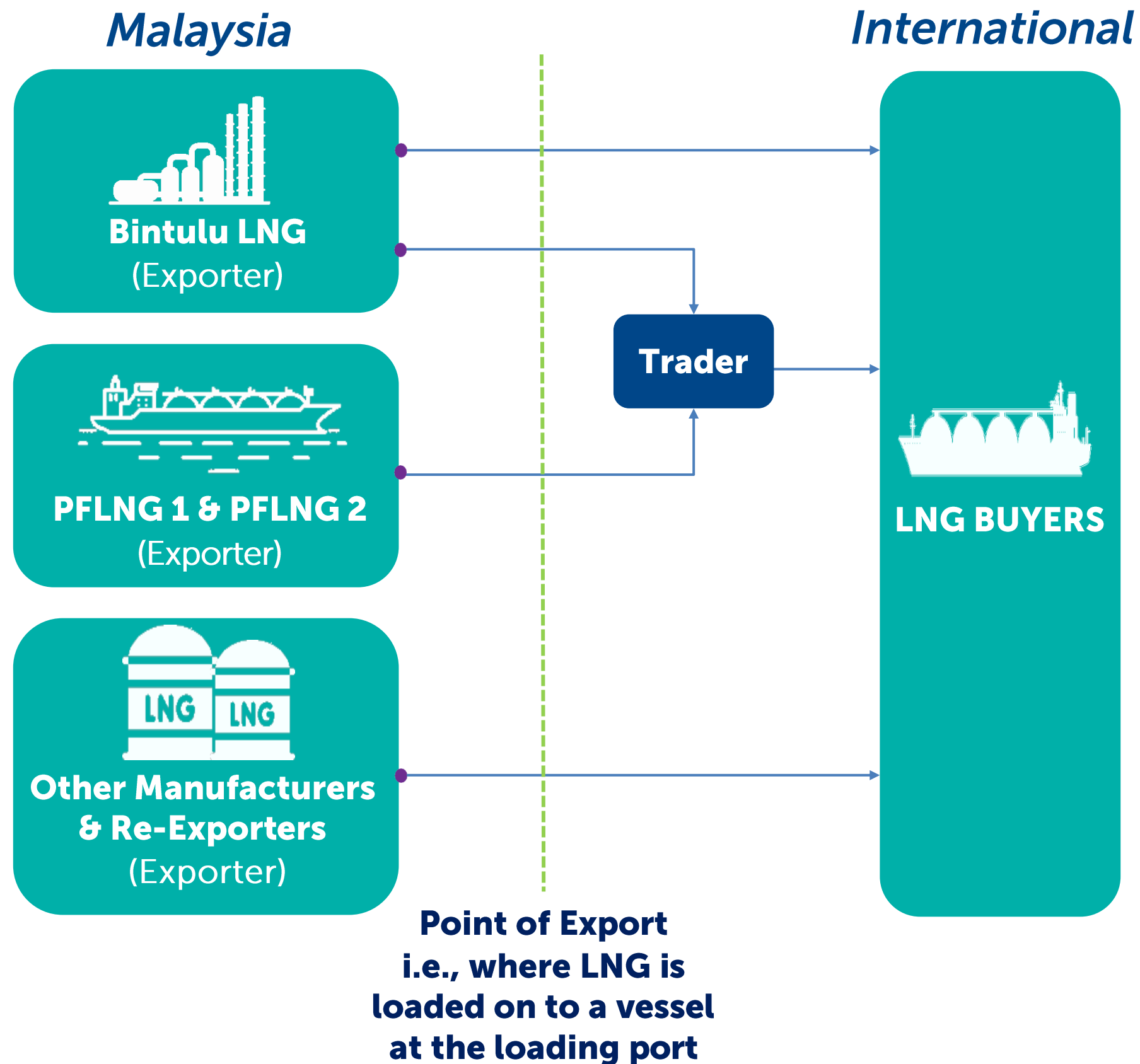
Frequently Asked Questions (FAQs)

on Malaysia Reference Price (MRP)

- 1** What is Malaysia Reference Price (MRP)?
- 2** Why is MRP used as the gas price marker?
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1

What is Malaysia Reference Price (MRP)?



MRP is the weighted average price of LNG (Free On Board [FOB] basis) exported out of Malaysia.

MRP is calculated as follows:

$$MRP = \frac{LNG \text{ Export Value (FOB Basis)}}{(LNG \text{ Export Volume} \times \text{Conversion})}$$

**Conversion = 52 MMBtu per 1 MT of LNG*

Details of LNG exports i.e., LNG export values & LNG volumes are submitted by LNG exporters to the Royal Malaysian Customs Department (Customs) and the Department of Statistics Malaysia (DOSM).

DOSM publishes the LNG export values (FOB basis) and LNG volumes on its website on a monthly basis.

2

Why is MRP used as the gas price marker?

MRP is used as the gas price marker in view of the following:



Declining relevance of HSFO

Declining use of HSFO due to regulatory changes & transition to cleaner fuels, particularly in marine fuels, where limits on amount of sulfur is imposed.



Price Marker Standardisation

MRP has been used as a marker to price downstream gas in Malaysia. It is now being adopted gradually in the upstream sector.

Standardizing MRP as a price marker across the value chain minimises price reference exposure.



Relevance to Malaysia Gas Market

MRP reflects the value of gas exported out of Malaysia, where prices are driven by global market dynamic.



Liquid & Sustainable Price Marker

MRP liquidity is demonstrated in the large volumes and number of buyers of Malaysian LNG.

MRP's sustainability lies in the longevity of supplies available from Malaysia to support its LNG export demand.

3

How are the LNG export details gathered and published?

(1/2)

LNG Exporters in Malaysia

Export declaration forms

Export declaration forms

Government Internal Process



Royal Malaysian Customs Department
Custom Act 1967



Department of Statistics Malaysia (DOSM)
Statistics Act 1965

DOSM Official Portal

<https://www.dosm.gov.my>

LNG export values and volumes are published on DOSM website

Data Submission & Publication Process



01

LNG export details i.e., LNG export values & LNG export volumes are submitted by LNG exporters to Customs and DOSM, as required by law, e.g., the Customs Act 1967 and the Statistics Act 1965.



02

Declaration to Customs is done within seven (7) days after each LNG cargo is loaded



03

Submission to DOSM is done at the beginning of the following month after the transaction month (i.e., data for January transactions is submitted to DOSM by the 1st week of February). The submission must adhere to Custom's guidelines.



04

The LNG export details submitted will be used by DOSM for publication of the **Monthly External Trade Statistics (METs)** on its website.

4

How to extract data from DOSM website to calculate MRP?

(1/6)

A step-by-step process to extract the LNG Export Value (FOB basis) and LNG Export Volume from DOSM website

1

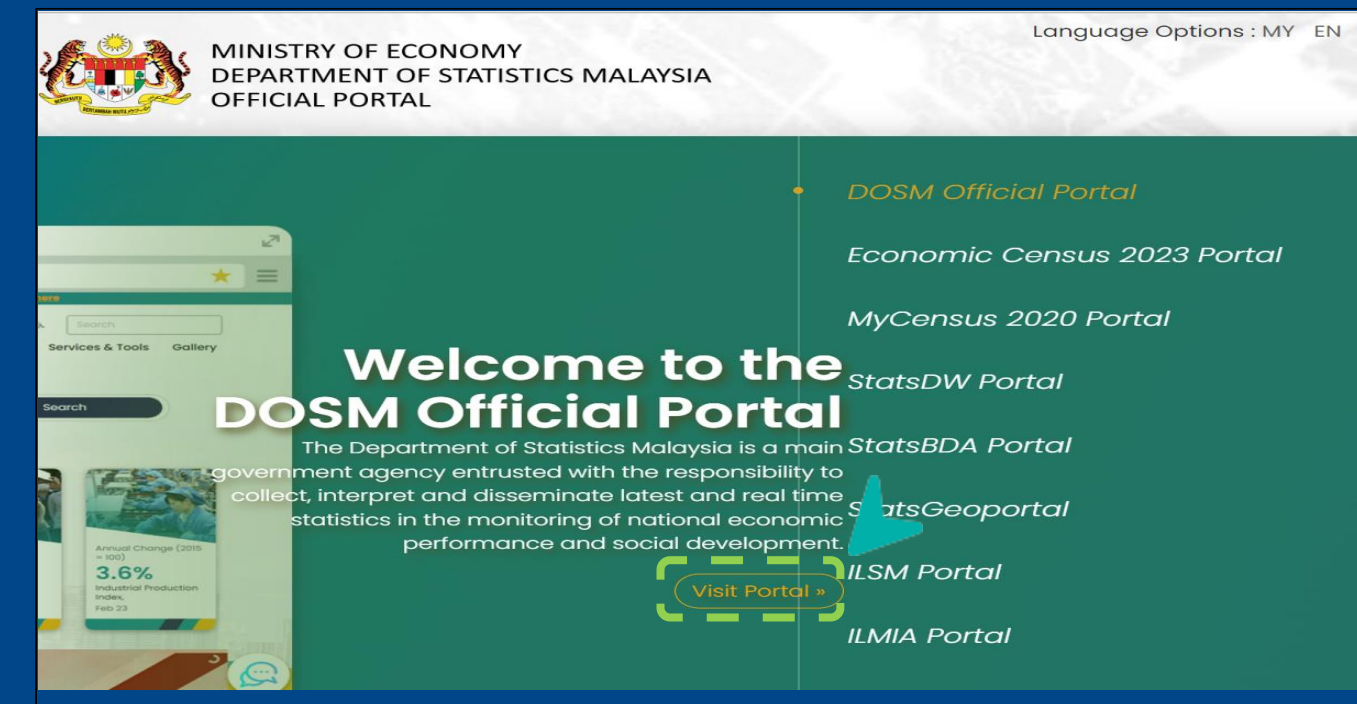
Search for DOSM on your browser and click the "Department of Statistics Malaysia Official Portal – DOSM" link

<https://www.dosm.gov.my/v1/>



2

Go to DOSM Official Portal and click visit portal



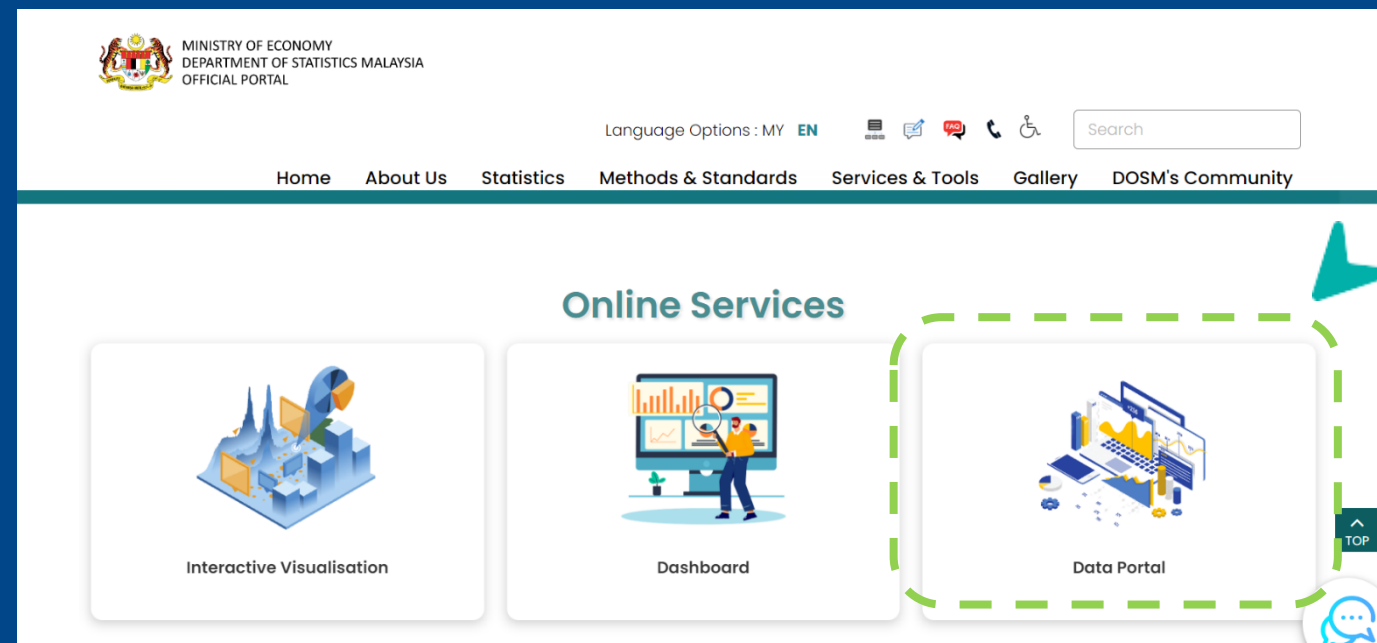
4

How to extract data from DOSM website to calculate MRP? (2/6)

(2/6)

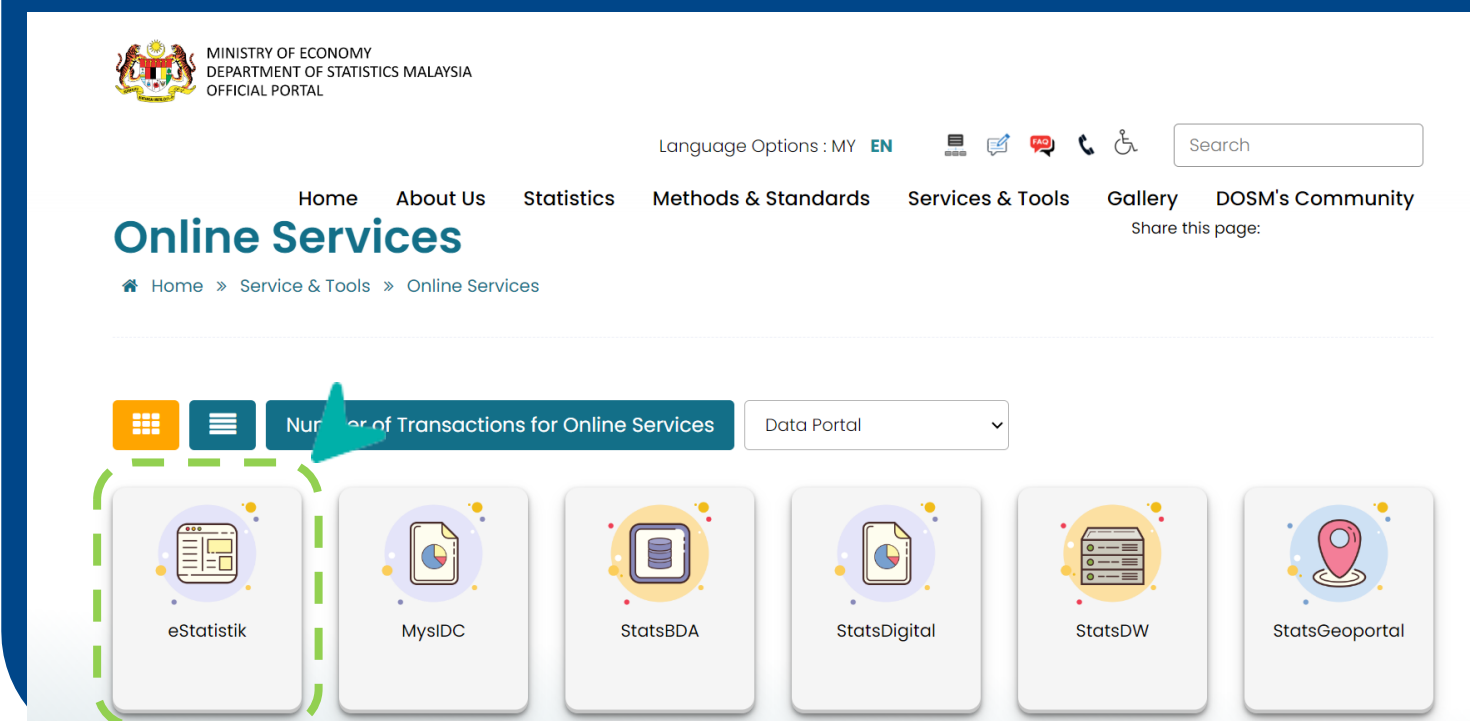
3

Scroll down until you reach the Online Services section and choose Data Portal.



4

Choose estatistik from the list of options.



4

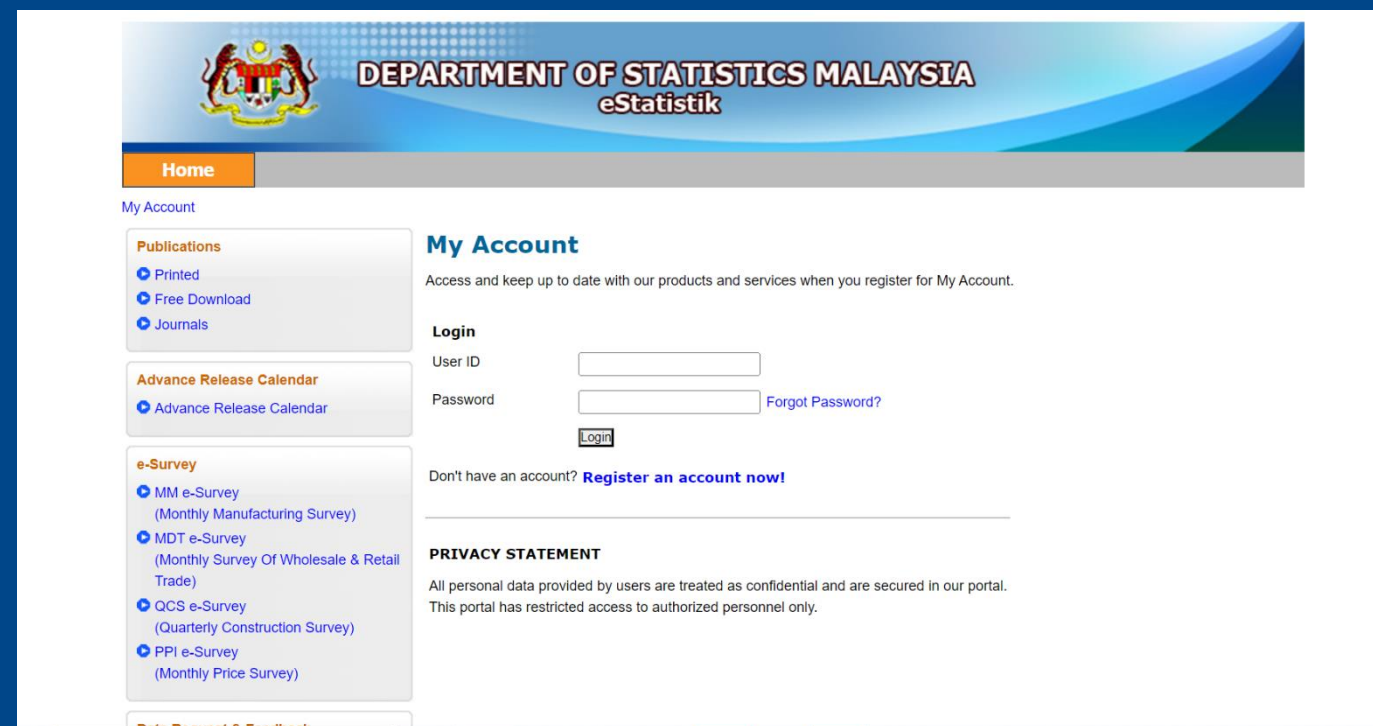
How to extract data from DOSM website to calculate MRP?

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5

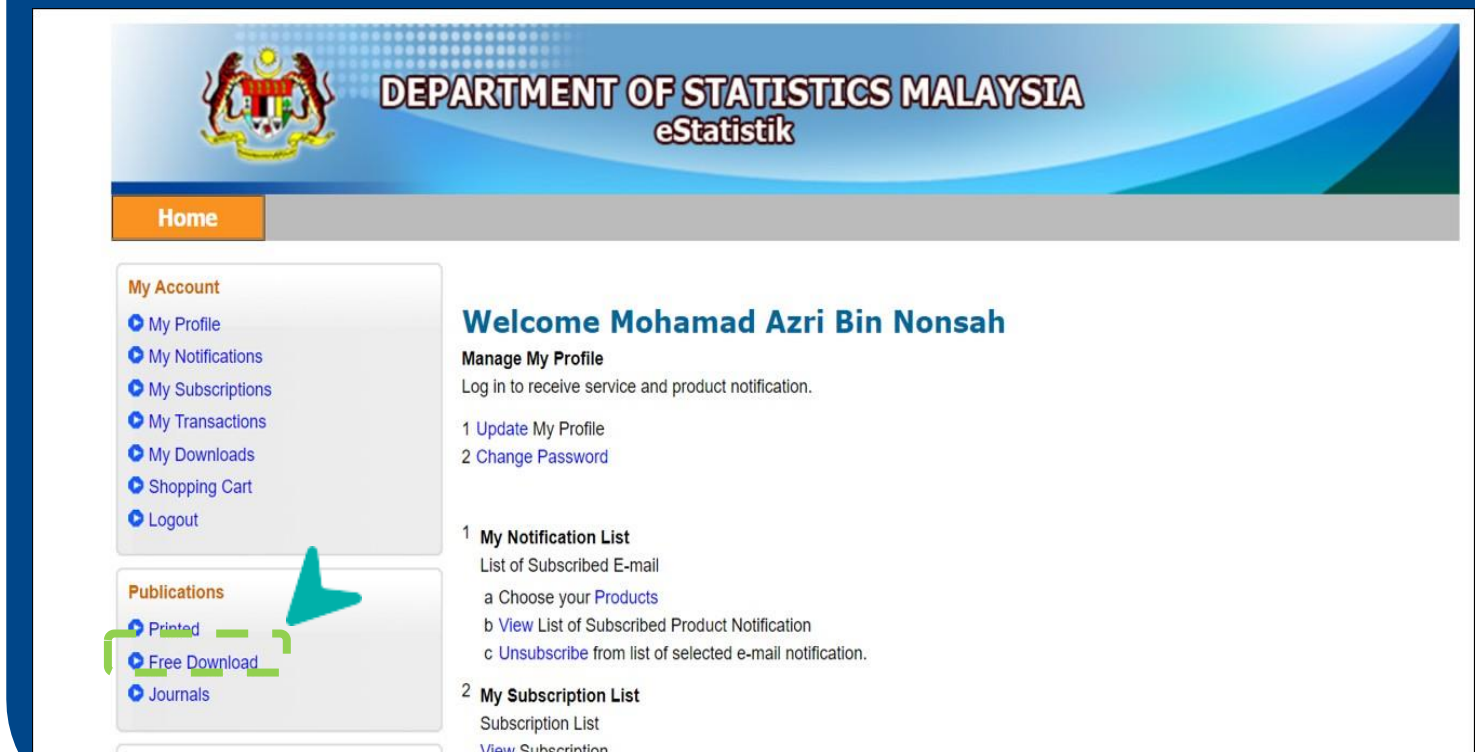
Alternatively, you can click on this link to go directly to eStatistik website:

[eStatistik \(statistics.gov.my\)](http://eStatistik (statistics.gov.my))



6

Click on the free download section under Publications.



4

How to extract data from DOSM website to calculate MRP?

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Select "Economy" for Main Category and "External Trade" as Sub-Category.

Free Download

Main Category

Sub-Category

8

Select "Monthly External Trade Statistics, Malaysia" and refer to the Release Series section to select the desired data. Released Series September 2022 will contain information to derive the MRP for September 2022.

Free Download

Main Category

Sub-Category

No.	Title of Publications	Product Type	Release Series	Release Date
1	External Trade Indices, Malaysia	Publication	January 2024	28 February 2024
2	Monthly External Trade Statistics, Malaysia	Publication	January 2024	28 February 2024

4

How to extract data from DOSM website to calculate MRP? (5/6)

(5/6)

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Under **Subject**, choose the subject **JADUAL_TABLE** to download the Excel file.

Close

Download List

Subject	File Name
01 MONTHLY EXTERNAL TRADE STATISTICS, JANUARY 2024 (FULL PUBLICATION)	LAPORAN_REPORT_JAN_2024.pdf
02 ISI KANDUNGAN/CONTENT	KANDUNGAN_CONTENT.pdf
03 RINGKASAN	03_RINGKASAN.pdf
04 SUMMARY	04_SUMMARY.pdf
05 JADUAL_TABLES	PENERBITAN JANUARI 2024.xlsx

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In the Excel file, find the **Table 9 (Export of Major and Selected Commodities)** tab and look for **"Liquefied Natural Gas"** under Primary Agricultural Products to retrieve the LNG export value in RM million and LNG Export quantity in '000 tonne. Choose the value for the month that you want to calculate.

JADUAL 9 (SAMB) : EKSPORT BARANGAN UTAMA DAN TERPILIH (RM JUTA)											
TABLE 9 (CONT'D) : EXPORT OF MAJOR AND SELECTED COMMODITIES (RM MILLION)											
	NOV 2023		DEC 2023		JAN 2024			JAN - JAN			
	KUANTITI QUANTITY	NILAI VALUE	KUANTITI QUANTITY	NILAI VALUE	KUANTITI QUANTITY	NILAI VALUE	SUMB. SHARE (%)	KUANTITI QUANTITY	NILAI VALUE	KUANTITI QUANTITY	NILAI VALUE
JUMLAH/TOTAL		121,736		118,379		122,425	100.0		112,655		122,425
REFINED PETROLEUM PRODUCTS ('000 TONNE)											
GAS ASLI CECAIR ('000 TAN)	2,537	5,630	2,732	6,239	2,700	6,051	4.9	2,644	6,675	2,700	6,051
LIQUEFIED NATURAL GAS ('000 TONNE)											
KAYU DAN HASIL KELUARAN KAYU	-	1,985	-	2,046	-	2,010	1.6	-	1,504	-	2,010

TAB: JAD 1 JAD 2 JAD 3 JAD 4 JAD 5 JAD 6 JAD 7 JAD 8 **JAD 9** JAD 10 JAD 11 JAD 12 JAD 13 JAD 14 JAD 15

4

How to extract data from DOSM website to calculate MRP?

(6/6)

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When all the information has been gathered, the MRP can be calculated using the below formula:

$$MRP = \frac{LNG\ export\ value\ (FOB\ Basis)\ (RM)}{(LNG\ export\ volume\ (tonne) \times conversion\ (MMBtu/tonne))}$$

*Conversion: 52
Whereby, 52 MMBtu equals to 1 MT of LNG

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Below is an example of the MRP calculation for the months of November & December 2023 :

	November	December
LNG Export Value (RM Mil)	5630	6239
LNG Export Quantity ('000 tonne)	2537	2732
MRP	$\frac{5630 \times 1000}{2537 \times 52}$ = RM 42.68 / MMBtu	$\frac{6239 \times 1000}{2732 \times 52}$ = RM 43.91 / MMBtu

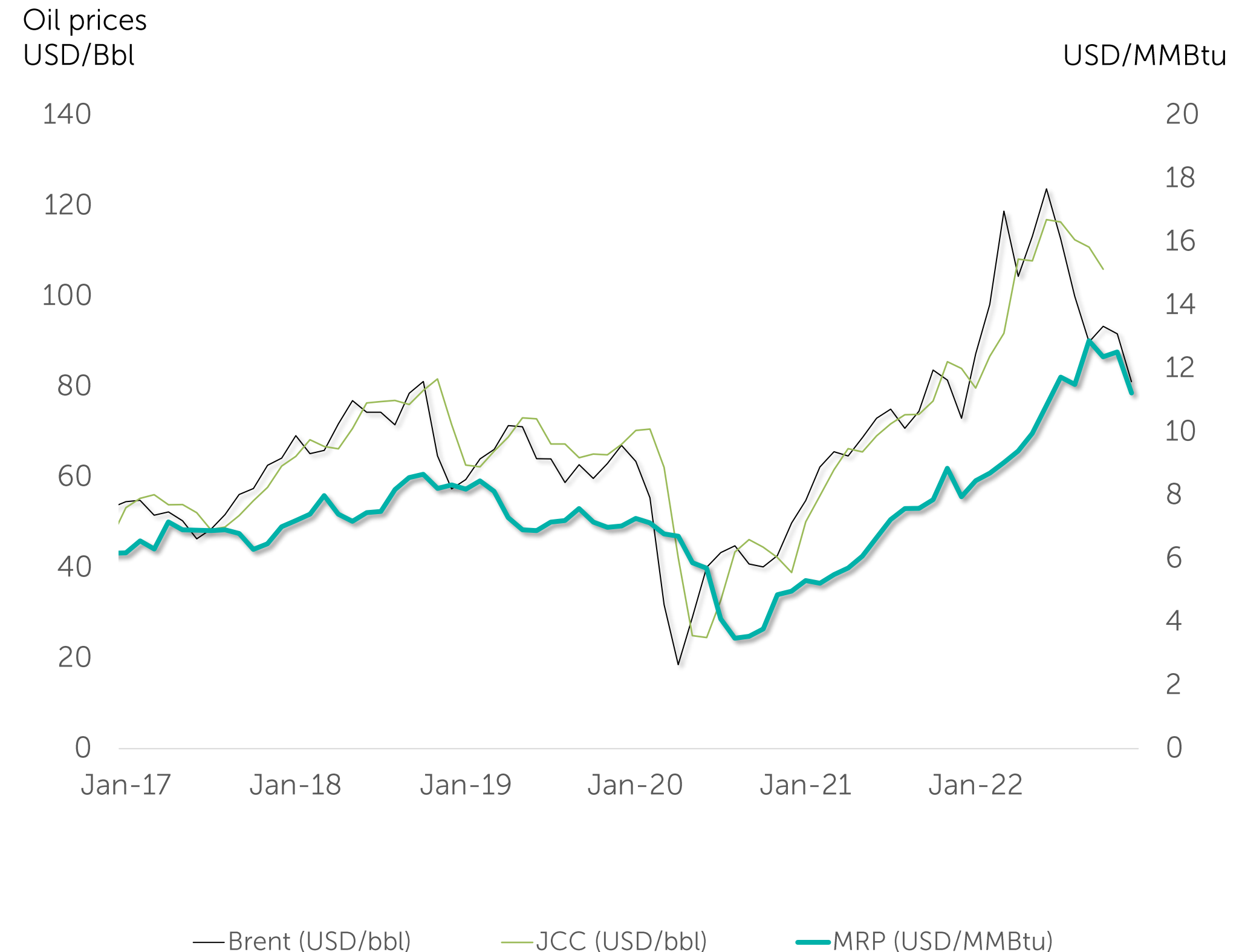
*52 is the conversion factor to convert LNG from MT to MMBtu

5

Does the movement of MRP tracks key oil markers?

- **Yes, the MRP movement tracks key oil markers,** namely, Brent and JCC, since large proportion of the LNG exported out of Malaysia are indexed to these markers.
- The observable lag in price movements between MRP and these oil markers are due to the following :
 - (i) The adoption of prior months oil prices as the price index for most of Malaysia LNG sales contracts.
 - (ii) The data to calculate MRP are only available on DOSM website two months after the transaction month due to requirements enforced by DOSM on submission and publication.
- Therefore, any movements in these oil markers will only be reflected in the MRP in the following months, typically within a 4 to 6-months period.

Historical prices of Brent, JCC and MRP



6

How to forecast MRP?

(1/2)

- MRP can be forecasted by making assumptions on the total value and volume of LNG export out of Malaysia as per formula below:



- Components of LNG export value and volume can be obtained by subscribing to industry consultants' database.
- One needs to have a view on the regional and global gas and LNG market to make sound assumptions.
- By repeating the above steps to a subsequent set of data, one can generate a longer term forecast monthly or annually.

In absence of detailed information on Malaysia LNG export data, MRP can be forecasted by considering the following:

- MRP movement is highly correlated to oil prices as current Malaysia LNG contracts are still largely indexed to oil.
- MRP represents the value of LNG exported from Malaysia. Its behaviour will be influenced by the changes in global LNG market trends e.g., LNG supply demand, spot vs term prices, price indexation.
- MRP forecast must also consider the lagging factor of 4 months as explained in question #5.

End