



ADDRESSING THE CHALLENGE: IMPROVING ENGINEERS' STARTING SALARY



By:
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Chairman, Task Force
"Engineers' Low Starting Salaries"

CONTENTS



- Background Issue
- **Challenges Faced by Engineering Graduates**
- Impacts of Low Salaries on the Engineering Profession and Economic Development
- **Chronology of Study "Gaji Permulaan Jurutera yang Rendah"**
- The Task Force "Gaji Permulaan Jurutera yang Rendah"
- **The Study on "Gaji Permulaan Jurutera yang Rendah"**
- Findings
- **White Paper as the Platform for Improving Engineers' Starting Salaries**
- Chronology of the Development of White Paper "Gaji Permulaan Jurutera yang Rendah"
- **Conclusion**

BACKGROUND ISSUE



Bajet 2022
dijangka
peruntuk
RM400b

Jurutera miskin

Gaji RM1,500-RM2,000 sebulan • 20 tahun tidak berubah

OHAI ROSALINDA MELIADAN ANASTASIOULAS ARADIAN

terima jurutera statik masih diberikan pada nilai yang sama seperti 20 tahun lalu. Menurut Rosalinda, jurutera statik di Malaysia hanya mendapat gaji antara RM1,500 hingga RM2,000 sebulan. Faktor lain yang mempengaruhi pendapatan jurutera statik adalah beban kerja yang semakin meningkat. Menurut Rosalinda, jurutera statik di Malaysia hanya mendapat gaji antara RM1,500 hingga RM2,000 sebulan. Faktor lain yang mempengaruhi pendapatan jurutera statik adalah beban kerja yang semakin meningkat.

Bayaran tak berubah sejak 20 tahun lalu

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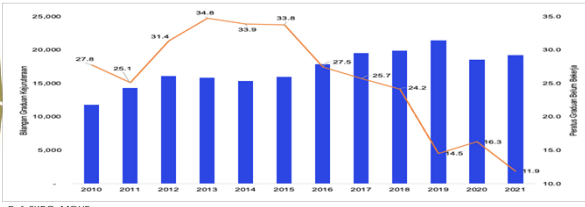
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CHALLENGES FACED BY ENGINEERING GRADUATES

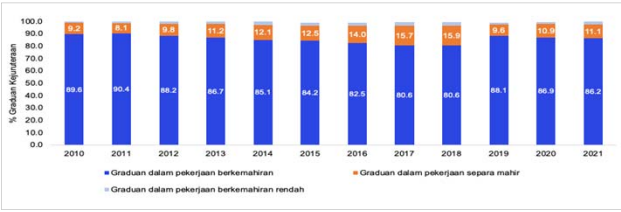
CHALLENGES

1. Competitive employment.



Ref: SKPG, MOHE
Unemployment rate among engineering graduates (2010 - 2021)

2. Difficulties in getting employment according to academic qualifications.






Ref: SKPG, MOHE
Mismatch of academic qualifications and employment of engineering graduates (2010 - 2021)

3. Mismatch of skill types according to the employer's demand/ requirements.

Soft skills: motivation, communication, interpersonal, critical thinking, problem-solving and entrepreneurial skills.


IMPACTS OF LOW SALARIES ON THE ENGINEERING PROFESSION AND ECONOMIC DEVELOPMENT






- Engineers conducted various jobs simultaneously - **reducing productivity** of the main job.
- Migrated** to economically stable countries and offered better salaries (brain-drain) - 1.8 of million Malaysians work in Singapore in various professions, and 20% work as professionals including engineers (BERNAMA).
- Decline in numbers of locally skilled engineers** in certain fields - **affected the country's ability to attract foreign investment**.
- Reduction in interest** among the young generation **to join the engineering profession** - empowerment of STEM education will not be achieved. Young generation more inclined to choose fields that offer promising salaries.

CHRONOLOGY OF STUDY "GAJI PERMULAAN JURUTERA YANG RENDAH"





4

18TH SEPTEMBER 2022

BEM released a full report on the findings to the public.

3

20TH AUGUST 2022

YAB Dato' Sri Ismail Sabri Yaakob put his concerns on the "GAJI PERMULAAN JURUTERA YANG RENDAH" in his officiating speech during the BEM's 50th Anniversary Dinner.

2


22ND NOVEMBER 2021

Board of Engineers Malaysia (BEM) formed a **Task Force** to conduct a detailed study on "**GAJI PERMULAAN JURUTERA YANG RENDAH**".

1

28TH OCTOBER 2021

Utusan Malaysia released an article "**JURUTERA MISKIN**", which has created a lot of misunderstanding among registered persons and the public regarding BEM's roles and functions.



THE TASK FORCE

"GAJI PERMULAAN JURUTERA YANG RENDAH"





CHAIRMAN

FIRST ADMIRAL (RTD.) DATO' Ir. (Dr) HAJI AHMAD MURAD HAJI OMAR



Ir. Dr. MEGAT ZUHAIRY MEGAT TAJUDDIN



PROF. Ir. Dr. ABD. RAHIM ABU TALIB



Ir. MOHD NORAMIL MOHD DARIL



Ir. HAMZAH HASHIM



Ir. ABDUL RAZAK YAKOB



Ir. JANARI SEKELI



PROF. Ir. Dr. ROZITA YUSOFF



Ir. NOR AZNITA YUSOF

THE STUDY ON

"GAJI PERMULAAN JURUTERA YANG RENDAH"



Fresh engineering graduates received **low starting salaries** in the **range of RM1,500 to RM2,000** for the **last 20 years.**

PROBLEM STATEMENT

METHODOLOGIES

OBJECTIVES OF STUDY

▪ **Surveys**

BEM, Engineering Organization, Engineering Consulting Association, HILs.

▪ **Secondary Data**

MOHE (SKPG), JPA, Statutory and Non-Statutory Bodies, Job Agencies.

▪ **Brainstorming**

Government Agencies, Engineering Associations/ Organizations.

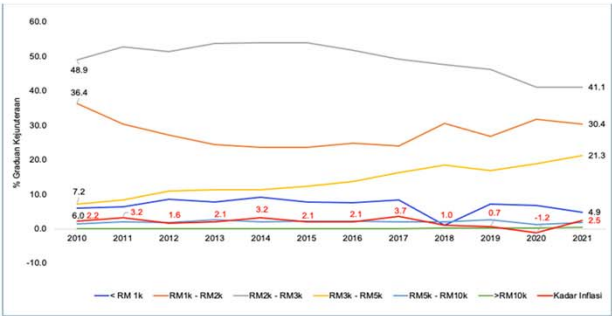
▪ **To identify the legitimacy** of the issue of low starting salaries for engineers.

▪ **To identify the root cause** of low starting salaries for engineers.

▪ **To provide recommendations and action plans** to improve the starting salary of engineers.

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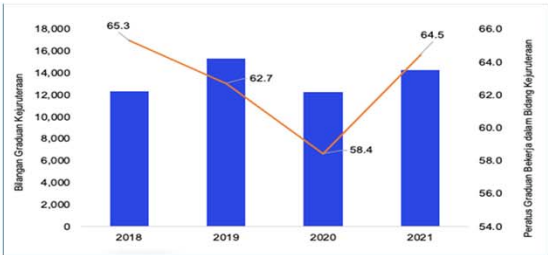
FINDINGS: ENGINEERS' STARTING SALARIES



Ref: SKPG, MOHE and DOSM

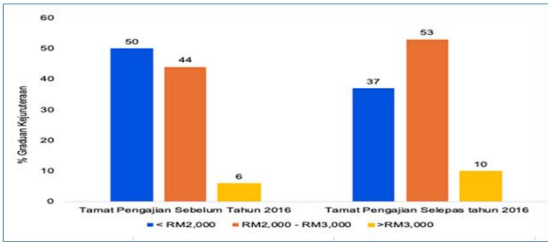
Range of starting salaries of engineering graduates (2010 – 2021)

- On average, **17,000** engineering students graduate from HLIs yearly. About **63%** work as engineers.
- 37%** of them received starting salaries < RM2,000 after the year 2016 (a reduction of 13% as compared to previous years).



Ref: SKPG, MOHE

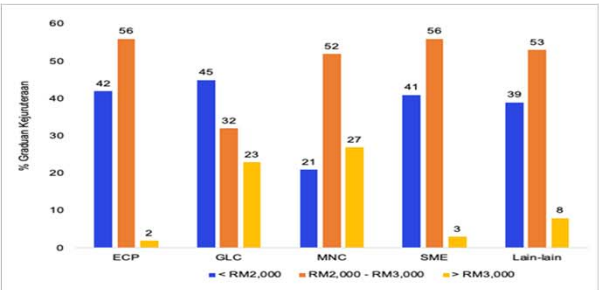
Engineering graduates working as engineers (2018 – 2021)



Ref: BEM Surveys

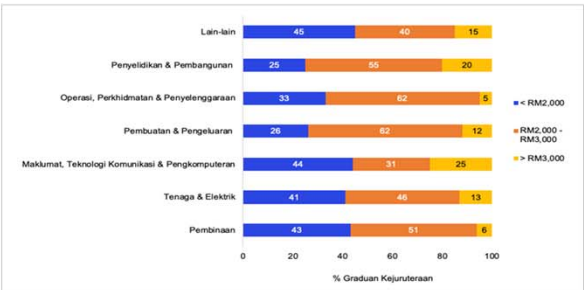
Comparison of starting salaries (before 2016 and after 2016)

ENGINEERS' STARTING SALARIES (CONT'D)



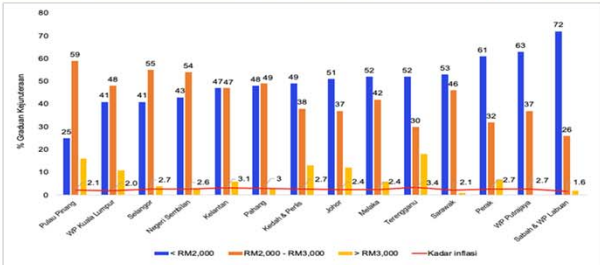
Ref: BEM Surveys

Range of starting salaries according to types of companies



Ref: BEM Surveys

Range of starting salaries according to industrial sectors



Ref: BEM Surveys, DOSM

Range of starting salaries according to working location

COMPARISON OF ENGINEERS' STARTING SALARIES GLOBALLY



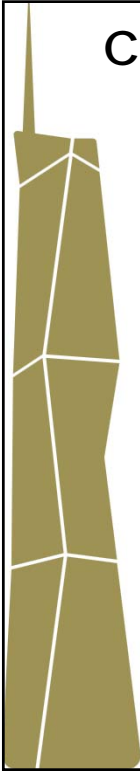
COUNTRY	STARTING SALARIES	STARTING SALARIES (RM)
BANGLADESH	BDT17,000 – BDT45,000	700 – 1,800
INDIA	INR33,000 – IND67,000	1,800 – 3,800
VIETNAM	VND11M – VND12M	2,000 – 2,200
MALAYSIA		2,000 – 3,500
INDONESIA	IDR9M – IDR19M	2,600 – 5,600
THAILAND	THB25,000 – THB37,000	3,200 – 4,700
BRUNEI	BND2,000 – BND5,000	7,000 – 17,500
SINGAPORE	SGD3,000 – SGD5,500	10,500 – 19,200
JAPAN	JPY410,000 – JPY660,000	12,600 – 20,300
AUSTRALIA	AUD5,400 – AUD6,300	16,800 – 19,600
USA	USD4,500 – USD7,000	21,300 – 33,200
GERMANY	EUR4,500 – EUR7,000	22,800 – 35,600

Ref: Glassdoor, (2024). Graduate Engineers' Salaries


CURRENT STATUS OF ENGINEERS' STARTING SALARIES



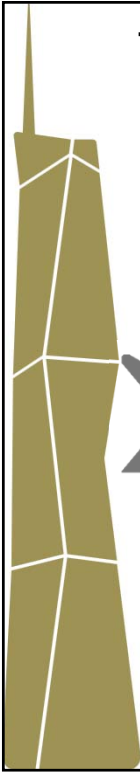
- Dasar Gaji Progresif – starting salaries ranging from RM2,195 to RM3,600.
- Selangor’s integrated circuit (IC) design park – offering fresh engineering graduates' salaries ranging from RM5,000 to RM6,000.




COMPARISON OF COMPENSATION OF EMPLOYEES (CE) GLOBALLY



COUNTRY	CE (%)
INDONESIA	14.6
THAILAND	20.7
PHILIPPINE	34.4
MALAYSIA	34.8
CAMBODIA	37.8
SINGAPORE	39.4
AUSTRALIA	47.7
CANADA	50.7
GERMANY	53.8



THE MAIN CAUSES OF LOW STARTING SALARIES



1. OVER SUPPLY

Oversupply of engineering graduates in certain industrial sectors - competition and exploitation by employers to reduce salaries.

2. AWARENESS

Lack of awareness of the scope of work of the engineering profession (Engineers, Engineering Technologists, and Technicians) - engineers take on the scope of work of technicians with low salaries.

3. COMPLIANCE

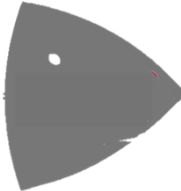
Employers offering engineer positions without the requirement of registration with the BEM in compliance with the Engineers Registration Act 1967 [Act 138] - resulted in no regulatory monitoring, lowering the value of the engineering profession.

4. BENCHMARK

Absence of benchmarks for engineers' starting salaries as a reference by the employers (at the time of the study).

5. SCALE OF FEES (CONSTRUCTION INDUSTRY)


Financial constraints based on company size and market pressure not to use the engineering scale of fee - forced employers to offer low starting salaries.



LOW STARTING SALARIES


Ref: BEM Surveys

WHITE PAPER AS THE PLATFORM FOR IMPROVING ENGINEERS' STARTING SALARIES



EMPOWERING ENGINEERING

- Consists of **five (5) chapters** on the findings of the study of "Gaji Jurutera yang Rendah" and recommendations to improve low starting salaries.
- Utilized/ cited various reliable data and references** (i.e. SKPG MOHE, BEM Annual Report, DOSM, Khazanah Research Institute, TalentCorp, etc.)
- Recommend **a total of 13 short-term action plans** and **long-term action plans**.



ACTION PLAN

IMPLEMENTATION

SHORT TERM

LONG TERM

1. Adjustment of starting salary.

2. Enforcement of engineering scale of fee compliance (applicable for construction industry only).

3. Improvement in supply and demand.


1. Catalysing Malaysia as a technology developer from a technology user.

ACTION BY RESPECTIVE PARTIES




OUTPUT

To improve the low starting salaries of engineers.

CHRONOLOGY OF THE DEVELOPMENT OF WHITE PAPER "GAJI PERMULAAN JURUTERA YANG RENDAH"



EMPOWERING ENGINEERING



1

8TH DECEMBER 2021

BEM Forum and Workshop on "GAJI PERMULAAN JURUTERA YANG RENDAH & KEBOLEHPASARAN JURUTERA DI MALAYSIA".

2

28TH OCTOBER 2022

BEM Convention and Workshop on "GAJI PERMULAAN JURUTERA YANG RENDAH".

3

24TH AUGUST 2023

BEM Convention and Workshop on "GAJI PERMULAAN JURUTERA YANG RENDAH".

4

8TH MARCH 2024

Action Plan Workshop on "GAJI PERMULAAN JURUTERA YANG RENDAH" with stakeholders and preparation of White Paper.

5

24TH APRIL 2024

Presentation of White Paper to BEM President.

6


27TH JUNE 2024

Presentation of White Paper to BEM Board Members.


7

8TH AUGUST 2024

Presentation of White Paper to Ministry of Works.



CONCLUSION



- On average, engineers received starting salaries in the **range of RM2,000 to RM3,500**, (industrial sector and public sector) - **denying claims that engineers received starting salaries in the range of RM1,500 to RM2,000 for the past 20 years.**
- Low starting salaries potentially contribute to the migration of highly skilled engineers to other countries - reducing the availability of locally capable engineers.
- A white paper on “Gaji Permulaan Jurutera yang Rendah” has been developed and consists of action plans to improve the starting salaries.





THANK YOU

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