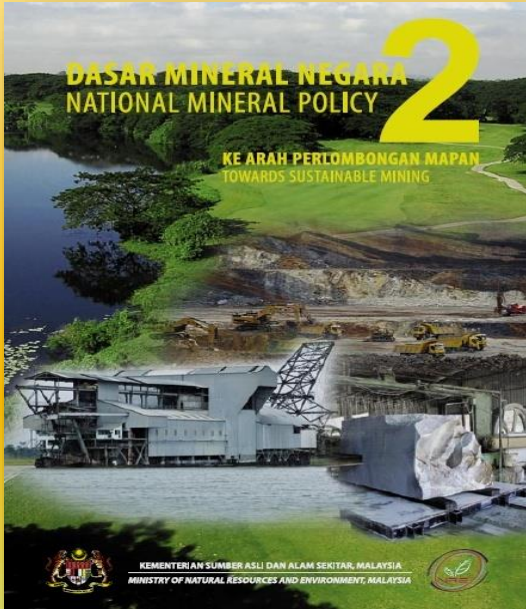


Malaysia's National Mineral Policy II: Assessment of its Impact and Effectiveness



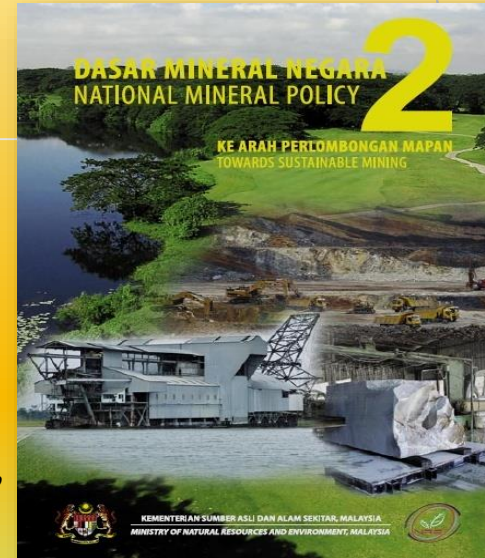
SHAHAR EFFENDI BIN ABDULLAH AZIZI

Deputy Director General

Department of Minerals and Geoscience (JMG)

DATO WAN MAZLAN MAHMOOD

Under Secretary (Minerals and Geoscience Division),
Ministry of Natural Resources and Environment



**ASIA PACIFIC MINERAL RESOURCE EXHIBITION AND CONFERENCE
(APMREC 2016)
PUTRA WORLD TRADE CENTRE (PWTC)
11 NOVEMBER 2016**

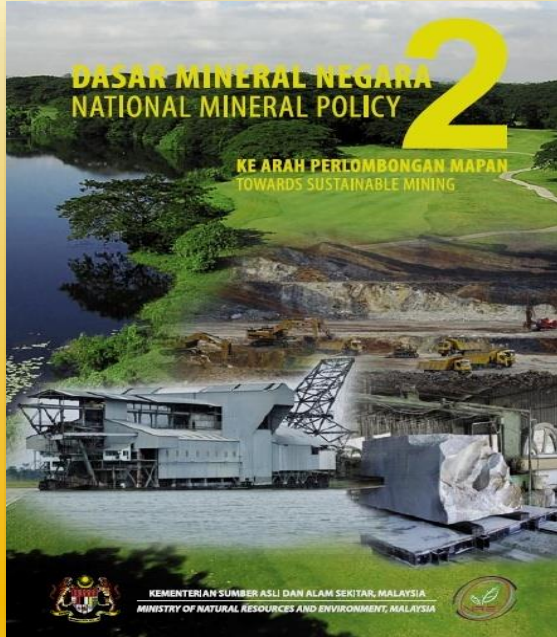
PRESENTATION FORMAT

- Introduction
- National Mineral Policy 2
- Methodology
- Findings
- Conclusion

INTRODUCTION

- The National Mineral Policy was first formulated in 1993 with assistance from UNDP to improve the mineral sector investment environment.
- NMP achieved some milestone but does not quite able to attract investors. Thus after a decade, the NMP was reviewed to ensure that mineral resources are developed in an environmentally sound, responsible and sustainable manner.
- The NMP2 was tabled at the National Mineral Council in 2008 and accepted by all the States.
- It was officially launched by the Minister of NRE on 9 January 2009.

NATIONAL MINERAL POLICY 2



Policy Statement

To enhance the contribution of the mineral sector to the socio-economic development of the nation through the **efficient, responsible and sustainable development** as well as the **optimum utilisation of mineral resources.**



Launching of DMN2 by the Minister of Natural Resources & Environment on 22 January 2009

Objectives

Thrusts

1. To ensure the sustainable development and optimum utilization of mineral resources.
2. To promote environmental stewardship that will ensure the nation's mineral resources are developed in an environmentally sound, responsible and sustainable manner.
3. To enhance the mineral sector's competitiveness and advancement in the global arena.
4. To enhance the use of local minerals and promote the further development of mineral-based products.
5. To encourage the recovery, recycling and reuse of metals and minerals.

- The National Mineral Policy 2 is supported by nine (9) major thrusts and 46 programs:
- Thrust 1: **Expansion of the Mineral Sector** (7 programs)
 - Thrust 2: **Conducive Business Climate** (6 programs)
 - Thrust 3: **Environmental Stewardship** (8 programs)
 - Thrust 4: **Research and Development (R&D) Enhancement** (5 programs)
 - Thrust 5: **Human Resource Development** (5 programs)
 - Thrust 6: **Establishment of Integrated Mineral Information** (3 programs)
 - Thrust 7: **Community Involvement and Social Responsibility** (5 programs)
 - Thrust 8: **Promotion, Marketing and Branding** (4 programs)
 - Thrust 9: **Publicity and Public Relations** (3 programs)

NMP2 IMPACT SURVEY

- ❑ Initiative taken by NRE in 2013 in response to the recommendation by MAMPU to monitor the implementation of the various policies formulated by the Ministry
- ❑ Altogether there were 391 respondents involving 4 categories of stakeholders
- ❑ The consultation session with the respondents were carried out between 21 October 2013 and 21st November 2013 at the various JMG offices including NRE.

METHODOLOGY

INSTRUMENT

PRIMARY DATA
- Questionnaire

ANALYSIS

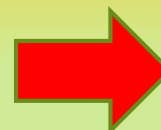
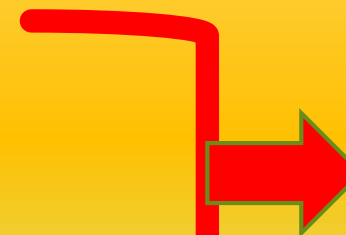
QUALITATIVE
QUANTITATIVE

FINDINGS

SHORT TERM
LONG TERM

SECONDARY DATA

DESKTOP STUDY



PRIMARY DATA (QUESTIONNAIRE)

- Based on the hypotheses that the nine (9) thrusts influenced the effectiveness of the NMP2
- Structured in line with the 4 category of respondents namely industry players, state government, enforcement agencies and others
- There are 4 sections in the questionnaire namely:
 - (i) *Information on respondent*, (ii) *Level of satisfaction on the NMP2 programs*,
 - (iii) *Level of satisfaction on the NMP Objectives*, and (iv) *Additional information*
- 5 point Linert scale analysis used in the questionnaire
- The questionnaire is considered as reliable as the value of Cronbach Alpha's coefficient is more than 0.7

Kategori Responden : A

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(Kegunaan pejabat)



**KEMENTERIAN SUMBER ASLI DAN ALAM SEKITAR
BAHAGIAN MINERAL DAN GEOSAINS**

**BORANG SOAL SELIDIK
KAJIAN IMPAK DASAR MINERAL NEGARA 2**

Tujuan kajian impak ini dijalankan adalah untuk mengukur tahap keberkesanan pelaksanaan Dasar Mineral Negara 2 yang dilancarkan pada tahun 2009. Borang soal selidik ini terdiri daripada **empat seksyen (seksyen I, II, III dan IV)** dan kerjasama tuan/ puan adalah dimohon untuk melengkapkan butiran yang tertera. Untuk makluman, Semua maklumat yang diberikan hanya untuk **kegunaan kajian ini sahaja**.

Semua maklumat adalah dianggap sulit dan akan diterbitkan dalam bentuk agregat sahaja

Seksyen I : Maklumat Responden

<p>NAMA: _____</p> <p>JAWATAN: _____</p> <p>NO. TELEFON: _____</p> <p>EMAIL: _____</p>	<p>NAMA ORGANISASI:</p> <p>NEGERI:</p>
----------------------------------------------------------------------------------------	-------------------------------------------------------

Sila tandakan (/) pada ruangan jawapan yang disediakan.
 Please tick (/) in the space provided below.

Bil	Perkara	Jawapan										
1	Kategori anda dalam industri mineral. <i>Your category in the mineral industry.</i>	<input type="checkbox"/> Pengusaha <input type="checkbox"/> Pengeksport <input type="checkbox"/> Pekerja Industri <input type="checkbox"/> Kerajaan Negeri <input type="checkbox"/> Agensi Penguatkuasa <input type="checkbox"/> Universiti <input type="checkbox"/> Lain-lain (.....)										
2	Berapa tahun anda terlibat dalam industri? <i>How many years have you worked in industry?</i>	<input type="checkbox"/> < 1 tahun <input type="checkbox"/> 1 - 5 tahun <input type="checkbox"/> 5 - 10 tahun <input type="checkbox"/> > 10 tahun										
3	Tahap pemahaman anda mengenai Dasar Mineral Negara 2. <i>Level of your understanding of the National Mineral Policy 2.</i>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="5">Rendah.....Tinggi</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	Rendah.....Tinggi					1	2	3	4	5
Rendah.....Tinggi												
1	2	3	4	5								
4	Tahap pengetahuan anda mengenai program-program di bawah Dasar Mineral Negara 2. <i>Level of your knowledge about the programs under the National Mineral Policy 2.</i>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="5">Rendah.....Tinggi</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	Rendah.....Tinggi					1	2	3	4	5
Rendah.....Tinggi												
1	2	3	4	5								
5	Nyatakan dari mana anda mendapat pendedahan mengenai Dasar Mineral Negara 2. <i>State from which you gain exposure on National Mineral Policy 2.</i>	<input type="checkbox"/> Universiti <input type="checkbox"/> Jabatan Mineral dan Geosains (JMG) <input type="checkbox"/> Bahagian Mineral dan Geosains (BMG) <input type="checkbox"/> Lain-lain (.....)										

Seksyen 1 : Maklumat Responden

<p>NAMA: _____</p> <p>JAWATAN: _____</p> <p>NO. TELEFON: _____</p> <p>EMAIL: _____</p>	<p>NAMA ORGANISASI:</p> <p>NEGERI:</p>
----------------------------------------------------------------------------------------	---------------------------------------------------

Sila tandakan (/) pada ruangan jawapan yang disediakan.
 Please tick (/) in the space provided below.

Bil	Perkara	Jawapan								
1	Kategori anda dalam industri mineral. <i>Your category in the mineral industry.</i>	<input type="checkbox"/> Pengusaha <input type="checkbox"/> Pengeksport <input type="checkbox"/> Pekerja Industri <input type="checkbox"/> Kerajaan Negeri <input type="checkbox"/> Agensi Penguatkuasa <input type="checkbox"/> Universiti <input type="checkbox"/> Lain-lain (.....)								
2	Berapa tahun anda terlibat dalam industri? <i>How many years have you worked in industry?</i>	<input type="checkbox"/> < 1 tahun <input type="checkbox"/> 1 - 5 tahun <input type="checkbox"/> 5 - 10 tahun <input type="checkbox"/> > 10 tahun								
3	Tahap pemahaman anda mengenai Dasar Mineral Negara 2. <i>Level of your understanding of the National Mineral Policy 2.</i>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">Rendah.....</td> <td colspan="2">Tinggi</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>5</td> </tr> </table>	Rendah.....		Tinggi		1	2	3	5
Rendah.....		Tinggi								
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Rendah.....		Tinggi								
1	2	3	5							
5	Nyatakan dari mana anda mendapat pendedahan mengenai Dasar Mineral Negara 2. <i>State from which you gain exposure on National Mineral Policy 2.</i>	<input type="checkbox"/> Universiti <input type="checkbox"/> Jabatan Mineral dan Geosains (JMG) <input type="checkbox"/> Bahagian Mineral dan Geosains (BMG) <input type="checkbox"/> Lain-lain (.....)								

Seksyen II : Tahap Keberkesanan Program DMN2

Sila bulatkan tahap persetujuan anda terhadap pernyataan di bawah mengikut skala jawapan pada ruangan maklum balas

Please circle your level of agreement to the statement below



Skala Jawapan

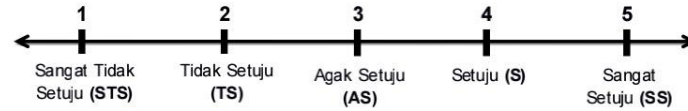
Bil.	Keberkesanan	Maklum Balas				
		STS	TS	AS	S	SS
1	Aktiviti perlombongan diberi keutamaan guna tanah pertama berbanding aktiviti ekonomi lain. <i>Mining activities are given first priority land use than other economic activities.</i>	1	2	3	4	5
2	Lebih banyak kawasan telah diperuntukkan untuk tujuan cari gali dan pembangunan lombong dan kuari. <i>More areas have been allocated for exploration and development of mines and quarries.</i>	1	2	3	4	5
3	Perancangan bersepadu guna tanah giat dilaksanakan bagi mengelakkan pemajiran mineral. <i>Integrated planning of land use has been carried out in order to avoid sterilization of mineral.</i>	1	2	3	4	5
4	Terdapat peningkatan aktiviti penyiasatan dan pemetaan sumber mineral termasuk di persisiran pantai. <i>There is increased activity in the investigation and mapping of mineral resources including coastal areas.</i>	1	2	3	4	5
5	Permohonan lesen melombong tuan punya di atas tanah beri milik mudah mendapat kelulusan. <i>Mining license application for the owner of the land alienated easy to approved.</i>	1	2	3	4	5

Bil.	Keberkesanan	Maklum Balas				
		STS	TS	AS	S	SS
	<i>Promotional and marketing activities of minerals and mineral-based products are actively implemented.</i>					
39	Aktiviti promosi produk berasaskan mineral yang dijalankan berjaya mendapat tempat khusus di pasaran tempatan dan global. <i>Promotional activities conducted on Mineral-based products successfully got a special market in the local and global.</i>	1	2	3	4	5
40	Kutipan levi atau ses penting untuk membiayai usaha pemasaran dan aktiviti promosi produk mineral. <i>Collection of levies or cess to fund marketing and promotional activities of mineral products is important.</i>	1	2	3	4	5
41	Maklumat mengenai kepentingan dan sumbangan sektor mineral telah disebarkan secara efektif kepada pihak awam. <i>Information on the importance and contribution of the mineral sector has been effectively disseminated to the public.</i>	1	2	3	4	5
42	Media, organisasi bukan kerajaan dan semua pihak berkepentingan telah memainkan peranan secara efektif dalam meningkatkan kesedaran awam terhadap industri mineral. <i>Media, non-governmental organizations and all stakeholders have played an effective role in increasing public awareness of the mineral industry.</i>	1	2	3	4	5
43	Usaha penjenamaan semula industri mineral memerlukan kerjasama erat antara pengusaha dan kerajaan. <i>Rebranding effort of mineral industry requires close cooperation between the operators and the government.</i>	1	2	3	4	5
44	Individu atau organisasi yang telah menyumbang kepada sektor mineral diberi pengiktirafan sewajarnya. <i>Individuals or organizations that have contributed to the mineral sector are given due recognition.</i>	1	2	3	4	5

Seksyen III : Tahap Keberkesanan DMN2

Sukacita tuan/ puan dimohon untuk membulatkan tahap persetujuan tuan/ puan terhadap pernyataan di bawah mengikut skala pada ruangan maklum balas

Please circle your level of agreement to the statement below



Skala Jawapan

Bil	Keberkesanan	Maklum Balas				
		STS	TS	AS	S	SS
1	Sumber mineral negara telah digunakan secara mampan. <i>The mineral resources in Malaysia have been used sustainably.</i>	1	2	3	4	5
2	Sumber mineral negara telah dibangunkan secara mesra alam dan bertanggungjawab. <i>Mineral resources in Malaysia have been developed in an environmentally sound and responsible manner.</i>	1	2	3	4	5
3	Kemajuan sektor mineral negara berdaya saing di peringkat global. <i>Advancement of the mineral sector in Malaysia is globally competitive.</i>	1	2	3	4	5
4	Penggunaan mineral dan produk berasaskan mineral tempatan meningkat. <i>The use of mineral and mineral based products is increasing.</i>	1	2	3	4	5
5	Kesedaran mengenai perolehan, kitar semula dan guna semula logam serta mineral meningkat. <i>Awareness about the recovery, recycling and reuse (3R) of metals and minerals has increased.</i>	1	2	3	4	5

Seksyen IV : Maklumat Tambahan Organisasi

1. Bilangan program yang melibatkan komuniti setempat dalam setahun (CSR).
Number of programs involving local communities in a year.

Tiada < 2 2 - 5 6 -10 >10

2. Bilangan perjumpaan bersama komuniti bagi meningkatkan tahap kesedaran.
Number of engagements with the community to increase awareness.

Tiada < 2 2 - 5 6 -10 >10

3. Jumlah peruntukan yang disediakan oleh organisasi untuk aktiviti penyelidikan dan pembangunan (R&D) pada tahun 2012.
How much of your company's annual fund was allocated for research and development activities in 2012.

<input type="checkbox"/> < RM50K	<input type="checkbox"/> RM501K – RM1M
<input type="checkbox"/> RM50K - RM100K	<input type="checkbox"/> RM1.1M - RM5M
<input type="checkbox"/> RM101K - RM500K	<input type="checkbox"/> > RM5M

4. Adakah organisasi anda terlibat dengan aktiviti kitar semula produk berasaskan mineral?
Is your organisation involved in recycle activities for mineral-based product?

Ya Tidak

5. Penambahbaikan yang perlu dilakukan pada Dasar Mineral Negara 2 bagi meningkatkan industri perlombongan dan pengkuarian.
Improvements that need to be done on National Mineral Policy 2 to increase the mining and quarrying industry.

Pihak Bahagian Mineral dan Geosains, Kementerian Sumber Asli dan Alam Sekitar
merakamkan setinggi-tinggi penghargaan dan terima kasih di atas kerjasama tuan/ puan melengkapkan borang soal selidik ini.

QUALITATIVE DATA ANALYSIS

Four types of analysis:-

- **Demographic Analysis**
- **Min Analysis**
- **Correlation Analysis**
- **Importance Performance Analysis**

IMPORTANT PERFORMANCE ANALYSIS

IMPORTANCE

QUADRANT I
HIGH PRIORITY
LOW SATISFACTION

Concentrate here. Requires immediate attention.

QUADRANT II
HIGH PRIORITY
HIGH SATISFACTION

Maintain performance

QUADRANT III
LOW PRIORITY
LOW SATISFACTION

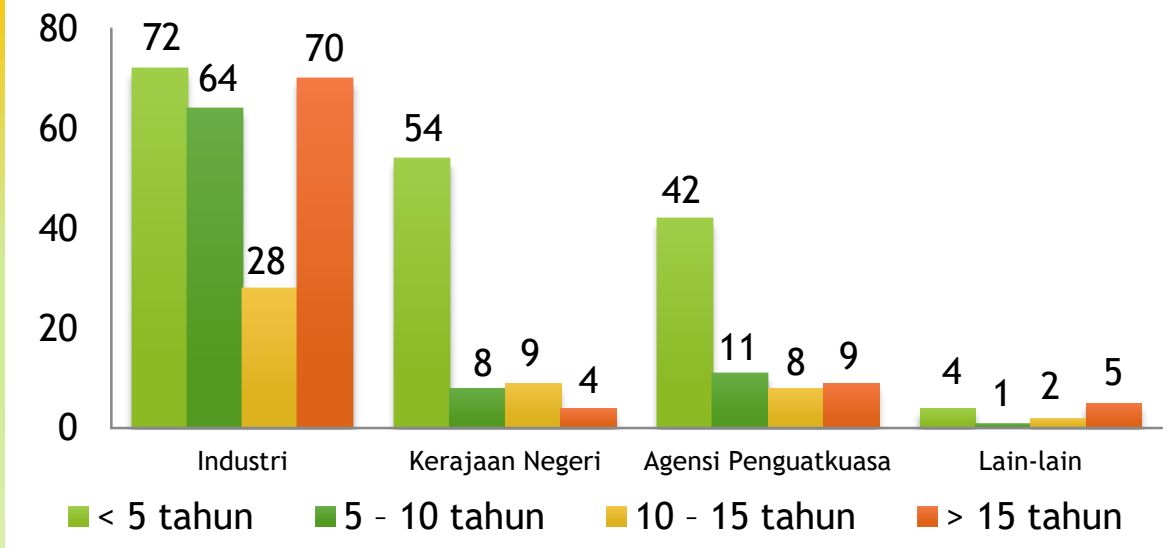
Low priority.

QUADRANT IV
LOW PRIORITY
HIGH SATISFACTION

No need to give too much attention here

SATISFACTION

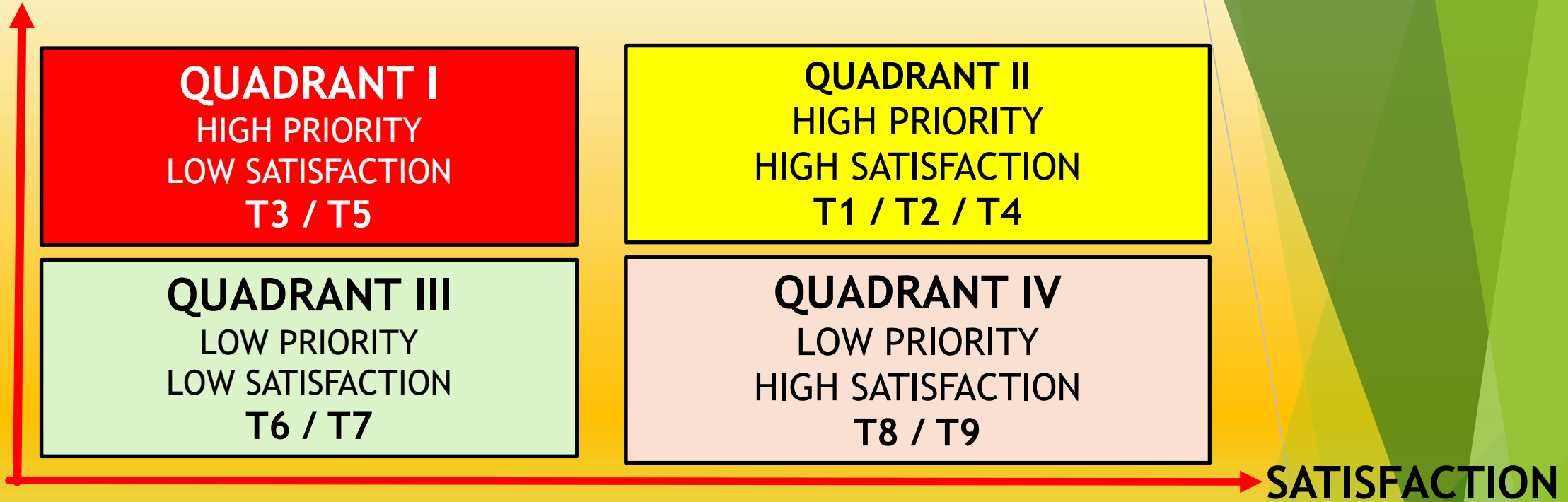
Category	Number	Peratus (%)	Group	Industry players	State Govt	Enforcem't Agency	Others
Industry players	234	59.8	Top Middle Support Total	170 (72.6%)	22 (29.3%)	23 (32.9%)	12 (100%)
State Govt	75	19.2		56 (23.9%)	36 (48%)	40 (57.1%)	0
Enforcement Agency	70	17.9		8 (3.4%)	17 (22.7%)	7 (10%)	0
Others (IHL)	12	3.1		234 (100%)	75 (100%)	70 (100%)	12 (100%)
Total	391	100					



FINDINGS – DEMOGRAPHIC ANALYSIS

OVERALL - NATIONAL MINERAL POLICY2

IMPORTANCE

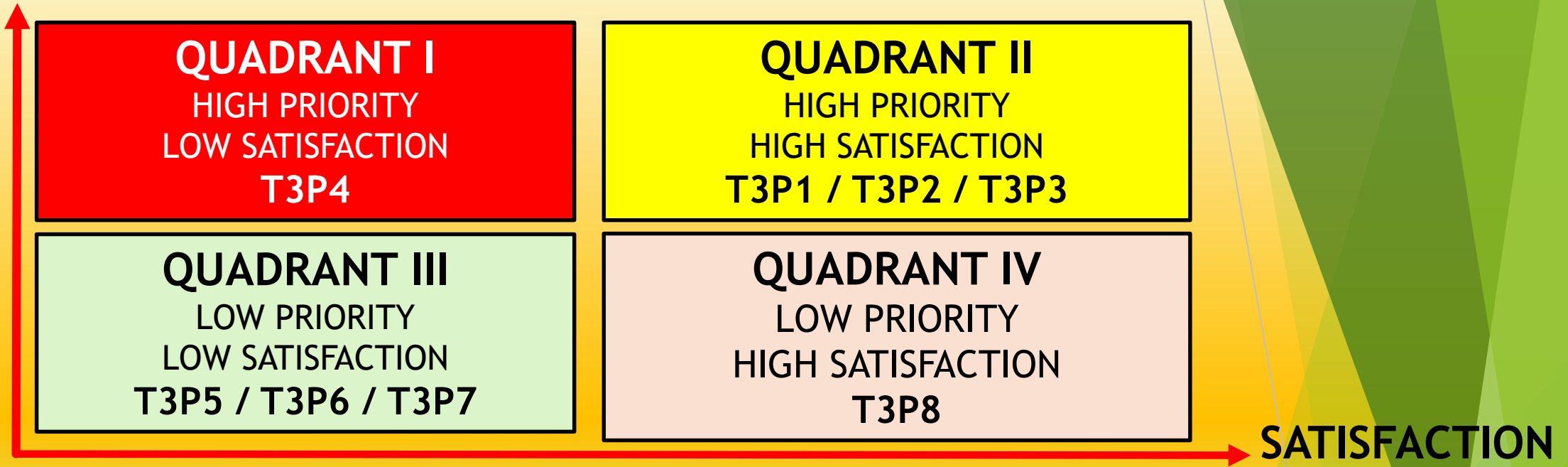


T1: Expansion of the mineral sector
T2: Conducive business climate
T3: Environmental stewardship
T4: R&D enhancement
T5: Human resource development

T6: Establishment of integrated mineral information
T7: Community Involvement & Social Responsibility
T8: Promotion, marketing & branding
T9: Publicity & public relations

THRUST 3 - ENVIRONMENTAL STEWARDSHIP

IMPORTANCE



T3P1: Implement regulatory/self regulatory environmental management measures including EIA and environmental audit

T3P2: Comply with national & state policies, physical plans

T3P3: Comply with national & international standards, codes, guidelines

T3P4: Implement progressive and post mining rehabilitation

T3P5: Promote 3R of minerals, metals and mineral-based products

T3P6: Implement effective mine waste management measures

T3P7: Promote best mining practices, public disclosure & CSR

T3P8: Implement Mine Safety and Health Management Plan

THRUST 5 - HUMAN RESOURCE DEVELOPMENT

IMPORTANCE

QUADRANT I
HIGH PRIORITY
LOW SATISFACTION
T5P2

QUADRANT II
HIGH PRIORITY
HIGH SATISFACTION
T5P1

QUADRANT III
LOW PRIORITY
LOW SATISFACTION
T5P3 / T5P4

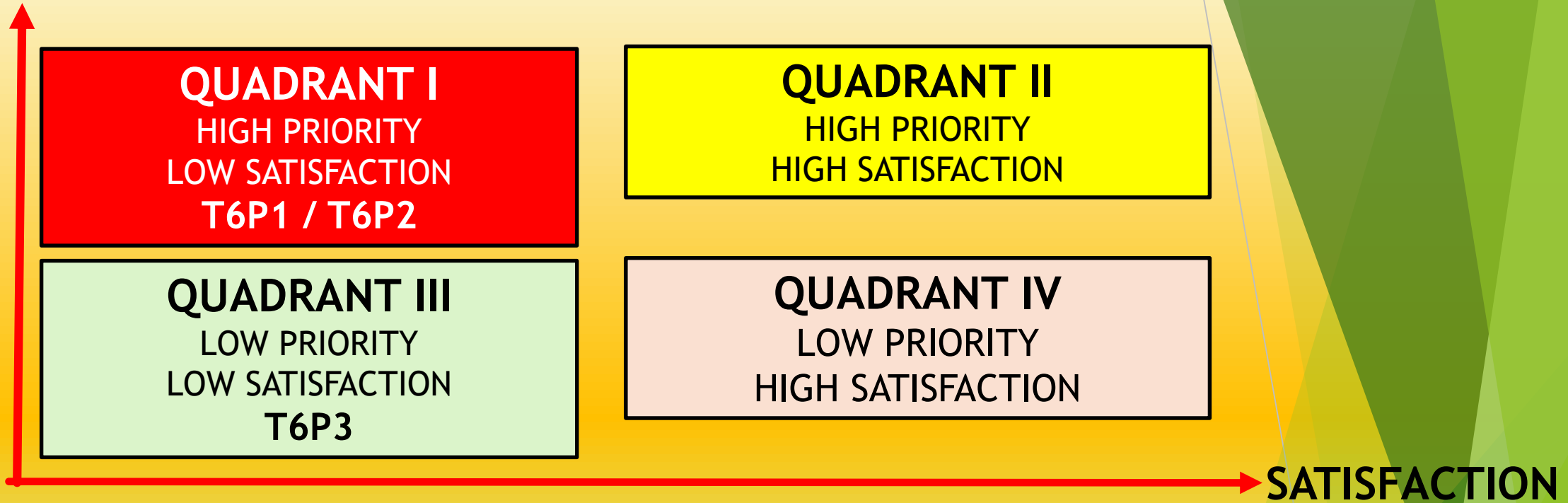
QUADRANT IV
LOW PRIORITY
HIGH SATISFACTION

SATISFACTION

T5P1: Design, formulation and promotion of relevant training and educational program
T5P2: Adequate scholarships, grants, bursaries, loans and other incentives
T5P3: Retraining and skills upgrading programmes and refresher courses
T5P4: Establish a mineral industry training fund

THRUST 6 - ESTABLISHMENT OF INTEGRATED MINERAL INFORMATION

IMPORTANCE



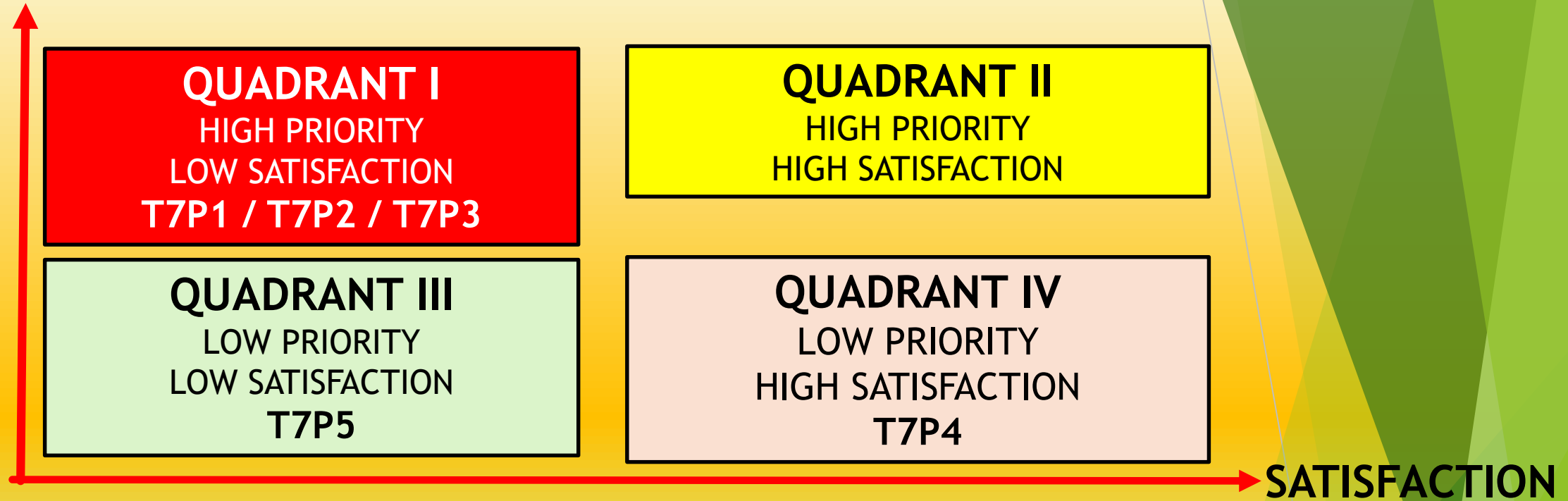
T6P1: Establish a national centre for collection, collation, integration and dissemination of data and information on mineral resources, sustainability, environmental information and others

T6P2: Strengthen database linkages and networking with other relevant agencies

T6P3: Adequate training, facilities and infrastructure for database management

THRUST 7 - COMMUNITY INVOLVEMENT AND SOCIAL RESPONSIBILITY

IMPORTANCE



T7P1: Create workable social adjustment strategy involving all stakeholders

T7P2: Establish enduring relationship between the mine operation and the surrounding community

T7P3: Adequate social, safety, health and educational services to the society

T7P4: Establish joint consultative committee between mine operator and stakeholders from the planning stage

T7P5: Implement Social Impact Assessment on mineral operations

4 main issues raised by respondents during the interview:-

- ❑ Importance of “institutional memory” as a record and reference on government policies
- ❑ Tenure period of mineral tenements
- ❑ Buffer zone for quarries and mines
- ❑ One stop center for quarries and mines application

CONCLUSION

- In general, the NMP2 gives a positive impact on the mining and quarrying industry
- Importance-Performance Analysis (IPA) is a simple tool that can help identify which thrust should be improved to increase overall stakeholders satisfaction.
- Attention should be given to those thrusts under the Quadrant I IPA which are Environmental Stewardship (thrust 3) and Human Resource Development (thrust 5) as well as those under Quadrant III IPA which are Establishment of Integrated Information (thrust 6), and CSR (thrust 7).
- Those 4 issues raised by the respondents during the interview should be addressed.
- The implementation of NMP2 should be monitored regularly



Sunway Lagoon Resort, Kuala Lumpur



The Mines Hotel and Resort, Kuala Lumpur



THANK YOU



Lake Titiwangsa, Kuala Lumpur
(mining rehabilitated area)



Fraser's Hill Golf Course, Pahang State