

Jabatan
Alam Sekitar



BAB / CHAPTER 1



Department of
Environment



MESYUARAT ANTARA MENTERI SAINS, TEKNOLOGI DAN ALAM SEKITAR DENGAN MENTERI-MENTERI DAN AHLI-AHLI MESYUARAT KERAJAAN NEGERI YANG BERTANGGUNGJAWAB KE ATAS HAL EHWAL ALAM SEKITAR (MEXCOE)

Mesyuarat ke 23 antara Menteri Sains, Teknologi dan Alam Sekitar dengan Menteri-Menteri dan Ahli-Ahli Mesyuarat Kerajaan Negeri Yang Bertanggungjawab Ke atas Hal Ehwat Alam Sekitar (MEXCOE) telah diadakan pada 21 Oktober, 2003 di Kluang, Johor bersempena dengan sambutan Minggu Alam Sekitar Malaysia yang telah dilancarkan di Kluang, Johor.

Mesyuarat telah mempertimbangkan dan memaklumkan mengenai perkara-perkara berikut:

- keperluan mengenakan syarat EIA bagi semua aktiviti pembalakan sebelum diluluskan oleh Kerajaan Negeri.
- pewartaan zon larangan pembakaran terbuka di sekitar Lapangan Terbang Antarabangsa Kuala Lumpur (KLIA).

MEXCOE juga bersetuju mulai 2004, sambutan Minggu Alam Sekitar Malaysia (MASM) akan dilaksanakan di peringkat negeri untuk meningkatkan penglibatan pelbagai peringkat.

Ahli-ahli MEXCOE bagi tahun 2003 adalah seperti berikut:

- **Y.B. Dato' Seri Law Hieng Ding**
Menteri Sains, Teknologi dan Alam Sekitar
- Pengerusi
- **Y.B. Dato' Hj. Zainal bin Dahalan**
Timbalan Menteri Sains, Teknologi dan Alam Sekitar

MEETING BETWEEN THE MINISTER OF SCIENCE, TECHNOLOGY AND THE ENVIRONMENT WITH STATE MINISTERS AND STATE EXECUTIVE COUNCILLORS RESPONSIBLE FOR ENVIRONMENTAL MATTERS (MEXCOE)

The 23rd Meeting between the Minister of Science, Technology and the Environment with State Ministers and State Executive Councillors responsible for Environmental Matters (MEXCOE) was held on 21 October 2003 at Kluang, Johor in conjunction with Malaysia Environment Week 2003 which was launched in Kluang, Johor.

The meeting deliberated and took note of the following:

- the need to ensure compliance with EIA conditions for logging activities prior to State Government approval.
- gazettelement of the no open burning zone around the Kuala Lumpur International Airport;

MEXCOE also agreed that beginning 2004, Malaysia Environment Week (MASM) celebrations would be at the State level to enhance participation at all levels.

MEXCOE members for 2003 were as follows:

- **Y.B. Dato' Seri Law Hieng Ding**
Minister of Science, Technology and the Environment
- Chairman
- **Y.B. Dato' Hj. Zainal bin Dahalan**
Deputy Minister of Science, Technology and the Environment

- **Y.B. Datuk Chong Kah Kiat**
Menteri Pembangunan Pelancongan, Alam Sekitar, Sains dan Teknologi Negeri Sabah
- **Y.B. Datuk William Mawan Ikom**
Menteri Alam Sekitar dan Kesihatan Awam Negeri Sarawak
- **Y.B. Dato' Ho Cheng Wang**
Pengerusi, Jawatankuasa Kesihatan, Sains, Teknologi dan Alam Sekitar Negeri Perak
- **Y.B. Datuk Dr. Teng Hock Nan**
Pengerusi, Jawatankuasa Kerajaan Tempatan, Alam Sekitar dan Pengurusan Lalulintas Negeri Pulau Pinang
- **Y.B. Dato' Dr. Chua Soi Lek**
Pengerusi, Jawatankuasa Pelancongan dan Alam Sekitar Negeri Johor
- **Y.B. Dato' Beh Heng Seong**
Pengerusi, Jawatankuasa Pengangkutan, Tenaga dan Komunikasi, Sains, Teknologi dan Alam Sekitar Negeri Kedah
- **Y.B. Tuan Haji Md. Isa bin Sabu**
Pengerusi, Jawatankuasa Pelancongan, Kebudayaan, Kesenian dan Alam Sekitar Negeri Perlis
- **Y.B. Datuk Wira Poh Ah Tiam**
Pengerusi, Jawatankuasa Perumahan, Kerajaan Tempatan dan Alam Sekitar Negeri Melaka
- **Y.B. Dato' Peter Lai Yit Fee**
Pengerusi, Jawatankuasa Bertindak Sains, Alam Sekitar dan Sumber Manusia Negeri Sembilan
- **Y.B. Dato' Haji Mohd. Mokhtar bin Haji Ahmad Dahlan**
Pengerusi, Jawatankuasa Tetap Kerajaan Tempatan, Setinggan dan Alam Sekitar Negeri Selangor
- **Y.B. Datuk Chong Kah Kiat**
Minister of Tourism Development, Environment, Science and Technology, Sabah
- **Y.B. Datuk William Mawan Ikom**
Minister of Environment and Public Health, Sarawak
- **Y.B. Dato' Ho Cheng Wang**
Chairman of Health, Science, Technology and Environment Committee, Perak
- **Y.B. Datuk Dr. Teng Hock Nan**
Chairman of Local Authority, Environment and Road Traffic Management Committee, Penang
- **Y.B. Dato' Dr. Chua Soi Lek**
Chairman of Tourism and Environment Committee, Johor
- **Y.B. Dato' Beh Heng Seong**
Chairman of Transport, Energy and Communication, Science, Technology and Environment Committee, Kedah
- **Y.B. Tuan Haji Md. Isa bin Sabu**
Chairman of Tourism, Culture, Arts and Environment Committee, Perlis
- **Y.B. Datuk Wira Poh Ah Tiam**
Chairman of Housing, Local Authority and Environment Committee, Melaka
- **Y.B. Dato' Peter Lai Yit Fee**
Chairman of Science, Environment and Human Resource Action Committee, Negeri Sembilan
- **Y.B. Dato' Haji Mohd. Mokhtar bin Haji Ahmad Dahlan**
Chairman of Local Government, Squatters and Environment Committee, Selangor

- **Y.B. Dato' Kan Tong Leong**
Pengerusi, Jawatankuasa Kerajaan Tempatan,
Alam Sekitar Dan Pembangunan Perbandaran
Negeri Pahang
- **Y. Bhg. Kol. Datuk Mohamad Shaid Bin
Mohamad Taufek**
Datuk Bandar, Dewan Bandaraya Kuala Lumpur
- **Y.Bhg. Dato' Ramli bin Abdul Rahman**
Pengarah, Jabatan Pembangunan Persekutuan
Negeri Kelantan
- **Y.Bhg. Encik Mukhtar Bin Abdullah**
Pengarah, Jabatan Pembangunan Persekutuan
Negeri Terengganu
- **Y.B. Dato' Kan Tong Leong**
Chairman of Local Authority, Environment and Urban
Development Committee, Pahang
- **Y. Bhg. Kol. Datuk Mohamad Shaid Bin
Mohamad Taufek**
Mayor, Dewan Bandaraya Kuala Lumpur
- **Y.Bhg. Dato' Ramli bin Abdul Rahman**
Director, Department of Federal Development,
Kelantan
- **Y.Bhg. Encik Mukhtar Bin Abdullah**
Director, Department of Federal Development,
Terengganu

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Jabatan
Alam Sekitar



BAB / CHAPTER 2



Department of
Environment



MAJLIS KUALITI ALAM SEKELILING

1. Dalam tahun 2003, Majlis Kualiti Alam Sekeliling telah bermesyuarat sebanyak empat (4) kali dan dipengerusikan oleh Y. Bhg. Dato' Kok Wee Kiat.
 - Mesyuarat Bilangan Ke-84 telah diadakan pada 18 Februari 2003 di Sutera Harbour & SPA, Kota Kinabalu, Sabah.
 - Mesyuarat Bilangan Ke-85, 86 dan 87 telah diadakan di Bilik Cempaka, Aras 6, Pejabat Jabatan Alam Sekitar, Putrajaya pada 20 Mei, 18 Ogos dan 18 November 2003.

2. Beberapa perubahan ahli telah berlaku dalam tahun 2003. Encik Lim Sum Teck telah menggantikan Tuan Haji Aliasak bin Haji Ambia yang mewakili industri getah, Dr. Ibrahim Abu Ahmad telah menggantikan En. Zainal Azman bin Seman mewakili Ketua Setiausaha Kementerian Perdagangan Antarabangsa dan Industri, Tuan Haji Zakaria bin Bahari telah menggantikan Cik Lim Yuk Hua dari Kementerian Pengangkutan. Prof. Madya Dr. Mohd. Nasir Bin Hassan telah dilantik sebagai ahli gantian baru menggantikan Prof. Nordin Hassan yang telah menarik diri. EQC merakamkan penghargaan kepada semua atas sumbangan mereka.

4. Antara perkara-perkara yang dibentangkan dalam tahun 2003 adalah seperti berikut:

ENVIRONMENTAL QUALITY COUNCIL (EQC)

1. The Environmental Quality Council (EQC) held four (4) meetings in 2003 chaired by Y. Bhg. Dato' Kok Wee Kiat.
 - The 84th Meeting was held on 18 February 2003 at the Sutera Harbour Resort, Kota Kinabalu, Sabah.
 - The 85th, 86th and 87th Meetings were held at the Department of Environment, Putrajaya on 20 May, 18 August and 18 November 2003 respectively.

2. There were some changes of EQC membership in 2003. Mr. Lim Sum Teck replaced Tuan Haji Aliasak bin Haji Ambia as the representative of the Rubber-Industry; Dr. Ibrahim Abu Ahmad replaced En. Zainal Azman bin Abu Seman as the representative of the Secretary-General of the Ministry of International Trade and Industries; Tuan Haji Zakaria bin Bahari replaced Miss Lim Yuk Hua as the representative of the Ministry of Transport. Asso. Prof Dr. Mohd. Nasir bin Hassan was elected as the new alternative member replacing Prof. Nordin Hassan who had voluntarily resigned. EQC recorded its appreciations to past members for their contributions and welcomed the new representatives.

4. Among the matters brought to the EQC in 2003 were as follows:

Kertas EQC Bil.1/87/2003
Kertas oleh Kementerian Kesihatan Malaysia

- Kesihatan Alam Sekitar

EQC Paper No. 1/87/2003 by Ministry of Health

- Environmental Health

Kertas EQC Bil.2/87/2003
Kertas oleh Ahli EQC, Ir. Gurmit Singh K.S.

- Kecekapan Penggunaan Tenaga Di Malaysia

EQC Paper No. 2/87/2003 by EQC Member Ir. Gurmit Singh K.S.

- Energy Usage Efficiency In Malaysia

Kertas EQC Bil.1/86/2003
Kertas oleh Jabatan Alam Sekitar

- Cadangan Pindaan Peraturan-peraturan Kualiti Alam Sekeliling (Pengurusan Refigeran) 1999

EQC Paper No. 1/86/2003 by Department of Environment

- Proposal for amendments to the Environmental Quality (Refrigerant Management) Regulations 1999

Kertas EQC Bil.1/85/2003
Kertas oleh Jabatan Alam Sekitar

- Cadangan Peraturan Baru: Peraturan-peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2003

EQC Paper No. 1/85/2003 by Department of Environment

- Proposal for amendments to Environmental Quality (Scheduled Waste) Regulations

Kertas Makluman EQC Bil.2/85/2003
Kertas oleh Jabatan Alam Sekitar

- Cadangan Penganugerahan Bandar Lestari

EQC Paper No. 2/85/2003 by Department of Environment

- Proposal for Sustainable City - Environment Award

Kertas EQC Bil.3/85/2003
Kertas oleh Jabatan Pengairan dan Saliran

- Taklimat oleh Jabatan Pengairan dan Saliran

EQC Paper No. 3/85/2003

- Briefing by Department of Drainage and Irrigation

Kertas EQC Bil.4/85/2003
Kertas oleh Jabatan Perikanan

- Taklimat oleh Jabatan Perikanan

EQC Paper No. 4/85/2003

- Briefing by Fisheries Department

Kertas EQC Bil.5/85/2003
Kertas oleh MARDI

- Taklimat oleh MARDI

EQC Paper No. 5/85/2003

- Briefing by MARDI

Kertas Makluman EQC Bil.1/84/2003
Kertas oleh Jabatan Alam Sekitar

- Kertas Makluman Mengenai Cadangan Peningkatan Kualiti Minyak Kenderaan

EQC Paper No. 1/84/2003 by Department of Environment

- Information Paper on Proposal to Upgrade Fuel Quality

Kertas EQC Bil.2/84/2003

Kertas oleh Jabatan Alam Sekitar

- Cadangan Mengkaji Semula Kriteria-kriteria Pemilihan Bagi Anugerah Langkawi

EQC Paper No. 2/84/2003 by Department of Environment

- Proposal To Review the Selection Criteria For Langkawi Award

Kertas EQC Bil.3/84/2003

Kertas oleh Jabatan Alam Sekitar

- Laporan Kajian Kesan Kepada Alam Sekitar (EIA) Akibat Penambakan Laut oleh Negara Singapura

EQC Paper No. 3/84/2003 by Department of Environment

- EIA Report on Sea Reclamation by Singapore

Kertas EQC Bil.4/84/2003

Kertas oleh Jabatan Alam Sekitar

- Cadangan Projek Pembinaan Loji Rawatan "Thermal" Sisa Pepejal Di Broga, Selangor Oleh Kementerian Perumahan Dan Kerajaan Tempatan

EQC Paper No. 4/84/2003 by Department of Environment

- Proposed Project on Construction of the Thermal Treatment System at Broga, Selangor by the Ministry of Housing and Local Government

Kertas EQC Bil.5/84/2003

Kertas oleh Bahagian Hal Ehwal Pengguna, Kementerian Perdagangan Dalam Negeri dan Hal Ehwal Pengguna

- Ke Arah Pengguna Lestari

EQC Paper No. 5/84/2003 by Consumer Affairs Division, Ministry of Domestic Trade And Consumer Affairs

- Towards Sustainable Consumerism

Kertas EQC Bil.6/84/2003

Kertas oleh Jabatan Konservasi Alam Sekitar, Sabah

- *"Policy And Strategies For Environmental Protection In Sabah"*

EQC Paper No. 6/84/2003 by Environmental Conservation Department, Sabah

- Policy And Strategies For Environmental Protection in Sabah

| Perwakilan Representative | Nama Name |
|---|--|
| Pengerusi EQC EQC Chairman | Dato' Kok Wee Kiat |
| Ketua Setiausaha Kementerian Sains, Teknologi dan Alam Sekitar Secretary General, Ministry of Science, Technology and the Environment | Dato' Leong Ah Hin |
| Ketua Setiausaha Kementerian Perdagangan Antarabangsa dan Industri atau wakilnya yang di beri kuasa Secretary-General, Ministry of Trade & Industry or his authorized representative | Dr. Ibrahim Abu bin Ahmad |
| Ketua Setiausaha Kementerian Perdagangan Dalam Negeri dan Hal Ehwal Pengguna atau wakilnya yang di beri kuasa Secretary-General, Ministry of Domestic Trade & Consumer Affairs or his authorized representative | Puan Normah Sheikh Abdullah |
| Ketua Setiausaha Kementerian Pertanian atau wakilnya yang di beri kuasa Secretary-General, Ministry of Agriculture or his authorized representative | Encik Lim Eng Siang |
| Ketua Setiausaha Kementerian Sumber Manusia Secretary-General Ministry of Human Resources or his authorized representative | Encik Omar bin Mat Piah |
| Ketua Setiausaha Kementerian Pengangkutan atau wakilnya yang di beri kuasa Secretary-General, Ministry of Transport or his authorized representative | Tuan Haji Zakaria bin Bahari |
| Ketua Pengarah Kementerian Kesihatan Malaysia atau wakilnya yang di beri kuasa Director General, Ministry of Health or his authorized representative | Datuk Ir. Dr. Mukundan Sugunan Pillay |
| Wakil Kerajaan Negeri Sabah Representative from the Sabah Government | Datuk Monica Chia Mui Foong |
| Wakil Kerajaan Negeri Sarawak Representative from the Sarawak Government | Datu Haji Hamzah bin Haji Drahman |
| Wakil Industri Petroleum Representative from the Petroleum Industry | Encik Iqbal bin Abdullah |
| Wakil Industri Kelapa Sawit Representative from the Oil Palm Industry | Encik Teo Leng |
| Wakil Persekutuan Pekilang-Pekilang Malaysia Representative from the Federation of Malaysian Manufacturers | Tan Sri Datuk Clifford Francis Herbert |
| Wakil Industri Getah Representative from the Rubber Industry | Encik Lim Sum Teck |
| Wakil Kakitangan Akademik Representative from the Academic Staff of Universities or Colleges in Malaysia | Prof. Dr.Muhamad bin Awang |
| Wakil Pertubuhan Yang Berpengalaman Mengenai Alam Sekitar Representative from registered Societies knowledgeable and having interests in matters pertaining to the environment | Dato' Dr. Salleh bin Mohd. Nor |
| Wakil Pertubuhan Yang Berpengalaman Berhubung Alam Sekitar Representative from registered Societies knowledgeable and having interests in matters pertaining to the environment | Ir. Gurmit Singh K.S. |



Mesyuarat EQC ke-84 di Kota Kinabalu, Sabah, 18 Februari 2003
84th EQC Meeting in Kota Kinabalu, Sabah, 18 February 2003



Ahli EQC diberi taklimat mengenai pengurusan di Taman Laut Gayana, Sabah
Briefing to EQC members regarding management of Gayana Marine Park, Sabah

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Jabatan
Alam Sekitar



BAB / CHAPTER 3



Department of
Environment



PENGURUSAN SUMBER MANUSIA DAN KEWANGAN

Perjawatan

Sehingga 31 Disember 2003, jumlah anggota yang ada ialah seramai 973 orang terdiri daripada dua pegawai dalam kumpulan Pengurusan Tertinggi (JUSA), 172 Pegawai dalam kumpulan Pengurusan dan Profesional serta 801 orang kakitangan dalam kumpulan Sokongan. Ini juga termasuk 62% dari jumlah keseluruhan persetujuan peribadi di bawah pelaksanaan penstrukturan tahun 2002.

Peruntukan Kewangan dan Perbelanjaan

Jumlah peruntukan yang diterima bagi tahun 2003 adalah sebanyak RM102,799,495.00 iaitu penambahan sebanyak RM3,307,285.00 (3.32%) berbanding tahun sebelumnya. Daripada jumlah tersebut RM79,607,895.00 (77.44%) adalah peruntukan untuk perbelanjaan mengurus sementara baki RM23,191,600.00 (22.56%) merupakan peruntukan perbelanjaan pembangunan (Rajah 3.1 dan Rajah 3.2).

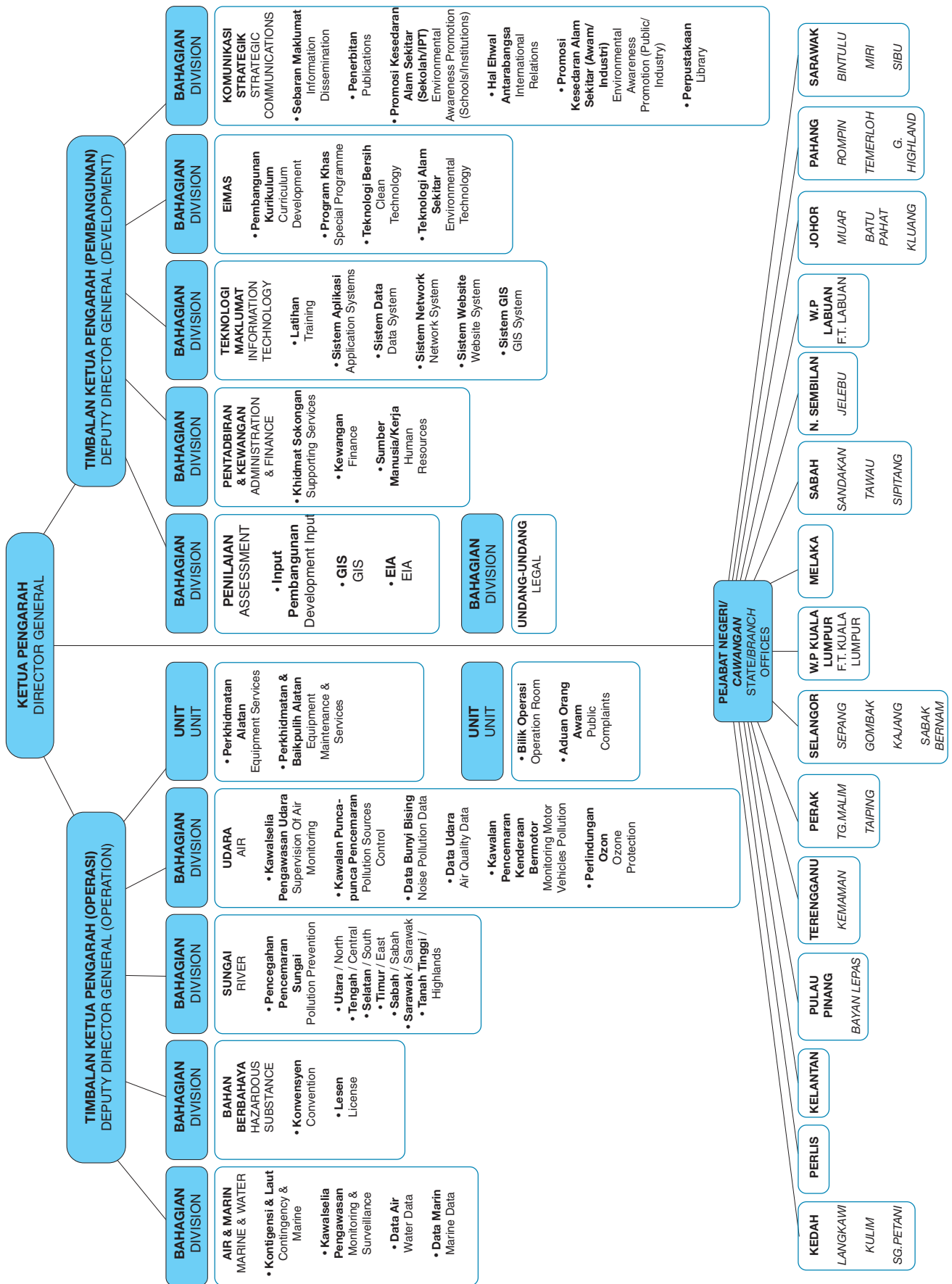
HUMAN RESOURCE AND FINANCIAL MANAGEMENT

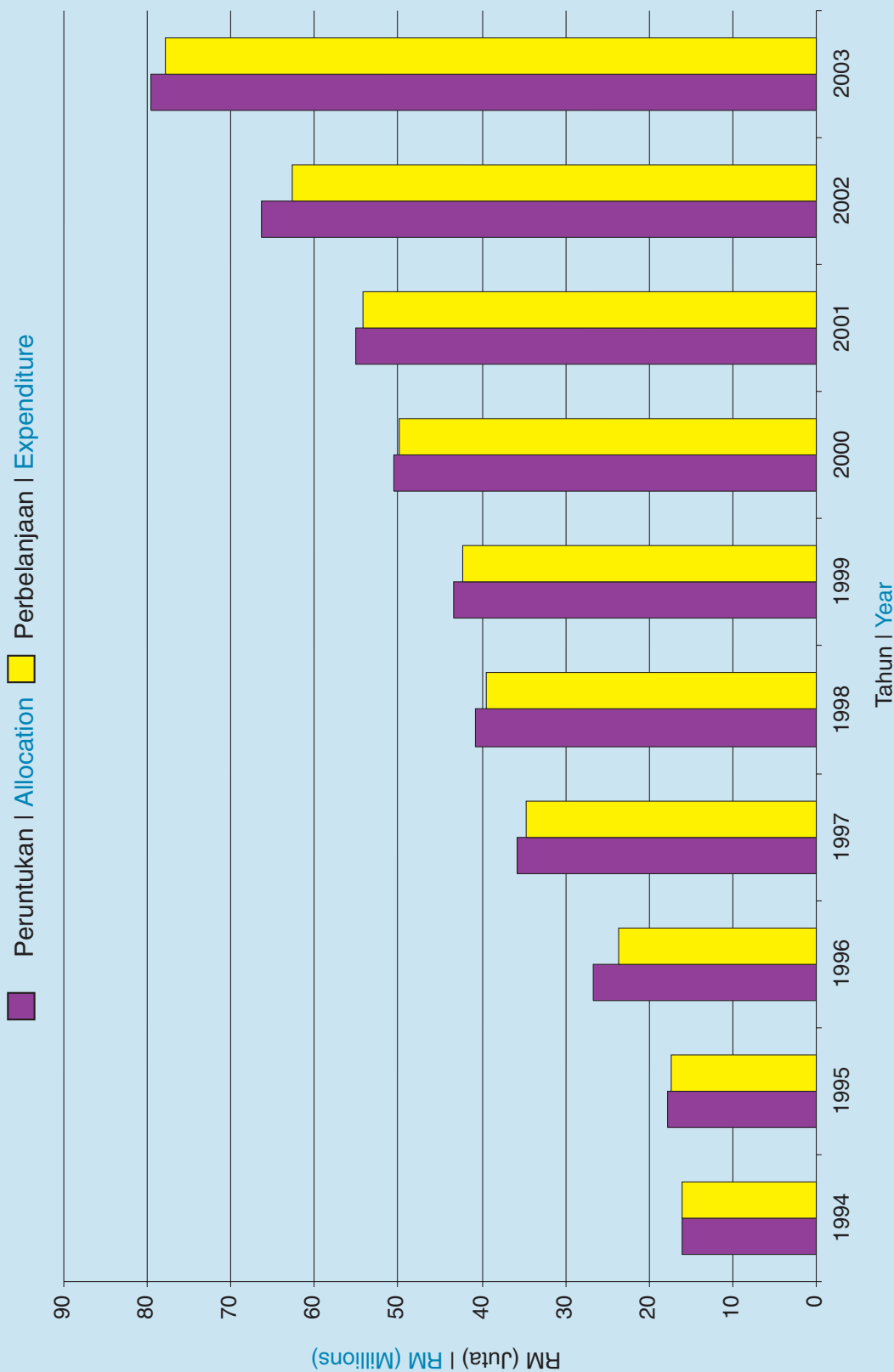
Recruitments

As at 31 December 2003, the total number of personnel at the Department of Environment was 973 comprising of two officers in the Upper Management Group, 172 officers in the Management and Professional Group and 801 in the Supporting Group. This constituted 62% of the total number of personnel approved under the restructuring exercise in 2002

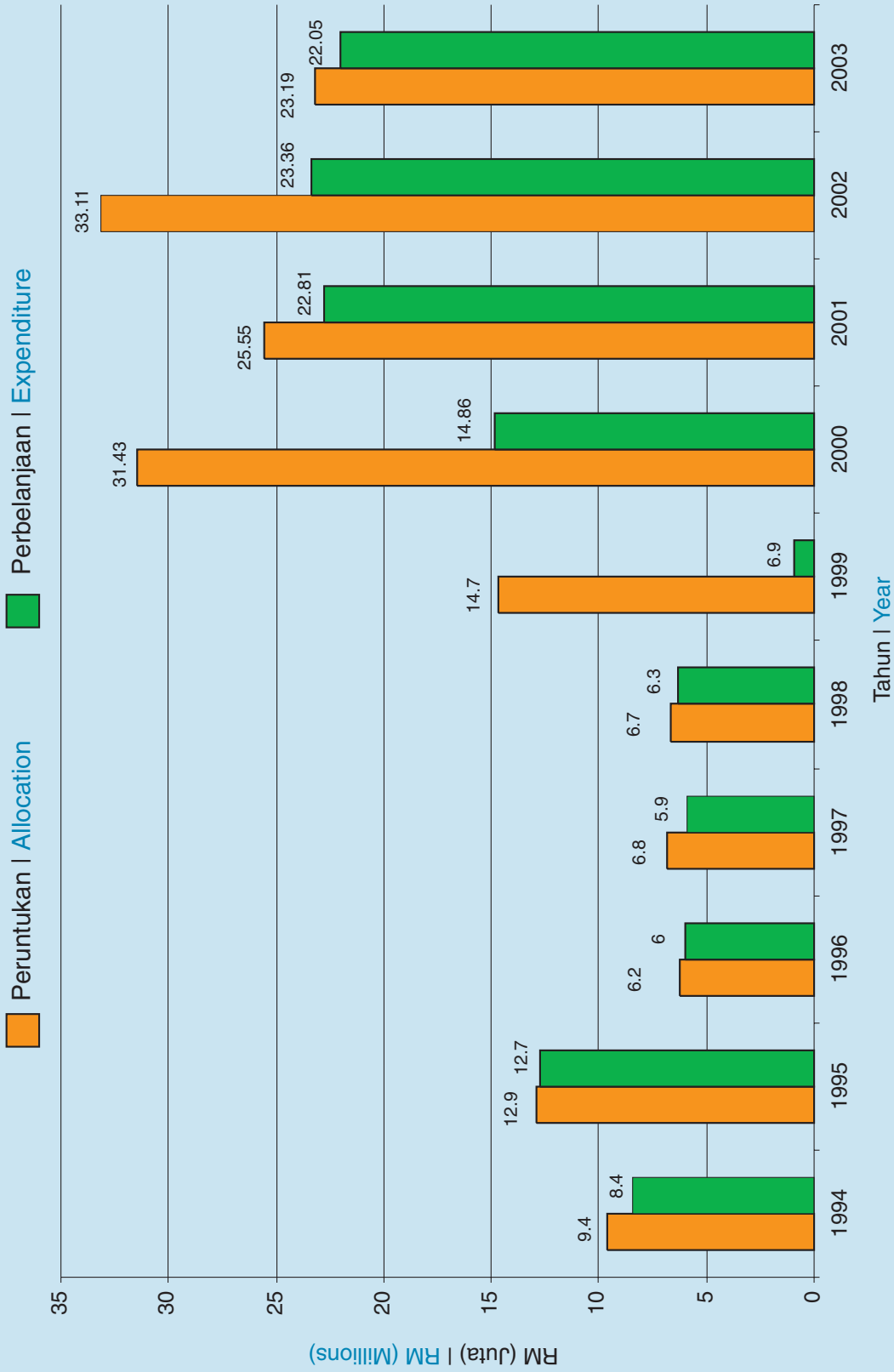
Allocation and Expenditure

The total budget allocation received by DOE for 2003 was RM102,799,495.00, an increase of RM3,307,285.00 (3.32%) over the previous year. From this amount, a sum of RM79,607,895.00 (77.44%) was allocated for operational expenditure, while RM23,191,600.00 (22.56%) was for development projects (Figures 3.1 and 3.2).





Rajah 3.1 Jabatan Alam Sekitar: Peruntukan dan Perbelanjaan (Mengurus), 1994-2003
Figure 3.1 Department of Environment: Allocation and Expenditure (Operational), 1994-2003



Rajah 3.2 Jabatan Alam Sekitar: Peruntukan dan Perbelanjaan (Pembangunan), 1994-2003
Figure 3.2 Department of Environment: Allocation and Expenditure (Development), 1994-2003

Jabatan
Alam Sekitar



BAB / CHAPTER 4



Department of
Environment

PENILAIAN KESAN KEPADA ALAM SEKELILING DAN INPUT KEPADA PERANCANGAN PEMBANGUNAN

Penilaian Kesan Kepada Alam Sekeliling (*Environmental Impact Assessment-EIA*) merupakan satu alat perancangan untuk mengelakkan dan mengurangkan masalah-masalah akibat tindakan pembangunan. Ianya juga dapat mengelakkan kesilapan besar semasa projek dilaksanakan serta dapat meminimumkan kos projek.

Di Malaysia, EIA digunakan sebagai alat untuk menggabungkan pertimbangan alam sekitar di dalam perancangan yang mana apabila disepadukan dalam perancangan sedia ada dan dalam proses membuat keputusan akan memberi maklumat tambahan dalam membuat keputusan yang lebih baik.

ENVIRONMENTAL IMPACT ASSESSMENT AND INPUT FOR DEVELOPMENT

Environmental Impact Assessment (EIA) is essentially a planning tool for preventing environmental problems due to a development action. It also seeks to avoid costly mistakes in project implementation as well as minimizing project cost.

In Malaysia, EIA is used as a tool to incorporate environmental considerations into project planning which when integrated into existing planning and decision-making processes provides additional information for better decision-making.



Gambarfoto 4.1 : Pembangunan Lereng Bukit Yang Tidak Terkawal
Photo 4.1 : Uncontrolled Hill Slope Development



Gambarfoto 4.2 : Sistem Perangkap Mendap Yang Cepak
Photo 4.2 : Efficient Silt Trap System

Laporan EIA 2003

Sebanyak 98 laporan telah diterima pada tahun 2003. Daripada bilangan ini, 83 laporan EIA telah diproses mengikut prosedur penilaian awal EIA dan 15 laporan EIA lagi melalui prosedur terperinci (Rajah 4.1). Negeri Johor menerima bilangan laporan EIA tertinggi pada tahun 2003 diikuti dengan Negeri Selangor (Rajah 4.2).

Lawatan Penguatkuasaan Projek EIA

Sejumlah 865 lawatan penguatkuasaan telah dijalankan pada tahun 2003 untuk mengenalpasti status pembangunan dan pematuhan projek-projek EIA berbanding dengan 584 lawatan penguatkuasaan pada tahun 2002. Daripada lawatan-lawatan tersebut (tahun 2003), sebanyak 278 notis atau surat arahan dan sebanyak 38 kompaun telah dikeluarkan manakala tiga (3) kes telah didakwa di mahkamah kerana tidak mematuhi syarat-syarat kelulusan.

Input Alam Sekitar Kepada Perancangan Pembangunan

Pada tahun 2003, sejumlah 61 input alam sekitar telah diberikan. Kebanyakan input-input yang diberi adalah input-input berkaitan Penyelarasan Perancangan Pembangunan, Kajian Pelan Spatial Kebangsaan, Polisi Zon Pesisiran Pantai Kebangsaan, Pelan Tempatan dan kajian-kajian lain seperti langkah-langkah kawalan banjir, air bawah tanah, permonitoran pulau-pulau dan aktiviti-aktiviti tanah tinggi.

Pendaftaran Jururunding EIA

Pada tahun 2003, sebanyak 22 permohonan individu dan tiga (3) permohonan firma jururunding diterima untuk pendaftaran sebagai jururunding EIA. Daripada permohonan tersebut, 13 individu dan dua (2) firma telah diluluskan untuk pendaftaran. Semenjak skim

EIA Reports 2003

A total of 98 reports were received in 2003. Of these 83 were preliminary EIA reports and 15 detailed reports (Figure 4.1). Johor received the highest number of EIA reports in 2003, followed by Selangor (Figure 4.2).

EIA Enforcement Visits

A total of 865 enforcement visits were conducted in 2003 to check on the progress of projects and compliance of EIA approval conditions compared to 584 enforcement visits in 2002. Consequently, 278 notices or written directives and 38 compounds were served and three (3) cases were charged in court for non-compliance.

Environmental Input For Development Planning

In 2003, a total of 61 environmental inputs were provided to other agencies in connection with Development Planning Coordination, National Spatial Plan Study, National Coastal Zone Policy, Local Plans and other studies regarding flood-mitigating measures, ground water, island monitoring and highland development activities.

Registration Of EIA Consultants

In 2003, 22 new applications from individual and three (3) applications from consultancy firms were received for registration as EIA consultants. Out of these, 13 individuals and two (2) consultancy firms were approved for registration. Since the registration

pendaftaran ini diperkenalkan pada tahun 1991 hingga 2003, sebanyak 313 juruperunding individu dan 80 firma perunding EIA telah diluluskan pendaftarannya.

Penilaian Awal Tapak Projek

Bagi projek-projek pembangunan yang tidak termaktub di bawah Perintah-Perintah Kualiti Alam Sekeliling (Aktiviti Yang Ditetapkan)(Penilaian Kesan Kepada Alam Sekeliling), 1987, pemaju perlu mengemukakan permohonan kepada JAS bagi Penilaian Awal Tapak (PAT) untuk menentukan kesesuaian tapak projek yang dicadangkan. PAT dapat membantu mengenalpasti isu-isu yang akan timbul dan pemantauan dapat dilaksanakan ke atas sesuatu projek.

Pada tahun 2003, sejumlah 3,374 permohonan telah diterima di mana Negeri Johor mencatat permohonan PAT (1,144) paling tinggi, diikuti oleh Negeri Selangor (780), Negeri Pulau Pinang (353) dan lain-lain negeri seperti yang ditunjukkan dalam Rajah 4.4. Permohonan-permohonan ini dirujukkan kepada Jabatan Alam Sekitar oleh pihak berkuasa seperti Pihak Berkuasa Tempatan dan Pejabat Tanah. Input teknikal telah diberikan kepada pihak berkuasa ini bagi memastikan aspek alam sekitar diberikan pertimbangan yang sewajarnya di dalam membuat keputusan.

Kebenaran Dan Kelulusan Bertulis

Peraturan-peraturan Kualiti Alam Sekeliling (Kumbahan dan Effluen-effluen Perindustrian), 1979 dan Peraturan-peraturan Kualiti Alam Sekeliling (Udara Bersih), 1978 menghendaki supaya kebenaran dan kelulusan bertulis diperolehi terlebih dahulu daripada Ketua Pengarah Alam Sekitar (KPAS) sebelum apa-apa loji rawatan sisa kumbahan dan alat kawalan pencemaran udara dibina. Pada tahun 2003, Jabatan Alam Sekitar telah menerima 293

scheme was introduced in 1991, by the end of 2003, 313 consultants and 80 consultancy firms had been registered.

Project Pre-siting Evaluation

Where development projects were not subjected to the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987, pre-siting evaluation of proposed site suitability were carried out. This would help to identify issues that could potentially arise in the future besides complementing project monitoring.

In 2003, a total of 3,374 such applications were received. Johor recorded the highest number (1,144), followed by Selangor (780), Pulau Pinang (353) and other States as shown in Figure 4.4. These applications were mainly referred to the Department of Environment by Local Authorities and Land Offices. Technical environmental inputs were provided to ensure environmental aspects were given due consideration in decision-making.

Written Permission And Approval

The Environmental Quality (Sewage and Industrial Effluents) Regulations 1979 and the Environmental Quality (Clean Air) Regulations 1978 require written permissions and approvals to be obtained from the Director-General of Environment before construction of wastewater treatment plants and installation of air pollution control systems are installed. In 2003, 293 such applications were received for construction of effluent treatment plants (Figure 4.5) and 671

permohonan bagi pembinaan loji rawatan sisa kumbahan (Rajah 4.5) dan 671 permohonan bagi pemasangan alat kawalan pencemaran udara (Rajah 4.6). Selain daripada peralatan kawalan pencemaran, Jabatan Alam Sekitar juga telah menerima 1,182 permohonan bagi kelulusan bertulis untuk pemasangan alat pembakaran bahan api seperti dandang dan alat janakuasa (Rajah 4.7).

Sistem Maklumat Geografik

Di bawah Rancangan Malaysia Kelapan (RMK8) Seksyen GIS (dahulunya Unit GIS) telah dipertanggungjawabkan untuk memastikan bahawa teknologi GIS dapat dimanfaatkan sepenuhnya di Jabatan Alam Sekitar (JAS) dalam menguruskan alam sekitar di Malaysia.

Pada tahun 2003, pelaksanaan GIS di peringkat JAS Negeri/Cawangan telah digerakkan. Kesemua 14 JAS Negeri dan enam (6) JAS Cawangan telah dibekalkan dengan perkakasan dan perisian GIS pada awal tahun. Selain itu, latihan asas kepada pegawai-pegawai JAS Negeri/Cawangan telah dijalankan. Kursus Pengenalan GIS kepada 14 wakil JAS Negeri & enam (6) JAS Cawangan telah diadakan pada 6-8 Mei 2003 di EiMAS. Program taklimat GIS dan latihan *hands-on* telah dijalankan ke enam (6) JAS Negeri iaitu JAS Selangor, JAS Kuala Lumpur, JAS Pulau Pinang, JAS Terengganu, JAS Sarawak dan JAS Sabah pada September dan Oktober.

Pada tahun 2003 juga, pembangunan Sistem Aplikasi Pengurusan *Geodatabase* dan '*Mobile GIS*' telah dijalankan bertujuan memudahkan perkongsian, pertukaran dan pengemaskinian data spatial yang berkaitan dengan pengurusan alam sekitar pada satu

applications for installation of air pollution control equipment (Figure 4.6). In addition, 1,182 applications for written approvals for installation of fuel burning equipment such as boilers and generator sets were processed (Figure 4.7).

Geographical Information System (GIS)

Under the 8th Malaysia Plan, the GIS Section (formerly known as GIS Unit) has been given the task to ensure that GIS technology is fully utilized by the Department of Environment (DOE) in environmental management in Malaysia.

In 2003, the implementation of GIS at State and Branch levels were initiated. All 14 State offices and 6 Branch Offices were equipped with GIS hardware and software early in the year. Apart from that, a basic training course was conducted on 6-8 May 2003 in EiMAS to 20 participants from State and Branch Offices. Hands-on training was also provided to officers from Selangor, Kuala Lumpur, Pulau Pinang, Terengganu, Sarawak and Sabah State Offices in September and October 2003.

In 2003, the Geodatabase Management Application System and '*Mobile GIS*' were developed to facilitate sharing, interchanging and updating of spatial data. The mobile GIS system allows spatial data to be captured on-site with the use of GPS and pocket

platform yang sama. 'Mobile GIS' pula merupakan sistem yang membolehkan data spatial dicerap di lapangan dengan penggunaan GPS berserta komputer poket dan perisian yang bersesuaian. Data yang telah dicerap di lapangan akan dimuat naik (*upload*) ke dalam sistem *geodatabase* bagi tujuan pengemaskinian.

Selain itu, Seksyen GIS juga bertanggungjawab membekalkan maklumat lokasi titik panas (*hotspot*) setiap hari bagi tujuan pemantauan pembakaran terbuka. Input yang berkaitan dengan maklumat spatial yang diperlukan oleh Bahagian-bahagian di Ibu Pejabat, JAS Negeri/Cawangan atau agensi luar telah juga diberikan.

Pusat Khidmat Nasihat Jas Di MIDA

Pusat Khidmat Nasihat JAS di MIDA memberi penerangan dan maklumat serta nasihat kepada bakal pelabur dari dalam dan luar negara mengenai keperluan alam sekitar di dalam pembangunan projek industri. Sehubungan dengan itu, sebanyak 90 ulasan bertulis, 50 pertanyaan melalui telefon dan 16 bilangan temujanji telah diterima dalam tahun 2003. Pertanyaan yang diterima adalah berhubung-kait dengan kesesuaian lokasi kedudukan tapak premis, zon penampan, kepakaran juruperunding alam sekitar, polisi kerajaan mengenai sisa buangan dan lain-lain.

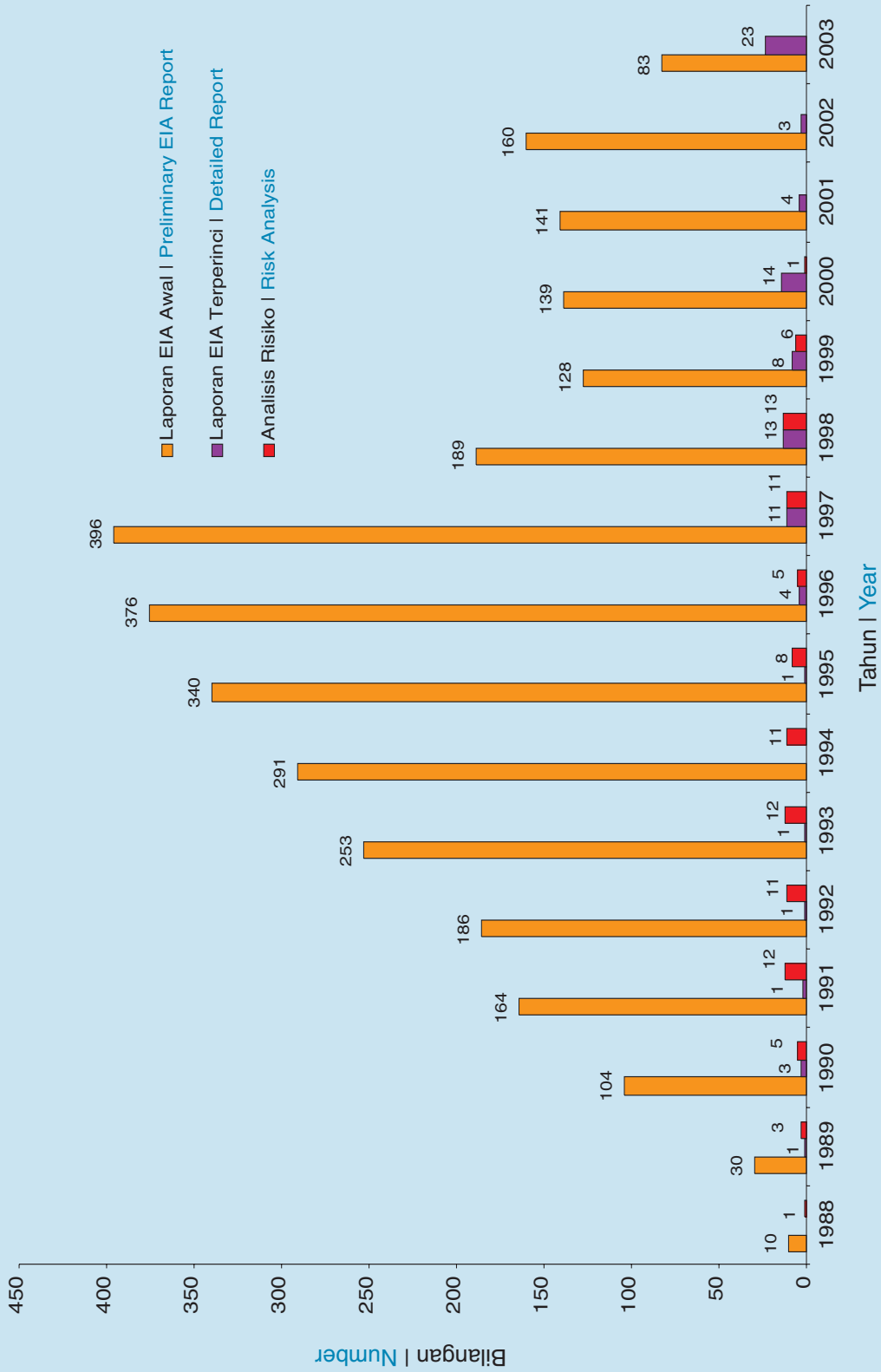
computer with suitable software. The data can be uploaded into the geodatabase system for updating.

The GIS Section is also responsible to supply hotspots information daily for the purpose of monitoring open burning. Input related to spatial information required by the various divisions at the Head Office, State Offices/Branches or external agencies were also provided.

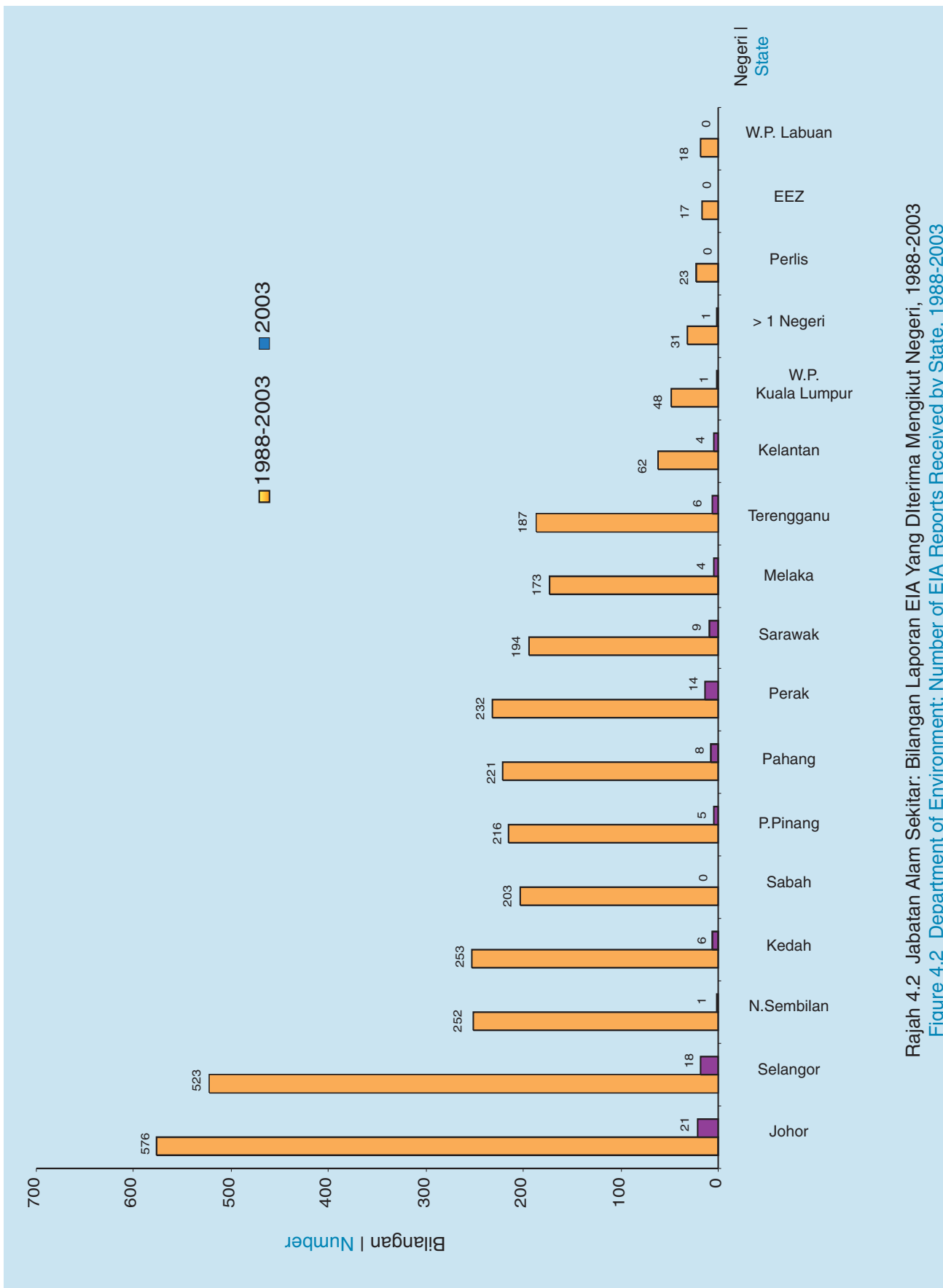
DOE Advisory Services Desk at MIDA

The DOE Advisory Services Desk at the Head Office of the Malaysian Industrial Development Authority (MIDA) serves to provide environmental information and advice to prospective local and foreign investors.

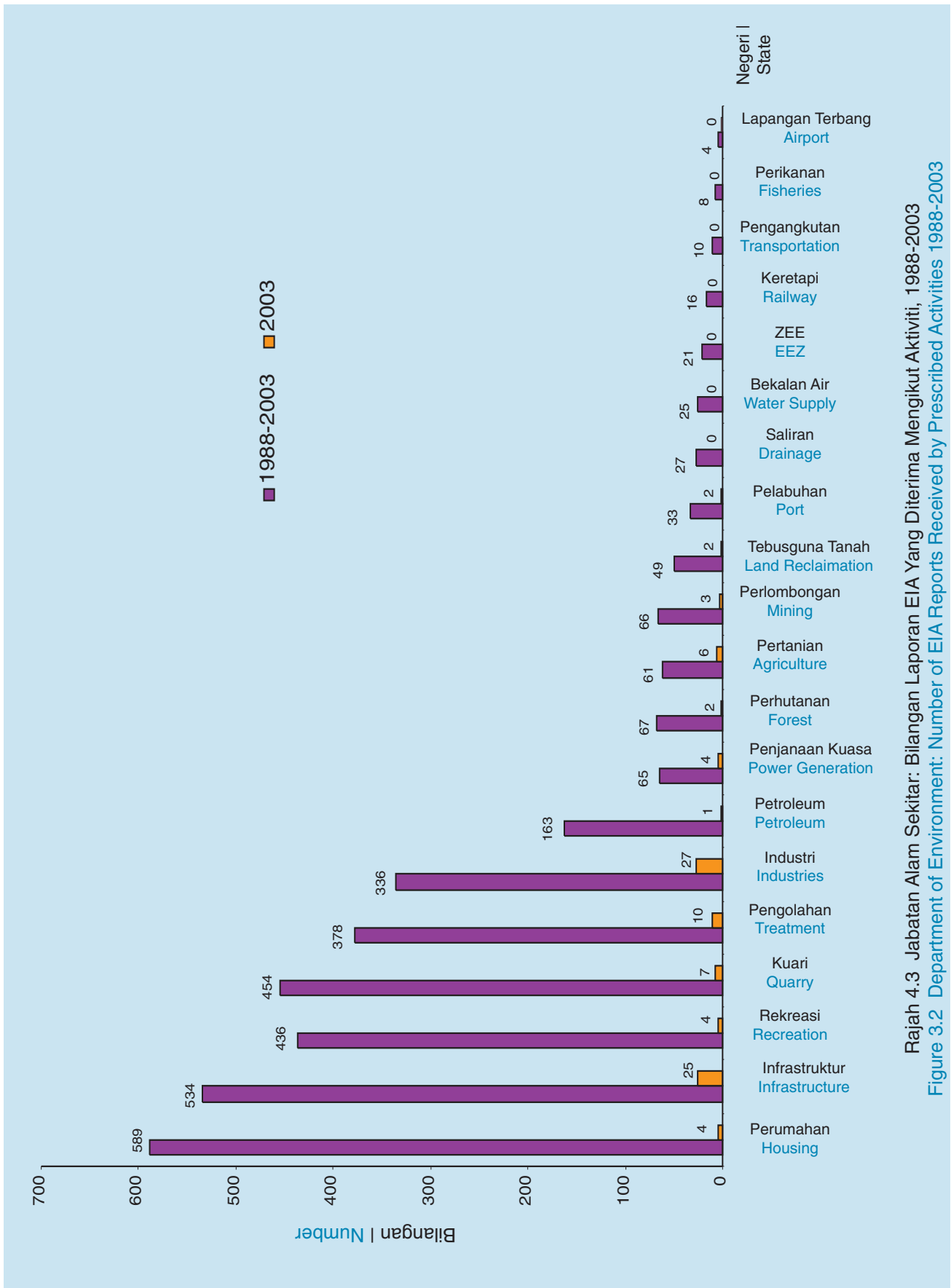
In 2003, 90 written comments were submitted to MIDA, 50 telephone enquires were attended to and 16 meetings with investors were held. Most of the enquiries received pertained to project site suitability, buffer zones, environmental consultancy expertise and government policy on waste management.



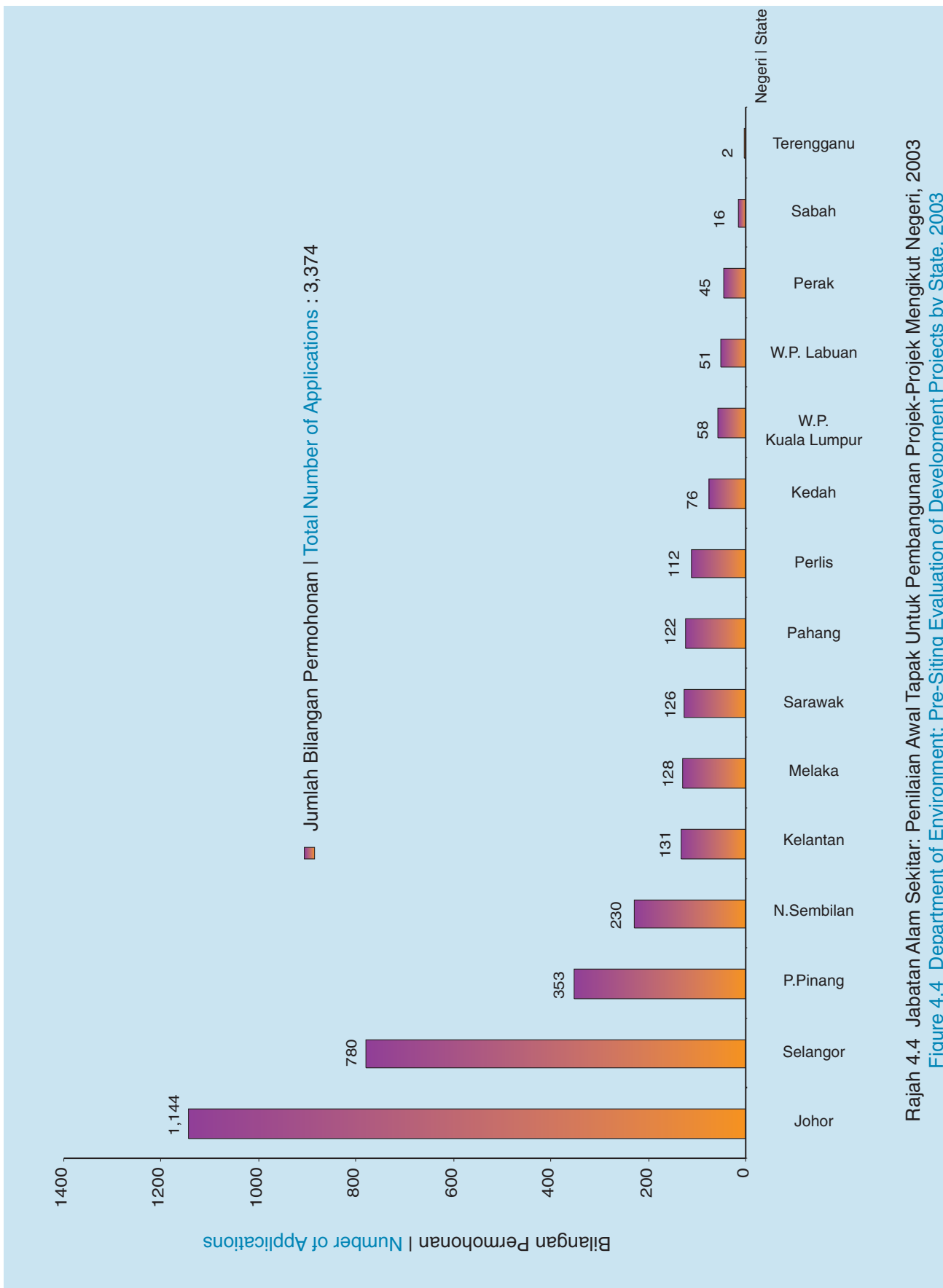
Rajah 4.1 Jabatan Alam Sekitar: Bilangan Laporan EIA dan Jenis Laporan Diterima, 1988-2003
Figure 4.1 Department of Environment: Number and Type of EIA Reports Received, 1988-2003



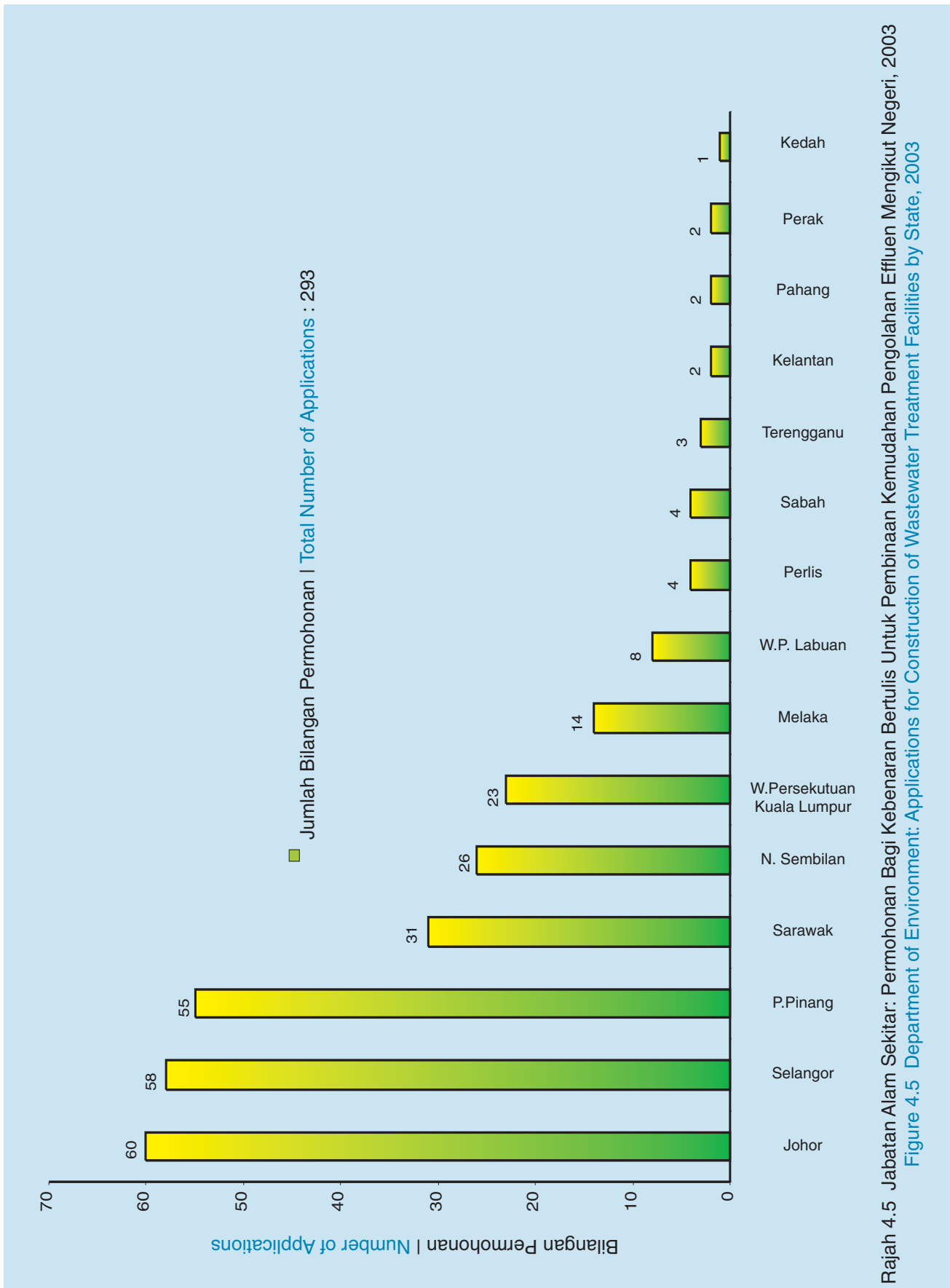
Rajah 4.2 Jabatan Alam Sekitar: Bilangan Laporan EIA Yang Diterima Mengikut Negeri, 1988-2003
Figure 4.2 Department of Environment: Number of EIA Reports Received by State, 1988-2003



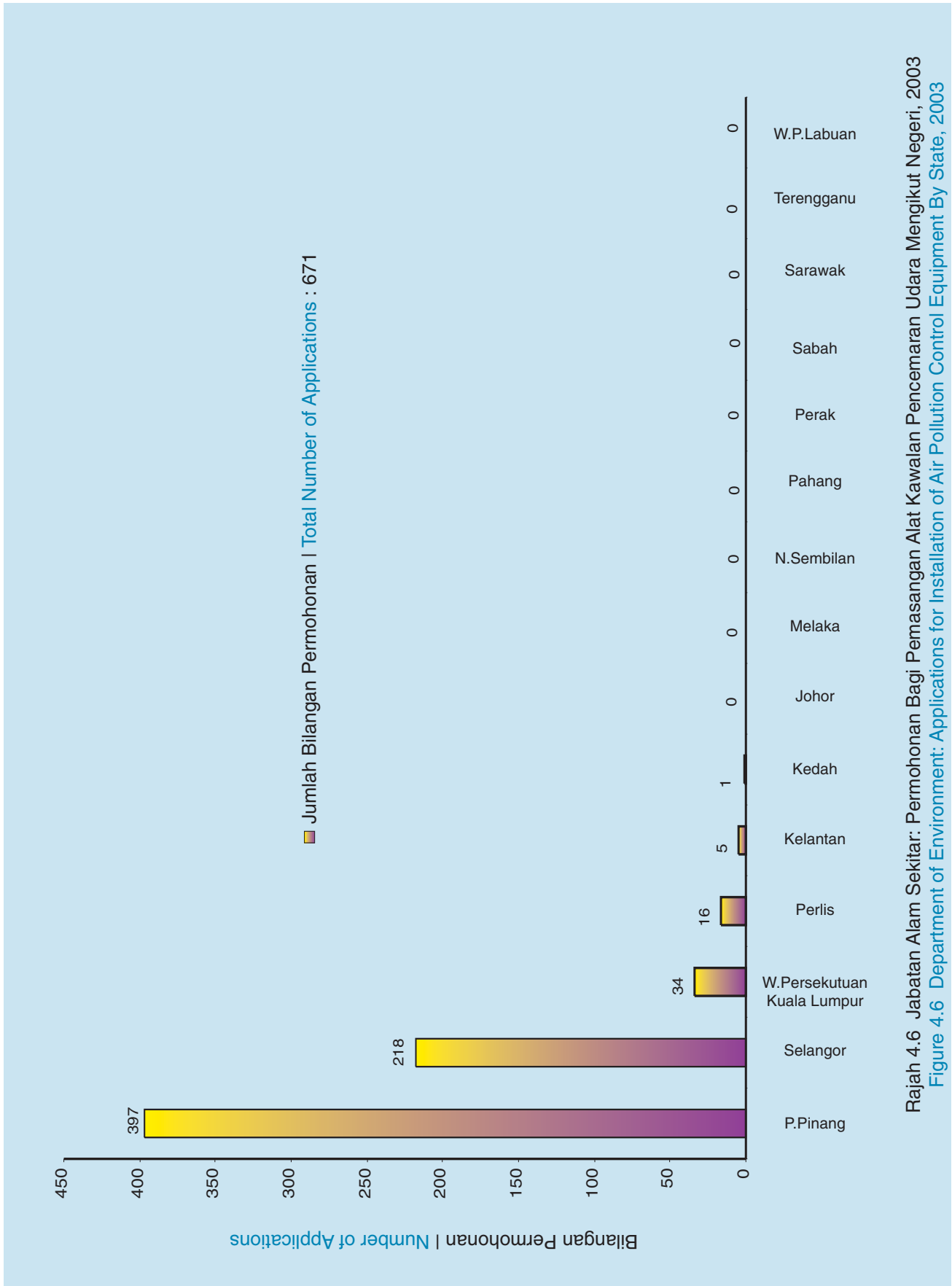
Rajah 4.3 Jabatan Alam Sekitar: Bilangan Laporan EIA Yang Diterima Mengikut Aktiviti, 1988-2003
Figure 3.2 Department of Environment: Number of EIA Reports Received by Prescribed Activities 1988-2003



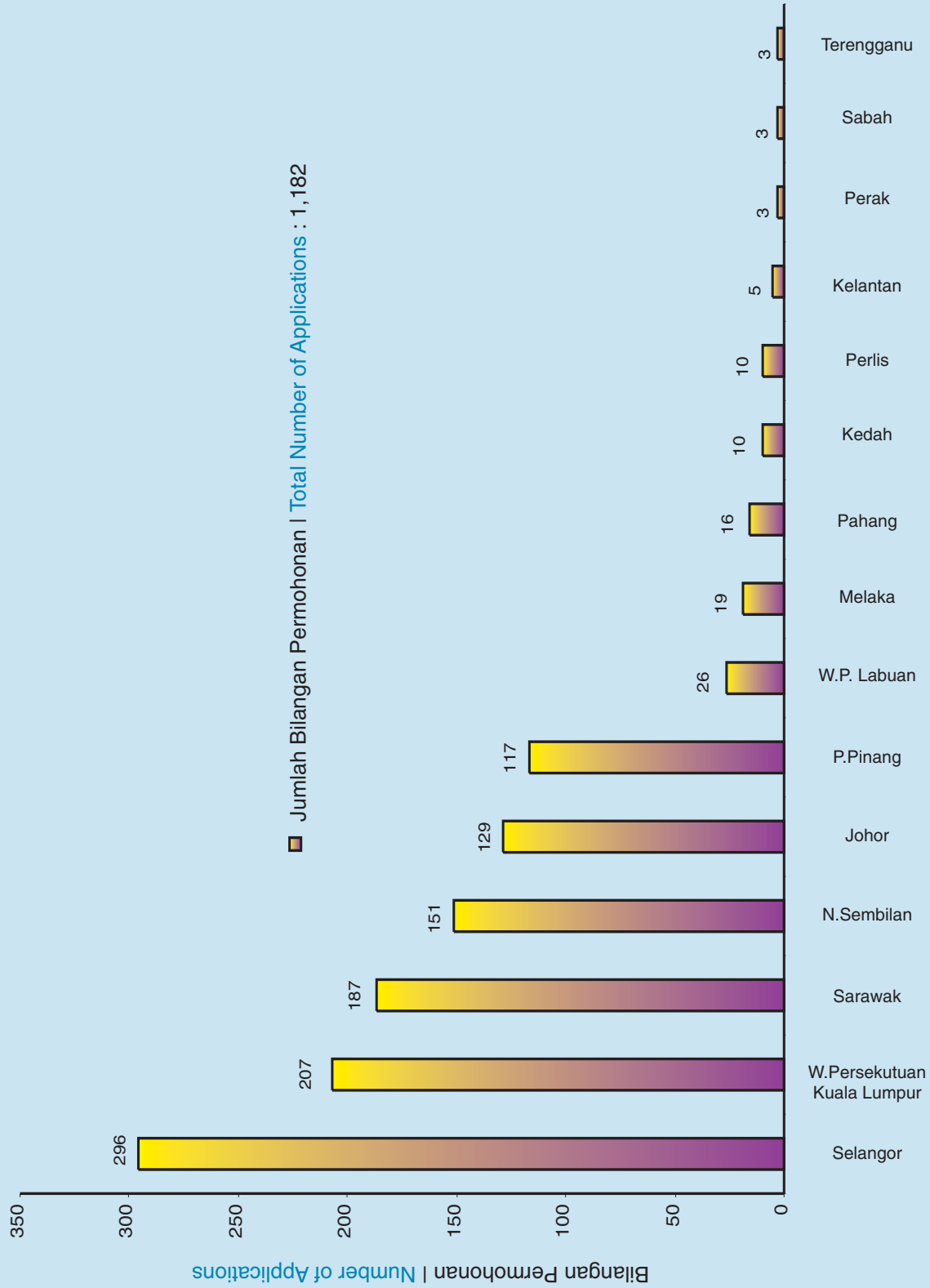
Rajah 4.4 Jabatan Alam Sekitar: Penilaian Awal Tapak Untuk Pembangunan Projek-Projek Mengikut Negeri, 2003
 Figure 4.4 Department of Environment: Pre-Siting Evaluation of Development Projects by State, 2003



Rajah 4.5 Jabatan Alam Sekitar: Permohonan Bagi Kebenaran Bertulis Untuk Pembinaan Kemudahan Pengolahan Effluen Mengikut Negeri, 2003
Figure 4.5 Department of Environment: Applications for Construction of Wastewater Treatment Facilities by State, 2003



Rajah 4.6 Jabatan Alam Sekitar: Permohonan Bagi Pemasangan Alat Kawalan Pencemaran Udara Mengikut Negeri, 2003
Figure 4.6 Department of Environment: Applications for Installation of Air Pollution Control Equipment By State, 2003



Rajah 4.7 Jabatan Alam Sekitar: Permohonan Bagi Pemasangan Alat Pembakaran Bahan Api Mengikut Negeri, 2003
Figure 4.7 Department of Environment: Applications for Installation of Fuel Burning Equipment By State, 2003