

MALAYSIA

BANCI EKONOMI 2016 *ECONOMIC CENSUS*

BEKALAN AIR; PEMBETUNGAN, PENGURUSAN SISA DAN AKTIVITI PEMULIHAN
WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES

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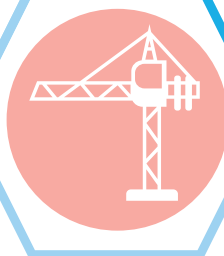
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JABATAN PERANGKAAN MALAYSIA
DEPARTMENT OF STATISTICS, MALAYSIA

Jabatan Perangkaan
MALAYSIA



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BANCI EKONOMI *ECONOMIC CENSUS*

2016

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DAN AKTIVITI PEMULIHAN**
*WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT
AND REMEDIATION ACTIVITIES*



JABATAN PERANGKAAN MALAYSIA
DEPARTMENT OF STATISTICS, MALAYSIA

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ISBN 978-967-2000-26-6

KATA PENGANTAR

Penerbitan ini memaparkan perangkaan bagi sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan yang diperoleh daripada Banci Ekonomi 2016 bagi tahun rujukan 2015. Sektor ini meliputi semua industri dalam Seksyen E yang dikelaskan di bawah Piawaian Klasifikasi Industri Malaysia (MSIC) 2008 Ver. 1.0, selaras dengan Piawaian Klasifikasi Standard Perindustrian Antarabangsa bagi Semua Aktiviti Ekonomi (ISIC), Semakan Ke-4, 2008. Kali terakhir banci ini dijalankan adalah pada tahun 2011 bagi tahun rujukan 2010.

Data utama yang berkaitan dengan nilai output kasar, nilai input perantaraan, nilai ditambah, bilangan pekerja, gaji & upah dan nilai harta tetap dilaporkan dalam penerbitan ini. Maklumat pekerja mengikut kelulusan dan pemilikan wanita turut dipaparkan. Data tersebut boleh digunakan oleh agensi kerajaan, ahli ekonomi, ahli akademik, pihak swasta serta individu bagi tujuan membuat perancangan dan penggubalan dasar, analisis ekonomi, unjuran dan membantu merancang pembangunan perniagaan.

Penerbitan ini dibahagikan kepada empat bahagian. Bahagian pertama memaparkan hasil penemuan utama diikuti bahagian kedua yang memaparkan ringkasan penemuan bagi keseluruhan sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan. Aspek teknikal seperti skop dan liputan, konsep dan definisi serta pembolehubah utama yang digunakan diterangkan di bahagian ketiga bagi memudahkan pengguna memahami statistik yang diterbitkan, manakala bahagian keempat pula memaparkan jadual perangkaan terperinci.

Jabatan merakamkan setinggi-tinggi penghargaan kepada semua pihak yang terlibat secara langsung dan tidak langsung dalam merealisasikan penerbitan Banci Ekonomi 2016 ini. Setiap maklum balas dan cadangan untuk penambahbaikan laporan ini pada masa akan datang amat dihargai.

DR. MOHD UZIR BIN MAHIDIN

Ketua Perangkawan Malaysia

Julai 2017

PREFACE

This publication presents statistics on water supply; sewerage, waste management and remediation activities sector obtained from the Economic Census 2016 for reference year 2015. This sector include all industries in Section E classified under the Malaysia Standard Industrial Classification (MSIC) 2008 Ver. 1.0, in accordance with the International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4, 2008. The last census was conducted in 2011 for reference year 2010.

Key data related to value of gross output, value of intermediate input, value added, number of persons engaged, salaries & wages and value of fixed assets are reported in this publication. Information on number of persons engaged by qualification and women ownership are also published. These data can be use by government agencies, economists, academicians, private sectors and individuals for planning and formulations policies, economic analysis, projections and to assist in business development planning.

This publication is divided into four parts. The first part displays the main findings followed by the second part which displays the summary findings of water supply; sewerage, waste management and remediation activities sector. Technical aspects such as scope and coverage, concepts and definitions as well as the key variables used are describes in the third part to assist users to understand published statistics. Meanwhile, the fourth part provides the detailed statistical tables.

Department expressed gratitude to those who have contributed directly and indirectly to this Economic Census 2016 publication. Every feedback and suggestion towards improving future reports is highly appreciated.

DR. MOHD UZIR BIN MAHIDIN

Chief Statistician Malaysia

July 2017

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PENEMUAN UTAMA
MAIN FINDINGS



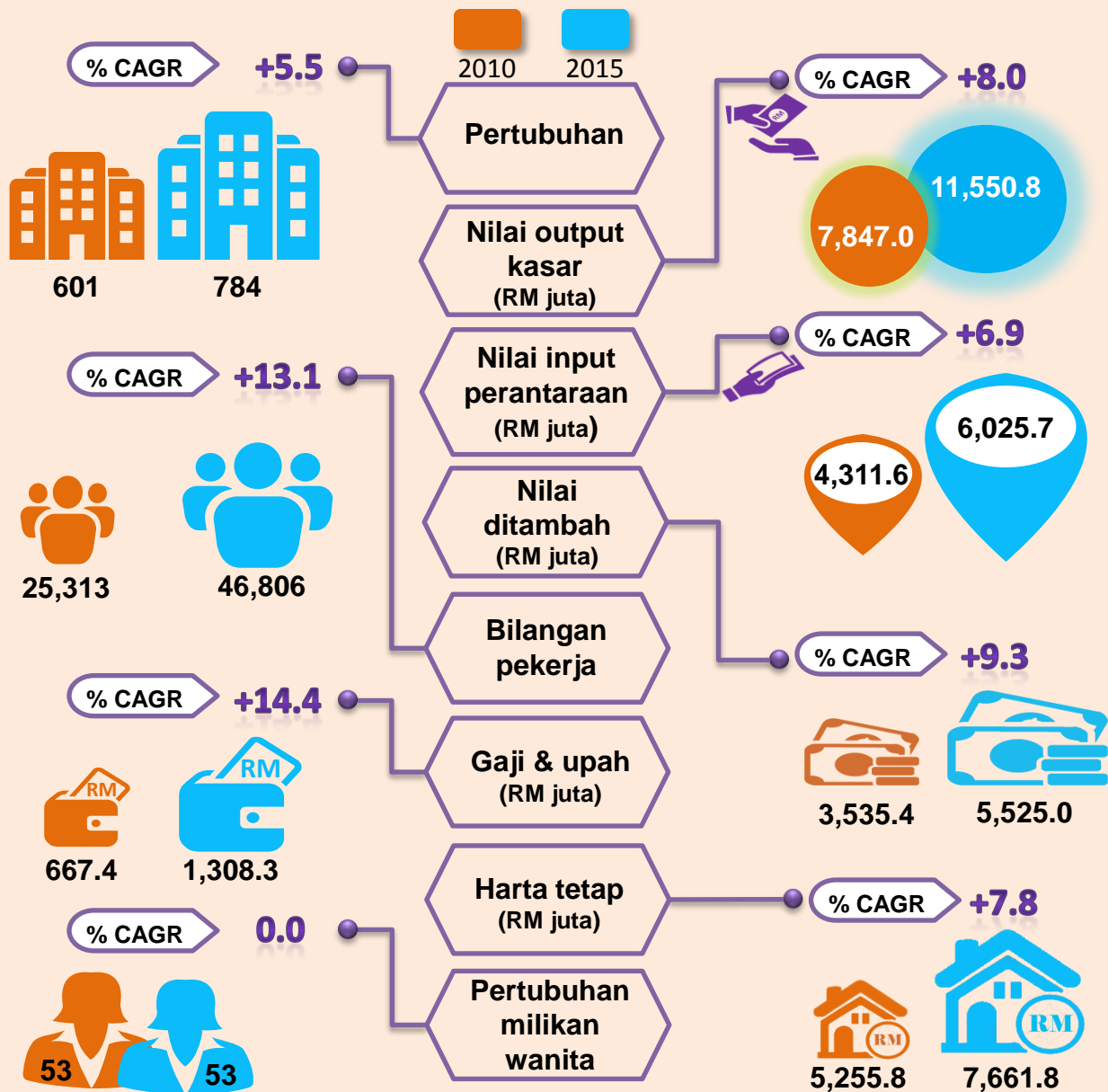
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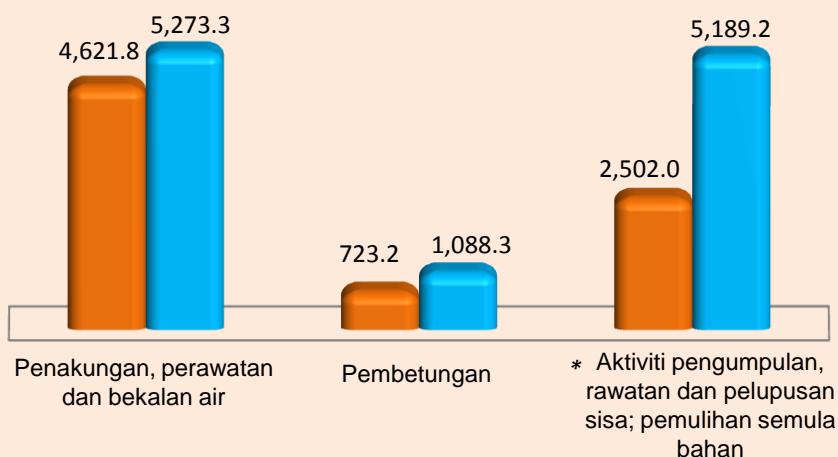
PENEMUAN UTAMA SEKTOR BEKALAN AIR; PEMBETUNGAN, PENGURUSAN SISA DAN AKTIVITI PEMULIHAN



Nilai output kasar mengikut subsektor (RM juta)



2010
2015



Jumlah
2010: 7,847.0
2015: 11,550.8

CAGR
+8.0%

CAGR

+2.7%

+8.5%

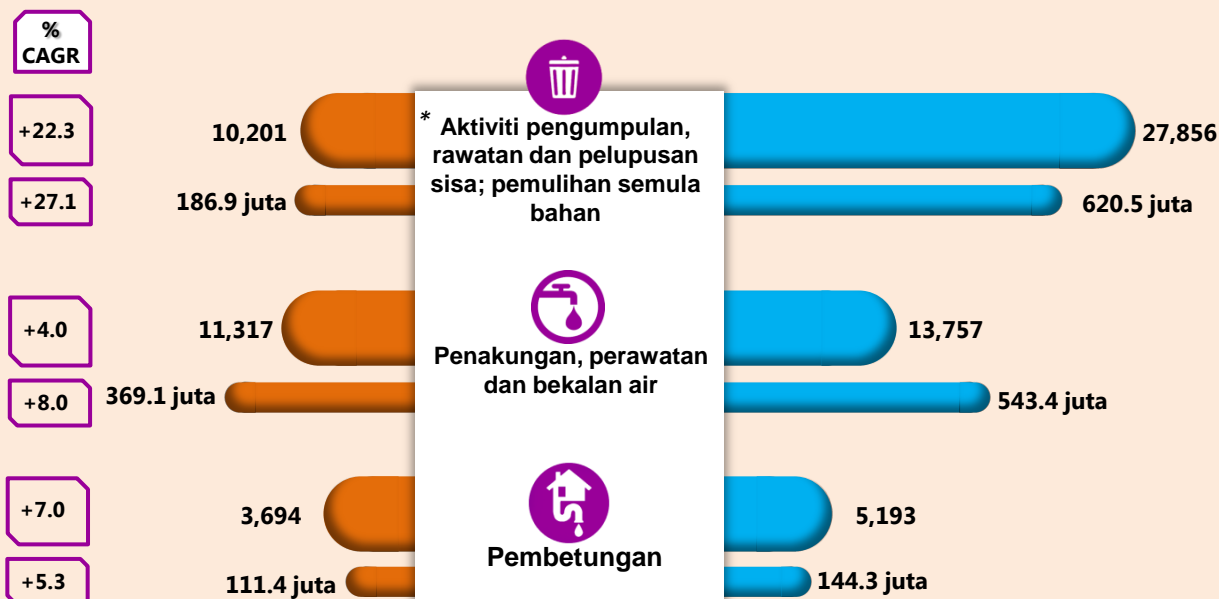
+15.7%

Bilangan pekerja dan gaji & upah mengikut subsektor



2010

2015



%
CAGR

+22.3

+27.1

+4.0

+8.0

+7.0

+5.3

Bilangan pekerja
Gaji & upah (RM)

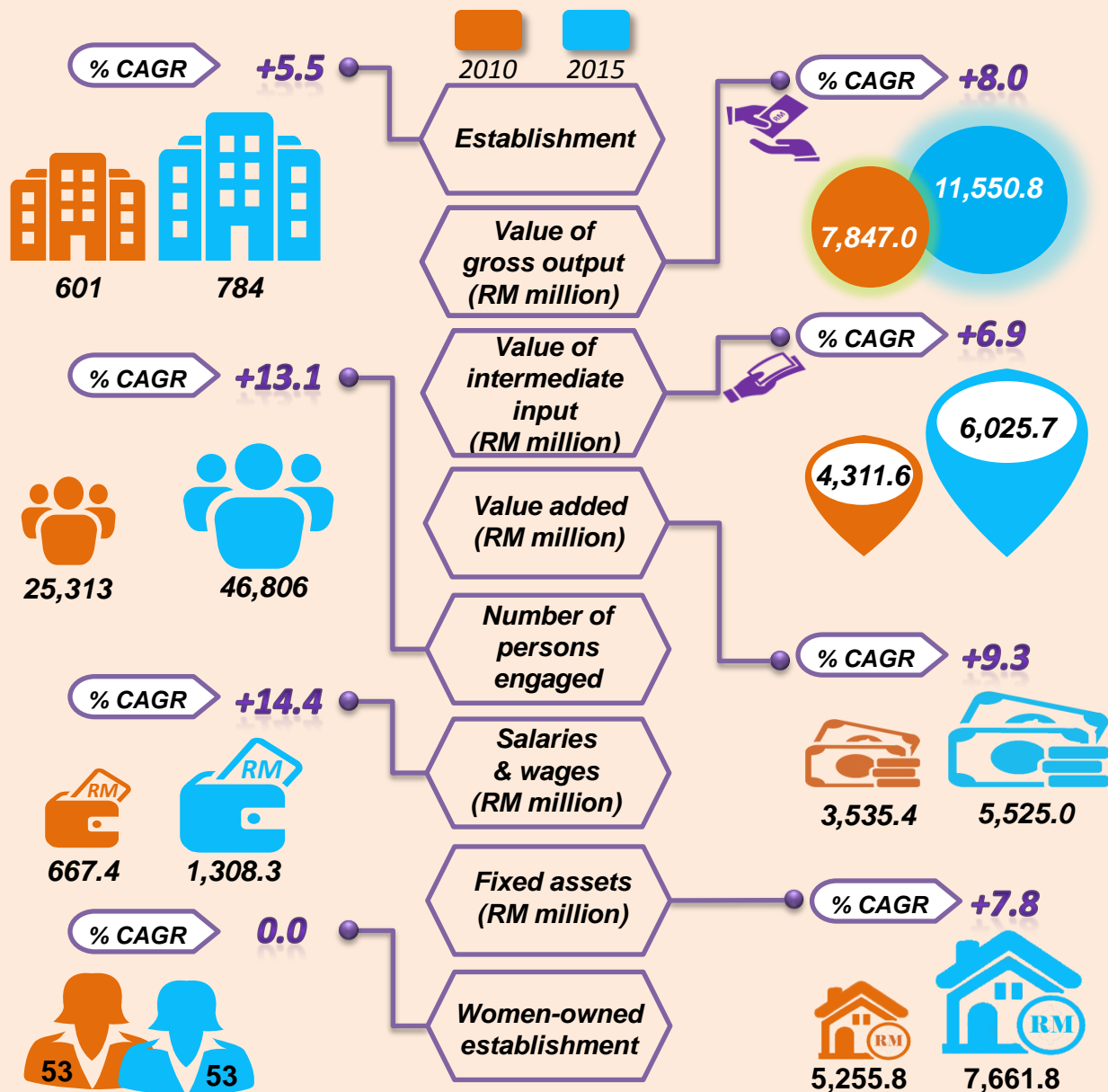
* Termasuk aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa



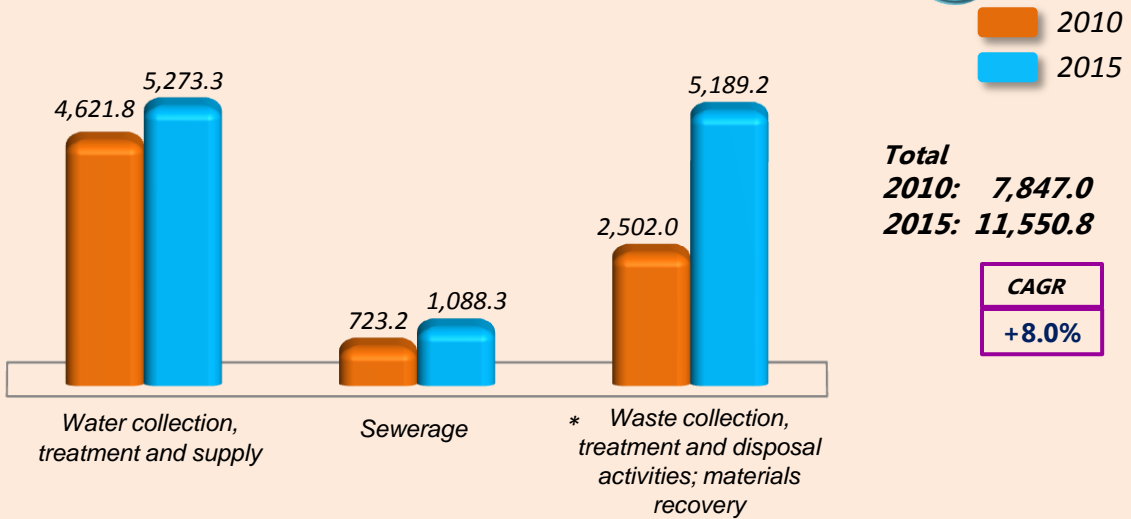
ECONOMIC CENSUS 2016



MAIN FINDINGS OF WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES SECTOR



Value of gross output by sub-sector (RM Million)



CAGR

+2.7%

+8.5%

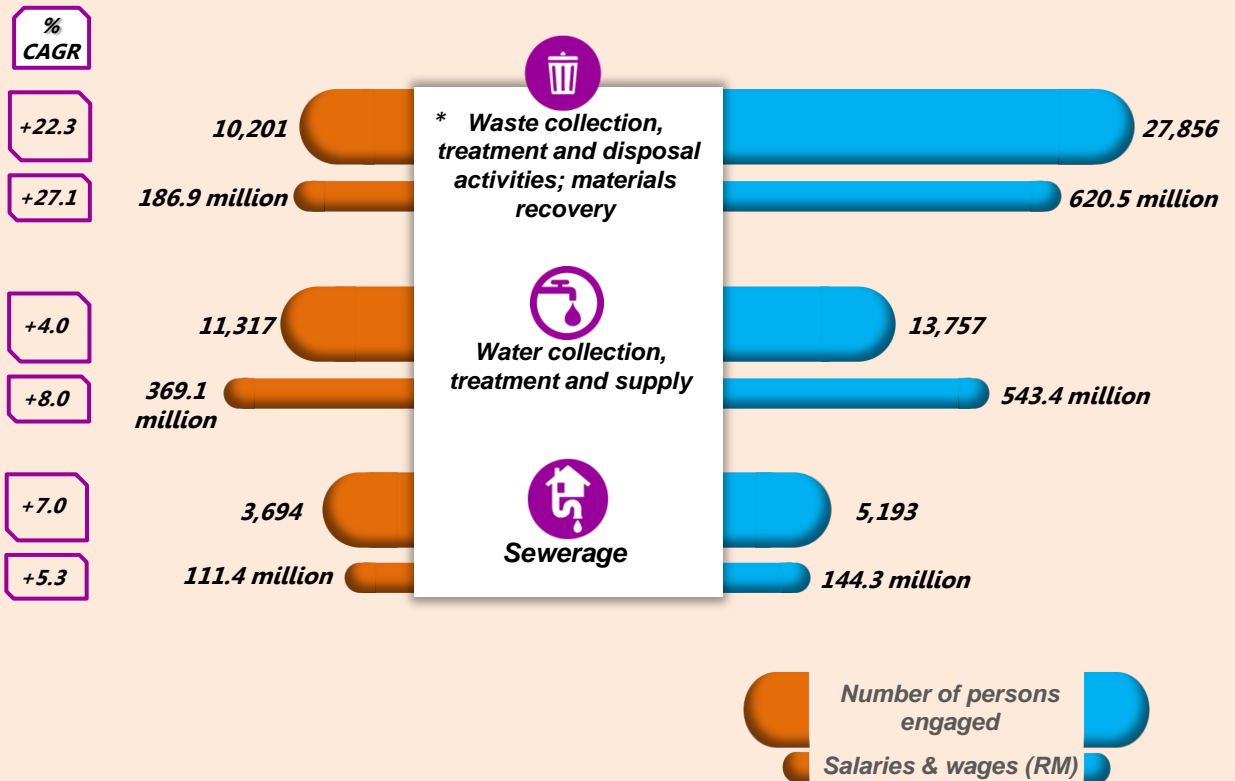
+15.7%

Number of persons engaged and salaries & wages by sub-sector



2010

2015



* Includes remediation activities and other waste management services

RINGKASAN PENEMUAN
SUMMARY OF FINDINGS



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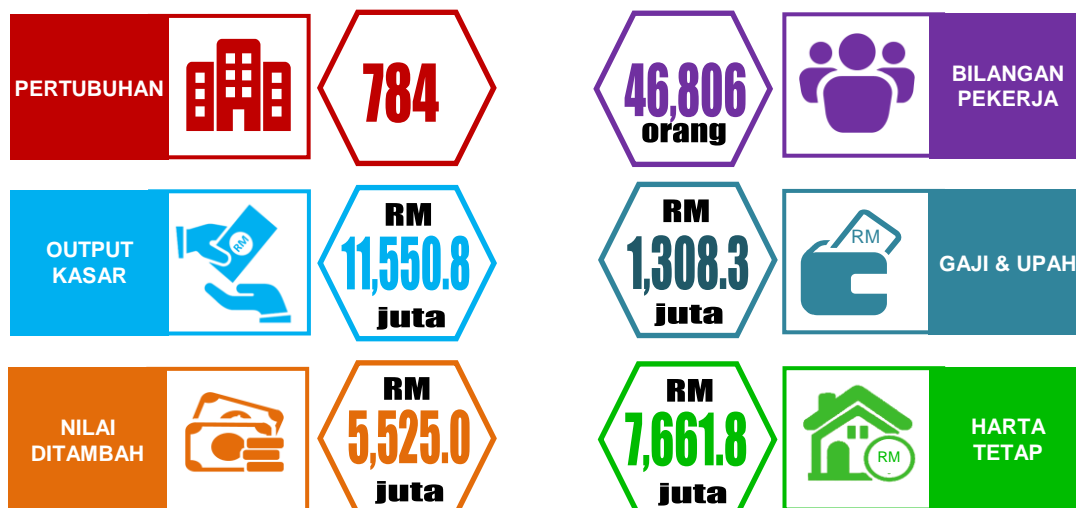
SEKTOR BEKALAN AIR; PEMBETUNGAN, PENGURUSAN SISA DAN AKTIVITI PEMULIHAN

1. PENDAHULUAN

Laporan ini memaparkan perangkaan sektor bekalan air; pembedungan, pengurusan sisa dan aktiviti pemuliharaan bagi tahun rujukan 2015 yang disusun daripada Banci Ekonomi 2016.

2. PRESTASI KESELURUHAN

Pertumbuhan tahunan bagi perangkaan utama sektor bekalan air; pembedungan, pengurusan sisa & aktiviti pemuliharaan pada tahun 2015 menunjukkan prestasi yang lebih baik berbanding tahun 2010. Pertumbuhan ini didorong oleh peningkatan bilangan pertubuhan sebanyak 5.5 peratus setahun kepada 784 pertubuhan dengan pertambahan nilai output kasar 8.0 peratus setahun kepada RM11,550.8 juta. Sektor ini juga mencatatkan peningkatan bilangan pekerja sebanyak 13.1 peratus setahun kepada 46,806 orang dengan jumlah gaji & upah sebanyak RM1,308.3 juta (+14.4% setahun). Purata gaji & upah pekerja sepenuh masa adalah RM2,363 sebulan.



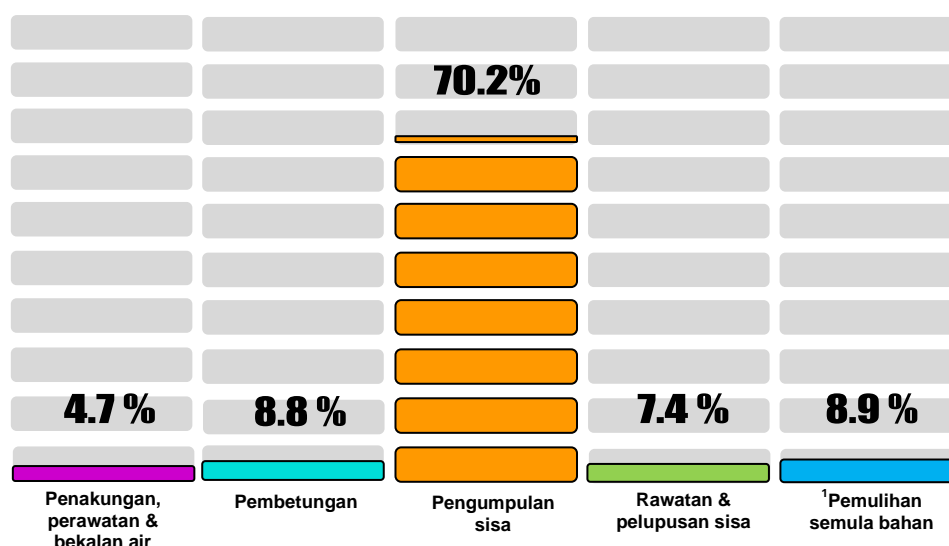
3. PERTUBUHAN

Sektor bekalan air; pembedungan, pengurusan sisa & aktiviti pemuliharaan mencatatkan bilangan pertubuhan sebanyak 784 pertubuhan pada tahun 2015 berbanding 601 pertubuhan pada tahun 2010 dengan CAGR 5.5 peratus. Kumpulan industri

RINGKASAN PENEMUAN

pengumpulan sisa masih kekal sebagai penyumbang tertinggi bilangan pertubuhan dengan sumbangan sebanyak 70.2 peratus (2010 : 70.4%), diikuti pemuliharaan semula bahan (8.9%), pembedungan (8.8%), rawatan & pelupusan sisa (7.4%) dan penakungan, perawatan & bekalan air (4.7%).

Carta 1 : Bilangan pertubuhan mengikut kumpulan industri, 2015



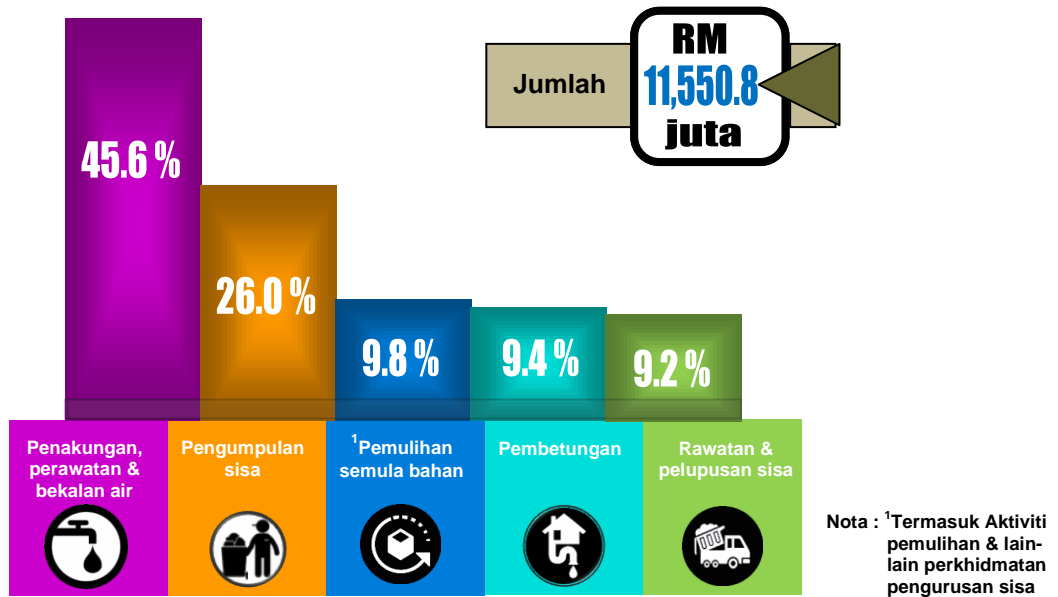
Nota : ¹Termasuk Aktiviti pemuliharaan & lain-lain perkhidmatan pengurusan sisa

Jumlah pertubuhan : 784

4. NILAI OUTPUT KASAR

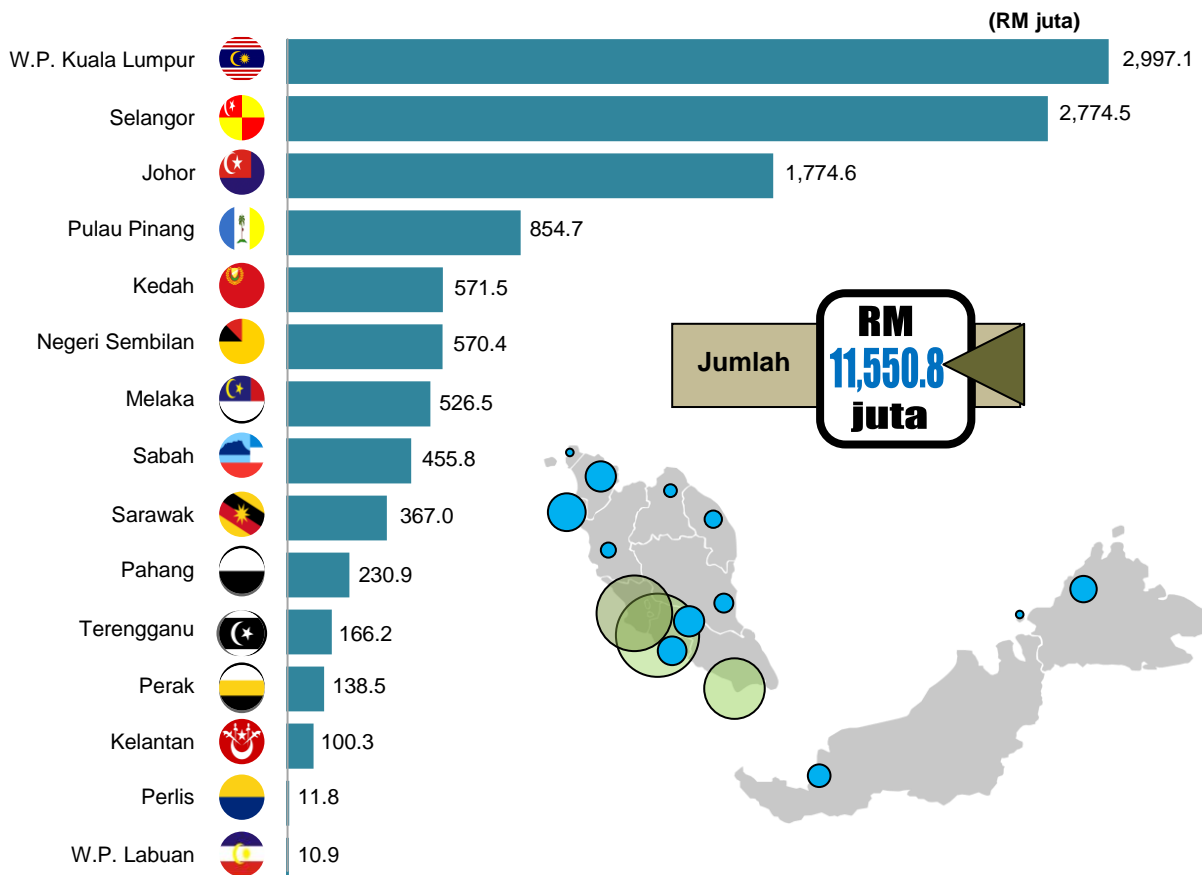
Dalam tempoh 2010 hingga 2015, nilai output kasar sektor bekalan air; pembedungan, pengurusan sisa & aktiviti pemuliharaan berkembang sebanyak 8.0 peratus setahun iaitu RM7,847.0 juta pada tahun 2010 kepada RM11,550.8 juta pada tahun 2015. Kumpulan industri penakungan, perawatan & bekalan air merupakan penyumbang utama nilai output kasar dengan nilai RM5,273.3 juta atau sumbangan 45.6 peratus dari nilai keseluruhan sektor. Ini diikuti pengumpulan sisa RM2,997.5 juta (26.0%) dan pemuliharaan semula bahan RM1,127.5 juta (9.8%). [Carta 2].

Carta 2 : Nilai output kasar mengikut kumpulan industri, 2015



W.P. Kuala Lumpur mencatatkan nilai output kasar tertinggi iaitu RM2,997.1 juta dengan sumbangan 25.9 peratus, diikuti Selangor RM2,774.5 juta (24.0%), Johor RM1,774.6 juta (15.4%) dan Pulau Pinang RM854.7 juta (7.4%).

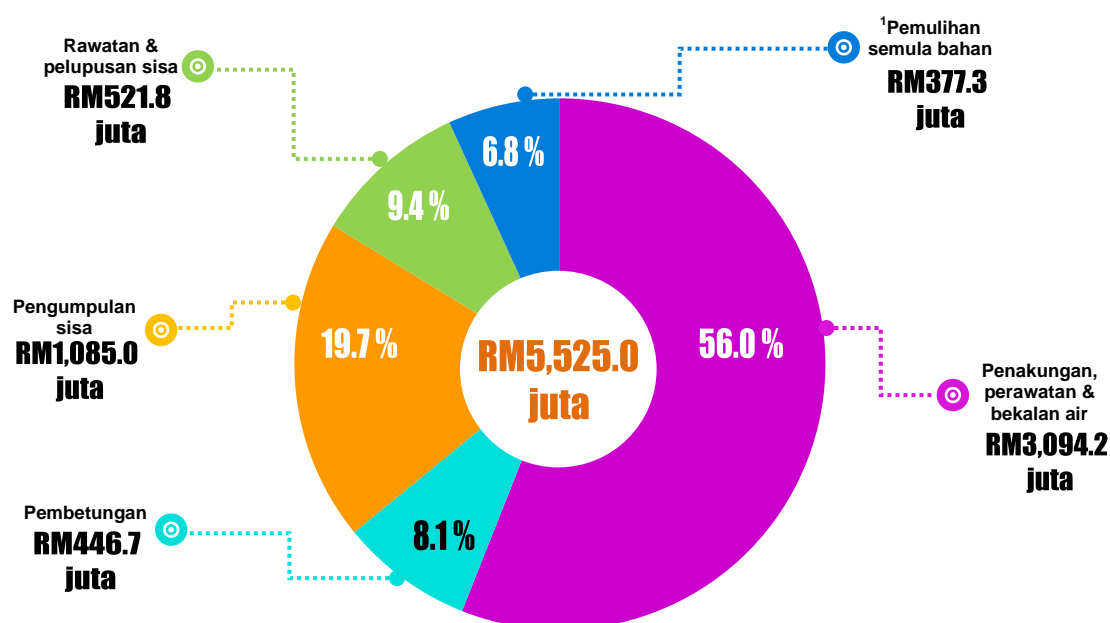
Carta 3 : Nilai output kasar mengikut negeri, 2015



5. NILAI DITAMBAH

Pada tahun 2015, nilai ditambah bagi sektor bekalan air; pembetulan, pengurusan sisa & aktiviti pemulihan adalah RM5,525.0 juta (2010 : RM3,535.4) dengan CAGR 9.3 peratus setahun. Nilai ditambah tertinggi dicatatkan oleh kumpulan industri penakungan, perawatan & bekalan air iaitu RM3,094.2 juta dengan sumbangan 56.0 peratus diikuti pengumpulan sisa RM1,085.0 juta (19.7%) dan rawatan & pelupusan sisa RM521.8 juta (9.4%). Ketiga-tiga kumpulan industri ini menyumbang 85.1 peratus daripada keseluruhan nilai ditambah. [Carta 4].

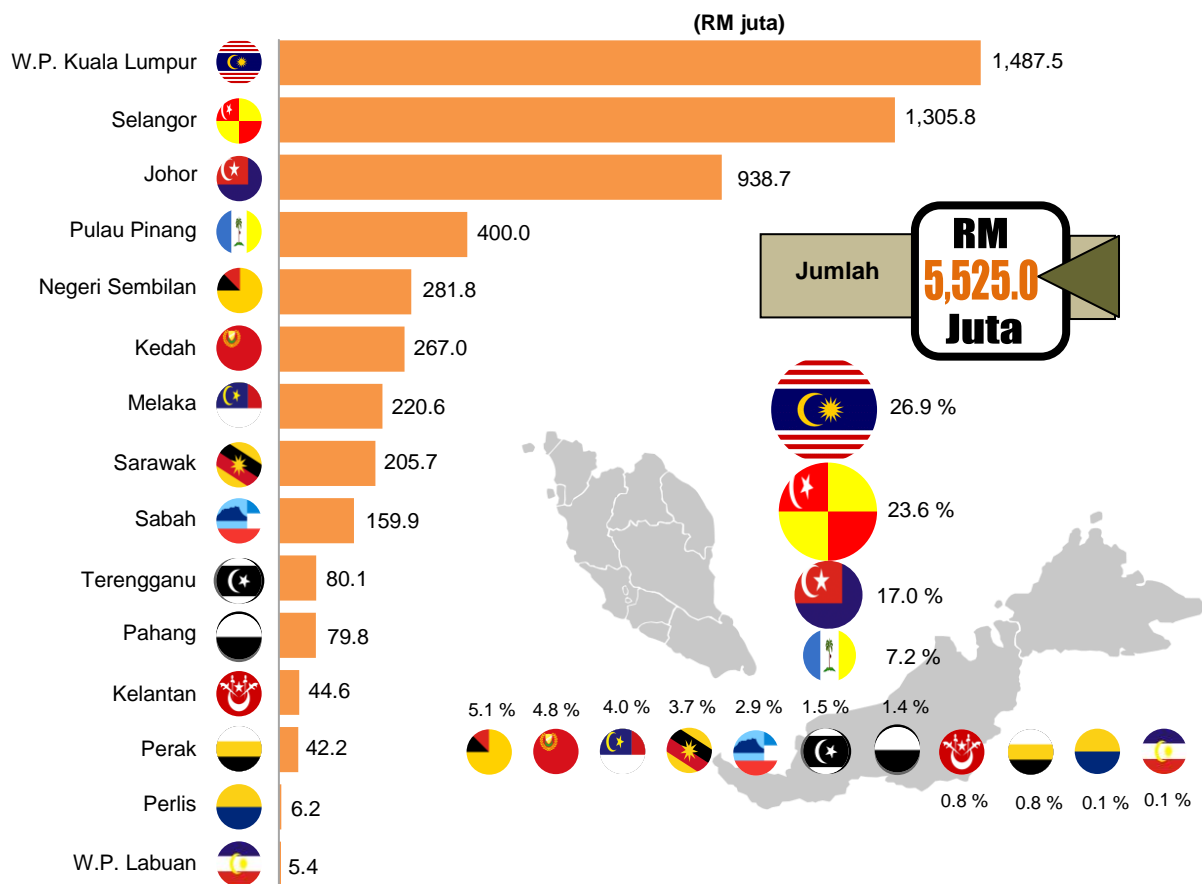
Carta 4 : Nilai ditambah mengikut kumpulan industri, 2015



Nota : ¹Termasuk Aktiviti pemulihan & lain-lain perkhidmatan pengurusan sisa

Prestasi nilai ditambah mengikut negeri pada tahun 2015 menunjukkan W.P. Kuala Lumpur adalah penyumbang utama iaitu RM1,487.5 juta dengan sumbangan 26.9 peratus, diikuti Selangor RM1,305.8 juta (23.6%), Johor RM938.7 juta (17.0%) dan Pulau Pinang RM400.0 juta (7.2%). [Carta 5].

Carta 5: Nilai ditambah mengikut negeri, 2015



6. BILANGAN PEKERJA DAN GAJI & UPAH

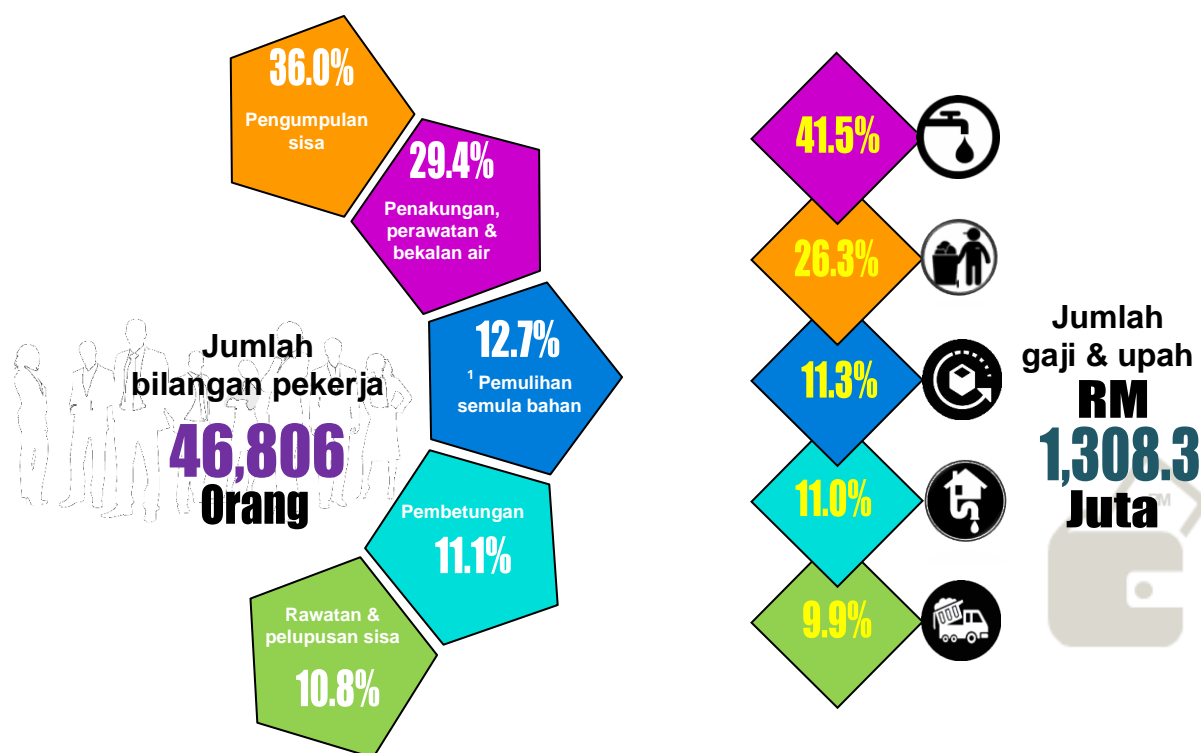
Sektor bekalan air; pembetulan, pengurusan sisa & aktiviti pemulihan mencatatkan bilangan pekerja seramai 46,806 orang pada tahun 2015 berbanding 25,313 orang pada tahun 2010 dengan pertumbuhan CAGR 13.1 peratus setahun. Kumpulan industri pengumpulan sisa merekodkan bilangan pekerja tertinggi iaitu 16,878 orang dengan sumbangan 36.0 peratus. Ini diikuti oleh kumpulan industri penakungan, perawatan & bekalan air 13,757 orang (29.4%) dan pemulihan semula bahan 5,928 orang (12.7%).

Selari dengan pertambahan bilangan pekerja bayaran gaji & upah tahun 2015 juga telah meningkat kepada RM1,308.3 juta berbanding RM667.4 juta pada tahun 2010 iaitu peningkatan pada kadar 14.4 peratus setahun. Walaupun bilangan pekerja kumpulan industri penakungan, perawatan & bekalan air mewakili 29.4 peratus namun jumlah gaji & upah yang diterima adalah yang tertinggi iaitu RM543.4 juta

RINGKASAN PENEMUAN

dengan sumbangan 41.5 peratus. Ini diikuti oleh kumpulan industri pengumpulan sisa RM343.5 juta (26.3%) dan pemuliharaan semula bahan RM147.7 juta (11.3%).

Paparan 1: Bilangan pekerja dan gaji & upah mengikut kumpulan industri, 2015

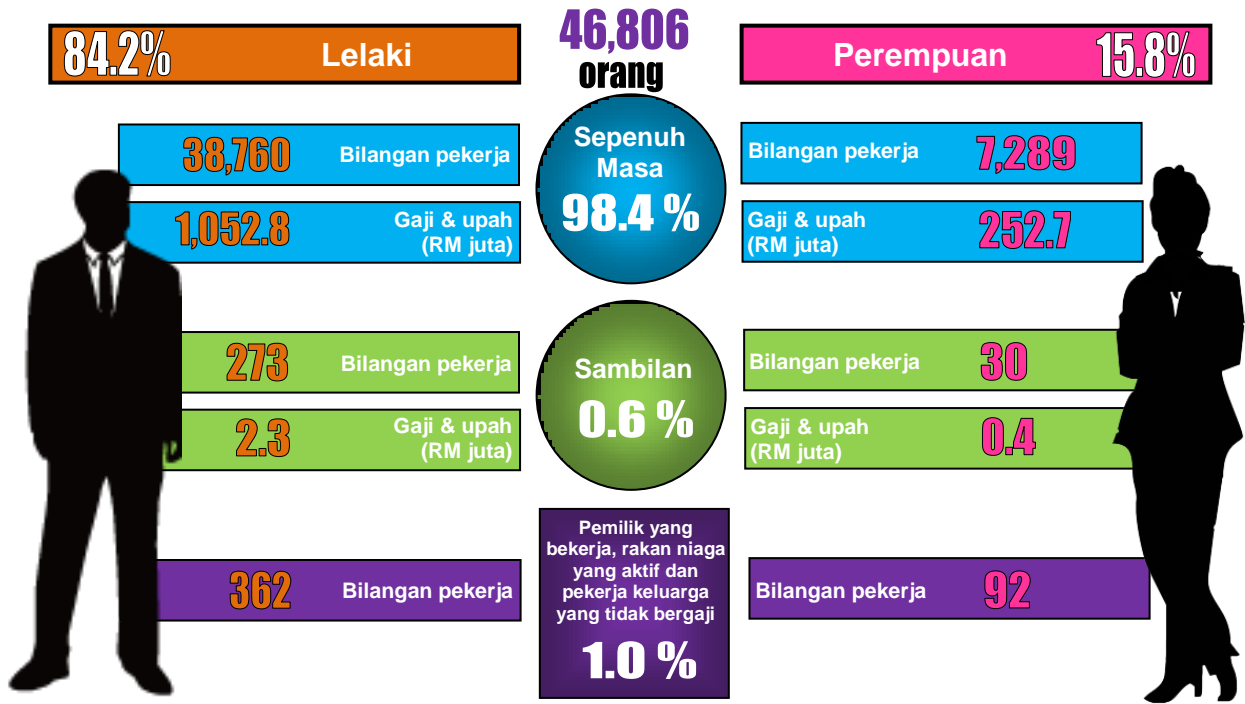


Nota : ¹Termasuk Aktiviti pemuliharaan & lain-lain perkhidmatan pengurusan sisa

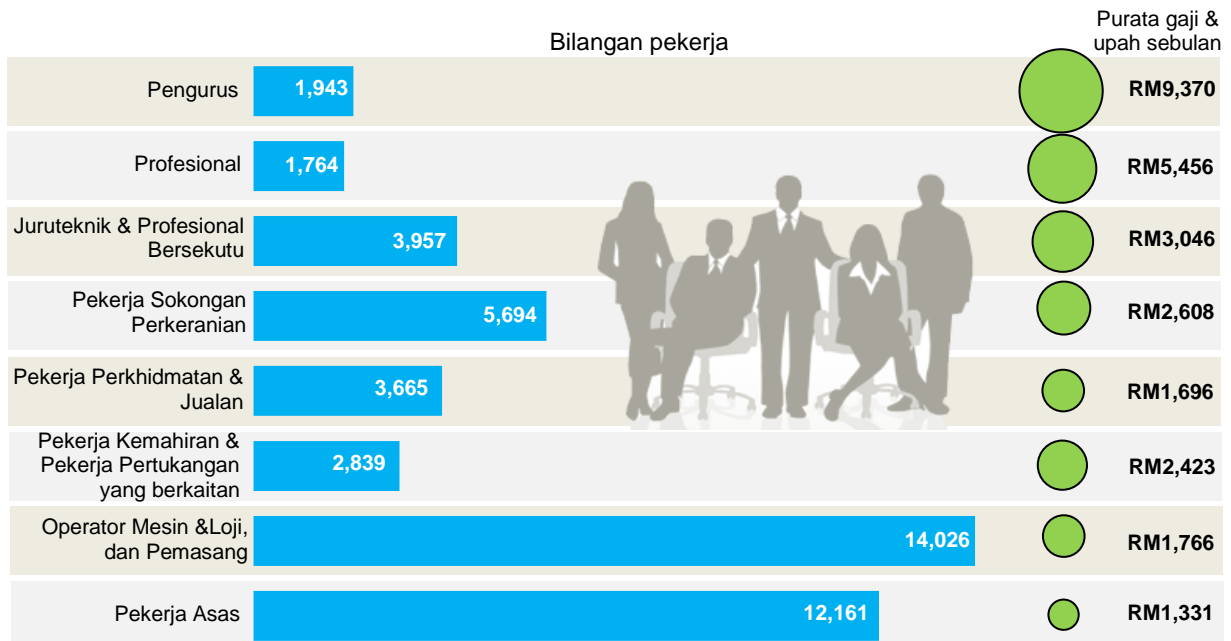
Kategori pekerja menunjukkan bilangan pekerja sepenuh masa seramai 46,049 orang (98.4%), pekerja sambilan 303 orang (0.6%) dan pemilik yang bekerja, rakan niaga yang aktif dan pekerja keluarga yang tidak bergaji 454 orang (1.0%). Jumlah gaji & upah bagi pekerja sepenuh masa adalah sebanyak RM1,305.5 juta dengan purata gaji & upah sebanyak RM2,363 sebulan. (**Paparan 2** dan **Jadual 9**).

Kategori Pekerja Mesin & Loji, dan Pemasang mencatatkan bilangan pekerja paling ramai iaitu 14,026 orang dengan sumbangan 30.5 peratus. Manakala kategori pekerja Pengurus adalah penerima gaji & upah bulanan tertinggi dengan purata RM9,370. (**Carta 6**).

Paparan 2 : Bilangan pekerja dan gaji & upah mengikut kategori pekerja dan jantina, 2015



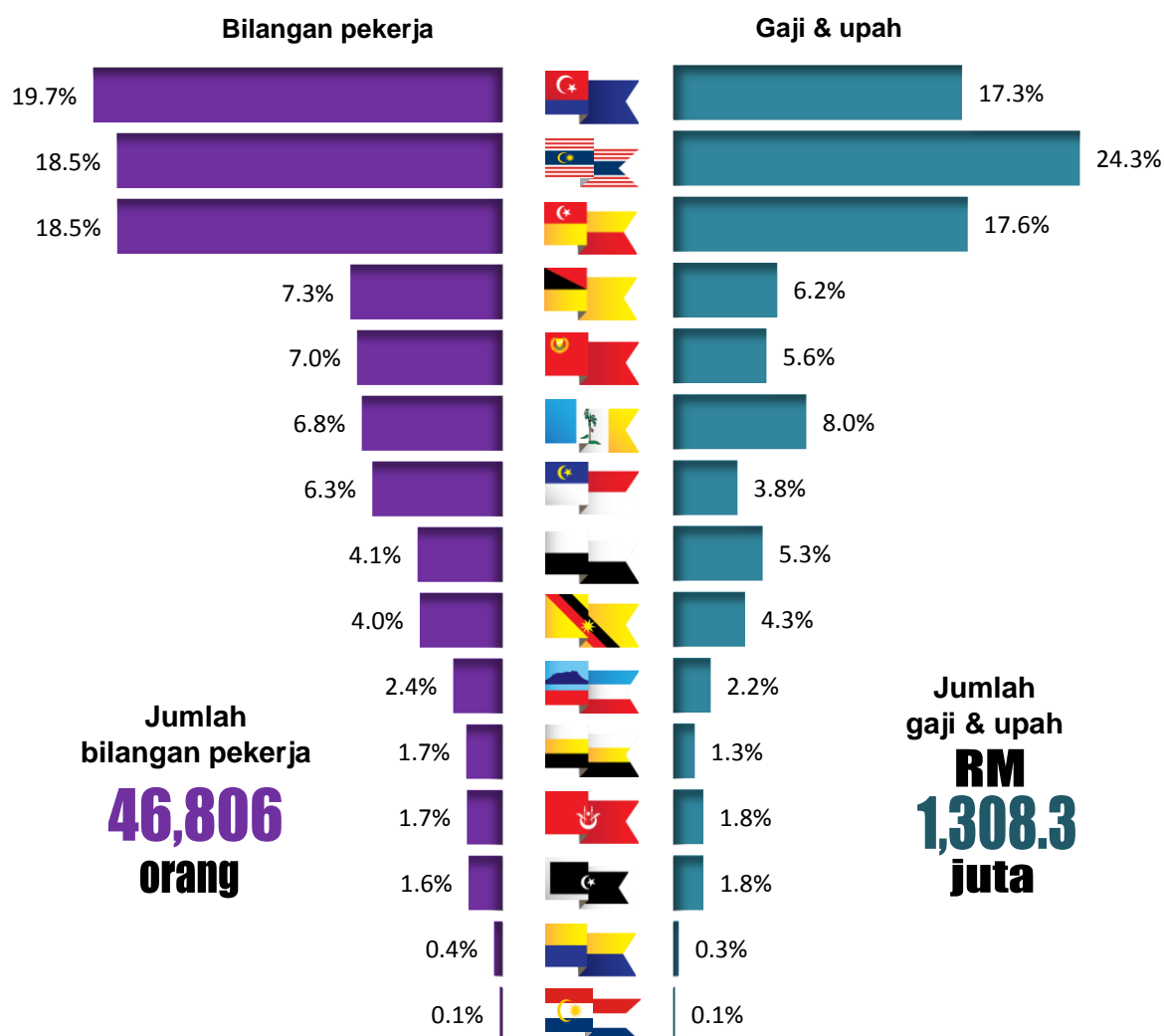
Carta 6 : Bilangan pekerja sepenuh masa dan purata gaji & upah sebulan mengikut kategori, 2015



RINGKASAN PENEMUAN

Johor mencatatkan bilangan pekerja tertinggi iaitu 9,206 orang dengan sumbangan 19.7 peratus, diikuti W.P. Kuala Lumpur 8,674 orang (18.5%), Selangor 8,667 orang (18.5%) dan Negeri Sembilan 3,421 orang (7.3%). Manakala bayaran gaji & upah mengikut negeri merekodkan W.P. Kuala Lumpur adalah tertinggi iaitu RM318.2 juta atau 24.3 peratus daripada keseluruhan gaji & upah (RM1,308.3 juta)..

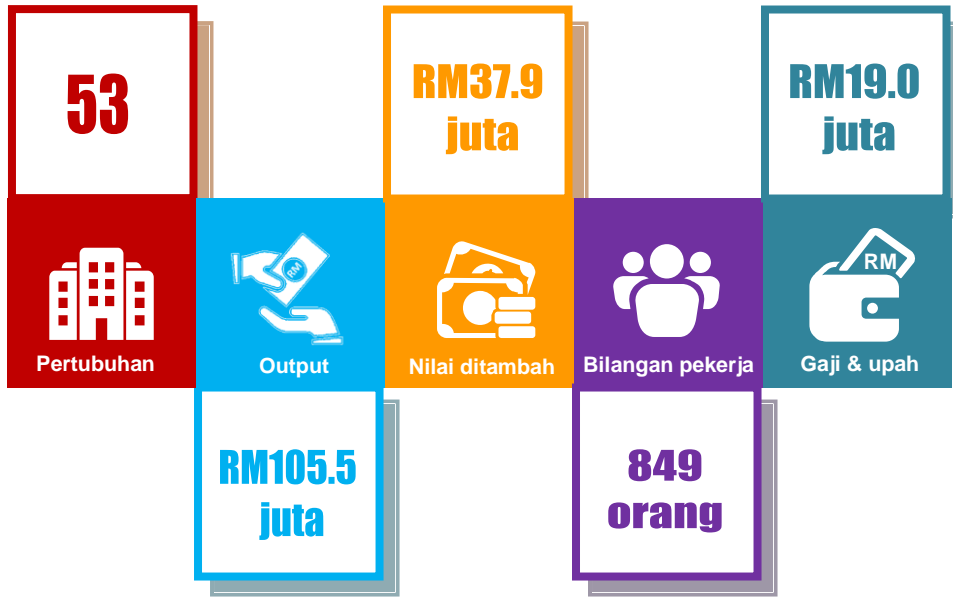
Carta 7 : Peratusan bilangan pekerja dan gaji & upah mengikut negeri, 2015



7. PERTUBUHAN MILIKAN WANITA

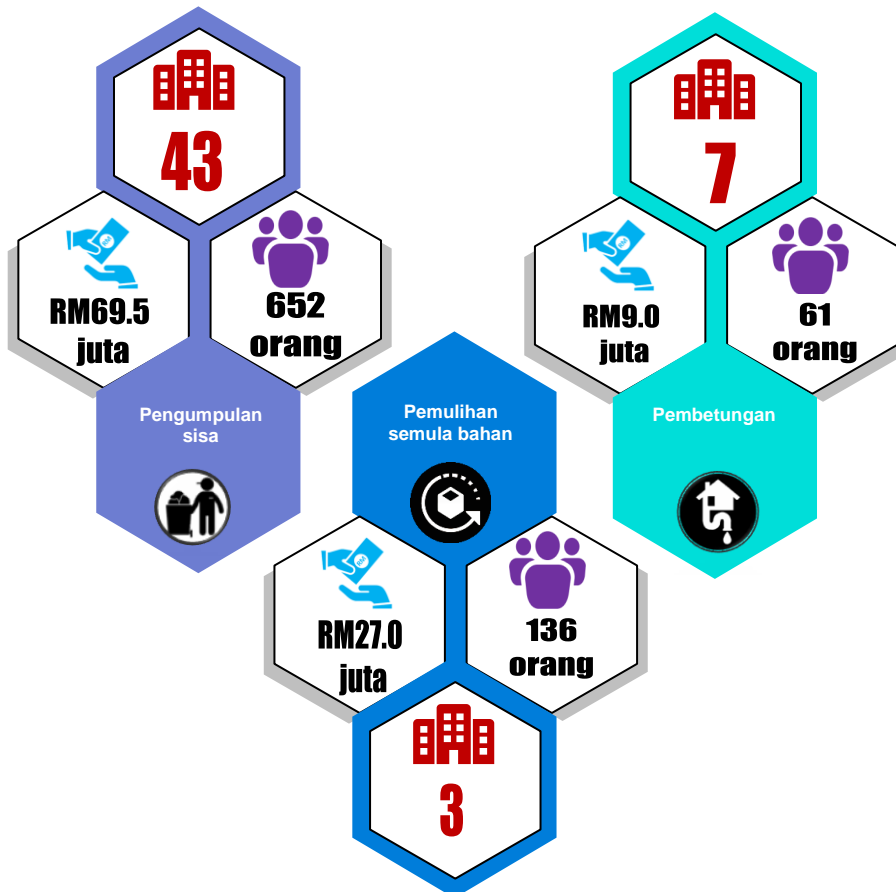
Pertubuhan milikan wanita yang direkodkan pada tahun 2015 adalah 53 pertubuhan dengan sumbangan 6.8 peratus daripada keseluruhan pertubuhan. Jumlah nilai output kasar dan nilai ditambah bagi pertubuhan milikan wanita masing-masing adalah RM105.5 juta dan RM37.9 juta. Pekerja sepenuh masa seramai 746 mewakili 87.9 peratus daripada keseluruhan 849 orang bilangan pekerja. Purata gaji & upah pekerja sepenuh masa adalah RM2,064 sebulan.

Paparan 3 : Perangkaan utama pertubuhan milikan wanita, 2015



Pertubuhan milikan wanita hanya direkodkan di dalam tiga kumpulan industri. Bilangan tertinggi dicatatkan oleh kumpulan industri pengumpulan sisa iaitu 43 pertubuhan.

Paparan 4 : Pertubuhan milikan wanita mengikut kumpulan industri, 2015



WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES

1. INTRODUCTION

This report presents statistics of the water supply; sewerage, waste management & remediation activities sector for reference year 2015 canvassed under the Economic Census 2016.

2. OVERALL PERFORMANCE

An annual growth for the main statistic of water supply; sewerage, waste management & remediation activities sector in 2015 showed a better performance compared to 2010. This growth was driven by an increasing number of establishments at 5.5 per cent per year to 784 establishments with an increase in gross output value of 8.0 per cent per year to RM11,550.8 million. This sector also recorded an increase in the number of persons engaged by 13.1 per cent per year to 46,806 persons with total salaries & wages RM1,308.3 million (+14.4% per year). Average salaries & wages of full-time employees was RM2,363 per month.



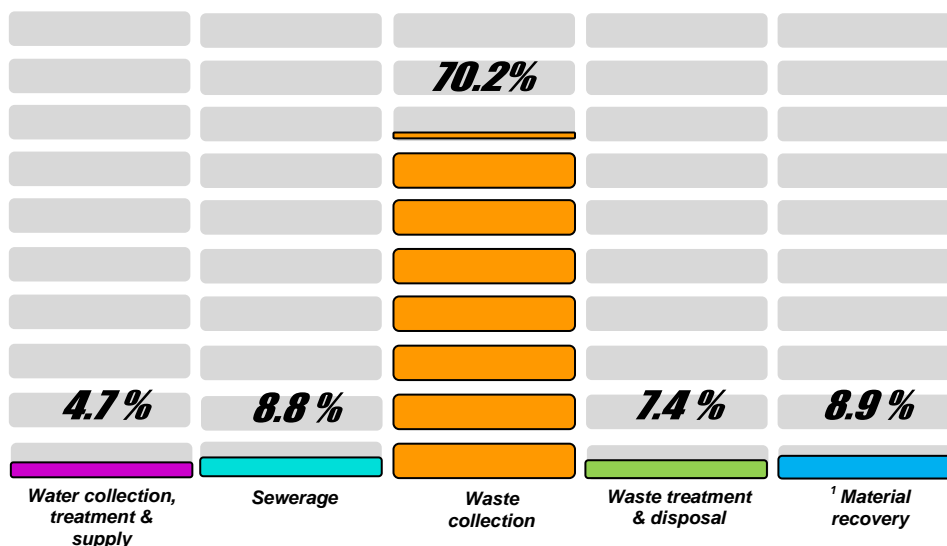
3. ESTABLISHMENT

Water supply; sewerage, waste management & remediation activities sector recorded the number of establishments of 784 establishments in 2015 compared to 601 in 2010 with a CAGR of 5.5 per cent. The group of waste collection industry remains as the largest contributor to the number of establishments with a contribution

SUMMARY OF FINDINGS

of 70.2 per cent (2010 : 70.4%), followed by material recovery (8.9%), sewerage (8.8%), waste treatment & disposal (7.4%) and water collection, treatment & supply (4.7%).

Chart 1: Number of establishment by industry group, 2015



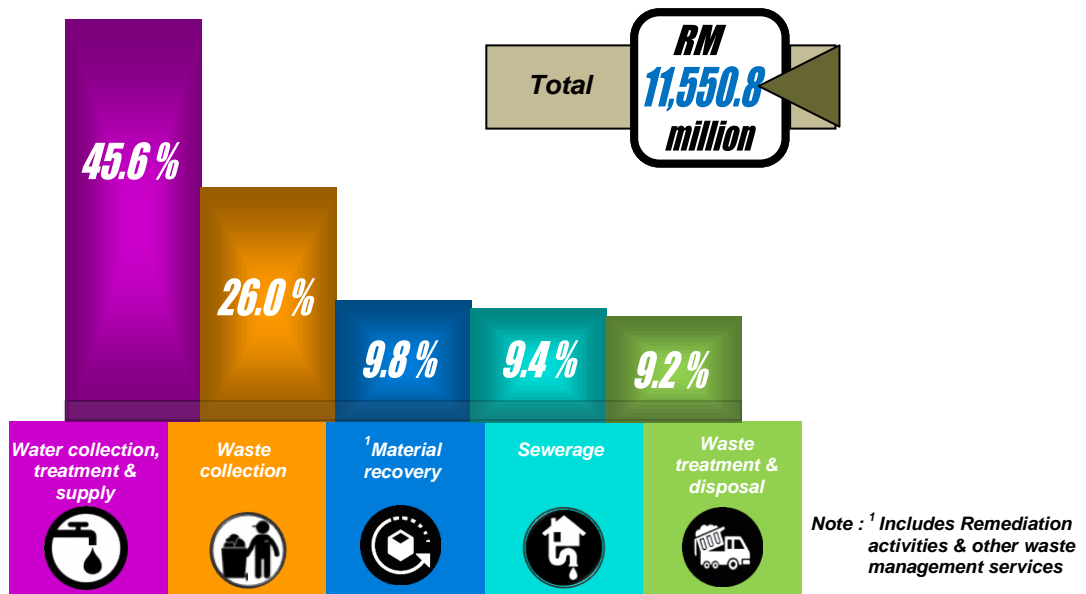
Note : ¹ Includes Remediation activities & other waste management services

Total establishment : 784

4. VALUE OF GROSS OUTPUT

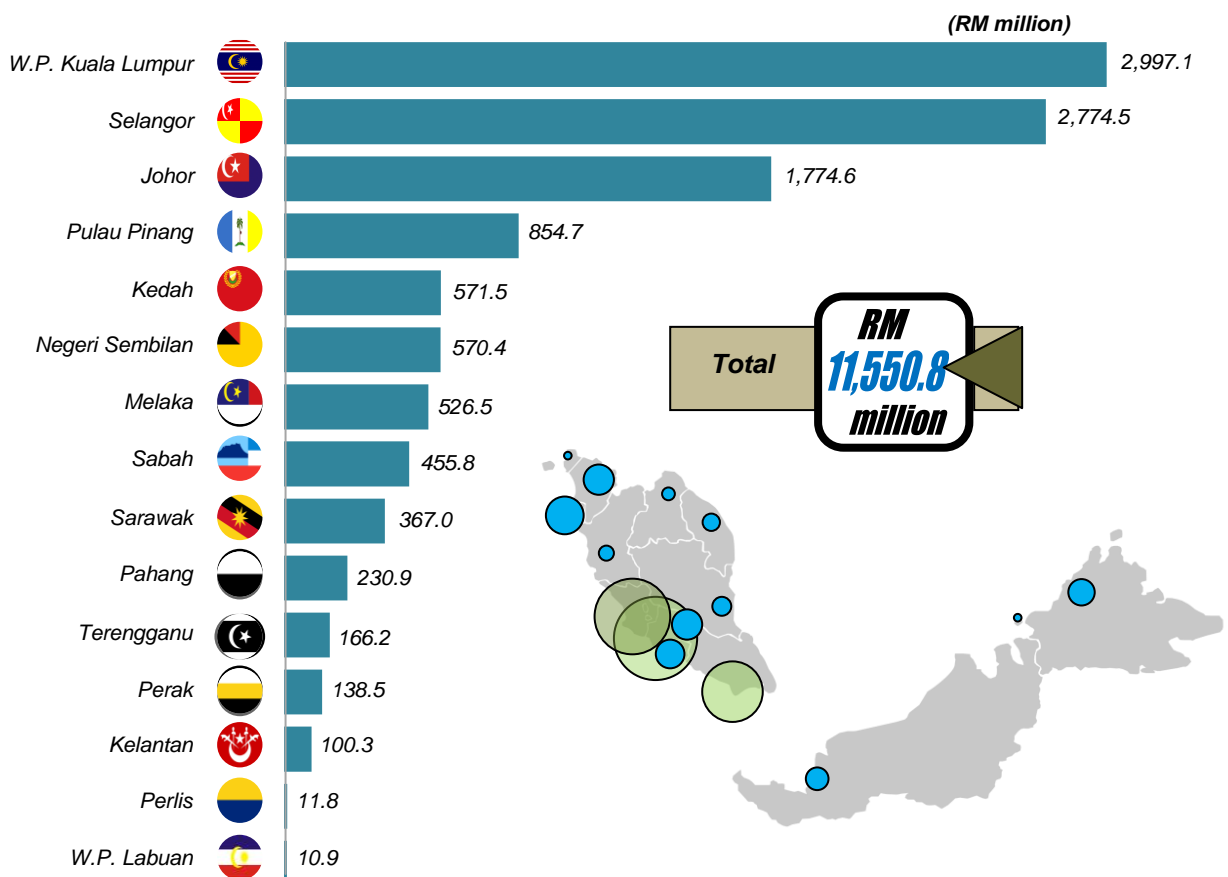
In the period 2010 to 2015, the value of gross output of water supply; sewerage, waste management & remediation activities sector growth by 8.0 per cent per year which is RM7,847.0 million in 2010 to RM11,550.8 million in 2015. The group of water collection, treatment & supply industry was the main contributor to the value of gross output with the value of RM5,273.3 million or 45.6 per cent of the total value. This was followed by waste collection RM2,997.5 million (26.0%) and material recovery RM1,108.3 million (9.6%).

Chart 2 : Value of gross output by industry group, 2015



W.P. Kuala Lumpur recorded the highest contribution gross output value of RM2,997.1 million with a contribution of 25.9 per cent, followed by Selangor RM2,774.5 million (24.0%), Johor RM1,774.6 million (15.4%) and Pulau Pinang RM854.7 million (7.4%).

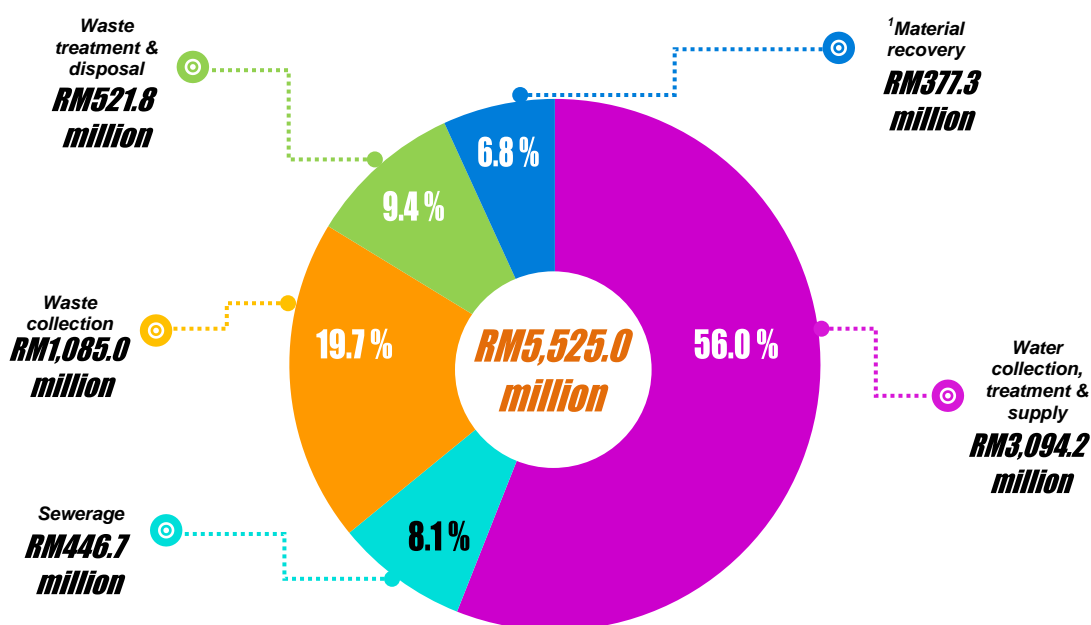
Chart 3 : Value of gross output by states, 2015



5. VALUE ADDED

In 2015, value added for the water supply; sewerage, waste management & remediation activities sector was RM5,525.0 million (2010: RM3,535.4) with a CAGR of 9.3 per cent per year. The highest value added was recorded by group of water collection, treatment & supply industry RM3,094.2 million with a contribution of 56.0 per cent, followed by waste collection RM1,085.0 million (19.7%) and waste treatment & disposal RM521.8 million (9.4%). These three industrial groups accounted for 85.1 per cent of the total value added. (Chart 4).

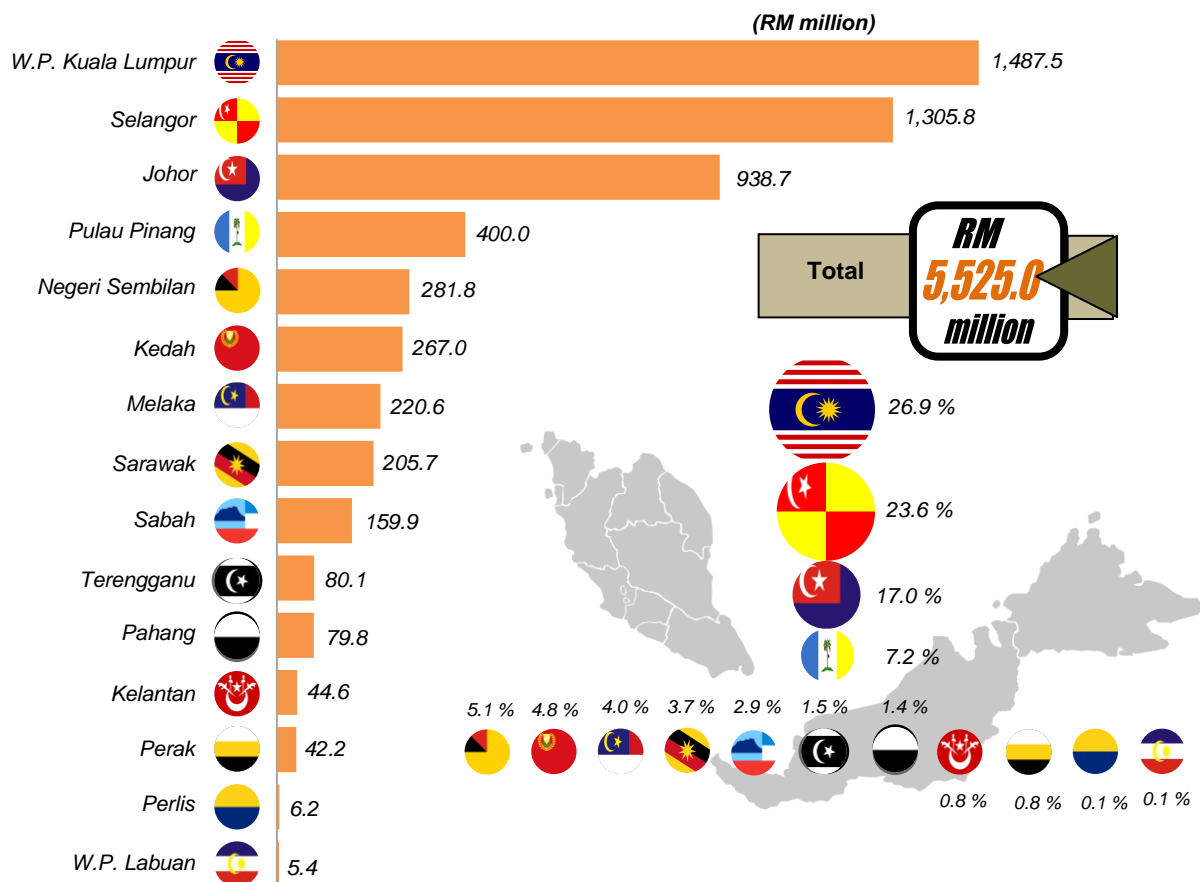
Chart 4 : Value added by group industry, 2015



Note : ¹ Include Remediation activities & other waste management services

Value added performance by states in 2015 showed W.P. Kuala Lumpur was the main contributor of RM1,487.5 million with a contribution of 26.9 per cent, followed by Selangor RM1,305.8 million (23.6%), Johor RM938.7 million (17.0%) and Penang RM400.0 million (7.2%). [Chart 5].

Chart 5 : Value added by states, 2015

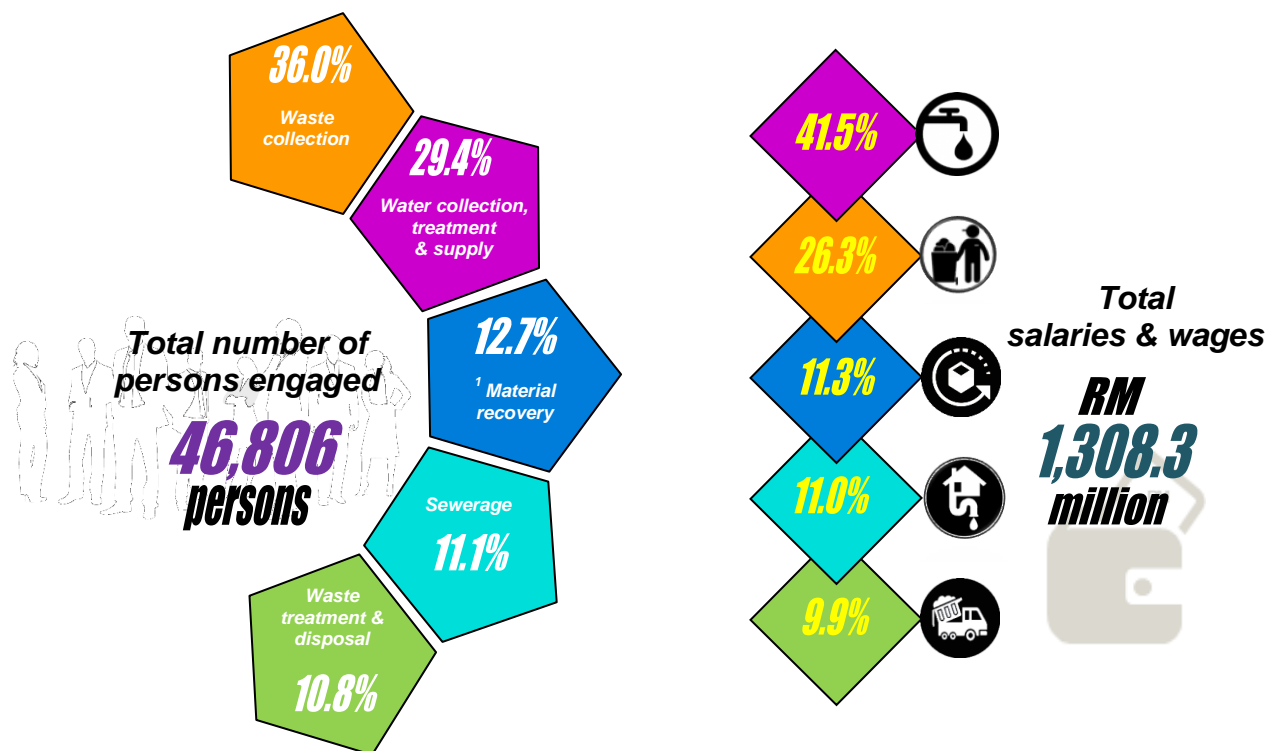


6. NUMBER OF PERSONS ENGAGED AND SALARIES & WAGES

Water supply; sewerage, waste management & remediation activities sector recorded the number of persons engaged was 46,806 in 2015 as compared to 25,313 in 2010 with a CAGR growth of 13.1 per cent per year. The group of waste collection industry recorded the highest number of persons engaged 16,878 persons with a contribution of 36.0 per cent. This was followed by group of water collection, treatment & supply industry 13,757 persons (29.4%) and material recovery 5,928 persons (12.7%).

In line with the increasing number of persons engaged, salaries & wages paid in 2015 also increased to RM1,308.3 million compared to RM667.4 million in 2010, an increase of 14.4 per cent per year. Despite the number of persons engaged for group of water collection, treatment & supply industry representing 29.4 per cent but the amount of salaries & wages received was the highest at RM543.4 million with a contribution of 41.5 per cent. This was followed by group of waste collection industry RM343.5 million (26.3%) and material recovery RM147.7 million (11.3%).

Exhibit 1: Number of persons engaged and salaries & wages by industry group, 2015



Note : ¹ Includes Remediation activities & other waste management services

The category of workers showed the number of full-time employees was 46,049 persons with a contribution of 98.4 per cent, part-time employees 303 persons (0.6%) and working proprietors & active business partners and unpaid family workers 454 persons (1.0%). Total salaries & wages for full-time employees was RM1,305.5 million with average salaries & wages of RM2,363 per month. (Exhibit 2 and Table 9).

Plant & Machine Operators & Assemblers category recorded the largest number of persons engaged of 14,026 persons with a contribution of 30.5 per cent. Meanwhile the category of managers was the highest recipient with average monthly salaries & wages of RM9,370. (Chart 6).

Exhibit 2 : Number of persons engaged salaries & wages by category of workers and sex, 2015

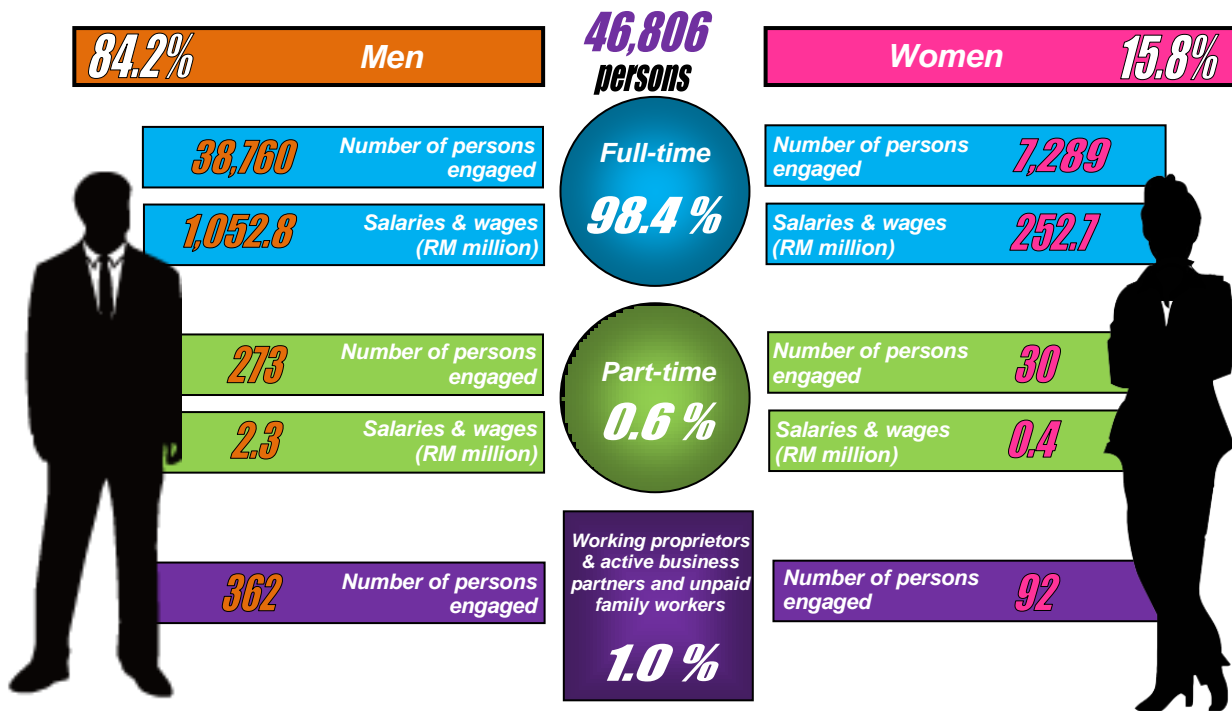
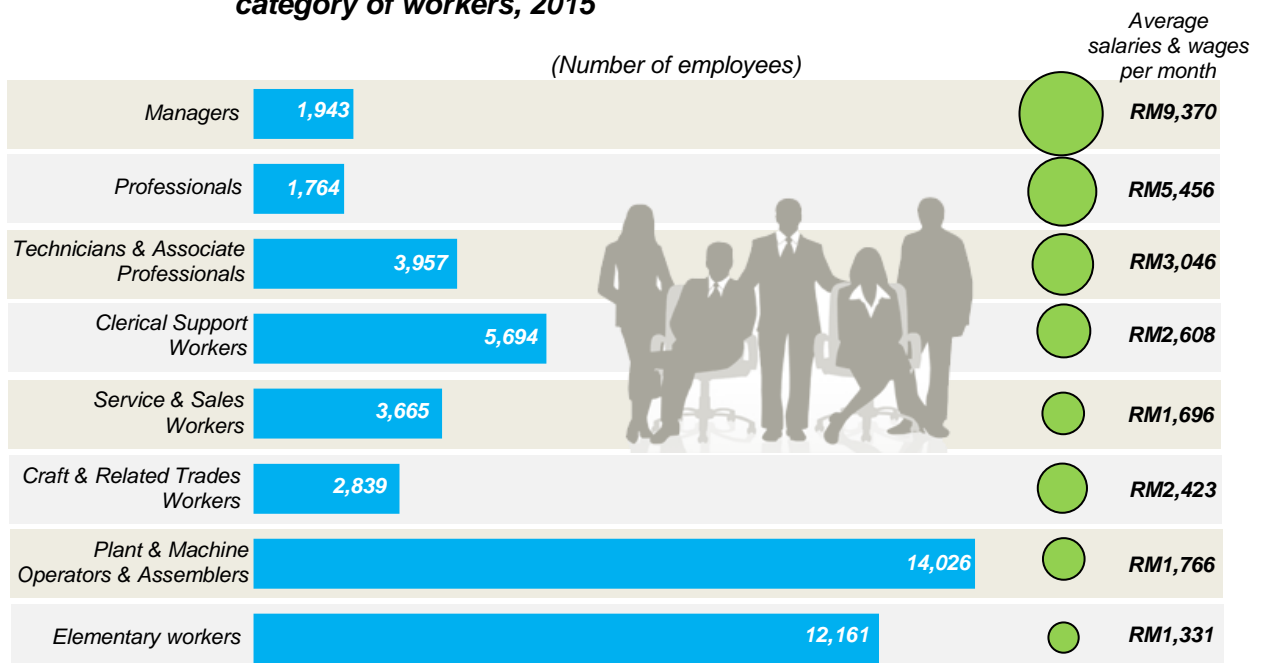


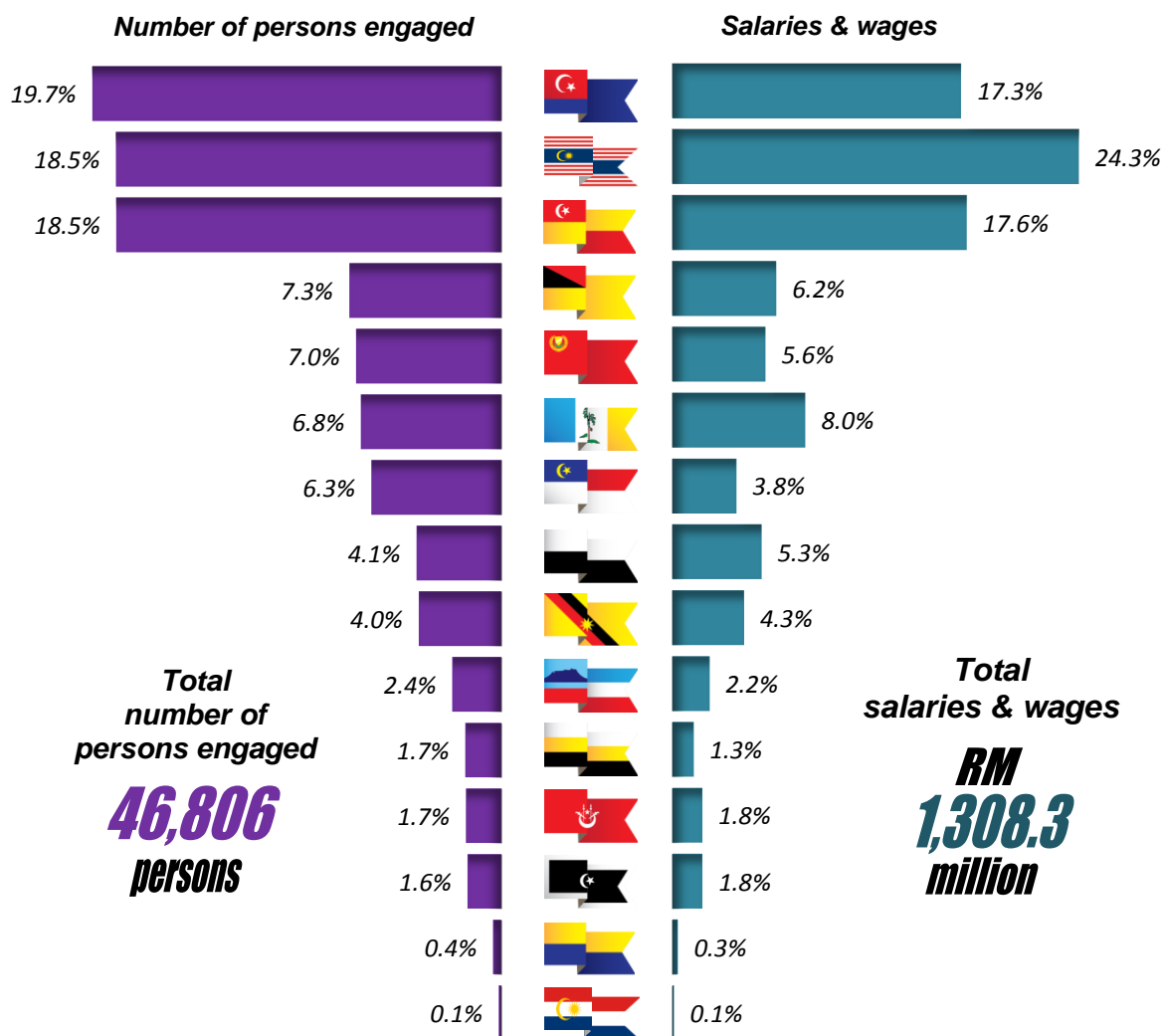
Chart 6 : Number of full-time employees and salaries & wages per month by category of workers, 2015



SUMMARY OF FINDINGS

Johor recorded the highest number of persons engaged which is 9,206 persons with a contribution of 19.7 per cent, followed by W.P. Kuala Lumpur 8,674 persons (18.5%), Selangor 8,667 persons (18.5%) and Negeri Sembilan 3,421 persons (7.3%). Meanwhile, salaries & wages paid by states recorded W.P. Kuala Lumpur was the highest at RM318.2 million or 24.3 per cent of the total salaries & wages (Rm1,308.3 million).

Chart 7: Percentage number of persons engaged and salaries & wages by states, 2015

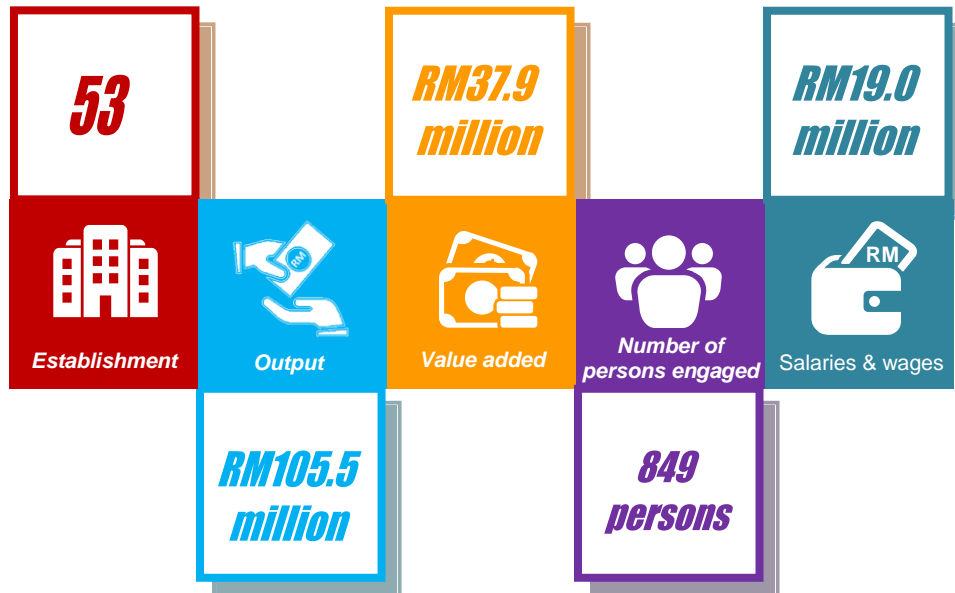


7. WOMEN-OWNED ESTABLISHMENTS

Women-owned establishments recorded in 2015 were 53 establishments with a contribution of 6.8 per cent of the total establishment. Total value of gross output and value added for women-owned establishments were RM105.5 million and RM37.9 million respectively. Full-time employees was 746 persons represented 87.9 per cent

of the total 849 persons. The average salaries & wages for full-time employee was RM2,064 per month.

Exhibit 3 : Main statistical of women-owned establishments by states, 2015



Women-owned establishment only recorded in the three industry groups. The highest number was recorded by group of waste collection industry which is 43 establishments.

Exhibit 4 : Women-owned establishment by industry group, 2015



NOTA TEKNIKAL
TECHNICAL NOTES



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- 1. Skop dan liputan** Meliputi semua pertubuhan yang terlibat dalam sektor bekalan air; pembedungan, pengurusan sisa dan aktiviti pemulihan. Sebanyak 18 kod industri di peringkat 5-digit diliputi berdasarkan kategori yang dikelaskan di bawah Seksyen E mengikut Piawaian Klasifikasi Industri Malaysia (MSIC), 2008. Senarai lengkap industri yang diliputi ditunjukkan di Lampiran (**muka surat 75**).
- 2. Sumber rangka** Sumber maklumat utama rangka pertubuhan diperoleh daripada Suruhanjaya Syarikat Malaysia (SSM). Selain itu, maklumat rangka dikemaskini daripada sumber seperti Suruhanjaya Perkhidmatan Air Negara (SPAN), Perbadanan Pengurusan Sisa Pepejal dan Pembersihan Awam (PPSPPA), Pihak Berkuasa Tempatan (PBT), syarikat konsesi pengurusan, media cetak serta media elektronik.
- Rangka dikemaskini setiap tahun untuk mengambil kira pertubuhan baru dan merekod sebarang perubahan dalam status pertubuhan seperti tutup, tidak beroperasi, perubahan jenis aktiviti atau alamat untuk memastikan maklumat yang terdapat di dalam rangka adalah yang paling terkini.
- 3. Jenis aktiviti perniagaan** Jenis aktiviti perniagaan merujuk kepada aktiviti utama dan sekunder. Aktiviti utama merujuk kepada aktiviti yang mana pertubuhan menggunakan sebahagian besar sumbernya atau yang memberikan sumbangan besar dari segi pendapatan. Aktiviti sekunder didefinisikan sebagai aktiviti sampingan kepada aktiviti utama. Klasifikasi industri bagi pertubuhan adalah mengikut aktiviti utamanya berdasarkan kepada Piawaian Klasifikasi Industri Malaysia (MSIC), 2008 Ver.1.0. MSIC 2008 adalah selaras dengan Klasifikasi Standard Perindustrian Antarabangsa bagi Semua Aktiviti Ekonomi (ISIC), semakan ke-4, Pertubuhan Bangsa-Bangsa Bersatu dengan pengubahsuaian untuk keperluan tempatan.
- 4. Konsep dan definisi** Konsep dan definisi yang diguna berasaskan kepada syor-syor *United Nation Statistical Division*¹. Konsep berkenaan mengikut amalan yang sudah diterima pakai bagi memudahkan perbandingan data dibuat di peringkat antarabangsa.

¹ *International Recommendations for Industrial Statistics, United Nations Statistical Division, Statistical Papers, Series M No. 90, United Nations, New York, 2009.*

Takrif yang digunakan adalah selaras dengan “Piawaian Klasifikasi Industri Malaysia (MSIC), 2008” iaitu aktiviti yang berkaitan dengan pengurusan sisa (termasuk pungutan, perawatan dan pelupusan) seperti sisa terjadual, sisa pepejal dan air sisa daripada perindustrian dan isi rumah, termasuk juga pemulihan bahan dan tapak yang tercemar. Hasil sisa daripada proses perawatan boleh dilupus atau menjadi input kepada proses pengeluaran yang lain. Aktiviti yang berkaitan dengan perawatan dan bekalan air juga dimasukkan dalam sektor ini.

5. Unit melapor

Bilangan pertubuhan yang dilaporkan dalam penerbitan ini berbeza dengan data awalan yang dikeluarkan dalam penerbitan Banci Ekonomi 2016 Statistik Pertubuhan. Perbezaan ini disebabkan oleh analisis terkini status cawangan, pengelasan industri dan status operasi pertubuhan.

Unit melapor bagi banci ini ialah **pertubuhan**. Sesebuah pertubuhan secara ideal ditakrifkan sebagai “satu unit ekonomi yang bergiat di bawah satu hak milik atau penguasaan tunggal, iaitu di bawah satu entiti yang sah. Ia menjalankan satu jenis subsektor ekonomi utama di satu tempat/lokasi fizikal”. Setiap pertubuhan diberikan klasifikasi industri berdasarkan aktiviti utamanya dan bukannya mengikut aktiviti syarikat induk.

Setiap cawangan daripada organisasi yang mempunyai beberapa cawangan di lokasi yang berbeza dari segi konsep dianggap sebagai pertubuhan yang berlainan. Pertubuhan berkenaan diminta memberikan penyata yang berasingan bagi setiap kegiatannya dari segi nilai. Walau bagaimanapun, dari segi praktis akaun biasanya disediakan secara berpusat kerana kesukaran untuk memperoleh data yang berasingan bagi setiap unit atau cawangan. Entiti atau ‘*enterprise*’ ini akan dianggap sebagai satu unit melapor dan dibenarkan mengemukakan soal selidik yang menggabungkan semua unit atau cawangannya.

6. Nilai output kasar Nilai output kasar ditakrifkan dengan memasukkan perkara berikut:

- + Jumlah pendapatan daripada aktiviti utama
- + Nilai jualan (daripada barang/bahan yang dibeli untuk dijual semula tanpa melalui proses selanjutnya)
- + Pendapatan output lain t.t.t.l.
- + Pendapatan daripada perkhidmatan profesional
- + Pendapatan daripada sewa bangunan tempat kediaman
- + Pendapatan daripada sewa bangunan bukan tempat kediaman
- + Pendapatan daripada sewa alat pengangkutan
- + Pendapatan daripada sewa jentera dan kelengkapan
- + Pendapatan daripada sewa lain-lain
- + Lain-lain (output)
- + Royalti, hakcipta, perlesenan dan yuran francais
- + Perbelanjaan modal yang dibuat dan dibina sendiri
- Kos barang yang dijual (barang/bahan yang dibeli untuk dijual semula tanpa melalui proses selanjutnya)
- + Perbelanjaan penyelidikan dan pembangunan (**dalaman**)
(Perbelanjaan penyelidikan dan pembangunan*(Perbelanjaan penyelidikan dan pembangunan: **dalaman**)/100))
- Pembelian air terawat

7. Nilai input perantaraan

Nilai input perantaraan ditakrifkan dengan memasukkan perkara berikut:

- + Kos bahan mentah/komponen/bahagian yang digunakan
- + Pembelian air mentah
- + Subkontraktor
- + Caj pelupusan
- + Bahan yang digunakan bagi pembaikan dan penyelenggaraan
- + Alat tulis dan bekalan pejabat
- + Air yang dibeli
- + Tenaga elektrik yang dibeli
- + Bahan pembakar, pelincir dan gas
- + Bayaran pembaikan dan penyelenggaraan semasa yang dibuat oleh pihak lain bagi harta tetap pertubuhan ini
- + Perkhidmatan pengangkutan
- + Perbelanjaan perjalanan
- + Perbelanjaan hiburan

- + Bayaran perakaunan, audit dan kesetiausahaan
- + Bayaran guaman
- + Bayaran profesional
- + Perbelanjaan teknologi maklumat
- + Bayaran pengurusan
- + Komisen dan bayaran agensi
- + Bayaran telekomunikasi
- + Bayaran pos dan perkhidmatan kurier
- + Perbelanjaan pengiklanan dan promosi
- + Bayaran bank
- + Premium insurans kecuali insurans pampasan pekerja
- + Bayaran untuk perkhidmatan keselamatan
- + Bayaran feri dan tol
- + Bayaran sewa (tidak termasuk bayaran bagi sewa tanah)
- + Bayaran royalti kepada : Organisasi bukan kerajaan/tajaan korporat
- + Lain-lain (input)
- + Bayaran kepada pengarah tidak bekerja kerana kehadiran mereka dalam mesyuarat Lembaga Pengarah
- + Nilai pakaian percuma yang disediakan
- + Kos latihan kepada pekerja
- + Bayaran kepada pertubuhan lain yang membekalkan pekerja

8. Nilai ditambah Nilai ditambah adalah tambahan kepada nilai barangan dan perkhidmatan yang dikeluarkan oleh sebuah pertubuhan. Nilai ditambah diperoleh daripada perbezaan antara nilai output kasar dengan input perantaraan.

9. Bilangan pekerja Bilangan pekerja meliputi semua orang yang diambil bekerja pada bulan Disember atau pada tempoh pembayaran gaji terakhir pada tahun rujukan. Bilangan orang yang bekerja dikategorikan seperti berikut:

i. Pemilik yang bekerja dan rakan niaga yang aktif

Kategori ini merujuk kepada semua pemilik perseorangan dan rakan niaga, sambilan atau sepenuh masa, yang bekerja dengan aktif dalam pertubuhan. Justeru itu, ia tidak termasuk rakan niaga yang tidak aktif.

ii. Pekerja keluarga tanpa gaji

Kategori ini meliputi semua ahli isi rumah pemilik pertubuhan yang melaksanakan kerja tertentu (sepanjang masa atau sambilan) dan bekerja sekurang-kurangnya satu pertiga daripada waktu bekerja biasa yang diamalkan oleh pertubuhan berkenaan tanpa mendapat bayaran secara 'regular' sama ada dalam bentuk wang tunai atau mata benda bagi kerja yang dilakukan. Biasanya pekerja berkenaan mendapat makanan, tempat tinggal dan bantuan lain sebagai sebahagian daripada ahli isi rumah pemilik dan terus mendapatnya sama ada mereka bekerja atau tidak di pertubuhan tersebut.

iii. Pekerja sepenuh masa

Ia merujuk kepada semua pekerja bergaji yang bekerja sekurang-kurangnya 6 jam sehari dan sekurang-kurangnya 20 hari sebulan.

iv. Pekerja sambilan

Ia merujuk kepada semua pekerja bergaji yang bekerja kurang daripada 6 jam sehari dan/atau kurang daripada 20 hari sebulan.

10. Kategori kemahiran

Kategori pekerjaan telah dikelaskan berdasarkan Piawaian Pengkelasan Pekerjaan Malaysia (MASCO) 2013 adalah seperti berikut:

i. Pekerja mahir

Pengurus, Profesional dan Juruteknik dan Profesional Bersekutu;

ii. Pekerja separa mahir

Pekerja Sokongan Perkeranian; Pekerja Perkhidmatan dan Jualan; Pekerja Mahir Pertanian, Perhutanan, Penternakan dan Perikanan; Pekerja Kemahiran dan Pekerja Pertukangan yang Berkaitan; Operator Mesin dan Loji dan Pemasang; dan

iii. Pekerja kurang mahir

Pekerja Asas

11. Nilai harta tetap Harta tetap meliputi semua barangan, baru atau terpakai, aset ketara atau tidak ketara yang digunakan secara berulang atau berterusan yang mempunyai hayat produktif lebih daripada setahun. Ia termasuk tanah, bangunan dan struktur, alat pengangkutan, komputer dan 'peripheral equipment', mesin, peralatan serta perabut dan pemasangan lain. Nilai harta tetap awal dan akhir bagi tahun rujukan 2015 adalah berasaskan nilai buku bersih. Pembelian, pindaan dan pembaikan besar atau perbelanjaan modal pada tahun berkenaan dikira pada nilai kos sebenar yang dibayar. Nilai harta tetap yang dijual dalam tahun semasa juga dikira pada nilai sebenar.

12. Pembundaran Penjumlahan komponen mungkin berbeza dengan angka jumlah besar disebabkan pembundaran.

13. Kadar pertumbuhan tahunan dikompaun Kadar pertumbuhan tahunan dikompaun (r) adalah berdasarkan formula berikut;

$$Y_t = Y_o(1 + r)^t$$

Di mana r ,

$$r = \left[e^{\frac{1}{t} \ln \left(\frac{y_t}{y_o} \right)} - 1 \right] \times 100$$

Dimana,

Y_t = Nilai pada tahun semasa

Y_o = Nilai pada tahun sebelum

t = Bilangan tahun, $Y_t - Y_o$

r = Kadar pertumbuhan tahunan dikompaun

14. Simbol dan singkatan Simbol dan singkatan berikut digunakan dalam penerbitan ini:

> lebih daripada

< kurang daripada

- tiada

} gabung

& dan

CAGR Kadar pertumbuhan tahunan dikompaun

t.t.t.l. tidak terkelas di tempat lain

RM Ringgit Malaysia

n.a. tidak berkaitan

W.P. Wilayah Persekutuan

- 1. Scope and coverage** *Covers all establishments involved in the water supply; sewerage waste management and remediation activities sector. There are 18 industries code at 5-digit level covered by the categories classified under Section E according to the Malaysia Standard Industrial Classification (MSIC) 2008. The complete lists of industry covered as per Appendix. (page 75)*
- 2. Source of frame** *The main source of information for the establishment frame is obtained from the Companies Commission of Malaysia (CCM), In addition, the frame information is update from sources such as the National Water Services Commission (SPAN), Solid Waste Management and Public Cleansing (PPSPPA), Local Authorities (PBT), concession management company, print media as well as electronic media.*
- The frame is updated annually to take into account new establishments and to record any changes in the status of the establishment such as closed down, not in operation, changes in activities or addresses to make sure the information in the frame is the latest update.*
- 3. Type of business activity** *The type of business activity refers to both principal and secondary activities. The principal activity refers to the activity to which the establishment devoted most of its resources or to which it contributes the largest income. Secondary activities are defined as those incidental or ancillary to the principal activity. The classification of the industry of the establishment is based on its principal activity and is in accordance to the Malaysia Standard Industrial Classification (MSIC), 2008 Ver.1.0. The MSIC 2008 conforms to the International Standard Industrial Classification of All Economic Activities (ISIC) Revision 4, United Nations, with modifications to suit local conditions.*
- 4. Concepts and definitions** *Concepts and definitions used are based on the recommendations of the United Nations Statistical Division¹. This concept adheres to accepted practices, thereby facilitating data comparison at international level. The definition used is in accordance with the "Malaysia Standard Industrial Classification (MSIC) 2008", which is activities related to waste management (including collection, treatment and disposal) such as scheduled waste, solid waste and waste water from industrial and household, including recovery materials and contaminated sites. The waste from the treatment process can be*

¹ International Recommendations for Industrial Statistics, United Nations Statistical Division, Statistical Papers, Series M No. 90, United Nations, New York, 2009.

disposed off or used as input for other production process. Related activities in water treatment and supply are also included in this sector.

5. Reporting unit *The number of establishments reported in this publication were different from the preliminary data published in the Economic Census 2016 Establishment Statistics. The difference was due to the latest analysis of branches status, reclassification of industry and operational status of the establishments.*

The reporting unit for this Census is the establishment. An establishment ideally defined as “an economic unit that engaged in one activity, under a single legal entity and operating in a single physical location”. Each establishment was assigned an industry classification based on its principal activity and not to that of its parent company.

Each branch of the multiple organisation has branches in different locations of conceptually treated as the different organisation. The establishment was requested to give separate returns for each activity in terms of value. However, if in practice, the accounts were centrally kept such that it was not possible to obtain separate data for each individual unit or branch. The entity or enterprise was treated as a single reporting unit and allowed to submit a consolidated questionnaire covering all units or branches.

6. Value of gross output *The value of gross output is defined to include the following elements:*

- + Total income from main activities*
- + Value of sales (From goods/ materials purchased for resale without further processing)*
- + Income from other output n.e.c.*
- + Professional fees received*
- + Rental income received from residential building*
- + Rental income received from non-residential building*
- + Rental income received from transport equipment*
- + Rental income received from machinery and equipment*
- + Rental income received from others*
- + Others (output)*

- + *Royalties, copyrights, licensing dan franchise fees*
- + *Capital expenditure built/self produced*
- *Cost of goods sold (goods/ materials purchased for resale without undergoing further processing)*
- + *Research and development expenditure (in-house)*
(Research and development expenditure(Research and development expenditure: in house/100))*
- *Purchase of treated water*

7. Value of Intermediate input *The value of intermediate input is defined to include the following elements:*

- + *Cost of materials/components/parts used*
- + *Purchase of raw water*
- + *Subcontractor*
- + *Disposal charges*
- + *Materials used for repairs and maintenance*
- + *Stationery and office supplies*
- + *Water purchased*
- + *Electricity purchased*
- + *Fuel, lubricants and gas consumed*
- + *Payments for current repairs and maintenance work done by others on this establishment's fixed assets*
- + *Transport services*
- + *Travelling expenses*
- + *Entertainment expenses*
- + *Accounting, secretarial and audit fees*
- + *Legal fees*
- + *Payment for other professional*
- + *Information technology expenses*
- + *Management fees*
- + *Commission and agency fees*
- + *Telecommunication fees*
- + *Postage and courier services*
- + *Advertising and promotion*
- + *Bank charges*
- + *Insurance premiums except worker's compensation insurance*

- + *Payment for security services*
- + *Ferry charges and tolls*
- + *Rental payment (excludes rent for use of land)*
- + *Royalties paid to: non-government organisations/ corporate sponsorship*
- + *Other input*
- + *Fees paid to non-working directors for their attendance at Board of Directors' meetings*
- + *Value of wearing apparel provided*
- + *Staff training cost*
- + *Payment to other establishment for providing workers*

8. Value added *Value added is the increment to the value of commodities and services contributed by the establishments. This value is derived as the difference between the value of gross output and value of intermediate input.*

9. Total number of persons engaged *Employment covers all persons engaged during December or the last pay period of the reference year. The number of persons engaged was classified under the following categories:*

i. Working proprietors and active business partner

This category refers to all individual proprietors and partners, part-time or full time, who are actively engaged in the work of the establishment. It therefore, excludes silent and inactive partners.

ii. Unpaid family workers

This category encompasses all persons (full-time or part-time) in the household of the owners of the establishment who perform a specified job and work for a minimum of one third of the normal working time of the establishment but do not receive regular payment, either in cash or in kind for work done. Such workers generally receive food, shelter and other support as part of the household of an owner but this would continue whether they worked in the establishment or not.

iii. Full-time employees

It refers to all paid workers who work for at least 6 hours a day and 20 days a month.

iv. Part-time employees

It refers to all paid workers who work for less than 6 hours a day and/or less than 20 days a month.

10. Category of skills

Job category has also been categorized according to Malaysia Standard Classification of Occupations 2013 (MASCO) as follow:

i. High-skilled

Manager, Professionals and Technician and Associate Professionals;

ii. Semi-skilled

Clerical Support Workers; Services and Sales Workers; Agricultural, Forestry, Livestock and Fisheries Skills Workers; Craft and related Trades Workers; Plant and Machine Operators and Assemblers; and

iii. Low-skilled

Elementary Workers

11. Value of fixed assets

Fixed assets cover all goods, new or used, tangible or intangible and used repeatedly or continuously that have a normal economic life span more than one year. This included land, buildings and structure, transport equipment, computer and peripheral equipment, other machinery, equipment and furniture and fittings. Value of fixed assets as at the beginning and end of 2015 was based on net book value. Purchases, alterations and major repairs or capital expenditure during the year were valued at actual costs incurred value of fixed assets sold during the year refers to the realised value.

12. Rounding

The sum of components figures may not tally with the sub-total or total figures due to rounding.

13. Compound annual growth rate

The calculation of compounded annual growth rate (*r*) is based on the following formula:

$$Y_t = Y_o(1 + r)^t$$

Where *r*,

$$r = \left[e^{\frac{1}{t} \ln \left(\frac{Y_t}{Y_o} \right)} - 1 \right] \times 100$$

Where,

- Y_t = Value at current year
- Y_o = Value at previous year
- t = Number of years, $Y_t - Y_o$
- r = Compound annual growth rate

14. Symbols and abbreviations

The following symbols and abbreviations have been used throughout the publication:

- > more than
- < less than
- nil
- } combine
- & and
- CAGR compound annual growth rate
- n.e.c. not elsewhere classified
- RM Ringgit Malaysia
- n.a. not applicable
- W.P. Wilayah Persekutuan

JADUAL
TABLES



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Jadual 1: Perangkaan utama sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kumpulan industri, 2010 dan 2015

Table 1: Principal statistics of water supply; sewerage, waste management and remediation activities sector by industry group, 2010 and 2015

Keterangan kumpulan industri <i>Industry group description</i>	Kod kumpulan dan industri <i>Group and industry code</i>	Tahun <i>Year</i>	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
				(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah <i>Total</i>		2015	784	11,550,761	6,025,714	5,525,047	46,806	1,308,256	7,661,798
		2010	601	7,846,982	4,311,558	3,535,425	25,313	667,388	5,255,822
Penakungan, perawatan dan bekalan air <i>Water collection, treatment and supply</i>	360	2015	37	5,273,315	2,179,081	3,094,234	13,757	543,444	4,927,916
		2010	77	4,621,823	1,894,058	2,727,766	11,317	369,137	3,468,368
Pembetulan <i>Sewerage</i>	370	2015	69	1,088,257	641,576	446,682	5,193	144,289	489,979
		2010	33	723,230	513,921	209,309	3,694	111,411	1,026,175
Pengumpulan sisa <i>Waste collection</i>	381	2015	550	2,997,472	1,912,498	1,084,974	16,878	343,507	1,094,056
		2010	423	1,372,562	1,020,204	352,358	8,377	135,647	274,057
Rawatan dan pelupusan sisa <i>Waste treatment and disposal</i>	382	2015	58	1,064,170	542,360	521,810	5,050	129,282	733,881
		2010	17	516,240	337,828	178,412	671	26,495	250,096
Pemulihan semula bahan <i>Material recovery</i>	383	2015	70	1,127,546	750,199	377,347	5,928	147,734	415,967
Aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa <i>Remediation activities and other waste management services</i>	390	2010	51	613,127	545,547	67,580	1,254	24,698	237,126

Jadual 2: Perangkaan utama sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kumpulan dan industri, 2015
 Table 2: Principal statistics of water supply; sewerage, waste management and remediation activities sector by group and industry, 2015

Keterangan kumpulan dan industri <i>Group and industry description</i>	Kod kumpulan dan industri <i>Group and industry code</i>	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
			(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah <i>Total</i>		784	11,550,761	6,025,714	5,525,047	46,806	1,308,256	7,661,798
Penakungan, perawatan dan bekalan air <i>Water collection, treatment and supply</i>	360	37	5,273,315	2,179,081	3,094,234	13,757	543,444	4,927,916
Penulenan dan pengagihan air untuk tujuan bekalan air <i>Purification and distribution of water for water supply purposes</i>	36001	}	5,273,315	2,179,081	3,094,234	13,757	543,444	4,927,916
Penyahmasinan air laut atau bawah tanah untuk menghasilkan air sebagai kepentingan produk utama <i>Desalting of sea or ground water to produce water as the principal product of interest</i>	36002							
Pembetulan <i>Sewerage</i>	370	69	1,088,257	641,576	446,682	5,193	144,289	489,979
Pembetulan dan aktiviti-aktiviti yang seumpamanya <i>Sewerage and similar activities</i>	37000	69	1,088,257	641,576	446,682	5,193	144,289	489,979
Pengumpulan sisa <i>Waste collection</i>	381	550	2,997,472	1,912,498	1,084,974	16,878	343,507	1,094,056
Pengumpulan sisa pepejal yang tidak berbahaya di kawasan setempat <i>Collection of non-hazardous solid waste within a local area</i>	38111	105	1,603,194	1,044,787	558,407	6,733	138,893	793,994

Jadual 2: Perangkaan utama sektor bekalan air; pembetungan, pengurusan sisa dan aktiviti pemulihan mengikut kumpulan dan industri, 2015 (samb.)

Table 2: Principal statistics of water supply; sewerage, waste management and remediation activities sector by group and industry, 2015 (cont'd)

Keterangan kumpulan dan industri <i>Group and industry description</i>	Kod kumpulan dan industri <i>Group and industry code</i>	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
			(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Pengumpulan bahan kitar semula <i>Collection of recyclable materials</i>	38112	376	808,674	538,506	270,169	5,292	112,653	220,614
Pengumpulan sampah dalam tong sampah di kawasan awam <i>Collection of refuse in litter-bins in public places</i>	38113	45	515,190	279,037	236,153	4,500	82,677	61,248
Pengumpulan sisa pembinaan dan runtuh <i>Collection of construction and demolition waste</i>	38114	5	1,837	1,008	828	27	352	865
Pengumpulan sisa berbahaya <i>Collection of hazardous waste</i>	38121	19	68,578	49,160	19,418	326	8,931	17,334
Rawatan dan pelupusan sisa <i>Waste treatment and disposal</i>	382	58	1,064,170	542,360	521,810	5,050	129,282	733,881
Rawatan dan pelupusan sisa tidak berbahaya <i>Treatment and disposal of non-hazardous waste</i>	38210	33	459,543	239,235	220,308	3,471	65,613	516,655
Rawatan dan pelupusan sisa berbahaya <i>Treatment and disposal of hazardous</i>	38220	25	604,627	303,125	301,502	1,579	63,668	217,226

Jadual 2: Perangkaan utama sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kumpulan dan industri, 2015 (samb.)
 Table 2: Principal statistics of water supply; sewerage, waste management and remediation activities sector by group and industry, 2015 (cont'd)

Keterangan kumpulan dan industri <i>Group and industry description</i>	Kod kumpulan dan industri <i>Group and industry code</i>	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
			(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Pemulihan semula bahan <i>Material recovery</i>	383							
Aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa <i>Remediation activities and other waste management services</i>	390	70	1,127,546	750,199	377,347	5,928	147,734	415,967
Meremukkan secara mekanikal sisa logam <i>Mechanical crushing of metal waste</i>	38301	13	313,669	198,873	114,796	2,493	67,719	39,886
Meleraikan peralatan automobil, komputer, televisyen dan peralatan lain untuk pemulihan bahan <i>Dismantling of automobiles, computers, televisions and other equipment for material recover</i>	38302	12	423,566	302,271	121,294	1,127	27,307	146,010
Memulih guna getah seperti tayar terpakai untuk menghasilkan bahan mentah sekunder <i>Reclaiming of rubber such as used tires to produce secondary raw material</i>	38303	12	21,838	13,166	8,672	225	4,875	34,371
Pemulihan bahan t.t.t.l <i>Materials recovery n.e.c.</i>	38309							
Aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa <i>Remediation activities and other waste management services</i>	39000	33	368,473	235,888	132,585	2,083	47,834	195,700

Jadual 3: Perangkaan utama sektor bekalan air; pembetungan, pengurusan sisa dan aktiviti pemulihan mengikut negeri, 2015
Table 3: Principal statistics of water supply; sewerage, waste management and remediation activities sector by states, 2015

Negeri States	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
		(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah Total	784	11,550,761	6,025,714	5,525,047	46,806	1,308,256	7,661,798
Johor	138	1,774,583	835,925	938,658	9,206	226,129	702,193
Kedah	39	571,483	304,522	266,961	3,269	73,012	144,316
Kelantan	4	100,308	55,756	44,552	799	23,497	840,893
Melaka	42	526,498	305,944	220,554	2,926	50,255	524,872
Negeri Sembilan	25	570,422	288,629	281,793	3,421	81,343	273,708
Pahang	17	230,898	151,114	79,784	1,910	69,890	29,032
Perak	66	138,533	96,345	42,188	810	16,737	21,171
Perlis	6	11,808	5,643	6,165	187	4,330	4,529
Pulau Pinang	68	854,734	454,698	400,036	3,164	104,125	1,088,367
Sabah	25	455,767	295,862	159,904	1,102	29,135	308,266
Sarawak	43	367,011	161,355	205,656	1,855	56,116	312,947
Selangor	209	2,774,538	1,468,749	1,305,788	8,667	230,424	2,309,077
Terengganu	9	166,228	86,109	80,119	759	23,596	37,583
W.P. Kuala Lumpur	88	2,997,064	1,509,597	1,487,466	8,674	318,223	1,063,068
W.P. Labuan	5	10,886	5,464	5,422	57	1,445	1,776
W.P. Putrajaya	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Jadual 4: Perangkaan utama sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut taraf sah organisasi, 2015

Table 4: Principal statistics of water supply; sewerage, waste management and remediation activities sector by legal organisation, 2015

Taraf sah organisasi <i>Legal organisation</i>	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
		(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah <i>Total</i>	784	11,550,761	6,025,714	5,525,047	46,806	1,308,256	7,661,798
Hak milik perseorangan <i>Individual proprietorship</i>	233	84,021	45,792	38,229	1,052	12,298	15,989
Perkongsian <i>Partnership</i>	53	67,200	51,765	15,435	511	7,025	9,766
Syarikat sendirian berhad <i>Private limited company</i>	495	11,056,174	5,713,860	5,342,314	43,070	1,204,905	7,118,846
Syarikat awam berhad <i>Public limited company</i>	3	343,367	214,298	129,069	2,173	84,028	517,197

Jadual 5: Perangkaan utama sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut hak milik, 2015

Table 5: Principal statistics of water supply; sewerage, waste management and remediation activities sector by ownership, 2015

Hak milik <i>Ownership</i>	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantara <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
		(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah <i>Total</i>	784	11,550,761	6,025,714	5,525,047	46,806	1,308,256	7,661,798
Residen Malaysia <i>Malaysian residents</i>	780	11,449,258	5,973,358	5,475,900	46,589	1,301,033	7,647,662
Bukan residen Malaysia <i>Non-Malaysian residents</i>	4	101,503	52,356	49,146	217	7,223	14,136

Jadual 6: Perangkaan utama sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut saiz pekerja, 2015
Table 6: Principal statistics of water supply; sewerage, waste management and remediation activities sector by employment size, 2015

Saiz pekerja <i>Employment size</i>	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
		(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah <i>Total</i>	784	11,550,761	6,025,714	5,525,047	46,806	1,308,256	7,661,798
Kurang daripada <i>Below</i>							
5	290	185,368	115,242	70,126	937	10,631	156,306
5 – 29	333	1,822,284	935,633	886,651	4,109	98,115	1,752,350
30 – 75	85	1,026,533	672,681	353,852	3,918	104,884	552,040
76 dan lebih <i>and above</i>	76	8,516,575	4,302,158	4,214,417	37,842	1,094,626	5,201,101

Jadual 7: Perangkaan utama sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut saiz output, 2015
Table 7: Principal statistics of water supply; sewerage, waste management and remediation activities sector by output size, 2015

Saiz output <i>Output size</i>	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>	
(RM'000)		(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)	
Jumlah <i>Total</i>	784	11,550,761	6,025,714	5,525,047	46,806	1,308,256	7,661,798	
Kurang daripada <i>Below</i>	300	246	30,843	14,111	16,732	796	7,676	12,533
300 – < 3,000	315	357,091	200,427	156,664	3,530	72,778	146,573	
3,000 – 20,000	158	1,214,976	747,534	467,442	8,686	207,341	599,088	
20,000 dan lebih <i>and above</i>	65	9,947,852	5,063,643	4,884,209	33,794	1,020,461	6,903,605	

Jadual 8: Perangkaan utama sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut saiz harta tetap, 2015

Table 8: Principal statistics of water supply; sewerage, waste management and remediation activities sector by size of fixed assets , 2015

Saiz harta tetap <i>Size of fixed assets</i>			Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
(RM'000)			(RM'000)	(RM'000)	(RM'000)	(RM'000)	(RM'000)	(RM'000)	
Jumlah <i>Total</i>			784	11,550,761	6,025,714	5,525,047	46,806	1,308,256	7,661,798
Kurang daripada <i>Below</i>									
		50	281	218,521	140,168	78,353	1,896	32,681	5,131
50	–	<100	82	73,965	48,972	24,993	699	12,400	6,007
100	–	<200	82	175,404	109,662	65,742	2,383	33,390	11,852
200	–	<500	95	199,271	123,122	76,149	1,271	29,040	30,185
500	–	<1,000	63	493,845	314,902	178,942	2,199	56,225	45,670
1,000	–	<5,000	108	1,356,265	860,187	496,079	8,073	212,091	252,097
5,000	–	<10,000	24	1,579,670	619,252	960,418	7,096	258,847	163,578
10,000	–	<50,000	30	1,588,787	945,023	643,764	8,760	207,048	672,633
50,000	–	<100,000	7	702,754	327,734	375,020	2,990	103,249	488,126
100,000	–	<200,000	3	417,332	167,364	249,968	496	24,420	396,512
200,000		dan lebih and above	9	4,744,945	2,369,326	2,375,620	10,943	338,866	5,590,006

Jadual 9: Bilangan pekerja dan gaji & upah sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kategori pekerja, 2015
 Table 9: Number of persons engaged and salaries & wages of water supply; sewerage, waste management and remediation activities sector by category of workers, 2015

Kategori pekerja <i>Category of workers</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>			Gaji & upah yang dibayar <i>Salaries & wages paid</i> (RM'000)
	Jumlah <i>Total</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	
Jumlah <i>Total</i>	46,806	39,395	7,411	1,308,256
Jumlah pemilik yang bekerja dan pekerja keluarga tidak bergaji <i>Total working proprietors and unpaid family workers</i>	454	362	92	n.a
Pemilik yang bekerja dan rakan niaga yang aktif <i>Working proprietors and active business partners</i>	361	306	55	n.a
Pekerja keluarga tidak bergaji (semua ahli keluarga dan rakan yang tidak menerima upah yang tetap) <i>Unpaid family workers (all members of family and friends not receiving regular wages)</i>	93	56	37	n.a
Jumlah pekerja bergaji (sepenuh masa) <i>Total paid employees (full-time)</i>	46,049	38,760	7,289	1,305,548
Pengurus <i>Managers</i>	1,943	1,472	471	218,481
Profesional <i>Professionals</i>	1,764	1,097	667	115,493
Profesional <i>Professionals</i>	1,724	1,067	657	113,711
Penyelidik <i>Researchers</i>	40	30	10	1,782

Jadual 9: Bilangan pekerja dan gaji & upah sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kategori pekerja, 2015 (samb.)
Table 9: Number of persons engaged and salaries & wages of water supply; sewerage, waste management and remediation activities sector by category of workers, 2015 (cont'd)

Kategori pekerja <i>Category of workers</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>			Gaji & upah yang dibayar <i>Salaries & wages paid</i> (RM'000)
	Jumlah <i>Total</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	
Juruteknik dan Profesional Bersekutu <i>Technicians and Associate Professionals</i>	3,957	3,556	401	144,664
Pekerja Sokongan Perkeranian <i>Clerical Support Workers</i>	5,694	2,652	3,042	178,233
Pekerja Perkhidmatan dan Jualan <i>Service and Sales Workers</i>	3,665	2,953	712	74,605
Pekerja Kemahiran dan Pekerja Pertukangan yang berkaitan <i>Craft and Related Trades Workers</i>	2,839	2,734	105	82,546
Operator Mesin dan Loji, dan Pemasang <i>Plant and Machine Operators and Assemblers</i>	14,026	12,955	1,071	297,274
Pekerja Asas <i>Elementary Occupations</i>	12,161	11,341	820	194,252
Jumlah pekerja bergaji (sambilan) <i>Total paid employees (part-time)</i>	303	273	30	2,708

Jadual 10: Bilangan pekerja sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kumpulan dan industri, 2015
Table 10: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by group and industry, 2015

Keterangan kumpulan dan industri <i>Group and industry description</i>	Kod kumpulan dan industri <i>Group and industry code</i>	Bilangan pertubuhan <i>Number of establishments</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>			
			Jumlah <i>Total</i>	Pemilik yang bekerja, rakan niaga yang aktif dan pekerja keluarga yang tidak bergaji <i>Working proprietors, active business partners and unpaid family workers</i>	Pekerja sepenuh masa <i>Full-time employees</i>	Pekerja sambilan <i>Part-time employees</i>
Jumlah <i>Total</i>		784	46,806	454	46,049	303
Penakungan, perawatan dan bekalan air <i>Water collection, treatment and supply</i>	360	37	13,757	-	13,740	17
Penulenan dan pengagihan air untuk tujuan bekalan air <i>Purification and distribution of water for water supply purposes</i>	36001	}	13,757	-	13,740	17
Penyahmasinan air laut atau bawah tanah untuk menghasilkan air sebagai kepentingan produk utama <i>Desalting of sea or ground water to produce water as the principal product of interest</i>	36002					
Pembetulan <i>Sewerage</i>	370	69	5,193	15	5,172	6
Pembetulan dan aktiviti-aktiviti yang seumpamanya <i>Sewerage and similar activities</i>	37000	69	5,193	15	5,172	6
Pengumpulan sisa <i>Waste collection</i>	381	550	16,878	408	16,239	231
Pengumpulan sisa pepejal yang tidak berbahaya di kawasan setempat <i>Collection of non-hazardous solid waste within a local area</i>	38111	105	6,733	47	6,578	108

Jadual 10: Bilangan pekerja sektor bekalan air; pembetungan, pengurusan sisa dan aktiviti pemulihan mengikut kumpulan dan industri, 2015 (samb.)

Table 10: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by group and industry, 2015 (cont'd)

Keterangan kumpulan dan industri <i>Group and industry description</i>	Kod kumpulan dan industri <i>Group and industry code</i>	Bilangan pertubuhan <i>Number of establishments</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>			
			Jumlah <i>Total</i>	Pemilik yang bekerja, rakan niaga yang aktif dan pekerja keluarga yang tidak bergaji <i>Working proprietors, active business partners and unpaid family workers</i>	Pekerja sepenuh masa <i>Full-time employees</i>	Pekerja sambilan <i>Part-time employees</i>
Pengumpulan bahan kitar semula <i>Collection of recyclable materials</i>	38112	376	5,292	328	4,845	119
Pengumpulan sampah dalam tong sampah di kawasan awam <i>Collection of refuse in litter-bins in public places</i>	38113	45	4,500	22	4,475	3
Pengumpulan sisa pembinaan dan runtuh <i>Collection of construction and demolition waste</i>	38114	5	27	6	21	-
Pengumpulan sisa berbahaya <i>Collection of hazardous waste</i>	38121	19	326	5	320	1
Rawatan dan pelupusan sisa <i>Waste treatment and disposal</i>	382	58	5,050	11	5,022	17
Rawatan dan pelupusan sisa tidak berbahaya <i>Treatment and disposal of non-hazardous waste</i>	38210	33	3,471	-	3,460	11
Rawatan dan pelupusan sisa berbahaya <i>Treatment and disposal of hazardous</i>	38220	25	1,579	11	1,562	6
Pemulihan semula bahan <i>Material recovery</i>	383	70	5,928	20	5,876	32
Aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa <i>Remediation activities and other waste management services</i>	390					
Meremukkan secara mekanikal sisa logam <i>Mechanical crushing of metal waste</i>	38301	13	2,493	6	2,475	12

Jadual 10: Bilangan pekerja sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kumpulan dan industri, 2015 (samb.)
Table 10: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by group and industry, 2015 (cont'd)

Keterangan kumpulan dan industri <i>Group and industry description</i>	Kod kumpulan dan industri <i>Group and industry code</i>	Bilangan pertubuhan <i>Number of establishments</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>			
			Jumlah <i>Total</i>	Pemilik yang bekerja, rakan niaga yang aktif dan pekerja keluarga yang tidak bergaji <i>Working proprietors, active business partners and unpaid family workers</i>	Pekerja sepenuh masa <i>Full-time employees</i>	Pekerja sambilan <i>Part-time employees</i>
Meleraikan peralatan automobil, komputer, televisyen dan peralatan lain untuk pemulihan bahan <i>Dismantling of automobiles, computers, televisions and other equipment for material recover</i>	38302	12	1,127	2	1,125	-
Memulih guna getah seperti tayar terpakai untuk menghasilkan bahan mentah sekunder <i>Reclaiming of rubber such as used tires to produce secondary raw material</i>	38303	12	225	8	215	2
Pemulihan bahan t.t.t.l <i>Materials recovery n.e.c.</i>	38309	33	2,083	4	2,061	18
Aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa <i>Remediation activities and other waste management services</i>	39000					

Jadual 11: Bilangan pekerja sektor bekalan air; pembetungan, pengurusan sisa dan aktiviti pemulihan mengikut jantina dan industri, 2015
Table 11: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by sex and industry, 2015

Keterangan kumpulan industri <i>Group and industry description</i>	Kod kumpulan dan industri <i>Group and industry</i>	Jumlah <i>Total</i>	Jumlah pekerja <i>Total number of persons engaged</i>		Pemilik yang bekerja, rakan niaga yang aktif dan pekerja keluarga yang tidak bergaji <i>Working proprietors, active business partners and unpaid family workers</i>		Pekerja sepenuh masa <i>Full-time employees</i>		Pekerja sambilan <i>Part-time employees</i>		Gaji & upah yang dibayar <i>Salaries & wages paid</i>	
			Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>
Jumlah <i>Total</i>		46,806	39,395	7,411	362	92	38,760	7,289	273	30	1,055,162	253,094
Penakungan, perawatan dan bekalan air <i>Water collection, treatment and supply</i>	360	13,757	10,610	3,147	-	-	10,602	3,138	8	9	418,377	125,067
Penulenan dan pengagihan air untuk tujuan bekalan air <i>Purification and distribution of water for supply purposes</i>	36001	13,757	10,610	3,147	-	-	10,602	3,138	8	9	418,377	125,067
Penyahmasinan air laut atau bawah tanah untuk menghasilkan air sebagai kepentingan produk utama <i>Desalting of sea or ground water to produce water as the principal product of interest</i>	36002											
Pembetungan <i>Sewerage</i>	370	5,193	4,055	1,138	15	-	4,034	1,138	6	-	111,725	32,565
Pembetungan dan aktiviti-aktiviti yang seumpamanya <i>Sewerage and similar activities</i>	37000	5,193	4,055	1,138	15	-	4,034	1,138	6	-	111,725	32,565
Pengumpulan sisa <i>Waste collection</i>	381	16,878	15,065	1,813	318	90	14,533	1,706	214	17	294,542	48,965
Pengumpulan sisa pepejal yang tidak berbahaya di kawasan seumpamanya <i>Collection of non-hazardous solid waste within a local area</i>	38111	6,733	5,836	897	31	16	5,697	881	108	-	112,773	26,119

Jadual 11: Bilangan pekerja sektor bekalan air; pembetungan, pengurusan sisa dan aktiviti pemulihan mengikut jantina dan industri, 2015 (samb.)
 Table 11: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by sex and industry, 2015 (cont'd)

Keterangan kumpulan industri <i>Group and industry description</i>	Kod kumpulan dan industri <i>Group and industry</i>	Jumlah <i>Total</i>	Jumlah pekerja <i>Total number of persons engaged</i>		Pemilik yang bekerja, rakan niaga yang aktif dan pekerja keluarga yang tidak bergaji <i>Working proprietors, active business partners and unpaid family workers</i>		Pekerja sepenuh masa <i>Full-time employees</i>		Pekerja sambilan <i>Part-time employees</i>		Gaji & upah yang dibayar <i>Salaries & wages paid</i>	
			Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>
Pengumpulan bahan kitar semula <i>Collection of recyclable materials</i>	38112	5,292	4,652	640	262	66	4,287	558	103	16	97,620	15,034
Pengumpulan sampah dalam tong sampah di kawasan awam <i>Collection of refuse in litter-bins in public</i>	38113	4,500	4,304	196	16	6	4,286	189	2	1	76,965	5,712
Pengumpulan sisa pembinaan dan runtuh <i>Collection of construction and demolition waste</i>	38114	27	23	4	5	1	18	3	-	-	263	90
Pengumpulan sisa berbahaya <i>Collection of hazardous waste</i>	38121	326	250	76	4	1	245	75	1	-	6,921	2,010
Rawatan dan pelupusan sisa <i>Waste treatment and disposal</i>	382	5,050	4,530	520	11	-	4,502	520	17	-	106,373	22,908
Rawatan dan pelupusan sisa tidak berbahaya <i>Waste treatment and disposal non-hazardous waste</i>	38210	3,471	3,197	274	-	-	3,186	274	11	-	57,063	8,550
Rawatan dan pelupusan sisa berbahaya <i>Treatment and disposal of hazardous</i>	38220	1,579	1,333	246	11	-	1,316	246	6	-	49,310	14,358
Pemulihan semula bahan <i>Material recovery</i>	383											
Aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa <i>Remediation activities and other waste management services</i>	390	5,928	5,135	793	18	2	5,089	787	28	4	124,145	23,589

Jadual 11: Bilangan pekerja sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut jantina dan industri, 2015 (samb.)

Table 11: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by sex and industry, 2015 (cont'd)

Keterangan kumpulan industri <i>Group and industry description</i>	Kod kumpulan dan industri <i>Group and industry</i>	Jumlah <i>Total</i>	Jumlah pekerja <i>Total number of persons engaged</i>		Pemilik yang bekerja, rakan niaga yang aktif dan pekerja keluarga yang tidak bergaji <i>Working proprietors, active business partners and unpaid family workers</i>		Pekerja sepenuh masa <i>Full-time employees</i>		Pekerja sambilan <i>Part-time employees</i>		Gaji & upah yang dibayar <i>Salaries & wages paid</i>	
			Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>
											(RM'000)	
Meremukkan secara mekanikal sisa logam <i>Mechanical crushing of metal waste</i>	38301	2,493	2,345	148	5	1	2,330	145	10	2	61,592	6,127
Meleraikan peralatan automobil, komputer, televisyen dan peralatan lain untuk pemulihan bahan <i>Dismantling of automobiles, computers, televisions and other equipment for material recover</i>	38302	1,127	931	196	2	-	929	196	-	-	21,958	5,349
Memulih guna getah seperti tayar terpakai untuk menghasilkan bahan mentah sekunder <i>Reclaiming of rubber such as used tires to produce secondary raw material</i>	38303	225	200	25	7	1	192	23	1	1	4,281	593
Pemulihan bahan t.t.t.l <i>Material recovery n.e.c.</i>	38309	2,083	1,659	424	4	-	1,638	423	17	1	36,314	11,520
Aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa <i>Remediation activities and other waste management services</i>	39000											

Jadual 12: Nilai harta tetap sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut jenis harta, 2015
 Table 12: Value of fixed assets of water supply; sewerage, waste management and remediation activities sector by type of assets, 2015

Jenis harta <i>Type of assets</i>	Nilai buku bersih seperti pada 1.1.2015 <i>Net book value as at 1.1.2015</i>	Perbelanjaan modal <i>Capital expenditure</i>	Harta yang dijual atau ditamatkan penggunaannya <i>Assets sold or discarded</i>	Keuntungan/ kerugian daripada jualan/penilaian semula harta <i>Gain/loss from sales/ evaluation of assets</i>	Susut nilai semasa <i>Current depreciation</i>	Nilai buku bersih seperti pada 31.12.2015 <i>Net book value as at 31.12.2015</i>
	(RM'000)	(RM'000)	(RM'000)	(RM'000)	(RM'000)	(RM'000)
Jumlah <i>Total</i>	7,747,636	510,788	96,842	3,560	546,738	7,661,798
Harta tetap <i>Fixed assets</i>	7,063,320	276,804	42,185	3,561	542,742	6,758,757
Tanah <i>Land</i>	2,737,676	6,434	-	-	114,925	2,629,185
Bangunan dan binaan lain <i>Buildings and other construction</i>	1,319,633	92,049	3,583	940	115,030	1,294,009
Tempat kediaman <i>Residential</i>	103,020	5,070	-	-	13,936	94,154
Bukan tempat kediaman <i>Non-residential</i>	903,450	75,827	1,131	790	81,387	897,548
Binaan lain <i>Other construction</i>	313,163	11,152	2,452	150	19,707	302,307
Alat pengangkutan <i>Transport equipment</i>	769,762	51,066	17,595	1,991	99,347	705,886
Kereta penumpang <i>Passenger cars</i>	85,372	21,213	2,565	71	15,549	88,543
Lori, van pikap dsb <i>Lorries, vans, pick-ups etc</i>	680,799	29,509	14,996	1,920	82,983	614,257
Lain-lain <i>Others</i>	3,591	344	35	-	814	3,086

Jadual 12: Nilai harta tetap sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut jenis harta, 2015 (samb.)
Table 12: Value of fixed assets of water supply; sewerage, waste management and remediation activities sector by type of assets, 2015 (cont'd)

Jenis harta <i>Type of assets</i>	Nilai buku bersih seperti pada 1.1.2015 <i>Net book value as at 1.1.2015</i>	Perbelanjaan modal <i>Capital expenditure</i>	Harta yang dijual atau ditamatkan penggunaanya <i>Assets sold or discarded</i>	Keuntungan/ kerugian daripada jualan/penilaian semula harta <i>Gain/loss from sales/ evaluation of assets</i>	Susut nilai semasa <i>Curret depreciation</i>	Nilai buku bersih seperti pada 31.12.2015 <i>Net book value as at 31.12.2015</i>
	(RM'000)	(RM'000)	(RM'000)	(RM'000)	(RM'000)	(RM'000)
Teknologi maklumat dan komunikasi <i>Information and communications technology</i>	109,110	20,312	8,548	0	29,834	91,040
Perkakasan komputer <i>Computer hardware</i>	56,604	7,780	6,083	0	13,927	44,374
Perisian komputer <i>Computer software</i>	32,682	10,832	2,463	-	12,921	28,129
Peralatan telekomunikasi <i>Telecommunications equipment</i>	19,824	1,700	3	-	2,986	18,536
Jentera dan kelengkapan <i>Machinery and equipment</i>	2,019,560	100,023	9,345	504	163,615	1,947,116
Perabot dan pemasangan <i>Furniture and fittings</i>	107,579	6,920	3,113	126	19,990	91,522
Harta-harta lain <i>Other assets</i>	684,316	233,984	54,657	(0.16)	3,996	859,647
Muhibah, paten <i>Goodwill, patent</i>	764	298	-	-	334	727
Kerja dalam pelaksanaan <i>Work in-progress</i>	425,799	211,111	54,003	-	-	582,906
Lain-lain <i>Others</i>	257,753	22,576	654	(0.16)	3,661	276,014
Perbelanjaan penyelidikan dan pembangunan <i>Research and development expenditure</i>	n.a	n.a	n.a	n.a	n.a	43,394

Jadual 13: Perangkaan utama pertubuhan milikan wanita sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kumpulan, 2015

Table 13: Principal statistics of women-owned establishments of water supply; sewerage, waste management and remediation activities sector by group, 2015

Keterangan kumpulan <i>Group description</i>	Kod kumpulan <i>Group code</i>	Bilangan pertubuhan <i>Number of establishments</i>	Nilai output kasar <i>Value of gross output</i>	Nilai input perantaraan <i>Value of intermediate input</i>	Nilai ditambah <i>Value added</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir <i>Total number of persons engaged during December or the last pay period</i>	Gaji & upah yang dibayar <i>Salaries & wages paid</i>	Nilai harta tetap yang dimiliki pada akhir tahun <i>Value of fixed assets owned as at the end of the year</i>
			(RM'000)	(RM'000)	(RM'000)		(RM'000)	(RM'000)
Jumlah <i>Total</i>		53	105,513	67,649	37,863	849	19,034	45,986
Pembetulan <i>Sewerage</i>	370	7	8,996	5,258	3,738	61	1,916	1,113
Pengumpulan sisa <i>Waste collection</i>	381	43	69,501	40,562	28,939	652	13,434	25,895
Pemulihan semula bahan <i>Material recovery</i>	383	3	27,015	21,829	5,186	136	3,683	18,978

Jadual 14: Perangkaan utama pertubuhan milikan wanita sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut negeri, 2015

Table 14: Principal statistics of women-owned establishments of water supply; sewerage, waste management and remediation activities sector by states, 2015

Negeri States	Bilangan pertubuhan Number of establishments	Nilai output kasar Value of gross output (RM'000)	Nilai input perantaraan Value of intermediate input (RM'000)	Nilai ditambah Value added (RM'000)	Jumlah pekerja pada bulan Disember atau pada tempoh gaji akhir Total number of persons engaged during December or the last pay period	Gaji & upah yang dibayar Salaries & wages paid (RM'000)	Nilai harta tetap yang dimiliki pada akhir tahun Value of fixed assets owned as at the end of the year (RM'000)
Jumlah Total	53	105,513	67,649	37,863	849	19,034	45,986
Johor¹	7	46,890	30,112	16,778	355	9,720	27,398
Kedah²	7	5,701	4,207	1,493	47	877	2,707
Melaka³	6	4,672	2,992	1,680	53	825	400
Perak	4	6,745	2,615	4,130	59	1,944	4,002
Pulau Pinang	3	13,935	11,626	2,310	41	1,182	954
Sarawak	3	11,662	7,946	3,716	184	2,311	6,648
Selangor	20	13,350	6,622	6,729	96	2,006	3,818
W.P. Kuala Lumpur⁴	3	2,558	1,530	1,028	14	168	59
Kelantan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Terengganu	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sabah	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
W.P. Putrajaya	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Nota/Note : ¹ Termasuk Pahang / Include Pahang² Termasuk Perlis / Include Perlis³ Termasuk Negeri Sembilan / Include Negeri Sembilan⁴ Termasuk W.P. Labuan / Include W.P. Labuan

Jadual 15: Bilangan pekerja sektor bekalan air; pembetungan, pengurusan sisa dan aktiviti pemulihan mengikut negeri, 2015
Table 15: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by states, 2015

Negeri States	Bilangan pertubuhan <i>Number of establishments</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>				Pekerja dibekalkan oleh pertubuhan lain <i>Persons outsourced by other establishment</i>
		Jumlah <i>Total</i>	Pemilik yang bekerja dan pekerja keluarga tidak bergaji <i>Working proprietors and unpaid family workers</i>	Pekerja sempuh masa <i>Full-time employees</i>	Pekerja sambilan <i>Part-time employees</i>	
Jumlah <i>Total</i>	784	46,806	454	46,049	303	199
Johor	138	9,206	115	9,033	58	28
Kedah	39	3,269	23	3,214	32	-
Kelantan	4	799	2	795	2	-
Melaka	42	2,926	38	2,879	9	-
Negeri Sembilan	25	3,421	10	3,403	8	-
Pahang	17	1,910	10	1,899	1	-
Perak	66	810	69	684	57	-
Perlis	6	187	4	183	-	-
Pulau Pinang	68	3,164	32	3,120	12	-
Sabah	25	1,102	9	1,078	15	101
Sarawak	43	1,855	21	1,822	12	30
Selangor	209	8,667	72	8,587	8	40
Terengganu	9	759	3	748	8	-
W.P. Kuala Lumpur	88	8,674	46	8,547	81	-
W.P. Labuan	5	57	-	57	-	-
W.P. Putrajaya	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Jadual 16: Bilangan pekerja sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kewarganegaraan dan kategori pekerja, 2015

Table 16: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by citizenship and category of workers, 2015

Kategori pekerja <i>Category of workers</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>		
	Jumlah <i>Total</i>	Warganegara <i>Citizen</i>	Bukan Warganegara <i>Non-citizen</i>
Jumlah <i>Total</i>	46,806	38,986	7,820
Jumlah pemilik yang bekerja dan pekerja keluarga tidak bergaji <i>Total working proprietors and unpaid family workers</i>	454	454	-
Pemilik yang bekerja dan rakan niaga yang aktif <i>Working proprietors and active business partners</i>	361	361	-
Pekerja keluarga tidak bergaji (semua ahli keluarga dan rakan yang tidak menerima upah yang tetap) <i>Unpaid family workers (all members of family and friends not receiving regular wages)</i>	93	93	-
Jumlah pekerja bergaji (sepenuh masa) <i>Total paid employees (full-time)</i>	46,049	38,255	7,794
Pengurus <i>Managers</i>	1,943	1,927	16
Profesional <i>Professionals</i>	1,764	1,751	13
Profesional <i>Professionals</i>	1,724	1,713	11
Penyelidik <i>Researchers</i>	40	38	2

Jadual 16: Bilangan pekerja sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kewarganegaraan dan kategori pekerja, 2015 (samb.)
Table 16: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by citizenship and category of workers, 2015 (cont'd)

Kategori pekerja <i>Category of workers</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>		
	Jumlah <i>Total</i>	Warganegara <i>Citizen</i>	Bukan Warganegara <i>Non-citizen</i>
Juruteknik dan Profesional Bersekutu <i>Technicians and Associate Professionals</i>	3,957	3,942	15
Pekerja Sokongan Perkeranian <i>Clerical Support Workers</i>	5,694	5,687	7
Pekerja Perkhidmatan dan Jualan <i>Service and Sales Workers</i>	3,665	3,659	6
Pekerja Kemahiran dan Pekerja Pertukangan yang berkaitan <i>Craft and Related Trades Workers</i>	2,839	2,642	197
Operator Mesin dan Loji, dan Pemasang <i>Plant and Machine Operators and Assemblers</i>	14,026	9,034	4,992
Pekerja Asas <i>Elementary Occupations</i>	12,161	9,613	2,548
Jumlah pekerja bergaji (sambilan) <i>Total paid employees (part-time)</i>	303	277	26

Jadual 17: Bilangan pekerja sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut jantina dan kelulusan, 2015

Table 17: Number of persons engaged of water supply; sewerage, waste management and remediation activities sector by sex and qualification, 2015

Kelulusan <i>Qualification</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>		
	Jumlah <i>Total</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>
Jumlah <i>Total</i>	46,806	39,395	7,411
Pascasiswazah <i>Postgraduate</i>	220	143	77
Ijazah Sarjana Muda /Diploma Lanjutan atau yang setaraf* <i>Bachelor / Advanced Diploma or equivalent</i>	3,373	2,124	1,249
Diploma <i>Diploma</i>	5,328	3,533	1,795
STPM atau yang setaraf <i>STPM or equivalent</i>	1,470	772	698
Sijil <i>Certificate</i>	6,803	5,966	837
SPM / SPM(V) atau yang setaraf <i>SPM / SPM(V) or equivalent</i>	16,449	14,502	1,947
Di bawah taraf kelulusan SPM / SPM(V) <i>Below SPM / SPM(V)</i>	13,163	12,355	808

* Merujuk kepada kelulusan dalam pengkhususan Teknologi yang diperolehi daripada Rangkaian Universiti Teknikal Malaysia (MTUN)
Refers to qualification specialised in Technology obtained from Malaysian Technical University Network (MTUN)

Jadual 18: Bilangan pekerja bergaji sepenuh masa dan gaji & upah sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kategori kemahiran dan jantina, 2015
Table 18: Number of paid full-time employees and salaries & wages of water supply; sewerage, waste management and remediation activities sector by category of skills and sex, 2015

Kategori kemahiran <i>Category of skills</i>	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir <i>Total number of persons engaged during December or the last pay period</i>			Gaji & upah yang dibayar <i>Salaries & wages paid</i> (RM'000)
	Jumlah <i>Total</i>	Lelaki <i>Male</i>	Perempuan <i>Female</i>	
Jumlah <i>Total</i>	46,049	38,760	7,289	1,305,548
Mahir <i>High-skilled</i>	7,664	6,125	1,539	478,638
Separa Mahir <i>Semi-skilled</i>	26,224	21,294	4,930	632,658
Kurang Mahir <i>Low-skilled</i>	12,161	11,341	820	194,252

Jadual 19: Bilangan pekerja bergaji sepenuh masa sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kategori kemahiran dan kumpulan, 2015
 Table 19: Number of paid full-time employees of water supply; sewerage, waste management and remediation activities sector by category of skills and group, 2015

Keterangan kumpulan Group description	Kod kumpulan Group code	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir Total number of persons engaged during December or the last pay period			
		Jumlah Total	Mahir High -Skilled	Separuh Mahir Semi-Skilled	Kurang Mahir Low-Skilled
Jumlah Total		46,049	7,664	26,224	12,161
Penakungan, perawatan dan bekalan air Water collection, treatment and supply	360	13,740	2,365	9,777	1,598
Pembetulan Sewerage	370	5,172	2,434	2,399	339
Pengumpulan sisa Waste collection	381	16,239	1,402	8,070	6,767
Rawatan dan pelupusan sisa Waste treatment and disposal	382	5,022	834	1,629	2,559
Pemulihan semula bahan Material recovery	383	5,876	629	4,349	898
Aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa Remediation activities and other waste management services	390				

Jadual 20: Bilangan pekerja bergaji sepenuh masa sektor bekalan air; pembetulan, pengurusan sisa dan aktiviti pemulihan mengikut kategori kemahiran dan negeri, 2015
Table 20: Number of paid full-time employees of water supply; sewerage, waste management and remediation activities sector by category of skills and states, 2015

Negeri States	Jumlah pekerja pada bulan Disember atau pada tempoh gaji terakhir Total number of persons engaged during December or the last pay period		
	Mahir High -Skilled	Sepuluh Mahir Semi-Skilled	Kurang Mahir Low-Skilled
Jumlah Total	7,664	26,224	12,161
Johor	750	6,470	1,813
Kedah	439	1,337	1,438
Kelantan	106	668	21
Melaka	154	345	2,380
Negeri Sembilan	350	710	2,343
Pahang	222	1,134	543
Perak	73	364	247
Perlis	29	139	15
Pulau Pinang	353	1,971	796
Sabah	231	620	227
Sarawak	221	824	777
Selangor	1,009	6,606	972
Terengganu	141	468	139
W.P. Kuala Lumpur	3,570	4,543	434
W.P. Labuan	16	25	16
W.P. Putrajaya	n.a.	n.a.	n.a.

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**PIAWAIAN KLASIFIKASI
INDUSTRI MALAYSIA
2008 VER. 1.0**
*MALAYSIA STANDARD
INDUSTRIAL CLASSIFICATION
2008 VER. 1.0*



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Piawaian Klasifikasi Industri Malaysia 2008 Ver. 1.0
Malaysia Standard Industrial Classification 2008 Ver. 1.0

Kumpulan Groups	Perkara Items	Keterangan Description	MSIC 2000
360	Penakungan, perawatan dan bekalan air <i>Water collection, treatment and supply</i>		
	36001	Penulenan dan pengagihan air untuk tujuan bekalan air <i>Purification and distribution of water for water supply purposes</i>	01400p, 41000p
	36002	Penyahmasinan air laut atau bawah tanah untuk menghasilkan air sebagai kepentingan produk utama <i>Desalting of sea or ground water to produce water as the principal product of interest</i>	41000p
370	Pembetulan <i>Sewerage</i>		
	37000	Pembetulan dan aktiviti-aktiviti yang seumpamanya <i>Sewerage and similar activities</i>	90001p
381	Pengumpulan sisa <i>Waste collection</i>		
	38111	Pengumpulan sisa pepejal yang tidak berbahaya (cth. sampah) di kawasan setempat <i>Collection of non-hazardous solid waste (i.e garbage) within a local area</i>	90002
	38112	Pengumpulan bahan kitar semula <i>Collection of recyclable materials</i>	90002p
	38113	Pengumpulan sampah dalam tong sampah di kawasan awam <i>Collection of refuse in litter-bins in public places</i>	90002p
	38114	Pengumpulan sisa pembinaan dan runtuh <i>Collection of construction and demolition waste</i>	90003p
	38115	Operasi stesen pemindahan pembuangan sisa tidak berbahaya <i>Operation of waste transfer stations for non-hazardous waste</i>	90001p
	38121	Pengumpulan sisa berbahaya <i>Collection of hazardous waste</i>	90003p
38122	Operasi stesen pemindahan pembuangan bagi sisa berbahaya <i>Operation of waste transfer stations for hazardous waste</i>	90003p	

Kumpulan Groups	Perkara Items	Keterangan Description	MSIC 2000
382	Rawatan dan pelupusan sisa <i>Waste treatment and disposal</i>		
	38210	Rawatan dan pelupusan sisa tidak berbahaya <i>Treatment and disposal of non-hazardous waste</i>	90002p, 24120p
	38220	Rawatan dan pelupusan sisa berbahaya <i>Treatment and disposal of hazardous waste</i>	90002p, 90003p, 23300p
383	Pemulihan semula bahan <i>Material recovery</i>		
	38301	Meremukkan secara mekanikal sisa logam <i>Mechanical crushing of metal waste</i>	37101, 37109p
	38302	Meleraikan peralatan automobil, komputer, televisyen dan peralatan lain untuk pemulihan bahan <i>Dismantling of automobiles, computers, televisions and other equipment for material recover</i>	37109p
	38303	Memulih guna getah seperti tayar terpakai untuk menghasilkan bahan mentah sekunder <i>Reclaiming of rubber such as used tires to produce secondary raw material</i>	37202
	38304	Penggunaan semula produk getah <i>Reuse of rubber products</i>	37202p
	38309	Pemulihan bahan t.t.t.l <i>Materials recovery n.e.c.</i>	37109p, 37201p, 37209p
Kumpulan Groups	Perkara Items	Keterangan Description	MSIC 2000
390	39000	Aktiviti pemulihan dan lain-lain perkhidmatan pengurusan sisa <i>Remediation activities and other waste management services</i>	45102p, 45104p, 90001p, 90002p, 90003p

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