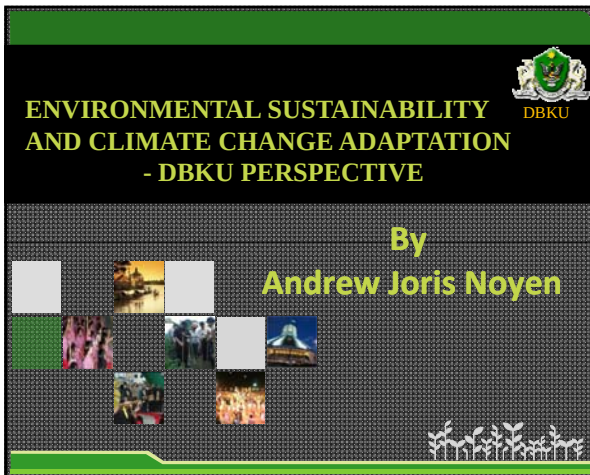




**Taib foresees Kuching as a modern city**

...Kuching as a MODERN City that is BEAUTIFUL, GREEN, HEALTHY, ECONOMICALLY VIBRANT, CULTURALLY VIBRANT, with THE PEOPLE'S PARTICIPATION

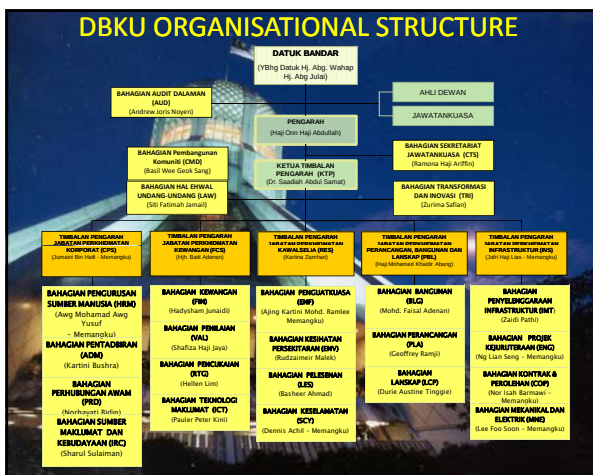
(Excerpt of speech by the Rt. Hon. Chief Minister of Sarawak at the launching of Kuching Festival at Padang Merdeka, Kuching, - 1 August 2007)



**DEWAN BANDARAYA KUCHING UTARA**

**Brief Background.**

|                                     |                         |
|-------------------------------------|-------------------------|
| 1. Population                       | : 191,500               |
| 2. Area                             | : 369.48 sq. km         |
| 3. Developed Area                   | : 223.14 sq. km         |
| 4. Forested Area                    | : 135.245 sq. km        |
| 5. Gazetted Green Area              | : 28.345 sq. km         |
| 6. Open Space, Parks and Playground | : 4.15 sq. km (48 nos.) |
| 7. Road length                      | : 552.41 km             |
| 10. Footpath in Parks               | : 16.12 km              |
| 11. Footpath along the Road         | : 310 km                |
| 12. No. of Tree/Palm planted        | : 42,026                |
| 13. No of Children Playground       | : 20                    |

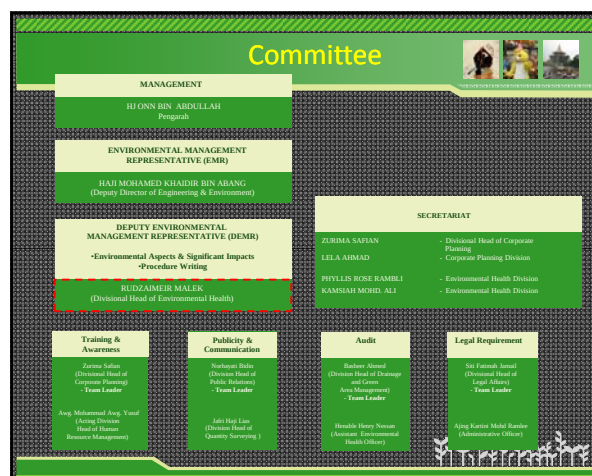
**Key element on environmental sustainability and climate change adaptation - DBKU perspective**

- Sound environmental policy
- Solid waste management
- Wastewater management
- Landscape management
- Traffic management
- Energy efficient management



**We are committed towards :**

- D** Dynamic leadership in Environmental Management
- B** Best practices in environmental activities and services
- K** Knowledgeable and capable workforce through continuous learning
- U** Understanding the changing environmental needs
- C** Compliance with the relevant environmental laws and regulations
- A** Awareness on environmental aspects and significant impacts to all stakeholders
- R** Reduce, Reuse and Recycle concept
- E** EMS through constant review of the environmental objectives and targets
- S** Sustainable Urban Development Initiatives

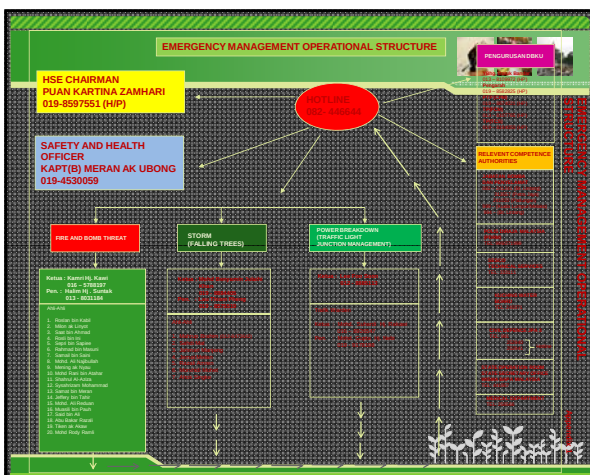
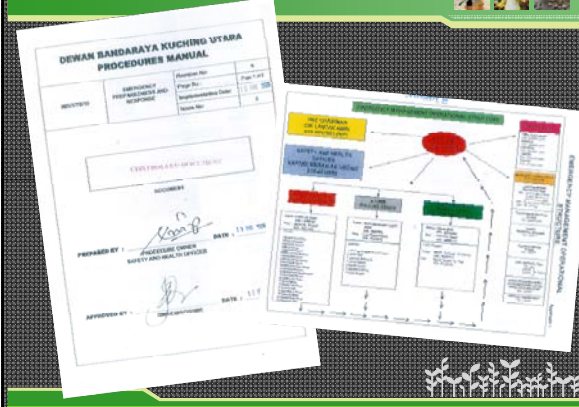


## EMS ISO 14001:2004 by SIRIM

- DBKU ISO EMS14001 : 2004 certified on 29 December 2009 by SIRIM
- Certification valid for 3 years



## EMERGENCY RESPONSE PLAN



## Solid waste management

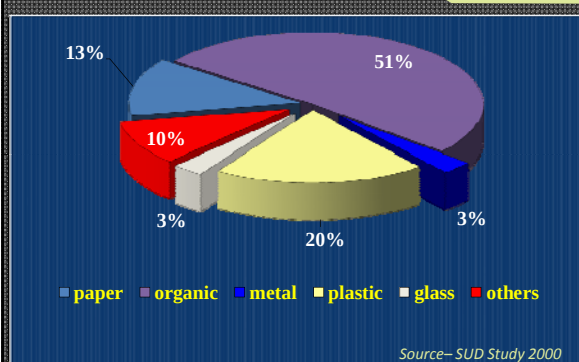


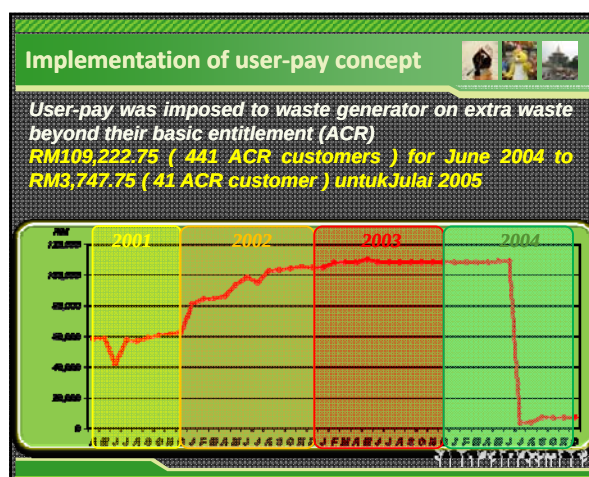
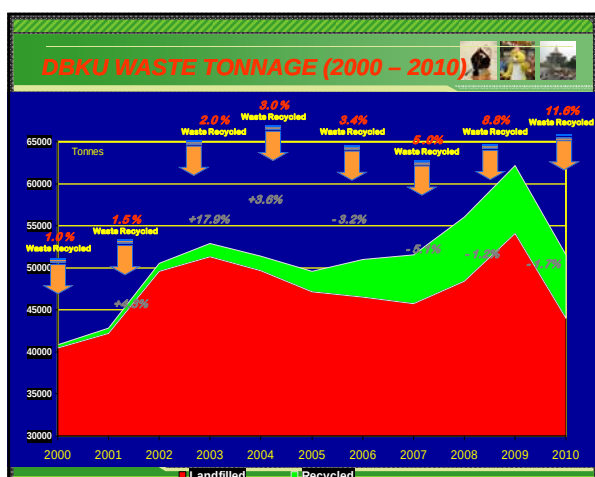
## WASTE MANAGEMENT PROGRAM

Reduction of waste to landfill can help to reduce production of green house gas like methane. DBKU had initiate the following program to reduce waste;

1. User pay concept
2. Promote recycling of recyclable
3. Composting of organic waste

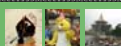
## Waste composition







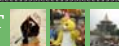
### RESULT OF WASTE MINIMISATION USING 'HOME COMPOSTING'



| No | Item                    | 2008<br>Kpg Salak                | 2009<br>Tmn Desa Guru             | 2010<br>Tmn Westwood            | 2011<br>Sumber Alam Sunctuary | 2011<br>Taman Tatai Kumang |
|----|-------------------------|----------------------------------|-----------------------------------|---------------------------------|-------------------------------|----------------------------|
| 1. | No of house participate | 96 buah                          | 24 buah                           | 100 buah                        | 100 buah                      | 100 buah                   |
| 2. | Date commence           | 10/7/2008                        | 1/4/2009                          | 19/7/2010                       | 24/9/2011                     | -                          |
| 4. | Compost production      | 168 kg / house<br>Total- 6128 kg | 210 kg / house<br>Total- 5,040 kg | 264 kg / house<br>Total-2640 kg | On going                      | -                          |
| 5. | Waste reduction         | 68 %                             | 44 %                              | 77 %                            | -                             | -                          |



### APPLICATION OF EM BOKASHI BY-PRODUCT



#### LIQUID BY PRODUCT

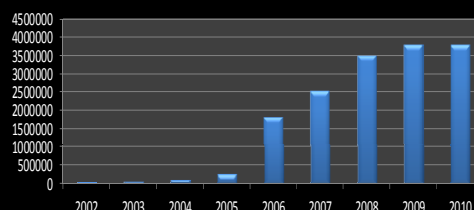
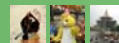
1. Fertilizer to plant



### COMPOSTING OF GREEN WASTE



### GREEN WASTE COLLECTED



Since 2002 an approximately 14,521 ton of green waste had been collected from in house landscape work and been compost.



### Wastewater management

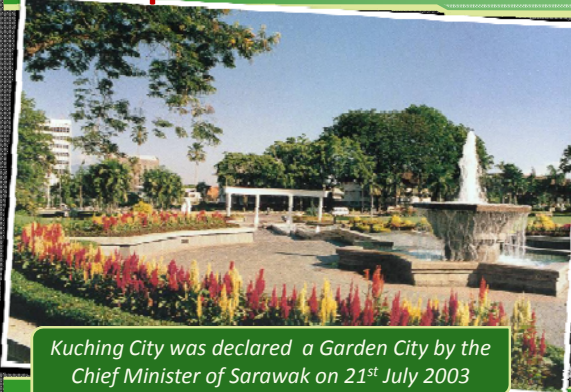
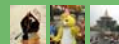


DBKU is ensuring all discharge water from premises does not pollute drain and river .

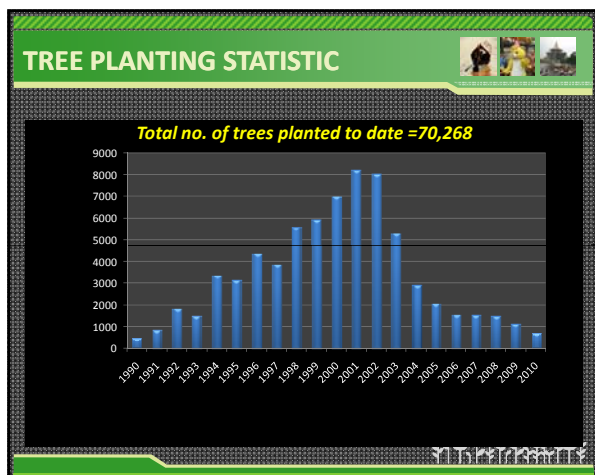
- Compulsory desludging
- Monitoring of effluent by sampling
- Compulsory Installation of grease Interceptor at all food outlet



### Landscape maintenance



Kuching City was declared a Garden City by the Chief Minister of Sarawak on 21<sup>st</sup> July 2003





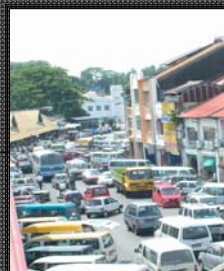
### TRAFFIC MANAGEMENT



|                     |          |
|---------------------|----------|
| Road length         | 532.2 km |
| No of traffic light | 26 nos   |
| Pedestrian Crossing | 7 nos    |
| Roundabout          | 11 nos   |
| Bus stop            | 199 nos  |

Good traffic management reduce traffic jam and less air pollution

### REDESIGN TRAFFIC FLOW




**RELOCATION OF GAMBIR MARKET & CONSTRUCTION OF KUCHING ESPLANADE**

### USE OF TRAFFIC WARDEN DURING PEAK HOUR

Before using traffic police




DBKU traffic warden

### PROMOTE EFFICIENT PUBLIC TRANSPORT




### EFFICIENT ENERGY MANAGEMENT






### USED OF WIND AND SOLAR POWER TO GENERATE ELECTRICITY







