

**LegCo Panel on Manpower
(For Meeting on 20 June 2000)**

**Assessment of Job Opportunities Created
by Environmental Protection Initiatives**

Introduction

This paper informs members of the job opportunities likely to be created by the Administration's environmental and conservation initiatives.

Background

2. At the meeting of the Legislative Council Panel on Manpower held on 25 May 2000, Members suggested that a briefing should be made on employment opportunities that would be created by the Administration's environmental protection initiatives and projects.

3. An assessment has been made on the likely additional employment prospects based on the environmental and conservation initiatives and commitments announced in the 1999 Policy Address in respect of the Environmental Protection Department, Agriculture, Fisheries and Conservation Department and Electrical and Mechanical Services Department. The assessment covers jobs in the Government, non-Governmental organizations (NGO) and in the private sector arising directly from specific initiatives or projects. We have updated the information previously circulated to Members through the panel secretariat in late March 2000. We are, however, not in a position to assess how the private sector would respond to and complement the Administration's actions. Hence, we have not assessed the likely job opportunities that would arise from private sector initiatives.

Findings

4. We estimate that from 2000 to 2006, a total of 1,446 jobs may be created. 66 of these jobs would be in the Government; 1 in NGO and 1,379 jobs in the private sector (comprising 379 permanent jobs and 1,000 project-based jobs). A summary of the assessment is at Annex I.

A list of the projects/initiatives with the job creation projection is at Annex II.

5. Most of the jobs to be created are “crafts/plant & machine operators/assemblers” (755 jobs, 52%), followed by service workers/shop sales workers (250 jobs, 17%) and “professionals/associate professionals” (201 jobs, 14%). A summary table is at Annex III.

Further measures

6. Material recovery and recycling is one potential area that may generate employment opportunities. We are undertaking a package of measures to promote material recovery and recycling:

- (a) We are promoting waste separation at source. Separate collection bins are being provided in all public housing estates and many private housing developments. The Buildings Ordinance is being amended to require new developments to set aside adequate space for waste separation facilities;
- (b) We are examining how waste recovery and recycling operations can be integrated into the waste collection system;
- (c) We are identifying suitable land to be allocated on a short-term basis and at reasonable cost for recycling operations. For the longer term, we are examining the feasibility of developing recycling parks with better facilities;
- (d) To stimulate markets for recycled products,
 - we are reviewing how “green specifications” can be incorporated into Government’s procurement contracts;
 - we will continue to encourage environmentally-responsible purchase within the Government;
 - we will monitor closely international developments on eco-labelling systems so as to consider whether such system can be implemented in Hong Kong to promote

“green consumerism”; and

- (e) We intend to introduce landfill charges. This will provide a strong economic incentive for waste producers to divert waste away from landfills for recycling.

7. This package of measures is part of our efforts towards achieving a more sustainable waste management system. It is highly likely that these measures would also lead to the creation of new employment opportunities.

Advice sought

- 8. Members are invited to note the contents of this paper.

Environment and Food Bureau
June 2000

Summary of job creation as a result of Government major initiatives

A. Environmental Protection Department

<u>Year</u>	<u>Government</u>		<u>NGO</u>		<u>Private Sector</u>	
	<u>Permanent</u>	<u>Project based</u>	<u>Permanent</u>	<u>Project based</u>	<u>Permanent</u>	<u>Project based</u>
2000	29			1	38	130
2001						25
2002-06	4				70	99
<u>Subtotal:</u>	33			1	108	254

B. Agriculture, Fisheries and Conservation Department

<u>Year</u>	<u>Government</u>		<u>NGO</u>		<u>Private Sector</u>	
	<u>Permanent</u>	<u>Project based</u>	<u>Permanent</u>	<u>Project based</u>	<u>Permanent</u>	<u>Project based</u>
2000	18					4
2001						4
2002-06					41	4
<u>Subtotal:</u>	18				41	12

C. Electrical and Mechanical Services Department

<u>Year</u>	<u>Government</u>		<u>NGO</u>		<u>Private Sector</u>	
	<u>Permanent</u>	<u>Project based</u>	<u>Permanent</u>	<u>Project based</u>	<u>Permanent</u>	<u>Project based</u>
2000	15				40	233
2001					100	253
2002-06					90	248
<u>Subtotal:</u>	15				230	734

<u>Total:</u>	66			1	379	1000
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Total jobs to be created : 1446

Environmental Protection Department

Year	Project/ Initiative	Government		NGO		Private		Total across sectors
		Permane- nt	Project- based	Permane- nt	Project- based	Permane- nt	Project- based	
2000	Leachate Treatment in NENT Landfill						5	5
2000	Waste Reduction Framework Plan Implementation	3						3
2000	NWNT/Gin Drinkers Bay Landfill Restoration					22		22
2000	Control of Greenhouse Gas Emission	3						3
2000	Outlying Island Transfer Station					16		16
2002-06	Outlying Island Transfer Station					8	13	21
2000	North West New Territories Refuse Transfer Station						100	100
2002-06	North West New Territories Refuse Transfer Station					45		45
2000	Clinical Waste Disposal at CWTC						25	25
2001	Clinical Waste Disposal at CWTC						25	25
2002-06	Clinical Waste Disposal at CWTC						10	10
2002-06	Restoration of Pillar Point Valley Landfill	4				17	25	46
2002-06	Animal Cremator						51	51
2000	Strengthen Cross Boundary Environ Co-operation	15						15
2000	Retrofit Noise Barriers and Enclosure on Existing Roads	1						1

Year	Project/ Initiative	Government		NGO		Private		Total across sectors
		Permane-nt	Project-based	Permane-nt	Project-based	Permane-nt	Project-based	
2000	Motor Vehicle Emission Control Strategy	5						5
2000	Monitor Trend and Effects of Acid Rain				1			1
2000	Indoor Air Quality Management Programme for Offices and public places	2						2
Total for EPD		33			1	108	254	396

Agriculture, Fisheries and Conservation Department

Year	Project/ Initiative	Government		NGO		Private		Total across sectors
		Permane nt	Project- based	Permane nt	Project- based	Permane nt	Project- based	
2000	Construction of International Wetland Park	4						4
2002-06	Construction of International Wetland Park					41		41
2000	New Control under Animal & Plants (Protection of Endangered Species) Ordinance.	8						8
2000	Construction of Artificial Reef						4	4
2001	Construction of Artificial Reef						4	4
2002-06	Construction of Artificial Reef						4	4
2000	Ecological Impact Assessment – Monitoring of Ecological Mitigation Measures	3						3
2000	To Improve the Management of Marine Parks and Marine Reserve	3						3
Total for AFCD		18				41	12	71

Electrical and Mechanical Services Department

Year	Project/ Initiative	Government		NGO		Private		Total across sectors
		Permane-nt	Project-based	Permane-nt	Project-based	Permane-nt	Project-based	
2000	Replacement of Diesel Taxis with LPG Taxis					40	180	220
2001	Replacement of Diesel Taxis with LPG Taxis					100	200	300
2002-06	Replacement of Diesel Taxis with LPG Taxis					90	200	290
2000	Consultancy Study for the Development of Energy Consumption Indicators and Benchmarks for Selected Energy-consuming Groups in Hong Kong	1					5	6
2001	Consultancy Study for the Development of Energy Consumption Indicators and Benchmarks for Selected Energy-consuming Groups in Hong Kong						10	10
2000	To Raise Awareness of Energy Efficiency Considerations in the Transport Sector	1						1
2000	To Encourage the Use of Renewable Energy in Buildings	1					4	5
2001	To Encourage the Use of Renewable Energy in Buildings						6	6
2002-06	To Encourage the Use of Renewable Energy in Buildings						18	18
2000	To Introduce Statutory Requirements on Energy and Conservation	1						1
2000	To Implement an Indoor Air Quality Management Programme	2					10	12

Year	Project/ Initiative	Government		NGO		Private		Total across sectors
		Permane nt	Project- based	Permane nt	Project- based	Permane nt	Project- based	
2001	To Implement an Indoor Air Quality Management Programme						20	20
2002-06	To Implement an Indoor Air Quality Management Programme						30	30
2000	To Promote the Wider Adoption of Water-cooled Air Conditioning Systems in Hong Kong	9					34	43
2001	To Promote the Wider Adoption of Water-cooled Air Conditioning Systems in Hong Kong						17	17
Total for EMSD		15				230	734	979

Analysis of Job Creation from 2000 to 2006

<u>Position</u>	<u>EPD</u>	<u>AFCD</u>	<u>EMSD</u>	<u>Total</u>
1 Managers/ Administrators	13	10	22	45 (3.11%)
2 Professionals/ Associate Professionals	78	26	97	201 (13.90%)
3 Clerks	20	4	21	45 (3.11%)
4 Service Workers/Shop Sales Workers	-	-	250	250 (17.29%)
5 Crafts/Plant and Machine Operators/Assemblers	160	12	583	755 (52.21%)
6 Elementary/Unskilled Workers and Other	125	19	6	150 (10.37%)
Total	396	71	979	1446