

# ACE-WM Paper 3/2018 For information by circulation

# Full Implementation of the Producer Responsibility Scheme on Waste Electrical and Electronic Equipment

#### **PURPOSE**

This paper updates members of the Waste Management Subcommittee of the Advisory Council on the Environment on the full implementation of the Producer Responsibility Scheme ("PRS") on Waste Electrical and Electronic Equipment ("WEEE") ("WPRS").

#### **BACKGROUND**

- 2. Every year, about 70 000 tonnes of WEEE are generated locally in Hong Kong, most of which are exported for reuse or recovery of valuable materials. The reliance on export in handling locally generated WEEE may not be sustainable in the long run as demand for such second-hand products in markets outside Hong Kong may decline over time with progressive economic development and tightening of import control over WEEE in other jurisdictions. On the basis of the community's feedback received during a public consultation conducted in 2010, the Government has been preparing for the introduction of a PRS to facilitate the proper treatment of WEEE in Hong Kong, as committed under *Hong Kong: Blueprint for Sustainable Use of Resources 2013-2022* issued in May 2013.
- 3. The WPRS aims to put in place a system for the proper management of WEEE generated in Hong Kong. It covers eight classes of electrical and electronic equipment, namely air-conditioners, washing machines, refrigerators, televisions, computers, printers, scanners and monitors (hereinafter collectively referred to as "regulated electrical equipment" or "REE"). In March 2016, the Legislative Council ("LegCo") passed the Promotion of Recycling and Proper Disposal (Electrical Equipment and Electronic Equipment) (Amendment) Ordinance 2016 to provide for the legislative framework for the WPRS, whereas the Product Eco-responsibility (Regulated Electrical Equipment) Regulation was enacted in July 2017 to provide for

the operational details concerning suppliers and sellers of REE. In February 2018, the Government published in the Gazette commencement notices to fully implement the WPRS in 2018, with details set out in ensuing paragraphs.

#### **FULL IMPLEMENTATION**

#### Timetable

Measures concerning suppliers and sellers of REE

- 4. Starting from **1** August **2018**, a supplier of REE must have been registered with the Environmental Protection Department ("EPD") before distributing REE. Registered suppliers must also fulfil other statutory obligations, including the submission of returns and audit reports to EPD and payment of recycling levies, as well as providing recycling labels when distributing REE.
- Also from 1 August 2018, a seller of REE must have a removal service plan endorsed by EPD for selling REE. When a seller sells REE and if requested by the consumer, the seller should arrange for the consumer a free statutory removal service to collect the same class of equipment abandoned by the consumer in accordance with the endorsed plan. The removal service aims to help members of the public handle waste equipment requiring disposal, and as the waste equipment collected will be sent to downstream recyclers for proper treatment, it will help turn waste into resources, thereby achieving resources recovery. In this regard, the seller must also notify the consumer in writing the terms and conditions relevant to the removal service. To identify REE distributed under the WPRS, sellers must provide a recycling label and a receipt containing prescribed wording on the recycling levy to the consumer.

Measures concerning recyclers and importers/exporters of abandoned REE

6. The WPRS also imposes disposal licensing control, import and export permit control, and landfill disposal ban in respect of abandoned REE, which will commence on **31 December 2018**. By then, any person who is engaged in the storage, treatment, reprocessing or recycling of abandoned REE must obtain a waste disposal licence ("WDL"); a permit will be required for the import and export of abandoned REE; and abandoned REE will no longer be accepted for disposal at the landfills and other designated waste disposal facilities (e.g. refuse transfer stations).

#### Trade Facilitation

7. To prepare for the implementation of the WPRS, we have been engaging recyclers and importers/exporters to facilitate their understanding of the relevant control. In particular, we started accepting applications for the waste disposal licence for abandoned REE in June 2017 to provide sufficient time for the trade to comply with the licence application requirements.

8. In parallel, EPD continues to engage with sellers and suppliers of REE for them to make the necessary preparation for the implementation of the WPRS. scheme for sellers on the removal service plan was launched in late November 2017 and a separate trial scheme with suppliers started in December 2017. These trial schemes helped sellers and suppliers better understand the relevant regulatory requirements and facilitate the smooth implementation of the WPRS. will continue to run until the commencement of relevant control on 1 August 2018. We have also been holding various briefings and meetings with trade associations<sup>1</sup>, etc., to explain to them in detail the operation of the scheme and their statutory obligations<sup>2</sup>. We have also engaged service providers to provide the relevant trades with the necessary assistance in making applications as registered suppliers and for the endorsement of removal service plans which EPD has started accepting beginning on 4 May 2018. Follow-up contacts and shop visits, particular to those smaller establishments are also in progress. Besides, a telephone hotline is set up to answer any trade enquiries.

#### **Publicity and Public Education**

9. A programme of publicity and public education initiatives, including posters, website, TV and radio Announcements in the Public Interest, are being implemented in tandem with the phased implementation to publicise the different features of the WPRS.

#### WEEE PARK

10. As part of the efforts in introducing the WPRS, the Government has developed a WEEE treatment and recycling facility at EcoPark in Tuen Mun to provide the requisite local treatment capacity to underpin the WPRS. The facility, named as WEEE-PARK, was officially opened by the Chief Executive on 19 March 2018, marking a key milestone in the development of waste-to-resources facilities in Hong Kong and showing the Government's determination for achieving resources recovery. A backgrounder on the key features, treatment processes, and development milestone of the facility is at **Annex B**. The WEEE-PARK is operated by the ALBA Integrated Waste Solutions (Hong Kong) Limited under a design, build and operate contractual agreement after open tender.

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Including the Hong Kong & Kowloon Electrical Appliances Merchants Association Ltd., the Radio Association of Hong Kong, and the Hong Kong Retail Management Association.

For instance, we have condensed the key statutory obligations of REE suppliers and sellers into one-page reference (in **Annex A**) to facilitate the trade's quick understanding the WPRS and highlight their immediate action required.

## WAY FORWARD AND ADVICE SOUGHT

11. We will continue to work closely with the relevant trades to get themselves prepared for the imminent implementation of the WPRS. Members are invited to note the implementation arrangements for the WPRS.

**Environment Bureau/Environmental Protection Department June 2018** 

## 誰是銷售商 Who is a seller?



- 向消費者分發受管制電器者/公司 Means a person/company distributing REE to consumers
- 不包括只提供物流運輸服務者
  Not include transportation / logistics service providers
- 銷售商可同時是供應商 A seller may also be a supplier

## 主要責任 Main responsibilities:

#### 銷售商必須 Seller must

- 備有獲環保署批註的除舊服務方案 Have a removal service plan endorsed by EPD
- 在訂立合約前以書面通知消費者其法定除舊服務責任及條款 Notify consumers in writing the statutory removal service obligation and terms before entering into contract
- 應消費者要求安排法定除舊服務
  Arrange statutory removal service as requested by consumers
- 提供循環再造標籤予消費者 Provide recycling label to consumers
- 提供載有訂明字句的收據
  Provide receipt with prescribed wording to consumers
- 妥善保存一年記錄Keep records properly for one year

## 八類受管制電器

# Eight Classes of Regulated Electrical Equipment (REE)

空調機 Air conditioners

(不超過 3 匹 Not exceeding 3 hp)

雪櫃 Refrigerators

(不超過 500 公升 Not exceeding 500 L)

洗衣機 Washing Machines

(不超過 10 公斤 Not exceeding 10 kg)

電視機 Televisions

(不超過 100 吋 Not exceeding 100 inches)

電腦 Computers

(包括桌上、平板、 Including desktop, tablet,

手提及筆記簿電腦 laptop and notebook computer)

打印機 Printers

(不超過 30 公斤 Not exceeding 30 kg)

掃描器 Scanners

(不超過 30 公斤 Not exceeding 30 kg)

顯示器 Monitors

(不超過 100 吋 Not exceeding 100 inches)

## 2018年8月1日起

受管制電器銷售商<u>必須備有經環保署批註的除舊服務方案</u> 方可向消費者分發受管制電器

From 1 August 2018, a REE seller must have <u>a removal service plan</u> endorsed by EPD before distributing REE to consumers

請盡早遞交批註申請

Please submit the application for endorsement as early as possible

環保署在收到已填妥申請表及所有支持文件後起計的十個工作天一般可完成批註手續 The endorsement process is normally completed within 10 working days after EPD's receipt of the completed application form and all necessary supporting documents

查詢 Enquiries: 2310 0223 / WEEE@thewgo.org

## 誰是供應商 Who is a supplier?



- 包括受管制電器製造商及進口商 Include manufacturers and importers of REE
- 不包括只提供物流運輸服務者
  Not include transportation / logistics service providers
- 供應商可以同時是銷售商A supplier may also be a seller

## 主要責任 Main responsibilities:

## 供應商必須 Supplier must

- 經環保署登記成為登記供應商 Be registered as registered supplier with EPD
- 呈交季度申報Submit quarterly returns
- 呈交審計報告 Submit audit reports
- 繳付循環再造徵費Pay recycling levy
- 提供循環再造標籤予受分發者
  Provide recycling labels to the distributee
- 妥善保存五年記錄

  Keep records properly for five years

## 八類受管制電器

# Eight Classes of Regulated Electrical Equipment (REE)

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顯示器 Monitors

(不超過 100 吋 Not exceeding 100 inches)

## 2018年8月1日起

<mark>受管制電器供應商必須經環保署登記為「登記供應商」</mark>

方可分發受管制電器

From 1 August 2018, a REE supplier must have been registered as registered supplier with EPD before distributing REE

## 請盡早遞交登記申請

Please submit the application for registration as early as possible

環保署在收到已填妥申請表及所有支持文件後起計的**十個工作天**一般可完成登記手續

The registration process is normally completed within 10 working days after EPD's receipt of the completed application form and all necessary support documents

查詢 Enquiries: 2310 0223 / WEEE@thewgo.org



## **Turning Waste into Resources**

WEEE·PARK is a state-of-the-art Waste Electrical and Electronic Equipment (WEEE) treatment and recycling facility located on a 3-hectare site in EcoPark, Tuen Mun. It signifies Hong Kong SAR Government's commitment towards sustainable use of resources and provides an essential infrastructure in support of the producer responsibility scheme (PRS) on WEEE (WPRS), which will be fully implemented this year.

At present, about 70 000 tonnes of WEEE are generated in Hong Kong annually of which 85% are air-conditioners, refrigerators, washing machines, televisions, computers, printers, scanners and monitors (regulated WEEE). Most of the WEEE are currently exported for reuse or recovery of valuable materials. The reliance on export however may not be sustainable in the long run as the demand for second-hand products in markets outside Hong Kong will decline over time with progressive economic development and tightening of import control over WEEE in other jurisdictions. Hence, we need to take forward the implementation of the WPRS to promote the proper recycling of regulated WEEE, turning them into resources and thereby promoting a circular economy.

## **Environmental Technology**

WEEE contains harmful materials such as lead, mercury and greenhouse gases, which may cause harm to the environment and human health if not properly treated or disposed of. As one of the leading facilities of its kind in the world, WEEE·PARK adopts advanced technologies to turn regulated WEEE into valuable secondary raw materials through a series of detoxification, dismantling and recycling processes. Stringent control over hazardous components contained in WEEE will be exercised in the process.

## **Green Architecture**

The facility adopts different green building features, including a rainwater harvesting system, a solar water heating system, and green architectural design to maximise the use of natural lighting and ventilation. In addition, WEEE·PARK has a green coverage ratio of 30 percent, and is to be accredited in accordance with the BEAM Plus standard.



## **Smart Recycling**

Apart from the main facility located in the EcoPark in Tuen Mun, WEEE·PARK is expanding its collection network in the territory, with the ultimate target of setting up five Regional Collection Centres and eight Collection Satellites. With a smart tracking and reporting system, the network will provide logistics support to facilitate the fleet in the collection of regulated WEEE disposed of by members of the public across Hong Kong. WEEE-PARK is also ready to provide support to retailers in their provision of statutory removal service in respect of regulated WEEE later this year.

## **Cherishing Resources and Care for the Community**

Equipped with a refurbishment workshop, WEEE-PARK will divert serviceable electrical appliances received for repair into refurbished items for further donation to families in need, promoting a loving and caring community while going green.

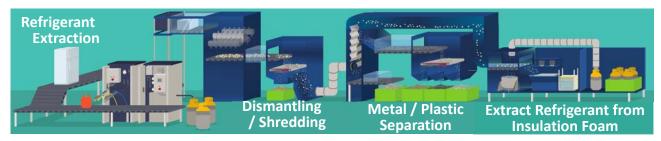
## **Going Green Together**

There is an exhibition corridor at WEEE PARK, and guided tours will be arranged for members of the public to get a better understanding of the recycling and treatment processes of WEEE, and a deeper appreciation of the importance of turning waste into resources. Interested groups may make reservations for the guided tours.

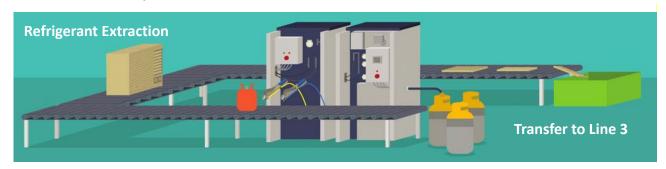
#### **Treatment Processes**

WEEE PARK is designed to treat 30 000 tonnes of regulated WEEE annually, which can be increased to 57 000 tonnes annually by extending the operation hours as necessary. There will be four processing lines:

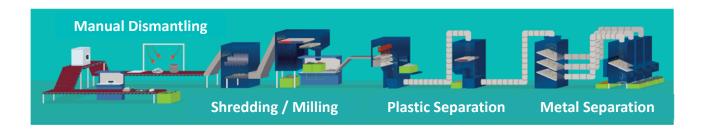
**Line 1 (Refrigerator Processing):** Refrigerants (CFC or HFC) are extracted from refrigerators for proper disposal. The refrigerators are then dismantled in an inert atmosphere whereby potentially flammable insulation will be extracted safely and metal and plastic components will be separated.



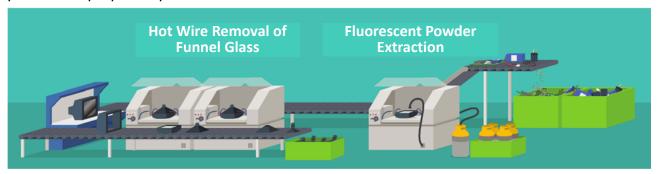
**Line 2 (Air-conditioner Processing):** Refrigerants (CFC or HFC) are extracted from air-conditioners for proper disposal. The air-conditioners are then transferred to Line 3 for further material separation.



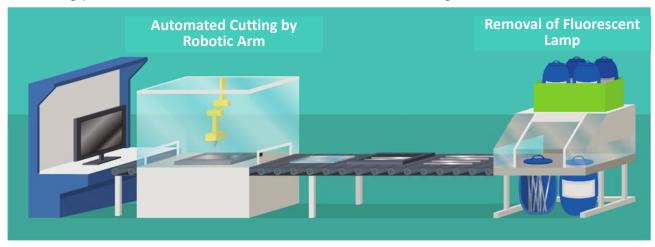
Line 3 (Dismantling and Material Sorting): Computers, washing machines, air-conditioners (transferred from Line 2), as well as TVs and monitors (after detoxification in Line 4) are dismantled, shredded and sorted into secondary materials such as steel, copper, aluminium and plastics.



Line 4 (CRT Detoxification): CRT (Cathode Ray Tube) screens are dismantled using hot wire in order to separate the lead containing funnel glass and to extract the fluorescent powder for proper disposal.



**Line 4 (Flat Screen Detoxification):** Flat screens are cut open automatically using robotic arm and the mercury containing fluorescent lamps are removed for proper disposal. The remaining parts are transferred to Line 3 for further dismantling.



## **Key Milestones**

Jan 2016	Ground breaking ceremony
Aug 2016	Completion of substructure
Jan 2017	Completion of superstructure
Apr 2017	Completion of processing equipment
Jun 2017	Testing and commissioning of processing equipment
Oct 2017	Commencement of initial operation
Mar 2018	Commencement of full operation

Environmental Protection Department March 2018