

## 附件一、議程



**2018 International E-waste Management Network Workshop  
and Philippines Day**

**Sponsored by the Environmental Protection Administration Taiwan and U.S.  
Environmental Protection Agency, and**

**Hosted by Department of Environment and Natural Resources,  
Environmental Management Bureau**

Quezon City, Philippines  
24 – 28 September 2018

**Day 1: Philippines Day**

Purpose: promote and increase awareness on the importance of environmentally sound management of e-waste through sharing of policies, experiences and new technologies among governments, recycling industries and experts, respectively.

Objectives:

- to foster collaborations between local and international stakeholders on e-waste management;
- to introduce the concept of circular economy applicable to e-waste recycling business; and
- to share new policies, experiences and technologies on efficient and effective e-waste management.

**08:30 – 09:00**

**Registration**

**09:00 – 09:45**

**Opening Ceremony**

Welcome Message: Philippines DENR Representative,  
Atty. Jonas R. Leones, Undersecretary for Policy,  
Planning and International Affairs (*to be confirmed*)

Opening Remarks: Taiwan EPA Representative, Hsin-chen Sung

Opening Remarks: USEPA Representative, Barnes Johnson

Note: Presentation of the appreciation token to DENR.

**09:45 – 10:15**

**Group Photo and Coffee Break**

**10:15 – 11:00**

**Overview of Philippines' E-waste Management System**

Mr. Geri-Geronimo R. Sañez, Chief, Hazardous Waste Management  
Section, DENR-EMB

Discussion: What did you find most interesting about the DENR system?

- 11:00 – 12:00**      **Highlights of Taiwan E-waste Recycling Program – Dr. Lihchi Wen, CIER, Taiwan (20 minutes)**
- Highlights of U.S. E-waste Recycling Program – Barnes Johnson, USEPA (20 minutes)**
- Discussion: What new ideas did you get from the Taiwan EPA and USEPA presentations?
- 12:00 – 13:00**      **Lunch**
- 13:00 – 13:45**      **Update on UNIDO-GEF-DENR Project “Implementation of PCB Management Programs for Electric Cooperatives and Safe E-waste Management” and Launching of the Project’s Video and E-waste Collection Event of the DENR**
- Engr. Leah Aurea U. Texon, National Project Manager, UNIDO
- Discussion: What types of e-waste projects are you undertaking?
- 13:45 – 15:00**      **Recycling Industry Presentations**
- William Sui, General Manager, E&E Recycling, Taiwan
  - Mr. Lee Salvatore Echiverri, President Integrated Recycling Industries Philippines, Inc. (to be confirmed)
  - Ms. Gina Castillo, Executive Director, Semirecycling Co., Inc, (to be confirmed)
- 15:00 – 15:15**      **Coffee Break**
- 15:15 – 16:00**      **Recycling Industry Discussion**
- 16:00 – 16:15**      **Closing Remarks – Engr. Metodio U. Turbella, Director, DENR-EMB (to be confirmed)**

## 2018 International E-waste Management Network Workshop

**Purpose:** to build the capacity of government officials to develop and implement comprehensive programs for the collection, recycling and reuse of e-waste.

### **Learning Objectives:**

1. Assess your downstream markets for e-waste materials.
2. Understand the opportunities and impacts of major market changes.
3. Examine the benefits and barriers involved with new processes and technologies.
4. Identify effective ways of building relationships and working with industry.
5. Describe the elements of a facility audit to protect worker health and safety and the environment.

### **Day 2: September 25, Tuesday**

- 8:30 – 9:00**                      **Registration**
- 9:00 – 9:10**                      **Opening Message** – Atty. Jonas Leones, Undersecretary for Policy, Planning and International Affairs, DENR
- 9:10 – 9:30**                      **Overview of 2018 IEMN Workshop** – Brenda Doroski, USEPA
- 9:30 – 10:00**                    **Keynote: Innovative Financing for Waste Management and Recycling**  
Speaker: Aimee Gonzales, PEMSEA – (20 minutes)  
Discussion (10 minutes)
- 10:00 – 11:00**                    **Downstream Markets**  
Presenter: Elizabeth Smith, United Nations University
- Demonstration: Break down a piece of e-waste to show the fractions of plastic, metal and hazardous materials and how they can be recycled. (30 minutes)
- Discussion: What new information did you learn about how to handle waste fractions? (30 minutes)
- 11:00 – 12:00**                    **Understanding Downstream Markets**  
Moderator: Stephanie Adrian, USEPA
- Panel Discussion: What products or materials are produced at your facility? What are the local, national and global markets for various types of e-waste? What markets are emerging and what markets are diminishing? What factors are needed to realize a robust market?
- Panelists: (7 – 10 minutes each)
- Neil Peters-Michaud, Cascade Asset Management
  - Larry King, Sims Recycling Solutions
  - Alex Chien, Manager, Solar Applied Materials Technology Corporation (SOLAR), Taiwan

**Small Group Discussion and Report Out:** What products or electronics fractions are you currently recovering? What markets do you have for plastics and other types of e-waste? What factors do you consider when determining where to send materials? (30 minutes)

**12:00 – 1:15**

**LUNCH and Networking Opportunity**

**1:15 – 2:00**

**Challenges and Opportunities Created by Major Market Changes**

Presenter: Dr. Shunichi Honda, UN Environment Programme (10 minutes)

Group Discussion: What major shifts are you seeing that could change your markets? What new opportunities and impacts are you seeing? What ideas do you have for responding to these shifts? (35 minutes)

**2:00 – 3:00**

**Developing Downstream Markets for Lithium Ion Batteries**

Moderator: Karen Pollard, USEPA

Panel Discussion: What are Li-ion batteries and how are they being used? What factors are affecting the downstream markets? What best practices are you implementing to reduce negative impacts?

Panelists: (10 minutes each)

- Neil Peters Michaud, Cascade Asset Management
- Robert Kang, Blue Whale

**Small Group Discussion and Report Out:** What processes are you currently using to manage Li-ion batteries? What impacts and opportunities are you seeing as a result of the growth of Li-ion batteries market? What additional factors are affecting their downstream market? (40 minutes)

**3:00 – 3:15**

**Coffee Break**

**3:15 – 4:00**

**Pursuing Circular Economy in E-Waste Recycling**

Moderator: Dr. Chun-hsu Lin, CIER, Taiwan

Panel Discussion: How would you define circular economy? What role does e-waste play in the circular economy? What benefits and issues do you see from using a circular economy approach?

Panelists: (10 minutes each)

- Grace Liu, acer, Taiwan
- E&E Recycling, Taiwan

Group Discussion: What trends are you seeing in circular economy (or sustainable materials management) in your country? What are you

currently doing to implement a circular economy approach in your country? What issues and barriers are you encountering? (25 minutes)

**4:00 – 4:45**

**IEMN Discussion**

What role does IEMN play in helping you achieve your e-waste goals?  
What information and resources would you like to share through IEMN?  
What training and networking activities would you find most useful?

**4:45 - 5:00**

**Day 2 Reflections**

**Time TBD**

**Evening Reception hosted by Government of Philippines**  
Seda Vertis North Hotel time TBD

**Day 3: September 26, Wednesday**

**9:00 – 9:15**

**Highlights from Day 2 and Framing for Day 3**

**9:15 – 10:30**

**Examining E-Waste Trends**

Moderator: Garth Hickle, Member, Board of Directors, Sustainable Electronics Recycling International

Group Exercise: What processes/technologies are currently available and/or being used in your country? (15 minutes)

Panel discussion: What new processes and technologies are available for e-waste management systems? Why are they needed? What are potential advantages and barriers to implementing this technology?

Panelists: (7-10 minutes each)

- Dr. Wen-yu Wang, Chao-yang University, Taiwan
- Robert Kang, Blue Whale
- Larry King, Sims Recycling Solutions

Group Discussion and Report Out: What did you find most interesting about the processes/technologies presented? What would be the benefit of implementing one of these technologies? What would it take to implement one of these technologies in your country? (30 minutes)

**10:30 – 10:45**

**Coffee Break**

**10:45 – 12:00**

**Identifying Effective Regulatory Approaches for Working with Industry**

Moderator: Dr. Lihchyi Wen, CIER

Panel Discussion: What is industries role in extended producer's responsibility systems? What role has your industry/manufacturer played in implementing new technologies and establishing downstream markets?

Panelists: (10 minutes each)

- Dr. Chun-hsu Lin, CIER, Taiwan
- Patrick Wiedemann, Reverse Logistics Group (RLG)

Group discussion and Report Out: What approaches have you found most effective to build relationships with industry in your country? What problems has industry helped solve? What more could you do with industry? (50 minutes)

**12:00 – 1:15**

**Lunch**

**1:15 – 2:45**

**Identifying Effective Voluntary Approaches for Working with Industry**

Moderator: Barnes Johnson, USEPA

Panel Discussion: What voluntary approaches has your organization found effective in improving e-waste management? What role has your organization played in implementing voluntary systems and establishing downstream markets? What are the characteristics of successful voluntary programs?

Panelists: (10 minutes each)

- Patrick Wiedemann, Reverse Logistics Group (RLG)
- Julia Hsieh, Procurement Manager, acer, Taiwan
- Larry King, Sims Recycling Solutions

Small Group Discussion and Report Out: What approaches have you found most effective to build relationships with industry in your country? What problems has industry helped solve? What more could you do with industry? (50 minutes)

**2:45 - 3:00**

**Coffee Break**

**3:00 – 4:15**

**Conducting a Facility Audit for Worker Health & Safety and Environmental Protection**

Presenter: Ms. Kelley Keogh, Greeneye Partners

Pictorial walk-through of facility to demonstrate best practices for worker health and safety and environmentally responsible processing of electronics. (30 minutes)



Group Discussion: What do you do to ensure worker health and safety and environmental protection? What new ideas did you get from this presentation that you will try in your program? (45 minutes)

**4:15 – 4:45**                    **Preparing for Tomorrow’s Site Visit**

**4:45 - 5:00**                    **Day 3 Reflections**

**Day 4: September 27, Thursday**

**8:00 – 5:00**                    **Visit to Semirecycling Co., Inc. (SRCI) Facility**

**Day 5: September 28, Friday**

**9:00 – 9:15**                    **Overview of Day 5**

**9:15 – 10:15**                    **Report Out and Discussion of Site Visit**

What best practices did you observe for worker health and safety and environmentally responsible processing of electronics? What new ideas did you get from the site visit that you will try in your country?

**10:15 – 10:30**                    **Coffee Break**

**10:30 – 11:30**                    **Innovative E-Waste Outreach and Education Approaches**  
Moderator: Barnes Johnson, USEPA

Panelists: (10 minutes each)

- Marco Pimentel, Brazil: Brazil Youth Education and Collection Campaign
- Leila Devia, Argentina: Provincial E-waste Campaign

Group discussion: What approaches have you found most effective in educating and motivating the public to recycle e-waste? What barriers are faced; how can the barriers be overcome? (40 minutes)

**11:30 – 12:00**                    **Sharing Country Action Plans**

Describe three new actions you will take to assess your downstream markets, adopt new processes/technologies, expand your relationships with industry and manufacturers, or improve worker health and safety and environmental protection.

**12:00 – 1:15**                    **Lunch Break**

**1:15– 3:30**

**Sharing Country Action Plans (continued)**

Describe three new actions you will take to assess your downstream markets, expand your relationships with industry and manufacturers, and improve worker health and safety and environmental protection.

**3:30 – 4:00**

**Wrap-up and Next Steps**