APEC Sustainable Plastics Eco System: The Best Practice Sharing On Business Model Innovation and Technologies Implementation

Purpose: Information
Submitted by: Chinese Taipei
APEC PPSTI 2019 Funding Session 2

APEC Sustainable Plastics Eco System: The Best Practice Sharing On Business Model Innovation and Technologies Implementation

Plastics Industry Development Center, Chinese Taipei

TSAI, Cheng-Hsiu
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A story of providing a cleaner environment for the endangered specie, Black-faced Spoonbills to reside and how we Chinese Taipei turned waterway waste plastics into fountain pens.
Connecting People, building the future

- **Strategic priority 1**: Digital society
- **Strategic priority 2**: Integration 4.0
- **Strategic priority 3**: Women, SMEs, & Inclusive Growth
- **Strategic priority 4**: Sustainable Growth

- Technical implementation for SME development
- Cross-fora collaboration with OFWG
Objectives

1. **Sharing** best practices from local business model innovation, existing technologies and equipment for further collaboration in APEC.

2. **Connecting** people by providing more capacity building and generic process sharing to foster a healthy eco-system for a cleaner and greener APEC.

3. **Promoting** the Circular Economy using waterway waste plastics as a solution to plastic pollution to achieve a sustainable society.
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<td>Cleaning Actions</td>
<td>1. Cleaning, quality checks and categorization</td>
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<td>2. Material science training</td>
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<td>3. Selection of material and target product.</td>
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<td>2. Pellet and property improvement and testing</td>
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<td>Feb. 2019</td>
<td>Regeneration of recycled plastic materials</td>
<td>1. Manufacturing process for one or more recycled plastic product(s)</td>
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<td>Apr. 2020</td>
<td>Manufacturing of recycled plastic product(s)</td>
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<td>2. Documentary film festival</td>
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<td>3. International expert discussion forum</td>
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<td>Jul. 2020</td>
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Timeline and Key activities (1/2)

- **Clean up**
  - Nov.
- **Processing Collected materials**
  - Dec.
- **Regeneration of recycled plastic materials**
  - Feb.
- **Manufacturing of recycled plastic product(s)**
  - Apr.
- **Discussion Forum**
  - Jul.
- Final report to APEC
  - Sept.
Timeline and activities (2/2)

2019 Self-funded forum and workshops
Date: Nov. 25~29
Place: Taipei

Day 1
• Session 1 From waste to material
• Session 2 From material to products

Day 2
• Session 3 technology, norms & standards
• PIDC tour

Day 3
• Factory tour: plastic recycling
• Factory tour: rubber recycling

Day 4
• Clean up event
• Workshop: Sustainable materials

Day 5
• Field trip: Kenting National Park
Expected Outcomes

1. Educational event on waterway cleaning to examine the cost of plastic pollution.

2. Forum & workshops on the best practice of innovative knowledge of plastic waste solutions, and to draft policy recommendation proposals.

3. Policy recommendations to focus on SMEs’ capacity building, circular economy cluster development, and sustainable society.
Expected Outcomes

The circular economy business model for waste plastics

Collection: Policy/Profit driven system
Sorting: Recycling Company
Material quality improvement: Pellet mfr. + Material supplier
Value creation: Designer + End product mfr.
Marketing: ODMs + Sales channel

• Industry
• Government
• NGO

• Recycling Company

• Pellet mfr. + Material supplier

• Designer + End product mfr.

• ODMs + Sales channel
Conclusion

Turn plastic waste into consumer goods to balance the eco-system while driving economy growth through the circular economy concept. Chinese Taipei will share best practices from business model innovation and technology implementation through educational events, forums and workshops for a cleaner and green APEC.
Thank you!

Special thanks to all the people who made and released these awesome resources for free:

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