

Taiwan Chemical Industry Association (TCIA) Circular Economy Declaration

Sep.12th, 2017

Taiwan Chemical Association Recycling Economy Objective: To integrate the technologies and resources of the Taiwan Chemical Industry Association members, to continuously promote the sustainable development of the industry, to help the industry in response to the global circular economy driven by the opportunity, to support the chemical industry reach zero pollutions, zero emissions, zero accident ultimate goal.

1. The origin and significance of "circular economy" for Taiwan

1.1 Because of the recent severe climate change, the global towards energy-saving and carbon reduction of sustainable development. Due to the shortage of energy, resources, water resources, Taiwan's chemical industry is greatly affected by the development of these trends; therefore, this Council takes promoting resource recycling to enhance energy efficiency and reduce greenhouse gas emissions as an important strategy to protect the ecological environment.

1.2 Expected results for chemical industry to promote circular economy:

- (1) To reduce the chemical industry process raw materials, energy, water and other resource consumption, reduce greenhouse gas emissions
- (3) To reduce the amount of waste generated
- (4) To enhance the chemical industry social image through implementing circular economy
- (5) To support Taiwan chemical products in line with the international trend of circular economy and into the international market brand supply chain

1.3 TCIA circular economy vision:

To integrate the technologies and resources of the Taiwan Chemical Industry Association members, to continuously promote the sustainable development of the industry, to help the industry in response to the global circular economy driven by the opportunity, to support the chemical industry reach zero pollutions, zero emissions, zero accident ultimate goal.

2. Concept of TCIA circular economy:

2.1 Product life cycle analysis:

Consider the impact of the product on the environment throughout the life cycle, and propose cost-effective and socially acceptable solutions.

2.2 To help solve the problems of the chemical industry in implementing circular

economy:

To invite the experts to discuss and coordinate the policies, policies, technologies and integration of the circular economy, the government,

2.3 TCIA as industry's upstream and downstream cooperation platform:

Promote the upstream and downstream manufacturers, the use of by-product as resources, to promote cross-plant recycling economy.

2.4 TCIA as a cross-industry platform:

Link the circular economy related industry (energy industry, water treatment industry, equipment industry, resource management industry, etc.) and the chemical industry to promote circular economy.

3. TCIA Suggests circular economy measures:

3.1 It is suggested that the Government should set up a dedicated ad hoc organization to be responsible for the active promotion and implementation of circular economy.

3.2 It is recommended to invite domestic scholars / experts / industry to discuss and formulate Taiwan's circular economy policy and implementation plan.

3.3 It is recommended that the existing relevant regulations and administrative regulations on waste resources, clarify the definition of waste and recyclable resources, should be reviewed to reduce the obstacles and enhance using of valuable materials.

3.4 TCIA suggests government R & D in circular economy in science programs, including: Chemical reactions revert to original chemical monomer or material technology, raise energy efficiency, new materials research and development, low-carbon chemical new processes, high-performance materials, etc.

3.5 TCIA suggests the Government to accelerate the establishment of the chemical economic zones based on circular economy principles, detailed planning material balance, heat, water, resources, circulation.

3.6 TCIA is willing to exchange circular economy related issues with citizen groups (NGOs) and environmentalists to promote the implementation of circular economy in the chemical industry.