Circular economy in the context of implementing sustainable development goals and responding to climate change

Nguyen Hoang Nam, PhD
Institute of Strategy and Policy on Natural Resources and Environment

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Linear economy causes resource depletion and waste increase

→ We now need 1.7 earths to meet the world's resource needs today (GFN, 2018);
I. Linear economy vs Circular economy

Linear economy causes resource depletion and waste increase

→ By 2050, the total volume of plastic waste discharged into the sea will be more than the total volume of fishes

(Ellen MacArthur Foundation, 2016: 17)
I. Linear economy vs Circular economy

Linear economy causes resource depletion and waste increase

→ Vietnam: SW increases by 10% per year, MSW increases by 10-16% per year (the 4th in Southeast Asia) (MONRE, 2017: 16);

→ 11.6 million tonnes in 2016; 15.9 million tonnes in 2030 and 21.96 million tonnes in 2030 (WB, 2018);
I. Linear economy vs Circular economy

Linear economy causes resource depletion and waste increase

→ Vietnam ranked 68th in the world in total area, 15th in the world in population, but ranked 4th in plastic waste (Jambeck et al, 2015);
I. Linear economy vs Circular economy

Linear economy causes resource depletion and waste increase

→ Air pollution cost Vietnam 5.18% of 2013 GDP (WB, 2016);

→ Water pollution is estimated to cost 3.5% of GDP by 2035 (WB, 2019)
A circular economy is an industrial system that is *restorative and regenerative* by intention and design. It replaces the ‘end-of-life’ concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse, and aims for the elimination of waste through the superior design of materials, products, systems, and, within this, business models.

*(Ellen MacArthur Foundation, 2012: 7)*
Preserve and develop natural capital through the proper use and regeneration of resources

Optimize the return of resources by circulating products and materials as much as possible in cycles

Improve the overall performance of the entire system by minimizing negative externalities, through waste design
II. Context

Transition has become a trend

In Europe:
• 600 billion Euros per year
• 580,000 jobs
• Reducing greenhouse gas emissions
• (Ellen MacArthur Foundation, 2015)

In 2018:
• 34 countries
• 118 models
Circular economy can have a direct impact on more than 10 of the total 17 sustainable development goals;

134 of 169 specific targets are closely related to circular economy (Schroeder, 2018)
III. Current status - Policy framework:

1998
- Directive 36 / CT-TW
  “To issue tax and credit policies to support the application of clean technologies” and “apply clean, low-waste technologies, consume less raw materials and energy”

2004
- Resolution 41 -NQ / TW
  “Encourage recycling and use of recycled products” and “Step by step applying measures to force production and import establishments to recover and process used products”

2005
- Law on Environmental Protection
- Mineral Law 2010
- Water Resources Law 2012
- Land Law 2013
- Law on Environmental Protection

2004
- Law on Environmental Protection
- Water Resources Law 2012
- Land Law 2013
- Directive 29-CT / TW of 2009
  Socio-economic development strategy 2011-2020

2005
- Resolution 41 -NQ / TW
  “Encourage recycling and use of recycled products” and “Step by step applying measures to force production and import establishments to recover and process used products”

2012
- Vietnam Sustainable Development Strategy 2011-2020
  Environmental protection strategy to 2020, vision to 2030
- Green Growth Strategy

2013
- Decision 16/2015 / QD-TTg
  National strategy on integrated management of solid waste

2015
- Decree 38/2015 / ND-CP
- Decision 16/2015 / QD-TTg

2018
Some typical models

Benefits for businesses

- Model of eco-industrial park in Ninh Binh, Can Tho and Da Nang, helps to save up to 6.5 million USD/year;
- Cleaner production models;
- Model of processing seafood byproducts (shrimp shell, shrimp head, ...) creates Chitosan and SSE

Benefits for society

- Zero Waste to Nature Initiative initiated by VCCI;
- Initiative to recycle cap of Tiger beer into iron to build a bridge in Tien Giang;
**IV. Cooperation opportunities**

**Institutionalization of the circular economy, aiming to implement a circular economy in all activities**
- Law on Circular Economy;
- Promote green public spending;
- International experience;

*Develop a roadmap for circular economy.*
- Enterprises are the central driving force;
- Close coordination between MONRE, NGOs, VCCI and enterprises;
- International experience;

**Promote recycling markets**
- Extended producers' responsibilities (EPR);
- Market of secondary materials;
IV. Cooperation opportunities

Circular economy is the best way to decouple natural resource use and environmental impacts from economic growth
– UNEP (2011) và OECD (2011)

👍 No longer trade-off between economic development and environmental quality
Thank you

nhnam@isponre.gov.vn