The circular economy and inland ports

- 19 April 2016-

The role of inland ports

The circular economy has an important potential for inland ports. Port areas are attractive for the recycling industry. The main reason for this is the proximity to cities, industries and the terminals. They are the providers of the supply for the recycling installations. The feedstock provided by big cities and the industry is generated locally. The terminal generates international feedstock. Inland ports provide crossing points between transport modes of waste streams with connections to hinterland and on-site industrial activities and a nearby urban setting.

This means that inland ports, despite their limited areal footprint, have access to significant quantities of bio wastes, surrounding bioenergy resources, biomass from crossing supply chains and energy from intensive activities.¹ EFIP expects that new economies like the circular economy will emerge and that this will lead to new transport flows. It is an important trend for ports to attract these economies to locations along the network, along the inland waterways. Inland ports are therefore important crossroads of all kinds of waste and industrial streams and act as logistical hubs for the import/export of waste materials.

![Circular economy sectors - inland ports](image)

© Source: Output EFIP-survey on circular economy, 13 inland ports, 2015

¹ Energy Port integration with cities by 2020, EPIC 2020, p 225 “Economie circulaire et ecosystems portuaires”
The main challenges for inland ports:

1. **The lack of space** to install collection and treatment units on their sites. We need to make sure that as much brownfield sites and/or industrial sites are re-used for the development of the circular economy.

2. **Inland ports are neither exploiting the circular economy nor a producer** of sustainable energy. As landlord and matchmaker they have the commercial assets to only stimulate the industries within the port area. The development of the circular economy heavily depends on the final market uptake and initiatives of individual companies.

3. There are clear opportunities for inland ports in terms of collecting waste and transport it through inland waterways to valorization centers in a sustainable way. A challenge is to reach **enough critical mass** in the circular economy business model for certain waste to obtain economic profitability.

4. **The development of waste units/plants is hindered by the overall negative public opinion about waste; waste should be equal to value**, this also limits the development of business cases regarding waste valorization.

5. **The transition towards a circular economy requires a marathon, not a sprint.** Ports cannot stop from one to another day the import of fossil raw materials such as coal and phosphate as it is still important for the energy production by coal power plants or for the production of fertilizers used in the agriculture sector.

6. The development and implementation of circular economy strategies requires **a renewed cooperation** between the various stakeholders (ports, authorities, companies, etc.) including the role of citizens associations.

7. **With the recycling (down cycling) of plastics** a second quality raw material is being created. The quality of this type of waste should be increased in the next phase. Waste should be separated and collected in a good way in order to create a strong business case and companies and consumers should be made sensible.

What is needed?

1. **Support for the role of inland ports as intermediate and matchmaker.** As matchmaker, inland ports can stimulate companies and cluster development and activities (e.g. cleantech) to produce in a biobased, sustainable and circular way in view of creating an added value for the port. Besides, they bring both the producing and re-using industries in contact with each other
for the re-usage of energy in the chain. In order to fulfill this role, inland ports invest in the development of capacity, skills, tools and supporting methods.

2. **Diminish conflicting regulation.** Waste and its valorization are considered as a new business model, but there is a lack of common understanding and interpretation of waste depending on the value.

3. A **common interpretation** of the end-of-waste criteria (less on a case by case basis) and the administrative procedures (selection for green lists, permissions etc.) for the cross-border transshipment of waste.

4. Handling waste requires **additional permits**; this slows down the market development.

5. **Waste** has to be valued more **as a resource.** If waste remains waste, public authorities have to support companies to develop new valorization processes through innovation programs.

6. **Increase of knowledge and information** about value-added applications of waste resources; this will help to simplify the transport of waste.

7. The EU should **promote innovation** for the development of a new valorization process for waste that has reached the “end of life”.

8. **Standardization and quality schemes for secondary raw materials.** Standardization of products and materials can be helpful as long as this is done voluntarily and the standards are accepted throughout the whole European Union. NEN-EN-ISO product descriptions to support the circular economy might be helpful. Through standards, trust could be build and market uptake could be facilitated. Standardization in order to guarantee quality could help but should not be too restrictive.

9. **A stable investment climate.** The transition to a circular economy is a lengthy process that will require legislative perseverance and investment extending over a long time span in order to create a stable investment climate for the circular economy and an equal level playing field.

10. **Harmonized safety requirements and regulatory framework.** Safety requirement should be identical in each member state, thus avoiding unfair distortion of competition.

11. **A maximum of 3 months clause** to collect, analyze and decide whether waste has reached its end of life status or could be reused or valorized by other industries.