

# Circularity concepts in the forest sector – concept note

## Background

Circular economy applies to the entire production chain for forest-derived goods and services, including the conservation and management of forest ecosystems. Forest products constitute a renewable resource that is particularly suitable to circular economy. Therefore, if based on sustainably managed forests, they have a potential to effectively contribute to the transition to a circular, low-carbon economy.

Sustainable management of forest ecosystem services is increasingly recognized as an indispensable condition for sustainable forest-based value chains. Further, circular approaches in the production process, such as use of waste, particularly in energy production, are a common and long-standing practice throughout the wood-based industry; and reuse and recycling, for example through lumber salvage and paper recycling, are likewise widely applied.

Circular economy strategies applied in forest industry chains are often a result of economic efficiency and common sense. However, when viewed as a whole, the circularity goals provide numerous opportunities for improved sustainability in forest resources use. They start in the forest and follow throughout a given product's lifecycle. This implies the principles of sustainable forest management, an optimized cascading use of wood at every production stage, and an extended producer responsibility for the recovery of post-consumer wood at the end of value chains.

Consequently, existing good practice in the forest sector presents numerous opportunities for promoting the principles of circular economy and the sustainable use of natural resources, at the same time contributing to the transition to the circular economy and a pursue of broader societal goals, including those encompassed by the 2030 Agenda for Sustainable Development and Sustainable Development Goals.

## Content

### Chapter 1

1. Definition(s) of the circular economy concept as the means to achieving sustainable resources management and SDGs.
2. Existing related policies at the international and national level
3. How circularity concepts are applied to the forest sector (e.g SFM, cascading use etc.)
4. Why circular economy makes sense in the forest sector (opportunities and challenges)

### Chapter 2

5. Circularity in the forest-based value chains – for each sector visualize the value chain, its steps and principles that apply:

- a. Primary manufacturing
  - i. Sawmill industry
  - ii. Cellulose, pulp and paper
- b. Product manufacturing
  - i. Wood in construction
  - ii. Furniture industry
  - iii. Cellulose-based fibers
  - iv. Cellulose-based plastics
- c. Waste Streams Management
  - i. Wood Pellets Production
  - ii. Wood Energy
  - iii. Biodegradation

### Chapter 3

- 6. Tools/policies/general practice supporting circular approaches at each stage of the of the value chain (examples of tools, initiatives, case studies, good practice etc.)
- 7. Success stories and limitations to increased circularity of forest-based value chains
  - a. The role of SFM
  - b. The role of eco design
  - c. Economic viability of circular approaches
  - d. Environmental externalities of increased circularity

### Chapter 4

- 8. Conclusions

## Methods

- 1. Review of scientific papers and reports
- 2. Statistical data analysis where possible
- 3. Interviews with experts and case studies

## Timeline

- 1. First draft by end of 2020
- 2. Possible review by member States (e.g. workshop during Working Party Session or a taskforce of interested countries)
- 3. Final draft by June 2020
- 4. Printed version COFFI/EFC 2020

## Output

60-80 page publication