Summary good practice guidelines for regional players

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Summary of good practices

The aim of this document is to provide a summary regarding the main issues that need to be considered when promoting initiatives that use biomass coming from landscape conservation and maintenance work carried out in the public interest for energy purposes. The type of initiative can range from small boilers installed in a farm seeking for the most efficient and low-cost way to cover its heat demand, up to large scale applications like biomass fired or gasification plants for instance. The aspects relevant in each case might differ greatly depending on the characteristics of the application. Therefore, due to the differences among the different types of initiatives, it is more appropriate to consider the best practices in each step of the chain. For this reason, best practices have been identified in general bases for all kind of initiatives in order to provide recommendations and principles valuable for any application even though not all aspects will be relevant for each specific case.

The identified key parameters for the setup of a successful LCMW biomass value chain are depicted in Figure 1.

- Carry out a comprehensive feasibility study (to determine the biomass potentially available).
- Combine different uses for the resource according to the local demands.
- Select conversion technologies that increase and/or optimize the efficiency of the process and material flows.
- Optimize storage and transportation schemes (shortening transport distance).
- Ensure raw material quality along the value chain.
- Select most appropriate technologies that allow to optimise efficiency. Continuous update and innovation/optimization seeking during the project lifetime.
- Look for flexible systems while keeping the chain as simple as possible.
- Take advantage of existing infrastructures/machinery/existing value chains services.
- Establish strategies to secure supply (combine with other biomass types compatible with the technology used to meet the demand).
These aspects will need consideration at different points of the process. Some will necessarily take place during the planning phase before the value chain implementation and others during the project lifetime (see Figure 2).
According to the specific characteristics and constraints of the region, type of LCMW and initiative the best practice applicable will differ. The present document intends to give a wide
overview of best practices for LCMW value chains but not all identified best practices will apply. A deep assessment will be required to determine the specific conditions of the case and therefore, select the best practices that could be convenient. Additionally, it is worth mentioning that public acceptance and environmental impact, which are sometimes minor or less relevant aspects, are highly important in LCMW value chains and should be taken into consideration and periodically updated during the project lifetime.