

Wooden windows in circular economy

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Regular wooden window consist of around 50 elements among which wood, glass, metal hinges and surface coating are just few of them. If we dig deeper, we come to several hundred different chemical elements which are integrated in one relatively simple product. Wooden windows are considered as an environmentally friendly and sustainable products due to their basic material – wood. Even though this seems logical at the first glance, there is an issue which must be considered – use of materials after the end of product lifetime, including wood. If glass and metal from hinges from windows are normally recycled and used again, the same can not be stated for wood. In positive scenario, wooden parts of windows are chopped into wooden chips and used for heating by burning in appropriate burners. At the same point, surface coating must be addressed, as it is an integral part of wooden frames and may contain heavy metals like zinc, lead and chromium, and other elements e.g. chlorine or even arsenic. Examples, where wood from discarded windows would be re-used are very rare, and therefore this is an important topic which needs to be addressed to consider wooden window in the scope of circular economy.