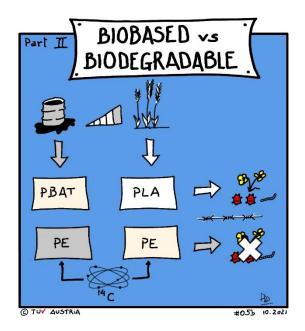
05 - biobased vs biodegradable - part II





As explained in sketch 03, biobased and biodegradable are two distinct concepts and not everything that is biobased is necessarily biodegradable and vice versa.

Another important aspect is that a product can be partially or fully biobased.

Being only 20% biobased is better than not being biobased at all.

On the contrary, a claim of partial biodegradability is not allowed: a material is either declared biodegradable or it is not, and there are no half measures possible.

The criterion 90% of transformation of carbon into CO2 in the standards does not mean that the material is only 90% biodegradable, but simply that the remaining 10% will take a little longer to biodegrade than the time set for the test, or will be absorbed by the micro-organisms which will have worked with the process.

So, there are materials of fossil origin that are biodegradable (e.g. PBAT) and biobased products that are not (e.g. sugarcane-based PE).

In the case of products that can be either of fossil origin or biobased (such as PE in the sketch), since the molecule is absolutely identical, the only way to determine the fossil part of the biobased one is to carry out a carbon-14 analysis.