Bio-waste generation
in the EU: Current capture levels and future potential

Report summary

The Bio-based Industries Consortium (BIC) has teamed up with Zero Waste Europe (ZWE) to produce a first-of-its-kind report estimating the current and future availability of bio-waste in the EU28. This summary of the report is now available, and the full report will be made available on 6 July 2020 on BIC’s and ZWE’s websites.

There are two major types of bio-waste: garden and food waste as defined in EU regulations (the revised Waste Framework Directive). This report focuses on food waste, although calculations also cover bio-waste as a whole.

The first chapter briefly outlines the EU policy drivers for the management of bio-waste, one of which will be the new Waste Framework Directive (WFD), which mandates bio-waste collection from 1 January 2024 onwards. Other drivers from environmental policies are also mentioned.

In the second chapter, the methodology of the report is outlined. The report builds on public information and national data from the 27 Member States + UK and Norway for bio-waste generation, making a number of assumptions on how to calculate the current capture of bio-waste in the EU27+ and the theoretical potential.

The third chapter presents the results. In the EU27+, current capture of food waste is 9,520,091 tonnes per year, just 16% of the theoretical potential, estimated at 59,938,718 tonnes. It must be noted that the latter number is indeed only theoretical. Every type of collection aims at maximising capture but will never reach 100%. With that in mind, the report defines a target capture level, the ‘operational potential’, of around 85% of the theoretical potential, so as to calculate how much food waste, currently left in mixed waste, may actually be still recovered.

The fourth chapter provides some best practices in bio-waste management. This includes the case of Milan; an outstanding example of how residential food waste collection has been implemented. Catalonia’s landfill tax is also described, where economic instruments aim to promote the collection of bio-waste. Another best practice is in France, where some municipalities were pioneers in promoting the separate collection of bio-waste. BBI JU funded projects are also included as examples of best practices for sustainably valorising bio-waste to provide new bio-based compounds for the chemicals, food-packaging and agricultural sectors.

Finally, the report includes country-specific factsheets that provide calculations for various countries, and other specific information that is relevant to bio-waste management strategies and perspectives in that specific country.
The Bio-based Industries Consortium (BIC)

- **BIC** ([biconsortium.eu](http://biconsortium.eu)) is Europe’s leading industry association, putting circularity, innovation and sustainability at the heart of the European bioeconomy and the private partner in the €3.7 billion public-private partnership with the EU - the Bio-based Industries Joint Undertaking (BBI JU).

- BIC’s membership includes 200+ industry members covering the whole value chain, from primary production to the market, across multiple and diverse sectors including agriculture & agri-food, aquaculture & marine, chemicals and materials, including bio-based fibres and bioplastics, forest and forest-based sectors, market sectors, technology providers and waste management & treatment.

- BIC also has over 200 associate members representing academia, research organisations, trade associations, etc.

- BIC’s mission is to build new circular bio-based value chains and to create a favorable business and policy climate to accelerate market uptake.

Zero Waste Europe (ZWE)

- Zero Waste Europe ([zerowasteeurope.eu](http://zerowasteeurope.eu)) is the European network of communities, local leaders, businesses, experts, and change agents working towards the same vision: phasing out waste from our society. ZWE wants to empower communities to redesign their relationship with resources, to adopt smarter lifestyles and sustainable consumption patterns, and to think circular.