

# Valorisation of rural and urban biowaste: an inventory of feedstocks, technologies and production chains

J.W.A. Langeveld

*Biomass Research, Costerweg 1D, 6700 AE Wageningen, the Netherlands.*

**Copyright:** 2021 Langeveld J.W.A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

## Abstract

According to IPCC, bioenergy should be an essential and integral part of carbon reducing policies; bioenergy use will be substantial in 1.5°C pathways due to its role in decarbonizing energy use. Bioresidues and biobased materials represent a potential source of renewable energy and biobased materials. The use of urban and rural waste as feedstocks for bioeconomy production chains will contribute to the realisation of UN Sustainable Development Goals (SDGs) related to healthy lives (SDG-3), sustainable water and sanitation (SDG-6), energy security (SDG-7) and climate change (SDG-13). Questions that need to be addressed include the selection of the feedstock, their availability and the use of conversion technologies needed to develop environmentally sustainable, economic and socially acceptable production chains.

Low urban and food waste recycling rates and high costs for waste collection, handling and conversion are some of the barriers that hinder development successful waste-conversion chains. This presentation discusses availability of organic waste streams from forestry, agriculture and urban centres in the Netherlands and various countries in Europe. Results of recent projects that describe options for the valorisation of urban waste in dedicated biobased production chains (feedstocks, biorefineries, potential end-products) using the urban metabolism analytical framework will be presented. Special attention is given to logistic concepts including bio-hubs

## Biography:

Hans is a former owner and Managing Partner of a national premier league boutique and has led the Dutch office of Korn/Ferry International being responsible for its European Advanced Technology Practice. Prior to this, Hans was a Board Member at KPN Telecom NV and CEO of the Business Market Division with more than 3,000 personnel where under his leadership, a large reorganisation was carried out. While at KPN, Hans was a member of the Corporate Accounts Group, responsible for large contracts in the government area, and was a key player in creating the global AT&T/Unisource joint venture.

## Publications:

1. Structural Break and Causal Analyses of U.S. Corn Use for Ethanol and Other Corn Market Variables.
2. Variable demand as a means to more sustainable biofuels and biobased materials.
3. Development perspectives for the bio-based economy.

**Citation:** J.W.A. Langeveld Biomass Research, Costerweg 1D, 6700 AE Wageningen, the Netherlands, SP, Valorisation of rural and urban biowaste: an inventory of feedstocks, technologies and production chains. 1st International conference on Internal Medicine and Primary Care, Oct 22-23, 2021 at Paris, France