Documentation for hierarchal flowchart:

The idea behind the flowchart is based on a decision tree, by having questions that branch into different answers to recommend the most appropriate starting initiative in the hierarchy based on specific characteristics of the FLW. However, as certain questions that branch out later lead back to same node further down the decision tree, the data structure was changed to a flowchart.

Approach:

Questions are arranged in a specific order such that the FLW is first considered for the top most ranked initiative in the hierarchy, and following that the next best ranked initiatives are then considered in the event that 1) the user realises that the FLW does not qualify for the current highest ranked initiative in the hierarchy, or 2) the user chooses to view the next best alternative.

Questions will attempt to assess the FLW’s appropriateness for a particular initiative by inquiring the presence of certain characteristics that the undertaking of that particular initiative requires. For example, for a FLW to be sent for donation, it would have to be a) edible and b) desirable for human consumption, where both a) and b) are characteristics required for the FLW to qualify for food donation.

Industrial Application/ Energy Extraction:

However, as there are many Industrial Applications and Energy Extraction methods that could be performed on various types of FLW with very specific characteristics, it is virtually impossible to iterate through all possible enumerations of IA and EE methods and ask questions inquiring the presence of corresponding required characteristics method by method. Therefore, the flowchart is connected to the food waste-to-resource mapping database after it flows past the animal feed initiative in the hierarchy, and the database will be queried with the specified type of FLW to detect the corresponding recommended IA/EE methods in the database. If no results are returned from the query, the user is returned to the flowchart to continue assessing the FLW suitability for the next best initiative in the hierarchy (which is Composting in this case).