

# Appendix A: List of biogas feedstock terms and variants

| CATEGORY                  | BIOGAS FEEDSTOCK TERM     | VARIANTS OF THE TERM   | REFERENCES |
|---------------------------|---------------------------|--|------------|
| Crop_leftover             | meadow_hay                | meadow_hay; field_fodder_hay; ensiled_meadow_grass; hay_grass  | [1]        |
| Crop_leftover             | cut_flower_wastes         | cut_flower_wastes; flower_waste; flower_stalk  | [1]        |
| Crop_leftover             | maize_cobs                | maize_cobs; maize_cobs; maize_corncob  | [1]        |
| Crop_leftover             | maize_stover              | maize_stover; corn_stover_harvest; corn_stover_quality; maize_stalks; stover_harvest; stover; maize_stalk; corn_stover_removal; corn_stover_supply; stover_yield; stovers; maize_residues; corn_stover; corn_stover_feedstock; harvesting_corn_stover; corn_residues; corn_stover_fractions; maize_straw; rice_straw_and_corn_stalk  | [1]        |
| Crop_leftover             | oat_straw                 | oat_straw; oat_straws  | [1,2]      |
| Crop_leftover             | pea_straw                 | pea_straw; pea_straws  | [1,2]      |
| Crop_leftover             | rapeseed_straw            | rapeseed_straw; rape_straw; rape_straws; rapeseed_straws   | [1,2]      |
| Crop_leftover             | rice_straw                | rice_straw_biomass; rice_straws; rice_straw_residue; rice_straw; raw_rice_straw; untreated_rice_straw; pretreated_rice_straw; natural_rice_straw; shredded_rice_straw; rice_straw_feedstock; rice_straw_and_corn_stalk   | [1]        |
| Crop_leftover             | rye_straw                 | rye_straw; rye_straws  | [1,2]      |
| Crop_leftover             | ryegrass_straw            | ryegrass_straw; ryegrass_hay; ryegrass_shoots; ryegrass_straws   | [1,2]      |
| Crop_leftover             | barley_straw              | barley_straw; barley_straws; lignocellulosic_barley_straw; untreated_barley_straw; barley_straw_(bs)_biomass   | [1,2]      |
| Crop_leftover             | wheat_straw               | wheat_straw; lignocellulosic_wheat_straw; acid_pretreated_wheat_straw_(ws); dried_wheat_straw; winter_wheat_straw; wheat_straw; wheat_straws   | [1,2]      |
| Vegetable_industry        | vegetable_waste_(general) | vegetable_waste; vegetable_food_waste; vegetable_processing; fruit_and_vegetable_residues; vegetable_solid_waste; vegetable_residues; fruit/vegetable_waste; vegetable_and_fruit_crops; vegetable_wastes; vegetable_residues; vegetable_processing_waste   | [1]        |
| Vegetable_industry        | succory_waste             | succory_waste; succory_chaff; chicory_chaff; succory_mush; chicory_mush  | [1,2]      |
| Vegetable_industry        | onion_processing_residues | onion_processing_residues; onion_residues; onion_waste; onion_solid_wastes; onion_peels; onion_skin; onion_processing_waste  | [1]        |
| Vegetable_industry        | asparagus_waste           | asparagus_waste; asparagus_peels   | [1]        |
| Vegetable_industry        | cauliflower_residues      | cauliflower_residues   | [1]        |
| Vegetable_industry        | eggplant_residues         | eggplant_residues  | [1]        |
| Vegetable_industry        | tomato_residues           | tomato_residues; industrial_tomato_residues; tomato_processing_waste; tomato_waste; tomato_peel_waste; tomato_plant_residues; tomato_wastes; tomato_peels  | [1]        |
| Vegetable_industry        | turnip_residues           | turnip_residues; turnips_tops  | [1,2]      |
| Vegetable_industry        | spinach_waste             | spinach_waste  | [1]        |
| Vegetable_industry        | feeding_beet_leaves       | feeding_beet_leaves; sugar_beet_leaves; beet_leaves  | [1,2]      |
| Vegetable_industry        | champost                  | champost; spent_mushroom_compost; spent_mushroom_composts; mushroom_compost; spent_mushroom_substrates; spent_mushroom_substrate; mushroom_substrate; mushroom_substrates; mushroom_waste; smc   | [4]        |
| Fruit_processing_industry | apple_pomace              | apple_pomace; apple_waste; apple_pulp; apple_slurry; apple_cake; apple_filtration_cake; apple_marc; apple_processing_wastes; apple_pomace_ultrafiltration_sludge; apple_pomace_waste; apple_juice_processing; apple_residues; apple_processing_wastes  | [1,2]      |
| Fruit_processing_industry | citrus_bagasse            | citrus_bagasse; loose_skinned_mandarin; tangarine_residues; orange_residues; orange_peel_and_seeds; lemon_pulp; lemon_residues; citrus_processing_waste; orange_bagasse; orange_peel_waste_biomass; orange_peel_waste; orange_peel; orange_peels; waste_orange_peels; lemon_peel_waste; waste_orange_peel; citrus_peel_waste; banana_and_citrus_peels; citrus_juice_waste; lemon_peel; citrus_processing_waste; orange_pulp_and_carob_meal; citrus_peel; citrus_processing_waste; citrus_wastes; citrus_peel_waste; citrus_waste | [1]        |
| Fruit_processing_industry | grape_marc                | grape_marc; grape_residues; grape_processing_waste; grape_seeds; grape_wastes; grape_pomace; grape_seed; winery_biomass_waste; grape_marcs; raw_grape_pomace; spent_grape_marc; exhausted_grape_marc; grape_skins; grape_pomace; wine_residue; wine_processing_waste_sludge  | [1,2]      |
| Fruit_processing_industry | pineapple_peel            | pineapple_peel; pineapple_residues; pineapple_waste; pineapple_processing_waste; pineapple_peels; pineapple_leaf_waste   | [1]        |
| Fruit_processing_industry | banana_peel               | banana_peel; banana_peels; banana_residues; banana_processing_waste; banana_and_citrus_peels; banana_biomass; banana_waste; banana_agricultural_waste; banana_plant_waste; mango_processing_waste; mango_residues  | [1]        |
| Fruit_processing_industry | mango_residues            | mango_residues; mango_processing_waste; mango_peels; mango_peel; mango_waste; mango_seed; mango_seed_kernel; mango_seed_shell; mango_peels; mango_stone; mango_peels; mango_peel; mango_waste  | [1]        |
| Fruit_processing_industry | apricot_fibre             | apricot_fibre; apricot_shell   | [1]        |
| Hot_beverage_industry     | malt_coffee_marc          | malt_coffee_marc; coffee_pulp/husk; malt_coffee_druff; coffee_pulp; coffee_husk; coffee_industry_residues; coffee_waste; coffee_residues; spent_coffee_waste; coffee_husks; coffee_silverskin; spent_coffee_grounds; spent_coffee_filtration; spent_coffee_waste; spent_coffee_ground; spent_ground_coffee; exhausted_coffee_residue; spent_coffee_filtration; spent_ground_coffee; waste_coffee_ground  | [1,2]      |
| Hot_beverage_industry     | cocoa_shell               | cocoa_shell; cocoa_shells; cocoa_pod_husk  | [1]        |
| Hot_beverage_industry     | tea_production_waste      | tea_production_waste; waste_tea; tea_waste; medical_tea_waste; waste_tea_leaves; tea_waste_biomass; chinese_medicinal_herbal_residues  | [1,2]      |
| Bakery_industry           | old_bread                 | old_bread  | [1]        |
| Bakery_industry           | bakery_residues           | bakery_residues; baking_waste; discarded_wheat_flour   | [1,2]      |
| Milling_industry          | barley_bran               | barley_bran  | [1,2]      |

|                              |                                    |  |       |
|------------------------------|------------------------------------|--|-------|
| Milling_industry             | oat_bran                           | <i>oat_bran</i>  | [1,2] |
| Milling_industry             | rice_bran                          | <i>rice_bran; de_oiled_rice_bran</i>   | [1,2] |
| Milling_industry             | rye_bran                           | <i>rye_bran</i>  | [2]   |
| Milling_industry             | wheat_bran                         | <i>wheat_bran; wheat_bran_medium; wheat_bran_based_biorefinery; destarched_wheat_bran</i>  | [1,2] |
| Vegetable_oil_industry       | coconut_extraction_meal            | <i>coconut_extraction_meal; coconut_cake; coconut_expeller</i>   | [1,2] |
| Vegetable_oil_industry       | cotton_seed_extraction_meal        | <i>cotton_seed_extraction_meal; cotton_seed_cake; cotton_seed_expeller; cottonseed_cake</i>  | [1,2] |
| Vegetable_oil_industry       | flax_extraction_meal               | <i>flax_extraction_meal; flax_cake; flax_expeller</i>  | [1,2] |
| Vegetable_oil_industry       | hemp_press_cake                    | <i>hemp_press_cake</i>   | [1,2] |
| Vegetable_oil_industry       | maize_germ_extraction_meal         | <i>maize_germ_extraction_meal; maize_germ_cake; maize_germ_expeller</i>  | [1,2] |
| Vegetable_oil_industry       | olive_pulp                         | <i>olive_pulp; olive_oil_waste; olive_oil_mill_wastes; olive_oil_mill_waste</i>  | [1,2] |
| Vegetable_oil_industry       | palm-kernel_extraction_meal        | <i>palm-kernel_extraction_meal; palm-kernel_cake; palm-kernel_expeller</i>   | [1,2] |
| Vegetable_oil_industry       | peanut_extraction_meal             | <i>peanut_extraction_meal; peanut_cake; peanut_expeller</i>  | [1,2] |
| Vegetable_oil_industry       | rapeseed_extraction_meal           | <i>rapeseed_extraction_meal; rapeseed_oil_cake; rapeseed_expeller; rapeseed_oil_cakes; %_rapeseed_meal; rapeseed_cake</i>  | [1,2] |
| Vegetable_oil_industry       | safflower_extraction_meal          | <i>safflower_extraction_meal; safflower_seed_press_cake; safflower_seed_cake</i>   | [1,2] |
| Vegetable_oil_industry       | sesame_extraction_meal             | <i>sesame_extraction_meal</i>  | [1,2] |
| Vegetable_oil_industry       | soybean_extraction_meal            | <i>soybean_extraction_meal; soybean_meal; soya_meal; soymeal</i>   | [1,2] |
| Vegetable_oil_industry       | sunflower_extraction_meal          | <i>sunflower_extraction_meal; sunflower_pressed_bagasse; sunflower_meal; sunflower_cake; sunflower_expeller</i>  | [1,2] |
| Vegetable_oil_industry       | sunflower_peelings                 | <i>sunflower_peelings; sunflower_seed_hulls; sunflower_seed_shell</i>  | [1,2] |
| Starch_industry              | potato_peel                        | <i>potato_peel; potato_peels; potato_peel_waste; potato_processing_wastes</i>  | [1,2] |
| Starch_industry              | potato_pulp                        | <i>potato_pulp</i>   | [1,2] |
| Sugar_industry               | sugar_beet_melasse                 | <i>sugar_beet_melasse; sugar_beet_molasses; beet_molasses; molasses</i>  | [1,2] |
| Sugar_industry               | sugar_beet_pulp                    | <i>sugar_beet_pulp; sugar_beet_pulp_sbp; exhausted_sugar_beet_cossettes</i>  | [1,2] |
| Sugar_industry               | sugar_filter_cake                  | <i>sugar_filter_cake; sugarcane_filter_cake; filter_cake; filter_cakes</i>   | [1]   |
| Sugar_industry               | sugar_beet_scraps                  | <i>sugar_beet_scraps; sugar_beet_processing_wastes; sugar_beet_waste; sugar_beet_tops; sugar_beet_taproots</i>   | [1,2] |
| Fermentation_industry        | beer_barm                          | <i>beer_barm</i>   | [1]   |
| Fermentation_industry        | brewers_grains                     | <i>brewers_grains; brewers_spent_grains</i>  | [1,2] |
| Fermentation_industry        | brewers_yeast                      | <i>brewers_yeast; brewer's_yeast</i>   | [1,2] |
| Fermentation_industry        | distillers_grains                  | <i>distillers_grains; dried_distillers_grains; dried_distillers_grain; wet_distillers_grains; distillers; ddgs; distiller's_dried_grains; distiller's_grains; corn_distillers; distillersâ€™_dried_grains; distillers; €™_dried_grain; dried_distillersâ€™_grains; distillersâ€™_grains</i>  | [1,2] |
| Fermentation_industry        | distillers_residues                | <i>distillers_residues</i>   | [1,2] |
| Biodiesel_industry           | glycerol                           | <i>glycerol; crude_glycerin_cg; pure_glycerin; crude_glycerin; glycerine; crude_biodiesel_glycerol; glycerol; crude_glycerol; biodiesel_byproduct_glycerol; raw_glycerol; crude_glycerol; pure_glycerol; biodiesel_derived_glycerol</i>  | [1,2] |
| Paper_industry               | sisal_pulp                         | <i>sisal_pulp; sisal_waste; sisal; sisal_fiber; sisal_fibers</i>   | [1]   |
| Dairy_industry               | dairy_industry_waste_general       | <i>dairy_industry_waste</i>  | [1]   |
| Dairy_industry               | cheese_waste                       | <i>cheese_waste; cheese_wastes</i>   | [1]   |
| Dairy_industry               | milk_whey                          | <i>milk_whey</i>   | [1]   |
| Fish_&_slaughtering_industry | fish_liver_meal                    | <i>fish_liver_meal</i>   | [1,2] |
| Fish_&_slaughtering_industry | fish_meal                          | <i>fish_meal; fish_meal_protein; fish_meal_production; fishmeal</i>  | [1,2] |
| Fish_&_slaughtering_industry | slaughterhouse_flotate_fat         | <i>slaughterhouse_flotate_fat</i>  | [1,2] |
| Fish_&_slaughtering_industry | animal_fats                        | <i>animal_fats; animal_fat; waste_animal_fats; waste_animal_fat</i>  | [1,2] |
| Fish_&_slaughtering_industry | animal_meat_and_bone_meal          | <i>animal_meat_and_bone_meal; meat_and_bone_meal; meat_and_bone_meal_residues; bone_meal</i>   | [1]   |
| Fish_&_slaughtering_industry | animal_offals                      | <i>animal_offals; animal_offal; poultry_offal; poultry_offals; poultry_meat_offals; animal_organs_and_intestines; animal_intestines; animal_intestine; animal_organ_waste</i>  | [1,2] |
| Fish_&_slaughtering_industry | animal_hairmeal                    | <i>animal_hairmeal; hair_meal</i>  | [3]   |
| Fish_&_slaughtering_industry | animal_feather_meal                | <i>animal_feather_meal; feather_meal; poultry_feathers; feather_waste; waste_feathers; feather_wastes; chicken_feather_waste; chicken_feathers; waste_chicken_feathers</i>   | [3]   |
| Fish_&_slaughtering_industry | animal_bloodmeal                   | <i>animal_bloodmeal; blood_meal; poultry_blood_waste; blood_waste</i>  | [3]   |
| Fish_&_slaughtering_industry | rumen_content                      | <i>rumen_content; rumen_contents</i>   | [1]   |
| Fish_&_slaughtering_industry | meat_waste                         | <i>meat_waste</i>  | [1,2] |
| Fish_&_slaughtering_industry | slaughterhouse_wastes_mixtures     | <i>slaughterhouse_wastes_mixtures; slaughterhouse_wastes; slaughterhouse_waste_materials; slaughterhouse_waste; slaughterhouse_wastes_mixtures; solid_slaughterhouse_wastes; solid_slaughterhouse_waste; poultry_slaughterhouse_waste; slaughter_house_waste; slaughterhouse_sludge; solid_slaughterhouse_wastes; solid_slaughterhouse_waste</i> | [1]   |
| Industrial_wastewater        | distillery_wastewater              | <i>distillery_wastewater; cassava_distillery_wastewater; alcohol_distillery_wastewater; wine_distillery_wastewater</i>   | [1]   |
| Industrial_wastewater        | brewery_industry_wastewater        | <i>brewery_industry_wastewaters; brewery_industry_wastewater; brewery_wastewater; brewery_waste_water</i>  | [1]   |
| Industrial_wastewater        | coffee_industry_wastewater         | <i>coffee_industry_wastewater</i>  | [1]   |
| Industrial_wastewater        | fruit_industry_wastewater          | <i>fruit_industry_wastewater</i>   | [1]   |
| Industrial_wastewater        | oilseed_processing_wastewater      | <i>oilseed_processing_wastewater; olive_processing_wastewater; table_olive_processing_wastewaters; olive_oil_manufacturing_waste_waters</i>  | [1]   |
| Industrial_wastewater        | potatoes_waste_water               | <i>potatoes_waste_water</i>  | [1]   |
| Industrial_wastewater        | vinasses                           | <i>vinasses; vinasse; sugarcane_vinasse</i>  | [1]   |
| Industrial_wastewater        | pulp_and_paper_industry_wastewater | <i>pulp_and_paper_wastewater; pulp_and_paper_mill_wastewater; pulp_and_paper_effluents</i>   | [1]   |
| Industrial_wastewater        | textile_industry_wastewater        | <i>textile_industry_wastewater; textile_wastewater; textile_wastewaters; textile_effluents; textile_waste_water; real_textile_wastewater</i>   | [1]   |
| Industrial_wastewater        | dairy_industry_wastewater          | <i>dairy_industry_wastewaters; milk_industry_wastewater</i>  | [1]   |
| Industrial_wastewater        | slaughterhouse_wastewater          | <i>slaughterhouse_wastewater</i>   | [1]   |

|                      |                    |  |       |
|----------------------|--------------------|--|-------|
| Manure               | cattle_manure      | cattle_manure; liquid_cow_manure; fresh_cow_manure; dairy_cattle_manure; cow_manure; bovine_manure; dairy_manure; separated_dairy_manure; beef_cattle_manure; cow_slurry; livestock_slurries; cattle_slurry; cattle_slurries; dairy_cattle_manure; dairy_slurry; dairy_manure; bovine_manure; buffalo_manure; cattle_manure; cattle_and_pig_slurry   | [1,2] |
| Manure               | pig_manure         | pig_manure; separated_pig_manure; pig_manure_solids; pig_manure; liquid_pig_manure; fresh_pig_manure; pig_slurry; swine_manure_solids; raw_swine_manure; liquid_swine_manure; pig_slurries; swine_slurry; cattle_and_pig_slurry; treated_pig_slurries; untreated_pig_slurry; swine_manure; cattle_and_pig_slurry; pig_muck   | [1,2] |
| Manure               | poultry_manure     | poultry_manure; chicken_manure; hen_manure; poultry_manures; duck_manure; chiguano_and_poultry_manure; poultry_litter; poultry_litters; poultry_litter_waste; chicken_droppings; poultry_droppings   | [1,2] |
| Manure               | sheep_manure       | sheep_manure; sheep_litter   | [2]   |
| Manure               | rabbit_manure      | horse_and_rabbit_manure; rabbit_manure   | [2]   |
| Animal_feed_residues | grass_meal         | grass_meal   | [2]   |
| Animal_feed_residues | clover_meal        | clover_meal  | [2]   |
| Animal_feed_residues | manioc_meal        | manioc_meal; manioc_chips  | [2]   |
| Animal_feed_residues | cereal_grist       | cereal_grist   | [2]   |
| Others               | food_leftovers     | food_leftovers; food_residues; food_residuals; vegetable_food_waste; collected_food_waste; untreated_food_waste; food_waste_materials; food_industry_residues; food_waste; agricultural_and_food_wastes; edible_food_waste; typical_food_waste; kitchen_food_waste; restaurants_food_waste; solid_food_waste; organic_food_waste; food_wastes; mixed_restaurant_food_waste; commercial_food_waste; mixed_food_waste; municipal_food_waste; food_waste; mixed_food_waste; domestic_food_waste   | [1,2] |
| Others               | organic_housewaste | organic_housewaste; organic_household_waste; organic_household_wastes; solid_organic_household_waste; source_separated_organic_household_waste; source_sorted_organic_household_waste; municipal_solid_waste; municipal_organic_waste; msw; organic_municipal_solid_wastes; organic_municipal_wastes; municipal_organic_waste; municipal_solid_waste_organic_fraction; municipal_solid_waste_fractions; urban_municipal_solid_waste; especially_municipal_solid_waste; municipal_solid_waste_stream; municipal_solid_waste_disposal; unsorted_municipal_solid_waste; real_municipal_solid_waste; landfilled_municipal_solid_wastes; shredded_municipal_solid_waste | [1,2] |
| Others               | garden_waste       | garden_waste; garden_wastes; food_and_garden_waste; kitchen_and_garden_wastes; source_segeregated_green_waste_compost  | [2]   |
| Others               | roadside_grass     | roadside_grass; municipal_lawn; municipality_lawn  | [4]   |
| Others               | natural_grass      | natural_grass; conservation_land_grass   | [4]   |
| Others               | used_paper         | used_paper; old_newspaper; mixed_office_waste_paper; waste_paper; waste_newspapers; waste_papers; waste_newspaper; wastepaper  | [1]   |
| Others               | wastewater_sludge  | dewatered_wastewater_sludge; municipal_wastewater_sludge; water_sludge; wastewater_sludge; waste_water_sludge; wastewater_sludges  | [1,2] |

#### References

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