





Greenprint.

A net carbon-negative systems model for green infrastructure management 10/04/2024





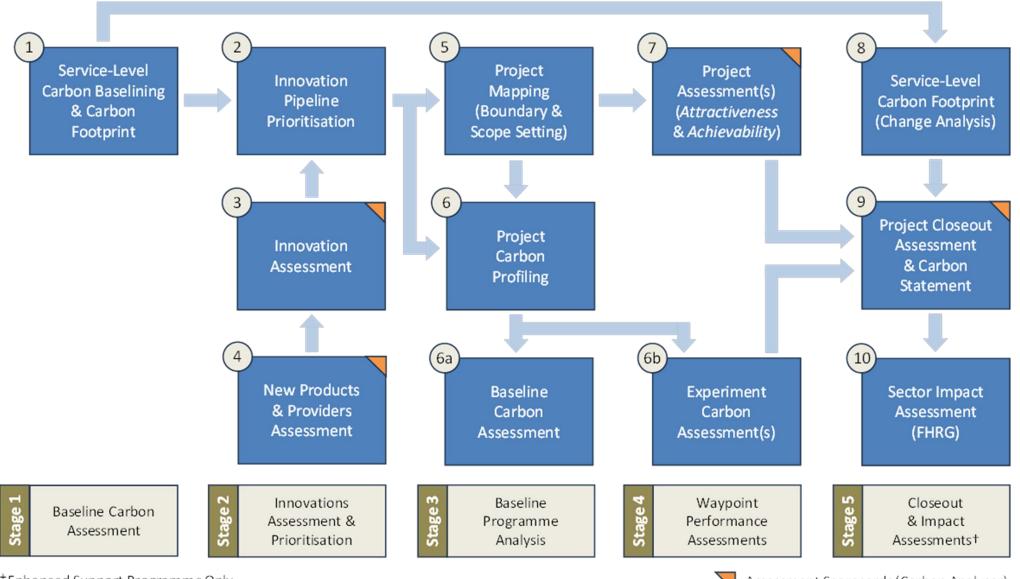






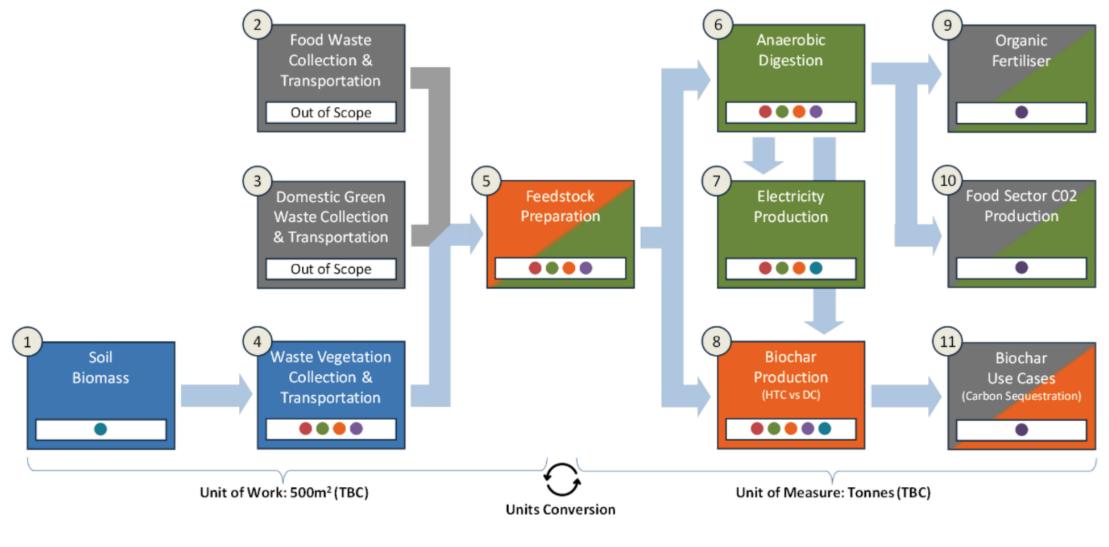












- People (Commuting, Home Working & Business Travel*)
- Premises & Sites (Combusted Fuels / Energy Use*)
- Vehicles & Plant (Embodied Carbon & Fuels / Energy Use*)
- Purchased Products & Services (Business Change, Future Operations & Transportation As A Service*)
- Carbon Offsetting & Sequestration (Including Energy To Grid*)
 - *Additional, Live Labs II specific, above baseline.

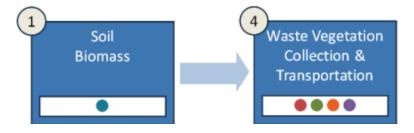




Storming the issues!

- Nice to have 'counterfactuals' but 'out of scope'
- Verge sampling methodology and local circumstances (sequestration)
- Proportioning of vehicle life cycle emissions
- Maintaining consistency of approach in trial areas
- Allocation of fuel use across the fleet



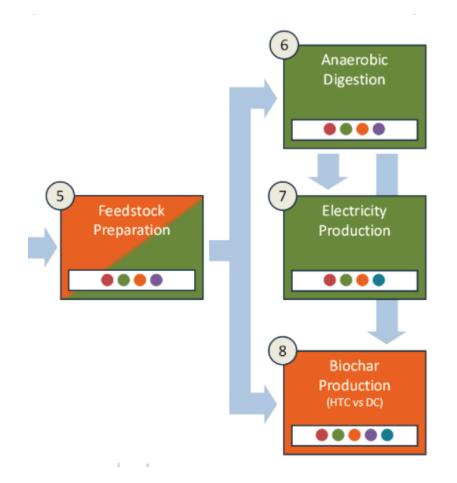




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Storming the issues!

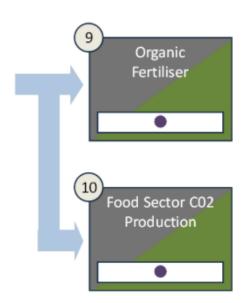
- Still awaiting Ofgem/Genico sign off to waste categorisation although other AD plants on standby in a local network!
- Calculating carbon emissions from process that are equivalent to 'BAU' type operations and not small scale experimental although 'Micro AD' may reduce transport emissions.
- Carbon emission from drying and low carbon options for Pyrolysis.
- Proportioning the inputs and outputs where there are multiple feedstocks
- Moisture content of arisings and drying options

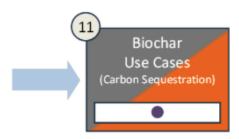
NBAD should have a teal dot on it

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Storming the issues!

- Nice to consider alternative uses for the outputs but may be too far 'out of scope'..... TBC
 - Biochar for agriculture, tree planting media
 - AD digestate, for agriculture, vertical farming
- Will see how far we can push the boundaries but unlikely to be original research.



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Current Challenges

- Granularity of baseline data and existing data management systems or lack of them!
- Working within the rhythm of existing surveys
- Setting carbon reduction targets what does good look like?
- Boundaries.....lots of opportunities for 'carbon creep!'
- Involvement of Government agency and approval bodies e.g. Ofgem categorisation of waste
- Community perception of carbon....turned a corner?
- Calculating emissions from unique processes e.g. AD / pyrolysis plant
 - At what scale does adding grass to feedstock become distinguishable?
 - Testing solutions which are scalable/feasible in the real world























