26/10/2022

* Creating activities in brightway
* Looking into markets: what is in ecoinvent and what we want to manipulate
* Chose to manipulate concrete market for ‘normal concrete: PE, ZA, RNA, RoW’
* Replacing sub-activities within a main activity
* Changing market shares
* Making datapackages
* Building dbs for foreground system
* Importing Excel files
* Importing ecoinvent data
* Looking at markets and regionalisation
  + Charcrete as a % of concrete market (still working on it: Lisa)
  + Replacing the geographical location (done: Lisa)
* Charcrete Excel is imported
* Basic calculations for comparison of concrete production (20 MPa)
* Contribution analysis
* Next step: identify uncertainty distribution
* Next step: contextualise electricity mix (e.g. changing the electricity mix for concrete production)
* Lisa is made a function called replace\_stuff that replaces sub activities within a main activity
* Rahul is looking for data on concrete for biochar in concrete
  + Different percentages of biochar and plasticiser in concrete and workability and water retention → could be used in an uncertainty analysis

End of the day:

* Succeeded in importing Excel file with activities !!!! after many hours
* Ran a first LCA and decided we need to look into the data

27/10/2022

* Looking into getting a range of compositions for the charcrete and running these as scenarios
* Replacing markets for concrete with markets for charcrete
* Lisa: imported charcrete, first function works but second doesn’t.
  + Next steps: Fix function, more figures for market shares, new activity coupled with ecoinvent data
  + Two figures of preliminary results of replacing market shares (small % and big %)
* Midza: outputs of contribution analysis
  + Next steps: first scenario with data arrays (of different charcrete compositions), uncertainty propagation
* Rahul: made 4 scenarios of differing compositions of charcrete
  + Next steps: looking into Premise and prospective scenario
* First step is to update the LCA results with the data
* Charlotte: computing density for different concrete activities
* Tomas advice: best to add the three activities of charcrete production (of different compositions) before trying to do scenario analysis, so that we have a reference to check against