THE HAMMENHÖG BIOCHAR PLANT – RESIDUES AND BY-PRODUCTS TO PRODUCE BIOCHAR AND RESIDENTIAL HEATING

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In the small community of Hammenhög in Sweden, one of the largest biochar plants in Europe have been built as part of two projects supported by the Swedish government. Rest till Bäst is a Vinnova-funded project whose purpose is to develop solutions for managing organic residues (park- and garden waste, sludge, algae’s and seaweed) and create a valuable product (biochar), while minimizing environmental and climate impact and a carbon sink is established. The other project is a climate initiative, Klimatklivet, which supports activities that act to mitigate climate change. The pyrolysis plant consists of two clines, were one is constructed to be run at high temperatures in order to separate Cd and other metals in the process. This capacity makes pyrolysis of polluted materials like sludge, algae and garden wastes a viable alternative and tests are being run. The main feed-stock in the other cline is residues from seed production on site that is pelleted. The plant is expected to produce xx W and produce 6500 tons of biochar per year. The nearby community will get distant heating from the plant making it a carbon negative community. The biochar characteristics as well as the growth potential in different applications like raingardens, urban tree plantations, green roofs and green walls, are tested in the project.

Figure 1 – Schematic description of the Hammenhög case and the adjacent studies in the project Rest till Bäst Biokol.org