CARBON STANDARDS international

EBC/WBC preparation technical pre-audit (TPA)

This checklist contains the document requirements for the technical pre-audit. Please upload the relevant documents in the Biochar Tool.

To upload the documents in the Biochar Tool, in the menu item “Production unit list” please create a new production unit "Add new Production Unit". As soon as all mandatory fields have been completed, you can submit the production facility for certification. “Technical pre-audit” will then appear in the corresponding menu item and you can start submitting the documents.

Once you have uploaded all the documents and information, click on the "Submit for evaluation" button.

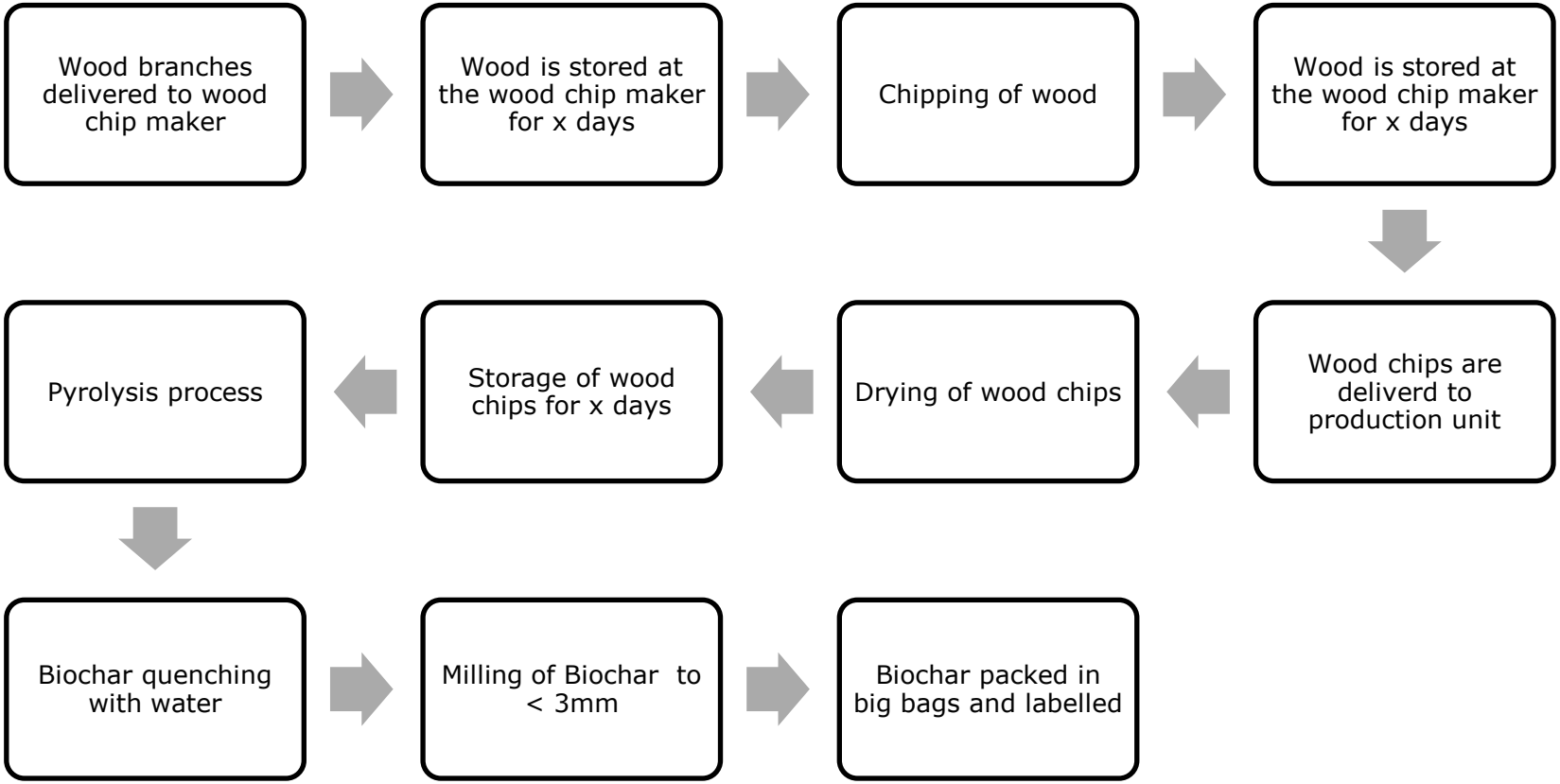
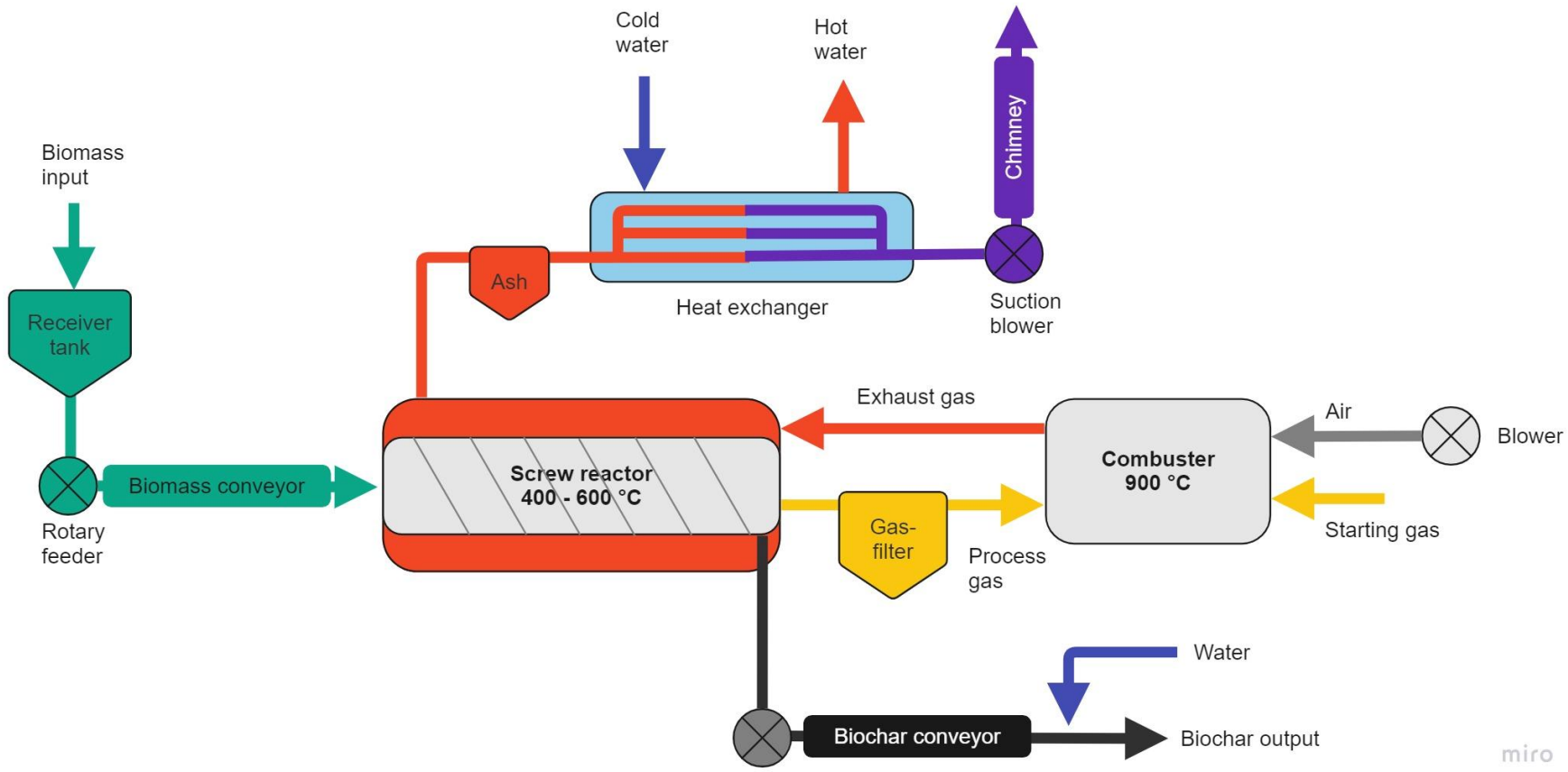
In the technical pre-audit, Carbon Standards will compare your pyrolysis technology with the specifications from the guidelines and, if necessary, offer you advice on how to improve your processes.

Carbon Standards will also check whether you have understood the EBC/WBC guidelines for the sustainable production of biochar and have taken the necessary precautions to implement them. Good preparation enables Carbon Standards to carry out the technical pre-audit efficiently.

applicable	Not applicable	Documents
☐	☐	**Company description** The company description should at least include History of the company, concept of the company, products and services both in the biochar sector and in other areas, number of employees, locations, development goals for the next three to five years.
☐	☐	**Contract with your subcontractor,** if the production plant is operated by a subcontractor. This contract must contain at least the following points: 1. commitment to comply with the EBC/WBC guidelines for the sustainable production of biochar. 2. ensuring access to the production facility for audit and inspection purposes by the inspection body and Carbon Standards International.
☐	☐	**Production unit flow chart** Preferably, this should be a technical drawing. In any case, it must show all processes from the biomass input to the outlet of the biochar as well as the flue gas routing and the heat or power generation.
☐	☐	**Sampling plan** To prepare, please complete the sampling training in the Academy learning platform. The sampling plan should apply the general requirements of the guidelines to the specific conditions at the production facility and present them in the format that is usual for your company. Any deviations from the guidelines will be discussed during the technical pre-audit and subsequently confirmed by a waiver from Carbon Standards International.
☐	☐	**Production flow chart** The flow chart should clearly show all steps from the production of the biomass to the packaging of the biochar products. If you already have other production units in operation, these must be visible in the flow chart in conjunction with the new unit.

☐	☐	**Preliminary analysis result** Applicable for pyrolysis plants for which no system certification is available. The analysis result must be from biochar produced in this or an identical pyrolysis unit and, if possible, with the planned biomass. The sample does not have to be representative, but we encourage you to take a representative sample by following the guidelines for representative sample taking. In any case, you must document where you took the sample as a comment in biochar tool. The analysis must be carried out by an EBC/WBC accredited laboratory and must include the following parameters: • Organic elemental analysis: Carbon, hydrogen, nitrogen, oxygen, sulfur (CHNOS) • Ash • pH • Heavy Metals • polycyclic aromatic hydrocarbons (PAH) – EFSA / EPA • bulk density (for biochar grinded to below 3mm) • electric conductivity It is checked whether the biochar corresponds to at least one certification class.

Annex 1: Example company flowchart



Annex 2: Example PU-flowchart