

An underwater photograph showing a diver swimming in the center, surrounded by a massive, dense school of small fish. Sunlight rays penetrate the water from the top, creating a bright, ethereal atmosphere. The bottom of the frame shows dark, rocky terrain covered in green algae.

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Ympäristövastuullinen jätehuolto tulevaisuuden risteilijöissä

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Objective

- Create, concept and value future-proof sustainable waste management concept for future cruise ships.



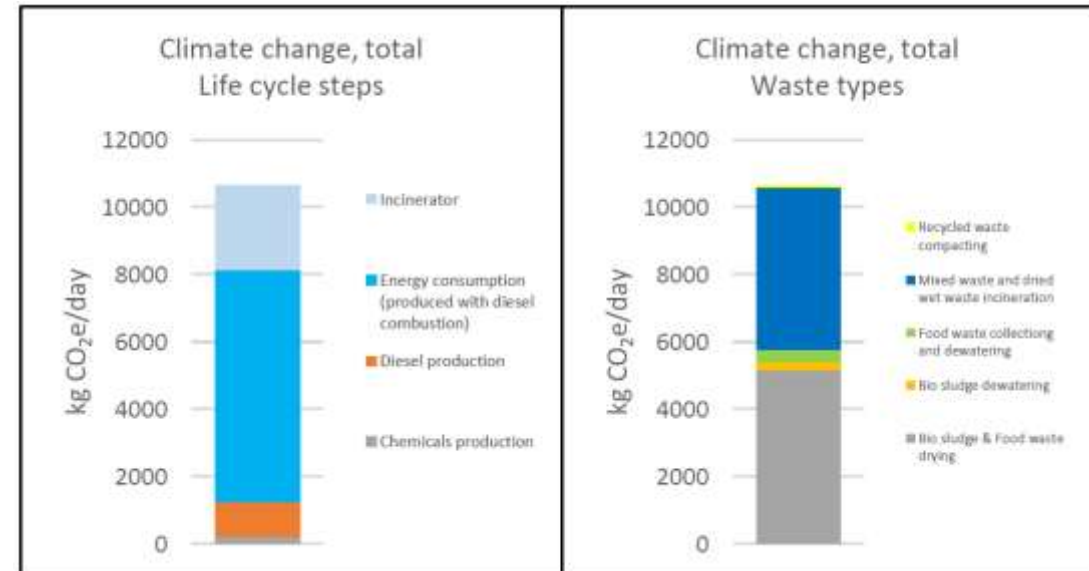
Actions

- Interviews and co-creation sessions with Meyer and RCG
- Analysis of one year waste data sets from 2 cruise ships
- One day studies on waste operations of 5 cruise ships,
- 2 one-week extensive ship studies to research all the waste producing activities
- Construction of novel waste management system
- Footprint valuation of the conventional system
- Handprint of novel system
- Feasibility study and specifying the solution



Outcome: Need to change the existing waste systems

- All current waste management's, with drying and combustion, including gasification and pyrolysis, need diesel as auxiliary fuel and release the carbon and other harmful compounds contained in both waste and auxiliary fuels.
- Climatic impact to a considerable extent from the treatment of wet waste

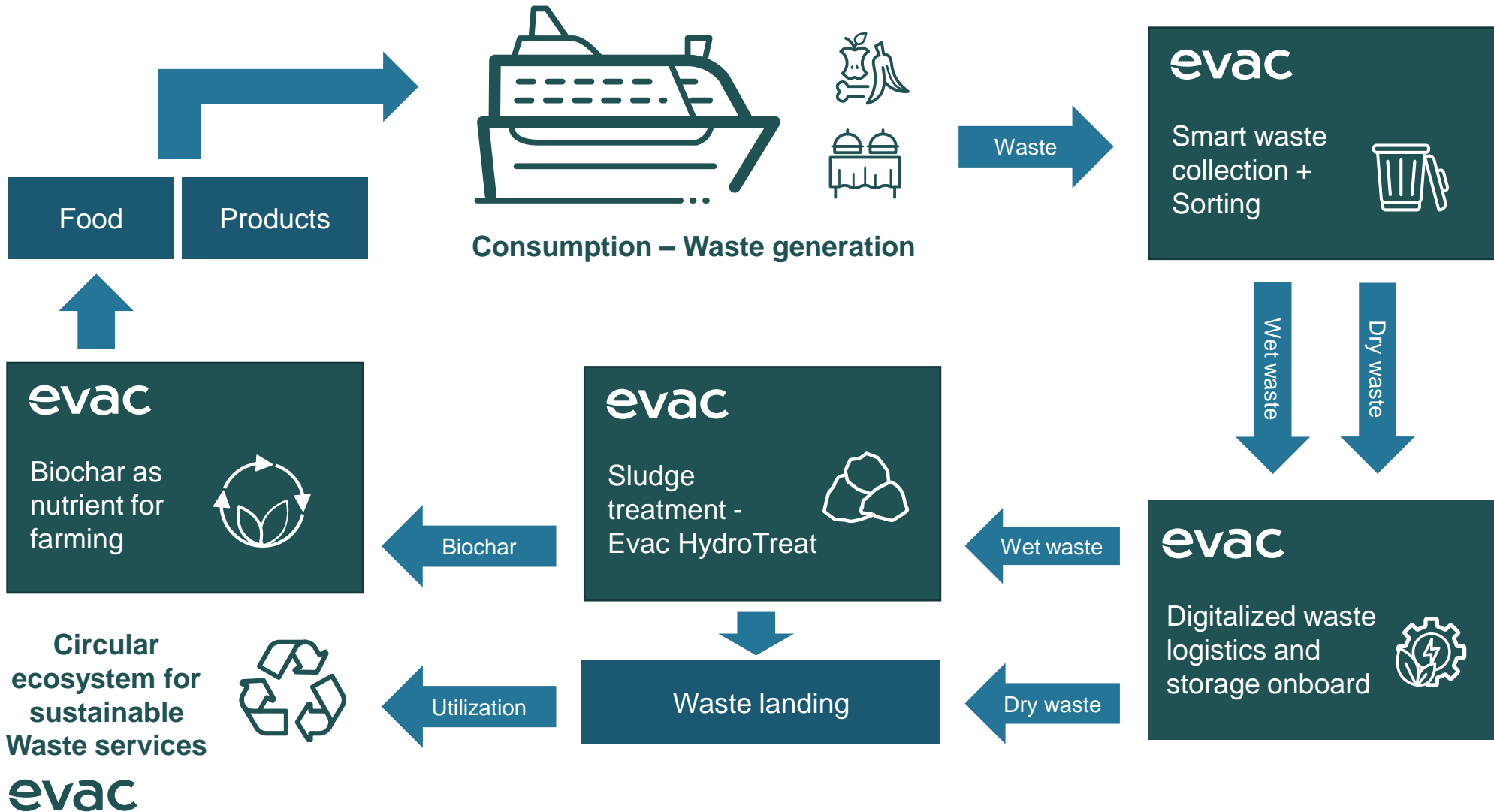


Solution:

- Wet waste carbonization to produce biochar
- Optimized waste material sorting in operation to minimize the contaminated mixed waste.
- Minimizes the emissions from energy consumption and maximizes the material recovery for circular economy



Evac's future solution for Circular Economy



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