

FIRST COMMERCIAL DEPLOYMENT FOR INNOVATIVE MINERALS RECYCLING PAPER TECHNOLOGY

ENVIROFIL® PCC, AN INNOVATIVE RECYCLING TECHNOLOGY, SUPPORTING A CUSTOMER TO ACHIEVE ZERO SOLID WASTE TARGET

BACKGROUND

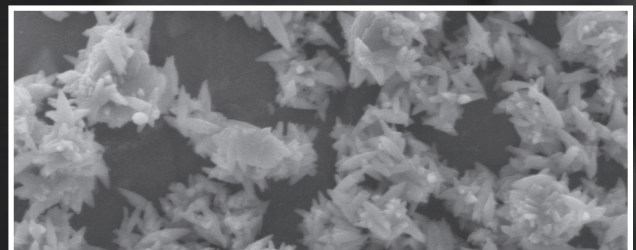
Many of our customers at paper mills are seeking ways to recycle by-products, which include carbon dioxide, from side streams and use them more efficiently. They are facing challenges with determining how to handle waste, reduce landfill costs and respond to more stringent environmental regulations.

HOW ENVIROFIL® PCC HELPS

ENVIROFIL® PCC helps to address important sustainability challenges that our customers are facing at the paper mill. It is a new, innovative recycling technology that allows papermakers to recover mineral pigments from deinking residue by converting these raw materials to ENVIROFIL® PCC. This process has proven to substantially improve waste paper yield, mitigating solid waste disposal costs and reducing the environmental impact of the deinking process. Through this new solution, we are providing an enhanced process for our customers to convert waste material that would normally be deposited to a landfill into a valuable pigment for producing paper.

After extensive collaboration with UPM-Kymmene Corporation (UPM) to determine the best way to produce PCC from residue ash and address waste and landfill issues, we have initiated production of ENVIROFIL® PCC at its plant in Germany. This partnership demonstrates the value ENVIROFIL® PCC can provide our customers who are seeking ways to recover waste from the production process. The product will reduce greenhouse gas emissions and lower energy consumption. Importantly, we are directly supporting our customer's goal to become a zero solid waste company by 2030.

And this is only the beginning of our efforts with ENVIROFIL® PCC – given the environmental landscape, we see additional opportunities to partner with our customers to support their efforts to reduce process waste and CO₂ emissions.



ENVIROFIL® PCC

“UPM’S RESEARCH INTO PAPER MILL SIDE STREAMS AIMS TO FIND MORE EFFICIENT WAYS TO UTILIZE BY-PRODUCTS. WITH ENVIROFIL® PCC, THE CARBON DIOXIDE THAT RESULTS FROM THE BURNING PROCESS IS CAPTURED DIRECTLY WITHIN THIS ALTERNATIVE FILLER MATERIAL. THIS WAY, IT IS NOT RELEASED INTO THE ENVIRONMENT. THE COLLABORATION WITH MTI IS AN EXCELLENT EXAMPLE OF OUR EFFORTS TO PROMOTE A CIRCULAR ECONOMY. THE PROJECT IS PART OF UPM’S ZERO SOLID WASTE TARGET, WHICH AIMS TO DEVELOP SOLUTIONS FOR RECYCLING SURPLUS MATERIALS TO ENSURE THAT THEY PRODUCE ADDED VALUE”

- WOLFGANG OHNESORG, GENERAL MANAGER OF UPM SCHONGAU