KEMIRA OYJ 28.9.2023

Sustainability at Kemira

KOHTI KESTÄVÄMPIÄ RATKAISUJA VEDENKÄSITTELYSSÄ, BIOP-REC WEBINAR

Kemira

We are global

Pulp & Paper

Industry & Water

2022 REVENUE

€3.6B

2022 OPERATIVE EBITDA

€572M

MARGIN 16%

SALES TO

100+

Countries

NUMBER OF EMPLOYEES

~5,000

Worldwide

Why are we having sustainability at such high importance in our strategy?

Unless **immediate, rapid and large-scale action** is taken to reduce emissions and other hazardous environmental impacts, the average global temperature is likely to reach or cross the 1.5 degree Celsius (2.7 degrees Fahrenheit) warming threshold within 20 years.

Kemira supports the ambitions of the Paris climate agreement

SUSTAINABLE PROFITABLE GROWTH

We share the worlds future ambition articulated in the UN Sustainable Development Goals (SDGs).

Safety

Because every drop is essential

RENEWABLE POLYMERS FOR WATER TREATMENT

Kemira

The Future of renewable polymers

SAFE, SUSTAINABLE CHEMISTRIES ARE A PART OF GOOD LIFE, ENSURING HYGIENE, SAFE WATER, FOOD SAFETY AND MORE

2023

Current biomass balance PAM offering

2023 - 2025

Scale-up and commercialization of the novel polysaccharide formulations

2026

Full bio-based portfolio available for customers

The challenge

Today, water and sludge treatment requires high-performance polymers. But urgent issues like climate change and resource efficiency mean it’s time for municipal water utilities and water-intensive industries to transition to polymers made with fewer fossil feedstocks.

The challenge is finding sustainable solutions that reliably protect our world’s water now and well into the future.

The solution

Kemira is a forerunner in the development of renewable, bio-based chemistry.

As we invest in effective new biopolymers for water treatment applications, our customers can already take real action right now by choosing high-performance, biomass balance polymers today.

Biomass balance polymers are a risk-free, drop-in solution for instant renewable product claims and no compromises on quality.

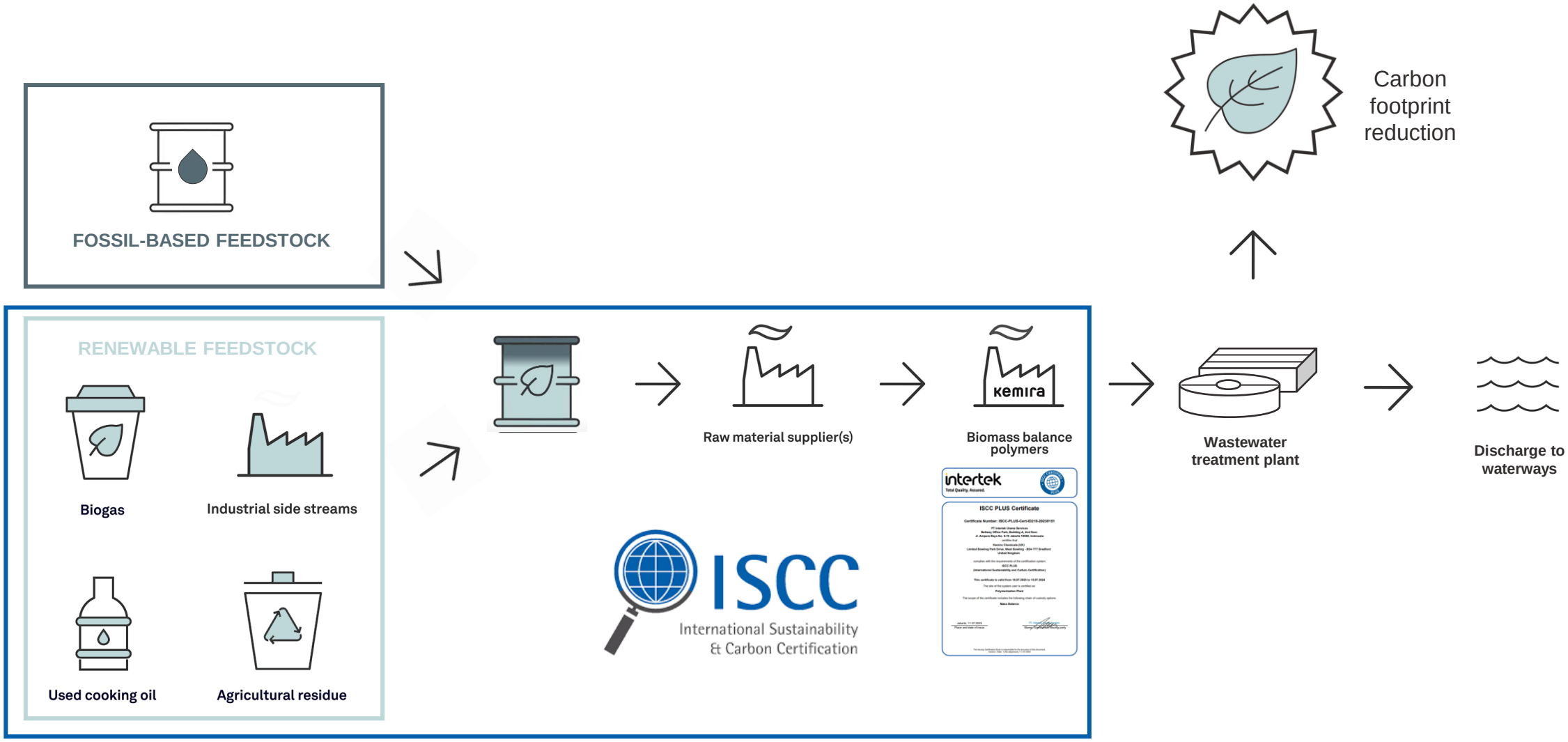
RENEWABLE BY NATURE.
YOUR PATH TO THE FUTURE.

Maintain performance while increasing sustainability

Together with our customers:

- We limit human impact on the planet and make a positive contribution to global circularity and climate goals
- We constantly add more renewable materials to PAM value chain
- We walk towards fossil-free water-treatment

Biomass balance value chain



Choose biomass balance:

- Make a positive contribution to the UN's global climate and circularity goals

Superfloc® BioMB

- Chemically identical to existing Superfloc®
- Are made with > 50% ISCC PLUS certified renewable raw materials
- The same product performance
- A drop-in solution: no requalification or trials
- Works with existing process equipment

Products

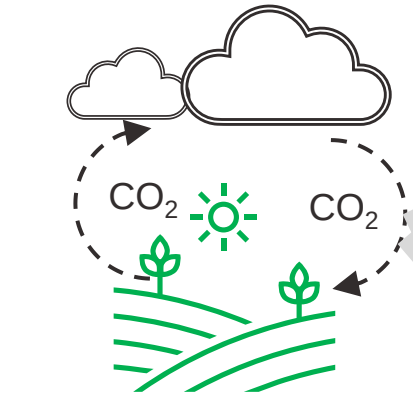
ISCC International Sustainability & Carbon Certification

- Superfloc® BioMB is the chemical equivalent to polyacrylamide for wastewater and drinking water applications.
- The Superfloc® BioMB range is a complete portfolio of anionic, nonionic, and cationic polymers.
- It includes dry and emulsion polyacrylamides for water and sludge treatment.
- It's suitable for applications that require potable water grades.

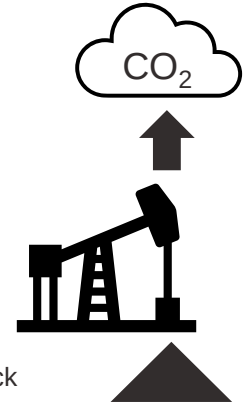
BECAUSE EVERY DROP IS ESSENTIAL.

Mass balance products are using carbon from atmosphere

Biogenic carbon removal is reported in Kemira product carbon footprint (PCF) document



Renewable feedstock



Fossil feedstock

Biogenic carbon refers to carbon that is sequestered from the atmosphere during biomass growth.

Result for 1 kg of unpacked, finished product

	Value	Unit
Result according to ISO 14067		
Carbon Footprint[1)]	3.4	kg CO_2 eq/kg
Biogenic carbon removal[2)]	- 1.1	kg CO_2 eq/kg
Net result according to TfS[3)]		
Sum of GHG emissions and removals	2.3	kg CO_2 eq/kg

Table from Kemira carbon footprint document

For fossil-based product biogenic carbon removal is **zero.**

Biogenic carbon removal will reduce carbon footprint of the end-product (cradle-to-grave assessment scope).

Video: Shift to renewable polymers

https://youtu.be/gBZUO2dZtk4

Thank you!

kemira