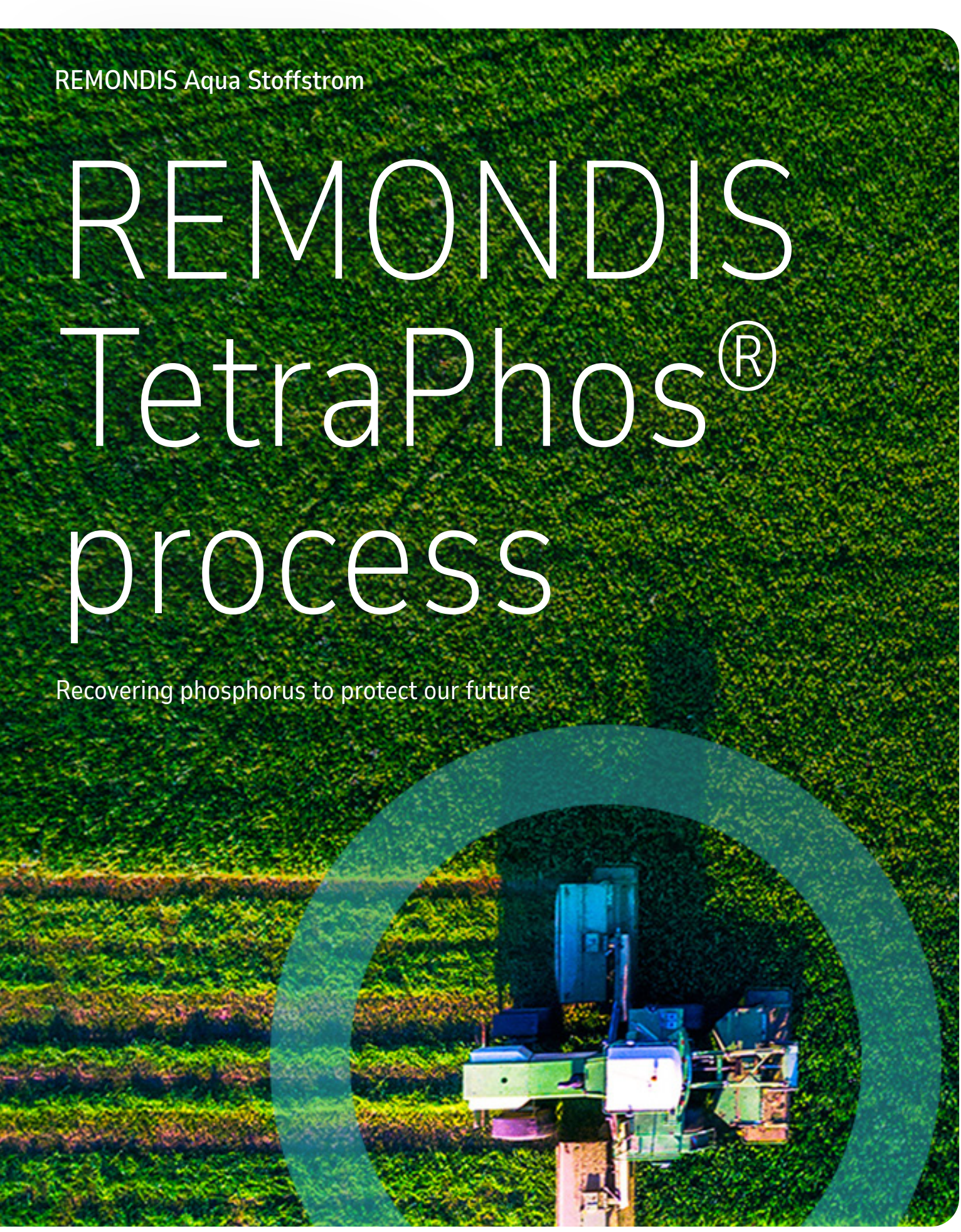
REMONDIS Aqua Stoffstrom

REMONDIS TetraPhos® process

Recovering phosphorus to protect our future



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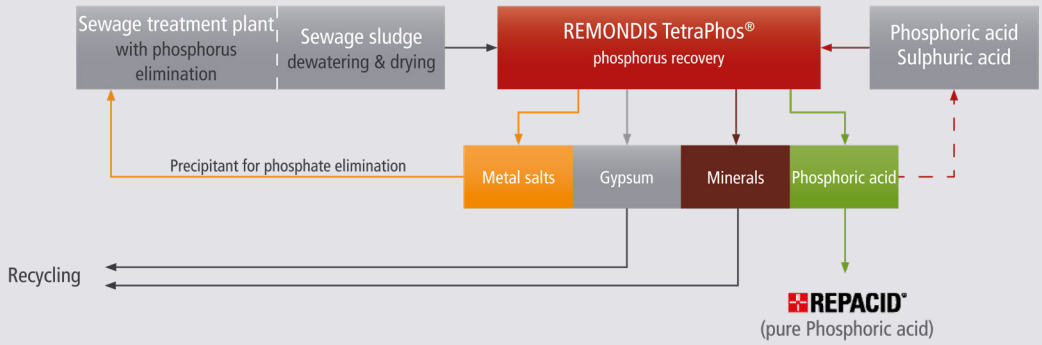
REMONDIS®
WORKING FOR THE FUTURE

New ways to conserve natural resources. Recovering phosphorus protects our future

Phosphorus is a nutrient that is vital for all living organisms on earth. Practically all of Europe's phosphorus has to be imported and it is becoming more and more difficult to supply our agricultural and industrial sectors with this valuable substance as natural reserves are gradually becoming depleted and the quality of the raw material is deteriorating. REMONDIS' TetraPhos® process can make a contribution to phosphorus recovery and the conservation of resources.



Municipal sewage treatment plants as a source of raw materials – REMONDIS' TetraPhos® process

Our philosophy: wastewater treatment plants are not disposal facilities, but rather recovery facilities for clean water, energy and minerals. Using REMONDIS' processes and services, wastewater is treated, sewage sludge is recycled and valuable salts are recovered – for example, using the TetraPhos® process developed by REMONDIS Aqua.

A resource-efficient path to the future

From 2029, phosphorus must be recycled from municipal sewage sludge in Germany. The TetraPhos® process for phosphorus recycling enables the recovery of several marketable secondary raw materials at once: phosphorus as a vital resource, as well as iron and aluminium salts, which in turn can be used for phosphate removal in the sewage treatment plant. In addition, gypsum and mineral materials are produced for the building materials industry.

Main advantages

Legal certainty

Well over 80% of the phosphorus can be removed from sewage sludge, which fully complies with the adopted amendment to the Sewage Sludge Ordinance (AbfKlärV) and thus makes the plants more future-proof.

Resource conservation

Multiple material cycles are closed and high-quality secondary raw materials are produced. Compared to the use of imported primary raw materials, the production of REPACID® phosphoric acid can help conserve natural resources and reduce transport costs. This has a positive impact on the overall environmental assessment of the process.

Reliable separation of nutrients and pollutants

Phosphoric acid is a fully marketable and widely used secondary raw material.

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