



**WASTEWATER
TREATMENT.**

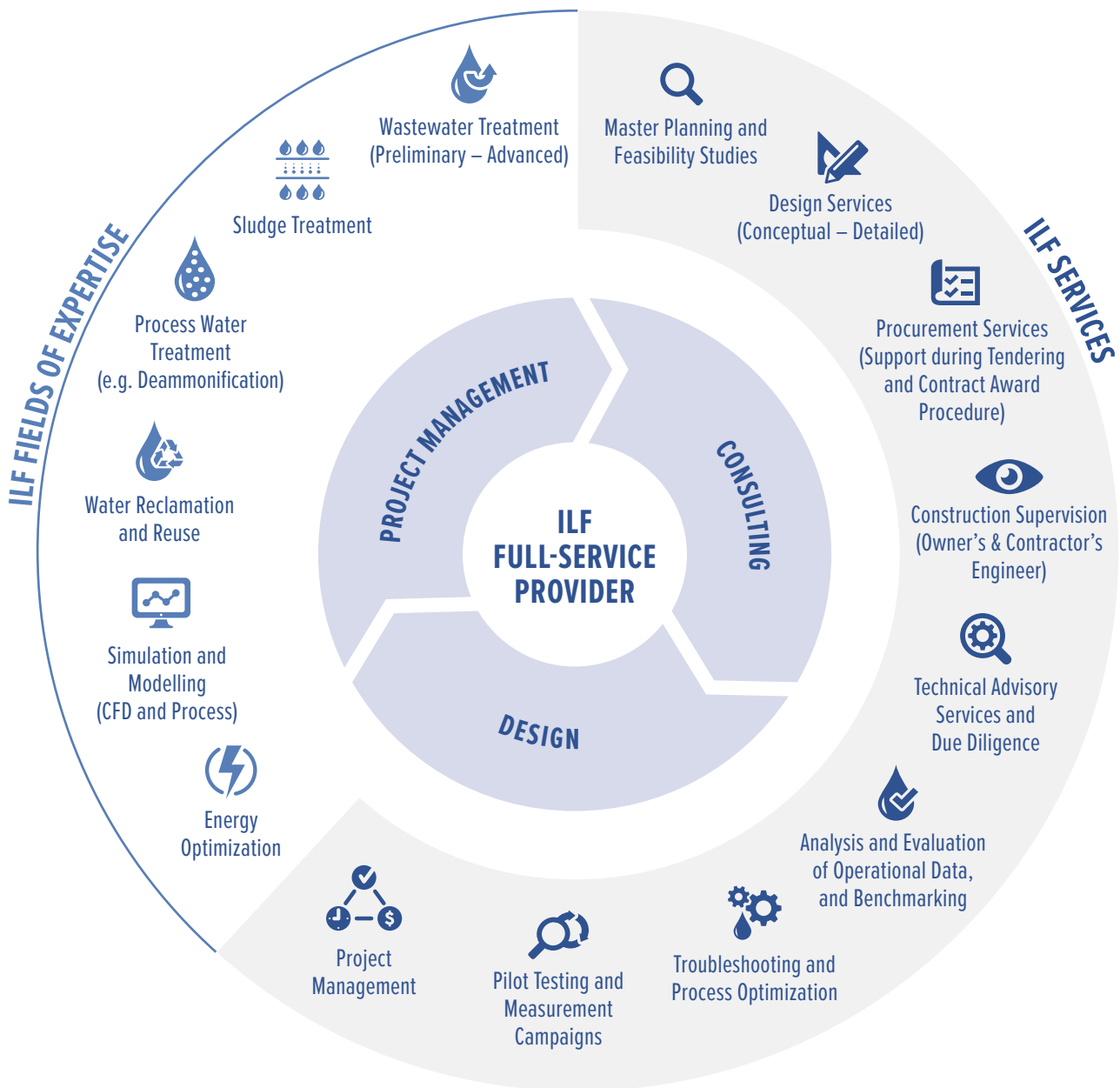
ENGINEERING EXCELLENCE.



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WASTEWATER TREATMENT

Advancements and developments in wastewater treatment have accelerated in recent years. Today, sustainability, resource efficiency and recovery are the main drivers of further innovation in wastewater treatment. For over 50 years, ILF has served clients worldwide to develop and implement customized, cost efficient and holistic wastewater and sludge treatment solutions.



GLOBALLY, 80% OF WASTEWATER FLOWS BACK INTO ECOSYSTEMS WITHOUT BEING TREATED OR REUSED.

WWW.UNWATER.ORG/WATER-FACTS/QUALITY-AND-WASTEWATER/

Wastewater and sludge treatment technologies are rapidly developing – as are the tools and technologies that are available and can be used when designing cost-efficient and reliable solutions that minimize environmental impact. Regulatory requirements aim to further improve recipient water quality and allow the safe use of treated effluent. They also call for additional efforts beyond conventional treatment solutions. Additionally, finite resources and climate change are key factors driving the shift to more sustainable and efficient practices, such as material and energy recovery.

ILF provides its clients with treatment process solutions that involve all levels of intricacy, from robust and low-tech solutions to more complex, advanced treatment and recovery processes. By applying modern simulation software for CFD modelling and process design, ILF is able to offer highly optimized designs.



“ILF considers wastewater to be a valuable resource. By using innovative technologies we can transform wastewater into clean water and energy, and extract valuable materials.”

Wolfgang van Appeldorn,
Senior Wastewater Treatment Expert

PROJECT HIGHLIGHTS

Groundbreaking and innovative

- Vienna Main Wastewater Treatment Plant (WWTP) (670,000 m³/d), 2-stage biological treatment and innovative sludge treatment, Austria
- Jeddah Airport Independent Sewage Treatment Plant (ISTP) (300,000 m³/d), Sponsor’s Technical Advisor, NEREDA-based aerobic granular biomass process, Kingdom of Saudi Arabia
- Dammam ISTP (200,000 m³/d), Lender’s Technical Advisor, IFAS-based biological treatment process, Kingdom of Saudi Arabia
- Sulaibiya Wastewater Treatment and Reclamation Plant (600,000 m³/d), largest reverse osmosis-based WWTP worldwide, Kuwait
- Strass WWTP, Zillertal (original design: 58,580 m³/d), adsorption/bio-oxidation (A-B) process, first plant reaching energy self-sufficiency worldwide, Austria
- Warsaw Czaika WWTP (435,000 m³/d), largest WWTP in Poland

Internationally financed

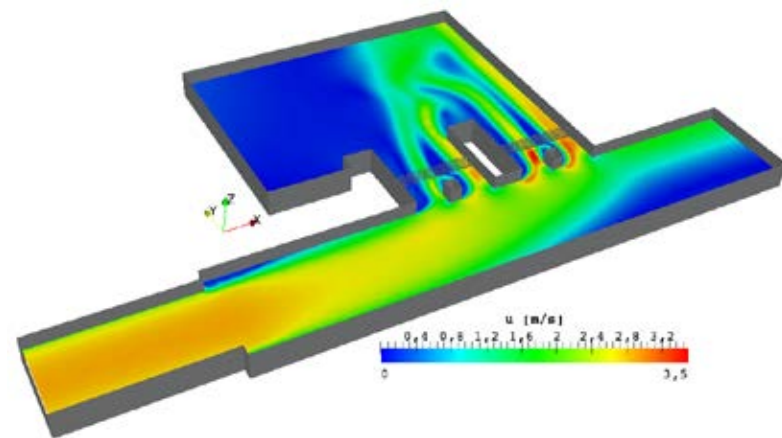
- Korça WWTP (85,000 PE), aerated ponds – KfW funded, Albania
- Telavi WWTP (52,000 PE) and Tskaltubo WWTP (18,500 PE), anaerobic ponds and trickling filter – SIDA/World Bank funded, Georgia
- Tehran South WWTP Module 1-4 (2.1 million PE) – World Bank funded, Iran



Vienna Main WWTP, Austria



BOOT project, Abu Dhabi



CFD simulation of sediment deposition in the inlet area of a wastewater pumping station



Korça WWTP, Albania



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