RAMBOLI COMPANY PRESENTATION



RAMBOLL IN BRIEF

- Independent engineering and design consultancy and provider of management consultancy
- Founded 1945 in Denmark
- 15,000 experts
- Close to 300 offices in 35 countries
- Particularly strong presence in the Nordics, the UK, North America, Continental Europe, Middle East and Asia Pacific
- EUR 1.5 billion revenue
- Owned by Rambøll Fonden The Ramboll Foundation



CONSULTANCY AND EXPERIENCE FOR THE PLANNING AND EXECUTION OF PROJECTS

- Holistic analyses and multi-disciplinary deliveries
- Technical details to processes
- Combine technical consultancy and socioeconomic competences
- World-class technical expertise
- Large and small scale project management
- Process management
- Stakeholder management

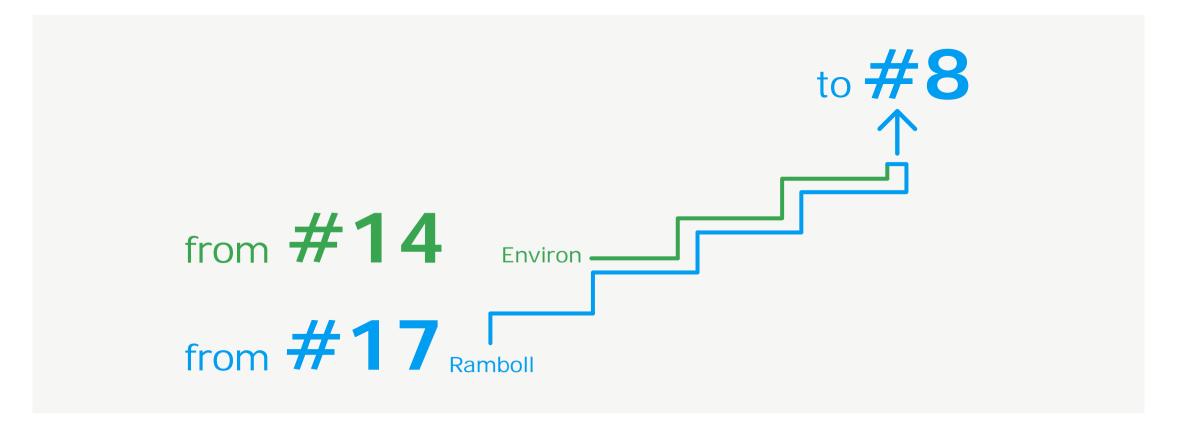






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GLOBAL TOP-10 AMONG ENVIRONMENTAL CONSULTANCIES



Environment Analyst 2019



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GEOGRAPHICAL FOOTPRINT



RAMBOLL

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FOUNDATION OWNERSHIP

- Majority owner of Ramboll Group (98%)
- Remaining 2% held by employees
- Commercial foundation with a long-term ownership perspective
- Clear division between ownership and leadership
- Ensures financial and commercial continuance
- Ensures that the company maintains its basic values

Ramboll Foundation

Group Board of Directors Ramboll Group A/S

Group Executive Board Ramboll Group A/S





MARKETS

BUILDINGS	TRANSPORT	WATER	ENVIRONMENT & HEALTH	ENERGY	MANAGEMENT CONSULTING
Revenue '18: 496.6 m€	Revenue '18: 351.4 m€	Revenue '18: 84.4 m€	Revenue '18: 365.7 m€	Revenue '18: 162.9 m€	Revenue '18: 62.7 m€
Employees: (FTEE) 4,499	Employees: (FTEE) 2,853	Employees (Jan '19): (FTEE) 940	Employees (Jan '19): (FTEE) 2,443	Employees (Jan '19): (FTEE) 1,821	Employees: (FTEE) 436
	Reven				



SUSTAINABLE SOCIETY CONSULTANT

- Solve local and global challenges
- Holistic approach to specific challenges
- Quality and long-term durability
- Long-term value for local communities and society at large
- Work to influence development and public agenda



PUBLIC/PRIVATE REVENUE SPLIT

Public sector



Private sector





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BUSINESS AND IMAGE RANKINGS DEVELOPMENT

MEDIA					
ENR – 150 global design firms		2017 28th	2018 23rd		
ENR - Environmental firms (engineering and design)				2017 2018 10th 8th	
STD - European top 300 consulting engineering and architectural groups				201820 7 14th 12th	
Berlingske Business – Image survey	2018 38th	2017 29th			
Universum – Nordic's most attractive employer					201817 3rdhd
50)th	2	ōth	1	1st
	Ranking				



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WATER SERVICE AREAS

- Climate Adaptation & Landscape
- Water & Wastewater Treatment
- Water & Wastewater Networks
- Water Resource Management



RAMBOLL WATER & WASTEWATER TREATMENT AT A GLANCE



A STRONG FOUNDATION

More than 50 years of solid experience from the water business and strong expertise in both the private and the public sector.



THE ENTIRE CYCLE

We embrace the entire water cycle; from initial strategic analyses over designing of master plans to planning and implementation of final solutions.

#6

Ranked no. 6 by ENR within sewers & waste.



A COMPLETE RANGE OF SERVICES

WASTEWATER TREATMENT PROCESSES	LABORATORY SERVICES	DRINKING WATER & CLEAN WATER QUALITY	OPERATION & MAINTANENANCE
WATER TREATMENT PROCESSES	TECHNOLOGY SELECTION & ENGINEERING	WATER REUSE	INDUSTRIAL WASTEWATER & LEACHATES
SLUDGE MANAGEMENT, PHOSPHORUS EXTRACTION AND BIOGAS PRODUCTION	MUNICIPAL WASTEWATER	WORLD-CLASS BIM COMPETENCE	MBR BASED DESIGN



COVERING BOTH MUNICIPAL AND INDUSTRIAL TREATMENT



Municipal treatment Primarily for cities/municipalities in the Nordics



Industrial treatment Primarily for private industries and industrial sites in North America



STOCKHOLM FUTURE WASTEWATER TREATMENT (SFA) Client: Stockholm Vatten

CHALLENGE

To protect residents' health and the safety of the water source, Henriksdal is being extended to double the treatment capacity to serve 1.6 million people and to comply with new, more stringent treatment requirements – and will become the largest treatment plant in Europe located inside rock.

WHAT WE DO

Ramboll has been assigned the task to manage the process, project coordination and all engineering disciplines related to the site extension of the Henriksdal wastewater treatment plant, incl. permitting.

EFFECT

The Henriksdal wastewater treatment plant will become of the most modern and efficient wastewater treatment plants in the world when the work is completed in 2024 (expected year of completion).





DESIGNING A NEW UNDERGROUND WASTEWATER TREATMENT PLANT IN TAMPERE, FINLAND

CHALLENGE

Need for renovation and extension of wastewater treatment plant.

WHAT WE DID

Consultancy regarding the full renovation and extension process of an advanced underground wastewater treatment plant.

EFFECT

More efficient water treatment and sophisticated use of the underground.



HIGH QUALITY DRINKING WATER IN SKELLEFTEÅ Client: Municipality of Skellefteå

CHALLENGE

The city of Skellefteå suffered from cryptosporidium in the drinking water. The municipality hence decided to replace the old waterworks by a new treatment plant.

WHAT WE DO

In partnership with Skellefteå Municipality and NCC, Ramboll is lead consultant on a project of establishing a new treatment plant treating the water with artificial groundwater recharge followed by oxidation, filtration and disinfection. Ramboll is (also) responsible for all detailed design.

EFFECT

Long-term certainty for high quality drinking water in the future, as the projects solves several issues at the same time:

- Quality issues of the drinking water
- Capacity issues
- Climate change issues
- Water reserve issues





KAUPINOJA SURFACE WATER PLANT, FINLAND Tampereen Vesi, Econet Oy

CHALLENGE

To modernize a plant that was built in 1920s' and expanded later. Plant had not been renovated since 1980s' after it was demoted to a stand by unit.

Plant needed full upgrade in terms of equipment and automation so that it can be primary water source for majority of Tampere residents.

WHAT WE DID

EPC construction started 10/2013 and Ramboll had following roles, for example:

- Safety coordinator and supervision of construction (every workday)
- Project management
- Supervision of tender process for security systems
- Additional planning (two pumping stations, valve station, chlorination system)

+ several miscellaneous tasks from keeping the minutes of the meeting to evaluation of provided plans from contractor.

EFFECT

Modern water plant with lower water treatment and overall pumping costs.

The modernisation of the surface water treatment plant and the pumping plant extension of Tampereen Vesi and Tampereen Sähkölaitos were completed in 2017.

RAMBOLL

NEW WASTEWATER TREATMENT PLANT IN KRISTIANSUND, NORWAY

CHALLENGE

Difficult to efficiently operate several small sieve plants when new treatment requirements were imposed. Needed to establish a new wastewater treatment plant.

WHAT WE DID

Recommended equipment and systems. Designed treatment plant. Moved discharges to a better recipient. Planned for future expansion and stricter treatment requirements.

EFFECT

More efficient treatment and healthier recipients. Meet the new treatment requirements.



SYVAB STOCKHOLM: EXTENSION OF WWTP

CHALLENGE

Need for increased capacity and for meeting higher demands on reducing nutrients. The new setup includes a Membrane Bio Reactor (MBR)

WHAT WE DO/DID

Ramboll is contracted as General Consultant. Tasks include detailed design on current parts of the plants as well as on the new MBR building.

EFFECT

The new/extended WWTP will be among the most modern and efficient MBR based facilities in the world.



NORVATTEN

CHALLENGE

To meet the future demand in an area which is expected to growh from 600.000 to 1M inhabitants, Ramboll has been selected to do a feasibility study for building a new plant instead of the existing 'Görvälnverket'.

WHAT WE DO/DID

The feasibility study includes exploration of the opportunities within ultra filtration and ion exhange.

EFFECT

The feasibility study will be compared with a similar study on modernizing the existing plant, hence providing a perfect basis for decision for Norvatten



BUCHAREST WATER SUPPLY AND SEWAGE MASTER PLAN ROMANIA

CHALLENGE

Need for making the water systems in Bucharest even more efficient and sustainable.

WHAT WE DID

Audit of water supply and sewerage systems / infrastructure + economic and financial analysis and macro affordability.

EFFECT

Strategy and action plan to implement the most effective measures needed for the development / optimization of water supply and sewerage system.

INDUSTRIAL WATER, GLOBAL MEDICO COMPANY

CHALLENGE

A leading industrial company in the healthcare sector needed a global partner for efficient industrial water management and operations support.

WHAT WE DO

A consistent team from Ramboll provides reliable, cost-effective operation support to multiple sites worldwide as well as extra engineering capacity.

EFFECT

Stable, reliable and cost-effective industrial water management service including support to inception feasibility, concept, scheme design and detail design project phases.



Bright ideas. Sustainable change.

