SECURING EFFICIENT GREEN ENERGY TRANSITION

WWW.RAMBOLL.COM/ENERGY
As a globally recognised environmental and health consultancy, we have earned a reputation for technical and scientific excellence, innovation and client service. Advances in science and technology and evolving regulatory, legal and social pressures create increasingly complex challenges for our clients. We evolve to keep pace with these changes – by adding new services, contributing to scientific advances or expanding geographically.

Read more at: www.ramboll.com/environment-and-health

Mobility fuels economic and social development and with 50% of the world’s population now living in urban areas, efficient and reliable transport systems are essential.

To meet this need, Ramboll has been working on some of the world’s largest, most innovative infrastructure projects and is the leading consultancy in the Nordic market.

We create value for transport authorities, contractors and local authorities by providing multidisciplinary technical excellence and minimising resource usage.

Read more at: www.ramboll.com/transport

Working with municipalities, utilities and industrial clients, Ramboll draws on proven multidisciplinary expertise to manage the most challenging water resources, wastewater, and storm water issues.

We integrate treatment process selection and engineering, operational services, and regulatory management and planning to deliver innovative solutions that benefit both industry and society.

Read more at: www.ramboll.com/water

Ramboll’s holistic approach to urban development encompasses strategy, planning and world class technical design services and is based on an integrated multidisciplinary skills base.

We have an extensive track record working with a number of the world’s largest cities to create liveable, sustainable and implementable urban development solutions that are fully adapted to the local context.

Read more at: www.ramboll.com/planning-and-urban-design

PLANNING & URBAN DESIGN
WATER
TRANSPORT
ENVIRONMENT & HEALTH

13,000 EXPERTS
300 OFFICES
35 COUNTRIES

Read more at: www.ramboll.com/transport

Read more at: www.ramboll.com/planning-and-urban-design

Read more at: www.ramboll.com/water

Read more at: www.ramboll.com/environment-and-health
COUNTRIES WITH PERMANENT OFFICES  
NORDIC REGION: Denmark - Copenhagen, company head office, Finland, Greenland, Norway, Sweden  
EUROPE: Belgium, Cyprus, France, Germany, Italy, Netherland, Poland, Romania, Russia, Spain, Switzerland, United Kingdom  
MIDDLE EAST: Kingdom of Saudi Arabia, Qatar, United Arab Emirates  
ASIA-PACIFIC: Australia, China, India, Indonesia, Malaysia, Myanmar, New Zealand, Singapore  
THE AMERICAS: Brazil, Canada, Mexico, USA  
AFRICA: South Africa

ENERGY
Security of supplies, climate change, energy efficiency and resource scarcity are top priorities on the global agenda. The key challenge is to plan and implement a sustainable and affordable energy system that is capable of meeting the growing demand for energy.
As a consultancy, Ramboll is at the forefront of addressing these issues with world-leading competencies in wind energy, waste-to-energy, thermal power and district energy. 
Read more at: www.ramboll.com/energy

BUILDINGS
As one of Europe’s top buildings designers with decades of experience in the global market, we create inspirational, sustainable and award-winning buildings that allow people and nature to flourish.
We design more than 10 million square meters of buildings every year, and are a preferred partner of the world’s leading architects and developers. Technology and design is our passion, and we have an unwavering focus on excellence in everything we do. We hold the industry’s top certifications within sustainable design and are leaders in Building Information Modeling.
Read more at: www.ramboll.com/buildings

OIL & GAS
Success in today’s fast-paced and competitive oil and gas market depends on advanced technical solutions that combine economic efficiency with stringent health, safety and environmental (HSE) requirements during the entire asset life cycle.
Based on four decades of engineering consultancy, Ramboll has gained valuable insights on how to develop, prolong and optimise offshore and onshore production. Our combined insights and service offerings support leading energy companies and operators in maximising a sustainable recovery of oil and gas.
Read more at: www.ramboll.com/oil-gas

MANAGEMENT CONSULTING
With unprecedented levels of competition in the global economy, Ramboll’s 550 management experts focus on empowering private-sector customers with expertise and effective management tools.
National, regional and local authorities are responsible for issues that affect us all – from health care, education and day care to strategic planning of infrastructure and climate initiatives. Ramboll also acts as a trusted partner to public administrations, creating the insights needed to make informed strategic decisions that promote sustainable societies.
Read more at: www.ramboll.com/management-consulting
ENERGY
ABOUT US

Ramboll has more than 45 years of experience in the planning, design and implementation of energy solutions.

Our energy team provides expertise on the full spectrum of technologies and all parts of the value chain from production through to transmission and distribution.

Our special competencies lie within wind energy, waste-to-energy, thermal power and district energy. Within these four areas, we provide a one-stop shop of services based on unique know-how and experience gained from a large number of projects, unmatched by other consultancies.

- More than 65% of the world’s offshore wind turbines rise from foundations engineered by Ramboll. We have provided expert services to onshore wind farms with a nominal output of +60,000 MW in more than 60 countries
- We have worked on waste-to-energy projects in 45 countries, providing consulting services for 145 new units and retrofits
- We have designed and constructed more than 90 major power plants, including some of the most energy-efficient plants in the world, and been instrumental in the ongoing conversion from fossil fuels to biomass
- We have provided consultancy services to more than 200 district energy systems worldwide, ranging from small village schemes to city-wide transmission networks.
OUR APPROACH

WE TRANSFORM COMPLEX CHALLENGES INTO SOLUTIONS THAT ARE FUTURE PROOF, ENERGY EFFICIENT, COST EFFECTIVE AND PRACTICAL

Securing the supply of energy
The projects that we carry out for our clients typically provide the overall society benefit of securing the supply of energy, reducing climate impact, improving energy efficiency and countering resource scarcity.

Reducing the cost of energy
We place a strong focus on improving performance and reducing costs in all phases of our projects, from capital to operation and maintenance costs.

Optimum solutions
For our clients, working with Ramboll means that they will benefit from our long-term experience and know-how, and together we can transform their challenges into excellent solutions.

Scandinavian roots
When working outside Scandinavia, we often use Nordic best practice solutions as inspiration, while naturally considering the local factors applying to the project in question. Ramboll has offices in 35 countries around the world - thereby combining global knowledge with a local presence.
01. DISTRICT ENERGY AT DARTMOUTH UNIVERSITY, USA
The Ivy League university is converting its steam system to hot water district energy. The conversion will result in CO₂ reductions of up to 80% as well as a more flexible system, a reduced risk of leakages, a higher degree of efficiency, and better possibilities of integrating renewable energy.

02. NORTH LONDON WASTE-TO-ENERGY FACILITY, UK
Ramboll has been assisting North London Waste Authority in establishing a new state-of-the-art 700,000 tpa waste-to-energy facility.

03. SALALAH II CCGT PLANT, OMAN
Ramboll was appointed to monitor the construction and commissioning of this 440 MW CCGT natural gas/fuel oil fired power plant and to provide project co-ordination services.
Clean water and efficient and sustainable waste management are essential to modern mega cities such as Singapore. Ramboll is assisting the National Environment Agency in the conceptual design of the city’s new Integrated Waste Management Facility and advises on synergies between waste management and water reclamation. The facility will have a capacity of 2.5 million tonnes of waste annually.
OUR SERVICES

WIND ENERGY
WASTE-TO-ENERGY
THERMAL POWER
DISTRICT ENERGY
POWER SYSTEMS
ASSET MANAGEMENT
RENEWABLE ENERGY
ENERGY PLANNING
HOW WE WORK

PROJECT MANAGEMENT EXCELLENCE, DEEP TECHNICAL INSIGHT AND INDEPENDENCE OF SUPPLIERS

From idea to operation
We assist our clients on all aspects of a project, ranging from planning to engineering design, to long-term operation and maintenance.

Strategic advice and hands-on experience
We typically act as the Owner’s/Developer’s Engineer or Lead Advisor on multi-million EUR energy investment projects, assisting our clients with project management, technical expertise and engineering. Unlike most other consultancies, we work both as strategic advisors and are deeply involved in the implementation phase of our projects, drawing on our hands-on experience from the operation and maintenance of energy facilities.

Trusted advisor
We seek long-term relationships with our clients and have worked for some of them for more than 30 years.

01. RASKIFTET ONSHORE WIND FARM
As part of its endeavor to make Munich fossil free, Stadtwerke München is establishing a 350 GWh onshore wind farm 200 km north of Oslo together with two Norwegian utilities.

02. PHOTOVOLTAIC POWER PLANT IN MA’AN, JORDAN
Jordan’s national strategy aims at raising the share of renewables in the energy mix to 10% by 2020. The new Falcon solar PV plant will deliver 147 million kWh per year to the national grid. Ramboll is the owner’s Engineer.
01. COPENHILL, DENMARK
Copenhill will be one of the most efficient waste-to-energy facilities in the world. As the Owner’s Engineer, Ramboll has assisted in the planning and implementation of the 560,000 tpa facility, which will produce 20% more energy per tonne of waste, compared to the existing plant. The facility will be fully integrated into the urban setting, surrounded by high-end flats, and will feature recreational facilities on the roof (Illustration: Amager Ressourcecenter).

02. SPIC BINHAI NORTH PHASE 2 OFFSHORE WIND FARM, CHINA
Ramboll is, as the first non-Chinese company, designing one of China’s largest offshore wind farms consisting of 100 turbines with a capacity of 400 MW, which corresponds to the total energy consumption of 350,000 households. The project is a continuation of phase 1 in which Ramboll was the head designer of the turbine foundations.
01. DISTRICT COOLING IN MECCA, SAUDI ARABIA
The King Abdul Aziz Road Project includes two roads, a metro line, a grand mosque and over 200 plots for houses along a new pedestrian pathway running from the city outskirts to the Grand Holy Mosque. The district cooling system that will ensure a comfortable journey through Mecca for the millions of pilgrims during Hajj will be one of the largest in the world. Ramboll is carrying out preliminary studies, conceptual design and procurement of the system.

02. COPENHAGEN DISTRICT HEATING SYSTEM, DENMARK
Copenhagen’s district heating system is one of the largest in the world, and the associated networks supply low-carbon heat to a city of one million residents. For more than 30 years, Ramboll has been the Metropolitan Copenhagen Heating Transmission Company’s main consultant, providing consultancy assistance during all stages of the project from planning and design to operation and maintenance of the city-wide system.

03. AVEDØRE POWER PLANT, DENMARK
Ramboll assisted DONG Energy as the Owner’s Engineer in converting power units from coal to biomass. Ever since the conception of the first unit in the 1980s, Ramboll has participated in the development of the plant’s continuous and flexible adaptations to new fuel types. Today, the plant is a state-of-the-art, multi-fuel producer of low-carbon power and heat, and one of the most energy-efficient plants in the world.
Ramboll is a leading engineering, design and consultancy company employing 13,000 experts. Our presence is global with a strong representation in the Nordics, UK, North America, Middle East and Asia-Pacific. We constantly strive to achieve inspiring and exacting solutions that make a genuine difference to our customers, end-users and society as a whole. www.ramboll.com