ENABLING SUSTAINABLE SOCIETIES

WWW.RAMBOLL.COM
The world today faces far-reaching challenges that affect us all. Complex megatrends such as urbanisation, climate change, and resource scarcity require holistic solutions.

As a global engineering, design and consultancy provider, Ramboll is dedicated to working with clients to meet these challenges by combining local insights with the multidisciplinary expertise of 13,000 professionals over six continents.

We continually strive to be at the forefront of delivering innovative, inspiring and sustainable solutions that set new standards and maximise value for our clients and society as a whole.

Ramboll today holds a leading position in the Nordic market and serves clients globally through a network of 300 offices across 35 countries.

www.ramboll.com
COMPANY PROFILE

RAMBOLL AT A GLANCE

Markets
Buildings
Transport
Planning & Urban Design
Water
Environment & Health
Energy
Oil & Gas
Management Consulting

Key facts
13,000 professionals
300 offices
35 countries
EUR 1.4 billion turnover

WORLD CLASS PROJECTS

01 PORT OF SAN DIEGO
CLIMATE ACTION PLAN
Creating and implementing a plan to reduce greenhouse gas emissions across half a dozen targeted areas

02 SOCIETY BUILDING
Helping the Greenlandic government to prioritise investment funds to areas representing the best value for society pg 6

03 TATE MODERN
Engineering a landmark extension for the world’s most visited modern art gallery in central London pg 10

04 AVEDØRE POWER PLANT
Conversion from coal to highly efficient and low CO2 biomass facility

05 FEHMARNBELT FIXED LINK
Designing the world’s longest immersed road and rail tunnel to connect Scandinavia with Central Europe pg 11

06 VANKE PAVILION
Applying highly advanced digital tools and techniques to engineer the complex centrepiece for Expo Milan 2015.

07 NORD STREAM
Environmental assessment of the world’s longest subsea pipeline - providing gas to 20 million households

08 JEDDAH MASTERPLAN
Paving the way for improved social, environmental and living conditions in Saudi Arabia’s second largest city

09 TELECOM TOWERS FOR 4G
Supporting the roll-out of 4G in India with our partners by providing 7,700 telecom towers to Reliance Jio
CREATING CLIENT VALUE

Our clients are at the centre of everything we do. By placing our clients’ needs first, we are fully dedicated to creating added value and delivering the very best solutions.

We provide guidance and support at every stage of the value chain, from expert advice during early stage strategy development to managing the entire project. Our aim is to delight our clients by meeting or exceeding their expectations in terms of value, quality and responsiveness. To support this, Ramboll’s Project Excellence programme is devoted to maximising project benefits for clients and ensuring consistent service.

CLIENT PERSPECTIVES

“Ramboll delivers proactive people who take responsibility and make a difference”
Bo L. Seligmann, Senior Manager, Novo Nordisk China

“Competent staff, good insights, good dialogue”
Jan Flyvholm, Production Superintendent, Maersk Drilling

“High level competencies, delivered on time”
Lars Nilsson, E.ON
CLIENT SATISFACTION SURVEY

Results based on 3,810 customer satisfaction survey responses from the period January - December 2016.

Ramboll overall client satisfaction score in 2016 on a scale of 1 to 5

4.32

NURTURING SUCCESSFUL CLIENT RELATIONSHIPS

By drawing on our global knowledge base and local experience, we have a complete understanding of the markets in which our clients operate. We have worked with each of our top ten clients for an average of 50 years and nurture successful relationships based on mutual trust and consistent results. Our top priorities are to continuously enhance our reputation for providing the highest level engineering, design and consultancy services, and strengthen relationships with our clients.
“Every day we find innovative solutions to the challenges posed by the global trends of urbanisation, climate change, resource scarcity and globalisation.”

Jens-Peter Saul, Ramboll Group CEO

CREATING A WORLD OF DIFFERENCE

ENABLING SUSTAINABLE SOCIETIES

Ramboll is committed to meeting today’s demands without jeopardising the needs of future generations. We achieve this through a holistic and balanced approach that combines specialist knowledge of management and strategy with world class technical and scientific competences. This enables us to set the public agenda on issues affecting societal development and provide expert consultancy services to ensure long term value to both our clients and society as a whole.

www.ramboll.com/sustainsociety

01 RAMBOLL’S SUSTAINABILITY MODEL

Ramboll understands sustainability as balancing economic, social, environmental and climatic factors.

02 SOCIETY-BUILDING, GREENLAND

To guide the Greenlandic government in prioritising the country’s limited investment funds to areas that represent the best value for society, Ramboll is performing socio-economic impact assessments and cost-benefit analyses on the expansion of the container harbour in Nuuk and increasing capacity in the education sector.

03 COPENHAGEN LIGHT RAIL, DENMARK

The new light rail link in the Greater Copenhagen area will not only provide better options for commuters and reduce carbon emissions, but also be a powerful enabler for urban growth in the communities that it connects. Ramboll is providing project management and rail engineering services on the project.

PROMOTING URBAN GREEN GROWTH

According to the World Bank, two thirds of the world’s population will be city dwellers by 2050 and the global middle class is expected to grow by three billion people over the next two decades. This has led to a focus on creating liveable cityscapes in which people and businesses can thrive, communities can grow, and the environment can flourish. Ramboll has played a central role in providing strategic guidance and developing the building, transport, energy and water infrastructure for the Nordic capitals, which are internationally recognised for sustainable development. Today we work with cities worldwide to create attractive and well-connected urban environments that enable green growth and improved quality of life.

www.ramboll.com/cities

RESPONSIBLE ARCTIC DEVELOPMENT

Falling oil and mineral commodity prices have slowed economic expansion in the Arctic. However, Arctic communities remain strongly focused on the best approaches for long-term sustainable development. Ramboll is the leading consultancy in the Arctic with over 30 years’ experience designing and implementing both public and private sector projects, as well as 450 experts located across 17 offices in the region.

Working with clients on society-building, infrastructure, buildings, energy, water, waste, mining and oil & gas initiatives, Ramboll brings together Arctic experts in engineering, scientific and management services with proven experience in delivering environmentally and socially responsible solutions.

www.ramboll.com/resource-scarcity
MARKETS

BUILDINGS
TRANSPORT
PLANNING & URBAN DESIGN
WATER
ENVIRONMENT & HEALTH
ENERGY
OIL & GAS
MANAGEMENT CONSULTING

By providing an integrated multidisciplinary service across eight markets, Ramboll offers world class technical and scientific capabilities, creative thinking, and service excellence. This ensures that clients receive fully optimised solutions and maximum value on investments.
As a top three buildings consultancy in Europe, we have designed inspiring, efficient, and award-winning buildings for several decades and we are the preferred partner for some of the world’s leading architects and developers. Our design philosophy is to always consider the human experience and we challenge assumptions to create the most practical and economic designs.

**Revenue (2016)**
EUR 443 million

**Number of specialists**
3,849

**Geographical spread**
100 offices in 10 countries

**Signature sectors**
Hospitals, arts & culture, airports, hotels & leisure, pharma & labs, sports

**Key clients**
Architects, contractors, developers, municipalities, hospitals and universities

**10 MILLION M²**
Area of buildings Ramboll designs for 10,000 projects annually

**01. TATE MODERN, UK**
This landmark extension will increase Tate Modern’s display area by 60% to cater for the increasing number of visitors. Ramboll developed the engineering design to accommodate the building’s structural specifications and realise the architect’s visions. Image: Hayes Davidson and Herzog de Meuron.

**02. PANUM – UNIVERSITY EXTENSION, DENMARK**
The 42,000 m² landmark extension to Copenhagen University’s Panum complex will serve as a modern, vibrant, and flexible centre for science and education accommodating world-leading specialists in cancer, ageing, and lifestyle-related diseases. Ramboll is providing all engineering services. Image: C. F. Møller Arkitekter and SLA Urbanity

**03. UUSI LASTENSAIRAALA CHILDREN’S HOSPITAL, FINLAND**
This ambitious new 48,000 m² children’s hospital in Helsinki has been planned with special attention to youngsters’ perspectives and needs. Ramboll is structural and geotechnical engineer for the EUR 160 million project, which emphasises Building Information Modeling (BIM), life cycle thinking, and a healthy indoor environment. Image: SARC Architects
Mobility fuels economic and social development and with 53% of the world’s population now living in cities, efficient transport systems are an essential component of urban liveability. As the 13th largest transportation consultancy globally, we work on some of the world’s biggest and most cutting edge infrastructure projects. We combine advanced technical competences with resource-minimising design to identify the best possible solution at the lowest cost.

01. FEHMARN BELT TUNNEL LINK, DENMARK/GERMANY
The world’s longest road and rail tunnel beneath the Fehmarn Strait will realise the vision of a permanent, close and direct link between Scandinavia and Central Europe. Ramboll’s design solution challenges existing tunnel building standards and will significantly reduce travel times whilst creating new opportunities for freight transport. Image: Femern A/S

02. DOHA METRO, QATAR
The Green Line forms part of Doha’s new metro system, which is a key delivery for the 2022 FIFA World Cup. Ramboll is the Design Verification Engineer for the project, which brings together experts from the Middle East, the UK and Denmark, and draws on our competences in geotechnics, shoring/temporary structures, tunnels, mechanical, electrical and plumbing (MEP), and structures. Image: Qatar Railways Company

03. GATEWAY ASIA 2030, PHILIPPINES
Ramboll is developing a large-scale transport plan for Manila Bay that is focused on promoting growth and solving congestion issues in the world’s most densely populated city. The plan, which has been initiated by private developer, All-Asia Resources and Reclamation Corporation, will see the creation of interconnected air and seaport facilities with a rapid metro link to central Manila.
ENVIRONMENT & HEALTH

A leading global environmental and health consultancy, we maintain a science-first approach to helping clients resolve their most challenging environmental, health and social issues. Our culture of excellence, innovation and client service has earned us the respect and loyalty of private and public clients around the world.

TOP 10

Ramboll’s global ranking in environmental engineering and design (ENR 2015)

- Revenue (2016) EUR 331 million
- Number of specialists 2,191
- Geographical spread 129 offices in 27 countries

World class services
- Air Quality; Compliance, Strategy & Transaction Services; Ecological Services; Health Sciences; Impact Assessment; Laboratory Services; Resource & Waste Management; Site Solutions

01. ADDRESSING AIR QUALITY, HONG KONG
We developed a comprehensive atmospheric modeling system for the Hong Kong Environmental Protection Department to analyse emissions, meteorological and air quality data and to forecast regional air quality.

02. HANNUKAINEN MINE, FINLAND
To facilitate production of iron concentrate, gold and copper, Ramboll is conducting environmental impact assessment reporting and land use planning for the whole life cycle of the mine.

03. SCIENCE BENEFITS HOMES, USA
Our scientists discovered the gases and chemical reactions causing odours and corrosive effects on copper and silver from Chinese drywall used in residential buildings, enabling the gases to be eliminated and repairs to be made to over 2500 homes.

“The nature of our work frequently positions us at the intersection of science, business and policy - fertile ground for developing groundbreaking solutions.”

Tom Vetrano, Managing Director, Ramboll Environment & Health
WATER

Ramboll experts address global water and climate challenges by working across the entire water cycle from water resources and supply, processing and treatment, to sewerage and discharge. We draw on proven multidisciplinary expertise to create innovative, sustainable and liveable solutions for our clients and society.

“From blue-green infrastructure to wastewater treatment we assist government agencies and large companies with their most challenging water management issues.”

Hanne Christensen, Managing Director, Ramboll Water

Revenue (2016)
EUR 79 million

Number of specialists
702

Geographical spread
40 offices in 6 countries

Key clients
Utilities, Municipalities, industry, and private companies

Number of water-related awards won by Ramboll in the last five years

42

01. THE BLUE-GREEN GARDEN CITY, DENMARK
For Denmark’s largest current climate adaption project in the town of Kokkedal, Ramboll is combining flood prevention measures on a local waterway with the creation of attractive recreational areas to promote social cohesion, increased property prices, and improved well-being for the local community. Image: Schønherr, Ramboll, BIG

02. THE FUTURE OF STOCKHOLM’S WASTEWATER TREATMENT, SWEDEN
To accommodate annual population growth of 20,000 in Sweden’s capital, expansion of the wastewater treatment infrastructure is required, which will also create much needed space for new homes. Ramboll is responsible for the preliminary design and design management of the new facilities.

03. ARAD COUNTY WATER PLAN, ROMANIA
Ramboll assisted Arad County in identifying and prioritising investments in water quality improvements such as upgrading sewer systems and improving supply stability to ensure compliance with the European Water Framework Directive. 98% of the region’s 250,000 inhabitants now have clean drinking water compared to three quarters five years ago.
ENERGY

Security of supplies, climate change, energy efficiency and resource scarcity are top priorities on the global agenda. Ramboll is at the forefront of addressing these issues with world-leading competencies in offshore wind, waste-to-energy, thermal power and district energy. Ramboll has worked on waste-to-energy projects in 40 countries and 200 district energy systems worldwide. We have also designed 90 major power plants and 65% of the world’s offshore wind turbine foundations.

Revenue (2016)
EUR 116 million

Number of specialists
809

Geographical spread
25 offices in Denmark, Sweden, Norway, UK, Germany, Poland, Switzerland and Canada

Number of major power plants designed by Ramboll
90

01. BORKUM RIFFGRUND 1
OFFSHORE WIND FARM, GERMANY
As wind farms move to deeper water with larger turbines, bottom-mounted foundation concepts are required in place of traditional monopiles. Ramboll has performed the innovative structural design for the first installed full-scale jacket foundation and suction buckets, a technology used for offshore oil and gas platform foundations with several economic and environmental advantages.

02. COPENHILL, DENMARK
Copenhill will be one of the most efficient waste-to-energy facilities in the world. Ramboll has assisted in the planning and implementation of the EUR 469 million facility, which will feature recreational facilities on the roof. Image: Amager Ressourcecenter

03. DISTRICT COOLING IN MAKKAH,
KINGDOM OF 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 Makkah for the millions of pilgrims during Haj will be one of the largest in the world. Ramboll is carrying out preliminary studies, conceptual design and procurement of the system.
OIL & GAS

Success in today’s fast paced and competitive oil and gas market depends on cost effective and advanced technical solutions coupled with stringent health, safety and environmental safeguards during the production and distribution processes. With four decades of experience – offshore as well as onshore - we have exhaustive industry knowledge and a project track record from oil and gas hotspots worldwide. Our multidisciplinary service portfolio covers the entire asset and project life cycle.

01. POLARLED PIPELINE, NORWEGIAN NORTH SEA
This 481 km offshore pipeline sets a world record for the deep water installation of a 36” pipeline and will connect new fields in the Norwegian Sea with existing infrastructure to secure future energy supply to Europe. Drawing on extensive knowledge of subsea pipeline design and state-of-the-art analytical software, Ramboll specialists are delivering an optimised, innovative, and cost effective solution.

02. CULZEAN FIELD WELLHEAD JACKET DETAILED DESIGN, BRITISH NORTH SEA
The newly discovered Culzean oil field has potential to meet around 5% of UK gas demand by 2020/21. The development concept comprises a wellhead platform, a processing facility, and a platform for utilities and living quarters. Ramboll made the detailed design of the wellhead platform’s jacket substructure, associated piles and appurtenances, and the FEED for two additional jackets.

03. CREATING ONE SINGLE ARAB ENERGY MARKET
To determine the best options for electrical and gas interconnections creating one single energy market for 20 Arab countries, Ramboll proposed feasible infrastructure options to ensure energy availability, identify implementation methods and outline an energy trade strategy among Arab countries. The options were backed by techno-economic feasibility analyses of several scenarios and involved managing relations with almost 60 stakeholders.

Revenue (2016)
EUR 66 million

Number of specialists
599

Number of offices
Nine offices in Denmark, Norway, UK, Qatar, UAE, India and USA
PLANNING & URBAN DESIGN

Ramboll has an extensive proven 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.

Number of specialists
500

Geographical spread
Nordic countries, UK, Middle East, Singapore, Beijing, North America

Key clients
City authorities and private developers

01. NORDHAVN, DENMARK
Nordhavn is Scandinavia’s largest city development project and rethinks how urban life can be combined with sustainable energy, environment, traffic and cityscape solutions. Ramboll is working on urban development projects in the Aarhusgade and Sundmolen areas as well as the new 3 km long road link, road tunnel, and Metro Extension, which will connect the district to the wider city.

Image: Ramboll’s original Nordhavn masterplan, 2nd stage competition proposal. COBE, Sleth, Polyform and Ramboll.

02. MANDAI NATURE SAFARI PARK, SINGAPORE
Just 30 minutes from downtown Singapore, the 128ha Mandai Nature Safari Park is being rejuvenated into a world class integrated wildlife and nature area. Ramboll Studio Dreiseitl is leading the master planning team for the initial development phase.

03. RAMBOLL’S PLANNING IMPLEMENTATION MODEL
Ramboll’s approach to urban planning is focused on delivering executable solutions and maximising value.

“Our holistic approach to urban development encompasses strategy, planning, and renowned technical design services and is based on an integrated multidisciplinary skills base.”

Neel Strøbæk, Group Director for Planning & Urban Design, Ramboll Group
MANAGEMENT CONSULTING

Ramboll is one of the largest management consultancies in Northern Europe and is committed to supporting change. As a trusted partner to private sector clients, we deliver the complete chain of transformation; defining strategic direction, forming new organisational structures, optimising processes and driving leadership and cultural transition. Our strong track record in enabling public-sector development includes qualified guidance on social affairs, labour market policies and employment, and facilitating stakeholder engagement and community dialogue in urban master planning initiatives.

Revenue (2016)
EUR 70 million

Number of specialists
635 worldwide

Geographical spread
9 offices in 6 countries

Services
Strategy & operations, client & market, leadership & HR, business technology, city & society development, policy advice & evaluation

4.46
Client satisfaction score for Ramboll’s management consultancy services on a scale of 1 to 5

01. BOOSTING COMPETITIVENESS OF EUROPEAN ENERGY GIANT, SWITZERLAND
A strategy developed through scenario building has empowered major energy supplier, Alpiq, to meet an ever-changing market. The scenarios made it possible to build an action oriented strategy including concrete steps to address a number of uncertainties. Image: Alpiq

02. ‘PERFORM TO GROW’ PROJECT AT RITTAL, GERMANY
Over the course of 2½ years, Ramboll helped global industry solutions provider, Rittal, transform its decentralised procurement operations into a global purchasing and supply chain organisation. The project was runner up in the 2014 BME Awards.

03. STOCKHOLM MUNICIPALITY ORGANISATIONAL DEVELOPMENT, SWEDEN
For almost a decade, Ramboll has been a trusted management consulting advisor to Stockholm Stad – the municipality in the ever growing capital of Sweden. The consultancy has aimed to strengthen management capabilities and improve quality and efficiency within the organisation.
INNOVATING FOR A BRIGHT FUTURE

Ramboll is committed to continually developing and combining knowledge and technology in new and different ways. As an internationally recognised thought leader and expert practitioner in each of the markets in which we operate, we provide cutting edge solutions to solve our clients’ and society’s largest challenges.

CHICAGO LAKESIDE, USA

Ramboll has produced the design concept for sustainable design, stormwater management and waste management to transform the 600-acre Chicago Lakeside city district into a model community based on 21st century infrastructure and technologies. The concept will reduce the use of fossil energy by 90%, potable water by 60% and landfill to 1% with 90% of stormwater infiltrated and directed to Lake Michigan.
SOLID FOUNDATIONS AND GROWTH

In achieving our strategic ambitions to become a global and diversified consultancy, Ramboll has grown by 250% over the last decade. Revenue in 2016 was EUR 1.4 billion.

250%

Growth in Ramboll revenue over the last decade

Key figures and financial ratios

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<tbody>
<tr>
<td><strong>Income statement</strong>, DKK million</td>
<td>EUR m</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Revenue</td>
<td>1,423.9</td>
<td>10,607.7</td>
<td>10,589.3</td>
<td>8,291.9</td>
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<tr>
<td>EBITA</td>
<td>80.8</td>
<td>602.1</td>
<td>474.7</td>
<td>413.2</td>
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<tr>
<td>Operating profit (EBIT)</td>
<td>45.4</td>
<td>338.0</td>
<td>146.7</td>
<td>286.7</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>45.9</td>
<td>342.0</td>
<td>222.6</td>
<td>265.1</td>
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<tr>
<td>Profit for the year</td>
<td>23.7</td>
<td>176.9</td>
<td>76.3</td>
<td>164.5</td>
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<td><strong>Balance sheet</strong>, DKK million</td>
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<tr>
<td>Total assets</td>
<td>856.9</td>
<td>6,383.8</td>
<td>6,837.5</td>
<td>5,381.3</td>
</tr>
<tr>
<td>Total equity</td>
<td>290.2</td>
<td>2,162.3</td>
<td>2,113.1</td>
<td>1,859.5</td>
</tr>
<tr>
<td>Net interest bearing cash/(debt)</td>
<td>3.7</td>
<td>27.3</td>
<td>(194.1)</td>
<td>380.2</td>
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<tr>
<td><strong>Non-financial indicators</strong></td>
<td></td>
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<tr>
<td>Private sector revenue, %</td>
<td>65</td>
<td>69</td>
<td>59</td>
<td>58</td>
</tr>
<tr>
<td>Public sector revenue, %</td>
<td>35</td>
<td>31</td>
<td>41</td>
<td>42</td>
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</table>

The figures in EUR have been translated from DKK using an exchange rate of 7.45.
CORPORATE RESPONSIBILITY

Responsible corporate citizenship based on trust, integrity, transparency and professionalism have been the hallmarks of Ramboll’s business approach since the company’s foundation nearly 70 years ago.

292,454 CONFERENCE CALLS IN 2016

Extensive use of video technology has helped reduce our travel-related CO2 emissions per FTEE despite our international expansion.

GLOBAL COMMITMENT

As a longstanding signatory to the UN Global Compact, an internationally recognised framework for advancing corporate responsibility, our performance is measured and reported in four main areas:

Human rights
Labour
Environment
Anti-corruption

Ramboll’s ‘Global Commitment’ directly links these areas to our operations and services by creating the framework for all our corporate policies and informing the way in which our employees and suppliers operate.

www.ramboll.com/csr

Ramboll works to continuously improve performance on corporate responsibility. On an annual basis, we are guided by the UN Global Compact Management Model to support our efforts in integrating the ten principles on human rights, environment and anti-corruption into core strategies and business operations.

Source: UN Global Compact Management Model, framework for implementation 2010.
70 YEARS’ OF SUSTAINABLE DEVELOPMENT

Passion for engineering and contributing to society guided Ramboll’s founders, B. J. Rambøll and J. G. Hannemann, when they established the company in 1945. Whilst Ramboll has evolved into a global multidisciplinary consultancy, these values and our Nordic roots remain cornerstones of the company today.

Foundation ownership enables us to take a long-term perspective and provide advice to clients that is independent of external or personal interests. Over the last five years, the Foundation has donated more than EUR 1 million to fund a range of technical research and support relief efforts for natural disasters worldwide.

www.ramboll.com

"Being decent and proper does not only concern whether your tie is in place when doing business. It is about treating other people and society well in long-term perspective.”

B. J. RAMBØLL