COMPANY OVERVIEW

Ramboll is a leading engineering, design and consultancy company founded in Denmark in 1945. With 15,000 employees working from 300 offices in 35 countries, Ramboll combines local experience with a global knowledge base. They strive constantly to achieve inspiring and exacting solutions that make a genuine difference to their clients, the end-users and society at large. Ramboll works across the following markets: Buildings, Transport, Planning & Urban Design, Water, Environment & Health, Energy and Management Consulting.

Responsible business conduct and sustainable practices have been part of Ramboll’s DNA since the company’s inception. The company’s founders believed in high ethical standards and behaving responsibly with each other and society at large. Today these principles are an integral part of Ramboll’s mission and services and are formalised through their UN Global Compact membership and their systematic work with the UN sustainable development goals. Ramboll’s Environment & Health market, responsible for most of their environment-related work, focuses on human health outcomes, as well as environmental impacts in all relevant engagements.

CASE: NO. 1

SUPPORTING WELL-BEING THROUGH HEALTH IMPACT ASSESSMENT

Health Impact Assessment (HIA) is a structured process that draws on comprehensive environmental, socioeconomic and demographic data, professional expertise and stakeholder input to identify and evaluate the potential public health consequences of proposed projects or policies. Ramboll health scientists have in-depth expertise and first-hand experience with the role of HIAs in environmental and social impact assessment (ESIA) and the intersection between HIA, ESIA and sustainable development. Ramboll tailors their support in this area to the specific project and may:
• **Carry out** a comprehensive HIA
• **Critically review** and evaluate an HIA produced by others
• **Advise** on the purpose and practice of HIA, including training on how HIAs are performed and vary by jurisdiction, how they can be used (and misused) and how to participate in HIA processes
• **Perform** complementary analyses such as human health risk assessments to address more traditional chemical exposures in combination with an HIA

Some situations call for community-level exposure and health studies to characterise and estimate exposures to environmental stressors. In these cases, Ramboll’s epidemiologists work closely with their other health scientists, including experts in toxicology and risk assessment, exposure science and chronic and infectious diseases, to offer:

• Baseline community health assessments
• Scenario analysis to compare health improvement impact and cost of competing initiatives
• Monitoring of impacts of implemented measures

Whether assessments are focused on a community or a population, Ramboll is adept at communicating the approach and results so relevant audiences understand that safeguarding the health and well-being of affected communities or populations is of paramount importance.

**CASE: NO. 2**

**PROBING THE ENVIRONMENTAL CYCLE OF ANTIBIOTIC RESISTANCE**

A public health threat that already endangers millions worldwide, antibiotic resistance is on track to become an even deadlier problem. “A lot has been done to understand antibiotic resistance in hospitals and other clinical settings, but we have just a little bit of information — a drop in the bucket — about how that resistance cycles in the environment,” says Sean Norman, a professor in environmental health sciences in the Arnold School of Public Health at South Carolina University.

Ramboll is partnering with the University to identify and implement innovative ways to prevent these antibiotic-resistant infections and their spread. Ramboll’s focus area is determining the potential for exposure to antibiotic-resistant pathogens in bioaerosol emissions from wastewater treatment plants.

The work is being funded by an applied public health prevention research grant from the U.S. Centers for Disease Control and Prevention. The goal of the CDC grant program is to advance innovative and important studies that are relevant for public health practice to improve health for people across the United States.

**CASE: NO. 3**

**BENEFITS OF CONVERTING A DOWNTOWN STREET TO A PEDESTRIAN-ONLY ZONE**

Ramboll assessed the health impacts associated with the conversion of a downtown street to a pedestrian-only zone in Linnégatan, Gothenburg, Sweden. Their analysis relied on air quality, traffic flow, population and health data to determine whether the health of residents and visitors to the area would benefit from the change.

As part of their evaluation Ramboll modeled the reduction in air pollutants and quantified the health benefits for both long-term residents (people who live and work in the area) and short-term visitors to the area.
Ramboll’s assessment indicated that long-term residents would experience a 15% reduction in asthma outcomes from reduced levels of NO2 attributed to the pre-existing road traffic. Long-term elderly residents would experience fewer cardiovascular effects due to reduced exposures to particulate matter (PM2.5). No impact was evident for short-term visitors.