

# Projects

In 2016, the revenue of the Projects business was EUR 1,233.6 million, consisting of the Technical Installation revenue of EUR 782.3 million and Large Projects revenue of EUR 451.3 million.

## Technical installations for properties and industry

Technical installation is a particularly important business area for Caverion due to its volume. We deliver technical installations for both building renovations and future properties. Delivery contracts can cover one or more technical disciplines, such as material delivery and installation of ventilation, electricity or building automation. We have special expertise in technical design and installations for demanding facilities, such as clean rooms and premises with high acoustic demands.

Caverion also delivers projects to industrial clients across the Nordic countries, including pipe and electricity installations and customised project deliveries of maintenance and modernisation services during shutdown.

## Large Projects are based on the single supplier model

In 2016, Caverion had about 50 ongoing Large Projects worth over EUR 5 million for real estate and industrial clients.

Large Projects are either design & build projects covering planning and execution or tender-based projects. In design & build projects, Caverion acts as partner to the main contractor and is in charge of procurement, planning and building systems. From the client perspective, working with one partner reduces the need for coordination between various contractors, makes risk management easier and improves execution quality. The coordination of the planning and execution phases also accelerates project implementation and reduces costs. For Large Projects, the planning and execution phases have an average duration of 3–12 months and 8–24 months, respectively. Caverion also uses subcontractors during project execution, especially in Central Europe.

Total deliveries of building systems account for an increasing share of our Large Projects. In these projects, Caverion is usually responsible for expert services, planning, coordination of building systems, project management, project execution and handover to the end user. Increasingly often, our delivery covers several building systems also in large tender-based projects.

In life cycle projects, Caverion focuses on life cycle, investment and operating costs, availability and the operation of properties in the long term. The model ensures the retention of property value, good indoor air and safe conditions throughout the life cycle. When we are involved already at the planning stage, we can use our expertise, our knowledge of technical maintenance and managed operations and our

experience to shorten the construction phase and reduce overall life cycle costs.

In addition to public sector and commercial clients, Caverion executes Large Projects for industrial clients in, for example, the energy, mining and forest industries. Our competitiveness in industrial projects and technical installations is based on advanced industrial prefabrication, excellent planning and good management of resources and logistics. For example, in short shutdown projects requiring efficiency, Caverion has the capacity to rapidly allocate hundreds of professionals to the worksite.

## Measures to improve the profitability of the project business

In 2016, Caverion carried out a thorough review of its project portfolio to identify the challenges related to project management and execution. Based on the review, Caverion has made the necessary cost estimate adjustments, write-downs and provision increases (“project write-downs”) related to its project portfolio, which mainly relate to divisions Sweden, Germany and Industrial Solutions. The project write-downs totalled approximately EUR 59 million for the year 2016.

The Projects unit was established to support the divisions’ project management offices (PMO). The unit’s responsibilities include improving the profitability of the project business, managing risks and developing common approaches. We introduced a stricter bid approval and decision-making model for projects at all levels. In practice, we have for example raised minimum tender margin requirements and have set up proper tender go/no go analyses. In our new organisation, we have also clearly defined the units responsible for maintenance or projects, and all Large Project operations have been centralised to professional project management teams within the divisions.

At the end of 2016, we increased the efficiency of our project manager training courses in order to guarantee common project processes and common project management guidelines. Furthermore, we launched a survey to select a project management tool for the whole Group and, thereby, to improve risk management and forecasting.

In 2017, we will continue to instil common practices, develop the quality of tender pricing and improve economic predictability and the project managers’ knowledge.

**Caverion’s expertise in the Project business is based on our:**

- Technical expertise in all building systems and key technical disciplines for industry
- Solid experience in large and complex projects
- Project management offices in all divisions
- Strong market position

- Design and engineering knowledge in all client segments
- Integrated total deliveries of building systems
- Life cycle management and sustainability focus

See some examples of the orders we received in 2016