



**A SNAPSHOT OF THE  
ELECTRICAL  
CONTRACTING  
SECTOR IN EUROPE**

# ACKNOWLEDGEMENTS

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## Disclaimer

The authors of this report share the objective to improve industry's and policy makers' understanding of the electrical contracting sector in Europe and to provide them with some key figures and trends from the sector. Each contributor shared their knowledge and estimations to support the provision of a clear and transparent sector overview. The information included in this report should however not be treated as binding on the organizations involved.

## AIE Members



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# EXECUTIVE SUMMARY

## Electrical Contractors

- AIE is the European association of electrical contractors and promotes a regulatory and business environment in Europe that embraces the modern electrical contractor. This report aims to inform industry and policy makers by providing a concise overview of the electrical contracting sector.
- Electrical contractors are the companies and businesses performing electrical work in a great variety of situations and applications. They vary in size, from micro-enterprises to multinationals, and skillset, comprising electricians as well as engineers and management staff.
- Their scope of action centers on the installation of electrical systems but extends upstream to design and planning and downstream to operation and maintenance.
- The projects they undertake also vary in scale and complexity. Electrical contractors work on systems in all buildings (housing or non-housing) and on infrastructure. Further, they do renovations as well as new build projects.

## Key Figures

- The annual turnover of the European electrical contracting sector amounts to **EUR 200 billion**. This figure represents 15% of the entire construction sector.
- There are an estimated **1.8 million professionals** employed by electrical contractors. This means that **1 out of 134 active Europeans are employed in our sector**.
- There are an estimated **300.000 companies** active in our sector. Most are SMEs and have on average 6 employees.

- When averaged, turnover is evenly distributed between the different market segments available to electrical contractors (housing, non-housing, infrastructure) and between new build on one hand and renovation, maintenance and service on the other. Country-specific figures, however, are more variable and can be explained by national characteristics such as regulatory context, emphasis on climate action, large investments or national technological trends.

## Key trends

- Working with electrical installations has put our sector in a position to reap the benefits of current and growing climate action and energy policies. This has led to a differentiation of growth compared to the rest of the wider construction sector.
- Particularly, decentralized and green technologies are driving the growth in our sector. These are again supported by the favorable policy context.
- Digitalization is an increasingly impactful trend that comes with the aforementioned technologies and is changing installations and work processes.
- The traditional skillset found in electrical contracting companies is evolving quickly, in line with digitalization. More diverse skills are needed, especially digital skills.
- There is a move from blue-collar to white-collar skills leading to skills shortages and mismatches, as well as “bottleneck vacancies”.
- Education programs need to be dynamically updated to keep up with labor market demands.

# INTRODUCTION & BACKGROUND

## Who Are Electrical Contractors and What Do They Do?

Electrical contractors are the companies and businesses performing electrical work. Our modern world is electric and electricity is poised to become the fuel of choice for the energy transition. This world is made possible thanks to electrical contractors, needed to perform work in a great variety of situations and applications.

The diverse range of projects requiring their expertise entails great differences among companies. The size can go from a single, self-employed professional focusing mainly on domestic works to a multinational company with thousands of employees undertaking large-scale projects.

The workforce can differ as well, covering a wide skillset and a variety of educational backgrounds, ranging from electricians to engineers, with knowledge in basic electrical infrastructure and/or in electrical machines and/or IT connections, alongside business engineers, managers and more.

The common misconception about electrical contractors is that they are limited to the installation of electrical equipment. While they have the exclusive competences to do so, they are also involved upstream and downstream of the installation stage.

Upstream, they work with architects, engineers, quantity surveyors, building contractors and the final client to provide pre-engineering and installation advice. In addition, they assist

manufacturers in the development and testing of new products.

Downstream, they cooperate with clients and facilities managers to provide maintenance and servicing of electrical installations. Often involved with the design of installations, they are uniquely prepared to handle the day to day operations of an electrical system.

**THE COMMON MISCONCEPTION ABOUT ELECTRICAL CONTRACTORS IS THAT THEY ARE LIMITED TO THE INSTALLATION OF ELECTRICAL EQUIPMENT. WHILE THEY HAVE THE EXCLUSIVE COMPETENCE TO DO SO, THEY ARE ALSO INVOLVED UPSTREAM AND DOWNSTREAM OF THE INSTALLATION STAGE.**

Figure 1 shows the role electrical contractors play in the full life cycle of electrical installations.

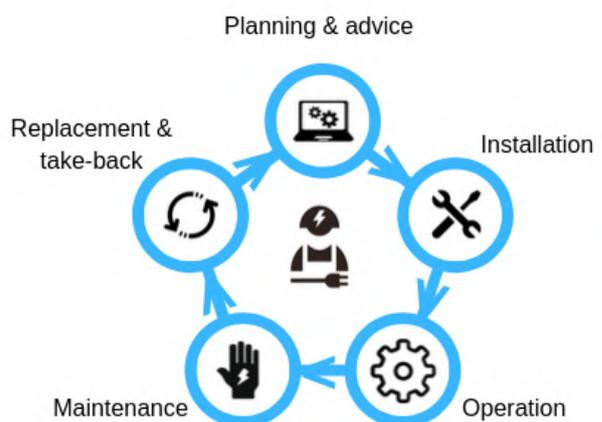


Figure 1: electrical contractors are involved in the full installation life cycle, AIE 2019

# INTRODUCTION & BACKGROUND

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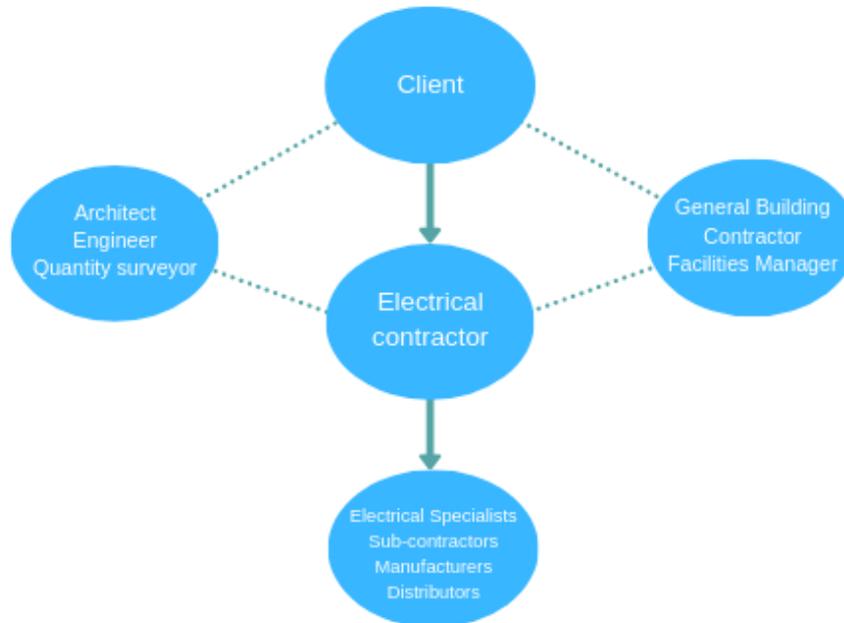


Figure 2: Electrical contractors at the crossroads of the construction and electrical value chains, AIE 2019

Figure 2, shows that electrical contractors interact with a variety of professionals along the building and electricity value chains, and are in close contact with the final client.

A second misconception is that electrical contractors are limited to wiring lights or fitting electrical sockets in residential buildings. While this is the example we are all familiar with, businesses of all sizes perform work at larger scales and in other markets.

When it comes to buildings, in addition to dwellings, electrical contractors work on hospitals, schools, commercial or industrial buildings, such as factories, warehouses, data centers, etc. Non-residential buildings all require complex electrical installations, often managed by automation and control systems, to support the activities taking place in these buildings relying on electricity.

Electrical contractors are also strongly engaged in the engineering and infrastructure market. Whether it is public infrastructure for lighting, electricity or telecoms, or power plants or airports, they have the knowledge to handle all types of electrical installations.

In addition, the advent of electric vehicles has led to many electrical businesses installing and maintaining charging points in both industrial and residential environments.

Finally, electrical contractors work on both new build and renovation or refurbishment projects.

**A SECOND MISCONCEPTION IS THAT ELECTRICAL CONTRACTORS ARE LIMITED TO WIRING LIGHTS OR FITTING ELECTRICAL SOCKETS IN RESIDENTIAL BUILDINGS. WHILE THIS IS THE EXAMPLE WE ARE ALL FAMILIAR WITH, THEY PERFORM WORK AT LARGER SCALES AND IN OTHER AREAS.**

# INTRODUCTION & BACKGROUND

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Electricity, as widespread as it already is, is set to take over from fossil fuels in several new applications to respond to climate objectives. Electrical contractors need to keep up to date with the newest technologies (all using electricity) and add to the wide array of services they already supply. Not only is the energy transition calling for more electricity but so are our lifestyles. The ongoing digital revolution has already changed the way we behave and introduced a greater number of electrical devices and services into our daily lives. Electricity has underpinned this shift and it is now clear that a sudden halt in electricity supply would cause chaos in our modern way of life.

## Taking Electrical Contracting to New Heights

In Paris, Vinci Energies, a major French electrical contractor and part of AIE's network, is currently in charge of installing the electrical system that will bring power to the upcoming Tours Duo (Duo Towers), a large-scale construction project consisting of two high-rise buildings placed side by side reaching 180 and 122 meters of height.

This future landmark of the 13th "arrondissement" will house a variety of tenants. The first tower will be reserved for office spaces and the second will host a hotel, a restaurant, and a shopping area, amounting to 110.000 m<sup>2</sup>.

Powering such a large area is no small feat. Providing a comfortable and pleasant environment to the vast amount of occupant these towers are designed to accommodate, requires the installation of 300 KM of cabling and 16.000 lights, just as an example. In addition, the buildings will feature onsite renewable electricity generation. A 180 KW solar power system will be installed to help curb the energy demand of such a massive building and reap the benefits of decentralized electricity production.

## Who Is AIE?

AIE is the European Association of Electrical Contractors. Our membership is drawn from electrical contractors' associations from 12 countries in Europe. AIE promotes opportunities for electrical contractors by helping to build a regulatory and business environment in Europe that embraces the modern electrical contractor. From energy efficiency, to energy services and standardization, ICT, smart and new digital technologies, renewable energy, electromobility, and training and education - AIE makes sure that the key strategies and main priorities for the modern electrical contractor as a solution provider in Europe are well represented.

## Scope and Objectives of this Report

The key figures and trends presented here are derived from a survey the AIE secretariat has circulated to AIE member associations. The report takes into account the whole national sector from several European countries: Austria, Belgium, Denmark, France, Finland, Germany, Luxembourg, the Netherlands, Norway, Sweden, Switzerland and the UK.

This report aims to provide a concise overview of the electrical contracting sector's size, activities and trends, as the services offered by our professionals are a cornerstone of the electricity and construction value chains.

This report is meant to inform both the industry and policy makers. Industry can better understand the magnitude of our sector and the key drivers for growth. As policies and regulations underpin our sector evolution, we hope that authorities will find useful information in this report to improve policy making and provide our sector with the tools we need to help build a strong, green and electric Europe.

# KEY FIGURES OF THE ELECTRICAL CONTRACTING SECTOR

## ANNUAL TURNOVER

15% of overall construction sector turnover

**EUR 200  
BILLION**

**300.000**

## COMPANIES

60% of which employ 1 to 5 professionals  
Average number of employees per company is 6

## EMPLOYEES

1 in every 134 professionals is employed by electrical contractors, equating to 1% of the active population

**1.8  
MILLION**

**HIGHLY-  
VALUED**

## JOBS

Skilled, local and stable jobs, key to meeting climate and energy goals

## Nominal Figures

The total estimated turnover of our sector in the EU and EFTA countries exceeds 200 billion Euro.

The magnitude of this figure can be explained by the ubiquity of electricity and of its applications.

Indeed, all major construction projects require electrical installations, meaning that electrical contractors will be active on all work sites, whether it is for buildings or infrastructure.

Not only is electrical contractors' expertise solicited on essentially any occasion construction is taking place, but their work is highly valued and more complex compared to other construction professionals.

And their work is not limited to the installation phase; they are also active earlier, at the design and planning phase, and later in the, sometimes long-lasting, operation and maintenance of the installations.

Further, the material and installations themselves are more expensive and sophisticated, requiring more specialized competences and skills compared to other construction sub-sectors.

Another factor catalyzing overall turnover is the sheer number of people working for electrical contractors.

# KEY FIGURES OF THE ELECTRICAL CONTRACTING SECTOR

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In addition to carrying out valuable and highly skilled work, **almost 1% of the active population of Europe is employed by electrical contractors.** Indeed, **1 out of 134 working Europeans are employed in this sector.** This means that almost all of us will know someone working in electrical contracting!

Again, the impressive figure of **1.8 million professionals** can be explained by the aforementioned need for electrical work and the increasing ubiquity of electricity in our modern lives.

However, additional factors are at play.

**NOT ONLY IS ELECTRICAL CONTRACTORS' EXPERTISE SOLICITED ON ESSENTIALLY ANY OCCASION CONSTRUCTION IS TAKING PLACE, BUT THEIR WORK IS HIGHLY VALUED AND MORE COMPLEX COMPARED TO OTHER CONSTRUCTION PROFESSIONALS.**

The jobs offered by our sector are quality jobs. The electro-technical industry is known for "career jobs", which is not necessarily the case for the entire construction sector. Requiring higher qualifications, they cannot be de-localized or replaced easily by cheaper labor or machines.

Our jobs are also more stable and are characterized by a more predictable future, which is easy to determine when looking at existing and upcoming regulatory and legislative milestones for climate and energy. Not to mention the personal gratification stemming from the positive impact of electro-technical work on climate and decarbonization goals.

In this context of popular upheaval about climate change policies, the attractiveness of green jobs that can center on switching out fossil fuel installations to renewable ones cannot go overlooked.

Finally, the proportionately high number of companies can be easily explained as a function of the number of professionals and the size of companies, often organized as SMEs.

Indeed, **the average electrical contracting company in our sector has 6 employees.** Some electrical contractors are larger companies and sometimes even multinationals, but **most of them are SMEs or even micro-enterprises.**

## ELECTRICAL CONTRACTORS COME IN DIFFERENT SIZES A DANISH CASE STUDY

### Ecopti

#### Advanced Lighting Solutions For The Demanding Consumers

Ecopti is a specialized electrical contractor offering high-end smart and integrated lighting systems. They cater to the needs of exigent customers in the market for tailored lighting solutions to fit their needs and who pay special attention to design and aesthetics.

90% of their orders come from private clients looking for electrical contractors who can lead the building process. Indeed, Ecopti position themselves as advisors and designers in addition to handling the installation of their lighting solutions.

- Founded in 2010
- About 5 employees
- Specialize in development, installation, and service of advanced KNX lighting solutions
- Located in Copenhagen
- [www.ecopti.dk](http://www.ecopti.dk)

### AB Electric

#### Digging For Gold In Data Centers

There is an increasing number of data centers in Denmark and all indicators point to the fact that this trend will continue and even grow stronger in the coming years. This is why, 3 years ago, AB Electric decided to open a new department dedicated to the installation and service of data centers.

Their new business strategy requires employees equipped with a wide range of skills. The latter are especially important as they will work with their customers at the design and planning stage to ensure the optimal solution is found for each project. Further, they have joined forces with a cooling company to offer turn-key packages to their clients.

- Founded in 1980
- About 40 employees
- 4 major focus points: Industry services, automation, electrical work and data centers
- Located in the small town Bjert, Jutland
- [www.datacentergruppen.dk](http://www.datacentergruppen.dk)

### Intego

#### Electrifying The Transport Network

Intego has supported the development of electromobility in Denmark by providing the necessary charging infrastructure for road cars and busses. They saw the potential in the e-mobility market a few years ago and set up a dedicated unit that has since doubled in size.

Intego has harnessed synergies with other actors in the e-mobility infrastructure value chain such as car manufacturers and petrol station operators to deploy fast-charging in Denmark. Intego is cooperating with companies such as Tesla or E.ON to install 2.500 charging points across the country, in addition to charging infrastructure for electrical busses in Aarhus.

- Founded in 2008
- About 800 employees
- One of the largest electrical contractors in Denmark.
- Headquarter in Aalborg, Jutland.
- [www.intego.dk](http://www.intego.dk)

# KEY FIGURES OF THE ELECTRICAL CONTRACTING SECTOR

## Market Segmentation

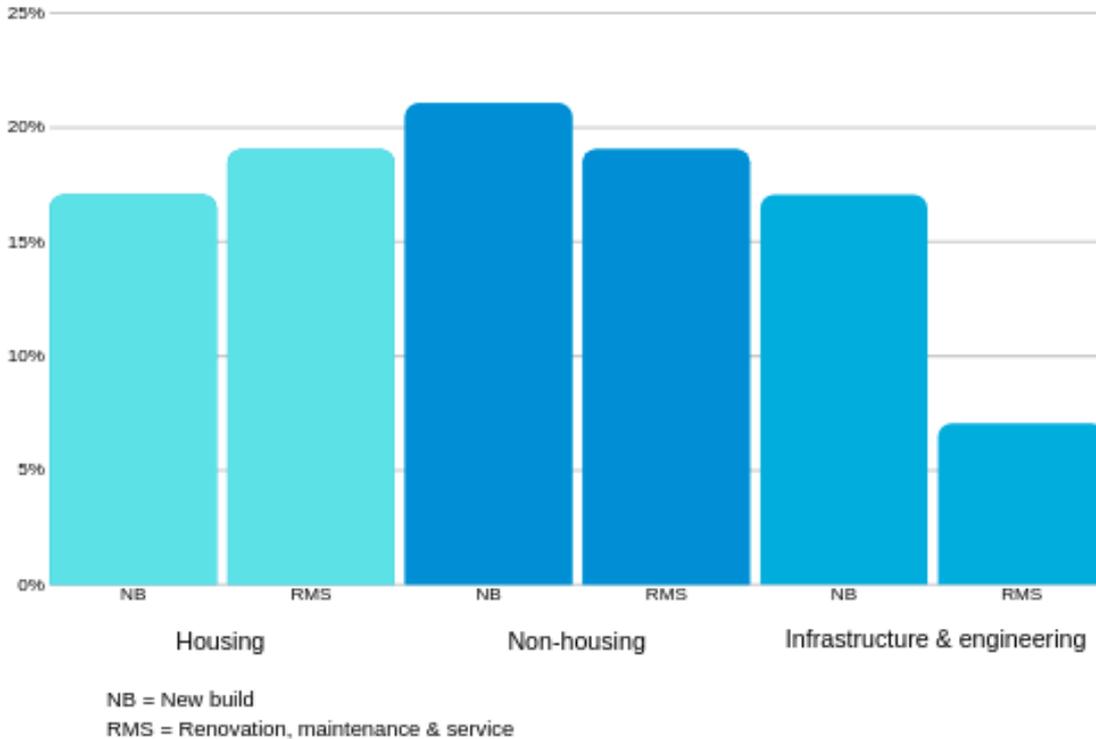


Figure 3: segmentation of electrical contractors' activities in countries covered by AIE membership, AIE 2019

As figure 3 shows, electrical contracting activities in the countries covered by AIE membership are evenly spread between the new build (NB) and the renovation, maintenance and servicing (RMS) of electrical installations in housing and non-housing building markets as well as infrastructure and engineering market.

These figures have to be understood as a European average and they can vary significantly from one country to another.

The national context will obviously affect market developments for our sector.

This encompasses a wide array of factors such as the demand for electrical work, and the governmental emphasis on climate action or on electrification. In Scotland, for instance, new buildings represent only 5% of the total building stock, which means that the majority of work is undertaken in the renovation, maintenance and service markets.

However, economic and worldwide events can also have a considerable impact at domestic level.

The financial crisis of 07-08 has affected all markets across Europe but looking at the electrical contracting sector, it becomes clear that the various national markets reacted differently, as national governments have tackled this crisis differently and with different time frames. For instance, the Danish market initially suffered from the crisis but went on to experience remarkable growth in the last 5 years and is expected to level out in the coming years. In contrast, the Scottish market is still recovering from the crisis and is experiencing steadier growth.

# KEY FIGURES OF THE ELECTRICAL CONTRACTING SECTOR

Investments can also trigger meaningful market developments. The energy transition has already motivated large-scale investments in climate action technologies and green solutions, which almost always use electricity. In relatively small countries, large investments can be consequential for the national market. This is the case in Sweden, where major ongoing and upcoming projects such as the Northvolt battery manufacturing plant, with its \$1 billion in funding, are driving the new build market for non-housing buildings to reach 48% of total national turnover. In France, the government's massive plan to cover 80% of the national territory with very high-speed, fiber optic network by 2022 is resulting in increased activities and jobs in the infrastructure market.

Some countries represented here have technological specificities that can cause their market segmentation to differ. In Norway, electrical contractors are involved in infrastructure works to a greater extent than in other countries. While the country itself is relatively small in terms of population, they have large shipyards and operate a significant number of offshore oil and gas platforms which both require extensive and complex electrical installations, acting as a driver of growth for the infrastructure market.

## Norway: the Champion of E-Mobility

Norway is famous in the electrification community as the frontrunner of this trend. Transport is infamously difficult to decarbonize but this has not scared Norwegian electrical contractors away.

Westcon Power & Automation, a member of the Norwegian electrical contractors' association Nelfo, have taken this a step further than just road cars as they have electrified maritime transport. They were responsible for the electrical system of "Future of the Fjords", an electric passenger ferry built by the Brødrene Aa shipyard.



Westcon relied on the latest in power electronics, engine technology and battery technology to achieve the necessary for a fully electric propulsion solution.

"Future of the Fjords", a 42m long carbon fiber, all-electric catamaran capable of carrying 400 passengers, makes 700 round trips across the fjords between Flåm and Gudvangen every year, making it the first emission free vessel of this kind.

The ferry is powered by two electric engines of 585 horsepower each, connected to a battery pack of 1800 kWh, about 40 times the power of a typical electric car. The installation allows the vessel to operate at a speed of 16 knots for 30 nautical miles between charges. Charging infrastructure for such an innovative vehicle was not readily available. As the ferry only has 20 minutes to charge its batteries, it needs 2,4 MW of charging capacity, which is challenging for charging points as well as for the onshore local power grid. Westcon worked with the shipyard to engineer a suitable charging station called the Powerdock.

The Powerdock is essentially a floating dock designed to house battery packs. This way, the Powerdock can offer flexible and smart charging as it can charge its batteries during peak and off-peak periods depending on demand in the local grid. As the ferry arrives, the batteries housed in the dock can unload the needed power within the available time frame. This innovative solution for short-haul maritime transport illustrates the breadth of competences electrical contractors can offer as well as how widely electrification can be deployed.

# KEY TRENDS IN THE ELECTRICAL CONTRACTING SECTOR

## Economic and Technological Trends

### An Overall Growing Sector

In the countries covered by AIE's membership, **our sub-sector has experienced a higher growth than the overall construction sector in recent years and is expected to grow to new heights in the next years.**

The reason behind this differentiation between electrical contracting and construction in general has to do with the specifics of the work of electrical contractors. Indeed, they deal with electricity, which is relied upon for the energy transition. The latter is the focus of regulatory efforts, seeking to promote clean technologies for buildings and for infrastructure.

### Decentralized Electrical and Digital Technologies Are Driving Growth

In particular, there is an increase in demand for decentralized power plants producing renewable energy, sometimes coupled with storage solutions, as well as for electric heating and transport technologies. Consumers are also increasingly asking for connected objects, controlled by energy management systems, to support energy efficiencies and improve safety, health and comfort in buildings.

The growing market of simple home entertainment and audiovisual devices is not having a positive impact on the electrical contracting sector, as such devices are often sold as part of "Do-It-Yourself" or "Plug-and-Play" kits.

On the other hand, electro-technical service companies are increasingly involved in the design, installation, integration, operation and maintenance of sophisticated smart building systems, in residential, commercial and industrial buildings, especially when energy management systems are part of the package.

When it comes to infrastructure and engineering activities, a market picking up quickly in some countries is electromobility infrastructure, with Norway being the undisputed leader. Besides electromobility, markets which our companies are increasingly involved in are power grids, IT and telecommunication networks, as well as smart cities. This trend is stronger in France, with the aforementioned fiber optics initiative, as well as in Germany, where the outdated telecommunication infrastructure calls for renovations.

European and national climate targets and regulations are proving to be the most important factor accelerating the deployment of all these technologies and solutions. The implementation of the recently adopted "Clean Energy for All Europeans Package", especially **the revised Renewable Energy Directive and Energy Performance of Buildings Directive, will certainly result in increased demand for electrical technologies in buildings and infrastructure in the next years, driving electrical contracting activities, and related jobs and turnover, up.**

## Which technologies will drive the electrical contracting sector's growth in the next 5 years?

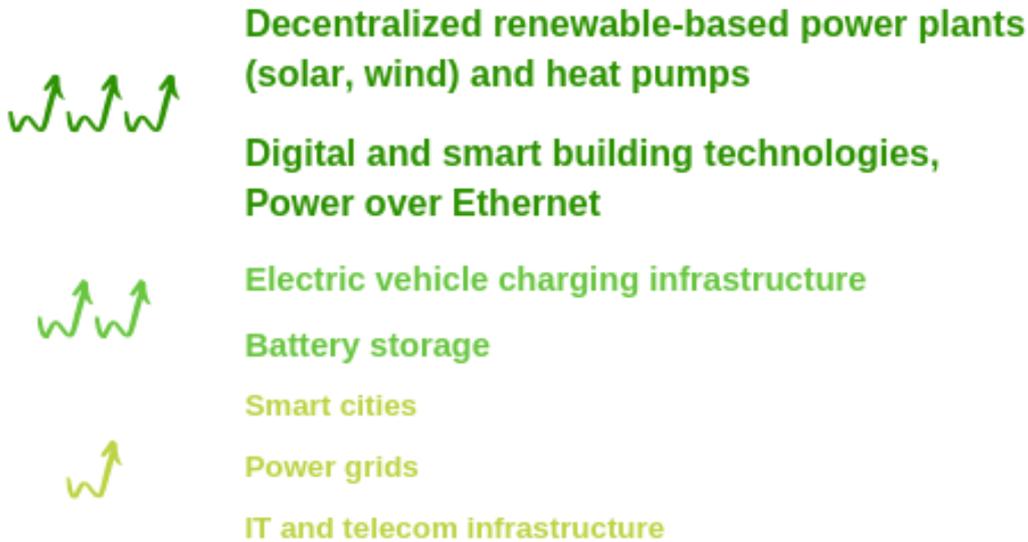


Figure 4: projected growth of technologies driving the electrical contracting sector expansion in the next 5 years, AIE 2019

Going forward, our sector could also benefit from **tougher carbon pricing rules**, as well as from **a better recognition of the fast decarbonization of the electricity mix** in several countries, when comparing electrical technologies with fossil-fuel based alternatives.

Finally, **standardization and data regulations** may have a role to play in the growth of the sector, provided they are successful in guaranteeing **non-discriminatory and easy access to data** produced by connected objects, thereby facilitating high-quality maintenance and operation by our companies.

### **Digitalization is transforming the sector in many ways**

The bulk of electrical contractors' activities is of course centered on hardware. The growth of decentralized, electrical technologies is resulting in more hardware work, including activities for the adaptation and refurbishment of the pre-existing installations, both in buildings and in public infrastructure (e.g. to accommodate power supply needs of electric vehicles).

In the future, the electrical installations in European buildings will require upgrades, as most of them are at least 30 years old and no longer in line with safety standards.

However, as highlighted in the previous section, **most of the time, small-scale electrical technologies come with a level of digitalization**. Therefore, a growing portion of the electrical contracting workforce in Europe is carrying out programming and configuration activities, integrating different connected machines and devices. Electro-technical businesses are also increasingly harvesting the data produced by these connected objects to provide more and higher quality maintenance.

**ELECTRICAL CONTRACTORS INTEGRATE DIFFERENT CONNECTED MACHINES AND DEVICES. THEY ALSO HARVEST DATA PRODUCED BY THESE OBJECTS TO PROVIDE MORE AND HIGHER QUALITY MAINTENANCE.**

# KEY TRENDS IN THE ELECTRICAL CONTRACTING SECTOR

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Digitalization is also impacting electrical contracting businesses in Europe in the way they work.

**Companies increasingly need to deal with digital orders and must be able to work with software and digital representations of the installations and products they use.** In all the surveyed countries, it is perceived that the use of BIM (Building Information Modelling) by electrical contractors will experience a moderate increase in the next 5 years. BIM has the potential to improve the efficiency and quality of electrical contractors' work, it can support the earlier involvement of our companies in the project design stage and can facilitate maintenance and refurbishments. **The acceleration of BIM uptake in our sector in the short- and medium-term is, however, expected to be conditional on governments' ability to make BIM a requirement for large and public projects, as well as on standardization organizations' ability to create an open BIM ecosystem.**

## Workforce and skill related trends

The aforementioned growing electrification and digitalization of our economy and society, driven primarily by energy and climate policies, as well as by increasingly connected lifestyles, are underpinning the expansion of the European electrical contracting sector.

Not only are electrical contractors scaling up their operations to meet higher market demand, but they are also diversifying their activities to harvest the business opportunities offered by new technologies.

This of course is having and will have strong repercussions on the number of professionals in the sector, but importantly it will also impact heavily workforce profiles..

While around 90% of the operatives in the electrical contracting sector come from electro-technical schools and electrical engineering tertiary education institutions, the educational background and skillset of our workforce are increasingly diversified.

**WHILE AROUND 90% OF THE OPERATIVES IN THE SECTOR COME FROM ELECTRO-TECHNICAL SCHOOLS AND ELECTRICAL ENGINEERING TERTIARY EDUCATION INSTITUTIONS, THE EDUCATIONAL BACKGROUND AND SKILLSET OF OUR WORKFORCE ARE INCREASINGLY DIVERSIFIED.**

To be able to design electrical, lighting, security and IT systems involving connected devices and machines and ensure that these communicate and interact properly, electrical contracting companies are seeking to hire employees with telecommunication and computer skills. These skills are also more and more needed to provide complex, data-driven operation and maintenance services.

Companies in the countries covered by AIE membership are reportedly seeking to hire also business managers, site supervisors, and professionals with expertise in marketing, finance and contract management.

**In short, the proportion of white-collar professionals with a tertiary degree is growing, while the share of blue-collar electricians with vocational education and training (VET) background is decreasing, while of course remaining predominant.**

# KEY TRENDS IN THE ELECTRICAL CONTRACTING SECTOR

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While this is a very positive evolution, **the sector is facing a growing skills shortage and skills mismatch challenge, leading to “bottleneck vacancies”**. This means that employers are unable to fill their vacancies, as there are not enough candidates on the market with the required skillset.

To address this challenge, a number of national electrical contractors’ associations are working in cooperation with education agencies and employment institutions towards **improving vocational education and training paths leading to our profession**, so that more students can have access to the electrical contracting sector and are equipped with the skills and competences sought by employers.

For instance, our German member association ZVEH is currently working with other partners on the reform of the national VET system for our sector in order to establish new VET paths, providing our future professionals with a wider skillset (so-called “Novellierung der Ausbildungsberufe im Elektrohandwerk” initiative) (1).

In France, our member associations FFIE and SERCE are engaged in an initiative called “Accord pour le développement des compétences dans la filière électrique”. This multi-stakeholder project aims to anticipate the skill needs along the electrical value chain (from technologies production, to electricity generation and distribution and electrical installations) in order to adapt the relevant qualifications and match skills supply and demand (2).

As on the one hand the market and technologies are evolving fast and on the other hand workers are retiring later, the sector is also facing the challenge of a **growing need for continuous learning**, to make sure workers’ skills and competences remain up to date.

Some AIE members have reported a growing number of operatives taking top-up training. Some members do however mention difficulties in attracting professionals to courses due to a lack of time and mainly incentives.

Going forward, political and financial support for the upskilling of our professionals will be pivotal to enabling the further growth of our sector and to providing electrical contractors with the tools they need to build a strong, green and electric Europe.

**POLITICAL AND FINANCIAL SUPPORT FOR THE UPSKILLING OF OUR PROFESSIONALS WILL BE PIVOTAL TO ENABLING THE FURTHER GROWTH OF OUR SECTOR AND TO PROVIDING ELECTRICAL CONTRACTORS WITH THE TOOLS THEY NEED TO BUILD A STRONG, GREEN AND ELECTRIC EUROPE.**

(1) More information here: <https://bit.ly/31dc5Wg>

(2) More information here: <https://bit.ly/2BgdsJd>



# ANNEXES

## **Annex I**

### **Methodology & Sources**

This report is the first attempt to provide a consolidate view of the electrical contracting sector in Europe. As clearly shown throughout this document, our sector is extremely varied and every country has its own specificities, which are linked with broad economic trends, construction sector activities, the national building stocks and their evolution, structures of and trends in the electricity sectors, specific, ongoing, big projects, etc.

We aim to reach a greater level of harmonization and detail for the next editions of this report and we welcome suggestions and input to improve our work.

The AIE team has been able to prepare this report and compute the numbers included in this report thanks to the key contribution from member associations active in several European countries.

Our member associations have provided us with figures and estimations covering their respective national markets. They have used aggregated information from their member companies and then made projections in case they do not cover the full electrical contracting market, i.e. not all electrical contracting businesses are their members.

To cover areas in which little or poor information is available from businesses, our member associations have taken data from the national statistical offices.

AIE membership covers 10 EU member states and 2 EFTA countries. To make projections covering all 28 members states of the EU and all 4 EFTA countries, we have first calculated the percentage of EU + EFTA GDP, calculated by the IMF, represented by the countries covered by our membership, and we then have multiplied our numbers by the percentage of GDP represented by the other countries.

As we have limited knowledge about the countries not covered by our membership, we have computed the European simple averages using only the information provided by our member associations.

The numbers contained in this report should therefore be considered as approximations.



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