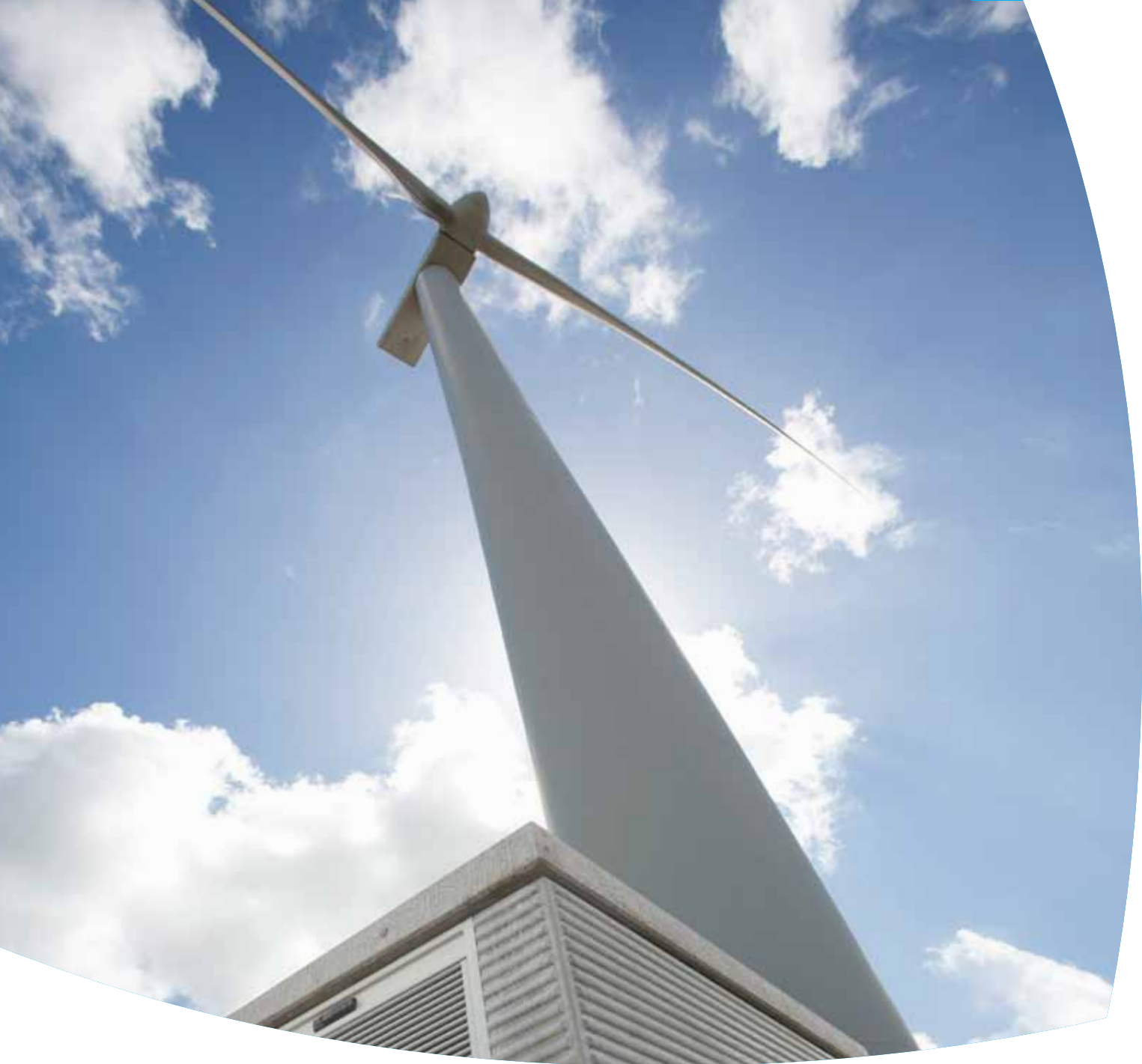




Energy solutions  
of the future



**ALFEN**  
POWER TO ADAPT



## Sustainable and innovative

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In addition to the transformer substations developed by Alfen, which are primarily delivered to grid operators, the organization constructs complete privately owned electricity grids for companies such as industrial corporations and greenhouse horticulturists. As the industry leader in energy distribution, Alfen is also regularly invited to participate in sustainable projects such as energy storage and the large scale connection of solar parks and wind turbines. With this service portfolio, Alfen has more than 75 years of experience as an expert in the field of transforming and distributing high and medium voltage electricity.

Building further on its long history and vast experience, Alfen continuously looks for pioneering innovations, such as electricity storage and remote automation of transformer substations. These solutions are developed and delivered to make the electric infrastructure even more intelligent and reliable. Together with strategic partners, all this work is done to help build the electricity grid of the future: sustainable and innovative.

# Power to Adapt

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With transformer substations, energy storage solutions, charge points for electric vehicles and a large portfolio of other products used to distribute energy, Alfen takes on a central role and is a connecting partner in the international electricity grid. The transformer substations delivered by Alfen supply millions of households and companies with energy, while the charge points recharge thousands of electric vehicles every single day.

As an industry leader in the assembly, delivery, management and maintenance of transformer substations, Alfen has the commanding electro technical foundation needed to develop the energy solutions of the future. We automate substations and connect solar farms, while we also offer energy storage systems and charge points for electric vehicles. We proactively engage with our clients to create tailored solutions for every situation, sharing our knowledge and innovative strength. We continuously educate a new generation of high-end electro technical professionals within our own organization. These are just few aspects of the energy mix that has powered Alfen for more than 75 years.



# Fields of expertise



## Transformer substations

Craftsmanship combined with decades of experience and innovative technology

Prefab transformer substations are our primary expertise. Alfen built its very first transformer substation over 50 years ago, and we have been working hard to equip them with the latest technological developments and innovative solutions ever since. Alfen transformer substations are tailored solutions, ensuring they provide matching answers to every situation and user profile. We take pride in the fact that we have delivered tens of thousands of stations to grid operators, industrial corporations and the horticultural industry.



## Energy storage

Sustainable, reliable and cost-efficient decentralized grid

The possibility and capacity to store electric energy will come to play a crucial role in our energy supply over the coming years. As an increasing number of companies and consumers generate renewable energy, while more people also opt for electric vehicles, the demands on the power grid change and become even more unpredictable. With Alfen's solution for energy storage, these peaks and troughs can be absorbed, thus eliminating the requirement to make significant investments in both the power grid and its connections. Our energy storage unit is also an excellent choice for energy trading and realizing autonomous electricity grids in combination with for instance solar or wind energy.





## Electricity grids

High and medium voltage grid for companies in the private sector

Based on our technical know-how, our experienced mechanics and a large number of relevant products for the distribution of electric energy, Alfen provides complete solutions in the field of high and medium voltage grids in the private domain. Our decades of experience with electric installations, experience with a vast amount of projects and the internal product development enables Alfen to offer expert advice about the most efficient layout of any electricity grid.



## Management & Maintenance

Full service for all medium voltage facilities

By maintaining a professional maintenance plan, problems are solved before they arise, while the energy supply is optimized and the medium voltage facility can operate for years without experiencing any issue. Alfen provides for all services needed to maintain your electric facilities and offers complete service and maintenance plans.





### Grid automation

Smart technology that provides insights in the electricity grid

Our Erado technology connects transformer substations with the internet and offers a large range of smart functionalities for measuring and managing transformer substations. This key to the future of our electricity grids is applicable for integration in both existing and new transformer substations. The development of Erado was a culmination of the know-how and experience obtained by Alfen during decades of work on electricity grids and transformer substations, combined with the extensive knowledge of charge points



### EV charge points

Reliable and high-tech charge points for electric vehicles

ICU Charging Equipment is our complete range of charge points to use at home, at work and at public places. These charge points are available in a large variety of charging capacities and functionalities. The unique combination of Alfen's transformer sub-stations, storage solutions and ICU's charge points allow for optimal balancing of local grids.





# Markets

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## Grid management

**Working together on the electricity grid of the future**

Alfen closely cooperates with various grid operators to future-proof the current electricity grid. By joining forces with grid operators, Alfen developed innovative solutions such as the ICU charge points for electric vehicles and Erado grid automation, while also equipping thousands of medium voltage facilities with digital remote fault passage indicators. Furthermore, Alfen's energy storage solution enables grid operators to manage, store and use energy generated in a decentralized configuration.

## Greenhouse horticulture

**An optimal and reliable energy supply for every greenhouse**

For over ten years, Alfen is the number one partner for companies in the greenhouse horticulture industry. We provide for CHP connections, transformer substations and construct complete, privately owned high and medium voltage grids. This means we have vast experience with aspects such as installing lighting stations and connecting generators. Alfen provides for complete projects, from the initial design phase all the way to daily maintenance.

## Industry


**Ideal solutions for a reliable energy supply**

Alfen is a highly reliable partner for industrial organizations in the field of distributing electric energy and the construction of electricity grids. Alfen delivers both separate prefab (transformer) stations and complete privately owned high and medium voltage grids. These are all fully serviced, turn-key solutions for the energy supply, which include all management and maintenance services.

## Renewable energy

**A reliable, profitable and sustainable energy supply**

As our society evolves toward a sustainable one, more and more electricity is generated from energy sources such as solar, wind and bio energy. In addition, electric energy is also increasingly being used to power electric vehicles. Alfen offers a portfolio of solutions to transform, store and distribute sustainable electric energy and is often partner in connecting solar parks and wind turbines.



# Contact

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