

*Polarium*

# Enabling endless energy



**We envision** a world with endless energy.

A world where energy no longer comes from finite sources. Where all energy is renewable, and the flow of energy never stops. We believe that this is within reach, but to get there we need great energy storage. And lots of it. Fast.

This is where we come in. We want to enable endless energy through great energy storage solutions.

**Green, safe, seamless.**



# This is Polarium

Polarium is a Swedish company dedicated to providing the best performing, safe and sustainable energy storage solutions built on lithium-ion technology. We were founded in 2015 with the purpose to empower a smart and sustainable world with the help of energy storage.

Our headquarters and R&D center are situated in Sweden and the manufacturing in Mexico and Vietnam. Through our global sales channels we serve customers worldwide.

Today, our market-leading solutions are in use on all continents and in all climate zones – from the equator to the Arctic – ensuring that the flow of energy never stops, while enabling our customers to reduce costs and carbon footprint.



Enabling endless energy

# “Energy storage is the missing link in the renewable energy system”

– Stefan Jansson, CEO of Polarium

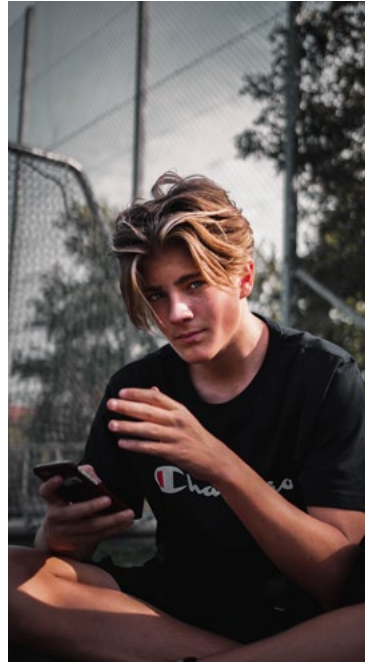


# Our segments

TELECOM

COMMERCIAL

INDUSTRIAL



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## SEGMENT

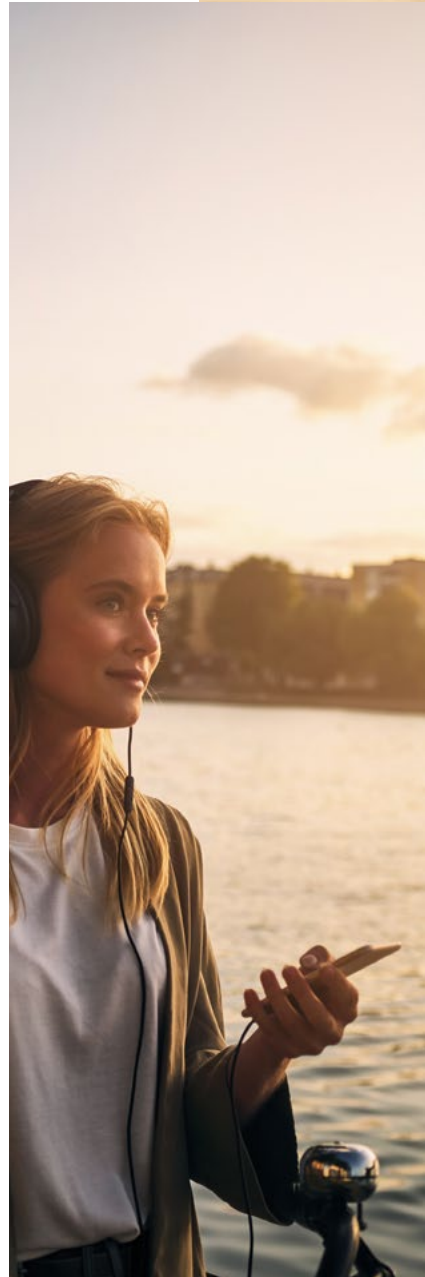
# Telecom

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In a world where everything is connected, connections must never be lost. Meanwhile the world needs to shift from fossil fuels to clean, green energy.

The telecom network of the future needs to be smarter, greener and more cost-effective. The roll-out of 5G will add millions of new nodes to already rapidly expanding networks. With 5G, more and more critical systems and applications will depend on always-on connectivity. Simply put, the connected world needs great power backup.

We created our series of smart lithium battery solutions to let you focus on your core business - while saving money and helping our planet at the same time.



SEGMENT

# Commercial

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Every commercial property owner and building manager should have energy storage top of mind. Costly power interruptions and harmful fossil fuels belong in the past. Polarium's modular energy storage solutions, enable you to substantially reduce cost and carbon emission.

As the public's environmental awareness and sensitivity grows, the use of smart and efficient energy storage will translate into a strong business benefit and competitive advantage. By storing energy when it is abundant, cost-efficient and green, you can take the necessary steps to migrate from fossil fuels and save money at the same time.

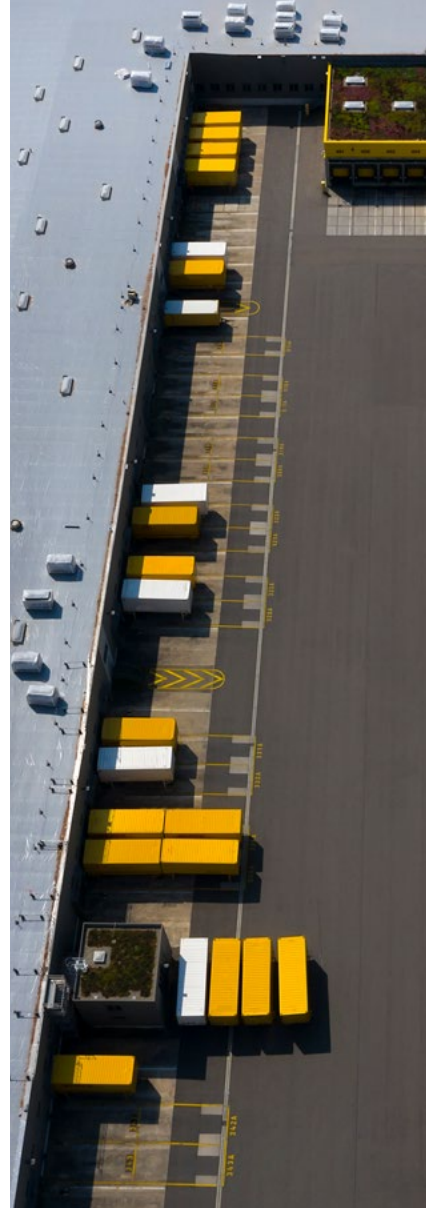
SEGMENT

# Industrial

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Industrial facilities are facing higher energy costs, as new decarbonized industry standards and government demands are set. Polarium's intelligent lithium-powered energy storage enables you to reduce operating costs and optimize energy usage when needed the most.

Pairing energy storage solutions with renewable sources such as solar or wind allows you to maximize sustainable production and store excess green energy when it is produced. A game-changer for the industries and ultimately for the environment. Secure a first-mover advantage and stay ahead of your competitors.







# Our Technology

## Safe

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Our top priority is – and always will be – safety. All our products are designed with your safety in mind - thoroughly verified and certified for safe operation. We have a completely redundant safety system in our BMS, including electronically controlled circuit breakers, and thorough control in the design and manufacturing of every system component. We also have advanced solutions for propagation prevention. The batteries are protected during transportation, installation, and use, even in the toughest conditions. Polarium is safe every step of the way.

## Simple

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In a few simple steps, you're good to go. Advanced technology made easy to use, giving you complete control. Easy installation and zero maintenance – just connect the cables and turn it on. Our products are plug-and-play compatible with existing power systems due to our patented charge control function. Configuration and testing are automatic. Polarium's solutions are designed to support a wide range of deployment configurations and integration partners, with low and high voltage battery systems.



## Strong

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We have installations in more than 50 countries, from the equator to the Arctic. Our products are strong, robust, and of superior quality with a guarantee to provide a long-lasting life. They just keep working, even in the most extreme conditions and environments. The robust design includes optional ingress protection of the electronics. A wide range of lithium cell chemistries targeting different site conditions make our offering stronger than any other alternative on the market.

## Smart

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Due to the embedded intelligence of our lithium batteries, you always know the state of charge (available capacity in real time) and the state of health (available life for optimal planning and usage). With its remote management system, our lithium-powered backup solution is maintenance-free and gives you full control. You can also manage your on-site climate control system based on the internal temperature of your lithium batteries or you can shut down non-prioritized loads. With the smart information already embedded in your lithium batteries, you can control, plan, reduce costs, and reduce environmental impact.



## Secure

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You can feel secure, knowing that your Polarium solution is protected. In many parts of the world, lead-acid batteries are stolen for scrap metal, private use, or re-sale. Polarium's lithium battery modules eliminate the first two reasons for theft. To make resale unattractive, we have developed multiple anti-theft features for our batteries, which prevent discharge of battery modules if removed from installations. In addition, our batteries are prepared for our optional GPS tracker and marking options for recovery in case of theft.

### Anti-Theft Systems

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#### **Theft protection solutions**

- Anti-theft features

#### **Theft recovery solutions**

- Tracker
- Branding
- Engraving

## Sustainable

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Polarium's lithium batteries are fully recyclable and meet all RoHS, WEEE and REACH requirements. Energy turn-around losses typically amount to only a few percent points, which is better than other lithium batteries (which normally record turn-around losses of up to 5%) and lead-acid batteries (normally up to 30%). All our solutions and products are designed to have exceptionally long lifetime. Our low-carbon manufacturing and installation, efficient operations, and the fact that our products are recyclable – all contributes to a circular business model.



[www.polarium.com](http://www.polarium.com)