

A person wearing a white full-body protective suit, a blue respirator mask with a large circular filter, and blue gloves. They are holding a rectangular object above their head with both hands. The word "northvolt" is visible on the right side of the suit. The background is a grey corrugated metal wall.

Join the #firstshift

A guide to the opportunities
of working at Northvolt Ett

Joining the revolution

An industrial revolution is being born, and it's electric. Society and industry will change for the better and we'll tackle the climate crisis in the process.

At Northvolt, we're playing our part by establishing a European manufacturing base for a key component in the new energy landscape – batteries. We've built the factory. Now we need skilled technicians, operators and leaders to join the 3,000-person team that will work at Northvolt Ett.

The First Shift at Northvolt Ett begins in November 2021. Joining us means a fresh new career in the industrial revolution that will define the 21st century. We'll welcome you, train you and support your work in a new kind of manufacturing industry. So join us in the journey to a greener future. Join the First Shift.



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About Northvolt

There is a great and historic change taking place today. The switch from fossil fuels to electric is impacting every corner of society and industry. The world is changing for the better and there is one common factor to it all... batteries.

The world needs batteries. Lots of batteries. And for Europe in particular, we need to establish an entirely new manufacturing industry in order to ensure we can supply Europe from Europe.

Northvolt Ett is Europe's first homegrown battery gigafactory and a direct response to the new industrial revolution. Fully built, it will produce enough battery cells for over one million electric vehicles every year, but it will also deliver cells to other industries and applications including heavy industrial machinery, grid energy storage, electric scooters and much, much more.

Northvolt Ett is a state-of-the-art facility, built with circularity and sustainability in mind, but also with a view to the future of manufacturing – highly automated, digital, responsive to the people who work there.

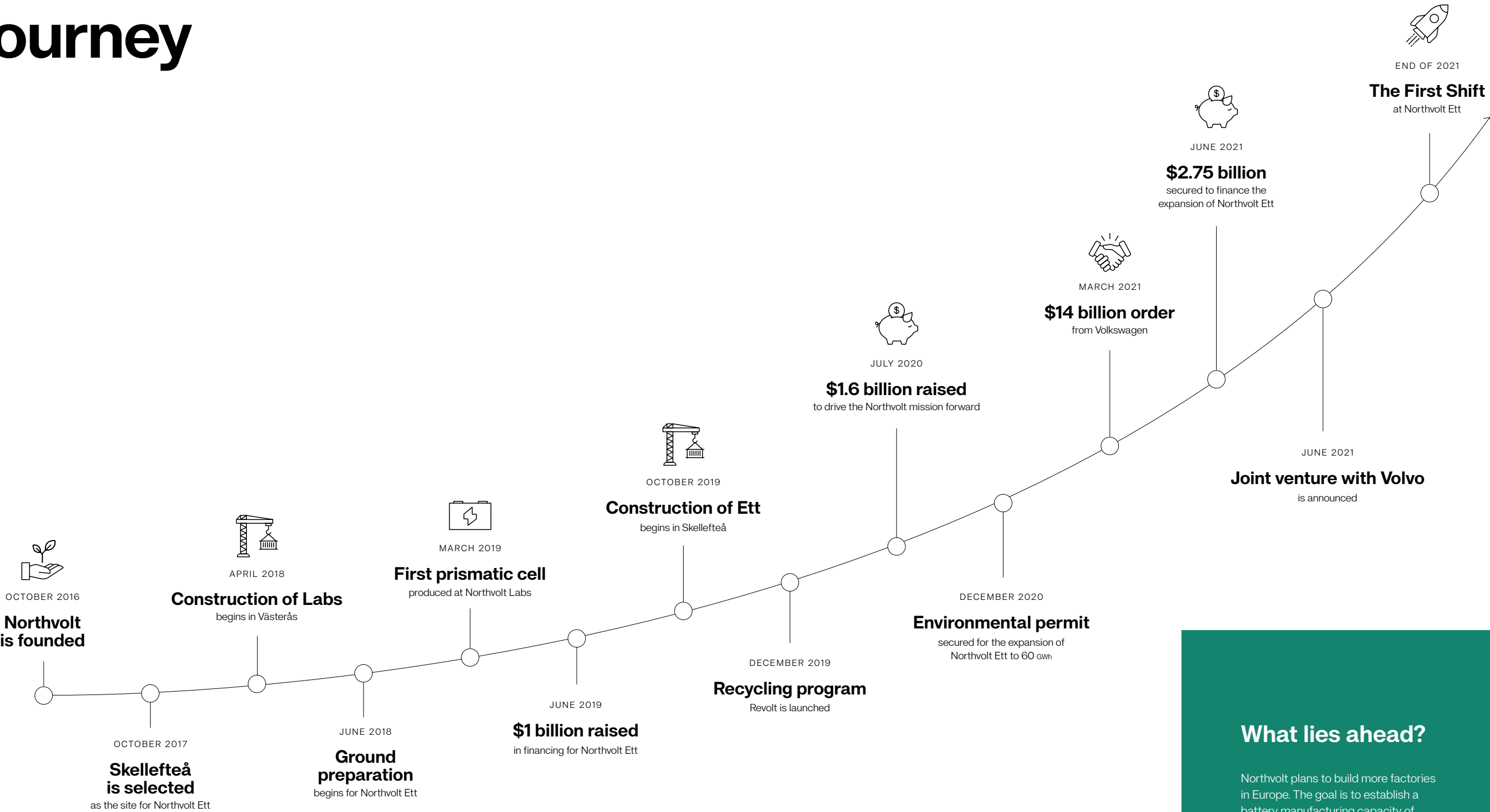
But behind the technology, we know that it's people that will make this all a success. The first part of factory is built and the equipment has been installed. But without skilled, passionate people on the production lines, it's all for nothing. We're now looking for the team to be a part of the First Shift at Northvolt Ett. Some of Europe's largest companies have put their faith in Northvolt, but now we're looking to you to help us drive this mission forward.

So join us on the journey to a greener future. Find your place in Northvolt and choose to work with something you'll be proud to tell your grandchildren about.



**Join the
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Northvolt's journey









What lies ahead?

Northvolt plans to build more factories in Europe. The goal is to establish a battery manufacturing capacity of **150 GWh** per year, by 2030.

Who are we recruiting?

By 2025, we expect around 3,000 people will work at Northvolt Ett, with about 85% working in production. For these positions we're looking for both experienced production workers, as well as those looking to start a new career.

Key production roles we're recruiting:

-  **Operators**
-  **Maintenance technicians**
-  **Quality technicians**
-  **Quality engineers**
-  **Shift leaders**
-  **Production managers**



What we offer



Clean, safe, modern
work environment



Competitive salaries
and **stock-options**



Career prospects in a
future-secure industry



Unions and
collective agreements



Available roles



**Can't find anything
for you?**

Search the complete list of positions available
at Northvolt on our career webpage.

northvolt.com/career

Operator

As an Operator, you work in the core of Northvolt – where battery cells are manufactured. Key duties involve control and monitoring of the machines, replenishing material and contributing to continuous improvements on the line.

Precise tasks and what your working day looks like depends on where in production you work. In some Operator roles you don't work close to machines, but instead service workstations with materials, ensure batteries are packed and ready to leave the factory, or support production in other vital ways.

Beneficial previous experiences

Work experience in industries such as paper mills, food, chemicals, electronics, oil and gas production or smelters and/ or training as an operator from industrial high schools or similar.

Maintenance Technician

Northvolt Maintenance Technicians are tasked with ensuring that machinery and production equipment are kept in good condition, and receive the service needed to prevent downtime.

Should downtime occur, however, it is the Maintenance Technicians who help to investigate what's wrong, how to fix it and how it can be avoided in the future. The work is critical to keeping production lines working optimally.

Beneficial previous experiences

Engineering education from industrial high schools. Experience working with pneumatics, hydraulics and automation as well as maintenance of machines and equipment.

Production Engineer

Working as a Production Engineer at Northvolt involves participating in and running projects to increase production capacity and efficiency. It can be planning installation of new equipment, analyzing production flows or other problem solving to improve production yields and quality.

Beneficial previous experiences

Bachelor's or Master's degree in chemical, mechanical, industrial or manufacturing engineering or equivalent. In addition, work experience from industries such as paper mills, smelters, pharmaceuticals, food or refineries, is also relevant.



Quality Technician

A Quality Technician at Northvolt Ett works with standard and state-of-the-art quality control tests and equipment in order to ensure materials and battery cells being produced are of an excellent standard. Chemical analysis of sample materials, visual inspection of cells and dialogue with production teams are all common activities.

Beneficial previous experiences

Having worked in a lab environment before is a merit, as is having some kind of education in basic quality systems or similar.

Quality Engineer

A Quality Engineer works closely with Quality Technicians. Often in a lab environment, they work to increase the quality of the product by improving production processes. A Quality Engineer spends time on the production lines too, and works closely with the production engineers.

Beneficial previous experiences

Education as a Bachelor or Master of Science in Production Engineering or Quality.

Shift Leader

A Shift Leader is responsible for and works alongside the team. A key part of the role is to ensure production is meeting daily targets and monitoring the overall workings of the team and machines. Additionally, Shift Leaders work with training staff and implementing new processes.

Beneficial previous experiences

Previous work experience in industries such as paper mills, food, chemicals, electronics, and/or training as an operator from industrial high school or similar. In addition, experience in leadership and character for building strong teams and developing others.

Production Manager

A Production Manager is responsible for a particular area of the production line. Here, they work with planning production, staffing and budgets. Developing and improving production processes is also big part of a Production Manager’s work. They also participate in work on collective bargaining issues. As Production Manager, you will regularly deal with larger issues regarding different aspects of production, and engage with management of Northvolt Ett to find solutions.

Beneficial previous experiences

Previous work experience in relevant industries or a relevant education. In addition, experience in project leadership is welcomed.



Join the
#firstshift



Working at Ett

Joining the First Shift and working at Northvolt Ett is an opportunity to become part of history in the making. For Northvolt, having a well-feeling staff is just as important as having well-functioning production. For this reason we provide continuous opportunities for training and growth.

What kind of employment can I get?
Everyone employed by Northvolt is offered an initial temporary probationary period which automatically turns into a permanent position if everything is well. This provides both us and you an opportunity to feel that this is right and that we feel comfortable together.





What are the development opportunities?
At Northvolt, we place the individual in center and see development as a key part of our DNA. When we hire you, we look both at what you know today and at your potential to grow with us. Many of those who started at Northvolt have quickly grown into new roles through our development tracks.

What will I learn?
We apply market-based wage setting, in accordance with collective agreements. More details will be provided during your recruitment process.

What working hours will you have?
This depends on which part of the production line you work in. Production will be running 24 hours a day, 7 days a week, so you can expect shifts rotating between days, evenings, nights and weekends.

Is it dangerous to work in battery cell production?
No, but as in all production environments, there are risks. In battery cell production there are various chemicals and materials that require special training in handling and storage, as well as special protective equipment. As part of your initial training, we'll introduce you to all of this, and thereafter provide on-going opportunities to expand your skills and experiences to prepare you for growing into more senior roles.

Northvolt Ett in numbers

- 
SIZE
1,500,000 m²
 fully built
- 
PRODUCTION
60 GWh / year
 enough for 1,000,000 electric cars
- 
STAFFING
3,000 employees
 by 2025
- 
POWER CONSUMPTION
360 MW

Employee benefits

At Northvolt, our employees are just as important as our mission. Which is why we offer a variety of benefits to each and every one of our team.



Collective Bargaining Agreement

An agreement set by four of Sweden’s biggest labor unions, regulating work conditions, wages, employee safety and insurances, vacation, as well as offering you protection in work-related disputes.



Pension & parental benefits

Receive an occupational pension providing additional savings on top of the statutory pension, as well as additional parental benefits (making your total parental leave benefit up to 90% of your gross salary).



Private healthcare insurance

Access medical services 24/7 through Northvolt’s healthcare insurance. Receive support for medical or psychological symptoms and gain quick access to prescriptions or referrals — all free of charge.



Warrants

Share in the success you’ve played a key part in achieving by participating in the Northvolt incentive program — offering the opportunity to acquire Northvolt shares at a fixed price.



Wellness grant

Work out or get a massage, it’s all on us! Northvolt offers all employees a wellness grant of 3,000 SEK per year. With over 100 different wellness activities included, there’s surely something for everyone.



How we work at Ett

Working at Northvolt Ett means working in an automated production environment dedicated to delivering batteries of the highest quality. In this chapter you can find out more about what to expect.

How does battery manufacturing work?

The production process is divided into two large blocks that we refer to as upstream and downstream. The upstream process involves chemical processing, and it's here we produce active cathode material from raw materials. In downstream blocks, we manufacture electrodes and assemble battery cells.

What does “automated production” mean?

Automated production refers to processes which are self-operating, but overseen by technicians. It's part of a new kind of industry characterized by presence of digital interfaces and robotics, sometimes called Industry 4.0. Automation technicians work with installing and running the machines, and

their duties also include maintaining operations and supporting preventive maintenance.

What is the factory environment like?

Production of battery materials and cells requires highly controlled environments in order to assure high-quality products. Therefore, it's important that much of the cell production process takes place in clean & dry rooms – environments which limit dirt and particles and are temperature and humidity controlled.

Working in a clean & dry room is similar to working in a lab environment, and it requires specific training and protective clothing.

The factory runs 24/7?

Correct. The lines will come offline from time to time for maintenance, but generally they are operating every day of the year. This means we work with several shifts a day.

Did you know?



There are over
80 nationalities



We're aiming for at least
50% women



Average age at Northvolt is
36 years

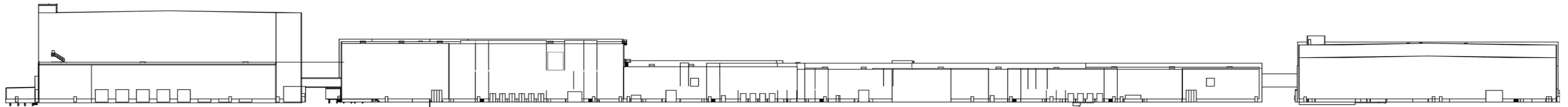


The factory at a glance

Did you know?

Northvolt Ett is unique in its featuring upstream production, downstream production and battery recycling. By doing this, we gain full control over the product and can build better batteries, at lower cost.

We call this vertical integration.



1 Upstream

This is where battery cell manufacturing begins. Raw materials including lithium, nickel, manganese and cobalt are mixed to create cathode 'active material'. It is the active material that enables the battery to store energy. The building is 35 meters high to accommodate a dense network of pipes, ovens and chemical processing equipment.

2 Slurry mixing

In this building, anode and cathode active materials are separately mixed with other materials to produce anode and cathode mixtures called 'slurries'. The chemicals in the mixture prevent the active material from breaking down – so that we can produce a safe, high-performance and long-lasting battery.

3 Electrode manufacturing

Here, the anode and cathode slurries are coated onto copper and aluminum foils to create anode and cathode electrodes. On separate lines, the anode and cathode electrode is oven-dried before being pressed and collected into a large roll. The reason why the building is so long is that all steps must take place one after the other in a straight line.

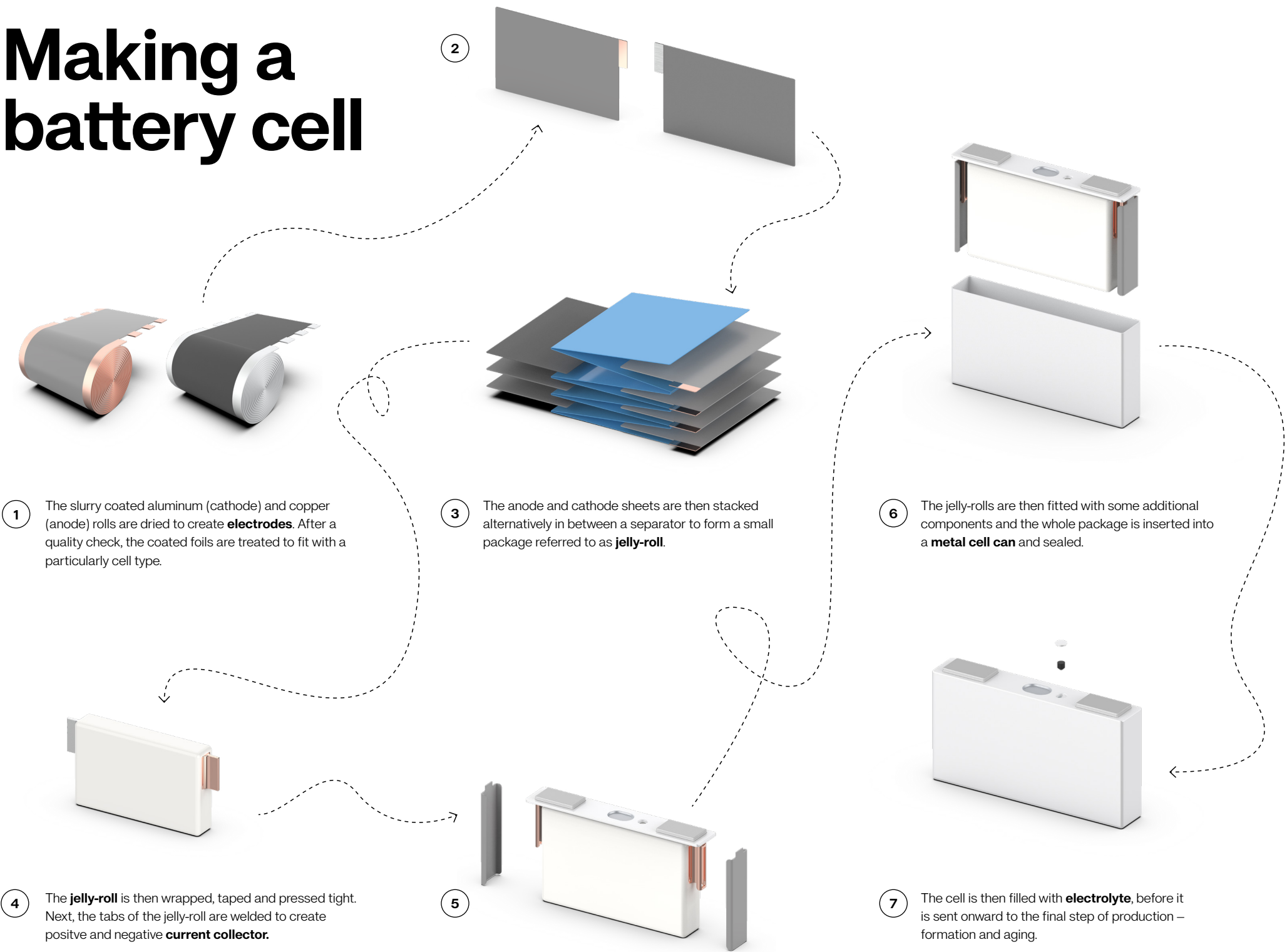
4 Cell assembly

At this point in the production process, the electrode rolls are fed into machines that cut and prepare the material into smaller products. The electrode is then either rolled up (for cylindrical cells) or stacked (for prismatic cells) into small packages, which are then fitted into a metal can. Finally, the cells are filled with electrolyte and sealed.

5 Formation & aging

This is the last step in production process and it's about bringing the battery cells to life. To do this, we complete many charge-discharge cycles under controlled conditions. We do this to make sure that the cell works properly, but also because its first few cycles are absolutely crucial to how it will perform for the rest of its life.

Making a battery cell

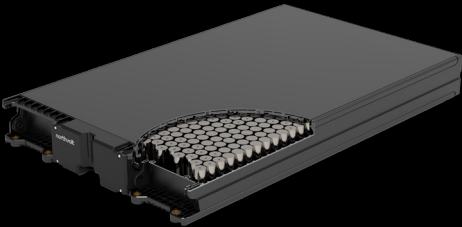


A cylindrical battery cell

Prismatic vs Cylindrical

At Northvolt, we produce two types of battery cells — cylindrical and prismatic. Cylindrical cells look like your classic AA-battery, while prismatic cells are like old-fashioned video tapes. The graphic to the left shows production of prismatic cells.

This is a Voltblock



Cells vs Batteries

Cells are the smallest unit we produce. Once multiple cells are set together into a system, we call this a battery. The Voltblock shown above is a type of battery called a module.

The road to Northvolt

Battery production is a new industry for Europe. So naturally, there are very few people in Europe with experience of working in this area. But that's okay! Many manufacturing roles of other industries are of great use at Northvolt Ett.

Many of our existing production staff based down in our pilot factory, Northvolt Labs, have arrived from the paper, lumber, metals processing and vehicle manufacturing industries, and we know first-hand how useful this is. To everyone who joins, we provide a program of training to prepare you for your role.

What does the introduction process look like?

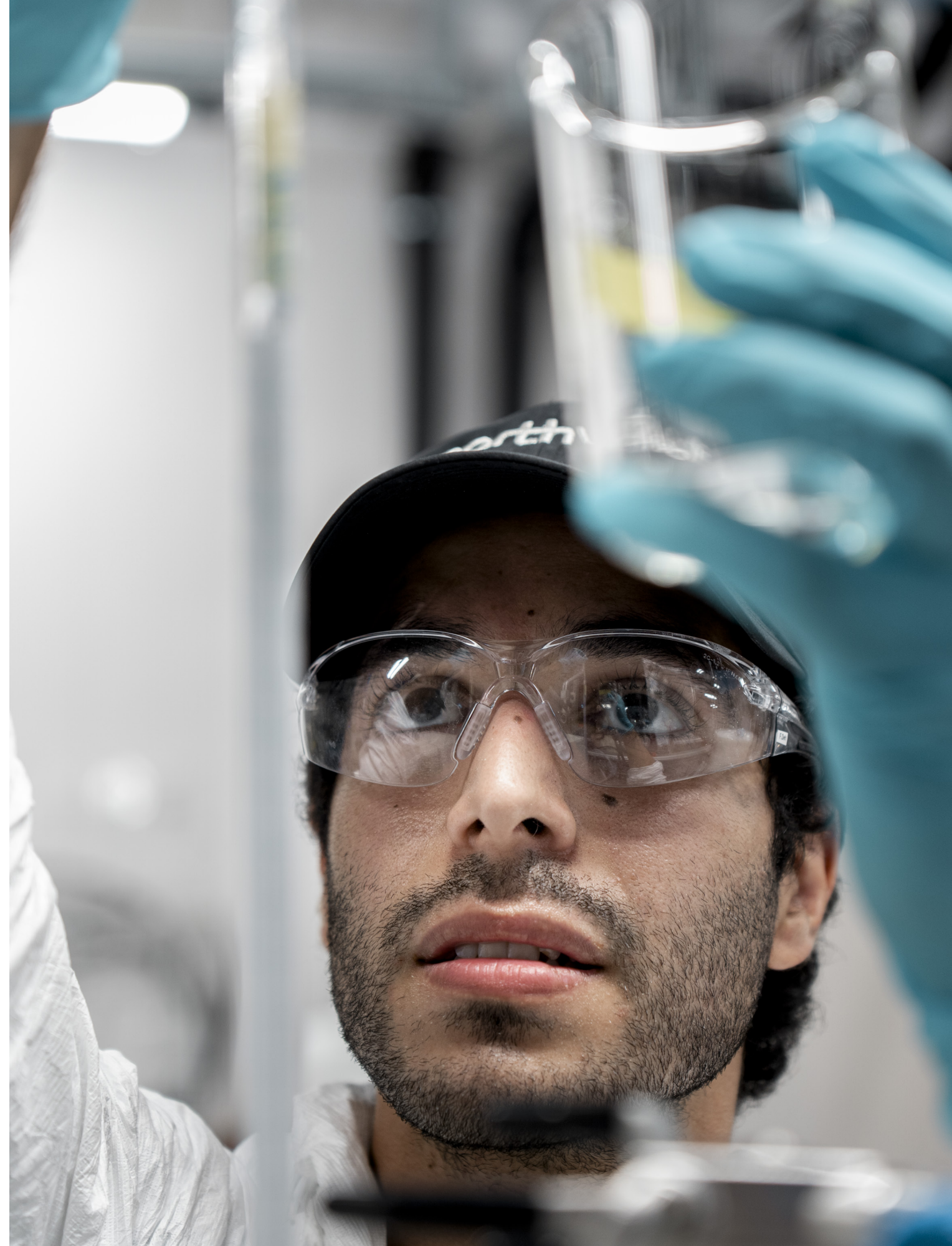
When you begin at Northvolt, you'll be set up on a program to provide you with all the training you require.

Over the course of your first 100 days, this training provides an introduction to Northvolt, guides you through a basic understanding of what Northvolt Ett is and involves production environment and safety orientation.

We place a great focus on preparing you for working around chemicals and other materials encountered in the production environment, as well as working in clean & dry rooms. Specific to your role, you'll also receive training on production processes and machines.

Much of the training is hands-on and practical. You will work side-by-side with some of our existing production teams – who just like you began not long ago – as well as our machine and process experts. We don't expect anyone to be an expert from day one – but with Northvolt, you can become one. As one of the first people on the production lines of Northvolt Ett, you'll be part of setting the Northvolt standard for excellence in manufacturing that will come to be applied at other factories we're developing.

Not only will you be a part of bringing Northvolt Ett to life, but you'll be gaining skills for working in a modern production environment that will set you up for years to come.






Employee journey

🕒 DAY ZERO

Preboarding

After signing your contract, we provide various materials to get you settled and familiar in your position at Northvolt Ett.

We also offer support on a number of other matters, to you and your family:

-  **Relocation, immigration & VISAs**
-  **Enrollment into schools for children**
-  **Other assistance to get you comfortable**

We also offer Swedish classes (and soon English classes)

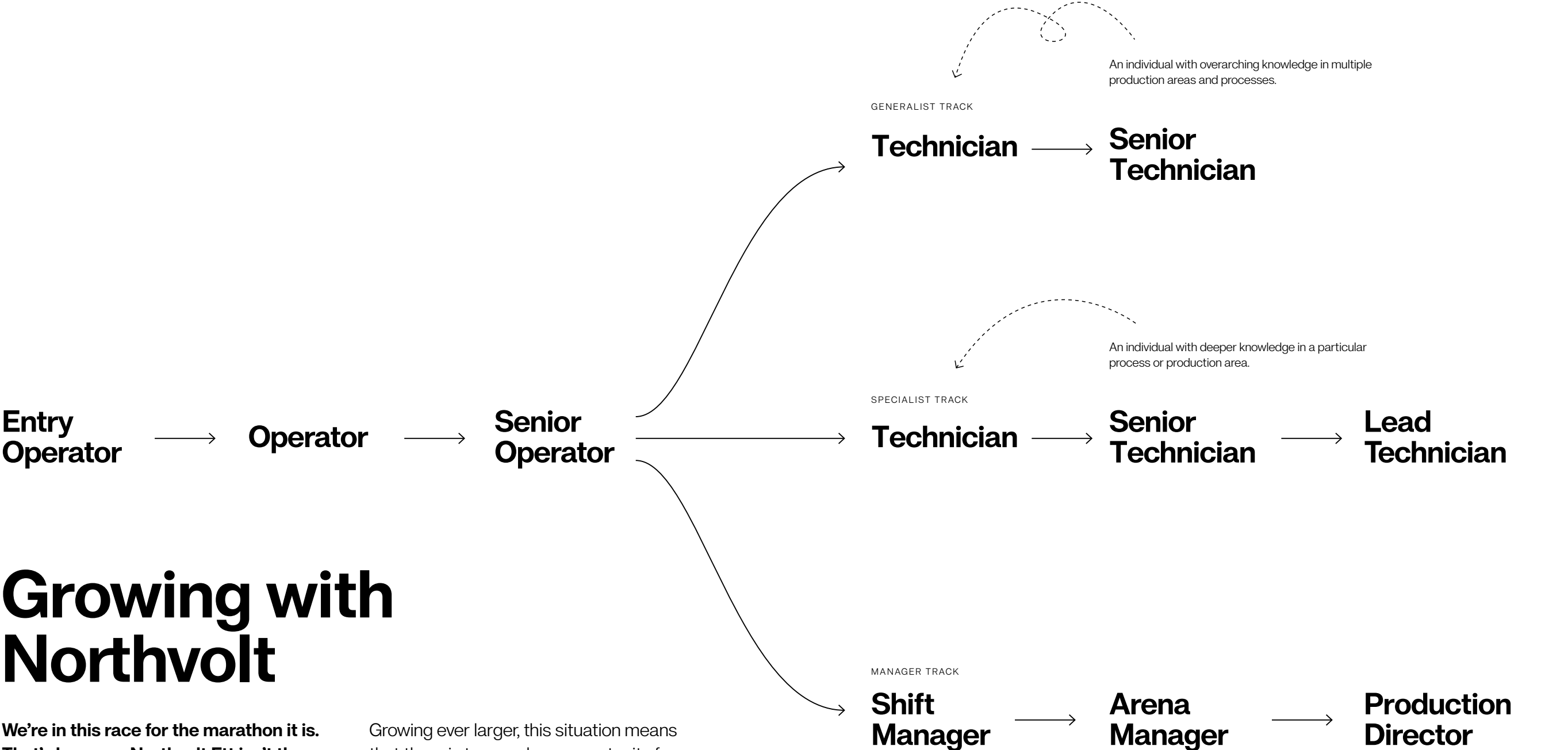
🕒 EARLY WEEKS AT NORTHVOLT ETT

Onboarding

In your first days and weeks with Northvolt, you'll participate in a program of onboarding featuring:

-  **Orientation**
An introduction to Northvolt, its working culture and meetings with new colleagues.
-  **Manufacturing Essentials Training**
A mix of lectures and workshops introducing you to safety, chemicals, production, clean & dry rooms and quality control at Northvolt.
-  **Role-specific training**
with your team
-  **True North**
A 3-day leadership program that all Northvolt Ett employees attend.





Growing with Northvolt


We're in this race for the marathon it is. That's because Northvolt Ett isn't the final goal – it's just the beginning. And this brings great opportunities for those who join early.

Northvolt Ett will continue to expand for several more years to reach a capacity of 60 GWh. In the meanwhile, we'll be building new factories.

Growing ever larger, this situation means that there is tremendous opportunity for you to learn, develop and advance into more senior roles within the company. We want to see you grow with us. We need you today, but we need you even more in the future, once you've gained experience on the line.



We're actively recruiting people for junior level roles who show signs of promise for **advancement into positions of leadership.**



Equivalent advances in seniority can be made in other tracks, including in **maintenance, quality and production engineer**

Moving to Skellefteå

Northvolt Ett being located just a few kilometers outside the city of Skellefteå, we expect a lot of the production staff will arrive to us from other cities or countries. Relocation is something we plan for and whole-heartedly support you with. Rest assured, you have a fantastic city waiting for you.

Can you help me find accommodation in Skellefteå?

Absolutely! We have employees in Skellefteå working on these matters.

My partner will also need a job. Can you help out with that?

Sure. We're in contact with a number of recruitment agencies and can support your partner's way into working life in Skellefteå. The region already enjoys one of the lowest unemployment rates in Sweden, and aside from jobs at Northvolt, Skellefteå is seeing a great increase new jobs in other sectors.

What schools are there in Skellefteå for my children?

There's great options for education at every level, including college and university. Alongside

Swedish-language schools, the city offers education in English from grade 1 to 12 (ages 7 to 18). Find out more at Skellefteå municipality's website.

Can you support me getting a residency permit?

Yes! Over half of all people working at Northvolt are from outside Sweden. So we're familiar with the processes of getting you settled. We have processes and people to help with everything from PIN numbers to bank accounts and schools.

How can I commute to Northvolt Ett?

A public bus route can be used to reach Northvolt Ett, alternately you can drive yourself or even cycle. New commuter options are also under development.

What can I expect from Skellefteå as a city?

Northern lights and midnight sun, life in Skellefteå is filled with wonders. You'll quickly realize that Skellefteå is a city on a rise. With a growing public sector, more than 2,000 new jobs are expected by 2030. New housing, cultural attractions and infrastructure is taking shape each day. And you can be a part of this journey.

Skellefte-who?

Skellefteå is a city on the rise. It's home to some 36,000 people, and enjoys phenomenal access to the beautiful nature of northern Sweden all year round. A rising bar, restaurant and cultural scene is also open to its residents. Away from relaxing, the city is full of opportunities for employment outside of Northvolt and excellent education options from preschools to universities and colleges.



Like what you see?

Check out more of the city on VisitSkellefteå's Instagram: [@visitskellefteå](#)

OUR PARTNERS



CONTACT US

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northvolt.com/firstshift