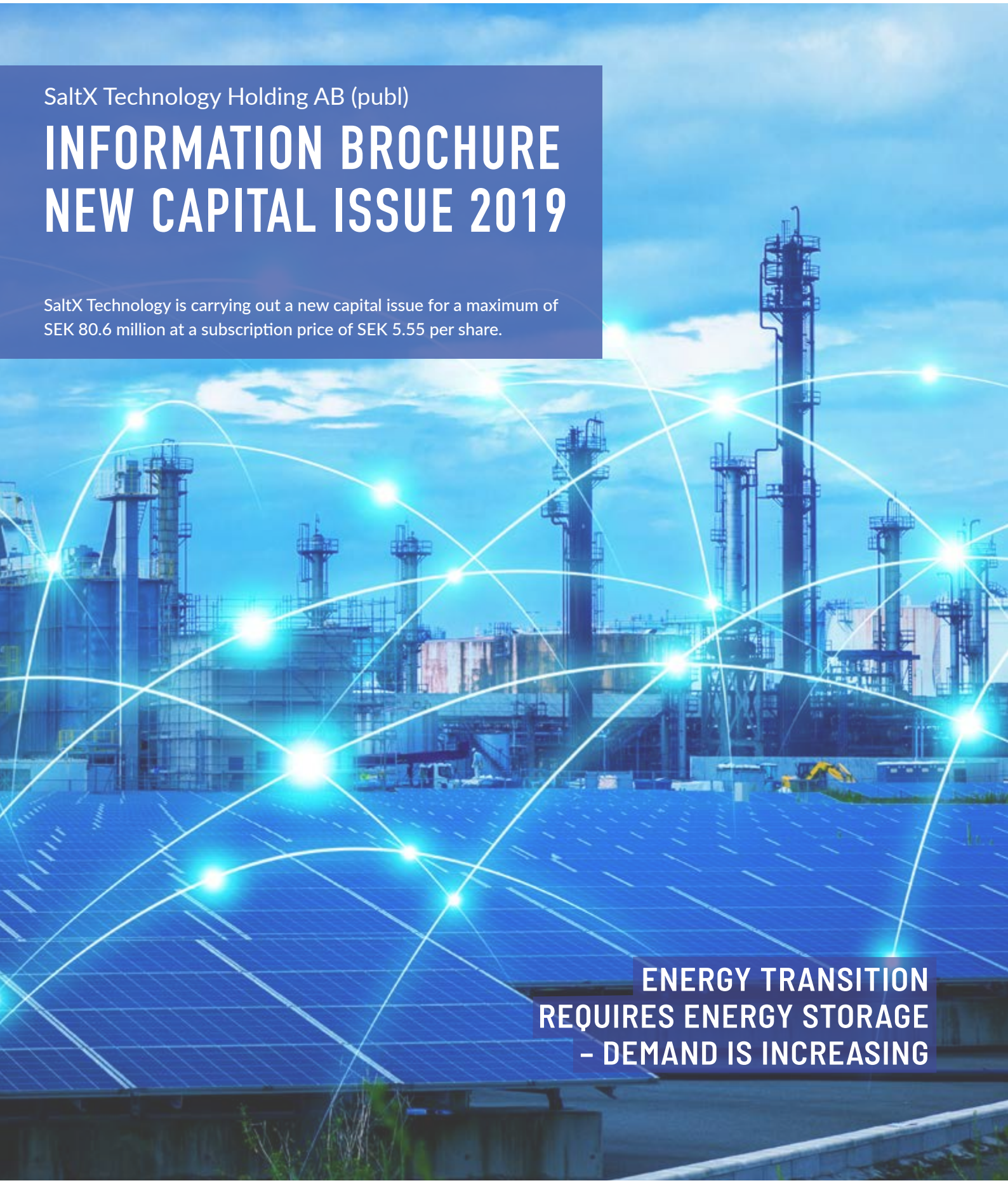
SaltX Technology

SaltX Technology Holding AB (publ)

INFORMATION BROCHURE NEW CAPITAL ISSUE 2019

SaltX Technology is carrying out a new capital issue for a maximum of SEK 80.6 million at a subscription price of SEK 5.55 per share.



CONTENTS

Summary	3
The CEO's adress	4
How the funds will be used	8
Fluidizing Bed – Saltx's future reactor	9
Saltx is establishing in key markets	10
The surface layer makes Saltx solution unique	11
Great interest in energy storage in the market	12
Interview with Markus Witt, Vattenfall Germany	13
The new strategy is being implemented	14
The way forward to large scale energy storage	15
Saltx maximizes cooperation with its partners	16
The views of Saltx's system partners	17
Great global interest in Saltx's technical solution	20
Saltx and Ahlstrom-mMunksjö are investing in the material of the future – Graphene	21
Other information	24

SUMMARY

RIGHTS ISSUE

- In total, the rights issue amounts to approximately SEK 80.6 million before issue costs
- The new capital issue is guaranteed in full
- Shareholders receive one (1) subscription right for each (1) share held and five (5) subscription rights give the right to subscribe for one (1 share)
- The subscription price is SEK 5.55 per share
- ovember 14 – 28, 2019 – Subscription period
- November 14 – 26, 2019 – Trading in subscription rights

IMPORTANT INFORMATION

This announcement (hereafter referred to as the information brochure) is not and should not be considered a prospectus in accordance with applicable laws and regulations and does not constitute a recommendation to subscribe for shares in SaltX. The information in this information brochure should be regarded as marketing material. The invitation to shareholders and the general public to subscribe for shares is only through the prospectus produced for the offer approved by Finansinspektionen (Sweden's financial supervisory authority) on November 13, 2019 (the "Prospectus") which includes, among other things, a presentation of SaltX, the new capital issue and the risks associated with an investment in SaltX and participation in the offer. This approval shall not be construed as an approval of the securities offered. Prospective investors are advised to read the Prospectus before making an investment decision in order to fully understand the potential risks and benefits associated with the decision to invest in the securities. The Prospectus has been published and is available at SaltX's head office, Västertorpsvägen 135, 129 44 Hägersten and on SaltX's website www.saltxtechnology.com. The prospectus is also available on the website of the issuing institution, Eminova Fondkommission AB, www.eminova.se. Prospectuses and application forms can also be obtained free of charge from the issuing institution Eminova Fondkommission AB.

The offer to acquire shares in the Company in accordance with the terms of the Prospectus is not addressed to persons domiciled in the USA, Canada, Australia, New Zealand, Hong Kong, Japan or South Africa, or in any other country where participation in the issue would require an additional Prospectus, registration or other measures than those under Swedish law or contravene rules in such a country. No paid subscribed shares, or other securities issued by the company, have been registered or will be registered under the United States Securities Act 1933, or under the securities laws of any state in the United States or any provincial law in Canada. Therefore, no paid subscribed shares, shares or other securities issued by the company may be transferred or offered for sale in the United States or Canada other than in exceptional cases that do not require registration. Registration to acquire shares in contravention of the above may be considered invalid and be disregarded. This information brochure may not be made public, published or distributed, directly or indirectly, within or to the United States, Canada, Australia, New Zealand, Hong Kong, Japan or South Africa or any other jurisdiction where such action would be unlawful or subject to legal restrictions.

[1)] Download the prospectus here

"THE NEXT STEP FOR US AND OUR PARTNERS IS TO OPTIMIZE THE PROCESSES."

READ MORE ON PAGE 4

THE CEO'S ADDRESS

SALTX EN ROUTE TO LONG AND PROFITABLE RELATIONS

SaltX is carrying out a new capital issue for MSEK 80. What will the funds be used for??

The funds will be used to continue to develop SaltX. During the past year, the company's operations have become more focused. We will now build the team around large-scale energy storage – EnerStore.

Commercialization requires cutting edge expertise and resources. We are planning recruitment on both the technical and the commercial side.

It should be remembered that there is no standard for this type of large-scale thermal energy storage being developed by SaltX. This means that we are constantly breaking new ground while we are on the way to creating a standard for thermal energy storage. We are carrying on this work with our partners, which means that in practice we gain third-party approval.

Now that we are asking shareholders for additional funding, it is worth emphasizing that we have come a long way. We have created great values on our journey so far.

The intention is not, however, that the money will be needed to build up another large-scale prototype, like the facility in Berlin, which has required considerable financial and personnel resources, but which we have deemed to be absolutely necessary. The next step for us and our partners is to optimize the processes.

Does the company conduct all sales through partners? What does a sales process look like?

Our sales efforts are carried out in close collaboration with our partners. We have built up a large contact network of potential customers from earlier. If we continue to cultivate these contacts, this is always done in conjunction with a partner. Actual deals should then always be signed through our partner. In this way, we intend to build competence and profitability together.

What does the revenue model look like in an typical business deal going forward?

The revenue model can vary among different business deals and depends on the specific customer's situation. We earn revenue from different elements. For example, it may come from competence and the pricing of values we create, or from variable remuneration depending on the amount of stored energy.

We are in a phase where we are working with our partners to develop these revenue models.

"THIS MEANS THAT WE ARE CONSTANTLY BREAKING NEW GROUND WHILE WE ARE ON THE WAY TO CREATING A STANDARD FOR THERMAL ENERGY STORAGE."

How long do you expect this type of business deal to take?

We are now in the phase where, in conjunction with our partners, we are designing their respective solutions. The solution must then be produced before delivery can begin. The first projects will take longer.

After 25 years in the industry, I have respect for the time required to launch new solutions in the energy market. We must remember that we

Carl-Johan Linér, CEO

work in an industry that is in the midst of a transition from non-renewable energy sources to renewables, and is searching for new solutions.

It is worth emphasizing that the end customer is often involved during the development phase. It can be said that customers are "onboard" before the product is commercially ready, which ultimately increases the success of the business deal.

The advantage when you succeed in this type of business deal is that you can have very long and profitable relationships.

How important is the demo project with Vattenfall?

The project is very important and has generated great interest among both electricity and power companies and industrial customers, as well as politicians and investors. There has been a continual flow of visitors and Vattenfall uses the facility for customer engagement on an ongoing basis. The facility in Berlin has also been crucial for us to be able to sign agreements with our system partners.

This has created significant values for the company and our shareholders.

When can you expect revenue on a larger scale for SaltX?

We are in a position where we are working with our partners to develop these pre-commercial facilities. This is being done at the same time as we are cultivating end users, which means that we are working in simultaneous processes to win new business.

Once we have become established with existing partners, we will be looking for additional partners in the next phase in order to further expand the business. Being a partner requires a great deal of expertise, which we develop together.

The company has carried out several new capital issues. Should we view SaltX a bit like a biotech or pharmaceutical company which go through different phases in the development of a commercial product?

There are similarities. Both ourselves and pharmaceutical companies have high demands in terms of functionality and quality. We go from demo plant to pilot plant, to pre-commercial plant, and then on to serial production. This means that the industries go through several phases before getting to a commercial launch.

Which geographical markets are most ripe for the SaltX solution?

Two countries have declared that they will shut down coal power – Germany and India. The interest is high in these two huge markets. In southern Europe, markets are also ready for solutions concerning energy storage.

There is also great interest from China – where the need is huge. Therefore, it is extra gratifying that we have found a Chinese partner that we believe in. It can also be noted that there is considerable interest from various parts of North America.

"WE MUST REMEMBER THAT WE WORK IN AN INDUSTRY THAT IS IN THE MIDST OF A TRANSITION FROM NON-RENEWABLE ENERGY SOURCES TO RENEWABLES AND IS LOOKING FOR NEW SOLUTIONS."

How big is the interest in SaltX's EnerStore solution?

Energy storage is one of the areas gaining most attention in the world today. This is natural when many of the world's countries are transitioning to renewable energy sources. The transition means that it must also be possible in practice to store energy because the time when the energy is produced does not always coincide with the need to consume it. There is great interest in our solution. My view is that there will be a handful of different technologies that will solve the need for energy storage.

However, in this respect, EnerStore has a big advantage. Our solution is a so-called non-sensitive chemical process, which means that it does not lose capacity during the period

the energy is stored. In addition, our nanocoated salt has a high energy density. For this reason, I believe that our patented solution for storing energy in salt has the prerequisites to be well-positioned in the market.

Does the company have the organization and the necessary competence to scale up the business?
In general, we have the competence required but we need to invest continuously in expert support. We will continue to recruit talented and motivated employees going forward.

SaltX's pilot facility at Vattenfall's plant in Berlin, Germany.

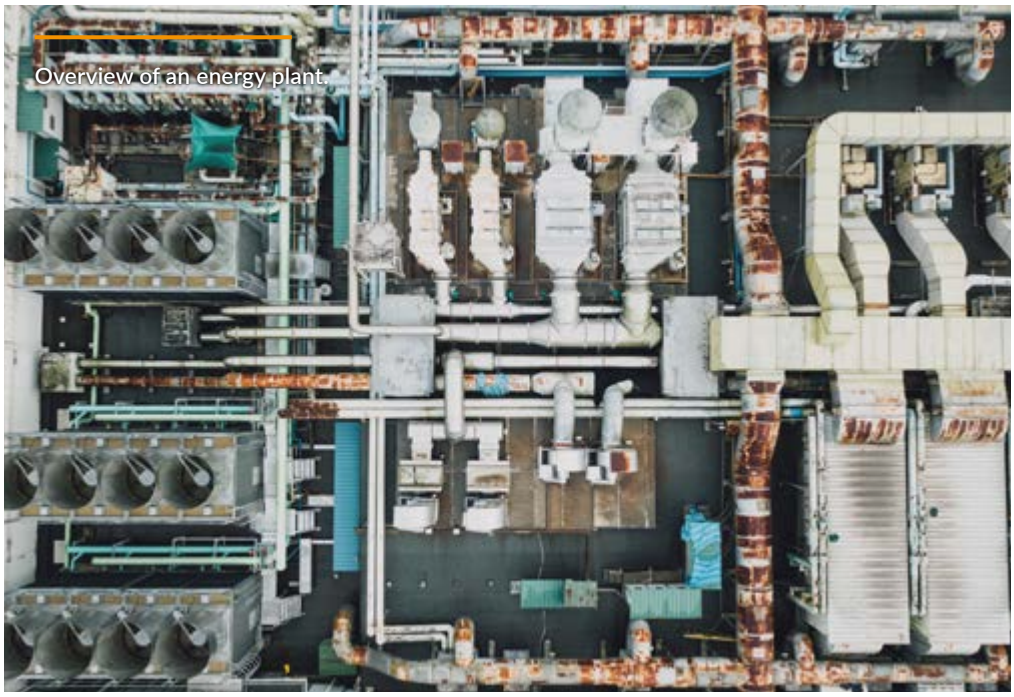
HOW THE FUNDS WILL BE USED

With the global transition from fossil to renewable energy sources, and with the successes of the pilot project in Berlin at Vattenfall's plant, interest in SaltX's patented solution of thermal energy storage in nano-coated salt has increased over the past year. In order for SaltX to continue its development towards a commercial solution based on large-scale energy storage – EnerStore – and to utilize the strong market situation, the company is raising capital through a rights issue for approximately MSEK 80.

Significant steps towards getting a commercial solution in place have been made in the past year. As part of the process going forward, SaltX has decided that all sales will be carried out in close cooperation with and through the company's key partners.

With the capital from the new share issue, SaltX will be well prepared and have adequate resources to continue to develop EnerStore towards becoming a commercial product. SaltX has an energy store based on a patented cost-effective solution for storing thermal energy in a market that is now gaining momentum.

DURING THE PAST SIX MONTHS, WE HAVE BEEN ABLE TO SEE THAT DEMAND IN THE FORM OF THE NUMBER OF PROCUREMENT PROCESSES FOR ENERGY STORAGE PROJECTS HAS INCREASED VERY SIGNIFICANTLY.



Overview of an energy plant.

A BESPOKE SALTX

SaltX will continue to strengthen its organization in order to be able to connect with system partners in future projects.

The German company, Steinmüller, the Spanish company, INERCO, and the Chinese company, Shuangliang, are three partnerships that mean that the road ahead has become even clearer and more focused than before. With these partners, the development of storage solutions will continue.

FOCUS ON PRODUCT DEVELOPMENT

In concrete terms, this means that investments are being made in further development, testing, verification and quality assurance of the SaltX material. It is also about new compositions and optimization of the nano-coated salt. This is done partly on a small scale in SaltX's own lab, and partly in collaboration with

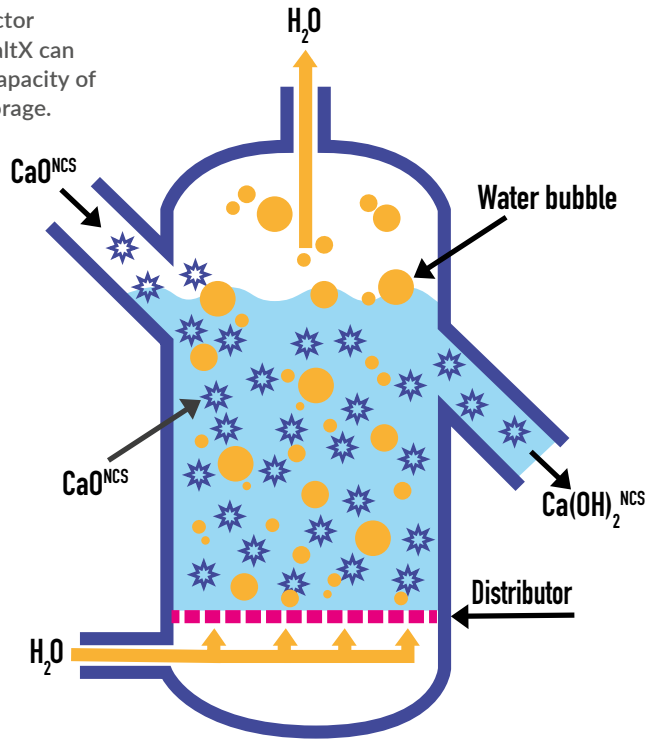
technical universities and other partners. The next step is to further develop this in order to meet commercial requirements.

INCREASED DEMAND

Demand in the form of the number of procurement processes for energy storage projects has increased sharply in the past year. From SaltX's target markets – Germany, Spain and China – there is a significant number of new invitations to tender for large energy storage projects. In addition, there are interesting inquiries from other geographical markets.

SaltX's strategy is to continue to attract customers and projects and then respond to invitations to tender with partners. These requests are increasing every day and in order for the company to keep pace, the commercial organization will be strengthened and a number of existing technical resources will be supplemented within SaltX.

With new reactor technology, SaltX can increase the capacity of the energy storage.



FLUIDIZING BED – SALTX'S FUTURE REACTOR

In the next stage in the commercialization of SaltX energy storage, system costs need to be lowered and power increased.

SaltX's energy storage consists of four key components; two silos for storing the nanocoated salt, and two reactors where the salt is charged or discharged. The salt, together with the reactor, forms the actual core of the energy storage.

Together with partners, the company has identified an industrial process and application that is considered to be a very cost-effective and scalable reactor – a fluidizing bed. The technology originally came from the coal industry and began to be used commercially in the 1980s. The boilers have been developed to make combustion more efficient and reduce emissions of, for example, sulfur and nitrogen oxides.

By mixing air and fuel – e.g. coal, sand or lime – the bed (fuel and air) will act as liquid. This means that high heat transfer rates can be achieved and high power can be extracted from the system.

SALTX IS ESTABLISHING IN KEY MARKETS

With SaltX energy storage, it is possible to store surplus energy, and then use it in periods when it is required. The market for the SaltX solution is global, but there are some specific markets that SaltX has chosen to focus on. These are Germany, Spain and China. SaltX has entered into important partnerships in these markets.

CHINA

In China, one of the largest solar and wind parks in the world is being built. Especially in northern China, it can get very cold and today the urban areas rely on district heating from coal-fired power plants. Solutions are needed there that enable a rapid energy transition. The country is building both new coal power plants and shutting down old ones, for example, China intends to shut down coal power plants equivalent to 8.6 gigawatts or 1 percent of the country's coal production by the end of 2019/2020.

SPAIN

Spain has for a long time focused on implementing solar power as the country's main energy source. One proof of this is the work with Concentrated Solar Power (CSP) technology, where Spain is a world leader. The country is now transforming its energy production and therefore the need for energy storage is growing rapidly. One of the country's major energy companies, Endesa, does not consider coal to be competitive anymore and will shut down all its coal power plants in the country.

GERMANY WILL CLOSE 12 COAL-FIRED POWER PLANTS IN 2022 AND IS THEREFORE LOOKING FOR SOLUTIONS THAT CAN MEET THE NEED THAT HAS BEEN CREATED FOR ENERGY STORAGE.

GERMANY

Up to now Germany has relied heavily on coal power, but powerful political decisions have been taken to quickly move away from this non-renewable energy source.

Germany's goal is to close 12 coal-fired power plants by 2022 and the remaining 33 by 2038. The energy companies in the country are therefore looking for solutions that can quickly fill the need that has been created.

Once SaltX has established partnerships in these markets, new markets and partnerships can be established. Other major energy storage markets are, for example, India, Japan and the United States.

THE SURFACE LAYER MAKES SALTX SOLUTION UNIQUE

SaltX technology is just as powerful as it is simple. The company utilizes well-known chemical properties in salt. Modern technology is then used in order to be able to utilize the properties to store energy on a large scale.

It has long been known that energy can be stored in salt. This is achieved when the energy is stored chemically by separating the water from the salt, the salt then contains the energy which has been supplied. When the salt then comes into contact with water again, a chemical reaction occurs. The energy used to separate the molecules is released and it gets very hot.

THE SURFACE LAYER RETAINS STRENGTH

The challenge was previously that the process of separating and bringing together salt and water could only be repeated a few times. Thereafter the salt turned from free-standing salt grains into clumps. SaltX's patented technology entails that this is prevented by a special surface coating – so-called nanocoating. The salt thus retains its original form of individual salt crystals despite many charges and discharges without losing performance.

SALTX'S TECHNOLOGY ENTAILS THAT A SURFACE LAYER PREVENTS THE SALT CRYSTALS FROM TURNING INTO CLUMPS. THEREFORE ENERGY CAN BE STORED AND RELEASED OVER A LONG PERIOD

The salt treated with nanocoating also possesses the property of not corroding – no rust is created – unlike normal salt. This provides a long-term and cost-effective solution. Salt is also a natural, easily accessible material which is thus environmentally sustainable and can be recycled.

GREAT INTEREST IN ENERGY STORAGE IN THE MARKET

Energy companies all over the world are very interested in the opportunities that cost-effective energy storage offers. In slightly simplified terms, a transition of energy production from oil, gas, coal and nuclear power to renewable energy sources creates new and major challenges if energy is to be consumed as before – a consumption

What non-renewable energy sources have in common is that they have a uniform production rate. In contrast with the generation of energy from renewable sources such as solar and wind power, which instead have an uneven production rate.

This requires that the energy can be stored if it is to be consumed when the energy is needed. This, in turn, is necessary if the transition to renewable energy sources is not to be too painful. It must be possible to handle fluctuations in the grid, and this is where large-scale energy storage becomes necessary.

INCREASING NEED FOR ENERGY STORAGE

The need for energy storage has long been identified. Now it has come to the point where it is really needed and fast. Companies in the power market have problems maintaining sufficient frequency in the grid and struggle daily with the evident lack of capacity that exists. That a country with such good power infrastructure as Sweden already suffers from this type of problem is indicative of the global situation. .

THE DECISION-MAKING PROCESS FOR MICROGRIDS IS FASTER, BUT EACH INDIVIDUAL TRANSACTION TO THE ENERGY COMPANIES IS SIGNIFICANTLY GREATER IN VALUE.

LONG TIME BEFORE DECISONS ARE MADE

Despite an urgent situation, it takes a long time for the power companies to adjust their offerings. The power industry has a built-in inertia with regulations and slow processes. In addition, these are often major investments, which require longer time to be evaluated.

INDUSTRY AND MICROGRIDS

A strong trend in the energy market as a result of the transition to renewable energy sources is towards increasingly local energy production units. That is, smaller systems for energy generation, so-called microgrids.

Here, for example, this could be a company or a property owner who wishes to build local energy production using solar cells or wind power and thus has a need to also be able to store the energy locally.

TWO MARKETS

One advantage of the market for solutions in the microgrid segment is that the decision-making process is judged to be considerably faster compared to the energy companies.

With energy companies, their evaluation processes are naturally longer and more extensive, but at the same time each individual transaction to the energy companies is significantly greater in value.

INTERVIEW WITH MARKUS WITT, VP ASSET MANAGEMENT, VATTENFALL

VATTENFALL

What is your role in the EnerStore project in Berlin?

I am the sponsor for this project within the framework of Vattenfall's Heat business area.

How would you sum up SaltX's pilot project so far in Vattenfall's plant?

Once SaltX became familiar with our local rules and procedures, the cooperation has gone very well. The operation of the pilot project has been SaltX's responsibility and what we have seen so far has provided considerable experience that the team can build on.

How do you see the process going forward?

It is necessary to review and analyze all the data obtained, as this gives us clear indications in regard to the technological development. We are also examining questions about profitability, but at this stage it is too early to draw any conclusions.

There are still many parameters that can be changed, both in terms of the German energy market and the technical solution.

What time frame should be expected?

Next year, important steps and decisions will be taken. To clarify the situation: The German energy and electricity market is very complicated due to all the taxes and fees.

At the same time, fluctuations in prices and the surplus of renewable electricity make energy storage very attractive.

Finally, what role can EnerStore play in Berlin's future energy supply?

It remains to be seen in practice, but in theory, energy storage can help in the integration of renewable energy into the district heating system. We can integrate it to increase the flexibility of CCGT (Combined Cycle Gas Turbine), but also with steam and/or electricity.

THE NEW STRATEGY IS BEING IMPLEMENTED

SaltX's strategy to streamline the company's operations has continued.

During the past year, the focus has been entirely on the company's solution for large-scale energy storage – EnerStore. The focus has meant that the company's resources – financially and in its daily operations – could be devoted exclusively to speeding up the process to commercialize the solution.

FIVE REASONS BEHIND THE STRATEGY

The reasons behind the new strategy in brief are:

- **Market dynamics**
  The market for energy storage is estimated to grow six-fold by 2030. SaltX must concentrate its focus in order to be able to compete in this market.
- **Tested and patented technology**
  SaltX has strong patent protection worldwide for its nanocoated salt. The technology has been tested and proven by independent parties such as Stockholm University and German DLR.
- **Reference ready**
  The pilot project at Vattenfall is a first reference that is being used to create interest in large projects with other energy companies and customers with similar needs.
- **Competitive**
  EnerStore is cheaper compared to other thermal energy storage alternatives such as molten salt or concrete and requires significantly less volume.
- **Complement to batteries**
  SaltX should be seen as a complement to batteries that store electrical energy. This is because the heat from the SaltX solution can be converted into steam which drives a steam turbine which in turn generates electricity. For fast and short-term storage, batteries can be used, and for so-called peak-shifting, SaltX's large-scale storage can be used.
- **Key partners in place**
  With the agreements with the Nordkalk and Wacker companies, SaltX has secured the partners needed for production of the nanocoated salt. INERCO, Steinmüller and Shuangliang were secured as SaltX's system partners in 2019. They are developing the concept and the design and are expected to be an important future sales channel.

WITH ENERSTORE, WE HAVE THE RAW MATERIAL, TECHNOLOGY, PARTNERS AND ESTABLISHED CONTACTS WITH POTENTIAL CUSTOMERS.

STRONG SYSTEM PARTNERS

During the past year, SaltX has entered into agreements with important system partners through whom sales will take place. They have shown great interest in SaltX's storage solution and have a very large presence in today's energy market. In conjunction with the German company, Steinmüller, the Spanish company, INERCO and the Chinese company, Shuangliang, SaltX will have good opportunities to do business with end customers.

The new strategy is to focus on two segments within so-called "peak-shifting", which in short means that energy storage can be utilized to defer the consumption of energy production until it is needed.

The solution that SaltX, together with its partners, will offer the market is based on the experience from the pilot project that

has been implemented in Berlin.

1. Energy companies
Here, the target customers are often energy companies, similar to Vattenfall, who need to supplement and replace fossil fuels. In this respect, SaltX's energy storage can ensure that base load power is available. The energy store can ensure both that electricity is supplied at night and district heating is supplied to urban areas

2. Industry
Here, customers are often large companies and industries that consume a lot of steam in their processes. They wish to make their processes more efficient with energy storage as well as utilize fluctuations in electricity prices so that they obtain as low an energy cost as possible. In addition, they see an opportunity to develop their energy system into so-called micro-grids.

With the new strategy, SaltX is judged to be well positioned in the energy storage market and has good prospects of winning market share.

THE WAY FORWARD TO LARGE SCALE ENERGY STORAGE

OCTOBER 2012
The nanocoated material is invented.

JUNE 2013
SaltX builds a smaller pilot for General Electric.

MARCH 2016
More and more requests to develop large-scale energy stores are received. The company makes a strategic decision to explore this opportunity.

JANUARY 2017
Testing at DLR (the Germany Aerospace Center) verifies in a smaller test facility that the technology can be upgraded.

APRIL 2017
Together with Vattenfall and the Swedish Energy Agency, a projec is started to demonstrate the technology on a larger scale with the intention of building a full-scale demonstration plant next to a district heating plant in Berlin.

OCTOBER 2018
On October 23, 2018, EnerStore is demonstrated for the first time at SaltX's headquarters in Stockholm for partners, investors, press and other stakeholders. It was a smaller energy store that could fit in a 40 foot container.

NOVEMBER 2018
SaltX enters into strategic collaborations to scale up the production of nanocoated salt in collaboration with Nordkalk and Wacker.

APRIL 2019
The large-scale demonstration facility in Berlin at Vattenfall is inaugurated.

JUNE 2019
SaltX signs a development agreement with a German partner. A pre-commercial thermal energy storage based on nano-coated salt will be built.

JULY 2019
SaltX signs a cooperation agreement with a Spanish partner for collaboration.

SEPTEMBER 2019
The pilot plant in Berlin shows very promising results in regard to large-scale energy storage.

OCTOBER 2019
Chinese Shuangliang confirms that is building a pilot plant in China.

SALTX MAXIMIZES COOPERATION WITH ITS PARTNERS

SaltX develops energy storage based on nanocoated salt in conjunction with partners. The company's future revenues are expected to come mainly from sales of the nanocoated salt, license fees and technology transfer. But revenue streams could also come from the finished solution in the form of installation and energy fees, for example.

SaltX's business concept is to sell and deliver the world-patented nanocoated salt along with key knowledge of the technology to end customers through its partners. The company is developing the finished solution in collaboration with partners who already supply energy plants.

SALTX'S PARTNERS HAVE RESOURCES TO SELL AND DELIVER LARGE VOLUMES TO DEMANDING AND PROFITABLE CUSTOMERS.

THE ECOSYSTEM IS GROWING

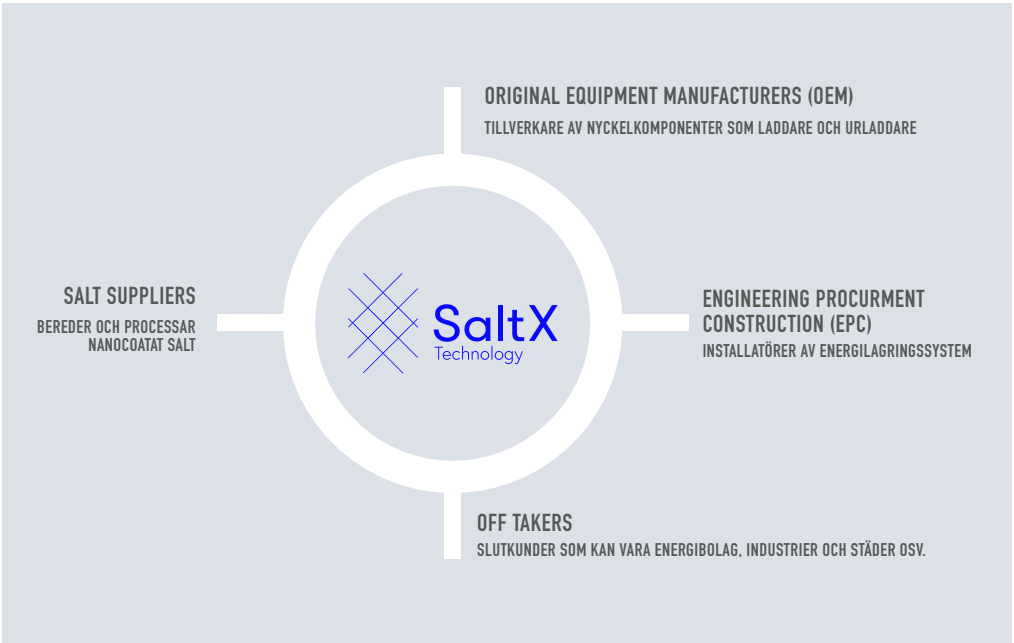
The company is dependent on finding the right partners who can assist with other elements required for a complete plant. One piece of the jigsaw that was important to have in place during 2018 was the company's salt suppliers. The partnerships with the Nordkalk and Wacker companies are in place to supply future projects with nanocoated salt.

THREE NEW, IMPORTANT SYSTEM PARTNERS

In 2019, the company has focused on finding partners who are experienced in building energy plants. Three important partners are now in place – the German company, Steinmüller; the Spanish company, INERCO; and the Chinese company, Shuangliang. The next step is to build pre-commercial facilities together and to establish a common plan for commercialization and customer offering. The company's partners will also play a key role in the sale of energy storage projects.

SALTX ECOSYSTEM

On the road to commercialization of EnerStore, there are a number of principal parties that SaltX will work with. Depending on the market and the final application, these partners may differ, but in the main, they will have four different functions. These partners are salt suppliers who prepare and process nanocoated salt, OEMs that manufacture key components, EPCs that install energy storage systems, and end customers, so-called off-takers, who may be energy companies, industries and urban authorities.



THE VIEWS OF SALTX'S SYSTEM PARTNERS

双良锅炉
SHUANGLIANG BOILER

Interview with Minghua Yu – CEO

What market potential do you see for SaltX solution EnerStore?
The ability to store energy thermally is crucial, both to be able to offer fossil-free energy, and to be able to consume energy when it is required- i.e. peak-shifting. I believe that SaltX's high-temperature chemical energy storage solution in calcium oxide will be one of the more important technologies for energy storage. It will be widely used in electric heat storage to produce industrial steam. Compared to other storage methods, such as sensible heat and phase change storage, SaltX solution can deliver higher temperatures with a high energy density at a relatively low cost.

As a partner, how can you contribute to EnerStore becoming a success?
The Shuangliang Group is one of China's 500 largest private companies. The company has significant capacity in terms of manufacturing and marketing in the areas of absorption machines, heat exchangers and industrial boilers. In this respect, SaltX can benefit from the Shuangliang Group's capacity to manufacture heat equipment for chemical heat storage and to market thermal energy storage in China.

How do you view the process going forward?
With the advantages of SaltX technology, we will focus on solutions to produce steam for the domestic Chinese market. However, China currently has insufficient natural gas capacity for steam production, especially during winter.

SaltX's solution offers an opportunity to offer "clean" steam when there is no natural gas. We believe there is huge potential in this market.

What is the interest for EnerStore among your customers?
We already have a large number of customers who supply steam in the central heating segment, such as Moutai Distillery, Power China and State Grid Cooperation of China (SGCC). Customers have expressed interest after learning about and understanding the benefits of the SaltX solution. If we can show an acceptable system cost for the SaltX solution, customers will want to build demonstration plants in industrial areas.

"WE BELIEVE THAT THE SALTX SOLUTION HAS MANY ADVANTAGES. WE ARE DISCUSSING WITH LEADING CHINESE STATE-OWNED COMPANIES ABOUT COMMERCIALIZING ENERSTORE."

MINGHUA YU
– CEO

THE VIEWS OF SALTX'S SYSTEM PARTNERS

Interview with Pedro Marín — CEO

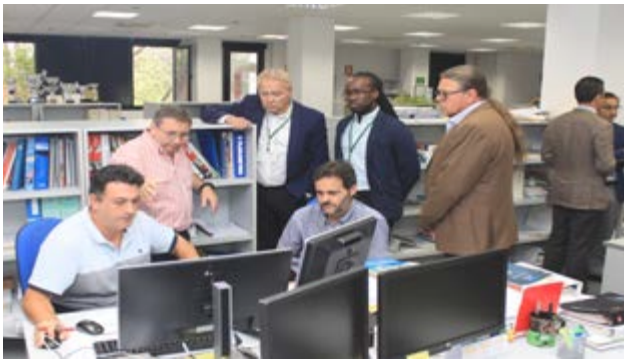
How do you view the potential of EnerStore?
To meet the EU's goal of reducing carbon dioxide emissions by 2050, a significant contribution from energy storage in power generation and other energy-intensive industries is required. INERCO has a strong belief that thermochemical energy storage is a stable, versatile and cost-effective solution that can provide heat and power from renewable energy to these industries. INERCO sees benefits in terms of storing thermal energy in nanocoated salt, and this has convinced us to enter into a partnership with SaltX.

As a partner, how can you contribute to EnerStore becoming a success?
INERCO is a multinational company specializing in offering EPC solutions and technology development for energy and environmental applications. NERCO has completed more than 40 R&D projects, which have given us significant experience and we provide proprietary technologies to the international market.

In our partnership with SaltX, INERCO contributes expertise in commercializing technological innovations, together with our expertise in building large-scale industrial plants.

How do you view the process going forward?
"The Green and Fair New Deal" published by the EU Commission's new president, Ursula von der Leyen, as well as the voluntary commitments of major global industrial players to reduce carbon dioxide emissions indicate the importance of energy storage. In this regard, SaltX and INERCO are working closely together to develop new solutions to store thermal energy and to develop technical solutions for customers with a global presence, which increases business opportunities and increases the value of the solutions/products.

What is the interest for EnerStore among your customers?
INERCO has ongoing contact with power companies, which regularly express a genuine interest in energy storage technologies.



"INERCO SEES BENEFITS IN TERMS OF THERMAL ENERGY IN NANOCOATED SALT, AND THIS HAS CONVINCED US TO ENTER INTO A PARTNERSHIP WITH SALTX."

PEDRO MARÍN — CEO

However, the companies feel that the current national laws and regulations do not reflect the solutions offered to the operators of the power grids in terms of energy storage, and they consider that appropriate compensation schemes are lacking. In such a scenario, the power companies are not willing to invest in large-scale storage solutions, but they would like to see solutions that will be feasible in the near future.

How do you view the timeline going forward?
Together with SaltX, we have decided to build a pre-commercial megawatt size pilot plant in 2020 to demonstrate the benefits to customers and public stakeholders.

THE VIEWS OF SALTX'S SYSTEM PARTNERS

steinmüller engineering

Interview with Lutz Brandau – Head of Marketing

How do you view the potential of EnerStore?
SaltX is continuously developing its energy storage solution in order to become established as a mature solution in the market. Steinmüller Engineering is a system partner and we are now working to identify the application areas where nanocoated salt works best. The industry's understanding of renewable energy and its uneven production rate is maturing every day, and this also increases the demand for energy storage, especially in terms of thermal/chemical solutions.

As a partner, how can you contribute to EnerStore becoming a success?
Steinmüller Engineering is an engineering company with expertise in a number of technologies and applications for heat transfer, and we are working for a "greener world". With decades of experience in the field of fluidizing technologies, and as a partner to SaltX, Steinmüller Engineering is committed to finding suitable technologies to efficiently charge and use nanocoated salt in order to harness the potential that exists in the different industrial and power applications.

How do you view the process going forward?
Although current renewable energy legislation is not yet sufficiently mature and well-balanced to support the financial interests, the future demand and need for renewable energy is obvious and associated energy storage is necessary.

What is the interest for EnerStore among your customers?
Under the heading of "Energy transition", producers of conventional and renewable energy have an interest in energy storage. The success of a technology depends on many decisive factors, such as level of competence, suitability, efficiency, etc., but these are secondary to factors such as financing and payback period. There is a need in this regard for legislation in order to boost market confidence.

"...AS A PARTNER OF SALTX, STEINMÜLLER ENGINEERING HAS COMMITTED TO FINDING SUITABLE TECHNOLOGIES TO EFFICIENTLY CHARGE AND USE NANO-COATED SALT."

LUTZ BRANDAU – HEAD OF MARKETING

How do you view the timeline going forward?
There are currently many discussions about energy storage technologies. The success of a technology depends on a good prototype in order to build customer confidence. SaltX took a big step forward in Berlin with EnerStore, when it credibly demonstrated nanocoated salt and demonstrated the possibility of taking the technology to the next level in an optimal way.

ERIC JACOBSON, HEAD OF SALES AND MARKETING

GREAT GLOBAL INTEREST IN SALTX'S TECHNICAL SOLUTION

How would you describe the interest in the SaltX solution?

We are regularly contacted by a large number of companies who are interested in our solution. A majority of these are interested in a finished commercial solution, but as we know, the commercial solution is not yet fully developed.

The challenge now is to collaborate with the companies that can and want to support SaltX at the stage we are at – that is, to complete a pre-commercial plant that can be scaled up.

Of course, we are also keeping other companies in the loop that may be relevant to our solution.

What types of companies are contacting you?

They are primarily power companies, chemical companies and companies in heavy manufacturing industries.

And also municipal authorities – especially from Germany – are also contacting us. These usually own energy companies that need to replace coal power, which is a major challenge. A number of the German municipal authority power companies also have significant overproduction from wind power. This is energy that they would like to be able to store and then use when demand exceeds supply.

In addition, there are larger companies that wish to build local electricity networks, so-called microgrids – where the aim is to become self-sufficient in energy.

We were recently contacted by a large Swedish company that is planning to create such a grid in conjunction with the construction of its new head office. This is one of many examples of the attention our solution is gaining.

Can you comment on the trend with microgrids?

It is a very interesting segment of the market and perhaps the one that will grow the fastest. Companies and other organizations have come a long way with today's available solutions, such as solar and wind. Solutions are needed to store energy in order to take the last step and be even more self-sufficient.

What is the interest like from other parts of the world?

We see interest in our solution from many different parts of the world. One example is our Chinese partner -Shuangliang- which is working with the world's largest energy company. They see the need for our solution in the market because coal plants are being shut down continually in China. In purely technical terms, a replacement for coal power is required in the event of a shutdown so that it is not necessary to simultaneously shut down the district heating. In China, 8.6 gigawatts of coal-fired energy will be shut down

Eric Jacobson
Head of Sales & Marketing

"WE SEE INTEREST IN OUR SOLUTION FROM MANY DIFFERENT PARTS OF THE WORLD. ONE EXAMPLE IS OUR CHINESE PARTNER – SHUANGLIANG – WHICH IS WORKING WITH THE WORLD'S LARGEST ENERGY COMPANY."

just in the period to the end of the year.

We see that major cities around the world have started to prohibit large-scale energy storage using lithium-ion batteries for safety reasons, which means that there is a great interest in the SaltX solution from these cities too. We see that the market is global, but it is important to stay focused and continue to work on the plans for pre-commercial facilities with key customers.

How do you transform the interest into business deals?

Our challenge is in choosing the right companies to partner with. This means companies that fit in at the stage where SaltX is today and who see the opportunity in the needs that exist in the market. We need to channel our energy so that we develop in the right way.

That is why we are devoting the greater part of our energy today on working with the partners we have identified. The next step will be to work with a number of major customers who have similar challenges in different places around the world. This is how we are planning to scale up SaltX. As we progress, it will become easier to deal with more interested companies through our partners. It's actually quite a nice problem to have.

SALTX AND AHLSTROM-MUNKSJÖ ARE INVESTING IN THE MATERIAL OF THE FUTURE – GRAPHENE

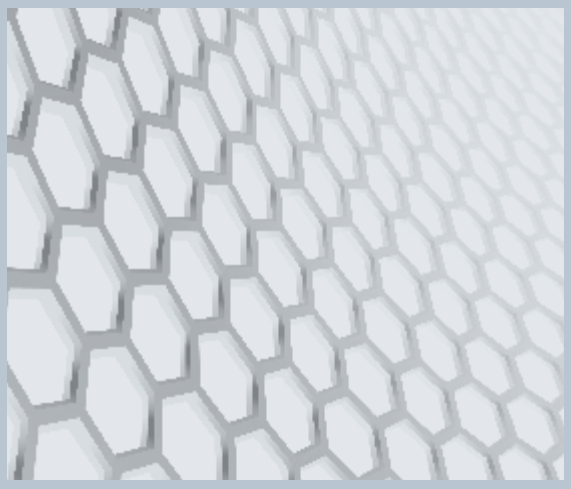
Ahlstrom-Munksjö and SaltX have jointly developed a first industrial method for producing graphene-coated salt paper. The aim of the project is to further streamline and broaden use of the SaltX material.

In this strategic collaboration project that started in March 2018, SaltX, in conjunction with Ahlstrom-Munksjö, is developing and testing an industrial process for the production of graphene-coated paper that is coated with nano-coated salt. In a first step, the project has shown that manufacturing works on an industrial scale.

Graphene is a completely carbon-based material consisting of an extremely thin layer – just one atomic layer thick. Graphene increases the thermal conductivity of the SaltX material and means that the manufacturing cost of SaltX energy storage material can be lowered significantly.

- Energy storage is one of two major development areas at Ahlstrom-Munksjö. Our development project for energy storage in collaboration with SaltX, to create a paper coated with graphene and nano-coated salt, is very interesting. Our joint project looks very promising, says Anna Bergquist, business area manager for insulating paper at Ahlstrom-Munksjö.

Ahlstrom-Munksjö is a world leader in fiber-based materials and delivers innovative and sustainable solutions to its customers. The company's mission is to expand the role of fiber-based solutions in a sustainable everyday life.



Unlike graphite, graphene consists of an extremely thin sheet, only one atomic layer thick. The atoms are arranged in a hexagonal pattern, which gives the material a number of unique properties such as the ability to conduct electricity extremely well. It is flexible and very lightweight – one square meter of it weighs only 0.77 mg.

INAUGERATION OF THE PILOT PLANT IN BERLIN

Simon Ahlin and Christofer Rhén, SaltX.

Henrik Röglin and Ruben Hoffmann, Vattenfall.

Markus Witt, Vattenfall.

OTHER INFORMATION

ADDRESS

SaltX Technology Holding AB (publ)
Västertorpsvägen 135
SE-129 44 HÄGERSTEN

For more information, please contact:

Carl-Johan Linér, CEO
+46-70 532 08 08
cj.liner@saltxtechnology.com

Harald Bauer, CFO
+46 708 10 80 34
harald.bauer@saltxtechnology.com