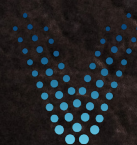
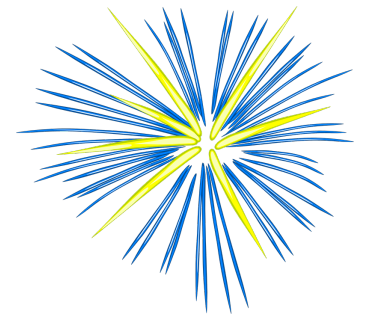
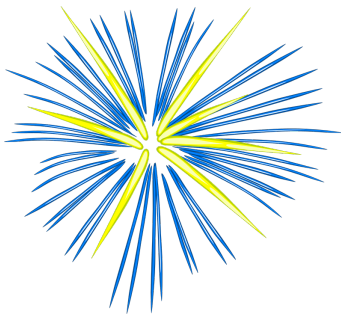


Milestones

2022



visblue
energy in the flow



2022 has come to an end!

We have now reached the end of the year 2022, and with that said, the increasing interest in our battery solutions in 2022 has led to growth in the company, in terms of both employees, customers and projects.

We look back on another year in which we reached new milestones, which we will tell much more about in this article.



First of all we would like to say a big thank you for the great support and interest we have received at VisBlue throughout 2022. We look forward to sharing all the good news and experiences the year has brought.

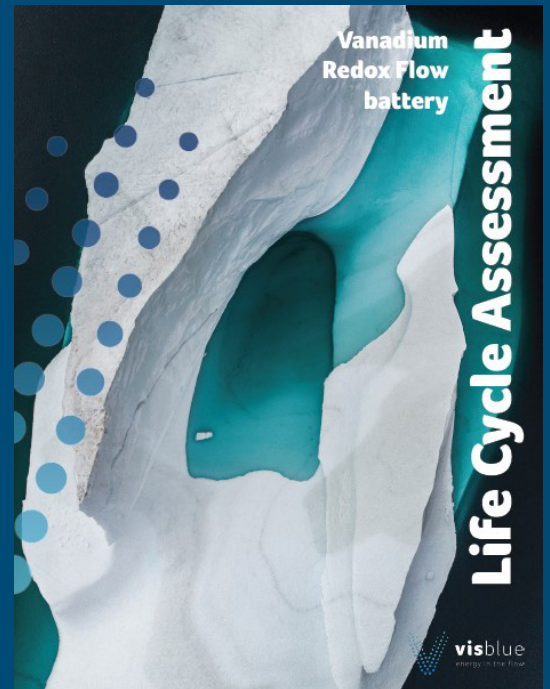
Projects and optimisations on the battery solution

We have made a **Life Cycle Analysis!**

We have prepared a Life Cycle Analysis of our 8 kW, 40 kWh Redox Flow Battery with a view to optimization and quality assurance.

Here we have taken a closer look at the ISO 14040 and 14044 standards and measured both global warming, particulate matter, terrestrial acidification, human toxicity and fossil resource scarcity and compared the relative impact with data points from a lithium battery.

If you want it, please feel free to e-mail us: sales@visblue.com



Tarif control

We have **optimised** the battery solution and have developed tariff control, which means that we can keep an eye on the prices of electricity, so that the battery charges when the electricity is **cheapest** – for example at night, when the sun is not shining and therefore not able to charge the battery through **solar cells**.



Collaboration with CHS Container

In 2022, we entered a **collaboration** with CHS Container DK, where, in connection with producing new systems for customers, we were delivered a **special container** that can be used both as a battery and for learning. We are very **happy** about this collaboration!



New Danish website

It was also in 2022 that we spent a lot of time optimizing the Danish website and launched a new version, which now offers case stories about some of our newest installations, a flowchart that helps navigate one's journey towards sustainable energy, opportunity to test whether our flow battery is a solution for you, change in the design of the website and much more.

All this also helps to make it even easier for the individual to find out if our battery is right for them and to make the website even more user-friendly.

In 2023, we will work on optimizing the English website and look forward to being able to publish it, so that it is also up-to-date!

Smart Energy

Målet med dette projekt er at støtte, udvikle og forbedre en kommerciel produktion af et dansk vanadium redox flowbatteri (VRFB) og energilagring med kvalitetssikring. VisBlue gør dette ved at teste, optimere og demonstrere samarbejdet mellem VRFB-teknologi og solcelleanlæg, vandopvarmning og varmepumper.

Derudover har dette projekt også til formål at demonstrere potentialet i VRFB-teknologien, som en buffer i elnettet, i en mere og mere decentraliseret energiproduktion.

Digital Booster

Målet med dette projekt er at forbedre den digitale interfaceløsning til at gøre markedet klar til et danskproduceret vanadium redox flowbatterisystem (VRFB).

Projektet forsøger at optimere et uafhængigt, digitalt serviceprodukt, der kan forbedre den digitale kommunikation mellem et VRFB og solcelleanlæg, energinet og slutbrugeren.

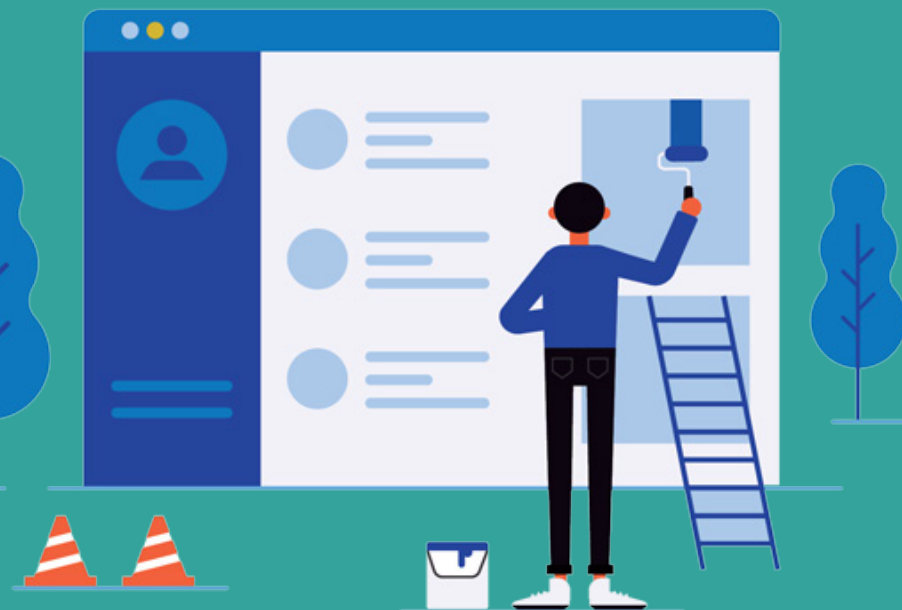
Grid Connected

I samarbejde med EUDP, Eniig og Connected Flow Batteries, der har

Before



After



New colleagues

In 2022, we have grown significantly and have been enriched with new employees – both interns and full-time employees.



Preben

Preben has a technical background as an engineer, which has subsequently been supplemented with a commercial superstructure HD(A). For the past 11 years, Preben has worked in the energy industry, where the products have been various equipment for gas. At VisBlue, Preben's primary role will be to sell our battery solutions to the industry in Denmark and to our international customers.



Malene

Malene is our new team-mate in internal sales, who also assists our three salespeople, as they are often on the road to customer meetings around Denmark and abroad. Malene's daily life will take place at the office in Aarhus, where she will provide help and guidance to current and potential customers for the green transition using a VisBlue battery. Malene must also handle ad-hoc tasks and are thus a great help in the office when our three salespeople are on road.



Louisa

Louisa is a civil engineer in International technological management from Aalborg University and deals with project management, resource planning and purchasing at VisBlue. Louisa therefore wears many different hats.

New colleagues



Ole



Mohamad



Christine



Jelle

Both Mohamad and Ole are training to become machinists, where in connection with this they will be doing an internship with us until the beginning of 2023. Here they get their hands on the battery systems and are out to customers with the installations, so they can get a lot of good experience.

Christine is studying AP Graduate in Commerce Management and is therefore doing her internship at VisBlue until June 2023. Here, she is doing marketing and is especially optimizing on our website and SEO, but also ensures, among other things, that our LinkedIn is regularly updated.

Jelle is about to take his master's degree as a mechanical engineer at Delft University of Technology with a field of study within energy, process, and flow technology. In February, Jelle started his internship at VisBlue, where he worked on optimizing our container setup so that it could integrate more systems that it could at the beginning of 2022.

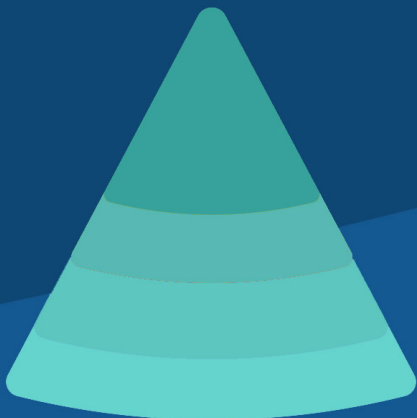
We are incredibly happy to have gained a lot of new faces and benefit from all the different inputs and perspectives for VisBlue!

Articles



In 2022, [Business Review](#) published an article about VisBlue's battery solution and the possibilities for storing green energy. The article discusses, among other things, how we make the best use of renewable energy with a battery from VisBlue and can thus help reduce resource waste, as well as the new layer of intelligence that would be integrated into a VisFlow battery in 2022, of which could manage our battery solution adaptively according to electricity prices.

In connection to rising electricity prices and a continued need for green transition, [Erhvervplus](#) also published an article about VisBlue. The article gives an insight into how this can be felt in VisBlue and compares it with lithium batteries which, among other things, is challenged by price increases and delivery challenges for copper etc., which makes delivery times for lithium batteries longer.



Installations

In continuation of our great growth, we also had the flow battery installed in many different places in 2022, including 6 municipalities, and has also done some exciting projects in industry and housing associations. You can read about some of those installations below:

It was, among other things, installed in various schools all over Denmark, including Jyderup Skole in Holbæk Kommune. It has also meant that the school can now use more of the electricity produced by the school's solar cells.

Another school is Strandskolen, located on the outskirts of Aarhus. The battery will be used as part of the teaching, where students will be able to gain knowledge about energy production and storage. Here, the idea was to install a battery based on being able to store the power that would not be used in the summer, and in that way save money and be more environmentally conscious.

Our machinists have also had a lot to do in November, as we have been busy getting lots of battery systems ready for delivery in December. That can only be called a great success!



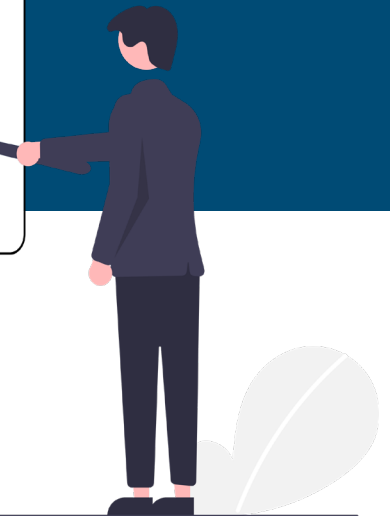
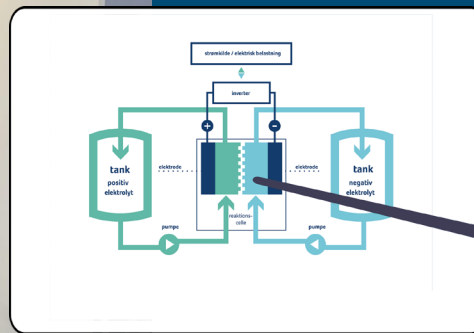
We have also been at Bymarksskolen in Hobro to install a giant 100 kWh battery. Here, the battery will help to make better use of their solar cell production by storing the energy and using it when the sun is no longer shining, or the solar cells' energy production is not sufficient. This will help the green transition in Mariagerfjord Kommune and in relation to the rules for municipal energy production.



Events & fairs

In 2022, we attended fairs again, where we visited, among other things, the Expo for Decarbonised industries in Düsseldorf, Germany, Housing association fair in Copenhagen and Housing associations day to have a talk about storing sustainable energy.

Our CEO Søren Bødker was also at the IDA event on October 26 in Copenhagen, where both students, self-employed people and pensioners showed up to hear about the flow battery, as well as hear about the legislation in relation to the transition to renewable energy sources and the challenge in the Danish legislation in relation to the energy infrastructure.



We have also had several visits from outside, to talk about our battery solution and to learn others about how we use renewable energy more efficiently and sensibly. Here, among other things, we have had visits from energy technology students from Aarhus University, the Aarhus economic committee and AGF Network. We love to share our knowledge and are happy that there is a great interest in our company and what we do.



Thank you!

2022 has brought a lot of **good things**, and with a growing VisBlue, we look forward to entering new and larger premises at the beginning of **2023**, where we can have even more space to produce battery systems.

For us, the **increasing interest** and a **growing** VisBlue has also meant many trips out of the house and many client meetings. It has also meant that we have had a great start to 2023, which we look **forward** to telling you more about later in the year.

With that said, we have taken even more steps in the **green** direction. And for that we want to say **thank you** to those of you who have been on the journey, and thanks again for the great interest!

