

Improving life through co-creation of meaningful water innovation

Annual Report 2022 From vision to the first results

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Water Valley Denmark bring the best minds in the water industry together. We facilitate project collaboration and innovation in order to create solutions for the world's fundamental water challenges.

Water Valley Denmark is a non-profit member organization founded by Danish Industry, Grundfos, AVK, Danfoss, Aarsleff, Systematic, Kamstrup, Ramboll, Aarhus Municipality together with Danish utilities and research institutions.



Accelerating business growth through partner innovation

Water is more important than ever before, and the global crisis calls for new solutions. Water Valley Denmark is committed to accelerate the development of Danish water technology in order to make a difference and create well-being for the world's population.

With the ambition to create one of the world's strongest platforms for water tech innovation we have succeeded in establishing Water Valley Denmark and to increase awareness on water. One of the highlights of 2022 was the appointment of water technology as a Danish stronghold and the following approval of the Lighthouse WaterTech with a grant of DKK 76M for water tech innovation.

The Danish water sector is experiencing significant growth. Water has a prominent position politically, addressing climate and environmental policies as well as business promotion. Partnerships across the water sector have gained greater coherence and momentum through new and robust forums for strategic dialogue, innovation, and co-creation.

In the coming years, Water Valley Denmark will further build on and focus on vital strategic projects that will accelerate the sector's development. We will promote innovation and collaboration through the establishment of more living labs in Denmark. These living labs aim to provide strong frameworks for developing, testing, and demonstrating tomorrow's technologies in close partnership.

We will also actively support the development of the physical water innovation district, The Spring and continue to expand our global perspective and engage in dialogue with leading international water organizations and clusters.

Anders Søndergaard Larsen Chair of the Board

A strong vision brought to life

Our clear ambition is to find solutions for the world's water challenges through demand-driven open innovation.

Water Valley Denmark was initiated by a strong alliance of partners motivated by a clear ambition. In 2022 we went from the first cardboard boxes and team members arriving at the office to getting the first results from ambitious activities, such as Water Living Lab and Water Data Space - a milestone for the Danish water sector.

What we have done in the last two to three years is to gather the forces of the Danish water sector. On top of this, we have managed to secure a wide range of funding for the water sector in Denmark. We will continue delivering on UN SDG 6 and contributing to the Danish government's goal to become carbon neutral by 2030. Our agenda is double edge, including a fundamental focus on sustainability, while at the same time a strong commitment to a commercial agenda rooted in the ambition of doubling the export of Danish water technology.

Thanks to our members and partners in the water ecosystem for meaningful and inspirational collaboration. More than 400+ water professionals and thinkers have been involved in our activities resulting in partnerships and projects.

We look forward to creating even more water impact with you in 2023.

Ulla Sparre CEO

It has been great seeing partners and members leaning in to our shared purpose on improving life through co-creation of meaningful water innovation.

We are different, but we all share one ambition: To rethink, re-build and innovate worldleading water solutions.



2022 Highlights



Up and running

Onboarding of CEO Ulla Sparre and establishment of the office - from cardboard-boxes to headquarter



Lighthouse WaterTech

76 mDKK to important innovation projects as living labs, digitalisation and data sharing

February



First team onboarded

1 March we welcomed our first team members specialists in innovation, digitalisation and communication



Kickoff Water Living Lab

The partners started developing a safe collaboration space, and concepts of predictive technologies.

January



Together with 50 data specialisst we set the stage on understanding a data spaces and qualifying important use-cases



March

Start of water startup accelerator In August the Spring opened the doors to the first Danish watertech incubator. From Water Valley Denmark we developed our new mentor corps linking experienced water profs with

innovative ambitious startups.

Official launch

Water Valley Denmark is officially launched at Water Tech Talks 9 June 2022 – finally we could all meet physically after COVID



August



IWA World Water Conference & Exhibition

Water Valley Denmark facilitates Innovators platform workshop, Workshop on Wicked Water Problems, xx

Worlds most sustainable and efficient water cycle Ambition born and conceptualized at our first Water Innovation Council meeting









June

Water Data Space Workshop

50+ digitalization pros were assembled to discuss challenges and describe project ideas, where data sharing is essential for impact of solutions

September

November

December

Vision & strategic focus areas

Improving life through co-creation of meaningful water innovation





Research, Education & Funding WaterTech

Building a Lighthouse

No innovation without new insights, new learnings, new talents, and new investments. It is therefore at the core of our work to stimulate research and education in water technology and to attract attention from talents and investors.

In Water Valley Denmark we support strong collaborations between research institutions, utilities and companies.

In 2022 Water Valley Denmark secured funding for the first phase (2022-2023) of Lighthouse WaterTech with 76 mDKK. It supports water tech innovation projects in collaboration with partners in the Danish eco system.

The Business Lighthouse for Water Technology brings the Danish water sector together and forms strong innovative partnerships between utilities, businesses, knowledge institutions, public actors, and innovative small and medium-sized companies.

The business lighthouse WaterTech embraces the entire Danish water sector. It contributes to a CO₂- and climate neutral water sector by 2030 along with establishing a world-leading research and

knowledge environment within water technology.

Water Valley Denmark is project owner of the two largest activities in phase one of the Lighthouse: Water Living Lab and Water Data Space. The other project owners are CLEAN, Klimatorium, Aarhus University, City of Aarhus and VIA University College.

In 2022 Water Valley Denmark also contributed to the summer school Advanced Water Cycle Management Course, and we look forward to further develop research and education activities with our partners.







In the short term, we are working to create leading large-scale test and demonstration facilities. This is done to ensure long-term talent development and create the framework for many more startups and more business development in the companies within the water area

Ulrik Gernow,

COO of Grundfos and Chairman of the Steering Committee for the Lighthouse WaterTech



to the COVID-19 pandemi

Investing in your future

Lighthouse WaterTech projects in 2022-2023





Water Data Space

10 partners investigating how to enable open data sharing with the aim to leverage innovation on sustainable and efficient water solutions. 80+ persons has participated in the project so far



Water Living Lab

14 partners creating a digital test environment in connection with the drinking water system in Aarhus for innovation and demonstration of safe and sustainable solutions.



Water Cycle Denmark

6 partners creating an overview of the relevant available large scale test facilities and an innovative platform for online collaboration



Water consuming food industry 5 Innovation projects with 15 partners

to promote the green transition through increased collaboration between water tech companies and the major water consuming companies



Test facilities in The Spring

Developing a blueprint for an integrated test and demonstration facility in the water innovation district



Startup & Incubation

Creating an ambitious incubation hub for water technology scaleups. Matchmaking between startups and business partners



World Water Center

7 partners developing a blueprint for a new innovation hub in the new water tech innovation district The Spring



What if Lab

Connecting students with real-life challenges from the water industry



Startup & Acceleration





Pictures from the first FLOW-camp and the very first "Water's Den"

During autumn 2022 the development of our startup and acceleration program was started. Part of this is the Flow Camp funded by the project BeyondBeta. It supports startups in developing a proactive business plan, give startups insight knowledge about the water industry and create a safe space for open innovation to take roots/flourish.

The 'Water Den' experts with +50 years of experience – first of its kind in Denmark - hatched at this camp and has been a great success. Startups can spar with the panel and get inside knowledge, recommendations, and link to network.

Members from Aarhus Vand, Grundfos, Envidan and Kamstrup have attended the expert panel, which we are very appreciative of.

Another key action in 2022 was establishing the Water Valley Denmark Mentor Corps. It is a collaboration which serve the companies to increase their innovation power and to give startups the possibility to learn from water professionals and get access to a powerful network. Since the launch in December 2022 fifteen mentors have joined the Mentor Corps.

Looking into 2023, we are planning to consolidate and further extend the Mentor Corps. In addition, we are planning to develop a business Spin-In activity.

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We were very pleased with Jesper Hall as a mentor, he is super sharp and knowledgeable, and it was really useful to be able to spar with him, especially in relation to hiring a CTO/co-founder and structuring our sales.

Søren Schou Aguareg





Innovation and large-scale projects

From co-learning to business projects

We initiate and facilitate demand driven open innovation between our members and partners.

In 2022 we had 400+ persons attending our workshops and innovation activities and we succeeded in identifying important projects, forming partnerships and securing funding.

Highlighted here on the right are three of the projects that support our strategic aims of creating largescale test and demonstration projects via living labs and enable digitalization in the water sector.

When solving wicked water problems, it is important to join forces to innovate the needed solutions. On the following pages you can see an illustration of our framework for open innovation and an example of an innovation cycle.









Green transition in the food industry

Through collaboration with Food & Bio Cluster Denmark a number of innovation projects have been launched to bring down water consumption within the food industry.

The projects center around Cleaning-In-Place (CIP) processes, digitalisation opportunities for early detection of water leakage and optimisation of field watering during periods with draught. For more information read here and here.

Water Living Lab – creating a digital model for innovation, test and demonstration

14 partners creating a digital test environment in connection with the drinking water system for 17,000 house holds in Aarhus for innovation and demonstration of safe and sustainable solutions. A digital twin, a shared data catalogue, a blueprint for water living labs and a common innovation platform for partners. Next phase is inviting SMEs and startups to test and demonstrate their solution.

Water Data Space – enabling innovation through data sharing

The Water Data Space project is a driver in promoting digitalization in the water industry and thereby ensuring both more quality, sustainability and efficiency. The first use case has been completed with a proof of concept, and the perspectives in implementing the solution are great and shows potential to save two months manual work yearly for a utility. Read more in the article here.



From challenges to business projects

Water Valley Denmark's framework for open innovation

Innovation projects — Securing that ideas create the needed impact and learnings are distributed and used in future colearning



Danish and international challenges are voiced

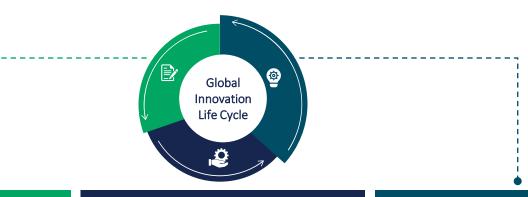
Knowledge sharing on already existing solutions and projects

Based on potentials and challenges identified in the COLEARNING stakeholders mobilize to create new innovative solutions and form partnerships in co-creation workshops.



From co-learning to Living Lab

How we create value - An example of the process from setting the theme to projects in action



1. Co-learning



The Board and Water Innovation Council of Water Valley Denmark identify mega challenges. The first challenge raised was the need for solutions to secure efficient drinking water supply. 50+ water professionals met to share experiences and needs and prioritized the following needs:

- Need for digital solutions and real-time modelling
- Need for data-sharing and standards
- Demonstration and test sites for Danish Water Technology.

2. Co-creation



Based on the prioritized needs Water Valley Denmark facilitated co-creations sessions as online and physical workshops with:

- Knowledge from 150+ top water professionals
- Input from top thinkers eg. London Business School
- Company dedicated valuable sparring

It led to new partnerships, project, and political and international attention securing the first round of funding.

3. Co-effectuate



Out of the co-creation sessions three valuable partnerships and projects started:

Water Living Lab Aarhus, 14 partners

- Digital model for drinking water supply
- Funding: 8.5 mDKK

Water Data Space, 12 partners

- How to enable open data sharing
- Funding: 16 mDKK

INSA Drikkevand: Partnership to secure healthy drinking water without environmentally harmful substances.



Global Collaboration

Connecting Danish and international partners around the needed innovation

To solve the world's wicked water challenges, we need to innovate in partnerships. 2022 marked the beginning of collaborative sessions facilitated by Water Valley Denmark and leading to new partnerships in Europe, US and India.

A highlight was the IWA World Water Congress & Exhibition, where Water Valley Denmark hosted workshops on living labs and introduced our innovation model to the IWA hosted session Water Innovation Accelerator.

Our first international partner agreement was signed with Pune Knowledge Cluster in India and together with partners we are pleased to be involved in two Global Innovation Network Programs granted by the Ministry of Higher Education and Science.

Water Valley Denmark happily collaborates with The Trade Council, DI Water, CLEAN, Danish Export Association and State of Green connecting export and innovation.

MoU with Pune

Knowledge Cluster



Meeting with **TOKYO Waters**

Water Tech Connect

Platform supporting SMEs in networking and international opportunities – part of Lighthouse Watertech.

Innovators Platform

CONNECT

60 global water professionals attended 6 hours of intensive co-creation workshop at IWA World Congress facilitated by Water Valley Denmark.

> Race to Zero – co-learning session with US Water Alliance, WTA, DI Water and Danish Export Association.

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"I thought it generated very good discussions.

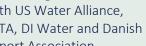
Really well done. I've been pondering your question – 'what would be included in the equation to express the value of water?' ever since you posed it."

Jeanette Smith, Grundfos

Participated in Water Valley Denmark's innovation workshop as part of WTA fact finding tour.



Solvong wicked water problems International interest in our open innovation model at IWA.



Financial and operational key figures - Result



Resultatopgørelse for perioden 3. oktober 2021 til 31. december 2022

	2021/2022 kr.
Indtægter	
Kontingent	5,945,000
Projektindtægter	2,037,100
Andre indtægter	115,946
Indtægter I alt	8,098,046
Udgifter	
Honorarer	(15,000)
Kørselsgodgørelse i egen bil	(19,482)
Møder og rejser mv.	(362,670)
Administrationsudgifter	(331,382)
Rådgivning og etableringsomkostninger	(2,210,210)
Personaleomkostninger	(2,691,327)
Lokaleudgifter	(241,963)
IT udgifter	(313,542)
Tab på debtitorer	(7,200)
Udgifter i alt	(6,192,776)
Resultat af foreningsdrift	1,905,270
Finansielle poster	
Finansielle poster i alt	0
Resultat før skat	1,905,270
skat	0
Årets resultat	1,905,270



Periodens positive resultat på 1.905 tkr. disponeres, så beløbet overføres til foreningens egenkapital til understøttelse af foreningens formål og aktiviteter jf. vedtægter

Financial and operational key figures - Balance

Aktiver		Passiver Passiver			
Note		2021/2022 kr.	Note		2021/2022 kr.
	Finansielle Omsætningsaktiver				
	Tilgodehavender			Egenkapital	
	Debitorer samlekonto	2,167,164		Saldo 1. januar	0
	Beyond Beta	256,054		Årets resultat	1,905,270
	Moms	161,843		Egenkapital i alt	1,905,270
	Tilgodehavende moms	214,015		Kortfristet gæld	
	Periodeafgrænsningsposter	6,000		DI	86,050
	Andre tilgodehavender	28,906		Kreditorer samlekonto	529,635
	Tilgodehavender i alt	2,833,982		Anden gæld	228,821
	Likvide beholdninger	0		Projekt Fyrtårn	84,206
	Omsætningsaktiver i alt	2,833,982		Kortfristet gæld i alt	928,712
	Aktiver i alt	2,833,982		Passiver i alt	2,833,982

You can find the entire financial statement here

Meet the board

Jesper Kristian Jacobsen Anders Søndergaard Larsen Flemming Besenbacher Claus Hélix-Nielsen **Brian Seeberg** Vice Chairman Chairman Danmarks Tekniske Dansk Industri **Aarhus Vand** Danfoss A/S Per Aarsleff A/S Universitet DTU aarhusvand AARSLEFF Ib Enevoldsen Michael Holm Mads Sckerl Mads Helleberg Dorff Niels Aage Kjær Rambøll A/S Systematic Kamstrup DI Vand AVK Danmark A/S kamstrup RAMBOLL AK **SYSTEMATIC** Vand Ulrik Gernow Kaj Stjernholm Carl-Emil Larsen Martin Østergaard Christensen Grundfos A/S Stjernholm A/S Aarhus Kommune Danva **STJERNHOLM**®

Meet the team



Ulla Sparre CEO usp@wvdk.com +45 2222 9948

Innovation
Management
Water Data Space
Innovation District



Pia Jacobsen
Head of Global
Innovation
pja@wvdk.com
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Water Living Labs International collaboration with export focus e.g. WTA



Camilla F. Simonsen
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Admin
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+45 9310 9036

Member service, communication Administration



Anna Listh
Head of Industry
Acceleration
anl@wvdk.com
+45 9393 4941

Startups & Facilitation Mentornetwork



Jackie Van Tran Foged Project Manager jvt@wvdk.com +45 2199 0415

International collaboration with focus on India & Southeast Asia



Jesper Borg Christensen Head of Research & Education jbc@wvdk.com +45 2332 8580

Funding, Research and Education Lighthouse application

A strong alliance of stakeholders

Thank you to our members

PARTNERS

MEMBERS



















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