# TRILOBITE

#### **INDUSTRIES**

Trilobite solves environmental problems.

## Background



#### What will Trilobite do?

- The company will use its technology to clean different fluids with water as a common factor and that way enable recycling and turn waste into value
- License out the technology to increase the company value to industries not possible to pursue
- Develop new and innovative technology to further improve the environment and product/license portfolio of the company
- The technology was patented by the founder Eirik Egeland and Trilobite Innovation
- The core technology is licensed exclusive to Trilobite Industri AS to be commercialized and fully utilized within industrial treatment of fluids with a fixed license fee yearly of € 100.000,- to keep the patent maintenance and then royalties when the company is in sales mode at a later stage.
- Started as a master thesis project in 2008, turned into a company in 2010, and ready for scale up in 2023.

# Company and technology



Test system done for Car Wash





UV-LED from CISUV

#### Separation and recycling

Hydrodynamic separation (own technology)

#### Disinfection

•UV

Sensing and analytics

•UV Sensor

UV Sensor system from Photonics

## Three principal directions that complement each other:

- Separation and recycling of fluids using own patented technology coupled with other common hardware like UV-LED and UV sensor to a complete system for recycling of fluids with a special focus on water
- Disinfection using *UV-LED* or Ozone depending on the application
- Sensing and analytics with *UV-Sensor* (working towards being distributor for Scandinavia)

## Problems this technologies solves in combination or as stand alone:

- Treatment of industrial water recycle for lower water bill
- Treatment and monitoring of drinking water
- Monitoring of sewage water
- Recycling of water from car wash, laundries, rainwater re-use, special treatment of water for crisis areas and military

## Our technology



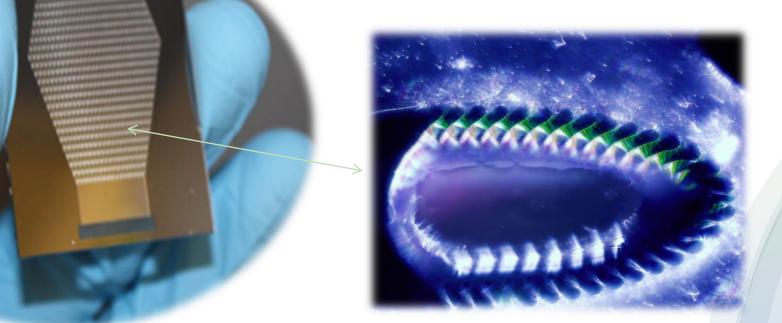
#### How the technology works:

- Think of a stone in a river
- The water will flow around the stone as it forces the water out and around it and creates pressures and certain acceleration zones
- The centripetal acceleration and centrifugal force will come into play as the particles flow around the stone and are being pushed out following the stream down
- Trilobite is utilizing this effect in a microsystem and enhances the various forces to make a system that will not clog
- The complete system will work as a separation device or a thickening device, depending on the end goal, clean particles or clean fluid
- A **patented** continuous hydrodynamics separation technology for **micro and nano-particles** from liquids and gases
- Has the potential to be a platform technology for a new standard of filter less filtration devises for all types of fluid treatment from drinking water to sewage treatment, gas treatment and all between
- Current filters in the micro- and nano ranges are big, expensive and demand a lot of maintenance due to clogging
  - Trilobites **unique technology** allows for a **clog free**, low power usage, low pressure loss (no barrier that the water is forced through as with normal filters), low maintenance (**low OPEX**), **scalable** solution, suitable for both small volumes and very large volume flows, low production costs, and comes with a small footprint due to its compact design
- The Trilobite separation technology is highly suitable for **light weigh material** like bacteria, microplastics, algae, etc.



A unique platform technology that can be tailored to do:

- Separation of particles and fluid, clean particles or clean fluid
- Concentration of particles in very thin solutions like sea water
- Thickening of a fluid with particles, from thin solution to a thicker slurry
- Classification of particles according to size and shape



## Planned business

We will also deliver technology and solutions that are not inhouse patented and produced, but under distributor agreements (in progress)

- UV LED for disinfection of water for stand alone and also integration into our products based on own technology and supplier from CisUVC.
- UV Sensors to detect and monitor water quality

   negotiation to be distributor for the
   Scandinavian market
- Also possible to sell MBBR systems for biological treatment of water and waste and types of membrane systems for de-salination of water from suppliers from Thailand and China

## Trilobite Industri will both produce and sell systems and components and license out the technology

- Systems for recycling of water from Laundry wash, Car Wash, Tunnel wash runoff and other water treatment possibilities
- License out the technology for:
  - Harvesting of Algae for Aquaculture feedstock (in first negotiation phase)
  - Part of system for treatment of produces water for oil & gas (pre-project phase)
- Will follow up on the increasing demand for systems for sewage treatment in Norway and abroad with a focus on microplastic and other pollutant
- Will pursue a track towards water treatment systems for use in crisis and military use
- System price will vary with industry and capacity. License fee will vary with industry and royalty' vs upfront payment vs development cost

#### **Technology Roadmap:**

- 2023-2024: Further develop stand alone separation modules with integrated UV-LED
- 2024-:Integration of separation technology, pump technology and electric motor technology to a combined pump-separator
- 2023-2025:Develop a small scale transportable MBBR system for biological treatment of water and waste for use in high demand-critical situations as catastrophic areas, war zones etc

### Financials

EBITDA & FCF						
All figures in NOK (ex. VAT)	2023	2024	2025	2026	2027	2028
Total Operating Income	2 731 286	12 563 500	34 025 000	62 128 000	107 875 000	197 890 000
Grants	1 500 000	2 500 000	5 000 000	10 000 000	10 000 000	10 000 000
Total cost of sale	-260 739	-1 438 948	-2 815 813	-8 481 617	-22 458 979	-44 590 417
Total SG&A	-7 471 380	-13 476 448	-18 634 171	-22 555 067	-28 844 279	-39 478 142
EBITDA	-5 000 833	-2 351 896	12 575 017	31 091 317	56 571 742	113 821 442
Net interest expense						
Income tax				-5 225 524	-10 558 284	-22 589 368
Change in working capital	-1 620 000	0	0	-5 225 524	-5 332 760	-12 031 084
Cash from operations	-6 620 833	-2 351 896	12 575 017	20 640 269	40 680 698	91 232 073
Profit After Tax (Free Cash Flow)	-6 620 833	-2 351 896	12 575 017	20 640 269	40 680 698	91 232 073

#### Note

- Grants public grants for research, innovation and development etc (non-dilutive capital)
- The numbers are a projections based on potential sales numbers potential sales predictions that can be fulfilled if enough capital are raised and the market response is at proposed

## Financials

#### Capital raise:

- Total shares: 3.000.000
- New shares: up to 1.200.000
- After capital raise up to 4.200.000 shares
- Share price NOK 5 per share.

Raising up to 6.000.000,- NOK in this round.

- Minimum investment: NOK 50.000,-
- Each convertible is NOK 50.000,- and converts into shares for NOK 5 each untill feb. 28. 2025. The annual interest rate is 8%.

If you think the valuation is too high, you can make a counter offer. If you think the risk of buying shares is too high, you can buy convertibles.

- We will develop the market for industrial recycling of water in Norway and Scandinavia
- Capital need for development and expansion of sales
  - 2023: 6 MNOK scaling the sales of licenses, hardware and further development of products
  - 2024: 25 MNOK + 50 MNOK to be deployed for scaling the business and sales
  - 2025: The company will rely on sales and licensing revenue to further development and scale

### Team

The team in Trilobite Industry AS consist of an enthusiastic entrepreneur with knowledge and experience from both small companies and as a leader of Norwegian Water Cluster. The founder works with several partner companies to develop and build the products.

Trilobite Industri will work with Jeffersen Wells, an experience reqruiter.

We have identified several potential prospects that will be persued upon fincancing the company fully.

The following has been identified:

- Technical personell for development with bachelor/master degree within microsystems and electronics
- Business develoment and financials
- Project manager
- Marketing and sales

#### Eirik Bentzen Egeland, Founder/CEO

- 39 years old and father of two
- Background within Micro and nanotechnology
- Several co-authored publications and two patents filed
- Attended international school during and after studies, UC Berkely as part of master of science degree and Babson College outside Boston as an Entrepreneurial course with Innovation Norway.
- Founded several companies and serves on the board of 4 at the moment.
- Serves currently as CEO of Norwegian Water Cluster in addition to being founder of the Trilobite Group of companies.
- Will be an active player in the setup of the company and will seek to hire people that is better than him to run and develop the company further



## Thank you

If you have any questions please contact:

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