

# rocssole

SEE BEYOND.

MIKA TIENHAARA, CEO

WE MAKE THE INVISIBLE VISIBLE IN INDUSTRIAL PROCESSES

# Impact of **unplanned maintenance** in industries

## PROCESSING INDUSTRY



## MANUFACTURING

**82% of companies** experienced unplanned downtime in the past 3 years with an average cost of **\$ 2 million per occasion\***

## OIL & GAS



**LEVEL INSTRUMENTS FAILURES**

**52% of cases for processing equipment failures due to faulty level devices\***

# THE INDUSTRY CHALLENGE

\*Aberdeen Strategy & Research report, ISA and SPE/JPT.





**FINANCIAL PERFORMANCE**

**SUSTAINABILITY**

**WITH SEE BEYOND INSIGHTS**



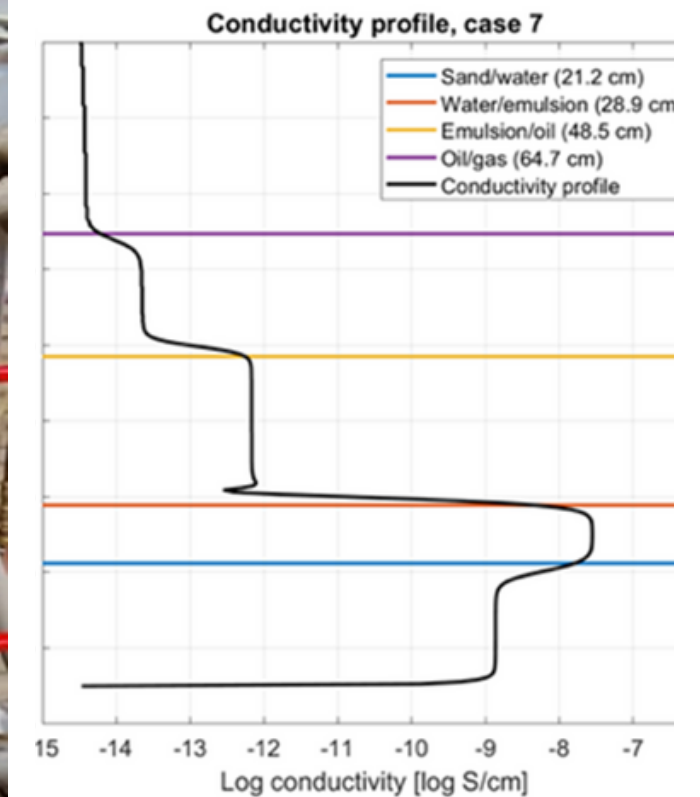
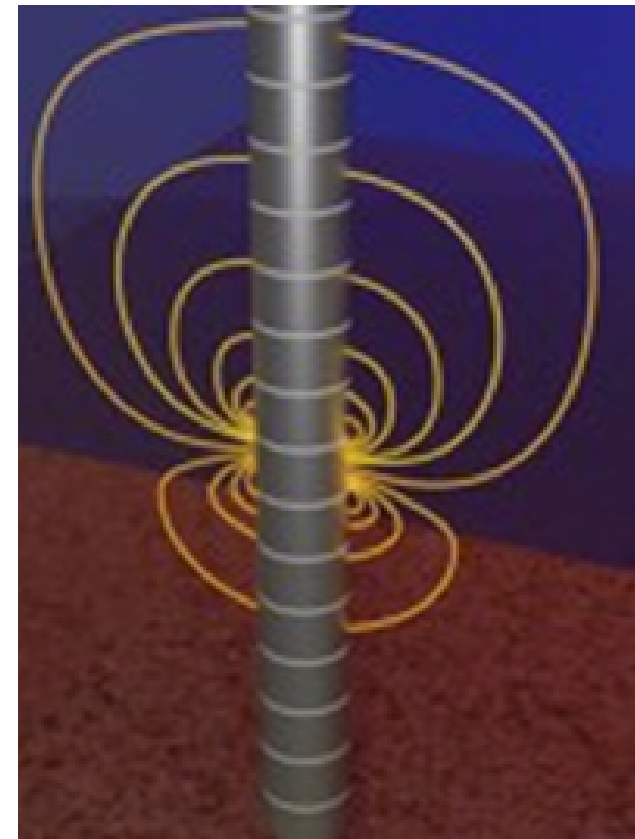
# Electrical Tomography

Originally rooted in med tech, our team started experimenting with its application in other 'can't see thru' situations.

We own the stress tested IPR, with patents granted in 18 countries. Additional patents pending.

**Now you can see beyond.**

**BASED ON LEADING  
RESEARCH AT THE UEF  
KUOPIO, FINLAND**



## Main Mechanism

Sensor measurements determining electrical admittance: Conductivity & permittivity.

## The Invisible

Real-time data from emulsions, solids and water levels.

## Made Visible

Supported by detailed data analytics for optimization.

**liquiDetect**

**solliDetect**

# BUSINESS MODEL

## SUBSCRIPTION-BASED MODEL

1.

**R&D and  
Consulting Services**  
(build an MVP)

2.

**Productification**

**liquiDetect**

**soluDetect**

3.

**Disrupting the Industry Rules, Offering a  
Subscription Model with wide acceptance**



Multiyear agreements, upselling of new features and other services



License out/JV HW manufacturing



Sales Distribution Corporate Partnerships - for a wide distribution

**From an initial Sales cycle of 24+ months,  
we have reduced it to 6-12 months, and eyeing a few months sales cycle**

# SeoBeyond

## THE MAIN APPLICATIONS + HOW YOU CAN BENEFIT

### Detection of Liquids

- 24/7 monitoring system with frequent data
- Oil/Water Level Detection (critical for performance)
- Emulsion Detection

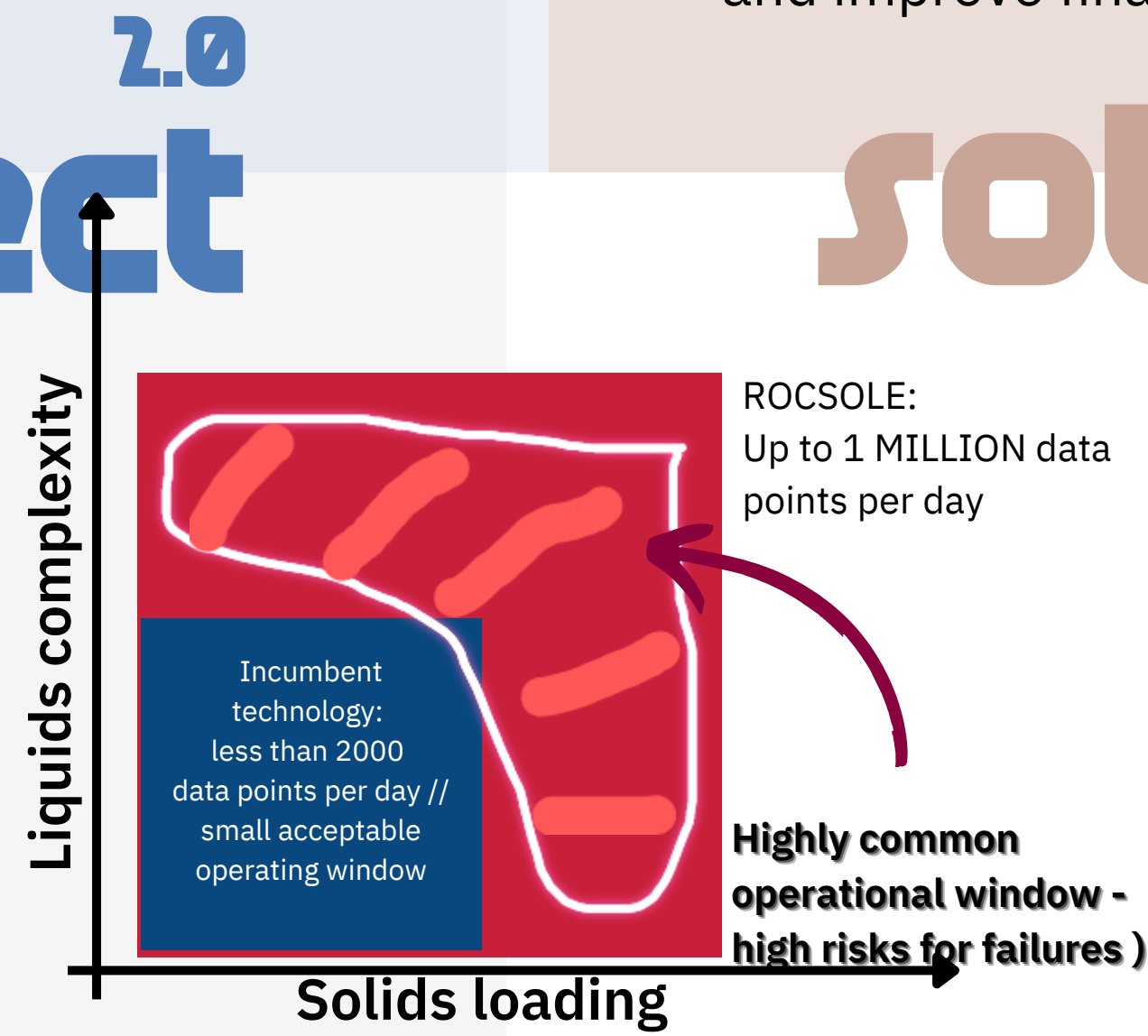
2.0  
**liquiDetect**



### Detection of Solids

- 24/7 monitoring system with frequent data
- works under all circumstances and continuously
- allows for well-informed decision-making to reduce cost and improve financial returns

1.0  
**solliDetect**







MARKET	TAM	SAM	SOM
OIL&GAS Instrumentation	3.7 B\$	400 M\$	100 M\$
OIL & GAS Pipeline Scanning	0.7 B\$	50 - 100 M\$	10-20 M\$
OIL & GAS Flowmeters	10.3 B\$	50 - 100 M\$	20 M\$
SEMICON MANUF. Adv. process control	6.4 B\$	400 M\$	50 - 100 M\$
Industrial IoT	10.3 B\$	200 M\$	40 M\$

# Market Size

We are targeting the key potential in US + Canada, as well as the Middle East.

Also, a lot of manufacturing capacity is being expanded in both North America and Europe (semiconductors etc), the need for Advanced Process Control, AI Data analytics is a significant growth opportunity.

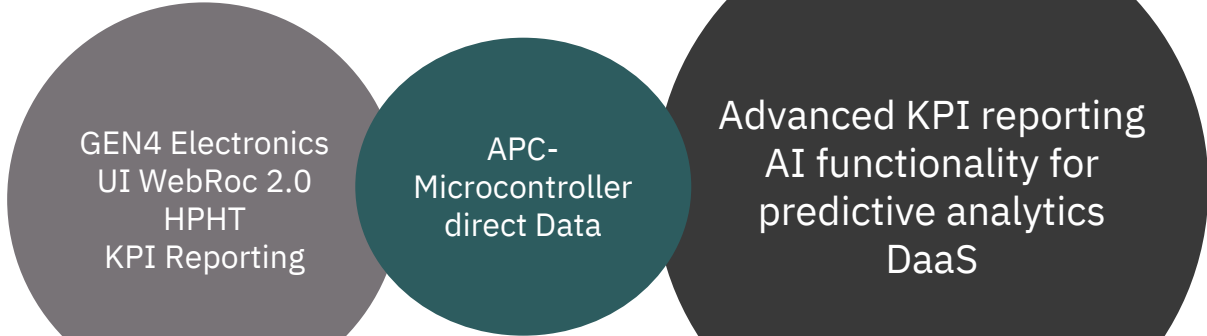
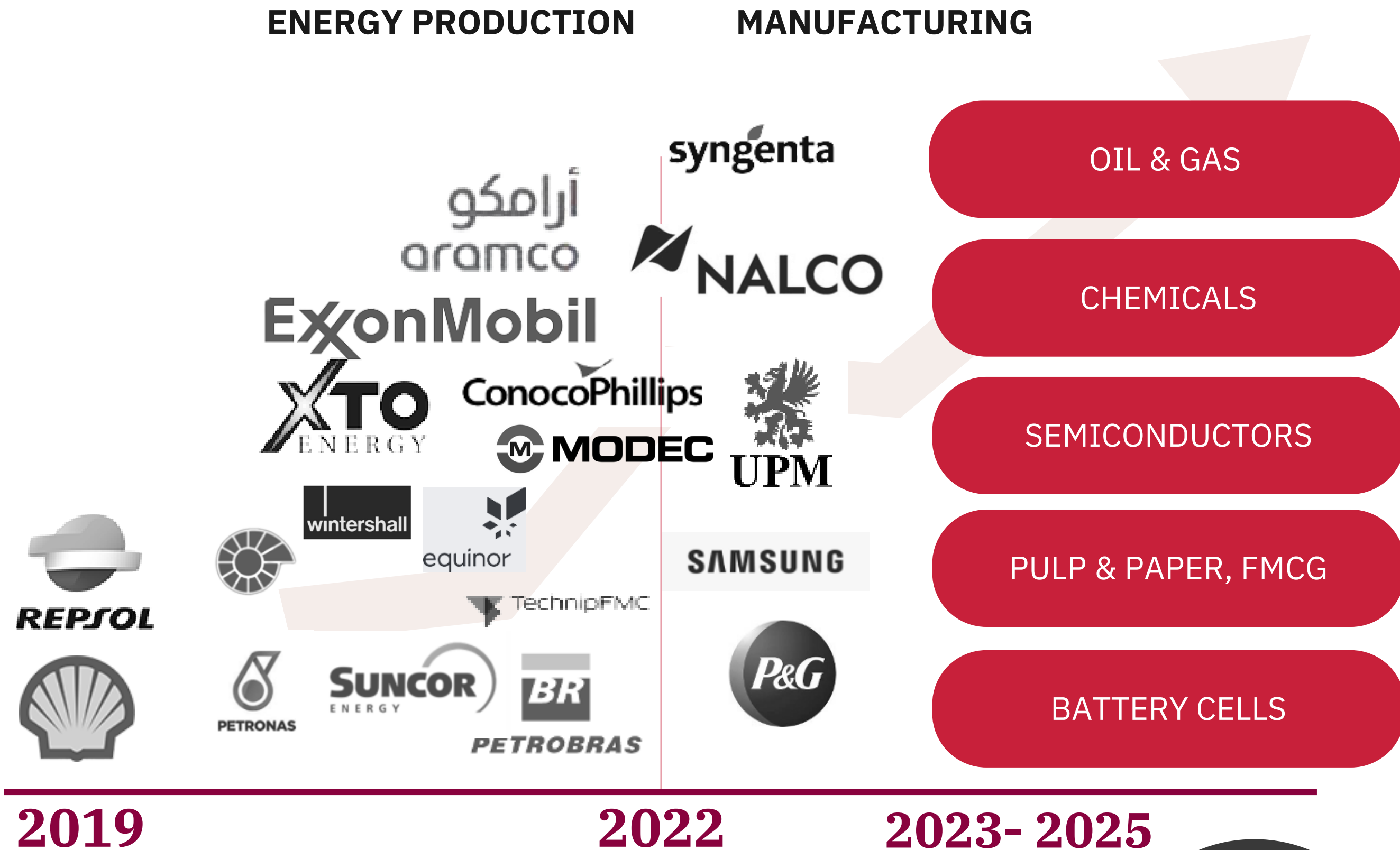
The key markets ROCSOLE fits into are:  
OIL&GAS Separators and Tank Instrumentation  
OIL&GAS pipeline services /flowmeters  
Semiconductor manufacturing Advanced Process Control as well as Industrial IoT.

**SOM: 280 M\$**

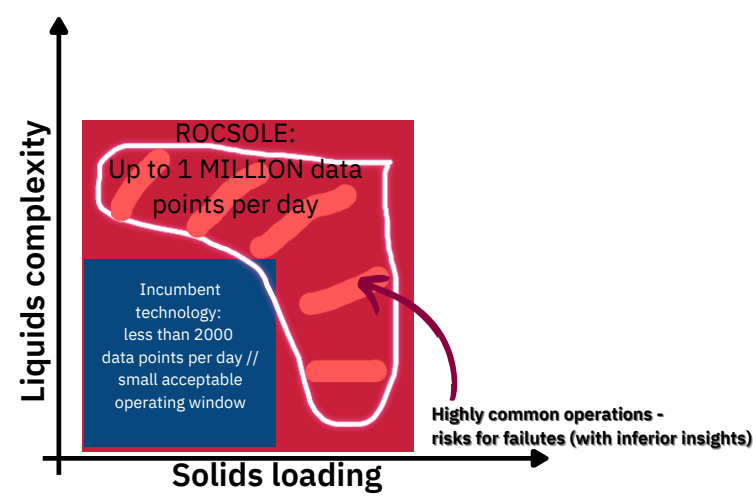
Market size data are taken from reports by Markets & Markets, Market Watch and other sources.

We work with large international corporates as our customers.

And onboarding more.







	CRITICALITY	seeBeyond	NUCLEONIC	GUIDED WAVE RADAR	CAPACITANCE
OIL/WATER INTERFACE	⚡⚡⚡	✔	✔	✔	✔
SOLIDS INTERFACE	⚡⚡	✔	✔	✔	✔
EMULSIONS LAYER INSIGHTS	⚡⚡	✔	✘	✘	✘
DATA POINTS/DAY	⚡⚡⚡	>850000	400	2000	1000
RANGE OF ACCEPTABLE OPERATING ZONE	⚡⚡⚡	VERY LARGE	LARGE	MID	MID
CAPEX		VERY LOW*	HIGH	LOW	LOW
OPEX		LOW	HIGH	LOW	LOW

\*Subscription model

Over the past 3 years operations, ROCSOLE has generated more than 267 BILLION unique data points

# Exciting last 12 months: Milestone achievements since Series A

## GENERAL

- Internal value mapping and process improvements done for tech, SW and marketing
- Product Development partnerships established - increase SW engineering, AI and electronics design capacity
- New facilities with full team under one roof ready Q4 2022

## COMMERCIAL

- Launched the subscription business model (recurring revenue)
- First repeat sales with corporate customer
- Customer piloting finalized
- New customer piloting
- Additional customer onboarding
- First Product Launches upcoming - SoliDetect 2.0 and LiquiDetect 1.0
- Corporate partnerships being established
- Sales Cycle reduced to less than 12 months, and next step below 6 months
- Tech features road map ready for up to 4.0 product launches

**Post-revenue**

**ARR**

**Order Backlog**

## OTHER

- Tech team increased from 2 to 7 persons
- Branding revamp
- New website launched
- Sustainability initiative in preparation

## TECHNICAL

- Process calculations reduced from over 20 sec to less than 5 sec - enabling advanced process control
- ML-based data processing algorithm for level detection established
- Level measurement algorithm for MCU platform in development
- New neural network model for deposit estimation established
- Simulations run successfully for new desalter application
- IoT/Remote DCS connection replication test unit established
- New remote connection system in development
- New G4 electronics concept and prototyping
- User Interface webroc 1.0 launched and 2.0 under development
- Mechanical pressure increased from 15 barg to over 500 barg
- Pipeline scanning tool prototype passed over 100 barg 24 hour test

**High-speed algorithms**

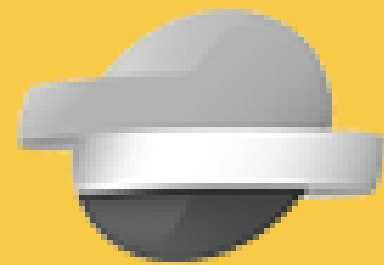
**ML & IoT**

**Tech road map**



# Solidly Funded + Venture Backed

Pre-SEED / SEED / Series A :  
**20 m€** funding (equity and non-dilutive)



**REPSOL**



**SPRINGVEST**



**LOOP Project**

## Bridge funding - convertible note

### The Investment

### Opportunity - Scalability and Growth

# 2-2.5 m€





# The Leadership Team



**Mika Tienhaara**

*B.Sc. Manufacturing, M.Sc. Energy, MBA Entrepreneurship, Hon. Dr.*

**CHIEF EXECUTIVE OFFICER**

Mika is a serial entrepreneur with several exits. He has led the commercialization of over 30 products & technologies. Mika is an award-winning executive and innovator. He has established and run global operations. He has more than 12k followers on LinkedIn and is strong a networker and recognized as a top global thought leader in entrepreneurship, startups and energy. He serves in the program committee of OTC and OTC Brasil. Mika's playbook is to enable sales and partnerships with bluechip corporates. His total fundraising exceeds 100 m€ and has more than 20 years as an executive. Since 2018 at Rocsole.

 <https://youtu.be/VEWcHms1jaY>



**Tommi Villanen**

**CHIEF OPERATING OFFICER**

Tommi has got diverse background in managing supply chain & manufacturing operations in cargo handling equipment manufacturing (Novatech group) business since 2016. He was also in charge of the assembly plant relocation to another country and his change management skills were key elements in the successful project execution. Tommi's "superpower" is ability to create excellent team spirit and build the "business momentum" by encouraging team members to use their strengths in everyday work. Tommi joined the Rocsole team in early 2021.

 <https://youtu.be/IOFcaeqUh6A>



**Arto Voutilainen**

*Ph.D. Physics*

**CHIEF TECHNOLOGY OFFICER**

Arto has a long background in the field of computational physics and inverse problems. The main focus has been on developing and improving methods needed in various estimation and 2D/3D imaging problems, and one of the key areas of interest has been electrical tomographic imaging. Arto joined Rocsole in 2012 before which he was in different R&D positions e.g. at the University of Eastern Finland and the tech startup Numcore Ltd.

 [https://youtu.be/gxTl\\_6DTSIO](https://youtu.be/gxTl_6DTSIO)



**Harri Hedman**

*BAA Business Administration*

**CHIEF MARKETING OFFICER**

Harri has over 20 years of marketing experience from Honeywell where he has had various global marketing and marketing communications roles handling oil & gas, pulp & paper and other process industry segments. Prior to Honeywell Harri has worked in Brazil and completed his studies in the US and in the UK. Harri joined Rocsole as CMO in early 2021.

 <https://youtu.be/bSYEzvoaOUs>



**Anttoni Juntunen**

*MSc - Economics and Business Administration*

**CONTROLLER**

Anttoni has joined Rocsole in the beginning of 2022. Before joining Team Rocsole, Anttoni worked for about 6 years in KPMG Finland as an Authorized Public Accountant managing and performing financial audits to Finnish SME's as well as Finland-based subsidiaries of large international manufacturing companies. Anttoni has also previously worked in the financial sector and for the Finnish Tax Authority. Through his education and previous work experience, Anttoni has a solid competence in external accounting and other financial issues.

 <https://youtu.be/5AUnhzVYRas>



**Pekka Kaunisto**

**VP SALES**

Pekka Kaunisto has worked at Rocsole since 2019. The biggest achievement at Rocsole is expanding the customer base and creating a scalable business model including a subscription model. Pekka has worked in the oil and gas sector since 2007. Before moving to Rocsole, Pekka was the CEO of Wellquip Holding Oy, which manufactured oil production equipment. Pekka has a strong background in company scaling (from 4M€ revenue to 40M€), processes, personnel management (from 10 to 150 employee), productization, business development and commercialization. As Rocsole's Vice President Sales, he is able to utilize the experience he has gained over the years in the challenges of scaleup.

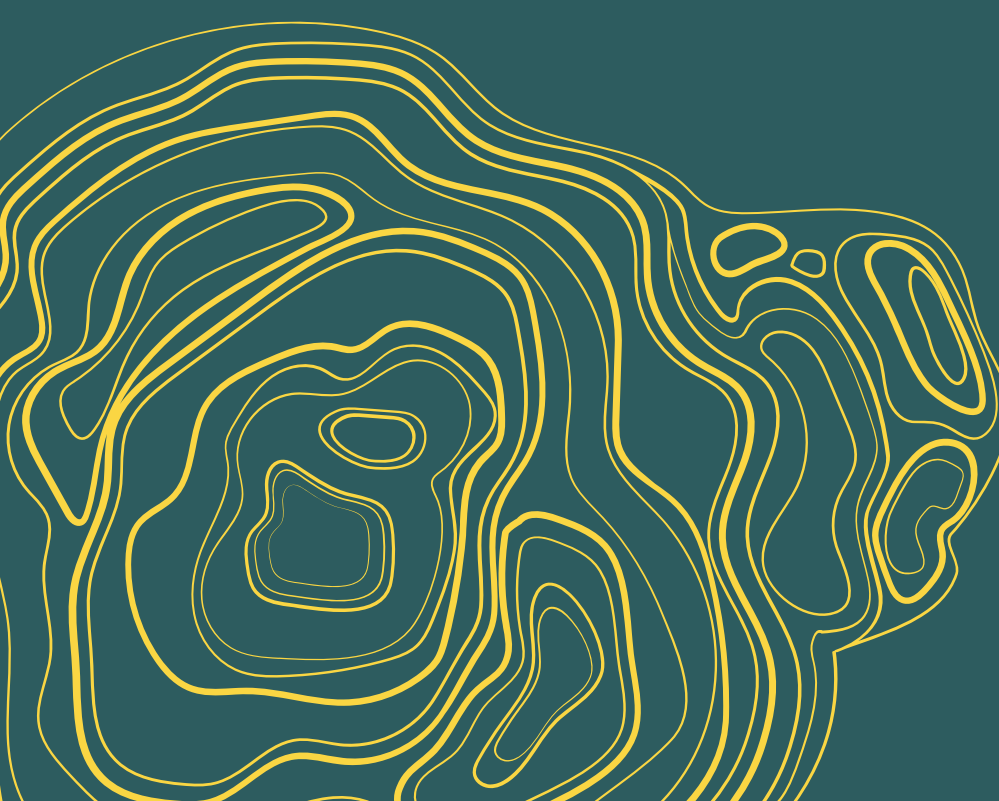
 <https://youtu.be/PRAtWoSGUCM>



**Expertise and abilities in:**  
**Entrepreneurship: startups, scaleups, exits**  
**Oil & Gas Industry**  
**Global operations**  
**Technology, software**



# Get onboard now!



- 1. Size of Opportunity & ready to Scale:** We serve large markets to blue-chip companies; scalability potential is enormous.
- 2. Technology approved & business model accepted:** Corporate(end-users) have approved the technology, and now beng included in recommended industry practices. The subscription model is right in time - and for this type of services we have the competitive edge.
- 3. Well setup for success:** We have a strong and efficient team; our work processes are continuously being improved; we can outsource manufacturing; we have software/AI partners to support our further scaling.
- 4. Right time to invest:** The company valuation is fair - the big growth is coming with high valuation potential.
- 5. Quick return on investment:** we will look at a possible exit scenario in 2024/25 as an M&A with an industrial company, or an IPO.

***Thank you for your attention!***



# **Mika Tienhaara**

## **CEO**

I am in my 8th startup venture; I am a builder, and I enjoy the scaleup phase with all its constant challenges, perfecting the execution. The learning process is constant; one needs to be highly hands-on and agile. This has enabled me to build a successful playbook for taking technology and innovation from the drawing board to corporate assets, creating massive user value, and making an impact with disruptive technology. Collaboration is key.

True customer drive will only be possible if you have a strong team backing the effort, for this, you need to be human-centric in your approach.

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