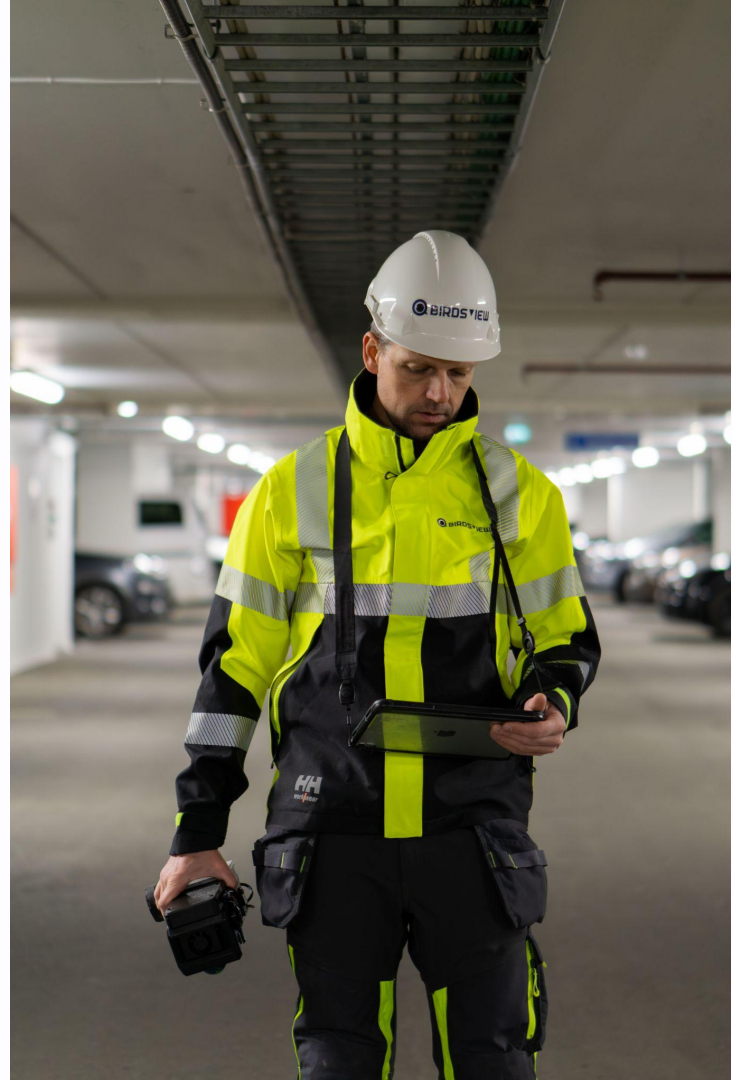


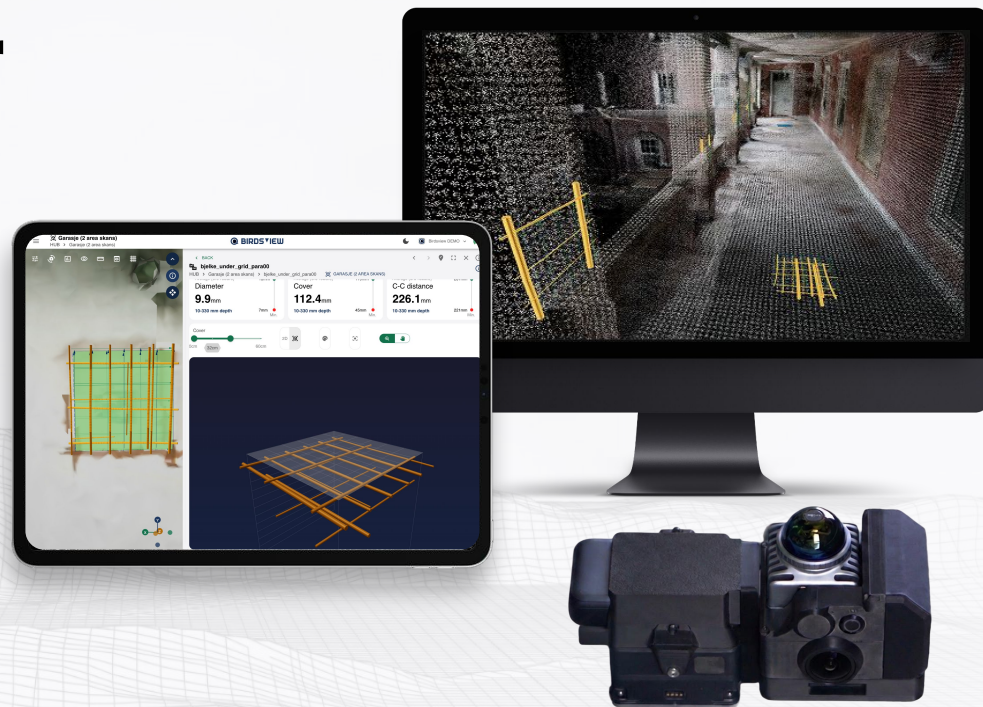
**Now everyone can become a superhero!**



# X-ray Vision for Concrete

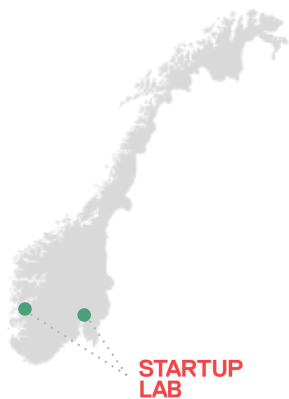
IN 3D

See inside any concrete structure with Birdsvie's 3D scanning concrete assessment technology.



# Birdsview at a glance

**Our mission** is to make it easier to secure and prolong the lifetime of the built world.



IP

Unique  
automatic 3D  
concrete  
scanning

Countries

6

Team  
members

12+

Founded

2017

Selected customers

COWI

SWECO



VINCI



asplan  
viak



## Concrete structures are aging.

64M buildings and 20M bridges need retrofitting and maintenance globally.

**50%+**

of European concrete structures built before 1980

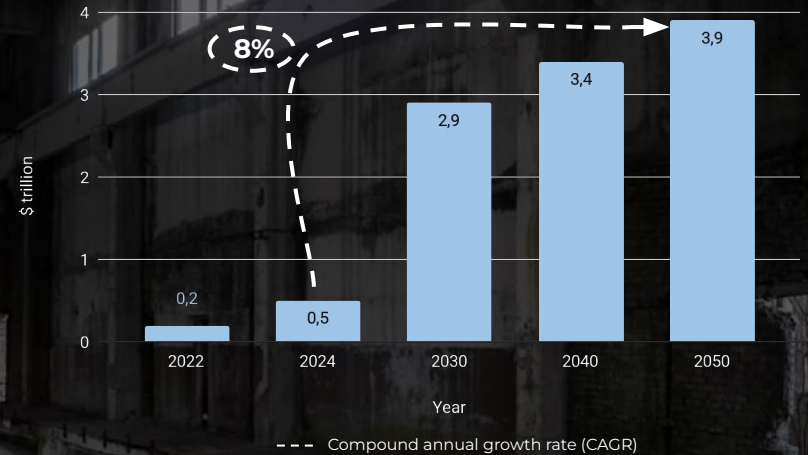
**26%**

of European buildings to be renovated by 2030-2033 due to EPBD requirements

**100%**

Eurocodes (EU/EEA), IBC & ACI 562 (US) regulations says that no rehab without assessment.

Projected global retrofit market size (2022-2050)



# Four reasons projects fail

Concrete retrofit and maintenance projects can run 3x over budget - largely due to poor upfront inspection.



1

## No drawings

As-built documentation missing or outdated for most older structures

2

## Subjective Inspections

Visual assessments give no information about rebar and the inside of concrete

3

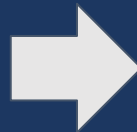
## Slow Tools

Current NDT methods take weeks for what should take hours and give little insight

4

## Destructive Testing

Core drilling damages structures and provides only point data



# 3x

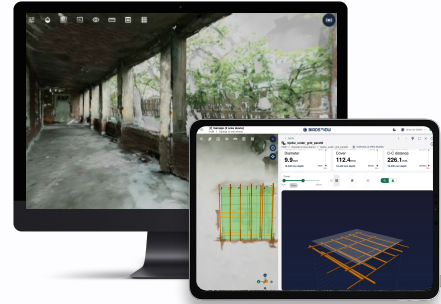
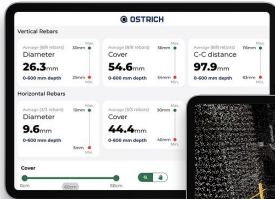
## over budget

Fat-tail risk on concrete retrofit and maintenance projects

# See inside concrete — without breaking it.

Powered by groundbreaking technology.

Birdsview gives you full visibility — so you plan right, avoid surprises, and stay on budget.



## 01 SCAN

- **Sensor Fusion** combining GPR radar, lidar and camera
- Captures data with **millimeter precision across large areas**
- **Only company globally** that combines this for concrete.



## 02 ANALYSE

- **AI-powered analysis** combines signals using Full Waveform Inversion.
- Automatically detects rebar, diameter, cover & key information about the structure with **millimeter accuracy**.



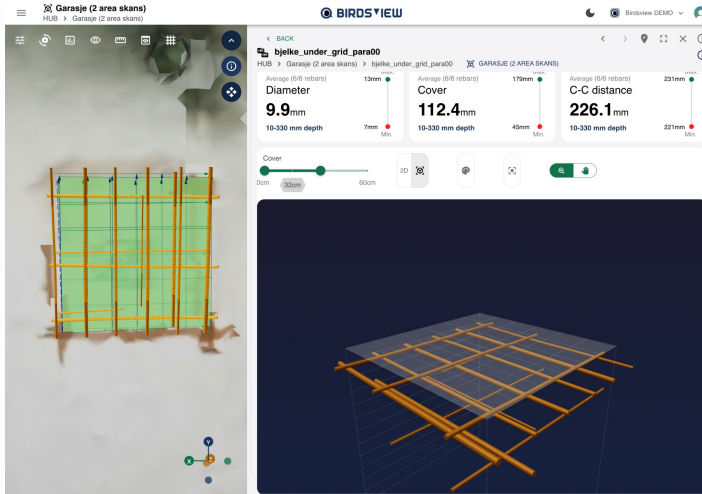
## 03 REVEAL

- **Complete digital 3D model** of the structures outside and inside
- **Data accessible anywhere, anytime**



 **Product video** (click to play)

# What you actually receive.



**3D Model**



**Rebar Information**



**Cloud based, shareable and exportable data**

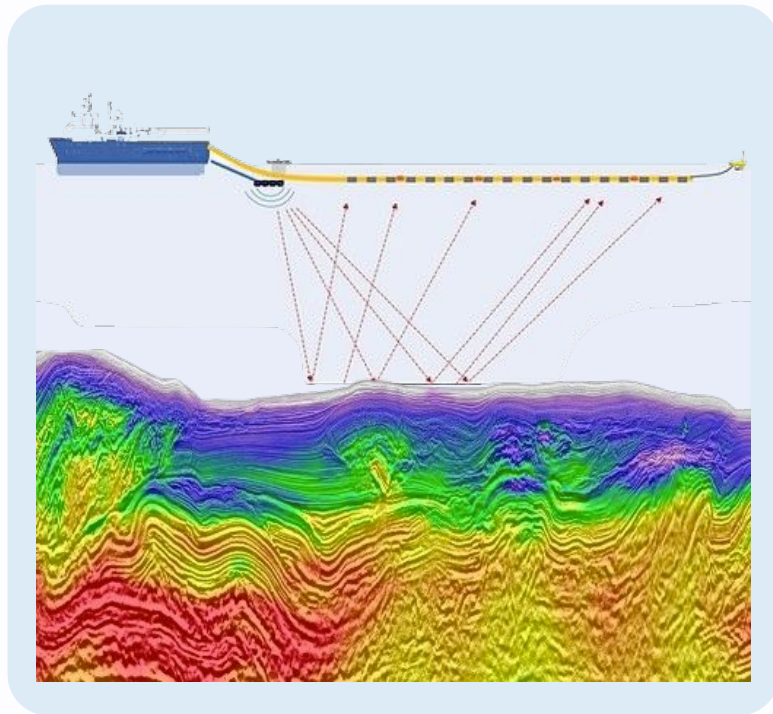


**Data security & Compliance**

## Performance:

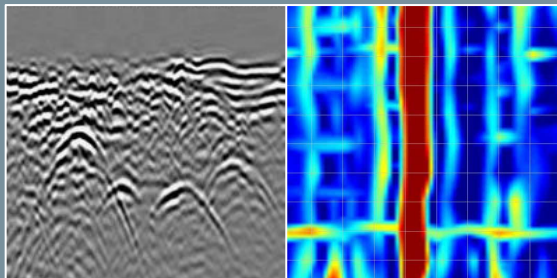
- Position of rebars in x- and y-axis: +/- 1-4 mm
- Cover of rebars: +/- 1-2 mm
- Diameter of rebars: +/- 1-3 mm
- Accuracy of point cloud: millimeter

## Building on technology from the oil and gas industry, we are revolutionizing the inspection of the built world



- Leveraging seismic optimization technology (FWI) from the oil and gas industry, Birdsview is revolutionizing the way we inspect and analyze structures in the built world.
- By using FWI, we enable precise, real-time data - enhancing accuracy, efficiency, and recognising materials and elements automatically in the inspection process.

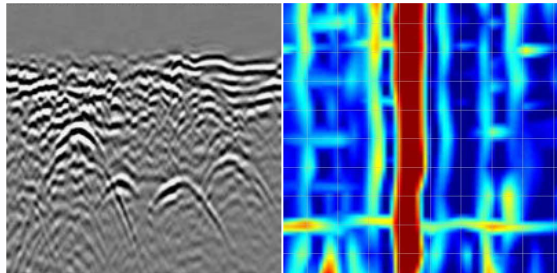
Moving from this...



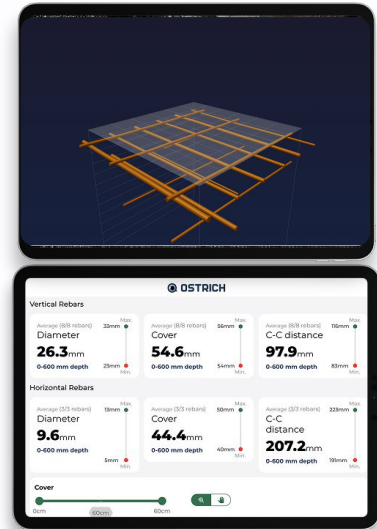
To this:



# How we use AI & ML?



**AI & ML**



Minutes

# Traditional NDT, Destructive testing vs. Birdsvew

Dimensions	Traditional NDT	Destructive testing	Birdsvew
Survey speed	20-50 m <sup>2</sup> /hour	5-10 m <sup>2</sup> /hour	<b>Up to 500 m<sup>2</sup>/hour</b>
Analysis time	Weeks of manual work	Weeks of manual work	<b>Minutes to Hours, fully automated</b>
Output format	2D Paper reports	2D Paper reports	<b>3D digital twin + cloud</b>
Accuracy	Centimeter, operator dependent	Millimeter, manual measuring	<b>Millimeter and Consistent, algorithm-driven</b>
Collaboration	PDF handoff, email chains	PDF handoff, email chains	<b>Real-time cloud sharing</b>
Coverage	Spot checks only	Spot checks only	<b>Full-area mapping</b>

# From data to decisions: 4 Bridge Cases

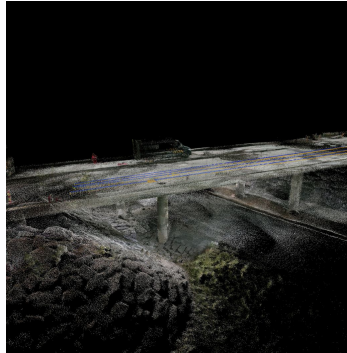
We demonstrate how our technology extracts critical structural information across diverse bridge types:

- **Reinforcement Mapping** (Location, spacing, diameter, and cover)
- **Post-tensioning Cable** identification
- **Full Bridge Deck** analysis
- **Beam Reinforcement** detailing
- **Integrated 3D Models** with chloride testing and rebar data

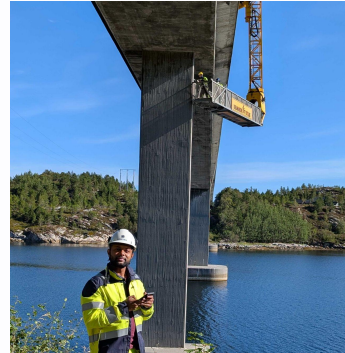
Example 1



Example 2



Example 3



Example 4



# Engineered for Structural Challenges.

## Project planning

- Improve tender accuracy
- Maximize reuse potential
- Reduce execution risk

## Retrofitting projects

- Assess structural load capacity
- Cut uncertainty and risk
- Save time and cost

## Quality Assurance

- Verify rebar placement and concrete cover in new construction

## Rebar mapping

- Locate rebar position, depth, diameter and spacing across entire structures

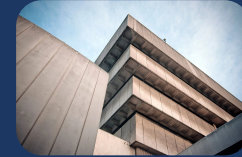
## Maintenance projects

- Smarter repairs
- Safeguard structural integrity
- Plan long-term maintenance

## Cutting and coring

- Avoid hits and hazards
- Ensure worker safety
- Prevent costly mistakes

Use it on bridges, buildings, power stations, ports, airports and many more structures.



# Value Potential through project lifecycle

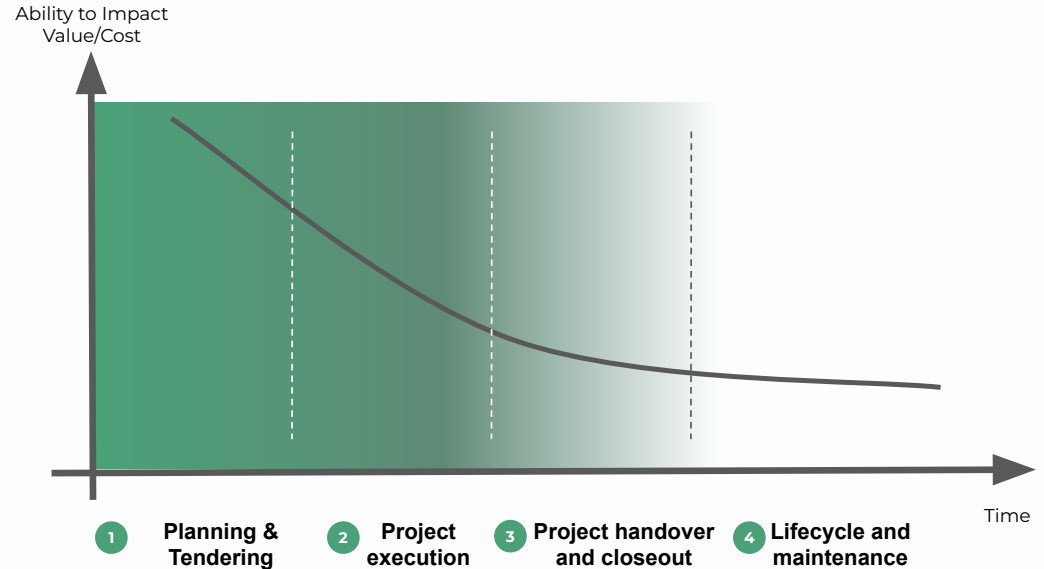
- ✓ Early analysis gives greater value
- ✓ Reduced project cost and risk
- ✓ Increase reusable potential of the asset

## A new standard for BKK

"Birdsview's technology has set a new benchmark for how we plan and execute upgrades to existing infrastructure."

- Nordås, BKK

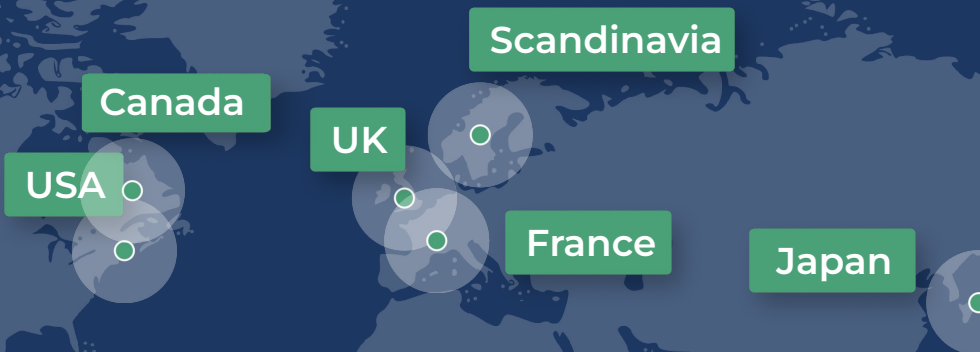
## Project lifecycle and value creation



# We are the global standard for concrete survey.

Proven technology and products – validated through 70+ global projects.

We partner with the world's leading names in construction and engineering.



## Award winning technology:



## What our customers say.

*"Using Birdsvie was a no-brainer. With Birdsvie, we got a faster, simpler, and far more cost-effective solution."*

**Ståle Smaadal**, Project Manager, Norwegian General Constructor



*"Birdsvie's solution was the only way to move forward. We have spent an incredible amount of time trying to find documentation, without success. And the client was completely dependent on good documentation in order to approve the building."*

**Daniel Wetresvåg**, Civil Engineer,



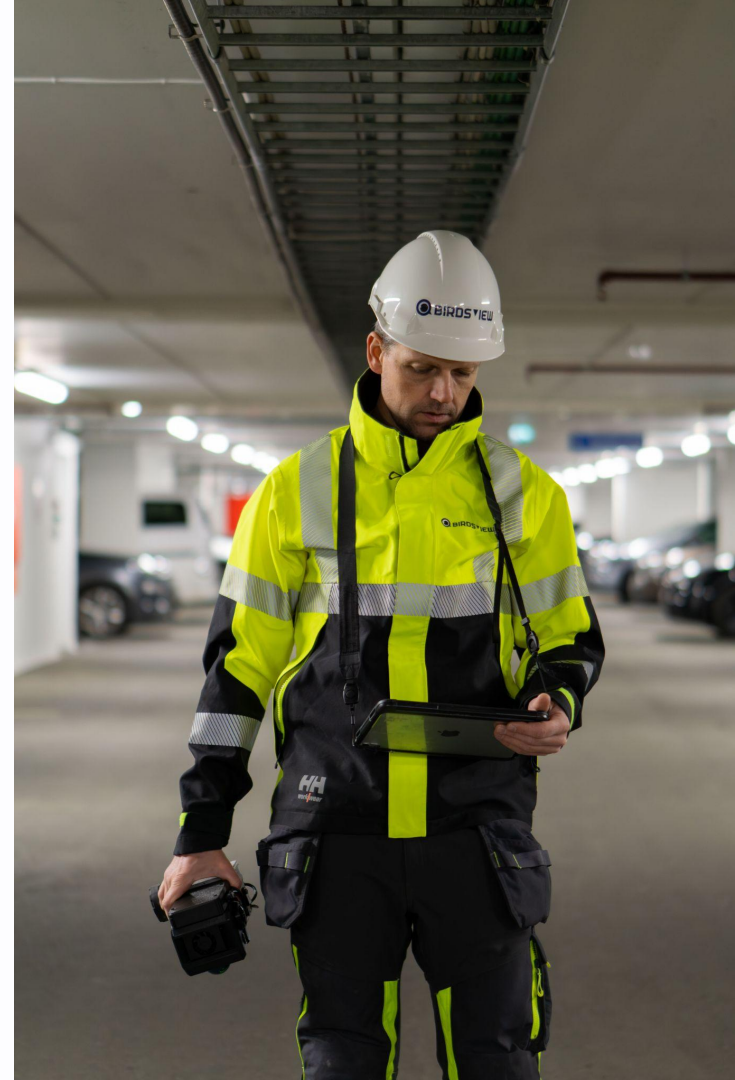
*"I see that as an asset owner, we can save money, time, and achieve higher quality data."*

**Eivind Stangeland**, Operations Manager, Norwegian Government's Building Commissioner & Developer



*"9 out of 10 of our projects today are retrofitting projects where insights like this is needed."*

**Val Tzvetkov**, Director, VDC & Emerging Technology



# X-ray Vision for Concrete

NOW IN 3D

Non-destructive 3D scanning of concrete structures. Sensor fusion + AI-powered analysis.



Olav Skogen, CEO



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[www.birdsvie.ai](http://www.birdsvie.ai)