Kanadevia
INOVA

A 360° View of Plant Health & Performance

Integrating Plant Data, Expertise & Robotics in Waste to Energy

End-to-End Optimization

AI-Powered Intelligence

Measurable Impact



Julie Clavier
Director Digital Service Solutions

Kanadevia INOVA

For a future free of wasted waste.

We build the future of waste management infrastructure.

Our world-leading Waste to X and Renewable Gas systems deliver real impact – a solid, established partner for your digital ecosystem.

Over 2,000
executed projects

More than 90
years of experience

CHF 1.47 bn
revenues

CHF 2.85 bn
order intake

3,800
professionals in

30+
countries

Covering the whole value chain

- **Development & financing**
- **Engineering, procurement & construction**
- **Maintenance & spare parts**
- **Monitoring & optimisation**
- **Modernisation & upgrade**

What makes a shift hard?

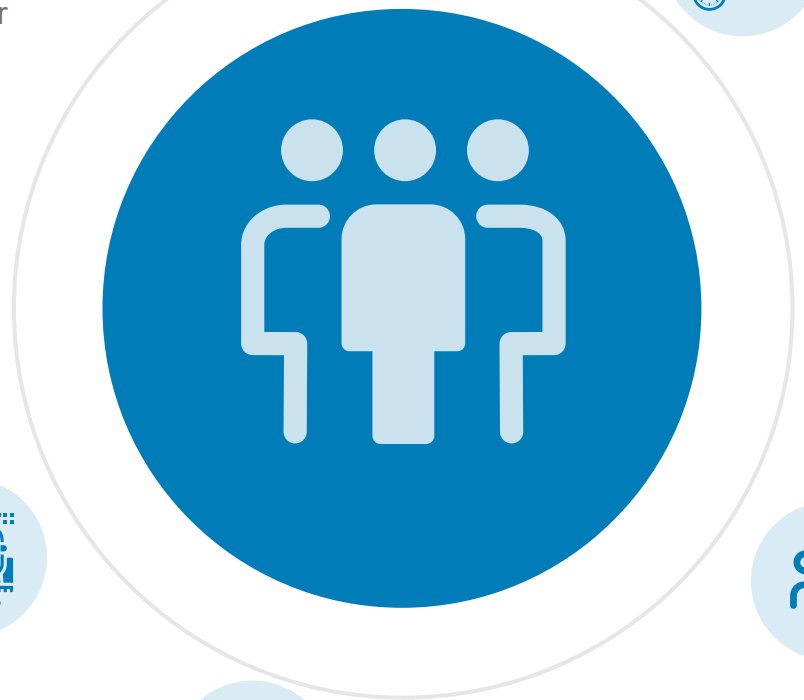
Kanadevia INOVA

Documentation

- High Reporting effort and compliance risk
- Integration with data/tools
- Communication and knowledge transfer between shifts

Plant Optimisation

- High variability in waste composition and NCV
- Lower boiler efficiency



Siloed data and tools

- Fragmented views and data
- High administrative effort and costs

Disruption

- Aging EfW assets with increased failure risk
- Contaminants impacting combustion and asset integrity, boiler fouling

Limited Advanced Analytics & Support

- Replacing "decimated" teams
- Loss of tacit operational knowledge
- Missed early warning on process deviation

Increasing attractivity to new generations

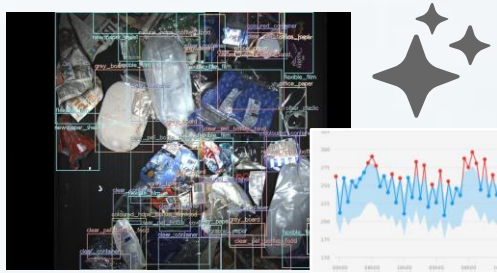
- Longer onboarding and training cycles
- Reduced operational consistency

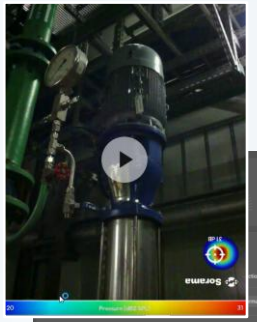
Traffic Management

- Queuing delays
- Inaccurate waste traceability
- Safety risk

1000 Alarms, Zero Awareness

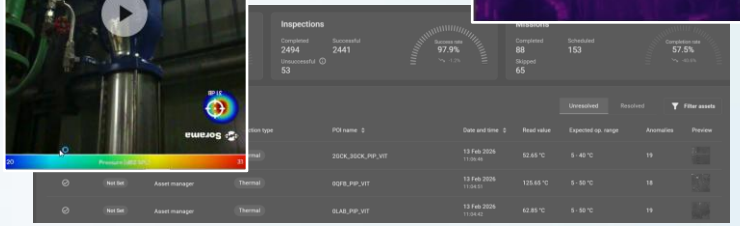
Insights come from correlation, not collection



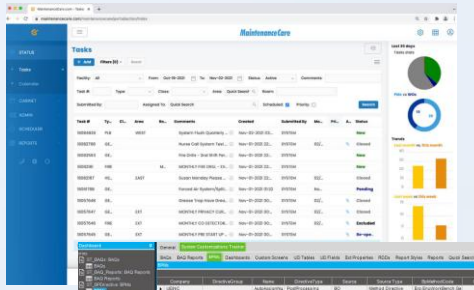








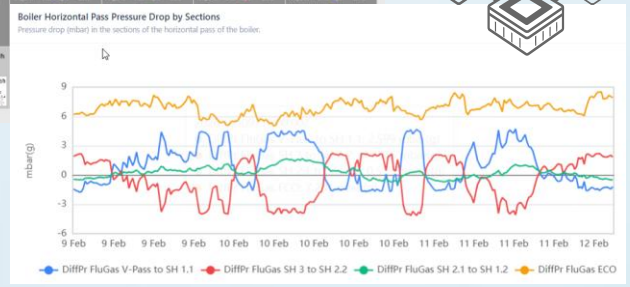












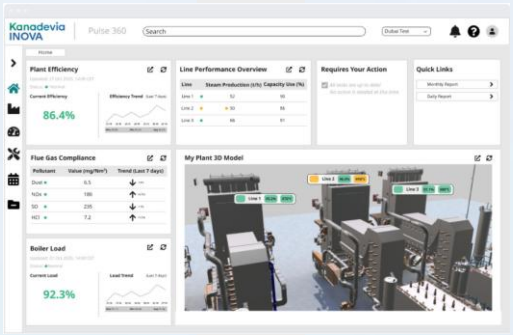
- **More data does not guarantee more clarity**
- **Overload blinds operators and hides what truly matters**
- **Stop adding data, start adding context**

360° = Data + Technology + Expertise

Built to Integrate



Delivering 360° value



Data Processing & Analysis



Collecting & structuring data from various sources

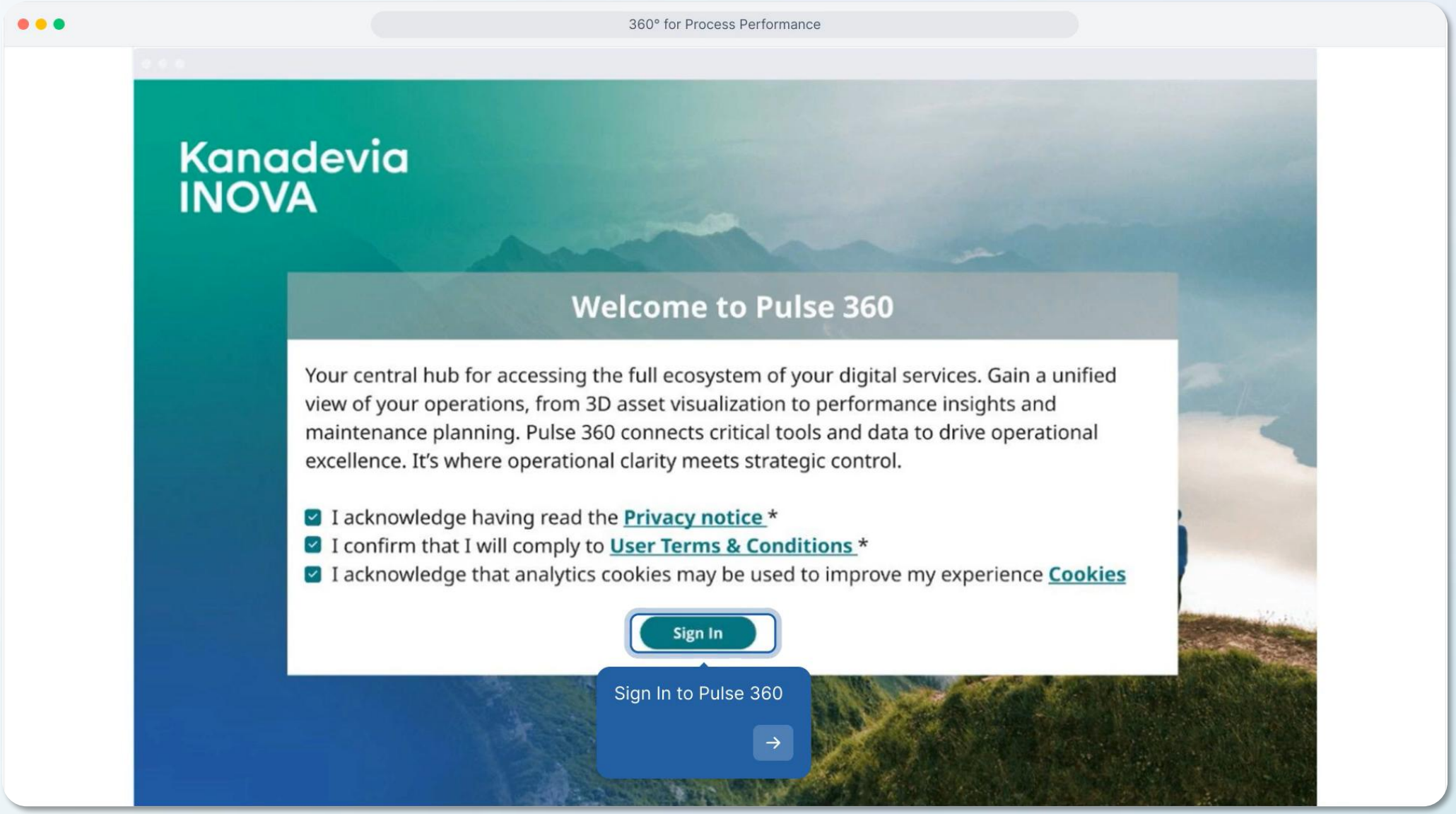


Real-time control – the foundation of digitization



360° for Process Performance

Signal → Context → Insight → Action

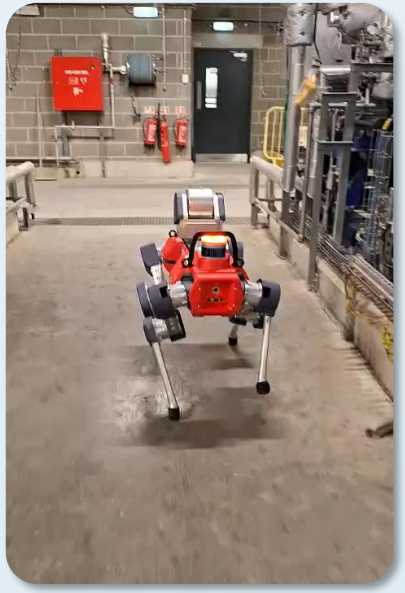


360° for Equipment Health

Pulse Patrol

Kanadevia INOVA





AMV botics

Technology Strategic Alliance

Integration and operational adaptation

Optimization and advanced services

360° for Equipment Health

Signal → Context → Insight → Action

⚠ The Challenge

Blockages in trouser leg pipes cause ash buildup, leading to performance loss and potentially forcing a complete plant shutdown.



Traditional Detection

Relies on switches or manual inspection with a heat gun.
Reactive, inconsistent, unsafe and often too late to prevent issues.

Pulse Patrol Solution

A thermal camera detects early signs of blockage before they become critical—maximizing plant uptime and performance.



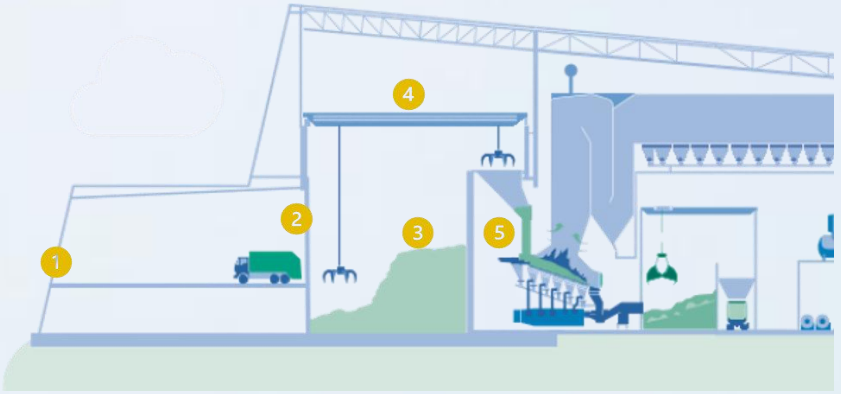
Impact on Operator work

Saves operator time (unblocking the trouser leg instead of the hopper)	- 6h
Manual inspections in hazardous area	0
Inspection Consistency, in location without easy human access	100%

Early detection means proactive maintenance instead of reactive, emergency repairs.

360° for Bunker Operation Support

Signal → Context → Insight → Action



License Plate Recognition

Link the non-conformant waste to the supplier via the truck license plate. Get your claim to the right supplier with our solution.

Bulky Waste Detection

24/7 monitoring solutions that detects bulky items and generates early alerts for the crane operators, enabling rapid actions.

Object Type Identification

Object identification allows a high level of customization to highlight or discard specific alerts. It also informs on the tipping catalogue and expected NCV.

Tipping Catalogue

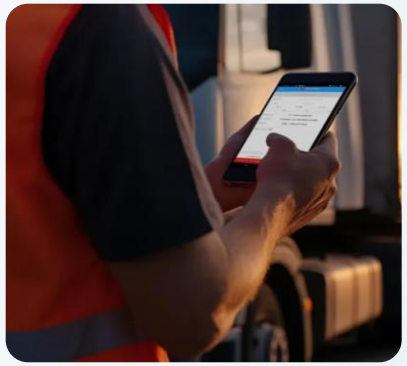
Get an overview of the waste delivery segregated per waste type, supplier or location.

Waste Mixing Index

Track the mixing within your bunker with an AI-based index and provide recommendations to your crane operators to enhance combustion stability.

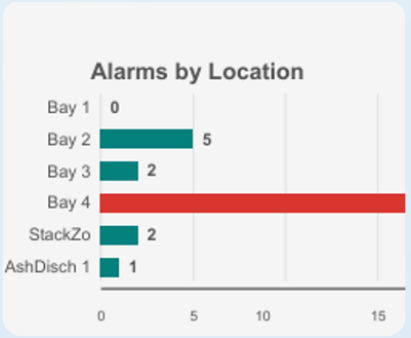
Bunker Volume Forecast

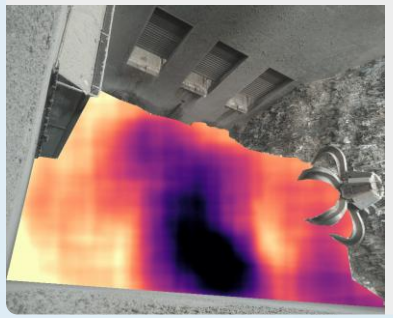
Our solution forecasts the waste volume and generates alarms. Take actions when your bunker level is too low or when a line shutdown threaten to increase it past the limit.

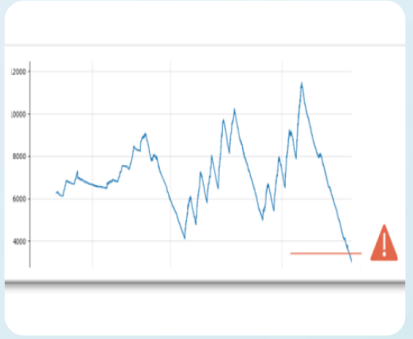












2026-2027 Roadmap

Anomaly Detection (Equipment)

Available Now

Anomaly Detection (Process)

Available Now

Waste-GPT

Available Soon

Online training

Training simulator

Available Soon

Raw material planning

Annual robot-assisted inspection



Kanadevia INOVA



Thank you
Connect with us

Website LinkedIn