

# Israeli ConTech Innovation



Building a Bridge Between Swiss Corporates  
and Israeli CleanTech Innovation.

## Agenda:

- High-level showcase of Israeli innovation in main ConTech pillars.
- Hearing Implenla's specific areas of interest and needs.

# Main Pillars

- Planning & design
- Enhanced Onsite Execution
- Inspection & Monitoring
- Materials & Methods
- Management & Collaboration
- Energy



# Planning & Design

## Leading Trend -

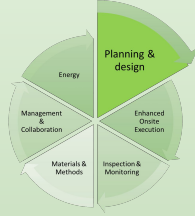
Leveraging AI and Automation to streamline and optimize the planning process while mitigating risks

The field of Planning & Design is linked with BIM.

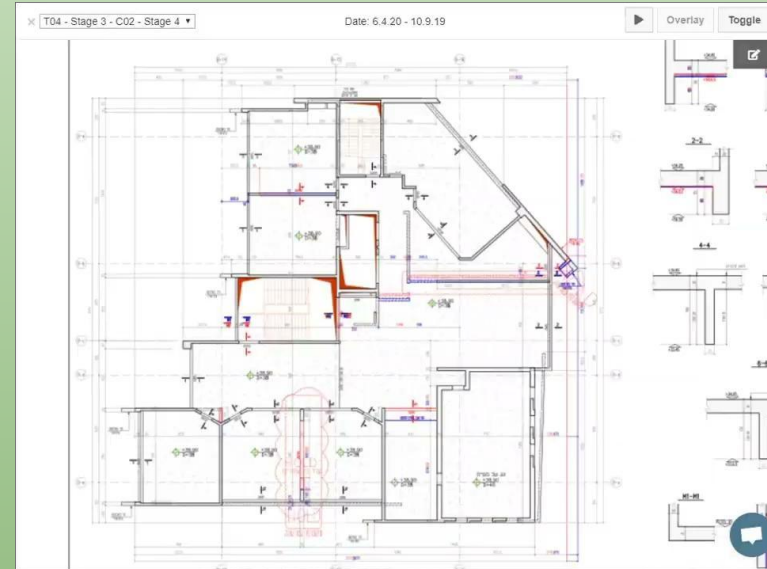
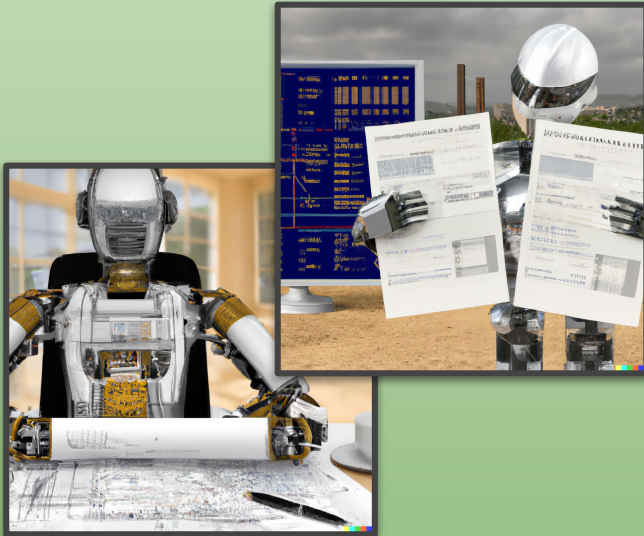


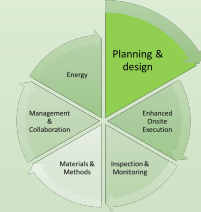
*"Always plan ahead. It wasn't raining when Noah built the ark."* – Richard Cushing, American prelate of the Roman Catholic Church

# AI-Powered Quality



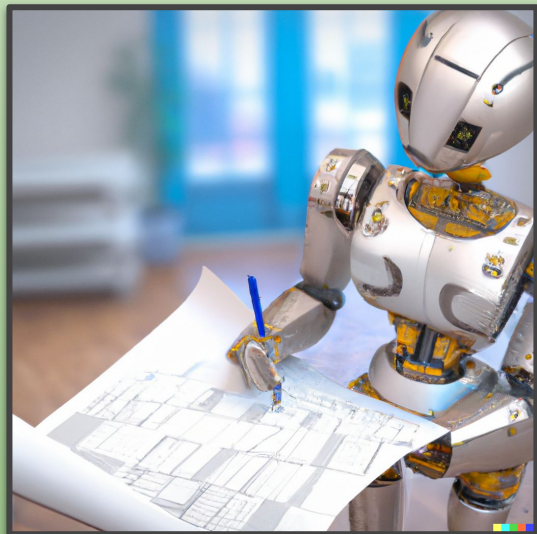
Solutions that use AI technology to automatically identifying incorrect design, or compare numerous number of versions to highlight discrepancies.





# AI-Powered Punctuality

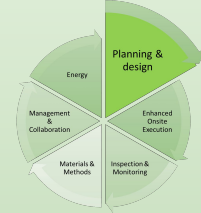
AI platform that creates accurate, detailed, and complete construction documents in minutes.



- 100+ Completed Projects
- 15 Min - Construction Documents Generation

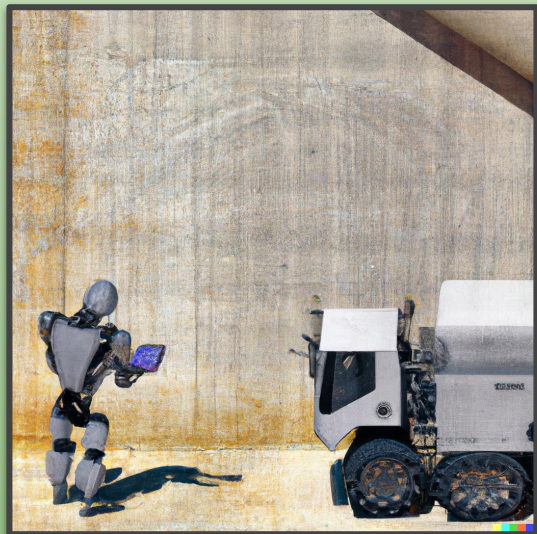


Founded by 3 ConTech veterans that sold their previous venture to Autodesk.



# AI-Powered Efficiency

An emerging startup that developed an AI-based tool to tackle the **overdesign** problem.



- Up to 15% concrete volume reduction
- Up to 15% reduction in concrete related execution costs
- Up to 50% design time reduction
- Reducing construction emitted Co2 emission - up to 30%

# Enhanced Onsite Execution

## Leading Trend

Leveraging innovative technological solutions to enhance accuracy, safety, and streamline processes in the onsite execution.

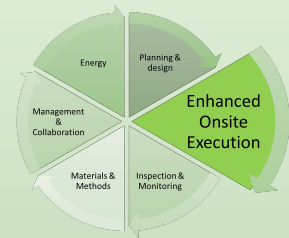


*"Give me six hours to chop down a tree and I will spend the first four sharpening the axe." – Abraham Lincoln*



# Autonomous Drone Hives

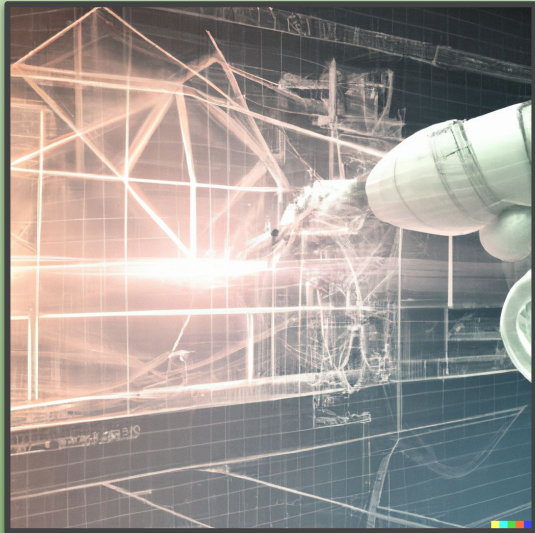
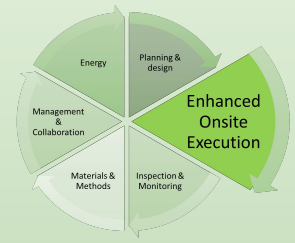
An enterprise-level platform that harnesses the power of AI and a fleet of drones to produce a 3D digital twin that can identify potential issues or faults in a project while closely monitoring its progress.



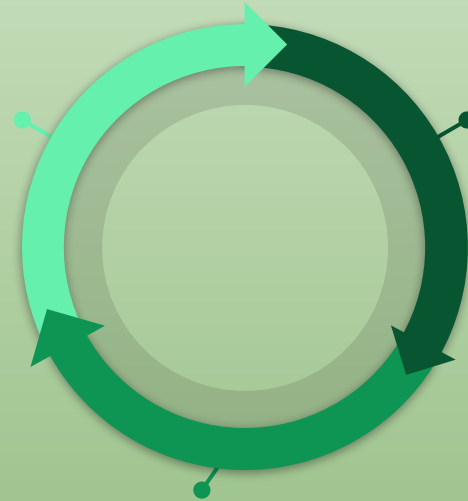
- 3D digital twin
- Better insights of field assets
- Actionable business insights
- Time, cost and resource saving
- Improved employee safety

# On-Site Blueprint Projection

A technology that turns blueprints into interactive field tools by projecting 2D blueprints on to the construction surfaces using an accurate laser.



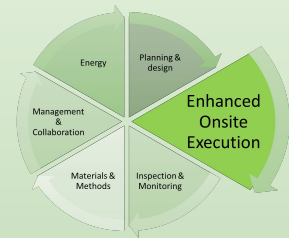
Guiding the construction worker what to do with almost zero measuring mistakes.



Detect mismatches between the digital plan and the “as built”

Connect to BIM plans

# Re-imagining Tower Cranes



Advanced capabilities for remote crane operation and movement analysis, enhancing efficiency and streamlining resource allocation to overcome operational bottlenecks.



- Up to 50% improved jobsite productivity and safety
- Advanced digital driving assistance system

Asset management  
Performance improvement  
Overlay guided AR  
Site view recording and storage  
Real-time data and insights  
Enhanced situational awareness  
Full site visibility  
Collision avoidance  
Performance monitoring  
Task planning

# Inspection & Monitoring

## Leading Trend

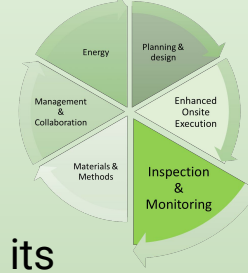
Utilizing advanced onsite surveillance solutions to enable a real-time hazard warnings, progress reporting, and defect detection.



*"An ounce of prevention is worth a pound of cure."* – Benjamin Franklin

# Data on Concrete Lifecycle

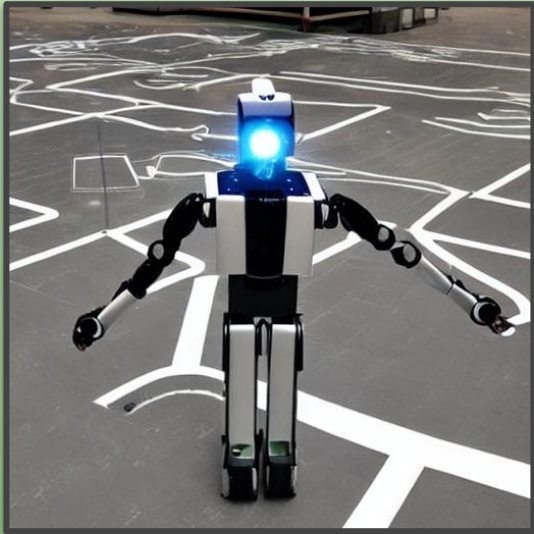
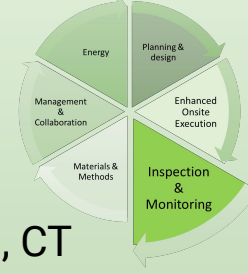
An IP-protected technology that utilizes IOT devices to monitor concrete throughout its lifecycle.



- Instantly measures any concrete mix
- Reduces inefficiencies and waste by up to 50%
- Cut waiting time for drying by 15-50%
- Alert on bad casting
- Alert on movement for up to 5 years from casting

# Subsurface Mapping Technology

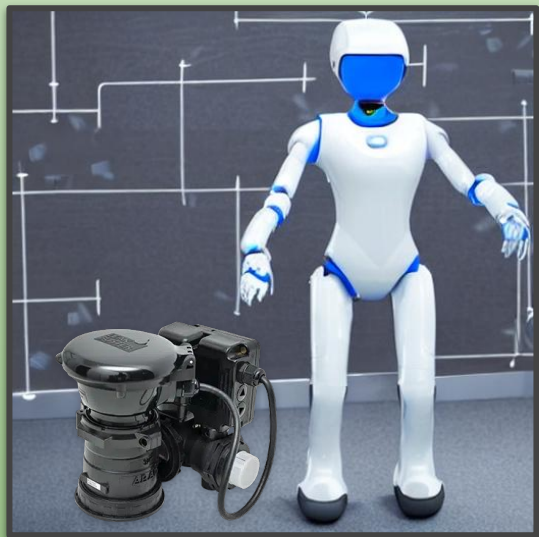
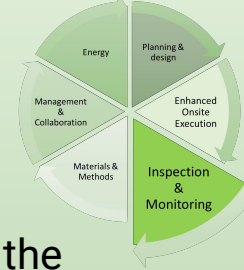
A company that revolutionized the field of underground mapping by integrating MRI, CT scans, and ultrasound to produce highly accurate and precise underground maps for design, construction, and subsurface discovery.



- Real mapping of underground Piping and special materials
- Preventing damage caused by referring to outdated plans
- Reducing costs and time by eliminating drilling and manual measurements

# Water Damage Prevention

Enterprise Grade AI-based water Intelligence technology to detect and stop leaks at the source.



- Prevent Water Damages
- Reduce Water Consumption
- Enhanced control over water use

# Materials & Methods

## Leading Trend

Development and adoption of new materials and compounds to reduce carbon footprint and energy consumption.

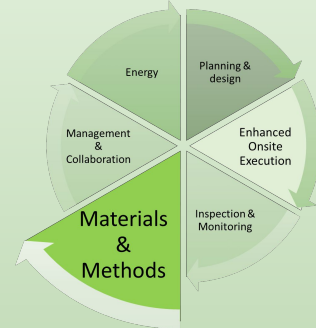


*"We do not inherit the earth from our ancestors,  
we borrow it from our children"* – Antoine de Saint-Exupéry



# Organic Fibers, Greener Buildings

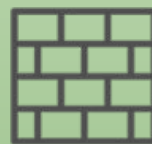
Production of Bio-Blends, natural fiber-based concrete and insulation materials, utilizing organic resources.



~80% (!) natural fibers.



Thermal insulating  
plaster



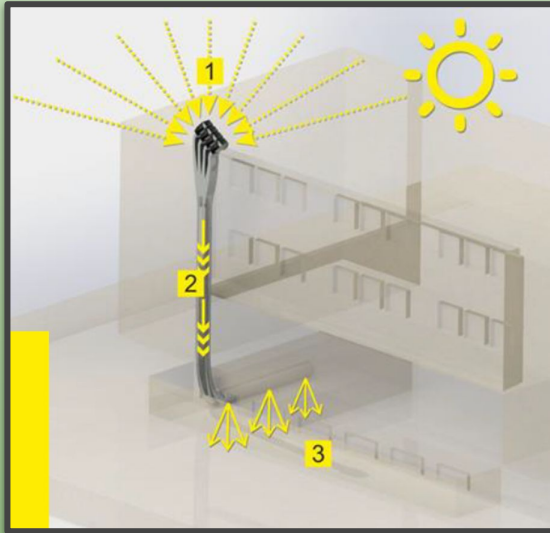
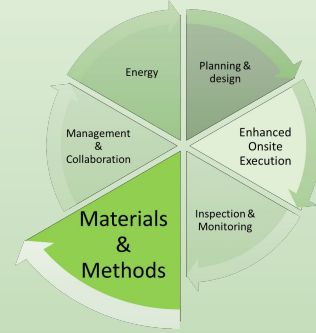
Thermal insulating  
masonry block & walls



Acoustics masonry  
block, walls & partitions

# Channeling Sunlight Into Buildings

IP protected technology that collects sunlight throughout the day and effectively channels it into desired spaces.



- Natural
- Healthy, full spectrum
- Interior lighting without admitting heat or UV

# Management & Collaboration

## Leading Trend

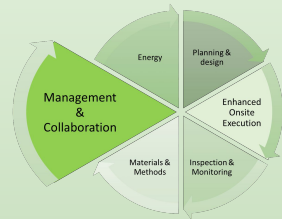
Digital transformation- Integration of software and hardware tools to capture, analyze and share data for enhanced control and improved project outcomes.



Performance monitoring  
Supplier Tracking  
Full site visibility  
Workforce Management  
Site Safety and Compliance  
Workflows Planning  
Contractor Communications  
Resource Management  
Learning & Guidance Systems  
Data Analytics

*"We must work together to ensure a sustainable future for our planet." - Ban Ki-moon*

# Digitizing Infrastructure Projects



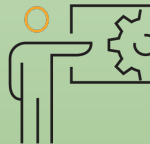
An Enterprise-Ready, cloud-based, 4D infrastructure construction data analytics platform for full visibility into infrastructure construction projects.



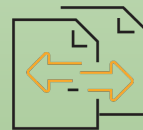
URNS DRONE DATA INTO  
ANALYTICS AND  
INSIGHTS



DIGITIZES  
CONSTRUCTION SITES

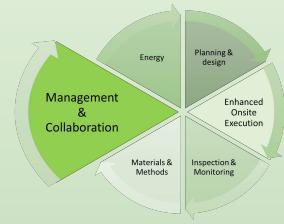


TRACKS WORK  
PROGRESS, DETECTS  
DEVIATIONS



ENHANCES COLLABORATION,  
REDUCES UNCERTAINTY AND  
IMPROVES EFFICIENCY

# Orchestrating Construction Projects



A comprehensive project management platform, designed specifically for the construction industry.

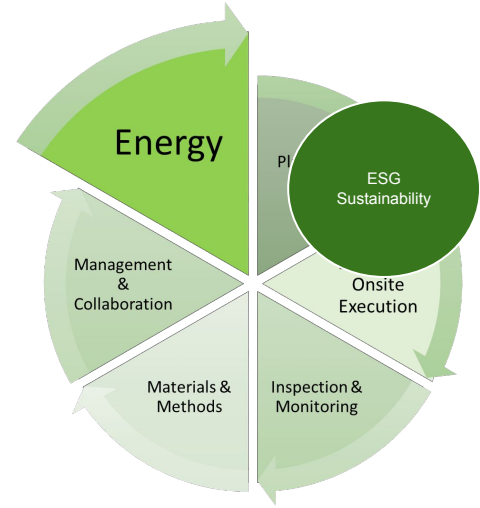


- 100,000s data points per project
- Fully Personalized per project and per user
- Fully customizable for micro-projects, checklists, local regulations and company's best practice

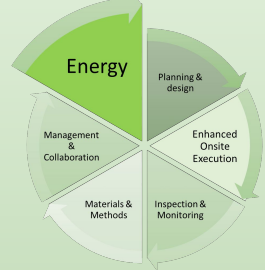
# Energy

## Leading Trend

Utilizing alternative energy sources, such as solar, hydroelectric and hydrogen, to power construction sites and buildings.



*"The best time to plant a tree was 20 years ago.  
The second best time is now." – Chinese Proverb*



# On-site Green Energy Generation

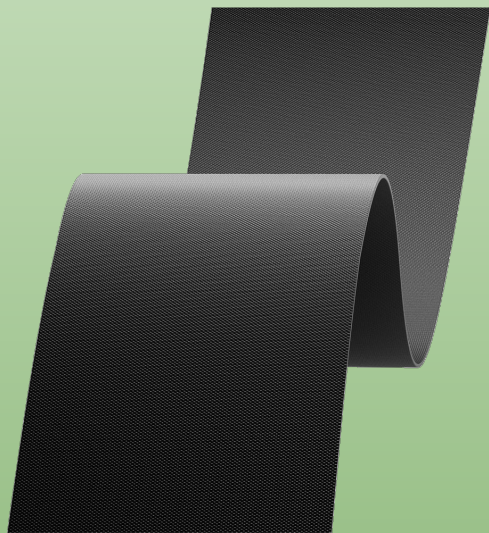
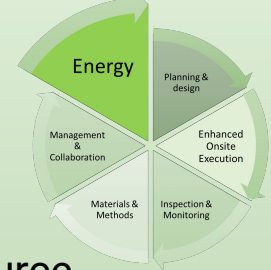
High-efficiency CCHP (Combined Cooling, Heat and Power) systems for buildings.  
Based on a patented multi-fuel jet-propulsion turbines technology.



- Outperform current offered solution's in electric efficiency (Hydrogen and Natural Gas)
- Low microgrid emissions
- Peak shaving for utilities
- Low installation and maintenance costs

# Revolutionizing the Solar Panel Technology

Flexible Energy-Film technology, converting any surface into a renewable energy source



**Lightweight**  
20% of the regular  
weight of solar panels



**Flexible**  
Could be attached and  
installed on any surface



**Durable**  
Meets all industry  
standards





Thank You