



# Driving Green AI Innovation Together

Advance ESG  
Goals with Powerful  
Digital Environmental  
Insights





# Are You Ready to Face Environmental Challenges?

Since 2002, we have been a leader in resource management and pollution control, consistently enhancing operational efficiency and empowering companies to exceed their sustainability goals in alignment with ESG standards. In tackling the pressing challenges of global climate change, UTRUST confidently harnesses advanced digital twin technology to provide innovative solutions for businesses and government organizations, driving us all toward a sustainable future.



## Digital Twin: A Revolutionary Solution for Environmental Protection

NVIDIA founder Jensen Huang emphasizes that Digital Twins are poised to become vital business assets, representing a crucial trend that cannot be overlooked. These powerful technologies offer five key advantages, significantly advancing efforts toward ESG and SDGs and achieving net-zero emissions



### Achieving Sustainability Goals

#### Resource Optimization & Environmental Impact Minimization

Precise resource control, waste reduction, and carbon emission reduction



### Optimize Operational Efficiency

#### Real-Time Monitoring and Predictive Maintenance

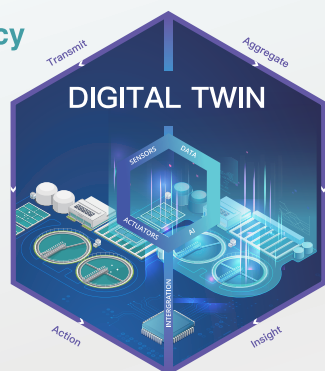
Optimize processes and increase productivity with real-time data analysis



### Reduce Risk and Cost

#### Precision Simulation & Scenario Analysis

Proactive issue prevention, minimized downtime, and lower operational costs



### Accelerating Innovation and R&D

#### Virtual Testing and Rapid Iteration

Quickly validate new ideas in a digital environment, shortening time to market



### Enhancing Customer Experience

#### Personalized Services and Predictive Maintenance

Provide customized solutions through data insights to improve customer satisfaction

## Core Advantages of Digital Twins

Integrating **3** Core Pillars to Create Comprehensive Digital Twin Solutions

### Cloud Computing

System Security  
High Availability

- ✓ High-Availability Architecture
- ✓ Flexible Scalability
- ✓ Secure & Reliable Operations

### Big Data

Ensuring Data  
Integrity & Accuracy

- ✓ Comprehensive Data Integration
- ✓ Deep Insight Analysis
- ✓ Real-Time Decision Support

### Artificial Intelligence

Provide Accurate  
Analysis & Prediction  
Capabilities

- ✓ Simulation-Based Prediction Models
- ✓ Automated Process Optimization
- ✓ Anomaly Detection & Alerts

By partnering with UTRUST, you will gain access to expertly designed digital twin solutions that drive the industry's digital transformation. We not only offer cutting-edge technology but also commit to long-term support and innovation, helping you achieve a balance between business growth and environmental protection. Choosing UTRUST means becoming a pioneer of change and contributing to a smarter, greener world for future generations.



Digital Twin



Case Studies

# UTRUST, Your Expert in Digital Twin Solutions

Collaboration of **3** Core Technologies for Comprehensive, Intelligent, and Reliable Digital Twin Solutions.



雲運算HA技術  
High Availability



方直雲  
VAST IoT Cloud



資料互聯智控中心  
DataSynthCenter



奧創AI智能預測引擎  
ULTRON AI Predicting Engine

## Cloud Computing

### Stable & Reliable Operational Assurance

- ✓ Maintain system stability to ensure uninterrupted operations
- ✓ Achieve high availability by leveraging containerization technology

## Big Data

### Comprehensive Data Integration & Analysis

- ✓ IoT data integration ensures efficient device monitoring and visual analytics
- ✓ Protect your data integrity and unlock the potential for meaningful discoveries

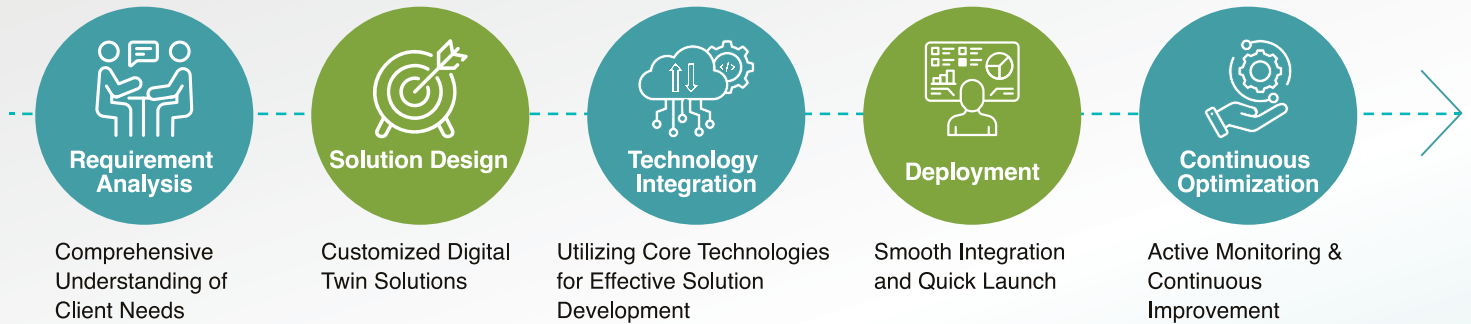
## Artificial Intelligence

### Transform Your Decision-Making with a Powerful AI Assistant

- ✓ Achieve accurate predictions quickly, even without programming experience.
- ✓ Enhance your decision-making efficiency while reducing costs

# UTRUST, Supporting Every Step of Your Digital Transformation Journey

The **5** Stages of UTRUST Service



## Select Your Smart Transformation Solution

### Predict Management of Sewer Mains and Laterals

- Blockage or Leakage prediction and warning
- Influent quality and quantity prediction simulation
- Strategic Optimization of Fee Structures
- Illicit Discharge and Infiltration Prediction and Warning

### Intelligent Management for Wastewater Treatment Operations

- Digital Twins for Aerobic Treatment & Energy Optimization
- Digital Twins for Biological Anaerobic Treatment
- Digital Twins for Chemical Dosing Dynamics
- Digital Twins of Influent Quality and Quantity

### Intelligent Scheduling & Management of Waste Flow

- Collection and Disposal Logistics Analysis
- Route Sequencing and Estimated Timing
- Big Data Matching for Zero-Waste Resource
- Warning Algorithm for Dynamic Vehicle Congestion
- Real-time Roadblock Reporting & Alert Notification

### International EDI for ESG-related PCF Data

- PACT International Carbon Emissions Data Exchange Guidelines & Data Model
- API Specifications for International Carbon Emissions Data Exchange
- Pathfinder Network for Carbon Emissions Data Exchange
- Design of an Automated Platform for Electronic Data Subscription & Exchange

### Intelligent Management of Incinerator Plant Logistics and Disposal

- Smart Alerts for Incineration Emissions Monitoring
- Disposal Capacity and Timing Scheduling Analysis / Annual Maintenance & Disposal Forecast

### Intelligent Management of Soil and Groundwater

- Levy Trend Forecast & Analysis of Socioeconomic Factors
- Big Data Classification & Anomaly Detection for Collection Targets
- Knowledge Mining for International Regulations & Smart Customer Service
- Intelligent Management of Groundwater Monitoring Data in High-Risk Areas



# Embracing Green Technology for a Sustainable Future

With over 20 years of expertise in environmental engineering, we deliver integrated environmental management and innovative low-carbon ESG solutions that help organizations achieve their sustainability goals.



## Customized Digital Enablement Solutions Designed to Meet Your Needs.

Accelerate Your Digital Transformation Journey with Us



Intelligent Audit



Real-time Monitoring and AI Predictions



UTRUST Website



FACEBOOK



Collaborative  
Consultation

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