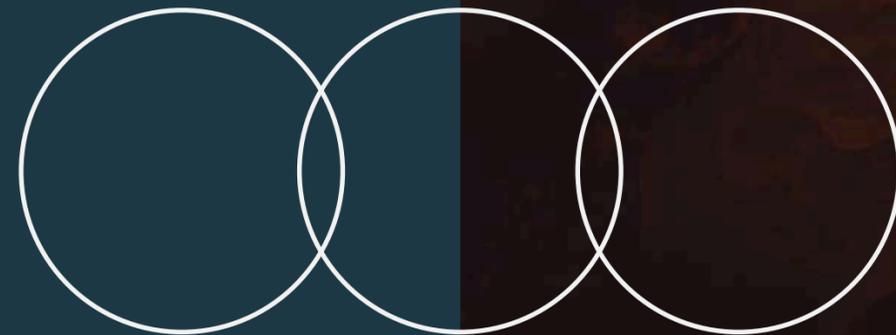


GLOBAL DUSTSHIELD

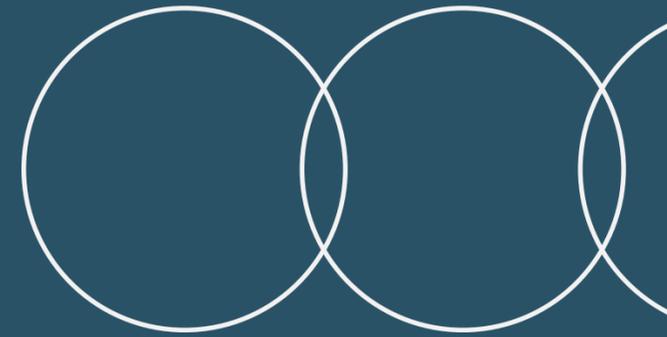
# Innovative Dust Suppression Solutions



# About Global DustShield

## Leading in Dust Solutions

Global DustShield is committed to innovating eco-friendly technology that addresses the challenges of dust in extreme environments, providing effective dust suppression solutions to protect infrastructure and enhance sustainability.



# GDS Solutions



## Sand Shield

Sand Shield effectively binds loose sand particles, preventing destructive sandstorms and enhancing visibility in extreme desert environments.



## Dust Shield

Dust Shield minimizes airborne dust particles, offering a non-toxic solution to reduce health risks and improve air quality in arid regions.



## Coal Shield

Coal Shield is designed specifically for coal handling, suppressing dust during transport and minimizing pollution in industrial applications.



## Salt Shield

Salt Shield provides a protective barrier against dust, promoting sustainable practices while ensuring minimal environmental impact for desert operations.

# Key Features

## Non-toxic Solutions

GDS's products are **safe for humans and wildlife**, ensuring environmental integrity while effectively managing dust in various settings.

## Eco-friendly Approach

Utilizing sustainable materials, GDS's solutions contribute to **environmental preservation**, aligning with global efforts to combat climate change and protect ecosystems.

## Long-lasting Effectiveness

Our formulations provide **extended durability**, significantly reducing the frequency of application while maintaining optimal dust suppression performance.

## Cost-effective Solutions

By minimizing maintenance needs and enhancing operational efficiency, our products deliver **substantial cost savings** for infrastructure projects in challenging environments.

# Field Testing Results

## CSIRO Wind Tunnel Validation Insights

Laboratory wind-tunnel testing has been conducted by a CSIRO-approved facility in Australia to assess resistance to surface erosion under controlled high-wind scenarios, demonstrating **remarkable effectiveness** against airborne dust particles, ensuring superior performance in extreme desert conditions.



# Innovative Application Methods



01

Aerial spraying provides efficient coverage over vast desert areas.



02

Ground application ensures targeted dust suppression in specific locations.



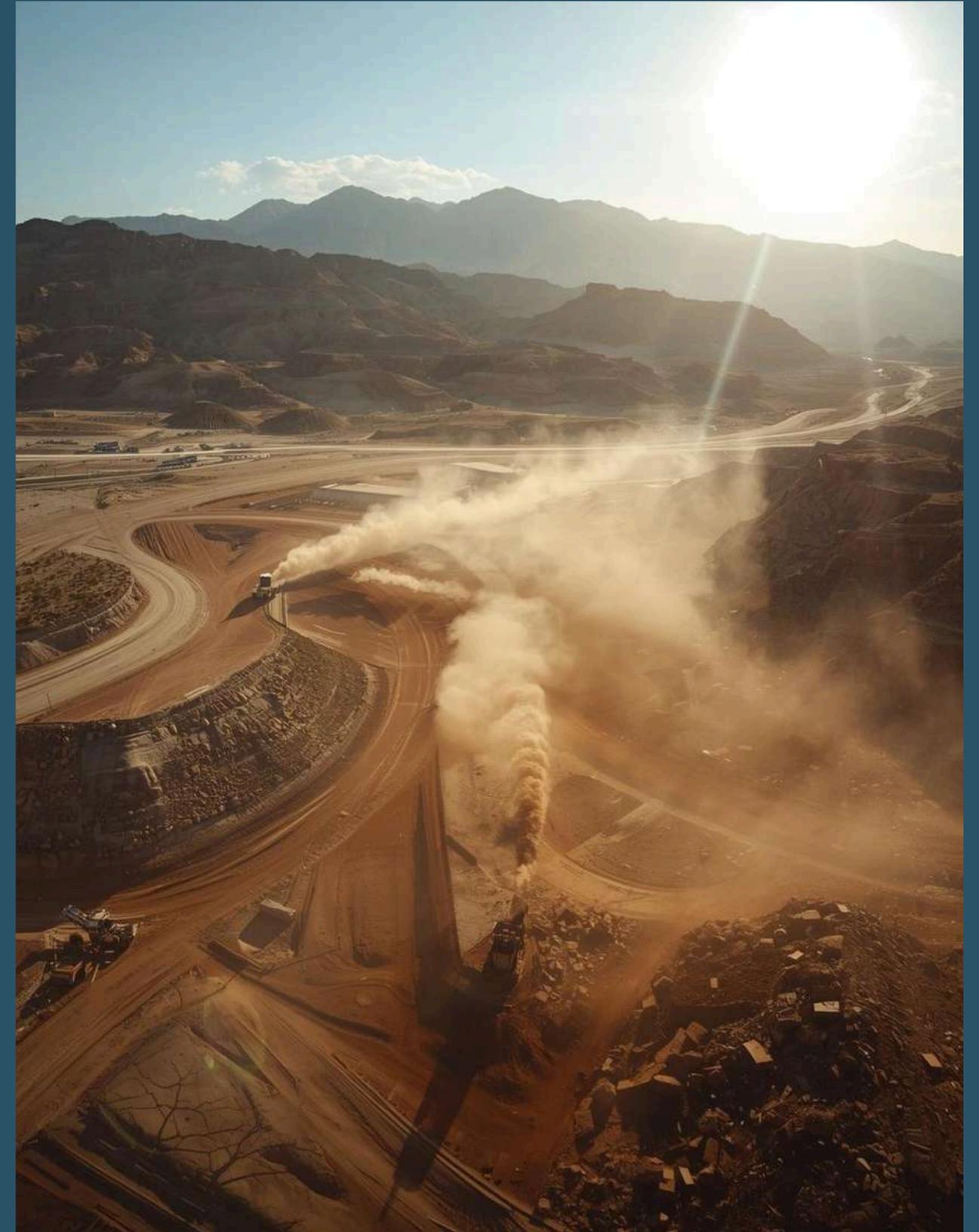
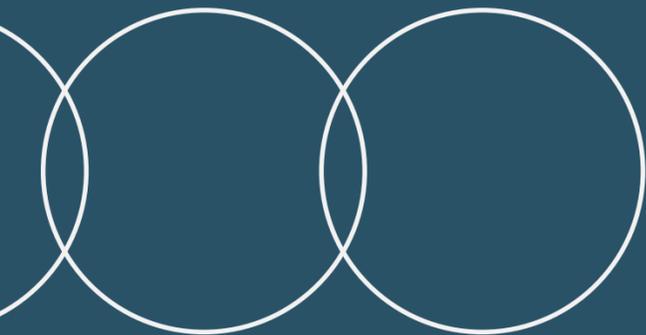
03

Customized solutions are tailored to meet unique site requirements.

# Site Impact

## Dust Suppression Benefits

Effective dust suppression solutions significantly enhance operational efficiency at mine sites by reducing airborne dust, improving safety, and minimizing environmental impact in extreme desert conditions.



# Infrastructure Benefits

## Extends Lifespan

GDS solutions significantly **enhance the lifespan** of infrastructure by preventing damage caused by dust accumulation and erosion.

## Reduces Maintenance

Implementing our dust suppression technologies results in **lower maintenance costs** and reduced frequency of repairs for infrastructure investments.

## Improves Efficiency

By minimizing dust interference, GDS products help improve the **operational efficiency** of solar panels and other infrastructure projects.

## Enhances Safety

Dust control solutions improve **safety conditions** for workers and machinery by reducing airborne particles that can obscure visibility and cause hazards.

# Environmental Benefits

## Protects Ecosystems

GDS solutions help **preserve natural habitats**, ensuring the survival of native species affected by dust storms and erosion.

## Conserves Water

Our dust suppression methods require less water than traditional approaches, leading to significant **savings in this vital resource** during dry conditions.

## Reduces Air Pollution

By minimizing dust emissions, GDS technologies contribute to **better air quality**, protecting public health and ecosystems from harmful particles.

## Enhances Soil Quality

GDS products improve soil structure, promoting **better vegetation growth** and reducing desertification in vulnerable areas facing climate challenges.

# Solar Farm Application Benefits

## Increasing Efficiency in Harsh Environments

GDS's eco-friendly dust suppression solutions enhance solar panel efficiency by preventing dust accumulation, ensuring optimal energy output. Our innovative techniques are specifically designed for **extreme desert conditions** to maximize performance.



“

**“Dust is more than a nuisance; it’s a threat to our environment and infrastructure.”**

– Global DustShield

# Why Choose GDS?

Innovative solutions for dust  
suppression challenges

## **Proven Performance**

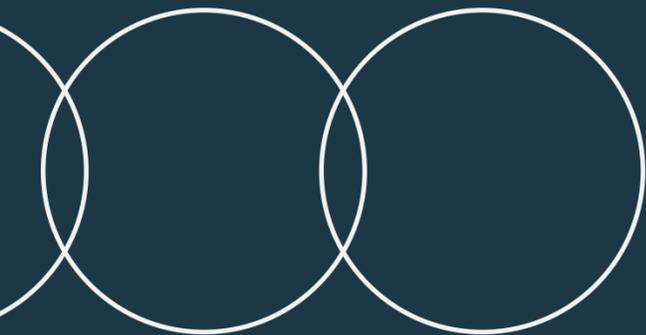
GDS's solutions have been tested extensively, showing significant effectiveness in reducing dust in harsh desert environments and construction sites.

## **Sustainable Solutions**

Our non-toxic formulations ensure environmental safety while providing long-lasting dust control, benefiting both ecosystems and infrastructure projects alike.

## **Global Expertise**

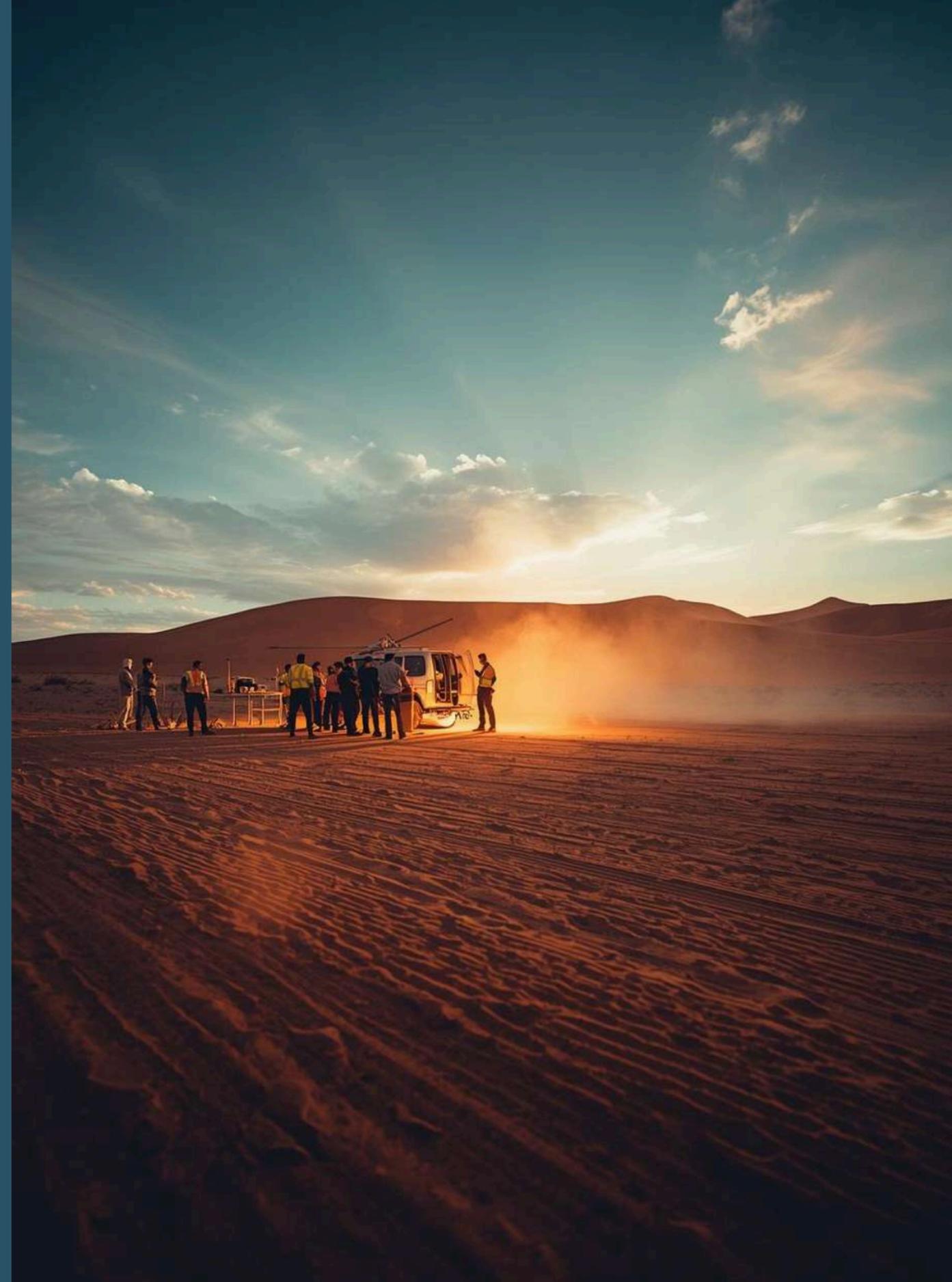
With a team of seasoned professionals, GDS leverages worldwide experience to deliver tailored dust suppression strategies that meet diverse client needs.



# Technical Pilot Collaboration Opportunities

## Partnering for Dust Suppression Success

GDS invites stakeholders to collaborate on technical pilot projects, demonstrating our innovative dust suppression solutions in real-world applications, enhancing environmental protection while ensuring sustainable infrastructure development in extreme desert conditions.



# Aligned with KSA's Strategic Goals

- Minimizes disruption from desert processes (dust, erosion)
- Enables cost-effective, sustainable infrastructure development
- Aligned with national carbon reduction and resilience strategies



---

# Engineered for Extreme Environments

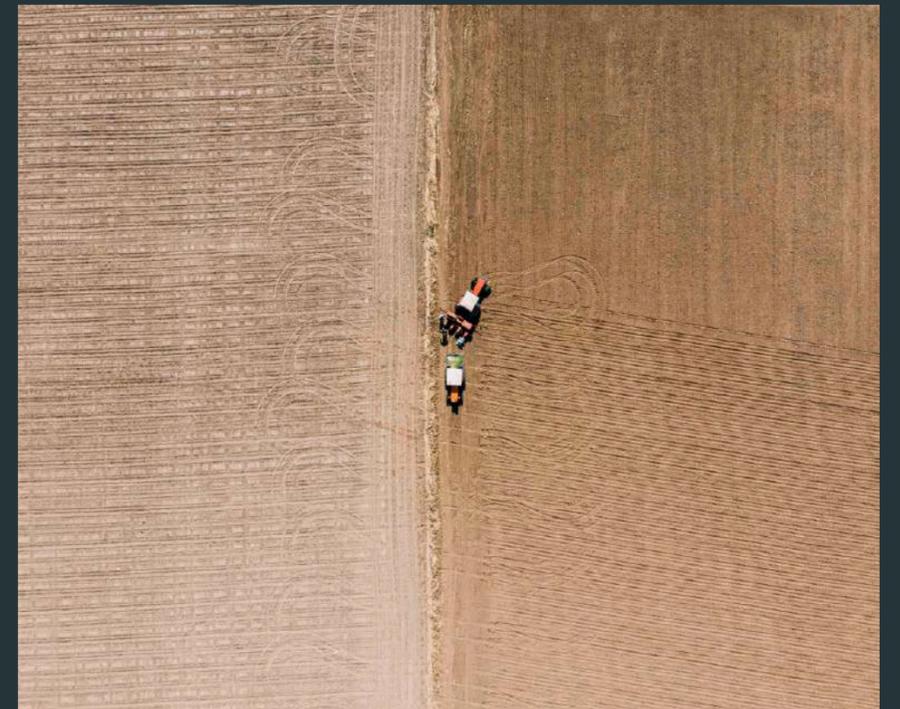
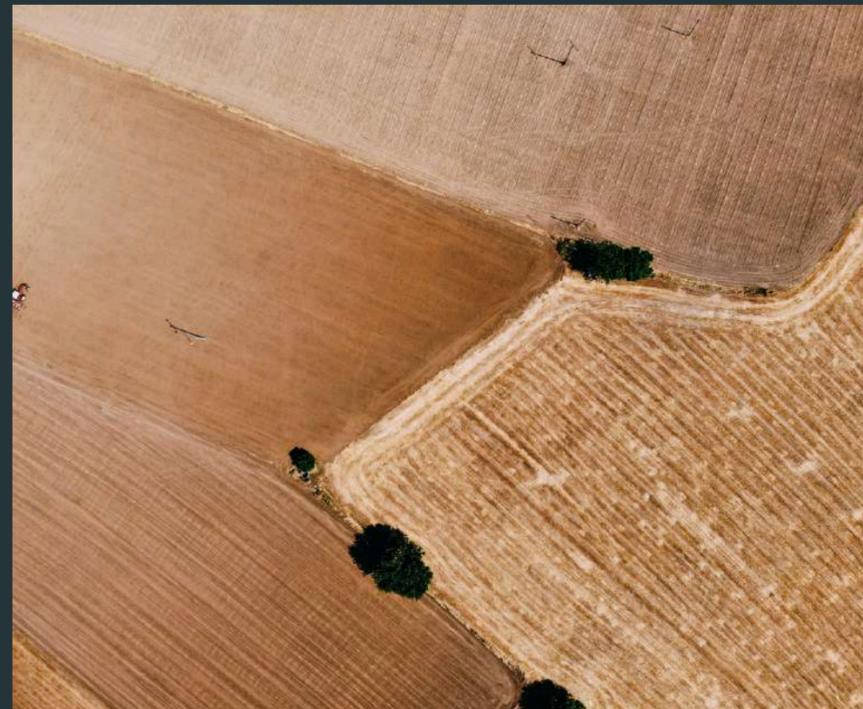
- 3–4 years of proven field durability
- Survives snow and freeze-thaw cycles
- Wind-resistant 110 km/h certified
- Thin, permeable crust avoids soil sealing



# Delivering Value at Scale



- 
- Viable for km<sup>2</sup>-scale deployment
  - Sprayable solution reduces labor and cost
  - Energy recovery and dust mitigation lower operational costs
  - Contributes to national carbon reduction targets





# Driving Sustainable Progress in the Desert



GDS empowers KSA's transition to sustainable infrastructure



Bridges nature-based solutions and advanced engineering



Reduces desert process impacts on clean energy operations



A step toward a greener, more resilient future

# Ready to collaborate?

Let's discuss pilot opportunities for effective solutions

