

Lessons from European HDD Fieldwork

Surveying and steering decisions when site reality changes the plan

What actually happens on site when things do not go as planned?



Neda

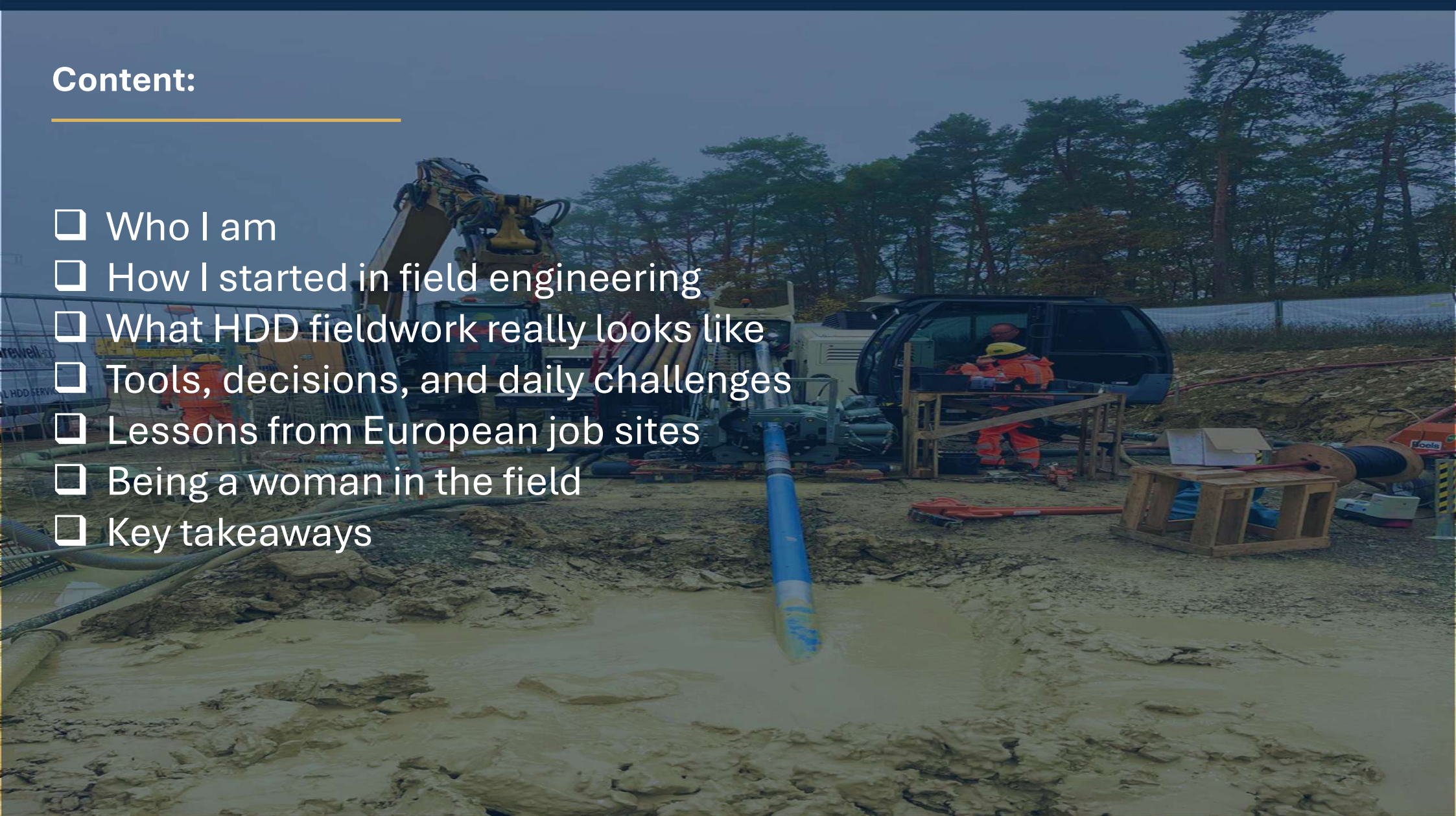
Field Engineer in European HDD

From drilling fundamentals to real-time field decisions on site.

20–25 min talk + 5 min Q&A

Content:

- Who I am
- How I started in field engineering
- What HDD fieldwork really looks like
- Tools, decisions, and daily challenges
- Lessons from European job sites
- Being a woman in the field
- Key takeaways



How I got into HDD fieldwork

Background

Going Green

Field Engineer in European HDD



Why this path mattered to me

01 I wanted real jobsite decisions, not only office roles.

02 I wanted to stay in drilling while moving toward greener work.

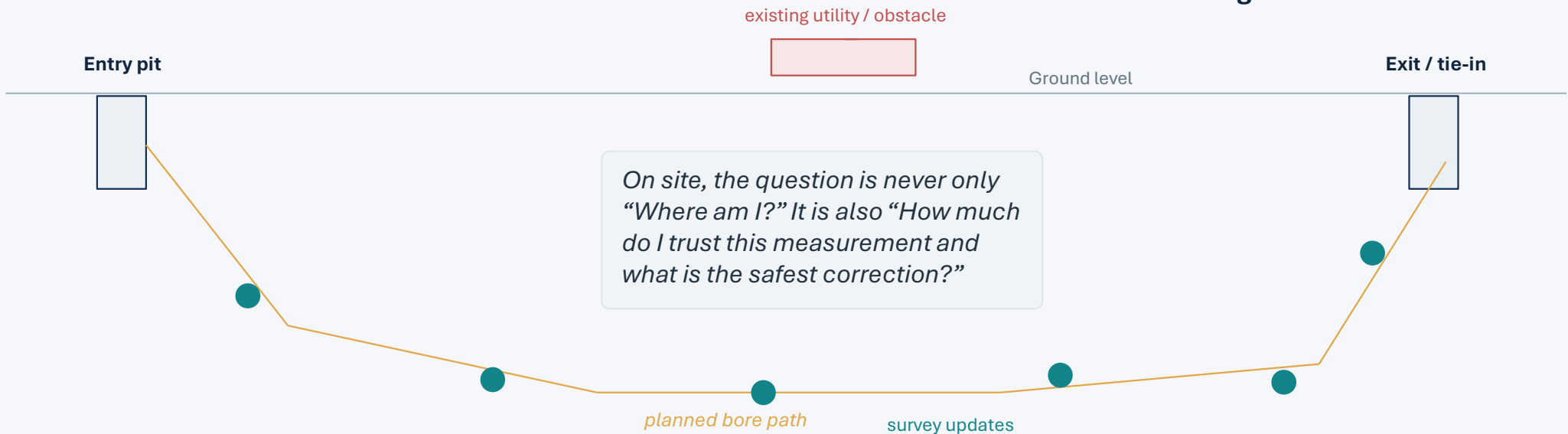
03 HDD became the bridge between my drilling background and renewable-energy direction.

Why surveying matters in HDD

For a general audience, the simplest way to say it is this: HDD is a guided underground crossing. You cannot see the bore path directly, so you rely on measurements, interpretation and disciplined corrections.

Key idea

Surveying is not reporting after the fact. It is an input to every steering decision.



03 / TOOLS & DECISIONS

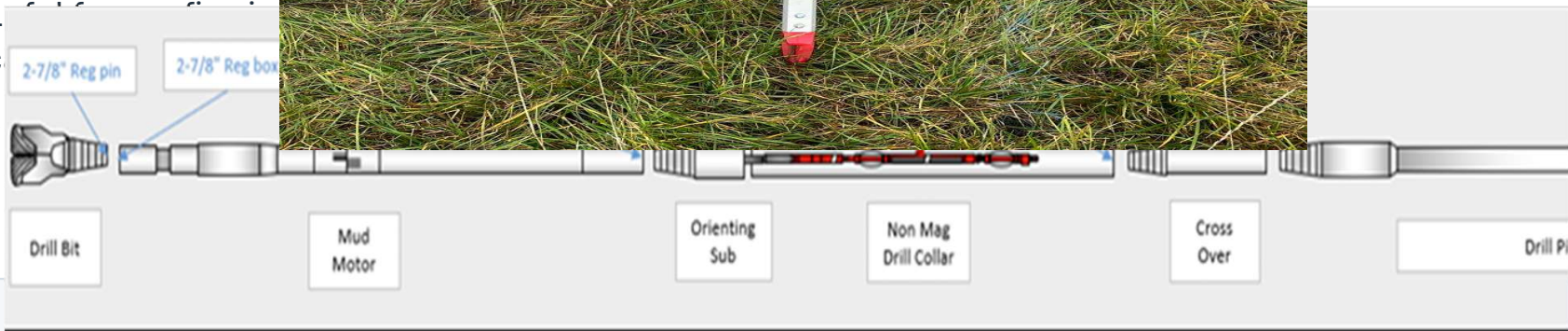
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Annulus	0.0
Temp	28
Hole V	38



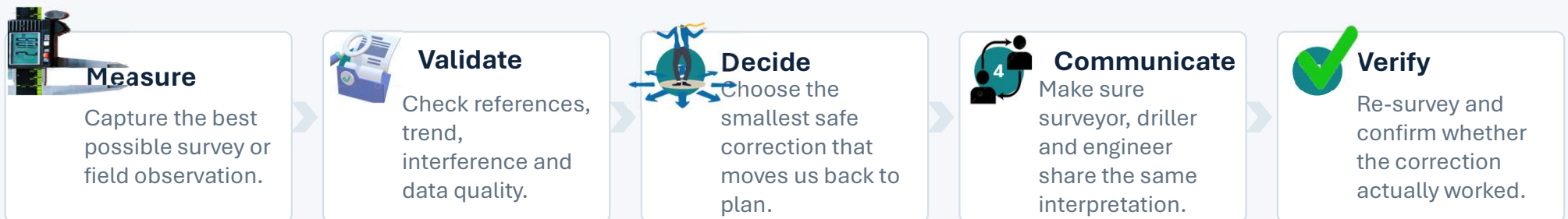
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Public version — simplified explanation for a non-specialist audience

The loop I use on site

never jump from one measurement straight to a big steering move.



Why this matters: under time pressure, a small wrong assumption becomes a large correction very quickly. The discipline is in slowing down just enough to validate before you act.

Data quality first

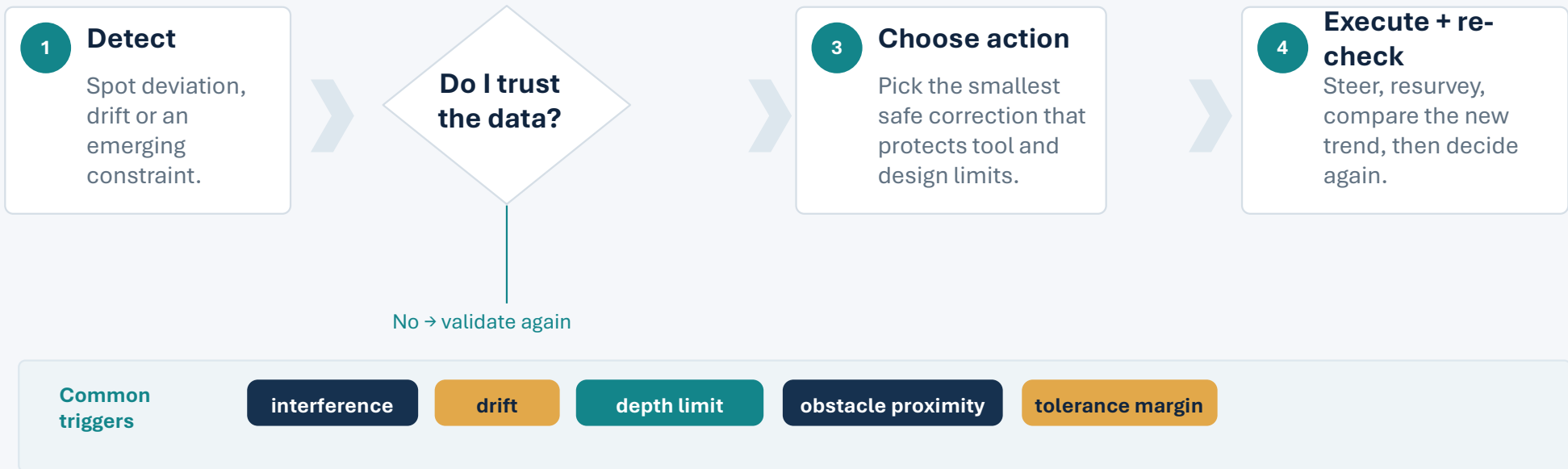
Small corrections

Stay aligned

When do I change course?

The key idea for me is simple: trend matters more than a single noisy point.

I never want one noisy point to make the decision for me.



Case 1 — when design meets field reality



ANONYMISED

“The design gives a target line. The field gives uncertainty.”

— **Situation**

Tight tolerances, limited working space, nearby utilities and restricted access.

— **Challenge**

The survey could not be treated as a formality; it had to drive every steering decision.

— **Response**

We checked references, validated the trend, and corrected in small steps instead of making one dramatic move.

— **Lesson**

The best steering decision is often the smallest one — if the whole team is aligned on the same interpretation.

Case 2 — operations can change the quality of the decision

Even with a good plan, the bore only behaves as well as the system around it.

— **Mud system challenges**

Mud is not a background detail; it affects cuttings transport, bore stability and steering feel.

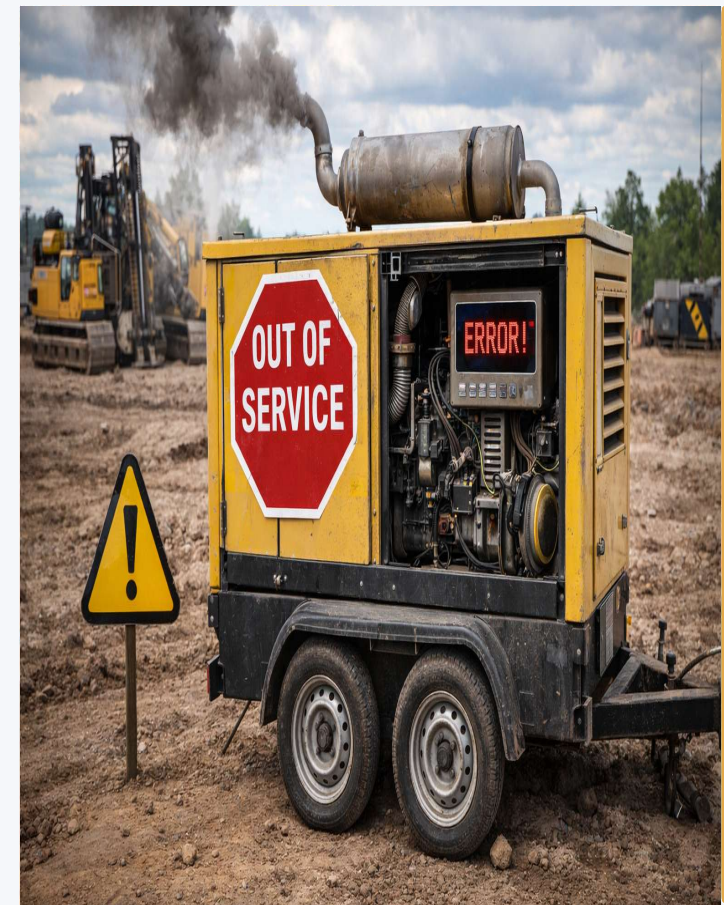
— **Tool / wireline delays**

When feedback slows down, confidence slows down too — and the next decision becomes harder.

— **Power or generator drops**

Interruptions create uncertainty at exactly the moment you need disciplined, reliable data.

My takeaway: stabilise the operating system first. Then steer from data you trust.



What the field keeps teaching me

The longer I spend on site, the less I believe in perfect plans — and the more I believe in good judgement, good data, and good communication.

01 The ground always gets a vote.

02 Good surveying reduces risk before it saves time.

03 Trend matters more than one noisy point.

04 Small corrections beat dramatic recoveries.

05 Communication is part of steering.

These are the lessons that help me turn uncertainty underground into a decision the whole team can act on safely.

Being a Woman on Site

My experience as a woman in HDD

- I was often the only woman in the field
- The environment is not yet built to support women properly
- Physically demanding beyond the heavy lifting
- The challenge is the full environment not only the task
- At first Both parties has some assumption
- Technical knowledge and calm decision-making built trust
- Every successful project made my voice stronger

What I learned as a woman on site

- Confidence grows through doing, not waiting
- Competence speaks louder than assumptions
- Visibility matters: when one woman enters, others can imagine it too
- Diversity makes field teams stronger
- I do not want to be the last woman in steering HDD in job site

Preparation + clarity + consistency build trust — especially in male-dominated spaces where credibility is often judged before your work is.

“Perfect plans are rare. What matters more is disciplined judgement under changing conditions.”

What I enjoy most

Turning uncertainty underground into a decision the whole team can act on safely.

Why HDD fits me

It lets me stay practical, technical, and close to work that supports the energy transition.

What builds trust

Preparation, clarity, and consistency — especially when credibility is tested before results are visible.

Good data. Small corrections. Clear communication.



Thank You

Lessons from European HDD Fieldwork

Thank you for your attention.

