Site-specific value assessment

Evolving your surface drilling for the next decade

Surface-drilling transitions are not one-size-fits-all. The operational and emissions value of electrification depends on your drilling requirements, diesel use, power availability and carbon intensity, equipment utilization, maintenance strategy and fleet-transition plan.

Sandvik helps you move from assumptions to site-specific evidence through a phased assessment and pilot.

Decision area	What we assess	Output for your team
Operating performance	Drilling output, productive utilization, availability and downtime	A fact base for defining operational requirements and scaling conditions
Energy and emissions	Diesel use, electricity demand and the emissions profile of the power supply	A site-specific Scope 1 and Scope 2 emissions-impact estimate
Cost of ownership	Equipment, installation, infrastructure, energy, maintenance and operating costs	Equipment, installation, infrastructure, energy, maintenance and operating costs
Technology readiness	Power access, data connectivity, maintenance capability and workflow integration	A prioritized implementation roadmap
Digital reporting	Data sources, quality, ownership and reporting requirements	A measurable dashboard and reporting-data foundation

Indicative pathway

1. Site assessment: Confirm baseline conditions, technical constraints and decision criteria.
2. Pilot deployment: Run selected equipment in defined operating conditions and monitor agreed metrics.
3. Validation review: Compare baseline and pilot results, including energy, availability, cost and emissions data.
4. Fleet-scale roadmap: Define infrastructure, investment, timing and governance needed for the next phase.

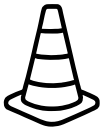
Decision outcome: A quantified, mine-specific business case that your operations, finance, sustainability and leadership teams can review with confidence.

Major phases

Site audit

Drill pilot

Fleet scaling



Continuous optimization

Key teams & vendors

Sandvik Surface Drilling experts and mine ops/IT with minimal 3rd-party needs.

Deployment

Pilot on 2-3 rigs, then phased fleet-wide.

Managing risks & mitigation

Every transformation introduces change and smart operators plan for it. In moving toward digital and electrified drilling, Sandvik helps customers anticipate and manage three main categories of risk:

1. **Operational integration:** Shifting to connected and semi-autonomous drilling can challenge existing routines. Sandvik mitigates this through phased rollout, embedded operator training and parallel uptime monitoring to ensure productivity stays stable during transition.
2. **Technology reliability:** Introducing electrified rigs and predictive systems brings new technical dependencies. Our RMS predictive platform detects early maintenance signals, and My Sandvik data gateways are backed by encrypted, redundant networks to secure real-time system continuity.
3. **Change management and buy-in:** From crews to leadership, adoption requires confidence. Sandvik supports this with on-site workshops, performance dashboards that make results visible and stepwise ROI validation to build internal alignment as improvements appear on-screen and in tonnage metrics.

With these mitigations built in, sites minimize ramp-up turbulence and realize consistent gains from pilot through fleet scale-up.

Next step

To explore how a phased pilot could look at your site, schedule an initial assessment via Carl Daintree, Sandvik Global Account Manager.

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