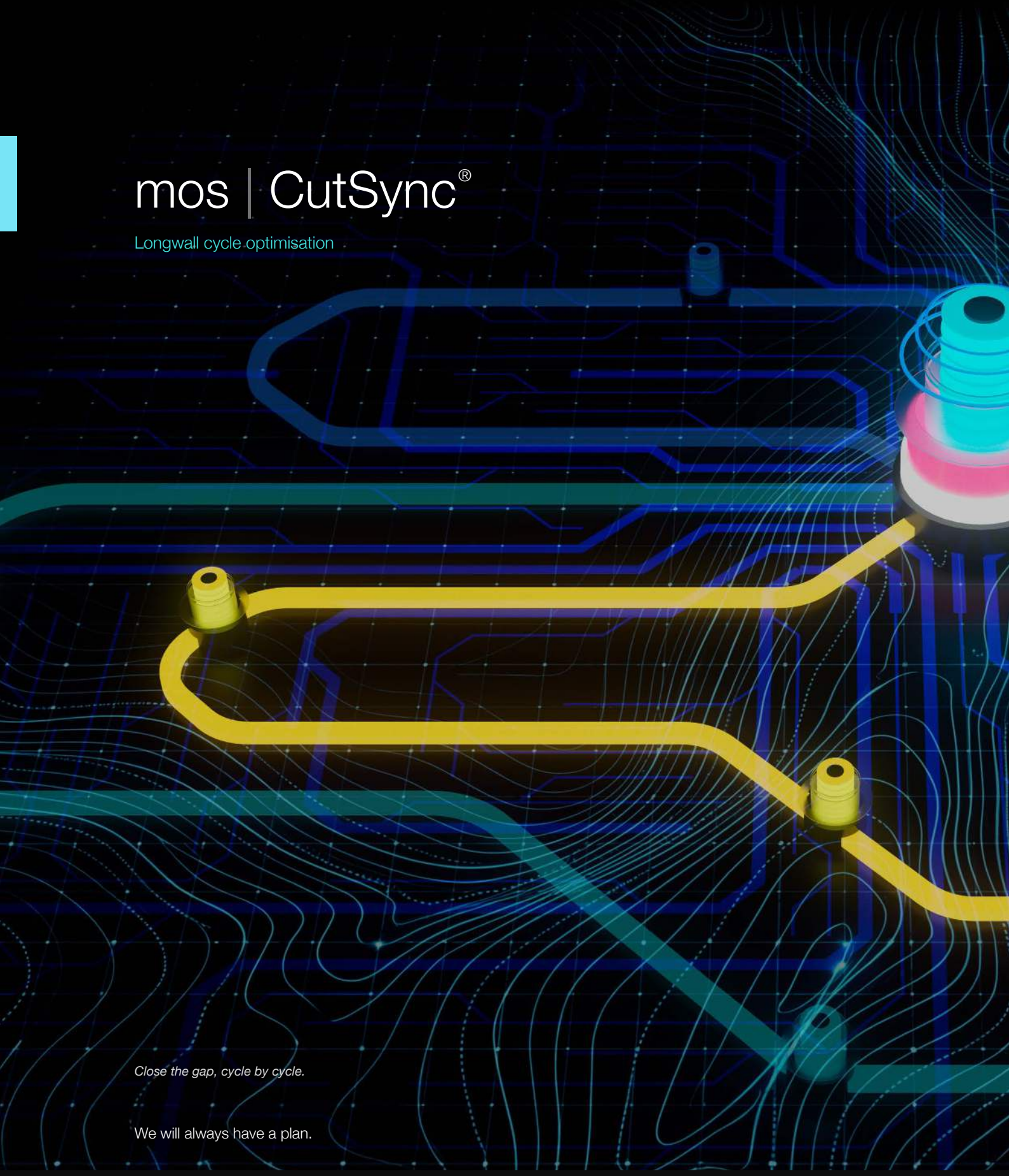
mapped out solutions

# mos | CutSync®

Longwall cycle optimisation



*Close the gap, cycle by cycle.*

We will always have a plan.

Product status: Early access

**DRAFT | not yet in production, content subject to change**

# mos | CutSync®

The longwall is a constrained machine. The shearer can only go as fast as the slowest of eleven physical limits permits, and on any given cycle one of them is binding while the rest have headroom going to waste. mos | CutSync® makes all eleven visible, names the one that is binding right now, and turns the gap into tonnes.

## What CutSync® offers

A number the superintendent can act on, the engineer can verify and finance can model. Push the speed and see where it clamps, and why. Tick a maintenance day and watch the recovery. The questions you used to guess at now have an answer in seconds.

**Here's how it supports your operation:**

- **See the binding constraint**
  Eleven limits on every cycle, colour coded and always in view. When the slider stops, CutSync names the one that stopped it.
- **Put a number on the gap**
  The difference between the cycle you are running and the cycle you could run, shown as tonnes, forecast against actual and potential.
- **Model the what if in seconds**
  Push the speed or cancel a maintenance day and watch cycle time, tonnes and production rate update live.
- **Defensible, not hand waved**
  First principles cycle physics that reproduces the planning engineer's own reference spreadsheet.

## Key features for everyday use

- **The eleven constraint strip**
  Every limit on every cycle, always in view and colour coded. Click any pill to drill into the segments that are binding.
- **One slider, live**
  Move it and the whole cycle re-runs. Cycle time, tonnes per cycle and production rate update on the spot.
- **It names the reason**
  When the slider stops responding, CutSync tells you which constraint stopped it, so you know what to work on.
- **Closing the gap view**
  Forecast, actual and potential side by side: the tonnes you are recovering and the tonnes still on the table.
- **Maintenance day calendar**
  Tick a day to model cancelling it and the recovery uplift renders in the cell.
- **Engineer view**
  Every segment and every constraint, with auto suggest and a preview before you commit, on the same maths.

The engineer view, every segment and every constraint

One slider for the superintendent. Every segment for the engineer. One engine underneath.

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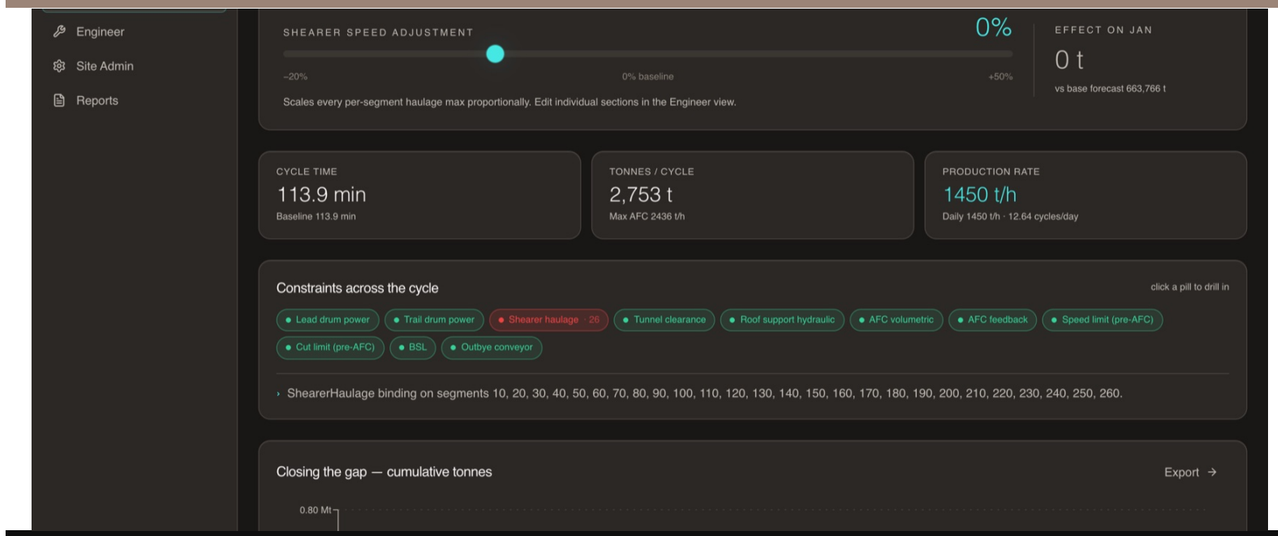
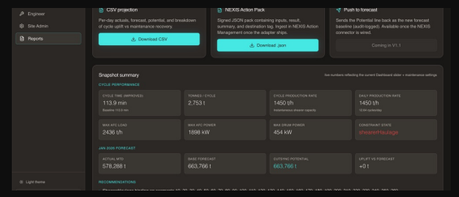
## Why choose CutSync®?

CutSync sits on the Production line of the MOS Suite, the operational lens that turns plan data into daily, actionable tonnage alongside NEXIS and PanelPlanner.

- **One tool, two views, one engine**
  The superintendent drives a single slider. The engineer works every segment underneath. Same maths, so the answer holds up when it is stress tested.
- **Low risk to adopt**
  It bolts on to the spreadsheets you already run. No new equipment and no re-engineering.
- **Two ways to run it**
  Stand it up standalone this quarter, or plug it into your NEXIS Production login when you are ready.
- **Built for the people who carry it**
  Superintendent, planning engineer, site administrator, general manager and finance. Five lenses, one engine.
- **Exports that travel**
  A clean export ready for modelling, so the arithmetic survives being handed up and across.
- **Support when you need it**
  Mapped Out Solutions provides training and support to help your team adopt it properly.



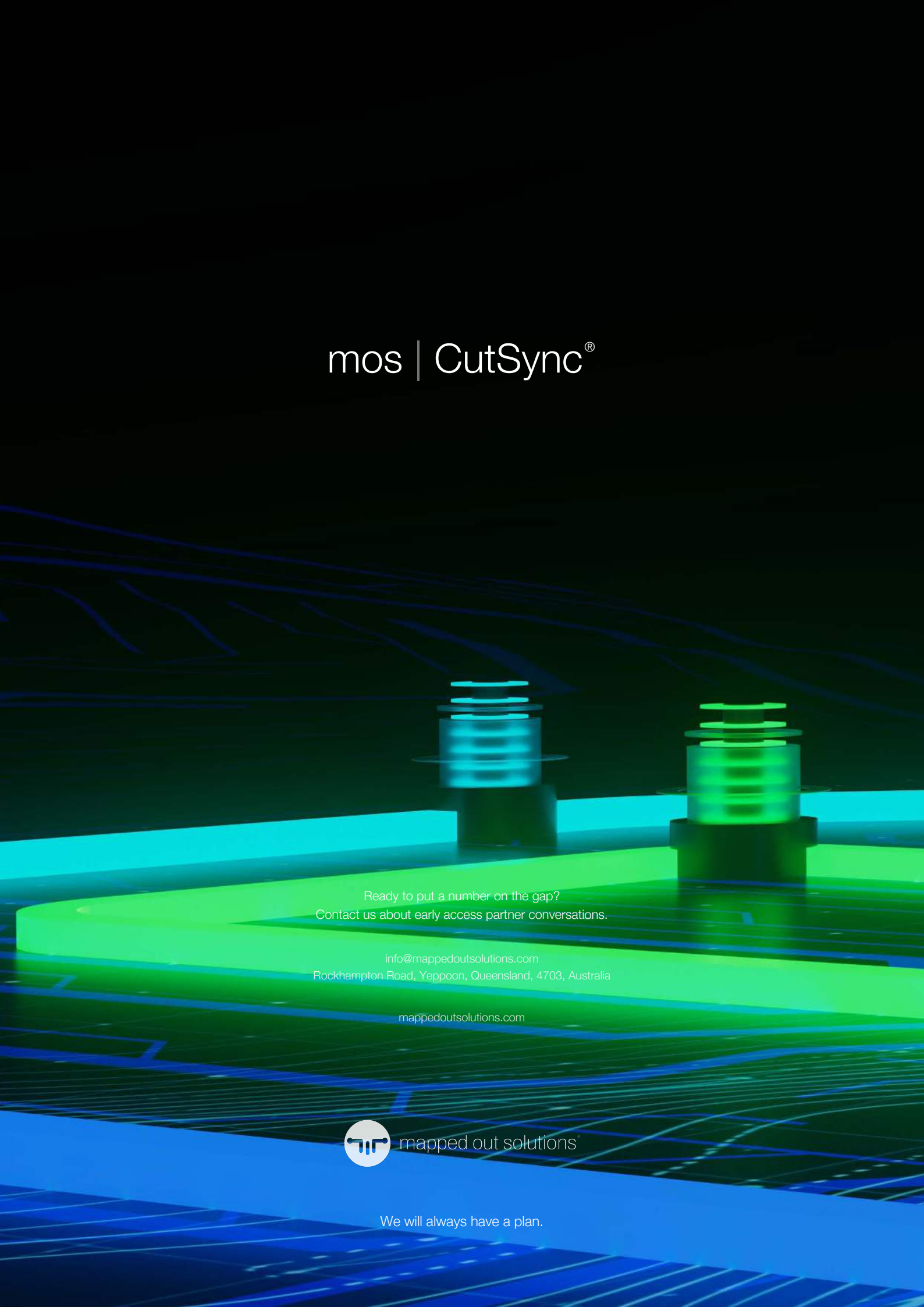



Reports, ready to hand up and across

### The gap, made visible

Every cycle leaves tonnes on the table and almost nobody can see why. CutSync shows which of the eleven limits is binding, what it is costing, and what changes if you push. Subscription based, deployed in weeks, your data in your tenancy.

Illustrative engine output is drawn from a reference 414 metre face. Your numbers will differ, which is the point.


mos | CutSync®
Ready to put a number on the gap?
Contact us about early access partner conversations.
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We will always have a plan.