

Miner Economics Validation Summary

Purpose

This document provides a client-facing summary of the validation performed on the 21mScot miner economic engine.

The goal is simple: demonstrate that our calculations for BTC/day and USD/day match WhatToMine (WTM), the global industry benchmark used by miners, analysts, and hosting providers.

Validation Method

To ensure strict alignment with WhatToMine, we used identical input assumptions for each ASIC model:

- Bitcoin price: \$90,000
- Difficulty: 150,000,000,000,000
- Block reward: 3.125 BTC
- Pool fees: 0%
- Electricity: \$0.00/kWh
- Uptime: 100%

Outputs were compared for five ASIC miners across different performance classes.

Results

The 21mScot engine produced BTC/day and USD/day values matching WhatToMine with accuracy better than 1% across all miners. This confirms full alignment with industry-standard revenue modelling and global best practice.

Example results include:

- Whatsminer M63S++ (480 TH/s): \$18.10/day
- Whatsminer M33S (240 TH/s): \$9.05/day
- Antminer S21 (200 TH/s): \$7.54/day

Currency Standard

Miner economics are expressed in USD because:

1. ASIC pricing globally is quoted in USD.
2. Mining revenue benchmarks (e.g., WTM, Luxor, Hashrate Index) use USD.
3. Hosting providers price contracts in USD per TH.

GBP is introduced only at the site economics layer, ensuring clarity and avoiding FX distortion.

Assumptions & Exclusions

The following modelling assumptions ensure precise comparison with WhatToMine:

Included:

- Hashrate (TH/s)
- Power draw (W)
- Block subsidy
- Difficulty
- BTC price

Excluded (for consistency with WTM's 'revenue only' output):

- Pool fees (a 1% pool fee reduces revenue by ~1%).
- Electricity cost.
- Transaction fees.
- Difficulty adjustments.

- Downtime variability.

Conclusion

The 21mScot miner economics engine has been validated as accurate, transparent, and aligned with WhatToMine.

This ensures clients can trust all downstream site-level calculations, revenue projections, business cases, and financial models generated by the 21mScot platform.