

Financial Business Case

Banlaw's Unified Management delivers multiplying productivity gains by implementing optimal fuel management systems and services throughout mine sites. Each element magnifies the effects of the others.

Saving Time			Saving Money			ROI		
Number of Haul Trucks	1	20	Number of Haul Trucks	1	20	Number of Haul Trucks	1	20
Average fuel tank size ¹	7,005	7,005	Machine running cost / hr ⁴	\$2,111	\$2,111	Refuelling locations upgraded	1	3
Proportion required to top up	70%	70%	Reduction in cost of idle machinery / yr	\$117,239	\$2,344,773	COSTS - Hardware + FMS Upgrade Costs	\$65,000	\$195,000
Amount required to top up ²	4,904	4,904	Fuel used by machines per year ⁵	1,471,050	29,421,000	BENEFITS - productivity, rebates, leakage reduction	\$219,182	\$4,383,649
Old fuelling speed	400	400	Proportion of fuel use reconciled before Banlaw engagement	80%	80%	Payback		
New fuelling speed	800	800	Proportion of fuel use reconciled after Banlaw engagement	95%	95%	Days to payback	108	16
Old minutes to fill	12	245	Reduced leakage from identified equipment and security issues	1.00%	1.00%	Weeks to payback	15	2
Old process/paperwork time	4	80	Fuel tax credit rebate value / litre	\$0.39	\$0.39	Months to payback	4	1
Old total refuelling time	16	325	Assumed site wholesale cost / litre	\$1.05	\$1.05	Note: All numbers are litres and Australian dollars. Fuel cost inclusive of excise, freight and charges		
New minutes to fill	6	123	Total Machine Idle Cost saved / yr	\$117,239	\$2,344,773	¹ Cat 797 s or c model, Komatsu 860 and 890		
New process/paperwork time	1	20	Additional Fuel Tax Credit claims enabled / yr	\$86,498	\$1,729,955	² Model assumes machines are filled just one time per day		
New total refuelling time	7	143	Value of fuel where leakage or theft is mitigated / yr	\$15,446	\$308,921	³ Would you like a free haul truck running 24/7 for over a month?		
Fuelling time saving / day	6	123	Monetary benefit from Banlaw upgrade / yr	\$219,182	\$4,383,649	⁴ Machine running cost is operator + fuel and maintenance costs. It excludes the productivity gain from having this machine in the pit rather than waiting around. Smaller trucks can be valued closer to 1000 p/h		
Automation time saving / day	3	60				⁵ Assuming 300 operational days / year / machine		
Total minutes saved / day	9	183						
Machine idle hours saved per year	56	1,111						
Machine idle days saved per year ³	2	46						