



AGNICO EAGLE

**AN APPROACH TO FINANCIAL
AND OPERATIONAL DATA
ANALYSIS TO DRIVE IMPROVED
DECISION-MAKING**

Verksamhetsstyrning 2.0

2024-09-25

AGENDA

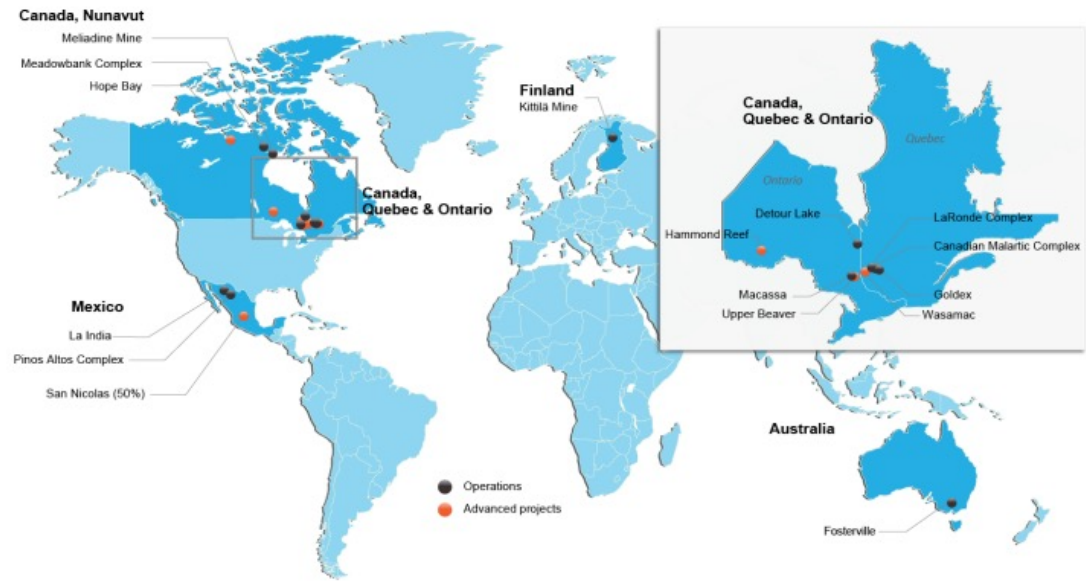


1. Agnico Eagle Mines
2. Business risks and opportunities in mining
3. AI in mining
4. AI in performance management
5. Data maturity model
6. Targeted data management organization
7. Mitigating our challenges
8. GHG data management - overview
9. Conclusion

AGNICO EAGLE MINES



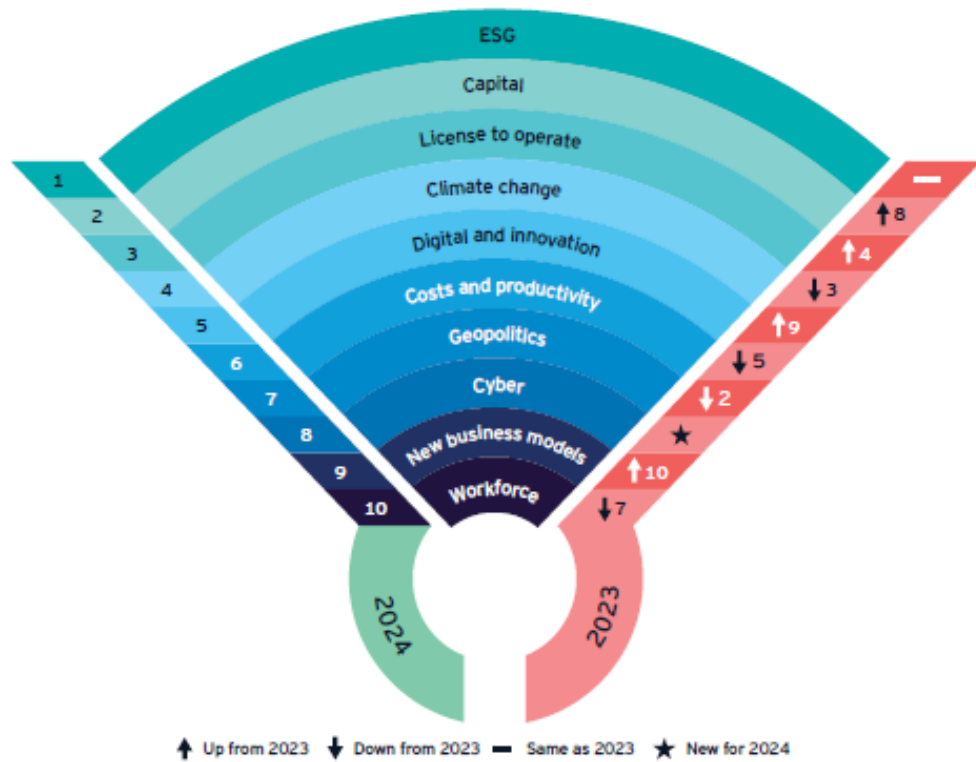
Third Largest Gold Producer
Proven Geological Potential in Premier Jurisdictions



Market Cap (BUSD)	Annual Revenues (BUSD)	Gold Production (moz)
40	6.6	2.0
33	11.4	4.0
59	11.8	5.3



BUSINESS RISKS AND OPPORTUNITIES IN MINING



Key themes:






- Investors' and stakeholders' have been underestimated and continue to increase
- The pace of change has accelerated
- Risks today are highly complex, interlinked and impact each other
- Building trust and articulating value can evolve the sector's brand

* Top 10 business risks and opportunities for mining and metals in 2024 from EY




AI IN MINING



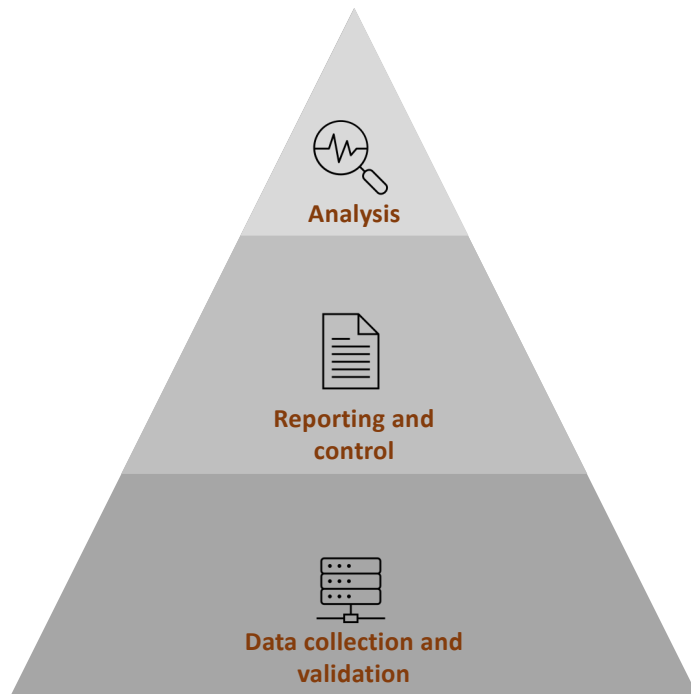
Potential across the value chain

				
Exploration	Mine operations	Processing	Transport	Sales and marketing
<ul style="list-style-type: none"> Subsurface geological modelling and assessment 	<ul style="list-style-type: none"> Equipment performance and productivity 	<ul style="list-style-type: none"> Process optimization 	<ul style="list-style-type: none"> Truck/train performance optimization 	<ul style="list-style-type: none"> Sales forecasting
<ul style="list-style-type: none"> Environmental impact assessment 	<ul style="list-style-type: none"> Optimal extraction planning 	<ul style="list-style-type: none"> Waste monitoring and optimization 	<ul style="list-style-type: none"> Rail line asset maintenance and monitoring 	<ul style="list-style-type: none"> Pricing optimization
<ul style="list-style-type: none"> Predictive mineralization 	<ul style="list-style-type: none"> Predictive blasting 	<ul style="list-style-type: none"> Predictive maintenance 	<ul style="list-style-type: none"> Predictive analytics and real time infrastructure and resource allocation 	<ul style="list-style-type: none"> Commodity prices forecasting
<ul style="list-style-type: none"> Autonomous exploration and prospectivity mapping 	<ul style="list-style-type: none"> Water monitoring and optimization 	<ul style="list-style-type: none"> Energy consumption optimization 	<ul style="list-style-type: none"> Real-time tracking and optimization 	<ul style="list-style-type: none"> Commodity demand forecasting
	<ul style="list-style-type: none"> Energy consumption optimization 	<ul style="list-style-type: none"> Workforce management 	<ul style="list-style-type: none"> Environmental impact reduction 	<ul style="list-style-type: none"> Intelligent invoicing

Representative use cases in mining and metals

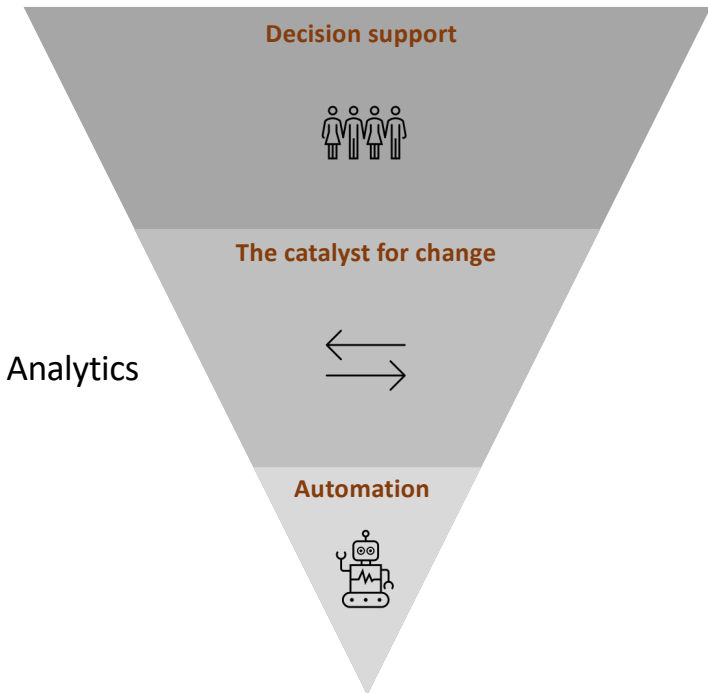
Area	What	How	Outcome
Processing 	<ul style="list-style-type: none"> Leverage AI and ML to improve metal recovery 	<ul style="list-style-type: none"> Running AI on real-time data from the processing plant 	<ul style="list-style-type: none"> Ability to adjust operational variables impacting ore processing and recovery
Processing 	<ul style="list-style-type: none"> Improve efficiency of blast furnace and reduce fuel consumption by controlling unwanted content in the ore 	<ul style="list-style-type: none"> Pilot solution embedding ML in the value chain 	<ul style="list-style-type: none"> A 37.5% reduction in unwanted content leading to the obtainment of targeted savings.
Safety 	<ul style="list-style-type: none"> AI-assisted image analysis to identify objects and potential hazards 	<ul style="list-style-type: none"> Train the analytical model on analyzing video streams. 	<ul style="list-style-type: none"> Automated 24/7 visibility and reduced manual work leading to more time being spent in the field

AI IN PERFORMANCE MANAGEMENT

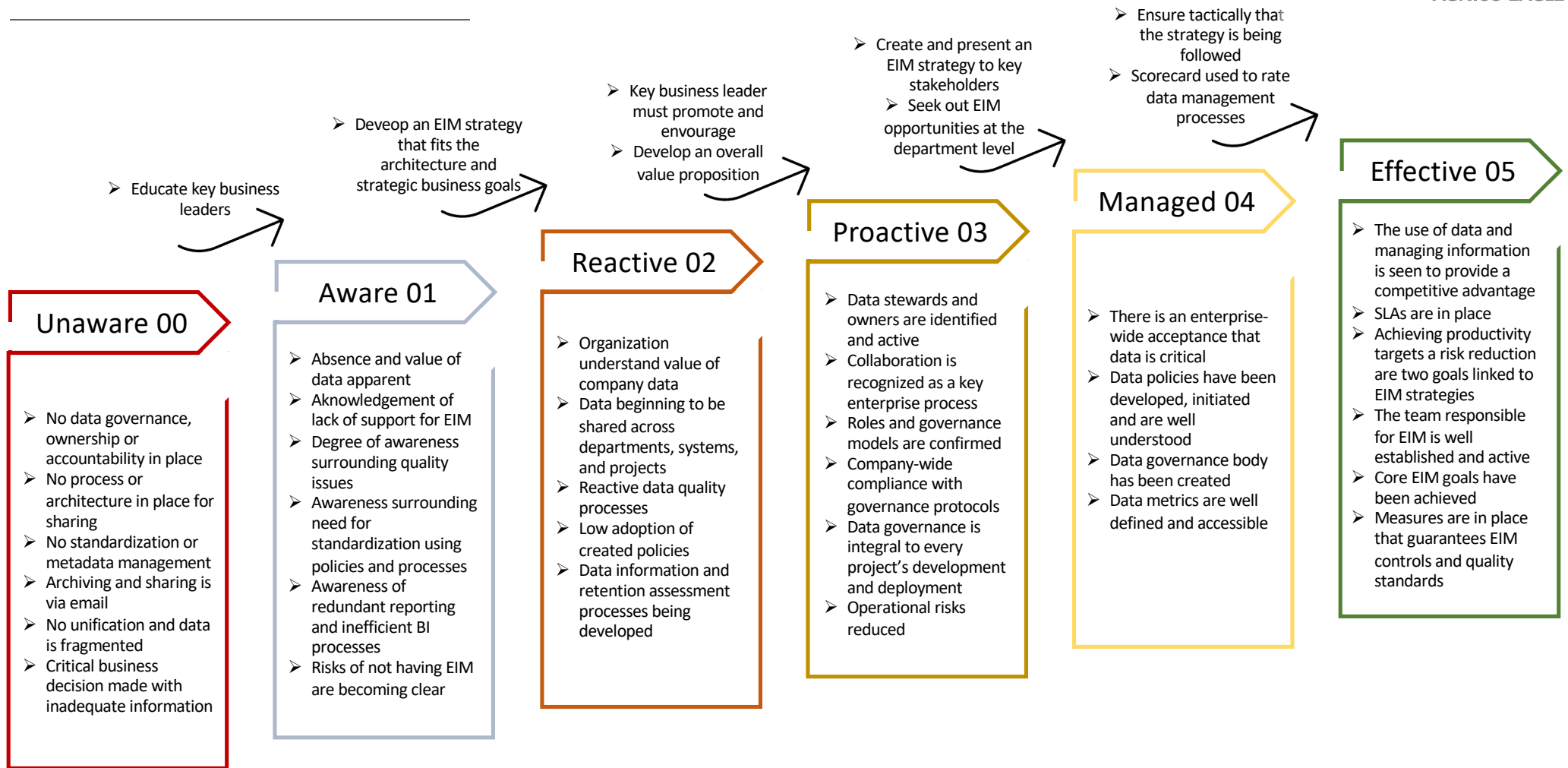


Enablers:

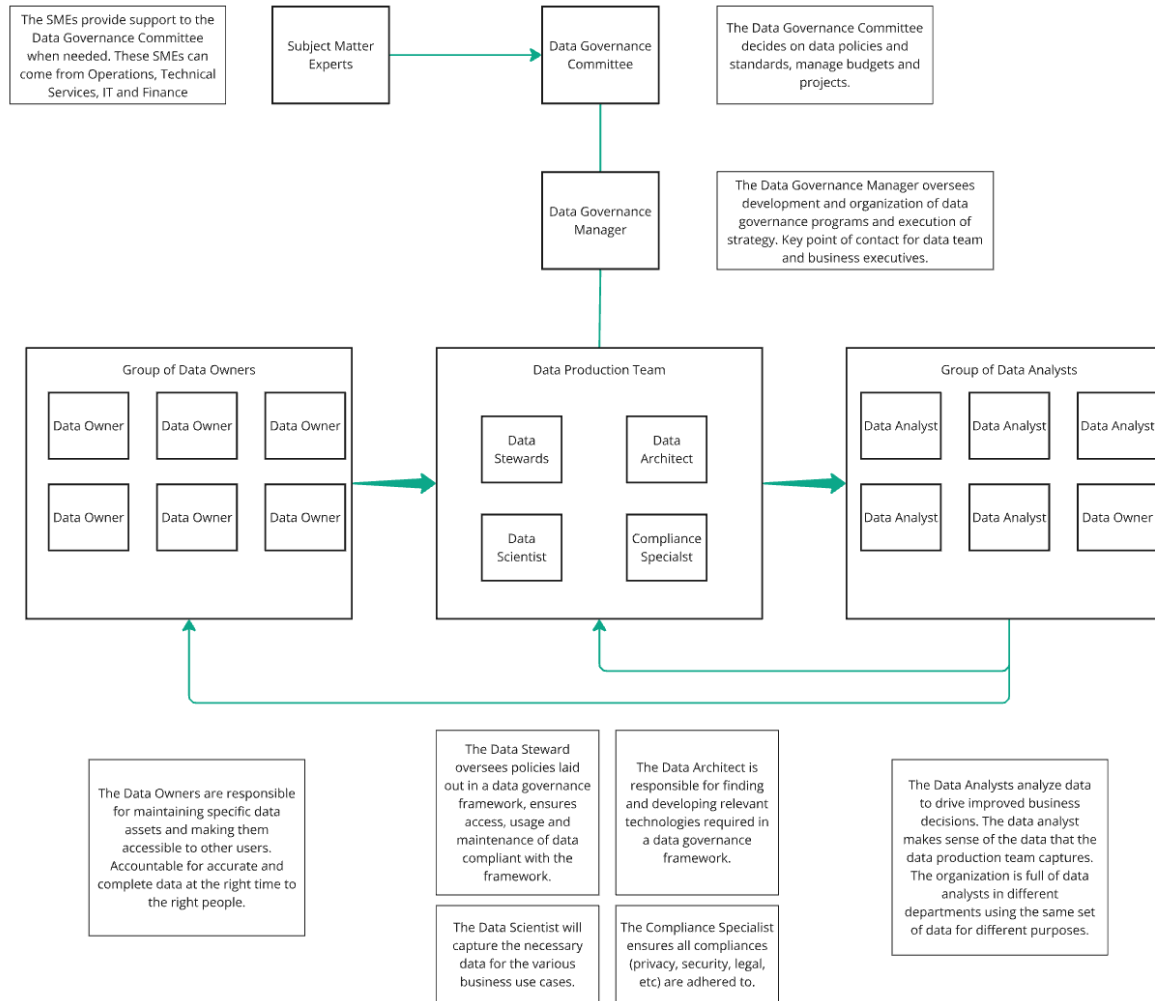
- Cloud
- Big Data and Visualization
- Cross-Fuctional Collaboration
- Standardization
- Machine Learning and Predictive Analytics
- Hiring and talent development
- Data Governance
- Integration
- Robotics and Generative AI



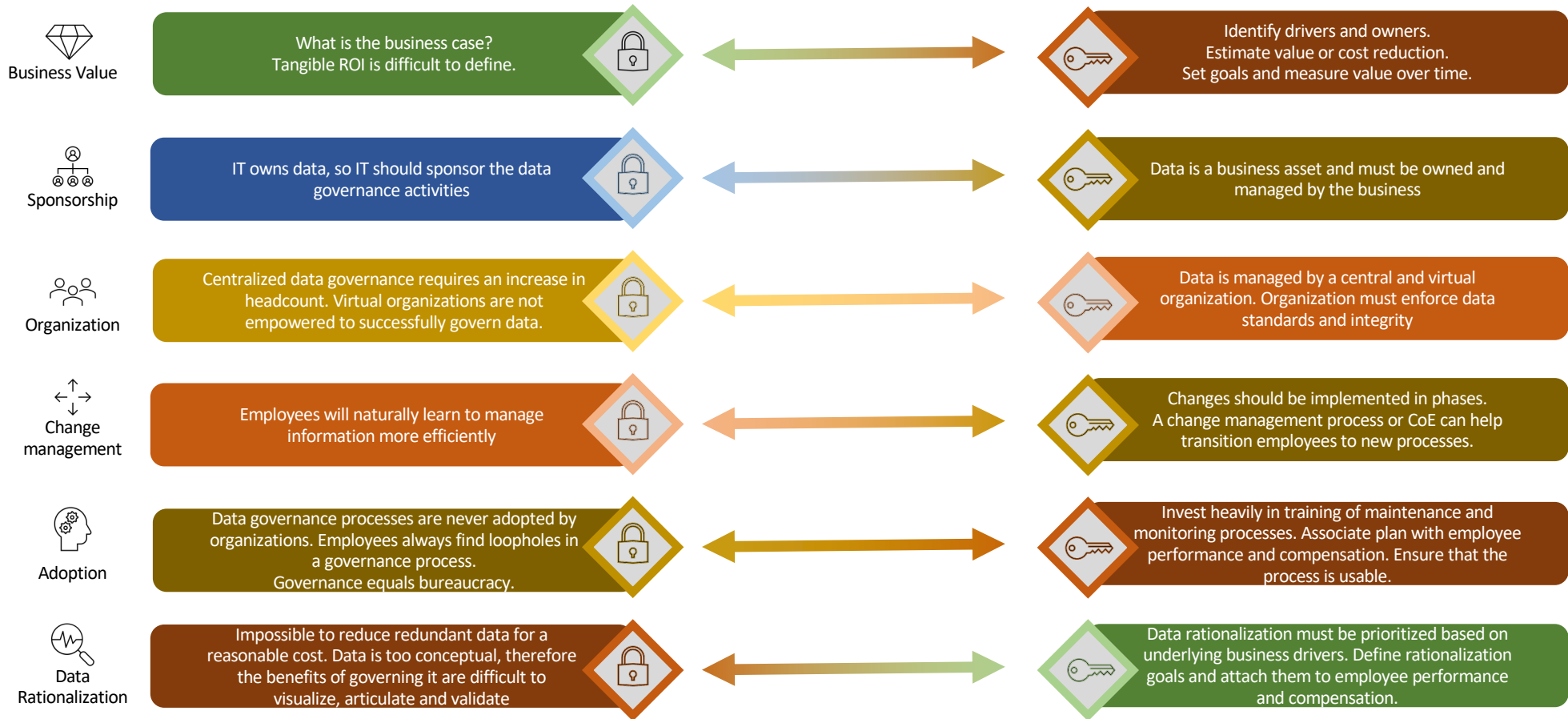
DATA MATURITY MODEL



TARGETED DATA MANAGEMENT ORGANIZATION



MITIGATING OUR CHALLENGES

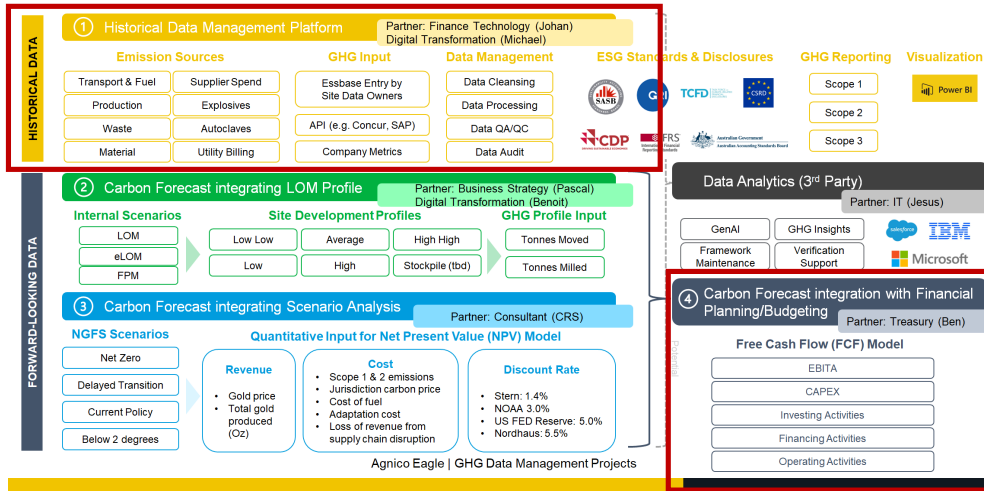


GHG DATA MANAGEMENT – OVERVIEW



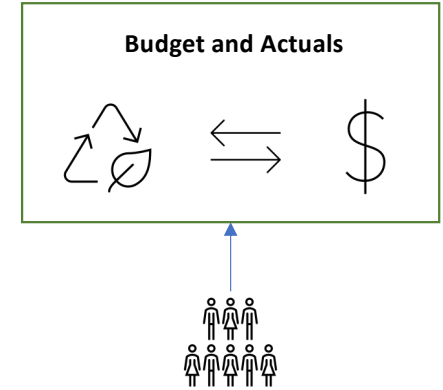
GHG DATA MANAGEMENT

HISTORICAL GHG PERFORMANCE AND CLIMATE-RELATED FORECASTING



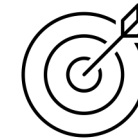
Focus area:

1. The historical data management platform
2. 2025 Budget
3. Will be the foundation for the other areas:
 - a) LOM profile
 - b) Scenario analysis
 - c) Data analytics
 - d) Carbon forecasting integrated with Financial planning and budgeting



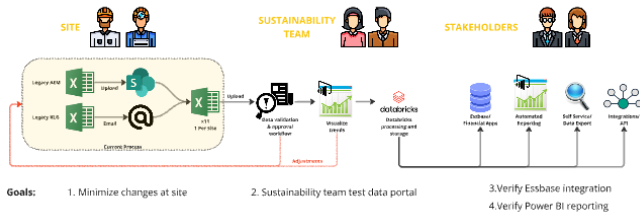
Team effort:

1. Digital Transformation
2. Sustainability
3. Finance
4. Treasury



Pilot go live for corporate sustainability group late Sep/early Oct 2024

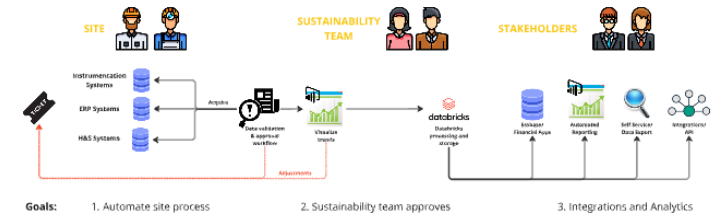
Phase 1 - Pilot Validation Portal



Phase 2 - Launch Validation Portal



Future - Automated Collection with Validation



CONCLUSION

