Goals and milestones in the Commonwealth Agreement

OUTPUT	MILESTONE NUMBER	MILESTONE DESCRIPTION	MILESTONE END DATE
RP1.1 Roadmap for co-developed relinquishment policy: **The roadmap will identify a policy reform pathway with a focus on removing constraints that are currently preventing transition to successful relinquishment**	1.1.1	**Policy review:** Develop map of policy and regulatory landscape	30/12/2021
	1.1.2	**Uncertainty analysis:** Complete assessment of gaps, ambiguities and counter-productive outcomes	30/06/2022
	1.1.3	**Strategic foresighting:** Complete socio-economic consequences of alternative policy settings	31/12/2022
	1.1.4	**Socio-economic modelling:** Optimal trade-offs for stakeholders identified for alternative policies	31/12/2023
	1.1.5	Deliver final roadmap	31/12/2025
RP1.2 Decision tool for regional planning of post mine uses: **Software tools to assist governments, industry and other stakeholders develop holistic approaches to basin and landscape post-mine planning. The tool will consider dynamic and cumulative impacts of alternative options for mine re-purposing**	1.2.1	**Land use planning review:** Complete review and gap analysis of regional land-use planning tools	31/03/2022
	1.2.2	**Attribute analysis:** Key attributes for integrating post-mine futures into regional planning identified	31/12/2022
	1.2.3	**Future land use model build:** Models developed to predict the interrelationships between attributes	30/06/2025
	1.2.4	**Training materials:** Software tools and training modules developed to build capacity for collaborative regional planning	31/12/2026
RP1.3 Frameworks, tools and capacity building to enable shared vision development: **This program will identify mechanisms for collaboratively building a shared vision of post mine options, that will deliver socio-economic gains to regional communities**	1.3.1	**Value aggregation.** Tools for aggregating community values developed	30/12/2023
	1.3.2	**Opportunity analysis:** Trade-offs for different opportunities and constraints quantified	30/06/2024
	1.3.3	**Dynamic modelling:** Dynamics of typologies, options and trade-offs modelled	31/6/2025
RP1.4 Integrated systems and training: **It will investigate gaps and issues in the existing policy landscape that are impeding successful relinquishment, and articulate a roadmap for policy reform. Decision tools for improved planning will be developed for integrating regional land use planning with mine planning. New community engagement approaches will be developed and tested using participatory research methods**	1.4.1	**Integrated modelling:** Algorithms developed to integrate qualitative and quantitative data	31/12/2026
	1.4.2	Educate 20 PhD students to become leaders in community engagement and regional development	1/01/2030
	1.4.3	Develop training modules and communication materials relating to community engagement and regional development	1/01/2030

OUTPUT	MILESTONE NUMBER	MILESTONE DESCRIPTION	MILESTONE END DATE
RP2.1 Advanced evaluation framework for long life assets: **This framework will allow for better decision making and more efficient operating behaviour over the life of mine through providing greater transparency around the real risks and costs of closure. Advanced evaluation framework for long life assets**	2.1.1	**Value concepts:** Next generation value propositions for a mining project conceptualised.	30/06/2022
	2.1.2	**Quantification:** Intangibles associated with a mining project quantified	31/12/2022
	2.1.3	**Cost modelling:** Methodologies for aligning costs and benefits over time developed	30/06/2023
	2.1.4	**Option evaluation:** Next generation mining project option evaluation framework developed	30/06/2025
RP2.2 Real time predictive models: **These models will predict the level of residual risk and liability remaining at a site upon completion of mining operations. This will aid in uniform liability reporting and setting objectives for business process improvements along the value chain.**	2.2.1	**Parameterisation:** Integrated total mining risk parameters identified	30/06/2023
	2.2.2	**Optimisation:** Optimisation models assessing unmitigable site liability developed	30/06/2024
	2.2.3	**Prediction:** Predictive algorithms and continuous monitoring needs embedded in optimisation tools	30/06/2025
	2.2.4	**Risk assessment:** Risk reduction quantified for different rehabilitation activities	30/06/2026
RP2.3 Planning tools to identify transferrable residual risk: **Qualitative assessment will allow the user to quantify the acceptable level of residual risk and liability that can be transferred to subsequent land users upon relinquishment. The tools will analyse risk-reward trade-offs based on alternative land uses that will most likely follow the mining phase.**	2.3.1	Alternative potential land uses for a region categorised	31/12/2022
	2.3.2	Acceptable residual risk quantified for each land use category	30/06/2024
	2.3.3	Progressive activities to achieve relinquishment identified	31/12/2024
	2.3.4	Optimal mix(es) of progressive activities identified	31/12/2025
	2.3.5	Educate 10 PhD students as leaders in mining and capital markets	1/01/2030
	2.3.6	Develop training modules and relevant communication materials for investment analysts, project planners, governments and regional planners	1/01/2030

OUTPUT	MILESTONE NUMBER	MILESTONE DESCRIPTION	MILESTONE END DATE
RP3.1 Smart architecture for closure design (Incl. data storage and transfer protocols): **A knowledge platform and suite of modelling tools to address shared problems between miners, community and regulators, providing quicker access to relevant knowledge, tools and data.**	3.1.1	**Scope requirements:** Establish data needs: Quantitative/qualitative models and data requirements reviewed	31/03/2022
	3.1.2	**Needs analysis:** Gap analysis for model, data and sensor requirements completed	21/12/2021
	3.1.3	**Platform development:** Data governance protocols and shared data platforms developed	30/12/2024
	3.1.4	**Interoperable architecture in place:** Scalable and dynamic information system architecture delivered	30/06/2025
RP3.2 Prototype risk management technologies for successful post-mine futures: **A suite of market-ready innovations to 1) intervene to prevent the creation of closure risks and 2) address critical closure risks and 3) quantify ecological responses to interventions**	3.2.1	**Constraints analysis:** Specific high-risk points in the mining value chain identified	30/06/2025
	3.2.2	Technology solutions with potential for broad commercialisation tested and either prioritised or fast failed	30/06/2022
	3.2.3	Priority technologies adapted and refined to optimise commercial result	30/06/2024
	3.2.4	A suite of new prototype technologies designed and commissioned for pilot testing	30/06/2029
	3.2.5	Prototypes validated at demonstration sites	30/03/2030
RP3.3. Business solutions for supply chain development: **Supply chain maps that will assist businesses supplying goods and services to post-mine ventures to make informed investment decisions.**	3.3.1	Current post-mine land use supply chains analysed	30/06/2024
	3.3.2	Market analysis and projection for future post-mine supply chains quantified	1/01/2025
	3.3.3	Business models and technologies that present scalable solutions prioritised	1/01/2027
	3.3.4	Test and validate solutions at demonstration sites	3/12/2030
RP 3.4 Training content and courses for integrating post closure outcomes into the workforce: **The Program will also educate 20 PhD students as leaders in mine closure operations, supply chain, and technology development.**	3.4.1	Microcredentialling courses for closure proficiency developed	30/06/2022
	3.4.2	Master of Closure programme delivered	1/01/2024
	3.4.3	Mine planning training incorporates closure scenarios	1/01/2025
	3.4.4	Technology specific skills development offered for prototype technologies	1/01/2027
	3.4.5	Educate 20 PhD students as leaders in mine operations, supply chains and technology development	1/01/2030