TERMS OF REFENCE: System analysis South Africa Combi track Critical Raw Minerals	
Country, State, City	South Africa
Sector	Critical Raw Minerals
Sub sector level 1	
Beneficiary(ies)	The beneficiary of this project is the CRM Combitrack team for South Africa that consists of representatives of EKN South Africa, RVO and MFA and relevant external stakeholders.
Project purpose	The Netherlands' Combi Approach aims to create sustainable impact by taking a systems perspective on global challenges and opportunities. This means understanding how a particular system works and where the gaps are; identifying local needs; building synergies and partnerships with local and international actors; and focusing efforts where the Netherlands can add the greatest value. Six enabling factors have been identified in the Combi Approach: 1) financing and markets; 2) improvement of laws and regulations; 3) policy influencing & diplomacy; 4) knowledge and research; 5) capacity building, skills development and technology transfer; and 6) infrastructure. South Africa is one of the countries selected to implement the Combi Approach with the overarching goal of contributing to sustainable, positive change, in this instance, in the Critical Raw Minerals (CRM) system. In this context, the CRM system that will be analysed consists of the actors, value chain activities, infrastructure, policies, finance, knowledge and market dynamics that together determine how critical raw materials are extracted, processed, transported and traded. The analysis will explore both large multinational mining companies and SMMEs although it is expected that most of the economic opportunities will reside with larger companies. This research project serves as a foundational step to guide the implementation of the Combi Approach. Specifically, the project aims to: - Enhance understanding of South Africa's critical raw minerals sector from a systems perspective, with a focus on platinum group metals, manganese, and other priority value chains (such as vanadium) identified through this project; - Provide strategic guidance and concrete, actionable recommendations for implementing the Combi Approach, indicating how the Dutch government and its partners can drive positive system change in the critical raw material sector.
Strategic embedding	The proposed project closely follows the strategic priorities of EKN South Africa, as outlined in its Multi-Annual Country Strategy 2026-2030 and its Annual Plan 2026. It also supports the Global Gateway Strategy, the European Critical Raw Materials Act, EU Battery Regulation and the Global Gateway project G2SAII/BVC. By focusing on critical raw minerals sector, this project aligns with EKN'S objective to promote private sector development in South Africa in priority sectors, which includes critical raw minerals and green hydrogen. South-Africa is an important global player in various Critical Minerals and Metals, including Platinum Group Metals and Manganese. The Netherlands, and more broadly the European Union, is keen on diversifying its supply of various Critical Minerals and Metals, and South-Africa is well-positioned to be

	one of the most important players In this agenda. At the same time, further development of the critical minerals supply chains in South-Africa provides opportunities for broadening the (economic) relation between the Netherlands and South-Africa and will provide business opportunities for various Dutch organisations. If designed well, our engagement on critical minerals and metals will also feed into South-Africa's Just Energy Transition and our cooperation on the energy transition, circularity and sustainability. Especially the link with developments on Green Hydrogen in South-Africa and our existing Combi-Track in this field provides a very interesting opportunity for linking agendas and further strategic embedding. It also serves to support Kruger2Canyons, which is in an agricultural area that uses water that flows from the platinum belt.
Institutional setting	Part of this assignment is to identify the various stakeholders relevant for the selected system. Existing studies by CSIR and Holland Circular Hotspot & Circular South Africa provide an important base for this stakeholder analysis. Regarding previous interventions of others in the selected system, it is particularly interesting to learn which results have been achieved so far with which stakeholders and what has worked well or not in terms of realising positive system changes. As this project particularly aims to deepen and improve the understanding of the selected system, the implementer is also requested to engage with 'unusual suspects' who may help to generate new insights, to challenge existing views, to identify unseen pathways to development. Furthermore, the use of local (consultancy) capacity and collaboration with local partner(s) by the implementer in order to enhance access to local knowledge, experiences, and networks is highly preferred and recommended. This is considered particularly relevant for obtaining profound insight into the selected system. At the start of the assignment, the implementer is required to coordinate with the Combi team which stakeholders will be involved in the project in what way, for example during the workshops. During this project and particularly in view of the development of an action plan, it is critical to manage the stakeholder expectations of the (financial) resources that the Netherlands can contribute.
Project background and problem analysis	South Africa plays a vital role in the global supply of critical minerals—particularly PGMs, manganese, iridium, rhodium and vanadium—essential for clean energy technologies, industrial manufacturing, and green innovation. These minerals are included in the EU's list of critical minerals[1]. The mining sector is a cornerstone of the South African economy, while it only contributes between 6% and 7.3% to GDP, it employs approximately 477,000 people and is a major source of export earnings. At the same time, it also poses significant challenges to local communities and the environment. This includes security and safety hazards for people working in the mining sector, pollution,

[1] Critical raw materials - Internal Market, Industry, Entrepreneurship and SMEs

	exacerbating water scarcity and Acid Mine Drainage (AMD) polluting ground- and surface water. A significant share of South Africa's raw materials is exported to meet global demand—especially to industrial powerhouses such as China, the United States and the European Union. Mineral exports account for 25–30% of South Africa's total merchandise exports. Exports are largely driven by offtake agreements. PGMs are primarily exported to Western countries (US, UK, Japan) while ferrous ores like ferrochrome and ferromanganese are mainly destined for China's steel and metallurgical industries. Due to limited domestic refining capacity, almost all minerals are currently exported in unprocessed form. Several Dutch stakeholders are already active in South Africa, including TNO/NMO (including through their work on PanAfGeo), CNV International, EPRM (hosted by RVO), and TU Delft. Moreover, over a dozen Dutch companies and investors—including Royal IHC, Alia Instruments and ING Bank—are engaged in the sector in South Africa. CSIR conducted a study for the Netherlands Embassy on opportunities for SA-NL collaboration in the CRM sector. A follow-up study is being done to specifically identify circular CRM opportunities. Nineteen Dutch companies joined the Mining Indaba conference in 2026 (compared to twelve in 2025), the largest mining conference in the Southern Hemisphere. Opportunities will be further strengthened by Invest International's new CRM financing instrument and the EU–South Africa Memorandum of Understanding on critical raw materials, signed in November 2025. The Netherlands' Critical Raw Materials Strategy[2] focuses on improving supply security through five pillars: circularity and innovation; sustainable European mining and refining; diversification of supply; sustainability in global supply chains; and enhanced knowledge and monitoring. South Africa offers opportunities to strengthen the security of supply for critical raw materials by fostering international partnerships, promoting innovation, and advancing sustainable practices. At the same time, it underscores significant opportunities for Dutch private sector engagement and private sector development (including job opportunities for youth and women) and is therefore a perfect sector for a combi-track.
Results	The implementer is required to deliver the following results: RESULT 1 STRATEGIC FOCUS & PRIORITY SETTING [WHAT & WHERE] **1.1 Sector analysis, opportunities and strategic focus for the Combi Track.** A clear overview of opportunities and risks for environmentally sustainable and inclusive economic growth within the South African CRM sector. This includes: • Opportunities to support inclusive economic development and growth of the CRM sector, including (gender) equity, decent work, greening, local beneficiation and, where relevant, digitalisation; • A prioritisation of key risks to (environmentally) sustainable and inclusive economic development (see RBC opportunities and risks paragraph below). **1.2 Strategies opportunities for Dutch engagement & earning capacity.**

[2] https://open.overheid.nl/documenten/ronl-c97cca89a0c360bc012f5d6da3d54dd1844a6d33/pdf

	Translating sector challenges and local demand into concrete areas where Dutch actors can add value and generate revenue, taking into account their competitiveness, willingness to engage and fit with local needs. This includes: • An assessment of relevant Dutch expertise (companies and knowledge institutions) and their added value; • Strategic (commercial) opportunities for Dutch actors to engage in the CRM sector; • The role of the Netherlands in supporting circular and environmentally sustainable CRM value chains. **1.3 Priority value chains and geographic focus.** Clear recommendations on priority subsectors and geographic areas for Combi Track engagement. This includes: • Subsections of value chains (e.g. PGM, manganese, and others like vanadium) with the strongest potential for win-win outcomes (taking into consideration local development needs and Dutch interests, including security of supply); • Key projects in SA in which EU/NL stakeholders can align; • Priority geographic areas for intervention; • Clear system boundaries to ensure focus and impact. RESULT 2 SYSTEM DESIGN AND IMPLEMENTATION PATHWAYS [HOW] **2. A defined model for how the selected CRM value chains should function.** *Having identified the most promising market segments, it is important to work this out into a systems map (including understanding which elements work and which do not work) that outlines how market actors need to operate to support the growth potential.* **2.1 A future-state value chain model and priority interventions.** A future-state value chain model showing how the system should function to realise growth potential. This includes: • The required functions, linkages and enabling conditions across the value chain, including an analysis of the processing / beneficiation steps that could be established in SA and how these match with the Dutch and European need and possible offtake agreements; • Gaps in the ex-China value chain and which capacities still have to be established. • The roles different stakeholders (public sector, industry, financiers, knowledge institutions, logistics providers etc) should play within a well-functioning system. • Key systemic constraints hindering growth (and specifically those affecting Dutch companies in the sector); • A short list of possible high-impact interventions across the six Combi enablers (1) finance & markets; 2) improvement of laws and regulations; 3) policy influencing & diplomacy; 4) knowledge and research; 5) capacity building, skills development and technology transfer; 6) infrastructure).

	2.2 Key actors to deliver and scale solutions To work in a systemic manner means to work with market players who can provide permanent solutions and have the ability to sustain and scale up those solutions. Therefore, identification of the system actors best positioned to implement and scale solutions within the system is required for this assignment. This includes: • A shortlist of high-potential public and private stakeholders with the capacity and incentives to deliver solutions; • Their roles in the future system and contribution to value chain performance; • Concrete opportunities to strengthen or scale their solutions, including partnerships, financing mechanisms, or policy support. (e.g., there is a specialized Dutch machinery company that is already selling platinum processing machines to Canada and that wants to expand their market to South Africa but cannot extend flexible payment terms as they need a guarantee or third party such as a bank to act as guarantor); • Targeted opportunities for collaboration with Dutch actors where this adds value. This will serve as practical guidance for the Combi team on the implementation of the CRM Combitrack and defining the stakeholder group with whom the Netherlands could collaborate on the implementation.
METHODOLOGY	The service provider is expected to apply a structured, systems-based and participatory approach to deliver the assignment. It should be evidence-based research and analysis using a combination of desk research and primary data collection. The project requires structured engagement with key stakeholders through the use of interviews, consultations, and/or workshops to validate findings and refine recommendations, and ensuring inclusion of diverse perspectives. When conducting this study, the use of Generative Artificial Intelligence (GAI) tools is allowed. It is foreseen that the use of these GAI tools could limit the amount of time spent on desk study, leaving more time for other research methods like interviews with key experts. However, specific conditions apply to the use of GAI-tools. They should be used in a transparent and complementary way to more traditional research tools, while data generated with Generative Artificial Intelligence need to be properly validated. Moreover, when using a GAI-tool, this will need to be an LLM that has been contracted by your firm, as the use of free LLM's is deemed too risky with regards to control over data flows and personal data. In addition, European GAI-providers are preferred over GAI-providers from other countries like the USA; the use of GAI's from China is forbidden. Finally, when using a GAI-tool, we require that the used prompts will be shared in a separate file, after the conducting of the market study has been finalized. In the proposal for this study, it is required to include a paragraph on:

	a. Whether you plan to use a GAI-tool; b. If so, which GAI-tool you plan to use; c. How your company plans to use the GAI-tools d. How the GAI-generated results are validated.
ACTIVITIES	Below is a summary of the minimally required activities for this assignment. The implementer is invited to elaborate further on, and extend upon these in a plan of approach to accomplish all envisioned results. **1. A system analysis is conducted as described in the section above.** Activities: 1.1 Write an inception report based on desk research, detailing the research plan and a comprehensive list of relevant sector stakeholders in South Africa and the Netherlands, including a plan for which stakeholders will be interviewed for the research. 1.2 Organise regular check-ins with the Combitrack team to report on progress and discuss the focus of the research 1.3 Organise a soundboard session with sector experts to validate initial findings before finalizing the report 1.4 Write a system analysis report addressing all elements listed in the 'results' section above. 1.5 Organise a webinar at the end of the research to disseminate findings with a bigger audience of external stakeholders. **2. Organising and coordination of a Sprint Week in collaboration with the Combitrack team.** A Sprint Week is an intensive, collaborative week at the start of a Combitrack where the country team and stakeholders jointly shape the intervention strategy and intervention logic. The findings of the system analysis conducted through this project are validated with all parties involved in the Combitrack, including relevant external stakeholders. Based on this validation, strategic choices are made regarding the precise focus of the Combitrack and the underlying business case is developed and strengthened. Activities: 2.1 To take care of the full organisation of the stakeholder validation workshop during the 'Sprint week' including inviting participants, logistics, venue, catering and a network reception with the group of stakeholders. Budget has been allocated for covering pre-agreed costs on reimbursement basis. 2.2 With the Combitrack team, identify interventions to start working on the desired system changes based on the identified gaps and leverage points. 2.3 Participate in the entire Sprint week, contributing and co-facilitating other workshops during the Sprint week as needed. **3. Evaluation** At the end of the project report on the implementation of the project. Activities:

	3.1 Report on performed activities, key lessons learned related to the execution of the project and the ability to achieve the anticipated results and overview of financial costs incurred during the project.
Monitoring and Evaluation	The implementer is required to report and/or provide input for the following Combitrack indicators: ➢ PSD B1: The extent to which the project contributes to improved quality or/ synergy with other (Dutch funded) interventions; ➢ PSD B2: The extent to which the project contributes to enhanced information, networks, integral programming and (economic) diplomacy; ➢ PSD C4: The extent to which enabling environment actors use better network, new knowledge and improved skills to provide better services to (future) MSMEs and improve policies, regulations and plans that enable sustainable PSD and addressing local challenges
RBC Opportunities and Risks	A number of both RBC opportunities and risks exist with regard to the CRM sector in South Africa (e.g. socio-economic and environmental risks). Earlier contextual assessments have mapped these (e.g. IMVO Risk checker South Africa). Potential new insights coming out of this assignment should be added to create a comprehensive risk overview, creating a foundation to prioritise 5 top risks. This prioritisation is a deliverable of this assignment and should be based on saliency to focus and identify appropriate mitigating measures, and include opportunities for the Dutch private sector. The identification of these measures for the top risks will be addressed in the follow-up of this assignment, and as part of the broader implementation of this CRM combi track.
Communication Strategy	No communication strategy is anticipated at this stage of the implementation
Requirements of service provider	The service provider needs to meet the following requirements: **1. Sector expertise and networks** • Demonstrated expertise in South African mining sector, with specific knowledge of critical raw materials (e.g. platinum group metals, manganese) and related value chains. • Strong network across key stakeholders, including government, private sector, industry associations, and research institutions. • Understanding of sustainable mining practices, including circularity, ESG standards, and inclusive development. **2. Strategic and analytical capabilities** • Proven experience in qualitative and quantitative research, including data collection, analysis and interpretation. • Strong systems thinking and value chain analysis skills, with the ability to translate complex into clear, actionable insights. • Experience in market analysis, opportunity identification, and strategy development. **3. Experience with multi-stakeholder processes** • Proven ability to facilitate workshops and stakeholder engagements with diverse actors (public, private, knowledge institutions). • Experience in building consensus and translating stakeholder input into structured outputs. • Strong stakeholder and management communication skills.

	4. **International and Dutch-SA context (strong advantage)** • Experience working in international cooperation, trade or investment promotion context. • Familiarity with Dutch private sector, knowledge institutions or government instruments is a strong advantage. • Ability to identify and operationalise opportunities for international collaboration. **5. Communication and deliverables** • Ability to produce clear, structured, and high-quality written outputs (reports, presentations, strategic recommendations). • Ability to present complex findings in a concise and actionable manner for policy and decision-making audiences. • Excellent command in English (written and spoken)
BUDGET	EUR 49.000,00
APPLICATION PROCESS	Interested service providers should submit their proposals to pre-ea@minbuza.nl by 30 June 2026. The proposal should be a maximum of 5 pages and include the following: • Your understanding of the project; • Methodology; • Budget; • Timeline; • Motivation on meeting criteria for service providers.
TIMELINE	• Deadline for proposals: 30 June 2026 • Awarding contract: within three weeks of deadline • Research period: 14 weeks • Sprint week: 20 November 2026 (to be confirmed)