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MINING SECTOR DIAGNOSTIC - KYRGYZ **REPUBLIC**

REPORT (March 2023)



March 2023

Acknowledgements and Validity

This report is the result of the Mining Sector Diagnostic for the Kyrgyz Republic carried out from April 2021 to July 2022 by a technical team led by Olle Östensson (consultant to the World Bank) and comprising Alieva Aicholpon, Altynai Sydykova and Helga Treichel (all consultants to the World Bank), under the overall guidance of Javier Aguilar (Senior Mining Specialist at the World Bank and Task Team Leader for mining in Kyrgyzstan). In the preparation of this report, the team interviewed a wide range of mining sector stakeholders for their points of view. The World Bank wishes to thank all the interviewees for their time and valuable contributions. This report is based on laws, regulations, data and indicators effective as of 31 May 2022, but certain important later changes have been noted where relevant.

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Executive Summary

Mining, particularly gold mining, plays a crucial role in the economy of the Kyrgyz Republic, accounting for almost 13 percent of GDP and over 60 percent of exports. The country's geology is relatively favourable for occurrences of gold and base metals as well as other metals such as tin, tungsten, antimony and rare earth metals, and it is also well documented. The Kyrgyz Republic had an important mining industry during Soviet times and after a decline in the 1990s and early 2000s, the number of mines is increasing.

The approach to mining policy by successive governments has been influenced by history and retains several Soviet characteristics, such as an emphasis on state ownership and detailed regulatory intervention along with mineral reserves being seen as an important national and state asset. The post-soviet mining business model emphasizes the leading role of the state in exploration for identifying deposits and estimating mineral reserves that later would be licensed to investors through auctions. Thus, the state mostly licenses well known mineral deposits, which means that unexplored areas that private companies consider having high prospectivity may be neglected, in spite of investors being willing to put capital at risk for exploration. Recent legislative changes have gone in the direction of increased state control. A long dispute with a Canadian investor over the country's largest mine, Kumtor, was finally settled in 2022.

The MSD Dashboard attempts to summarize the diagnostic's results. It is shown in Figure 1. The methodology used is described in Annex 1.

The dashboard shows the following:

- Regarding the sector management framework, while the institutional "Roles and Responsibilities" appear to be properly assigned, there appear to be weaknesses in "Sector Policy", "Sector Dialogue" and "Intra-Governmental Coordination".
- In terms of de jure performance, the legal and regulatory framework appears to be relatively strongest in the first three value chain stages and weaker when it comes to "Revenue Management and Distribution" and in particular "Local Impact".
- In terms of de facto performance, the relatively strongest links are for "Licenses" and "Revenue Management and Distribution" with the other three stages of the EI value chain being assessed in the "Low" range.

Figure 1: Mining Sector Diagnostic (MSD) Dashboard

Mining Sector Diagnostic										
	Mining Sector Management									
Sector Policy			Sector Dialogue		Rol	Roles and Responsibilities		Intra-Governmental Coordination		
			II. Ext	ractive I	ndustries Va	alue Chain				
	Contracts, Licenses and Exploration		Mining Operations		Mining '	Taxation	Revenue Mana and Distrib		-	Local Impact
De Jure Performance	Rules for Licens Allocation, Oversi and Transfer	_	Legislation/Pro Land/Compensat ettlement Environmenta Social Impa	tion/Res t, al and act	Tax Polic	y and Tax ation Rules		Revenue Sharing and Fiscal Stabilization Rules		Local Content, Employment, Community Engagement, CSR and Social Issues
Collection/Maintenance of Geological De Facto Information and Performance Effective License Allocation and Management		d d	Land/Compensation/Res ettlement, Environmental and Social Impact, Support for ASM, OHSA, Mine ClosurePractice		Administ	ng Tax ration and iting	St Re	abilizationsource R		Local Supplier Development, Employment, Community Engagement, CSR and Social IssuesPractice
	Scoring Key:	ery low (1.00 - 1.75)	Low (>	· 1.75 - 2.50)	High (> 2.50 -	3.25)	Very High	h (> 3.25 - 4.00)		

As a landlocked mountainous country with a small population and important gaps in infrastructure, the Kyrgyz Republic needs to look at diversification alternatives such as energy and agriculture, while for the medium term attracting investments to the mining sector to sustain the current level of exports and government revenue. It is therefore important not to leave unexploited any opportunities to raise mining's contribution to growth.

A number of findings emerge from the review:

- The mining licensing system is not conducive to exploration outside known deposits and in direct association with existing mines this was the case even before the current moratorium on new exploration licenses. It is also biased against private sector companies.
- Processes for environmental permitting, resolving competition between different land uses, regulating the mining sector's interaction with local communities and ensuring rehabilitation of abandoned mines are not in line with good international practices. Where provisions for consultation over environmental and social issues exist, they are applied in a manner that fails to inspire confidence in the integrity of the process.
- Accident and fatality rates are considerably higher than international comparators.
- There is no direct evidence that the mining industry in the Kyrgyz Republic carries a significantly higher tax burden than in comparative countries. However, the taxation system does not appear to be based on any analysis of incentives and disincentives for the taxpaying subjects. In several cases, taxes may lead to suboptimal decisions and misallocation of resources. The problems concern not only the tax system as such but also non-tax fees such as licensing fees and power and water rates.
- The system favors state owned companies over private ones and accords state owned companies and other state institutions a key role in the industry that many fear exceeds their capacity.

- While the Kyrgyz Republic has a functioning revenue sharing system, whereby local communities share in mining revenues, there is room for improvement in the transparency of the system.
- In the interest of medium term financial stability, the government could adopt mechanisms for fiscal planning that aim to smooth out the effects on government revenues of variations in the gold price and consider the establishment of a sovereign wealth fund using fiscal revenues from gold mining.
- The Kyrgyz mining industry could strengthen its links with local and regional economies and thus improve its contribution to these economies.

The Kyrgyz Republic faces a number of serious challenges that arise from the important role that mining plays in its economy.

The first important challenge arises from the uncertain prospects of maintaining production volumes in the mining industry over the long term. The main producer, Kumtor, is expected to close in 2031. Other mines are unlikely to be able to offset the loss of production from Kumtor. The possibility of maintaining or increasing national production is unfavourably affected by the apparent depletion of the stock of well documented commercially viable deposits that can be brought into production rapidly. Intensified greenfield exploration would alleviate the concerns but this would require attracting international investors. However, there is little sign of international investors taking an interest in exploration in the Kyrgyz Republic. The Kyrgyz Republic therefore needs to create an environment where international companies will be willing and anxious to commit resources to exploration and development of mineral deposits. Making mining investment in the Kyrgyz Republic more attractive without reducing government revenue from mining, and probably increasing it, would involve reforms in five areas:

- 1) Making licensing and geological information more accessible by
 - a. Digitizing all information that is not already digitized
 - b. Providing access to all non-confidential information on line free of charge
- 2) Reforming licensing allocation rules and procedures by
 - a. Only using auctions and competitions for assets that are well documented from a geological viewpoint and making the route prospecting license exploration license development license the default procedure
 - b. Making licenses exclusive and valid for all minerals found in the license area or excluding areas with existing licenses from new ones
 - c. Eliminating license allocation to state companies by decision of the Cabinet of Ministers
- 3) Restructuring taxes and non-tax fees by
 - a. Abolishing the bonus payment, except as an element of the bid in an auction of a known deposit
 - b. Charging the same tax on gold exports irrespective of the form in which the metal is exported
 - c. Streamlining and lowering royalties considering international benchmarking?
 - d. Lowering license retention fees but retaining the escalating fee structure
 - e. Strengthening transfer pricing and thin capitalization rules
 - f. Streamlining power and water fees and eliminating discriminatory pricing between industries
- 4) Clarifying the role and extent of state ownership by
 - a. Clarifying that the state share is always paid for

- b. Formulating a strategy for state owned mining companies
- c. Drawing up rules for state ownership and the relationship between the state as a shareholder and mining companies, strengthen the role of the State Property Fund
- 5) Providing assurance of stability by
 - a. Defining clearly the conditions for tax stabilization agreements and setting out clear dispute resolution mechanisms
 - b. Providing clear guarantees on international arbitration options in the new Investment Law

The second challenge is due to the Kyrgyz experience of conflict, sometimes violent, around mining projects and their impact on local communities. It has been difficult for mining projects to gain local acceptance. A number of reforms have been introduced with a view to increasing the share of revenues from mining accruing to local communities and investing in local development. The implementation of these reforms is, however, facing constraints due to skills gaps as well as more general problems of governance. It is necessary to strengthen positive socioeconomic local impacts and build credibility with local communities. Possible reforms include the following:

- 1) A more inclusive and transparent permitting process where local communities are provided better means to influence solutions proposed in EIAs
- 2) The introduction of mandatory Social Impact Statements as part of the EIA
- 3) The merger of the EIA and rehabilitation procedures, with the rehabilitation procedures to include more time for a proper consultation, with a year being the preferred minimum standard under good international industry practice.
- 4) The development of a methodology for estimating rehabilitation costs based on fair market value and mechanisms to ensure regular monitoring and review with financial assurances to be required for all projects and a portion of closure costs to be fully secured upon permitting, with the balance of the actual closure costs being required within two to five years of the start of operations.
- 5) Consider means and mechanisms for addressing environmental legacies of past mining activity.
- 6) As part of the SIA, require companies to prepare plans for training of local people and for interaction with local businesses.
- 7) The processes for citizen engagement need to be developed in order to enhance a dialogue between local communities, government at different levels and the mining sector.

The third challenge is to manage fiscal and monetary policy in such a way as to improve the resiliency of the economy to external shocks while retaining the emphasis on mining as a driver of economic growth. It is recommended that

- 1) The Government reviews the possibility of setting up a sovereign wealth fund by allocating larger than projected government revenues from mining to a fund consisting entirely of foreign assets and managed by independent trustees. Such a fund would need to be ruled by a framework that defines the relationship between the fund and the government and could be complemented by a fiscal rule of the type that is used in other countries in similar situations.
- 2) A joint Government/industry programme of economic diversification around mining is launched, with a view to building capacity and competitiveness in all the industries servicing mining.

I. Introduction

The Mining Sector Diagnostic (MSD) is a tool that the World Bank has developed, firstly, to comprehensively assess a country's mining sector laws, rules and regulations, and secondly, to determine how closely this legal and regulatory framework is adhered to in practice as well as to identify the strengths and weaknesses of the institutions that implement those laws, rules and regulations and administer and oversee the sector. The MSD addresses the "rules" in place ("de jure" performance) as well as the extent to which these "rules" are implemented in practice ("de facto" performance).

The assessment is based on information compiled from legislation, interviews, secondary sources, and surveys, the results of which are assessed and summarized around the extractive industries (EI) value chain links¹ and key issues for mining investment and governance.²

The MSD considers the views of the three main stakeholder groups — government, mining companies and civil society - in a structured manner. It is a systematic, objective, and practical diagnostic tool which produces prioritized recommendations for sector improvement. The results of an MSD can form the basis for a reform agenda that leads to a more dynamic mining sector, contributing not only to economic growth but also the wellbeing of the population, especially in mining regions. The methodology is described in detail in Annex 1.

The development of the MSD was agreed with the Government of the Kyrgyz Republic in January 2021. Primary data collection started in April 2021 and the results of the initial analysis of these data were presented in two (virtual) workshops to representatives from civil society and industry. Following those workshops, participants were asked to fill out questionnaires and give their assessment of mining sector priority areas. In addition, input was sought from a wide range of government entities. Unfortunately, the Covid-19 pandemic led to delays in the preparation of the diagnostic and work was interrupted in 2021. However, questionnaire data were analyzed and later followed by in-depth interviews with several stakeholders. Most of these interviews were carried out in April 2022. This report summarizes the analysis and findings of the MSD and is organized as follows:

- **Section I** contextualizes the diagnostic, describing the mining in the Kyrgyz Republic, specifically, its importance in the overall economy, the main institutional roles and responsibilities, and an overview of the legal and regulatory framework governing the sector.
- Section II presents a comprehensive summary of the results, discussing the data as aggregated into the MSD dashboard and analyzing implementation gaps between de jure performance and de facto performance.
- Section III analyzes the de jure and de facto performance of the Kyrgyz' mining sector management framework and identifies areas for improvement.

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¹ The Extractive Industries Value Chain is a methodology adopted by the World Bank to systematize the different mining sector management dimensions from the mining regulator's viewpoint, which differs from the industry's global value chain viewpoint. See Alba (2009). The term "extractive industries" refers to mining and hydrocarbons, since this same methodology is used to assess both sectors. In this report, every time we speak of extractive industries we are referring solely to mining.

² "Governance is the process of interaction among government and non-government stakeholders to formulate and implement policies within the framework of a specific set of formal and informal rules that shape and are shaped by power relationships." See "La Gobernanza y las Leyes", World Bank, 2017,

https://openknowledge.worldbank.org/bitstream/handle/10986/25880/210950ovSP.pdf

- Section IV analyzes the de jure and de facto performance along the five stages of the EI value chain: (i) contracts, licenses and exploration; (ii) mining operations; (iii) taxation; (iv) revenue management and distribution; and (v) local impact. For each of these stages, the MSD identifies possible areas for improvement.
- Section V analyzes stakeholder priorities defined as the key priority areas identified by respondents reforms that would have a significant impact on improving the mining sector's contribution to sustainable economic development and wellbeing for the entire population.
- Section VI concludes with a summary of sector's strengths and challenges and presents a reform agenda for the Kyrgyz mining sector.

This report has four annexes. Annex I contains a brief overview of the MSD methodology. Annex II contains the scores for all individual questions from the MSD questionnaire that form the basis for this report. Annex III reproduces the "votes template" being used to elicit stakeholder priorities from respondents. Annex IV contains a list of all the persons and organizations interviewed. This report and the underlying data will be made publicly available on the World Bank's MSD website.³

II. The Mining Sector in the Kyrgyz Republic

II.1 Mining Sector Importance

Macroeconomic Significance

The mining sector, particularly gold mining, plays a critical role for the Kyrgyz economy, together with remittances from Kyrgyz people working abroad, mainly in Russia and Kazakhstan. Table 3 summarizes the economic importance of the mining industry.

It is important to note that statistical data on the mining industry in the Kyrgyz Republic are unusually scarce, even for a former Soviet republic. The government does not publish regular data on mineral production. While some information can be obtained from other sources such as EITI reports, data are incomplete and often published in a form that is not very useful. For instance, production data may be given in terms of volume of ore or concentrate, rather than metal content. Table 1 shows production data for gold for the period 2015-2022. Gold is the only commodity for which it was possible to find data that were reasonably consistent over time.

Table 1. Kyrgyz gold production 2015-2022

	2015	2016	2017	2018	2019	2020	2021	2022	
Gold, tons	16,2	16,4	17,8	19,2	26,1	24,2	25,2	32,5	5

Sources: 2015-2017: EITI, Report of the Kyrgyz Republic for 2015-2017. https://eiti.org/sites/default/files/attachments/en_2015-2017 eiti report kyrgyz republic.pdf, 2018-2020: EITI, Report of the Kyrgyz Republic 2018-2020.

2021-2022: Presentation by the Deputy Minister of Natural Resources, Ecology and Technical Supervision Mr. Almazbek Tumanov during 17.02.2023 Collegium Meeting

³ World Bank (undated). Available at: https://www.worldbank.org/en/programs/egps/brief/mining-sector-diagnostic-msd (Accessed November 2022).

While export data can be obtained from other sources such as UN Comtrade or UNCTADStat, these sources depend on data provided by Kyrgyz authorities. Since some of the production is exported in the form of concentrates, sometimes mixed ones containing both precious and base metals, it is difficult to draw conclusions about total production of value minerals. UNCTADStat figures are sometimes based on estimates where national data are unclear or contain anomalies, but it is of course impossible for outside observers to identify all errors and statistical gaps. This being said, export figures from UN bodies can be considered as a more accurate source of information about the; Kyrgyz mining sector than figures for production.

The situation with regard to other basic data is similar. Thus, it has proved impossible to obtain data disaggregated with respect to both mineral and type of license or on the number of licenses issued and cancelled in any given year. Table 2 summarizes the available information. Additional information in the Draft Concept of Development of the Geological and Mining Industry of the Kyrgyz Republic for 2023-2035 confirms the downward trend in licenses.

Table 2. Licenses 2018-2023

	Number of licenses 2018-2020 Type of license 17 February 2023						
	2018	2019	2020	v 1		Exploitation	Total
Gold	392	470	435	55	200	134	389
Other metals Non-metallic	100	102	129	14	61	24	99
minerals	948	1031	1103	3	257	641	901
Coal	321	343	406	10	163	244	417

Sources: 2018-2020: EITI, Report of the Kyrgyz Republic 2018-2020.

2023: Presentation by the Deputy Minister of Natural Resources, Ecology and Technical Supervision Mr. Almazbek Tumanov during 17.02.2023 Collegium Meeting

As seen from Table 3, gold mining is particularly important because it accounts for a very large share of exports and of tax revenue. Figure 2 shows exports of gold and non-gold exports from the Kyrgyz Republic. Gold exports have varied considerably from one year to another as a result mainly of price fluctuations, raising specific challenges for macro-economic policy. The Kyrgyz Government has not put in place any specific mechanisms such as a fiscal rule to protect the economy from shocks emanating from fluctuations in world gold markets.

Table 3. Economic importance of mining in the Kyrgyz Republic

Share of mining in GDP	2020	12.6% ⁴
Share of Kumtor in GDP	2020	11%
Share of mining in value of industrial output	2020	64.5%5
Share of Kumtor in value of industrial output	2020	52%

⁴ National Statistical Committee of the Kyrgyz Republic (2020). *Gross domestic product in January-December* 2020. Available at: http://www.stat.kg/ru/news/valovoj-vnutrennij-produkt-v-yanvare-dekabre-2020-goda/ (accessed November 2021).

⁵ Calculations based on the data of the Industry of the Kyrgyz Republic 2020 publication National Statistical Committee of the Kyrgyz Republic (2020). *Industry of the Kyrgyz Republic 2016-2020*. Available at: http://www.stat.kg/ru/publications/sbornik-promyshlennost-kyrgyzskoj-respubliki-2008-2012g/ (accessed November 2021).

FDI in mining	2020	\$396.6 million (30,535 million KGS) ⁶
FDI in mining as a percentage of the total FDI	2020	21.6% ⁷
Share of mining products in total goods exports ⁸	2020	61.4%
Share of gold in total goods exports	2020	57.4%
Share of non-ferrous metals in total tax revenue	2021	20%9
Employment in mining	2021	$17,900^{10}$
Employment in mining as a percentage of total formal	2021	0,7%
employment		

Exports of other mineral commodities are modest, accounting for a few tens of million US dollars per year. The most important of these are coal and lignite exports, which have increased in recent years to reach US\$ 20-30 million per year. As seen from Figure 3, the Kyrgyz Republic also imports coal. Domestic production is 2-2.5 million tonnes per year.

Mining's contribution to employment is modest, and that is probably the case even if indirect and induced employment is taken into account. A World Bank study from 2005 showed that creation of one job in the mining industry would lead to creation of 1.6 jobs in related industries that provide supply of goods and services for mining. Mining companies purchase most materials abroad. Only a small part (about 3%) is purchased from local producers. However, local companies provide services to all mining companies. The situation is unlikely to have changed significantly since this study was prepared. A study with data from 2014-2016 arrived at similar numbers. In both studies, induced employment was lower than direct employment, which is an unusual result, particularly for low to middle income countries. The fact that mine workers have substantially higher wages than average means that their spending can support a large number of employees in other sectors. The contribution of mining to employment and local economic development is an important issue and it is unfortunate that the available public data do not allow an in-depth assessment of its importance and characteristics. If such data were available by region, it would probably prove highly useful for the planning and implementation of public investment and development projects.

⁶ National Statistical Committee of the Kyrgyz Republic (2020). *Investments in the Kyrgyz Republic 2016-2020*. Available at: http://www.stat.kg/ru/publications/sbornik-investicii-kyrgyzskoj-respubliki-2008-2012/ (accessed November 2021).

⁷Ibid.

⁸ UNCTADStat, https://unctadstat.unctad.org/EN/Index.html

⁹ State Tax Service under the Ministry of Finance of the Kyrgyz Republic (2021). *Analytical review of the execution of the revenue side of the state budget for January-December 2021*. Available at: https://sti.gov.kg/docs/default-source/other/anal_obzor_dec_2021.pdf?sfvrsn=2 (accessed March 2022)

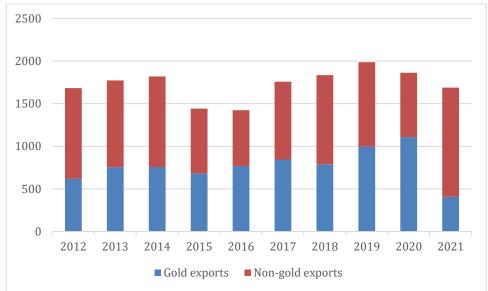
¹⁰National Statistical Committee of the Kyrgyz Republic (2021). *Employed population by type of economic activity*. Available at: http://www.stat.kg/ru/statistics/download/dynamic/434/ (accessed February 2023).

¹¹ *Indirect employment* concerns those working with other companies that supply goods and services to the mine in question or that uses its outputs. These employees are part of the supply chain. *Induced employment* includes those who are employed as a result of spending of wages by employees of the operation in question concerned and, usually, also by employees of suppliers and customers

¹² World Bank, 2005. Mining Industry as a Source of Economic Growth in Kyrgyzstan. PIU of World Bank IDF Grant for Building Capacity in Governance and Revenues Streams Management for Mining and Natural Resources. Bishkek.

¹³ Ernst & Young, 2018. Non-ferrous metals production and processing. The sector's total contribution to the economy of the Kyrgyz Republic and the effects of fiscal initiatives on it.

Figure 2: Gold ^{a)} and non-gold Kyrgyz goods exports, million USD, 2012-2021



a) Precious metals concentrates other than silver concentrates (Harmonized System 261690) and Unwrought non-monetary gold (Harmonized System 710812)

Source: UN Comtrade

Figure 3 Coal and lignite a exports and imports, thousand tonnes, 2012-2021



a) Coal (Harmonized System 2701) and lignite (Harmonized System 2702)

Source: UN Comtrade

Most metal mining companies are focused on gold. All mines operating now were either in operation already during Soviet times or exploit deposits that were found and measured during this period. None is based on recent exploration. Table 4 shows currently operating mining companies. Some small mining companies are not included due to lack of data. As seen from the table, medium to large size metal mining companies are either owned by the state or by foreign interests, reflecting the lack of interest and capacity of the domestic private sector as well as lack of sources of capital. Coal mines and quarries producing construction materials are, however, mainly operated by domestic companies.

Table 4. Main operating metal mines and ongoing mine developments in the Kyrgyz Republic

Name	Production	Reserves	Ownership	Description
Kumtor mine, Dzhety- Oguz region, Issyk-Kul oblast	424.7 tonnes of gold in dore bars	Proven and probable reserves (January 2021) 187 tonnes, ore grade 2.66 g Au/t ¹⁴	CJSC "Kumtor Gold Company" (Kyrgyzaltyn)	Kumtor has been in operation since 1996. 411 tonnes of gold have been recovered. In 2021, an increase in mineral reserves processing extended life of mine five years to 2031
Jerooy mine, Talas region, Talas oblast	Production officially started in March 2021. Until 2031, open pit mining will produce 1.3 million tons of ore per year, sales in form of dore bars. Production underground 2031-2043 planned to be 700,000 tonnes of ore per year	56.7 tonnes Au to be mined in open pit, 26,8 tonnes to be mined underground	Alians Altyn LLC, affiliate of "Russkaya Platina" group (Russia)	The Jerooy gold deposit was discovered in 1969. A license was granted in 2015. The deposit is planned to be developed sequentially by open pit and underground methods.
Taldy-Bulak Levoberezhny mine in Kemin region, Chuy oblast	Production started in 2015, annual gold production is about 4 tonnes of gold per year ¹⁶ in the form of concentrate exported to Kazakhstan	gold, 454.2 tonnes of silver, average grades 7.23 g Au/t,	Altynken LLC (60% ZiJin Mining, China, 40% Kyrgyzaltyn)	The field was the subject of numerous geological surveys between 1963 and 1995. In 2007, a joint enterprise between Kazak "Summer Gold" (60%) and Kyrgyzaltyn (40%), named "Altynken" was awarded with the mining license. In 2011, the Kazak share was sold to ZiJin Mining.
Unkurtash deposit in Ala- Buka region, Jalal-Abad oblast	Planned annual gold production 4.14 tonnes over an 18- year life. ¹⁷	Probable reserves 12.3 Mt with 1.7 g Au/t	Highland Exploration LLC (100% owned by Highland Gold Mining Ltd. (large mine operator in Russia))	Highland Gold acquired the Unkurtash project from Barrick Gold in 2008. Currently at design stage.
Terekkan deposit in Chatkal region, Jalal-Abad oblast	Production currently comes from the Terek field. The capacity of the enterprise allows the processing of 1	Terek deposit: 2.1 tonnes gold, average grade 2.46 g Au/t	Eti Bakyr Tereksai LLC (75% Eti Bakyr JSC, Turkey, 25% Kyrgyzaltyn)	The Eti Bakyr Tereksai JV was established in 2015 on the basis of the formerly unprofitable Tereksai mine.

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¹⁴ Centerra Gold Inc.(2022). *2021 Kumtor Mine Life Update Presentation*. Available at: https://www.centerragold.com/operations/kumtor (accessed May 2022).

¹⁵ Allians Altyn (undated). 'About company'. Available at: http://www.alliance-altyn.kg/o-kompanii/ (accessed May 2022).

¹⁶Altynken (undated). 'About company'. Available at: http://www.altynken.kg/about/company-altynken (accessed May 2022).

¹⁷ Highland Gold (2020). Highland Gold Mining Limited Annual Report and Accounts 2019. Available at:

Name	Production	Reserves	Ownership	Description
	million tonnes of ore per year. ¹⁸	Terekkan deposit: 25 tonnes gold, average grade 2.92 g Au/t., 23.4 tonnes silver, average grade 2.73 g Ag/t,		
		Perevalnoye deposit: 6.7 tonnes gold, average grade 9.29 g Au/t.		
Kuru-Tegerek deposit in Chatkal region, Jalal-Abad oblast	Gold concentrate	98 tonnes of gold, more than 30,000 tonnes of copper, considerable amounts of silver	CJSC "Kichi- Chaarat" (Tun Lin LLC, China)	The company was awarded with the exploration license in 2003. Production started in 2017 and the gold processing plant opened in 2019
Chaarat group of deposits in Chatkal region, Jalal- Abad oblast	Doré bar	Tulkubash deposit: Probable reserves 1.8 tonnes gold ¹⁹	CJSC "Chaarat ZAAV" (Chaarat Gold Holdings, British Virgin Islands)	Two of the licenses for Chaarat group mines were awarded to Chaarat ZAAV: Tulkubash and Kyzyltash deposits. Tulkubash is an open pit heap leach mine currently at construction stage.
Ishtamberdy deposit in Ala-Buka region, Jalal- Abad oblast	The processing capacity of the enterprise is 500 thousand tonnes of ore per year. Dore bars are produced.	Estimated gold reserves of 19.197 tonnes ²⁰	Full Gold Mining Ltd. (Chinese state corporation Lingbao Gold)	A license to develop the deposit was issued in 2007. In 2014-2016 the company exported gold concentrate to China for processing. The production of gold in Kyrgyzstan without the use of cyanides started in December 2016.
Bozymchak deposit in Ala-Buka region, Jalal- Abad oblast	6,000 tonnes of copper and about 1 tonne of gold in	Copper 140,777 tonnes, gold 22.96 tonnes, silver 144.2 tonnes.	KAZ Minerals Bozymchak (Kazakhstan)	Production began in 2015. Since 2016, the capacity of the mine and processing plant is 1 million tonnes of ore per year.

Eti Bakyr Tereksay (undated). 'Mining'. Available at: https://etibakirtereksay.kg/proizvodstvo/dobycha/ (accessed May 2022).
 Chaarat (undated). 'Stages of Project Implementation'. Available at: http://chaarat.kg/investitsionnye-proekty/tulkubash/

⁽accessed May 2022). Full Gold Mining has suspended mining at Ishtamberdy. Available at: https://gold.1prime.ru/news/20220504/453736.html (Accessed July 2022)

Name	Production	Reserves	Ownership	Description
	concentrate per year ²¹			
Karakazyk deposit in Chon-Alai region, Osh oblast	Gold concentrate	Remaining reserves are 27.9 thousand tons of ore and 342.3 kg of gold with an average grade of 12.3 g/t. ²²	Mountain Investment Company "Kaidi" Ltd. (China)	Initial exploration took place in 1977-82, Kaidi LLC was awarded the license for mining of gold, silver and copper on February 14, 2008. Production started in 2016.
Shiralzhin deposit in Bakai-Ata region, Talas oblast	The company plans construction of two gold processing plant to process 500,000 tons of ore annually	3 tonnes of gold, average grade 3.9 g Au/t. The content of copper in the ore is 0.64%, silver 24.97 g Ag/t. ²³	Global Shiraldzhin Mining Ltd. (Global Asia Mining Ltd.)	
Jamgyr deposit in Chatkal region, Jalal-Abad oblast	processing capacity of the mine is now 120 thousand tonnes per year. Gold concentrate is sent to	Reserves as of January 1, 2022 are at 10.7 tonnes of gold. The average grade is 6.06 g/t. ²⁴	Vertex Gold Company LLC (Kazakhstan)	Vertex Gold LLC had been developing the deposit since 2011. In June 2018, Global Jamgyr Mining LLC and Vertex Gold LLC agreed to jointly build a processing plant at the Jamgyr deposit.

By far the most important mine is Kumtor, which alone accounted for about 90 per cent of gold exports in 2020. The mine was developed as a joint venture between Kyrgyzaltyn (100% state owned entity) and Cameco Corporations in 1993. In 2003 the joint venture formed a Canadian company, Centerra Gold Inc (which went public and Kyrgyzaltyn remained as its main shareholder), which became the 100% owner of Kumtor Gold Company CJCS (holder of a 50-year concession to Kumtor Mine) and other assets in Turkey, Canada and the United States. Since then, the mine and the operating company, Centerra, have been at the center of disputes between the Kyrgyz side (Kyrgyz Government and Kyrgyzaltyn) and Centerra over environmental management and division of revenues, with both sides levelling accusations against each other and Centerra initiating international arbitration proceedings. The disputes were eventually settled in April 2022 and the wholly state-owned mining company Kyrgyzaltyn took full ownership of the mine.

²¹KAZminerals (undated). 'Our Activities Bozymchak'. Available at: https://www.kazminerals.com/ru/%D0%B3%D0%BB%D0%B0%D0%B2%D0%BD%D0%B0%D1%8F/our-business/bozymchak/ (accessed May 2022).

²² Geoportal of Kyrgyzstan (undated). Ore minerals. Available at: https://geoportal-kg.org/ore-minerals/. (Accessed July 2022).

²³ Global Asia Mining (undated). 'About us'. Available at: http://globalasiamining.com/global-asia-mining-ru.html (accessed May 2022).

²⁴ Jogorku Kenesh (2022). Deputies of the Committee of the Jogorku Kenesh on the Fuel and Energy Complex got acquainted with the activities of mining companies in the Jalal-Abad region. Available at: http://kenesh.kg/ru/news/show/13171/deputati-komiteta-zhogorku-kenesha-po-tek-oznakomilisy-s-deyatelynostyyu-gornodobivayushtih-kompaniy-zhalal-abadskoy-oblasti (Accessed May 2022).

Inevitably, however, the disputes have caused considerable damage to the image of the Kyrgyz Republic among international mining investors. ²⁵ ²⁶

The Kyrgyz mining industry faces two major challenges which will determine if it can continue playing the same critical role in the Kyrgyz economy as it has in the past couple of decades.

First, the Kumtor deposit is depleting. The planned closure date for Kumtor mine is 2031²⁷, although ongoing and planned exploration programs may extend its life beyond that date. This is of course contingent on the transition to new management proceeding smoothly with minimal loss of critical personnel and any outstanding environmental issues being resolved in a satisfactory manner.

Second, and more important in the long term since it affects the ability of the Kyrgyz mining industry to offset declining production at Kumtor, Kyrgyz mining is based on the exploitation of another depleting asset, namely the store of geological data and information collected during the Soviet era. Soviet geological surveys actively explored the Kyrgyz Republic's natural resource potential in the 1950-1980s and put close to two hundred deposits of thirty-seven various minerals in the state geological balance (the state geological balance is an inventory of mineral resources, drawn up according to Soviet resource classifications, see footnote 46).²⁸ During the Soviet period the Kyrgyz SSR ranked among the first in the world in the production of mercury and antimony. Since the breakup of the Soviet Union, attention has been focused on gold. There are also significant reserves of copper, tin, tungsten and antimony in the Kyrgyz Republic.²⁹ Finally, many households and Bishkek's thermal power station rely on coal for heating. Coal production has increased since a low in the early 2000s and it accounts for about a quarter of the primary energy supply.

The development of deposits discovered during the Soviet period has started, or in some cases restarted, over the past decade, mainly since 2015. These include the country's second-largest gold deposit, Jerooy, where production officially started in March 2021. Development of two other significant gold mining projects, Taldy-Bulak Levoberejnyi and Tereksai, is conducted by joint ventures of the state-owned Kyrgyzaltyn with Chinese ZiJin Mining (60%) and Turkish Eti Bakır A.Ş. (75%) respectively. Other significant projects include the copper-silver-gold mine Bozymchak, operated by Kazakhstan's KAZminerals LLC, and the gold-silver-copper deposit Kuru-Tegerek, operated by Kichi-Chaarat CJSC (100% owned by Tun Lin LLC).

While there may still exist deposits that have been identified and explored earlier, sooner or later the stock of known deposits will run out. At that time, the country will have to rely on new exploration to identify future mines.

In this context, it is important to explain that the existence of very detailed and comprehensive data on mineral resources, resulting from a thorough exploration effort in Soviet times, does not mean

²⁵ An indication of how the decision was received is that rating agency Moody's cut Kyrgyzstan's credit rating to B3 from B2, saying the authorities' decision to nationalize the Kumtor mine indicated weak governance and investment climate deterioration (Reuters, 25 January 2022).

²⁶ The Kumtor dispute is not the only one to go to international arbitration. The Kyrgyz government lost a dispute with the Canadian company Stans Energy and its Kyrygz subsidiary Kutisay Mining LLC over the rights to two mines for the extraction of rare earth elements rights by Stans Energy to invest in in the Kyrgyz Republic. Although the arbitration award was announced in 2019, the claimants were unable to collect the compensation. A subsequent arbitration judgment in June 2022 confirmed the award (Jus Mundi 2019, https://jusmundi.com/fr/document/decision/en-stans-energy-corp-and-kutisay-mining-llc-v-kyrgyz-republic-ii-award-tuesday-20th-august-2019).

²⁷ Centerra Gold Inc.(2022). *2021 Kumtor Mine Life Update Presentation*. Available at: https://www.centerragold.com/operations/kumtor (accessed May 2022).

²⁸ Draft Long and middle-term strategy of development of the mining sector of the Kyrgyz Republic (the Strategy was not approved by the Government)

²⁹ KEITI Report 2015-17

that all economically viable resources have been identified, much less evaluated. In order to provide background to our recommendations in the following, some explanations are required.

First, the exact resources in a particular deposit or in a given geographical area are never known until the entire deposit or area has been mined. Although the understanding of the processes leading to the occurrences of mineralized zones has improved dramatically, all resource estimates rely on inference from observations and since such observations are costly to carry out, the trade-off between the cost of the work necessary to obtain information and expected additions to economic resources always results in less than perfect information. This is why new mineral deposits are often discovered in areas where active exploration has earlier been carried out without results. Examples include the Viscaria copper mine in northern Sweden, which is located next to Europe's largest iron ore mine, which had been in operation for more than seventy years when the copper deposit was discovered, in an area which had been intensively explored over the years. The copper mine operated from 1983 to 1996 when it was closed due to low copper prices.³⁰ The mine is planned to reopen in 2023, following exploration that has resulted in major additions to the reserves.³¹

Second, considering the known historical production, reserves, resources and mineral occurrences, the geological formation of Kyrgyzstan is conducive to host significant mineral deposits. Kumtor being one of the largest gold mines in the world is a clear indication of the high prospectivity of the country. In countries previously belonging to the USSR and where the geological knowledge and mineral exploration was built up based on Russian technology and mindset, it was understood that the mining potential was already established by the State, and new discoveries were not possible because everything was already known. However, practical experience has demonstrated that this is not correct. This is because mining companies are specialized in exploring for particular types of deposits, having skills and capacities that are not affordable for State Geological Surveys. Moreover, exploration in the USSR used methods developed in the 20th century and in recent decades, new metallogenic models have appeared and the technology (especially geophysics) has evolved dramatically.³² Many deposits have been discovered using these techniques in areas previously considered as exhausted or barren. For this reason, when countries previously closed to exploration have been opened to new projects, new discoveries have resulted, as in the case of Mongolia.

Finally, increasing demand expected for minerals linked to the energy transition, such as lithium, cobalt and rare earths, has shifted the focus of exploration to minerals not previously explored.

For all these reasons and taking into account the Kyrgyz geological background, it is reasonable to believe that the country offers a rich potential for mineral deposits that have not yet been discovered and that exploration applying modern methods and targeting minerals that have not been a priority earlier would have good prospects for success.

The Government has identified the lack of exploration as one of the most serious challenges in the field of mining. The Draft Concept of Development of the Geological and Mining Industry of the Kyrgyz Republic for 2023-2035 notes that the growth of reserves has slowed down due to the lack of funding for exploration and that it is necessary to intensify advanced exploration work in order

³⁰ https://thebarentsobserver.com/en/industry-and-energy/2021/09/restarting-north-swedish-copper-mine-scales-resource-estimates

 $^{^{31}\} https://www.globenewswire.com/en/news-release/2021/09/20/2299427/0/en/Copperstone-Resources-scales-up-the-Viscaria-Project.html$

³² See Rogalsky (2019) for a good description of the resource classification system used in the Kyrgyz Republic and an overview of the Kyrgyz mining industry.

to ensure the country's mineral and raw material security as well as stable and long-term operation of existing mines.

However, exploration will not take place unless exploration companies believe that they will be able to recover their exploration costs. Unfortunately, political and regulatory instability has meant that major international mining companies – after showing some interest in the early 2000s - have hesitated to invest. The companies that have invested have mainly been smaller ones and have come to a large extent from countries where the mode of operation is similar to the one in the Kyrgyz Republic: China, Kazakhstan and Russia. Interest on the part of Chinese companies, in particular, has been important, and it was estimated in 2017 that there were 111 Chinese companies active in the Kyrgyz mining industry. ³³ It is difficult, however, to find detailed open-source information about the activities of most Chinese companies. It is equally difficult to find information about small mining projects funded by Chinese companies, as they are often registered to Kyrgyz citizens. ³⁴

The negative impression of the Kyrgyz Republic as a destination for international mining investment is illustrated by the latest annual survey by the Fraser Institute³⁵, where the country placed 76th of 84 jurisdictions in the "Policy Perception Index" For comparison, Kazakhstan placed 56th and Russia 46th.

Almost all the gold produced in the Kyrgyz Republic is refined in the country, in the gold refinery owned by Kyrgyzaltyn CJSC. Since 2020, a surtax is levied on exports of gold concentrate.

Impact of the COVID-19 Crisis

The Kyrgyz Republic announced a state of emergency due to COVID-19 on March 22, 2020. The state-enforced quarantine lasted for 47 days and was short primarily because of the possible negative consequences for the small businesses and the vulnerable groups of the population. Nevertheless, the Kyrgyz Republic faced the worst economic contraction in Central Asia: GDP declined by 8.6 percent in 2020, inflation and public debt rose, and unemployment and poverty increased.³⁷ Poverty rose by 11 percentage points to 30.5%.³⁸ In the mining sector three Chinese-owned gold mining companies suspended work for up to three months due to border restrictions with China.³⁹ Mining at Kumtor continued without major setbacks. Nevertheless, production

³³ S. Furstenberg and K. Toktomushev, 2021. Understanding Gold Mining and Social Conflicts in Kyrgyzstan. University of Central Asia. Working Paper #63.

³⁴ PeaceNexus, 2021. Conflict Management in the Mining Industry of the Kyrgyz Republic: Review of challenges and company practices.

³⁵ The Fraser Institute survey is an attempt to assess how mineral endowments and public policy factors such as taxation and regulatory uncertainty affect exploration investment. The 2021 survey was circulated electronically to approximately 2,200 individuals active in mining.

https://www.fraserinstitute.org/studies/annual-survey-of-mining-companies-2021.

³⁶ The Policy Perception Index is a composite index that captures the opinions of managers and executives on the effects of policies in jurisdictions with which they are familiar. All survey policy questions (i.e., uncertainty concerning the administration, interpretation, and enforcement of existing regulations; environmental regulations; regulatory duplication and inconsistencies; taxation; uncertainty concerning disputed land claims and protected areas; infrastructure; socioeconomic agreements; political stability; labor issues; geological database; and security) are included in its calculation.

³⁷ IMF, 2021 Article IV consultation – press release and staff report. IMF Country Report No. 21/174. August 2021. https://www.imf.org/-/media/Files/Publications/CR/2021/English/1KGZEA2021001.ashx

³⁸ World Bank (2021). 'One Year Later in the Kyrgyz Republic's Battle Against COVID-19', 17 March. Available at: https://www.worldbank.org/en/news/feature/2021/03/17/one-year-later-in-the-kyrgyz-republic-s-battle-against-covid-19 (Accessed March 2022).

³⁹ Akchabar (2020). 'The Kyrgyz Republic Expects Gold Mining Companies to Receive Income at the Level of 2019'. Akchabar, 1 May. Available at: https://www.akchabar.kg/ru/news/postupleniya-ot-zolotodobyvayushih-kompanij-kyrgyzstan-ozhidaet-na-urovne-2019-goda/ (accessed January 2022).

volume in the extractives sector decreased by 22.4 per cent in 2020.⁴⁰ investment in geological exploration decreased to a fifth of its previous level⁴¹ and employment in the mining sector declined by 38 percent, or 12,000 people, in 2020.⁴² Growth rebounded in 2021.

II.2 Institutional Framework

2020 uprising and constitutional changes

Worries arising from the COVID-19 crisis and alleged election fraud, among other reasons, caused a popular uprising in October 2020, which resulted in the change of power followed by the constitutional reform in April 2021. The former parliamentarian state is now a presidential republic led by Mr. Sadyr Japarov, who was elected in January 2021 presidential elections. As a deputy of Jogorku Kenesh in 2010-2013, Japarov argued for nationalization of the largest mining company, Kumtor Gold Company CJSC. Mr. Japarov had been imprisoned in 2017 for 11½ years for hostage taking during one of the Kumtor-related protests in 2013, which was widely seen as a political imprisonment. During the unrest in October 2020, Japarov and several other politicians were released from prison by the crowd of protesters.

During the instability caused by the October events, several local groups attempted to disrupt the work of mines and steal or damage company property. Seven gold mining companies publicly reported about such cases⁴³ and suspended operations. In November 2020, Mr. Japarov, as the Prime Minister and Acting President of the Kyrgyz Republic, visited affected gold mines in the Ala-Buka and Chatkal regions to discuss the economic and employment potential provided by the mining companies with the local communities. The same month Mr. Japarov signed a Government Order temporarily prohibiting licensing of geological exploration and development of gold, silver and copper. The moratorium remains in effect at the moment of writing with an exemption for 100 per cent state-owned enterprises introduced on January 22, 2022.⁴⁴ Currently, private investors interested in new areas for greenfield exploration cannot access licenses unless they agree on a joint venture with a state-owned enterprise.

Main government institutions

The Kyrgyz Republic is a presidential republic. According to the structure of government set out in the 2021 Constitution of the Kyrgyz Republic and Constitutional Law of the Kyrgyz Republic dated October 11, 2021, oversight functions in the mining sector are vested in the state institutions listed below:

⁴⁰ National Statistical Committee of the Kyrgyz Republic (2020). *Industry of the Kyrgyz Republic 2016-2020*. Available at: http://www.stat.kg/ru/publications/sbornik-promyshlennost-kyrgyzskoj-respubliki-2008-2012g/ (accessed November 2021)

⁴¹ National Statistical Committee of the Kyrgyz Republic (2020). *Investments in the Kyrgyz Republic 2016-2020*. Available at: http://www.stat.kg/ru/publications/sbornik-investicii-kyrgyzskoj-respubliki-2008-2012/ (accessed November 2021)

⁴² National Statistical Committee of the Kyrgyz Republic (2020). *Employment and unemployment in 2020*. Available at: http://www.stat.kg/ru/publications/zanyatost-i-bezrabotica-itogi-integrirovannogo-vyborochnogo-obsledovaniya-byudzhetov-domashnih-hozyajstv-i-rabochej-sily-v-2013g/ (accessed November 2021).

⁴⁴ Government Order No.368-p dated November 12, 2020.

- The President is the head of state, who defines key internal and external policies, including with respect to the mining sector. In January 2021, among his first orders, President Japarov signed the Presidential Decree No.2 on reforms of the mining sector. The decree called for the development of a new Mining Code, which would replace existing regulations in the sector, and the introduction of a process under which licenses for deposits of national importance would be issued to fully state-owned companies by decision of the Cabinet of Ministers. The establishment of a state-owned entity to develop all large mineral deposits was also announced⁴⁵.
- **Parliament** is the main legislative body, which adopts laws.
- Cabinet of Ministers adopts regulations and bylaws applicable to the mining sector and implements investment, concession and production-sharing agreements in the mining sector.
- The Ministry of Natural Resources, Ecology and Technical Supervision was created in 2021 in the course of the latest administrative reform through transformation of the State Committee of Environment and Climate of the Kyrgyz Republic and its subdivisions and merger of the State Agency for Geology and Subsoil Use under the Ministry of Energy and Industry of the Kyrgyz Republic. It is responsible, among other things, for development and implementation of public environmental protection, ecology, climate, geology and subsoil use policies, and ensuring compliance with environmental, technical, and mining safety rules and regulations.
- Department of Geology and Subsoil Use under the Ministry of Natural Resources is a key state regulator responsible for implementation of public geology and subsoil use policies. The Department supervises the operations of the Subsoil Use Licensing Commission, a collegial body which reviews all licensing related matters, and the State Reserves Commission, a collegial body which approves requirements for calculation of reserves and verifies the calculation and classification of reserves and resources. Its other responsibilities include:
 - o to attract investment to exploration and mining industry;
 - o to draft mining policies and bills;
 - o to promote new technologies;
 - o to issue, suspend or revoke licenses and to monitor compliance with licensing requirements;
 - o to manage the state balance sheet of ore reserves⁴⁶;
 - o to conduct expert reviews of technical documentation for prospecting, exploration, mining, liquidation, mine closure and other works to ensure their compliance with rational use of subsoil and technical safety regulations;
 - o to review annual reports and work plans of mining and exploration companies;
 - o to calculate various mining payments, including license retention fees, tender and auction fees, subsoil use fees.

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⁴⁵ Presidential Decree No. 5 dated January 29, 2021.

⁴⁶ The term is used in translations of Kyrgyz regulations. It refers to the system of records forming the base for the annual accounting of the mineral resource base of the country, taking into account existing reserves and depleted amounts. These records are based on data and reports submitted by exploration and mining companies.

- **Ministry of Economy and Commerce** develops the economic, trade, export, investment, tax, customs, and social insurance (pension) policies of the Kyrgyz Republic. Other responsibilities include: to issue export licenses, including metal export licenses, to manage state treasury operations, and to distribute revenue.
- State Tax Service is an implementing body of the Ministry of Finance responsible for collecting taxes, including subsoil use taxes such as bonuses and royalties.
- State Property Fund under the Cabinet of Ministers (Ministry of Finance) represents the Kyrgyz Republic as a shareholder in state-owned enterprises (SOEs), appoints relevant managers of SOEs, and may audit reports of SOEs and their subordinate units.
- Local state administrations are regional executive government authorities under the
 President and the Cabinet of Ministers ensuring coordination among regional offices of
 various government authorities and exercising of delegated powers in their respective
 territories. Local state administrations are responsible for attracting investment,
 participating in auctions and tenders for the award of subsoil use rights, and organizing
 public hearings during the EIA of exploration and mining projects in their respective
 territories:
- Local self-government bodies are municipal self-governmental authorities responsible for enhancing community relationships, granting surface rights, giving consent to subsoil users for conducting prospecting and exploration works, participating in decisions on auctions and tenders for the award of subsoil use rights representing the interests of their territories, participate in land rehabilitation, mine conservation and closures, etc.
- Kyrgyzgiprozem Land Management Design Institute State responsible for the review
 and evaluation of land for subsoil use purposes, issuance of expert opinions required for
 project designs, calculation of land rehabilitation costs, carrying out of the EIA,
 determination of the administrative location of license areas for the purposes of distribution
 of license retention fees among lower level governments, forestry departments and other
 land owners).

SOEs and their role in the Kyrgyz Mining Sector

The State has a central role in Kyrgyz policy with respect to the mining sector. The Kumtor debate has obviously played a role. In recent years, however, the emphasis on state influence and state-owned enterprises has strengthened considerably and it can be argued that it has reached a point where it is one of the major reasons for the reluctance of foreign investors to consider ventures in the Kyrgyz Republic.

There are a number of state-owned entities (SOE) in the Kyrgyz mining sector, including:

- State enterprises, which are set up and 100% owned by a government authority, often by the Mining Regulator;
- Commercial companies with state ownership interests (joint stock companies, LLCs) where 100% or less shares/interests are owned by the state or other state-owned entity;
- New entities set up in furtherance of Presidential Decree No. 5 of 5 August 2021

State enterprises

There are several state enterprises which mainly provide services to subsoil users. Some state enterprises also hold licenses and/or shares in a private company jointly with private investors:

- Kyrgyzgeologia State Enterprise⁴⁷
- Kyrgyzkomur State Enterprise under the Ministry of Energy and Industry of the Kyrgyz Republic;
- Central Laboratory State Enterprise under the State Agency for Geology and Mineral Resources under the Government of the Kyrgyz Republic;
- Ken-Too Design and Research Institute State Enterprise.

The above state enterprises formed by the state mining regulator are mainly successors to the Soviet-era entities which performed exploration works, lab tests, etc. by virtue of the public service order (the so called "goszakaz"). After the collapse of the Soviet Union, these entities became independent entities formed and financed by the state mining regulator or other relevant government authorities. Most of these entities have the rights to obtain subsoil use rights and\or act as a service provider in the mining sector; however, due to lack of professional management and employees, modern equipment and proper financing, they are often not competitive with private companies providing similar services.

More generally, according to a recent World Bank report, Kyrgyz legislation related to SOEs is fragmented and regulated by numerous legal instruments, sometimes conflicting with each other. Kyrgyz SOEs operate under different legal forms, reflecting the legislative history and ongoing evolution from a planned to a market economy.⁴⁸

On April 23, 2021, the Cabinet of Ministers reorganized Kyrgyzgeologia by merging six state enterprises into a single entity with the primary purpose of exploring and mining the largest mineral deposits in the Kyrgyz Republic and on February 9, 2022, the Government became its sole shareholder.⁴⁹

Commercial entities with (direct or indirect) state ownership interests

The following for-profit/commercial entities which are engaged in the exploration, development and/or processing of minerals are wholly or partly state-owned:

- Kyrgyzaltyn OJSC, a 100% state-owned entity engaged in gold and other metal exploration, development and processing/refining activities⁵⁰;
- Khaidarkan Mercury Company, a 99.99% state- owned entity;

⁴⁷ Kyrgyzgeologia State Enterprise was founded in 2021 by merging the following entities:

Northern Kyrgyz Geological Expedition under the State Agency for Geology and Mineral Resources under the Government of the Kyrgyz Republic;

⁻ Kyrgyz Methodological Expedition of Geological and Economic Research State Enterprise under the State Committee for Industry, Energy and Subsoil Use of the Kyrgyz Republic;

⁻ Southern Kyrgyz Geological Expedition State Enterprise;

⁻ Kyrgyz Geophysical Expedition State Enterprise;

⁻ Kyrgyz Integrated Hydrogeological Expedition State Enterprise under the State Agency for Geology and Mineral Resources under the Government of the Kyrgyz Republic.

⁻ Bishkek experimental plant of mining and exploration equipment.

⁴⁸ World Bank, 2021. Kyrgyz Republic: Integrated State-Owned Enterprise Framework Assessment.

⁴⁹ https://register.minjust.gov.kg/register/Public.seam?publicId=82058

⁵⁰ Kyrgyzaltyn (undated). Available at: http://kyrgyzaltyn.kg/. (Accessed November 2021).

- Altynken LLC, a Kyrgyz-Chinese joint venture of Kyrgyzaltyn OJSC (40%) and Zijin Mining (60%), developing the Taldybulak Leftbank gold deposit;
- Eti Bakir Tereksai LLC, a Kyrgyz-Turkish joint venture of Kyrgyzaltyn OSJC (25%) and Eti Bakyr/Cengiz Holding 75%) exploring and developing Tereksai gold deposits;
- Makmal Gold Company LLC, a Kyrgyz-Chinese joint venture of Kyrgyzaltyn OJSC (34%) and Manson Group (66%), engaged in exploring and processing of deposits, construction of plants.

Role of the state-owned financial institutions-banks in the Mining Sector

According to the Subsoil Law, subsoil users have to set aside funds for rehabilitation of land on a quarterly basis. Before changes introduced to the Subsoil Law on June 26, 2021 No 81 the subsoil users had the right to choose at which bank to open such a special account. After the amendments to the Subsoil Law introduced in June 2021 subsoil users may open special accounts only in the banks determined by the Cabinet of Ministers of the Kyrgyz Republic. At present the Cabinet of Ministers has determined that the rehabilitation funds shall be transferred to and held at one of the two state owned banks OJSC "RSK" and OJSC "Ayil Bank" Bank".

Recent changes concerning the management of the mining sector

The new Cabinet of Ministers has initiated reforms that will lead to major changes in the way the mining sector operates. They can be summarized as follows:

- A substantial increase in the industry's fiscal burden;
- A further shift towards government ownership of mining assets
- A more ambitious approach to the industry's role in local development

Some changes have already been introduced while others are expected and/or have been discussed in the context of work on a new mining code. While the direction of policy seems to be clear, much of the details remain to be determined. Some of the most important are summarized in the following.

Since July 2022, the government requires at least 30 percent of state equity for companies wishing to obtain licenses through tenders and auctions for the development of deposits of gold and silver. Moreover, mining companies must purchase "at least 80 percent of goods and services in the territory of the Kyrgyz Republic, with the exception of obligations under international treaties that have entered into force for the Kyrgyz Republic, as well as in cases where such goods or services are not produced in the territory of the Kyrgyz Republic." At least 90 percent of employees from the total staffing number involved in work on the territory of the Kyrgyz Republic must be citizens of the Kyrgyz Republic, unless otherwise provided by the norms of international treaties that have entered into force for the Kyrgyz Republic.

On October 26, 2022, the President signed a decree introducing a temporary ban for a period of six months on the export from the Kyrgyz Republic of gold-bearing ore and gold-bearing concentrate mined and produced in the territory of the Kyrgyz Republic. 90% Russian-owned OJSC "Kara-Balta Mining Plant" has been granted the exclusive right to process gold ore

⁵¹ 100% state owned bank. More information available at www.rsk.kg

^{52 100%} state owned bank. More information available at www.ab.kg

and gold concentrate mined and produced in the territory of the Kyrgyz Republic. In January 2023 OJSC "Kara-Balta Mining Plant" initiated bankruptcy proceedings.

On November 18, 2022, the Ministry of Economy and Commerce sent a package of amendments to the Tax Code to the Parliament. Proposed initiatives include proposing a specific income tax (instead of the general income tax) from the extraction of such metals as copper, silver, mercury, antimony, tungsten, and tin (by analogy with the sector-specific tax on gold). The package of amendments must be reviewed prior to the second reading in the Parliament.

In December 2022, the issue of liquidation of the Great Nomads Heritage Holding was reviewed at the Parliament. Notably, the Holding held at least 4 licenses for geological exploration of country's strategic deposits and took control over Kumtor after the takeover. Now Kumtor is operated by the state-owned OJSC "Kyrgyzaltyn".

On December 14, 2022, the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic submitted for public discussions the Draft Concept of Development of the Geological and Mining Industry of the Kyrgyz Republic for 2023-2035.

In January 24, 2023, the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic submitted for public discussion the draft Law of the Kyrgyz Republic "On Amendments to Certain Legislative Acts of the Kyrgyz Republic (the Law of the Kyrgyz Republic "On Subsoil", the Law of the Kyrgyz Republic "On Pledge")". The Ministry proposed to prohibit the pledge of a subsoil use license to a third party.

II.3 Legal Framework

Most legal acts concerning mining (laws, decrees, resolutions, regulations) are adopted by the President, Parliament and Cabinet of Ministers of the Kyrgyz Republic. Local self-government authorities have limited legislative functions mainly related to governance of local issues, and generally do not adopt local legal acts which regulate activities of subsoil users.

In addition to national legal acts, the Kyrgyz Republic is a party to international treaties and international organizations. As a member of the Eurasian Economic Union (EAEU) the Kyrgyz Republic has entered into a number of EAEU treaties affecting the activities of the subsoil users (e.g. safety, employment, export and import of goods and services, licensing etc.). The EAEU guarantees the free movement of goods, services, capitals and labour, and the pursuit of coordinated, concerted and common policies in the economic sectors of the five member states: the Republic of Armenia, the Republic of Belarus, the Republic of Kazakhstan, the Kyrgyz Republic and the Russian Federation.

Main legal acts

The Constitution of the Kyrgyz Republic (2021) establishes an exclusive state ownership over the subsoil. It states that land, its subsoil, airspace, water resources, forests, pastures, flora and fauna and other natural resources are within exclusive ownership of the Kyrgyz Republic and subject to special control and protection by the state.⁵³

The **Law on Subsoil** (2018) remains the primary legislation for the management of the sector. The Subsoil Law regulates such issues as ownership of minerals, geological information, roles and

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⁵³ Article 16, Constitution of the Kyrgyz Republic

responsibilities of various state and local authorities as well subsoil users. The Subsoil law also sets out the procedures for obtaining subsoil use rights, including granting of various types of subsoil use rights, grounds for temporary suspension and annulment of licenses, transfer, pledge over the subsoil use licenses, general requirements applicable to artisanal and small-scale mining, social packages, rights to land/surface and its rehabilitation as well as mine closure requirements.

For historical reasons, the legislation has some unusual features. Several of its most important provisions reflect the situation with an inventory of well explored, not yet exploited mineral deposits inherited from Soviet era geological surveys.⁵⁴ Mining legislation in most jurisdictions focuses on the exploration stage and the passage from exploration to mine development, where the purpose of the legislation is to establish clear property rights to mineral deposits and ensure an orderly process for regulating any potential conflicts with other interests and land uses. The main emphasis of the legislation in the Kyrgyz Republic is on the process of transferring the right to exploit identified mineral deposits, to which the state holds the rights, to operating companies. The necessary condition for this system to work is that underground mineral resources are well known, and the government role is to allocate the known mineral resources. In contrast, a system based on a first-come first-served licensing system assumes that the geological potential is unknown and this is why greenfield exploration is needed to identify undiscovered resources. In this system, the government, instead of allocating resources, allocates exclusive rights for private sector companies to invest in greenfield exploration with highly uncertain results. In this system, risk capital is essential to mineral exploration. As is argued in this report, the Kyrgyz Republic is exhausting the potential of its present system and it will be extremely difficult to maintain mining production at anything approaching present levels without changing systems.

The **Tax Code** (2022) establishes the tax regime for all entities, including mining companies. With the exception of OJSC "Kumtor Gold Company", for which special tax conditions were agreed as part of the original investment agreement in 1993, all other exploration and mining companies are subject to the regular tax regime. In addition to regular taxes which may apply to exploration and mining companies, there are specific taxes applicable to exploration and mining companies:

- Bonuses are one-time payments for the right to engage in exploration and development of
 subsoil. Bonus is paid upon receipt of a license, increase of the license area or reserves or
 change of ownership of the license holder. Bonus rates are set by the decision of the Cabinet
 of Ministers and depend on the size of the license area (for exploration licenses) and the
 value of reserves estimated according to an approved method (for mining licenses).
- Royalties are regular payments for the right to engage in production and/or extraction (recovery) of underground water, mineral resources, oil & gas etc.
- *Income tax for gold producers* Activities related to the extraction and sale of gold-bearing ore, gold-bearing concentrate, gold alloy and refined gold are subject to a special "income tax", which is a type of progressive royalty. Companies paying this tax do not pay regular profit taxes.

and Natural Resources. Bishkek).

⁵⁴ A World Bank study from 2005 mentions that more than 7,400 kilometres of drilling had been carried out, and more than 8 million cubic metres of trenches had been dug (World Bank, 2005. Mining Industry as a Source of Economic Growth in Kyrgyzstan. PIU of World Bank IDF Grant for Building Capacity in Governance and Revenues Streams Management for Mining

The **Non-tax Revenues** (**Income**) **Code** (2019) establishes types and payment procedures for mandatory payments, except taxes. Among non-tax payments subject to payment by subsoil users are:

- License retention fees are regular payments, paid annually for the first year of holding a license and thereafter on a quarterly basis. The amount of the license retention fee depends on type of the subsoil use right (prospecting, exploration, development), type of mineral resources and the license area size. The fee increases over time in order to deter licenses holders from holding on to licenses unnecessarily.⁵⁵ In September 2021 the Cabinet of Ministers increased the license retention fees dramatically. The highest rates were applied to prospecting and exploration companies.
- Payments for development and maintenance of infrastructure of local importance and implementation of projects in accordance with the programs of social and economic development of territories. The payment (2% from revenue received from sale of mineral resources, excluding indirect taxes) shall be made by subsoil users who develop mineral resources. The payments are distributed among village, regional and oblasts funds and budgets.⁵⁶

The **Land Code** (1999) covers aspects related to land ownership and use, describes roles and responsibilities of state and local authorities, land owners and land users, categories of lands used in the Kyrgyz Republic (agricultural and non-agricultural (lands of settlement, special protected territories, transport, industry and defense)), including the requirements and procedure for obtaining land use rights for the purposes of subsoil use.

In addition to the Land Code, detailed provisions for obtaining surface/land use rights for exploration and mining purposes are provided in the **Regulation "On some questions of granting of land use rights for subsoil use purposes"** approved by the Government Resolution on December 15, 2017 No 810.

The **Law on Environmental Protection** (1999) establishes the mechanisms through which the Government preserves the ecosystem. In the Kyrgyz Republic those are setting the norms for pollutants, fees and punishments for violations and special protection of state nature reserves.

The **Law on Environmental Expertise** (1999) specifies the principles and the procedure for environmental expertise and lists the documents which must be reviewed by the government and the public prior to the start of operations at the mine.

The **Regulation on the Recultivation of Lands disturbed in the Process of Subsoil Use** (2017) regulates mine closure, related fees and acceptance of the reclaimed lands, post-reclamation monitoring. It is to be noted that, contrary to the practice in most countries, regulations and processes concerning environmental management and those concerning reclamation/rehabilitation are separate.

Expected Legislative Reforms in the Mining Sector: new Mining Code

⁵⁶ Chapter 46, Non-tax Revenues Code dated August 10, 2018 No 90

⁵⁵ Chapter 31, Non-tax Revenues Code dated August 10, 2018 No 90

Following the recommendations of President Japarov provided in the Presidential Decree No 5, the Cabinet of Ministers of the Kyrgyz Republic is in the process of drafting a new Mining Code which shall contain and codify all relevant laws and by-laws regulating activities of the subsoil users.

The Cabinet of Ministers was expected to submit the draft Mining Code to the Parliament for review and approval before June 1, 2021. A formal working group was formed with the participation of the representatives of the Department of Geology, state enterprises, subsoil users, subsoil users' associations. The working group led by the Department of Geology developed and submitted for public hearings a draft Mining Code in May 2021. However, since the summer of 2021, the work on the draft Mining Code has been temporary suspended due to restructuring of the Department of Geology and the development of two or three alternative drafts by various formal and informal groups of drafters. The work has also been affected by a number of changes to legislation that were made independently in 2021. At present, it is not clear when and if the new Mining Code will be adopted.

III. MSD Results Dashboard

This section presents a summary of the Kyrgyz Republic MSD's key findings. The results are aggregated into the dashboard (Figure 4), which presents an overview of the performance of the mining sector along the extractive industries (EI) value chain as well as with respect to the sector management framework. Each cell in the dashboard consists of one or more indicators and each indicator is scored based on a set of questions included on the questionnaires.⁵⁷ The details behind each indicator (i.e., the underlying questions and their scoring) can be found separately in Annex II.

The application of the MSD process in the case of the Kyrgyz Republic has presented two sets of problems that are specific to the country.

First, the questions in the questionnaire do not always sufficiently take into account the characteristics of Kyrgyz legislation and the extent to which it derives from Soviet era approaches to public policy. Many of the questions address formal procedures, for instance, whether authorities are obliged to deliver a decision within a certain time frame, but ignore wider issues, for example, that a permission is required for something that in most jurisdictions is automatically allowed. Since there are many questions addressing formal procedures, the high scores shown on some items may actually disguise that policies are ineffective.

Second, a number of important regulatory changes have been introduced in the Kyrgyz Republic over the past two years. This means that assessments based on primary data were complicated by the need to revise assessments during the process of work. All efforts have been made to ensure that primary assessments are based on up to date information. However, where scores are based on responses to questionnaires it is often not possible to return to the same respondent when regulations have changed – a significant source of error since the process of collecting responses stretched over more than a year. Moreover, even when the interview took place after all the recent regulatory changes were made, there was no way to ensure that the respondent was informed about the changes or that their responses reflected experiences with the revised regulations rather than a summary view over the longer term.

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⁵⁷ The scores for each element in the sector management framework derive from a set of relevant questions. Annex II provides a complete list of the underlying questions for each element, as well as the disaggregated scoring for each question.

With these caveats in mind, the overview shows that scores are clustered in the middle, with no "very high" score and only one "very low" score. 58 The following sections will take a detailed look at each dimension and present an analysis of the issues each dimension is facing, discussing the main reasons behind the results. The dashboard can be seen from two different perspectives: horizontally and vertically. From the vertical perspective the assessment has three thematic blocks:

- 1. Mining sector management framework, which evaluates sector policy, sector dialogue, roles and responsibilities, and intra-governmental coordination;
- 2. De jure performance, which includes legislation, rules and regulations along the five stages of the extractive industries value chain; and
- 3. De facto performance, which consider the implementation of the existing legal framework and the performance of relevant agencies along the five stages of the extractive industries value chain.

Mining Sector Diagnostic Mining Sector Management Sector Policy Sector Dialogue Roles and Responsibilities Intra-Governmental Coordination II. Extractive Industries Value Chain Contracts. Licenses and Revenue Management and Mining Operations **Mining Taxation** Local Impact Distribution **Exploration** Mining Legislation/Processes, Local Content, **Rules for License** Land/Compensation/Reset De lure Tax Policy and Tax Revenue Sharing and Fiscal Employment, Community Allocation, Oversight, and tlement. Environmental Engagement, CSR and **Administration Rules** Stabilization--Rules Performance Transfer and Social Impact Social Issues Management, ASM, OHSA, Mine Closure--Rules Collection/Maintenance of Land/Compensation/Rese **Local Supplier** Revenue Sharing, Fiscal **Geological Information** tlement, Environmental Development, De Facto **Mining Tax Administration Stabilization and Resource** and Effective License **Employment, Community** and Social Impact, Support and Auditing Performance Revenue Transparency--Allocation and for ASM, OHSA, Mine **Engagement, CSR and Practice** Management Closure--Practice Social Issues--Practice High (> 2.50 - 3.25)

Figure 4: Mining Sector Diagnostic (MSD) Dashboard

The dashboard shows the following:

Scoring Key:

Very low (1.00 - 1.75)

Regarding the sector management framework, while the institutional "Roles and Responsibilities" appear to be properly assigned, there appear to be weaknesses in "Sector Policy", "Sector Dialogue" and "Intra-Governmental Coordination".

Very High (> 3.25 - 4.00)

Low (> 1.75 - 2.50)

In terms of de jure performance, the legal and regulatory framework appears to be strongest in the first three value chain stages and weaker when it comes to "Revenue Management and Distribution" and in particular "Local Impact".

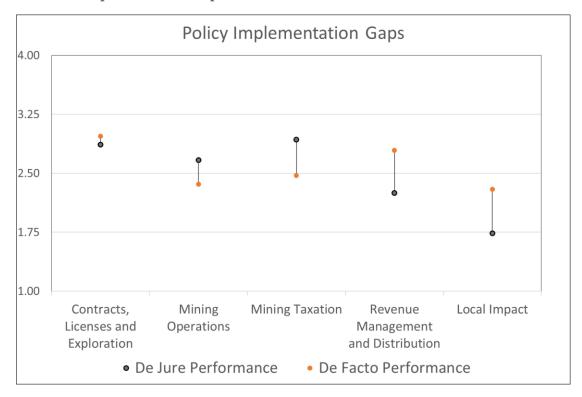
^{58 &}quot;Very high", "High", "Low" and "Very low" scores simply indicates the respective quartile of possible values (from highest to lowest along the 1-4 scale used in the MSD tool) that the average score fell into (see legend above).

- In terms of de facto performance, the strongest links are for "Licenses" and "Revenue Management and Distribution" with the other three stages of the EI value chain being assessed in the "Low" range.

Another reading of the assessment summarized in the above dashboard provides an aggregated horizontal overview of each of the five stages of the extractive industries value chain (see Figure 5). Overall performance is highest at the licensing and taxation stage, with somewhat weaker performance on "Mining Operations". Performance with respect to "Revenue Distribution and Management" and in particular "Local Impact" is weakest—in particular with respect to the de jure performance.

Having assessed de jure and de facto performance separately, the MSD tool provides an estimate of the so-called implementation gap, e.g., the gap that exists between the legal and regulatory framework and its implementation in practice. For the Kyrgyz Republic, the implementation gaps are relatively small for all five three stages of the EI value chain. At the first, fourth and fifth stage, actual (de facto) performance is actually stronger than the underlying legal framework—suggesting some room for improvements in the latter. For the second and third stage of the EI value chain, de jure performance is stronger than de facto performance. In other words, while there is some room to improve the implementation of the existing legal and regulatory framework, it is limited. It has already been noted that the existing policies as expressed by the legal framework may be ineffective. This implies that rather than improving implementation of this framework, any reforms should focus on making the framework itself more relevant to present conditions.





IV. Assessment of the Sector Management Framework

The review of the dashboard and the gap analysis in the preceding section provide a birds-eye view of the sector's de jure and de facto performance but does not give specific information on the strengths and weaknesses identified through the MSD. The current and the following section provide a more detailed look at the sector management framework and performance along the EI value chain – including identifying potential areas for improvement. The following discussion starts with the sector management framework (Figure 6).

Figure 6: MSD Management Framework

Mining Sector Management (2.57)							
	Sector Policy (2.19)	Sector Dialogue (2.42)	Roles and Responsibilities (3.19)	Intra-Governmental Coordination (2.48)			

The management framework for the Kyrgyz mining sector receives an average overall score—just above the midpoint of possible scores. Of the four aspects of the sector management framework that the MSD considers, the assignment of roles and responsibilities for the sector scores highest, while the other three aspects receive scores that are just below average.

Sector Policy (2.19)

There is no publicly available, approved mining sector strategy. In the recent **National Development Programme of the Kyrgyz Republic for 2021-2026 (NDP)** the mining sector is listed among the three economic development priority areas for the Kyrgyz Republic. According to the NDP there may be significant changes to the current legal framework of the mining sector within the next five years: the government plans to develop a new Mining Code (Code on Subsoil), improve the existing environmental legislation to match international standards, provide favorable conditions for state owned mining companies, revise all license agreements, and reconsider the distribution of taxes between the central and local budgets.

However, although the recent debate about a new Mining Code has taken place in public, there has been a lack of clarity about the government's objectives and strategies for the mining sector. Interviews and replies to questionnaires revealed considerable criticism of sector policy on the part of industry and civil society, both of which give the policy below average scores. Judging from the comments, lack of transparency is seen as a major problem. An important comment received from industry is that "recently, when initiating draft regulations, they are often adopted without the necessary financial and economic calculations, without conducting a regulatory impact analysis, without sufficient justification or taking into account the notes identified during public discussion, as required by the Law "On Regulatory Legal Acts" in the Kyrgyz Republic".

Most of all, interviewed companies complained about the political instability and lack of strategic vision for the development of the mining sector. In their view, lack of a rational long-term vision of the development of the mining sector is the root cause behind frequent chaotic regulatory changes and a strategy document should be developed with the participation of private companies to consider prospective impacts on the economy and investment attractiveness of the country. The International Business Council, an industry association, prepared a package of recommendations for the draft Code in 2022 but there has been little discussion of the proposals. In December 2022,

the government published a « Draft Concept of Development of the Geological and Mining Industry of the Kyrgyz Republic for 2023-2035 ». The document addresses some of the concerns expressed by industry and civil society organizations, including the need for more exploration and for better processes for environmental management and consultations with local communities. Since it is a concept text, it contains few details. Presumably the details will be worked out based on reactions to the concept document.

All the new mining operations exploit deposits that were either in operation already during Soviet times or that were found and measured during this period. None is based on recent exploration and there is little exploration going on, particularly greenfield exploration. This situation, which is of concern from the perspective of the industry's long term survival, is made more serious by the fact that the legislation is less than attractive to investors looking for new deposits Since there existed a stock of mining assets more or less ready for development that could meet demand from foreign investors and that secured a steady growth in the number of mining operations, there was little perception of a need for the legislation to change. The right to work on the deposits could be allocated by the State and there was no need to go into detail about how the legislation could promote active exploration. This impacted legislation in four ways:

- Mineral rights were seen as government assets that the government could dispose of freely and charge for, rather than private property rights
- An important role for state owned companies in the exploitation of deposits was seen as a default position, rather than as something that needed to be justified on its own merits
- Attention was focused on the estimated reserves associated with a license and the concept of reserves as a dynamic and evolving variable had difficulty gaining acceptance
- The idea that companies needed government approval for technical designs was seen as obvious

Recent legislative changes have if anything reinforced these views and limited to no attention has been given to the need to create incentives for new exploration.

State Ownership

In the Kyrgyz Republic there has been and is still considerable debate about the extent of state ownership. The present government clearly sees it as one of the main instruments to promote its policy objectives and even as an objective in itself. For these reasons, it is discussed here, although it strictly speaking falls outside the scope of the formal MSD assessment system. The following changes have been introduced recently:

- In 2021, it was decided that the Cabinet of Ministers will be able to instruct the state mining regulator to issue licenses for fully state-owned companies to develop deposits of national importance without auction or competition, thus according these companies an advantage over their private sector competitors with respect to access to mineral deposits.
- Also in 2021, the state was given ownership of technogenic formations (waste dumps, tailings which may be processed or exploited). The implications of this change for mining companies that are operating at present are not yet clear.
- At the same time, the establishment of a new state-owned holding company and of Kyrgyzgeologia was announced.
- During the debate on a new Mining Code, Parliament decided in June 2022 that the state shall own at least 30 per cent of all new gold and silver mining operations. The decision does not say if the state share is to be paid for, although it is assumed that it would be.

While local community representatives seem to be supportive of the state equity direction taken by the current President, industry is concerned with the frequent changes in policy direction and is less optimistic. With respect to Kumtor, local community representatives tend to believe that if the state could sell the gold produced instead of expecting dividends from the investor, state revenues would be much larger.

Companies operating in the Kyrgyz Republic are highly concerned about the rising participation of the state in the sector since 2020. While high-level officials keep stating that lawfully acquired rights for subsoil use will be protected by the state, tax increases since 2020 already "feel like a state share", one interviewed company claimed. The increase in the License Retention Fee to what is seen as impossible levels was also interpreted as a sign of the state's wish to return licenses to the state.

Two arguments are traditionally advanced in favour of state ownership. The first is that government may not receive its fair share of the economic surplus (rent)⁵⁹ without state ownership. However, there are trade-offs between taxation and ownership. From the investor's point of view, it may not make a large difference if the impact on the net present value of a mining project is due to taxation or state ownership (assuming that the state's share is not fully paid for). Accordingly, state ownership will affect the investor's decisions in the same way as a tax increase and may deter investment. Moreover, since an investment decision can be seen as a tacit negotiation, this implies that the respective shares of the state and the investor will be the same in the end, whether there is partial (minority) state ownership or not. Finally, the argument assumes that dividends are the only way that a company can extract revenue from a subsidiary. In the case of the Kyrgyz Republic, which lacks robust legislation on both transfer prices and thin capitalization (see below), this position does not take into account the possibility to raise fiscal revenues by modifications to the tax legislation.

The second argument is that state ownership allows the government to use mining companies as instruments to pursue specific policy objectives, for instance, promoting regional economic development or contributing to the establishment of an industrial base or a more diversified economy. Experience from attempts in this direction in other countries is mostly negative. Carrying out industrial policy through the medium of a state-owned company raises risks of inefficiencies and corruption and of the company becoming a burden on state finances rather a contributor. The only large state-owned mining companies that have done well and that are considered leaders in their respective markets, are Codelco (Chile) for copper, and LKAB (Sweden) and Vale (Brazil) for iron ore.⁶⁰ All three are characterized by their independence and are in fact run exactly as if they were private companies.⁶¹ Minority shares in mining companies do not carry the same risks of

resource, including a normal return on investment to the extractive enterprise.

⁵⁹ The concept of rent is central to discussions of natural resource taxation. The resource rent of a natural resource is the total revenue that can be generated from the extraction of the natural resource, less the cost of extracting the

⁶⁰ While Codelco and LKAB are wholly state-owned, in May 1997 the Brazilian Government sold a 41.73% interest in Vale for R\$3.34 billion (US\$3.13 billion).

⁶¹ For an insightful review of the experiences of nationalization and privatization in Chile and Peru, See G. Lagos, 2018. Mining nationalization and privatization in Peru and in Chile. Mineral Economics, May 2018.

https://www.researchgate.net/profile/Gustavo-Lagos-

 $Chile.pdf?_sg\%5B0\%5D=ElFep7eWX6te8TAIjvkssLf8eUfaHaQXRN_ISUggnPWJjCWlVi9DIzcS061sV8UCkq_PGWJc6gFILp\\51nvg35g.Rbt0j7__PcDXchkgKad0h26x5w_4Uhl1F4UzrMKrqq4_DjTHmN7IrOPx6mwY7t9_lllTdA8mL0vmD2PfWhzenA\&_s\\g\%5B1\%5D=O9ABPiroyhABO89bK5Il9vNnqnm4WnFAdaiItaNoEl5K4QqVhc6X4WQUPWBKqdBgAZW6bPRHQvaKpxqihy\\a36p2u_GjPhOpddQmdmX65SeJ1.Rbt0j7__PcDXchkgKad0h26x5w_4Uhl1F4UzrMKrqq4_DjTHmN7IrOPx6mwY7t9_lllTdA8\\mL0vmD2PfWhzenA\&_iepl=$

diversion of objectives or funds, but minority shares do not provide any control over corporate decision making and are therefore of very limited value as policy instruments.

Finally, state-ownership of mining companies raises problems of conflicts of interest since the state is both owner and regulator of the company.

The policy debate in the Kyrgyz Republic does not appear to have benefitted from a review of other countries' experiences and the arguments for and against state ownership have not been clearly formulated. Neither is it clear what objectives the Government is striving to meet through state ownership.

Sector Dialogue (2.42)

To achieve good mining management, government needs to enforce its legal, political, and administrative authority for handling sector matters, interacting with different stakeholders or pressure groups. On the other hand, citizens and companies should be provided with the mechanisms, procedures and institutions required to influence policy decisions, exercise their rights, comply with their obligations, and resolve their differences. From the scores on individual questions, it is clear that all stakeholders, including government, consider that meaningful consultations on strategy have been largely absent from the policy formulation process regarding mining. The participation of the civil sector is perceived as a formality, without its wishes being reflected in the final document.

The mining industry is satisfied with the way it is represented via business associations. Mining companies are members of a number of official dialogue platforms such as the Business Development and Investment Council chaired by the Head of the Government, the Council for the Development of Business and Entrepreneurship chaired by the speaker of the Parliament and the National Security Council chaired by the President, and they participate in working groups on major legal acts such as the Code on Subsoil. Moreover, the office of business ombudsman was introduced in 2019 to protect the rights, freedoms, and legitimate interests of businesses. While mining companies continue to be members in dialogue platforms and actively voice opinions through public outlets and the media, the reaction from the state is seen as limited. For example, the International Business Council (IBC) brought the issues of mining companies' concern together into a clear "Package of recommendations for the draft Code of the Kyrgyz Republic "On Subsoil" and IBC's conceptual proposals for further improvement of the mining industry in the Kyrgyz Republic" in April 2022. However, even after the distribution of the document among the key decision makers, the policy discourse does not appear to take IBC's proposals into account.

Less savvy in defending own interests, local communities often feel excluded from the policy discourse, even when policy changes concern issues that are important to them, such as allocation of Regional Development Funds. Although interviewed stakeholders affected by mining shared that they have access to companies through members of village councils, they believe that mining companies may use their lack of legal knowledge and find ways not to fulfill some of the communities' poorly substantiated proposals. "Protests are the only efficient way" stated one of the local community representatives. The dialogue between civil society and the industry suffers, in the industry's view, from the negative image of the industry in mass media. Civil society makes a distinction between the larger companies, with whom dialogue is seen as possible, and the others, who are seen as dishonest.

As for the dialogue between government and civil society, most of the local community is not involved in the dialogue between the government / local authorities and the local community, with only a small number of activists being engaged in discussions.

Roles and Responsibilities (3.19)

The scores are based on primary data and replies provided by government respondents. Roles appear generally to be clearly defined, although there is an absence of a responsible authority in some cases, for instance, concerning artisanal mining, and the decision procedure for granting licenses is not separate from the ministry. Many of the interviewed parties representing the industry, the civil society and even the government were disappointed with the lack of political stability and frequent changes in the government structure and state management. In fact, since October 2020, management of the line government body – the Department of Geology under the Ministry of Natural Resources, Ecology and Technical Supervision, has changed four times with one of the Deputy Ministers staying in power for fifteen working days.

While there is less confusion concerning the responsibilities of government bodies, lack of staff in the government bodies is of concern to the industry.

Intragovernmental Coordination (2.48)

A restructuring of the Government in 2021 established a single body responsible for mining policy, licensing, environment and oversight – the Ministry of Natural Resources, Ecology and Technical Supervision. Prior to this reform, for a decade, there were three separate government bodies, that have now become departments under the new Ministry:

- State Agency for Geology and Mineral Resources, with responsibility for mining policy, licensing, geoinformation, expertise of technical projects, collection of annual mine development plans and reports, and the State Reserves Balance
- State Agency for Environmental Protection and Forestry, with responsibility for environmental regulation
- State Inspectorate for Environmental and Technical Safety, responsible for oversight and monitoring.

There are significant differences between the way that government respondents view intragovernmental coordination and how it is perceived by industry and civil society respondents, with the latter usually being more critical.

The responses of the Government bodies, collected prior to the formation of a single Ministry, to the questionnaire varied, illustrating that there are diverging views of the merger of the three bodies. The reform has been criticized by other stakeholders for increasing risks of corruption.

Industry respondents provided a few examples of government ministries working at cross purposes, although in some cases these were deemed to be the result of lack of competence and experience rather than of competition or conflict between ministries.

A recent report noted that:

"While the responsibilities of government agencies involved in the regulation of the mining sector have been defined, there are numerous inconsistencies between agencies. According to experts within the sector, there is no clear division of responsibilities between the State Committee for Industry, Energy and Mineral Resources and the State Inspectorate for Environmental and Technical Safety with regard to the supervision of drilling and mining operations. According to interviews with government officials, this is primarily due to the regulatory framework and its inadequacy for addressing companies' legal issues." 62

Government respondents differ in their view of whether there is adequate information sharing. Both industry and civil society have criticisms. There are a number of databases, including the "Nedra" Information System, which at the moment holds data for 2500+ licenses, but they are not seen as easily accessible. One industry comment is that working and expert groups are being formed with the participation of government agencies and the private sector, but they do not have the authority to influence decisions. Businesses are not listened to or heard. Government institutions do not inform or provide arguments for their decisions.

Governance issues

The new constitution has raised governance concerns, for instance, on the part of the "Venice Commission" (European Commission for Democracy through Law (Venice Commission) and OSCE Office for Democratic Institutions and Human Rights (OSCE/ODIHR) 2021), which finds that many provisions regulating the institutional framework and separation of powers are not in line with international standards and OSCE commitments. Furthermore, the foreseen timeline and procedures leading to the adoption of the constitutional amendments raise serious concerns due to the lack of respect for the principles of rule of law and legality, and the absence of meaningful and inclusive public consultations and debate in parliament. These concerns are important, partly because they are added to other concerns about governance in the Kyrgyz Republic. For instance, the IMF (2019) noted in a recent Article IV report that there is evidence that market participants have low trust in the courts and the legal enforcement system and that courts are widely perceived as not independent. Similarly, the Worldwide Governance Indicator, the World Bank Doing Business Index, the household and expert based survey of the World Economic Forum, and the World Justice Project –Rule of Law all indicate low performance regarding the respect of the rule of law.⁶⁴

As illustrated by the important role played by the dispute over the Kumtor mine in the 2020 uprising, the mining sector has often found itself at the centre of political controversy in the Kyrgyz Republic. Conflicts with local communities over mining projects have been common, fueled both by mistrust of mining companies and suspicions of collusion between corrupt officials and the companies. According to the Transparency International Corruption Perception Index (CPI) 2021, 65 the Kyrgyz Republic ranks 148th out of 180 countries with 27 points out of 100. One of the contributing factors is weak integrity mechanisms, which are poorly defined in the law and do not comply with international standards. Laws aimed at ensuring such mechanisms are declarative and

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⁶² PeaceNexus, 2021. Conflict Management in the Mining Industry of the Kyrgyz Republic: Review of challenges and company practices.

⁶³ European Commission for Democracy through Law (Venice Commission) and OSCE Office for Democratic Institutions and Human Rights (OSCE/ODIHR) (2021). Joint Opinion on the Draft Constitution of the Kyrgyz Republic.

⁶⁴ IMF, 2019. Kyrgyz Republic. 2019 article IV consultation – staff report.

⁶⁵ https://www.transparency.org/en/cpi/2021

do not work in practice.⁶⁶ Another, related factor is low level of trust in the authorities. Exaggerated assessments fuel and promote the idea that the country's subsoil and other natural resources should not be given to foreigners for use⁶⁷. Local populations believe that state agencies grant licenses and permits to companies in corrupt ways, and that revenues derived from the mining sector are not distributed transparently and fairly⁶⁸.

There are also concerns over the transparency and equitability of government decision making, particularly with respect to licensing procedures, the enforcement of environmental regulations and state-owned enterprises (SOEs).

Room for Improvement in "Mining Sector Management Framework"

This assessment of the mining sector management framework has helped identify room for improvement in both the rules and their implementation.

- The Government would be well advised to prepare a clear statement of policy direction for the mining sector and to communicate it effectively. The sector policy as described in the National Development Plan is more a work plan than a strategy. Instead, decisions with major policy implications are taken in a seemingly improvised manner, with very little discussion and without any clear statement of objectives.
- The Government should formulate clearly what objectives it hopes to achieve through state ownership and initiate a dialogue with industry about whether these objectives can be achieved through other means.
- ♦ Formal mechanisms for dialogue should be established that have a clear legal status that gives effect to their recommendations. A transparent and inclusive debate about the role of the mining sector in the economic development of the Kyrgyz Republic would both clear up misunderstandings and lay a basis for sustained growth of the industry. Such a debate might address some of the conventionally held assumptions in a critical manner, for instance, the emphasis on state control and on state ownership.
- Responsible bodies should be designated for matters having to do with artisanal mining and for approving Social Impact Assessments and Social Management Plans, were they to be required in the future (see in the following).
- Mechanisms for coordination should have a clear legal status with corresponding responsibilities and authority and decision-making authority. Recent institutional reforms have attempted to solve problems of coordination by merging three former ministries into one. More important is to eliminate areas where it is unclear which department has authority and where discretionary decisions are still possible.

⁶⁸ Government, of the Kyrgyz Republic, 2014. Medium-term and long-term strategy for the development of the mining industry in the Kyrgyz Republic.

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⁶⁶ https://transparency.kg/files/pdf/NIS%20Kyrgyz%20Report%20rus%20-%20FINAL.pdf - National Integrity System, Transparency International Kyrgyzstan

⁶⁷ Mining, Development and the Environment in Central Asia: A Toolkit Supplement with Case Studies https://epublications.uef.fi/pub/urn isbn 978-952-61-0936-7/urn isbn 978-952-61-0936-7.pdf

V. Performance along the Extractive Industries Value Chain

This chapter takes a more detailed look at the performance of the mining sector at each stage of the value chain and lists potential areas where there is room for improvement. A number of issues emerge from the review of the indicators:

- The mining licensing system is not conducive to exploration outside known deposits and in direct association with existing mines this was the case even before the current moratorium on new exploration licenses. It is also biased against private sector companies.
- Processes for environmental permitting, resolving competition between different land uses, regulating the mining sector's interaction with local communities and ensuring rehabilitation of mined out areas are not in line with good international practices. Where provisions for consultation over environment and societal issues exist, they are applied in a manner that fails to inspire confidence in the integrity of the process.
- Accident and fatality rates are considerably higher than international comparators.
- There is no direct evidence that the mining industry in the Kyrgyz Republic carries a significantly higher tax burden than in comparative countries (a fuller comparison would necessitate modelling, which time and data have not allowed). However, the taxation system does not appear to be based on any analysis of incentives and disincentives for the taxpaying subjects. In several cases, taxes may lead to suboptimal decisions and misallocation of resources. The problems concern not only the tax system as such but also non-tax fees such as licensing fees and power and water rates.
- The system favours state owned companies over private ones and accords state owned companies and other state institutions a key role in the industry that many fear exceeds their capacity.
- While the Kyrgyz Republic has a functioning revenue sharing system, whereby local communities share in mining revenues, there is room for improvement in the transparency of the system.
- It would probably be in the interest of medium term financial stability for the government to adopt mechanisms for fiscal planning that aim to smooth out the effects on government revenues of variations in the gold price. It is also worth considering the establishment of a sovereign wealth fund using fiscal revenues from gold mining.
- The Kyrgyz mining industry could strengthen its links with local and regional economies and thus improve its contribution to these economies.

V.1 Contracts, Licenses and Exploration

Regarding the first value chain stage, "Contracts, Licenses and Exploration", all indicators received either a "high" or "very high score". Overall, both the de jure and de facto performance receive "high" scores, with the latter scoring slightly lower.

Figure 7: Contracts, Licenses and Exploration—Indicators

	Indicators					
De Jure Performance (2.87)	License Allocation Rules (2.48)					
	License Management and Transfer Rules (3.25)					
	Collection and Maintenance of Geological Information (3.14)					
De Facto Performance (2.97)	Effective License Allocation (2.98)					
(=.57)	Effective License Management (2.81)					

De Jure Performance (2.87)

The score reflects the fact that the questions mostly deal with the extent to which requirements and procedures for issuing licenses are clearly stated in the law and the room for discretionary or arbitrary decision making. The legislation of the Kyrgyz Republic incorporates features that satisfy these requirements. However, there are concerns that the legislation concerning licenses does not favour the development of a healthy mining industry and that it is in not line with what is today seen as best practice in this area.

The present system for allocating and managing licenses does not recognize the risks inherent in exploration for new deposits. A review of published exploration results has suggested that the proportion of exploration targets that eventually become profitable mines ranges between 1 in 24 to 1 in 100 for Brownfields exploration activities in a gold district that is known to be well-endowed. It ranges from 1 in 1,000 (0.01%) to 1 in 3,333 (0.03%) for Greenfields exploration activities that target world-class deposits. ⁶⁹ Moreover, on average it takes almost 18 years from the start of exploration to first production. ⁷⁰ Accordingly, most countries that have had success in opening new mines have tried to attract as much exploration and as many exploration companies as possible in the hope that at least a few of them will be successful, using instruments such as a) easy and cheap access to good quality geological information, b) indicating unequivocally the areas available and open to be licensed, c) simple licensing procedures, d) allocation of exploration licenses on the basis of first-come, first-served, e) guaranteed security of title (you can mine what you find), f) low fees (although often escalating over time to discourage hoarding of licensed areas), g) no discrimination between state owned companies and private ones and h) various fiscal incentives.

⁶⁹ Kreuzer, O.P. and Etheridge, M.A. 2010. *Risk and Uncertainty in Mineral Exploration: Implications For Valuing Mineral Exploration Properties*. AIG NEWS No 100, May.

⁷⁰ From 1985 to 2014, 205 gold mines were brought into operation in the world. The average time from discovery to operation was 14.8 years. However, this time has been increasing and the 121 gold mines that opened from 2006 to 2014 took on average 17.7 years to enter into operation (SNL Metals & Mining, S&P Global).

Two states in Australia (Queensland⁷¹ and Western Australia⁷²) and at least three provinces in Canada (New Brunswick⁷³, Newfoundland-Labrador⁷⁴ and Saskatchewan⁷⁵) have gone so far as to introduce programmes whereby public funds are given as either loans with conditional repayment or grants to exploration companies.

If it is the wish of the government of the Kyrgyz Republic to attract foreign investment in exploration, it would probably be well advised to follow the example of the countries that have been successful in this respect. Such countries include Australia and Canada, which together accounted for 32 per cent of world exploration expenditure in 2020, and Chile and Peru, which accounted for most of Latin America's share of 25 per cent of world exploration. These countries have used the instruments just described with considerable success.

Two central elements of the Kyrgyz system which illustrate how the processes rely on Soviet era concepts are the assessment of reserves and the mine design requirement. First, mining licenses are granted for a specified amount of minerals, based on the assessed reserves using historical estimates, presumably adjusted if clearly out of date. These reserve data also form the basis for various fees and for deciding to which of the categories defined in the legislation that a deposit belongs. Second, while many jurisdictions require some proof of professional qualifications before granting a license, and many also require applicants for mining licenses to submit some kind of mine plans, the Kyrgyz Republic is one of a small number to demand that a detailed mining plan be drawn up by a certified independent company and that this plan be observed in detail.

Reserves are seen as part of the State Balance Sheet of Mineral Reserves, which are drawn down as mineral exploitation proceeds. Article 11 of the Subsoil Law states (private translation):

- "1. The State Balance sheet of Mineral Reserves of the Kyrgyz Republic contains information on the quantity, quality and degree of study of minerals by deposits, location and degree of industrial development, extraction and availability of proven mineral reserves of operating enterprises.
- 2. Write-off of balance reserves of minerals that have lost their industrial significance, lost in the process of extraction or not confirmed during subsequent geological exploration or development of mineral deposits, is carried out by the authorized state body for subsoil use with subsequent amendments and additions to the State Balance of Mineral Reserves of the Kyrgyz Republic."

The concept of a balance sheet of mineral reserves is not important in most countries, except possibly as part of experiments with natural resource accounting. It is generally considered that a concept such as an overall balance of reserves is of no practical value because it would be subject to continuous change due to new discoveries but also because geological theory, exploration

⁷¹ Business Queensland, undated, Collaborative Exploration Incentives, https://www.business.qld.gov.au/industries/miningenergy-water/resources/geoscience-information/exploration-incentives/exploration-grants
72 Government of Western Australia. West Australia Exploration Incentive Scheme (EIS) undated.

https://www.dmp.wa.gov.au/Geological-Survey/Exploration-Incentive-Scheme-1428.aspx

⁷³ Government of New Brunswick. undated. New Brunswick Junior Mining Assistance Program.

https://www2.gnb.ca/content/gnb/en/departments/erd/energy/content/minerals/content/Incentives/NBJMAP.html

⁷⁴ Government of Newfoundland. undated. Newfoundland Labrador Junior Exploration Assistance Program. https://www.gov.nl.ca/nr/mines/exploration/mip/jea/

⁷⁵ Government of Saskatchewan. undated. Saskatchewan Targeted Mineral Exploration Incentive. https://www.saskatchewan.ca/business/investment-and-economic-development/business-incentives-and-tax-credits/targetedmineral-exploration-incentive

⁷⁶ Soviet descriptions of mineral reserves took little account of exploitation costs, Consequently, concepts such as reserves depending on assumed cut-off grades cannot be easily applied to reserve estimates.

technology and mining and beneficiation methods are continually evolving.⁷⁷ In any case, the concept of a balance of reserves is mostly considered impossible to apply, given the practical measurement difficulties. In the specific case of the Kyrgyz Republic, technological developments in exploration over the last three decades as well as structural changes in metal demand mean that the country could have many unknown deposits that were not identified with Soviet methods.

More fundamentally, even if reserves could be accurately estimated, does it make sense for society as a whole, beyond a narrow accounting approach, to charge for their depletion? Standard economic theory would argue that first, the opportunity cost of mineral reserves is zero since they have no alternative uses, second, that mining entails the depletion of natural resource capital which, however, will be offset by the accumulation of other forms of capital, either physical or human. Proponents of long term sustainable use of natural resources may argue that the balance between natural resource capital and other forms of capital should be tilted in favour of the preservation of natural resource capital, but this argument is usually not based on a perceived need to preserve mineral resources.⁷⁸

Mining companies almost always prepare reserve estimates according to a recognized scheme such as JORC⁷⁹, in order to be able to provide information to lenders and investors in a generally accepted format. Preparing another set of estimates according to official guidelines adds to their work without any clear benefit. Moreover, Government officials have to spend time verifying the estimates. Since the departments in question are short of staff, there would seem to be more urgent tasks on which they could spend their time.

The economic argument for relying on reserve estimates and the concept of the State Balance Sheet of Mineral Reserves would therefore appear to be weak. It is not clear what purpose the concept serves and why it should be an element of the licensing process.

The Kyrgyz Republic also requires that successful applicants for a development (mining) license have an approved mine design. When the applicant obtains a license, they then have to develop a mine design (so called Technical Project) and submit it for approval for compliance with rational use of subsoil legislation, mining safety legislation and environmental protection legislation. The license holder then has to present the approvals of the Technical Project to the licensing commission which issues a license agreement to conduct on site works to the license holder. This differs from requirements in most jurisdictions, where the need for approved designs is limited to environmental and safety aspects. The plan required in the Kyrgyz Republic goes beyond the need to ensure compatibility with safety and environmental requirements, and includes "the protection of the subsoil" (Article 50 of the Subsoil Law). Article 43 of the Subsoil Law defines the concept:

"1. The tasks of the state protection of the subsoil, the environment and the state supervision of industrial safety in subsoil use are:

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⁷⁷ For instance, the development of leaching technologies, combined with electrolysis, meant that vast amounts of previously sub-economic resources of copper and gold became commercially viable reserves in a very short period of time in the 1980s.

⁷⁸ There is of course also an issue of the optimum rate at which a given non-renewable resource should be exploited, but there is no indication that any such argument underlies the concept of the balance sheet of mineral reserves.

⁷⁹ The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the JORC Code') is a professional code of practice that sets minimum standards for Public Reporting of minerals Exploration Results, Mineral Resources and Ore Reserves. The JORC Code provides a mandatory system for the classification of minerals Exploration Results, Mineral Resources and Ore Reserves according to the levels of confidence in geological knowledge and technical and economic considerations in Public Reports. Public Reports prepared in accordance with the JORC Code are reports prepared for the purpose of informing investors or potential investors and their advisors. (https://www.jorc.org/).

⁸⁰ A number of Latin American countries require detailed mine plans before construction is started.

- 1) compliance by all subsoil users with the legislation on subsoil, industrial safety and environmental protection;
- 2) compliance with the economic interests of the state in the use of mineral resources;
- 3) prevention, minimization and elimination of harmful consequences of subsurface use.
- 2. The organization of specially protected natural territories within the boundaries of the State Subsoil Fund without the approval of the authorized state body for subsoil use is not allowed."

These protection needs would not seem to constitute an absolute necessity for the State to review all technical solutions and designs for a mining operation. Neither is it clear why they need to be included in the licensing process. Issues having to do with industrial safety and environmental management can be and are addressed through other legislation, as is the case in the vast majority of countries. The present process entails additional work for companies in the process of preparing feasibility studies since they need to take into account the specific requirements of the legislation. Moreover, it adds unnecessary tasks to the work burden of government authorities and prevents them from focusing on more useful activities such as inspections. Finally, if there is a need for prequalification of license applicants, it should be based on modern best practices. However, as observed by the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF),

"technical instructions are outdated and in need of revision to reflect best practice, as many are based on Soviet-era (*Gosstandart*, or GOST) state standard guidelines. These include numerous geological instructions for drafting and evaluating the technical projects and plans of mining works; regulations on industry; mineral resource safety audits; guidance on mine closure; and other industry-specific instructions (industrial and environmental safety, mineral resources safety, closure and post-closure)."81

License Allocation Rules (2.48)

The score on this item reflects the fact that procedures for allocating licenses are detailed and explicit and contain safeguards against arbitrary decisions. This is in contrast with the situation under the previous legislation. Prior to the 2012 Law on the Subsoil, there were few rules and the procedures for allocating licenses were opaque. However, while the rules provide explorers and mining companies with protection against biased decision making, they do not favour active exploration and are not attractive to investors. This is an instance where the questionnaire does not pick up on the particularities of a country's legislation and the effect of these particularities.

Under the Kyrgyz Laws⁸², prospecting, exploration and mining rights are granted by:

- (i) license;
- (ii) state registration;
- (iii) concession agreement; and
- (iv) production sharing agreement.

⁸¹ IGF, 2018. Mining Policy Framework Assessment. Kyrgyzstan. https://www.iisd.org/publications/report/igf-mining-policy-framework-assessment-kyrgyzstan.

At the time Kumtor was granted its licenses, the effective law was the Subsoil Law of July 2, 1997 (the "1997 Subsoil Law"), which was abolished on September 17, 2012 with the enactment of the new Subsoil Law of August 9, 2012 (the "2012 Subsoil Law"). The 2012 Subsoil Law was abolished on June 29, 2018 with the enactment of the current Subsoil Law of May 19, 2018 (the "2018 Subsoil Law").

State Registration, Concession and Production Sharing Agreements

Individual placer miners and applicants for extraction of construction materials (sand, gravel, loams) shall apply for state registration by the regional state authorities where areas of their interest are located.

Concession for subsoil use, i.e., a right to perform subsoil use works at the concession area for a maximum term up to 50 years pursuant to the concession agreement may be granted to a winner of a concession competition conducted pursuant to the Law on concession and concession enterprises (2012). Only the Kumtor deposit has ever been developed under a concession agreement. This agreement was concluded by Kumtor Gold Company CJSC and the Government of the Kyrgyz Republic in 1993.

Potential subsoil users may also apply to the Government of the Kyrgyz Republic to enter into a production sharing agreement pursuant to the procedure and terms provided in the Production Sharing Agreement Law (2012). No PSA agreement has ever been concluded. The Department of Geology has stated that it will initiate the cancellation of the Production Sharing Agreement Law due to its inapplicability in practice.

Licenses and License Agreements

The licenses are issued by the Department of Geology at the national level. In February 2023, there were 158 mining licenses for gold and other metals. Unfortunately, it proved impossible to obtain disaggregated data that would have allowed an analysis of the distribution of licenses among different types and minerals over several years.

An integral part of the license is a license agreement. The template license agreement, which contains very basic information (e.g., contact details of the license holder, type of subsoil use, work/production plan, existence of pledge over the license) is entered into with all license holders. More detailed license agreements are concluded with the winners of competitions or auctions.

Types of Licenses and Groups of Minerals

There are prospecting, exploration and development (mining) licenses.

Prospecting licenses are exclusive and not limited in size, although they are only valid for the minerals specified in the application. They are initially valid for three years and can be renewed for two years. In most countries, a prospecting license is intended to allow an explorer to carry out non-intrusive work over large areas. They usually exclude work such as trenching or drilling. It is relatively unusual for countries to require prospecting licenses for aerial geophysical surveys. Normally, prospecting licenses are not exclusive, since exclusivity could create a situation where one prospecting company blocks very large areas. The cost of prospecting licenses is usually also very low in order to encourage a maximum number of companies to carry out prospecting at the same time in the same area. The objective of prospecting licenses is mainly to enable authorities to keep track of extensive exploration activity. It is assumed that once a prospector has identified a

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⁸³ In Sweden, when the mining legislation was changed in 1992 and mining was opened up for foreign investment, the number of claims made increased dramatically. One of the more drastic consequences was that, since the cost for obtaining an investigation permit was low by international comparison, an Australian exploration company claimed a large part of Sweden for diamonds, thus excluding other exploration activities. This unintended effect led authorities to increase the fees for claims and for the Mine Inspector to be given the rights to evaluate the intentions and capabilities of the companies to explore the land they claimed (P. Weihed. How commodity prices and technical development has influenced exploration strategies: a case study from Sweden. Mineral Economics (2022) 35:409–427. https://doi.org/10.1007/s13563-022-00299-2.

promising, smaller area, they will apply for an exploration license, which is always exclusive. Many jurisdictions do not use prospecting licenses at all, since any intrusion on property can be handled through other legislation and since a non-exclusive license confers no property right.

It is difficult to see why the prospecting license in the Kyrgyz Republic is exclusive, why there are no limits on the area covered and why it should be restricted to certain minerals. Moreover, since it replicates most of the conditions of the exploration license (see below) it is difficult to understand what useful purpose is served by it in the Kyrgyz context, although the elimination of the first-come first-served route to the exploration license may have provided it with an indirect justification since first obtaining a prospecting license now represents the only way for a private explorer to obtain an exploration and, subsequently, a mining license.

The system of granting exploration and mining licenses is also different from that used in most countries. Exploration licenses are initially valid for four years with a possibility of extending them for another three years. Licenses fees increase over time so as to discourage companies from blocking promising areas. Development licenses are granted for 20 years and can be extended indefinitely. Licenses for both exploration and development (mining) are granted in four different ways:

- 1. Competition or tender⁸⁴
- 2. Auction
- 3. First-come, first-served
- 4. By decision of the Cabinet of Ministers

Competition or tender: Competitions are held for deposits of national importance by the decision of the Government. The Register of deposits of national importance is approved by the Government of the Kyrgyz Republic⁸⁵ on the proposal of the authorized state body for subsoil use in accordance with the criteria set forth by Government Regulation⁸⁶ reflected in Table 5. To conduct the competition, the Government of the Kyrgyz Republic forms a commission. Applications are evaluated by the commission using a point system.

Table 5. Criteria for deposits of national importance

Type of mineral	Subspecies of minerals	Type of work	Tested and recorded by the State balance of mineral reserves		
Coal		Development	30 million tons and more than 30 million tons		
Gold		Development	more than 10 tons		
Metals (*)		Development	Large and medium deposits		
Non-metallic raw materials	Facing stones, limestone for cement production, gypsum, wollastonite, quartzite	Development	Large deposits		
Hydrocarbon feed		Development	Large and medium deposits		

Source: GR KR dated November 29, 2018 № 561 On issues of licensing the right to use subsoil

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⁸⁴ The word used is usually translated as "tender", but "competition" is probably more appropriate.

⁸⁵ GR KR dated July 3, 2019 No. 339 On approval of the Register of Subsoil Fields of National Importance

⁸⁶ GR KR dated November 29, 2018 № 561 On issues of licensing the right to use subsoil

The Department of Geology is responsible for organizing the competition pursuant to the terms approved by the Cabinet of Ministers and competition commission. It publishes the competition announcement (in local and international media outlets and on its website), accepts and registers applicants and issues a license and enters into a license agreement with the winner of the competition as determined by the competition commission.⁸⁷

The competition commission determines the main terms of the competition which shall be approved by the Cabinet of Ministers. The terms are fairly standard and include, for instance, the minimum price for the subsoil use right. Other requirements are more unusual, for instance, the cost of a package of geological information about the deposit/license area.

The use of the term "Large and medium deposits" and ability of the Cabinet of Ministers to add any deposit to the list of nationally important deposits leave room for considerable discretionary decision making on the part of the Cabinet of Ministers. Although the Subsoil Law grants an exploration company exclusive rights to obtain a mining license in the event of a discovery there is a risk that such discovery may be declared by the Cabinet of Ministers to be of national importance and thereby taken away from its discoverer. Moreover, potential production would probably be a better criterion than the size of reserves if the intention is to identify deposits that may be of national economic importance. A gold deposit could have very large reserves but geological factors might constrain annual output. Finally, since it has been decreed that all major deposits of national interest shall in the future be developed by a wholly state-owned entity, ⁸⁸ the competition process might in fact no longer be used.

Auction: Subsoil use rights not subject to competition are subject to auction (with an exception of subsoil use right to explore and collect underground water). The Department of Geology determines the list of subsoil use objects subject to auction and forms an auction commission for each auction. The auction commission consists of at least 5 members, including representatives of the Department of Geology, relevant ministries and agencies, representatives of local government and local self-governance authorities of respective territories.

The Department of Geology announces and organizes auctions. The announcement shall be published at least 45 days prior to the auction date and shall contain information about the license area such as its location and geological characteristics, as well as procedural details.

As of August 2020, the Geology Department may also add additional requirements applicable to the winner of the auction such as:

- free of charge transfer of shares in the winning entity (entity which will be issued the license) to the state
- minimum investment requirements
- attracting qualified personnel
- experience
- deadlines for start of development, construction of facilities etc.⁸⁹

The detailed procedure for conducting an auction and determining the winner is provided in the Regulation on conducting auctions for subsoil use, approved by the Resolution of the Government of the Kyrgyz Republic dated November 29, 2018 No 561.

⁸⁷ Articles 22, 24, Subsoil Law of the Kyrgyz Republic (2018).

⁸⁸ Presidential Decree No. 5 dated January 29, 2021

⁸⁹ Resolution of the Government No 414 dated August 7, 2020.

In addition, the Law of the Kyrgyz Republic on Subsoil Use was amended by Law of the Kyrgyz Republic No. 48 dated June 23, 2022; setting out the share allocated to the government during the bidding process. This process has subsequently been formalized in regulations - Regulation on the Procedure and Conditions of Auctions for the Rights of Subsoil Use via the Resolution of the Cabinet of Ministers of the Kyrgyz Republic No. 722 dated December 30, 2022. Both the competition and the auction method assume that a substantial amount of geoscientific information exists about the area to be opened to competition or auctioned. Where little or no such information exists, it is unlikely that the winning bid would exceed the cost of organizing the auction, no matter how modest. There is no record of any jurisdiction successfully organizing auctions for mining rights – other than hydrocarbon rights – without bidders having a reasonably good idea of the geological and other characteristics of the asset. Even where geological features are well known, positive experiences from other countries such as India, which is the only country known to have organized mining rights auctions on a large scale, are limited to particular types of deposits. Since an auction system was introduced in India in 2015, replacing the previous first-come, first-served system, more than 100 mines have been sold. However, most of them were for bulk minerals such as bauxite, iron ore and limestone, where deposits were superficial and well known. Very few copper and gold mines were sold, the reason being that they required further exploration to be properly evaluated. Moreover, the vast majority of the mines sold were ones that were already or had recently been in operation. Very few greenfield deposits were sold. Prices were very high for iron ore mines, which were mainly sold to companies operating downstream facilities, and less so for mines producing other minerals.⁹⁰

The reason why so few countries use auctions and, if they do, only for operating mines or very well documented deposits, is of course that mining companies see little point in paying a significant price for an asset of an unknown value when the right to explore an asset of which equally little is known can be acquired for a very modest fee in most countries. So far, the licenses that have been put up for competition or auction in Kyrgyzstan have been well documented and reasonably attractive. As the stock of attractive assets is depleted, however, these modes of license allocation will become less practical. Moreover, the introduction in August 2020 of a possibility of unpaid for state participation in the project to be realized by the winner of an auction is likely to reduce investor interest in auctions considerably. Since recent legal changes have set as high a floor as 30 percent on such state participation, the attractiveness of auctions is likely to decrease even further.

First-come, first-served: A license is granted to the first applicant for an area which meets the regulatory requirements of the government. This method was used for areas where there is limited geological information. However, after the amendments⁹¹ to the Regulation on the Procedure and Conditions of the Auction for the Right to Use Subsoil in 2020, it is possible to apply for a license in this manner only for groundwater. It will still be possible for an exploration company to apply for and obtain a prospecting license, which carries the right to transform the prospecting license into an exploration license (Article 33 of the Subsoil Law). While the existence of this right should reassure explorers (Article 34 contains a similar right for the holder of an exploration license to obtain a mining license), the question is why the Government eliminated the first-come first-served avenue for exploration licenses. It would seem that this route provides a simple way for an exploration company that is interested in a smaller area to go directly for an exploration license. In view of the high risks associated with mineral exploration, the elimination of the first-come first-

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⁹⁰ R. Chadha and G. Sivamani (2021). Non-fuel Mineral Auctions: How Fair is the Game, and For Whom? CSEP Working Paper-11. Centre for Social and Economic Progress. New Delhi. August.

⁹¹ DGKR dated August 7, 2020 No. 414 On amendments to the Decree of the Government of the Kyrgyz Republic "On issues of licensing the right to use subsoil" dated November 29, 2018 No. 561

served route may deter investment in exploration. The particular characteristics of the prospecting license, for instance, the fact that it is exclusive, limits the attractiveness of the possibility to transform one license into another.

As is the case for prospecting licenses, exploration and development licenses are also valid only for certain minerals, that is, those for which reserves have been calculated and approved at the time of the granting of the licenses. Since 2018, it is no longer possible to obtain a license in an area where there is already a license for a mineral in the same group (hydrocarbons, ores, non-metallic minerals or water). This means that it is no longer possible to obtain a license for, say, copper, in an area with an existing license for gold. However, competing licenses could still exist, for instance, for hydrocarbons and metals or for metals and construction materials. Many countries, including countries such as Australia (most states), Canada, Chile and Peru, which have had considerable success in attracting exploration, try to avoid creating the confusion and potential court proceedings caused by such possibilities by extending the validity of licenses to all minerals found in the licensed area or by excluding the granting of a license if there is an existing mineral right of any kind in the area.

By decision of the Cabinet of Ministers: In 2021, it was decided that business entities and state-owned enterprises with a 100% state share may be granted the right to deposits by decision of the Cabinet of Ministers. Such a decision excludes the need to hold a competition or auction. The procedure for grant of subsoil use rights by the Cabinet of Ministers is determined by the Resolution of the Cabinet of Ministers No 148 dated August 23, 2021. State entities shall submit a request (letter) to the Cabinet of Ministers to grant a subsoil use rights indicating the name of the license area, location and type of requested subsoil use rights.

The Cabinet of Ministers has a right to refuse to grant subsoil use rights if the requested license area is already held by another subsoil user. It is not wholly clear if the Cabinet must refuse the grant. The Geology Department shall within 14 working days from the date of the decision of the Cabinet of Ministers to grant a subsoil use rights, issue the license to the state-owned entity.

Permission to carry out certain activities such as prospecting or extraction of sand and gravel for construction purposes is granted through *state registration* which is carried out by local state administrations.

License Management and Transfer Rules (3.25)

License Management

At the time of initial grant of the subsoil use license, the Department of Geology executes the license agreement No. 1 which is valid for a term of the license or shorter time period requiring the licensee within established term (i) to develop a technical document describing the type of prospecting activities, technologies, environmental and technical safety measures, environmental impact assessment etc., (ii) to get approval of the technical documentation by various government authorities and (iii) to obtain the right of use (access) to land.⁹²

⁹² Under the Kyrgyz Laws, the license grants only the right to minerals. To receive the right of access to the license area (land plots), the licensee must separately apply to government authorities, local authorities and private landowners.

In order to maintain the validity of the licenses the license holders are required to pay subsoil use taxes on time and in full, file annual reports on performed work with the Department of Geology, set aside rehabilitation funds and pay license retention fees.

The Department of Geology manages the license holders by desk review of the annual reports of the license holders, review of the status of the various subsoil use payments (confirmations submitted by the license holders on a regular basis about the timely and full payment of bonus tax, license retention fee, rehabilitation funds), execution of the social package agreements by license holders required to enter into such agreement with local authorities etc. The Geology Department is not required to conduct site visits and/or independently verify submissions (on performed works, production volumes, payments status) made by the license holders. It is responsible for maintaining the geological information generated by exploration carried out by the state or by companies, including reports, drill cores and samples.

Suspension and termination of licenses

The Department of Geology (i.e. Licensing Committee under the Ministry of Natural Recourses, Ecology and Technical Supervision) shall temporarily (for up to three months) suspend a license if the license holder (i) violates requirements of subsoil, environmental, and industrial safety protection laws of the Kyrgyz Republic, which poses a direct threat to life or health of the persons working or residing in the affected area; (ii) fails to submit the required reporting within the timeframe established by law; (iii) submits inaccurate resources, exploration and mining works completion reports; (iv) fails to observe requirements related to payments to the reclamation fund; (v) fails to timely pay bonus and/or licence retention fee; (vi) fails to timely notify the Department of Geology of the change of shareholders if such change entails bonus payment. ⁹³

Pursuant to the Subsoil Law (2018) the Department of Geology shall terminate a licence in cases of (i) voluntary waiver of a licence by a license holder; (ii) expiration of the term of a licence, unless the licensee timely filed an application for extension or transformation of the licence; (iii) carrying out works without a technical design document that has received all positive expert opinions and/or without a licence agreement for carrying out works; (iv) failure to timely eliminate the reasons for suspending the licence; (v) carrying out works related to subsoil use during the period of suspension of the licence; (vi) failure to provide information on beneficial owner(s) or provision of inaccurate information about beneficial owner(s) of the license holder.

License Transfer Rules

A license holder has a right to transfer a license to another party after two years from the date of execution of the license agreement to conduct respective subsoil use works. The transferor and transferee shall (i) guarantee to the Department of Geology that transferee accepts all obligations of the transferor provided in the license agreement; (ii) that there is no outstanding debt (arising from obligations to pay bonus, royalty and license retention fee). The decision to transfer of the license and issuance of a license on the name of the new license holder shall be adopted by the licensing commission under the Department of Geology. A commercial bank that foreclosed on a loan where the license was used as collateral may transfer the license to a third party without observing the two-year limit.

⁹³ Article 26, Subsoil Law of the Kyrgyz Republic (2018)

As transfer of a license requires *de facto* prior consent of the Department of Geology, the license holders in practice often transfer the shares in a company which holds a license because it does not require prior consent of the Department of Geology and only requires post transaction notification of change of ownership and beneficial owner as well as payment of the bonus.

Pledge over a subsoil use rights\license

A license holder has a right to pledge rights arising from the subsoil use license. License pledge agreement is subject to registration by the Department of Geology. The pledge holder may initiate a foreclosure of a license not earlier than 6 months from the date of the registration of the pledge over the license by the Department of Geology. In January 24, 2023, the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic submitted for public discussion a draft Law of the Kyrgyz Republic "On Amendments to Certain Legislative Acts of the Kyrgyz Republic (the Law of the Kyrgyz Republic "On Subsoil", the Law of the Kyrgyz Republic "On Pledge")", where the Ministry proposed to prohibit the pledge of a subsoil use license to a third party.

De Facto Performance (2.97)

Collection and Maintenance of Geological Information (3.14)

The score on this item mainly reflects that geological information is effectively collected and maintained while, on the other hand, access to it is problematic. Unlike the situation in many other countries such as Australia, Canada and Chile, where geological information held by the State is considered to be a public good that should be disseminated as freely and widely as possible in order to ensure its utilization by exploration companies and other interested parties in the interest of society as a whole, the legislation in the Kyrgyz Republic emphasizes the State's ownership to geological information and strives to maximize the State's income from it.

In the Kyrgyz Republic, pursuant to the Subsoil Law, geological, mining, technical, technological, economic information is considered state property. This includes information contained in geological reports, maps, samples, test reports and other materials on the geological structure and history of the development of the subsoil, as well as on the composition, properties and conditions of occurrence of rocks, groundwater, minerals and other geological formations. It also includes geophysical and geochemical data, including on methods and results, as well as information about the extracted mineral raw materials. As in other countries, geological information generated by subsoil users during the validity of their subsoil use rights is considered to be the property of the subsoil user; however, the ownership is transferred to the state, free of charge, after the termination of the subsoil use rights.

All subsoil users are required to submit annual and final geological reports in paper and electronic copies, including sampling databases with geo-references. The Department of Geology shall ensure the safety and confidentiality of information submitted by the subsoil users.

Access to geological information may be provided by the Department of Geology to subsoil users and other interested parties under the conditions and for a fee established in the Regulation on procedure and terms of granting access to geological information resources, approved by the Resolution of the Government dated March 17, 2014 No 144.

Original geological information resources can be reviewed only within the premises of the State Geological Information Fund. Some geological information may be regarded as state secret and subject to protection. It is not clear what the criteria are for information to be classified as secret.

Access to geological information resources is granted upon written request submitted in a form approved by the Government. By requesting access to geological information, the requesting party undertakes an obligation not to disclose the obtained information to third parties. All requests are subject to registration. The Geology Department decides whether or not to grant an access to the requested materials and the amount of fee payable for the requested information within 3 days.

Two types of access can be granted to the geological information:

- Introductory access without a right to make copies or recording of information
- User access with a right to copy geological information resources (except geological information related to license areas which are currently held by another subsoil users)

Access to geological information for state authorities and for educational\scientific research purposes shall be granted free of charge.

It is difficult to see how the system just described is consistent with economic efficiency. By making access to geological information costly and complicated the State effectively discourages exploration. Many countries that have reformed their system for dissemination of geological information in recent decades have opted for unrestricted on-line access to such information. Although theoretically they could make a profit from selling the information, as is done in the Kyrgyz Republic, they do not believe that commercial profits are a priority, and they also consider that open access to geological information encourages exploration and that future mines are likely to pay more in taxes than can be earned from selling the information. Accordingly, they usually have websites that list the available geological information and often provide on line access to it where feasible.

A mining industry respondent remarked that the Soviet geologists did an excellent job as far as geological mapping is concerned and that this work is still highly useful. However, industry respondents in general were less than fully satisfied with the way that geological information is accessed. It could be added that the geological mapping activity might be seen as even more useful if the plan for issuing of geological maps were made public.

In addition to geological information as such, most countries also make public and easily accessible the location and ownership of mining rights. The Kyrgyz Republic has a digital licensing database, which records the geographical location, ownership and time validity of mining rights. However, it is not GIS-based and it is not linked to the geoscientific information, much of which is not digitized. Moreover, while the EITI report for 2015-2017⁹⁵ provides a complete overview of statistical data on the distribution of licenses by type of work, information on auctions and tenders and the amount of proceeds from them, the number of licenses issued by years, production volume, etc., there are no such statistics on the relevant government agency's web portal

Effective License Allocation (2.98)

Industry respondents were somewhat critical in their assessment of the practical functioning of the licensing allocation process (the average score for industry respondents was 2.8, while it was 3.2

⁹⁴ This is the case in, for instance, Indonesia (https://geologi.esdm.go.id/geolindo), Kenya (https://ngdckenya.bgs.ac.uk/), Nigeria (https://ngsa.gov.ng/) and Tanzania (https://www.gmis-tanzania.com/).

⁹⁵ EITI report for 2015 – 2017 in Kyrgyz Republic

for government respondents). They attributed the lowest scores – although still above 2 - on items such as whether there are limits to discretionary power, if there is a preference for local companies, and if licenses are awarded to applicants that do not have the necessary technical and financial capacity. They gave high scores on items such as observation of timeframes and procedures. Thus, the relatively high score for the industry respondents appears to reflect their assessment that procedures are followed, while they seem to doubt that these procedures result in good outcomes. They point out that changes in the leadership of the state body responsible for licensing together with restructuring and lack of professional staff do not allow for stable and satisfactory work of the licensing commission. They also observe that the timelines for mining licenses are not always compatible with timelines for other permits, particularly at the local level. Finally, they note that state-owned companies are exempt from complying with licensing legislation.

Government respondents are more positive, although they note that many decisions are appealed.

Effective License Management (2.81)

Industry is critical of some aspects of the license management, including the time limits on exploration licenses. This seems to be a reasonable criticism, particularly since the license retention fee increases over time, which would appear to reduce the need for short time limits. This point is reinforced by the recent increases in the license retention fees.

Industry has also noted the recent legislative change that seems to eliminate the right for a company that holds an exploration license for a deposit of national importance and is in compliance with regulations to have first priority to obtain a mining license for the deposit.

Room for Improvement in "Contracts, Licenses and Exploration"

- The Kyrgyz Republic would do well to review the assumptions underlying its approach to licensing and geological information and to consider whether the approach responds to the evolving needs. When preparing a pre-licensing package of geological information (for companies to purchase), scanned versions of Soviet geological reports are used. The government has already granted licenses for most subsoil areas for which geological information is available (including indicated reserves and ore grades). However, large areas with preliminary or no resource estimates still exist, and they require further exploration work. The present system has worked reasonably well as long as the task was to find investors who were willing to bear the cost of developing deposits identified during the Soviet period. However, the country seems to be running out of such deposits and the need is now for a system that also encourages greenfield exploration for new deposits. Since the state lacks the resources, knowledge and technology to carry out extensive exploration, foreign investment in exploration needs to be encouraged.
- ♦ Possible reforms that could attract exploration companies to the Kyrgyz Republic include
 - a) complete the programme to digitize all geoscientific information with a view to placing all geological information that is not confidential, including information on licenses, on line with free access, and in a form that is compatible with other geocoded information, particularly the cadastre;
 - □ b) make prospecting licenses non-exclusive, in order to prevent any one prospector from monopolizing very large areas and to encourage prospecting;

c) clarify the rules concerning which deposits are considered of national importance and keep the number of such deposits to a minimum;
d) reserve competitions and auctions for well documented deposits;
e) reintroduce first-come, first-served license allocation and lift the moratorium on new exploration licenses;
f) remove time limits on licenses but retain escalating fees, although at a lower level than the one introduced in 2021;
g) forbid the issuing of an exploration or development license in an area with an existing mineral right of any kind;
h) define which aspects of the Technical Project are necessary and consider the possibility of making the requirements more flexible, while retaining the requirements for an environmental management plan and a safety plan, both of which should be approved by the competent authorities independently of the licensing process;
i) eliminate the possibility to grant the right to deposits by decision of the Cabinet of Ministers; and
j) eliminate any right to partial or full state ownership that is not paid for.

V.2 Mining Operations

For the purpose of this report, the "Mining Operations" component of the extractive industries value chain includes a look at such aspects as the processes for obtaining mining operation, environmental and sectoral permits; the effectiveness of environmental and social impact regulations; resettlement; artisanal and small-scale mining; health and safety; and mine closure.

De jure performance scored around average—with somewhat better performance for mining regulations and processes. There is considerable variation in the scoring of the underlying indicators—with scores ranging from "very high" to "very low".

Figure 8: Mining Operations—Indicators

	Indicators						
	Mining Legislation and Processes (3.70)						
	Land, Compensation and Resettlement Rules (2.00)						
De Jure Performance	Environmental and Social Impact Management (2.03)						
(2.67)	Artisanal and Small-Scale Mining (2.30)						
(=:5:7	Occupational Health and Safety (4.00)						
	Mine Closure and Financial Sureties for Decommissioning (1.98)						
	Land, Compensation and ResettlementPractice (2.19)						
	Environmental Impact (2.40)						
De Facto Performance	Social Impact (1.67)						
(2.36)	Support for Artisanal and Small-Scale Mining (2.20)						
(=:00)	Occupational Health and Safety (3.30)						
	Mine Closure and Financial Sureties for Decommissioning (2.4						

Mining Legislation and Processes (3.70)

Mining legislation, including the Subsoil Law itself, is often revised and amended. The first Subsoil Law came into force in 1992. It was replaced by a new law in 1997. A revised Subsoil Law was adopted in 2012, and it was amended in 2014 and 2017, before being succeeded by the 2018 Subsoil Law, which had been amended four times by April 2022. A recent change that appears to have attracted relatively little attention is that the State is now claiming ownership to tailings remaining from past operations. Since it is common for mine operators to return to tailings as a source of feed for concentration processes, this change could have a deleterious impact on project economics in many cases.

Every time the new Subsoil Law is adopted or amendments made to it, a large set of bylaws also have to be amended. Changes in legislation, often without a transition period to allow the mining companies to take necessary steps to adjust, are likely to have affected the mining industry and mining investor interest in the Kyrgyz Republic negatively.

Land, Compensation and Resettlement Rules (2.00)

When subsoil use rights are granted to companies such rights do not include land use (surface) rights. The subsoil users have to apply for and obtain land use (surface) rights after the issuance of the subsoil use rights (license, concession, PSA).

The procedures for securing land use rights are provided in the Subsoil Law, the Land Code and Regulation "On some questions of granting of land use rights for subsoil use purposes" approved by the Government Resolution on December 15, 2017 No 810.

Depending on the type of subsoil use the following land use rights are granted:

- for prospecting purposes, a written consent of the land owner and/or state authority where the subsoil use area is located is sufficient. Such consent shall be issued for the term of the license and permits the subsoil user to conduct prospecting or exploration works which do not cause damage to the surface. The consent does not require a subsoil user to pay land lease payments and shall be granted unless this area has already been granted to another subsoil user. It should be noted that having a consent to land does not grant to subsoil user an exclusive right to use the land and allows the use of the lands by any third party.
- for detailed exploration purposes and for mining the subsoil users shall obtain land use rights for the term of the license, enter into lease agreement and pay regular land lease payments.

Although, pursuant to the laws, the land owner is required to grant their consent and/or land use rights to a subsoil user and can refuse only if the requested area has been already granted to another subsoil user, in practice many subsoil users face difficulties in obtaining land use rights due to one or more of the following reasons:

- difficulties to determine who is the land owner authorized to grant land use rights and/or there is a dispute between several land owners, state and/or municipal authorities (village authorities, forest authorities) about the borders and land rights;

- the land is owned by private persons and they set commercially nonviable terms for subsoil users: 96
- due to existing and potential risk of opposition to exploration and mining activities the local authorities are reluctant (afraid) to issue their consent or land use rights to subsoil users.

In order to resolve the problem of securing land use rights by the license holders the Government and Mining Regulator made an attempt in 2012 to issue the land use/surface rights simultaneously with the subsoil use rights and made corresponding changes to the legislation. However, although the legislative changes were made, in practice they did not work, as the Mining Regulator did not have access to the national unified registers of land plots and did not have human capacity to grant land use rights together with the license. At the same time state authorities responsible for maintaining the land cadaster and recording any land related transactions did not support the Mining Regulator's initiative. So the changes were overturned.

Pursuant to the law, if land owned by a private person is required for subsoil use purposes and the owner is not willing to voluntarily provide (i.e. enter into a lease contract) the subsoil user with a right to use the land for exploration or mining purposes, the state may, through a court decision, expropriate the land with a compensation for the cost of the land and by providing an equal piece of land elsewhere.

The Kyrgyz Republic does not have specific regulations on resettlement. Since the majority of mine sites are located outside settled areas there are no known cases of mass resettlement projects in the Kyrgyz mining sector. There have been cases of individual resettlement cases where companies have independently negotiated a buyout of a property (houses, land plots) required for mining purposes. In non-mining related projects, such as large road construction projects, the project implementers have used ADB or other international institutions resettlement rules taking into account general Kyrgyz rules on land, expropriation of private property for public interest/needs.

Environmental and Social Impact Management (2.03)

Activities of all subsoil users are subject to the following environmental laws:

- **Law on Environmental Protection** (1999) establishes the mechanisms through which the government preserves the ecosystem. In the Kyrgyz Republic those are setting the norms for pollutants, fees and punishments for violations and special protection of state nature reserves.
- **Law on Environmental Expertise** (1999) specifies the principles and the procedure for environmental expertise and lists the documents which must be reviewed by the government and the public prior to the start of operations at the license area/mine.

Prospecting, exploration and mining companies, after the receipt of the subsoil use license, and prior to commencing on site works must develop a technical project for prospecting, exploration or mining which among other things shall contain a section on environmental protection. Such a technical project contains information about the license area, type and volume of works to be conducted, and technology and equipment to be used. The environmental section of the technical project shall have a description of any negative environmental and social impacts of the project and

⁹⁶ There are provisions for expropriation in such cases, but authorities or the exploration/mining company may be reluctant to use them until all alternatives are exhausted.

recommendations on how to exclude/minimize or mitigate the existing or potential risks. Before its implementation, the technical project is subject to state review and approval in a form of positive state expert opinions for compliance with rational use of subsoil, mining safety and environmental safety legislation.

As part of the process of drafting of the environmental section of the technical project and securing a positive state expert opinion for compliance of the project with environmental legislation the subsoil user shall conduct an environmental impact assessment (EIA).

The Regulation on procedure of conducting environmental impact assessments in the Kyrgyz Republic (approved by the Government Resolution dated February 13, 2015 No 60) establishes a step by step description of EIA process. This process provides for no formal stakeholder engagement or feedback. Instead, any member of the public, including public associations and local authorities, can request a public review. The public review is self-funded by the public and provides a forum for stakeholder input. The public can request the same information submitted to the state, but the public review must be completed within one month, must be published in the media, and is merely advisory to the state process. ⁹⁷ There is an obligation for the advice from the public review to be noted in the state decision, but no formal requirement to do anything other than acknowledge the process occurred. In addition, as a public review can be called by any member of the public, it is possible for multiple disjointed reviews to be conducted.

There are no laws regulating or establishing requirements on conducting a social impact analysis. In the absence of a clear legal requirement to conduct social impact analysis subsoil users do not conduct or produce SIA reports. However, in practice some large project operators might address in their EIA reports social impacts of the project and provide such assessment/reporting.

The Kyrgyz Government, in particular the Ministry of Natural Resources and its predecessors, have previously expressed the need and readiness to develop an Ecological (Environmental Protection) Code with an aim to codify and update the environmental legal acts in line with best international standards. However, no such Code has yet been drafted and adopted. Meanwhile, it is perhaps indicative that as far as is publicly known, no mining project in Kyrgyzstan has ever been cancelled as a result of the EIA not being approved. Neither has proposed technology ever been changed as the result of the environmental permitting process. Finally, it deserves to be noted that the number of companies certified to carry out EIAs in the Kyrgyz Republic is very small. These companies have a significant influence on how environmental legislation is translated into practice. The isolation of Kyrgyz standards from those of the rest of the world provides these companies with a considerable competitive advantage.

Artisanal and Small-Scale Mining (2.30)

Individual Placer Miners⁹⁸

Activities of individual placer miners are regulated by the Subsoil Law (2018) and Regulation on individual placer miners, approved by the Government Resolution dated July 23, 2015 No 524.

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⁹⁷ EIA Law, Articles 14-17.

⁹⁸ It seems that since artisanal miners in the Kyrgyz Republic are mainly or only mining alluvial or placer deposits of gold, the term placer miners has been adopted to describe them.

Individual placer miners are required to register and pay a fixed tax amount. The regional state authority (akimiat) issues a registration certificate with one-year validity period for a specific area. The regional state authority provides the register of individual placer miners registered in its territory to the Department of Geology which is then supposed to establish a unified national register of individual placer miners. However, no such register is established or published by the Department of Geology.

Area size per placer miner shall not exceed 500 meters along the river floodplain or a maximum of 0,5 hectares. In addition to the certificate issued by the local state authorities, the placer miner shall obtain a written consent of the land owner.

Placer miners can operate in all areas, except those:

- included in the State Cadastre of deposits and prospective areas
- where prospecting, exploration or development licenses for placer gold have been issued
- where applications have been submitted for prospecting, exploration or development licenses for placer gold
- where ore waste dumps or tailings are located;
- with proven reserves
- special protected territories (national parks, nature reserves, cultural and historical heritage sites etc)
- state border areas, interstate rivers with special status.

The Geology Department is responsible for informing the regional state authorities which issue certificates to placer miners about territories available for placer miners.

Individual placer miners are prohibited to use chemicals and must follow environmental, technical and fire safety rules. They shall ensure the security of collected placer gold and submit annual reports about work to the local state authority. Each local state authority shall forward these reports to the Department of Geology. Failure to comply with the above requirements may lead to suspension of the certificate of the individual placer miner, whereas compliance with the rules and requirements serves as a ground for securing a right of an individual placer miner for the next year or a new area.

The individual placer miners have the right to sell gold at authorized at special purchase points organized by the state. Placer miner rights are non-transferable.

Small-Scale Mining

The Kyrgyz laws do not generally differentiate between small- and large-scale mining. With the exception of extraction of sand and gravel, loams, all license holders irrespective of the size of the license area, type of resources are subject to same licensing rules, tax regime.

Occupational Health and Safety (4.00)

Requirements concerning occupational health and safety are established in the Labour Code of 2004 and the Law on Labour Protection of 2003. Kyrgyz labour legislation requires employers, including in the mining sector, to take all measures to guarantee safety of life and health of employees while performing their duties. Such measures include legal, social and economic measures, organizational

and technical, sanitary and hygiene, medical, preventive, rehabilitation and other measures. Employers must provide employees with a safe work place and protective gear and obtain mandatory insurance coverage.

Mine Closure and Financial Sureties for Decommissioning (1.98)

Upon termination of subsoil use rights, the license area and mining property, including the mine, are subject to rehabilitation. According to the Subsoil Law the subsoil user is responsible for developing and implementing a conservation or liquidation technical project, that is, a closure plan. However, plans for rehabilitation do not form part of the EIA but are handled separately.

When work starts in the license area (at any stage of exploration and mining), the subsoil users are required to set up a special rehabilitation account in a Kyrgyz bank and make quarterly payments in order to accumulate funds for future rehabilitation of the mining area. Mining companies determine the amounts themselves. When mining ceases, the funds from this account are used to cover land rehabilitation and mine closure expenses. After the amendments to the Subsoil Law introduced in June 2021 the special accounts are to be held only in the banks determined by the Cabinet of Ministers of the Kyrgyz Republic. At present the Cabinet of Ministers has determined that the rehabilitation funds shall be transferred to and held at one of the two state owned banks OJSC "RSK" and OJSC "Ayil Bank".

The Ministry of Emergency Situations is responsible for the monitoring of rehabilitation activities. Its main focus is however on the rehabilitation of legacy uranium mining sites.

The Kyrgyz Republic does not have any legislation addressing the remediation and management of legacy contaminated sites. Former licensees remain liable for closure obligations, but this does not ensure the mines are properly closed, nor is it of assistance for legacy projects.

The European Union and the European Bank for Reconstruction and Development have signed multilateral framework agreements with the Kyrgyz Republic, Tajikistan and Uzbekistan. Based on these agreements a strategic master plan was published by the International Atomic Energy Agency (IAEA) and European Commission in May 2018. The plan defined the priority uranium legacy sites and the estimated cost of the remediation work. The total cost of remediating the identified seven sites in Central Asia is estimated at around EUR85 million, with Kyrgyzstan's Mailuu-Suu site representing about EUR30 million of the total.⁹⁹ In the Kyrgyz Republic, the Ministry for Emergency Situations is responsible for the administration of the programme.

De Facto Performance (2.36)

Land, Compensation and Resettlement (2.19)

The low score on this subject reflects mainly that, according to civil society respondents, the practice does not follow the legislation. There appears to be a general sentiment that the responsible government agencies are indifferent to problems. A similar sentiment is expressed in a comment by industry to the effect that companies have to deal themselves with any problems arising from disagreements with local communities and that the government is absent.

⁹⁹ World Nuclear News, EBRD calls for funding to progress Central Asian legacy clean-up, 13 November 2019.

Environmental Impact Management (2.40)

Concerning monitoring, industry notes that there are many contradictions between regulations and claims that the state interprets regulations in their favor and does not try to eliminate such problems by amending the laws.

All companies that were interviewed noted that the situation in the mining sector had deteriorated significantly in 2018-2019. Companies overwhelmingly stressed the need to reduce the number of unjustified inspections by the Kyrgyz controlling authorities. Almost every company interviewed at the time was involved in several litigation cases, including cases where it is claimed that government agencies were persecuting company employees.

Government respondents noted that under the present legislation, environmental documents were not approved before mining rights were accorded.

Civil society respondents gave low scores for the way the institutions charged with monitoring and enforcing environmental law are carrying out their task and with the public availability and accessibility of EIAs and EMMPs. They are not satisfied with monitoring and claim that mining companies solve their environmental issues through bribes to government officials. Local communities often complain about the supervisory authority of the eco-technical inspection, saying that they do not check at all and just come for kickbacks.

Civil society respondents also point to the practical difficulties of obtaining EIA documents. Even if somebody submits a written request for a copy of a particular EIA to the Ministry, the Ministry's response may only concern the Ministry's decision and it will share neither the EIA nor the summary EIA as it is the responsibility of the company to disclose it on its own website. Civil society respondents assert that while large mining companies may provide for something on the issue of EIA at a mine, they do not do so always, and small companies do not even think about it, since this is a financially costly business, and everything is decided through bribes to officials. They also observe that companies present and provide an EIA at the beginning of their activity, but later it is practically difficult for activists to get this document. Government respondents agreed with these criticisms of the present system.

Finally, civil society respondents note that Emergency Preparedness Plans are not always available as required by law.

Social Impact Management (1.67)

As has been noted, the Kyrgyz Republic has no specific legislation requiring Social Impact Assessments (SIAs) or Social Impact Management Plans (SIMPs). The low score reflects this absence. However, some companies do carry out SIAs, although civil society comments hint that they do so only grudgingly and that the quality is not necessarily high.

Support for Artisanal and Small-Scale Mining (2.20)

Civil society comments indicate that artisanal mining is common in some areas. Health and environmental precautions are often not observed. Moreover, artisanal miners are not explicitly obliged to rehabilitate mined out areas, which has in some cases led to conflicts with local communities. Mechanisms for resolving disputes with large scale mining work less than satisfactorily, and there are examples of large companies having been obliged to suspend operations

due to conflicts with artisanal miners, although some large companies make an effort to find mutually acceptable solutions. For example, after the collapse of the Soviet Union, local groups began extracting antimony in Terek Sai using artisanal methods. The arrival of companies with mining licenses led the local population to be denied access to the mines that had been their main source of livelihood for the past 20 years. ¹⁰⁰

Occupational Health and Safety (3.30)

It is notable that the number of accidents in the mining industry of the Kyrgyz Republic is high in an international perspective, with 10-15 fatalities per year according to trade union representatives. The lower number corresponds to 0.5 fatalities per million of hours worked (based on the number of people employed in mining in the Kyrgyz Republic in 2019 and assuming 1600 hours of work per year). The same year, member companies of the International Council on Mining & Metals (ICMM)¹⁰¹ reported 0.118 fatalities per million hours worked. It should be noted that 2019 was an unusually severe year in terms of fatalities; in 2018, the number was 0.022 per million of hours worked.¹⁰²

There is a grievance mechanism, but opinions on how well it works are divided, with at least one civil society respondent claiming that "all complaints dissolve in the bureaucratic offices of thieving officials and dishonest employees of mining companies. Perhaps occasionally they are solved, but this is a minuscule, a drop in the ocean."

Mine Closure and Financial Sureties for Decommissioning (2.41)

An industry respondent noted that all work on closure and reclamation is accepted by a commission created by the local state administration with the participation of representatives of the local state administration, local government, territorial administration of the authorized state body for environmental and technical safety, authorized state body for cadastre and registration of rights to real estate, on whose territory the reclaimed object is located, and the subsoil user, as well as the owner of land rights, if it is not a local government body.

According to industry respondents, government agencies carry out scheduled and unscheduled inspections. However, most of the state bodies, including bodies in the field of subsoil use and ecology, are undergoing a reorganization stage. Over the past year, the authorized body in the field of subsoil use has changed its name and status several times and has been transferred to the jurisdiction of two different ministries.

Civil society respondents state that mining companies perform reclamation activities very negligently and that they do not adhere to the regulatory requirements of waste disposal. Corruption in the relevant agencies hampers monitoring and the legislation is ineffective since there are no serious consequences for companies that do not rehabilitate properly. Government respondents

¹⁰⁰ PeaceNexus, 2021. Conflict Management in the Mining Industry of the Kyrgyz Republic: Review of challenges and company practices

¹⁰¹ ICMM is an organization of large mining companies and mining industry associations. Its corporate members together account for one third of the global industry.

¹⁰² ICMM 2020. Safety data: Benchmarking progress of ICMM members in 2019. htps://www.icmm.com/website/publications/pdfs/health-and-safety/2020/benchmarking-safety-data-2019.pdf

agree that there is dissatisfaction with the way rehabilitation is carried out and note that closure and rehabilitation plans are not publicly available in practice.

It should be noted that the sums set aside for reclamation are very small. They are made in local currency, based on calculations of the cost of rehabilitation and mine closure made at the very beginning of the project. They are not updated or verified by government authorities, which raises fears that the funds may not be sufficient when the time comes to use them. Although the funds are located in escrow accounts they do not accrue interest. The recent requirement that the funds be transferred to banks which are owned by state may affect the security of the funds. If reclamation funds are not sufficient to cover the costs, there seems to be little possibility of recovering funds directly from the company responsible.

Finally, it should be noted that there are not yet any examples of land rehabilitation or mine closure that demonstrate the effectiveness or not of the legislation.

Room for Improvement in "Mining Operations"

- ♦ In the light of reported delays and conflicts over land use in connection with exploration, it would maybe be a good idea to resurrect the reform made in 2012, that is, to issue land use/surface rights simultaneously with the subsoil use rights and make corresponding changes to the legislation. This is more or less the procedure followed in most countries with respect to exploration, with the qualification that the landowner must receive compensation for any damage to the land. For the more intrusive work associated with mine development, most countries require the license holder to buy the land, through expropriation if necessary, as is also the case in the Kyrgyz Republic.
- ♦ The requirement that applicants for a development (mining) license have an approved mine design may have led to an unintended problem, with the fact that parts of the design document are confidential being used to block access to EIAs. It has already been observed that all legitimate interests can be protected without the design requirement. This problem provides another argument for making this requirement more flexible and focused on aspects that are in fact necessary to regulate, while accommodating the need for an EIA in separate legislation.
- ♦ Consultation around environmental issues, monitoring of environmental management and follow-up of commitments made in EIAs could clearly be improved. It has also been observed that the methods used by the public authorities need to be modernized in order to conform to international standards and practices.
- ♦ The lack of an explicit requirement for an SIA is problematic. Its introduction would bring the Kyrgyz Republic in line with international best practice and might lead to a reduction in the number and severity of conflicts around mining projects by providing a framework for addressing conflicts.
- ♦ The high rate of fatalities in Kyrgyz mines is concerning and there would appear to be good reasons to undertake a major effort with a view to improving safety, including by training and more frequent and intrusive inspections.
- The legislation on rehabilitation of mined out areas and the financing of such work needs to be brought in line with international standards. In countries with good practice on

- reclamation, such as Canada, the financial requirements are reviewed regularly in order to ensure that the funds set aside are sufficient. 103
- ♦ A Strategic Environmental and Social Assessment (SESA) could be an appropriate next step due to the environmental and social issues highlighted by responses.

V.3 Taxation

The performance of the third EI value chain component ("Taxation") scores high with respect to de jure and low with respect to de facto performance. Noteworthy is the weak performance on "Tax Policy and Instruments" versus the much better performance with respect to "Mining Tax Administration" rules. It should be noted that respondents to the questionnaire could not take into account several recent changes in mining taxation. It is likely that these changes, had they been reflected, would have resulted in the score being significantly lower.

Figure 9: Taxation—Indicators

	Indicators					
De Jure Performance (2.93)	Tax Policy and Instruments (2.14)					
	Mining Tax Administration Rules (3.71)					
De Facto Performance	Mining Tax Administration (2.94)					
(2.47)	Mining Tax Auditing (2.00)					

De Jure Performance (2.93)

Tax Policy and Instruments (2.14)

Taxation in the Kyrgyz Republic is regulated by the Tax Code (2022). The Tax Code establishes taxes and the functions of tax authorities, including administration of taxes and tax audits.

Mining companies, with the exception of Kumtor Gold Mining CJSC, are subject to the general tax regime. They do not enjoy any tax credits, accelerated depreciation, or other tax or non-tax payments incentives. Accordingly, they are liable for standard corporate taxes provided in the Tax Code such as VAT (0% on commodity exports, 12% on most other products), profit tax (0% for gold producing companies, 10% for others), withholding tax (10% on all payments to non-resident

¹⁰³ For a review of the reclamation systems in Canada and a few other countries, see The International Institute for Sustainable Development, 2021. Global Review: Financial assurance governance for the post-mining transition. https://www.iisd.org/system/files/2021-09/financial-assurance-governance-for-post-mining-transition.pdf as well as the report by the World Bank specifically on the Kyrgyz Republic: World Bank, 2020. Mine Closure and Economic Regeneration Study: Kyrgyzstan.

¹⁰⁴ Kumtor has a special tax regime under which it pays 18% of sales revenue in various taxes including contribution to the regional development fund.

individuals or companies, including dividends and interest, royalties and payments for services provided in the Kyrgyz Republic), excise tax (rate defined per item), property tax (rates defined per type and characteristics of a property) and sales tax (0% to 5%). Transfer pricing rules have been introduced in the latest tax code (2022), allowing the tax authorities to review prices used by taxpayers in "controlled transactions". If the tax authorities establish that a taxpayer price differs from the market price, they are entitled to assess additional tax liabilities, late payment interest and penalties based on the market price. Of interest to exploration and mining companies is the fact that there is a provision for loss carry forward during five years. Such provisions are useful because they allow mining companies to deduct exploration expenditures (since during the exploration phase, companies often have little income from which to deduct this expenditure) and to even out the tax burden over several years.

In addition to the ordinary taxes, there are subsoil use specific taxes applicable to exploration and mining companies, including both subsoil use taxes and mandatory non-tax payments. The Kyrgyz Republic relies heavily on taxes levied on revenues rather than profits. According to one study based on the situation in 2018, the Kyrgyz Republic would be expected to collect almost 75 % of its tax revenue from a model gold mine from taxes on gross sales, whereas other countries would collect between 0 and 30% this way. 105

Subsoil use taxes

Bonus

Bonus is a one-time payment for the right to engage in mineral exploration and mining activities.

The different bases for calculation of the bonus include:

- for mining of a deposit (except groundwater) the amount of approved mineral reserves;
- for exploration and prospecting the size of the license area;
- in the event of a transfer of a license, the amount of remaining mineral reserves or existing size of the license area;
- in the event of change of ownership of the license holder the amount of mineral reserves that has not been mined at that time in accordance with mineral right holder's reports (mining rights) or the license area.

Bonus is paid upon issuance of a license, increase of the approved reserves, license area, the inclusion of additional mineral resources to the license, change of ownership due to change of shareholder, transfer and foreclosure of subsoil user rights. While we have no recent data on the size of bonuses, according to an earlier study¹⁰⁶ the bonus for the development (mining) license for a hard rock gold deposit with 2 tonnes of reserves was US\$ 120,000.

While it is normal practice in virtually all countries to levy a fee for the issuance of an exploration or mining license, such fees are usually set so as to cover administrative expenses only, unless the payment has been determined as the result of a competitive bidding process for a defined deposit. It is very unusual to link the fee to the amount of reserves. It is even more unusual to charge for an increase in the reserves. It is difficult to understand the underlying rationale unless you accept that

¹⁰⁵ D. Manley, 2018. An Economic Evaluation of Gold Mining Tax Regimes in the Kyrgyz Republic. Natural Resource

¹⁰⁶ Ernst & Young, 2018. Non-ferrous metals production and processing. The sector's total contribution to the economy of the Kyrgyz Republic and the effects of fiscal initiatives on it.

reserves that have not yet been exploited belong to the State and that if you want to exploit those augmented reserves you have to pay the State for them — even if they result from your own exploration efforts. Most investors would find it difficult to follow the logic of this reasoning.

Royalty

Royalty is a regular payment made by subsoil users engaged in production and/or extraction (recovery) of mineral resources.

The tax base for royalties is:

- revenue received from the sale of minerals in the case of their sale, or the cost of minerals before their processing, with the exception of gold, silver and platinum; or
- the cost of a chemically pure metal contained in a metal-containing ore or a concentrate of exchange metal sold in the tax period.

If the value of a chemically pure metal contained in a metal-containing ore or an exchange metal concentrate is lower than the revenue received from the sale of metal-containing ores and concentrates of exchange metals, then the revenue received from the sale of metal-containing ores and concentrates of exchange metals is used as the royalty tax base.

Royalty is paid on a monthly basis and is levied at the rates shown in table 6.

Table 6. Royalty rates

Mineral	Rate
Gold, silver and platinum	5%
Other metals	3%
Gypsum	6%
Natural stones used in the production	12%
of facing materials	
Bituminous and brown coal	1%
Other minerals	3%

Source: Tax code of the Kyrgyz Republic, Dated January 18, 2022 No. 3, article 359.

Income tax paid by gold producers

Activities related to the extraction and sale of gold-bearing ore, gold-bearing concentrate, gold alloy and refined gold are subject to a special income tax. ¹⁰⁷

The tax base of the income tax is:

- proceeds, excluding VAT and sales tax, received from the sale of gold alloy and/or refined gold;
- the cost of gold in gold-bearing ore and gold-bearing concentrate, calculated on the basis of world prices, in the manner prescribed by the Cabinet of Ministers

¹⁰⁷ In November 2022, the Government proposed extending the scope of this tax to copper, silver, mercury, antimony, tungsten, and tin. On October 26, 2022, the President signed a decree introducing a temporary ban for a period of six months on the export from the Kyrgyz Republic of gold-bearing ore and concentrate mined in the territory of the Kyrgyz Republic. The 90% Russian-owned company "Kara-Balta Mining Plant" was granted the exclusive right to process gold ore and gold concentrate mined in the territory of the Kyrgyz Republic. In January 2023 "Kara-Balta Mining Plant" initiated bankruptcy proceedings.

This tax is in fact a kind of progressive royalty which is levied at the rates shown in table 7. For gold in concentrate, a 7 per cent surcharge is added, so that the rate is 27 % when the gold price is above USD 2500/oz.

Table 7. Rates of gold income tax

Tax rate for gold alloy and refined gold, %	Tax rate for gold concentrate, until 2023, %	Tax rate for gold concentrate, from 2023, %				
1	8	11				
3	10	13				
5	12	15				
7	14	17				
9	16	19				
11	18	21				
13	20	23				
14	21	24				
15	22	25				
16	23	26				
17	24	27				
18	25	28				
19	16	29				
20	27	30				
	refined gold, % 1 3 5 7 9 11 13 14 15 16 17 18	refined gold, % 1 8 3 10 5 12 7 14 9 16 11 18 13 20 14 21 15 22 16 23 17 24 18 25				

Source: Tax Code of the Kyrgyz Republic, Dated January 18, 2022 No. 3, Article 245

If there are other minerals in the gold-bearing concentrate, their production and sale is subject to general profit tax. It is not clear how costs are allocated between the different minerals in the concentrate and therefore, how the income tax for other minerals is to be calculated. Another unclear point is whether the royalty can be deducted when calculating the income tax, as is the case in most countries.

The gold income tax does not differ in principle from progressive royalties that are applied in a number of countries. It is maybe unusual insofar as it is higher than royalties in many other countries, but the level has to be seen also in relation to the rest of the taxation burden. Since companies that pay the gold income tax do not pay the normal profit tax the level is not as high as

it could seem. In fact, if the gold income tax had come into force in 2012, and assuming for the sake of simplicity that it would have been based on annual rather than monthly averages, it would have been levied at a rate of 1% half of the time (see Figure 10).

Rate (left hand scale, %) Gold price (right hand scale, \$/oz)

Figure 10: Theoretical rate of the gold income tax, calculated on the basis of average annual gold price

Sources: Author's calculations on the basis of Tax Code of the Kyrgyz Republic, Dated January 18, 2022 No. 3, article 245, and London Bullion Market Association.

It can be argued, however, that there are two problems with the gold income tax.

First, it is levied on top of the royalty, which means that for large mines, the minimum rate is 6% rather than 1% and the top rate is 25% rather than 20%. For concentrate exporters, the top rate would be 35% from 2023.

Second, and most important, the economic justification for the additional export tax on concentrates is not obvious. There is considerable excess capacity in gold refining in the world and it is a competitive industry with no indications of monopoly profits except where mines are legally required to use a particular refinery. Accordingly, there would not seem to be any immediate economic benefits to the industry associated with requiring miners to refine gold in the country. Table 8 compares the average unit value of Kyrgyz gold exports and the London bullion price. Differences between the two values are most likely explained by variations in price during the course of a year. However, there is no indication of Kyrgyz gold exports receiving less than a fair price before the introduction of the export tax on concentrates. It is of course possible that Kyrgyzaltyn receives a significant income from refining fees. If that is the case, that income should be considered a tax on the industry and its usefulness should be assessed in relation to other taxes.

Table 8. Export unit value of Kyrgyz gold exports and London bullion price, USD/oz

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Export unit value	1693	1361	1249	1183	1260	1260	1262	1392	1748	1771
London bullion price, annual average	1669	1410	1266	1160	1250	1258	1269	1394	1771	1799

Sources: Author's calculations based on UN Comtrade and London Bullion Market Association

Note: Export unit value is calculated by dividing the value of total Kyrgyz exports of unwrought non-monetary gold (Harmonized System 710812) with the volume of the exports.

In principle, there are of course other possible arguments in favour of the export tax, for instance, that it may increase employment. However, although the number of employees in Kyrgyzaltyn's refinery is not known, as a basis for comparison it can be noted that one of the world's largest gold refineries, Valcambi in Switzerland, with a capacity of 2000 tonnes of gold per year or 100 times the annual production of the Kyrgyzaltyn refinery, has 168 employees. ¹⁰⁸ According to information received, the Kyrgyzaltyn refinery has about 200 employees. It would appear that the employment creation objective has been given exceptional weight, at the expense of other objectives.

The requirement to refine gold containing concentrates constrains mining companies' choice of refining services and may expose them to both risks and additional costs. During the period September 2021 to May 2022, gold from Kyrgyzaltyn was not certified as "Good Delivery" by the London Bullion Market Association due to its failing to meet the Association's responsible sourcing standards. The issue was resolved in May 2022, but during the period when its product was not recognized as Good Delivery, Kyrgyzaltyn had to accept a discount on the price received. At least part of the discount had to be borne by gold mining companies in the Kyrgyz Republic. Although the discount imposed on these companies was low, USS 10/oz according to industry sources, or less than 1 per cent of the price, it did constitute an economic cost. More seriously, companies producing concentrates that cannot be handled by the Kyrgyzaltyn refinery, because of impurities or because they are sulphide concentrates containing gold and copper, also have to pay the export tax. Although the tax is reimbursed if the gold that is refined elsewhere is returned to the Kyrgyz Republic and sold to the National Bank, the companies still have to pay extra transport and other transaction costs. Moreover, while it might be possible to make a case – although it is unclear on what grounds - for the export tax in the case of other gold mines who are able to refine their gold in Kyrgyzaltyn's refinery, for mines with complex concentrates the tax does not provide any meaningful incentive.

In conclusion, it is difficult to find any economic justification at all for the export tax on gold concentrates and there are several reasons to abolish it.

Non-tax fees

One of the most important of the non-tax fees is the license retention fee, which is paid in order to retain an exploration or mining license. Traditionally, like in most other countries, these fees have been relatively low, although the exploration license fee increased over time in order to deter licensees from blocking large areas; again, this is common practice in many countries. In September 2021 the Cabinet of Ministers without any consultations increased the license retention fees dramatically. The highest rates were applied to prospecting and exploration companies. Many companies were unable or unwilling to pay the new rates and turned in their licenses. Pursuant to the Geology Department over 100 licenses were turned in voluntarily, and a large number of

¹⁰⁸ https://www.valcambi.com/about-us/at-a-glance/

¹⁰⁹ In the case of one company, the fee for exploration licenses increased from 11.6 million soms to 194.4 million (US\$ 2.4 million), while the fee for mining licenses went from 0.9 million to 61.5 million soms (US\$ 0.8 million), source: personal communication.

companies downsized their license areas. Many are currently waiting and have not paid license fees since October 2021 because the Government has promised to revise the new rates. If the Government does not reduce the new rates more companies will turn in their licenses and possibly abandon their projects. The reasons for the dramatic increases in fees have not been explained.

At the same time, fees for power and water were increased by substantial amounts. The increases appeared to have been decided without consideration of the cumulative impact of all the increases in non-tax fees, and without close coordination between the different agencies involved. The increase in water fees were due to the introduction of a new system for calculating the fees. Some uses are exempt from fees, notably households and agriculture. The system for setting electricity tariffs was also changed. A basic tariff of 252 tyiyn/kWh was established and different sectoral adjustments were defined. For the mining industry, the basic tariff is multiplied by 2, the same as for production facilities for alcohol, double the corresponding adjustment factor for industry in general. It

Stabilization of tax regime

The Tax Code does not provide for stabilization of taxes. However, Article 2 of the Investment Law grants stabilization of taxes and non-tax mandatory payments to a qualified investor and invested entity 10-year stabilization from the date of execution of the stabilization agreement. Mining companies which invest at least 20 million USD into its charter capital qualify for execution of the stabilization agreement with the Government of the Kyrgyz Republic. 112

There is only one example of a tax stabilization agreement between a mining company and the Government. It is not clear however whether or not the investor was able to exercise its rights granted in the stabilization agreement. ¹¹³ A new Investment Law is under preparation. It is not clear if it will provide for tax stabilization. The availability of tax stabilization can be a decisive factor for an investor in mining, given the very long life of the investment and the payback period. The fact that tax legislation in the Kyrgyz Republic has changed very frequently in recent years means that the possibility of obtaining stability becomes even more important to investors. It would therefore seem important to retain this option.

Mining Tax Administration Rules (3.71)

Mining taxes are collected and administered by the State Tax Service. The State Tax Service implements the tax policy determined by the Ministry of Economy and Commerce and is authorized to organize and control collection of taxes and submission of reports. It also conducts tax audits, both desk audits and on site audits, including of mining companies. The State Tax Service may

¹¹⁰ The procedure for determining and collecting fees for the use of surface water resources in the Kyrgyz Republic. Resolution of the Cabinet of Ministers of the Kyrgyz Republic dated October 18, 2021 No. 222.

¹¹¹ Medium-term tariff policy of the Kyrgyz Republic for electricity for 2021-2025. Application to the Resolution of the Cabinet of Ministers of the Kyrgyz Republic dated September 30, 2021 No. 192. As amended by the Resolution of the Cabinet of Ministers of the Kyrgyz Republic dated December 10, 2021 No. 299, December 23, 2021 No. 328, April 8, 2022 No. 198.

¹¹² Article 2, Law of the Kyrgyz Republic "On investments in the Kyrgyz Republic" dated March 27, 2003 No 66;

¹¹³ Ministry of Economy of the Kyrgyz Republic (2019). The First Agreement on the Stabilization Regime was Signed between the Government of the Kyrgyz Republic with Chaarat Gold Holdings Limited and Zaav Holdings Limited. Available at: http://www.mineconom.gov.kg/ru/post/6132 (Accessed November 2021).

¹¹⁴ State Tax Service (undated). Available at: https://sti.gov.kg/. (Accessed November 2021).

initiate a tax audit solely on the basis of a statement from a law enforcement body or other state authority. Failure to pay taxes fully and in a timely manner may be regarded as tax evasion which, depending on the amount of the unpaid tax, may subject the taxpayer (its responsible officers: CEO, chief accountant etc.) to criminal charges and punishment.

De Facto Performance (2.47)

Mining Tax Administration (2.94)

There were several comments from industry noting, among other things, that over the past two years, tax legislation and legislation in the field of non-tax income have undergone major changes in terms of rates. When the rates were raised, no analysis or monitoring was carried out. A significant part of subsoil users simply could not justify such expenses and had to give up their license. At the same time, changes are being made to the Law of the Kyrgyz Republic "On Investments", maybe leading to changes in or the abolition of the stabilization regime. It appeared to respondents that Jogorku Kenesh (the parliament) is doing everything possible to destroy the extractive industry.

As regards the consultative process, neither in the process of initiating nor adopting changes were the views and suggestions of the representatives of the mining industry taken into account. The legislation provides for public discussion of the draft of the adopted normative legal act relating to the sphere of entrepreneurship. Unfortunately, the process is not always followed.

It was also felt that it was difficult to obtain guidance from the authorities on tax matters. Often, the subsoil user itself has to apply for the interpretation of the regulatory act to the tax authorities for confirmation or clarification.

Mining Tax Auditing (2.00)

The scoring under this item is based on interviews with Government. The respondents confirm that systematic auditing takes place. The relatively low score reflects the absence of specific legislation concerning transfer pricing and thin capitalization which means that audits of these aspects cannot take place.

Room for Improvement in "Taxation"

- ♦ There would seem to be a general need to consider more in depth the objectives of mining taxation and the best ways to achieve those objectives. At present, it appears that sometimes one piece of legislation is contradicted by another piece.
- ♦ The Government should consider abolishing the bonus for obtaining licenses. The bonus increases the upfront costs of obtaining an exploration or mining license without making a significant contribution to fiscal revenue. Replacing it by any measure that results in the collection of a similar amount later in the life of the mine would probably generate more revenue, due to increased attractiveness of conditions for exploration.

- ♦ Royalties should be levied at a uniform rate. There is no economic justification for levying different rates of royalties on different minerals. 115
- ♦ The gold income tax needs to be adapted to better take into account the situation of mines with several value minerals and clarify their tax obligations.
- ♦ The export tax on gold concentrate should be abolished since it has no meaningful purpose and damages the business of mines with complex concentrates.
- ♦ The appropriate level of non-tax fees should be assessed. While there is a legitimate objective in having license fees that rise over time so that explorers do not monopolize large areas indefinitely, fees should not be set at a level that deters exploration. Fees for water and power should not discriminate against any particular industry.
- ♦ The option of stabilizing the tax regime as well as other regulatory regimes should be retained in the Investment Law currently being finalized. In view of the Kyrgyz Republic's history of frequent regulatory changes, this option is probably necessary in order to attract investment.
- ♦ Future legislation on mine taxation would benefit from more systematic and inclusive consultation with industry.

V.4 Revenue Distribution and Management

The performance is very uneven in this stage of the value chain ("Revenue Distribution and Management"). While revenue sharing was rated "very high" in terms of both de jure and de facto performance, fiscal stabilization was rated "very low" in both dimensions. Performance with respect to resource revenue transparency is in the "high" range.

Figure 11: Revenue Distribution and Management--Indicators

Indicators

De Jure Performance (2.25)	Revenue Sharing Rules (3.50)				
	Fiscal Stabilization Rules (1.00)				
De Facto	Revenue Sharing Arrangements (4.00)				
Performance (2.79)	Fiscal Stabilization (1.50)				
	Resource Revenue Transparency (2.88)				

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¹¹⁵ There is in fact little economic rationale behind levying any royalties at all since they increase costs and result in the sterilization of resources that would otherwise be exploited. However, since basing mining taxation exclusively on profit related taxes may require more resources for auditing than most Governments are prepared to pay, most countries have chosen to let royalties play a part in their mining taxation system since they are relatively easy to collect.

De Jure Performance (2.25)

Revenue Sharing Rules (3.50)

Subsoil users pay the following types of tax and non-tax revenues to local budgets:

- Property tax. 116
- License retention fee, unless otherwise provided by the Non-Tax Revenues Code. 117
- Income tax paid by the withholding agent; 118

In addition, since 2014, mining companies also pay 2 per cent of their sales to the Regional Development Funds (RDFs). For deposits included in the Register of subsoil plots of national importance, approved by the Cabinet of Ministers of the Kyrgyz Republic, distributions are made in the following order:

- 50 percent to the regional development fund;
- 30 percent to the district development fund;
- 20 percent to the relevant local budgets at the location of the mineral deposit.

For deposits not included in the Register of subsoil plots of national importance, distributions are made as follows:

- 80 percent to the district development fund;
- 20 percent to the relevant local budgets at the location of the mineral deposit.

As noted in the latest EITI report, it is not clear, however, how the government calculates the allocation of the money from the Treasury to separate regional and district funds. 120

In order to increase the transparency of these distributions the Ministry of finance has developed the web site https://fond.okmot.kg/fund_portal/view/main.xhtml where information on revenues and expenditures of RDFs is disclosed. Unfortunately, the web portal for RDFs, where information on submitted, approved and implemented projects should be disclosed, has still not been developed.

Fiscal Stabilization Rules (1.00)

Somewhat surprisingly in view of the country's dependence on gold exports and the consequent exposure to price fluctuations, the Kyrgyz Republic has no fiscal stabilization rule and no sovereign fund intended to smooth out variations in fiscal income or provide a cushion for a future time when commodity export income might fall. The National Bank takes expectations about gold prices into account when determining its monetary policy but there is no explicit decision rule. The fact that the other main sources of external revenues – revenues from exports to Russia and Kazakhstan, and remittances from Kyrgyz citizens working in those two countries – may be equally unstable,

¹¹⁶ Article 37 and Chapter XIII of Tax Code, December 22, 2021.

¹¹⁷ Article 154 Non-tax revenues Code.

¹¹⁸ Article 10 of Republican Budget Law on 2022 mentioned that 100% of the income tax paid by the withholding agent should be paid to the budgets of cities and aiyl aimaks.

¹¹⁹ Article 128 of Chapter 46 of Non-tax revenues Code.

¹²⁰ EITI. 2020. Second Validation of the Kyrgyz Republic: Final Assessment by the EITI International Secretariat. [Online]. https://eiti.org/kyrgyz-republic.

underlines the potential precarity of the Kyrgyz external balance. The National Bank targets the exchange rate and attempts to maintain its stability, but does not explicitly target the inflation rate, although this may be changing.

De Facto Performance (2.79)

Revenue Sharing (4.00)

No substantive comments were received on this item. Generally, from interviews carried out it appears that greater transparency around payments would be useful but that the system is working reasonably well. However, the reported lack of transparency may reflect that local government authorities do not inform actively about the fact that a given community investment is financed by the Regional Development Fund. It is also necessary to take into account that the results of some investments may only be visible with a considerable delay, and that positive impacts may be unevenly distributed geographically.

Fiscal Stabilization (1.50)

In the absence of fiscal stabilization rules or a fiscal policy that attempts to offset or alleviate stresses due to fluctuating commodity prices, the burden of adaption falls on monetary policy. In this context, it deserves to be noted that the IMF expressed some reservations regarding the National Bank's policy of exchange rate targeting as in the Staff Report for the 2019 Article IV Consultations:

"The importance the authorities attach to the stability of the exchange rate is understandable, considering the weight of imported goods in the consumer price index (35 percent), the still high dollarization, and the high share of foreign exchange-denominated debt in total public debt. However, limiting interventions solely to smoothing excessive fluctuations the NBKR would help the economy adjust to external shocks through the exchange rate channel, correct the currency's overvaluation and foster export diversification." ¹²¹

Later, in 2021, IMF has welcomed the central bank's intention to adopt an inflation targeting framework over the medium-term and its commitment to maintaining exchange rate flexibility as a shock absorber. 122

Resource Revenue Transparency (2.88)

There were no substantive comments received under this heading. The Kyrgyz Republic was suspended from the EITI in 2017 due to a lack of improvement in transparency initiatives and concerns about a continued lack of transparency in some licensing processes. Corrective action began in late 2018, which should mean that shortcomings in revenue transparency will receive attention on the part of the government.

The Kyrgyz Republic was among the first countries to join the Extractive Industries' Transparency Initiative (EITI): the country declared its EITI membership in 2004 and achieved compliance status

¹²¹ IMF, 2019. Kyrgyz Republic. 2019 article IV consultation – staff report.

¹²² IMF, 2021. Kyrgyz Republic. 2021 article IV consultation – press release.

in 2010. However, since 2014, after EITI reports continuously demonstrated little discrepancies between official tax data and payments reported by companies (primarily Kumtor) and international financial support for EITI decreased, the government's participation in the initiative declined ¹²³ Subsequently, in 2017 the country lost its compliance status. After the second assessment took place in 2019, the country improved its standing, but must implement nine corrective actions on transparency of licensing, state participation in the sector and local payments, among other requirements, before the spring of 2023 to sustain its EITI membership. ¹²⁴ The latest available report, published in 2022, covers data up to 2020.

Notably, the Kyrgyz Republic discloses payments of all entities to the state budget in real time since 2007 through the Open Budget portal (budget.okmot.kg). Using the Individual Taxpayer number of a legal entity, it is possible to view payments of taxes, non-tax payments and fines paid to the State Treasury. According to the 2019 Budget Transparency Index, Kyrgyzstan scored 63 points for budget transparency out of 100 possible, ranking below Russia and above Kazakhstan and Turkey. Due to the suspension of work of the Open Budget portal in 2019-2020 explained by database renovations, the ranking in budget transparency may change.

The interviewees gave a medium score for Revenue Transparency management.

Room for Improvement in "Revenue Distribution and Management"

- ♦ There is room for improvement in the provision of information on spending by Regional Development Funds. Civil society has called for more detailed reporting of expenditures. The lack of precise information also makes it more difficult to assess the effectiveness of the expenditures.
- ♦ It is important that the Kyrgyz Republic confirms its commitment to the EITI process and that efforts to improve transparency continue.
- ♦ It would probably be in the interest of medium term financial stability for the government to adopt mechanisms for fiscal planning that take variations in the gold price into account. It is also worth considering the establishment of a sovereign wealth fund using fiscal revenues from gold mining.

V.5 Local Impact

This section looks at the rules and policies and their enforcement with regard to the local impact of mining in the Kyrgyz Republic. It is the lowest scoring stage of the EI value chain—with a "very low" score on overall de jure performance as a result of largely non-existing rules on local content and CSR. De facto performance overall scores \higher, but performance is uneven at the indicator stage.

¹²³ EITI. 2020. Second Validation of the Kyrgyz Republic: Final Assessment by the EITI International Secretariat. [Online]. https://eiti.org/kyrgyz-republic.

 ^{124 &}quot;Kyrgyz Republic has made meaningful progress with considerable improvements in implementing the 2016 Standard"
 https://eiti.org/board-decisions/kyrgyz-republic-has-made-meaningful-progress-considerable-improvements-implementing
 125 The Budget Transparency Index assesses eight budget documents: budget resolution; draft state budget; approved state budget; citizens' budget; Monthly reports; Semi-annual review of budget execution; Annual report; Audit report.

Figure 12: Local Impact--Indicators

	Indicators
	Local Content Rules (1.00)
De Jure Performance	Employment Policies (2.20)
(1.74)	Rules on Community Engagement (2.74)
	CSR and Social IssuesRules (1.00)
	Local Supplier Development (2.37)
De Facto Performance	Employment (2.64)
(2.30)	Community Engagement (2.23)
	CSR and Social Issues (1.95)

De Jure Performance (1.74) Local Content Rules (1.00)

There are no local content requirements set by the legislation except for the following:

- The Law on production sharing agreements establishes local content requirements by requiring employment of foreign nationals only at the initial work stages, employing at least 80% of workers among Kyrgyz citizens, give priority to Kyrgyz service and goods providers, and purchase equipment from Kyrgyz entities sharing equipment cost 50/50 between Kyrgyz and foreign suppliers. However, since adoption of this Law no PSA has been executed:
- The Law on precious metals and stones¹²⁶ and Law on oil & gas¹²⁷ contains an internal marketing requirement applicable to sale of previous metals and stones, oil & gas.
- the competition or auction commissions, when determining the terms of competition or auction for a specific deposit\license area may include a requirement on minimum Kyrgyz-foreign citizens' employment ratio, prioritizing employment from residential areas near the license area, or a requirement to source a certain percent of goods and services made in the Kyrgyz Republic

The possibility of tightening the rules concerning local content has been discussed in connection with the debate on a new Mining Code. In June 2022, the Parliament approved amendments to the Law "On Subsoil" according to which mining companies must purchase at least 80 percent of goods and services in the territory of the Kyrgyz Republic, with the exception of obligations under international treaties that have entered into force for the Kyrgyz Republic, as well as in cases where such goods or services are not produced in the territory of the Kyrgyz Republic.

The compatibility of the strengthened regulations with the Kyrgyz Republic's commitments and obligations as a member of the WTO and of the Eurasian Economic Union (EAEU) has been

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¹²⁶ Article 8, Law of the Kyrgyz Republic "On precious metals and precious stones" dated May 14, 1998 No 61

¹²⁷ Article 21, Law of the Kyrgyz Republic "On oil and gas" dated June 8, 1998 No 77. It should be noted that Article 21 of the Law refers to a priority right to purchase oil & gas by the state established by Article 21 of the Subsoil Law of 1997 which is no longer effective. Currently effective Subsoil Law of 2018 does not contain an internal marketing requirement for oil & gas or other minerals.

questioned. 128 Specifically, attention has been drawn to the need to apply the requirements of the Kyrgyz Republic in such a way that they do not conflict with Article III of the GATT / WTO, concerning the national regime of domestic taxation and regulation. In addition, Section XV of the Treaty on the EAEU and the Protocol to the Treaty on the EAEU (Annex No. 16 to the Treaty) on trade in services, establishment, operation and investment are designed to ensure freedom of trade in services within the Eurasian Economic Union. In addition, by Article 66 of the Treaty on the EAEU, the Member States undertook not to introduce new discriminatory measures against trade in services, establishment and activities of persons of other Member States in comparison with the regime in force on the date of entry into force of the Treaty.

Employment Policies (2.20)

The Kyrgyz laws do not establish special rules applicable to exploration and mining companies. Mining companies, like any other employers in the Kyrgyz Republic, are governed by the provisions of the Labour Code (2004).

The Labour Code governs the relationship between employers and employees, prohibits any form of discrimination, sets minimum requirements applicable to employment contracts, payments, rights to leave, exhausted list of grounds for termination, procedure for setting up unions and entering into collective agreements among employers, professional unions and employees.

Subsoil users who seek to hire foreign employees shall secure a quota per company and obtain an individual work permit for each foreign employee on an annual basis.

As many subsoil users conduct activities in remote areas in high altitude their employees are entitled to higher employment compensations and social benefits. 129

As in the case of local content, the possibility of tightening the rules concerning employment of local people has been discussed in connection with the debate on a new Mining Code. In July 2022 the code was revised to say that at least 90 percent of employees from the total staffing number involved in work on the territory of the Kyrgyz Republic must be citizens of the Kyrgyz Republic, unless otherwise provided by the norms of international treaties that have entered into force for the Kyrgyz Republic.

Rules on Community Engagement (2.74)

Local communities, often via their representative bodies (local state authorities, local self-governance authorities) are engaged

at the subsoil use granting stage, when members of local communities are invited to take
part in the competition commission or auction commissions which adopt decisions on
issuance of mining rights to the participants of the competition or auctions as provided in
the Subsoil Law;

¹²⁸ International Business Council, 2022. Package of recommendations for the draft Code of the Kyrgyz Republic "On Subsoil" and conceptual proposals of the International Business Council for further improvement of the mining sector of the Kyrgyz Republic. Bishkek.

¹²⁹ Government Resolution On providing state support to persons living and working at high altitude and remote areas of the Kyrgyz Republic dated June 25, 1997 No 377.

- when land use rights are granted to subsoil users which have obtained mining rights, pursuant to the Land Code;
- during the public consultations required for the EIA.

Social Package

In 2010-2012 the conflicts between the companies and local communities peaked in the Kyrgyz Republic. One of the tools used to address the issue was the introduction in 2012 of social package agreements.

At present the social package is defined as a voluntary agreement between a subsoil user and a local self-government body aimed at promoting the social and economic development of the region where a deposit/license area of the national importance is located. The agreement shall be drafted taking into account the regional social and economic development program of the relevant territory. There is no model agreement.

The agreement is commonly drafted by the subsoil users and presented for review and signature to the local authorities. While drafting the terms of the agreement the subsoil user must take into account the Regional social and economic development program of the relevant territory to be developed by local authorities. However, in practice, usually no such Program has been developed by regional authorities.

The agreement contains obligations of the subsoil users to invest certain amounts in specific projects (defined during the agreement discussions and negotiation stage) into various social and economic projects aimed at improving the living conditions of the local community. Such projects include educational training, employment of the local population, infrastructure and other construction projects.

A copy of the social package agreement must be submitted to the Department of Geology with annual reporting required on investments made and projects implemented. The Subsoil Law also requires the Department of Geology to publish social package agreement texts with annual reports on its website.

Despite the fact that the law requires social package agreements to be signed only for deposits of national importance, most other license holders, small or large, also volunteer to sign social package agreements with local authorities in order to formalize their investments in the local community irrespective of the existence of the formal agreement.

The investment made into the social package agreement by the holder of the right to the deposits of national importance is defined by the competition commission when determining the competition terms. All other license holders, who are not obliged by law to enter into social package agreements are free to determine by themselves the size and types of the social package investments.

CSR and Social Issues (1.00)

There are no mandatory CSR requirements applicable to exploration and mining companies. However, the intentions behind the social package are very similar to those underlying most CSR programmes. One obvious criticism of the social package is that it is defined at the beginning of the project and that there are no mandatory provisions for updating or revisions. It is not either

totally clear how the relationship between the social package and the contribution to regional development is intended to work in practice.

De Facto Performance (2.30)

Local Supplier Development (2.37)

Industry comments on this point stress that local suppliers are used as much as possible. The wording of the 2021 decree seems to mean that purchases from local representatives of foreign enterprises would count as local content, in which case it should not be difficult for companies to comply with the 80% requirement. According to interviews carried out in connection with a recent study:

"Most mining companies noted the challenges of implementing local procurement in villages, as the underdevelopment of entrepreneurship in rural areas has resulted in a lack of skilled labour and a very limited market for goods and services. While local procurement is most often conducted as a part of community investment programmes and in the context of conflict mitigation, no concrete steps are taken to ensure its effectiveness." ¹³⁰

The most advanced local procurement programme is probably the one operated by Kumtor. According to the company's website¹³¹, Kyrgyz suppliers account for 25% of Kumtor's total purchases of goods and services. From an international perspective, this is however not a very impressive proportion. The company does have several initiatives in place, including advertising requirements in local newspapers and on the company website; procurement presentations; and identifying items currently procured internationally for possible local procurement. The website does not mention training or other efforts to raise the capacity of suppliers.

The company gives priority to majority Kyrgyz-owned businesses and, where possible, it supports firms that are located closest to the mine. However, it takes care not to build new supplying capacity at the local and/or regional level when there are already adequate suppliers in the country.

Employment (2.64)

In response to suggestions made in the context of a new Subsoil Law about raising the share of local employees to 90%, industry has argued that such a requirement is only realistic during the production stage but is not possible during the period of design, construction and commissioning.¹³²

Regarding employment opportunities for women, opinions differ between companies and civil society respondents. The latter note that it is very rare to see women in the mining industry, especially in the mines themselves. They believe that the rules prohibiting the employment of women in certain types of work should be revised to reflect current trends.

¹³⁰ PeaceNexus, 2021. Conflict Management in the Mining Industry of the Kyrgyz Republic: Review of challenges and company practices.

Kumtor, undated. Local procurement. https://www.kumtor.kg/en/local-procurement/

¹³² International Business Council, 2022. Package of recommendations for the draft Code of the Kyrgyz Republic "On Subsoil" and conceptual proposals of the International Business Council for further improvement of the mining sector of the Kyrgyz Republic. Bishkek.

Industry respondents on the other hand argue that mining is an extremely difficult and dangerous work, and women are represented in administrative and economic activities.

Community Engagement (2.23)

There have been many instances of conflicts, sometimes violent, between mining companies and local communities in the Kyrgyz Republic. Many of the conflicts have concerned Chinese companies. Since 2010, gold mining has been a source of deep contention among the nearby communities who have expressed grievances about the scale of Chinese mining operations, perceived corruption, the lack of transparency, and discrimination against hiring local residents as well as environmental degradation linked to mining activities. Additionally, local residents complain about Chinese companies being opaque and lacking transparency in terms of working practices towards their employees. Opposition to Chinese-owned or -funded mining operations has grown considerably in the country. 133

A study that has already been referred to 134 found that Chinese companies often comply with the demands of local communities and authorities to ensure the smooth running of the company. However, this does not help reduce conflict at the local level, as companies often lack experienced managers who can understand and tailor their communication strategies to the local context and dynamics.

Civil society respondents are not satisfied with community engagement practices. Community development agreements that go further than the social package exist, but only between large mining companies and local authorities. The respondents note, however, that mining companies hold public hearings at an early stage in order to obtain a so-called social license. But once the initial stage is over, negotiations are conducted with the local authorities and local deputies, and meetings and hearings are not held regularly.

Participation of women is another issue which attracted comments. Respondents note that few women are present in the field, at meetings and public hearings. Women are either MPs or representatives of NGOs who participate in meetings and discussions. According to respondents, due to the absence of women at such meetings, problems with drinking water, local procurement, and education of children are not solved, and funding is spent on gyms and football fields or for major repairs of incomprehensible buildings. Also, women who are hired by companies are vulnerable on many issues ranging from poor working conditions and low wages to harassment at work.

CSR and Social Issues (1.95)

Conflicts over the provision of services in mining communities should be seen against the historical background of the Soviet period. During that period, mining companies were expected to take responsibility for almost all aspects of its employees' lives, including health care, education, vacation facilities, sports and cultural activities. In older mining communities, in particular, inhabitants may still expect the mining company to assume this wide range of responsibilities, and

¹³³ S. Furstenberg and K. Toktomushev, 2021. Understanding Gold Mining and Social Conflicts in Kyrgyzstan. University of Central Asia. Working Paper #63.

¹³⁴ PeaceNexus, 2021. Conflict Management in the Mining Industry of the Kyrgyz Republic: Review of challenges and company practices.

the company's unwillingness to do so may cause disappointment. In some cases, mining companies, in particular large ones with substantial resources, may attempt to meet at least some of the expectations. Comments by civil society respondents indicate that health services are better in mining communities with large mining companies, otherwise not. The same applies to education services.

As could be expected, Kumtor, as the largest mining company and the one that is likely to have been most exposed to modern thinking about CSR, has the most ambitious CSR programme. It abides by the Strategy of Sustainable Development of the Issyk-Kul Region, which includes the following four components:

- development of agricultural sector;
- support for the growth and diversity of small and medium-sized businesses;
- collaboration with young people in the region and support for educational initiatives;
- environment.

The company aims to ensure that by the end of operation every project or initiative now supported by Kumtor can become independent, viable and beneficial to local budgets and communities.

Current projects include support to irrigation, access to potable water, local business initiatives, rehabilitation of pasture roads and support to community owned projects such as the creation of nature reserves.¹³⁵

Industry respondents underline problems with staff turnover leading to a lack of continuity in cooperation and that cooperation may lead to blackmail by "activists" in order to obtain personal benefits from companies.

Room for Improvement in "Local Impact"

- It should first be noted that the large number of conflicts, often violent, that have taken place around mining in the Kyrgyz Republic, have led to a situation where local communities have a de facto veto over new projects. However, once mines are in operation, the influence exercised by local communities declines, sometimes leading to disappointment and frustration. There are no simple solutions to this problem, although an essential part of any solution is likely to include a strengthening of the central government's capacity to act as an honest broker, something which requires the buildup of trust.
- ♦ Simple measures can be taken by most mining companies in order to enhance their contributions to the local economy. They include training and capacity building, particularly of enterprises that can evolve into significant local suppliers, and support to local community efforts in the areas of education and health. Companies also need to introduce or strengthen procedures for addressing grievances from local communities.
- Care should be taken that measures introduced with a view to supporting local employment and procurement from local enterprises by mining companies do not damage competitiveness. Moreover, such measures should be designed to avoid both circumvention by, for instance, counting purchasing from local representatives of foreign companies as local procurement, and the creation of protected local monopolies. With respect to local

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¹³⁵ Kumtor, undated. Community Development Projects. https://www.kumtor.kg/en/social-responsibility/community-development-projects/

- employment, requirements should come into effect only when the mine begins operation, in order to allow sufficient time for the training of local employees.
- ♦ There is room for improving processes for citizen engagement in order to enhance a dialogue between local communities, government at different levels and the mining sector.
- Although WTO disputes over local content rules are rare, care should be taken to formulate any rules in such a way as to minimize the risk of conflict with either WTO or EAEU regulations.

VI. Stakeholder Priorities

The analysis in Sections IV and V has treated every topic and each indicator equally. In giving a simple listing of shortcomings, the analysis overlooks an important aspect: some problems are more important than others. They either have a larger impact (positive or negative) on the functioning of the mining sector or they are perceived as indispensable areas that require reforms. The analysis of stakeholder priorities in this section is a first step towards identifying the topics that should be considered priorities, as seen through the eyes of the three main stakeholder groups in the mining sector: government, industry, and civil society.

During the interview phase of the MSD, all respondents were asked to identify their top priorities for the sector. Specifically, they received the voting template reproduced in Annex III, and each respondent picked the topics evaluated in the MSD that they considered most important. Each respondent was given 100 "votes" and asked to assign these votes across those indicators that in their view were priorities and required special attention. Priority areas were defined as areas where reforms would be most likely to significantly improve the functioning of the sector with the aim of increasing its contribution to overall sustainable development. It should be noted that by definition each possible priority area is an indicator in the MSD framework.

The stakeholders' votes were standardized to 100 per respondent, giving equal weight to each respondent. The responses were then aggregated for each stakeholder group. The following table shows the top ten priorities for each sector (Figure 13). The table also gives the score for each priority topic. Some of the priorities picked by the three stakeholder groups scored low on the MSD analysis, coinciding with areas where room for improvement has been identified. However, there are also several higher-scoring topics among the top priorities.

For industry respondents, almost 30 percent of all votes cast fell on two priority areas—mining legislation and processes as well as mining taxation. Government respondents placed 35 percent of all votes on their first two priorities—mining legislation and resource revenue transparency. There is considerably more dispersion on the priorities identified by civil society.

Priority areas are also unequally distributed along the EI value chain; they are mostly concentrated in stage II ("Mining Operations") and stage V ("Local Impact").

Figure 13: Top Stakeholder Priorities

Topic	Votes (%)	Votes (% Cumula tive)	Scores	
			De Jure	De Facto
Ca., a managa				
Governmer	IT			
Mining Legislation and Processes	23%	23%	3.70	
Resource Revenue Transparency	12%	35%	3.70	2.88
Intra-Governmental Coordination	10%	45%	2.43	
License Allocation	8%	53%	3.26	2.98
Social Impact Management	8%	62%		1.67
Sector Policy	7%	68%	2.33	
Sector Dialogue	7%	75%	2.42	
License Management and Transfer	7%	82%	3.38	2.97
Industry				
Mining Legislation and Processes	18%	18%	3.70	
Sector Policy	10%	28%	2.33	
Tax Policy and Instruments	9%	36%	2.22	
License Management and Transfer	8%	44%	3.38	2.97
Revenue Sharing	7%	51%	3.50	4.00
License Allocation	5%	56%	3.26	2.98
Employment	5%	61%	2.20	2.64
Local Content/Local Supplier Development	4%	65%	1.00	2.37
Civil Societ	У	T		
License Management and Transfer	00/	00/	2.20	2.07
License Management and Transfer	8%	8% 15%	3.38	2.97
Environemental Impact Management	7%	15%	2.02	2.43
Local Content/Local Supplier Development	7%	22%	1.00	2.37
Intra-Governmental Coordination	7%	29%	2.43	2 27
Collection and Maintenance of Geological Info		35%	2.26	3.27
License Allocation	6%	41%	3.26	2.98
Sector Policy	5%	46%	2.33	
Tax Policy and Instruments	5%	51%	2.22	

The Venn diagram below (Figure 14) provides information on shared priorities by illustrating where the top priorities overlap among stakeholder groups. There is limited overlap regarding the priorities of the three stakeholder groups—with the notable exception of four shared priorities between industry and civil society respondents.

- All three stakeholder groups identify "License Allocation" as one of their Top-8 priorities, even though it is not on the top of anyone's list.
- Government and industry have one shared priority area—Mining Legislation and Processes—and it is also the top priority for both of these stakeholder groups.
- Government and civil society both view Intragovernmental Coordination as a top priority. It does, however, only gather 7-10% of total votes.
- Industry and civil society have four areas that they both consider priorities—Sector Policy, License Management and Transfer, Tax Policy, and Local Content.

While shared priorities and provide a starting point for a fruitful dialogue, one also needs to keep in mind that the actual concerns of one stakeholder groups within an area can be very different from those of another stakeholder group—so there might be disagreement on specifics hiding behind agreement on a broad area.

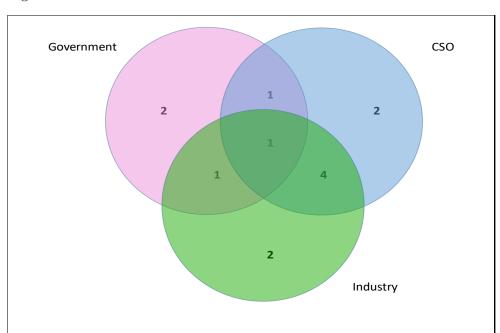


Figure 14: Shared Stakeholder Priorities

VII. Strengths, Challenges, and Reform Agenda

This section concludes the report by noting the current strengths - where the rules are in line with good international practice and where there are competent and capable institutions. It then outlines the main medium- and long-term challenges and concludes by proposing a set of necessary improvements that could go onto a mining sector reform agenda that includes, firstly, policy improvements, and secondly, reinforcement of institutional performance and management.

VII.1 Strengths

The Kyrgyz Republic has a geology that is relatively favourable for mineral occurrences. The geology is also well documented and there is a wealth of geological information that can be made available to explorers.

Like many other countries, the Kyrgyz Republic has experienced conflict, sometimes violent, around mining projects and their impact on local communities. However, these conflicts have for the most part been resolved with solutions eventually accepted by all groups involved, and in the process, government and mining companies have learned valuable lessons. The lively debate that surrounds mining projects and mining legislation should be seen as evidence that the public is concerned and interested and as an indication that through constructive dialogue, solutions can be found.

VII.2 Challenges

The Kyrgyz Republic does, however, also face a number of serious challenges that arise from the important role that mining plays in its economy.

The most important challenge is that the country's economy remains dependent on export revenues from mining with little sign of diversification, while at the same time the prospects of maintaining production volumes in the industry over the long term are increasingly worrying.

Very little has been done in public finance terms to counteract the dependence on mining exports, which means that the economy remains vulnerable to market price fluctuations as well as to any disturbances affecting supply. As a landlocked mountainous country with a small population and important gaps in infrastructure, the Kyrgyz Republic has few readily available diversification alternatives. This makes it all the more important to ensure that the mining sector contributes to the maximum of its potential to the development of the national economy.

The continued dependence on mining is a serious concern not least because question marks surround the ability of the main producer, Kumtor, to maintain its recent level of production. The change of ownership should not necessarily affect production, but managing a large gold mine may place strains on the new manager, Kyrgyzaltyn's capacity. This would not be a major cause of concern if other mines could offset any production loss at Kumtor. However, this is clearly not the case. Prospects for maintaining or increasing national production are unfavourably affected by the apparent depletion of the stock of well documented commercially viable deposits that can be brought into production rapidly. Intensified exploration would alleviate the concerns but this would require attracting international investors. Kyrgyz taxpayers cannot be expected to finance risky ventures like mineral exploration and the demand for experienced and qualified staff to carry out exploration would in any case exceed the national supply.

But with few exceptions, there is no sign of international investors taking an interest in exploration in the Kyrgyz Republic. On the contrary, the country's image among such investors is very negative, due to perceptions of political and regulatory instability and recent regulatory changes that are seen as adverse to investment.

The first challenge for the Kyrgyz Republic is to create an environment where international companies will be willing and anxious to commit resources to explore and develop mineral deposits. The reform agenda outlined in the following contains a few ideas for initiating the creation of this environment.

The second challenge is to put in place mechanisms for consultation, mediation and dialogue that ensure positive and inclusive development in mining areas, including the buildup of a diversified local economy that provides good jobs, thus favouring the emergence of an environment where economic development can take place around mining. In this context, it is also important to address the environmental legacies of past mining activities, which have contributed to undermining trust in environmental management associated with mining.

The third challenge is to manage fiscal and monetary policy in such a way as to improve the resiliency of the economy to external shocks while retaining the emphasis on mining as a driver of economic growth.

VII. 3 Reform Agenda

This Mining Sector Diagnostic has identified areas with room for improvement, whether in the rules or in their implementation. Summarized below are our main recommendations for improvement arising from this report. They are organized into three groups which respond to the three challenges just described.

Make mining in the Kyrgyz Republic attractive to foreign investors

Foreign investment in exploration and mine development is necessary to maintain and increase the contribution of mining to the Kyrgyz economy. Making investment in the Kyrgyz Republic more attractive without reducing government revenue from mining, and probably increasing it, involves reforms in five thematic areas:

- 1) Making licensing and geological information more accessible by
 - a. Digitizing all information that is not already digitized
 - b. Providing access to all non-confidential information online free of charge
- 2) Reforming licensing allocation rules and procedures by
 - a. Only using auctions and competitions for assets that are well documented from
 a geological viewpoint and making the route prospecting license exploration
 license development license the default procedure
 - b. Make licenses valid for all minerals found in the license area or excluding areas with existing licenses from new ones
 - c. Eliminate license allocation to state companies by decision of the Cabinet of Ministers
- 3) Restructuring taxes and non-tax fees by
 - a. Abolishing the bonus payment except as an element of bids for a deposit that is auctioned.

- b. Charging the same tax on gold exports irrespective of the form in which the metal is exported
- c. Streamline and lower royalties
- d. Lower license retention fees but retain the escalating fee structure
- e. Strengthening transfer pricing and thin capitalization rules
- f. Streamlining power and water fees and eliminating any discriminatory pricing between industries
- 4) Clarifying the role and extent of state ownership by
 - a. Clarifying that the state share is always paid for
 - b. Formulating a strategy for state owned mining companies
 - c. Drawing up rules for state ownership and the relationship between the state as a shareholder and mining companies, strengthen the role of the State Property Fund
- 5) Providing assurance of stability by
 - a. Clearly defining the conditions for tax stabilization agreements and setting out clear dispute resolution mechanisms
 - b. Providing clear guarantees on international arbitration options in the new Investment Law

Strengthen positive local impacts and build credibility with local communities

Conflicts between local communities and mining companies have hindered projects in the Kyrgyz Republic and act as constraints on the benefits that can accrue to communities by undermining confidence. A more productive dialogue would produce better outcomes. Reforms include the following:

- 1) A more inclusive permitting process where local communities are provided the means to influence solutions proposed in EIAs
- 2) The introduction of mandatory Social Impact Statements as part of the EIA
- 3) The merger of the EIA and rehabilitation procedures, with the rehabilitation procedures to include more time for a proper consultation, with a year being a preferably minimum standard under good international industry practice.
- 4) The development of a methodology for estimating rehabilitation costs based on fair market value and mechanisms to ensure regular monitoring and review with financial assurances to be required for all projects and a portion of closure costs to be fully secured upon permitting, with the balance of the actual closure costs being required within two to five years of the start of operations.
- 5) Consider means and mechanisms for addressing environmental legacies of past mining activity.
- 6) As part of the SIA, require companies to prepare plans for training of local people and for interaction with local businesses.
- 7) The processes for citizen engagement need to be developed in order to enhance a dialogue between local communities, government at different levels and the mining sector.

Improve the resilience of the Kyrgyz economy

In order to enable the Kyrgyz economy to better withstand shocks emanating from international commodity markets or domestic supply disruptions, we recommend that

- 1) The Government reviews the possibility of setting up a sovereign wealth fund by allocating larger than projected government revenues from mining to a fund consisting entirely of foreign assets and managed by independent trustees. Such a fund would need to be ruled by a framework that defines the relationship between the fund and the government and could be complemented by a fiscal rule of the type that is used in other countries in similar situations.
- 2) A joint Government/industry programme of economic diversification around mining is launched, with a view to building capacity and competitiveness in all the industries servicing mining.

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%D0%BF%D1%80%D0%B5%D0%B4%D0%BF%D1%80%D0%B8%D0%BD%D0%B8%D0%BC%D0%B0%D1%82/ (accessed November 2021).

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ANNEXES

Annex I: MSD Methodology - Brief Description 136

The MSD is a diagnostic tool which comprehensively assesses a country's mining sector. As a systematic and practical diagnostic tool, it informs objectively. Specifically, the MSD analyses the rules and policies that govern a country's mining sector and the gap between these rules and their actual implementation. It also looks at the overarching policy framework as well as the institutional arrangements governing the sector, and evaluates the quality of stakeholder dialogue and of coordination among government institutions involved in the sector. The MSD reviews sector performance from the perspective of three main stakeholder groups—government, investors in the mining value chain ("industry") and civil society.

MSD presents mining sector management and performance along the EI value chain in the form of the MSD dashboard (see Figure 4 in the main text). The dashboard shows the 14 topics and their aggregate scoring.

Each topic (i.e., each cell in the dashboard) is composed of one or more indicators. The actual MSD assessment is performed through a combination of desk research and in-country interviews—all of which use detailed questionnaires. Desk research uses primary data which consists mostly of domestic laws, regulations and similar documentation that are being reviewed to determine the *de jure* performance of the mining sector. In-country interviews with a range of stakeholders are used to assess the *de facto* performance of the mining sector.

The full MSD questionnaire consists of a total of 308 questions. All questions are designed to be fact-based and independently verifiable, actionable by governments, and comparable across countries. The questionnaire is structured around the topics listed in the dashboard. Figure 3 below lists all 14 topics and 38 indicators in the order in which they appear in the questionnaire. The table also shows how many questions (broken down by information source) are used to develop each indicator.

Respondents answer the questions in their questionnaire by picking one answer from a range of answer choices provided. In addition to that, respondents have the opportunity to make comments which can be used to explain a particular answer choice and/or provide more background, examples, etc.

Data Sources

Each question is based on a well-defined data source—primary or interview. Questions based on primary data are mainly concerned with the existence of legally binding provisions and the extent to which these provisions are consistent with internationally accepted "good practice".¹³⁷ Primary questions are answered by the MSD assessment team—typically with the assistance of a person who is familiar with the legal and regulatory framework in the specific country. Primary questions are answered based on published official documents (laws, regulations, implementing guidelines) and other publicly available sources. Answers to primary questions are backed up with supporting evidence in the form of links to documents or notes explaining relevant provisions.

In-country interviews are used to assess the deviation of *de facto* practice from *de jure* practice, specifically the extent to which *de facto* practice measures up against the country's own goals. In addition, the in-country interviews are used to assess the capacity of existing institutions as well as the extent to which respondents from all three stakeholder groups are satisfied with existing practices. In many instances, similar questions are posed to all three stakeholder groups to ascertain differing views and assessments. Questions used in in-

¹³⁶ A fuller description of the MSD methodology can be found on the MSD website.

¹³⁷ The primary source for internationally accepted "good practice", is the <u>EI Sourcebook</u> (Cameron, Peter D. and Michael C. Stanley: "Oil, Gas, and Mining—A Sourcebook for Understanding the Extractive Industries", The World Bank Group, 2017. Internationally accepted "good practice" captures knowledge based "a critical review of the many country and regional case studies, elaborations of general principles, published models, and recent research" (page 55/56 of the Sourcebook). It should not be confused with the outdated standard of "best international practice" which refers to the strict application of an ideal "model" without any regard for specific country context.

country interviews are answered by subject-area experts in government, industry, and civil society.

There are several types of questions in the MSD questionnaire. First, questions can be either simple or compound questions—the latter being defined as "umbrella" questions that are comprised of a list of subquestions. Second, questions can also be classified depending on their answer choices. Some questions have dichotomous answer choices, typically requiring either a "Yes" or "No" answer. Other questions have more granular answer choices—either to allow differentiated answer more (e.g., Always/Often/Sometimes/Never) to express satisfaction on a scale (e.g., Very satisfied/Satisfied/Dissatisfied/Very Dissatisfied). 138

Scoring

The MSD uses a scoring scale from 1 (lowest) to 4 (highest). For primary questions (which concern de jure performance) a score of "4" signifies full compliance with good international practice. For secondary questions, a score of "4" signifies either full compliance between implementation and the country's policy or complete satisfaction of relevant stakeholders with implementation and/or performance of a particular government entity. There is no subjectivity involved in the scoring process—once answers have been provided to questionnaires, scoring is automatic as explained below.

The answer to each question is translated into a score ranging from 1 to 4. For all primary and interview questions, scores are derived from the answer(s) provided to the question (or list of sub-questions). The following table shows the scores that apply to some of the most common answer choices.

Figure	1:	Scoring	Guidance ¹³⁹
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Score	Dichotomous	Frequency	Satisfaction Scale	Applicability
4	Yes	Always or almost always	Very satisfied	Fully
3		Often (more than half of the time)	Satisfied	
2.5				Partially
2		Sometimes (less than half of the time)	Dissatisfied	
1	No	Never of rarely	Very dissatisfied	Not at all

For compound questions, the score for the "umbrella" question is the average of the sub-question scores. If no answer is provided for a question or sub-question, it is marked "N/A" and is excluded from further aggregation, i.e., it does not enter into the calculation of the question (if applicable), indicator, and topic scores.

For interview questions with multiple respondents the final question score is arrived at by averaging the question scores from individual respondents. In cases where several government entities provide answers to the same question, the final score might require some judgement in terms of the "relevance" of the response which will need to be made on a case-by-case basis. In some cases, the answer from the responsible government entity will be the primary determinant of the score if it may be assumed that other government entities lack relevant information. However, if it may be assumed that other government agencies can provide

¹³⁸ The answers to the MSD questionnaire are compiled in an EXCEL spreadsheet—the so-called "MSD tool". For each question, the EXCEL spreadsheet contains drop-down menus with answer choices.

¹³⁹ The table assumes that positive answers (e.g., "Yes" or "Always") should be scored high. However, for some questions the scoring scale needs to be reversed as positive answers indicate problematic issues.

relevant input (the question on the capacity of a particular government agency might be a good example here), an adjustment might be made. In many other cases, though, it is reasonable to average the answers from a range of government respondents. Averaging would apply, for example, to questions about coordination and views on the overall policy framework.

The scores of individual questions are then aggregated into the indicator they comprise. Where there are multiple indicators for a topic, indicators are aggregated to create topic scores. At each level, aggregation occurs through simple arithmetic averages, with each question or indicator receiving equal weight. As a result, each indicator and topic is also associated with a score between 1 and 4. The scores are then divided into four equal ranges: Very high (>3.25-4.0), High (>2.50-3.25), Low (>1.75-2.50) and Very low (1.0-1.75)—see Figure 2 which also shows the MSD color coding scheme.

Figure 2: Interpretation of Indicator and Topic Scores

Score	Interpretation of Topic and Indicator Scores
>3.25 - 4.0	Very high
>2.50 - 3.25	High
>1.75 - 2.50	Low
1.0 - 1.75	Very low
N/A	Not sufficient information or not applicable

Figure 3: Structure of the MSD

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Number	Topics and Indicators	Primary	Interview	Total
Α	Mining Sector Management	10	40	50
A1	Sector Policy	2	9	11
A2	Sector Dialogue	2	14	16
А3	Roles and Responsibilities	6	3	9
A4	Intra-Governmental Coordination	0	14	14
В1	Rules for License Allocation, Oversight, and Transfer	16	0	16
B1.1	License Allocation Rules	10	0	10
B1.2	License Management and Transfer Rules	6	0	6
	Collection/Maintenance of Geological Information and Effective License Allocation			
C1	and Management	2	40	42
C1.1	Collection and Maintenance of Geological Information	2	14	16
C1.2	Effective License Allocation	0	15	15
C1.3	Effective License Management	0	11	11
	Mining Legislation/Processes, Land/Compensation/Resettlement, Environmental			
B2	and Social Impact Management, ASM, OHSA, Mine ClosureRules	40	1	41
B2.1	Mining Legislation and Processes	4	1	5
B2.1 B2.2		4	0	4
B2.2 B2.3	Land, Compensation and Resettlement Rules	4 17	0	4 17
B2.3 B2.4	Environmental and Social Impact Management	6	0	6
B2.4 B2.5	Artisanal and Small-Scale Mining	2	0	2
	Occupational Health and Safety		0	7
B2.6	Mine Closure and Financial Sureties for Decommissioning Land/Compensation/Resettlement, Environmental and Social Impact, Support for	7	U	/
C2	· · · · · · · · · · · · · · · · · · ·	0	58	58
62.4	ASM, OHSA, Mine ClosurePractice	•	•	4
C2.1	Land, Compensation and ResettlementPractice	0	4	4
C2.2	Environmental Impact	0	18	18
C2.3	Social Impact	0	8	8
C2.4	Support for Artisanal and Small-Scale Mining	0	9	9
C2.5	Occupational Health and Safety	0	4	4
C2.6	Mine Closure and Financial Sureties for Decommissioning	0	15	15
В3	Tax Policy and Tax Administration Rules	23	2	25
B3.1	Tax Policy and Instruments	14	2	16
B3.2	Mining Tax Administration Rules	9	0	9
C3	Mining Tax Administration and Auditing	1	17	18
C3.1	Mining Tax Administration	1	11	12
C3.2	Mining Tax Auditing	0	6	6
В4	Revenue Sharing and Fiscal StabilizationRules	4	0	4
B4.1	Revenue Sharing Rules	2	0	2
B4.2	Fiscal Stabilization Rules	2	0	2
C4	Revenue Sharing, Fiscal Stabilization and Resource Revenue Transparency	1	7	8
C4.1	Revenue Sharing Arrangements	0	2	2
C4.2	Fiscal Stabilization	0	2	2
C4.3	Resource Revenue Transparency	1	3	4
B5	Local Content, Employment, Community Engagement, CSR and Social Issues	17	0	17
B5.1	Local Content Rules	4	0	4
B5.2	Employment Policies	5	0	5
B5.3	Rules on Community Engagement	4	0	4
B5.4	CSR and Social IssuesRules	4	0	4
	Local Supplier Development, Employment, Community Engagement, CSR and			
C5	Social IssuesPractice	0	29	29
C5.1	Local Supplier Development	0	5	5
C5.2	Employment	0	7	7
C5.3	Community Engagement	0	5	5
C5.4	CSR and Social Issues	0	12	12
		114	194	308

Annex II: Question Scores

Number	Question	Data Source	Score
Α	Mining Sector Management		
A1	Sector Policy		
1	Is there an approved mining sector strategy that is publicly available?	Primary	1.00
2	Is there a current multi-year national development plan that has a section on the mining sector and that is publicly available?	Primary	1.00
3	How satisfied is government with the mining sector development taking place in this country?	Interview Government	2.67
4	How satisfied is the mining industry with the mining sector development taking place in this country?	Interview Industry	2.27
5	How satisfied is civil society with the mining sector development taking place in this country?	Interview Civil Society	2.17
6	Is mining sector legislation in accordance with the mining sector strategy?	Interview Government	2.50
7	Is mining sector legislation (including policies and regulations) consistent with other relevant legislation (including policies and regulations)?	Interview Government	2.50
8	How satisfied is the mining industry with the country's mining legislation (e.g., is it reasonably up-to-date and addresses all relevant issues)?	Interview Industry	2.18
9	How satisfied is the government with the country's mining legislation (e.g., is it reasonably up-to-date and addresses all relevant issues)?	Interview Government	2.67
10	How satisfied is civil society with the country's mining legislation (e.g., is it reasonably up-to-date and addresses all relevant issues)?	Interview Government	2.42
11	Is there an investment promotion strategy that adequately covers the mining sector?	Interview Government	2.75
A2	Sector Dialogue		
12	Is there a Chamber of Mines (or similar organization) that represents the mining industry?	Primary	4.00
13	How satisfied is the mining industry with the way the Chamber of Mines (or similar organization) represents the views of the mining industry?	Interview Industry	2.80
14	Are there civil society organizations that represent the views of civil society on a wide range of mining sector issues?	Primary	3.00
15	How satisfied is civil society with the way existing civil society organizations represent the views of civil society on mining sector issues?	Interview Civil Society	2.33
16	How satisfied is the government with the dialogue between the government and the mining industry on mining sector issues?	Interview Government	3.00
17	How satisfied is the government with the dialogue between the government and civil society on mining sector issues?	Interview Government	2.67
18	How satisfied is the mining industry with the dialogue between the government and the mining industry on mining sector issues?	Interview Industry	2.70
19	How satisfied is the mining industry with the dialogue between civil society and the mining industry on mining sector issues?	Interview Industry	2.10
20	How satisfied is civil society with the dialogue between the government and civil society on mining sector issues?	Interview Civil Society	2.25

21	How satisfied is civil society with the dialogue between the mining industry and civil society on mining sector issues?	Interview Civil Society	2.75
22	Did an informed and meaningful national consultation take place during the preparation of the mining sector strategy?	Interview Government	1.90
23	Did an informed and meaningful national consultation take place during the preparation of the mining sector strategy?	Interview Industry	1.50
24	Did an informed and meaningful national consultation take place during the preparation of the mining sector strategy?	Interview Civil Society	1.75
25	Did an informed and meaningful national consultation take place during the preparation of the national development plan?	Interview Government	
26	Did an informed and meaningful national consultation take place during the preparation of the national development plan?	Interview Industry	1.60
27	Did an informed and meaningful national consultation take place during the preparation of the national development plan?	Interview Civil Society	1.93
А3	Roles and Responsibilities		
28	Is there a stand-alone Ministry of Mines with clearly defined responsibilities for the mining sector? If not, and mining sector issues are covered by a unit/section in a different Ministry, is this unit/section sufficiently empowered to deal with mining sector issues?	Interview Government	4.00
29	Does mining or other legislation assign clear authorities and non-overlapping responsibilities between government ministries/agencies in the mining sector?	Interview Government	3.75
30	Is there a clear understanding and acceptance of the various roles and responsibilities amongst the agencies involved in the management of the mining sector?	Interview Government	3.25
31	Is there a dedicated unit within the mining authority dealing with artisanal and small-scale mining (ASM)?	Primary	1.00
32	Is there a legally binding provision for the establishment and operation of a mining cadastre that specifies its authority and responsibilities?	Primary	4.00
33	Is there a legally binding provision that identifies the authority that issues exploration and mining licenses and is this authority separate from the mining ministry?	Primary	2.50
34	Is there a legally binding provision that provides for the use of mining-related standard contracts and/or development agreements, does the law define the signatory and is the signatory the same as the license issuer?	Primary	3.00
35	Are there legally binding provisions that identify which institution or institutions are responsible for approving EIAs and EMMPs as well as monitoring and enforcing compliance with legal requirements related to managing environmental impact?	Primary	4.00
36	Are there legally binding provisions that identify which institution or institutions are responsible for approving SIAs and SMMPs as well as monitoring and enforcing compliance with legal requirements related to managing social impact?	Primary	
A4	Intra-Governmental Coordination		
37	In practice, are there disagreements between government ministries/agencies over the roles and responsibilities regarding the mining sector?	Interview Government	4.00
38	In practice, are there disagreements between government ministries/agencies over the roles and responsibilities regarding the mining sector?	Interview Industry	2.86
39	In practice, are there disagreements between government ministries/agencies over the roles and responsibilities regarding the mining sector?	Interview Civil Society	2.23

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40	Has the government set up formal mechanisms to share resources and information between institutions in the form of committees, task forces or working groups that bring together "mining sector practitioners"?	Interview Government	1.00
41	Has the government set up formal mechanisms to share resources and information between institutions in the form of committees, task forces or working groups that bring together "mining sector practitioners"?	Interview Industry	2.88
42	Has the government set up formal mechanisms to share resources and information between institutions in the form of committees, task forces or working groups that bring together "mining sector practitioners"?	Interview Civil Society	1.88
43	Are there formal mechanisms for sharing information between government ministries/agencies working on the mining sector?	Interview Government	2.50
44	How satisfied are you with the effectiveness of the formal mechanisms for sharing resources and information?	Interview Government	2.50
45	How satisfied are you with the effectiveness of the formal mechanisms for sharing resources and information between government ministries/agencies working on the mining sector?	Interview Industry	2.13
46	How satisfied are you with the effectiveness of the formal mechanisms for sharing resources and information between government ministries/agencies working on the mining sector?	Interview Civil Society	2.20
47	Has a central information storage system and database been set up that effectively supports the maintenance, verification, and sharing of data for the mining sector?	Interview Government	2.40
48	How satisfied are you with the central information storage system and database?	Interview Government	3.00
49	How satisfied are you with the central information storage system and database that the government is using to maintain, verify and share data relateed to the mining sector?	Interview Industry	2.88
50	How satisfied are you with the central information storage system and database that the government is using to maintain, verify and share data relateed to the mining sector?	Interview Civil Society	2.30
1	Contracts, Licenses and Exploration		
B1	Rules for License Allocation, Oversight, and Transfer		
B1.1	License Allocation Rules		
51	Is the licensing legislation stable and in case amendments take place, is there a reasonable transition period for license holders to adjust to the new regime?	Primary	1.00
52	Are there legally binding procedures for granting exploration and mining licenses that are consistent with good practice and compatible with other relevant legislation?	Primary	2.80
53	Do the procedures used in granting exploration and mining licenses ensure that licenses are only issued to qualified applicants and do rely on either "First Come, First Served procedures" or "Competitive Bidding"?	Primary	3.00
54	If competitive bidding is used for granting exploration licenses, are standardized bidding documents and contracts used and, if so, do the evaluation criteria emphasize work commitments?	Primary	3.00
55	Is there a mechanism that facilitates large-scale prospecting such as airborne geophysical surveys?	Primary	1.00
56	Are all license applications, private and state, treated equally?	Primary	1.00

57	Are prospecting and exploration license fees set at levels which encourage exploration?	Primary	1.00
58	Are licensees encouraged to give up their licenses to areas that they have explored, for instance, through mandatory reductions of license areas or escalating license fees?	Primary	3.00
59	Does the law contain any negatie incentives for exploration companies?	Primary	1.00
60	Doe the exploration company automatically obtain mining rights upon discovery?	Primary	1.00
61	Does the legislation allow for overlapping licenses and if so, does it contain appropriate rules to avoid conflicts between competing licenses for different types of minerals to the same area?	Primary	2.50
62	If competitive bidding is used for granting mining licenses, are standardized bidding documents used and, if so, do the evaluation criteria emphasize investment commitment and premium payments?	Primary	3.00
63	Are there legally binding procedures for registering or granting licenses to artisanal and small-scale mining operators and, if so, can the registration/license be obtained from field offices, not just the mining authority head office?	Primary	4.00
64	Are there legally binding provisions regarding the timeframes for the issuance of exploration and mining licenses and the approval of exploration work programs?	Primary	2.00
65	Is there a legally binding requirement or guideline that requires that a map component be used to record license boundaries in the cadastre?	Primary	4.00
66	Are there legally binding provisions that an applicant be informed if a license application is denied or a license is cancelled and, if so, are they consistent with good practice?	Primary	4.00
67	Are there legally binding provisions that require exploration license holders to report exploration activities and results to the Geological Survey Department or the mining authority and, if so, are they consistent with good practice?	Primary	3.40
68	Are there legally binding procedures for granting licenses to mineral traders and are they required for trading minerals, gemstones, etc. produced by mining license holders as well as artisanal and small-scale mining operators?	Primary	4.00
B1.2	License Management and Transfer Rules		
69	Are there legally binding provisions for penalties and sanctions for non-compliance with exploration and mining license conditions?	Primary	3.25
70	Are there legally binding requirements that exploration and mining licenses, contracts and agreements be made publicly available?	Primary	1.00
71	Are there legally binding provisions, such as state secrecy laws, that contain barriers to the disclosure of mining sector information?	Primary	4.00
72	Are there legally binding provisions that require license holders to provide the government with details of the beneficial ownership of the license and is this information made publicly available?	Primary	4.00
73	Are there legally binding provisions that permit exploration and mining license holders to transfer their licenses to an eligible party that meets the license provisions?	Primary	4.00
C1.1	Collection and Maintenance of Geological Information		
C1.1	Collection and Maintenance of Geological Information		
74	In practice, are exploration license holders delivering the required operational information to the Geological Survey Department (GSD) or mining authority on a regular basis?	Interview Government	3.80

75	In practice, does the GSD or similar organization maintain geological information from companies in a confidential manner until such time as it can be made publicly available?	Interview Government	4.00
76	Is geological information (maps, reports, sample data) geocoded and available on- line?	Primary	1.00
77	Is geological informtion available free of charge or against payment of administrative costs?	Primary	1.00
78	In practice, does the GSD or similar organization make use of the geological data collected from companies to improve government and public awareness/understanding of geological prospectivity?	Interview Government	4.00
79	In practice, does the GSD or similar organization make use of the geological data collected from companies to monitor compliance with license conditions?	Interview Government	4.00
80	In practice, does the GSD or similar organization have the capacity to fulfill its mandate in a satisfactory manner?	Interview Government	4.00
81	How satisfied is the mining industry with the way in which the Geological Survey Department (GSD) or similar organization is fulfilling its mandate?	Interview Industry	2.71
82	What percentage of the licensed ground is being serviced by active exploration?	Interview Government	4.00
83	How satisfied is the mining industry with the availability of geological maps for the most prospective areas?	Interview Industry	2.75
84	In practice, does the Mining Cadastre have the capacity to fulfill its mandate in a satisfactory manner?	Interview Government	3.79
85	How satisfied is the mining industry with the way in which the Mining Cadastre is fulfilling its mandate?	Interview Industry	2.50
86	In practice, is the topographic map for the cadastre compatible with GPS systems?	Interview Government	2.50
87	What percentage of the mining cadastre is up-to-date?	Interview Government	3.00
88	In practice, if there is a decentralized cadastre system in place, is the central office able to obtain updated information on a timely basis?	Interview Government	4.00
C1.2	Effective License Allocation		
89	In practice, is the information required for license applications publicly available?	Interview Industry	3.17
90	Are the procedures in the legal framework for the award of exploration and mining licenses followed in practice?	Interview Industry	3.25
91	Are the limits to discretionary power in the award of exploration and mining licenses followed in practice?	Interview Industry	2.50
92	In practice, is there a preference for local companies or producers in the award process of exploration and mining licenses?	Interview Industry	2.13
93	In practice, are exploration and/or mining licenses awarded to applicants which do not have the technical and financial capacity to fulfill license requirements and any associated work program?	Interview Industry	2.20
94	In practice, are the legislated timeframes for exploration and mining license awards and extensions followed?	Interview Industry	3.21
95	Are the timeframes for the approval of exploration work programs followed in practice?	Interview Industry	3.40
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96	Are the timelines for deciding on exploration and/or mining license applications compatible with the timelines of other required permits?	Interview Industry	2.71
97	In practice, when licenses are denied or cancelled, are the procedures followed?	Interview Government	3.75
98	In practice, does the unit issuing exploration and mining licenses have the capacity to fulfill its mandate in a satisfactory manner?	Interview Government	3.79
99	How satisfied is the mining industry with the way in which the unit issuing exploration and mining licenses is fulfilling its mandate?	Interview Industry	2.78
100	What percentage of licenses are subject to boundary disputes between license holders due to the ambiguity of boundaries?	Interview Government	3.00
101	Are mining contracts and agreements signed and approved by the authority or authorities defined in the law?	Interview Government	4.00
102	In practice, how often do license cancellations or denials result in appeals?	Interview Government	1.75
103	If mining-related standard contracts and/or development agreements are used, are they used to modify provisions in the law?	Interview Government	3.00
104	In practice, is information about existing licenses available on-line without charge?	Interview Industry	1.00
C1.3	Effective License Management	,	
105	Is the government effectively managing compliance with exploration and mining license conditions?	Interview Government	3.67
106	In practice, does the unit managing the monitoring of licenses have the capacity to fulfill its mandate in a satisfactory manner?	Interview Government	2.29
107	How satisfied is the mining industry with the way in which the unit managing the monitoring of licenses is fulfilling its mandate?	Interview Industry	2.83
108	How satisfied is the mining industry with the authorities' practices regarding the extension of exploration and mining licenses?	Interview Industry	2.58
109	In practice, are license holders able to transfer their licenses to companies which meet the qualification criteria?	Interview Government	3.00
110	In practice, does a company that holds an exploration license for a certain areas and is in compliance with exploration license conditions have an automatic first priority to obtain a mining license in that area—provided it does also meet the conditions and has provided all necessary information required for a mining license?	Interview Industry	3.25
111	In practice, are exploration and mining licenses, contracts and agreements made publicly available?	Interview Government	2.65
112	If the answer to the preceding question is "No", are key details of exploration and mining licenses readily accessible?	Interview Government	4.00
113	In practice, does the agency or ministry responsible for awarding licenses for exploration and mining operate independently from the mining ministry, and without undue influence from the mining ministry?	Interview Industry	2.50
114	Do you perceive corruption as having a negative impact on mining-sector activitiesin particular the licensing process?	Interview Industry	2.33
115	Is your company aware of the payment of bribes in the mining sector?	Interview Industry	3.57

2	Mining Operations		
	Mining Legislation/Processes, Land/Compensation/Resettlement, Environmental		
B2	and Social Impact Management, ASM, OHSA, Mine ClosureRules		
B2.1	Mining Legislation and Processes	Duine	4.00
116	Are there legally binding regulations which cover exploration and mining activities?	Primary	4.00
117	Are the laws and regulations governing exploration and mining operations readily available from a dedicated government source?	Primary	2.50
118	Is there a legally binding process to appeal decisions by mining authorities and, if so, is the authority that receives the appeal independent of the mining authorities?	Primary	4.00
119	If it exists, does the legally binding process to appeal decisions by mining authorities have the legal standing to overturn these decisions?	Interview Government	4.00
120	Are timeframes for the approval of mine development plans and the approval of extensions of mining operations set out in the regulations?	Primary	4.00
B2.2	Land, Compensation and Resettlement Rules		
121	Does the holder of a mineral right have legally guaranteed access rights to surface land?	Primary	1.00
122	Is there a legally binding established procedure for the resettlement of communities displaced by mining activities and, if so, does it follow internationally accepted principles such as the Equator Principles or the IFC Performance Standards?	Primary	1.00
123	Is there a legally binding procedure for the payment of compensation when exploration and/or mining activities interfere with land ownership or land use?	Primary	4.00
124	If mining is taking place in areas where armed conflict is taking place, are there legally binding requirements for a diagnostic review for appropriate actions regarding existing mineral rights in such areas?	Primary	:
B2.3	Environmental and Social Impact Management		
125	Is there a legally binding requirement that the clearance of the agency or ministry responsible for environmental protection be obtained before exploration or mining activities can commence and is the agency or ministry separate from the mining authorities or in a separate line of authority from the mining licensing agency?	Primary	2.00
126	Is there a legally binding requirement for companies to prepare and submit EIAs, EMMPs (or combined ESIAs and ESMMPs) and related reports including implementation and monitoring reports for review and approval by the concerned government agencies?	Primary	4.00
127	Is there a legally binding requirement for EIAs and EMMPs (or combined ESIAS and ESMPS) and related implementation and monitoring reports to address mining's environmental impacts on women separately from the impacts on men?	Primary	1.00
128	Is there a legally binding requirement for E(S)IAs and E(S)MMPs (or other key environmental impact related documents such as monitoring reports) to be made public and is the requirement consistent with good practice?	Primary	1.00
129	Are there legally binding requirements for pollution prevention and management of air pollution, hazardous and non-hazardous wastes, chemicals and hazardous materials and pesticides?	Primary	4.00
130	Are there legally binding requirements for the protection of surface and ground water quality and the review and balancing of water allocations and are they consistent with good practice?	Primary	2.20

131	Is there a legally binding requirement for structures such as tailings dams and impoundments that hold mine wastes to be designed, operated and maintained according to internationally recognized standards that is consistent with good practice?	Primary	1.00
132	Is there a legally binding requirement for mining operations to identify, manage and protect biodiversity that is consistent with good practice?	Primary	2.00
133	Is there a legally binding requirement for mining operations to identify, manage and protect natural habitat that is consistent with good practice?	Primary	3.00
134	Is there a legally binding requirement that mine design and operations reflect anticipated trends in weather event severity and frequency related to climate change that is consistent with good practice?	Primary	1.00
135	Is there a legally binding requirement for mining operations to have an Emergency Preparedness and Response Program (EPRP) prior to commencement of mining operations that is consistent with good practice?	Primary	1.75
136	Is there a legally binding requirement for Emergency Preparedness Plans to be made public and is the requirement consistent with good practice?	Primary	1.00
137	Is there a legal provision for a simplified Environmental Permit for artisanal and small-scale mining (ASM)?	Primary	4.00
138	Is there a legally binding requirement for companies to prepare and submit SIAs and SMMPs (and related reports including Implementation and Monitoring reports) for review and approval by the concerned government agencies and is the requirement consistent with good practice?	Primary	1.00
139	Is there a legally binding requirement for SIAs and SMMPs (or other key social impact related documents such as monitoring reports) to be made public and is the requirement consistent with good practice?	Primary	
140	Is there a legally binding provision establishing a grievance and complaints mechanism for environmental and social mitigation issues and is the complaints mechanism consistent with good practice?	Primary	1.00
141	Is there an authority with whom a grievance or complaint can be filed and has the authority put in place procedures for hearing as well as corrective procedures?	Primary	2.50
B2.4	Artisanal and Small-Scale Mining		
142	Is there an association that represents artisanal and small-scale miners?	Primary	1.00
143	Is there a government-run program that ASM workers and their families can access to get basic health and education services in the area where they work?	Primary	1.00
144	Are there legally binding provisions that provide for the legal operations of artisanal and small-scale mining (ASM) activities?	Primary	4.00
145	Are there legally binding provisions that permit ASM activities to take place, with the consent of the (non-ASM) license holder, on land for which an exploration or mining license has been issued?	Primary	1.00
146	Are there legally binding provisions that provide for the settlement of disputes between ASM and exploration and mining license holders?	Primary	4.00
147	Are there legally binding provisions for ASM that safeguard from potential environmental and other harm?	Primary	2.80
B2.5	Occupational Health and Safety		
148	Are there legally binding Occupational Health and Safety (OHS) standards and procedures, and, if so, do they include related education and training requirements and are they in line with internationally used standards?	Primary	4.00
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Is there a grievance mechanism for workers for non-compliance with Occupational Health and Safety (OHS) standards and procedures, and, if so, does it include penalties in case of non-compliance?	Primary	4.00
Mine Closure and Financial Sureties for Decommissioning		
Are there legally binding regulations which cover mine closure and reclamation activities?	Primary	4.00
Is there a legally binding requirement for a Mine Closure and Reclamation Plan (MCRP) to be prepared and is it consistent with good practice?	Primary	2.80
Are there legally binding provisions that outline what the MCRP must cover regarding environmental protection, remediation and reclamation as well as managing and mitigating potentially harmful social impacts?	Primary	1.00
Is there a legally binding requirement for the MCRP to be prepared in consultation with the affected communities and local government and is it consistent with good practice?	Primary	1.00
Is there a legally binding requirement for Mine Closure and Remediation Plans to be made public and is the requirement consistent with good practice?	Primary	1.00
Is there a legally binding requirement for mining companies to include progressive rehabilitation in the mining plan?	Primary	1.00
Are there legally binding provisions regarding a financial assurance mechanism related to mine closure that are consistent with good practice?	Primary	4.00
is there a legal provision for the funds required and set aside for rehabilitation to be recalcualted regularly to take into account any changes in rehabilitation costs?	Primary	1.00
Land, Compensation and ResettlementPractice		
Land, Compensation and ResettlementPractice		
In practice, does the government enforce the legally binding payments of compensation when exploration and/or mining activities interfere with land ownership or land use?	Interview Civil Society	2.17
If mining is taking place in areas where armed conflict is taking place, does the government take appropriate actions in practice regarding existing mineral rights in such areas?	Interview Government	2.00
If mining is taking place in areas where armed conflict is taking place, how satisfied is the mining industry with the actions taken by government regarding existing mineral rights in such areas?	Interview Industry	2.40
Environmental Impact		
In practice, do exploration or mining activities commence without obtaining a permit from the agency or ministry responsible for environmental protection?	Interview Government	4.00
Is the institution tasked with monitoring and enforcing environmental laws and regulations carrying out its task in a satisfactory manner regarding the mining sector from exploration to post-mine closure?	Interview Government	2.40
How satisfied is civil society with the way the institution tasked with monitoring	Interview Civil Society	2.09
and emoreing environmental law is earlying out its task:	,	
	Health and Safety (OHS) standards and procedures, and, if so, does it include penalties in case of non-compliance? Mine Closure and Financial Sureties for Decommissioning Are there legally binding regulations which cover mine closure and reclamation activities? Is there a legally binding requirement for a Mine Closure and Reclamation Plan (MCRP) to be prepared and is it consistent with good practice? Are there legally binding provisions that outline what the MCRP must cover regarding environmental protection, remediation and reclamation as well as managing and mitigating potentially harmful social impacts? Is there a legally binding requirement for the MCRP to be prepared in consultation with the affected communities and local government and is it consistent with good practice? Is there a legally binding requirement for Mine Closure and Remediation Plans to be made public and is the requirement consistent with good practice? Is there a legally binding requirement for mining companies to include progressive rehabilitation in the mining plan? Are there legally binding provisions regarding a financial assurance mechanism related to mine closure that are consistent with good practice? Is there a legal provision for the funds required and set aside for rehabilitation to be recalcualted regularly to take into account any changes in rehabilitation costs? Land, Compensation and Resettlement—Practice In practice, does the government enforce the legally binding payments of compensation when exploration and/or mining activities interfere with land ownership or land use? If mining is taking place in areas where armed conflict is taking place, does the government take appropriate actions in practice regarding existing mineral rights in such areas? If mining is taking place in areas where armed conflict is taking place, how satisfied is the mining industry with the actions taken by government regarding existing mineral rights in such areas? Environmental Impact In practice, do exploration or mining activities	Health and Safety (OHS) standards and procedures, and, if so, does it include penalties in case of non-compliance? Mine Closure and Financial Sureties for Decommissioning Are there legally binding regulations which cover mine closure and reclamation activities? Is there a legally binding requirement for a Mine Closure and Reclamation Plan (MCRP) to be prepared and is it consistent with good practice? Are there legally binding provisions that outline what the MCRP must cover regarding environmental protection, remediation and reclamation as well as managing and mitigating potentially harmful social impacts? Is there a legally binding requirement for the MCRP to be prepared in consultation with the affected communities and local government and is it consistent with good practice? Is there a legally binding requirement for Mine Closure and Remediation Plans to be made public and is the requirement for Mine Closure and Remediation Plans to be made public and is the requirement for mining companies to include progressive rehabilitation in the mining plan? Are there a legally binding requirement for mining companies to include progressive rehabilitation in the mining plan? Are there legally binding provisions regarding a financial assurance mechanism related to mine closure that are consistent with good practice? Is there a legal provision for the funds required and set aside for rehabilitation to be recalcualted regularly to take into account any changes in rehabilitation costs? Land, Compensation and Resettlement—Practice In practice, does the government enforce the legally binding payments of compensation when exploration and/or mining activities interfere with land ownership or land use? If mining is taking place in areas where armed conflict is taking place, does the government take appropriate actions in practice regarding existing mineral rights in such areas? If mining is taking place in areas where armed conflict is taking place, how satisfied is the mining industry with the actions taken by gove

165	In practice are EIAs and EMMPs (or other key environmental impact related documents) approved by the mining authority before a mining right is granted and are the documents updated and approved on a regular basis with specified timeframes?	Interview Government	1.00
166	In practice is the implementation of EMMPs and other environmental impact management and mitigation requirements monitored and enforced systematically?	Interview Government	2.88
167	Are Environemntal Impact Assessments (EIAs) and Environmental Management and Mitigation Plans (EMMPs) (or other key environmental impact related documents such as monitoring reports) made public in practice and are they widely available?	Interview Government	1.00
168	How satisfied is civil society with the public availability and accessibility of EIAs and EMMPs?	Interview Civil Society	2.00
169	In practice is surface and ground water quality being protected and water allocations reviewed and balanced?	Interview Government	3.00
170	In practice are structures such as tailings dams and impoundments that hold mine wastes designed, operated and maintained according to internationally recognized standards?	Interview Industry	2.71
171	In practice is biodiversity being identified, managed and protected?	Interview Industry	3.81
172	How satisfied is the government with the mining companies' design, operation and maintenance of structure such as tailings dams and impoundments that hold mine wastes?	Interview Government	2.50
173	In practice is natural habitat being identified, managed and protected?	Interview Industry	2.50
174	In practice do mine design and operations reflect anticipated trends in weather event severity and frequency related to climate change?	Interview Industry	3.63
175	In practice do mining companies have an Emergency Preparedness and Response Plan (EPRP) that is approved by Government, is reviewed, tested, and updated on a regular basis with reporting to the Government and is prepared and updated in close collaboration with the local community?	Interview Industry	2.18
176	Are Emergency Preparedness Plans made public in practice and are they widely available?	Interview Government	1.21
177	How satisfied is civil society with the public availability and accessibility of Emergency Preparedness Plans?	Interview Civil Society	2.00
178	In practice is the government monitoring and enforcing compliance with environmental requirements for artisanal and small-scale miners?	Interview Government	1.75
C2.3	Social Impact		
179	Are the institutions tasked with monitoring and enforcing social mitigation measures and requirements carrying out their tasks in a satisfactory manner?	Interview Government	1.43
180	How satisfied is civil society with the way the institutions tasked with monitoring and enforcing social mitigation measures and requirements are carrying out their tasks?	Interview Civil Society	2.10
181	How satisfied is the mining industry with the way the institutions tasked with monitoring and enforcing social mitigation measures and requirements are carrying out their tasks?	Interview Industry	2.33

In practice are SIAs and SMMPs (or other key social impact related documents) approved by the mining authority before a mining right is granted and are the documents updated and approved on a regular basis with specified timeframes? In practice is the implementation of SMMPs and other social impact management and mitigation requirements and compliance with legal requirements monitored and enforced systematically? Are Social Impact Assessments (SIAs) and Social Management and Mitigation Plans (SMMPs) (or other key social impact related documents such as monitoring reports) made public in practice and are they widely available? How satisfied is civil society with the public availability and accessibility of SIAs and SMMPs? Is the grievance and complaints mechanism for environmental and social mitigation in sus working well in practice? C2.4 Support for Artisanal and Small-Scale Mining If there is a unit in the mining authority dealing with artisanal and small-scale mining, does it have the capacity to fulfill its mandate in a satisfactory manner? In practice, does the government provide technical training to ASM miners to help improve their mining activities and, if so, is the training effective and inclusive? In practice, are large-scale mining operations able to coexist with ASM activities? In practice, are artisanal and small-scale miners operating in the formal market? In practice, are artisanal and small-scale miners operating in the formal market? In practice, are artisanal and small-scale miners operating in the formal market? In practice, are artisanal and small-scale miners operating in the formal market? In practice, are the mechanisms for the settlement of disputes between ASM and other mining operations being used? In practice, are the mechanisms for the settlement of disputes between ASM and other mining operations being used? In practice, are ASM workers and their families able to access basic health and education services in the area where they work? Civil Society vision services in			
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701 1 1 1 1 1 1 1 1 1	200		4.00
	201		1.69

202	In practice do mining companies consult communities and local government when developing and updating the Mine Closure and Reclamation Plan (MCRP)?	Interview Industry	3.70
203	How satisfied is civil society with the way mining companies consult with communities when developing and updating the Mine Closure and Reclamation Plan (MCRP)?	Interview Civil Society	1.73
204	How satisfied is local government with the way mining companies consult with communities when developing and updating the MCRP?	Interview Government	2.00
205	Are Mine Closure and Remediation Plans made public in practice and are they widely available?	Interview Government	1.00
206	How satisfied is civil society with the public availability and accessibility of MCRPs?	Interview Civil Society	1.73
207	How satisfied is the mining industry with the way the institutions tasked with monitoring and enforcing the environmental and social obligations associated with mine closure are carrying out their tasks?	Interview Industry	2.67
208	How satisfied is civil society with the way the institutions tasked with monitoring and enforcing the environmental and social obligations associated with mine closure are carrying out their tasks?	Interview Civil Society	1.91
209	In practice does progressive rehabilitation take place to reduce the scope and cost of work needed for mine closure and reclamation once production ceases?	Interview Industry	3.40
210	In practice are mining companies setting aside funds for mine closure consistent with the estimates in the MCRP and are the funds sufficient to cover the costs of premature closure as well as the cost of closure by third party contractors in the event this becomes necessary?	Interview Industry	4.00
211	Are adequate procedures in place regarding the funds being set aside for mine closure?	Interview Government	2.88
212	How satisfied are mining companies with the procedures in place regarding the funds being set aside for mine closure?	Interview Industry	3.00
213	In practice is government working to inventory abandoned mine sites, and determine the most effective way forward?	Interview Government	2.85
214	In practice, is the approved plan for moving forward with abandoned mine sites being implemented?	Interview Government	1.00
215	Are the funds required and set aside for rehabilitation recalcualted regularly to take into account any changes in rehabilitation costs?	Interview Industry	1.00
3	Mining Taxation		
В3	Tax Policy and Tax Administration Rules		
B3.1	Tax Policy and Instruments		
216	Is the fiscal regime applicable to mining companies stable and, when changes are made, iare provisions made for a reasonable transition period for mining companies to adjust to the new fiscal regime?	Primary	1.00
217	Are there legally binding provisions that prescribe which government agencies have the authority to collect taxes, royalties, and other payments (if applicable) from mining companies?	Primary	4.00
218	Are income and withholding tax payments and royalties from mining companies to government required by law to be placed in the national treasury or other designated accounts?	Primary	4.00
	I.	1	

219	Are the rates, formulae and bases for the main fiscal instruments (such as income taxes, withholding taxes, indirect taxes and royalties) that apply to mining prescribed by law?	Primary	4.00
220	Are there legally binding provisions for the granting of tax incentives to mining companies and, if so, do they require that a cost-benefit analysis be conducted before granting the tax incentives?	Primary	1.00
221	Can the government negotiate fiscal provisions with mining companies that differ from those provided in the law and, if so, are these fiscal provisions being made public?	Primary	1.00
222	Are there legally binding provisions that ensure that the government has an adequate minimum revenue stream (relative to sales revenue) in all production periods?	Primary	2.50
223	Does the country employ an adequate mix of progressive and regressive fiscal instruments with respect to revenues from mining?	Primary	3.25
224	Are there legally binding provisions that require an annual disclosure of related party transactions?	Primary	1.00
225	Are there legally binding provisions regarding transfer pricing and, if so, are they consistent with good practice?	Primary	1.00
226	Are there legally binding provisions that limit the risk from thin capitalization and, if so, do they include interest rate caps and debt to equity caps?	Primary	1.00
227	Are there legally binding provisions that identify profits from the indirect or offshore transfer of exploration and mining assets/rights so that they are taxable in the host country?	Primary	1.00
228	In cases where the government holds equity shares in resource companies, are the actual benefits from equity holding greater than the costs for acquiring equity?	Interview Government	1.00
229	How satisfied is the mining industry with the stability over time of the fiscal terms for mining?	Interview Industry	1.71
230	Are there no or low tariffs on imports of capital equipment?	Primary	4.00
231	Do companies have to pay VAT or sales tax on imports of capital equipment?	Primary	4.00
232	Are there no or low tariffs (or non-tariff barriers) on raw material exports?	Primary	1.00
233	Are there legally binding provisions that specify which agencies collect mining sector payments and is the number of agencies involved relatively small?	Primary	4.00
234	Are there legally binding provisions for mining sector tax payment processes and, if so, do they cover detailed arrangements?	Primary	3.40
235	Are there legally binding provisions for mining sector royalty payment processes and, if so, do they cover detailed arrangements?	Primary	4.00
236	Does the government have a simplified tax collection system for ASM?	Primary	4.00
B3.2	Mining Tax Administration Rules		
237	Are there legally binding provisions that require regular tax, cost and physical audits to be conducted of mining operations and, if so, do the provisions apply to all mining taxpayers (excluding ASM) and are the audits risk-based?	Primary	4.00
238	Are there legally binding provisions for penalties and sanctions for companies for non-compliance with tax legislation?	Primary	3.00
239	Are there legal provisions for independent agencies to exercise oversight of the administration of the fiscal regime?	Primary	3.00

240	Are there legally binding provisions that require government officials with a role in the oversight of the mining sector to disclose information about their financial interests in any extractive activity or project (NB: These could be general, e.g. not mining-specific provisions)?	Primary	4.00
241	If they exist, are national mining companies limited to a commercial role and subject to fiscal regulation in the same way as other commercial companies?	Primary	4.00
C3	Mining Tax Administration and Auditing		
C3.1	Mining Tax Administration		
242	In practice, are policies and procedures related to mining taxation publicly available, easily accessed, and understandable by the taxpayer?	Interview Industry	3.25
243	In practice, are changes to mining tax legislation undertaken through a consultative process and, if so, how satisfied is the mining industry with the process?	Interview Industry	1.75
244	In practice, does the taxation authority issue guidance notes for mining sector taxpayers and, if so, how satisfied is the mining industry with these guidance notes?	Interview Industry	2.17
245	In practice, are the bases on which taxes are levied subject to disputes between taxpayers and the tax authorities and if there are such disputes are they resolved through active tax tribunals?	Interview Government	2.50
246	Does the tax administration have a large taxpayer unit/office or one specialized in natural resources/mining?	Primary	4.00
247	In practice, does the large taxpayer unit/office or the one specialized in natural resources/mining have the capacity to fulfill its mandate in a satisfactory manner?	Interview Government	2.50
248	In practice, how satisfied is the mining industry with the way in which the large taxpayer unit/office or the one specialized in natural resources/mining is fulfilling its mandate?		2.67
249	In practice, are taxes and payments by mining sector tax payers only collected by the mandated agencies?	Interview Government	2.50
250	In practice, are income and withholding tax payments and royalties from mining companies to government placed in the national treasury or other designated accounts?		4.00
251	In practice, are the fiscal terms, including provisions for tax incentives in the law followed?	Interview Government	3.50
252	In practice, does the government negotiate fiscal terms and fiscal incentives with mining companies that differ from those in the mining and fiscal laws and regulations and, if so, does the government have well experienced and qualified representative to negotiate fiscal terms and fiscal incentives with mining companies and are the negotiated terms publicly available?		4.00
253	In practice, do government officials with a role in the oversight of the mining sector disclose information about their financial interest in any extractive activity or project?	Interview Government	2.50
C3.2	Mining Tax Auditing		
254	In practice, are tax, cost and physical audits of mining companies conducted systematically?	Interview Government	3.00
255	In practice, are the legally binding provisions regarding transfer pricing being implemented?	Interview Government	1.00

In practice, are there regular audits for domestic and international related party transfer pricing transactions?	Interview Government	1.00
In practice, are advanced pricing rules used for regularly occurring domestic and international related party transactions?	Interview Government	2.00
In practice, are there regular audits of mining companies for compliance with thin capitalization rules?	Interview Government	1.00
In practice, are the legally binding provisions on penalties and sanctions for non-compliance with tax legislation being implemented?	Interview Government	4.00
Revenue Management and Distribution		
Revenue Sharing and Fiscal StabilizationRules		
Revenue Sharing Rules		
Are there legally binding provisions regarding arrangements for resource revenue sharing between central and sub-national governments that clearly articulate the objectives of resource revenue sharing and do they specify how much should be transferred to sub-national governments?	Primary	3.00
Does the Ministry of Finance have written guidelines regarding when and how yearly budget allocations to sub-national governments should be disbursed?	Primary	4.00
Fiscal Stabilization Rules		
Are there legally binding provisions that require a medium-term fiscal framework?	Primary 1.00	
Are there legally binding provisions for a mechanism to protect budget expenditures from revenue volatility?	Primary	
Revenue Sharing, Fiscal Stabilization and Resource Revenue TransparencyPractice		
Revenue Sharing Arrangements		
In practice, are the arrangements for resource revenue sharing between central and sub-national governments being followed?	Interview Government	4.00
In practice, does the Ministry of Finance follow its guidelines regarding when and how it disburses budget allocations to sub-national governments and do sub-national governments receive their entire yearly budget allocations?	Interview Government	4.00
Fiscal Stabilization		
In practice, is the mechanism to protect budget expenditures from revenue volatility being applied?	Interview Government	1.00
In practice, have changes in commodity prices had a negative impact on budget performance?	Interview Government	2.00
Resource Revenue Transparency		
Is all government spending from resource revenues appropriated through the national budget and, if not, are off-budget funds that manage resource revenues audited and subject to external oversight?	Primary	4.00
In practice, are the assets and liabilities of mining sector SOEs included in the public sector accounts as reported by the Ministry of Finance?	Interview Government	2.50
In practice, are the assets and liabilities of any natural resource funds included in the public sector accounts as reported by the Ministry of Finance?	Interview Government	1.00
In practice, does the country disclose details relevant to mining sector revenues, such as data on production, sales, reported profits and payments by fiscal instruments, through EITI or another disclosure process?	Interview Government	4.00
	transfer pricing transactions? In practice, are advanced pricing rules used for regularly occurring domestic and international related party transactions? In practice, are there regular audits of mining companies for compliance with thin capitalization rules? In practice, are the legally binding provisions on penalties and sanctions for noncompliance with tax legislation being implemented? Revenue Management and Distribution Revenue Sharing and Fiscal Stabilization—Rules Revenue Sharing Rules Are there legally binding provisions regarding arrangements for resource revenue sharing between central and sub-national governments that clearly articulate the objectives of resource revenue sharing and do they specify how much should be transferred to sub-national governments? Does the Ministry of Finance have written guidelines regarding when and how yearly budget allocations to sub-national governments should be disbursed? Fiscal Stabilization Rules Are there legally binding provisions that require a medium-term fiscal framework? Are there legally binding provisions for a mechanism to protect budget expenditures from revenue volatility? Revenue Sharing, Fiscal Stabilization and Resource Revenue Transparency—Practice Revenue Sharing Arrangements In practice, are the arrangements for resource revenue sharing between central and sub-national governments for source revenue sharing between central and sub-national governments receive their entire yearly budget allocations? Fiscal Stabilization In practice, does the Ministry of Finance follow its guidelines regarding when and how it disburses budget allocations to sub-national governments and do sub-national governments receive their entire yearly budget allocations? Fiscal Stabilization In practice, in the mechanism to protect budget expenditures from revenue volatility being applied? In practice, have changes in commodity prices had a negative impact on budget performance? Resource Revenue Transparency Is all government spending from resource revenues	transfer pricing transactions? In practice, are advanced pricing rules used for regularly occurring domestic and international related party transactions? In practice, are there regular audits of mining companies for compliance with thin practice, are the legally binding provisions on penalties and sanctions for noncompliance with tax legislation being implemented? Revenue Management and Distribution Revenue Sharing and Fiscal Stabilization—Rules Revenue Sharing Rules Are there legally binding provisions regarding arrangements for resource revenue sharing between central and sub-national governments that clearly articulate the objectives of resource revenue sharing and to they specify how much should be transferred to sub-national governments? Does the Ministry of Finance have written guidelines regarding when and how yearly budget allocations to sub-national governments should be disbursed? Fiscal Stabilization Rules Are there legally binding provisions that require a medium-term fiscal framework? Are there legally binding provisions that require a medium-term fiscal framework? Are there legally binding provisions for a mechanism to protect budget expenditures from revenue volatility? Revenue Sharing, Fiscal Stabilization and Resource Revenue Transparency—Practice Revenue Sharing, Fiscal Stabilization and Resource Revenue Transparency—Practice Revenue Sharing Arrangements In practice, are the arrangements for resource revenue sharing between central and sub-national governments being followed? In practice, have changes in commodity prices had a negative impact on budget government wolatility being applied? In practice, have changes in commodity prices had a negative impact on budget government Interview Government Primary Interview Government Interview Government Fiscal Stabilization In practice, are the assets and liabilities of mining sector SOEs included in the public sector accounts as reported by the Ministry of Finance? In practice, are the assets and liabilities of mining sector

5	Local Impact		
B5	Local Content, Employment, Community Engagement, CSR and Social Issues		
B5.1	Local Content Rules		
272	Is there a policy for the promotion of opportunities for local, regional and national supply of goods and services to the mining industry that is consistent with good practice?	Primary	1.00
273	Are there site-specific agreements with mining companies that promote opportunities for local, regional and national supply of goods and services to the mining industry?	Primary	1.00
274	Is there an agency in the government whose mandate includes tracking demand and supply of goods and services needed by the mining sector and does this agency periodically conduct this assessment?	Primary	1.00
275	Does the legally binding requirement to prepare and submit SIAs and SMMPs support local and national employment, supply of goods and services, and business development?	Primary	:
B5.2	Employment Policies		
276	Is there a legally binding provision for mining companies to give equal employment opportunities to women from local communities?	Primary	1.00
277	Is there a legally binding provision for mining companies to provide on-the-job training?	Primary	1.00
278	Are there legally binding provisions that prohibit child labor including ASM child labor?	Primary	4.00
279	Are there government commitments to provide women with equal employment opportunities and conditions?	Primary	1.00
280	Are there legally binding rules that require employment equity, has an agency been designated to enforce the rules and has the agency put in place monitoring procedures and enforcement mechanisms?	Primary	4.00
B5.3	Rules on Community Engagement		
281	Is there a legally binding requirement for community stakeholder consultation throughout the mine life with affected communities and, if so, is it consistent with good practice?	Primary	1.43
282	Does this legally binding requirement for community stakeholder consultation conform with good practice in terms of record keeping, access, and use of information?	Primary	::
283	Is there a legally binding requirement that the results of community stakeholder consultations be used in preparing and updating EIAs, EMMPs, SIAs and SMMPs?	Primary	4.00
284	Is there a legally binding requirement for Community Development Agreements between mining companies, government and affected communities and, if so, is it consistent with good practice?	Primary	2.80
B5.4	CSR and Social IssuesRules		
285	Is there a national policy on Corporate Social Responsibility (CSR) that applies to mining and is publicly available and is there an agency that is responsible for oversight of the policy and its application in different sectors including mining?	Primary	1.00
286	Is there a legally binding requirement for free, prior and informed consent, has an agency been designated to enforce the requirement and has the agency put in place monitoring procedures and enforcement mechanisms?	Primary	1.00

287	Are there legally binding requirements for local governments and companies to work together to manage the effects of the potentially rapid and disruptive inmigration around mining operations?	Primary	1.00
288	Is there a legally binding requirement for companies to collect data on, report on, and address the impacts of mining on women separately from the impacts on men?	Primary	1.00
C5	Local Supplier Development, Employment, Community Engagement, CSR and Social IssuesPractice		
C5.1	Local Supplier Development		
289	Has the government sought the views of a wide range of stakeholders in preparing the local content policy for goods and services within the mining value chain?	Interview Government	1.00
290	What percentage of goods and services is your company sourcing from local suppliers?	Interview Industry	3.43
291	How satisfied is the mining industry with the support provided for domestic suppliers in attaining local content goals?	Interview Industry	3.00
292	In practice, is there an agency in the government that is tracking demand and supply of goods and services needed by the mining sector and does this agency periodically track demand and supply?	Interview Government	1.00
293	In practice, does the Investment Promotion Agency (IPA) or similar organization have the capacity to fulfill its mandate in a satisfactory manner?	Interview Government	3.40
C5.2	Employment		
294	In practice, is your company providing on-the-job training for your employees?	Interview Industry	4.00
295	Are the laws prohibiting child labor, including ASM child labor, enforced?	Interview Civil Society	2.13
296	Is significant progress being made in implementing employment equity?	Interview Government	1.00
297	How satisfied is civil society with the government's actions to provide women with equal employment opportunities and conditions?	Interview Civil Society	1.91
298	How satisfied is civil society with industry's actions to provide women with equal employment opportunities and conditions?		1.89
299	In practice are mining companies providing equal employment opportunities and conditions for women?	Interview Industry	3.54
300	In practice do mining companies value and respect their female employees?	Interview Industry	4.00
C5.3	Community Engagement		
301	In practice, are the consultations that take place between mining companies and affected communities meaningful?	Interview Civil Society	2.48
302	In practice are the consultations that take place between mining companies and affected communities comprehensive?	Interview Civil Society	2.30
303	Are the results of the mining company-community stakeholder consultations used in the preparation of relevant documents?	Interview Government	1.00
304	In practice are community development agreements negotiated between mining companies and affected communities and local governments?	Interview Civil Society	3.10
305	In practice do women consider that mining companies and government are doing a satisfactory job addressing women's concerns and issues?	Interview Civil Society	2.30

C5.4	CSR and Social Issues			
	In practice, how satisfied are mining community representatives with how			
306	industry, government and civil society collaborate in the planning and	Interview	2.09	
300	implementation of Community Social Responsibility (CSR) activities and with the	Civil Society	2.03	
	participation of women in these activities?			
307	In practice, how satisfied is the mining industry with the planning and	Interview	3.08	
307	implementation of CSR activities?	Industry	3.06	
308	In practice are the health services in mining communities similar to or better than	Interview	2.20	
308	nearby non-mining communities?		2.20	
309	In practice are the education services in mining communities similar to or better		1.60	
309	than in nearby non-mining communities?	Civil Society	1.00	
310	In practice, do mining communities depend on regular support from mining		2.50	
310	companies for the provision of basic services?	Civil Society	2.50	
311	In practice are the effects of the potentially rapid and disruptive in-migration around mining operations adequately managed?		2.00	
311			2.00	
312	Does the government recognize indigenous people on its territory and, if so, does it		1.89	
312	safeguard their rights in relation to mining?	Civil Society	1.05	
	In practice do indigenous groups consider that mining companies and government	Interview		
313	are doing a satisfactory job addressing their concerns and issues of indigenous	Civil Society	2.62	
	groups?	Civil Society		
314	If the Government has a policy of free, prior and informed consent, is it	Interview	1.00	
314	implemented in practice?		1.00	
315	If the government has a policy of free, prior and informed consent (FPIC), how	Interview	2.40	
313	satisfied is civil society with the implementation of this policy?		2.40	
316	In practice do women who are land users but not land owners receive adequate	Interview	1.00	
310	compensation for loss of land taken for mining?	Civil Society	1.00	
	In practice does the government provide support to improve the productivity and	Interview		
317	incomes of female subsistence farmers who have had to relocate their agricultural	Government	1.00	
	activities due to mining development taking place?	Covernment		

Annex III: Voting Template

Instructions: Below is a list of 25 topics that are important for the functioning of a country's mining sector. They are organized into six broad areas: mining sector management, plus the five stages of the IE value chain. Think of the topics your country's mining sector most needs to change and improve. You have 100 votes. Assign the votes among the 25 topics so that the number of votes indicates how important you consider the topic. You can divide your votes among whichever topics you choose, whether many or few. Specifically, if you think that only one topic is important, assign all 100 of your votes to that topic. On the other hand, if you think four topics are equally important, assign 25 votes to each of the four. Then again, if you think one topic is very important but two others are still relatively important, you could divide your votes 60-20-20.

	Indicators						
	Sector Policy						
Mining Sector	Sector Dialogue						
Management	Management Roles and Responsibilities						
	Intra-Governmental Coordination						
Contracts,							
Licenses and	License Allocation						
Exploration	License Management and Transfer						
	Mining Legislation and Processes						
	Land, Compensation and Resettlement						
	Environemental Impact Management						
Mining	Social Impact Management						
Operations	Transportation of Minerals						
	Artisanal and Small-Scale Mining						
	Occupational Health and Safety						
	Mine Closure and Financial Sureties for						
Tax Policy and	Tax Policy and Instruments						
Administration	Tax Administration						
Auministration	Tax Auditing						
Revenue	Revenue Sharing						
Management &	Fiscal Stabilization						
Distribution	Resource Revenue Transparency						
	Local Content/Local Supplier Development						
Local Impact	Employment						
Local illipact	Community Engagement						
	CSR and Social Issues						

Annex IV Persons interviewed during mission 4-15 April 2022

Category		First Name	Last Name	Position held in Organisation	Organisation Name (or affiliation)
Government	Mr	Arkadiy	Rogalsky	Ex- Director/Deputy Minister	Department of Geology under the Ministry of Natural Resources, Ecology and Technical Supervision
Government	Mr	Aisha	Karpaeva	Director/Deputy Minister	Department of Geology under the Ministry of Natural Resources, Ecology and Technical Supervision
Government	Mr	Baatyrbek	Sekiev	Head of the Environmental Expertise Department	Ministry of Natural Resources, Ecology and Technical Supervision
Government	Mrs	Aruuke	Kalygulova	Senior Specialist Environmental Expertise Department	Ministry of Natural Resources, Ecology and Technical Supervision
Government	Mr	Bekzhan	Sultangaziev	Deputy Minister	Environmental Technical Supervision Service under the Ministry of Natural Resources, Ecology and Technical Supervision
Government	Mr	Zhyrgan	Bulatov	Head of the Mining Supervision Department	Environmental and Technical Supervision Service under the Ministry of Natural Resources, Ecology and Technical Supervision
Government	Mr	Bolot	Ibraev	Head of the Department of Industrial Safety	Environmental and Technical Supervision Service under the Ministry of Natural Resources, Ecology and Technical Supervision
Government	Mr	Medet	Omurbekov	Head of the Department of Subsoil Safety	Environmental and Technical Supervision Service under the Ministry of Natural Resources, Ecology and Technical Supervision
Government	Mrs	Veronika	Isaeva	Deputy Minister	Ministry of Economy and Commerce of the Kyrgyz Republic

Government	Mr	Kubanych	Ysabekov	Head of the Department of Tax Policy	Ministry of Economy and Commerce of the Kyrgyz Republic
Government	Mr	Aktilek	Mamytkanov	Specialist, Department of Investments	Ministry of Economy and Commerce of the Kyrgyz Republic
Government	Mr	Ulan	Musaev	Senior Specialist Income Department	State Tax Service under the Ministry of Finance
Government	Mr	Iskender	Alymbekov	Head of the Incomes Department	State Tax Service under the Ministry of Finance
Government	Mrs	Asel	Seitkazieva	Deputy Director	Department of Tailings Management, Ministry of Emergency Situations
Government	Mr	Alymkadyr	Khakimov	Department of Non-tax Incomes	Ministry of Finance of the Kyrgyz Republic
Government	Mr	Azamat	Ibraimov	Department of Interbudgetary Relations	Ministry of Finance of the Kyrgyz Republic
Government	Mr	Nurbek	Akjolov	Technical Assistance and Public-Private Partnership Department	Ministry of Finance of the Kyrgyz Republic
Government	Mr	Ruslan	Olmasov	Head of the Division	Department of Precious Metals under the Ministry of Finance of the Kyrgyz Republic
Government					National Statistical Committee
Government	Mrs	Lola	Baimatova	Head of the International Relations Department	National Statistical Committee

Government	Mr	Azat	Kozubekov	Head of the Economic Development Department	National Bank of the Kyrgyz Republic
Government	Mr	Aibek	Aliev	Financial Markets Analysis Department	National Bank of the Kyrgyz Republic
Parliament	Mr	Azizbek	Tursunbaev	Chairman	Committee for Fuel and Energy Complex, Subsoil Use and Industrial Policy
SOE	Mr	Eleman	Muratov	Commercial Director	"KyrgyzGeologiya" under the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic
SOE	Mr	Kerim	Zhumabekov	Commercial Director	"KyrgyzKomur" under the Ministry of Energy of the Kyrgyz Republic
SOE	Mr	Karybek	Ibraev	Senior Geologist	Kyrgyzaltyn
Companies	Mr	Alp	Togay	Deputy Director	Eti Bakir Tereksay
Companies	Mrs	Dilyara	Sharshembieva	Legal Director	KAZminerals PLC
Companies	Mrs	Ekaterina	Kudaibergenova	CFO	KAZminerals PLC
Companies	Mr	Adilet	Akmataliev	Deputy Director/ Director of Legal Department	Alliance Altyn
Companies	Mr	Taalaibek	Dzhusupov	Head of the Mining Safety Department	Alliance Altyn
Companies	Mr	Davron	Vahabov	Director general	Chaarat Holdings Ltd.
Companies	Mrs	Saltanat	Imanova	Deputy Director/ Director of Legal Department	Chaarat Holdings Ltd.

Companies	Mr	Abdykubat	Bayalinov	Director	Vertex Gold Holding
Companies	Mr	Altynbek	Dusheev	Advisor	Vertex Gold Holding
Business Association	Mr	Askar	Sydykov	Director	International Business Council
Business Association	Mr	Ishimbay	Chunuev	President	Kyrgyz Society of Subsoil Experts
Business Association	Mr	Yurii	Dostovalov	Mining Engineer	Association of Miners and Geologists of the Kyrgyz Republic
Labor Union	Mr	Eldar	Tadzhybaev	Chairman	Mining and Metallurgical Trade Union of the Kyrgyz Republic
State-owned consultancy	Mr	Bakyt	Kozhogulov	Director	Project&Research center Ken- Too
Consultancy	Ms	Natalia	Makeeva	CEO	Consulting company "EcoService"
Consultancy	Mr	Doug	Grier	Director	Consulting company "EcoSolutions"
CSOs	Ms	Chinara	Aitbaeva	Director	"Nash Vek" Public Fund
CSOs	Ms	Nazik	Imanbekova	Project Manager	NGO Consortium for promotion of EITI in Kyrgyzstan
CSOs	Ms	Nurlan	Dzhodoshev	Member	NGO Consortium of promotion of EITI
CSOs	Mrs	Nazgul	Aksarieva	Project Manager	PeaceNexus
CSOs	Mr	Adylbek	Sharshenbaev	Expert	Transparency International Kyrgyzstan
CSOs	Ms	Aigul	Akhmatjanova	National Chapter Leader	Transparency International Kyrgyzstan
LGA	Mr	Nasyr	Mursaliev	Head	Secretariat of Orlovka Regional Development Fund
CSOs	Mrs	Svetlana	Dmitrieva	Deputy	Orlovka Local Council
CSOs	Mr	Almaz	Ashirov	Ex-Coordinator	Mineral Resources for Development Programme, GiZ
CSOs	Mr	Bakytbek	Satybekov	Director	Alliance on Civic Initiatives Promotion, Public union
LGA	Ms	Nurgul	Mamytkanova	Investments Specialist	Orlovka City Administration
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LGA	Mr	Bakytbek	Chancharov	Mayor	Orlovka City Administration
LGA	Mr	Talgarbek	Tentiev	Deputy	Orlovka Local Council
LGA	Mrs	Evgeniya	Koryagina	Deputy	Orlovka Local Council
LGA	Mrs	Madina	Mametova	Deputy	Orlovka Local Council
LGA	Ms	Symbat	Kabaeva	Deputy	Orlovka Local Council