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Albania Mining Sector Reform, Restructuring and Future Prospects

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The Task Team expresses its appreciation to the Government and, in particular, to the counterparts in the Ministry of Economy, Trade and Energy as well as the Albanian Agency Natural Resources for their invaluable contributions to the preparation of this report.

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Prologue: Statement of the Minister of Economy, Trade and Energy on the World Bank Mining Sector Report:

REPUBLIC OF ALBANIA
MINISTRY OF ECONOMY, TRADE AND ENERGY
GENERAL REGULATORY DIRECTORATE

Reg. no. 4198

Tirana, 22 May 2009

Re: On the draft report on the mining sector restructuring

Ms. Camille Nuamah
Country Manager
World Bank Tirana Office

Dear Ms. Nuamah

The Ministry of Economy, Trade and Energy appreciates the contribution made by the World Bank team engaged in drafting the report on the Albanian mining sector restructuring, with close cooperation of the Ministry of Economy, Trade and Energy and affiliated institutions.

While recognising the value of the experts' findings concerning an improved business climate, the need for redesigning the legal procedures for granting licenses with a view to avoiding the division of mining resources into plots, and improved efficiency of mineral resource use, we would at the same time like to draw the attention to substantial progress that has been achieved in the Albanian mining sector in the past years:

A considerable number of companies, both local and foreign, are in the prospection and exploration stage, covering both metallic and industrial minerals. Investment figures have also increased: Investment in small-scale mines went up to 2.7 billion lekë in 2008, from 650 million lekë in 2005. Workforce increased to 6,000 in 2008, from 1,800 in 2005; production has kept growing on a yearly basis, and is now moving close to the 1990 levels of around 3.5-4 million ton minerals annually. In the meantime, investments earmarked for large-scale chromium, copper and iron-nickel mines as well cement production amount to over 1 billion Euros. A number of well-known companies are moving to bring preliminary procedures to a close, and have started to make investments in a powerful local industry of the cement production, successfully using the high quality mineral raw material.

Special attention has been focussed on ramping up the processing capacity for our minerals. To that effect, a Turkish operator has doubled the processing capacity of the copper-enrichment plant at Fushë Arrëza. In the chromite sector, Albania's biggest chromite mining company is about to start work to deepen the shaft at Bulqiza, and wind up work on the third furnace in the metallurgical compound at Elbasan, designed to ensure a yearly ferro-chrome output of around 50,000 ton. At the same time, negotiations

with an international consortium for starting the metallurgical compound at Burrel are about to conclude. Construction of three furnaces will help ensure a yearly ferro-chrome output of around 30-40 thousand tons, thus taking Albanian ferro-chrome output to high levels, as compared to world ferro-chrome output.

Over the past 4 years, attention has been paid to attract investment by foreign companies, particularly for prospection, thus offsetting some momentary shortcoming by the Albanian Geologic Service which is currently revealing a limited budget. At present, Canadian, Turkish and Chinese companies hold licenses to prospect for chromium, copper and iron-nickel minerals. Albania has for the first time seen the successful use of modern airborne geo-physical exploration methods by a Canadian company.

Building also on the conclusions in the World Bank experts' first report regarding the possible negative effects caused by the division of old mines into dozens of small-scale mining licenses (e.g. privatisation of the large mines, including Batra, Tërnova and Krasta, between 1998 and 1999), the Ministry of Economy, Trade and Energy has successfully granted four exploration licenses to a Canadian company. Within the surface covered by these licenses, sixty small-scale licenses that emerged from the aforementioned privatisation are found. The Canadian company is in the process of entering into mining agreements with them in order to provide unified exploration service for the entire area. This is the first indispensable move towards regulated unified exploitation.

Attention has on a constant basis been paid to amending mining legislation. Even though Law no. 7796, dated 17 February 1994, the "Mining Law of Albania," has been a very good law and has proved to keep up with time, with this opinion being shared by foreign experts as well, over recent years the whole mining legislation has carefully been reviewed in favour of the mining business, so as to enhance transparency of procedures, facilitate them, and, at the same time, upgrade miners' workplace safety requirements, with a group of experts offering for the first time mandatory life insurance for the miners in a certain fixed amount.

Finally, we state that restructuring of the National Agency of Natural Resources and coordination with the National Licensing Centre helps further warrant the rigorous meeting of the mutual legal obligations in this area.

Under the said conditions, we are of the opinion that we witness the growing development of the mining sector, which, in 2008, accounted for a high rate of Albanian exports. Nevertheless there is still room for restructuring so as to enhance efficiency, and achieve the sector-wise goals, as outlined in this draft report.

Thanking you for your cooperation, we look forward to receiving the final report on the Albanian mining sector restructuring.

**MINISTER
GENC RULI**

A. MINING SECTOR REFORM AND PROSPECTS

A.1 Introduction

1. The mineral industry of Albania served for more than fifty years as a foundation of industrial growth and economic linkages, building on an underlying resource endowment of chrome for which it was, until the 1980s, one of the world's biggest producers, together with nickel, iron and copper mineralization. Large industrial complexes operated across an integrated value-chain from mining through metallurgical processing to downstream metals fabrication. The history of the Albanian mining industry is one of systematic expansion for three decades followed by a brief period (up to 1989) of over-expansion driven by a weak macro-economy that increasingly demanded irrationally high levels of production. By 1991 this had culminated in a rapid decline to such a degree that remaining operations today realize only around 10% of rated plant capacities with most having succumbed to a decade of underinvestment, cannibalization and decay. This is regrettable, given that a well-managed mining sector can substantially increase the creation of jobs (both directly and indirectly), stimulate the transfer of technologies and knowledge, promote the development of modern infrastructure¹ and generate valuable foreign exchange earnings. Therefore measures for reform are required, in order to create an investment environment in which appropriate international investors² can re-start the production and bring the sector back to its economic potential. The Government has taken the view that a revived mining sector “would as a core industry be able to stimulate economic development, provide a means for acquiring foreign currency and will help to reduce poverty”³. Therefore the Government has the intention of reshaping the sector so that it can become a major contributor to the macro-economy, local community development, and employment. For these reasons, the mining industry is being given top priority for the country's economic development⁴.

2. At present the sector shows, after a difficult privatization process having weak design, poor implementation and lax enforcement of contractual obligations, signs of recovery. Such a change is expressed in improved numbers with regard to investments in both smaller and large-scale mines, increased output and employment, and higher capacities of downstream processing of minerals. In addition, the underlying mineral endowment remains highly prospective and a potential source of growth. To realize the

¹ Mining projects have in the past already led to the construction of railroads, electricity networks and the like. Since current investors are pressing for the upgrade of existing infrastructure, such pull-effects could go hand in hand (and might be supported in part by some of the mining companies).

² For Albania, international junior mining companies seem to represent the ideal investor type. These companies tend to be listed on the major stock exchanges and are regulated by stock exchange rules and standards. Thus, they uniformly adhere to systems such as Canada's NI 43-101 rules for handling their Resources and Reserves calculations and use recognized reporting codes, e.g. CIM or JORC, with their results being compliant with those codes. However, even unlisted companies might in some cases represent high quality investors

³ From the Government's Study for the Strategic Development Plan for Promoting the Mining Industry of Albania, 2007

⁴ Ibid; private sector development is also a main pillar of the current World Bank's CAS

extent of that potential, some strategic actions are suggested:

- ***Improve the Investment Climate through Reforming the Policy, Legal and Regulatory Frameworks, including Enhanced Administrative Capacity and Sector Promotion*** – to improve Albania’s ability to attract technically and financially qualified investors within a transparent, competitive, non-discretionary, and stable administrative system. Also, there is a need to improve the technical capacities of the Government to sustain reforms, undertake sector promotion and ensure that investors benefit from an efficient administrative system and ongoing access to new investment opportunities. In order to promote the sector, not only should the national geological database be updated and be made available widely⁵, but the resource potential should be also properly assessed, by applying current market prices, production costs and available technology to known deposits. This should help to identify the subset of resources that might form the basis of potential investor interest.
- ***Improve the Development Outcome of the Mineral Operations through Addressing Environmental and Social Issues, as well as Improving Sustainability at the Community Level and Benefit Sharing*** – this takes account of the crucial role the sector can and should play in terms of national and local economic development. However, experience shows that positive outcomes are only possible if certain criteria are met. Each mining operation needs to adhere to an agreed set of environmental and social standards in order to mitigate its impacts; beyond that, if communities are involved in the process from the beginning on, the concerned stakeholders can design positive benefit sharing and community support schemes which strengthen the local economy and provide the mining operator with the “social license to operate”.

3. From the outset there is need for a dual focus (a) to determine what actions might be taken to enable new investors to enter into existing operations, and (b) what actions are needed to attract quality investors to undertake generative exploration towards new discoveries under improved sector governance. In this regard, experience demonstrates the uplift of lesser performing mines by new mines established under improved operating conditions. To achieve this outcome, the improvements of overarching policies, laws and frameworks becomes paramount to the structural framework within which investors might undertake new generative exploration and development.

4. This report provides a concise overview of the current situation of the mining sector in Albania. It evaluates the major events that took place in the last two decades (especially regarding the privatization process), and examines its governance, overarching policies and its legal frameworks that have guided the sector development. Having identified the weaknesses and difficulties that the sector faces, the report then

⁵ The Albanian Geological Survey is currently working on digitalizing the geographical data maps, which will also be made available to foreign investors. However, there is some lack of appropriate modern software and the relevant human resource to work with this software

suggests an outline for a comprehensive reform program. The main findings in this regard are related to:

- ***Improving sector governance*** - with particular attention to improve coordination between the relevant institutions and organizations, as well as creating a transparent investment climate in order to improve attractiveness for international investors
- ***Improving regulatory effectiveness*** - including contract enforcement on existing operations (i.e. ensuring that operations perform according to legal requirements and that they fulfill their contractual obligations)
- ***Strengthening the technical capacities*** of the relevant organizational institutions (e.g. Ministry of Economy, Trade and Energy, METE and supporting agencies)
- ***Addressing environmental⁶ and social legacy, and community benefit sharing issues***
- ***Sustaining sector growth through sector promotion***

5. The report also summarizes an evaluation of the mineral legal and regulatory environment, in order to inform an overall reform strategy and to identify commodities and/or resource areas of particular interest going forward – “low hanging fruit” that might offer new growth opportunities. The first pass evaluation summarizes current production, including the impact so far of foreign investment on existing mining operations, reforms to date, as well as the strengths and weaknesses of the fiscal, legal and regulatory framework in attracting investment.

6. The overall conclusion of the report is that sector reform should emphasize new Greenfield resource potential through generative exploration by smaller and medium-sized international “junior” mining companies. New resource development would be undertaken within a strengthened governance framework reinforced by a competitive, transparent, stable, non-discretionary regulatory regime. Although now highly fragmented, existing operations would be improved with the introduction of new operations performing to international good practice. Additionally, the private sector should be enabled to consolidate license holdings under improved regulatory enforcement that prevents licenses being held for speculation without intention to undertake meaningful investments that would result in development.

7. As indicated briefly above, reform and subsequent re-strengthening of the mining sector could have substantial benefits for the country, and contribute to sustainable economic growth through

- the creation of employment, both directly and indirectly;
- the facilitation for the development and upgrading of critical infrastructure;

⁶ especially environmental legacy issues of old, but currently non-operating mines and plants

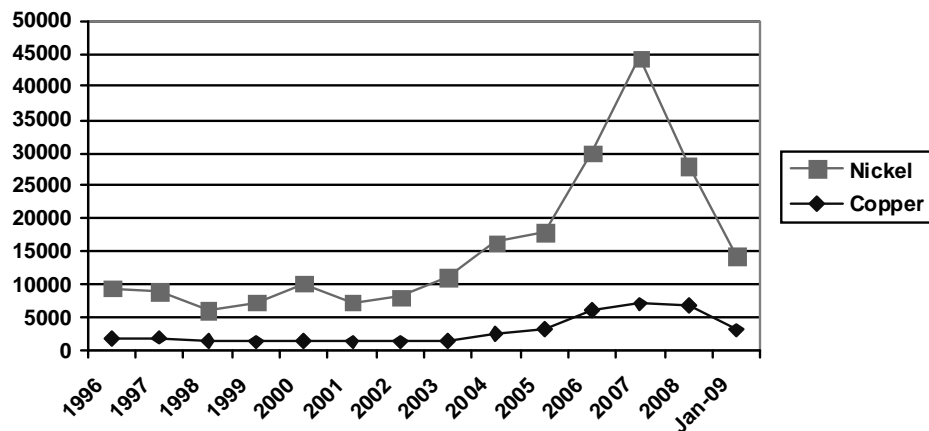
- the provision of foreign exchange, which would facilitate the purchase of capital equipment to improve other productive sectors like the textile industry. Likewise, the creation of capital and foreign exchange from the mining sector would also reduce the dependency of the country on foreign remittances;
- the creation of local economic development, especially in lagging regions and regions with high incidences of poverty (such as the north and the northeast);
- its potential to create or revive a downstream processing industry, which would create additional jobs plus technological know-how around industrial processes which could also be put to use in other industries.

B. TECHNICAL ASSESSMENT OF MINERAL SECTOR POTENTIAL

B.1 Background

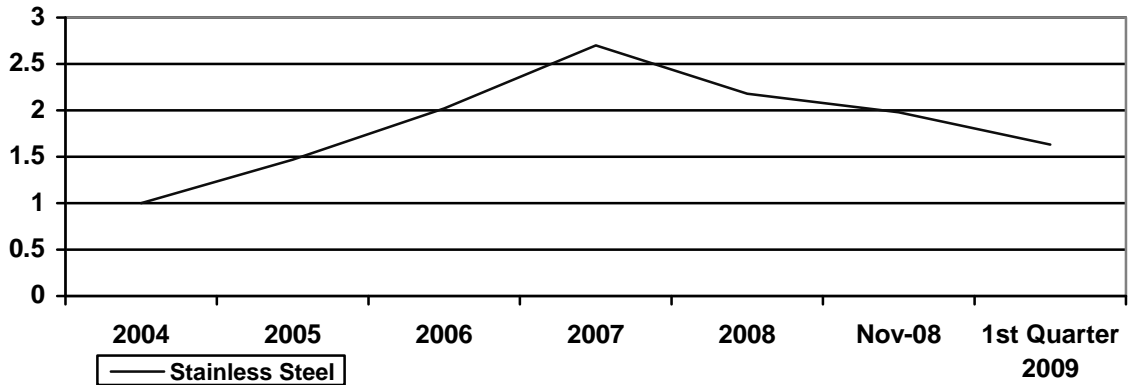
8. Beginning 2001 commodity prices strengthened to record highs (Graph 1). Even though recently there occurred a fall of these prices, it is expected that commodity demand will recover, resulting in a subsequent improvement of mineral value. It is therefore expedient for Albania to use the time to engage on sector reform, so as to be ready for a new cycle of demand for exploration and mining.

Graph 1: Price development of nickel and copper, 1996 – 2009, USD p.mt



Source: United States Geological Survey (USGS)

Graph 2: Stainless Steel Prices as a proxy for chromite prices⁷, 2004-2009, USD per pound

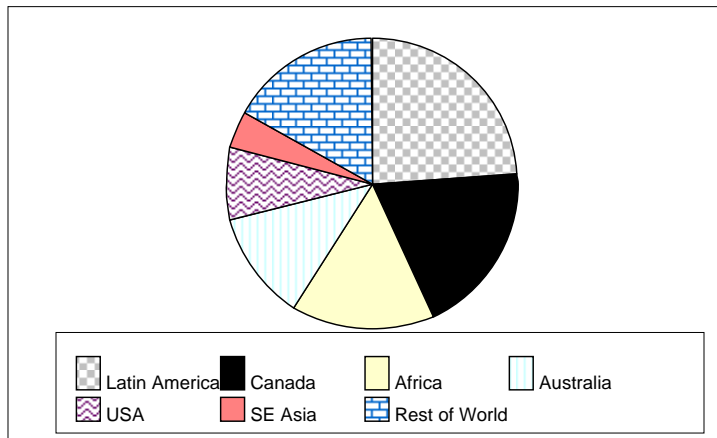


Source: Enodis USA

9. The World Bank (1993) undertook an extensive compilation of mineral resources. As will be discussed in more detail in section B. 3, Albania has substantial resources of good quality chromites, iron-nickel, nickel-silicates, and copper, along with gold and zinc.

10. The current geographical focus of exploration expenditure is in the traditional mining centers of Latin America, North America, Africa and Australia. Europe in general and the Balkans in particular have failed to register in a major way in the global search for non-ferrous metals. This is partly a reflection of the expected size of discovery, but also a recognition that mining investment clusters around the more recent, larger discoveries, but also its tendency to go to countries with sound and transparent investment environments. This is in consequence one area where countries like Albania can gain additional investor's focus by improving the relevant investment climate.

Graph 3: Global non-ferrous exploration budget, by



Source: Metal Economics Group

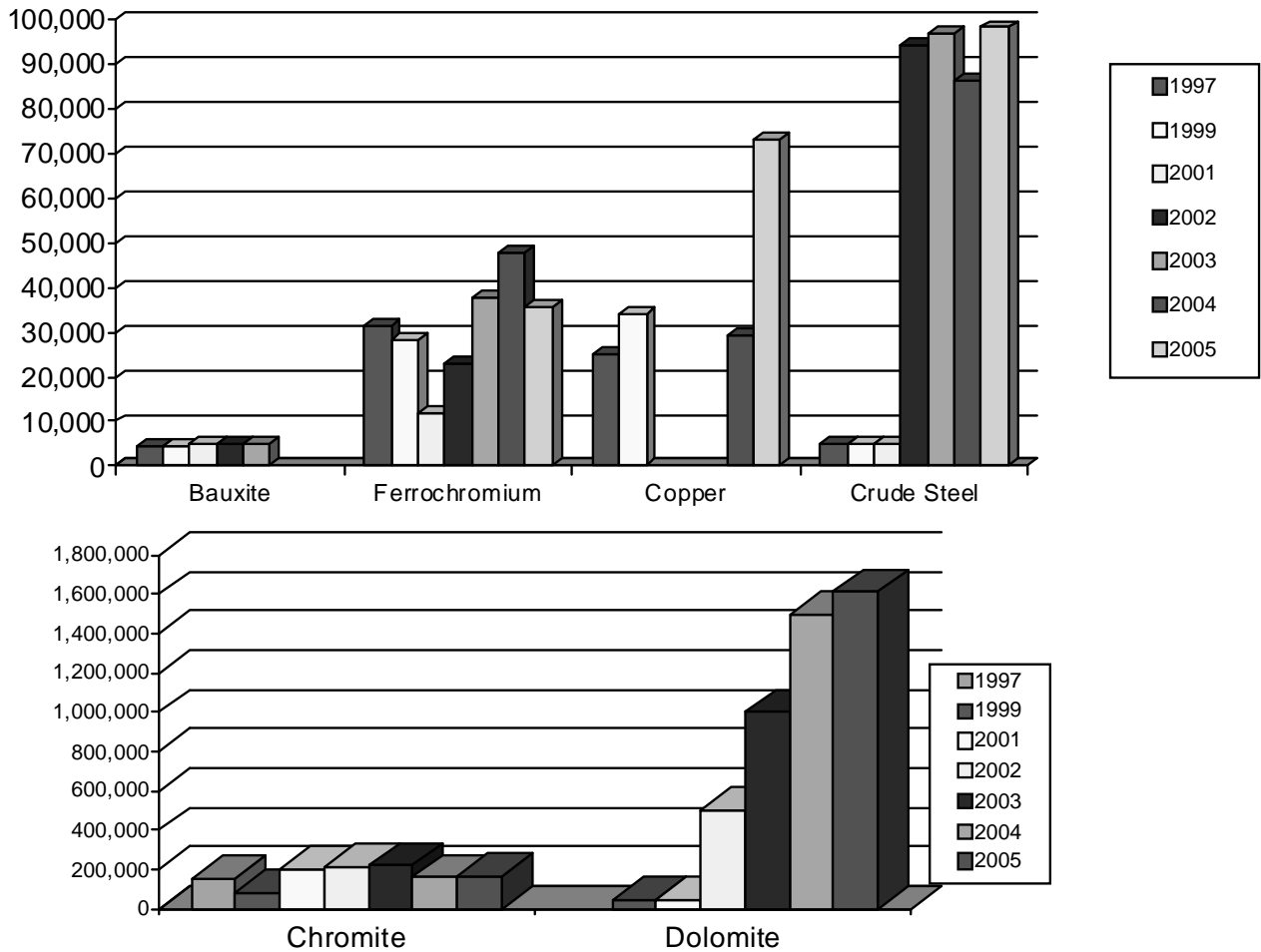
⁷ Stainless steel has and can be used as a proxy for two reasons: First, chromite itself has practically ceased to be a traded good, since the bulk of it is used for the production of ferro-alloy, which in turn is used for the production of stainless steel (more than 90%). Second, this in turn is currently taking place under the framework of integrated production, i.e. from the mine to the smelters to the steel production itself under one vertically integrated company. Thus, according to the United States Geological Service, there is globally almost no demand at all for pricing of this good.

11. It is noteworthy that currently Greece appears as the only representative of the Balkans out of the 25 countries assessed in the 2007 edition of the annual Behre Dolbear⁸ mining country ranking survey. As such, the Balkans constitute a minor segment in the global mining investment portfolio at the moment.

B.2 Current Production

12. The Albanian mining sector has centered about three main metals (chrome, copper and nickel). The United States Geological Survey (USGS) statistics from 2005 reveal that production in 2005 was lower for most metallic or industrial minerals than in 1995. However, it can be seen that production re-gained momentum in most cases from 2001 / 2002 onwards (for chromite, crude steel, dolomite and salt; ferrochromium production followed a similar pattern after 2003). The graphs below illustrate these past and current production patterns of the most important metals. The relevant tables which also include some additional minerals can be found in Annex G.

Graph 4 & 5: Production levels of selected commodities, 1997-2005 (in metric tons.)

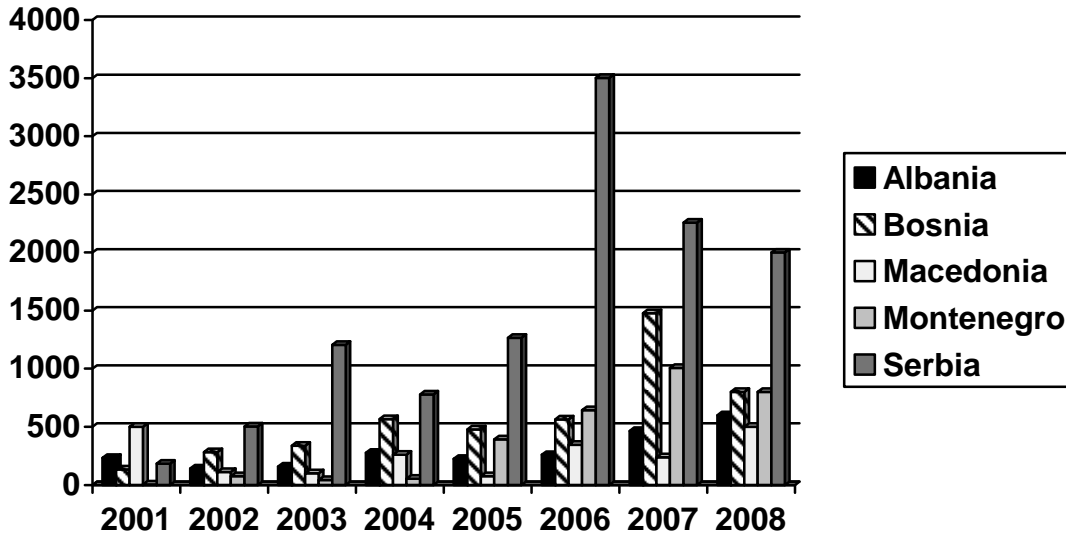


Source: United States Geological Survey (USGS)

⁸(www.dolbear.com)

13. Despite these recoveries, Albania’s mining sector still has not yet maximized its full potential, and it has not yet sufficiently attracted foreign investors commensurate with the underlying resource potential. Indeed, when compared to its neighboring countries, Albania is currently still seen as being a minor location for foreign investors.

Graph 6: Foreign Direct Investment into the Balkans, 2001–2008, in Million Euros

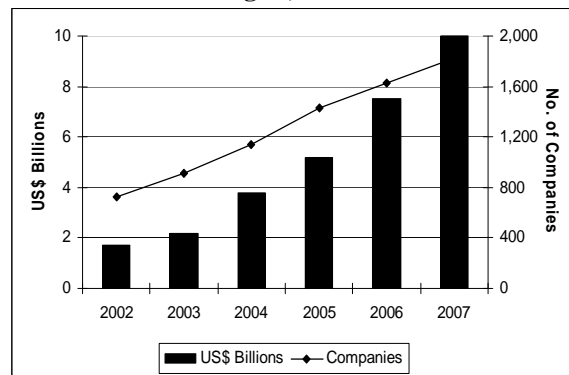


Source: Vienna Institute for International Economic Studies (www.wiwi.ac.at)

14. However, exploration activities, investments and the number of internationally active junior companies have been on a continuous rise during 2002 – 2007 (see Graph 6). Both commodity prices and exploration activities have declined sharply in 2008, as a result of the collapse of the international financial system and the subsequent global recession. However, commodities generally lead recoveries and it is expected that economic activities will recover and revert to previous levels within the next three to five years.

Graph 7: Global non-ferrous metal exploration budgets, 2002-2007

15. As will be further outlined in Section B 3 below, Albania has good prospective geology for copper, chromite, iron-nickel, but also gold, zinc, titanium and platinum. In 2008, the most recent year of reporting, exploration and mining companies from Canada, Turkey, Austria, United Kingdom and Australia were active in the country. Copper is being mined at



Source: Metals Economics Group

Munella by a Turkish operator, and chromite from Bulqiza by an Austrian / Russian Joint Venture (JV) (see picture 1). Two international juniors from Canada are exploring for copper in the northern copper region around Munella, and other juniors are exploring lateritic nickel deposits in the south-east. An Australian junior company is exploring for copper, gold and nickel within Rubik area (western copper area), as well as fast tracking the development of the Kalimash chromite deposits, while an exploration license has been granted to another junior company in the highly prospective Bulqiza area. The new companies seem to have a similar basic approach to exploration in Albania. They are digitizing the old records, and then using modern geological and geophysical concepts to select optimum drill sites to test both old and new targets. Most have carried out drilling programs in 2008. These current developments do demonstrate that international investors see a definite potential in Albania as a mining country. But these opportunities will also have to be used to create a framework so that the mineral development projects will contribute to sustainable economic growth on a national as well as on national scale.

Picture 1: Bulqiza chromite mine, entrance



B.3 Resource Potential

16. The resource potential for select metallic deposit types of chromite, copper and nickel is high and offers growth potential, favoring modern exploration for new discoveries by good practice investors. Sustained mining sector growth will result from a diverse portfolio of investors across:

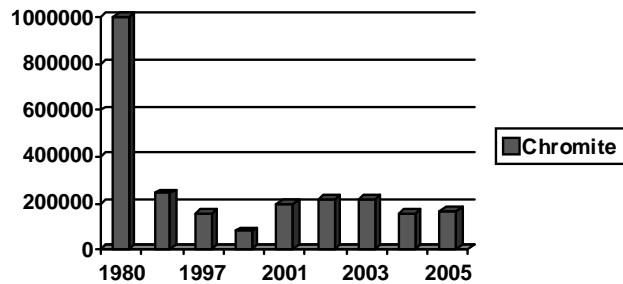
- (a) smaller chromite mines run by domestic investors having reached an output equilibrium lower than historical (1990) levels but generating employment, export earnings and revenues to government;
- (b) the potential for larger nickel and copper mining operations in which international investors undertake the requisite exploration towards establishment of new mining operations employing international good practices that will have a positive catalytic effect across the sector.

B.3.1 Chromite Production:

Graph 8: Graphic illustration of chromite production, 1995-2005
Source: USGS

17. The *Exploration Potential* for chromite is **High** for small-to-medium size deposits, using modern exploration technologies searching for deeper deposits in prospective areas. New discoveries need to be added to the portfolio of operating mines in order to replenish ore reserves that sustain sector growth. The Albanian Geological Survey

(AGS) has previously identified the opportunity for extensions to known larger ore bodies and some government technical assistance may be needed to guide the identification of exploration targets by enterprises who lack the in-house capacity for systematic prospecting / exploration.



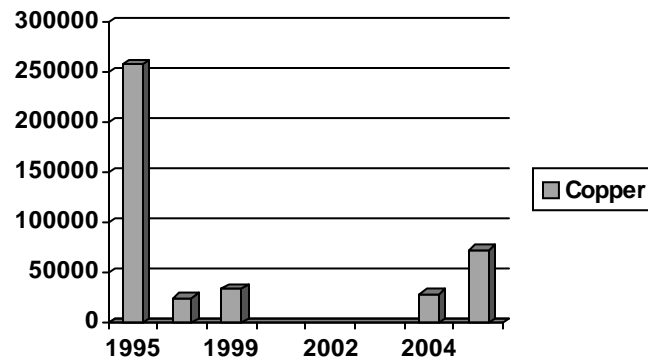
The Albanian Geological Survey (AGS) has previously identified the opportunity for extensions to known larger ore bodies and some government technical assistance may be needed to guide the identification of exploration targets by enterprises who lack the in-house capacity for systematic prospecting / exploration.

18. Regarding its *Future Potential*, Albanian's chromite sector features mostly small-scale enterprise operations or family-run operations that do not lend themselves to either consolidation or expansion of individual outputs. However, the recent exploration activities of an Australian junior company in Kalimash, which has proceeded with feasibility studies, show that some existing operations might have the potential to attract international junior companies. The requirement to undertake further State-run exploration is minimal, except with regard to ancillary PGM potential associated with the chromite ores.

19. *Current and Target Investors.* The current investments of known significant size are the Austro-Russian JV which has been involved at Bulqiza since February 2007, and the Kalimash project. The potential target investors into Albania's chromite sector should in addition include Turkish companies. These have a proven record of significant production levels on Alpine-type Podiform chromite deposits.

B.3.2 Copper Production

Graph 9: Graphic illustration of copper production, 1995-2005



Source: USGS

20. The *Exploration Potential* for copper is **Very high** for smaller deposits occurring in clusters, and Albania should seek to attract foreign junior mining companies who are able to use modern exploration techniques. Because of the type of deposit model present in Albania, the country is less likely to be a world-class producer of

copper but several countries within the region enjoy a modest but robust copper sector built on this type of copper deposit (Cyprus and Turkey). The ultimate reserve potential is unknown, and will be informed by ongoing exploration programs that began 2007. Metallurgical processing in-country remains an issue for further investigation (at least one flotation plant is currently re-vitalized). The copper sub-sector remains under-developed and represents an important potential source of investment opportunity.

21. Regarding its *Future Potential*, Albania's copper sector is the smallest of those currently active in the Balkans. It will be important to attract international mining companies that adhere to "good practice" in their exploration and mining activities to search for and exploit Albania's deposits. These companies tend to be listed on the major stock exchanges and are regulated by stock exchange rules and standards. Thus, they uniformly adhere to systems such as Canada's NI 43-101 rules for handling their Resources and Reserves calculations and use recognized reporting codes, e.g. CIM or JORC, with their results being compliant with those codes.

22. *Current and Target Investors.* The traditional junior exploration sector (UK, Canada and Australia) represents a viable source of competent and capable investors. The main investors throughout the Balkans base and precious metals exploration activities are drawn from this source. Exploration investors in Albania at present include a Canadian junior explorer which has introduced industrial "good practice" in its exploration activities and undertaken a major airborne geophysical survey. The company is actively rejuvenating exploration interest in the Mirdita zone by the introduction of modern ore genesis models that are being tested by modern technology. There are, in addition, other internationals in the explorations stage in this area.

B.3.3 Nickel Production

23. The **Exploration Potential** is **High** for medium-sized deposits that can be economically significant and represent viable targets for smaller and medium-sized international companies. Deposits are thought to be comparable to Greece, with tonnages similar to neighboring Kosovo (10,000 t.pa). The ultimate reserve potential is unknown, but could be comparable to Turkey (e.g. Çaldag). Metallurgical processing in-country remains an issue for further investigation. Overall, the nickel sector remains under-developed and a source of investment opportunity.

24. Regarding its **Future Potential**, Albania's nickel sector is currently benefiting from the arrival of European Nickel, an UK-based exploration junior company that has introduced international approaches to exploration and professional development

25. **Current and Target Investors.** The current investors in Albania's nickel exploration sector include the afore-mentioned UK-based company which is currently commissioning the Çaldağ Ni-Co Mine in western Turkey. It is noteworthy that this company has trained its domestic Albanian technical staff to the point that they are now fully adhering to "good practice" without any international supervision, apart from occasional managerial progress monitoring visits. The company is planning to establish an acid leach plant similar to that being commissioned at Çaldağ and sell the 30% Ni concentrate product to nickel smelters in Europe.

26. The Albanian nickel sector has substantial Indicated Reserves and should aim at attracting more junior companies. The senior nickel companies are already engaged on major expansions at their large-scale nickel sulphide operations in Canada, South Africa and Australia.

C. SECTOR MANAGEMENT AND GOVERNANCE

C.1 Overview of Mining Sector Reforms

27. A detailed history of the Albanian mining sector serves to underscore the differences between the formerly integrated mine / metallurgical operations of the 1980's in contrast to the now highly fragmented nature of remaining assets (see more detailed history in Annex A). The brief history presented here touches upon some of the more salient historical events to underscore the history of reforms and the associated decline of the industry because of under-capitalization and fragmentation of license holdings leading to closure.

28. For nearly fifty years the Albanian mining sector was an engine of growth feeding raw materials to downstream industrial activities that included steel, metals production and value-added metallurgical products for export. Mineral production and exports peaked in 1989 at US\$140 million when chrome, copper and nickel accounted for about 80 percent of total Albanian exports (by value). By 1992 mining exports had fallen significantly to around \$20 million, a result of political instabilities, economic decline within the country and the onset of a commodity recession that would persist throughout the remainder of the decade. Under severe financial constraints, reinvestment in mines and plants all but ceased and was replaced by asset stripping and salvaging of the mines and equipment that rendered essential processes non-operational.

29. A program for restructuring, rationalization and/or consolidation of potentially viable mines and concentrators as well as closure of uneconomic operations was discussed by the Government and the World Bank (1993), based on a systematic approach to social, environmental and financial liabilities. While some positive steps were taken with the enactment of the 1994 Mining Law, the transfer of mineral operations to qualified investors did not take place. In 1998, the Government embarked on a license transfer to reassign mineral exploration and exploitation rights to mitigate emerging discontent within rural areas. A majority of mineral rights were assigned to individuals having inadequate technical expertise and financial resources necessary to recover the sector. Moreover as a part of this transfer large, integrated mining operations were unbundled into dissociated units lacking the economies-of-scale necessary for efficient metallurgical processing. An ensuing decade of lax contractual enforcement enabled these license holders to passively hold resources, and thus effectively sterilizing key assets and restricting access to qualified investors.

30. The ensuing years after 1998 would show incoming investors to be largely under-capitalized speculators. Within two years, nearly all remaining productive capacity of the large, diversified, integrated mining sector had been stripped away. The decline of the major mining and downstream metallurgical operations is exemplified by the history of the Elbasan Steel Works. Darfo S.p.A., an Italian investor, assumed control of the

ferrochromium plant at Burrel and the steel mill at Elbasan⁹(see picture 2). The capacity of the latter was designed for a steel production capacity of 750,000 tonnes and a production value of \$140 million (in 1989). Under Darfo, the plant was significantly downgraded and was eventually taken over by Kurum of Turkey whose production was 100,000 tonnes (\$20 million). The plant was eventually closed, with Kurum citing high electricity costs¹⁰ as well as imports that would be too competitive for Albanian production to meet. Today, other remaining operations are a mere 10% of their rated capacities and most have been reduced to a state of disrepair. Whereas the objective of privatization was to coincide with the macro-economic shift towards market-based economic growth, the outcome was markedly different. The sector remained for years a mere shell of its former self. The fragmentation of both large and small mines has rendered many investment opportunities “uninteresting” to the international investment community. Large-scale investors face considerable challenges¹¹ to consolidate former operations into viable assets. However, in the most recent time, a slight recovery of the sector could be noticed, as a number of international junior companies realized exploration opportunities, and the increasing number of workforce and investment in the sector also supports the notion of a recovery.

C.2 Legal, Regulatory and Institutional Reforms

Picture 2: Elbasan metallurgical complex

31. *Governance – The Situation at Present.*

Despite some early reforms and privatization of the mining sector, Albania has attracted a limited number of foreign good practice investors for its existing mineral operations. By comparison, the resource potential for select deposit types is high and offers growth potential for new investments especially if exploration can be attracted for new discoveries by good practice investors. A 2003 Mining Sector Strategy was



31. *Governance – The Situation at Present.* Despite some early reforms and privatization of the mining sector, Albania has attracted a limited number of foreign good practice investors for its existing mineral operations. By comparison, the resource potential for select deposit types is high and offers growth potential for new investments especially if exploration can be attracted for new discoveries by good practice investors. A 2003 Mining Sector Strategy was

⁹ This is a good example of an integrated production process, as it has existed in Albania until the 1990s. Ferrochromium is used for the production of stainless steel

¹⁰ These comments from Kurum stem from their own view on the Albanian Investment Promotion Act. While Kurum gives no numerical value with regard to electricity costs and exact cost disadvantages relative to neighboring countries are difficult to obtain, it can at least be confirmed that electricity supply is unreliable, especially for energy-intensive production (see common investor views on points of urgent reform further below this page). High electricity costs are also cited by JAB Resources (see JAB: Albanian Projects, under www.jabresources.com)

¹¹ These challenges have to do with a lack of coordination between relevant public institutions, lax enforcement of regulations, legacy problems and often inadequate infrastructure

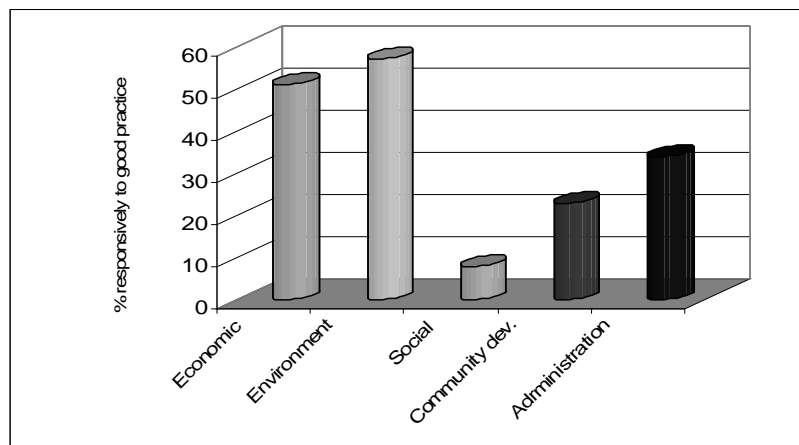
prepared, but has not yet been fully implemented and needs updating. Albania’s 1994 Mining Law provides for private sector led investment, and contains good environmental and licensing practices. However, strengthening of enforcement is needed, together with additional provisions for managing social risks. The sector will benefit overall from an improved enforcement of the terms and conditions to which license holders are obligated.

32. **The Albanian Mining Law.** The Ministry of Economy, Trade and Energy (METE) has begun to address overarching institutional and legislative frameworks by drafting a new mining law, currently under internal review. However, mining law reform would logically follow adoption of a national mineral policy/strategy – a detailed roadmap whereby the government, industry and civil society have come to a common agreement after broad consultation (the full slate of issues that Albania might want to consider in sector policy and law is included in Annex C).

33. Below (Graph 10) is a graphical illustration of the responsiveness of the draft new mining law with regard to economic, social, environmental and community issue prerogatives, which was prepared by the World Bank Group and is based on the following categories/elements of good practices:

- Economic: Tenure, transparency, flexibility, types of rights, obligations, incentives, violations, dispute resolution
- Environment: Assessment, management, health & safety, reclamation
- Social: Consultative processes, frameworks, mitigation, compensation, and gender issues
- Community Development: Economic, environmental, and social development; and artisan mining issues
- Administration: Competent authorities; responsibilities, inspection, violations and penalties, resolution and appeals

34. The percentage of responsiveness was calculated based on the presence and absence of certain good practice elements, as described in the template of good practices in mining legislation (Annex D), developed by the World Bank, and based on global experience. The average score (ca. 35%) shows room for improvement on social, community and overall policy considerations.



Graph 10: Mining Law / Regulations; assessment against good practice

35. From the economic point of view the draft law provides for a clear and transparent licensing system, ensuring the secure of tenure, clearly stating the relations with the surface land owners and flexibility in timing for exploration and exploitation. Some of the provisions related to the type of rights and eligibility of cancellation, obligations for taxes, duties and royalties and renewal, transfer, termination of the licensing should be strengthened to include clear indication of what it is required from a titleholder in order to benefit from these rights. The draft law does not address the reliance on the private sector to provide investment, and there is no provision for a binding tax stability¹² or authorization of the appropriate government agency to provide financial tax provisions or amortization, depreciation and loss-carried forward.

36. Of critical importance is the ability to **attract qualified investors through an appropriate licensing methodology**. Mineral resource development relies upon comprehensive regulations in order to provide a maximum gain out of such operations, whereby the interest of the state needs to be balanced against the interests of the investor / resource developer. The benefits of a dual methodology for the assignment of mineral exploration / exploitation rights – depending on the level of information available for the underlying resource should be considered. Of the utmost importance is that the government should ensure that qualified investors (in terms of technical and financial capability and also of Corporate Social Responsibility) will become the developers of a resource. The currently employed “**first come / first served**” approach is appropriate for exploration licensing when little is known of the underlying resource potential. But when good information is available from past discoveries or production, and there is interest from more than one potential investor, then a **competitively based selection** (for exploration or small deposits) or a full scale auction respectively (for the exploitation of larger deposits) may be more appropriate. The utility of a competitively based selection is due to the fact that the licensing agency can select the best candidate based on a technical evaluation of the information about the financial and technical capabilities of that particular candidate, investment and work plans of the candidates. A competitively based process can also include bidding with regard to payments of royalties and surplus rents (mineral rents). The main steps of the process should be clearly specified by the Mining Law, while the details regarding the procedures and criteria for selection should be part of the enabling regulations.

37. The **environmental** aspects are well covered in the draft law, from health and safety and emergency response as well as mine reclamation. However, the draft law does not specify what are the environmental safeguards that the title holder needs to observe (such as the requirement of preparing an Environmental Impact Assessment (EIA) before any mining activity, Environmental Management Plans (EMPs), etc).

38. With regard to **social** aspects, namely pre-development social planning (requirement of a Strategic Impact Assessment (SIA) and mitigation plans), resettlement and compensation as well as community well being, the draft law is largely silent and

¹² Tax stability is a key instrument of competitive taxation in large capital mining industries where a company may elect to pay higher corporate tax in return for a “stability” during which taxes are fixed for a specified period of time

does not have any provision that would look at these aspects. With regard to consultation processes, the draft law provides for consultation with local authorities, in case it is considered that granting the mining rights may seriously impact on and lead to negative impacts for and conflicts with the inhabitants in the relevant area (Art. 13 of the new law). This article has two main shortcomings (namely that the decision on the impact on the communities is discretionary and consultation is required only with local authorities) and needs to be strengthened to align with international Good Practices related to consultations processes, which generally include provisions for consultation with the most vulnerable groups.

39. **Community development** aspects need also to be strengthened, especially in clarifying the provisions for preparation of an initial mine closure plan as part of the licensing process. Additionally, there is no requirement on progressive closure (“close as you mine” where and when possible) and no specifications on what type of social mitigation measures need to be taken in order to ensure that communities from the affected areas would be sustainable after the closure. The provisions related to the mining legacy issues and how Government is going to deal with them need to also be strengthened to clarify when closure falls under the responsibility of the license holder and when under Government’s responsibility and what type of post-closure monitoring is needed.

40. In terms of **administration of the law**, the draft law has clearly defined violations and penalties, but needs to be strengthened with regard to the responsibilities of the competent authorities and transparency of their activity and public disclosure. Responsibilities of setting up the regulatory/legal framework are separated from the implementation of such framework, eliminating the conflict of interest that may arise if the same institution prepares/adjusts legislation and implements it. The licensing authority should definitely have a certain level of independence from other relevant ministries (mining, environment, etc) and ideally should be functioning under the coordination of the prime minister.

41. *Best practice* would require that institutional arrangements and roles of each institution involved are clearly defined in the law including (i) the relevant **Mining Ministry** - responsible for preparing and managing the mining strategy/policy through a prioritized action plan including mining related laws and regulations for setting mining royalties in consultation with the Ministry of Finance (MoF)¹³; (ii) the **Geological Survey** - responsible for the collection and dissemination of geoscientific data to government and industry (including, in this particular case data on hydrogeology, underground water and geological hazards) as an independent public research entity possibly on a partial fee-service basis; and (iii) a **Competent Authority** – as an independent entity that implements the mining strategy/policy, monitors and controls the sector activities, including licensing process (mining cadastre), management of industry assessment reports, assessment of royalties, environmental and social compliance, health and safety, closure/post closure monitoring, and control of mining activities. Additionally, such an Authority

¹³ The MoF would set the mining fiscal regime which would generally be in line with the rest of the economy

would act as a mining one-stop interface for potential investors, which would greatly enhance the attractiveness of the Albanian mining sector. This one-stop interface should not be part of the general one-stop-shop approach for non-mining sector licensing, as mineral licensing is unique in that the state retains ownership of the mineral asset and awards exploration / development rights, as specified by the mining legislation. This contractual relationship between the government and private sector is not seen in other parts of the economy and therefore warrants specific treatment.

42. Also the draft law should be clearer on the access to information, the functions of the mining cadastre, and documents/reports required to be prepared by the titleholder during the mining activity.

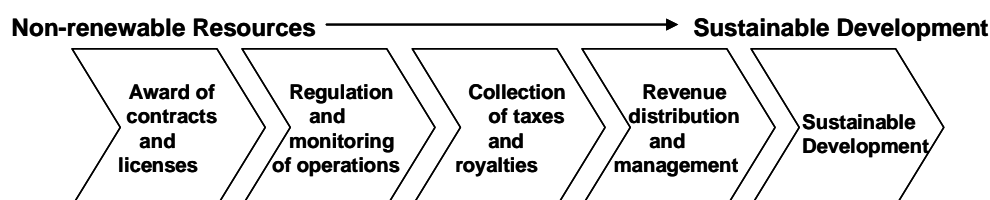
43. **Improving transparency and accountability** by disclosing the payments made by resource extracting companies to the government is an important step towards turning a country's natural resource endowment into economic prosperity. As such, global initiatives like the Extractive Industries Transparency Initiative (EITI) are particularly beneficial for countries to help make sure the mineral sector has the proper transparency, and thus makes it easier for governments to estimate its economic contribution. It is also a pertinent measure to diminish distrust of local communities and civil society against mineral operations.

D. THE FUTURE PROSPECTS OF THE ALBANIAN MINING SECTOR

D.1 Key Policy Issues to Consider for the Future for Albanian's Mining Sector

44. When well managed, extractive industries create jobs, stimulate the transfer of technologies and knowledge, and generate valuable foreign exchange earnings, thus providing governments a financial base for the development of infrastructure and the provision of social services. Unfortunately, many governments have mismanaged their mining revenues and have suffered to varying degree “the resource curse,” whereby poor policy choices coupled with corruption have exacerbated the cycles of poverty and conflict. Good sector governance begins with sound management and transparency along the full spectrum of the mineral governance chain, from the awarding of contracts, to the monitoring of operations, to the collection of taxes, to the sound distribution of revenues, and finally to the achievement of sustainable development for the economy as a whole.

Figure 1: Increasing the value from mineral resources for the economy: From non-renewable resources to sustainable development



45. Sector reform uses instruments to provide an integrated holistic approach encompassing good governance and transparency along the entire chain (Figure 1).

A dual-track approach of reform is often used:

- **broader initiatives** to stimulate sector growth, mostly through targeting new exploration, investment in and modernization of one or two reform-minded operations dominant within the peer group. Such operations can incubate skilled labor, enhance government revenues, and attract foreign direct investment towards improved operational efficiencies.
- **step-by-step reform** of rent-distorted operations to limit pushback, while broader initiatives build a pro-reform political constituency¹⁴

46. This may be done by preparing an overall strategic road map for future Albanian mining sector development. The recommended actions combine to a comprehensive reform as summarized in the following matrix:

¹⁴ Benefiting from Mineral Enclaves, Richard Auty (Lancaster University)

Table 1: A matrix of thorough mining sector reform in Albania

<i>Reform</i>	<i>Principal Objective of Reform</i>	<i>Responsible Entity</i>	<i>Area of Focus</i>
Preparation of a road map/strategy for sustainable development of the mining sector	Develop strategic actions for future development of the mining sector, including addressing mining legacy issues	Ministry of Economy, Trade and Energy, Ministry of Environment	Nationwide Investors and communities
Strengthening Sector Governance	Strong adherence to laws to mitigate against non-transparent / discretionary authority; Implementation of EITI to improve transparency and accountability in the extractive industries sector	METE;	Nationwide Investors in mineral license areas
Institutional Strengthening and Capacity Building	Improved sector administration of exploration and development; Clear-cut Terms of Reference to avoid both institutional overlap and gaps appearing in the minerals administration; Facilitate access for investors in Albanian Mining sector through “one stop shop”; Strengthening enforcement of mining polices, laws and regulations. Revocation of licenses that do not perform according to contract agreements and/or regulations	METE; Independent Mining Licensing (Cadastral) Authority working in conjunction with Ministry of Economy, Trade and Energy; and Ministry of Environment	Nationwide Investors Non-performing license holders
Addressing Environmental / Social Legacy Issues	Prioritize unaddressed environmental / social legacy issues to define a strategic long-range program through the preparation and implementation of a Strategic Environmental and Social Assessment	Ministry of Environment; Ministry of Labor	Nationwide; Former metallic mining operations, small-to-medium construction material operations, pensioned miners
Improving Sustainability at the Community Level and Benefit Sharing	Sustainable long-range sector development in which a broad stakeholder group participates in resource development planning and sharing of benefits; this also requires transparency with regard to payments between the companies and the Government	METE	Stakeholders and vulnerable groups in affected communities around resource development
Sustaining Sector Growth	Increased investment in exploration and development; Transform national geological database into an electronic format and make publicly accessible on an integrated basis via a dedicated website; Other forms of sector promotion (international exhibitions, features in respective magazines, websites etc...)	Geological Survey, oversight by the Independent Mining Licensing Authority; METE; sector promotion agencies	Prospective mineral areas for metals, cement and industrial minerals

47. Such an overall reform agenda would entail the following components:

48. ***I. Strengthening Sector Governance.*** Good sector governance is defined by a stable, transparent and efficient regulatory environment that enables private-sector led investments, facilitates sustained economic growth, and increases revenues to the Albanian government. Through commercialization and/or privatization of state-owned enterprises, the Ministry focuses on policy making and regulatory functions across four main areas:

- ***Setting Sector Policy.*** Create and implement policies for solid and energy minerals, and take the lead in formulating policies and drafting laws, regulations, standards, and model contracts.
- ***Strengthening Laws.*** Define transparent, non-discretionary laws, regulations, licenses, contracts, and standards. Regulation should require that Ministry of Economy, Trade and Energy be able to measure or verify production; calculate royalties, fees, and inspect and make the necessary measurements to check compliance with health, safety, and environmental standards.
- ***Improving Sector Revenue Management.*** Through (a) improved regulatory enforcement on surface fees and royalties for small and large-scale mining, and (b) strengthening assessment and collection of royalty payments. Transparency and accountability of the sector revenues will benefit from Albania's adoption of the Extractive Industries Transparency Initiative (EITI), a generic, proven program that could bring beneficial results in a comparatively brief time. EITI is currently implemented in around 30 countries worldwide. Through regular reporting of all payments to the government that spring from the mineral sector, and the parallel reporting of government receipts, transparency is credibly increased and shows the country's commitment to accountability. In addition, EITI can involve a full audit process, which enables civil society and the government to examine if the levels of payments received are equal to what the companies are supposed to pay according to the prevailing contracts. Due to the fact that these revenues will be scrutinized by an independent auditor on a regular basis, and thanks to the active involvement of civil society stakeholders, EITI has shown to create widely accepted accountability of the mineral sector, and is often an incentive for the administration to save or spend revenues more appropriately (see Annex E for additional information on EITI).
- ***Building Strategic Planning and Technical Capacity.*** Formulating strategies for sector growth will challenge METE to develop a better understanding of factors that make sectors economic and efficient, and to adjust institutional, legal and contractual frameworks based on learning.

49. **II. Institutional Strengthening and Capacity Building.** Capacity building and institutional strengthening comes via exposure of personnel to best international practices in the mineral industries. Key tasks include:

- **Functional Management Review.** To assess necessary capacities for administration, regulatory functions, and collection of geoscience for sector promotion.
- **Institutional Reform.** To look at the demands placed on the METE, the type of agencies needed to respond, the long-range policy and legal planning capacity, the need for strong regulatory institutions, and the need to collect geoscience and produce ongoing production statistics in support of sector promotion. Attention is given to the specific needs of ministerial departments for sector policy, cadastre services, mines inspection, health and safety issues, environmental matters, commodity certification and quality control, and geological survey and laboratory services.
- **Strengthening of Mineral Rights Regime.** Establishing an independent cadastre office for administration of all existing and future mineral licenses and improving monitoring and enforcement of health and safety, and environmental and social compliance.

50. **III. Addressing Environmental and Social Legacy Issues.** Another important factor to make the Albanian mineral sector (a) more attractive to new good practice investors and (b) improve its developmental outcome will be to address the environmental / social legacy issues. The most urgent *environmental problems* are¹⁵

- decaying facilities and other structures of former mining- and processing plants, which occupy the sites (pictures 4 and 5);
- pollution of water by shut-down copper mines, leaking of methane and carbonic gases from shut-down coal mines; soil contamination, dust collection and precipitation systems;
- the subsidence of ground across all mines, especially in the Bulqiza and Mirdita areas, as well as the former major coal deposits;
- insufficient spacial planning between use of space for mines, processing, living and other economic activities (e.g. agriculture)¹⁶;
- rehabilitation of mining surfaces.

¹⁵ The following list is drawn from the Government's own "Strategy for the Development of the Mining Industry" from 2005

¹⁶ This can be of very negative consequences, as according to the AGS, housing is not seldom constructed on subsiding terrain and/or thin galleries

It should be pointed out at this stage that in Albania no inventory of environmental hazards exists.

Picture 3: Abandoned mine in Perrenjas



Picture 4: Abandoned Ferro-chromium smelter, Elbasan



Picture 5: Mine tailings discharge into riverine system, Mirdita area



The most pressing *social issues* are to be found in

- the large number of laid-off workers of the former state-run mining enterprises, and the lack of viable alternative economic opportunities;
- the insufficient dynamics of the formal economy in rural areas (helping to maintain the number of unemployed);
- the low level of participation and consultation by community members in questions regarding local economic development.

A strategic long-range program should be designed based on the recommendations of a Sector Environmental and Social Assessment Study, which will include also a priority action plan. Four main points which should be pursued in order to address these issues were identified:

- The need for an environmental baseline study, that will outline in detail the status of the environment around existing and former mining operations, and will, as an additional output result in a detailed action plan;
- Improve the reporting and information sharing between the Ministry of Environment and the Regional Environmental Agencies. The aim is to provide all environmental agencies with better information on who is doing what, and on what scale;
- The need for an up-to-date database program (with the relevant IT equipment), in order to monitor more effectively the environmental impacts of mineral operations;
- Assess the number of Artisanal – and Small-Scale Mining (ASM) operations, including the most pressing social, environmental and health related problems, and provide guidance for possible Government Extension Services.

51. ***IV. Improving Sustainability at the Community Level and Benefit Sharing.***

Sustainable long-range sector development in which a broad stakeholder group participates in resource development planning and sharing of benefits will greatly enhance the developmental impact of Albanian mineral operations. In line with the Government's own assessment in its Mining Sector Strategy, mineral operations have to make a key economic and employment contribution in the country's rural regions, which often lack alternative productive activities. This is especially true for the northern copper region and the northeastern copper and chromite regions. These areas bear a significant potential for further mining development¹⁷, but feature at the same time the highest poverty outcomes of all Albanian regions¹⁸, which will leave the mining sector an important source for income through direct and indirect demand for labor and goods. It is therefore necessary for all future operations to link up with the communities at an early stage, and involve the stakeholders into the development process. Procedures on how to

¹⁷ As indicated by the presence of several foreign investors in these regions

¹⁸ World Bank Country Assistance Strategy (CAS), p.7

engage communities to participate in the development of respective areas and consultation frameworks should be developed. Annex F provides an outline of what a benefits sharing package should include, as well as a case country example.

52. **V. Sustaining Sector Growth.** Moving to private-led investments, the Mining Licensing Authority will need to maintain an up-to-date database on mineral resources and production, provide vital data and information (such as area under license and not under license, production, sale, exports, imports, prices paid) to private sector participants and promote the sector to potential investors.

53. **Short Term Actions.** In line with the proposals for reform mentioned above, the government should consider the following actions as the start of a wider sector reform process:

- Complete, in consultation with all relevant stakeholders, the review of the Mining law in line with good practice for the development of an efficient, non-discriminatory, transparent licensing regime. In this line, the government might also consider to initiate the first steps of the procedures for Albania becoming an EITI member country;
- Review of the management functions of main institutions involved in the mining sector and capacity building, and consider setting up an independent licensing authority, which combines both the licensing and enforcement of licensing roles;
- Preparation of a Sector Environmental and Social Assessment Study and a priority action plan for addressing legacy issues, as well as a thorough assessment of the incidence of small-scale mining;
- Preparation of procedures on how to engage communities to participate in the development of their respective areas and consultation frameworks;
- Compilation of existing geo-data and collection of new geo-data for sector promotion.

D.2 Possible Future Support from the World Bank

54. The note presents mining as a source of growth using a dual track approach of (a) evaluating remaining assets to determine their productive capacity subject to key regulatory and policy improvements; and (b) to identify prospective terrains and corresponding deposit types that would be of investor interest for Greenfield exploration. The resources potential is still high and by putting in place an adequate legal and regulatory framework, as well as effective reforms and institutions, Albania can position itself for the next mineral cycle upswing to attract international junior mining companies to undertake significant exploration and mining, which should contribute more to the growth of Albanian economy.

55. From other EU countries experiences in reforming their mining sector, the most important lessons learnt show that successful change does not come easily – it requires (i) a well formulated Government strategy, developed in consultation with social partners, that is updated as and when needed; (ii) strong commitment at the highest levels of Government; (iii) strong institutions with clear roles and responsibilities, able to implement and enforce the strategy; and (iv) effective coordination between the different ministries/entities involved.

56. A focus of sector restructuring should be on ensuring the sustainability of reforms. This requires key actions to be taken by government as outlined previously in this report. The World Bank has broad experience in such reforms in particular in the following areas that might be needed in Albania:

- Formulating and updating its mining strategy to complete the restructuring of the sector;
- Strengthening the overarching policies, laws and regulations that govern the sector, with particular attention towards creating a transparent investment climate backed by strong policies on revenues management and benefits sharing; this includes support for the implementation of the Extractive Industry Transparency Initiative (EITI) through a Trust Fund and Technical Assistance;
- Supporting the assessment of the small-scale mining sector, which could include an analysis of problems of governance, revenue management, health & safety, the environment and technical training, in order to give guidelines for Government Extension Services;
- Strengthening institutions and build their capacity for better enforcement of the policies, laws and regulations, including contract enforcement on existing operations building government's relevant institutions' capacity to better manage the sector;
- Addressing environmental and social mining legacy issues, including preparation of a SESA (or additionally an Health Impact Assessment, HIA) and a time bound priority action plan; more specifically, the Bank might support the government in drafting frameworks for community engagement, so that they can fully participate in the development of their constituencies; this step may further include an assessment of the current size, problems and opportunities of small-scale mining; and/or;
- undertaking sector promotion to attract and retain technically / financially qualified investors.

Annexes

Annex A: A Brief History of the Albanian Mining Sector

1. From its 1990 peak when the Albanian mining sector ranked third in the world in chrome production, the sector has succumbed to chronic under-investment, cannibalization and decay. The history leading to this collapse is summarized as follows.

Pre-1990 centrally planned command and control development

2. For nearly fifty years the mining sector was an engine of growth feeding raw materials to downstream industrial activities that included steel, metals fabrication and value-added metallurgical products for export. Despite this role, mining occupied a relatively small (<2%) share of Net Material Product (NMP) through the early 1980s. It had a modest three percent of total employment as it relied on early deployment of new technologies. During the 1980s its share of total NMP doubled, through the exports of primary or semi-finished products. The value of external sales rose from about \$50 million in 1980 to some \$140 million in 1989. Given broader economic stagnation, mining rose within industry's share of total exports to over 37 percent in the peak years 1988 and 1989, and represented virtually all of the country's increase in export values over that decade.

3. Following the break with China in 1978, coinciding with a significant strengthening of commodity markets, mining became an instrument of national economic stabilization. New fixed investments and supplementary resources were allocated to mining, and up to 25 to 35 percent of total investments for industry and energy came into the sector; largely as capital investment in processing facilities for downstream value-added processing plants (i.e. steel). Any one metallurgical processing plant was fed by a diverse source of upstream mines, but overall this high degree of vertical integration was common across the sector. Albania was using minerals as the basis of its long-term growth strategy.

1990 - 2000 Transition

4. Mineral production and exports peaked in 1989 at US\$140 million ² when chrome, copper and nickel accounted for about 80 percent of total Albanian exports (by value). Chromium products were the main export product with an estimated value of about US\$89 million, copper products ranked second with nearly US\$26 million, while exports of nickel amounted to less than US\$6 million in 1989 (nominal dollars = 1989).

5. By 1992, mining exports had fallen significantly to about \$20 million, a result of economic decline within the country and the onset of a commodity recession that would persist throughout the remainder of the decade. Under severe financial constraints, reinvestment in plant and equipment all but ceased and was replaced by cannibalization of key assets to sustain production. The physical facilities of mines and metallurgical operations deteriorated with many essential processes rendered non-operational. Operating deficits of state-owned mines and metallurgical plants were covered by transfers from the Government's budget and an opaque system of inter-company debt throughout the economy.

6. By early 1993, the mining sector had been crippled by government restrictions on funding ongoing operating deficits of state-owned enterprises and further accumulation of inter-company debt. The ensuing credit contraction forced suppliers to demand cash-on-delivery payments during a time in which falling export demand limited hard currency injections. As the situation worsened, the World Bank responded (1993) with a series of recommended structural reforms.¹⁹

“... A considerable part of the Mining sector's activities appear to be uneconomic, or at best marginal. Consequently, in the context of a market economy they require substantial restructuring which should comprise the closure of uneconomic operations and substantial rationalization, consolidation and divestiture of remaining activities. There is a need to reevaluate all mineral resources on sound economic criteria and to formulate a detailed medium term restructuring program embracing overall mineral activity. ... The study should (i) assess the viability of each deposit, mine and metallurgical unit; (ii) formulate a strategy designed to cease uneconomic activities; (iii) support and improve those with recovery potential; and (iv) identify new economically viable mining and metallurgical operations. A program designed to alleviate the social impact of a contraction in employment opportunities should also be formulated.

Restructuring should be carried out under a joint venture approach with the private sector. ... The promotion of these objectives will require the creation of a mineral and investment framework designed to (i) attract private investors in a free market economy on the basis of clear and transparent rules-of-the-game; and (ii) address the whole process of exploration, development, production, marketing, fiscal and environment. Corrective measures (privatization, modernization, rehabilitation) even if undertaken promptly will involve significant time intervals until production and investment performance can be increased substantially.”²⁰

7. A program for restructuring, rationalization and/or consolidation of potentially viable mines and concentrators; and closure of uneconomic operations was tabled. It included undertaking a comprehensive technical and economic audit of ore reserves in order to consolidate small operations (to the extent possible) and eliminate duplication of facilities and overheads. Mine closure was to be systematic with adequate attention to social, environmental and financial liabilities. Additionally, a social safety net for retraining and relocation of displaced workers was to be undertaken with additional incentives to induce voluntary retirement.

8. A program of capacity building and restructuring of governmental agencies, such that they might attract and retain new qualified investors, was also undertaken. It called for the

- completion of legal and regulatory framework to attract private investors, with emphasis on completion of mining code and regulations, fiscal regime and environmental legislation, guidelines and norms;

¹⁹ Albania: Mining Sector Strategy Paper, The World Bank, Country Operations Division (1993)

²⁰ Albania: Mining Sector Strategy Paper, The World Bank, Country Operations Division (1993), page 27

- Compiling, interpreting and prioritizing target areas on basis of available data to outline priority prospects of interest to mining investors; and dissemination of geological information reinforced by capacity building of geologists;
- Preparation of environmental regulations under the proposed mining legislation, to clarify investors' roles and responsibilities within a clear and transparent regulatory framework;
- Extensive restructuring of government agencies.

9. The notable response by the government was the 1994 Mining Law, a balanced and modern piece of legislation to begin the process of attracting qualified investors. However, the transfer of mineral operations to such investors did not take place. In 1998, the government embarked on a license transfer to reassign mineral exploration and exploitation rights to mitigate emerging discontent within rural areas. A majority of mineral rights were assigned to individuals having neither the technical capacity nor financial resources necessary to recover the sector.

10. The former mining operations endured continued cannibalization of assets such that the Elbasan steel works was reduced to processing scrap steel. A majority of firms suffered from thin capitalization and limited operational expertise.

Annex B: Global Perspective for Main Metal Deposits

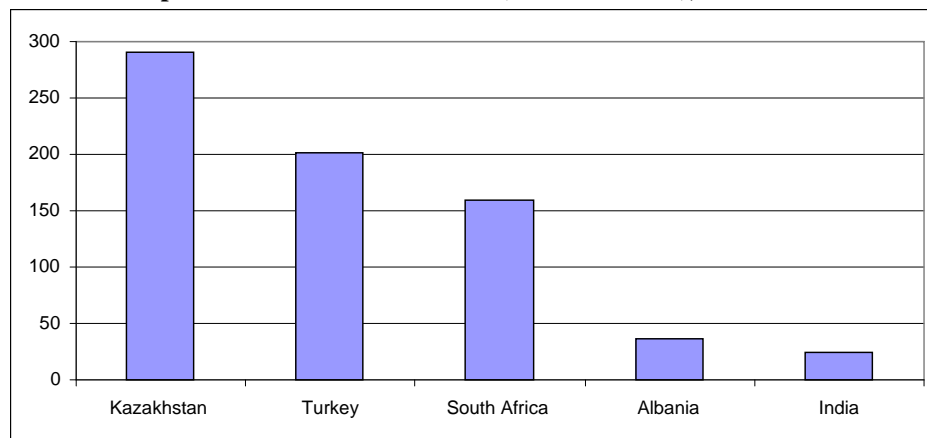
CHROMITE

A) Global Perspective.

1. *Overview:* Chromium is a hard metallic element that is an essential component of stainless steel and other alloy steels, where it is used in the form of the alloy ferro-chromium. Its compounds are important pigments and the natural mineral chromite is used in refractories.

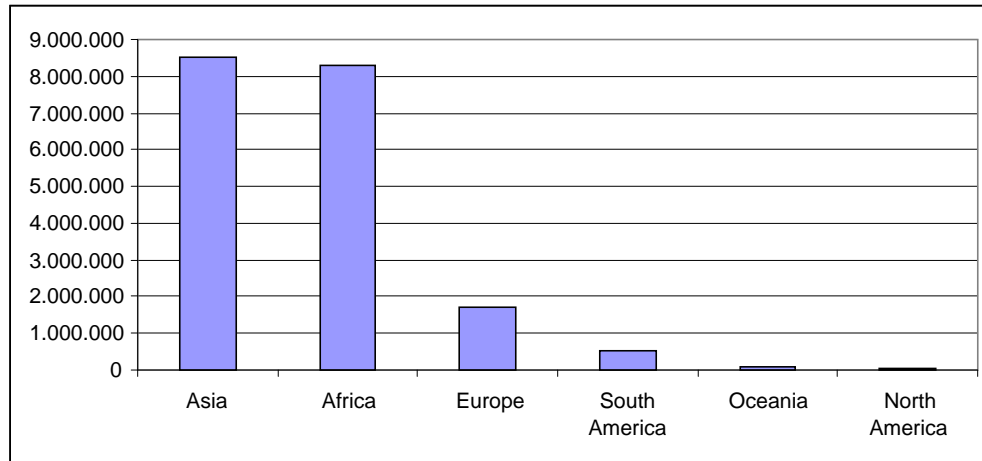
2. *Sources:* Chromite ore is restricted to two main geological sources, as an early stage magmatic differentiate in a layered ultramafic intrusive complex (e.g. Voshkod, Kazakhstan and the Bushveld, South Africa) or in ophiolitic layers (e.g. Balkans). The former dominate the latter in both tonnages of individual deposits and on a cumulative basis, with ophiolitic ores being restricted to a maximum size of ± 5 million tonnes.

Graph 11: Chromite ore reserves (Million Tonnes), 2008



Sources: USGS, Geological Survey of Albania, (www.gsa.gov.al) and Mining Journal (www.mining-journal.com)

Graph 12: Chromite ore and concentrate production by continent (Tonnes), 2006

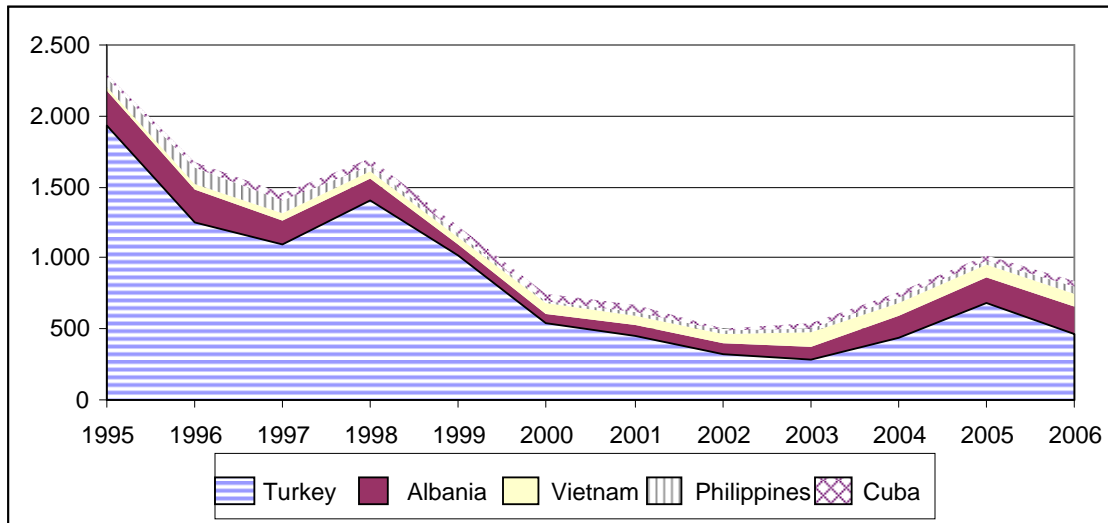


Source: British Geological Survey (www.bgs.ac.uk) (Russia included under Europe).

B) Albania Perspective.

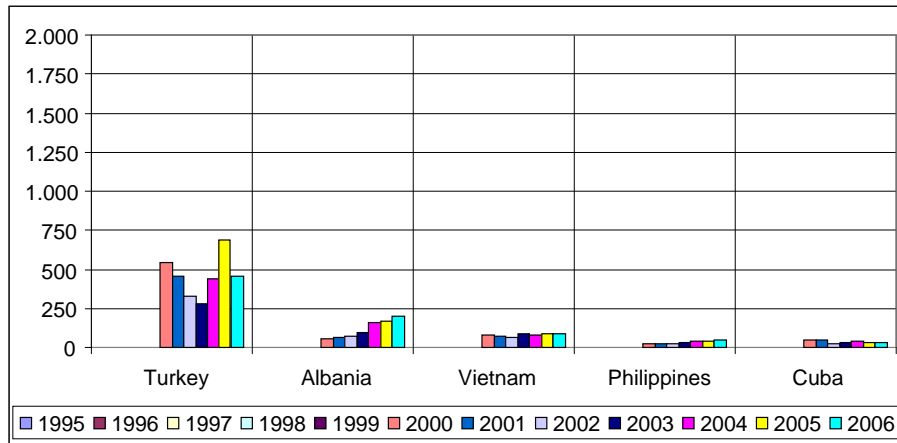
3. *Albania's Market Competitors:* After removing the dominance of the layered ultramafic intrusive hosted ore sources from the global supply of chromite, it is evident that Albania must compete with other sources of ophiolite-hosted ore. These sources are globally distributed and the rising cost of sea freight allows Albania to compete for the European market, although Turkey provides substantial, if dwindling, competition. Turkey retains large reserves but production is highly dependent upon the prevailing price of chromite.

Graph 13: Cumulative ophiolitic Cr ore production (Thousand Tonnes), 1995-2006



Source: World Bureau of Metal Statistics – www.world-bureau.com (1995-2001) and British Geological Survey (2002-2006)

Graph 14. Individual ophiolitic Cr ore production (Thousand Tonnes), 1995–2006



Source: World Bureau of Metal Statistics (1995-2001) and British Geological Survey (2002-2006)

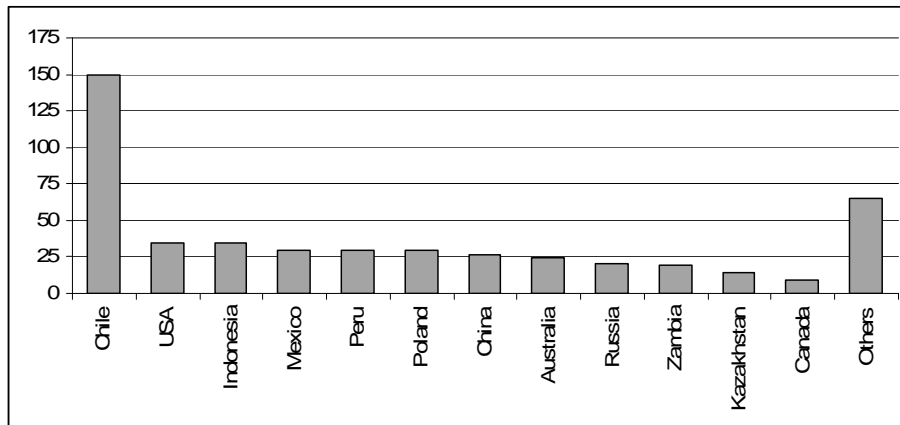
COPPER

A) Global Perspective.

4. *Overview:* Copper is a reddish, malleable and ductile element with excellent thermal and electrical conductive qualities. It is a very important industrial material and is used in the electrical, electronics, transportation and construction industries.

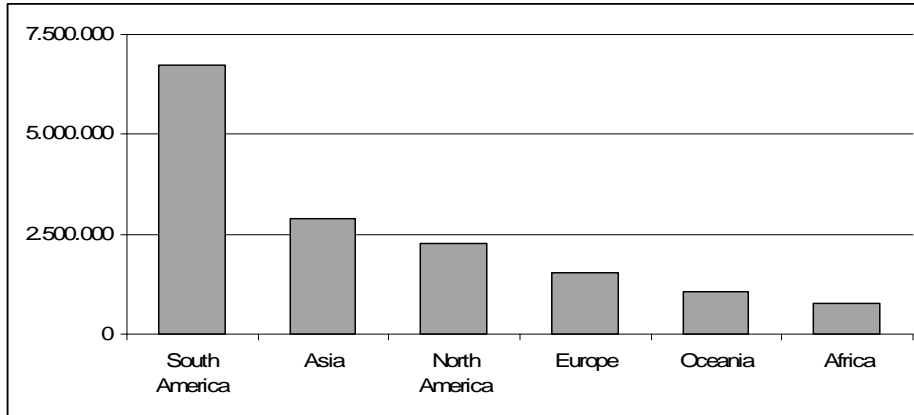
5. *Sources:* Copper is found in a variety of geological systems, but is dominated by the porphyries of the Pacific Rim. Sedimentary copper deposits, particularly in the Central African Copperbelt and Poland, form the second major source. Volcanogenic massive sulphides, such as in Albania, are much smaller but often of higher grade than the porphyries.

Graph 15: Copper metal reserves (Million Tonnes), 2008



Source: United States Geological Survey

Graph 16: Copper metal production by continent (Tonnes), 2006

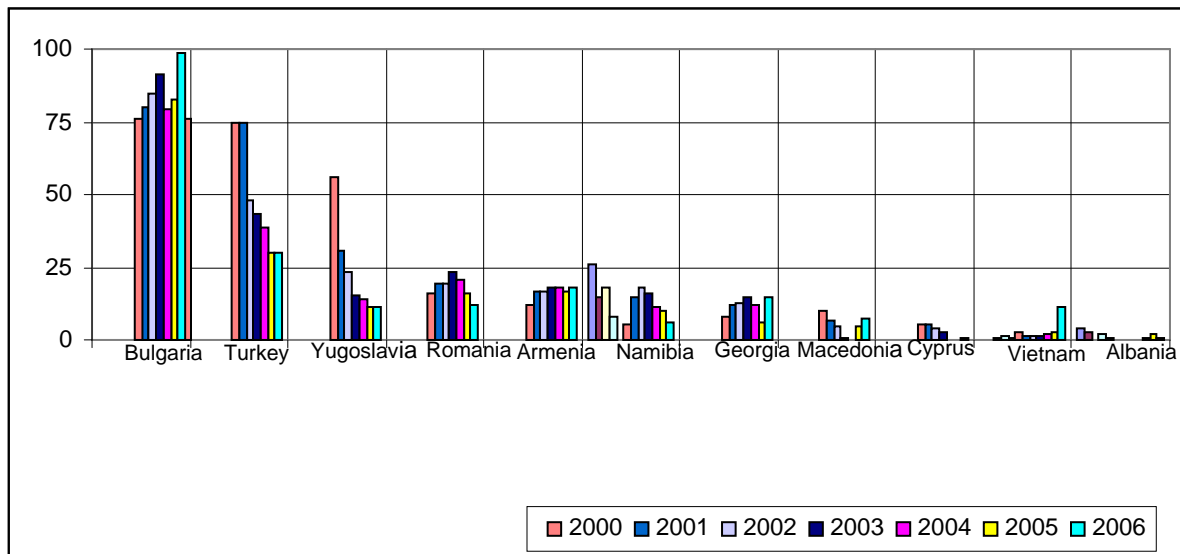


Source: British Geological Survey (Russia included under Europe)

B) Albanian Perspective.

6. *Albania’s Market Competitors:* The dominance of VMS (Volcanogenic Massive Sulphide) polymetallic deposits in the Balkans places Albania in direct competition for the European market with many of its neighbouring countries. The largest individual deposit tonnages present in the Balkans are also porphyry-hosted (Serbia, Macedonia, Bulgaria and Greece). Paramount amongst these are Bor in Serbia and Chelopech in Bulgaria, although Bor is currently on a “care-and maintenance” regime whilst awaiting another privatisation retender. The production from Chelopech has skewed the Balkan copper production away from VMS deposits.

Graph 17: Individual VMS/Balkan mined Cu metal (Thousand Tonnes), 1995–2006



Source: World Bureau of Metal Statistics (1995-2001) and British Geological Survey (2002-2006)

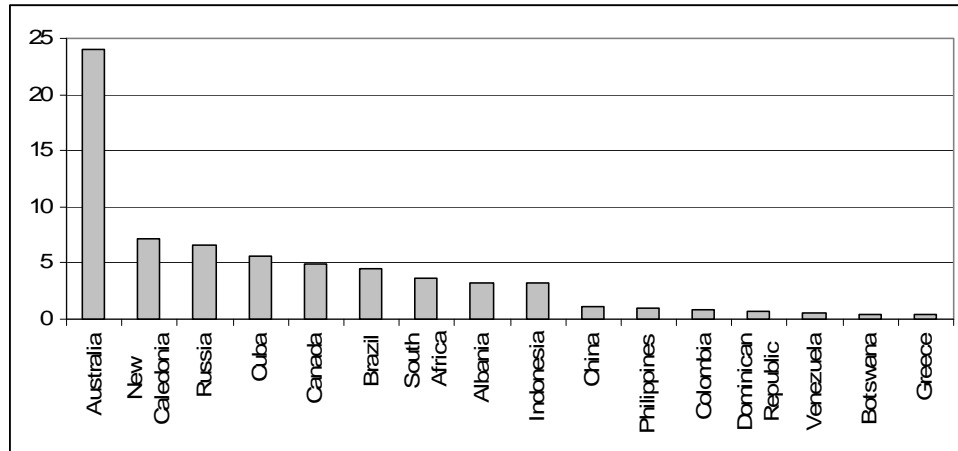
NICKEL

A) Global Perspective.

7. *Overview:* Nickel is a hard, strong, corrosion-resistant malleable and ductile metal that is a good conductor of heat and electricity. Its most important use is in steel alloys where it imparts strength and toughness. It is also widely used in plating, both metals and plastics, and combined with copper in cupro-nickel alloys.

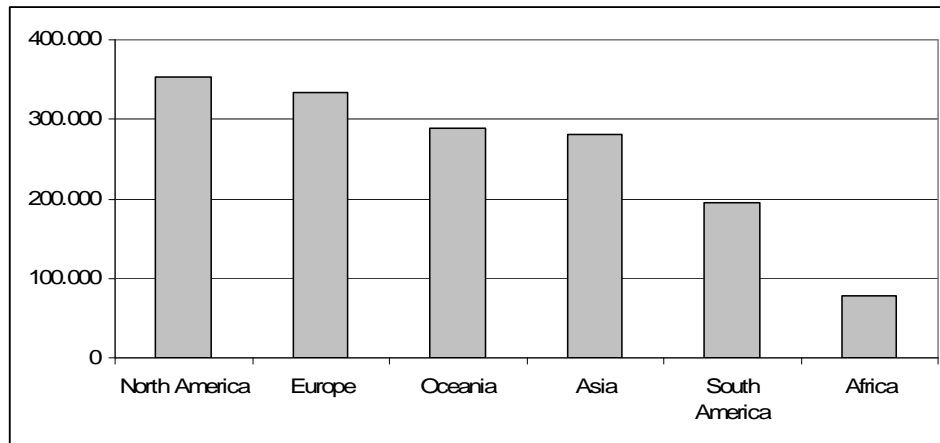
8. *Sources:* Nickel ores are divided into two main types; magmatic sulphides (e.g. Norilsk, Russia, and including the astrobleme-hosted deposits of Sudbury, Canada), which accounts for 60% of all known reserves and lateritic (e.g. the Balkans), which accounts for the remaining 40%.

Graph 18: Nickel metal reserves (Million Tonnes), 2008



Source: USGS and Geological Survey of Albania

Graph 19 : Nickel metal production by continent (Tonnes), 2006



Source: British Geological Survey (Russia included under Europe)

B) Albanian Perspective.

9. *Albania's Market Competitors:* The Balkans reserves of nickel are dominated by lateritic ores, including the fossilized laterites present in Albania as nickel silicates and iron-nickel ores now preserved beneath overlying Cretaceous – Eocene limestones and conglomerates. Thus, Greece, the former Yugoslavia and Macedonia are viewed as the main competitors. Resurgence of the nickel sector in neighboring Kosovo and the emergence of a domestic lateritic nickel mining sector in Turkey are prime competitors. Both of these competitors are being governed by foreign companies that are producing NI 43-101 compliant reserves and resources estimates.

Annex C: Sector Governance, Overarching Regulatory Frameworks and Institutional Objectives

A. Sector Governance

1. Mining sector governance is described according to three elements:
 - **Technical Capacity** - a government's capacity to effectively manage its mineral resources and implement sound policies by reducing the regulatory burden and increasing administrative effectiveness;
 - **Sound Institutions** - creating sound institutions that respect the rule of mining law and reduce corruption; and
 - **Transparent / Participatory Processes** - competent authorities ensuring a stable, transparent processes for mineral licensing, exploration and development, in which local affected communities participate in planning and execution of resource development.
2. Additionally, the performance of the sector is evaluated according to World Bank guiding principles for sector sustainability:
 - Strengthen governance and transparency;
 - Ensure that extractive industry benefits reach poor people;
 - Mitigate environmental and social risks;
 - Protect the rights of people affected by extractive industry investments;
 - Strengthen Revenues Management and Benefits Sharing;
 - Public private partnerships are needed to ensure mining is a driver of regional infrastructure development.
3. Good governance is essential to avoid misallocation of national resources that could lead to increased poverty, corruption, and local opposition. As a starting point, the government of Albania needs to ensure competition, transparency, and adherence to international best practices in respect of licensing. It is important to recognize the need for transparent procedures at each key decision point in terms of (a) upstream issuance of mine title and/or authorization of investment agreements; and (b) downstream management of benefit streams through sound sector policy.

B. Legal and Regulatory Framework

4. **Mineral Policy** - Good sector policy is guided by the principles of sustainable development – the economic, environmental, and social impacts by which performance of the sector in Albania will be monitored, measured, and reported. Mineral policy provides the basic principles and the framework for sector development and should be based upon the principle of equitable sharing of resource rent among all levels of government, companies, and communities. Sound sector policies define mechanisms to create a competitive business environment, establish competitive provisions to attract

investors, and strike a balance between mineral specific royalties and fees, and taxation of industries along the value chain. Revenue transparency is essential.

5. ***Mining Law*** - Albania retains ownership of solid minerals and assigns revocable rights to third-parties to develop these resources. With these rights, investors are obligated to invest in the mineral property, comply with all articles of the law, and file periodic assessment reports verifying continued exploration or development such that the mineral asset is being improved. Payment to the state for the privilege to develop mineral resources includes mineral royalties – a unique payment from the developer to the government based on unit of production, unit of output, gross revenues, or value of processed mineral products.

- Good mining law includes clear definition of the rights, privileges, and obligations of holders of mineral rights towards social and environmental management plans, fiscal and regulatory obligations including equitable distribution of resource rents, and provisions for mine permitting, mine closure and post-closure monitoring. Cross-references are included for essential obligations and provisions under other laws (principally taxation, foreign investment, and treatment of labor);
- The granting of mineral rights should be transparent, efficient, and non-discretionary, and therefore a mining cadastre and title registry system is paramount in attracting investments. Key elements considered by investors when evaluating the competitiveness of the granting of mineral rights across the country will include the process by which exploration areas are granted and relinquished, rights and obligations to surface owners on the same or adjoining parcel, term and renewability of rights, rules and procedures for maintenance and cancellation of mineral rights, compensation in the case of expropriation, transferability or reassignment of rights, and security of tenure in transferring exploration rights to mining rights upon discovery.

6. ***Mining Regulations*** – Mining regulations define specific procedures by which mineral rights are acquired, transferred, expanded, rescinded, or otherwise modified. Central to defining clear regulations for Albania will be the calculation, procedure, and administrative processes for payment of royalties and surface fees. Albania’s revised regulations should also define the organizational structure of the ministry (and its regulatory departments); as well as the National Agency for Natural Resources and Albania Geological Survey. Regulations should also be expanded to define the terms and conditions for the assessment and management of social and economic impacts, and ongoing monitoring of key sustainability indicators. To this end, Albania’s mining regulations will form the basis through which the government will define mine closure and the transfer and sustaining of key economic, social, and environmental programs when major mines close.

7. ***Mining Contract/License*** - Major projects often require a mining contract (mineral development agreement) to clarify terms and conditions of the legal, fiscal, and regulatory environment. A mining contract for Albania could include project-specific

provisions regarding schedules of investment, financial commitments and surety of closure through performance bonds, and general understanding regarding the economic, environmental, and social contributions of the mine.

C. Institutional Arrangements and Objectives

8. Government Objectives

- Attract high risk private sector exploration and development capital expenditures from international and domestic investors;
- Improve the benefits to the nation especially through increased employment and skills transfers especially to rural areas;
- Improve environmental and social performance of mining, hydrocarbons and industrial operations;
- Achieve safer mineral resource exploration and development operations; and
- Increase tax and royalty collections at a time when revenue collection is a critical country priority.

9. Ministry Objectives

The ministry should:

- achieve separation of regulatory and commercial operational functions (including addressing state-owned enterprises);
- develop capacity to provide strategic planning advice to the Minister on the direction of programs and the requirements for donor interventions;
- establish an ongoing development and support function for the coordination of donor activities in the ministry through the creation of a donor coordination function within a program management unit;
- provide continuous improvement of regulatory processes by establishing a mining and hydrocarbon sector regulation department;
- establish policies and regulations to support the implementation of the mining and hydrocarbons laws through a legal and policy branch;
- attract new private sector mining and hydrocarbon investment to the country by strengthening the geological survey, the latter including support for up-to-date software and relevant human resources capable of working with it;
- establish an industrial development and regulation function for the regulation and promotion of light industries and downstream processing of natural resources;
- put in place the management capacity to develop and manage industrial parks to promote new industrial development;
- develop ongoing human resource, financial, and information technology services

and support to the ministry.

10. ***Independent Mining Licensing Authority***

It should achieve:

- an efficient, transparent and effective mining cadastre office to issue licenses to operate to existing mining and hydrocarbons operations as well as process new applications for mining and hydrocarbons exploration and development licenses and sufficient capacity to efficiently implement and enforce mining and hydrocarbons legislation;
- an efficient, transparent and effective office of inspection and engineering to carry out mining and hydrocarbons inspection and technical audit functions, as well as develop skills in occupational health and safety audits to ensure adequate standards are followed;
- an environmental and social protection office to ensure that the mining, hydrocarbons and other industries follow appropriate and acceptable environmental and social management practices;
- improved stakeholder consultation processes, project facilitation, and management of mining benefit streams by establishing a mining and hydrocarbon coordination and liaison function;
- improved performance of the small scale mining sector by establishment of a small scale mining regulation and extension service;
- an up-to-date database on natural resources and production, provide vital data and information (such as production, sale, exports, imports, prices paid) to private sector participants and promote the sector to potential investors.

11. ***Geological Survey***

It should:

- be an independent public research entity on a partial fee-service basis;
- undertake collection and dissemination of geoscientific data to government and industry;
- by upgrading the capacity of the geological survey, prepare regional geological, geophysical and mineral resource maps.

Annex D: Key Components of Mining Law

This document considers key components within overarching mineral policies and laws – that are essential to realize sustainability at the local level. This template has been designed for global application, recognizing the importance of regional strategies to empower historically disadvantaged groups. All components are considered essential, with those marked by bold and yellow highlighting deemed to be of elevated importance.

COMPONENTS DESCRIPTION - MINING LAW & RELATED REGULATIONS

L1. Introduction

<i>Code</i>	<i>Component</i>	<i>Description</i>
L1a.	purpose & scope of law	A provision as to <ul style="list-style-type: none"> the role of private investment definitions for key terminology scope of the law covering all mineral activities
L1b.	objectives of the law	Clear statements regarding objectives for the law in regulating the sector
L1c.	ownership of mineral resources	a provision for state ownership in which mineral investment by the private sector provides broader social benefit
L1d.	role of the state as regulator	The role of the state clearly defined to: <ul style="list-style-type: none"> promote efficient development by the private sector mandate that state owned enterprises, if any, are subject to the law

L2. Economic

<i>Code</i>	<i>Component</i>	<i>Description</i>
L2a.	security of tenure	provision of suitable guarantees for the investor against arbitrary actions that would threaten mineral rights
L2b.	transparent, clear, non-discriminatory licensing framework	Statements regarding the licensing framework that reflect the granting of licenses either in (a) the order of application filed, or, in the instances where a resource has been sufficiently inventoried (b) to the winner of a competitive process, providing that the granting process in both cases is clearly described, the criteria for selection are transparent and non-discretionary, what rights are provided, to whom, how, and under what obligations are clearly defined
L2c.	promotion of the private sector, economic growth, & job creation	The reliance on the private sector to provide investment capital, with expectations for economic multipliers in the economy, and job creation
L2d.	flexibility in timing of exploration, development, exploitation, period & extensions	The issuance of mineral rights that allow a holder to determine the timing of their program within the bounds of the mineral right, the right to proceed from exploration to exploitation subject to regulatory compliance, and the ability to file for extensions of mineral rights
L2e.	mineral rights: types of rights & eligibility cancellation	The types of mineral rights that can be acquired, eligibility requirements that are non-discriminatory, and clearly defined regulations for cancellation of such rights
L2f.	mineral rights: common provisions for period, extension, renewal, transfer, relinquishment, withdrawal, termination	The period of a mineral right, processes for extension of perimeters, processes for transfer of rights to third parties, the right and regulatory process for a holder at any time to relinquish whole or a part of a right, conditions and

<i>Code</i>	<i>Component</i>	<i>Description</i>
		processes for temporary withdrawal or permanent termination of a mineral right, and process for appeals of the above actions
L2g.	mineral rights: obligations for maintenance, relations with surface land owners & between holders of rights, infrastructure, health & safety, protection of cultural heritage	The obligations of a mineral right holder to maintain good standing through payments of fees and / or work completion of commitments, to maintain good relations with surface owners and other rights holders in the area, processes for resolution of disputes in this regard, procedures for the provision and / or sharing of infrastructure, compliance with local health & safety regulations, and safeguards for the protection of cultural heritage, vulnerable groups, and communities in general
L2h.	mineral rights: obligations for taxes, duties, royalties	A clear statement of obligations on holders of mineral rights to pay taxes, duties, and royalties; what agency and authorized person collects those obligations - including procedures, schedules for payment, and applicable rates
L2i.	Mining related taxation, including provisions for preproduction and production expenditures, tax stability, and incentives	<ul style="list-style-type: none"> • A clear statement as to the authorization of the appropriate government agency to provide financial tax provisions for amortization of pre-production expenses, (accelerated) depreciation of capital investments, and loss-carried-forward. • A clear statement as to the ability of the government to provide for binding tax stability for a period of time agreed upon with the holder of a mineral right, and courses of actions should the stability clause be involuntarily terminated
L2j.	secondary processing of materials	<ul style="list-style-type: none"> • A clear statement as to prevailing regulations regarding materials beneficiated from secondary sources including scrap, waste streams and piles, and recycling. • Provisions to encourage value-added (downstream) mineral processing
L2k.	Informal and small-scale mining	<ul style="list-style-type: none"> • Special provisions for the issuance of mineral rights, regulatory compliance, and / or financial obligations of artisanal miners • Special regulations should be included for: employment of pregnant or post natal women, child labor and forced labor of disabled persons, processing mineral ores in surface waters, using chemicals hazardous to health, control of black markets
L2l.	other mineral activities	Provisions relating to other mineral activities that might include crafts, collection of gem specimens, and fossils
L2m.	fiscal requirements: closure funds / environmental guaranty	<ul style="list-style-type: none"> • Obligations on the holder of mineral rights to provide financial certainty of mine closure through instruments that include: one-time, sinking fund, or bonded closure funds and tax treatment of these instruments • Obligations on the holder of mineral rights to provide financial certainty of funds to cover environmental abatement, mitigation, and clean up in the case of accidents; and tax treatment of instruments used
L2n.	closure plan: initial plan at time of license application, updated periodically	Obligations on the holder of mineral rights to provide a comprehensive mine closure plan at the time of application for an exploitation right. This plan would include consideration of economic, environmental, and social

<i>Code</i>	<i>Component</i>	<i>Description</i>
		impacts and remedies by which the company, community, and government might individually or in partnership achieve sustainability during and post-closure of operations. The closure plan should define financial and social obligations on the holder of the mineral right, and procedures for regular update and consultation of the plan
L2o.	A clear statement of violations, penalties, and powers of enforcement	A clear statement of actions constitute violation of the law, a schedule of civil and criminal penalties (or reference to applicable law), the civil and criminal powers of the state over the sector, and enforcement powers
L2p.	Recognized dispute resolution mechanisms and appeals	A clear statement of dispute resolution procedures, including election to voluntary arbitration, rights of recourse to international courts, mechanisms and procedures for filing appeals, and time limits set on the above
L2q.	Revenue sharing with communities	<ul style="list-style-type: none"> • A provision to share revenues from mining (i.e. royalties and fees) with local impacted communities. • Is there a mechanism to direct mining contributions from central accounts to local accounts

L3. Environmental Stewardship

<i>Code</i>	<i>Component</i>	<i>Description</i>
L3a.	risk assessment & management during exploration & exploitation	<p>A clear statement of environment safeguards required by rights of mineral holders. This includes defining when Environmental Impact Assessment (EIA) and Environmental Management Plans (EMP) are to be prepared, references to frameworks for preparing these plans, and procedures for submission, public comment (if applicable), and approval:</p> <ul style="list-style-type: none"> • Environmental impact assessment (EIA) is an instrument to identify and assess the potential environmental impacts of a proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures. • Environmental management plan (EMP): An instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures.
L3b.	health & safety and emergency preparedness	Clear statements regarding the obligation of holders of mineral rights to maintain health & safety and emergency preparedness plans and action teams when and when applicable
L3c.	mine reclamation	Clear statement as to expectations for mine area reclamation, including rehabilitation plans, restoration of flora and fauna, performance standards, and penalties for non-compliance

L4. Social: Mining and Communities

<i>Code</i>	<i>Component</i>	<i>Description</i>
L4a.	consultation frameworks	Requirements to develop frameworks for community consultation / empowerment on resource planning and development. This may include reference to:

Code	Component	Description
		<ul style="list-style-type: none"> consultation frameworks for community impact analysis consultation frameworks for grievances and dispute resolution consultation and empowerment of local communities on land-use planning and post-mining activities
L4b.	Pre-development social planning	<ul style="list-style-type: none"> Social Impact Assessment - requirements for holders of mineral rights applying to obtain a mineral exploitation right to assess social impacts in local communities. This would include consideration of vulnerable groups and gender issues Requirements for holders of mineral rights applying to obtain a mineral exploitation right to prepare a social mitigation plan to address adverse impacts identified in the social impact assessment and enhance opportunities for vulnerable groups and gender issues
L4c.	resettlement & compensation	Reference to safeguards policies for voluntary resettlement and equitable compensation for residents
L4d.	community well-being	<ul style="list-style-type: none"> A specific reference to gender and family issues with respect to social impact assessment and social mitigation planning A specific reference to affirmative action for community members and minority or disadvantaged groups

L5. Sustainable Development: Community Plan

Code	Component	Description
L5a.	Economic closure planning <ul style="list-style-type: none"> local economic development diversification 	The obligation for holders of mineral rights, community, and government to implement the mine closure plan prepared as part of the application for the exploitation license. To achieve economic sustainability: <ul style="list-style-type: none"> fostering local economic development through procurement of goods and services in mine impacted communities and the region economic development programs to lessen across time the dependence of local companies on the mine, as prepared for the mine closure plan opportunities to partner with local / regional economic development agencies to share infrastructure and foster new alternative land-uses
L5b.	Environmental closure planning <ul style="list-style-type: none"> reclamation plan environ. / habit enhancement 	The obligation for holders of mineral rights, community, and government to implement the mine closure plan prepared as part of the application for the exploitation license. To achieve environmental sustainability: <ul style="list-style-type: none"> mine closure according to the reclamation plan creation of habitat, biodiversity, and protected areas ongoing monitoring and reporting for a defined period of time
L5c.	Social closure planning <ul style="list-style-type: none"> retraining re-conversion 	The obligation for holders of mineral rights, community, and government to implement the mine closure plan prepared as part of the application for the exploitation license. To achieve economic sustainability: <ul style="list-style-type: none"> re-skilling of mine workers for professional advancement and increased technological capacity

<i>Code</i>	<i>Component</i>	<i>Description</i>
		<ul style="list-style-type: none"> • redeployment of redundant mine labor through retraining for other sectors • opportunities and incentives to partner with local or regional development agencies on job placement in other sectors • opportunities and incentives for re-conversion of closed mining facilities for other purposes
L5d.	Informal & Small-Scale Mining	<ul style="list-style-type: none"> • Clear provision of the legal status of informal / unlicensed operators, and processes by which they might register • Assistance made available to small scale mines from larger mining operations and the government on issues of legal & administrative, health & safety training, technical training on equipment and mechanized mining, environmental protection, and access to fair & competitive markets.

L6 Administration of Law

<i>Code</i>	<i>Component</i>	<i>Description</i>
L6a.	competent authorities: responsibilities, inspections, controls	Ensuring that responsibilities of regulatory offices are clearly defined (Mines Inspectorate, Mining Cadastre, and Geologic Survey), and that these agencies have clearly defined protocols for regulatory inspection and controls.
L6b.	misc. provisions: data status, mining cadastre and geological database, access to information	<ul style="list-style-type: none"> • Data status relates to the collection and dissemination of geological and exploration data, including to whom does the data belong, which data are public domain versus confidential or classified. • Mining Cadastre – should have clearly defined functions and procedures • Geological database is maintained, updated, and administered by the geological survey, and that there is open, equal access to land status, mineral rights, and geologic information for investors.
L6c.	classification of mineral deposits	That the government uses a recognized, industry accepted system for the classification of mineral resources using classifiers such as commodity type, quality (coal) or industry-standard nomenclature such as rock type (quarry materials).
L6d.	provisions including miscellaneous, transitional, transparency, public inspection, confidentiality, and repeals	<ul style="list-style-type: none"> • Miscellaneous includes the obligation of transparency, availability of information for public inspection, confidentiality, and consistency of the mining regulations with the mining law. • Transitional includes the promulgations of regulations, establishment of data inventories, and treatment of existing mineral rights. • Transparency includes the Extractive Industries Transparency Initiative – a program sponsored by the British Department for International Development (DIFD) to increase transparency over payments by companies to governments and government-linked entities, as well as transparency over revenues by those host country governments. • Public inspection – that the state shall compile and make publicly available reports concerning mineral rights,

<i>Code</i>	<i>Component</i>	<i>Description</i>
		<p>mineral production, state revenues and other direct or indirect economic benefits received.</p> <ul style="list-style-type: none"> • Confidentiality – the confidential treatment by the state or sector ministry of technical, geological, or financial data; as submitted by the holders of mineral rights and as may be required by law. The period of confidentiality will be defined within the Mining Regulations. • Repeals - those laws that have been nullified through changes to the current set of laws.
L6e.	authorizations for construction of infrastructure	The entitlement of holders of mineral rights to build and maintain infrastructure required for the activities connected with the mineral rights
L6f.	processing, transportation and sale of mineral products	The entitlement of holders of mineral rights to process mineral substances, transport and store mineral products, and sell products at freely negotiated prices.
L6g.	clearly defined violations and penalties	<p>Clearly defined</p> <ul style="list-style-type: none"> • Violations defined according to the statutes of the Mining Law and corresponding Mining Regulations. • Offenses established by the sector ministry punishable by civil (fines) or criminal (fines / imprisonment) penalties. • Powers of enforcement and courts of competent jurisdiction clearly defined.

Annex E: The Extractive Industries Transparency Initiative (EITI)

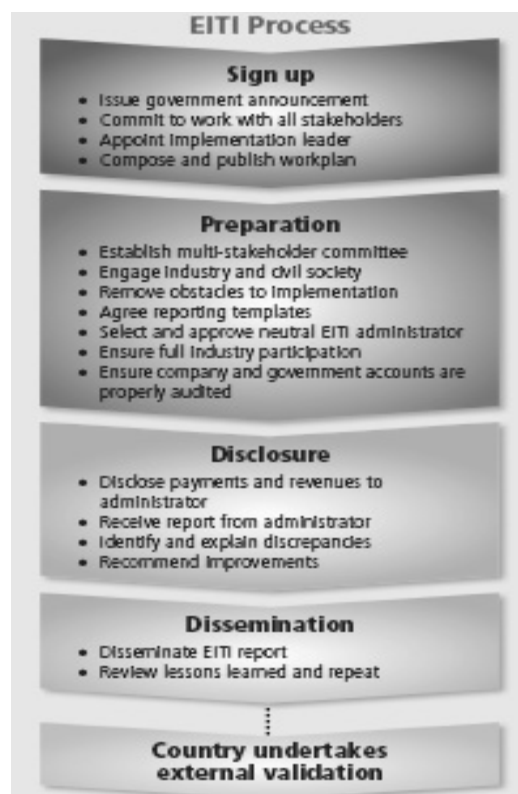
1. What is EITI?

The Extractive Industries Transparency Initiative (EITI) supports improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas, and mining. The Initiative works to build multi-stakeholder partnerships in developing countries in order to increase the accountability of governments and companies. Good governance is a precondition for converting large revenues from extractive industries into economic growth and poverty reduction. When transparency and accountability are weak, the extractive industries may instead contribute to poverty, corruption, and conflict—the so-called “resource curse.” The EITI is an important step in defeating this “curse.”

2. How does it work?

The EITI Secretariat has developed an EITI Source Book that provides guidance for countries and companies wishing to implement the Initiative. The Source Book can be found on the website (in several languages) or hard copies can be obtained from the Secretariat. The process shown in the following diagram, combined with the “EITI Principles and Criteria,” shows how an EITI process would work:

Source: International EITI Secretariat



3. What are the benefits of implementing EITI?

The primary beneficiaries of EITI are the governments and citizens of resource-rich countries. Knowing what companies pay and what governments receive is a critical first step to holding decision-makers accountable for the use of revenues. Resource-rich countries implementing EITI can benefit from an improved investment climate by providing a clear signal to investors and to international financial institutions that the government is committed to strengthening transparency and accountability. Companies and investors, by supporting EITI in countries where they operate, can help mitigate investment risk. Civil society can benefit from an increased

amount of information in the public domain about those revenues that governments manage on behalf of citizens. In summary, implementing EITI as part of a program of improved governance will help to ensure that oil, gas, and mining revenues contribute to sustainable development and poverty reduction.

4. The EITI Criteria

The EITI Criteria were agreed at the EITI London Conference in March 2005 and set out what countries need to do in order to successfully implement EITI. The criteria are:

1. Regular publication of all material oil, gas, and mining payments by companies to governments (“payments”) and all material revenues received by governments from oil, gas, and mining companies (“revenues”) to a wide audience in a publicly accessible, comprehensive, and comprehensible manner. **2.** Where such audits do not already exist, payments and revenues are the subject of a credible, independent audit, applying international auditing standards. **3.** Payments and revenues are reconciled by a credible, independent administrator, applying international auditing standards and with publication of the administrator’s opinion regarding that reconciliation including discrepancies, should any be identified. **4.** This approach is extended to all companies including state-owned enterprises. **5.** Civil society is actively engaged as a participant in the design, monitoring and evaluation of this process and contributes toward public debate. **6.** A public, financially sustainable work plan for all the above is developed by the host government, with assistance from the international financial institutions where required, including measurable targets, timetable for implementation, and an assessment of potential capacity constraints.

5. Which countries are implementing EITI?

EITI is now a global initiative. More than thirty countries have either committed to, or are now actively implementing EITI, in Africa, Asia, Europe, Middle East and South America. For the most recent list of countries and information on what they are doing, please look at the “EITI Countries” section of the EITI website.

6. Who else is involved?

EITI is supported by an International Secretariat in Oslo, Norway. The Secretariat works closely with the World Bank and the IMF. In addition to the implementing governments, EITI is supported by donors; by many of the largest oil and mining companies in the world, as well as investors in those companies; and by civil society groups many of which work under the umbrella of the Publish What You Pay Coalition. A full list of organizations involved in EITI is listed in the “Supporters” section of the EITI website.

7. How is implementation of EITI financed?

EITI is financed in part through a Multi-Donor Trust Fund (MDTF) administered by the World Bank. Australia, Belgium, Canada, France, Germany, the Netherlands, Norway, and the United Kingdom all currently contribute to the Fund. The funds are being disbursed to implementing countries to help meet the EITI criteria. Implementing countries also provide their own resources wherever possible. Individual donors also provide some separate funds for EITI implementation on a country-by-country basis. For more information about the MDTF, please look at the EITI website under “Supporting Implementation.”

8. What are the challenges for the future of EITI?

The major challenge will be to help more than 30 countries, and many different companies and civil society groups, to implement the Initiative. Key issues at the global level are addressed by the EITI Board. Mr. Peter Eigen, founder and chairman of Transparency International, chairs the Board, which consists of representatives from EITI implementing countries, companies, civil society groups, investors, and donors. The independent EITI Secretariat, headed by Jonas Moberg, is responsible for the daily operations of the EITI, communicating with stakeholders, and organizing the annual Board conferences. It works with the Chair and members of the Board to promote the concept of revenue transparency and the global adoption and implementation of EITI through building critical relationships and through a program of outreach and publicity.

9. Background & Principles

The Extractive Industries Transparency Initiative (EITI) was launched by U.K. Prime Minister Tony Blair in Johannesburg in September 2002. The launch was followed by the initial international EITI conference at Lancaster House in London, June 2003, where the participants from government, industry, and civil society agreed the following Principles:

1. We share a belief that the prudent use of natural resource wealth should be an important engine for sustainable economic growth that contributes to sustainable development and poverty reduction, but if not managed properly, can create negative economic and social impacts.
2. We affirm that management of natural resource wealth for the benefit of a country's citizens is in the domain of sovereign governments to be exercised in the interests of their national development.
3. We recognize that the benefit and revenue streams of resource extraction occur over many years and can be highly price dependent.
4. We recognize that a public understanding of government revenues and expenditure over time could help public debate and inform choice of appropriate and realistic options for sustainable development.
5. We underline the importance of transparency by governments and companies in the extractive industries and the need to enhance public financial management and accountability.

6. We recognize that achievement of greater transparency must be set in the context of respect for contracts and laws.
7. We recognize the enhanced environment for domestic and foreign direct investment that financial transparency may bring.
8. We believe in the principle and practice of accountability by government to all citizens for the stewardship of revenue streams and public expenditure.
9. We are committed to encouraging high standards of transparency and accountability in public life, government operations and in business.
10. We believe that a broadly consistent and workable approach to the disclosure of payments and revenues is required, which is simple to undertake and to use.
11. We believe that payments' disclosure in a given country should involve all extractive industry companies operating in that country.
12. In seeking solutions, we believe that all stakeholders have important and relevant contributions to make—including governments and their agencies, extractive industry companies, service companies, multilateral organizations, financial organizations, investors, and non-governmental organizations. These principles serve as the core tenets of the Initiative upon which subsequent standards, such as the EITI Criteria, have been based

Annex F: Community Benefit Sharing Mechanisms

1. **Sustainable communities** are the product of good policies and laws that have been planned and implemented at the local level by competent institutions/organizations, with the active participation of community members. Resistance to mineral investments is likely to develop if communities perceive threats to livelihoods or exclusion from the development process. Overarching instruments to ensure that local communities benefit from the extractive industries include:

- *community consultation framework* to assess and assign the roles and responsibilities of government(s), the company(s), NGO's and donors, and local affected communities on measures to address environmental and social impacts; and
- *community development plan* facilitated and coordinated by the Government both at central and local level, in consultation with stakeholders, including the active participation of communities, to integrate mining and mine closure planning with broader regional economic development plans. The ultimate goal should be to transform the community into a reliable partner from just being a beneficiary.

2. A comprehensive framework for compensation and benefit sharing that leads to a concerted community development plan between the local community, the government and the mining company is the critical factor in the managing mining revenues for local community development. Compensation will be not effective if the issue of facilitating the community's transition to a sustainable new way of life is addressed. Benefit sharing approaches could be an important tool in transforming a community from just a dependent beneficiary into a strong reliable partner, prepared to manage its own development.

3. There is a broad range of benefits that can be provided to local communities affected by mining. These include provision of rural infrastructure, SME development, formation of human capital through company-sponsored training, providing job skills both directly at the mine, and in secondary support ("spin off") industries.

4. A comprehensive community benefits package, in principle, should include:

- *employment and income-related benefits* - which would include employment and income related opportunities that would be provided to the affected communities during both construction and operating phases including direct employment by the mine and also indirect employment such as local sourcing of certain supplies and services, spin-off businesses and small and medium enterprise development;
- *benefits aimed at building local human capital and institutional capacity* - which would include provision of training for community members (both for direct and indirect employment possibilities), training for community leaders and capacity building for community institutions and provision of micro credits to support existing and new businesses (not only those that supply the mine but also other sectors such as agriculture).
- *benefits for the community resulting from the development of infrastructure* - which would facilitate access to: (i) education (schools); (ii) access to markets for local communities to sell their products (roads); (iii) health (medical facilities); (iv) clean water, etc. that, ideally, should be supported by the investor and the government and managed by the community. Benefit sharing will be effective if the

accumulation of human and social capital is promoted by improving the education and health standards of the local population and their collective ability to organize themselves, define their priorities, and represent and negotiate effectively their interests with third parties such as the government.

- **trust funds** - efficient mechanisms to sustain human and social capital accumulation, either (a) set up for financing local development initiatives and which should be managed by the community according to its needs; or (b) set up for providing funds for future generations.

5. The Appendix of this Annex includes a practical example of a comprehensive benefits sharing package from Papua New Guinea.

6. The following table summarizes the options and trade offs that would need to be considered in developing a benefit sharing mechanism.

Table 2: Benefit Sharing Schemes

	Advantages	Risks
Structure		
Partnership Participatory Approach such as Development Forum	<ul style="list-style-type: none"> • Consultative, inclusive, accountable, flexible • Reach mutually beneficial agreement • Emphasis is on mobilizing trust and partnership, rather than the coercive force of law 	<ul style="list-style-type: none"> • Developer or government may be unwilling to participate • With large and diverse numbers of firms and affected people assuring fair and adequate representation will be difficult
Forms of benefits sharing		
Employment and income related benefits	<ul style="list-style-type: none"> • Community preferred benefit • People feel more safe if they get a job • Small businesses created bringing more job opportunities 	<ul style="list-style-type: none"> • Mining highly intensive, limited direct jobs available; • Affected communities lack necessary skills either to work for the mining company or to set up other businesses
Cash	<ul style="list-style-type: none"> • Less vulnerable to capture • Easy to target • Easy to deliver cash benefits when institutions are weak 	<ul style="list-style-type: none"> • Create cash dependency, promote consumption not development or saving • Not effective in large populations
Public Goods	<ul style="list-style-type: none"> • Promote development • Build lasting human capital. • Create sustainable regional economy after mine closes 	<ul style="list-style-type: none"> • Difficult to provide public goods if weak institutions • Wastage if services not desired by communities
Training	<ul style="list-style-type: none"> • for community members (both for direct and indirect employment possibilities), • for community leaders • capacity building for community institutions • provision of micro credits to support existing and new businesses (not only those that supply the mine but also other sectors such as agriculture) 	<ul style="list-style-type: none"> • captured by community elite and not all community members have equal chances to attend training • not economically viable small businesses so that credits can not be returned (to create a revolving fund) • community institutions unwilling to participate
Trust Funds	<ul style="list-style-type: none"> • financing local development initiatives and which should be managed by the community according to its needs; • providing funds for future generations 	<ul style="list-style-type: none"> • weak community institutions not able to participate actively in the decision process for trust funds management • trust funds captured by politicians/community elite/local governments and used for other purposes

Relevant Stakeholders Roles		
Companies	<ul style="list-style-type: none"> • Large corporations may have better capacity and experience in supplying infrastructure than remote and under-funded local governments • Fosters trust with mining sector • Builds a mining community that is loyal to the mineral sector or firm. 	<ul style="list-style-type: none"> • Not core business of the mining company, raises business costs • Create mine dependency
State/Local Government	<ul style="list-style-type: none"> • Overcome collective action problems when there are a large number of mines • Builds capacity of local government and communities 	<ul style="list-style-type: none"> • Lack skills and capacity, Vulnerable to capture by interest groups who divert benefits to other purposes.
Civil society	<ul style="list-style-type: none"> • Provide services to the affected community (training, awareness programs) • Trusted by communities • Able to mobilize funds 	<ul style="list-style-type: none"> • Have their own agenda and can easily manipulate communities • Represent the interest of the sponsor and not so much the interest of the community
Community	<ul style="list-style-type: none"> • Knows better what it needs • Partner in the development agenda • Better monitoring of the implementation of development programs and their impacts 	<ul style="list-style-type: none"> • Lack of consensus between different groups • Weak community organizations and easy to be corrupted • Captured by interested groups

Annex G: Production Statistics for Selected Commodities:

Table 3: Production of Metals (in metric tons)

Commodity	1995	1997	1999	2001	2002	2003	2004	2005
<i>Bauxite</i>		4,454	4,624	5,000	5,000	5,000	n.a.	n.a.
<i>Chromite*</i>	242,998	157,203	79,445	200,000	215,000	220,000	160,300	170,000
<i>Ferrosilicium</i>	42,986	31,144	28,120	11,900	22,800	37,800	47,700	35,780
<i>Copper</i>	257,709	24,895	33,945	n.a.	n.a.	n.a.	29,030	73,000
<i>Crude Steel</i>	5,000	5,000	5,000	94,100	96,600	86,117	98,026	140,000

* Chromite production was around 1 mil. tons in 1980

Table 4: Production of Industrial Minerals and Salt (in metric tons)

Commodity	1995	1997	1999	2001	2002	2003	2004	2005
<i>Clay, kaolin</i>	500	500	500	385	350	n.a.	300	310
<i>Dolomite</i>	50,000	50,000	50,000	500,000	1,000,000	1,500,000	1,613,000	1,000,000
<i>Salt</i>	10,000	10,000	10,000	25,783	22,746	21,448	24,783	25,000

Table 5: Production of Mineral Fuels (in metric tons)

Commodity	1995	1997	1999	2001	2002	2003	2004	2005
<i>Asphalt and bitumen</i>	32,850	16,900	16,625	n.a.	4,200	42,076	61,035	60,000
<i>Coal, lignite (in thousand metric tons)</i>	80,906	38,900	30,000	16,400	20,300	18,000	12,600	12,000

Papua New Guinea's Distribution Measures of Benefits from Mining Sector

Royalties

The PNG Mining Act 1992 specifies a minimum of 20% of royalties received must be paid to the landowning communities of the mining lease area, the balance being paid to provincial governments

- The percentage is negotiable between provincial government and landowners. Percentages range from 20% up to 80% paid to landowners;
- Most is distributed in cash to affected peoples, or used by provincial governments for infrastructure and services;
- Royalties are paid directly by the Company to the Agreed Beneficiaries and then reconciled to Central Government for Audit.

Special Support Grants (SSG)

SSG is a form of derivation grant established under a constitutional organic law which determines that a value equivalent to 1% of the gross value of sales (effectively equivalent to a 1% royalty) is paid to the Provincial Government as a grant from the National Government in the National Budget

- By agreement a portion of this grant may be channeled to the Local Level Government in the mine area (up to 20%);
- By agreement some may also be channeled to Sustainable Development Foundations established by the mine developer.

Compensation

Communities are required by law to be compensated for loss of assets and loss of access to land. Some also receive compensation for inconvenience or loss of lifestyle and/or relocation housing

- Continues throughout mine life;
- Concerns exist over creating dependence as most of the money leads to consumption not investment;
- Some packages (such as the Ok Tedi river compensation package) include provision of infrastructure development and housing in lieu of cash.

Tax Credit Scheme

Infrastructure Tax Credit Scheme (ITCS)

- Established in recognition of limited capacity of local level governments to implement infrastructure projects;

- Enables the mine developer to spend up to 0.75% of the value of gross sales on approved infrastructure projects and receive a tax credit when paying company income tax, i.e. the amount expended is considered as tax paid;
- Project identification and approval process involves consultation between the Company, communities, local level and provincial governments and the national government;
- Mostly targeted at education, health and community services such as water supplies, roads, policing etc.

Equity Participation

Landowners have the right to take up 5% of project equity free carried to point of development on Special Mining Leases

- This has both potential benefits and liabilities and exposes communities to project risk;
- Benefits to projects include increased community support and loyalty;
- Benefits to communities from successful projects include cash for other developments. Most communities reinvest profits into other business development activities or real estate for growth of future opportunities.

Prescribed Infrastructure

Local communities receive community facilities and infrastructure constructed by the developer for general public access. These may include:

- Roads
- Schools
- Hospitals or health centres
- Government administration offices and housing
- Community facilities infrastructure and services
 - Reticulated water supply
 - Electric power supply
 - Waste water treatment
- Management and maintenance of the above

Preferred Area Status

Local communities receive preferential treatment in terms of:

- Employment opportunities
 - Preferred area applicants must be employed first
- Education and training
 - Preferential secondary and tertiary scholarships
 - Preferred entry to apprenticeships
- Business development assistance

- Preferred supplier status given to local businesses in order to promote capacity and local business activity
- Assistance with arrangement of JV businesses

Other Grants and Assistance

National Government provides other assistance such as:

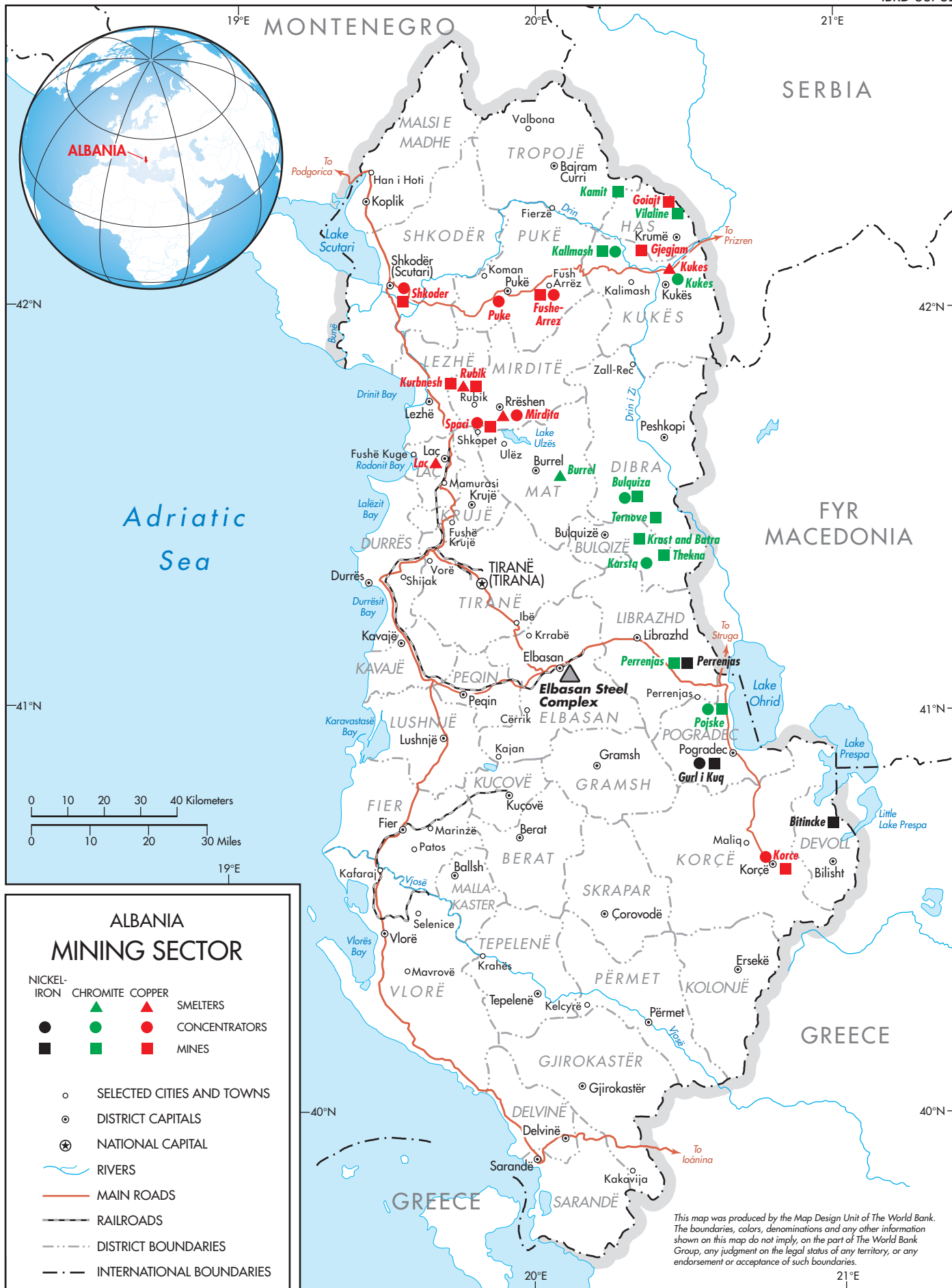
- Business establishment grants
- Bank guarantees to local business enterprises
- Assistance with financing landowner equity
- Management assistance with equity holdings
- Management assistance with business development activities and trust investments

PNG Development Forum model

The forum has *two principal functions*. The *first* is as a venue for the sharing of information on the project from the developer and the national and provincial government with the landowners on the nature, scope and impacts of the project. The *second* is to establish how the benefits derived from the project will be shared by the various stakeholders, which are then recorded in a series of project agreements or Memorandums of Agreement (MoA).

These agreements establish the role and responsibilities of all involved parties (government, mining company and community) and include services and benefits that will be provided in the project's affected area. These include the provision of community infrastructure and the sharing of project's financial benefits. In return for the benefits, the landowners commit themselves not to disrupt the project development and to work together with the government and the developer. It also commits the parties to an ongoing consultation process where development related issues could be discussed and resolved as they arise. This initial consultative process and the establishment of the various agreements take place prior to the Development/Concession Contract be signed between the Government and the mining company.

There are a number of key advantages to such a participatory approach that emphasizes partnerships and mutual obligations. *First*, it provides a flexible template that can accommodate diverse issues and needs of different communities. *Second*, the approach remains highly inclusive, with all relevant stakeholders being part of the management and making informed decisions, based on communication, consultation and negotiation. *Third*, the approach is fundamentally participatory and democratic. Affected people have an active role in decision making. *Finally*, the Development Forum in PNG has firm legal underpinnings and is enforceable contracts. Consequently they are credible and legally binding commitments that create trust and confidence which are needed to rebuild communities and enhance economic activity.



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