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# Towards a Vision for Mining in Peru in 2030

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## Acknowledgements

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## Introduction

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This document proposes a vision for the future of mining in Peru and identifies what needs to happen to progress this vision. It uses 2030 as the reference point, to align with the target date that the UN has set for meeting the Sustainable Development Goals (SDGs) articulated in *Transforming Our World: The 2030 Agenda for Sustainable Development* (September 2015).

The primary aim in releasing the document is to promote a dialogue with government, civil society and the broader mining industry and galvanize action to reduce the level of societal conflict around mining, enhance the contribution of mining to the sustainable development of Peru, and help ensure the long term viability of the industry. This is an opportune time to initiate this dialogue, given the current state of the mining sector in Peru, developments elsewhere in the region, and the renewed global focus on sustainable development.

The document has been developed under the leadership of a Driving Group comprising senior personnel from international mining companies operating in Peru and representatives of the National Dialogue and Sustainability Office of the Presidency of the Council of Ministers (ONDS-PCM). Technical accompaniment has been provided by the United Nations Development Program (UNDP). The University of Queensland's Sustainable Minerals Institute (SMI) assisted with the drafting of the Vision and led the preparation of the background chapter (Part 2), which provides contextual information that has informed the development of the Vision.

In formulating the Vision, the Driving Group has built on the efforts of several other groups and organizations, in particular the work of the Dialogue Group for Mining and Sustainable Development (GDMDs). The Project Team has also had the benefit of multiple discussions with senior representatives of several civil society organizations and government agencies, and has accessed reports of bodies such as the International Council on Mining and Metals (ICMM), the World Bank, the World Economic Forum and the OECD, and sector reviews by civil society organizations in Peru.

### Report structure

**Part I** presents the proposed Vision for Mining in Peru in 2030. This part commences with a brief overview of recent development trends in Peru and the role played by mining, provides the rationale for proposing a Vision at this time, articulates the Vision and outlines what actions are required –by industry and government– to enable progress towards the Vision.

**Part 2** provides a synthesis of information and studies relevant to the broad topic of mining and development in Peru and identifies global trends that could impact on Peru - and the mining sector in particular - between now and 2030. Reports and other information sources used in the preparation of this synthesis are listed at the end of the document.

## Part 1: A Proposed Vision for Mining in Peru, 2030

### Setting the context

Peru has had a record of strong growth so far this century, with the economy expanding at an average rate of nearly six percent annually between 2002 and 2015. In the last decade, poverty rates have more than halved on account of strong growth in employment and income. Peru is now ranked as an upper middle income country by the World Bank and, along with Colombia, is on track to join Chile and Mexico as Latin American members of the OECD.

The mining industry has been an important part of Peru's recent growth story. The country's mineral wealth and favorable investment climate have made Peru one of the most important producers of base and precious metals in the world. According to an assessment by McKinsey & Co. published in 2013, the industry in Peru is cost competitive, with modern operations and a large presence of international companies (Melero & Baztarrica 2013).

Based on recent figures, mining and mining services account for 8-9 per cent of Peru's GDP, around half of the export income generated by the country and around a quarter of foreign investment. The sector directly employs around 200,000 people and contributes, directly and indirectly, to the employment of many more. Mining has also been a very important revenue source for government, accounting for around 12 per cent of total revenue, on average, over the decade from 1999 to 2009. In 2013, at the height of the resources boom, the Peruvian Government received some US\$2 billion in taxation and royalties from the sector.

The contribution of mining to government revenues has been particularly important in some areas of the Andes, where most of the large mines are located. For example, between 2005 and 2015, Ancash region received over S/.8 billion in Canon Minero funds and five other regions over S/.3 billion. Collectively, companies have also made substantial direct social investment outlays in the areas where they operate, either on a voluntary basis or to fulfil contractual obligations. In the peak year of 2012 the total value of these payments exceeded S/.1.3 billion.

Despite the economic importance of mining to Peru, the industry has struggled to gain acceptance, particularly at the regional and local level. A survey undertaken on behalf of the International Council on Mining and Metals (ICMM) in 2015 found that respondents in mining areas held quite negative views of the industry, with a high proportion completely rejecting the sector and many doubting that mining significantly contributes to development of local communities around mines. Even in the non-mining areas, such as Lima, support for the mining industry can best be described as mixed.

Conflicts related to mining have increased in both frequency and intensity over the last decade and in a number of cases have resulted in injuries and deaths, mostly of community members. Well over half of the current active and latent socio-environmental conflicts identified by the Ombudsman (Defensoría del Pueblo) relate to mining. While the causes of these conflicts are complex, concerns about negative environmental impacts, especially relating to water, have often been at the core. These conflicts have caused substantial

delays in the construction of new projects and, in some cases, have been a significant contributing factor in the cancellation or deferral of major projects. This is fueling perceptions amongst international investors that Peru is becoming a more difficult place to do business.

### **Looking ahead**

Peru faces significant development challenges, notwithstanding the impressive growth record of the last 15 years. The Gini coefficient, which is a globally accepted measure of income inequality, has improved significantly since the turn of the century, but is still very high relative to OECD standards. Generally speaking, growth has been more beneficial for the middle class than lower income groups and there are some parts of the country, such as the rural areas of the Andes, where half or more of the population remains poor. These areas include localities where the mining industry is active. According to the OECD, the over-dominance of Lima in the national economy has further exacerbated regional disparities.

Achieving sustainable improvements in social and economic conditions at the sub-national level, particularly in the Andes, has proved challenging for a variety of reasons. These include low levels of trust and social capital within communities, lack of education, the challenges of geography and isolation, a lack of institutional capacity at both the national and sub-national level, and poor program design and implementation.

Other development challenges facing Peru include the high rate of informalization in the economy, the narrow tax base, relatively low levels of productivity, and poor road and port infrastructure. Between now and 2030 (and beyond), the impacts of climate change on water availability and the agricultural sector (in particular) will present significant challenges, as will problems of environmental degradation more broadly.

Peru, as a small, open, economy with a large degree of dependence on resources, faces an uncertain economic future, as do other countries that rely heavily on the production and export of commodities. While a long term rebound in the prices of key minerals such as copper can be expected, it is unclear at this stage when this will occur; and also how well positioned the country will be to take advantage of this upturn.

Without concerted action to address the underlying causes of conflict and mistrust around mining and make the path to developing new projects easier, there is a very real possibility that, when mineral prices do recover, investor interest may have shifted elsewhere to those countries that are seen as having a lower risk profile. A decline in investor attractiveness would mean fewer economic opportunities for Peruvians, less revenue for governments at all levels, and fewer resources available to tackle Peru's still pressing social challenges.

### **Why Peru should have a Vision for mining**

The challenges facing the Peruvian mining sector and Peru as a country cannot be addressed through piecemeal action and a 'business-as-usual' approach. A paradigm shift is needed for how mining's role in society is viewed. Articulating a Vision for the future of mining can help meet this need, by focusing attention on the longer term, stimulating a dialogue with other key stakeholders to identify common ground and setting a benchmark against which progress can be judged.

Chile, a major competitor in the mining arena, has already commenced work on developing and implementing a Vision for the country's mining sector, through the work of the Commission for Mining and Development of Chile (2014). This was a multi-stakeholder initiative, supported by Government, which laid out a high level roadmap for building a 'virtuous, sustainable and inclusive' mining industry by 2035. This work is now being continued through the Value Mining Alliance (Valor Minero 2015).

Colombia, has also started down this path with the recent publication of the report of the Dialogue Group on Mining in Colombia, *Proposals for a Shared Vision on Mining in Colombia Roadmap* (Dialogue Group on Mining in Colombia 2015) and the release in April 2016 of a new mining policy for Colombia, entitled *Basis for Future Mining* (MINMINAS 2016). The vision articulated in this document is that by 2025 'Colombia will have an organized, legitimate, inclusive and competitive mining sector, generating development both regionally and nationally, which will support the leveraging of post-conflict opportunities.'

To fulfil its true development potential, Peru cannot afford to ignore one of the key areas in which it has a competitive advantage in the global marketplace: its mineral endowment. Having a well-developed Vision for mining, which is embraced by all key stakeholders, will help maintain that advantage.

To gain traction, the Vision needs to focus on how mining can best contribute to achievement of Peru's national and regional development goals rather than just being concerned with the sustainability of the industry itself. In this regard, it is opportune that in September 2015 the United Nations adopted the Sustainable Development Goals (SDGs) for 2030: the successor to the Millennium Development Goals. The SDGs are set out in detail in *Transforming Our World: The 2030 Agenda for Sustainable Development*. In broad terms signatory countries have resolved to:

*...end poverty and hunger everywhere; to combat inequalities within and among countries; to build peaceful, just and inclusive societies; to protect human rights and promote gender equality and the empowerment of women and girls; ... to ensure the lasting protection of the planet and its natural resources; and to create conditions for sustainable, inclusive and sustained economic growth, shared prosperity and decent work for all, taking into account different levels of national development and capacities.* (United Nations 2015).

It is intended that the SDGs will be used by countries to frame long term development objectives and supporting policies and strategies. Work has already commenced in Peru through bodies such as CEPLAN to integrate the SDGs into national planning processes and identify priority goals.

With a new Government taking office, this is an ideal time to initiate a dialogue about how mining in Peru can best contribute to the future development of Peru and the achievement of key SDGs. There is also an opportunity to draw on the work that the UNDP has initiated on mapping how mining can contribute to the SDGs (UNDP, WEF and CCSD 2016).

### **Framing a Vision**

In formulating its proposed Vision for Mining in Peru in 2030, the Driving Group has built on the efforts of several other groups and organizations. In particular, the Driving Group has benefitted from the work of the Dialogue Group for Mining and Sustainable Development

(GDMDS, 2006, 2014, 2016), which for 15 years has provided a space for multi-stakeholder dialogue that aims to promote intercultural dialogue on mining, and its relationship with the environmental protection and sustainable development. The Driving Group and the Project Team have also had the benefit of discussions with representatives of civil society and other stakeholders, and has drawn on reports by organizations such as the ICMM, the World Bank, the World Economic Forum and the OECD, as well as sector reviews undertaken by civil society organizations such as Propuesta Ciudadana, SPDA and CooperAcción.

As indicated, the Vision emphasizes the need to focus not just on enhancing the economic contribution of mining, but also on ensuring alignment with the SDGs and territorial development priorities. The mining industry can no longer remain inactive and passive as it has done in recent years, assuming that providing employment opportunities and paying taxes will be a sufficient contribution. Education is highlighted in the Vision as an area for special attention, as helping to build the capabilities and knowledge of the next generation of Peruvians is one of the most tangible ways in which mining can make an enduring contribution to the future development of the country. The Vision also highlights the importance of addressing legacy issues relating to environmental contamination from past and present mining operations, and the need to deal more decisively with unresolved issues around the status of informal mining and the growing problem of illegal mining.

### **A Vision for Mining in Peru, 2030**

#### **In 2030:**

- **Peru is a leading mining country in the Latin America region, with a vibrant innovative and sustainable mining industry which is internationally competitive, has a strong social licence, respects human rights and operates ethically according to locally and globally recognised social and environmental performance standards.**
- **The mining industry in Peru is accepted as a trusted development partner which has enabled economic growth and productive diversification at both the regional and national level, and has contributed significantly to the achievement of priority SDGs, particularly in regards to improving access to, and quality of, education.**
- **Territorial development processes are operating effectively in those areas where mines and associated infrastructure are located, and there is productive collaboration between government, mining and other industries, and local communities in the pursuit of agreed development goals.**
- **Abandoned and closed mine sites which pose a significant threat to the health of people and the environment have been effectively remediated.**
- **Significant progress has been made in formalizing informal mining and ending illegal mining.**
- **Government and the mining industry have co-invested in building research and innovation capability in Peru to enable better economic, social and environmental outcomes across the mining value chain.**



## Implementing the Vision

### Key challenges

Realizing the proposed Vision will not be easy and cannot be achieved by industry acting alone. Government has a key role to play in creating an enabling environment and strengthening the institutional framework; the cooperation and input of civil society and local communities will also be required.

Particular challenges which will need to be addressed include:

- Entrenched attitudes of distrust towards the state and the mining industry, particularly in the mining areas.
- Lack of confidence within Peruvian society in current institutional arrangements for regulating the mining industry.
- Unresolved and escalating social conflicts around a number of mining projects.
- Lack of transparency by some industry actors, which has contributed to suspicion and prevented stakeholders from fully understanding the benefits, contributions and social & environmental impacts of mining.
- Low levels of organization within the mining industry, with no agreed social and environmental performance standards and no coherent industry 'view' on the way forward.
- Lack of coordination and alignment within national government, between Congress and Executive, and across the different levels of government in regards to national and territorial development priorities, planning and service delivery.
- Limited government service delivery capability in key areas such as health and education.
- Low governance and execution capacity, particularly at the sub-national level, with no consistent approach to the issue of decentralization across the different levels of government.
- The cyclical nature of mineral commodity markets, which leads to uneven revenue flows for government and fluctuating levels of development activity.
- Significant corruption in several areas of government, particularly at the sub-national level, compounded by weak accountability mechanisms.
- Complex regulatory requirements and administrative bottlenecks which create unnecessary costs and delays for projects.
- A history of under-investment by government and industry in research, technology and innovation, including in the mining sector.

The following sections outline what actions will be required of the mining industry and the national government to deal with these challenges and enable progress towards the Vision. The roles that sub-national governments and civil society groups can and should play are also briefly considered.

### **Key actions required to implement the Vision**

- 1) Promote and embed internationally accepted standards for environmental and social performance throughout the mining industry.
- 2) Institutionalise early collaboration between the state and project developers to improve social conditions in mining areas and build community capability.
- 3) Promote the values of citizenship, trust and respect within communities, companies and the wider society.
- 4) Create processes and spaces to enable informed citizen participation across the life cycle of projects.
- 5) Improve and strengthen the prior consultation mechanism as it relates to investment projects in the mining and energy sectors.
- 6) Strengthen the decentralization process and the capabilities of regional personnel to enable effective planning and management for territorial environmental, economic, social and human development.
- 7) Take a more strategic approach to generating employment and business development opportunities in the areas where mines and associated infrastructure are located.
- 8) Promote awareness of the SDGs within government and industry and ensure that the goals inform policy and practice in both sectors.
- 9) Strengthen the environmental institutional framework and improve coordination between environmental agencies.
- 10) Ensure that the government complies with its international obligations to protect the human rights of all Peruvians and that human rights are respected by mining companies and businesses generally.
- 11) Implement an effective national system of conflict prevention and management.
- 12) Take decisive action to address societal concerns about the negative environmental impacts of mining, including by taking remedial action to address environmental legacy issues associated with abandoned and closed mines.
- 13) Develop and implement effective measures to formalise informal mining and curtail illegal mining.
- 14) Invest in building research, technology and innovation capability across the mining value chain.
- 15) Create a permanent national level space / platform to define a roadmap for implementing the Vision, facilitate coordination & collaboration, and track implementation of the Vision, linking this to wider SDG implementation in the country.

### **The mining industry**

This section focuses mainly on the organized mining sector and the role of larger companies in particular. However, the Driving Group recognizes that a comprehensive vision for mining

in Peru must encompass small as well as large companies and cover the full value chain of mining, from exploration through to downstream processing.

To support the Vision, mining companies, acting individually and collectively, need to:

- 1. *Adopt and act in accordance with internationally accepted environmental and social performance standards for mining; and, to the extent that is practical, require suppliers and contractors to also comply with these standards.*** Key standards relevant to mining include; the ICMM Sustainable Development Principles, the International Finance Corporation's Performance Standards on Environmental and Social Sustainability, the Voluntary Principles on Security and Human Rights, and the UN Guiding Principles for Business and Human Rights. Leading companies operating in Peru already subscribe to these standards and report against them, but this is not standard practice across the sector. Active engagement will be required with the broader mining industry in Peru and the SNMPE (Sociedad Nacional de Minería, Petróleo y Energía) to secure industry-wide commitment to a credible set of social and environmental standards.
- 2. *Engage with communities and other stakeholders in an open, transparent and responsive manner and actively support participatory processes.*** Companies should promote and take part in participatory spaces at the local level (for example, Development Tables) to identify opportunities to work with communities and their representatives to achieve better development outcomes. Mining projects should also continue with and expand participatory water and environmental monitoring and establish mechanisms for transparent information sharing across the life cycle of projects.
- 3. *Participate in territorial planning and management processes and coordinate social investments and other activities around development goals that have been agreed to with local communities and which are in alignment with territorial priorities.*** This will require a more collaborative approach by mining companies to determining where and how they focus their social investments, along the lines of the Partnerships for Development model promoted by the ICMM (2013). For example, where improving education outcomes for local people has been agreed to as a priority, companies should look to contribute by such means as: providing financial and in-kind support for capacity building in local education and training institutions, sharing knowledge and expertise, and sponsoring initiatives to increase access of poor and marginalized groups to educational opportunities.
- 4. *Respect the human rights of all people, particularly those living in the area of influence of mining projects.*** The risk of significant human rights violations occurring is particularly high in conflict situations and where governance is weak; conditions that often characterize mining in Peru. Companies should seek to minimize these risks by undertaking due diligence, ensuring that security and other personnel are properly trained and managed, and by establishing or participating in effective operation-level grievance mechanisms for individuals and communities who may be adversely impacted.

5. **Engage with other sectors (e.g. agriculture) at the national and territorial level to identify synergies, contribute to productive diversification and promote a collective vision of development.** A greater focus on achieving cross-sector synergies and linkages will help reduce points of tension with communities and contribute to economic diversification. The mining industry can make an important contribution through sharing technology, know-how and infrastructure (such as water storages and pipelines, or electricity generation and transmission facilities). Companies should also commit to purchasing goods and supplies locally, wherever practical, and to building the capacity of local suppliers. Effective territorial planning will facilitate the identification of these opportunities (see next section).
6. **Commit to taking decisive action to address societal concerns about the negative environmental impacts of mining.** Mining operations should strive to minimize their use of inputs of water, energy, land, chemicals and other materials, as well as outputs of waste, effluent and emissions, and land disturbance. Companies should also seek out opportunities to demonstrate positive impacts through such means as promoting water conservation and energy efficiency in the areas where they operate, protecting biodiversity, and contributing to adaptation to climate change.
7. **Work with government and other actors to address negative environmental legacies associated with mining.** In addition to taking responsibility for legacy sites under their control and ownership, mining companies should be prepared to share technology and know-how with government to assist with the remediation and stabilization of abandoned sites, particularly those located in or near the areas where the companies are operating. There may also be opportunities for companies to help improve environmental practices in the informal sector through the transfer of technology and expertise.
8. **Deploy company resources and expertise to help build governance capacity at the subnational level.** Actions that could be taken in this regard include seconding skilled company staff to assist with project planning and execution, sharing technical expertise (e.g. on costing and budgeting) and providing training and secondment opportunities for local government personnel. It is critical that opportunities to build capacity are identified in consultation with local governments, rather than companies making their own assessment of what is best. Transparency will also be very important, to avoid any suggestion that this support is being used to exercise undue influence over local government or to buy favour with local officials.
9. **Invest in and facilitate research and development to promote innovation and diversification.** Mining companies, acting individually and collectively, can do more to stimulate R&D and innovation, not just in the mining sector but in other parts of the value chain and in related sectors. Possible actions include: contributing financial and in-kind support to enable research institutions to leverage matching funding from government schemes (such as the Centre of Excellence program managed through CONCYTEC, the National Council for Science Technology and Technical Innovation) entering into partnerships with universities; funding or part-funding research scholarships; and providing researchers with easier access to data.

10. **Establish and apply a common methodology for measuring, monitoring and reporting on the contribution of mining to sustainable development and the SDGs.** There is currently no agreed framework for monitoring and reporting on the development impacts and contributions of mining projects. Companies could consider adopting an approach such as the Index of Social Progress, which focuses on measuring environmental, economic, social and human development outcomes at the territorial level. This aligns with the objective of promoting joint management and joint ownership of territorial development.
11. **Expand the definition of a project's area of influence.** The area of influence of mining projects is usually defined based on criteria of environmental impact, but the social impact of projects is often broader than this. At a minimum, municipalities where infrastructure is located (e.g. processing plants, storage facilities, slurry pipelines, purpose-built roads) should also be included.

### National government

The national government has the lead role and responsibility in regards both to the governance of the mining sector and driving a broader development agenda for Peru, so its active involvement will be critical to the realization of the Vision. Specific actions needed from government are as follows:

1. **Adopt a consistent approach to determining and implementing development priorities across government.** Currently, it appears as if every government level and functional area is undertaking its own planning without a shared vision and common objectives. A more integrated approach would reduce waste and inefficiency and deliver better development outcomes for Peru.
2. **Implement a more coordinated approach to territorial planning and management.** There are significant, but as yet largely unrealized, opportunities at the territorial level to better align the activities of government agencies and the private sector around agreed development priorities (including the promotion of economic diversification). Making progress on this front will require better utilization of mechanisms such as Development Tables and inter-sectoral and inter-governmental commissions, supported by multi-year planning cycles and revised budgeting processes. The capacity of sub-national government to undertake coordination and planning functions will require strengthening, as more responsibilities and resources are devolved to this level.
3. **Build the capacity of citizens to participate in planning and management processes.** The State's role should be to drive and set the parameters for social spending through participatory mechanisms, rather than imposing these in a top-down manner. To enable this, more support is needed for citizen training and to develop the capabilities of social grassroots organizations.
4. **Ensure that the prior consultation mechanism functions smoothly and provides effective protection of the rights of Indigenous Peoples.** The Peruvian State, as a signatory to Convention 169 of the International Labour Organization (ILO), has a specific obligation to protect the right of indigenous peoples to be consulted on measures which may affect them directly, including prior to exploration or exploitation of sub-

surface resources. There is growing acceptance that the implementation of the prior consultation law in the mining sector is an irreversible process for new investments that potentially affect collective rights of indigenous communities in the Andean region. However, many actors feel that greater clarification around its application is needed, for example, with respect to when to apply the process during the life cycle of a project.

**5. *Take proactive measures to ensure that human rights of citizens are protected and that police and security personnel behave appropriately in conflict situations.***

Violent conflicts around mining projects, some of which have resulted in loss of life, are damaging to Peru's international reputation and have the potential to be a deterrent to investment. The causes of these conflicts are complex, but poorly trained and supervised police and security personnel can easily exacerbate already volatile situations. Where allegations of serious human rights breaches are made, these should be referred to a credible independent body for investigation.

**6. *Strengthen the national system for conflict prevention and resolution.*** Multiple institutional spaces have been established in government to monitor and intervene in socio-environmental (and other) conflicts. This has led to coordination problems and a lack of consistency in approach. The National Dialogue and Sustainability Office has proposed a national system for social conflict prevention and management which has the potential to address these issues and to increase the focus on prevention. A priority is to strengthen local institutions so that sub-national governments have more capacity and authority to intervene early in conflicts and ensure that agreements reached are honored by all parties.

**7. *Strengthen the institutional framework at the national level to provide for more effective and efficient environmental regulation.*** Action is required to strengthen the capacities and independence of public agencies, to give greater confidence that the physical environment, and the rights and interests of communities, are being protected. Currently, the perception of many in the community is that government is not an impartial actor. Recent modifications made to environmental legislation to promote investments in the sector have contributed to this view. This detracts from the credibility of environmental instruments such as the EIA and environmental control by OEFA (the Agency for Environmental Assessment and Enforcement). Lack of coordination between SENACE and the Agency for Environmental Assessment and Enforcement is also an issue.

**8. *Reform the Canon Minero to make it a more effective mechanism for addressing development needs at the territorial level.*** Canon resources are concentrated in a few regions and there is a long history of poor utilization of these monies. Criteria for using the funds should be reviewed to ensure that they are utilized to support projects or programs that contribute towards narrowing the gap in multi-dimensional poverty. The rules governing the allocation of Canon funds across and within regions should be reviewed to facilitate this. Consideration should also be given to establishing stabilization and intergenerational funds to enable a smoother distribution of Canon revenues over time.

9. **Strengthen efforts to formalise informal mining and to curtail, and eventually eradicate, illegal mining.** The government already has programs in place to formalize small-scale and artisanal mining and to address the problem of illegal mining, but these mechanisms appear to be of limited effectiveness. In the case of informal mining, a review of current approaches is needed, along with increased incentives and resourcing to encourage formalization. The problem of illegal mining is very difficult to address, but there may be lessons from other countries in how they have approached this vexed problem.
10. **Strengthen initiatives to deal with the problem of environmental mining liabilities and increase remediation efforts, in conjunction with industry.** Given the large number of environmental liabilities that have been identified (in excess of 8,000) the initial focus needs to be on abandoned sites and those that pose the greatest risks to people and the environment. As recommended by the United Nations Economic Commission for Latin America and the Caribbean and the OECD, in their 2016 *Environmental Performance Review for Peru*, government needs to establish responsibilities and funding requirements for the remediation of abandoned sites, make use of international technical cooperation, and ensure that remediation plans are adopted and overseen by SENACE and OEFA respectively.
11. **Provide targeted funding for building research, technology and innovation capability across the mining value chain and in industry more broadly.** In line with the approach taken in other countries, it is reasonable to expect industry, as a beneficiary, to also make a contribution through matched funding arrangements and other mechanisms. It is important that there is engagement with industry in designing these schemes, rather than them being developed unilaterally by government.

### Sub-national government

Sub-national governments also have an important role to play in the implementation of the Vision. Building the capacity of sub-national governments to perform these functions is primarily a responsibility of the national government (although, as indicated, industry can also contribute expertise and support, particularly at the municipal level). Specific attention should be given to enhancing the capability of sub-national governments in regards to:

- conflict prevention and resolution
- land use planning, including ecological and economic zoning
- territorial planning and development
- effective use of Canon resources.

### Civil society

Civil society organizations can help support the Vision by:

- engaging with government and industry on effective means to reduce mining-related conflict and enhance mining's contribution to sustainable development
- sharing knowledge in their areas of expertise
- actively participating in the definition of development objectives at national and territorial level
- assisting to build the capacity of local actors

- participating in and supporting participatory environmental monitoring processes
- holding governments and companies accountable for their commitments
- partnering with companies and government in capacity building initiatives and development projects.

### Next steps

If the proposed Vision is to gain traction, it will require the support and commitment not only of the wider mining industry, but of government at all levels. It will also need to have credibility with civil society and the broader community. Time will be required to build the requisite levels of commitment and trust so it is important to commence the dialogue process now, using this document as the starting point. The Driving Group will proactively seek feedback on the proposed Vision through detailed discussions with government and other stakeholders, including civil society organizations. The Driving Group will also initiate discussions with the SNMPE and approach other industry actors to join the Group. Further refinements of the document are anticipated as a result of this engagement.

The Driving Group also considers that there would be value in forming a multi-stakeholder Commission for Mining and Development of Peru, along the lines of what was established in Chile. The function of this body would be to further refine the Vision, develop an implementation roadmap and timetable, set targets and monitor progress against them, secure commitments from key players, and facilitate coordination and collaboration. The Commission would need to be resourced by government, but would operate at arms' length to protect its independence. The head of the commission should be a person of national standing, who has credibility with all key stakeholders.



## **Part 2: Background**

### **Country Overview: The recent story**

#### **Economic growth and diversification**

Peru has achieved an impressive level of economic growth since the turn of the century. From a low 0.6 percent GDP growth rate in 2001, the economy grew at an average rate of 5.7 percent between 2002 and 2015. There was a deceleration to 2.4 percent GDP growth in 2014, reflecting the slowdown in mining investment, but this improved to 3.3 percent in 2015. Growth is expected to recover gradually to an average rate of 3.8 percent in 2017-18 (World Bank 2016).

Peru is now classified as an upper middle income country, with a Gross National Income (GNI) per capita of \$11,015 (World Bank 2016). This is nearing the high income country category (GNI per capita > \$12, 736). Along with Colombia, Peru is on track to join Chile and Mexico as new Latin American members of the OECD, which will bring further integration into the global economy. An OECD country program was adopted in 2014 towards this goal.

Mining remains a key component of the Peruvian economy (see below) although there has been some diversification in recent years. In 2014 the mining sector (mineral extraction and related services) contributed 8.8 percent to GDP, compared with 12.1 percent in 2007 (INEI 2016). Overall, the non-traditional sectors (with the exception of the textile industry) have achieved higher growth rates than has mining, albeit from a lower base. Agricultural exports, for example, grew from \$800 million in 2004 to \$4.171 billion in 2014.

#### **Poverty reduction and human development**

Poverty rates have more than halved since 2004 on account of strong growth in employment and income. In 2004, 55.6 percent of Peru's 30.97 million people lived below the poverty line, whereas less than a quarter (21.8%) were living in poverty by 2015 (World Bank 2016). Even more impressively, extreme poverty rates declined from close to 25 percent in 2001 to 9.1 percent in 2014 (OECD 2015, 48; UNDP 2016)

Peru's Human Development Index (HDI) score rose from 0.6 in 1990 to 0.734 in 2014. It is ranked 84<sup>th</sup> out of 188 countries. Life expectancy at birth is 74.6 years (close to the average of 75 years for Latin America and the Caribbean). The mortality rate for children under five per 1,000 live births is 17, compared with 79 children per 1,000 live births in 1990. The country has an adult literacy rate of 93.8 percent (UNDP 2015).

Despite the improvement in the overall HDI and the reduction in poverty levels, uneven development remains a source of social conflict (see 'Social conflict related to mining' below). Income inequality – a serious challenge for social cohesion – has become less pronounced in recent years. The Gini coefficient (0 = most equal; 1 = most unequal) has reduced from 0.530 in 2003 to 0.439 in 2014 (UN ECLAC & OECD 2016, 10). This is a significant improvement, but is still very high income inequality relative to OECD standards (OECD 2015, 50).

## Challenges

### Narrow tax base

Peru's relatively narrow tax base is a significant constraint on meeting socio-economic and infrastructure development needs. Annual average tax revenue from 2011-2014 was 16.4 percent of GDP. During the mining boom, the budget became heavily reliant on mineral revenues (Fenochietto et al. 2015, 115). The size of the informal sector also limits the tax base and is one of the main factors constraining economic growth (Fenochietto et al. 2015). The size of Peru's informal sector is estimated at between 30% and 45% of official GDP (Machado 2014a).

In 2005, 76 percent of the non-agricultural workforce of Peru was informally employed (ILO 2014a). This had improved to 64 percent by 2013, following a decade of strong economic growth, but was still above the average rate of 46.8 percent non-agricultural informal employment in 14 countries in the region (excluding Chile) (ILO, 2014b, 33). In 2009, half of workers in the mining and quarries sector were informally employed. This percentage dropped to 39 percent in 2013 (ILO 2014b, 41).

### Barriers to doing business

Peru is ranked 69<sup>th</sup> (previously 65) out of 140 countries with a score of 4.21 in the World Economic Forum's Global Competitiveness Index, 2015/16. This measure is based on an assessment of the institutions, policies, and factors that determine the level of productivity of an economy. Peru's ranking is well below Chile (35) and roughly equivalent to Colombia (61).

Breaking the index down into some of its component parts, Peru scores well for its macro-economic environment (23) but relatively poorly on the quality of institutions (116) health and primary education (100) higher education and training (82), infrastructure (89) and business sophistication and innovation (106). Chile (32), scores significantly higher on all of these measures, particularly quality of institutions.

The top four barriers to doing business in Peru have been identified as:

- inefficient government bureaucracy
- restrictive labour regulations
- corruption
- inadequate supply of infrastructure (WEF 2016).

A study by the General Comptroller of the Republic (in Spanish, Contraloria General de la Republica) on administrative bottlenecks slowing down investment found that there are significant differences between the agreed timeframe and actual time taken for a range of approvals, including in the mining sector (Contraloria General de la Republica 2016, 175-176). In order to obtain authorizations, licenses or permits in the mining sector, companies have to deal with 18 different entities and 20 offices. Each administrative unit issues rules without analyzing how this new regulation could affect the macro process of obtaining authorizations, permits and licenses. (For more details on the mining sector specifically, see the section below on 'Impact of regulatory requirements').

## Corruption

The Transparency International Corruption Perceptions Index (CPI) 2015 ranked Peru 88<sup>th</sup> out of 167 countries, with Chile (23) seen as significantly less corrupt. Brazil (76) and Colombia (83) scored marginally better than Peru. According to the Comptroller General of the Republic, since 2010 the Peruvian Government has lost about S/.3,000 million (about US\$860 million) of its public treasury because of corruption (Contraloría General de la Republica 2016b). Corruption at subnational levels of government is a particular concern given the significant revenue transfers to municipalities and regional governments.

Institutional and governance structures are underdeveloped, especially at subnational level. For example, the average level of implementation of internal controls was 25 percent of 655 entities throughout Peru, according to the General Comptroller (Contraloría General de la Republica 2015). The average degree of implementation of internal control of the entities of the central government (36%) is greater than the entities of regional and local governments (20%), but still low in absolute terms (Contraloría General de la Republica 2015). On a more positive note, Peru is now fully compliant with the Extractive Industries Transparency Initiative (EITI) (see 'Transparency and Accountability' below).

## Lack of trust

There is a generally low level of trust in the state and amongst social groups. According to the Instituto Nacional de Estadística e Informática (INEI) 2014 National Household Survey Module: Governance, Democracy and Transparency:

- only 21.4 percent of respondents trust local municipalities
- 20 percent trust provincial municipalities
- 16.1 percent trust the Comptroller General of the Republic
- 16 percent trust the Public Prosecutor's Office
- 15 percent trust regional government
- 14.3 percent trust judicial power
- 9.1 percent trust the Congress
- 5.9 percent trust political parties (INEI 2014).

In the mining sector, an ICMM perception study of public attitudes towards mining in Peru found that trust levels in all stakeholders engaged with mining are low. This includes government, mining companies and even NGOs and local community leaders. Respondents in mining areas hold quite negative views of the industry, with a high proportion completely rejecting the sector and many doubting that mining significantly contributes to development of local communities around mines. Even in the non-mining areas, such as Lima, support for the industry can best be described as mixed. The study identified important factors in building trust are better community relations, transparency, environmental performance and community development (ICMM 2015).

## Environmental performance

Peru's environmental performance is rated poorly in the area of climate and energy in the Environmental Performance Index, when compared with countries that have a similar GDP per capita (Hsu et al. 2016). In 2016 Peru was ranked near the middle of the range (73 out of 180 countries) in overall environmental performance, but second from the bottom (179 out of 180) for trend in carbon dioxide emissions per kilowatt-hour (kWh). No data are available

specifically on the performance of the mining industry, and the extent to which it is contributing to carbon dioxide emissions. However, as a major energy user, the contribution of the industry is likely to be significant.

According to a report by CooperAcción and Oxfam (Machado, 2014b), the targets for reducing greenhouse gas emissions and combating climate change are not made explicit in Peru. There also is no framework for analyzing the risks posed by climate change for mining activity itself, nor a framework to evaluate or mechanisms for adaptation to the climate change phenomenon.

### **Science, technology and innovation**

As noted, according to the latest World Economic Forum Competitiveness Index, Peru ranked only 82 on higher education and training and 106 business sophistication and innovation.

A 2013 report by the Peruvian Government to the UN Economic and Social Council acknowledged that until 2011 there were no clear policies in place to promote science, technology and innovation. The report observed that the level of public and private investment in research and development in Peru was less than 0.2 percent of GDP, an amount described as “meagre” compared with other countries in the region. The report also noted that there was a lack of a critical mass of researchers in public research institutions and universities, research and development infrastructure was incomplete, and research and accreditation mechanisms were in some cases obsolete and inadequate (UN ECOSOC 2013, 5).

Some recent progress has been made on addressing these deficiencies, led by CONCYTEC, the National Council for Science Technology and Technical Innovation (in Spanish, Consejo Nacional de Ciencia, Tecnología e Innovación Tecnológica). This has included the formulation of a National Plan for Science, Technology and Innovation for Competitiveness and Human Development through to 2021, and the establishment of the Research and Development Fund for Competitiveness (FIDECOM) and a Centre of Excellence funding scheme. However, a sustained effort will be required to narrow the gap with other countries in the region.

### **Mining in Peru: The recent story**

#### **Peru's mining potential**

Peru's mineral wealth and favorable investment climate makes it one of the most important producers of base and precious metals in the world. In 2015 it was the third largest producer of copper, silver and zinc in the world; fourth largest producer of tin and fifth largest producer of gold (USGS 2016). There are 43,603 existing mining concessions over 18.2 million hectares (14.2% of the land area of Peru) (MINEM 2015a).

Mining accounted for just over half of exports (51.74%) in 2014, placing Peru squarely in the category of mineral dependence. This was despite a 14% decline in mineral exports compared to 2013. The leading export metals, in terms of value in descending order, were: copper, gold, lead, zinc, iron, silver, tin and molybdenum (EY 2016).

Between 2006 and 2015, copper production in Peru increased by 62%, from 1,048,472 metric tonnes (MT) to 1,700,814 MT. Lead, zinc and silver production also increased, but by

smaller amounts. Gold production, on the other hand, fell by 28.5% to 145,031 kg and tin production halved to 19,511 MT (MINEM 2015a, 29).

There is considerable potential for further mineral development. Peru is considered one of the top ten richest mineral countries, with:

- 13 percent of the world's copper reserves
- 4 percent of gold
- 22 percent of silver (the largest known reserves in the world)
- 7.6 percent of zinc
- 9 percent of lead; and
- 6 percent of tin reserves (MINEM 2015a; USGS 2016).

Foreign investment in Peru amounted to US\$22,615 million in 2013, of which 24 percent was in the mining sector.

The largest foreign investors in mining, in order, are: China, the US, Canada, and Australia (EY 2016, 25). The peak year for mining investment was 2013, with a total value US\$9.93 billion. This has dropped to US\$7.46 billion by 2015, but was still high in historical terms (MINEM 2015a). It is likely that much of this reflected decisions made prior to the drop in metals prices, rather than being 'new' investment. Major recent investments have included the US\$10 billion Las Bambas copper project, the US\$4.6 billion expansion project of Sociedad Minera Cerro Verde, and HudBay's US\$1.8 billion Constanca project (EY 2016, 26).

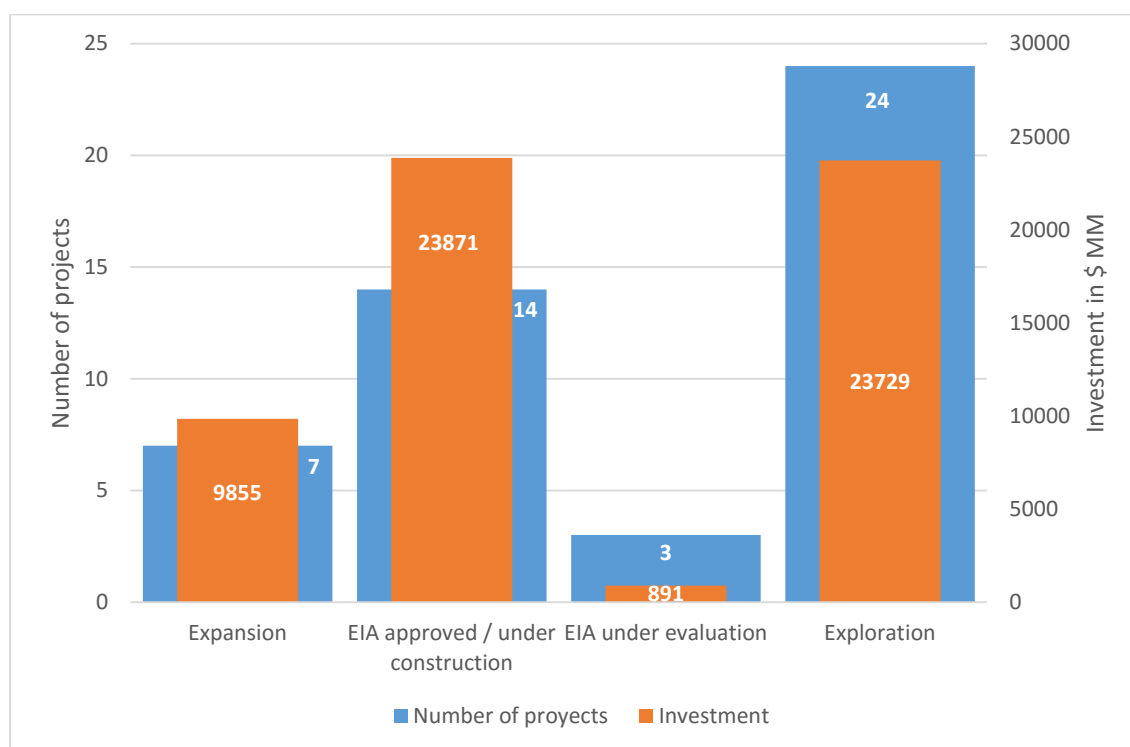
### **Cost competitiveness**

According to a review undertaken by the consulting firm McKinsey's in 2013, Peru's mining industry is cost competitive, with modern operations and a large presence of international companies. Low direct production costs in all minerals have been due to a combination of high mineral grades and relatively low energy and labour costs compared with other mining countries like Australia, Canada, and the United States. Costs of land transportation and shipping are about average in global rankings. The capital intensity needed to operate is similar to that of other countries. Even though mining companies in Peru have to address the lack of infrastructure in remote regions, the capital required per project is within the average range (Melero & Baztarrica 2013). Cost competitiveness may be an issue in the future, however, as grades in existing mines start to fall, and mines in other countries implement measures to reduce their costs (a process which is already well underway).

The effective tax rate in Peru, including the new Specific Mining Tax, is relatively high at 40-50 percent, depending on the company's operating margin. However, tax reductions and legal stability are offered as incentives to foreign investors willing to invest at least US\$10 million in mining in a two-year period.

While the pace of development has slowed significantly with the global downturn in mineral prices, there is a significant *potential* project pipeline.

**Figure 1: Portfolio of mining projects (pipeline) – March 2016**



Source: MINEM 2016

### Contribution to national and subnational revenues

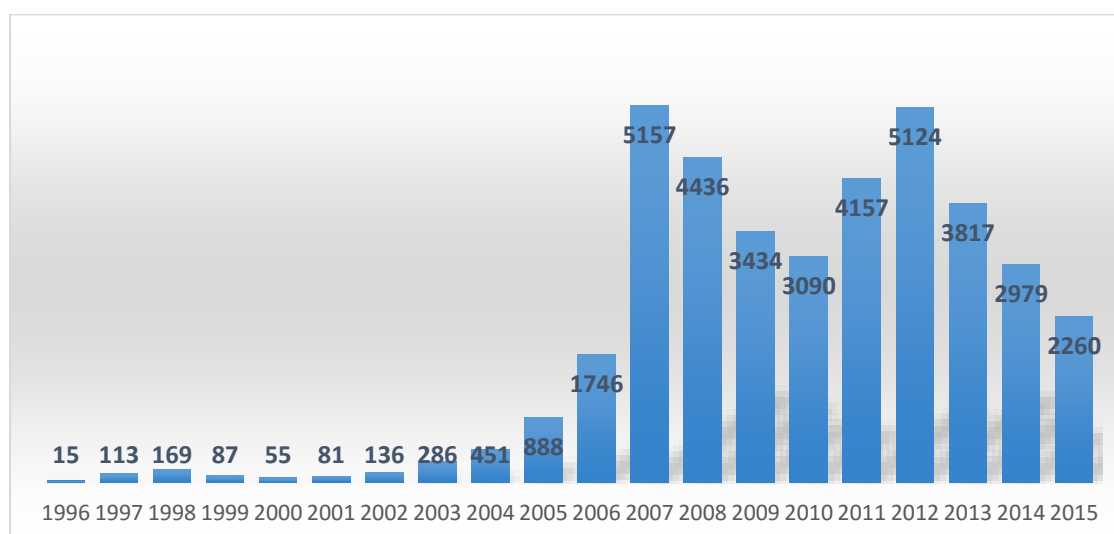
According to the latest Extractive Industries Transparency Initiative (EITI) report for Peru, in 2013 the Government of Peru received US\$5.5 billion from extractive industries from 63 reporting companies (MINEM 2015b). This covers 85 percent of the value of mining production and 97 percent of hydrocarbons. Slightly more than half of these revenues came from hydrocarbons, mainly gas, with the rest from mining, with copper and gold as the major commodities. Revenues were mainly collected through profit taxes (55%) and royalties (37%). Two special mining taxes introduced in 2011 represented almost 8% of revenues.

The contribution made by mining and metals companies' in corporate income tax grew from 8.8 percent in 2003, to peak at 48.6 percent in 2007 and dropped back to 10.3 percent in 2014 (Estimated in November 2014, EY 2016, 25).

Between January 1997 and May 2002, the Canon Minero consisted of 20 percent of 'Income Tax-Third Category', paid by the mining holders. However, from June 2002 that percentage increased to 50 percent as set by Canon Law (Law No. 27506) and its Regulations (D.S.N ° 005-2002-EF). In total S/.38,481 million have been transferred to the subnational level (regional, provincial and local) from 1996 to 2015.



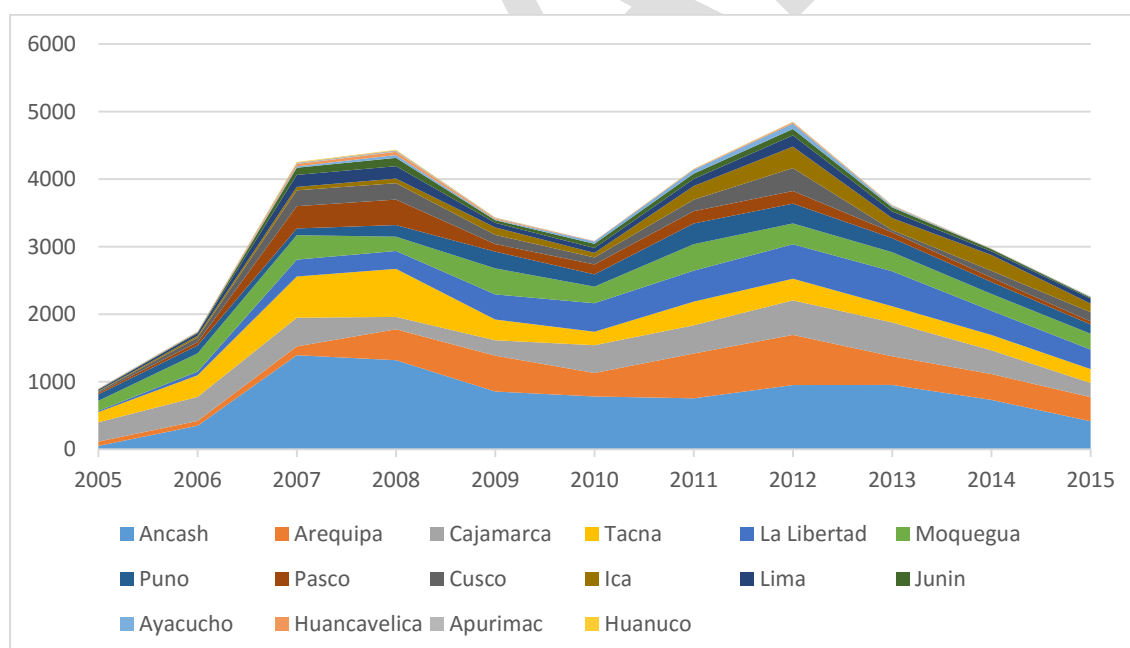
**Figure 2: Distribution of canon (1996-2015) (Million soles)**



Source: SNMPE, Reporte Canon Minero 2015

The distribution of Canon Minero increased significantly between 2005 and 2007 and between 2010 and 2012. Canon payments have reflected the volatility associated with the international economic cycle. There have been significant variations per year, and also across regions.

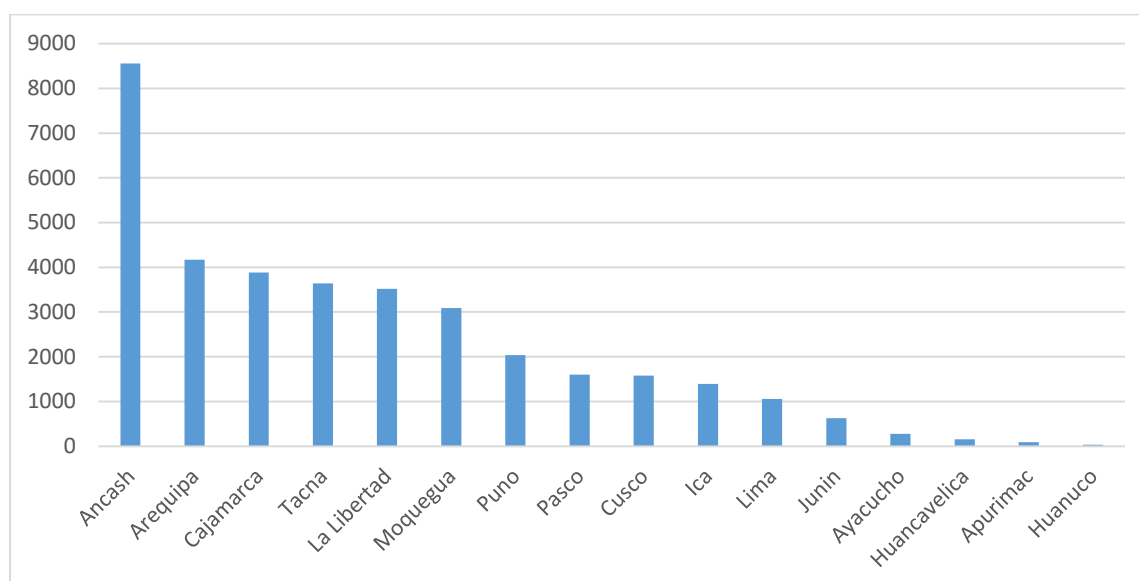
**Figure 3: Distribution Canon per region / year (2005-2015) (Million Soles)**



Source: SNMPE, Reportes Canon Minero 2016

Six regions received 75 percent of Canon transferred in the period 2005-2015: Ancash (23.9%), Arequipa (11.7%), Cajamarca (10.9%), Tacna (10.2%), La Libertad (9.8%), and Moquegua (8.6%).

**Figure 4: Distribution Canon per región (2005-2015) (Million Soles)**



**Source: SNMPE, Reportes Canon Minero 2016**

### **Contribution to local economic development and indirect employment**

Estimates of the indirect employment effects of mining investment vary. In a study by Macroconsult (2012) on the microeconomic effects of mining, a ratio of 4 indirect jobs per 1 direct job in the mining sector is estimated. In the same year, a study by IPE (2012) estimated a ratio of 9 indirect jobs per 1 direct job created by the mining industry.

According to results of the study by Macroconsult (2012), mining has generated an increase in family income and positive effects on other welfare dimensions such as education and health. In terms of access to infrastructure, it seems that the impacts are modest. Positive effects are clearly greater with large-scale and medium-scale mining.

On the other hand, research from the Pontificia Universidad Catolica del Peru (Tello 2014), found that in regions where natural resource (mineral) exploitation is present there has been growth, but this has not generated significant effects on secondary and tertiary employment and productive diversification in the region. The challenge is to promote a more diversified production base.

### **Social investment by mining companies**

The national government has created at least four mechanisms of social investment that involve active participation of the private sector (Propuesta Ciudadana 2014):

- **The Mining Solidarity Program for the People (PSMP):** The program was established as an agreement in 2006 between mining companies and the state in the midst of rising metal prices and the need to recover part of the gains generated by the extractive industries. The program replaced funds that could be raised through a tax. The firms committed 3.75 percent of their net utility to local or regional funds in order to finance projects for social development. The program ended in 2011.



- **Social funds:** These funds are financed by a percentage of the payment made by mining companies to the State for acquiring the concession rights. Social funds, initially trusts, were comprised of funds from the privatization of mining projects by the State. The resources managed by these funds are public resources. There are eight social funds with S/.1.54 billion available, of which around half has been executed (until August 2015). Currently there are six Social Fund Associations in the mining sector.
- **Contributions under the commitment to sustainable development:** In 2003 Supreme Decree No. 042-2003-EM established that any request for a mining concession (mining rights) must include, as a requirement, the commitment in a form of an affidavit of contributing to sustainable development in their areas of influence (strengthening local institutions, promoting local employment and local services, among others). These are voluntary contributions by companies (direct CSR).
- **Public Works as Tax Payment – Oxl (Obras por Impuestos):** This program was introduced by the Ministry of Economics and Finance to boost private sector involvement in the execution of public works for greater efficiency. Oxl are regulated and registered by the MEF and Proinversión, within the framework of the national public investment system. From 2012-2014, Oxl demonstrated higher growth rates than other modalities used for social investment. Out of a total of S/.1,500 million committed to Oxl, ten companies (of which five belong to the mining sector: Southern, Antamina, Volcan, Barrick, and Goldfields) account for more than 86 percent of the total (Propuesta Ciudadana 2015b)

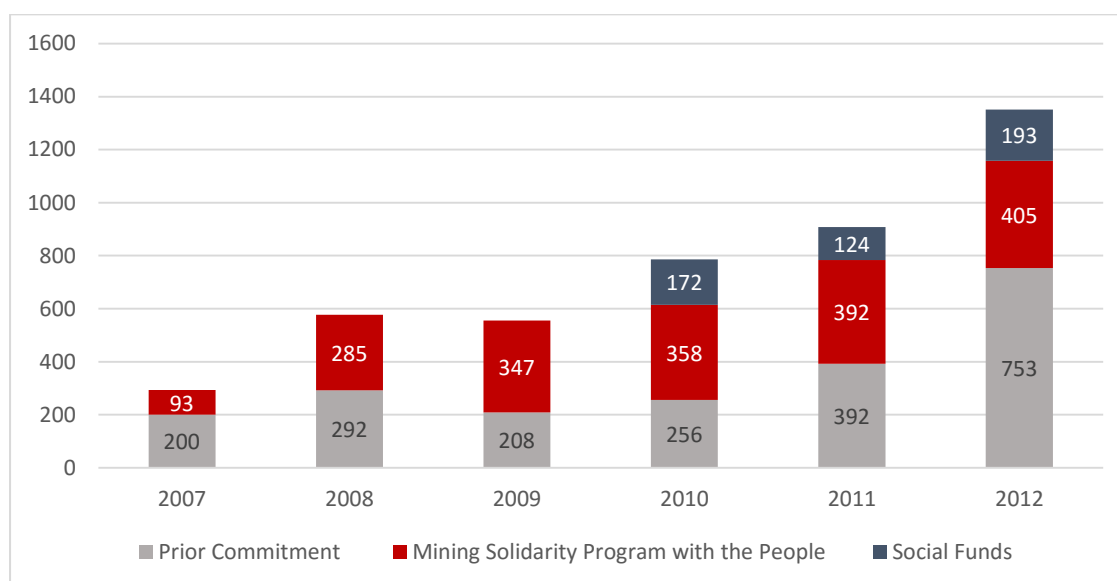
The first three mechanisms are similar in terms of the allocation of their resources to education, health and nutrition. In terms of education and health, the projects financed through these mechanisms are primarily geared towards infrastructure. Between 2007 and 2012 spending has been made through these mechanisms as follows:

- PSMP: S/.2,285 million between 2007 and 2012
- Social funds: S/.1,010 million between 2010 and 2012
- Contributions under the commitment to sustainable development: S/.2,100 million between 2007 and 2012 (Propuesta Ciudadana 2014).

In other words, between 2007 and 2012, mining companies executed a total of S/.4, 468 million in social development projects, with 47 percent of what has been executed via the commitment to sustainable development, 42 percent under the PSMP, and 11 percent through Social Funds.

These numbers do not take into account other expenditures made by mining companies through other mechanisms, such as Oxl and PPPs. Overall, of the total resources allocated to social investment, half were voluntary contributions and the other half arose from contractual obligations (Oxl, social funds and PSMP). The MINEM monitors direct social investment through the consolidated financial statements of mining companies, and through regular reports from the social funds and PMSP.

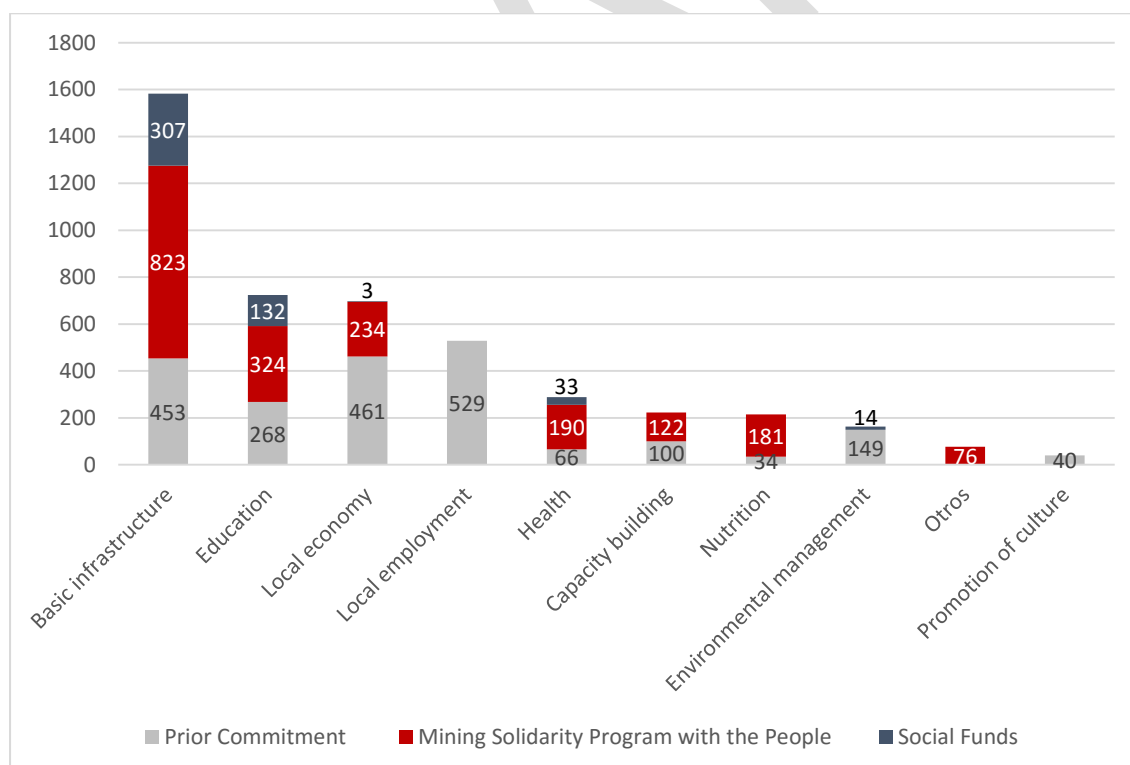
**Figure 5: Investment of Mining Companies in Social Development Projects (Million Soles)**



Source: El gasto social de empresas mineras (Propuesta Ciudadana 2014)

Nearly 78 percent of total resources have been destined to projects in basic infrastructure (35%), education (16%), local economy (15%) and local employment (12%).

**Figure 6: Investment of mining companies in Social Development Projects - By Category (Million soles)**



Source: El gasto social de empresas mineras (Propuesta Ciudadana 2014)

Generally, social investment by the mining sector concentrates only in the localities within its direct zone of influence. More than 50 percent of the total resources managed through social investment reach only 3 of 26 departments in the country: Cajamarca, Ancash, and La

Libertad. This disparity is sharpened at the micro-regional level: only 104 out of 194 provinces have benefited from social investment resources, of which 10 of these concentrated over 40 percent of all resources. According to Propuesta Ciudadana (2014), despite the considerable volume of social investment by the mining sector, there is still no established monitoring system that evaluates the impact of the investments made. Besides the distribution of social investment, there is also the challenge of enhancing capacities of local government to plan and manage investment for development purposes.

### **Transparency and accountability**

Mining contracts are publicly disclosed in Peru, and the country has been EITI compliant since February 2012. Ten EITI reports have been completed for the years 2004-2013, with the most recent report published in June 2015 (reporting 2013 revenues). The EITI reports cover oil, gas and mining companies, and the number of companies reporting payments has increased from 33 in 2004 to 63 in 2013 (44 mining and 19 hydrocarbons sector). The 2013 report covers profits, taxes, royalties and other significant benefits to government, including voluntary social transfers. Pilot subnational EITI reporting is being implemented in the regions of Piura and Moquegua.

### **Challenges**

#### **Volatility of mining revenues due to the minerals price cycle**

Although the economy has become more diversified in the past 15 years, exposure to minerals price volatility is clearly apparent in the matching fluctuations in Peru's GDP growth rate in recent years.

Volatility has also meant a substantial drop in the tax contribution of the sector in recent years (Propuesta Ciudadana 2015a, 30-33). In 2014:

- the mining sector contributed 9.2 percent of total domestic taxes; compared to 17.5 percent in 2011
- the mining sector contributed 10 percent of total income tax plus regularization by economic activity; compared to 33 percent in 2011
- mining income captured by the state was 6.077 million soles; compared to 11.283 million soles in 2011 (46% less)

During the boom, Peru built dependency around budget transfers from mining activity. Subnational governments financed most of their investments through budget transfers from the tax revenues generated through the extractive industries. For many subnational governments these resources represented their main source of income, particularly for authorities in Ancash, Cajamarca, Moquegua, Tacna, and La Libertad where large-scale mining activity takes place. These regions developed a dependency on these budget transfers and are currently facing the repercussions of reductions, seeing budget transfers from taxes on extractive activities reduce from S/.5.2 million in 2012 to S/.2 million in 2015 (Propuesta Ciudadana 2015a).

#### **Social conflict related to mining**

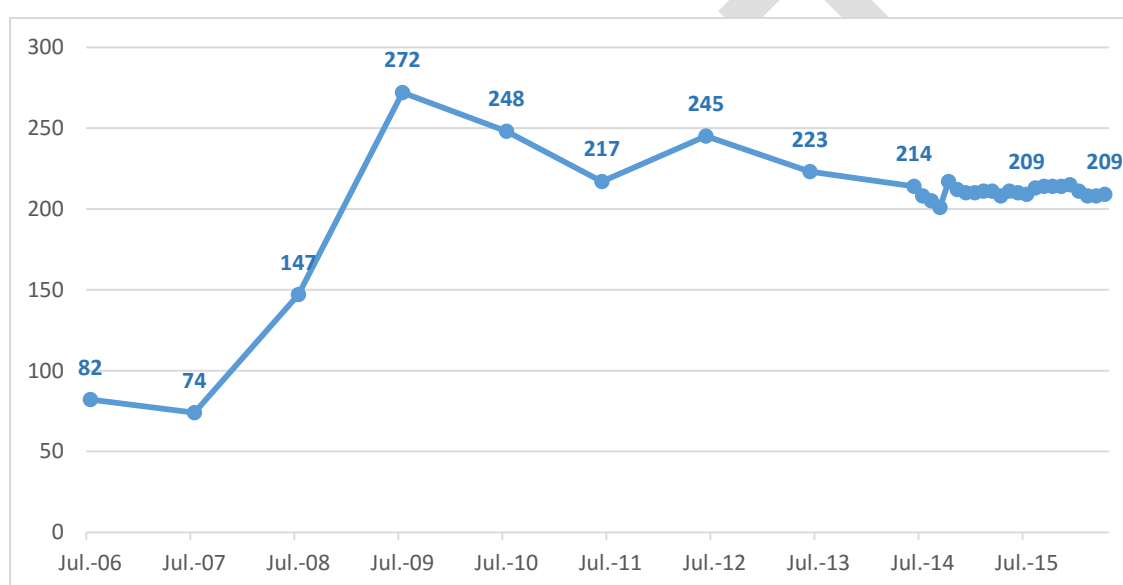
Violence and protests are very common in the context of social conflict in Peru. The period from 2007-2012 saw a sharp increase in social conflict related to mining. According to the Defensoría del Pueblo the number of social conflicts decreased in number and intensity from

mid-2012 to 2014, but has been stable since then (Defensoría del Pueblo 2016; Observatorio de Conflictos Mineros/CooperAcción, 2015). Of the total active and latent social conflicts (209) in the month of April 2016, 91 cases are related to mining (43.5%) (Defensoría del Pueblo 2016).

The Monitoring System for Social Conflicts (SIMCO, in Spanish) of the Ombudsman distinguishes between three states of conflict:

- Active: Social conflict expressed by either party or by third parties through public, formal or informal demands.
- Latent: Social conflict not expressed publicly. Remains hidden, silent or inactive.
- Resolved: Social conflict whose solution accepted by the parties, through agreement, rules or resolutions, terminates the dispute.

**Figure 7: Social conflicts in Peru (2006-2016)**



Source: Observatorio de Conflictos Mineros/CooperAcción 2015; Defensoría del Pueblo 2016.

The following table presents the total number of active social conflicts from January 2015 until April 2016.

**Figure 8: Active social conflicts registered by month: January 2015 – April 2016**

Jan 15	Feb 16	Mar 15	Apr 15	May 15	Jun 15	Jul 15	Aug 15	Sep 15	Oct 15	Nov 15	Dec 15	Jan 16	Feb 16	Mar 16	Apr 16
159	160	155	149	152	149	148	153	151	152	153	143	143	142	143	145

Source: Defensoría del Pueblo 2016.

Currently, the largest number of social conflicts developed in only one region are located in the departments of Apurímac (23 cases), Ancash (21 cases), Cusco and Puno (16 cases each) and Cajamarca (15 cases) (Defensoría del Pueblo 2016).

According to the Defensoría del Pueblo, the causes remain predominantly socio-environmental, mostly linked to extractive activities such as mining. Of the 145 active and latent socio-environmental conflicts in the month of April 2016, 62.8 percent (91 cases)

correspond to conflicts related to mining. This means that of the total active and latent social conflicts (209 cases), 43.5 percent are related to mining (Defensoría del Pueblo 2016).

In the view of the Defensoría del Pueblo, the vast majority of conflicts are not related to rejection of mining activity per se but are concerns about non-compliance with commitments and unmet expectations. The Defensoría del Pueblo estimates that only 30 percent of conflicts are related to rejection of projects (interview Deputy Ombudsman, June 2016; Defensoría del Pueblo 2007). Analysis of social conflicts in mining sector performed by other organizations (SER 2011; Ashton et al. 2015) highlight that the causes of social conflict are related mainly to inequitable distribution of benefits to communities, government absenteeism, lack of engagement with local communities, inadequate distribution of information on the mining project, and (abandoned) environmental liabilities.

There is political and social consensus to establish a national system for conflict prevention and management, empowering the ONDS as coordinating body and considering early public investment (social advancement) at the start of mining activities. However, the details of how this system will work in practice are still being discussed.

### **Indigenous rights issues not settled**

Peru enacted the Right to Prior Consultation for Indigenous or Native Peoples in Law No. 29785 of 2011, and Regulations of 2012, pursuant to its obligations under Convention 169 of the International Labour Organization (ILO). The law requires prior consultation with indigenous or native communities, who have been acknowledged as such according to the criteria identified in ILO 169, and whose collective rights could be affected directly by administrative measures or projects. To define who indigenous or native people are, an Official Database of Indigenous or Native People has been established. This database is dynamic and is updated regularly. Currently, the database has registered 55 indigenous groups (amongst these are the Quechua people) and 5000 rural and native communities (2015).

The Vice Ministry of Intercultural Affairs of the Ministry of Culture is responsible for determining, articulating, and coordinating the State policy on the implementation of the right to consultation. The Vice Minister is also mandated to provide technical assistance and training to the State entities and indigenous peoples. According to Oxfam (2015, 19), a lack of familiarity with the law amongst government employees within the entities required to engage in consultation is one of the key challenges.

Since the adoption of the Law, a series of questions have arisen about the presence of indigenous people in the Andean region, and, consequently, the relevance of carrying out the consultation processes in the mining sector. On several occasions, the Defensoría del Pueblo sent letters to Government warning about unjustified delays in meeting the commitments made by the State to indigenous peoples to implement prior consultation processes, especially in the mining sector (Defensoría del Pueblo 2014, 2015). The first formal process of prior consultation was carried out in the mining sector in September 2015.

To date, four processes of prior consultation have been concluded in the mining sector, all at exploration stage, and in which rural communities from Quechua villages have participated. The projects are small scale projects where activities are carried out in areas between 100 and 400 hectares (Ministry of Culture, 2016).

## Environmental performance

The Environmental Performance Evaluations Peru (UN ECLAC and OECD, 2016) highlight several key environmental challenges related to the mining sector. These include:

- Environmental and social impacts of the growth of informal and illegal artisanal and small-scale mining. The report calls for intensified efforts to control illegal mining and formalise artisanal and small-scale mining by providing technological assistance, promoting commercialization schemes and the adoption of environmentally sustainable technologies and practices.
- Deadlines for delivery of the comprehensive adjustment plans (in Spanish, Plan Integral para la Adecuación) and compliance with the respective maximum permissible limits and environmental quality standards have been repeatedly extended.
- An inventory by the General Directorate of Mining identified 8,616 environmental liabilities in 2015, over half of which are deemed to pose a high or very high risk to people and the environment.
- The cost of remediation of mining liabilities has been growing in parallel with the number of contaminated sites identified by MINEM. The report recommends increasing remediation efforts, prioritising abandoned sites and those that pose the greatest risks.
  - Regional governments need greater capacity for permitting and environmental oversight, and to coordinate their efforts with those of the Ministry of the Environment and the Agency for Environmental Assessment and Enforcement (in Spanish, El Organismo de Evaluación y Fiscalización Ambiental).

## Compliance with regulations

According to the Central Reserve Bank of Peru (in Spanish, Banco Central de Reserva del Perú) (Chirinos 2015), at the end of 2014 there were over 201 laws, supreme decrees, ministerial resolutions, deputy ministerial and directorial regulations, amongst others applicable to the mining sector. This situation contrasts sharply with the situation at the end of the last decade, where the number of regulations was less than 50. During the current administration a total of 129 new regulations have been enacted.

Changes in the legislation have led to the establishment of three institutions that oversee what previously (until 2007) was done by a single entity (the MINEM). These are the Agency for Environmental Assessment and Enforcement, the Supervisory Agency for Energy and Mines Investments (in Spanish, Osinergmin, Organismo Supervisor de la Inversión en Energía y Minería) and Ministry of Labor. According to the Reserve Bank, the biggest problem is the diversity of the criteria that these institutions use and the differences in the scale of fines and penalties. There are also concerns from civil society and other stakeholders that modifications to environmental regulation could weaken oversight of environmental impacts.

As noted in the section above, 'Barriers to doing business', there are significant differences between the agreed timeframe and actual time taken for business to obtain government authorization, permits and licenses. The following table shows the discrepancy between the

approvals time set in policy and the actual time taken for some of the administrative procedures that have the highest level of discretion in relation to the mining sector:

**Figure 9: Timeframe and actual time taken for business to obtain government authorization, permits and licenses**

Procedure	Agreed timeframe	Actual duration of procedure (approximate)
Mining Rights (Concession)	162 business days	1 year
Environmental Impact Statement of Mining Exploration - (Category I)	20 calendar days	4 months
Semi Detailed Environmental Impact Study of Mining Exploration (Category II)	40 calendar days	7 months
Environmental impact studies (EIA)	96 business days	170 business days
Authorization to Start/ Restart Exploration Activities , Development , Preparation and Exploitation	30 calendar days	6 months
Authorization of Water Studies for water use	15 business days	3 months
Authorization Execution Groundwater Studies with Perforations	30 business days	5 months
Permit for Water Usage	30 business days	11 months
Authorization for the Dumping of Treated Industrial Wastewater	30 business days	6 months
Certificate of Non-Existence of Archaeological Remains (CIRA)	20 business days	1 year

Source: Contraloría General de la Republica, 2016a

### Territorial development and land-use planning

Land-use planning is considered to be the basis for territorial development in Peru. It is the political and administrative process used to guide the orderly occupation and sustainable use of land. Economic, socio-cultural, environmental and institutional criteria are applied to identify land use potential and limitations (refer to MINAM website).

There are four technical instruments for land-use planning:

- Ecologic and Economic Zonification (in Spanish, Zonificación Ecológica y Económica) characterizes the territory according to its physical and biological aspects.
- Specialised Studies (Estudios Especializados) are intended to be supporting technical instruments of a more strategic nature used to analyse the dynamics, relationships and functionality of the territory and its articulation with other territories.
- The Territorial Integrated Diagnostic (Diagnostico Integrado de Territorio) is a supporting technical instrument that is meant to integrate and analyse the information generated in the EEZ and the SS.
- The Land-Use Plan (Plan de Ordenamiento Territorial) is intended to establish the guiding principles for planning and land management.

Ecologic and Economic Zonification processes have been concluded in the following mining regions:

- Ayacucho – 2013
- Cajamarca – 2011
- Cusco – 2009



- Huancavelica – 2013
- Tacna – 2012
- Puno – 2015
- Junin – 2015

According to the 2016 *Environmental Performance Review for Peru* challenges in effectively applying territorial governance in Peru include:

- In the past, some of the plans have been perceived as instruments for subnational levels of government to restrict mining activities.
- A dispersed number of issues related to land use planning need to be consolidated into a single law, to clarify the legal status of the Territorial Governance Plans.
- Greater involvement of a range of agencies of national government, subnational and local authorities is required to address issues beyond the environmental mandate of MINAM, which has been driving the planning processes.
- Better coordination and delimitation of responsibilities is needed between levels of government. (UN ECLAC & OECD, 2016)

### **Global trends to 2030**

Peru is increasingly integrated into the global economy and connected to international networks of ideas, stakeholders and organizations. Global trends in economic, environmental, social, geopolitical, and technological conditions will change the way the industry operates in coming years, although not necessarily in ways that can be predicted. These global trends may have supply-side or demand-side implication and could be associated with either constraints or innovations in production processes. Some of these trends are already being felt by the industry, some will impact in the short-term (the next five years) and others will be manifested over the longer term in ways that are not yet known. In this section we briefly highlight some key trends and possible scenarios, drawing on the work of organizations such as the World Economic Forum, the European Union and the US National Intelligence Council.

### **The commodities cycle and future demand for minerals**

The mining industry is currently facing a ‘productivity crunch’, leading to cost cutting, reduced investment in new projects, and an increased focus on technological solutions. Evidence of the end of the global mineral commodities super-cycle is now irrefutable.

According to a recent report by the international consulting firm PwC, the Top 40 mining companies in the world experienced a collective net loss of \$53 billion in 2015 and have now written off the equivalent of 32 percent of capital expenditure since 2010 (PwC 2016). A brief spike in prices during early 2016 is being interpreted not as a market recovery, but as signalling a period of increased price volatility over the next several years.

Predicting the future of commodity prices is a notoriously risky exercise, but the emerging consensus appears to be that, while China will continue to grow, along with some other emerging economies in Asia (especially India), there is unlikely to be another China-driven super-cycle in the foreseeable future. Prices for some commodities (e.g. copper) can be expected to rebound at some point due to a combination of increased demand, depletion of



existing reserves, and high-cost producers being forced out of the market. However, when this will occur is very difficult to determine.

Not surprisingly, it has become increasingly difficult to attract significant investment capital into the sector. The market capitalisation of the Top 40 companies has more than halved since the peak year of 2010, including a 37 percent reduction in 2015 alone (PwC 2016, 7). This has been accompanied by a series of credit downgrades. Borrowings for the Top 40 decreased by a combined US\$10 billion over 2015. In this new investment climate, investors – and companies – are likely to be more risk averse, and there will be a greater reluctance to invest in ‘greenfield’ sites, very large projects, and projects located in areas that are perceived as politically and/or socially unstable. This presents both a challenge and opportunity for Peru going forward.

### **Competition for land, water and energy and the impacts of climate change**

On some estimates global demand for water could increase by 40% and demand for energy by 50 percent by 2030, due to global population growth and shifting consumption patterns of an expanding middle class (National Intelligence Council 2012). For the global mining industry this will mean more intense competition with agriculture for land and water, and more scrutiny of the environmental performance of the sector. These pressures, in turn, will increase the potential for conflict between mining companies and communities and also likely lead to increased demands on government to ban or limit mining activity, particularly in food producing regions and catchments.

According to the UN Intergovernmental Panel on Climate Change, climate change will make weather patterns less predictable; arid areas will become dryer and wet regions will be more prone to flooding. This will present operational challenges to mining companies. Supply of water, and possibly electricity, will be less secure and mines will have to be designed to deal with more extreme climatic events. The cost of energy and other inputs to mining will likely increase unless cheaper alternatives to current mining processes are found. The global move toward payment for environmental services could also lead to higher tariffs on water, land and biodiversity that will have to be factored in to operating costs.

### **Increased scrutiny, accountability and connectedness**

The social and environmental performance of the mining industry will be subject to ever greater scrutiny from civil society, international bodies, social media networks and local communities. Civil society will continue to grow in influence and become even more connected internationally, filling a void left by the weakening of political parties, traditional institutions and mainstream media. As a consequence of the ever increasing speed of data transfer and the growth of social media information will travel more quickly and more widely than ever. Incidents at even the remotest mine sites are already being publicised on the other side of the world, and global campaigns are easily mobilised.

There has been an exponential increase over the last two decades in the number and type of ‘soft law’ initiatives aimed at raising environmental and social performance standards in mining and other industries, a trend which is likely to continue for the foreseeable future. Examples include the EITI, Voluntary Principles on Security and Human Rights, mineral certification schemes, the International Finance Corporation’s Performance Standards on Environmental and Social Sustainability, and industry-led voluntary initiatives such as the Equator Principles (which sets lending standards for banks) and the Responsible Jewellery

Council. Many of these standards are gradually being incorporated into 'hard law' regulatory requirements for new projects. Mining companies that ignore or seek to circumvent the domain of 'soft law' will risk reputational damage, find it more difficult to access capital, and could lose market access in some cases.

A related trend has been the growth in various forms of transnational law. International treaties and agreements such as ILO 169 and the United Nations Framework Convention on Climate Change are requiring signatory countries to pass enabling legislation and take other measures to ensure compliance. Both the United Kingdom and the US now have strong laws on the bribery of foreign officials which apply to all companies registered in these 'home' jurisdictions, regardless of where the alleged offence occurred. It is also becoming easier for individuals and communities who believe that they have been adversely affected by mining activities to take legal action against companies in their home jurisdictions. For example, allegations of mining companies not observing the OECD Guidelines for Multinational Enterprises may be lodged by NGOs and other parties for resolution by OECD National Contact Points in 46 countries, including Peru.

### **A changing geopolitical landscape**

An even more multi-polar world is the most likely configuration of geopolitical power by 2030. Migration in an inter-connected global society may help to even out differences of prosperity and poverty between traditionally developed and developing nations, but will also create new fault lines and pressure points. Inequality between educated elites and marginalised groups (particularly unemployed youth) will be a major social challenge for most countries.

A possible political response, which is already being manifested, is a resurgence of protectionism, with governments seeking to re-negotiate, or withdraw from, free trade agreements. In a worst-case scenario, this could reduce global economic demand and make it more difficult for countries like Peru to access international markets.

Regional insecurity in the Middle East and Central Asia could also spill over to worsening insecurity of Europe, Africa, Russia and the United States. This may be to the advantage of Latin America, which is relatively isolated from global drivers of conflict, especially if countries like Peru could offer a reliable supply of minerals in uncertain times for geopolitics (National Intelligence Council 2012).

### **Technological innovation and the implications for mining**

New technologies have the potential to transform mining by opening up previously uneconomic resources for development to deal with the problem of declining ore grades and to dramatically reduce water and energy use (CSIRO, 2014). Mass mining techniques such as block caving can be relatively low cost, high volume, safe, highly mechanised and, therefore, profitable (Chitombo 2014). In-situ leaching of primary copper sulphides is a future option for higher recovery of copper, although there are significant technical issues and environmental concerns that will have to be addressed before this technology can be used at commercial scale.

Automated and remote operation mining will provide opportunities to lower costs and improve occupational health and safety standards of mining, but will likely lead to a reduction in unskilled and semi-skilled roles and fewer jobs on-site (Franks et al. 2013). This could

make it more difficult for mines to secure a social licence, as it will be harder to meet community expectations in regards to employment and training.

Outside of mining, global technology will advance ever more rapidly, changing levels of demand for specific minerals, particularly base metals and rare earths (EY, 2015). The European Commission (2014) has identified a range of critical raw materials, based on high economic value and expected supply constraints. Lithium and Niobium are included in this category, while zinc and tin are also important.

### **Final observations**

The future of mining in Peru will be shaped by a broad range of factors, some of which can be controlled or influenced at the national and subnational level by industry and government, others of which are of a global nature and can neither be controlled nor, in some cases, even anticipated. Peru will be best equipped to deal with this complex uncertain and changing environment if it has effective governance structures and processes in place, and if its mining industry remains internationally competitive, has secured broad societal support and operates according to globally accepted standards.

DRAFT

## List of abbreviations

CEPLAN	El Centro Nacional de Planeamiento Estratégico/ National Centre of Strategic Planning
CONCYTEC	Consejo Nacional de Ciencia, Tecnología e Innovación Tecnológica/National Council for Science Technology and Technical Innovation
CPI	Corruption Perceptions Index
EITI	Extractive Industries Transparency Initiative
FIDECOM	Research and Development Fund for Competitiveness
GDMDS	Grupo de Diálogo, Minería y Desarrollo Sostenible /Dialogue Group for Mining and Sustainable Development
GDP	Gross Domestic Product
GNI	Gross National Income
HDI	Human Development Index
ICMM	International Council on Mining and Metals
ILO	International Labour Organization
INEI	Instituto Nacional de Estadística e Informática
MINEM	Ministerio de Energía y Minas de Perú/Ministry of Energy and Mines Peru
NGOs	Non-government organizations
OECD	Organisation for Economic Cooperation and Development
OEFA	El Organismo de Evaluación y Fiscalización Ambiental/Agency for Environmental Assessment and Enforcement
ONDS-PCM	National Dialogue and Sustainability Office of the Presidency of the Council of Ministers
Osinerghmin	Organismo Supervisor de la Inversión en Energía y Minería/ Supervisory Agency for Energy and Mines Investments
OxI	Obras por Impuestos/ Public Works as Tax Payment
PPPs	Public-Private Partnerships
PSMP	Mining Solidarity Program for the People
S/.	Nuevo Sol
SDGs	Sustainable Development Goals
SENACE	El Servicio Nacional de Certificación Ambiental para las Inversiones Sostenibles/ National Environmental Certification Service for Sustainable Investments
SIMCO	Sistema de Monitoreo de Conflictos Sociales/ Monitoring System for Social Conflicts
SMI	Sustainable Minerals Institute
SNMPE	Sociedad Nacional de Minería Petróleo y Energía
UN ECLAC	United Nations Economic Commission for Latin America and the Caribbean
UNDP	United Nations Development Program
USGS	US Geological Survey
WEF	World Economic Forum

## References and information sources

- Ashton, S. et al. (2015). *Mining in Peru: Benefitting from Natural Resources and Preventing the Resource Curse*. Columbia University School of International and Public Affairs, New York. [https://sipa.columbia.edu/sites/default/files/Capstone%20-%20Peru%20%2825%20June%202015%29\\_FOR\\_PUBLICATION.pdf](https://sipa.columbia.edu/sites/default/files/Capstone%20-%20Peru%20%2825%20June%202015%29_FOR_PUBLICATION.pdf)
- Chirinos, R. (2015). *Trabas normativas a la inversión minera*. Banco Central de Reserva del Perú (Central Reserve Bank), Lima.
- Chitombo, G. (2014). *Keynote address to the International Mineral Processing Congress, December 23, 2014*. <http://www.brc.uq.edu.au/news/brc-prof-chitombos-keynote-addresses-chile-2014>
- Contraloría General de la República (2015). *Boletín Institucional Número Año 7 –Edición 35*. Available at: <http://www.contraloria.gob.pe>
- Contraloría General de la República (2016a). *Estudio sobre Mejora regulatoria y simplificación de procedimientos administrativos que afectan la inversión*. Government of Peru, Lima. [http://doc.contraloria.gob.pe/estudios-especiales/estudio/2016/Estudio\\_Mejora\\_regulatoria\\_web.pdf](http://doc.contraloria.gob.pe/estudios-especiales/estudio/2016/Estudio_Mejora_regulatoria_web.pdf)
- Contraloría General de la República (2016b). *Presentación de Apertura*. CAAI (IAAC): Lima. <https://prezi.com/npkwwrfa5bmp/presentacion-apertura-vi-caai-2016/>
- CSIRO Futures (Commonwealth Scientific and Industrial Research Organisation) (2014) *The Future of Mining in Chile* CSIRO, Sydney. <http://www.csiro.au/~media/MRF/Files/Chile/EN-The-Future-of-Mining-in-Chile-WEB-PDF.pdf>
- Defensoría del Pueblo (2007). *Los Conflictos Socioambientales por Actividades Extractivas en el Perú*. Lima. [http://www.defensoria.gob.pe/modules/Downloads/informes/extraordinarios/inf\\_extraordinario\\_04\\_07.pdf](http://www.defensoria.gob.pe/modules/Downloads/informes/extraordinarios/inf_extraordinario_04_07.pdf)
- Defensoría del Pueblo (2014). *Defensor del Pueblo plantea fortalecer implementación de la ley de Consulta Previa*. Nota de Prensa N°184/OCII/DP/2014. Oficina de Comunicaciones e Imagen Institucional, Government of Peru, Lima. <http://www.defensoria.gob.pe/modules/Downloads/prensa/notas/2014/NP-184-14.pdf>
- Defensoría del Pueblo (2015). *Defensor del Pueblo exhorta al presidente de la república de atender la agenda pendiente de consulta previa*. Nota de Prensa N°099/OCII/DP/2015. Oficina de Comunicaciones e Imagen Institucional, Government of Peru, Lima. <http://www.defensoria.gob.pe/modules/Downloads/prensa/notas/2015/NP-099-15.pdf>
- Defensoría del Pueblo (2016). *Reporte Mensual de Conflictos Sociales N.° 143 y N.° 146*. Government of Peru, Lima. <http://www.defensoria.gob.pe/temas.php?des=3#>
- Dialogue Group on Mining in Colombia (Grupo de Diálogo Sobre Minería en Colombia) (2015). *Proposals for a Shared Vision on Mining in Colombia Roadmap*. SSRC & Ford Foundation, Bogota. <http://gdiam.ssrc.org/>
- EY (2015). *Megatrends 2015: Making sense of a world in motion*. [http://www.ey.com/Publication/vwLUAssets/ey-megatrends-report-2015/\\$FILE/ey-megatrends-report-2015.pdf](http://www.ey.com/Publication/vwLUAssets/ey-megatrends-report-2015/$FILE/ey-megatrends-report-2015.pdf)
- EY (2016). *Peru's mining and metals investment guide 2015/16*. EY & Ministry of Foreign Affairs, Peru, Lima. [http://www.ey.com/Publication/vwLUAssets/Gu%C3%ADa\\_Minera\\_2015-2016/\\$FILE/EY-Peru-mining-and-metals-investment-guide-2015-2016.pdf](http://www.ey.com/Publication/vwLUAssets/Gu%C3%ADa_Minera_2015-2016/$FILE/EY-Peru-mining-and-metals-investment-guide-2015-2016.pdf)
- European Commission (2014). *Report on Critical Raw Materials for the EU*. Report of the Ad hoc Working Group on defining critical raw materials, Brussels.
- Fenochietto, R. et al. (2015). *The Tax System and Administration as Pillars for Solid Fiscal Accounts*. In Santos, A. & Werner, A. (eds). *Peru: Staying the Course of Economic Success*. International Monetary Fund, Washington DC.
- Franks, D.M., McNab, K, Brereton, D, Cohen, T, Weldegiorgis, F, Horberry, T, Lynas, D, Garcia- Vasquez, M, Oñate Santibáñez, B, Barnes, R and McLellan, B. 2013.



- Designing Mining Technology for Social Outcomes: Final Report of the Technology Futures Project.* The University of Queensland, Brisbane.  
[https://www.csr.m.uq.edu.au/publications?task=download&file=pub\\_link&id=895](https://www.csr.m.uq.edu.au/publications?task=download&file=pub_link&id=895)
- GDMDS (Grupo de Diálogo, Minería y Desarrollo Sostenible) (2006). *Por una minería con responsabilidad social y ambiental: un acuerdo fruto del diálogo.* Lima.  
<http://www.grupodedialogo.org.pe/documentos/Acuerdo%20Minero%202006.pdf>  
 (English version:  
<http://www.grupodedialogo.org.pe/documentos/Acuerdo%20Minero%202006%20ver%20ingles.pdf>)
- GDMDS (Grupo de Diálogo, Minería y Desarrollo Sostenible) (2014). *Por una minería con responsabilidad social y ambiental: un acuerdo fruto de diálogo y las lecciones aprendidas.* Lima. <http://www.grupodedialogo.org.pe/wp-content/uploads/2015/03/Visi%C3%B3n-Miner%C3%ADa-20211.pdf>
- GDMDS (Grupo de Diálogo, Minería y Desarrollo Sostenible) (2016). *Propuestas para diálogos constructivos sobre minería y desarrollo.* Lima.  
<http://www.grupodedialogo.org.pe/wp-content/uploads/2016/01/Propuestas-para-di%C3%A1logos-constructivos-sobre-miner%C3%ADa-y-desarrollo-2016.pdf>
- Hsu, A. et al. (2016). *2016 Environmental Performance Index.* Yale University, New Haven, CT. [www.epi.yale.edu](http://www.epi.yale.edu)
- ICMM (International Council on Mining and Metals) (2013) *Responsible Mining in Peru:* London <https://www.icmm.com/peru>
- ICMM (2015). *Public Attitudes towards Mining in Peru: A Perception Study for ICMM.* ICMM, London and Globescan, Toronto.  
<http://www.icmm.com/document/10318>
- ILO (International Labour Organization) (2014a). *Trends in Informal Employment in Peru: 2004-2012.* Programme for the promotion of formalization in Latin America and the Caribbean (FORLAC). ILO Regional Office for Latin America and the Caribbean, Lima.  
[www.ilo.org/americas](http://www.ilo.org/americas)
- ILO (International Labour Organization) (2014b). *Thematic Labour Overview: Transition to Formality in Latin America and the Caribbean.* ILO Regional Office for Latin America and the Caribbean, Lima. [www.ilo.org/americas](http://www.ilo.org/americas)
- INEI (Instituto Nacional de Estadística e Informática) (2014). *Modulo: Gobernabilidad, Democracia y Transparencia.* Subgerencia de Estadística & GPP & RENIEC, Lima.  
[http://portales.reniec.gob.pe/documents/94898/99892/Resumen\\_Resultados\\_ENAHO\\_Gobernabilidad\\_2014.pdf/b29fe7be-f42d-473b-9c66-43c5f5fb97c0](http://portales.reniec.gob.pe/documents/94898/99892/Resumen_Resultados_ENAHO_Gobernabilidad_2014.pdf/b29fe7be-f42d-473b-9c66-43c5f5fb97c0)
- INEI (Instituto Nacional de Estadística e Informática) (2016). *Perú: Producto Bruto Interno Según Actividad Económica (Nivel 54), 2007 – 2014.* Government of Peru, Lima.  
<https://www.inei.gob.pe/estadisticas/indice-tematico/economia/>
- IPE (Instituto Peruano de Economía) (2012). *Efecto de la minería sobre el empleo, el producto y recaudación en el Perú.* Lima. <http://ipe.org.pe/documentos/efecto-de-la-mineria-sobre-el-empleo-el-producto-y-la-recaudacion-en-el-peru-0>
- Machado, R. (2014a). *The Informal Economy in Peru: Magnitude and Determinants, 1980-2011* [In Spanish: *La economía informal en el Perú: magnitud y determinantes (1980-2011)*]. Vol. XLI, N° 74, primer semestre (enero-junio 2014), páginas 197-233. Centro de Investigación de la Universidad del Pacífico,
- Machado, R. (2014b). *Cambio climático e industrias extractivas en el Perú.* CooperAcción and Oxfam, Lima.  
[http://cooperaccion.org.pe/main/images/derechos\\_colectivos/00052.pdf](http://cooperaccion.org.pe/main/images/derechos_colectivos/00052.pdf)
- Macroconsult (2012). *Impacto Económico de la Minería en el Perú.* Sociedad Nacional de Minería, Petróleo y Energía, Lima. <http://www.snmpe.org.pe/informes-y-publicaciones/impacto-economico-de-la-actividad-minera-en-el-peru.html>
- Melero, M and Baztarrica, J. (2013). *An Assessment of the Competitiveness and Health of Peru's Mining Industry.* McKinsey & Company.  
[http://www.mckinsey.com/~media/McKinsey/dotcom/client\\_service/Metals%20and%20](http://www.mckinsey.com/~media/McKinsey/dotcom/client_service/Metals%20and%20)

- [0Mining/PDFs/Competitiveness%20and%20health%20of%20the%20Peruvian%20Mining%20Sector-vf.ashx](#)
- MINAM (Ministry of Environment) (2016) *Ordenamiento Territorial en el Peru (2011-2015)*, Government of Peru, Lima
- MINEM (Ministry of Energy and Mines Peru) (2015a). Peru Mining Annual Report. Lima.
- MINEM (Ministry of Energy and Mines Peru) (2015b) *10 Años de EITI en el Perú*. Government of Peru, Lima. <http://eitiperu.minem.gob.pe/documentos/1-%202010%20a%C3%B1os%20EITI%20Per%C3%BA.pdf>
- MINEM (Ministry of Energy and Mines Peru) (2016). *Cartera de proyectos estimados*. Government of Peru, Lima. [http://www.minem.gob.pe/minem/archivos/file/Mineria/INVERSION/2016/CEP%2003-2016\\_.pdf](http://www.minem.gob.pe/minem/archivos/file/Mineria/INVERSION/2016/CEP%2003-2016_.pdf)
- MINMINAS (2016). *Política Minera de Colombia: Bases para la minería del futuro*. <https://www.minminas.gov.co/documents/10180/698204/Pol%C3%ADtica+Minera+de+Colombia.pdf/2c57618b-633d-4982-bd4b-2b92d56eb735>
- National Intelligence Council (2012). *Global Trends 2030: Alternative Worlds*. Office of the Director of National Intelligence, United States Government, Washington DC. <https://globaltrends2030.files.wordpress.com/2012/11/global-trends-2030-november2012.pdf>
- Observatorio de Conflictos Mineros/CooperAcción (2015). *16° Observatorio de Conflictos Mineros en el Perú – reporte primer semestre 2015*. Observatorio de Conflictos Mineros en el Perú (OCM), CooperAccion, Fedepaz, and GRUFIDES (Grupo de Formación e intervención para el desarrollo sostenible), Lima and Cajamarca, Peru. [https://business-humanrights.org/sites/default/files/documents/16informe de conflictos mineros2015-final.pdf](https://business-humanrights.org/sites/default/files/documents/16informe%20de%20conflictos%20mineros2015-final.pdf)
- OECD (Organisation for Economic Cooperation and Development) (2015), *Multi-dimensional Review of Peru: Volume 1. Initial Assessment*, OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/9789264243279-en>
- Oxfam (2015). *Right to Free, Prior and Informed Consent in Latin America: Progress and challenges in Bolivia, Brazil, Chile, Colombia, Guatemala and Peru*. Due Process of Law Foundation, Washington DC. [http://dplf.org/sites/default/files/executive\\_summary\\_consultation\\_2015\\_web\\_02-17-2016\\_c.pdf](http://dplf.org/sites/default/files/executive_summary_consultation_2015_web_02-17-2016_c.pdf)
- Propuesta Ciudadana (2014). *El gasto social de empresas mineras*. <http://www.propuestaciudadana.org.pe/sites/default/files/publicaciones/archivos/El%20Gasto%20Social%20de%20las%20Empresas%20Mineras.pdf>
- Propuesta Ciudadana (2015a). *Reporte Nacional N° 19 de Vigilancia de las Industrias Extractivas: Balance 2004 – 2014*. Propuesta Ciudadana, Lima. <http://www.propuestaciudadana.org.pe/sites/default/files/publicaciones/archivos/Reporte%2019%20Vigilancia%20de%20las%20Industrias%20Extractivas.pdf>
- Propuesta Ciudadana (2015b). *Al final de una década de boom, ¿qué le dejó la minería al Perú? Balance 2004-2014*. Propuesta Ciudadana, Lima. <http://www.propuestaciudadana.org.pe/sites/default/files/publicaciones/archivos/Al%20final%20de%20una%20d%C3%A9cada%20de%20boom%20%20Qu%C3%A9%20le%20dej%C3%B3%20la%20miner%C3%ADa%20al%20Per%C3%BA%20%20Balance%202004-2014.pdf>
- PwC (PricewaterhouseCoopers) (2016). *Mine 2016*. <https://pwc.docalytics.com/v/pwcs-mine-2016>
- SER (La Asociación Servicios Educativos Rurales) (2011). *El Estado y Gestión de Conflicto 2006-2011*. Noticias Ser, Lima. [http://www.noticiasser.pe/files/pdf/El Estado y la Gestion del Conflicto Difusion Asociacion SER.pdf](http://www.noticiasser.pe/files/pdf/El%20Estado%20y%20la%20Gestion%20del%20Conflicto%20Difusion%20Asociacion%20SER.pdf)

- SNMPE (Sociedad Nacional de Minería Petróleo y Energía) (2015) 2015 Reporte Estadístico Minero/Mining Statistical Report. SNMPE, Lima. <http://www.snmpe.pe/pdac/3-%20Reporte%20Estadistico/REM-mineria.pdf>
- SNMPE (Sociedad Nacional de Minería Petróleo y Energía) (2016). *Reportes Canon Minero, 2005 – 2015*. SNMPE, Lima. <http://www.snmpe.org.pe/informes-y-publicaciones/canon/canon-minero.html>
- Tello, Mario (2014). *Podemos hablar de una maldición de los recursos naturales en el Perú?*, PUCP, Lima. <http://cies.org.pe/sites/default/files/files/articulos/economiasociedad/06-tello.pdf>
- Transparency International (2015). *Corruption Perceptions Index (CPI), 2015*. Transparency International, Berlin, Germany. <https://www.transparency.org/cpi2015/>
- UN ECLAC and OECD (United Nations Economic Commission for Latin America and the Caribbean and Organisation for Economic Cooperation and Development) (2016). *Environmental Performance Review for Peru*. United Nations/OECD, Santiago. <https://www.oecd.org/environment/country-reviews/16-00312-environmental%20performance%20review-peru-web.pdf>
- UN ECOSOC (United Nations Economic and Social Council) (2013). *Letter dated 30 April 2013 from the Permanent Representative of Peru to the United Nations addressed to the President of the Economic and Social Council*. E/2013/58 United Nations, Geneva. [http://www.un.org/en/ecosoc/newfunct/pdf13/nvp\\_peru\\_report.pdf](http://www.un.org/en/ecosoc/newfunct/pdf13/nvp_peru_report.pdf)
- UNDP (United Nations Development Programme) (2015) *Human Development Report, 2015*. Human Development Report Office (HDRO), New York. <http://hdr.undp.org/en/countries/profiles/PER>
- UNDP (United Nations Development Programme) (2016) Informe Regional sobre Desarrollo Humano para América Latina y el Caribe. UNDP, Peru. <http://www.pe.undp.org/content/peru/es/home/library/poverty/informe-regional-sobre-desarrollo-humano-2016.html>
- UNDP, WEF and CCSD (United Nations Development Programme, World Economic Forum, and Columbia Center on Sustainable Development) (2016). *Mapping Mining to the Sustainable Development Goals: A Preliminary Atlas*. UN Sustainable Development Solutions Network, New York. [http://unsdsn.org/wp-content/uploads/2016/01/160115-Atlas\\_full.pdf](http://unsdsn.org/wp-content/uploads/2016/01/160115-Atlas_full.pdf)
- United Nations (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. Division for Sustainable Development, New York. <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- USGS (US Geological Survey) (2016). *Mineral Commodity Summaries*. US Geological Survey, Reston, Virginia. <http://minerals.usgs.gov/minerals/pubs/mcs/2016/mcs2016.pdf>
- Valor Minero (La Alianza Valor Minero/Value Mining Alliance) (<http://valorminero.cl/>)
- WEF (World Economic Forum) (2016). *The Global Competitiveness Report, 2015-2016*. WEF, Geneva. [http://www3.weforum.org/docs/gcr/2015-2016/Global\\_Competitiveness\\_Report\\_2015-2016.pdf](http://www3.weforum.org/docs/gcr/2015-2016/Global_Competitiveness_Report_2015-2016.pdf)
- World Bank (2016) *Peru: Country At A Glance*. World Bank Group, Washington DC. <http://www.worldbank.org/en/country/peru>