IGF

INTERGOVERNMENTAL FORUM on Mining, Minerals, Metals and Sustainable Development

CHILE: DIRECT EMPLOYMENT

THE MINING SKILLS COUNCIL & CENTRALIZED DATA COLLECTION

OVERVIEW

LEVEL OF OPERATION:
Industry (but with multistakeholder input)

GOVERNMENT ROLE:
N/A

FOR MORE INFORMATION:
See Fundación Chile (FCH)

KEY COMMODITIES:
Copper (world lead), iron ore, nitrates[1]

TOTAL NATURAL RESOURCE RENTS (AS % OF GDP) (2015):
12.2 per cent[2]

NATIONAL EXTRACTIVES COMPANY:
Codelco (copper mining)

UNDP HUMAN DEVELOPMENT INDEX VALUE (2016):
0.847 (Global Rank 38)[3]

DIRECT EMPLOYMENT IN MINING SECTOR (2016):
249,000 (>2 per cent of total workforce)[4]

As the world's leading copper producer, Chile's mining sector is a major driver of the country's economy, accounting for over 9.8 per cent of national GDP in 2016.[5] Despite an absence of any formal local content legislation, good governance and strategic oversight have enabled the country to develop a competent supply base and strong linkages between the mining sector and the domestic economy. Nationalization of the state-owned copper company, Codelco, has also contributed to government influence over local content in the sector.

[1] Central Intelligence Agency (CIA). (2017). *The world factbook*. Washington, DC: CIA. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/fields/2111.html

[2] World Bank Group. (2017). *Total natural resource rents (% of GDP)*. Washington, DC. Retrieved from https://data.worldbank.org/indicator/NY.GDP.TOTL.RT.ZS

[3] United Nations Development Programme. (2016). *Human Development Reports: Chile. Geneva, Switzerland*. Retrieved from http://hdr.undp.org/en/countries/profiles/CHL

[4] *Fundacion Chile (FCH)*. Mining Skills Council. Santiago, Chile: FCH. Retrieved from https://fch.cl/en/iniciativa/innovum-en/mining-competence-council-mcc; Contreras, M.J., Dominquez, A., Galvez, O., & Valente, E. (2017). *Chile's mining and metals investment guide 2016–2017*. Santiago, Chile: EY Chile. Retrieved from http://www.eychile.cl/Content/pdf/Estudios/12052017154045_pdf_Gu%C3%ADa%20para%20la%20inversión%20minera%20en%20Chile.pdf

[5] World Bank. (2018). Mineral rents (% of GDP). Retrieved from https://data.worldbank.org/indicator/NY.GDP.MINR.RT.ZS

CHILE'S CONSEJO DE COMPETENCIAS MINERAS (MINING SKILLS COUNCIL)

It is relatively common for mining companies to set up their own independent training programs as a means of ensuring that employees hold requisite competencies. While in-house training reduces dependence on the domestic education and training system, it can lead to variance in the technical competency of learners and graduates across the sector. On the other hand, state-funded training programs that have little engagement with mining companies can produce general skill sets untailored to the specific needs of mining projects. This disjunction has ramifications for the efficiency and productivity of the sector as a whole.

Chile's Mining Skills Council (CCM), aims to connect Chile's mining industry with the education sector in order to streamline national efforts to match labour force supply with demand. Set up in 2012 by the trade association Consejo Minero, CCM operates as an industry collabo ration at the centre of the country's mining sector. In building on lessons from skills councils in Australia, Canada and New Zealand, the Council serves as a hub through which education and training institutions can consult with industry stakeholders, align their service offerings, and adopt consistent qualification benchmarks to build competency and maximize employment opportunities within the domestic value chain.[6]

PROCESS

CCM collects data from mining companies and industry education and training suppliers operating throughout Chile. This allows it to identify skills shortages and forecast human capital demands. CCM thus has the information to evaluate existing quality and training standards in assessing sector productivity. The Council uses this data to assist education institutions in developing, implementing and improving their training programs for sector relevance.

CCM products, which include a system of certification of labour competencies (as well as more general tools, standards, and education frameworks and packages) are openly available to the market. This allows stakeholders access to the same pool of information, ideally to promote industry collaboration and competitiveness. The "Large-Scale Chilean Mining Workforce Report," released annually, presents an up-to-date snapshot of the information compiled by CCM to project 10 years into the future, allowing institutions to adapt their offerings based on shifting human capital requirements.

> **CCM aims to connect Chile's mining industry with the education sector.**

EXPECTED BENEFITS AND IMPACT

As an industry intelligence hub, CCM is positioned to play a critically enabling role for the promotion of direct employment in Chile's mining sector. By influencing the structural conditions of the industry, CCM works to maximize the opportunities available to the local labour force—facilitating work-ready competencies to meet demand. It cannot, however, ensure that its recommendations are implemented or that the industry will employ local workers.

Within its remit, the Council appears well equipped to address the varying needs of stakeholders within the Chilean mining sector. CCM lists its expected benefits as follows: for

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[6] Villarino, J. (2016). *Improving skills in the Chilean mining industry*. Santiago, Chile: Consejo Minero. Retrieved from http://www.consejominero.cl/wp-content/uploads/2016/09/Improving-Skills-in-the-Chilean-Mining-Industry.pdf; See also Smith, D., Pol Longo, M., & Murray, M. (2015). *Mining Skills Council creates common framework to address industry skills gap*. Shared Value. Retrieved from https://sharedvalue.org/groups/mining-skills-council-creates-common-framework-address-industry-skills-gap

current and potential workers, better employability and learning outcomes that are relevant to the changing requirements of the industry; for the mining sector, mitigation of projected skills shortages as well as improved productivity; for education institutions, ongoing intelligence and better graduate outcomes as well as increased opportunity for quality recognition; and for the state, more efficient allocation of public funds and reduced pressure on other industries.[7]

CCM is still relatively new, and time will tell whether it generates tangible, attributable impacts. The strength of CCM's approach lies in its recognition of the myriad stakeholders and contextual elements involved in building local workforce competency. At the very least, CCM's centralized data collation is a solid foundation for predicting and preparing to meet the future human capital requirements of the Chilean mining industry.

KEY LESSONS

- Skills councils can plan an important role in the development of mining industry labour force requirements.

- Human capital data is essential for keeping track of industry requirements as well as skills shortages within the domestic workforce. This enables government to forecast and plan appropriately to build capacity within the local population.

- When information on industry human capital requirements is openly available, it helps increase transparency and catalyze the competitiveness of the education and training sector. Open information can also inspire collaborative partnerships between the mining industry and education and training providers.

- While the presence of state-owned Codelco arguably makes it easier for Consejo Minero to oversee mining activity within Chile and action mineral policy, it doesn't necessarily dictate the effectiveness of the Council's data collection or collaborative processes. As evident in Australia and New Zealand—countries that do not have state-owned mining companies but do have similarly programmed skills councils—the concept of a centralized intelligence hub is replicable in states without a "national champion."

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[7] Consejo de Competencias Mineras (CCM). (2017). *¿Qué es el CCM?* Santiago, Chile: CCM. Retrieved from http://www.ccm.cl/que-es-el-ccm/

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