OECD Development Policy Tools
Collaborative Strategies for In-Country Shared Value Creation
FRAMEWORK FOR EXTRACTIVE PROJECTS

The Framework is an operational tool offering guidance on actionable steps for harnessing non-renewable natural resources to build competitive, diversified, and sustainable economies in a scalable manner. It presents a practical guide on how host governments, extractives industries and civil society can work together in a structured and systematic way to enable in-country shared value creation and advance the 2030 Agenda for Sustainable Development. The Framework transcends sectoral boundaries and focuses on strategies to foster coherence, sequencing, and effective co-ordination for integrated policy-making, and suggests monitoring and evaluation mechanisms to assess progress and impact over time. The actionable steps are addressed to governments, industry, and civil society clearly articulating their respective roles for improved collaboration, mutual respect and accountability.

Consult this publication on line at http://dx.doi.org/10.1787/9789264257702-en
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Collaborative Strategies for In-Country Shared Value Creation

FRAMEWORK FOR EX extractive PROJECTS
Foreword

Within the framework of its Strategy on Development, the OECD has hosted since 2013 a horizontal Initiative for Policy Dialogue on Natural Resource-based Development. This Initiative offers an inter-governmental platform for peer learning and knowledge sharing to improve understanding around the implications and impact of policy options. OECD and non-OECD mineral, oil and gas producing countries, in consultation with extractive industries, civil society organisations and think tanks, work together to craft innovative, collaborative and mutually beneficial solutions for natural resource governance and development.

At the Second Plenary Meeting of the Policy Dialogue on Natural Resource-based Development held on 3-4 June 2014 at the OECD, participating governments, industry, civil society, and academia converged around the common objective to use natural resources to build competitive and long-term sustainable economies, fostering direct employment and local entrepreneurship through the provision of goods and services, while ensuring that producing economies do not become solely reliant on non-renewable natural resources, but develop other sectors or segments of production that can support the creation of a diversified economy.

Participants identified lack of mutual trust, asymmetry of information and insufficient collaboration and co-ordination among all actors involved as major impediments to in-country shared value creation. They emphasised the need for improved understanding of how host governments, the private sector, local communities and civil society organisations can work together and leverage the extractives sector to catalyse long-term, competitive, diversified and, sustainable development. More than the choice of policy instruments, this calls first for the articulation of the appropriate processes and mechanisms to facilitate alignment across different constituencies around priorities and objectives for generating tangible benefits across all stakeholders involved. Constraints to in-country shared value creation identified through the process (lack of skills, insufficient technological and financial capabilities, inadequate local infrastructure, and weak local institutions, etc.) can only find an adequate response in long-term collaborative solutions with a clear attribution of roles and responsibilities, and continuous engagement of all stakeholders involved.

A multi-stakeholder Drafting Committee was established in January 2015 to develop operational guidance. The Drafting Committee comprised Liberia and Norway as co-chairs, Germany, Switzerland, South Africa, the African Union Commission, Anglo American, Antofagasta Minerals, the Chilean Mining Council, the Columbia Center on Sustainable Investment, Eni, Exxon Mobil, the International Council on Mining and Metals (ICMM), the International Petroleum Industry Environmental Conservation Association (IPIECA), Shell, Social Clarity, Total and UNDP. The OECD Development Centre supported the drafting process and served as secretariat. The Framework was first introduced at the Third Plenary Meeting of the Policy Dialogue on 17-18 November 2014, with successively more advanced drafts submitted and discussed at the Fourth and Fifth Plenary Meetings, held respectively on 29-30 June and 2-4 December 2015. During that time, the Drafting Committee met eight times via conference call to discuss revisions to the document and comments received during the on-line public consultation held from 15 September to 30 October 2015. The Framework was finally endorsed by participants in the Policy Dialogue on 29 February 2016.

The Framework articulates the sequencing of actions required to enable integrated policy making alongside formulation and implementation of collaborative strategies
for in-country shared value creation. It defines the roles and responsibilities of host
governments and extractives industries supportive of shared governance mechanisms
designed to improve efficiency, foster participation, and mutual accountability.

Through an open, inclusive and constructive dialogue, common ground was found
on how governments, industry, and civil society can work together to create shared
value and local development from extractive projects.

However, the journey does not end there. The ultimate success of the Framework
will depend on its wide uptake and actual use. We have already opened two promising
avenues to move forward in this direction.

The first is the development of an accompanying Compendium of Practices that will
serve to illustrate with concrete examples what has worked and not worked at each step
in the design and implementation of collaborative strategies for in-country shared value
creation. The Compendium is meant to provide further guidance for operationalising the
Framework, inform any necessary future revisions and adjustments, and support the
implementation of the 2030 Sustainable Development Agenda by showing how public-
private collaboration can work in practice.

The second is to pilot the Framework at the country-level. Work has already started to
carry out an inception study on Resource-based Value Creation in Kazakhstan’s Copper
Value Chain. The Framework will also support the development of Country Mining
Visions in collaboration with the African Union and partner institutions.

We wish to express our deep gratitude to all those who have actively participated
in thoughtful discussions to shape workable approaches for making public-private
 collaboration work in practice. In particular, we are grateful to all the members of the
Drafting Committee for their tireless engagement in the drafting process since January
2015.

We consider that the Framework is a practical and implementable guidance document.
In this regard, we strongly encourage OECD and non-OECD governments, extractive
industries and civil society to raise awareness, promote and make active use of this
tool to shape constructive relationships around extractive projects and work towards
win-win outcomes.

Mr Pål Davidsen
Senior Adviser, Private Sector Development,
Department for Economic Development,
Gender and Governance,
Norwegian Agency for Development Cooperation (Norad)

Hon. Sam G. Russ
Deputy Minister of Operations
Ministry of Mines, Lands and Energy,
Republic of Liberia
Acknowledgements

The OECD Initiative for Policy Dialogue on Natural Resource-based Development is led by Lahra Liberti, Head of Natural Resources and Development Unit, under the direction of Mario Pezzini, Director of the OECD Development Centre. This Framework was prepared by Lahra Liberti, serving as the secretariat of a multi-stakeholder Drafting Committee comprising African Union Commission, Anglo American, Antofagasta Minerals, the Chilean Mining Council, Columbia Center on Sustainable Investment, Eni, Exxon Mobil, Germany, the International Council on Mining and Metals (ICMM), the International Petroleum Industry Environmental Conservation Association (IPIECA), Liberia, Norway, Shell, Social Clarity, South Africa, Switzerland, Total, UNDP. The Drafting Committee met via teleconference on 27 January, 24 February, 24 March, and 19 May, 19 October, 28 October, 9 November 2015 and 21 January 2016 to discuss earlier drafts of the Framework and reflect comments received at the Multi-Stakeholder Consultations of the Third, Fourth and Fifth Meetings of the Policy Dialogue on Natural Resource-based Development held respectively on 17 November 2014, 29 June and 2 December 2015. The Framework further benefited from input received during an on-line public consultation from 15 September until 30 October 2015. The Working Party of the OECD Trade Committee was consulted during the drafting process. The author is grateful to all the members of the Drafting Committee for their constructive engagement and valuable inputs. The author is also grateful to the team in the OECD Development Centre, in particular Laure Brillaud and Aida Buendía, as well as Xavier Leflaive and Hannah Leckie in the OECD Environment Directorate for their valuable inputs. The author would like to express her deep appreciation to the co-chairs, Mr Pål Davidsen and Honourable Sam G. Russ, for successfully leading the multi-stakeholder negotiation process and the consultations held as part of the plenary meetings of the Policy Dialogue in 2014 and 2015.
Collaborative Strategies for In-Country Shared Value Creation: Framework for Extractive Projects

The Framework is an operational tool offering guidance on proposed actionable steps for harnessing non-renewable natural resources to build competitive, diversified, and sustainable economies in a scalable manner. It is addressed to governments, industry, and civil society clearly articulating their respective roles for improved collaboration, mutual respect and accountability.

The Framework transcends sectoral boundaries and is based on the recognition of the inter-linkages between several policy dimensions and associated trade-offs, as well as the interdependent and often competing uses of natural resources (energy, land, minerals, and water). It focuses on strategies to inform more integrated policy-making, and suggests monitoring and evaluation mechanisms to assess progress and impact over time.

The Framework is designed to foster coherence, sequencing, effective co-ordination and public-private partnerships that support progress towards more sustainable paths for access to and use of non-renewable natural resources, fostering innovation that enables shared benefits (alongside efficiency and security of supply), smoothing the transition towards future prosperity and a sustainable development trajectory that will outlast non-renewable resource extraction.

The Framework presents a practical guide on how host governments, extractives industries and civil society can work together in a structured and systematic way to enable in-country shared value creation. It offers a tool for forging a public-private alliance which can be used to advance the 2030 Agenda for Sustainable Development adopted by the United Nations in September 2015, and, in particular, support the achievement of Sustainable Development Goals 8 (Promote inclusive and sustainable economic growth, employment and decent work for all) and 9 (Build resilient infrastructure, promote sustainable industrialization and foster innovation), and contribute to Goals 6 (Ensure access to water and sanitation for all) and 7 (Ensure access to affordable, reliable, sustainable and modern energy for all).1

The Framework will be complemented by an on-line Compendium of Practices and useful sources. This will provide practical examples of how the proposed action-oriented steps can be translated into tangible and collaborative solutions that can be replicated or adapted to different contexts. Co-operation generates trust, improves predictability, and will yield sustainable outcomes. The Framework will also be used as a reference and diagnostic tool to carry out Country Reviews on Resource-based Value Creation.

The Framework and its scope will be reviewed by the OECD and its non-member partners and stakeholders based on experience with its use and country analysis to strengthen its effectiveness over time.

The Framework is structured around the following four actionable steps:

STEP 1. Adopt a comprehensive long-term vision and implementation strategy to build competitive and diversified economies and create in-country shared value out of natural resources.

STEP 2. Build an empirical basis to inform decision making through an inclusive participatory process.

STEP 3. Unlock opportunities for in-country shared value creation: local workforce and supplier development; shared infrastructure (power, water and transport).

STEP 4. Support and contribute to innovation leading to new products and services.

STEP 5. Establish effective and transparent monitoring and evaluation systems and regularly review the collaborative strategy.
STEP 1. Adopt a comprehensive long-term vision and implementation strategy to build competitive and diversified economies and create in-country shared value out of natural resources.

It is the responsibility of governments to commit to good governance to ensure transparency, accountability, and macroeconomic stability, social cohesion, and upholding of the rule of law, which are pre-conditions for sustainable development. Governments set out their expectations of the extractives sector and its contribution to the achievement of long-term strategic goals, and articulate appropriate policies in support of sustainable development. Political leadership should first ensure a coherent, comprehensive “whole-of-government” approach to in-country shared value creation. While ownership should reside in government to ensure clear accountability, the governance of the strategy should be more inclusive and involve government as well as non-government stakeholders.

1.A. What can host governments do:

- Articulate a vision for extractives industries and their role in the economy in terms of their contribution to economic, social, and environmental development. The vision should factor in long term trends (e.g. cycles of commodity prices, demographics, climate change, water availability and demand as well as other potential changes of circumstances).

- Apply practical mechanisms to ensure internal alignment and effective co-ordination among government agencies at all levels of government (ministries, regional and local authorities) in order to ensure coherence across sectoral policies, and develop and achieve long-term objectives and goals for in-country shared value creation. Co-ordination is crucial not only across the ministries and agencies overseeing the extractives sector but, more widely, with ministries and agencies responsible for related issues such as education, employment, environment, anti-corruption, innovation, industrial development, natural resources, planning, trade, transport and infrastructure, land ownership.

- Limit “rent-seeking” opportunities that could arise from the exercise of gate-keeping function and discretionary decision-making powers by public officials by eliminating unnecessary or excessive regulation, limiting the exercise of discretion and ensuring a transparent decision-making process thus facilitating market entry and competition.

- Implement counter-cyclical macro-economic policies to avoid risk of Dutch disease, saving during commodity booms and building the foundations of a diversified, post-resource economy since the very beginning.

- Build knowledge on resource endowments and assess impact of resource development projects on environment, safety, health and security.

- Develop sustainable options for energy production and consumption, also assessing trade-offs and combined use of renewable and non-renewable resources.

- Consider, where appropriate, the opportunity to adopt risk-sharing mechanisms and increase responsiveness of fiscal regimes to changing circumstances and address the problem of the obsolescence bargain to improve predictability, reduce pressure for renegotiation, and incentivise investments.

- Transparently report on extractives resource revenue collection, allocation and use, and relevant aspects of in-country shared value creation.

- Enhance economic competitiveness by effectively managing the revenue and spending from and for extractives. In particular, re-invest resource revenues in other sectors to foster diversification efforts and improve capacity to compete in segments of higher value added, with a view to avoiding exacerbating dependence on exports of raw materials.

- Understand the extractives industry, its production and market structure and consider where the country can position itself well along regional and global value chains. Look at opportunities that serve more than the extractives sector.
• Consider the inherent uncertainty around key variables affecting the extractives industries' performance (price, cost and volume) in establishing a programme and pace of development of local content, which are to be sustainable through these inevitable market fluctuations.

• Manage stakeholder expectations and communicate effectively, including by clearly articulating benefits that can realistically be achieved during the life cycle of a project.

• Develop mechanisms to foster participatory processes, designed to promote mutual understanding, prevent conflicts and litigation, overcome distrust and strengthen collaboration. Establish effective grievance and dispute resolution mechanisms to solve and avoid escalation of issues that may arise.

• Encourage, where relevant, donors, international financial institutions and other development partners to align their programming in areas that can support sustainable, competitive and diversified economies.

1.B. What can extractives industries do:

• Take a long-term approach and identify opportunities to align business interests and plans with national development objectives.

• Transparently report payments made to governments.

• Identify areas for pre-competitive collaboration with industry peers and stakeholders, including major contractors and suppliers (e.g. collective identification of skills requirements and solutions to common environmental challenges).

• Engage with relevant stakeholders in order to provide meaningful opportunities for their views to be taken into account in relation to planning and decision making for projects, or other activities, that may significantly impact resource-bearing communities.

• Understand local dynamics and power structures in resource-bearing communities, and engage with a broad range of local community stakeholders to maintain a constructive dialogue and avoid inadvertently fuelling existing local tensions.

• Assess the quality and quantity of the natural resources, ease of access, and available reserves.

• Share best practices developed in other contexts and sectors on how to generate in-country shared value.

1.C. Host governments, extractives industries and civil society can work together to:

• Build inclusive fora for continuous dialogue where consensus can emerge over the overarching role for the extractives sector and its contribution to the country's overall economic, social and environmental development. Having a wide variety of inputs is integral to develop a comprehensive and co-ordinated growth strategy that is resilient enough to withstand the cyclical nature of commodity markets, and the potentially distortionary impact of rapid and unbalanced growth.

• Forecast the necessary infrastructure and capacity that must exist, or be built to effectively achieve the final extraction phase. Anticipate future utilisation demands, as well as the cumulative effects and impacts of developments to maximise positive outcomes.

• Identify opportunities to which business activities can make a significant positive contribution, including through the promotion of forward and backward linkages with the rest of the economy to foster diversification and avoid the creation of extractives enclaves.
STEP 2. Build an empirical basis to inform decision making through an inclusive participatory process

As demand for workforce, goods, services and other inputs varies significantly over the life cycle of extractives sector projects, building a common understanding of the local context, as well as the needs, inputs, pace and scheduling of projects is crucial to leverage the potential for maximising socio-economic benefits. Informed decision-making can only occur if it is based on an accurate assessment of local economic conditions, capacity and priorities. This can be done by undertaking an early collective assessment of the sector’s needs, opportunities for building complementarities with other sectors; identifying systemic linkages between productive activities and existing gaps to determine where and how value can be created. Preliminary screening and data collection should inform any course of action, including choice of appropriate policy measures and instruments to promote in-country shared value creation. Capacity constraints define the level of benefits that can be captured at a given point in time.

2.A. What can host governments do:

- Serve as conveners and identify the stakeholders to be involved: central government agencies, regions, municipalities, upstream, midstream and downstream industry, chambers of commerce and industry associations, workers (including local and migrant workers) and trade unions, entities related through a business relationship (suppliers, contractors, shareholders), research institutes and universities, centres of excellence, training institutions, trade unions, local and affected communities (e.g. communities living downstream from a river near the site, or along a transport route), civil society, and vulnerable groups, such as indigenous peoples and women. In order to do so, where appropriate, design mechanisms viewed as credible by stakeholders.

- Obtain sufficient support from the start, by giving due consideration to interests and concerns across different constituencies, thus creating the conditions for proactive interventions and reducing potential situations of conflict by supplying early information.

- Identify trade-offs and associated costs/benefits, such as the potential impacts of the extractives sector’s demand of workforce, goods and services, on and from other industries, and public works projects.

- Consider the full life cycle of natural resource developments and their value chains when identifying in-country shared value opportunities.

- Classify systemic value chain links to show the nature of potential interconnections with other products and services in the renewable and non-resource sectors to identify segments with high growth potential. Take appropriate measures so that the extractives sector becomes a catalyst and an anchor for growth, diversified economic activity, and integrated territorial development, creating linkages through which knowledge, inputs, and labour can flow.

- Recognise that there may be areas of value creation beyond early reach, dependent on the type of resource, the maturity of the sector, the level of industrialisation and, more generally, the stage of development of the economy.

- Collect and aggregate the extractives sector’s current and future needs, in terms of demand for workforce, goods and services, infrastructure and use of other inputs (such as energy, land and water).
2.B. What can extractives industries do:

- Provide information on an individual basis (to avoid any anti-competitive issues) to governments on future demand for workforce, goods, services, infrastructure, technologies, and other inputs (such as land, water and energy) along the project lifecycle.

2.C. Host governments, extractives industries and civil society can work together to:

- Once aggregated by the government, assess the extractives sector's collective current and future needs, in terms of demand for workforce, goods and services, infrastructure and use of other inputs (like land, water and energy) as well as impact on affected communities and the environment.

- Undertake a dynamic exercise to map out potential economic opportunities over the course of the projects for building potential links with the local economy based on economic development priorities (e.g. exploring potential synergies with infrastructure, environment, safety and security, health care, education, tourism, services, biodiversity preservation, agriculture and fisheries) and industry needs. Also, map potential negative impacts and constraints in these areas and consider relevant management and mitigation strategies.

- Identify any barriers to entry for the production of certain products or the development of certain activities, taking into account the structure and dynamics of domestic, regional and global markets.

- Identify goods and services that are both specific and not specific to the extractives industry, highly specialised, or subject to strong competition.
STEP 3. Unlock opportunities for in-country shared value creation

Opportunities for in-country shared value creation can be found in sector-specific demand for workforces and for goods and services. Extractives sector projects can also be leveraged to develop multi-purpose and multi-user infrastructure, enabling systemic linkages and economic diversification as well as affordable access to power and water. Combined together, these measures can generate positive impact on job creation, skills development, and poverty reduction.

3.1. Local workforce and supplier development

3.1.A. What can host governments do?

- Improve the investment climate\(^6\) and assess the ease of doing business in the country, strengthening enabling conditions for business development, such as removing trade and investment barriers and addressing other constraints such as those identified in the World Bank’s reports on ease of doing business.

- Undertake a baseline assessment and build credible and reliable statistics on existing industry capacity, size of local enterprises, level of participation, supplier landscape and institutional capacity for skills and small and medium-sized enterprise development to inform strategic planning, required skills upgrading and technical training activities.

- Develop plans for an inclusive local workforce and supplier participation, focusing on increasing the participation of vulnerable groups, such as women and indigenous peoples.

- Prioritise approaches that enable progress towards achieving common objectives, goals and targets over compliance with and enforcement of local content quotas.

- Balance pressure for indigenisation (i.e. requirements that companies are registered locally or owned by nationals), which may incentivise or perpetuate rent-seeking and elite capture, with long-term benefits associated with localisation of productive activities, contributing to generating in-country value.

- Promote transparency, including clearly communicating if and how factors such as local employment, local procurement, training, skills upgrading, and technology transfers are factored into tender evaluation processes.

- Facilitate the linkage of multinationals with local firms, in particular local small and medium-sized enterprises.

- Support local firms to comply with international standards and industry global requirements, including through the adoption of, and compliance with certification standards.

- Create financing vehicles for local firms, including small and medium-sized enterprises, to support their ability to effectively compete for locally tendered contracts.

- Match training opportunities with documented industry demand, in priority segments/activities with the highest growth potential.

- Align technical vocational programmes with the skills required in the extractives sector, amongst others.

- Set up training funds for workforce and suppliers skills development in which extractive companies can contribute. Make prudent use of targeted tax incentives to promote the development of other industries in the value chain of extractives.\(^7\)

- Promote economic diversification through cross-industry linkages to enable additional opportunities for economic development after the phase-out of extractives sector projects.
3.1.B. What can extractives industries do:

- Clearly articulate the success factors for participation in extractives sector value chains (price, delivery reliability, safety, quality) and conformance to international standards (environment, labour, industry-specific requirements).
- Support capacity building for specific job or value chain-related skills, either directly or through joint training programmes/centres.
- Develop and implement plans for inclusive and progressive local workforce and supplier participation, focused on increasing participation of vulnerable and historically underrepresented groups, such as women and indigenous peoples.
- Assess short-term costs associated with workforce and supplier capacity building initiatives as investments that will reduce operating costs in the long term.
- Evaluate the potential to unbundle contracts for services and supplies, to support creation of enhanced opportunities for local businesses, in particular small and medium-sized enterprises.
- Evaluate the potential to make advance purchase orders, forward purchase agreements or implement other mechanisms that could help facilitate the integration of local suppliers in extractives sector value chains.

3.1.C. Host governments and extractives industries can work together to:

- Collectively assess existing industry capacity, level of local participation, and supplier “landscape”, to inform strategic planning, required skills upgrading, and technical training activities.
- Collectively assess the capabilities of the available local workforce and local supply base by occupation and existing skills. Undertake a decomposition analysis of the industry demand for skilled and unskilled workers and suppliers, charting the changing skills profile by type and phases of projects and their locations. Consider strategies to increase participation of vulnerable and historically underrepresented groups, such as women and indigenous peoples.
- Collectively undertake a gap analysis assessing national education and training systems against current and future industry needs and foster alignment between government plans and industry needs, particularly in regards to training, education, and infrastructure.
- Evaluate the time and resources needed to close any identified technological, infrastructure, capabilities, and financing gaps.
- Engage with major contractors and suppliers to encourage public awareness regarding local procurement and training needs, as the ability of workforce/local businesses to access employment/procurement opportunities will often depend largely on the efforts of major contractors.
- Agree actions of mutual benefit, also involving global industry associations in skills upgrading and dissemination of best practices, along with realistic, operational, measurable milestones and timelines, so as to manage expectations and show tangible progress over time.
- Publish estimated demand for workforce, suppliers, goods and services at each stage of a project.
- Identify and prioritise quick wins for local workforce and supplier participation and leverage other opportunity areas for long-term collaboration.
<table>
<thead>
<tr>
<th>Years</th>
<th>Phase activities</th>
<th>Employment opportunities</th>
<th>Procurement opportunities</th>
<th>Possible areas for collaborative efforts</th>
</tr>
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<tbody>
<tr>
<td>1-10</td>
<td>Exploration</td>
<td>Low intermittent</td>
<td>Low intermittent</td>
<td>Early assessments of workforce capacity</td>
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<td>- Seismic</td>
<td>Short-term</td>
<td>Short-term</td>
<td>and supplier landscape mapping</td>
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<td></td>
<td>- Exploration</td>
<td>100-200 full-time jobs</td>
<td></td>
<td>Identification of government and other</td>
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<td>- Drilling</td>
<td>for short periods</td>
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<td>stakeholders’ expectations and engagement</td>
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<td>- Appraisal</td>
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<td>of civil society organisations and donors</td>
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<td>drilling</td>
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<td>Conceptualisation and implementation of</td>
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<td>potentially scalable pilot projects</td>
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<td>2-6</td>
<td>Development</td>
<td>Low intermittent</td>
<td>Low intermittent</td>
<td>Planning of local workforce and suppliers</td>
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<td>and project management</td>
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<td>skills as well as basic skills and</td>
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<td>2-4</td>
<td>Sub-phase II:</td>
<td>Short-term</td>
<td>High</td>
<td>competencies in resource-bearing</td>
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<td>0.5-2</td>
<td>Sub-phase I:</td>
<td>On-shore: high</td>
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<td>Off-shore: low/medium</td>
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<td>3-5</td>
<td>Decommissioning</td>
<td>Low</td>
<td>Low</td>
<td>Identification of redeployment opportunities</td>
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<td>100s jobs</td>
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<td>Identification of transitional workers</td>
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* The opportunities for local employment and procurement of goods and services listed in the table do not claim to be exhaustive or relevant in all cases as circumstances may vary depending on specific contexts.
### Table 2: Employment and procurement opportunities along the life cycle of mining projects

<table>
<thead>
<tr>
<th>Years</th>
<th>Phase activities</th>
<th>Employment opportunities</th>
<th>Procurement opportunities</th>
<th>Possible areas for collaborative efforts</th>
</tr>
</thead>
</table>
| 1-10  | Exploration / Feasibility  
- Reconnaissance, location of mineral anomalies, discovery, sampling  
- Decision about economic (and social) viability of mining | Low Intermittent Short-term 0-250 jobs | Low Intermittent Short-term 0-5% of total spend | Early assessments of expected life of the mine, local workforce and suppliers capacity and infrastructure gaps  
Aggregation of industry demand for employment and supplies  
Understanding of stakeholder expectations  
Development of a shared vision for regional/ local economic development via cross-industry as well as public-private collaboration  
Development of a plan to realise the shared vision, including through domestic enterprise development  
Tailoring of existing government/support programmes (business mentoring, advisory support, financing, managerial capacity) to start addressing barriers to local enterprise development |
| 1-5   | Construction / Development  
- Planning: mine plan, environmental / social plans, closure plan, authorisations and permits  
- Construction: clearing, stripping, blasting, infrastructure | High Short/medium-term Direct 250-1 000s manual and technical jobs | High Short-term 10-25% of total spend | Alignment of training / capacity building programmes, including those supported by donors, with regional and national industrial development plans  
Capacity building in local labour pools (e.g. technical mining specific training and transferable skills for post-closure industries)  
Collaboration among stakeholders to address local firms' lack of scale and capacity  
Bridging of asymmetries of information through dedicated fora and online databases to share and manage information flows  
Assessment of the potential for inter-sectoral linkages and alternative economic activities, during the mining life-cycle and the post-closure phase |
| 2-100+ | Production  
- Ore extraction, processing, concentrating  
- Waste rock/tailings management,  
- Wastewater management  
- Progressive site reclamation | High Long-term Direct and Indirect 1 000+ manual and low skilled labour & med-high skilled labour resulting from training | High 75-90% of total spend | Same as above +  
Identification and prioritisation of goods and services with sufficient aggregate demand from all private actors  
Implementation of local SMEs development plans in agreed priority areas  
Identification and prioritisation of transferable skills (and on-going skills for environmental monitoring for example) to ensure post-closure labour market sustainability  
Identification of possible inter-sectoral linkages and synergies for local suppliers to serve other sectors |
| 1-5 | Decommissioning  
- Site clean-up, reclamation, rehabilitation and maintenance  
- Environmental monitoring | High Short/long-term Indirect 0-1 000+ jobs | Low 0-2% of total spend | Implementation of an economic development plan for the area post-closure |
3.2. Shared infrastructure

3.2.1. Shared power

3.2.1.A. What can host governments do?

- Obtain extractives sector projects’ projections for power demand, and preferred sources to allow for early planning and effective co-ordination amongst relevant central, and local authorities.
- Consider opportunities and the scale of possible power-gas and/or power mining integration (if applicable), taking due account of key economic factors, including cost, electrification rate, and power reliability and adequacy, which are essential for industrial extractives operations.
- Take a long-term perspective when identifying potential synergies, taking into due account any rising demand from non-extractives sector sources. Also, assess the affordability to communities and their willingness to pay, and plan sustainable provision beyond the conclusion of the extractives sector project.
- Consider mechanisms, such as stipulating power requirements and access fee arrangements in laws or contracts, to ensure the sustainability of supply beyond the extractives sector project and hold government to account.
- When extractives sector operations are used as anchor customers for large power developments, design appropriate power pricing mechanisms to avoid either subsidising the extractives sector at the expense of the utility or taxpayers, or decreasing the supply available to non-extractives sector industries and residential consumers.
- Consider partners other than the extractives sector in development of power generation capacity to incentivise the construction of oversized generation plants to serve neighbouring populations, or send excess capacity from self-supply to the grid.
- Where necessary, engage in regional and sub-regional policy co-ordination for infrastructure development and power sharing.

3.2.1.B. What can extractives industries do?

- Provide forecasts regarding anticipated demand for power and sourcing of power, and regularly provide data about actual usage.
- Implement energy efficient operations and evaluate whether there is potential idle capacity in stand-by self-supply generators that could be used for power solutions.

Where there is no grid or the grid is too remote so that grid-supplied electricity is more expensive or excessively unreliable compared with self-supply:

- Develop electricity self-supply plans that align with government’s plans for electrification and local contexts.
- When planning to supply local communities with power, consult early with the local communities to understand their power needs and preferences, defining their responsibilities and those of the local government in operating and maintaining power arrangements including access fees.
- Enable a sustainable strategy for leveraging extractives sector energy generation, by assessing the feasibility of renewable energy power generation options.
• In consultation with donors, governments, and utilities, assess the feasibility of installing a renewable energy-based mini grid instead of isolated generators and explore implementation and cost-sharing arrangements.

• Where economically viable (i.e. availability of inexpensive sources of energy such as hydropower and gas), collaborate with other extractives companies from the same basin to invest in power generation and transmission capacity, considering domestic needs, including non-industrial use.

Where electricity provided by the utility is stable and less expensive than self-supplied power:

• Buy electricity from the grid, while working with national or local public utilities and other extractives companies to upgrade generation, transmission, and distribution capacity to meet demand.

3.2.1.C. Host governments and extractives industries can work together to:

• Undertake early discussions regarding power infrastructure needs and plans to determine if there are synergies, efficiencies and other opportunities for shared value creation with respect to power generation and distribution. This includes developing strategies for situations where there is no ready access to the electricity grid.

• For any project undertaken, clearly articulate government and company responsibilities and liabilities, including operating and maintenance, power transmission and delivery, billing and customer revenue management.

• Consider power usage and distribution in the equilibrium of the overall contractual agreement with the extractives industries.

3.2.2. Shared use of water

3.2.2.A. What can host governments do?

• Acknowledge that investment in water security drives sustainable growth, and invest in infrastructures, institutions and information to manage water risks.

• Adopt an integrated approach to water resource management that recognises the need for a negotiated process to co-ordinate and adjudicate amongst competing users to ensure sustainable management of water resources.9

• Assess all water sources (surface and groundwater, rainwater) at the relevant scale for allocation with a view to determining which water resources are under current or future pressure (e.g. risk of scarcity or pollution, or risk to the ecosystems). Understand how they may be interconnected, when they are available (seasonality) and how they may change over time, as climate change, economic development and population growth will affect water availability and demand. The results should be made publicly available.

• Consider non-conventional water sources, such as treated wastewater and desalinated water as alternatives to freshwater, where appropriate from an economic, social and environmental perspective.

• Design a robust and transparent planning instrument that can adjust to changing conditions at least cost over time. Well-designed plans set out a clear framework for the allocation of water resources among competing uses (industry, agriculture, environment, residential) in order to manage pressure, competition, conflict over the use of water resources, and to protect against excessive deterioration.
• If scarcity arises, consider the introduction of a clearly delineated allocation regime based on clear, adjustable limits on abstraction. When water is over-allocated and/or over-used, bring use in line with sustainable limits through negotiated arrangements.

• Assign well-defined roles to authorities and organisations responsible for water allocation and adopt accountability mechanisms that actually work in practice.

• Ensure policy coherence across existing policy settings related to water resources management as well as water-related sectors, such as agriculture, mining and energy. Even a well-designed allocation regime can be undermined by perverse incentives in other sectors, such as subsidies that encourage over-consumption of water resources or pollution that degrades water quality.

• Levy appropriate fees on users, reflecting the full cost of providing access to water resources and the opportunity costs of using it.

• Ensure an adequate institutional framework to regulate, monitor, and enforce water rights, minimising waste and promoting the systematic reuse and recycling of used water.

• Take action to prevent and manage water pollution, from all sources (and in particular of groundwater), including diffuse pollutions and emerging pollutants. Combine regulatory, voluntary and economic instruments (for example standards and charges) to provide continuous incentives for water users to control pollution of water resources. In accordance with the Polluter Pays principle, pollution charges make pollution costly and support sustainable practices.

3.2.2.B. What can extractives industries do?

• Engage with local communities and water users, at basin and catchment levels, to understand water-related issues and risks (risk of scarcity, flooding, pollution, and risks to ecosystems) and consider offering solutions. For instance, investments made in multi-purpose infrastructure that support water-related objectives.

• With due regard to anti-competitive concerns, collaborate with other extractives companies from the same basin to devise a common solution for water management and allocation. For example, a collective water treatment infrastructure solution might be less environmentally costly and more cost-effective for all parties than several treatment facilities.

• Clearly articulate anticipated water footprint (demand for water and potential emissions) and implement water efficient operations that minimise pressure on the use of the resource.

• While selecting alternative exploitation and concentration methods, consider environmental risks and the amount of emissions. Select closed process-water circuit and dispersed water treatment, if applicable, and systematic monitoring and evaluation of the impacts of operations on water systems over time.
3.2.2.C. Host governments and extractives industries can work together to:

- Devise mutually beneficial arrangements. For example, when a company develops water treatment facilities allowing excess capacity to be used by the community. The government and the water utility should be responsible for distribution of the water and collection of associated tariffs.
- Share knowledge, information and expertise, and where appropriate, support additional research.

3.2.3. Shared use of transport infrastructure

3.2.3.A. What can host governments do?

- Provide a clear and effective regulatory framework for multi-purpose and multi-user infrastructure, to ensure a financially sustainable and effective model as well as clear access conditions based on objective criteria and simple adjudication and arbitration mechanisms.
- Avoid exclusive access or monopoly pricing for the transport services on the infrastructure by any other users.
- Clarify that extractives sector companies are expected to take community needs into account and design the transport infrastructure to allow for shared use, when this can be done safely and economically.
- Devise a tariff formula applicable to any third-party user, based on existing user volume agreements and linked directly to the cost of maintenance and upgrades.
- Recognise the rights of any extractives sector company participating in transportation financing, not through tariff discounts, but rather through the same rights usually afforded to other debt holders (i.e. commercial repayment of their financing).
- Develop an effective co-ordination mechanism in a non-fully integrated situation and consider double-track railway options to reduce the co-ordination costs of multiple users.
- Develop policy that encourages a tier one rail and port developer or operator to invest in transport infrastructure, holding them to account for providing supply chain planning and co-ordination.

3.2.3.B. What can extractives industries do?

- With due regard to anti-competitive concerns, collaborate with other extractives sector companies from the same basin to determine the potential for shared value through the development of shared transport infrastructure. Collective rail and port infrastructure might be the more cost-effective solution for all parties.
- Clearly articulate anticipated or disclose actual demand for transport infrastructure.

3.2.3.C. Host governments and extractives industries can work together to:

- Devise mutually beneficial arrangements concerning transport infrastructure.
STEP 4. Support and contribute to innovation leading to new products and services

Innovation in the extractives sector can also lead to new products and services fostering new areas of comparative advantage for host countries. Initial comparative advantage in natural resources can be leveraged to push the production possibility frontier outwards and create dynamic comparative advantages through diversification. If a country uses its resource endowment in this way, over time, resources will become proportionally less important within their economy.

4.A. What can host governments do?

- Identify changing trends in global consumption and production patterns (progressive ore grades decline and increasing labour, transport, energy, processing, capital/equipment costs), changes to end uses for minerals (innovation in final products), and carbon emissions trading.
- Fully consider trade-offs associated with technological innovation (i.e. automation and remote tele-operation, where potential gains in productivity are off-set by potential losses in social and economic benefit for local communities).
- Support research and development efforts to identify, adapt, and transfer technology, making sure that these efforts are responsive to private sector demands. In doing so, develop ties with local universities, public research institutions, and participate in collaborative initiatives.

4.B. What can extractives industries do?

- Invest in specialised technologies for planning, handling, processing, maintenance, operational monitoring and recycling (excavation, concentration, ore prospecting, monitoring of the state of the environment) that reduce environmental impact.
- Leverage extractives sector operations to increase use of renewable energy, as appropriate. This could be done for example by either linking production to renewable energy (e.g. making use of solar and wind power to reduce the contribution of fossil fuels and green-house gases to mineral and oil and gas production, while reducing high electricity costs associated with the use of decentralised diesel generators) or by developing green supply chains (e.g. mining rare earths and supporting local manufacturing of magnets for wind turbines to provide clean energy or mining lithium to manufacture electric batteries for incorporation into green products).
- Contribute, as appropriate and economically feasible, to improving the innovative capacity of subsidiaries and subcontractors (i.e. export of software and other knowledge services).
- Contribute, as appropriate and economically feasible, to finding solutions to challenges shared by extractive industry companies, thus increasing public trust in company’s operations.

4.C. Host governments and extractives industries can work together to:

- Engage in co-operation based on project life cycle analysis, covering the entire value chain and offering the opportunity to build on best practices of several sectors.
STEP 5. Establish effective and transparent monitoring and evaluation systems and regularly review the collaborative strategy

Setting up an appropriate monitoring and evaluation system will be essential to assess performance against identified shared goals and milestones, and ensure commitment to delivery from different stakeholders as well as mutual accountability. To the extent possible, the system should aim to capture the different dimensions of shared value creation, including cross-sectoral spin-off benefits. An efficient and standardised, yet flexible and adaptive methodology for performance measurement should be developed in order to ensure consistency and comparability of results. Regular reviews of the strategy, ideally on a biannual basis, allow for adjustments to reflect changes in the operating environment, progress made and lessons learned (what is working and what is not). Effective and structured communication around the strategy is also crucial to ensure continuous engagement and commitment from different stakeholders.

5.A. In doing so, host governments, industry and civil society can work together to:

- Build on existing structures, such as the Extractive Industry Transparency Initiative (EITI) Multi-Stakeholder Group (MSG) or, where necessary, develop governance mechanisms to ensure effective and transparent monitoring and evaluation, involving relevant government bodies, extractives industry and civil society in the design and implementation of the system, allocating clear roles and responsibilities.

- Develop an efficient and effective standardised, yet flexible and adaptive methodology for performance measurement and reporting, generating sufficient information to assess progress on all aspects of shared value creation and inform better decision-making and monitoring, while avoiding inefficiency or complexity for companies and government agencies.

- Evaluate impact, including local industry participation over time (e.g. number and rate of participation, progression in their particular place in the value chain over time where applicable), efficient use of limited resources and creation of value for all stakeholders involved.

- Re-evaluate measurements from time-to-time to ensure they continue to serve the intended purpose and review progress made on strategy implementation in light of changes in the operating environment and lessons learned.

- Communicate results to stakeholders using wherever possible existing structures, like the Extractive Industry Transparency Initiative (EITI) Multi-Stakeholder Group (MSG) or analogous inclusive platforms.

- Inform each other and raise awareness of potential new constraints or changing circumstances that might affect strategy objectives and outcomes, and assess what is working and what is not.

- Discuss and agree potential adjustments and changes to support the agreed vision and actions to build diversified, competitive economies and create in-country shared value.

5.B. What can extractives industries do:

- Integrate the standardised methodology and reporting procedures into internal local monitoring and evaluation system, including through existing sustainability reports where applicable and as appropriate.

- Provide reporting in as much detail as reasonably possible to better measure and manage company activities. Share available data and information as agreed with host government’s authorities to enable them to make better-informed decisions to create in-country shared value.
Glossary

For the purpose of this Framework the following definitions apply:

Natural resources: The term “natural resources” designates renewable and non-renewable resource stocks that are found in nature (mineral resources, energy resources, soil resources, water resources and biological resources). Natural resources are commonly divided into non-renewable and renewable resources.10

Renewable natural resources: Renewable natural resources are resources from renewable natural stocks that, after exploitation, can return to their previous stock levels by natural processes of growth or replenishment. Conditionally renewable resources are those whose exploitation eventually reaches a level beyond which regeneration will become impossible. Such is the case with the clear-cutting of tropical forests. Examples of renewable resources include timber from forest resources, surface and rainwater, land resources, wildlife resources such as fish, and agricultural resources.

Non-renewable natural resources or extractives: Non-renewable natural resources are exhaustible natural resources whose natural stocks cannot be regenerated after exploitation or that can only be regenerated or replenished by natural cycles that are relatively slow at human scale. Examples include metals and other minerals, such as industrial and construction minerals, groundwater in confined aquifers, and fossil energy resources, such as oil and natural gas.11 In this document non-renewable natural resources are also referred to as extractives.

Local content (also referred to as “National Content” or “Name of country or other geographic area Content”) is generally understood to be the local resources a project or business utilises or develops along its value chain while investing in a host country. This may include employment or inputs, goods and services procured from local sources, locally hired workforces, operations carried out in partnership with local entities, development of enabling infrastructure, the improvement of domestic capacity, or the improvement of local technological capabilities.

Local content requirements refer to obligations related to Local Content enshrined in laws or included as part of licensing, procurement agreements or other contracts.

In-country shared value creation means innovation by business, governments, and non-profit organisations working collaboratively and strategically to find areas where core business operations on commercial terms can create shared benefits with scalable development impact. Value is understood as a holistic concept encompassing financial, economic, social, cultural, and environmental dimensions. Shared value means the simultaneous realisation of mutual benefits and new value created for all stakeholders involved. In-country value is wider in scope than “Local Content”, as it implies taking advantage of any opportunity for creating synergies with existing operations.

Stakeholders refers to the multiplicity of relevant individuals or groups at the international, national, regional and local level that have an interest in or that are involved, impacted or otherwise directly or indirectly affected by the extraction, exploitation, transport, transformation and trade of natural resources.
Notes


3. “Dutch disease” is related to the strong upward pressure that natural resource revenues can place on the national currency and domestic prices, particularly in the context of large windfalls and strong global demand. The inflationary pressure from natural resource production can constrain the competitiveness in global and regional markets of other sectors of the economy, such as manufacturing and agriculture. This distorts the economy and limits potential diversification, which may provide greater opportunities and a broader base for socio-economic development.

4. “Contractors” is understood an all-inclusive notion encompassing all entities with whom extractive companies enter into a contractual relationship. In the oil and gas industry, major contractors mainly refer to engineering, procurement and construction (EPC) and maintenance service contracts.


6. OECD (2015), Policy Framework for Investment 2015 Edition, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264208667-en. The Framework is a tool, providing a checklist of key policy issues (investment policy; investment promotion and facilitation; trade policy; competition policy; tax policy; public governance; corporate governance; policies for enabling responsible business conduct; human resources development; an investment framework for green growth; private investment in infrastructure; and financing for investment) for consideration by any government interested in creating an enabling environment for all types of investment and in enhancing the development benefits of investment to society. A good investment climate helps to mobilise capital, skills, technology and intermediate inputs to allow firms to expand. But, it is not just about reducing the cost of doing business and raising corporate profitability. It should also ensure that investment brings about the highest possible economic and social impact.


The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

The Development Centre of the Organisation for Economic Co-operation and Development was established in 1962 and comprises 27 member countries of the OECD: Belgium, Chile, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom. In addition, 24 non-OECD countries are full members of the Development Centre: Brazil (since March 1994); India (February 2001); Romania (October 2004); Thailand (March 2005); South Africa (May 2006); Egypt and Viet Nam (March 2008); Colombia (July 2008); Indonesia (February 2009); Costa Rica, Mauritius, Morocco and Peru (March 2009); the Dominican Republic (November 2009); Senegal (February 2011); Argentina and Cabo Verde (March 2011); Panama (July 2013); Côte d’Ivoire, Kazakhstan and Tunisia (January 2015); the People’s Republic of China (July 2015) and Ghana and Uruguay (October 2015). The European Union also takes part in the work of the Centre.

The Development Centre occupies a unique place within the OECD and in the international community. It provides a platform where developing and emerging economies interact on an equal footing with OECD members to promote knowledge sharing and peer learning on sustainable and inclusive development. The Centre combines multidisciplinary analysis with policy dialogue activities to help governments formulate innovative policy solutions to the global challenges of development. Hence, the Centre plays a key role in the OECD’s engagement efforts with non-member countries. To increase the impact and legitimacy of its work, the Centre adopts an inclusive approach and engages with a variety of governmental and non-governmental stakeholders. It works closely with experts and institutions from its member countries, has established partnerships with key international and regional organisations and hosts networks of private-sector enterprises, think tanks and foundations working for development. The results of its work are discussed in experts’ meetings as well as in policy dialogues and high-level meetings, and are published in a range of high-quality publications and papers for the research and policy communities.

For more information on the Centre, please see www.oecd.org/dev.
The Framework is an operational tool offering guidance on actionable steps for harnessing non-renewable natural resources to build competitive, diversified, and sustainable economies in a scalable manner. It presents a practical guide on how host governments, extractives industries and civil society can work together in a structured and systematic way to enable in-country shared value creation and advance the 2030 Agenda for Sustainable Development. The Framework transcends sectoral boundaries and focuses on strategies to foster coherence, sequencing, and effective co-ordination for integrated policy-making, and suggests monitoring and evaluation mechanisms to assess progress and impact over time. The actionable steps are addressed to governments, industry, and civil society clearly articulating their respective roles for improved collaboration, mutual respect and accountability.