Framework on Public-Private Collaboration for Shared Resource-based Value Creation

Advanced Draft for comment until 30 October 2015
Context

At the meeting of the Policy Dialogue on Natural Resource-based Development held on 3-4 June 2014 at the OECD in Paris, participating governments, industry and civil society converged around the common objective to build competitive and long-term sustainable resource-based economies, fostering direct employment and local entrepreneurship through the provision of goods and services, promoting efficient and sustainable use of resources and progressively diversifying the economy so it is not solely reliant on mining and/or oil & gas.

Participants identified lack of mutual trust, asymmetry of information and insufficient collaboration and coordination among all actors involved as major impediments to shared resource-based value creation. They emphasised the need to get a better understanding of how host governments, the private sector, local communities and civil society organisations can work together to use extractives as a catalyst for long-term, competitive, diversified and sustainable development, also supporting the Post-2015 agenda and the achievement of the new Sustainable Development Goals. More than the choice of policy instruments, this calls first for the articulation of the appropriate process and mechanisms to facilitate alignment across different constituencies around priorities and objectives for generating tangible benefits across all stakeholders involved. The nature of the bottlenecks and constraints to resource-based value creation identified through the process (lack of skills, insufficient technological and financial capabilities, inadequate local infrastructure, and weak local institutions) can only find an adequate response in long-term collaborative solutions with clear attribution of roles and responsibilities and continuous engagement of all stakeholders involved.1

A multi-stakeholder Drafting Committee was set up in January 2015 with the task to produce an advanced draft of the Operational Framework on Public-Private Collaboration for Shared Resource-based Value Creation. The Drafting Committee is composed of Liberia and Norway, as co-chairs, Switzerland, South Africa, African Union Commission, Anglo American, Antofagasta Minerals, Chilean Mining Council, Columbia Center on Sustainable Investment, Eni, Exxon Mobil, ICMM, IPIECA, Shell, Social Clarity, and Total.

The Operational Framework articulates the sequencing of actions needed to assist with integrated policy making and the formulation and implementation of collaborative strategies to create shared value. It distinguishes the roles and responsibilities of host governments and extractives industries, supportive of shared governance mechanisms designed to improve efficiency, foster participation and mutual accountability.

Earlier drafts of the Operational Framework were submitted for consideration during the Multi-Stakeholder Consultations of the Third and Fourth Meetings of the Policy Dialogue on Natural Resource-based Development held on 17 November 2014 and 29 June 2015 at the OECD in Paris.

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1. This approach echoes the conclusions reached in recent OECD work on localisation barriers to trade: “[t]he barrier should be identified as part of a collaborative effort between government, industry, and other private organisations. The key factor is that the measure is directed at resolving the barrier to development, and not at distorting prices. Policies applied horizontally across the economy aim at providing the best possible environment to expand along existing areas of comparative and competitive advantage. […] Institutions can be developed that are embedded within the market to overcome the information barrier, while strong public accountability and transparency regimes mitigate the risk of corruption and rent-seeking behaviour.” Stone, S., J. Messent and D. Flaig (2015), “Emerging Policy Issues: Localisation Barriers to Trade”, OECD Trade Policy Papers, No. 180, OECD Publishing, Paris. http://dx.doi.org/10.1787/5js1m6v5qdy5j-en, pp.70-71.
The OECD Development Centre invites public comment on the advanced draft Operational Framework. Comments received will inform revisions to the Operational Framework by the Drafting Committee. The final text will be submitted to participants in the Policy Dialogue for possible endorsement during the Fifth Meeting of the Policy Dialogue scheduled for 2-3-December 2015 at the OECD Conference Centre in Paris.

**Invitation to contribute**

Government, business and civil society representatives, international organisations, and the general public are invited to contribute comments to the current draft of this Guidance. **Comments should be sent to DEV.NaturalResources@oecd.org by 30 October 2015.**

To find out more about OECD work on natural resource-based development, please consult: [http://www.oecd.org/dev/natural-resources.htm](http://www.oecd.org/dev/natural-resources.htm)
OPERATIONAL FRAMEWORK ON PUBLIC–PRIVATE COLLABORATION FOR SHARED RESOURCE-BASED VALUE CREATION

(Advanced draft for public comment)

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 transformative and scalable manner. It is addressed to governments and industry, 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 use of natural resources (energy, land, minerals, and water). It focuses on strategies to inform more integrated policy-making and proposes monitoring mechanisms to assess progress and impact.

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

The Framework includes an Annex with a Compendium of Practices and useful sources, providing practical examples on how the proposed action-oriented steps can be translated into concrete collaborative solutions that can be replicated or adapted to different contexts. Cooperation generates trust, improves predictability and will yield sustainable outcomes.

The Framework and its scope will be reviewed by the OECD and its non-member partners and stakeholders in light of experience with its use, to strengthen its effectiveness over time.

For the purpose of this Framework:

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. 2

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, 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. In this document non-renewable natural resources are also referred to as extractives.

In-country Value Creation means harnessing natural resources core business for unleashing new opportunities for resource-based inclusive growth with transformative and scalable development impact. Value is understood as a holistic concept encompassing financial, economic, social, cultural, and environmental dimensions. In-country value is wider in scope than ‘Local Content’, as it implies taking advantage of any opportunity for creating synergies with existing operations. “In-country value”, through its broader approach, allows for enhanced development impact over traditional ‘Local Content’ approach.

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 a share of employment or inputs, goods and services to be procured from local sources, 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 the imposition of Local Content obligations (generally in the form of quantified targets or quotas) enshrined in laws or included as part of licensing, procurement agreements or other contracts, prescribing local participation in the opportunities of extractives projects or operational activities in a variety of ways, ranging from the share of goods, services to be procured locally, manpower to be hired locally or the share of research and development to be carried out locally and the equity share to be owned by local companies in joint ventures.

Shared resource-based value refers to innovation by business, governments and non-profit organisations working collaboratively and strategically find areas where core business operations on commercial terms can create enhanced development impacts. Far from being a zero-sum game, shared value is understood as the simultaneous realisation of mutual benefits and new value for all stakeholders involved through long-term economically viable solutions that create shared prosperity. Shared value creation departs from the dichotomy between stakeholder and shareholder value characterising philanthropic thinking. “Shared Value” builds on, but also goes beyond the ‘do no harm’ principle governing responsible corporate citizenship based on regulatory compliance and risk mitigation to reduce adverse impacts.

Stakeholders refers to the multiplicity of relevant individuals or groups at the 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.

STEP 1 - Adopt a comprehensive long-term vision. Behave strategically to build resource-based competitive economies and create shared value.

It is the responsibility of governments to commit to good governance to ensure transparency, accountability, and macroeconomic stability, social cohesion and upholding the rule of law, which are pre-conditions for sustainable development. Governments set out their expectations of the extractive 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 shared resource-based 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 the extractives industry and its role in the economy in terms of its contribution to economic, social and environmental development. The vision should factor in long term trends (e.g. demographics, climate change and changes in water availability and demand).

- Ensure internal alignment and effective coordination among ministries and agencies at all levels of government in order to develop and achieve long-term objectives and goals for shared resource-based value creation. Coordination is crucial not only across the ministries and agencies overseeing the extractive sector but, more widely, with ministries and agencies in charge of related issues such as education, employment, environment, anti-corruption, innovation, industrial development, natural resources, planning, trade, transport and infrastructure, land ownership, as well as relevant regional and local authorities.

- Develop mechanisms to foster participatory processes, designed to promote mutual understanding, prevent conflicts and litigation, overcome distrust and strengthen collaboration. It is vital to provide an inclusive space for continuous dialogue where progressive convergence consensus can emerge over the definition of overarching goals for the extractive sector and its contribution to the overall economic, social and environmental development, so that all relevant stakeholders can ‘pull in the same direction’.

- Transparently report on extractives resource revenue collection, allocation and use.

- Enhance economic competiveness by effectively managing the revenue and spending from and for extractives so that barriers to shared value creation, such as inflation and exchange rates fluctuation, and conflicts on the distribution of benefits do not arise.

- Consider the inherent uncertainty around key variables affecting the extractives industry’s performance (price, cost and volume) in establishing a programme and pace of exploitation which is expected to be sustainable through these inevitable fluctuations.

- Understand the production and market structure and consider where the country can position itself well along global value chains, looking at opportunities that serve more than just the extractives sector.

- Manage stakeholders’ expectations and communicate effectively, including by clearly articulating the benefits that can be realistically achieved along the life cycle of the project.

- Encourage, where relevant, donors, international financial institutions and other development partners to align their programming in areas that can support the development of resource-based economies.

1 B. What can extractives industries do:

- Articulate a vision for the extractives industry and its role in the economy in terms of its contribution to economic, social and environmental development. The vision should factor in long term trends (e.g. demographics, climate change and changes in water availability and demand).

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- Manage stakeholders’ expectations and communicate effectively, including by clearly articulating the benefits that can be realistically achieved along the life cycle of the project.

- Encourage, where relevant, donors, international financial institutions and other development partners to align their programming in areas that can support the development of resource-based economies.
• Take a long-term approach and identify opportunities to align business interests and plans with national development objectives.

• Transparently report payments made to governments.

• Harness core business for enhanced development impact, thus effectively contributing to create value in a transformative and scalable manner and develop new competitive advantage.

• Identify areas for pre-competitive collaboration with industry peers and stakeholders, including suppliers, (e.g. collective identification of skills requirements and solutions to common environmental challenges) to produce impact at scale to improve the overall competitiveness of the host economy.

• 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.

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

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 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, through systemic linkages between productive activities, and gaps to determine where and how value can be created. Preliminary screening and data collection should inform any course of action, including the choice of the appropriate policy measures and type of instruments to promote shared resource-based 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), vulnerable groups, such as indigenous peoples and women).

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

• Identify trade-offs and associated costs/benefits.

• Consider the full life cycle of natural resources developments as well as their value chains as the horizon for the identification of shared value opportunities.

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

• realise that there may be areas of value creation beyond early reach, depending 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 (like energy, land and water).

2 B. **What can extractives industries do:**

• Provide information separately (to avoid any anti-competitive issues) to government on future demand for workforce, goods, services, infrastructure technologies and other inputs (like land, water and energy) along the project lifecycle.

2 C. **Host governments and extractives industries should work together to:**

• Once aggregated by the government, assess the extractive sector’s collective current and future needs, in terms of demand for workforce, goods and services, infrastructure and use of other inputs (like energy, land and water) 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, health care, education, tourism, services, biodiversity preservation, agriculture and fisheries) and industry needs. This, however, is subject to the full recognition that external factors can change overtime and sometimes quickly, necessitating mechanisms that are adjustable and flexible.

• Identify any barriers to entry, taking into account the structure and dynamics of domestic, regional and global markets.

• Identify goods and services that are highly specialised or subject to strong competition.
STEP 3 – Unlocking shared-value opportunities for transformational change

Opportunities for shared resource-based value creation may be found in sector-specific demand for workforce and goods and services. Extractive 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. Innovation in extractives can also lead to new products and services fostering new areas of comparative advantage.

3.1 - Local workforce and supplier development

3.1 A What can host governments do?

- Undertake baseline assessment of institutional capacity for skills and Small-Medium Enterprise (SME) development.

- Build reliable statistics on existing industry capacity, level of participation and supplier landscape so as to inform strategic planning, skills upgrading and required technical training activities.

- Assess the ease of doing business in the country and provide enabling conditions for business development, by removing investment barriers (such as lengthy and complicated procedures to register a business, costs involved and other onerous compliance requirements).

- Give preference to dynamic, phased-in approaches that enable progress towards achieving common objectives, goals and targets over mere compliance and enforcement of ‘local content requirements’.

- Carefully balance pressure for indigenisation with long-term benefits associated with localisation of productive activities, which contributes to generating in-country value and positive knock-on effects on the economy.

- Promote transparency, including by clearly communicating if and how local employment, local procurement, training, skills upgrading, and technology transfers are factored into competitive bids evaluation processes.

- Facilitate the linkage of multinationals with local firms, in particular local SMEs.

- Assist local firms to comply with industry global requirements, including through the development of certification standards.

- Create financing vehicles for local firms, including SMEs.

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

- Align technical vocational programmes with the skills required in the resources sector.

- Provide refundable tax credits to hire and train local workforce and suppliers.

- Offer subsidies or match grants to private firms or institutes to co-finance their training efforts.
• Discourage adaptive strategies whereby companies registered locally or owned by nationals are de facto mere import intermediaries or vehicles set up with the sole purpose to pay lip service to local regulations, therefore creating little value and potentially perpetuating rent-seeking or elite capture.

• Adequately plan to promote economic diversification through cross-industry linkages, with a view to creating new opportunities for the economy once extractives projects are phased out.

3.1 B What can extractives industries do:

• Clearly articulate the success factors for participation in extractives value chains (price, delivery reliability, safety, quality) and conformance to standards (environment, labour, industry specific requirements).

• Offer support for capacity building for specific job or value chain-related skills either directly or through joint training programmes/centres.

• Devise inclusive plans for progressive local workforce and supplier participation, including vulnerable groups, such as women and indigenous peoples.

• Consider 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.

• Evaluate the potential to make advance purchase orders, forward purchase agreements or implement other mechanisms that facilitate the integration of local suppliers in extractives’ value chains.

• Engage with major contractors, as the ability of local businesses/workforce to access employment/procurement opportunities will often depend more on the efforts of major contractors.

3.1 C Host governments and extractives industries should work together to:

• Collectively assess existing industry capacity, level of local participation and supplier landscape so as to inform strategic planning, skills upgrading and required technical training activities.

• Collectively assess the available local workforce capabilities and local supply base by occupation, skill requirements, with a decomposition analysis of the demand for skilled and unskilled workers and suppliers and charting the changing skill profile by type and phases of project and its location.

• 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 on training, education and infrastructure.

• Reasonably evaluate the time and resources needed to close any identified technological, infrastructure, capabilities, and financing gaps.

• Agree on actions of mutual benefit along with realistic, operational and measurable milestones and timelines so as to manage expectations and show tangible progress over time.

• Publish demand for workers and suppliers at every stages of the project.
Prioritise quick wins and leverage other opportunity areas for long-term collaboration.

Table 1 – Employment and Procurement opportunities along the life cycle of oil & gas projects

<table>
<thead>
<tr>
<th>Phase</th>
<th>Duration</th>
<th>Key Employment and Procurement Opportunities</th>
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</table>
| **Exploration phase**      | **1-10 years** | • Seismic, exploration drilling, appraisal drilling: low opportunities for local employment with limited number of full-time jobs (100-200) for short periods (months, not years) and low opportunities for procurement of local goods and services: industry-specific (e.g. seismic survey, laboratory services, marine and land surveys, rig provision, drilling services, coring, wireline logging, casing & running, cementing, perforating, etc.) and generic (e.g. freight forwarding, transport, vehicle fleet management, recruiting, HR, training & health, legal and regulatory services, financial & risk services, IT/communication services, construction services, environmental services, site support services & consumables, etc.) • Possible areas for collaborative efforts:  
  - Early assessments of workforce capacity and supplier landscape mapping  
  - Identification of government and other stakeholders’ expectations and engagement with other stakeholders such as CSOs and donors  
  - Conceptualization and implementation of potentially scalable pilot projects. |
| **Development phase**       | **Sub-phase I** (0.5-2 years) | • Feasibility, concept design and front-end engineering and design: low opportunities for local employment with limited number of jobs (10s) mainly off-site specialized engineering and project management services and low opportunities for procurement of local goods and services: industry-specific (engineering and design services) and generic (e.g. same as the above) • Possible areas for collaborative efforts:  
  - Planning of local workforce and suppliers capacity development for the construction phase  
  - After final investment decision, development of workforce and supplier skills as well as basic skills and competencies in resource-bearing communities |
| **Development phase**       | **Sub-phase II** (2-4 years) | • Specialized engineering and project management services, construction/fabrication labour: short-term opportunities for local employment with high number of onshore jobs and limited number of offshore jobs; opportunities for procurement of local goods and services: industry-specific (e.g. facility modules manufacturing/platform construction; on-site assembly/installation; infrastructure development (pipelines, flow lines, umbilical); storage tanks manufacturing; wellheads; drilling equipment) and generic (e.g. civil Works; welding; steel, basic structures; construction raw material; industrial heavy machinery; excavation equipment; electronic equipment; electrical equipment; supply chain services (freight forwarding, transport, etc.)) • Possible areas for collaborative efforts:  
  - Same as the above |
| **Operations phase**        | **10-40 years** | • Operation & maintenance, wells/facility optimisation, enhanced recovery: more stable and longer term opportunities for local employment (100s –1000s) with fewer offshore job opportunities given complexity and high-specialisation levels. Opportunities for procurement of local goods and services: industry-specific (e.g. production enhancement; modifications to platforms; inspection & repair of topside infrastructure; reservoir management; well intervention & work over; maintenance and repair; pipelines; compressor stations) and generic (generic: same as in the exploration phase). • Possible areas for collaborative efforts:  
  - Creation of recruiting pipelines from training programmes/centres  
  - Building of a globally competitive local workforce and supply base for phased progression and replacement of expatriates  
  - Promotion of innovation and support of diversification efforts |
| **Decommissioning phase**   | **3-5 years**  | • Specialized engineering, deconstruction, waste management: low opportunities for local employment with limited and reduced number of jobs (100s) opportunities for procurement of local goods and services: industry-specific (e.g. engineering; deconstruction; material disposal; site monitoring), and generic (e.g. same as in the exploration phase) • Possible areas for collaborative efforts:  
  - Identification of redeployment opportunities in other sectors  
  - Training of transitional workers |
Table 2 – Employment and Procurement opportunities along the life cycle of mining projects

<table>
<thead>
<tr>
<th>Phase</th>
<th>Opportunities</th>
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<tbody>
<tr>
<td>Exploration / Feasibility phase</td>
<td>- Exploration: reconnaissance, location of mineral anomalies, discovery, sampling - Feasibility: decision about economic (and social) viability of mining: low opportunities for local employment and procurement of local goods and services; with limited and intermittent number of direct employment (0-250) and supplier jobs over a short time frame (0-3% of total spend)</td>
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<tr>
<td></td>
<td>- Possible areas for collaborative efforts:</td>
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<tr>
<td></td>
<td>- Early assessments of expected life of the mine, local workforce and suppliers capacity and infrastructure gaps</td>
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<td></td>
<td>- Understanding of stakeholder expectations</td>
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<td>- Development of a shared vision for regional/local economic development via collaboration and coordination within the private sector (not just mining), and between the private sector and all of government</td>
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<td>- Development of a plan to realise the shared vision, including through domestic enterprise development via collective action from all of industry, all of government and other relevant actors (CSOs, donors etc)</td>
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<td>- Tailoring existing government/support programmes (business mentoring, advisory support, financing, managerial capacity) to start address barriers to local enterprise development (transparent tender/bid processes, access to reliable and affordable power supplies and transport infrastructure; SME ability to meet expected standards (timeliness, quality, process); lack of visibility on aggregated industry demand for local employment and supplies)</td>
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<tr>
<td>Construction / Development phase</td>
<td>- Planning: mine planning, environmental/social planning, closure plan, environmental and other permits - Construction: clearing, stripping, blasting, infrastructure: high opportunities for local employment and procurement of local goods and services, including short to medium-term opportunities for direct employment (250-1000s) and suppliers, mainly manual and technical labour, but over a short time frame (10-25% of total spend)</td>
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<td></td>
<td>- Possible areas for collaborative efforts:</td>
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<td></td>
<td>- Alignment of training / capacity building programmes with the objectives set in broader regional and national industrial development plans</td>
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<td></td>
<td>- Capacity building in local labour pools (e.g. increasing human capital, improving health standards, expanding training and skill building, including both technical mining specific training and transferable skills for post-closure industries)</td>
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<td></td>
<td>- Collaboration among stakeholders to address local firms’ lack of scale and capacity (e.g. via unbundling contracts, aggregation of demand, forward purchasing agreements, advance payment systems, and business matching schemes)</td>
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<td></td>
<td>- Bridging of asymmetries of information by establishing dedicated fora to share and manage information flows (e.g. through on-line databases of procurement contracts, enterprise maps, supplier databases and certification schemes), monitor and evaluate progress, and ensure appropriate feedback mechanism between companies, government, suppliers and others</td>
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<td></td>
<td>- Develop an economic development plan for the development of linked industries to pave the ground for alternative economic activities, during the mining life-cycle and the post-closure phase</td>
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<td>Production phase</td>
<td>- Ore extraction, processing, concentrating, waste rock/tailings management, wastewater management, progressive site reclamation: high opportunities for local employment and procurement of local goods and services, including long-term direct employment (1000+ manual and low skilled labour, plus some degrees of med-high skilled labour resulting from training), as well as suppliers, indirect and induced employment and linked enterprise development. Most local procurement occurs in this phase (75-90% of total spend)</td>
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<tr>
<td></td>
<td>- Possible areas for collaborative efforts:</td>
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<tr>
<td></td>
<td>- Same as above +</td>
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<td>- Identification and prioritisation of goods and services with sufficient aggregate demand from all private actors.</td>
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<td>- Pursue opportunities to foster local SMEs in agreed priority areas.</td>
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<td>- Identification and prioritisation of transferable skills (and on-going skills for environmental monitoring for example) to ensure post-closure labour market sustainability</td>
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<td>- Identification of possible intersectoral linkages and synergies allowing local suppliers to serve other sectors</td>
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<tr>
<td>Decommissioning / Closure phase</td>
<td>- Site clean-up, reclamation, rehabilitation, maintenance, environmental monitoring: short term to permanent employment opportunities (0-1000+) mostly indirect and induced employment and linked enterprise development (0-2% of total spend). Realising the potential is contingent on success/failure of alternative enterprise development during operational life of the mine</td>
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<tr>
<td></td>
<td>- Possible areas for collaborative efforts:</td>
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<td></td>
<td>- Implementation of an economic development plan for the area post-closure</td>
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3.2 Shared infrastructure

3.2.1 Shared power

3.2.1. A What can host governments do?

- Obtain extractive projects’ outlooks for power demand and sources to allow for early planning and effective coordination among relevant central and local authorities.

- Consider opportunities and scale of possible power-gas and/or power mining integration, taking into 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 based on the country’s power situation, taking into account any rising demand from non-extractives sources, including assessing the affordability to communities and their willingness to pay, and planning sustainable provision beyond the extractive project life.

- Consider mechanisms, such as stipulating power requirements and access fee arrangements into laws or contracts, to ensure the sustainability of supply beyond the extractive project life and hold government to account.

- When extractives operations are used as anchor customers for large power development, design appropriate power pricing mechanisms to avoid either subsidising extractives at the expense of the utility or taxpayers, weakening the utility’s financial health and crowding out of non-extractives industries or residential consumers.

- Consider partners other than extractives in the development of power generation capacity to incentivise oversized generation plants to serve neighbouring populations or send excess capacity from self-supply to the grid.

- Where necessary, engage in regional policy coordination on policies for infrastructure development and power sharing.

3.2.1.B What can extractives industries do?

- Outline anticipated demand for power and sourcing of power.

- After implementing energy efficient operations, evaluate whether there is potential idle capacity in stand by self-supply generators that could be used for decentralised 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:

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• Devise electricity self-supply plans that fit into government’s plans for electrification and local contexts.

• When planning to supply local communities with power, consult with the local community from the outset, to better understand the community’s power needs and preferences, define the responsibilities of the community and the local government in terms of operating and maintaining the power arrangements and clarify expectations for access fees.

• Enable a more sustainable strategy for leveraging extractives’ decentralized energy, 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 how to jointly implement and share the costs.

• 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 far less expensive than self-supplied power:

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

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

• Undertake early consultations for power infrastructures 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 devising strategies for situations where there is no grid or where the grid is too remote.

• For any project undertaken, 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 industry.

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 (risks of too much, too little, too polluted water and risks to ecosystems).
• Adopt an integrated approach to water resource management that recognises the need for a negotiated process to co-ordinate and adjudicate among competing users to ensure sustainable management of valuable water resources.7

• 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 publically 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 (led by ministries of economy or finance, in co-ordination with other ministries, and engage other relevant stakeholders) set out a clear framework for the allocation of water resources among competing uses (industry, agriculture, environment, residential) in order to manage pressure, competition and even conflict over the use of water resources and to protect against excessive deterioration. Such planning processes should be.

• If scarcity arises, consider the introduction of a more elaborate 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, and possibly compensations.

• 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 all users, in line with the Beneficiary Pays principle and 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 the water used.

• 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 green practices.

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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, or risks to ecosystems) and consider offering solutions. For instance, investments made in multi-purpose infrastructure that support water-related objectives.

- 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 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 evaluations and monitoring of the impacts of operations on water systems.

3.2.2. C  Host governments and extractives industries should work together to:

- Devise mutually beneficial arrangements. For example, when the company develops water treatment allowing excess capacity to be used by the community, the government and the water utility should be in charge of the 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.

- Require extractives companies take community needs into account and design the transport infrastructure to allow for shared use, when this can be done safely and economically.

- Devise 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 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 coordination mechanism in a non-fully integrated situation and consider double-track railway options, to reduce the coordination costs of multiple users.
• Develop policy that encourages a tier one rail and port developer or operator to invest and hold them to account for providing supply chain planning and coordination.

3.2.3. B What can extractives industries do?

• With due regard to anti-competitive concerns, collaborate with other extractives 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 should work together to:

• Devise mutually beneficial arrangements concerning transport infrastructure.

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

Initial comparative advantage in natural resources can be leveraged to push the production possibility frontier outwards and create dynamic comparative advantages through diversification. If the country manages to use its resource endowment in this way, over time resources will become proportionally less important as the rest of the economy becomes larger.

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 oil & gas and mining operations to increase use of renewable energy. 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 & gas production, while reducing high electricity costs associated with the use of decentralised diesel generator) 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 to improving the innovative capacity of subsidiaries and subcontractors (i.e. export of software and other knowledge services).

- Contribute to finding solutions to problem situations shared by extractive industry companies, thus increasing public trust in company’s operations.

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

- Engage in cooperation based on life cycle analysis, covering the entire value chain and offering the opportunity to exploit best practices of several sectors.

**STEP 5 - Create an effective and transparent third-party monitoring and evaluation system**

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 methodology for performance measurement should be developed in order to ensure consistency and comparability of results.

5. A **In doing so, host governments and industry should work together to:**

- Build on existing structures or, where necessary, develop governance mechanisms to ensure effective and transparent monitoring and evaluation, including through the use of incentives and sanctions.

- Involve relevant government bodies as well as key stakeholders including extractive industries in designing the system.

- Develop an efficient and effective standardised, yet flexible methodology for performance measurement and reporting.

- Develop cost-effective reporting processes that generate sufficient information to assess progress on all aspects of shared value creation, while avoiding inefficiency or complexity for companies and government agencies. This allows for the generation of data to inform better decision-making and monitoring.

- Measure benefits generated, 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.

- Communicate results to stakeholders using wherever possible existing structures, like the EITI Multi-Stakeholder Group or analogous inclusive platforms.
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.

- Provide reporting in as much detail as 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 shared value.

STEP 6 - Regularly review strategy and adapt to changing circumstances

The strategy should be regularly reviewed to reflect changes in the operating environment and adjusted in light of progress made and lessons learned (what is working and what is not). Effective and structured communication around the strategy is crucial to create mind-set change and ensure engagement and continuous commitment from different stakeholders.

In doing so, host governments and industries should work together to:

- Inform each other and raise awareness on potential new constraints or changing circumstances that might affect the strategy outcomes;

- Review progress made on the implementation of the strategy in light of changes in the operating environment and lessons learned;

- Discuss and agree upon potential adjustments and changes to be made.