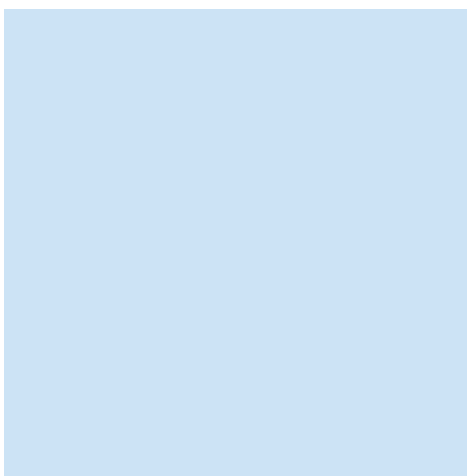
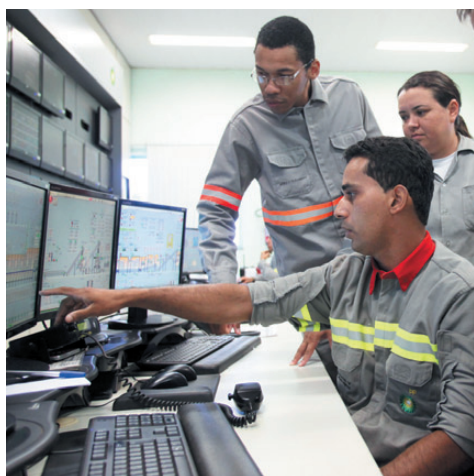


## Local content

A guidance document for the oil and gas industry

SECOND EDITION



Social  
responsibility



THE GLOBAL OIL AND GAS  
INDUSTRY ASSOCIATION  
FOR ENVIRONMENTAL  
AND SOCIAL ISSUES

[www.ipieca.org](http://www.ipieca.org)



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# Local content

A guidance document for the oil and gas industry

SECOND EDITION

## **IPIECA**

The global oil and gas industry association for environmental and social issues

14th Floor, City Tower, 40 Basinghall Street, London EC2V 5DE, United Kingdom

Telephone: +44 (0)20 7633 2388 E-mail: [info@ipieca.org](mailto:info@ipieca.org) Website: [www.ipieca.org](http://www.ipieca.org)

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To improve the content and utility of this guidance IPIECA sought stakeholder input on a draft prior to publication. Individuals with extensive experience in local content were asked to share their expert views on the content. While it was not possible to incorporate all feedback, their contributions were invaluable during the drafting process. Reviewers participated in their individual capacity and were not asked to represent or speak on behalf of their respective organizations. The list of stakeholders does not suggest full endorsement of the content.

Stakeholders provided their time on a voluntary basis and we thank them for their efforts.

### Stakeholders

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  - Chile Hidalgo, FSG
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  - Johana Dunlop, Schlumberger
  - Casper Sonesson, United Nations Development Programme (UNDP)
  - Silvana Tordo, World Bank
  - Wolfgang Kraus, Independent
-

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## LIST OF ACRONYMS

BSA	Benefit-sharing agreement
CDA	Community development agreement
EPC	Engineering, procurement and construction
ERP	Enterprise resource planning
FEED	Front-end engineering and design
FID	Final investment decision
FTE	Full-time equivalent
GDP	Gross domestic product
GVCs	Global value chains
HSE	Health, safety and the environment
IFC	International Finance Corporation
ILO	International Labour Organization
KPI	Key performance indicator
LNG	Liquefied natural gas
M&E	Monitoring and evaluation
NGO	Non-governmental organization
NOC	National oil company
NPV	Net present value
NQF	National qualification framework
O&M	Operation and maintenance
OECD	Organisation for Economic Co-operation and Development
PSA	Production-sharing agreement
PSC	Production-sharing contract
R&D	Research and development
SME	Small and medium enterprise
TVET	Technical and vocational education and training
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational education and training



# Executive summary

## OVERVIEW

This document offers guidance on understanding and delivering local content in relation to oil and gas projects. It has two aims: to offer oil and gas resource developers practical advice on how they can realize the potential value of local content; and to offer all stakeholders suggestions on ways to help create shared value through local content development.

Local content good practice is based on the idea of creating 'shared value'. In this document, shared value is defined as a business strategy designed to achieve both project competitiveness, and stability and economic development in the local community and host country. Projects can create shared value by generating and growing economic opportunities related to their workforce, local supply chain and surrounding communities, in ways that also support their bottom line.

While a robust local content strategy is based on country or regional specifics, a number of general learnings can be distilled, specifically:

- goals, strategy (plan for delivery), tactics and metrics are country-specific;
- there has to be a long-term, realistic vision and definition of success by government and companies;
- a country's long-term goal should be to diversify the economy by growing domestic enterprises capable of offering internationally competitive goods and services;
- transparency is crucial (from bid rounds through to tendering); and
- laws, regulations and rules should be developed consistently and support the process; special attention needs to be paid when different government bodies are involved to ensure alignment.

## SECTION 1

In the introductory section, local content is defined as the local resources a project or business utilizes or develops along its value chain while invested in a host country. Its main components—the primary focus for this guidance—are the direct and indirect employment of nationals in the workforce, and the procurement of

goods and services from companies residing in a host country and/or community. Local content may also include operations carried out in partnership with local entities, development of enabling infrastructure, the improvement of domestic skills capacity, or the improvement of local technological capabilities.

## SECTION 2

This section reviews the context for local content, exploring ways through which governments may incorporate local content into industrial policy and efforts to develop or improve competitiveness. It describes policy, legal and regulatory frameworks that governments may consider and common political drivers behind host government objectives. It also looks at the local content expectations of other stakeholders, and considers the implications if and when these diverge from the expectations of government and/or resource-producing companies. Section 2 closes by reviewing opportunities and risks for shared value creation.

## SECTION 3

Section 3 focuses on strategies for collaboration in the development of a shared vision for local content, the commitment this requires from stakeholders, and the opportunities it offers. It is aimed at companies, governments, international suppliers and contractors, financing institutions, chambers of commerce and others that decide to work together on a shared and achievable vision for local content.

This section identifies the local content opportunities related to the demand side of a project throughout its life cycle, from exploration, planning, engineering, and construction and operation to decommissioning (the demand side). It then focuses on the local capacity challenges to local content development (the supply side). This section suggests that the gaps between supply and demand can be addressed by formulating specific enterprise and skills development programmes as part of the collaborative strategy.

---

Section 3 closes with a discussion of stakeholder roles and a review of the processes for setting objectives and monitoring progress.

## SECTION 4

Establishing an organization capable of delivering value from local content is the focus of this final section. It describes how companies can undertake a business case evaluation, analysing the costs and benefits of local content, in order to develop a balanced and collaborative local content strategy. The document presents the types of local content activities that may be relevant at various phases in a project life cycle, together with the internal organizational considerations that can help to strengthen the effectiveness of programme management. It then describes procurement and contracting methods that companies have found to be effective in local content development.

This section also examines the identification and mitigation of risks linked to corrupt practices. It stresses the importance of ensuring that local content initiatives are implemented in a transparent manner and include a strong due diligence programme, along with appropriate safeguards and mitigations.

Section 4 closes with a discussion of the need for local content programmes to be supported by meaningful monitoring and evaluation systems. This will enable managers to track progress, demonstrate results and make adjustments as needed to improve outcomes.

---

## REFERENCES AND FURTHER READING

A *References and further reading* section lists various sources of information referred to throughout the document, and provides links to a range of additional resources relevant to each main section.

## ANNEXES

The document includes extensive annexes comprising a range of useful tools and practical information, and links to additional resources.



# Introduction

This guidance document has two aims:

- To offer oil and gas resource developers practical advice on how they can realize the potential value of local content.
- To offer all stakeholders suggestions on ways to help create shared value through the development of local content.

# Introduction

## REALIZING THE POTENTIAL VALUE OF LOCAL CONTENT

Many resource developers and their host countries identify and target local content objectives as ways to create and share value from oil and gas developments. Host countries may use local content as part of an industrial policy aimed at delivering benefits beyond the payment of royalties and taxes. For their part, many oil and gas companies take a strategic approach to local content efforts in recognition of the wider business benefits of creating and sharing value between themselves, local communities and countries; these companies do not view local content obligations simply as issues of regulatory compliance or as risks to be managed.

Local content good practice is based on the idea of creating 'shared value'. In this document, shared value is defined as a business strategy that views the competitiveness of a company and the vitality of the communities where it operates as mutually dependent. Projects can create shared value by generating and growing economic opportunities related to their local supply chain and communities, which also support their own bottom line. This guidance document supports this spirit of 'shared value' and outlines an approach that encourages producer countries, resource developers, their supply chain and other stakeholders to work collaboratively. It provides a framework that recognizes the interdependence of each party's efforts and the factors affecting them, and that mid-course recalibrations may be needed by all stakeholders as they learn together what does and does not work.

## SOME KEY TERMS

**Local content** is understood to be the local resources a project or business utilizes or develops along its value chain while invested in a host country. This may include employment of nationals, goods and services procured from companies resident in the host country, partnerships with local entities, development of enabling infrastructure, the improvement of local skills and capacity of local businesses, or the improvement of local technological capabilities.

This guidance document focuses on the main components of local content, i.e. the employment of nationals and the procurement of goods and services from companies residing in a host country.

Definitions of local content vary greatly across, and within, host countries. 'National content', 'Indigenous content', 'community content', 'shared value', 'in-country value', 'local participation' and 'industrial benefits' are some of the different terms used, while there is also the concept of 'supplier diversity'. Variations in definitions can be recognised, at least in part, by identifying the intended beneficiary, and assessing what specifically is being sought. Resource developers have to manage the variations in country-specific definitions of local content. Equally, governments and other stakeholders need to understand the differences when making comparisons between countries.

Other key terms used in this document are:

- **Resource developer and company:** these are used interchangeably, and refer to an oil and gas company. The terms apply equally to national oil companies (NOCs) or international oil companies (IOCs).
- **Producer country:** this defines a country involved in the extraction of oil and gas or processing of oil and gas products.



# Review the local content context



## Review the local content context

A local content context review can help a company decide:

- if engagement in that country is a sound decision;
- if there is potential for local content efforts to add mutually beneficial value; and
- how to work with stakeholders.

A local content context review typically provides:

- an understanding of the host country's current industrial capacity, its approach to industrial policy and the attention it gives to competitiveness of its industrial sectors;
- an assessment of local content-related policies, laws and contractual obligations; and
- an understanding of the stakeholders' expectations.

### APPROACH TO INDUSTRIAL POLICY AND INDUSTRIAL COMPETITIVENESS

Host governments consider many things when designing local content objectives, including the country's general industrial policy and competitiveness of its industrial sectors. Historically, host government industrial policies have generally been informed by one of two views: one view is that governments should minimize interventions, leaving entrepreneurs to make investments based on market forces; the other is that governments should take a strong lead in selecting particular industries in which companies should be investing, and in determining what inputs should be used and what outputs should be produced. However, a more prevalent contemporary view is that governments and markets complement each other: governments provide the institutions and infrastructure that allow markets to work efficiently and competitively.

Answering the following questions can help one understand a host government's approach towards, and capacity for, supporting the creation of shared value:

- What role has the host government decided to play in meeting its local content objectives? Is it actively engaged in helping specific companies or groups of companies?
- Are there viable forums where industry and other stakeholders can engage with the host government to promote policies that support shared value creation?
- How competitive is the host country's resource base, and how diverse and competitive are its non-resource sectors and industries?
- How aware are the host government and other stakeholders of the influence of institutional frameworks on the competitiveness of industry?

### POLICY, LEGAL AND REGULATORY FRAMEWORK

Host governments may pursue local content objectives and/or enforce local content requirements through a variety of instruments and at various institutional levels. Table 1 presents the policy arena within which government objectives are typically translated into local content requirements. A systematic review of these levels helps companies understand and organize host countries' local content objectives and requirements (a detailed framework can be found in [Annex 2](#)).

A review can reveal challenges to practical application of requirements in dynamic political situations. For example, objectives of current local content policies (level 2) may not be supported by existing regulations (level 4), which were designed to support previous policy goals. Companies may also find that local content clauses in contracts and agreements (level 5) signed in the past can be misaligned with more recent local content policies and regulations.

Furthermore, parallel institutional arrangements may co-exist within a single location. For example, a subnational government may develop a local content policy alongside Indigenous Peoples negotiating local content contributions as part of their engagement with resource developers.



## Section 2

### Review the local content context

Table 1 Key questions for conducting a review on policy, and legal and regulatory requirements

LEVEL	INSTRUMENT	QUESTION
Level 0	International agreements and norms	<ul style="list-style-type: none"> <li>What international agreements has the country signed that affect local content?</li> <li>What international norms and policy ideas are influencing the public policy arena?</li> </ul>
Level 1	Country constitutional features	<ul style="list-style-type: none"> <li>How is the country organized, politically and administratively? At what level(s) of government do local content expectations and objectives arise? Which public sector entities are in charge?</li> <li>Are there any (semi-)autonomous social groups with collective and constitutionally recognized claims to resources?</li> </ul>
Level 2	Policy environment and objectives	<ul style="list-style-type: none"> <li>How does the national government define local content?</li> <li>What role does government define for itself, and for the private sector, in pursuing its local content objectives and meeting citizens' expectations?</li> <li>What industrial policies does the country have that are relevant to the development of its oil and gas sector? How coordinated and collaborative is the country's approach to the formulation and implementation of industrial policies?</li> </ul>
Level 3	Legislation	<ul style="list-style-type: none"> <li>Does the country have specific local content legislation? Are local content-relevant stipulations covered more generally in sector legislation?</li> <li>Is there more general legislation also affecting local content (employment law, taxes, tariffs etc.)?</li> <li>Is there legislation concerning specific socio-economic groups (e.g. Indigenous Peoples or women), with local content implications?</li> </ul>
Level 4	Regulations	<ul style="list-style-type: none"> <li>Does the country have specific local content regulations?</li> <li>Do sector regulations contain specific local content obligations?</li> <li>Are there other regulations that affect local content?</li> <li>Do subnational governments set and enforce local content-relevant regulations?</li> </ul>
Level 5	Government contracts and agreements	<ul style="list-style-type: none"> <li>Do model/negotiated production-sharing contracts (PSCs) contain local content relevant references?</li> <li>Can parties to PSCs (e.g. national oil companies (NOCs), national privately-owned companies with political connections, etc.) exert additional leverage on pursuing local content objectives?</li> <li>Do concessions contain local content-relevant references?</li> </ul>
Level 6	Other agreements	<ul style="list-style-type: none"> <li>Is it expected or mandated, that resource developers commit to community development agreements, good neighbour agreements, benefit-sharing agreements, or similar, with local community organizations or specific socio-economic groups?</li> </ul>

## POLITICAL DRIVERS OF HOST GOVERNMENT OBJECTIVES

Producer countries do not all share the same policy drivers. This leads to variations in how host governments define local content and ensure local content objectives and expectations are met.

To recognize and better understand the objectives and expectations that apply in a particular country context, two questions can be asked: (i) what positive impacts are expected to be achieved by the host government's local content measures; and (ii) who is intended to benefit from those impacts? These two questions are represented by the vertical and horizontal axes, respectively, on Figure 1; the potential implications are shown in the quadrants.

The horizontal axis identifies beneficiaries of local content. The left side indicates that local content measures are expected to provide opportunities for specific socio-economic groups. The right side indicates the expectation that local content will provide economic opportunities for a broader group of citizens.

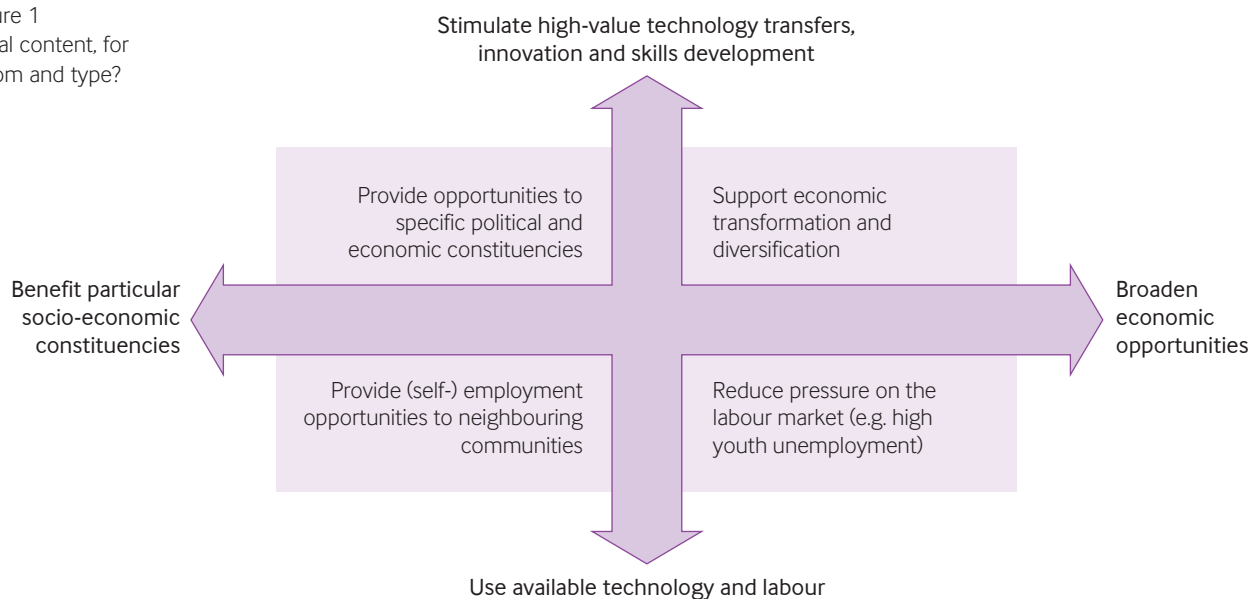
The vertical axis shows the 'type' of local content expected. At the base is the expectation that local

content will utilize available labour and other inputs. For example, in a situation where a producer country faces high unemployment, the host government and communities may expect the oil and gas sector to provide employment opportunities for local labour market participants (bottom right hand quadrant). At the top is the expectation that local content will help stimulate the development of higher value skills and internationally competitive entrepreneurial capabilities.

A key variant in local content policies and laws is how a 'local supplier' is defined (see Figure 2). That definition can signal a government's objectives and expectations. For example, some governments focus narrowly on the ownership of the suppliers, while others focus on the origin of goods, and the degree and type of engagement with nationals.

It is important to note, however, that there is no direct relationship between ownership of suppliers and the actual value retained in the country. For example, a domestically-owned supplier selling imported goods will add limited local value, while an international supplier using local inputs, employing local staff and substantially transforming or processing goods locally can deliver significant local value retention.

Figure 1  
Local content, for  
whom and type?

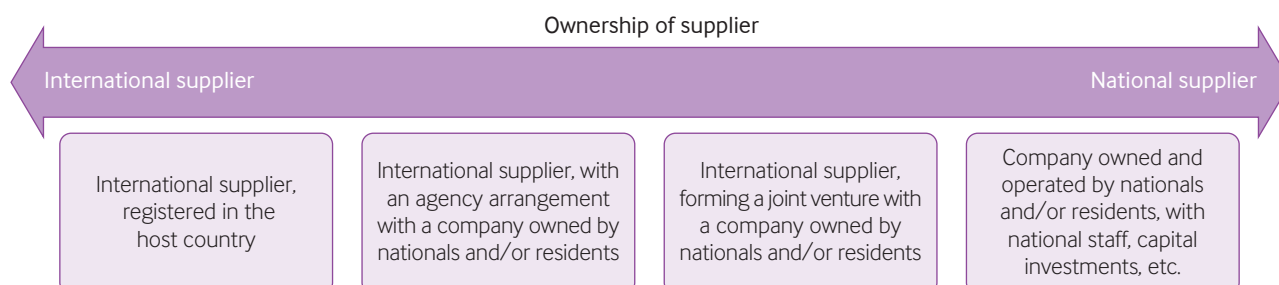




## Section 2

### Review the local content context

Figure 2  
Varying business arrangements counting as  
'local supplier' in host countries



Even though there is no direct relationship between ownership and retained value, the use of these definitions can sometimes have unintended consequences with definitions. For example, while programmes with 'ownership' definitions are usually the easiest to administer, there is the risk of 'fronting' (when someone assumes ownership for convenience and does not actively participate in the company). In some contexts, it may be better to focus on where the suppliers carry out their work, and on what local employment, training and skills development efforts they are undertaking. Too much focus on incentivizing companies to do work in-country may also have unintended consequences. For example, if there is a shortage of skilled labour, the hiring of local labour for intense periods of activity, such as onshore construction, may pull local workers away from work that is critical to the country's long-term growth prospects, such as infrastructure projects. (Risks associated with local content are discussed in the subsection on *Identifying and mitigating risks* on page 33).

Companies can map out country-specific policy objectives, identifying what benefits are intended and which domestic constituencies are the intended beneficiaries. Once this information is documented and analysed, it can lead to insights such as:

- **Local content objectives may be designed to achieve multiple and varied outcomes:** for example, it may be expected that local communities gain access to employment opportunities, and also that an internationally competitive supply chain industry be developed elsewhere in the country.

- **Public expectations may not be consistent with the objectives, incentives and consequences of policies, legislation, regulations and/or contractual clauses:** for example, people in communities and regions where resources are located and produced may expect low-skilled job opportunities, while the national government may be targeting higher-skilled technology and innovation-based economic diversification.

## OTHER STAKEHOLDER EXPECTATIONS

When conducting a local content context review, it is necessary to identify and consider all potential and interested stakeholders. Obvious stakeholders will include local communities where a facility may be built; less obvious stakeholders could be a training institute or international development organizations with active strategies in the area. Taking inventory of stakeholders and their objectives is important in understanding the full local content context. [Annex 3](#) provides a list of common stakeholders, typical expectations, potential roles and contributions, and the challenges they might typically face. A guidance tool for identifying and engaging stakeholders can be found in IPIECA, 2012.

## IDENTIFYING OPPORTUNITIES AND RISKS FOR VALUE CREATION

Country context analysis will help a company to understand the legal, regulatory and contractual requirements with which it must comply. It will also enable an understanding of the expectations and higher-level public policy objectives, and can then help to identify key challenges and opportunities for creating

## Section 2

### Review the local content context

value. Once the wider country context has been assessed, the company can then identify both the key challenges it will face in meeting local content requirements and the opportunities local content offers to create value for the project/business. By considering the challenges and opportunities from the perspectives of both the host country and the project, the company will be better able to help develop a local content strategy that enables all parties to share in value creation.

Potential opportunities include:

- Training institutes may develop courses that serve the needs of both the oil and gas industry and other sectors.
- The host government (and/or others) may develop infrastructure to strengthen the baseline economy.
- Development plans may provide incentives to develop certain economic sectors which could be linked with the oil and gas value chain.
- There may be established programmes to develop the SME sector, which could align with the oil and gas industry's own efforts to develop SME suppliers.
- There may be established programmes to develop historically under-represented or marginalized groups (e.g. women, Indigenous Persons), or SMEs owned by them.
- Initiatives may be under way for other industrial sectors (e.g. mining, construction, infrastructure, etc.) that could benefit the oil and gas industry.

Potential challenges include:

- A host government may take a prescriptive approach to local content and be unwilling to engage with industry to identify shared value opportunities and align efforts. In this case, the only option is to consider local content as a compliance exercise and, therefore, as a cost and risk management challenge, rather than an opportunity for shared value creation.
- A host government may set targets that are unrealistic because they exceed the capability and/or capacity of local resources. The government may see these aggressive targets as a way to 'push' the industry to do more to accelerate the value retained in the country. However, they may inadvertently have the opposite impact by incentivizing 'fronting' behaviour or establishing uncompetitive and, ultimately, unsustainable businesses.
- Certain objectives may only be feasible in a certain project phase (e.g. during the potentially labour-intensive construction phase), yet the government's objectives may apply in all phases.

# Establishing a company strategy for collaborating with stakeholders on a shared vision for local content



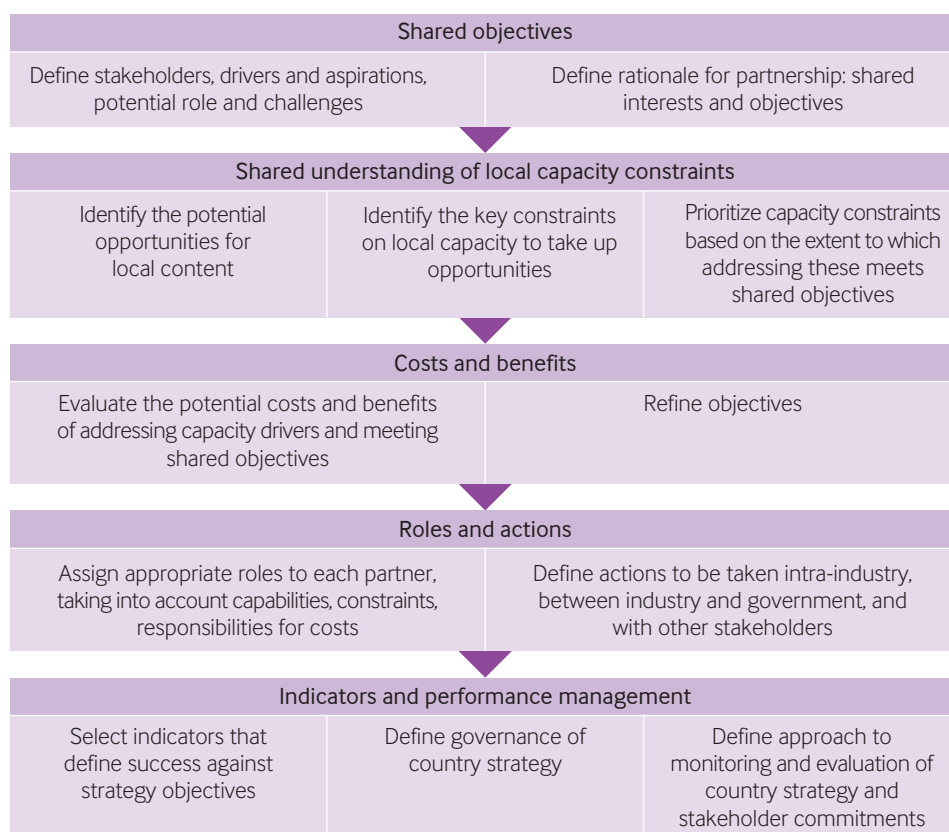
## Establishing a company strategy for collaborating with stakeholders on a shared vision for local content

This section is aimed at companies, governments, international suppliers and contractors, financing institutions, chambers of commerce and others that decide to work together on a shared vision for local content. Cooperation among oil and gas companies (as well as with companies from other sectors, e.g. mining) is encouraged as a way of ensuring critical mass for local content investments and avoiding inefficiencies associated with overlapping programmes.

The term 'collaborative strategy' is adopted throughout the section and refers equally to a country strategy, subnational regional strategy, a community strategy or a targeted marginalized group (e.g. women, Indigenous Persons) strategy, depending on the agenda defined by the context. However, an important distinction is made between a 'collaborative strategy' and a 'company

strategy'. The former is arrived at through a multistakeholder process, and contains a vision for 'in-country value' and sector development beyond a single project, while the latter is internal to a single company and sets out how the company will engage in efforts. Guidance on developing and delivering a company strategy is provided on pages 28–29.

Figure 3  
Elements of the  
multistakeholder process to  
inform a local content strategy  
Source: adapted from WBCSD, 2013.





## Section 3

Establishing a company strategy for collaborating with stakeholders on a shared vision for local content

### DEFINING STAKEHOLDER ROLES UNDER A SHARED VISION

A collaborative strategy sets out high-level objectives of stakeholders, roles and responsibilities, and an approach to accountability, monitoring and evaluation.

The process of creating the strategy should include:

- early and strong engagement among stakeholders to ensure a thorough understanding of each other's drivers and expectations;
- agreement on achievable local content objectives;
- clear, measurable and specific commitments to collaborate in identifying and investing in local content opportunities that offer mutual benefit;
- accountability mechanisms to support these commitments; and
- a well-defined leadership role.

Figure 3 details key elements that inform a collaborative strategy. This section highlights four of these elements: identifying the potential opportunities for local content; identifying the local capacity constraints; designing programmes and assigning partner roles to address these constraints; and indicator measurement/performance management. A detailed

list of potential stakeholder expectations, roles, responsibilities and challenges in local content development is described in [Annex 3](#).

### IDENTIFYING THE OPPORTUNITIES (DEMAND SIDE ANALYSIS)

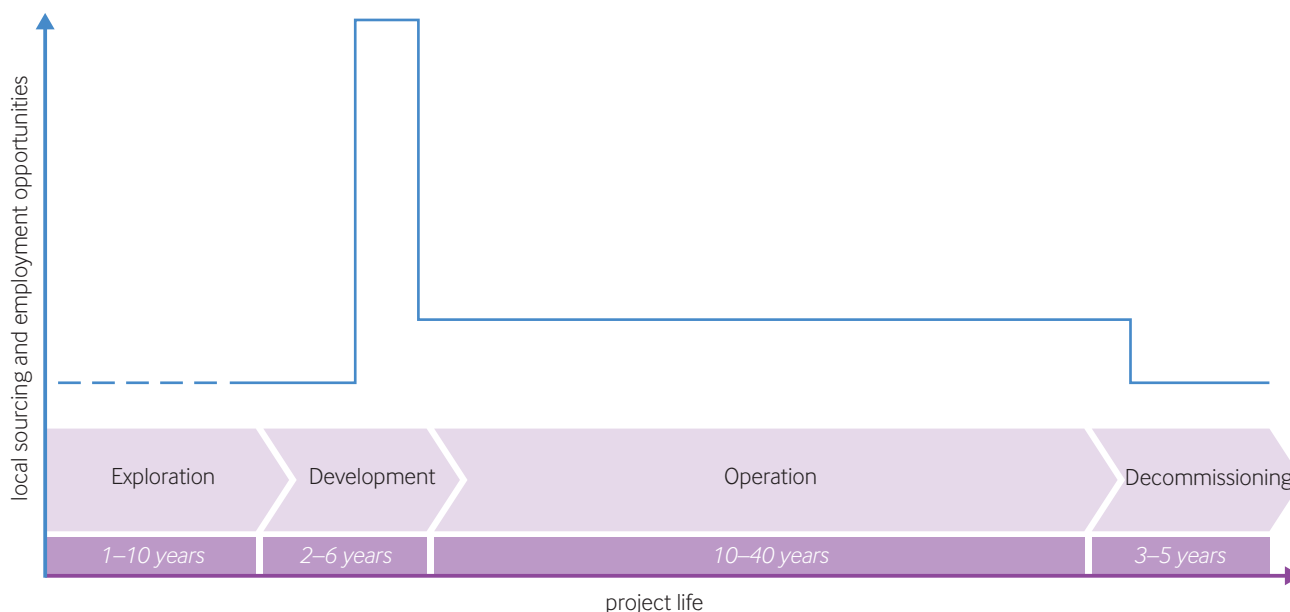
A good collaborative strategy will consider not just short-term demands of a single project, but also the needs of the industry (and interrelated industries) and will have a time horizon that is at least medium term in length. As such, a demand-side analysis requires estimates and potential timelines (on an aggregated basis) for goods and services and workers for the:

- oil and gas industry; and
- inter-related industry activities.

#### Opportunities in the project life cycle

Demand varies greatly in volumes, categories and technological complexity along the life cycle of projects. The upstream oil and gas life cycle is typically divided into exploration, development, operations (production) and decommissioning (see Figure 4). The highest risk and most significant cash flows occur during the exploration and development phases. Typically, local content opportunities are low and intermittent during exploration, numerous but short-term during development, medium and long-term during operations, and limited in decommissioning. See Figure 4.

Figure 4  
Local content opportunities in the project life cycle



## Section 3

### Establishing a company strategy for collaborating with stakeholders on a shared vision for local content

#### **Exploration**

Exploration (seismic, exploration drilling, appraisal drilling) typically lasts 1–10 years with short intermittent periods of work that is typically very specialized. Direct workforce demand is likely to be for less than 100 full-time equivalent employees (FTEs) working for short periods. Local content opportunities during this phase are therefore limited. Furthermore, offshore activities, especially those in deep water, generate even fewer local content opportunities than onshore projects due to their complexity and the specialized skills required.

#### **Development**

The development phase comprises a number of early planning sub-phases, namely feasibility, concept selection, and front-end engineering and design (FEED), followed by detailed engineering, procurement, fabrication/assembly and construction.

During early development, activity is typically limited to business and technical evaluation, detailed project design and planning, and securing regulatory approvals. It is during this phase, well before capital outlay, that the greatest opportunity exists to identify opportunities for generating shared value. Many decisions made in the conceptual and planning stages of a project can have a significant impact on the potential for local participation. Investments in capacity building remain high risk until the final investment decision (FID) is made at end of FEED.

#### **Feasibility study, concept design and FEED**

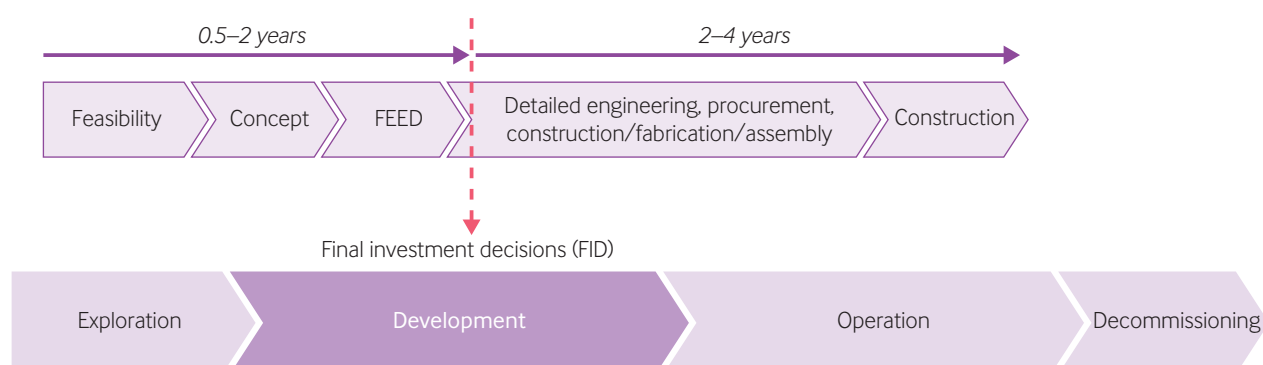
During this phase, local employment and procurement opportunities are limited and short-term, as most work involves specialized engineering and project management services. The direct workforce demand during this sub-phase is likely to be limited to between 10–100 FTEs.

#### **Detailed engineering, procurement, fabrication/assembly, construction**

This stage is typically short and characterized by significant and rapid change. Capital expenditure is greatest during this period, as are labour inputs. In an oil and gas project, the construction workforce can be several times larger than the operational workforce, albeit for very short periods of time.

The impacts of construction activity on local communities can be significant. Potential impacts can include rapid population growth, pressure on the local housing market, increased demand for local products and services, and labour shortages, particularly in skilled trades. Conversely, the winding-down of activity at the end of the construction phase can have a deflationary impact, and can put some local businesses at risk if they have become overly reliant on income from the project (See also the subsection on the negative impacts of local content development on page 35.)

Figure 5  
Development phase





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The development phase often presents numerous but short-term business opportunities for the local industry and workforce. Depending on the nature of the project (e.g. type of facilities and location), local content opportunities may vary. For onshore projects, local employment and procurement opportunities are medium-to-high and short-term; for offshore projects, opportunities are limited and short-term. The direct workforce demand during the sub-phase is likely to be for thousands of FTEs, with steep scale-up and scale-down over a relatively short time period.

### *Operations*

Production operations include extracting and processing oil and gas in readiness for distribution and sales. Key activities are the recovery of oil and gas to the surface for processing and transport, optimization of wells and production facilities, and efforts to enhance or maintain production. Depending on the type and scale of the project and external economic conditions, the length of this phase typically ranges from 10 to 40 years.

Longer-term opportunities for local businesses and workforces normally arise in the operations phase. Offshore activities generate fewer local content

opportunities than onshore projects given the complexity and high specialization levels required. Direct workforce demand in the operations phase is typically hundreds of FTEs.

### *Decommissioning*

Decommissioning of onshore oil and gas operations is usually straightforward and requires limited workforce and supplies. Decommissioning of offshore structures is highly complex and technical, and requires advance planning. Local employment and procurement opportunities are limited during this phase. However, closing out a project can involve site remediation, which provides opportunity for local content.

### Characteristics of procurement opportunities

Table 2 on pages 20–21 lists the categories of goods and services typically required during each phase. The scale and range of opportunities for local business participation will vary according to the type of operation and the maturity of local suppliers. This list is meant to be indicative and should not be considered to be all inclusive.



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Table 2 Oil and gas project phase and demand for goods and services

PROJECT PHASE	EXPLORATION	DEVELOPMENT		OPERATION	DECOMMISSIONING
Sub-phase	<ul style="list-style-type: none"> <li>Seismic</li> <li>Exploration drilling</li> <li>Appraisal drilling</li> </ul>	<ul style="list-style-type: none"> <li>Feasibility</li> <li>Concept design</li> <li>FEED</li> </ul>	<ul style="list-style-type: none"> <li>Detailed engineering, procurement, fabrication/assembly, construction</li> </ul>	<ul style="list-style-type: none"> <li>Operation and maintenance</li> <li>Wells/facility optimization</li> <li>Enhanced recovery</li> </ul>	<ul style="list-style-type: none"> <li>N / A</li> </ul>
Categories of goods and services likely to be in demand	<ul style="list-style-type: none"> <li>Industry-specific/technical               <ul style="list-style-type: none"> <li>Seismic survey and interpretation</li> <li>Laboratory services</li> <li>Marine and land surveys</li> <li>Rig provision</li> <li>Drilling services, drilling muds, drill bits</li> <li>Mud logging, coring, wireline logging</li> <li>Casing and running, cementing, perforating</li> <li>Well heads, completion equipment</li> <li>Engineering and design services</li> </ul> </li> <li>Generic               <ul style="list-style-type: none"> <li>Supply chain services (freight forwarding, transport, etc.)</li> <li>Vehicle fleet management</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Industry-specific/technical               <ul style="list-style-type: none"> <li>Engineering and design services</li> </ul> </li> <li>Generic               <ul style="list-style-type: none"> <li>Legal and regulatory services</li> <li>Financial and risk services</li> <li>Recruiting, personnel services, training, health</li> <li>IT/communication services</li> <li>Environmental and social planning</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Industry-specific/technical               <ul style="list-style-type: none"> <li>Facility modules manufacturing/platform construction</li> <li>On-site assembly/installation</li> <li>Infrastructure development (pipelines, flow lines, umbilical)</li> <li>Storage tanks manufacturing</li> <li>Well heads/Christmas trees</li> <li>Drilling equipment</li> </ul> </li> <li>Generic               <ul style="list-style-type: none"> <li>Civil Works</li> <li>Welding</li> <li>Steel, basic structures</li> <li>Construction raw material</li> <li>Industrial heavy machinery</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Industry-specific/technical               <ul style="list-style-type: none"> <li>Production enhancement</li> <li>Modifications to platforms</li> <li>Inspection and repair of topside infrastructure</li> <li>Reservoir management</li> <li>Well intervention and workover</li> <li>Maintenance and repair</li> <li>Pipelines</li> <li>Compressor stations</li> </ul> </li> <li>Generic               <ul style="list-style-type: none"> <li>Supply Chain services (freight forwarding, transport, etc.)</li> <li>Vehicle fleet management</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Industry-specific/technical               <ul style="list-style-type: none"> <li>Engineering</li> <li>Deconstruction</li> <li>Material disposal</li> <li>Site monitoring</li> </ul> </li> <li>Generic               <ul style="list-style-type: none"> <li>Legal and regulatory services</li> <li>Financial and risk services</li> <li>IT/communication services</li> <li>Environmental services</li> <li>Site support services (catering, hospitality, maintenance, waste management, security)</li> <li>Site support consumables (food, office supplies, stationery etc.)</li> </ul> </li> </ul>

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Table 2 Oil and gas project phase and demand for goods and services (continued)

PROJECT PHASE	EXPLORATION	DEVELOPMENT	OPERATION	DECOMMISSIONING	
Categories of goods and services likely to be in demand (continued)	<ul style="list-style-type: none"><li>• Recruiting, HR, training and health</li><li>• Legal and regulatory services</li><li>• Financial and risk services</li><li>• IT/communication services</li><li>• Construction services</li><li>• Lifting services</li><li>• Environmental services</li><li>• Site support services (catering, hospitality, maintenance, waste management, security)</li><li>• Site support consumables (food, office supplies stationery etc.)</li><li>• Replacement parts</li><li>• Energy (fuel, electricity) and chemicals</li><li>• Uniforms, personal safety equipment</li></ul>		<ul style="list-style-type: none"><li>• Excavation equipment</li><li>• Electronic equipment</li><li>• Supply Chain services (freight forwarding, transport, etc.)</li><li>• Vehicle fleet management</li><li>• Recruiting, HR, training and health</li><li>• Legal and regulatory services</li><li>• Financial and risk services</li><li>• IT/communication services</li><li>• Construction services</li><li>• Lifting services</li><li>• Environmental services</li><li>• Site support services (catering, hospitality, maintenance, waste management, security)</li><li>• Site support consumables (food, office supplies stationery etc.)</li><li>• Environmental services</li><li>• Site support services (catering, hospitality, maintenance, waste management, security)</li><li>• Site support consumables (food, office supplies stationery etc.)</li><li>• Replacement parts</li><li>• Energy (fuel, electricity) and chemicals</li><li>• Uniforms, personal safety equipment</li><li>• Non-core goods and services in business support services</li></ul>	<ul style="list-style-type: none"><li>• Recruiting, HR, training and health</li><li>• Legal and regulatory services</li><li>• Financial and risk services</li><li>• IT/communication services</li><li>• Construction services</li><li>• Lifting services</li><li>• Environmental services</li><li>• Site support services (catering, hospitality, maintenance, waste management, security)</li><li>• Site support consumables (food, office supplies stationery etc.)</li><li>• Replacement parts</li><li>• Energy (fuel, electricity) and chemicals</li><li>• Uniforms, personal safety equipment</li><li>• Non-core goods and services in business support services</li></ul>	<ul style="list-style-type: none"><li>• Energy (fuel, electricity) and chemicals</li><li>• Uniforms, personal safety equipment</li></ul>

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Establishing a company strategy for collaborating with stakeholders on a shared vision for local content

### Characteristics of workforce opportunities

Human resources are relevant to local content in three ways:

- **direct employment** by resource developers and their first tier contractors;
- **indirect employment** via the various **production linkages** (see *Linkage theory* in [Annex 1](#)); and
- further employment opportunities via the **consumption linkages** as those employed directly and indirectly by the sector spend their salaries and wages in the country (see *Linkage theory*, [Annex 1](#)). This employment channel is also referred to as **induced employment**.

It is important for low-income developing countries to recognize that the oil and gas sector offers only limited scope for the direct employment of unskilled and inexperienced staff. The oil and gas sector's direct labour demand is typically focused on certified trades and crafts skills. Typically, these competencies will include and require both formal qualifications based on a minimum of lower secondary education and relevant prior work experience.

Indirect employment opportunities through the various production linkages usually require skill levels similar to those for direct labour, often with a greater variety of profiles. Only induced employment offers more opportunities for lower skilled staff.

### IDENTIFYING THE LOCAL CAPACITY (SUPPLY SIDE ANALYSIS)

Local content has the potential to stimulate economic activity and encourage additional investment and employment in the local economy. Achieving enhanced economic activity is, however, not automatic and is dependent upon the existence of favourable macroeconomic and microeconomic conditions. Further, achieving globally competitive supply chains and workforces is challenging. Table 3 lists factors that typically determine the ability of local suppliers and workforce to be competitive in terms of cost, quality, volume, scheduling and reliability. These factors vary from country to country and between regions within a country.

The goal of supply side analysis is to identify the challenges and opportunities associated with meeting

Table 3 Factors contributing to the competitiveness of local workforce and suppliers

Source: adapted from WBCSD, 2013

#### MICROECONOMIC FACTORS (FIRM LEVEL)

- **Human resources and organizational capabilities:** managerial and technical skills, operational processes, HSE and quality control.
- **Technological capabilities:** availability of technology and the ability to adopt and deploy it; this is particularly relevant for industry-specific goods and services with a higher technology component.
- **Access to finance:** loan and equity finance for capital and operational needs; the constraints include high interest rates and collateral requirements that are not feasible for SMEs.
- **Access to local infrastructure:** availability and quality of local infrastructure, roads, utilities.
- **Access to procurement:** awareness of, and ability to apply for, opportunities: communication, prequalification, tender documentation and processes.

#### MACROECONOMIC FACTORS (COUNTRY'S BUSINESS-ENABLING ENVIRONMENT)

- **Regulatory environment:** ease of starting and running a business: permits, licensing, inspections, taxation, certification.
- **National infrastructure:** access to nationwide transport infrastructure, electricity, telecommunications.
- **Labour market:** broader educational and training policies at unskilled, semi-skilled and technical (TVET/VET) and higher education levels.
- **Capital markets:** macroeconomic financial situation: the availability of credit, the maturity of equity markets, and the size of a country's overall liquidity pool.
- **Investment incentives and import and export regimes** that impact the ability to start and scale up local businesses.

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### Establishing a company strategy for collaborating with stakeholders on a shared vision for local content

local employment and sourcing expectations. The gap between the supply and the demand side can potentially be addressed by enterprise and skills development programmes. In some contexts, the firm-level microeconomic constraints (as described in the left side of Table 3) can be addressed by individual company- or industry-led initiatives. In some contexts, public policy interventions are needed to address constraints in the enabling environment (as in the right side of Table 3). However, as mentioned earlier, there is a growing trend of addressing the full range of constraints through collaborative stakeholder efforts that may include the oil and gas industry, government, international finance institutions, NGOs and educational institutions.

Annex 4 offers guidance on how to examine the factors that influence local capacity. Two levels of analysis are usually required:

- identification of the key constraints on local capacity that would prevent the take up of opportunities provided by the industry; and
- prioritization of capacity constraints and evaluation of the potential costs and benefits of addressing them.

## DEFINING ROLES AND TIMING

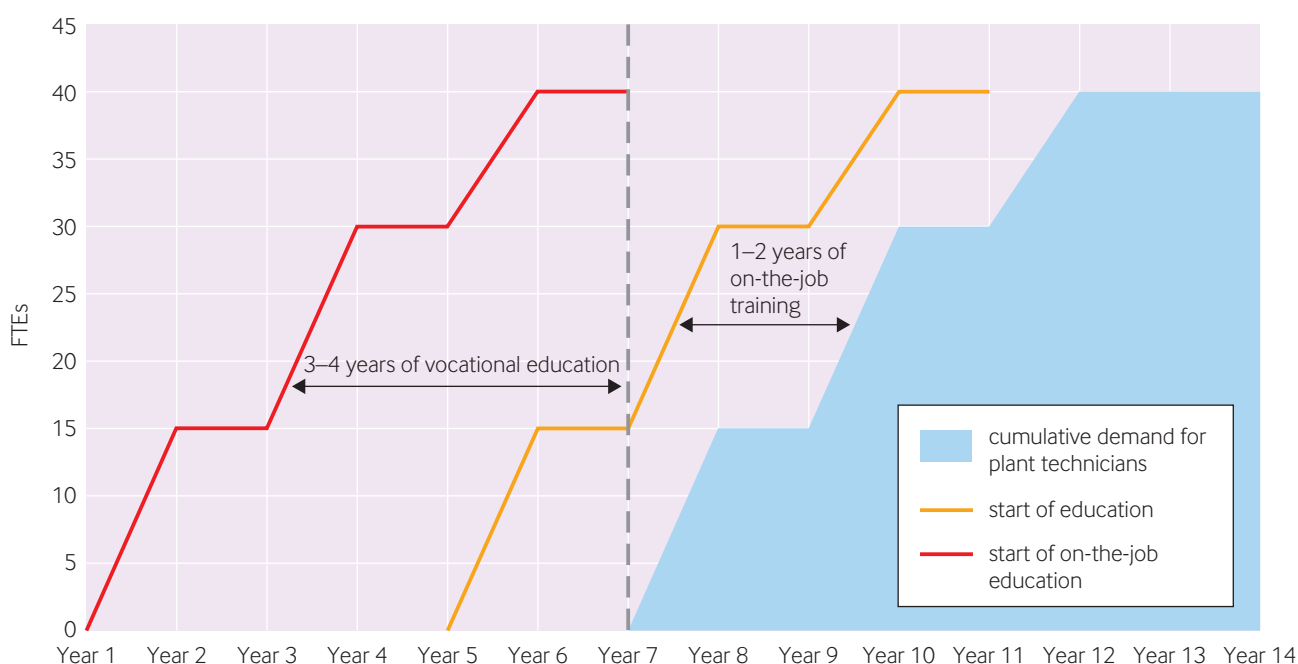
When defining initiatives to address the capacity constraints identified by a supply side analysis, and assigning roles and allocating costs, partners need to consider their respective organizational strengths and constraints. Workforce and supplier development requires medium-term planning horizons. The earlier these efforts are started, the more likely the labour market and enterprises will be both prepared for the demand and available in future to serve additional projects and sector-related activities. Timely workforce and supplier development is particularly important during the construction phase when opportunities are many, but the activity time span is short. In practical terms, companies need to develop workforce curves associated with the project at pre-FEED stage.

Figure 6 illustrates the importance of starting early. Lead times for development of some skills can be lengthy.

Companies should note the importance of engaging proactively with the government throughout the entire project life cycle in order to coordinate efforts and ensure local content and other industrial policies are aligned with industry's demand for workforce, goods and services.

Figure 6 Illustrative demand and lead times for plant technicians

Source: adapted from Schlumberger, 2013





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#### Exploration phase

The high-risk profile of exploration activities constrains the ability of resource developers to build local capacity before starting the development phase. It is therefore important for government to provide leadership to ensure early planning for local capacity development. To provide this, government will need to implement industrial and labour market strategies, including national education and training systems that align a country's enterprise and human capacity building with industry's potential needs. During exploration, the dialogue between the government and resource developers should focus on establishing a collaborative process to conduct relevant analysis and develop a strategy for local workforce and supplier development.

#### Development phase

Major contractors (including EPC contractors) typically account for the majority of local spend and employment during the development phase. Collaboration between resource developers and major contractors, supported by shared accountability is therefore advisable. Major contractors should be involved early to help develop capacity and to link local content planning and implementation activities to key engineering, procurement and construction milestones.



The conceptual and planning phase presents an opportunity to guide, and collaborate with, EPC and other major contractors to jointly assess and develop supplier capabilities, to set and monitor realistic performance indicators, and to plan for demobilization. During FEED, construction and operations, contracting strategies are developed and present a good opportunity to enable shared value opportunities. At this stage, workforce and supplier surveys and gap analysis can reveal specific opportunities that can focus the attention of stakeholders. Clear expectations, including roles and responsibilities, should be documented with major contractors. (See *Adapting procurement and contracting* on page 31 for more details.)

Fabrication, assembly and construction are usually managed by large EPC contractors. Consequently, the ability of local businesses/workforce to access opportunities often depends more on the efforts of major contractors than on oil and gas resource developers. Including major contractors in the planning for workforce training and capacity development of local suppliers is therefore strategic.

A major challenge for project developers is in planning for local employment and sourcing within tight timelines to meet peak construction requirements, as there is a short time period post-FID and before construction starts. Planning for the construction phase requires a collaborative approach between industry and government and across industry, taking account of linkages to other projects in the oil and gas and other sectors.

#### Operations phase

The operation phase presents opportunities to develop longer-term, sustainable local capabilities. However, to ensure sustainability, progression should be deliberate but at a realistic pace to ensure that local content programmes can consistently deliver high value to local economies.

Partnerships with government, other industry players, and vocational and technical education/higher education/R&D institutions should focus on investments with a longer-term horizon, such as developing competitive local value chains and promoting innovation and technology.



#### Decommissioning phase

The primary focus, both before and in the lead up to decommissioning, should be assisting the local workforce and businesses to diversify (where practical) to reduce their dependence on the operation and remain viable beyond closure.

#### Examples of collaborative actions

Examples of initiatives that companies, governments, major contractors and others can implement through partnerships to address identified gaps in a range of specific and unique contexts are available at [www.ipieca.org/sites/default/files/Local\\_content\\_case\\_studies\\_2016.pdf](http://www.ipieca.org/sites/default/files/Local_content_case_studies_2016.pdf). These examples are not prescribed as 'best practice', but do provide options to consider. Key topics covered include:

- **skills development programmes:** considerations for strengthening technical and vocational education and training (TVET), and case studies illustrating skills gap assessments, defining of skills competency standards, interventions at all levels of education (from primary to post-graduate) and knowledge transfer for talent acceleration;
- **enterprise centres/vendor development programmes:** alternatives for delivery models and considerations for implementation are offered, and case studies of initiatives designed to support supplier development, including supplier diversity, community agreements to address the supply/demand gap, community equity ownership in supplier firms, access to finance, online databases linking local businesses to contract opportunities, and partnerships between local and international SMEs to exchange know-how and improve access to markets; and
- **strategic and substantial investments with a long-term horizon:** cluster initiatives for world-class supplier development, common use infrastructure and investments in access to energy.

#### Special focus on marginalized/vulnerable groups

In many contexts in which oil and gas companies operate, historically marginalized groups (e.g. women, Indigenous Peoples or ethnic minorities) often represent large portions of the population but are often the least engaged in shared value opportunities that can result from local content initiatives. Special consideration and care should be given to having specific objectives and

plans related to these groups in both company plans and in collaborative strategies. Many institutions support such efforts. See the *References and further reading* section for additional resources.

#### SETTING OBJECTIVES AND MONITORING PROGRESS

Reaching agreements on local content objectives can be aided by including a structured, systematic process whereby stakeholders provide input into an evaluation of local content objectives and compare alternatives using a number of criteria, including government priorities and the costs and benefits to diverse stakeholders at a national, regional, community and/or targeted group level. A strong monitoring and evaluation (M&E) system can provide stakeholders with valuable information to inform future action.

Roles and responsibilities for the M&E programme should be clearly defined. If there is a lead organization for a country's local content stewardship, it would be responsible for collecting the data from various stakeholders, then synthesising and reporting it.

Selecting indicators that measure strategic outcomes and impacts, rather than simply focusing on implementation, can help drive resource sharing between the government and other stakeholders involved in informing the strategy. Some indicators that may be considered include:

- Agreed stakeholder objectives, i.e. who the local content efforts are designed to serve, and the purpose for which they are intended (e.g. to support economic transformation and diversification, to reduce high youth unemployment, to provide economic opportunities to neighbouring communities, etc). Approaches that measure multiplier effects can be used to capture indirect and induced economic impacts generated by local content programmes (See *Multiplier effects* in [Annex 1](#) for details)
- Indicators that demonstrate contribution to the collaborative strategy (see *Company strategy indicators* and *Company action plan indicators* on page 36).
- Indicators related to baseline conditions linked to the objectives (e.g health of the local economy, human capital, and ease of doing business). In many

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countries, government statistics departments conduct periodic surveys (census, industry surveys, employment, education, etc.), often supported by international institutions (e.g. World Bank).

- Indicators related to local capacity development programmes that provide evidence of programme impact. See the [References and further reading](#) section for information on performance story reporting.

It is also recommended that indicators be disaggregated by gender and other categories that isolate for the impact on historically marginalized/vulnerable groups, such as ethnic minorities, indigenous populations and youth. In many contexts in which oil and gas companies operate, historically marginalized groups have limited access to formal resources. They are also often affected differently by oil and gas operations. Without measuring inputs, outputs and impact for historically marginalized groups, M&E may capture only a partial and distorted picture.

# Set up the organization to deliver value from local content



## Set up the organization to deliver value from local content

This section addresses how companies can establish an organizational structure, systems and procedures to deliver value from local content efforts.

### EVALUATING THE BUSINESS CASE

A clear understanding of the costs and benefits of local content initiatives is necessary for companies to:

- assess the potential trade-offs between responding to external pressures and internal commercial imperatives, and understand the true benefits of local content investments; and
- justify local content budgets that compete with other corporate priorities, and prioritize investments.

The incentives to pursue local content are widely accepted by industry. Local content provides both costs and benefits, though it can be more difficult to quantify the latter. Examples of some of the costs that oil and gas resource developers have experienced include:

- training and education to increase local human and economic capital, and enterprise and workforce capability and capacity to meet industry demand and standards;
- delayed revenue stream due to the extended time frames required for local content development;
- paying premium prices to local suppliers to comply with preferencing requirements;
- increased administrative costs to communicate opportunities at the local level;
- increased transaction costs related to managing multiple smaller contracts to enhance accessibility to local suppliers;
- increased administrative costs in running networking events and matching large/international suppliers and contractors with local businesses;
- time allocated to participating in stakeholder dialogue activities; and
- increased administrative costs associated with compliance with legal requirements for verification

and reporting (where applicable), and tracking and compiling key performance metrics.

Tools exist to assess the business value of local content initiatives. One such tool is the [Financial Valuation Tool for Sustainability Investments](#) developed by IFC, Rio Tinto and Deloitte. Although the model targets broader sustainability interventions, its principles and core components are applicable to local content. The model quantifies the risks, creates a net present value (NPV) calculation for a scenario 'with' a local content programme, and then subtracts the NPV of the scenario 'without' a local content programme. The result is the NPV of the investment in local content programmes.

### DEFINING THE COMPANY'S STRATEGY FOR LOCAL CONTENT

A company's local content strategy needs to balance the company's internal imperatives against a country's socio-economic context. It expresses the company's commitment to the collaborative strategy and how the company's activity will support that strategy, articulates the trade-offs that have been made, describes objectives to guide an internal action plan, sets goals, and defines the organizational structure and systems required to deliver on the strategy.

Key questions that a company strategy would answer include:

- Business case: what are the key business objectives the company wants to achieve in terms of local content?
- Contribution to collaborative strategy: what are the stakeholder objectives that the company strategy shares?



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### Set up the organization to deliver value from local content

- Definitions: how is local content defined within the specific country context?
- Demand side analysis: what goods and services/workforce will the operation need over the project life cycle?
- Supply side analysis: what potential and actual local suppliers/workforce are present and to what extent do they have the ability to meet demand requirements?
- Gap analysis: how will the gap between supply and demand be bridged? What adaptations to procurement and contracting procedures and investment in capacity development programmes might be required?
- Targets: what levels of local content could be achieved by bridging the gap between supply and demand?
- Organization: what resources are needed to deliver the company strategy?
- Ongoing stakeholder engagement, communication and reporting: who is important and/or interested in the company local content strategy, and how will they be involved and communicated with?

## RESOURCING REQUIREMENTS

The wide range of functions and disciplines required to increase local content across the project life cycle is evident in the activities listed in Table 4 on page 30; the table provides a sample high-level local content action plan at the country/asset level.

Recognizing the cross-functional nature of a company action plan, successful implementation requires a number of internal resourcing elements to be put in place. Some potential approaches include:

- **At corporate/headquarters level:**
  - communication in respect of the corporation's view on local content efforts;
  - governance structure (e.g. internal steering committee) established for oversight and high level strategic direction for local content efforts;
  - provision of a roadmap/guidelines to countries/assets to enable alignment with corporate/headquarters strategy;
  - provision of a roadmap/guidelines on collaboration between corporate functions—e.g. procurement/supply chain management, human resources management and community/public/external affairs; and
  - allocation of appropriate resourcing and budget at both headquarters and country levels.



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Set up the organization to deliver value from local content

Table 4 Example of a company's Local Content Action Plan by project phase

PHASE		TYPICAL LOCAL CONTENT ACTIVITIES	POTENTIALLY UNDERTAKEN BY COMPANY ONLY, OR SHARED WITH OTHER STAKEHOLDERS
Exploration		● Institutional analysis and stakeholder analysis	Company
		● Preliminary engagement with government, other industry and stakeholders to establish collaborative relationships	Company
		● Preliminary demand analysis	Shared
		● Preliminary baseline assessment of supply	Shared
Development	Feasibility, concept design, FEED	● Agreement with government on local content strategies	Company
		● Concept selection, accounting for local content optimization	Company
		● Detailed project demand analysis	Company
		● Communication of project demand to local businesses and other stakeholders	Company
		● Detailed workforce and supplier capability surveys and gap analysis	Shared
Development	Detailed engineering, procurement, fabrication, assembly, construction	● Local content plan for detailed engineering, fabrication/assembly, construction	Company
		● Embedding of local content considerations as part of detailed design	Company
		● Implementation and monitoring of fabrication/construction local content plan	Company
		● Supplier matching events	Shared
		● Local content plan for operations phase	Company
		● Training of workforce for operations phase	Shared
		● Report local content performance to government and other stakeholders	Company
Operation		● Plan for managing discontinued workforce after the end of construction phase	Shared
		● Determine staircase of capabilities—progression from simple contracts to more complex ones	Company
		● Capacity building of suppliers and workforce	Shared
Decommissioning		● Report local content performance to government and other stakeholders	Company
		● Decommissioning plan including local impact and mitigation measures	Company
		● Advance notice to local businesses and workforce of decommissioning time frames	Company
Decommissioning		● Workforce transitional training	Shared



- **At country/asset level:** competent staff that cover the following responsibilities:
  - formulation of the company strategy for a particular project/asset;
  - representation at external forums, and in the collaborative strategy multistakeholder process, if such a process exists;
  - project management of action plan implementation, and reporting to the internal steering committee;
  - implementation of actions that fall within the remit of relevant functions, e.g. from new business development, government relations, social performance, social investment, human resources, supply chain, projects, operations, and health and safety; and
  - coordination of the inputs/resources of all functions under whose remit any of the implementation actions fall.

## ADAPTING PROCUREMENT AND CONTRACTING

Many oil and gas companies have adapted their procurement and contracting to increase local business access to opportunities, employing methods such as:

- including local content considerations in tender processes;
- breaking large contracts into smaller ones (unbundling) to create opportunities for smaller local suppliers; and
- providing guidance for the preparation of tenders.

Before engaging in such methods, it is important to ensure that such actions do not contravene national legal frameworks or international trade agreements, some of which prohibit preferential selection methods that may be considered to be anti-competitive.

Highlighted below are four types of demand-side intervention: (i) communicating opportunities; (ii) simplified procurement and contracting; (iii) supplier prequalification; and (iv) involving lead contractors and suppliers.

It is worth noting that these interventions typically require an increase in costs to the resource developer in the short term, and need to be weighed against the

business and stakeholder benefits sought over the medium to long term. However, there may be opportunity for a resource developer to work collaboratively with a multilateral development agency or the host government's economic development branch to establish the necessary platform or platforms for the following interventions, with the potential to offset some of the incremental cost.

## Communicating opportunities

Two common obstacles to increasing local content are a lack of awareness among local businesses of opportunities and how to access these opportunities, and a lack of understanding of the requirements for tendering. These can be addressed by: informing businesses about tendering opportunities; educating them about standards and evaluation criteria; and familiarizing them with the company's procurement systems.

To understand which mechanisms will be effective in reaching the businesses being targeted, it is first necessary to understand how local businesses network and communicate. Some questions to consider include:

- To which technologies do SMEs have access? For example, do they have internet and mobile phone access and use? Are these used frequently?
- How do community members most commonly access information on tenders?
- How is other information spread through the community? What are the available local channels? Radio? TV? Newspapers?
- Is there a strong sector of community based or civil society organizations? To what extent are community members active in these organizations?
- Are business forums, associations or chambers of commerce available to businesses? To what extent do SMEs participate in them? How strong or weak are these groups?

Channels to communicate opportunities for local businesses include:

- enterprise centres;
- information centres;
- chambers of commerce or business associations;
- procurement team;
- supplier forums;

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### Set up the organization to deliver value from local content

- reception desk;
- email, SMS, or social media;
- website;
- local radio or newspaper;
- community notice boards; and
- community newsletter.

#### Ensuring tendering and contracting processes are clearly understood

In some contexts, SMEs can be challenged by complex corporate procurement processes. The ability of SMEs to meet oil and gas companies' stringent tendering and contracting requirements is often hampered by their limited financial, technical and managerial capacity. Some of the ways in which tendering and contracting may be simplified to support the ability of SMEs to participate are listed below:

- **Tender documentation requirements:** required items may include tax clearance certificates, organization charts, shareholder agreements, VAT registration, etc. Requirements can be tailored according to the risk and complexity of the goods or services being procured.
- **Information on the tendering process:** regular workshops open to potential suppliers can provide information on the tendering process and on specific requirements, and can help to manage expectations and communicate available support. Offering feedback on unsuccessful bids can also enhance understanding.
- **e-procurement systems:** ensure fees are affordable; providers offer local suppliers free or cost-reduced training on the use of such systems; data usage requirements account for more restricted data limits; simpler language and multiple language options are offered if necessary.

#### Supplier pre-qualification

When local SMEs are interested in being considered for an opportunity, and proceed to register their businesses on the respective vendor databases of the operator, EPC companies and other large suppliers, they often face the need to use a range of different systems, each with its own requirements. This introduces an administrative and cost burden to SMEs, without any guarantee that an opportunity will actually become reality.

Stringent pre-qualification requirements may present another obstacle. Support can be provided to SMEs to meet international requirements through co-financed projects to develop HSE, technical and managerial capabilities of suppliers, e.g. supplier certification, international accreditation of standards certification organizations, and training programmes.

#### Involving lead contractors and suppliers

The ability to achieve local content goals is heavily reliant on how the contracts and procurement functions design their contract strategy and gear their tender evaluation criteria to align the practices of lead contractors and suppliers. An additional contributing factor is how the resource developer works with the contracted partner to develop its capacity to deliver.

When planning a typical 3–5 year construction phase, it is important to define the role and responsibilities of the lead contractor. Maximizing local content in the construction phase might require commencement of capability development one to two years in advance. Early involvement of contractors can help capacity development and also link local content planning and implementation activities to specific engineering, procurement and construction milestones.



## IDENTIFYING AND MITIGATING RISKS

### Corrupt practices

Implementation of local content requirements can expose resource developers to increased risk of reputational damage and/or legal liabilities, if not done in a transparent manner and without appropriate safeguards and mitigations. This risk arises from:

- **involvement of government and public officials** in the design and implementation of local content requirements where there may be attempts to use these requirements for personal benefit or to favour family members or business or political allies, or other circumstances where ethnic, tribal or other affiliations come into play (see also Figures 1 and 2 in Section 1);
- **close links to the contracting and procurement (supply chain) activities**, the area where corrupt and fraudulent practices are most likely to arise, and which could also be open to anti-competitive behaviours, such as bid-rigging or collusive tendering;
- **exposure to potential corrupt practices by the subcontractor or agents**, an area where resource developers have less leverage in applying safeguards and mitigations;
- **exposure to potential corrupt practices in joint ventures** with local partners; and
- **potential undisclosed conflicts of interest**, which could stimulate nepotism and other corrupt practices.

Examples of corrupt practices associated with local content typically include:

- conflict of interest and favouring based on family/business/political/ethnic, etc. affiliation;
- bribes and 'kickbacks' to local companies to serve as a 'front' in bidding processes in order to gain access to oil and gas contracts (see also Figure 2 in Section 1);
- facilitation payments;
- offering and receiving gifts and hospitality to unduly influence business decisions;
- fraud; and
- utilizing a chain of companies (often offshore), to obscure the ultimate beneficial owners, for example in relation to the award of contracts.

The corporate risk associated with corrupt practices can partially be addressed through the understanding of a company's local content programme (as outlined in Section 1), alongside the design and implementation of clear contracting and procurement standards, and an effective compliance programme that addresses the respective bribery and corruption as well as broader ethics and compliance risks. Such a programme should typically be linked and developed within the framework of a company's corporate governance and business conduct standards. Important elements of such a compliance programme include:

- **clear standards**, for example, clearly stated prohibition against bribery and corruption in all forms, including facilitation payments;
- **communication** of anti-bribery and corruption standards and requirements to all employees and contractors from the highest executive position;
- **procedures** to ensure compliance with applicable anti-bribery and corruption laws, e.g. procedures or guidelines in respect of contracting with third parties, gifts and hospitality, conflicts of interest or setting up ventures with local partners;
- **mandatory due diligence** to know the respective local contractors and suppliers and identify any 'red flags', and model anti-bribery and corruption clauses to be used in the respective contracts;
- **financial controls** that enable a transparent view of transactions;
- **training**, such as risk-based training of a company's staff and contractors on the key company anti-corruption policy requirements;
- **statement of employees' certification of compliance**;
- **global helpline** available for all employees to report a concern;
- **audit programmes** to monitor compliance;
- **consequence management**;
- **a clear governance structure**; and
- **records retention procedures**.

'Red flags' identified as a part of the mandatory due diligence procedure in respect of local contracts and suppliers need to be cleared, i.e. clarified and mitigated before the relevant contracts can be entered into.

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Examples of 'red flags' could include situations where:

- a local contractor/supplier is recommended by a governmental official;
- a local contractor/supplier is related to, or closely associated with, a government official;
- a local contractor/supplier refuses to comply with the due diligence process (e.g. refuses to provide ownership documents or has obscure ownership structure) or provides incomplete or inaccurate information;
- a local contractor/supplier is a 'briefcase company' and/incorporated in an offshore jurisdiction and/or requests payments to offshore bank accounts;
- a local contractor/supplier clearly lacks experience and capability to perform the required scope;
- there is reason to believe that there is, or may be, a violation of local law or policy (e.g. local tax, competition law), if the arrangements proposed with the local contractor/supplier are implemented.

In addition, the corruption risk in local content can partially be addressed through open collaborative effort by various stakeholders. However, where corruption is endemic in the local environment, actions may be necessary that extend beyond the scope of the oil and gas industry. Such efforts may be aimed at enhancing transparency and accountability, including rules on conflicts of interest, asset declaration, and public access to information about which entities have been awarded contracts. The oil and gas industry can support the role of local business associations in training local SMEs and providing them with tools and resources for the development of effective internal control, ethics, and compliance measures for the purpose of preventing and detecting corruption (OECD, 2009).

#### Adherence to labour, social, human rights and environmental standards

A common practice in the oil and gas industry is to apply international frameworks and standards to manage labour, social, human rights and environmental performance. Examples include the International Finance Corporation Performance Standards (IFC PS), United Nations Guiding Principles on Business and Human Rights, Voluntary Principles on Security and Human Rights and various International Labour Organization (ILO) standards. They are used in the development of management plans to avoid, minimize or mitigate



negative impacts associated with the activities of contractors. Mitigation measures include:

- building requirements into the contracts of EPC contractors and large international suppliers with regard to labour, social and environmental performance of local subcontractors;
- evaluation of tenders so that key risks are given appropriate prominence;
- incentives and punitive measures to achieve compliance;
- induction and training on code of conduct, camp rules, interaction with local communities, grievance procedures; and
- a system for managing issues in the field.

#### Operations in conflict-affected areas

Companies' recruitment and procurement practices, and supplier and workforce development initiatives, can increase pre-existing tensions in a community and trigger conflict. Even in relatively peaceful environments, opportunities created by major investments can alter traditional systems and raise tensions. Recruitment and procurement could unintentionally favour a privileged ethnic group that tends to have better education, work experience, access to finance, technology and other



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resources. Supplier and workforce development programmes can also feed into local tensions and fuel conflict through their selection of beneficiaries and priorities.

Mitigation measures should be based on an accurate understanding of any existing or potential conflict and its protagonists, and of the spectrum of influence that a company's activities may have on such conflict.

Measures can include:

- early, consistent and meaningful stakeholder engagement to build trust;
- inclusive and transparent employment policies and 'reconciliation-in-the-workplace' programmes that foster positive inter-group relationships;
- transparency in procurement from local suppliers, and engagement with major contractors to ensure inclusive and transparent procurement;
- investment in long-term skills training programmes; and
- engagement with government and other stakeholders on economic diversification and inclusive job-creation efforts.

#### Negative impacts of local content development efforts on communities

Local content development programmes can drain the local workforce and suppliers from other sectors and displace traditional economic activities like farming, livestock rearing, fishing, etc. Communities may grow dependent on a project's employment and supply contracts, with few livelihood options beyond the life of the project. There is also a risk of disturbing power relations in the community and affecting social cohesion: for example, opportunities may be taken up by a small group of influential community leaders, and may not be visible or accessible to the broader community.

Mitigation measures may include:

- ensuring thorough upfront community profiling and stakeholder analysis;
- communication strategies that reach the broader community rather than targeting specific groups;
- investment in developing alternative markets, by partnering with government and aligning with regional development and diversification initiatives to reduce dependence on the project;

- selecting supplier development and skills development implementation partners who understand and know how to work across social structures; and
- invest in skills and enterprise development in support services unrelated to supply chain opportunities.

#### MONITORING AND EVALUATION

Any local content strategy and action plan should be supported by a meaningful monitoring and evaluation (M&E) system. It enables managers to track progress, demonstrate results and take corrective action to improve delivery. What gets measured tends to get done.

While a standardized methodology for local content performance measurement across industry may enable consistency and comparability of results, there are several barriers to its application. The overview to this guidance highlighted a lack of uniformity in definitions: in different contexts governments and industry use different definitions of 'local' and 'content', as well as different frameworks to measure and report local content. There is also a lack of reliable methods to measure the true extent of local value addition.





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Local content M&E can be resource intensive. To measure local content accurately, it may be necessary to separate various aspects of procurement, human resources, social investment and other activities. In most oil and gas companies, management information/enterprise resource planning (ERP) systems are shared globally by all the company's subsidiaries. However, ERP systems are not built to measure local content, and therefore customized solutions are often needed. The design of such solutions, which aim for replication and standardization, adds complexity since they need to take into account the differences in definitions and the type of oil and gas projects.

The process of **monitoring** involves frequently checking whether the objectives identified at the outset are being met. The process of **evaluation** happens after a longer period and requires additional consideration of whether the objectives are valid and whether they should be adapted to changes in the environment.

In contexts where local content-related regulatory requirements and contractual provisions exist, minimum parameters for compliance monitoring and reporting are prescribed. Governments may provide industry with templates for monitoring and reporting, including indicators, measurement methods, reporting format and frequency, etc. Objectives need to be translated into a set of key performance indicators (KPIs). Performance measurement should assess both qualitative and quantitative dimensions of change. The number of indicators to be developed depends on how many are needed to answer the question, 'Has the objective been achieved?'

Three broad categories of indicators need to be included in local content M&E: strategy; company action plan; and capacity development programme investments. The first two are described below; the third, programme-level M&E, is described in the subsection on *Setting objectives and monitoring progress* on pages 25–26.

#### Company strategy indicators

These are indicators that demonstrate companies' contributions to collaborative strategies. Many companies collect local content data for international voluntary reporting initiatives, e.g. through the UN Global Compact<sup>1</sup>, The Global Reporting Initiative<sup>2</sup> and IPIECA's sustainability reporting guidance (IPIECA, 2015) (See Box 1). These indicators may or may not be relevant to the stakeholder objectives, or might need to be supplemented by others.

#### Company action plan indicators

At this level, M&E is internally oriented to the company and involves monitoring commitment delivery and assisting with problem solving. The metrics selected to monitor the action plan are indicators for whether the commitment is on time and within budget. Progress is tracked using the company's usual project scheduling methods and performance of team members is monitored through the usual staff performance management reviews.

#### Box 1 Local content indicators in international reporting frameworks

##### Global Reporting Initiative (GRI)<sup>2</sup>:

- EC6 Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation
- EC7 Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation

##### IPIECA Sustainability Reporting (IPIECA, 2015):

- SE5 Local content practices
- SE6 Local hiring practices
- SE7 Local procurement and supplier development

<sup>1</sup> [unglobalcompact.org](http://unglobalcompact.org)

<sup>2</sup> [globalreporting.org](http://globalreporting.org)

# References and further reading

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## References and further reading

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### REFERENCES

IPIECA (2012). *Voluntary Principles on Security and Human Rights: Implementation Guidance Tools (IGT)*. [www.ipieca.org/publication/voluntary-principles-security-and-human-rights-implementation-guidance-tools](http://www.ipieca.org/publication/voluntary-principles-security-and-human-rights-implementation-guidance-tools)

IPIECA (2015). *Oil and gas industry guidance on voluntary sustainability reporting*. <http://www.ipieca.org/publication/oil-and-gas-industry-guidance-voluntary-sustainability-reporting-3rd-edition>

OECD (2009). *Good Practice Guidance on Internal Controls, Ethics, and Compliance*. Annex II to the 'Recommendation for Further Combating Bribery of Foreign Public Officials in International Business Transactions' (the 'Anti-Bribery Recommendations'). <http://www.oecd.org/investment/anti-bribery/anti-briberyconvention/44884389.pdf>

Schlumberger (2013). *Transforming Reserves into Production—an opportunity for Africa*. Cape Town. Schlumberger Business Consulting.

WBCSD (2013). *A Framework for Dialogue on National Market Participation and Competitiveness*, Geneva and New York, WBCSD. [www.wbcsd.org/nmpi.aspx](http://www.wbcsd.org/nmpi.aspx)

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## FURTHER READING

### Section 2: Review the local content context

CSSI (2016). *Local Content Laws & Contractual Provisions—country profiles* (website). Columbia Center on Sustainable Investment. <http://ccsi.columbia.edu/work/projects/local-content-laws-contractual-provisions>

This website provides country profiles for a range of countries, summarizing the provisions in legal instruments dealing with local content, and highlighting examples of high impact clauses. The profiles examine provisions dealing with local employment, training, procurement, technology transfer and local content plans, as well as local ownership, depending on the country's approach to, and definition of, local content.

McKinsey Global Institute (2013). *Reverse the curse: Maximizing the potential of resource-driven economies*. [www.mckinsey.com/insights/energy\\_resources\\_materials/reverse\\_the\\_curse\\_maximizing\\_the\\_potential\\_of\\_resource\\_driven\\_economies](http://www.mckinsey.com/insights/energy_resources_materials/reverse_the_curse_maximizing_the_potential_of_resource_driven_economies)

This report discusses how countries that have large resource endowments can handle them more effectively in order to bolster economic development. It includes approaches for policymakers to ensure that their resource endowments are used to maximize socio-economic benefits through local content, shared infrastructure and economic diversification.

UNCTAD (2012). *Extractive Industries: Optimizing Value Retention in Host Countries*.

United Nations Conference on Trade and Development, New York and Geneva.

[http://unctad.xiii.org/en/SessionDocument/suc2012d1\\_en.pdf](http://unctad.xiii.org/en/SessionDocument/suc2012d1_en.pdf)

This document discusses challenges of value retention from the oil, gas and mining sectors and introduces industrial policy options aimed at the optimization of the local content.

### Section 3: Collaborate on a shared vision for local content

Australian Government (2009). *Developing a performance story report: user guide* (website and downloads). <http://nrmonline.nrm.gov.au/catalog/mql:2162>

This guide presents one of the frameworks used to measure performance with an emphasis on qualitative indicators. A 'performance story report' is a statement about progress towards a project goal supported by multiple lines of evidence and describing the causal links that show how the achievements were accomplished.

Ernst & Young (2014). *Getting ready for UK shale gas, Supply chain and skills requirements and opportunities*. [www.ey.com/Publication/vwLUAssets/Getting\\_ready\\_for\\_UK\\_shale\\_gas/\\$FILE/EY-Getting-ready-for-UK-shale-gas-April-2014.pdf](http://www.ey.com/Publication/vwLUAssets/Getting_ready_for_UK_shale_gas/$FILE/EY-Getting-ready-for-UK-shale-gas-April-2014.pdf)

This report provides an example of a country-wide demand side analysis. It looks at the supply chain, skills and shared infrastructure demand of the shale gas industry, maps existing capabilities in the UK, identifies gaps and provides recommendations for closing the gaps.

IGC (2012). *The Enterprise Map Series* (website and downloads).

International Growth Centre, London School of Economics and Political Science.

[www.theigc.org/project/the-enterprise-map-series](http://www.theigc.org/project/the-enterprise-map-series)

This website provides baseline information on industrial sectors in a number of countries in sub-Saharan Africa. Each volume in the *Series* begins with a general overview, followed by a series of chapters dedicated to each major industry in the country, spanning agribusiness, manufacturing and construction. Detailed profiles are provided of selected companies in each market and submarket.

IPIECA (2012). *Voluntary Principles on Security and Human Rights: Implementation Guidance Tools (IGT)*. Module 1, 'Stakeholder Engagement', pages 10–21. [www.ipieca.org/publication/voluntary-principles-security-and-human-rights-implementation-guidance-tools](http://www.ipieca.org/publication/voluntary-principles-security-and-human-rights-implementation-guidance-tools)

Module 1 of this document provides guidance and tools for stakeholder identification, engagement and resolution of challenges. The guidance could be applied to an overall strategy for country stakeholder engagement, including on local content issues.

USAID (2016). *Value Chain Development Wiki*. (USAID Microlinks website).

[www.microlinks.org/good-practice-center/value-chain-wiki](http://www.microlinks.org/good-practice-center/value-chain-wiki)

This website provides a detailed framework for a supplier gap analysis. The value chain approach seeks to understand the firms that operate within an industry—from input suppliers to end-market buyers, the support markets that provide technical, business and financial services to the industry, and the business environment in which the industry operates.

USAID (2016). *CARE/MEDA e-Course on Market Analysis and Value Chain Project Design* (website).

<https://www.microlinks.org/training-group/caremeda-e-course-market-analysis-and-value-chain-project-design>,

This online course provides an introduction to market-based economic development and a standard approach to conducting market analysis and designing value chain initiatives. It is particularly useful for the integration of gender and sustainable livelihoods consideration in the analysis and design of supplier development programmes.

VETA/VSO/Tanzania LNG Partners (2014). *Pathway to vocational employment in the emerging Tanzanian gas sector. A Collaborative Assessment of Vocational and Educational Training Needs*. November 2014, Dar es Salaam.

[https://www.vso.ie/sites/vso\\_hub/files/ic14071\\_tanzania\\_voc\\_skills\\_gaps.pdf](https://www.vso.ie/sites/vso_hub/files/ic14071_tanzania_voc_skills_gaps.pdf)

Vital Voices (2016). *Vital Voices Global Partnership* (website). [www.vitalvoices.org](http://www.vitalvoices.org)

Vital Voices is an international NGO that identifies, trains and empowers emerging women leaders and social entrepreneurs around the globe. Through their 'economic empowerment' stream of work they identify high-potential yet underserved women-owned SMEs and support them by: providing business mentoring programmes and leadership and skills training; providing access to peers, markets and opportunities; and informing and influencing stakeholders through advocacy and research. An ecosystem mapping report of women entrepreneurs can be downloaded from the website.

WBCSD (2012). *A Framework for Dialogue on National Market Participation and Competitiveness* (website). The World Business Council for Sustainable Development. [www.wbcsd.org/nmpi.aspx](http://www.wbcsd.org/nmpi.aspx)

This website provides guidance for building a dialogue between business and government on supplier competitiveness to enable local firms' participation in the value chains of large inward investments and to encourage local economic development. The framework lays out a strategy for achieving improved competitiveness of local firms through shared interests rather than through mandatory requirements.



WBENC and WEConnect (2016). *Women Owned* (website).

[www.womenownedlogo.com/about-women-owned](http://www.womenownedlogo.com/about-women-owned)

The *Women Owned* project is a certification initiative that provides benefits to women-owned businesses, including: access to supplier diversity and procurement executives at multinational corporations; access to mentoring, education and capacity development; and opportunities to network with other *Women Owned* businesses. The initiative is managed by WEConnect International ([www.weconnectinternational.org](http://www.weconnectinternational.org)) and the Women's Business Enterprise National Council (WBENC) ([www.wbenc.org](http://www.wbenc.org)).

World Bank (2016). *Doing Business: Measuring Business Regulations* (website).

[www.doingbusiness.org](http://www.doingbusiness.org)

This World Bank Group website provides comprehensive baseline data on business regulation environments in 189 economies and selected cities at the subnational level.

World Bank (2016). *Enterprise Surveys: What Businesses Experience* (website and downloads).

[www.enterprisesurveys.org](http://www.enterprisesurveys.org)

This World Bank Group website provides baseline firm-level data on the business environments in 135 economies. Surveys include data from more than 130,000 firms, and cover a range of topics including access to finance, competition, performance measures and perceptions regarding obstacles to growth, among others.

World Economic Forum (2015). *The Global Competitiveness Report 2014–2015* (website).

<http://reports.weforum.org/global-competitiveness-report-2014-2015>

This report provides an overview of the competitiveness performance of 144 economies and can be used as a source of baseline information. It contains a detailed profile for each of the economies included in the study, as well as an extensive section of data tables with global rankings covering more than 100 indicators.

### Section 4: Set up the organization to deliver value from local content

IFC (2009). *Projects and People: A Handbook for Addressing Project-Induced In-Migration*.

International Finance Corporation, Washington D.C.

[www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/ifc+sustainability/learning+and+adapting/knowledge+products/publications/publications\\_handbook\\_inmigration\\_wci\\_\\_1319576839994](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/learning+and+adapting/knowledge+products/publications/publications_handbook_inmigration_wci__1319576839994)

This document provides guidance on managing the risks associated with in-migration and its impacts.

IFC (2011). *A Guide to Getting Started in Local Procurement: For companies seeking the benefits of linkages with local SMEs*. International Finance Corporation in collaboration with Engineers Against Poverty, Washington, D.C.

<https://commdev.org/a-guide-to-getting-started-in-local-procurement-for-companies-seeking-the-benefits-of-linkages-with-local-smes>

This guide provides tools and resources to help companies increase their local sourcing and develop effective local procurement policy.

IFC (2016). *Financial Valuation Tool for Sustainability Investments (FV Tool)*

(Website and downloads). An innovation of the International Finance Corporation (a member of the World Bank Group), in partnership with CommDev, Deloitte, MIGA and Rio Tinto. [www.fvtool.com](http://www.fvtool.com)  
The FV Tool consists of software, a *User Guide* and other useful supporting information. The FV Tool calculates a probable range for the NPV of a portfolio of sustainability investments (including those aimed at local content development), including both the direct value creation and the indirect value protection of these investments. By highlighting the relative value of specific investments, the FV Tool can help to align the company's core business objectives with the sustainability investments it makes.

International Alert (2005). *Conflict-Sensitive Business Practice: Guidance for Extractive Industries*.

[www.international-alert.org/resources/publications/csbp-extractive-industries-en](http://www.international-alert.org/resources/publications/csbp-extractive-industries-en)

This document provides guidance and tools for risk management in conflict-sensitive areas. It includes a screening tool for early identification of conflict risk; a macro-level conflict risk and impact assessment tool; a project-level conflict risk and impact assessment tool; and special guidance on key flashpoint issues where conflict could arise at any point during a company's operation.

LCS (2010). *Unpacking Local Content Metrics and Measurement*. Dr Michael Warner, Local Content Solutions, November 2010.

[www.localcontentsolutions.com/pdf/SolutionsSeries5.pdf](http://www.localcontentsolutions.com/pdf/SolutionsSeries5.pdf)

This LCS briefing document includes an inventory of local indicators commonly used by the industry, together with information on where the data are likely to be sourced from, the level of confidence in the reported local content, and the administrative simplicity of data collection and reporting. The LCS website at [www.localcontentsolutions.com](http://www.localcontentsolutions.com) provides a number of other useful resources.

*Responsibility assignment matrix or RASCI (Responsible, Accountable, Supported, Consulted, Informed) matrix*. [http://en.wikipedia.org/wiki/Responsibility\\_assignment\\_matrix](http://en.wikipedia.org/wiki/Responsibility_assignment_matrix),

The RASCI matrix describes the participation by various roles in completing tasks or deliverables for a project. It is especially useful in clarifying roles and responsibilities in cross-functional/departmental projects and processes.

University of Queensland (2010). *Procuring from SMEs in Local Communities: A Good Practice Guide for the Australian Mining, Oil and Gas Sectors*. Table 1, 'Organisational maturity chart', pages 17–19. Centre for Social Responsibility in Mining (CSRm), University of Queensland, Australia.

<https://www.csr.m.uq.edu.au/publications/procuring-from-smes-in-local-communities>

The chart on pages 17–19 of this good practice guide is designed for use as a self-assessment tool for organizational maturity in local procurement practice, to assist companies in seeing how they compare with best practice, and to identify opportunities for improvement and track progress over time.

World Bank (2015). *A Practical Guide to Increasing Mining Local Procurement in West Africa*.

Washington, D.C. <http://documents.worldbank.org/curated/en/2015/02/23980553/practical-guide-increasing-mining-local-procurement-west-africa>.

This World Bank publication on local content provides information, guidance and tools to support decision making, planning and implementation of local procurement. Key sections are applicable to the oil and gas sector and to various global locations.

# Annex 1: Local content concepts

## Local content concepts

Local content emerged as a concept in the oil and gas sector in the 1970s when resource holding countries began reacting to the enclaved nature of some extractive projects, noting few beneficial linkages to the local economy as a result of the foreign investment. Several factors have been cited to explain the enclaved nature, including the prevalence in the industry of integrated global value chains (GVCs) as well as a low risk tolerance and the requirement for specialized knowledge and capital.

Consequently, local content policy regimes have developed in many countries. Further, the thinking and practice around local content has also evolved and has been influenced and shaped by a number of related concepts, including:

- linkage theory;
- multiplier effect;
- clusters;
- shared value;
- global value chains (GVCs);
- community content; and
- diversity.

### LINKAGE THEORY

Albert Hirschman is credited with describing the various channels through which the production of extractive resources might link with other economic sectors in the geographies where work takes place, or where production is linked with economic sectors located elsewhere (Hirschman, 1977). Channels frequently discussed are:

- **Fiscal linkages:** these arise when resource revenues fund public investments and recurrent expenditures.
- **Consumption (or demand) linkages:** these arise from the economic activities created by the spending of salaries and wages earned by those directly

employed by the extractive resources sectors. The demand created by those who benefited from the first round of spending creates further positive demand effects because these 'second tier' beneficiaries spend their salaries and wages on goods and services produced in the country.

- **Production linkages:** these include (1) backward linkages, which refer to the goods and services required for the production of extractive resources sourced in the host country, and (2) forward linkages, which refer to goods and services produced in the country that require the extractive resources as an input or stimulus. In the oil and gas sector, backward linkages relate to what is commonly known as the upstream sector, and forward linkages relate to the downstream sector.

Recently, a third category of production linkages has entered into discussion, referred to as (3) side-stream or horizontal linkages. This channel recognizes that the production of extractive resources requires auxiliary business services that are shared with, or transferable between, different economics sectors, such as utilities, logistical services, communication and financial services, and skills and technological developments.

In general, the local content debate has typically focused on backward linkages, identifying the procurement of production inputs and the sourcing of labour in the host country. However, this is changing as the scope of local content expands. Greater attention is being paid to side-stream/horizontal linkages and the dynamics between the different types of linkages. For example, public expenditure and investments in skills development (i.e. fiscal linkages) support all types of production as well as consumption linkages.



## Multiplier effects

The concept of multiplier effects seeks to identify the extent to which direct spending in the domestic economy results in further positive demand effects in the country. The size of an economic multiplier is explained in Jensen and West (2002), with two connected considerations:

- First, the extent to which resource developers purchase inputs from the national, regional or local economy: such inputs typically include wages for labour supplied from the local or regional area, and purchases of goods and services. The more a resource developer sources from the local or regional economy, the more money is directly injected into the economy.
- Second, the extent to which money spent in that economy is retained within it: if there is minimal opportunity for people receiving income to spend it on goods and services in their local or regional area, then not as much money will be kept in the local or regional area. Larger and more diverse regional economies tend to be better at keeping expenditure in their economy and not 'losing' it to other regions.

The most popular technique for assessing multiplier effects is input/output (IO) modelling. IO models seek to measure the significance of existing economic activities and industries and their interdependence. They do so by identifying the core drivers, the dominant supply and demand chains, and the bottlenecks to economic growth.

## Clusters

Clusters can be defined as 'geographically proximate groups of interconnected firms and associated institutions in related industries' (Porter, 1998). Clusters are an alternative way of organizing the value chain (distinct from GVCs). As companies are located geographically close to one another, upgrading may occur as they can cooperate relatively easily to develop innovations, notify one another of changes in input specifications, launch new products and detect changes in technology and demand. In addition, the geographic proximity can generate economies of scale and positive externalities such as lower costs of intermediate inputs or services, better access to skilled personnel, or greater attractiveness to clients (Webber and Labase, 2010).

## SHARED VALUE

Several organizations, including the OECD's Policy Dialogue on Natural Resource-Based Development (OECD, 2014) and the Harvard Business School (Porter and Kramer, 2011), have advanced the notion of creating 'shared value', which, in the local content context, emphasizes the process of bringing together the public and the private sector to pursue a more integrated approach to local content development. The belief is that local content efforts will be most successful if government and industry collaborate to build linkages with the host country's economy. Further, efforts will be most sustainable if structured to be mutually beneficial to both populations and business (e.g. the work positively impacts the cost of doing business in a country over time).

## GLOBAL VALUE CHAIN (GVC)

Oil and gas production, similar to many industries, is increasingly organized within global value chains (GVCs) where the different stages of the production process are spread across wide geographic distances and divided among multiple firms. UNCTAD's data show that almost all developing countries, including the poorest, are increasingly participating in GVCs (UNCTAD, 2013). Evidence from GVC links in developing countries suggests that they can have important developmental benefits:

- GVCs can facilitate access to global markets and integration in the global economy for developing countries, which no longer have to develop an entire industry to generate exports but can focus on fewer tasks within industry value chains.
- Participation in GVCs generates employment and may result in faster GDP and income growth.
- GVCs can be an important avenue for developing countries to build productive capacity, including through technology dissemination and skill building, opening up opportunities for longer-term industrial upgrading.

However, GVCs can also bring risks for developing countries:

- Many of the potential development benefits are not automatic (e.g. technology dissemination, skill building and upgrading). Developing countries can remain locked into relatively low value added activities along the chain.

- The location of tasks and activities within GVCs is determined by dynamic factors (i.e. relative labour productivity and cost) and can shift around the international production networks of multinational firms.

## COMMUNITY CONTENT

Community content refers more narrowly to activity within a project's 'zone of influence', its 'directly affected communities', or its 'host communities', where the geographic boundaries tend to be defined in permitting processes. The parameters that are typically drawn upon to identify a project's local community area include: a certain radius distance; the nearest town(s) with some commercial capability; within a reasonable daily commute; where employees live; and immediate host communities (villages or settlements). A form of community content that specifically targets local Indigenous Groups is sometimes referred to as Indigenous Content.

## DIVERSITY

Rather than being defined by individuals or companies within a geographic boundary, 'diversity' denotes efforts focused on members of a particular demographic group such as women, indigenous persons or youth. It may be a minority within a geographic boundary (e.g. indigenous persons) or it may be the majority that constitutes a geographic group (e.g. Blacks in South Africa). More specifically, it typically refers to groups that have historically been under-represented or marginalized within a geographic boundary vis-à-vis the economy.

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## Annex 2: Framework for policy and legal analysis

## Framework for policy and legal analysis

This annex provides information supplemental to Section 2, *Review the local content context*. Section 2 identified a number of levels of public policy formulation through which countries pursue local content objectives and enforce local content requirements. These are illustrated in Figure A1. Levels 1 to 6 represent the national public policy arena within which government objectives are translated into local content requirements. Level 0 reflects international agreements and norms that can constrain or enable national local content policies, laws, regulations and contractual stipulations.

This annex provides a detailed framework for conducting an institutional analysis of local content contexts. The framework allows companies and their stakeholders to understand variations and identify challenges that are relevant for developing company local content strategies.

### INTERNATIONAL AGREEMENTS AND NORMS (LEVEL 0)

Level 0 lies outside the national public policy arena but nevertheless affects the local content measures that producer countries put in place. There are two cases. The first case is that of internationally imposed constraints: *bilateral and multilateral trade agreements* often constrain or prohibit signatory countries from discriminating against goods and services sourced from a particular location. The second case is a supportive influence: *international norms* have shaped the development of local content policies, legislation, regulations and other policy measures across countries, by transferring policy ideas across jurisdictions.

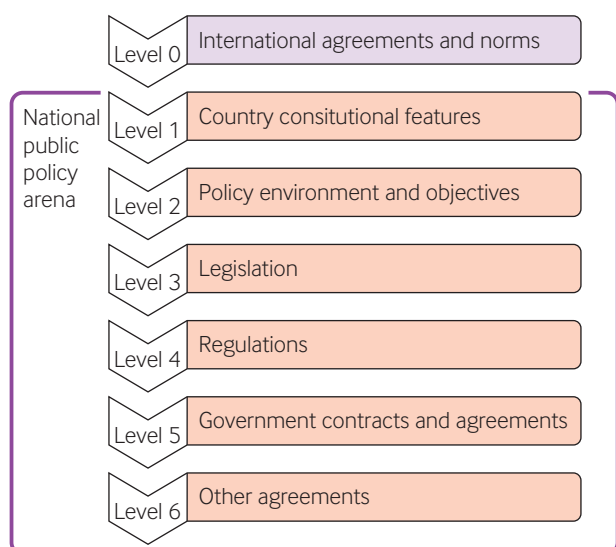
### COUNTRY CONSTITUTIONAL FEATURES (LEVEL 1)

The constitutions of producer countries will have an impact on local content management given that they typically determine how a country is organized and which levels of government are responsible for certain actions. Some countries are federations that are comprised of several autonomous regions, provinces or states. The ownership of natural resources, for example, may be held at a national level or subnational level, or even both. Similarly, the management of the natural resource (including local content issues) may occur at the national or subnational level or even at a municipal level. It is also possible that ownership and management may span different levels of government. Difficulties arise when different levels of government pursue local content objectives in contradiction to the policy objectives of other levels of government.

Constitutions can also recognize particular socio-economic groups as holders of communal rights. Such recognition is, for example, the basis on which Indigenous Peoples in Australia and Canada can expect

Figure A1 Institutional levels at which host countries formulate and enforce local content requirements

Source: Authors, drawing on Dietsche, 2013





to benefit from the granting of local content opportunities as part of negotiated benefit-sharing agreements.

## POLICY ENVIRONMENT AND OBJECTIVES (LEVEL 2)

Many governments have policies related to local content. These policies may either be stand-alone local content policies for the oil and gas sector (or perhaps more broadly the extractives sector) or may be embedded in more general industrial policies.

Policies may address specific subsets of the population or the overall population of a country. Similarly, policies may impact many elements of local content or just one or two elements.

There can also be significant variation in how host governments define local content and how they go about ensuring that their own objectives and those of their political constituencies are met. Key questions are:

- Who is local content intended to serve?
- What type of local content is sought?

Some producer countries pursue different local content and broader public policy objectives that are at odds with each other or, at least, are difficult to reconcile.

Another distinguishing feature at Level 2 is the general role that the government assumes in pursuing local content, varying between a laissez-faire approach or alternatively, a more rigid and/or interventionist approach.

In less-developed countries policies related to local content often start as a poverty reduction strategy and/or action plans and/or in national development plans.

## LEGISLATION (LEVEL 3)

Many countries have legislation related to local content and natural resources. Legislation may be: (i) specific local content legislation; (ii) local content clauses in wider sector legislation; and (iii) other legislation with local content implications.

## REGULATIONS (LEVEL 4)

Regulations related to local content may be: (i) specific to the natural resource sector; or (ii) more general regulations with local content implications.

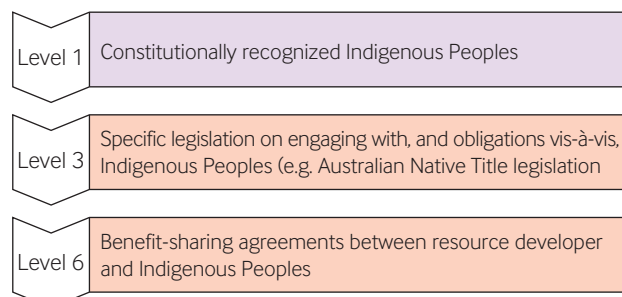
## GOVERNMENT CONTRACTS AND AGREEMENTS (LEVEL 5)

Level 5 reflects the local content stipulations contained in contracts and agreements between government and resource developers. Under contractual regimes, such stipulations have typically been included in model production sharing agreements (PSAs) (Tordo *et al.*, 2013). A model clause covering the *employment and training* of nationals is commonly incorporated into such agreements.

## OTHER CONTRACTS AND AGREEMENTS (LEVEL 6)

Level 6 captures contracts and agreements with deliverables on local content that are agreed between resource developers and parties other than the national (or regional) government and/or its semi-autonomous agencies. These third parties could include: (i) local communities that are settled around a project and are represented by some other form of collective entity (e.g. community trusts or foundations); and/or (ii) communities that can claim communal rights over natural resources or surface lands located where a project is situated. While community development agreements (CDAs) and benefit sharing agreements (BSAs) are prevalent in the mining sector, they can also be found in the oil and gas sector, in particular in relation to Indigenous Peoples. Figure A2 shows the consequences of this constitutional feature at Levels 3 and 6.

Figure A2 Influence of constitution on Indigenous Peoples' role in local content



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## OBSERVATIONS

One observation is that OECD countries tend to be more strategic in retaining flexibility in levels to allow evolution and adaptation of industrial policies. By contrast, less-developed countries tend to pursue more aspirational policy objectives by adopting specific laws, regulations and contractual stipulations while paying less attention to engaging the private sector in policy-making processes. The challenge with this approach, however, is an inability to recalibrate in the instance of negative unintended consequences.

A second observation is that while laws, regulations and contractual stipulations are means to enforce policy objectives, the organizational structures that underpin their implementation are equally important. Across all countries, the interdisciplinary nature of local content poses a challenge; ideally, several ministries, departments and agencies will work collaboratively, not least to also support the supply side of local content, coordinate and solicit vital information from the private sector, and adjust demand side requirements if these have been formulated too ambitiously in the first instance, and where more achievable and sustainable requirements are called for.

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## Annex 3: Stakeholder expectations, roles, responsibilities and challenges in local content development

## Stakeholder expectations, roles, responsibilities and challenges in local content development

Table A1 The various actors and stakeholders engaging in the local content space

POTENTIAL EXPECTATIONS	POTENTIAL ROLES AND RESPONSIBILITIES	TYPICAL CHALLENGES
<b>Governments and regulatory bodies</b>		
<ul style="list-style-type: none"> <li>Industrialization and economic development</li> <li>Promotion of social welfare</li> <li>National control of resources</li> </ul>	<ul style="list-style-type: none"> <li>Provision of stable, predictable and transparent policy frameworks, including sound macroeconomic management</li> <li>Clarity of priorities and development of policies economic development</li> </ul>	<ul style="list-style-type: none"> <li>Competing political, economic and social priorities</li> <li>Election cycles</li> <li>Institutional capacity to plan, implement and monitor local content initiatives</li> <li>Trade agreements provisions when in conflict with local content tactics</li> </ul>
<b>National oil companies (NOCs)</b>		
<ul style="list-style-type: none"> <li>To serve national political and economic goals</li> <li>Licence compliance</li> <li>Control access to resources</li> <li>Shareholder and investor responsibility</li> </ul>	<ul style="list-style-type: none"> <li>Potential oversight and enforcement of local content policy, as outlined by state or regulatory agency</li> <li>Helps implement local content policies—as resource developers and as government representatives in petroleum contracts</li> </ul>	<ul style="list-style-type: none"> <li>The economic development role may be at odds with a NOC's capacity and commercial objectives</li> <li>Conflicting roles in oversight and enforcement of local content policy, and facilitation and implementation of the policy</li> <li>Institutional capacity to plan, implement and monitor local content initiatives</li> </ul>
<b>Local communities</b>		
<ul style="list-style-type: none"> <li>Jobs</li> <li>Business opportunities</li> <li>Other economic benefits</li> </ul>	<ul style="list-style-type: none"> <li>Supply workforce</li> <li>Supply goods and services</li> <li>Articulate community perspectives</li> </ul>	<ul style="list-style-type: none"> <li>Lack of appropriate skills</li> <li>Limited access to infrastructure</li> <li>Limited access to finance</li> <li>Expectations gap—immediate and plentiful opportunities are expected</li> <li>Risk of establishing overdependence on project</li> </ul>

Table A1 The various actors and stakeholders engaging in the local content space (continued)

POTENTIAL EXPECTATIONS	POTENTIAL ROLES AND RESPONSIBILITIES	TYPICAL CHALLENGES
<b>Local business associations</b>		
<ul style="list-style-type: none"> <li>Localized social and economic development</li> <li>Jobs for association members</li> <li>Business opportunities for association members</li> </ul>	<ul style="list-style-type: none"> <li>Organizing/aligning local business</li> <li>Access to information on opportunities and contracts awarded</li> <li>Addressing local content enablers in regional development plans</li> <li>Advisory services to companies</li> </ul>	<ul style="list-style-type: none"> <li>Limited technical, organizational and financial capabilities</li> </ul>
<b>Civil society organizations</b>		
<ul style="list-style-type: none"> <li>Support economic and social development</li> </ul>	<ul style="list-style-type: none"> <li>Advocacy</li> <li>Monitoring of industry and government local content commitments</li> </ul>	<ul style="list-style-type: none"> <li>Limited financial and organizational capabilities</li> </ul>
<b>Education and training organizations</b>		
<ul style="list-style-type: none"> <li>Develop skills that are in line with market demand</li> </ul>	<ul style="list-style-type: none"> <li>Development of workforce in line with industry demand</li> </ul>	<ul style="list-style-type: none"> <li>Limited technical, organizational and financial capabilities</li> </ul>
<b>International development agencies</b>		
<ul style="list-style-type: none"> <li>Economic and social priorities of aid strategy</li> </ul>	<ul style="list-style-type: none"> <li>Fund industry development/linkage programmes</li> <li>Finance supporting infrastructure</li> <li>Technical assistance</li> <li>Dissemination of good practice</li> </ul>	<ul style="list-style-type: none"> <li>Budget and project cycle</li> <li>The scope of interventions may be limited by the aid strategy agreed with the host government</li> <li>Competing aid priorities</li> </ul>
<b>Major international contractors (EPC, fabrication, O&amp;M)</b>		
<ul style="list-style-type: none"> <li>Local content requirements and clauses in tender documents and contracts with resource developers</li> <li>Regulatory requirements</li> </ul>	<ul style="list-style-type: none"> <li>Employ and train local staff</li> <li>Support the development of local workforce</li> <li>Support development of local industry</li> </ul>	<ul style="list-style-type: none"> <li>Commercial risk posed by weak capacity in the local supplier market</li> </ul>
<b>Oil and gas resource developers</b>		
<ul style="list-style-type: none"> <li>Licence compliance</li> <li>Access to resources</li> <li>Shareholder and investor responsibility</li> </ul>	<ul style="list-style-type: none"> <li>Employ and train local staff, gradually replace expatriates with locals</li> <li>Support the development of local workforce</li> <li>Support development of local industry</li> </ul>	<ul style="list-style-type: none"> <li>Project economics and shareholder returns</li> <li>Project life-cycle constraints</li> <li>Unrealistic expectations</li> </ul>





## Annex 4: Supply side analysis: baseline study and detailed gap analysis

## Supply side analysis: baseline study and detailed gap analysis

This annex offers guidance on how to examine the factors that influence local capacity, which can help oil and gas companies to obtain sufficient contextual information to develop effective local content strategies and tactics. Comprehensive contextual analysis requires the examination of two sets of relevant data, i.e. (i) data on a host country's socioeconomic conditions and enabling environment; and (ii) data on the market conditions specific to the oil and gas industry's needs, including the characteristics of the local workforce and enterprises.

### BASELINE STUDY

#### Structural characteristics

The socio-economic indicators typically used to analyse the health of the host country's economy are:

- (un)employment rate (%);
- employment by industries (%);
- average household income (\$);
- incidence of low income households (%);
- persons aged 25–54 with some post-secondary education (%); and
- transfer payments (e.g. unemployment benefits) (\$).

(Esteves and Ivanova, 2015.)

In general, rural areas where oil and gas companies tend to operate are somewhat different from urban, more diversified economies. Gathering economic data specific to the rural areas of a country is therefore important, and likely to reveal that, in those areas:

- employment tends to be lower;
- primary industries are usually the main source of employment—measured as a location quotient;
- income is generally lower;
- incidence of low income is less;
- education level tends to be lower; and

- transfer payments tend to be higher (due to a higher number of children, unemployment, retirees).

Another important indicator of the capacity of the local economy is the level of economic dependency on one or several sectors in the region. The market share of the industry can be estimated using the 'location quotient' (Hildebrand and Mace, 1950), or the relative concentration of regional employment in a given industry (e.g. number of jobs in oil and gas divided by the total number of jobs in the region). The higher a local quotient for an industry, the more dependent the regional economy is on that industry, and therefore the more vulnerable it is to fluctuations in the employment and supplier opportunities linked to that industry. Lack of economic diversification is therefore an important factor for a host country and oil and gas company to consider when formulating a local content programme.

#### Human capital

Data on education outputs and the organization of a country's skills development system are key indicators of that country's level of existing and latent human capital. These include:

- Adult literacy rates.
- Enrolment and completion rates for:
  - primary education;
  - secondary education, which may be split into lower and higher secondary education. (Note: In some countries vocational education may be considered part of secondary education, and there are also cases where technical education is delivered alongside higher secondary education and higher/tertiary education, e.g. dual tracks/degrees);

- post-secondary education, including:
  - vocational education and training;
  - technical education and training; and
  - higher/tertiary education delivered at universities and other higher education institutions (HEIs).
- The comparative performance of students at different stages in key competence areas (reading, writing, maths, knowledge of science).
- Labour force and labour market statistics, for example:
  - employment status;
  - average duration of unemployment by level of education and skills;
  - average age of entering the labour market;
  - level of wages and salaries by level of education (e.g. measured by years in school) and skills; and
  - same information as above by demographic group.
- Qualitative data on the education and skill development system and provider and accreditation organizations (public and private, national and sub-national).

Data for these indicators can be retrieved from government education and skills assessments and policy papers, and from UNESCO, ILO, the World Bank, the OECD and other organizations that support education and skills development. In some countries, dedicated NGOs compile data on educational attainment, including geographic variations and variations by socio-economic constituencies.

### Ease of doing business

Consideration of the overall business environment—constraints, gaps and opportunities in the regulatory and administrative support mechanisms—should be an integral part of the supply-side analysis. The ability of local entrepreneurs to establish and grow businesses supplying the oil and gas value chain is, in part, influenced by the business environment in a country.

The World Bank Group's report, *Doing Business*, provides comprehensive quantitative data to compare business regulation environments across economies and over time. *Doing Business* provides two main types of

Table A2 Eleven areas of business regulation measured by *Doing Business*

Source: The most recent *Doing Business* data for 189 economies can be found at [www.doingbusiness.org/data](http://www.doingbusiness.org/data)

Complexity and cost of the regulatory process	
Starting a business	Procedures, time, cost and paid-in minimum capital to start a limited liability company
Dealing with construction permits	Procedures, time and cost to complete all formalities to build a warehouse
Getting electricity	Procedures, time and cost to get connected to the electrical grid
Registering property	Procedures, time and cost to transfer a property
Paying taxes	Payments, time and total tax rate for a firm to comply with all tax regulations
Trading across borders	Documents, time and cost to export and import by seaport
Strength of legal institutions	
Getting credit	Movable collateral laws and credit information systems
Protecting minority investors	Minority shareholders' rights in related-party transactions and incorporate governance
Enforcing contracts	Procedures, time and cost to resolve a commercial dispute
Resolving insolvency	Time, cost, outcome and recovery rate for a commercial insolvency and the strength of the insolvency legal framework
Labour market regulation	Flexibility in employment regulation, benefits for workers and labour dispute resolution

indicators, as shown in Table A2—those that broadly measure the complexity and cost of regulatory processes and those that measure the strength of legal institutions.

### Local enterprise characteristics

The baseline assessment should also include a profile of the characteristics of local enterprises at a sufficient level of detail to gauge the overall approach to company procurement. This type of study differs from the more detailed enterprise capability assessments, outlined below in *Detailed gap analysis*. A more general assessment of the characteristics that define local enterprises could focus on data such as the average age of businesses in the economy, average proportion of private versus public ownership in companies, percentage of businesses operating in the formal versus informal sector, percentage of businesses that hold a bank account, or percentage of firms with internationally-recognized quality certification.

A starting point for an initial assessment of enterprise capabilities can be the enterprise surveys that some international organizations compile periodically. For example, the World Bank regularly conducts enterprise surveys that provide company level data for emerging market and developing economies

([www.enterprisesurveys.org](http://www.enterprisesurveys.org)). Enterprise maps have been compiled for some African countries by the International Growth Centre, London School of Economics (IGC, 2012). More generally, regional comparative or country-specific industry capability assessments may be available from research as well as international development organizations. Firm registration boards, industry associations or chambers of commerce can also provide an overview of enterprise capabilities by sectors.

### DETAILED GAP ANALYSIS

While a basic profile is a useful start when assessing the potential for local content to materialize, a more in-depth understanding of the available and potential human resources and enterprises, compared with the actual demands of industry, is necessary to design specific interventions.

### Workforce gap analysis

This type of analysis should identify the gap between the workforce requirements of the sector and the output produced by the host country's education and skills development system; it should also identify measures that could be taken to better align these factors.





A gap analysis should include:

- assessment of the current state of the country's skills development and education programmes that can be related to the oil and gas sector;
- assessment of the quality of these programmes against industry benchmarks, international standards, or industry/sector requirements; and gauging industry perceptions of the quality of technical school and university graduates currently being hired by the sector;
- assessment of the quantity of graduates that technical/vocational schools and universities are able to produce at the required quality;
- identification of key institutional, curricula, teaching, infrastructural and other capacity gaps that need to be filled at technical schools and universities in order to meet these requirements;
- assessment of the extent to which current oil and gas operations will be able to provide employment opportunities at the most basic skills level to communities surrounding sites, the potential for growth of this segment in the future oil and gas labour market, and realistic options for enhancing skill levels and/or employability in these communities; and
- assessment of the current and potential demand for women employees in the oil and gas industry, and identification of realistic strategies that could enhance female labour participation in this sector.

(C2D, 2013.)

To bring the demand and supply sides together, diagnostic studies should outline and evaluate different options for closing the identified capacity gaps, using appropriate evaluation criteria such as: short-term priorities, best practices in oil and gas education, maximizing employment, sustainability, feasibility, coherence with government policies, gender and community considerations, deliverability, risk and cost-effectiveness.

### Designing programmes to bridge skills gaps

Highlighted below are several issues to consider when designing programmes to close skills gaps:

- Skilled workforce quantity gaps take time to address, as this segment requires years of practical experience. This highlights the importance of collaborative development of a country's **comprehensive labour market projections for the**

**oil and gas sector**, based on realistic trend projections or different scenarios over the short, medium and long term.

- Support for **updating a country's technical and vocational education and training (TVET) strategy** may be needed to bridge the gap between long-term labour market demand and training provision. In countries with a nascent oil and gas industry, it would be appropriate to support strengthening the TVET system in areas where there is an overlap between the oil and gas sector and other sectors' demand for labour, such as civil construction, infrastructure development, general electrical and mechanical work.
- Merely increasing the supply of TVET graduates does not guarantee their employability. A supporting approach may be to develop a country's **integrated framework of qualifications and training based on competency standards**, with a curriculum aligned with the needs of the oil and gas industry.
- To avoid lengthy periods of on-the-job training and coaching, oil and gas companies and their major contractors may need to support the reform of educational institutions to ensure that the enhanced **training is accompanied by experience in professional work situations**.
- Proactive action might need to be taken if only a small number of local women is likely to benefit from new employment opportunities. This action might include **ensuring that women students are represented** in TVET and university departments catering to the oil and gas sector.
- **Primary and secondary education support** may be needed to increase the throughput of students that can progress to technical and higher education.

### DETAILED GAP ANALYSIS OF LOCAL ENTERPRISES

There are established tools for enterprise capability assessments that can be used to inform and shape supplier development programmes. Applying the tools can be a resource-intensive exercise, and it can sometimes be prudent to take a phased approach, as shown in Figure A4 on page 62.

Figure A3 Phased approach to local supplier analysis



### Supplier mapping

This phase involves identifying/mapping the businesses across the full spectrum of goods and services present in the company's supply chain. Historic spend analysis and meetings with company contract owners/end users of goods and services will help to build a high-level list of purchasing categories to guide the mapping. A list of existing suppliers should also be included. The mapping exercise would then involve building on this information to include the types and nature of local businesses. Other sources of information include Government, Chambers of Commerce and other association databases.

### Purchasing category selection

Purchasing category selection is a tool for prioritizing goods and services based on criteria such as their potential for growth and competitiveness, potential to maximize impact, the extent to which there is a lead supplier/contractor presence, or potential for a 'multiplier' effect with other sectors. The selection process is inherently subjective, and the objective is to minimize subjectivity.

The purpose of the selection process is to identify which goods and services need to be analysed in more detail. Prioritization is typically conducted in a workshop using a simple 'weight and rate' spreadsheet, which provides the opportunity for different functions to contribute, such as procurement, social performance and technical end users/contract owners.

### Value chain analysis

Value chain analysis (USAID, 2016) can be applied to shortlisted goods and services in order to identify constraints for local firms' participation in the oil and gas supply chain and the conditions under which a value chain and its firms can achieve higher levels of performance. The value chain analytical framework looks at the following different stages of the process of supply:

- **End market:** this level involves engagement with internal contract owners or end users of goods and services, to understand their priorities and to gain their commitment to developing local content. Questions to ask contract owners include:
  - What are the risks in increasing local content in your category?
  - What do you perceive as the capability barriers among local suppliers?
  - What are the pre-qualification/specific accreditation/quality requirements?
  - What is the contracting and pricing strategy, and contract terms?
  - Is this category affected by a global framework agreement?
  - Where precisely is the opportunity, i.e. which work package/component?
  - What are the expected volumes over 2–3 years and the contract value?
  - Are there opportunities for subcontracting/joint ventures with international suppliers?
- **Inter-firm cooperation:** This level involves analysing the nature and extent of (i) vertical linkages—more efficient transactions among firms that are vertically related increase the competitiveness of the entire industry; and (ii) horizontal linkages that can help reduce transaction costs, create economies of scale, and contribute to the increased efficiency of an industry.
- **Firm-level upgrading:** In order to respond effectively to opportunities, firms need to innovate to add value to products or services, and to make production and marketing processes more efficient. This level of analysis involves conducting diagnostics of the generic business capability of local firms, namely management, finance, human resources and marketing, as well as capability dimensions that determine whether the business has the capacity to be a supplier to the oil and gas sector. This involves

assessing health, safety and environment (HSE), quality and business integrity.

- Supporting markets play an important role in firm-level upgrading and can be divided into three main categories:
  - financial services (e.g. lending, leasing, capital investing, factoring);
  - cross-cutting services (e.g. business consulting, legal advice, telecommunications, advertising); and
  - sector-specific services (e.g. testing, certification services, etc.).

### Designing programmes to bridge enterprise gaps

Many oil and gas companies are turning to Enterprise Centres as vehicles to deliver a set of activities that provide businesses in local communities with a range of support services that build their capability to become vendors. The activities can be grouped into the following four main themes:

- **Information provision:** upcoming opportunities; database of local businesses; website; company requirements; submitting tenders via an e-procurement system; options for technical assistance and financing; liaison with company personnel that offer business opportunities; networking events; financial products and providers.
- **Business diagnosis:** assessment of managerial capability, HSE and quality performance; market feasibility studies; business capability diagnosis.
- **Training and mentoring:** training; business improvement plans; mentoring; monitoring; support in preparing tenders.
- **Provision of facilities/infrastructure:** meeting rooms; workstations to access e-procurement; training rooms; internet, telephones, printing and photocopying facilities.

Sustainability is a key consideration in selecting an appropriate management model for enterprise centres. Rather than reinventing or duplicating programmes, it is more sustainable to build on existing institutions, structures, etc. through partnerships. The search for partners involves: surveying what donors, NGOs and other companies are doing; coordinating with Government Ministries and programmes; and identifying ongoing government or private/donor initiatives in entrepreneurship development, microfinance, training centres, etc.

Designing an enterprise centre with sustainability in mind also involves starting with an exit strategy. This involves thinking about who will take over when the funder/implementing organization no longer exists. Measures need to be put in place to cover items such as running costs, maintenance, equipment breakdown and qualified personnel. Working with stakeholders and partners to build the exit mechanism and time frame into the project design will ensure that the enterprise centre will ultimately be run by capable partners and will continue to generate benefits (without reliance on the resource developer, either financially or in terms of its ownership and management structures). For instance, the phasing out of company support may have to be staggered over time to allow stakeholders to adapt.

### ANNEX 4 REFERENCES

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[www.ipieca.org](http://www.ipieca.org)

14th Floor, City Tower  
40 Basinghall Street  
London EC2V 5DE  
United Kingdom  
  
Telephone: +44 (0)20 7633 2388  
Facsimile: +44 (0)20 7633 2389  
  
E-mail: [info@ipieca.org](mailto:info@ipieca.org)