

Local Content for the International Petroleum Industry

CONTENTS

Introduction	xv
Ownership, Management, and Cooperation	xvi
Local Content Policy Development: A Balancing Act	xvii
Local Content Policies Implemented: Requirements in Law, Regulations, and Contracts	xxi
In This Book	xxv
Notes	xxvi
1 ALGERIA	1
Introduction	1
Macroeconomic Issues	2
Local Content Policy and Baseline	7
Industrial Knowledge	9
Evolution of the Algerian Petroleum Industry	10
Key Players	13
Legislative Hydrocarbon Regime Concerning Local Content	15
Positive and Negative Experiences, Issues, and Challenges	20
Conclusion	22
Notes	23
2 ANGOLA	25
Introduction	25
Local Content Policy and Baseline	26
Key Players	30
Industry Knowledge	33
Legislative Hydrocarbon Regime Concerning Local Content	36
Positive and Negative Experiences and Expectations	41
Current Issues and Challenges	41
Conclusion	42
Notes	43

3 AZERBAIJAN	49
Introduction	49
Local Content Policy and Baseline	53
Industry Knowledge	56
Key Players	58
Legislative Hydrocarbon Regime Concerning Local Content	63
Production Sharing Agreements	67
Positive and Negative Experiences, Issues, and Challenges	68
Conclusion	70
Notes	70
4 BRAZIL	73
Introduction	73
Local Content Policies: A Global Overview	74
Implementing and Measuring Effectiveness of LCPs	77
Issues and Concerns for Establishing an Effective Local Content Program	78
E&P Regime and the Local Content Obligation in Brazil	79
Current Issues and Challenges	88
Legislative Hydrocarbon Regime Concerning Local Content	93
Conclusion	94
Notes	95
5 CANADA	103
Introduction ¹	103
Local Content Policy and Baseline	106
Conclusions	119
Notes	120
6 CHINA	125
Introduction	125
Local Content Policy and Baseline	126
Key Players	127
Industry Knowledge	130
Legislative Hydrocarbon Regime Concerning Local Content	132
Positive and Negative Experiences and Expectations Regarding the Regulatory Framework	138

Current Issues	139
Conclusion	141
Notes	141
7 CYPRUS	145
Introduction	145
Local Content Policy and Baseline	146
Key Players	148
Industry Knowledge	152
Legislative Hydrocarbon Regime in Cyprus	153
Positive and Negative Experiences and Expectations Regarding the Regulatory Framework	160
Current Issues	160
Conclusion	163
Notes	163
8 EGYPT	165
Introduction	165
Local Content Policy and Baseline	166
Key Players	167
Industry Knowledge	168
Legislative Hydrocarbon Regime Concerning Local Content	169
Positive and Negative Experiences and Expectations Regarding the Regulatory Framework	171
Current Issues and Challenges	172
Conclusion	173
Note	174
9 REPUBLIC OF EQUATORIAL GUINEA	175
Introduction	175
Local Content Policy and Baseline	176
Key Players	177
Industry Knowledge	179
Legislative Hydrocarbon Regime Concerning Local Content	179
Positive and Negative Experiences and Expectations Regarding the Regulatory Framework	184
Current Issues and Challenges	184

Conclusion	185
Notes	185
10 GHANA	187
Introduction	187
Local Content Policy and Baseline	187
Overview of Key Prevailing Local Conditions	189
Key Players	195
Industry Knowledge	198
Legislative Hydrocarbon Regime Concerning Local Content	199
Positive and Negative Experiences and Expectations Regarding the Regulatory Framework	207
Current Issues and Challenges	209
Notes	211
11 IRAN	217
Introduction	217
Local Content Policy, Baseline, and the Resistance Economy Policy	218
Key Players	225
Industry Knowledge	233
Legislative Hydrocarbon Regime Concerning Local Content	240
Positive and Negative Experiences, Issues, and Challenges	260
Conclusion	262
Notes	263
12 KENYA	265
Introduction	265
Local Content Policy and Baseline	266
Policies	267
Key Players	270
Industry Knowledge	276
Legislative Hydrocarbon Regime Concerning Local Content	277
Current Issues and Challenges	288
Conclusion	289
Notes	290

13	LEBANON	293
	Introduction	293
	Local Content Policy and Baseline: Current Regulatory Framework	295
	Evolving Implementation Strategies	298
	Industry Knowledge and Skill Gaps	299
	Conclusion	303
	Notes	304
14	LIBYA	311
	Introduction	311
	Macroeconomic Issues	312
	Industrial Knowledge and Manufacturing Base	313
	Infrastructure	315
	Human Resources	317
	Local Content Policy in the Libyan Oil and Gas Sector	318
	Evolution of the Libyan Exploration and Production Sharing Agreement (EPSA)	321
	New Draft Petroleum Law 2004, General People’s Congress	324
	Libyan National Oil Corporation (LNOC) and Local Content	326
	Appraising the Libyan Local Content Approach	331
	Current Issues and Challenges for O&G Companies	335
	Conclusion	336
	Notes	338
15	MOZAMBIQUE	341
	Introduction	341
	Local Content Policy and Baseline	342
	Key Players	345
	Industry Knowledge	347
	Legislative Hydrocarbon Regime Concerning Local Content	348
	Conclusion	355
	Notes	355
16	NIGERIA	357
	Introduction	357
	Local Content Policy and Baseline	360
	Key Players	362

Legislative Hydrocarbon Regime Concerning Local Content	364
Industry Knowledge	367
Current Issues and Challenges	369
Learning Points	371
Suggestions for Future Growth in Local Content Policy	373
Conclusion: A Journey, Not a Destination	376
Notes	377
17 NORWAY	381
Introduction	381
Local Content Policy and Baseline	385
Key Players	390
Industry Knowledge	393
Legislative Hydrocarbon Regime Concerning Local Content	395
Conclusion	397
Notes	398
18 QATAR	401
Introduction	401
Local Content Policy and Baseline	402
Key Players	405
Industry Knowledge	407
Legislative Hydrocarbon Regime Concerning Local Content	409
Current Issues and Challenges	414
Conclusion	415
Note	416
19 TIMOR-LESTE	417
Introduction ¹	417
Industry Overview	418
Key Players	418
Industry Knowledge	423
Legislative Hydrocarbon Regime Concerning Local Content	424
Conclusion	429
Notes	429

CONCLUSION	435
Introduction: The Importance of Local Content Development	435
Lessons to Be Learned?	440
Notes	448
INDEX	449
ABOUT THE AUTHORS	477

At the time there was a need for improvement of offshore technology, and Norwegians were part of developing it. Requiring transfer of technology is also a part of the enablement of domestic businesses and nationals. Without the requisite technology, it is difficult to succeed in the petroleum industry. As an example, we note that Iran, a country that has for a very long time been isolated from great parts of the world due to international sanctions, is focusing on technology. Now that Iran can again welcome foreign investment, it is highly focused on establishing joint ventures and obtaining access to new and modern technology.

Much can be said in detailing local content requirements, and this book provides many examples. Nonetheless, to be beneficial, local content rules must be complied with. The primary responsibility for compliance rests, of course, with the companies. However, in order to ensure a high level of compliance, the host government must be able to supervise and enforce the legal framework for local content development. To carry out these tasks efficiently, the relevant laws, regulations, and contracts must establish clarity of roles and responsibilities.¹⁰ The laws, regulations, and contracts must also provide the authorities with adequate tools for supervision and enforcement. Most countries require the submission of local content plans, regular reporting on compliance, and the use of tenders for purchases exceeding a certain price threshold. Governments also typically ensure they have the right to carry out audits and inspections. The level of government interference in procurement varies; however, we see that some countries require preapproval of purchases and contracts. Nonetheless, the manner in which supervision is modeled should be carefully considered. Compliance with a high level of complex reporting requirements takes time and money to administer, both for the companies and the authorities. Requirements for frequent approvals might delay projects, and compliance might become an administrative burden for all those involved, including the government.

The tools chosen for enforcement should also be chosen with care. High penalties might be efficient for “scaring” companies into compliance, but at what price? Indeed, companies might be more prone to accept corruption in order to avoid harsh punishments. Host countries should instead consider how they might actually assist companies with compliance, for instance by building databases of qualified or competent domestic companies. Alternately, the incentives for compliance might be more indirect, perhaps through consideration of historical levels of compliance in tenders or licensing rounds.

until 1945, with 100% ownership by the French government. The entity was charged with the “establishment of a national programme for oil exploration in Metropolitan France and in Algeria, the countries of the Protectorate, the country under Mandate and in French Colonies.”¹⁵

In 1946 BRP established, jointly with the French colonial government in Algeria, an oil exploration company, the Société Nationale de Recherche de Pétrole en Algérie (SN-Repal). As a direct result, a huge oil field was eventually discovered at Hassi-Messaoud in June 1956, and an equally impressive gas field was discovered at Hassi R'Mel in November 1956.

It is worth noting that it was French planners, geologists, and engineers who made these discoveries and carried out their commercial exploitation. According to Mohamed Sassi,

Efforts to put technical teaching in place, initiated during the interwar period, were accelerated after the end of the Second World War. France had a large training center (the first of its kind) beginning in 1950. It trained oil industry specialists under the direction of the Institut Français du Pétrole (IFP), which contained an application school, the École Nationale Supérieure du Pétrole et des Moteurs (a higher national school for oil and engines). It trained engineers in four specialized fields: a) geological and geophysical prospecting; b) drilling and exploitation of oil layers; c) refining, chemical engineering, and scientific research; and d) engines and applications to oil derivatives.¹⁶

The Évian Accords of 1962 between France and Algeria transferred political independence to Algeria, but also attempted to safeguard existing French and other foreign rights. On paper, at least, “in controlling most of the companies operating in the country...the French government had actually maintained its pre-independence advantages intact.”¹⁷ In the years that followed independence, the Algerian government nationalized foreign oil and gas interests, notably those of the French in 1971.

■ Algerian oil and gas reserves and production

Algerian oil and gas reserves and production can be traced from 1984 to 2014 in the timelines in figures 1–1 and 1–2. Both petroleum and natural gas proved reserves show a dramatic increase beginning in the mid-1990s. While production in natural gas saw a similar increase in the 1990s (fig. 1–3), the increase in petroleum production was more incremental, peaking in late 2008 (fig. 1–4).

These mandatory local content requirements, directed essentially at promoting sustained and inclusive economic growth, coupled with the existing legal framework in force since 2003,³ are (according to empirical data available) aimed at contributing to the improvement of domestic production and employment. According to the *African Economic Outlook*,

The government has established an institutional framework for entrepreneurship development and job creation through the Ministry of Employment and Social Security. The ministry's data indicates that professional training capacity has increased significantly and now stands at 159,000 trainees in more than 460 centres. In 2013, the vocational training programme generated 110 000 new jobs, notably in the energy (39,000), transport (29,000), and construction (24,000) sectors. The government currently allocates one-third of the budget to social areas to reduce poverty and reach the most vulnerable people.⁴

Local Content Policy and Baseline

■ Policy background, including short- and long-term goals

It is a national imperative to diversify the national economy, which has been anchored for the last 30 years solely to natural resources.⁵ In order to do so, the Angolan government has been heavily investing in its local communities by encouraging them to participate, notably in the industrial and agriculture sectors.⁶ Reduction of bureaucratic procedures and costs and improved access to physical infrastructure and finance have been governmental priorities. Special tax and financing measures have been in place since 2003⁷ in order to encourage social and economic development in other relevant sectors of the national economy.

Instituto de Fomento Empresarial (Angola Investment Program) and Instituto Nacional de Apoio às Micro, Pequenas e Médias Empresas (INAPEM, or Institute to Support Micro, Small and Medium Companies) were incorporated in 2012. With an initial budget of US\$700 million, they were created to foster local entrepreneurship, to legalize informal sectors, and to reduce poverty and unemployment rates.⁸ Two laws were enacted to foster these goals: Law No. 30/11 of September 13, 2011, the Micro, Small and Medium Companies' Law, and Decree-Law No. 43/12 of March 13, 2012, Regulation of Micro, Small and Medium Companies' Law. Provisions

The existing PSA signed in September 20, 1994, in Baku by and between the government of Azerbaijan and a consortium of 11 foreign oil companies was due to expire in 2024. By the reinstated PSA dated September 14, 2017, the period has been extended for an additional 25 years until the end of 2049. BP is the current operator of the field and will remain the operator under the extended ACG PSA. As part of the new PSA, SOCAR will increase its equity share from 11.65% to 25% and the participating interest of all partners will be revised.

Following completion of the contract, the new ACG PSA participating interests will become as follows: BP: 30.37%; AzACG (SOCAR): 5.00%; Chevron: 9.57%; INPEX: 9.31%; Statoil: 7.27%; ExxonMobil: 6.79%; TP: 5.73%; ITOCHU 3.65%; and ONGC Videsh Limited (OVL): 2.31%.²⁰

Currently, gas export projects are more popular and promising than oil. Thus expansion of the South Caucasus pipeline (SCP), which exports Shah Deniz gas from Azerbaijan to Georgia and Turkey, is expected.

Local Content Policy and Baseline

Since Azerbaijan gained its independence and the country entered into the so-called Contract of the Century, local human resources and industrial capacity have expanded. This is due in part to state programs to fund education abroad. The big oil companies such as SOCAR and BP have also played a role by providing financial support to their employees for studies at Western universities. The Employment Strategy of the Republic of Azerbaijan has been influential in encouraging improvements as well.

The government's goal is to continue developing the present human and industrial capital relating not only to the petroleum industry, but also to other nonhydrocarbon sectors of the economy.

The State Program on Implementation of the Employment Strategy of the Republic of Azerbaijan (2011–2015) included steps to increase competitiveness of locally produced goods in the international industry market. Both the program and the amendments made to the Law on Public Procurement in 2016 gave preference to local goods (services or supplies) at public procurement tenders.

The volume of oil and gas reserves is determined based on estimates of expected oil and gas reserves from the Azeri–Chirag–Gunashli, Shah Deniz, and other fields under agreements on production sharing among

The same World Bank study, an important guide for this article, indicates the main features an LCP should take into account:

- It cannot be limited to increasing local content on an immediate basis, but rather should focus on a long-term increase of enhancing local capabilities. These include education and training programs, along with relationships with other industries that can also benefit from the service chain.
- It will vary throughout time, accompanying the E&P cycle (from exploration to production). For instance, if a cluster is in the exploration phase, service providers more linked to that stage should have incentives to produce locally. However, the policy should anticipate when the cluster will divert to production and plan to maintain incentives.
- It should also consider the direct provision of social welfare contributions, such as the building and operation of local schools and hospitals.

In this section, we explore examples of LCPs around the world and discuss methods to measure their efficiency and hot issues relating to the LCPs.

■ International experience⁵

United Kingdom. The United Kingdom was a lead country in the E&P industry with the major North Sea cluster, shared with Norway. The 1970s were particularly important given the petroleum crisis and the perception that the UK-based companies were not directly benefiting from the growth of oil and gas activities. In this context, the Offshore Supplies Office (OSO) was created, with the aim of being

responsible to the Secretary of State for ensuring the maximum possible involvement of UK manufacturers, consultants, contractors and service companies in the provision of supplies and services to the offshore hydrocarbon industry. This includes the creation of new industrial capacity to meet existing and emerging needs and measures to ensure that such new capacity is as fully and continuously utilised as possible.⁶

A series of local content measures were then implemented, including discretionary licensing (as opposed to auctions), audits of purchases made by oil companies, and provision of financial assistance to domestic suppliers. According to a study by the UN Conference on Trade and Development,