# LOCAL CONTENT POLICIES IN RESOURCE-RICH COUNTRIES

YELENA KALYUZHNOVA, CHRISTIAN A. NYGAARD, YERENGAIP OMAROV and ABDIZHAPAR SAPARBAYEV

Centre for Euro-Asian Studies

#### **Euro-Asian Studies**

Series Editor
Christoph Bluth
Department of Peace Studies
University of Bradford
Bradford, UK

The transition of the countries in Euro-Asia is one of the most important developments affecting the international system since the end of the Cold War. The development of market economies after decades of central planning, the formation of new states and national identities, the creation of new, democratic institutions of state and the reintegration into the world economy poses enormous challenges. While some countries have progressed relatively well and are in the process of joining the European Union, others have experienced severe economic and social dislocations, to the point of political disintegration and armed conflicts. The Centre for Euro-Asian Studies at the University of Reading is dedicated to the academic study of the political, economic, social and cultural aspects of this process. This series presents the most recent contributions from leading academics in the field. With an interdisciplinary focus, it seeks to provide a substantial, original and ongoing contribution to our understanding of the region which is of vital importance for academics and of high policy relevance for governments and businesses.

More information about this series at http://www.springer.com/series/14973

Yelena Kalyuzhnova • Christian A. Nygaard Yerengaip Omarov • Abdizhapar Saparbayev

# Local Content Policies in Resource-rich Countries



Yelena Kalyuzhnova Henley Business School University of Reading Reading, UK

Yerengaip Omarov Kainar University Almaty, Kazakhstan Christian A. Nygaard Department of Economics University of Reading Reading, UK

Abdizhapar Saparbayev Kainar University Almaty, Kazakhstan

Euro-Asian Studies ISBN 978-1-137-44785-2 DOI 10.1057/978-1-137-44786-9

ISBN 978-1-137-44786-9 (eBook)

Library of Congress Control Number: 2016950869

© The Editor(s) (if applicable) and The Author(s) 2016

The author(s) has/have asserted their right(s) to be identified as the author(s) of this work in accordance with the Copyright, Designs and Patents Act 1988.

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made.

Printed on acid-free paper

This Palgrave Macmillan imprint is published by Springer Nature The registered company is Macmillan Publishers Ltd. London



#### Acknowledgements

The writing of this book was made possible by a British Council INSPIRE grant obtained by the Centre for Euro-Asian Studies of the University of Reading and Kainar University of Kazakhstan. Our research into local content (LC) development in Kazakhstan quickly began to draw on the experiences of other resource-rich countries—past and present—and so when the grant came to an end it was only logical to try to pull the different experiences together and systematise our understanding of LC policies more widely. We were excited that Palgrave Macmillan took an interest in a book on this rare and complex area of research—a topic that plays an important role in the economic development of resource-rich countries. We were privileged to have access to information, facts and stories of LC development across a series of resource-rich countries; opportunities to meet with companies operating in resource-rich emerging economies; and contact with many experts, academics and practitioners.

We were fortunate to be supported and encouraged by many people in the writing of this book. All our requests for interviews with governments and companies were kindly received. We would like to thank KazMunayGas, General Electric, Karachaganak Petroleum Operating, Byelkamit and Petrobras for providing us with such valuable insights into their LC policies. We are grateful to Pavel Beklemishev, Vladimir Feigin, Tatyana Mitrova, Jose Sergio Gabrielli, Willy Olsen, Ernest

#### viii Acknowledgements

Nwapa and Askar Syzdykov for their interviews, helpful suggestions and encouragement.

We are indebted to the Oxford Institute for Energy Studies who provided us with a platform and opportunity to present our work and discuss it with colleagues several times.

We are grateful to the participants of the Seminar Series on LC at the House of Lords, hosted by the late Lord Fraser of Carmyllie, for their generosity in sharing their views and providing us with valuable comments. We were saddened by the death of Lord Fraser, in 2013, when we had just started to write this book; he was a source of inspiration and deep ideas, which he shared with us from his personal experience of dealing with LC issues in the UK. We dedicate this book to Lord Fraser as a token of our acknowledgement and recognition of the debt that we owe him; without his wisdom and support the book would never have been written.

Our great colleagues at the University of Reading have been so generous with their time and suggestions. Our special thanks go to Christoph Bluth, Dina Azgaliyeva, Maksim Belitski, Noor Al Shalmali and James Moore. We are grateful to Kath Pilgrem, our copy editor, who worked with us to clearly communicate the understanding of LC and displayed amazing attention to detail. We are indebted to all of them for their endeavours—any mistakes remain our total responsibility.

Special gratitude also goes to Simon Williams, the director of the British Council in Kazakhstan during the period when this book was being written, for his tremendous support at the final stage of completing this project.

Finally, we would not have succeeded in writing this book without the support of our families.

Yelena Kalyuzhnova, Christian Nygaard Reading, UK Yerengaip Omarov, Abdizhapar Saparbayev Almaty, Kazakhstan

#### **Contents**

1	Intro	oduction	1
2	Loca	d Content: Concepts, Perspectives and Economy	11
	2.1	Introduction	11
	2.2	LC: Setting the Scene	15
	2.3	LC: Definitions and Concepts	34
	2.4	LC and Economic Development	44
	2.5	LC and NISs	58
	2.6	Summary	64
3	Diff	erent Models of Local Content Implementation	
	in tl	ne Oil and Gas Industry	75
	3.1	Introduction	75
	3.2	Models of LC in the North Sea	77
	3.3	Models of LC from Emerging Economies: Brazil,	
		Kazakhstan and Russia	94
	3.4	Summary	139

#### x Contents

4	Dete	erminants of Local Content Policies and Drivers	147
	4.1	Introduction	147
	4.2	Macro-Economic and Social Contexts	151
	4.3	Innovation Systems, LC and Spin-Off Activity	172
	4.4	Summary	205
_	0		210
5	Con	clusions	213
	5.1	LC Policies: Realities and Perspectives	214
	5.2	LC: An Industrial Tool for Success or Failure?	217
	5.3	LC: The End of the Road or a New Beginning?	221
In	dex		225

#### **List of Abbreviations**

BNDES Brazilian Development Bank BNOC British National Oil Company

BVQI Bureau Veritas Quality International

BSI Byelocorp Scientific Inc.
CP content protection
DC domestic content

ERM enhanced recovery methods EEA European Economic Area E&P exploration and production

ELLED Extractives-led Local Economic Development

ENL Exxon Neftegaz Ltd

FPSO floating production, storage and offloading vessel

FDI foreign direct investment
FSU former Soviet Union
FFO full and fair opportunity
GWS goods, works and services
GERD gross expenditure on R&D

PRH Human Resource Programme (in Brazil)

ICV in-country value

ILO International Labour Organization
IMF International Monetary Fund
IOC international oil company
JSC Joint Stock Company

#### xii List of Abbreviations

KPO Karachaganak Petroleum Operating BV

KMG KazMunayGas LNG liquefied natural gas

LC local content

LOSC locally owned oil service company

M&A mergers and acquisitions

MPE Ministry of Petroleum and Energy

MNE multinational enterprise
NC national company
NOC national oil company

NCDMB Nigerian Content Development and Monitoring Board

NCD Nigerian Content Division

NNPC Nigerian National Petroleum Corporation

NOGICD Nigerian Oil and Gas Industry Content Development Act

NIS national innovation system

NTB non-trade barrier

NCOC North Caspian Operating Company

NCS Norwegian continental shelf OSO Offshore Supply Office

O&G oil and gas

PDOC private domestic oil company PSA production sharing agreement PSC production sharing contract RIS regional innovation system

SEIC Sakhalin Energy Investment Company Ltd

SDAG Shtokman Development AG

TCO Tengizchevroil

TFP total factor productivity

TRIM trade-related investment measure UKOOA UK Offshore Operators Association

UNITAR United Nations Institute for Training and Research

WTO World Trade Organization

### **List of Figures and Tables**

Fig. 3.1	Kazakhstani households attitudes (2012): effects of LC	115
Table 2.1	National innovation system indicators	61
Table 3.1	Weighting factors for judging first 13 bid rounds, concession	
	framework	101
Table 3.2	LC requirement: rounds 1–13, concession framework	102
Table 3.3	Summary of survey data	116
Table 3.4	Chronology of sanctions against Russia, 2014–2015	131
Table 3.5	Key sectoral sanctions against Russia	133
Table 4.1	Developing LC: contextual indicators	153
Table 4.2	Governance indicators, 2014	174

## 1

#### Introduction

Many resource-rich countries are, or have been, pursuing policies to maximise the impact of natural resources. The central theme of this book is the role of local content (LC) policy in economic development. This is a subject of critical importance to resource-rich countries and the study of their economic development. This book analyses LC policies as part of sectoral (oil and gas, O&G) or wider economic and institutional catching up, and aims to situate LC policy within a wider framework of sustainability in the form of industrial diversification and innovation-led growth.

The definition of LC varies from country to country and even between periods of policy implementation. Therefore, it is complicated to unite different elements of policy-making in resource-rich countries into a single definition of LC. To the authors, LC is an industrial tool that can enable domestic producers to expand their activities, at least partially with domestic inputs, and gain access to international technological and managerial expertise. Jointly these factors can improve economies of scale and have positive domestic external effects that enhance producers' competitiveness on the international market.