

Institution: University of Reading		
Unit of Assessment: 17, Business and Management Studies		
Title of case study: Using Local Content Policy to Drive Economic Growth in Resource-Rich Countries		
Period when the underpinning research was undertaken: 2002 - 19		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Yelena Kalyuzhnova	Senior Lecturer Professor Vice-Dean (International), Henley Business School	1999 - present
Period when the claimed impact occurred: 2016–20		
Is this case study continued from a case study submitted in 2014? No		
<p>1. Summary of the impact</p> <p>Facilitating economic growth through the implementation of local content policy (LCP) can be challenging when considered as a stand-alone policy. Since 2016, research at the University of Reading has shaped the policies of governments in Kazakhstan, Russia and Kuwait on trade, industry and investment through its focus on LCP in the context of country-specific economic development strategies. As a result of the research, local content (LC) is now recognised by international organisations as a developmental instrument for nurturing the whole economy, beyond the oil and gas sectors. These organisations include the European Bank for Reconstruction and Development (EBRD), the United Nations Economic Commission for Europe (UNECE), and resource-rich governments. The research has therefore demonstrated how LCP can be adopted to enable economic growth in industries associated with natural resource extraction.</p>		
<p>2. Underpinning research</p> <p>Professor Kalyuzhnova is the founder of the Centre for Euro-Asian Studies (CEAS) at the University of Reading. CEAS has earned a worldwide reputation for its unique expertise on and leading research into resource-rich Euro-Asian countries in the areas of business, economics, politics and diplomacy. Between 2000 and 2020, CEAS carried out a variety of research projects related to economic development in a group of emerging economies that are rich in natural resources, investigating new governmental initiatives in economic policy, including that of LC [ref 3]. Although there are variations in its application between countries, broadly defined, LC is an industrial tool that can enable domestic producers to expand their activities using domestic inputs, procurement, labour and technology, and gain access to international technological and managerial expertise in order to enhance their competitiveness [ref 2].</p> <p>In 2010, CEAS formulated the first project related to the impact of LC development in Kazakhstan; this was supported by a Strategic Partnership Grant from the British Council's INSPIRE programme, which is aimed at strengthening the links between higher education institutions in the UK and those in central and south-east Asia. This facilitated a long-standing collaboration between CEAS and both Kainar University and the Kazakh–British Technical University in Kazakhstan. Through continued engagement, CEAS was successful in winning further British Council Institutional Links funding (from the Newton Fund) for research on LC impact in Kazakhstan's Energy Value Chain and was tasked with developing a Centre for Competitiveness (they received GBP500,000, April 2015 to April 2017). The research generated by this funding was novel in that LC had not been considered before as an instrument for industrial and economic policy. As a result of this engagement, the Kazakh–British Research Centre for Competitiveness (KBCC) was formed and is still in existence today. The research investigated government policies in five resource-rich countries to determine which LCPs and institutional drivers underpinned innovation-driven growth in other industries in those countries. It aimed to understand what supports successful LC strategies</p>		

and how these relate to developments in domestic research, innovation and skills capacity, which drive economic activity. The five resource-rich countries studied were Brazil, Kazakhstan, Norway, Russia and, for comparison, the UK.

The work highlighted LCP as an industrial policy that is chosen by governments to generate further industrial development through non-fiscal means, that is, by stimulating economic activity, market development and technological innovation through industrial diversification and innovation-led growth [ref 1].

This study found that LCP could be a critical, but not the only, condition for the economic development of resource-rich countries. It could indeed have an impact on both the approaches related to firms' development and on the functioning of national innovation systems, and thus contribute to industrial diversification and innovation-led growth. The research showed that, under the correct conditions, LCP could become a strategic tool that targets knowledge-transfer, technological innovation and economies of scale to create the conditions for spin-offs and positive externalities. Moreover, successful implementation of LCP is dependent upon development strategies based on unique macro-economic policy objectives, which are country-specific. LCP, when applied correctly, is therefore more than a policy that just secures an immediate increase in the percentage of local employees and procurement.

Although there is no single blueprint for LC delivery across countries, the research made recommendations in terms of LCP development and implementation. These included facilitating the procurement processes and revising industrial policies to ensure that small firms can participate [ref 5]; this may require innovations in social knowledge and governance structures [ref 6] in order to support local industry. In addition, the supporting sectors for oil and gas (for example, ICT, software, e-leadership and financial services) should be developed in terms of skills capacity, digital strategy and infrastructure by providing tax exemptions, subsidies and subventions. The research found that governments could also learn from international LC practices, adapting them to the domestic conditions around the known capabilities of firms, regulators and knowledge institutions. Furthermore, governments should consider the attractiveness of their countries to foreign capital investors when implementing LCP. This is important in terms of securing investment by industries with highly technical and safety-sensitive global supply chain standards – and avoiding monopolistic positions in smaller domestic markets, leading to higher costs that reduce country revenues and attractiveness for investors.

Through comparative case studies across countries rich in natural resources, such as oil and gas, the research has identified the factors influencing the success of LC policy implementation. It has shown that LCP is multidimensional and can be used as a vehicle for enabling the start-up of economic activity, technological catch-up or skills capacity accumulation, and sustaining demand for local goods, work and services. LCP can therefore be used as a strategic intervention to facilitate knowledge-transfer and technological innovation, creating the conditions for spin-offs and positive externalities to arise. It has therefore enabled government and industries to develop and adopt LCPs as part of their industrial and economic development strategies. Such strategies facilitate the exploitation of natural reserves whilst at the same time upskilling the local supply chain industries.

3. References to the research

1. Kalyuzhnova, Y. and Pomfret, R. (2017) [*Sustainable Energy in Kazakhstan: Moving to Cleaner Energy in a Resource-Rich Country*](#). Routledge, London.
2. Kalyuzhnova, Y., Nygaard, C.A., Omarov, Y. and Saparbayev, A. (2016) [*Local Content Policies in Resource-Rich Countries*](#). Euro-Asian Studies. Palgrave Macmillan, Basingstoke.
3. Kalyuzhnova, Y. (2008) [*Economics of the Caspian Oil and Gas Wealth: Companies, Governments, Policies*](#). Euro-Asian Studies. Palgrave MacMillan, Basingstoke.

4. Kalyuzhnova, Y. and Belitski, M. (2019) '[The impact of corruption and local content policy in on firm performance: Evidence from Kazakhstan](#)'. *Resources Policy*, 61. pp. 67–76. doi: <https://doi.org/10.1016/j.resourpol.2019.01.016>
5. Belitski, M., Kalyuzhnova, Y. and Azhgaliyeva, D. (2017) '[The role of alliances in leveraging national local content policies for firm competitiveness](#)'. *International Journal of Strategic Business Alliances*, 6 (1/2). pp. 69–85. doi: <https://doi.org/10.1504/IJSBA.2017.089844>
6. Heim, I., Kalyuzhnova, Y., Li, W. and Liu, K. (2019) '[Value co-creation between foreign firms and indigenous small- and medium-sized enterprises \(SMEs\) in Kazakhstan's oil and gas industry: The role of information technology spillovers](#)'. *Thunderbird International Business Review*, 61 (6). pp. 911–927. doi: <https://doi.org/10.1002/tie.22067>

The underpinning research for this case study comprises three full-length books (all refereed and of around 200–300 pages) and three refereed journal articles, two of which are in journals that are AJG/ABS list-rated as 2*. The research meets or exceeds 2* quality definitions, and develops important new knowledge on how local content policy can be shaped to enable economic growth in resource-rich countries.

4. Details of the impact

Addressing the context-specific challenges of implementing LCP, Kalyuzhnova's research has underpinned the development, refinement and adoption of LCP in resource-rich emerging economies. It has informed investment decisions by the EBRD and underpinned the teaching and training of business executives in LCP on a global scale. Importantly, the research has shown how the embedding of LCP within industrial strategies drives economic growth and development within a country. Professor Kalyuzhnova has therefore played a pivotal role in educating and influencing a diverse range of senior international stakeholders in the strategic development and deployment of LCP.

The long-term engagement of CEAS with Kazakhstan through the KBCC, and its facilitation through the British Council Institutional Links grant, gave the collaborative research a great deal of influence over the policy of the newly formed Kazakhstan National Agency on Development of Local Content (NADLoC) in November 2015. It facilitated the provision of timely KBCC policy briefs on how to adjust LCPs [source 2], and this coincided with Kazakhstan's accession to membership of the Eurasian Economic Union and its accession to the World Trade Organization. NADLoC was later incorporated within the Kazakhstan Center for Industry and Export, which has confirmed that research-informed LC measures were adopted in the State Program of Industrial and Innovative Development of the Republic of Kazakhstan for 2020–2025 [source 1]. These measures included “stimulating the development of basic industries” and “technological development and digitalization of manufacturing industries” [source 1]. In particular, the research findings relating to the harmonisation of supplier requirements and the encouragement of certification systems for local engineering suppliers by local governmental agencies, have been adopted and implemented by the new state programme for the engineering of oil and gas machinery [Evidence 5].

In terms of facilitating development in the manufacturing industry, Kalyuzhnova has had a long-term engagement with the Kazakhstan Manufacturing Union. This has resulted in widespread uptake of the research findings across the engineering industries through its large membership (543 companies). The Union [source 5], following research findings, now provides training for its members on mentoring, health and safety standards, accounting and finance, and has collated individual examples of companies implementing the research findings [source 5]. As a result, there have been “measurable changes in mechanical engineering practice recorded over the past two years. It should be noted that in 2018 and 2019, Kazakhstan's mechanical engineering showed a steady increase in production volumes by 20 and 27%, respectively” [source 5]. The Almaty Fan Plant LLP, for example, moved away from process upgrades to management training, thus demonstrating a change in business strategy based on an awareness that it would be preferable to focus on management skills before making any investment in technical upgrades [source 5]. Since then the company has

“managed to upgrade the technical processes, which has led to the expansion of its competitive range of the products”, as well as becoming an exporter [source 5]. Another engineering company has won a national prize for implementing LCP and developing new production technologies, while a further company has demonstrated a successful change in strategy and diversified to include engineering to supply the defence sector [source 5]. As a result of Kalyuzhnova’s “significant sustained impact on the shaping of local content development in Kazakhstan”, she has been invited to act as Special Adviser to the Association of Kazakhstan Machinery Industry [source 5].

Acting as an adviser, Kalyuzhnova has also used her research to inform the EBRD’s investment decisions with numerous clients and governments across central Asia [source 4]. As a multilateral developmental investment bank, the EBRD uses investment as a tool to build open-market economies while fostering sustainable and inclusive growth. In particular, risks such as corruption and inadequate indicators around quantitative targets for LCP are considered by the Bank, alongside the research findings in relation to the importance of investment in innovation, capacity-building and transparency around procurement as part of LCP [source 4]. Furthermore, the EBRD foresees the continued use of the research to inform “future discussions with clients in other Central Asian countries such as Uzbekistan” [source 4]. More widely, acting as an invited specialist to the United Nations Economic and Social Council (ECOSOC), Kalyuzhnova has informed discussions on energy provision and sustainable development. Furthermore, In November 2018, Kalyuzhnova was invited to speak with the UNECE in Geneva, this time to the Team of Specialists on Innovation and Competitiveness, on reshaping policies in order to promote sustainable and inclusive growth [source 6]. “Her presentation was instrumental in shaping the Report of the Team of Specialists on Innovation and Competitiveness Policies on its Eleventh session. In particular, Section 29, p4, highlighted the main principles corroborated by Professor Kalyuzhnova’s book” [source 6] where “local content policies can achieve economic and social objectives if adequately designed, implemented and used in conjunction with innovation strategies” (ECE/CECI/ICP/2018/2). She has since become a peer-reviewer of policy recommendations of UNECE for SPECA (Special Programme for the Economies of Central Asia), with a specific focus on Georgia. “This series of UNECE Innovation for Sustainable Development Reviews is a flagship, demand driven policy advisory service under the UNECE sub-programme 4, with reviews including policy recommendations issued as official UN publications and forming the basis for future capacity building activities for the beneficiary countries” [source 6]. “Her contribution has been especially appreciated with detailed analytical commentary, leveraging her academic expertise on chapters on public procurement and financing as drivers of innovative development and innovation and growth dynamics in Georgian enterprises” [source 6]. In October 2019, she led a capacity-building event for SPECA countries related to LC development. It was jointly organised by UNECE, Henley Business School and the Moscow State Institute of International Relations (MGIMO) Business Incubator, and “Kalyuzhnova led on producing a guide for SPECA policymakers” [source 6].

The introduction of LC research into curricula has developed through Kalyuzhnova’s links between CEAS and many educational institutions and professional bodies across Kazakhstan, Russia and the Middle East. This has enabled the development of high-level executive training, master’s programmes aimed at professionals, and a range of industries aligning the advice on LC to their development strategies. Kalyuzhnova et al.’s book entitled *Local Content Policies in Resource-Rich Countries* [ref 2] (translated into Arabic in 2018, with extracts also translated into Russian) has been adopted as the key LC text by a number of universities (in, for example, Kazakhstan, Russia and Uzbekistan) [source 7]. For example, within Kyrgyzstan, the book formed part of the EC International Cooperation and Development project “Support to the Education Sector of the Kyrgyz Republic”, which aimed to guide the Kyrgyz government in the implementation of structural reforms in the education sector; case studies from the book were used in the training of entrepreneurs. In Kazakhstan, the Institute of Engineering and Information Technology, responsible for promoting the oil and gas industry, used the research to underpin training programmes across the sector, involving 550 participants in nine cities with “94% reporting the gaining of new skills” [source 7].

Within Russia, the SKOLKOVO Energy Centre at the Moscow School of Management used the research to “take a strategic direction in terms of encouraging new research initiatives and new engagements and collaborations with local industry” [source 8]. Adopting the core principles of the book, the Centre made evidence-based recommendations to policymakers for the oil and gas industry; these recommendations were subsequently adopted by the Ministry for Trade and Industry in formulating policy on localisation and import substitution. Further work undertaken by the SKOLKOVO Energy Centre on the performance of the Russian oil industry, based on the Reading research, has been presented by the Russian oil minister to President Vladimir Putin (2018) [source 8].

The findings of the research have now also impacted the Middle East (Kuwait). Supply chain companies in the Kuwaiti oil sector have changed their policies and invested in building the capacity of local suppliers by providing training on management, accountancy and finance. As a result, and in collaboration with the relevant government agencies, there is now a focus on upskilling and employing local Kuwaiti managers instead of recruiting talent from overseas [source 3]. These changes have been facilitated by Kalyuzhnova’s engagement, in an advisory capacity [source 9], with the Kuwait National Assembly (Parliament) since 2017 and the hosting of an international conference on LCP at the University of Reading in 2018. Since then, the Kuwait National Assembly has established a new department on LC, and is implementing the research findings by stimulating an increase in technology within the local supply chain for the oil and gas industry. “Already, by 2019 the rate of recruitment of expatriate workers in the private sector has decreased by 62% which is an indication of policy implementation to restructure the demographic balance in the country.” This is all part of a wider strategy on increasing domestic value added [source 9].

In summary, research at the University of Reading has addressed the challenges associated with implementing LCP in resource-rich countries as a driver for economic growth. It has demonstrated the importance of aligning LCP with country-specific industry and economic policies, thus creating the conditions for spin-offs and positive externalities. As a result, it has underpinned the implementation of appropriate LCP policy interventions with a reach across a number of resource-rich nations in Euro-Asia, as well as Kuwait. In terms of significance, the impact of the revised policies on local supply chain industries (such as manufacturing and engineering) are now being realised, with increased skills capacity, production and diversification, all of which play an important role in the overall aim of increasing economic growth more generally.

5. Sources to corroborate the impact

- [S1] Letter from Deputy Chairman, National Agency on Development of Local Content, Kazakhstan.
- [S2] Letter from Kazakh Ambassador to the United Kingdom.
- [S3] Testimonial from Leader of the Committee for Supply Chain Companies for the Kuwaiti Oil Sector.
- [S4] Testimonial from European Bank for Reconstruction and Development, Lead Economist Central Asia.
- [S5] Letters from Deputy Chairman of the Committee for Kazakhstan Mechanical Engineering and Metalworking (2018 and 2020).
- [S6] Testimonials from the UNECE Secretariat (November 2018 and May 2020).
- [S7] Collection of letters from professional bodies and education institutions.
- [S8] Statement from Director SKOLKOVO Energy Centre, Moscow School of Management.
- [S9] Letters from Kuwait National Assembly (2019 and 2020).