

PART I

Introductory Context and Principles

1

Local Content and the Sustainable Development Nexus

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1 INTRODUCTION

Energy is inextricably linked to all aspects of human life: the ability to work, live, survive and execute tasks. Given the significance of energy to human life and the global economy, global energy markets are rapidly growing and have witnessed significant transformations over the last few decades.¹ Technological innovation; the diversification of the main primary energy sources (conventional and unconventional oil and gas, coal, renewables, nuclear and solid minerals); rise in global primary energy demand; changes to established means of energy supply and distribution; geopolitical uncertainties; environmental pollution; climate change; sharp drop in the price of oil since 2014; outbreak of the novel Coronavirus Disease of 2019 (COVID-19) pandemic; and the increasing demand for the equitable distribution of the benefits and risks of energy production amongst other things are rapidly transforming the field of energy law.² Furthermore, important political changes such as United Kingdom's exit from the European Union (Brexit); the rise of America-first policies in the United States under President Donald Trump; the abrupt diplomatic isolation and blockade of Qatar by several Gulf countries; as well as the global quest for low-carbon energy transition in alignment with the United Nations Sustainable Development Goals (SDGs) have all resulted in

¹ The global energy market consists of people, companies, financial institutions, trade organisations and national authorities involved in the production, distribution and sale of energy. The energy market consists of three key sectors: production (upstream), networks (midstream) and retail (downstream). There are various sub-industries encompassed in each key sector, including the petroleum industry, gas industry; mining industry, electrical power industry; coal industry; renewable energy industry; drilling, equipment/service industry; refining/marketing industry amongst others. See R. Heffron, *Energy Law: An Introduction* (Springer, 2015) 1–3; see also D. Olawuyi, *Extractives Industry Law in Africa* (Cham, Switzerland: Springer, 2018) 1–5.

² See D. Zillman, M. Roggenkamp, L. Paddock and L. Godden, 'Introduction: How Technological and Legal Innovation Are Transforming Energy Law' in D. Zillman, M. Roggenkamp, L. Paddock and L. Godden (eds.) *Innovation in Energy Law and Technology: Dynamic Solutions for Energy Transitions* (Oxford University Press, 2018) 1–16.

fundamental shifts in domestic national energy policies.³ In response, countries have evolved legal innovations, policies and measures aimed at maximising the gains of resource production in the energy sector, while lowering the negative social, economic, environment and geopolitical impacts. One key revolution in energy law and policy over the last decade is the rise in the adoption of local content requirements and policies (LCRs) – regulatory measures, contractual provisions and policies that require energy market participants and operators to give priority to nationals, domestic companies and locally produced materials, in the procurement of goods and services used for energy operations.

Given the international nature of the global energy industry, design and application of LCRs have taken diverse forms and standards in different jurisdictions. One consistent aim of LCRs in global energy markets is the desire to incentivise and maximise the use of local and in-country goods and services in energy operations. Despite this clear and uniform overall policy driver of LCRs in global energy markets, the practical outcomes of LCRs in terms of boosting productivity, developing value chains and advancing sustainable development have yielded mixed results to date. LCRs have been linked in a number of countries with producing conflict and misalignments with extant national obligations under core international treaty provisions on trade, investment, gender, environment, human rights and sustainable development.⁴ Similarly, the application of LCRs in the renewable energy sector has provided mixed results, with studies showing that protectionist and trade-restrictive LCRs may slow down the development of the renewable energy sector thereby stifling progress in environmental and sustainable development objectives.⁵ Furthermore, despite the rise in LCRs in terms of providing employment and participation opportunities for nationals, there remains a considerable gender gap in the distribution of benefits and risks, as well as access to socio-economic opportunities, for women in key sectors of the energy industry.⁶ Similarly, on-the-ground problems relating to the implementation of LCRs, such as lack of available technology, capacity and material at the local level, may delay projects and may ultimately result in loss of foreign direct

³ See D. Olawuyi, 'International Energy Law and the Gulf Crisis' in Rory Miller (ed.), *The Gulf Crisis: The View from Qatar* (Doha: HBKU Press, 2018) 127–35.

⁴ See B. Asiago and M. Wasunna, 'Are Local Content Requirements in Developing Petroleum Sectors Sustainable? Managing Expectations while Aligning Sustainable Principles with Regulatory Policy' (2018) OGEL, www.ogel.org/journal-advance-publication-article.asp?key=572.

⁵ Ibid. See also J.-C. Kuntze and T. Moerenhout, 'Local Content requirements and the Renewable Energy Industry: A Good Match?' International Centre for Trade and Sustainable Development (2013) 6–11.

⁶ African Development Bank, *Women's Economic Empowerment in Oil and Gas Industries in Africa*, www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/anrc/AfDB_WomenEconomics_Empowerment_V15.pdf, noting the need to address the considerable gender bias in the distribution of the risks, costs and benefits in extractive industries in Africa.

investment (FDIs) to less restrictive jurisdictions.⁷ Such an outcome may delay a country's path to wealth creation and sustainable development.

The undertone of conflict between domestic-level LCRs and the coherent implementation of sustainable development law and treaty provisions raise fundamental questions of policy and practice. This book provides a multijurisdictional and systematic exposition of how LCRs have evolved in energy markets across the world, with case studies from Africa, Asia, Europe, North America, Latin America, South America and Australasia. It then provides comparative analysis of the key implementation challenges that arise, and legal and negotiation techniques for managing those challenges.

This chapter provides foundational information, which would help readers to firmly grasp the underpinning concepts and terminologies relating to the sustainable development questions in the design and implementation of LCRs. After this general introduction, Section 2 provides an overview of the essential features of LCRs in global energy markets. Section 3 outlines the overall aim and structure of the book, providing information on the work that our thirty-two authors have done to examine the core intersections between LCRs, treaty implementation and sustainable development in global energy markets.

2 LCERS IN GLOBAL ENERGY MARKETS: LEGAL CONTEXT AND OVERVIEW

There is no uniform definition of LCRs. In this book, our working definition of LCR is regulatory measures, contractual provisions and policies that require energy market participants and operators to give priority to nationals, domestic companies and locally produced materials, in the procurement of goods and services used for energy operations. Although LCRs have been extensively discussed with respect to the oil and gas sector, LCRs have been widely applied in mining, renewable energy and other energy subsectors.⁸ Irrespective of the subsector, LCRs are generally utilised by governments to generate broader economic benefits for the local economy, beyond fiscal benefits.⁹

LCRs can be in form of preferential rates for local industries; mandatory procurement requirements to source goods from local industries; preferential tax and tariff

⁷ See D. Olawuyi, 'Local Content Policies and Their Implications for International Investment Law' in J. Chaisse et al. (eds.), *Handbook of International Investment Law* (Springer, 2019) 1–21.

⁸ See Organisation for Economic Co-operation and Development (OECD), Working Party of the Trade Committee, 'Local Content Policies in Minerals-Exporting Countries' (OECD 2017); also C. Banet, 'Techno-nationalism in the Context of Energy Transition: Regulating Technology Innovation Transfer in Offshore Wind Technologies' in D. Zillman, M. Roggenkamp, L. Paddock and L. Godden (eds.), *Innovation in Energy Law and Technology: Dynamic Solutions for Energy Transitions* (Oxford University Press, 2018) 74–98.

⁹ D. Olawuyi, 'Local Content and Procurement Requirements in Oil and Gas Contracts: Regional Trends in the Middle East and North Africa' (2019) 37(1) *Journal of Energy and Natural Resources Law* 93–117.

schemes that confer financial benefits on goods or energy produced with local equipment; preference for local goods and services as part of the conditions for approving contracts, permits or licenses; or performance requirements and targets designed to confer benefits on nationals and local industries.¹⁰ Slightly over 90 per cent of resource-rich countries have at least one form of LCR as regards their energy industries, 50 per cent of which impose quantitative performance targets to achieve certain threshold of local participation and utilisation of human and material resources indigenous to that economy.¹¹ Famous examples include ‘Buy American’ provisions in the United States, which typically require government contractors to purchase their supplies from American companies even if those supplies are more expensive than the same products purchased from non-American companies.¹² Also, the Feed-in-Tariffs Scheme (FIT Programme) in Ontario, Canada, which mandated project operators to procure ‘minimum amount of goods and services that come from Ontario’ in order to be able to participate in the price guarantees and grid access granted by the FIT.¹³ In Australia, Indigenous Land Use Agreements (ILUAs) in the mining sector have stipulated that at least 40 per cent of the workforce at the mine will at all times be comprised of local Aboriginal people.¹⁴ Similarly, as far back as 1959, the Government of Nigeria established indigenisation policies which gave priority to Nigerians, Nigerian companies and locally produced material in critical sectors of the Nigerian economy, including the oil and gas sector.¹⁵ Likewise, in the early 1990s, Spain developed a renewable energy legislation that encouraged regions in the country to apply LCRs as a condition for awarding concessions.¹⁶ A number of other prominent energy markets, such as Brazil, the United Kingdom, Norway, Qatar and several other

¹⁰ See United Nations Conference on Trade and Development (UNCTAD), ‘Foreign Direct Investment and Performance Requirements: New Evidence from Selected Countries’, 2003, p. 2, which defines performance requirements as ‘stipulations, imposed on investors, requiring them to meet certain specified goals with respect to their operations in the host country’. In other words, they are measures requiring investors to behave in a particular way or to achieve certain outcomes in the host country. Agreement on Trade-Related Investment Measures, April 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1868 UNTS 186 [TRIMs], Preamble.

¹¹ Olawuyi, note 7.

¹² T. Meyer, ‘How Local Discrimination Can Promote Global Public Goods’ 95 *Boston University Law Review* 1937–2001.

¹³ See, Ontario Ministry of Energy, ‘Feed-in Tariff Program Two-Year Review’, www.energy.gov.on.ca/en/fit-and-microfit-program/2-year-fit-review/.

¹⁴ See the Australian Native Title Act 1993 (Cth) see Division 3, Subdivisions B-E. See T. Hunter, *Legal Regulatory Frameworks for the sustainable Extraction of Australian Offshore Petroleum Resources: A Critical Functional Analysis* (University of Bergen, 2010), ch. 4.

¹⁵ For a discussion on the history of the development of legal and policy regimes to promote local content in the Nigerian oil and gas industry, see U. J. Orji, ‘Towards Sustainable Local Content Development in the Nigerian Oil and Gas Industry: An Appraisal of the Legal Framework and Challenges-Pt I’ (2014) *International Energy Law Review* 30–5.

¹⁶ International Renewable Energy Agency (IRENA) and Global Wind Energy Council (GWEC), ‘30 Years of Policies for Wind Energy: Lessons from 12 Wind Energy Markets’, Spain 2013.

countries in Africa and the Middle East, have implemented various forms of LCRs in oil, gas, mining, power and/or renewable energy sectors.¹⁷ LCRs are generally designed to unlock the competitiveness of the local economy and workforce, while allowing a country to diversify and strengthen its national industry. Such LCRs can also promote other social benefits such as job creation, development of endogenous technology and infrastructure and the redistribution of wealth and authority to address concerns of particular minority, indigenous or disadvantaged communities.¹⁸

LCRs have been increasingly framed as a revolutionary strategy and framework through which resource-rich countries can utilise resource exploitation to increase public welfare, advance sustainable development and diversify growth in other important sectors of their domestic economies, especially by creating local employment, skills development and the participation of local communities in the energy industry.¹⁹ As Ezenagu and Eze-Ajoku argue in this book, ‘if developing countries are to develop, upgrade their products, and compete favourably in today’s globalized economy, protectionist policies, in the form of LCRs, are inevitable’.²⁰ Furthermore, if carefully designed and implemented, LCRs can provide a basis for energy companies and indigenous communities to negotiate mutually beneficial terms that could address social, economic and environmental concerns of production operations in indigenous communities.²¹

However, despite the clear drivers, scope and policy objectives of LCRs in global energy markets, approaches taken to enforce and implement LCRs may conflict with core international treaty provisions on sustainable development, especially in countries with unclear and unspecific legal frameworks on LCRs. Here we define sustainable development, specifically sustainable resource management (SRM), as development that balances social and economic development and environmental protection in the management and use of petroleum, solid minerals and other natural resources.²² Sustainable development law therefore encompasses treaties, regulatory instruments and frameworks that aim to advance economic, social and environmental

¹⁷ Ibid. See also, T. Acheampong, M. Ashong and V. C. Svanikier, ‘An Assessment of Local Content Policies in Oil and Gas Producing Countries’ (2016) 9 *Journal of World Energy Law & Business* 282; S. Tordo et al., *Local Content Policies in the Oil and Gas Sector* (World Bank 2013); also P. Heum, ‘Local Content Development – Experiences from Oil and Gas Activities in Norway’ (2008) SNF Working Paper No 02/08, Institute for Research in Economics and Business Administration, Bergen.

¹⁸ See Intergovernmental Forum on Mining, Minerals Metals and Sustainable Development, *Designing Local Content Policies in Mineral Rich Countries* (2018), www.iisd.org/sites/default/files/publications/local-content-policies-mineral-rich-countries.pdf, p. 2–3.

¹⁹ See Meyer, note 12, arguing that ‘the use of these discriminatory subsidies at the subnational level can sometimes increase global welfare’.

²⁰ See Chapter 5 of this book.

²¹ See Odumosu-Ayanu in Chapter 19 of this book.

²² See the Brundtland Report, which defines sustainable development as ‘development which meets the needs of the present without compromising the ability of future generations to meet their own needs’. G. Brundtland, Report of the World Commission on Environment and Development: Our Common Future (United Nations General Assembly document A/42/427, 1987) para 27. Also, Para. 1.2 of the ILA

development for current and future generations. The principle of SRM, which seeks to address inconsistencies and overlap between economic instruments and their overall social and environmental development outcomes, especially in the energy sector, has become one of the most-recognised and important principles of international law, and has found its way into several international declarations, treaties and domestic law.²³ In its simplest practical application, SRM requires a coherent and systemic integration of core instruments and treaties on energy, environment, trade, investment, economic growth, human rights and development to encourage mutual supportiveness and avoid overlap.²⁴ This includes promoting (1) participation and inclusion, (2) access to information, (3) non-discrimination and equality, (4) empowerment and accountability and (5) legality and access to justice (the ‘PANEL Principles’) in the design and implementation of energy policies and programs to prevent social and human rights trade-offs.²⁵

New Delhi Declaration on Sustainable Development stating that ‘states are under a duty to manage natural resources, including natural resources within their own territory or jurisdiction, in a rational, sustainable and safe way so as to contribute to the development of their peoples, with particular regard for the rights of indigenous peoples, and to the conservation and sustainable use of natural resources and the protection of the environment, including ecosystems. States must take into account the needs of future generations in determining the rate of use of natural resources. All relevant actors (including States, industrial concerns and other components of civil society) are under a duty to avoid wasteful use of natural resources and promote waste minimization policies.’ See also the 2012 Sofia Guiding Statements on the Judicial Elaboration of the 2002 New Delhi Declaration of Principles of International Law Relating to Sustainable Development, RESOLUTION No. 7/2012 noting in para. 3 that ‘the sustainable use of all natural resources represents an emerging rule of general customary international law, with particular normative precision identifiable with respect to shared and common natural resources’.

²³ For a comprehensive list of these instruments, see the United Nations Sustainable Development Knowledge Platform. See also N. Schrijver, ‘Advancements in the Principles of International Law on Sustainable Development’, in M. C. Cordonier Segger and C. G. Weeramantry (eds.), *Sustainable Development Principles in the Decisions of International Courts and Tribunals, 1992–2012* (Routledge, 2017) 99–102 (providing an overview of the ways that sustainable development principles have been incorporated into and operationalised by international treaty regimes and tribunals); D. French, ‘The Sofia Guiding Statements on sustainable development principles in the decisions of international tribunals’, in Cordonier Segger and Weeramantry, *infra*, 177–84 (highlighting how sustainable development has been incorporated into the juridical activities of international bodies convened under the auspices of UN associated and influenced treaty regimes).

²⁴ See D. Olawuyi, *The Human Rights Based Approach to Carbon Finance* (Paperback Edition, Cambridge University Press, 2018) 1–25, discussing the need for systemic integration and harmonisation of core trade, environment, climate change, energy and human rights treaties to achieve broader goals of sustainable development.

²⁵ See D. Olawuyi, ‘Energy (and Human Rights) for All: Addressing Human Rights Risks in Energy Access Projects’, in R. Salter, C. G. Gonzalez and E. K. Warner, *Energy Justice: US and International Perspectives* (Edward Elgar, 2018) 73–104. See also the preamble to chapter 23 of Agenda 21, approved by the UN Conference on Environment and Development on 13 June 1992: UN doc A/CONF.151/26 (vols. I–III) (1992), stating that fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making. ‘This includes the need of individuals, groups, and organizations to participate in environmental impact assessment procedures and to know about and participate in decisions, particularly those that potentially affect the communities in which they live and work.’

SRM and the need for policy coherence have assumed greater significance and urgency as the United Nations' 2030 Agenda for Sustainable Development places great emphasis on the need for enhanced partnership – globally, regionally and nationally – to support the ambitious targets of the 2030 Agenda.²⁶ SDG 17.14 specifically encourages all stakeholders to enhance policy coherence for sustainable development. For example, in recognising the importance of trade to the attainment of the SDGs, SDG 17.10 encourages countries to promote a 'universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda'.²⁷ Similarly, SDG 2.B calls on countries to correct and prevent trade restrictions and distortions in world agricultural markets, through – amongst other measures – the elimination of export subsidies.²⁸ These and other SDGs recognise the need to strengthen and advance ongoing efforts to promote partnerships and mutual supportiveness between trade, energy, human rights and environment regimes as a prerequisite for achieving the 2030 Agenda.²⁹

However, as shown in chapters of this book, LCRs, if not properly designed and implemented, can result in significant overlap and misalignment in the domestic implementation of a number of international treaties relating to trade, investment, energy, human rights, the environment and sustainable development. For example, domestic level LCRs can present major inconsistencies and risks to the application of international trade and investment law. Forests of literatures have analysed the conflicts between LCRs and the provisions of the General Agreement on Tariffs and Trade (GATT, 1994, 1947); the Agreement on Trade-Related Investment Measures (TRIMS); the Agreement on Government Procurement (GPA); and the General Agreement on Trade in Services (GATS).³⁰ Many of these instruments expressly prohibit the use of certain performance requirements – especially those related to local content, export controls, foreign exchange restrictions, purchase of raw materials, domestic equity/ownership, technology transfer, research and development (R&D), employment and domestic equity/ownership – that can cause trade restriction or price-distorting effects.³¹ For example, in 2013, the WTO Appellate Body

²⁶ Ibid.; see also D. Olawuyi, 'Sustainable Development and the Water-Energy-Food Nexus: Legal Challenges and Emerging Solutions' (2020) 103 *Environmental Science and Policy* 1–9.

²⁷ United Nations, 'Transforming Our World: The 2030 Agenda for Sustainable Development', GA Res. 70/1, 25 September 2015 (2030 Sustainable Development Agenda).

²⁸ Ibid.

²⁹ Olawuyi, note 25.

³⁰ Olawuyi, note 7; also L. Nielsen, 'The Legality of Local Content Measures under WTO Law' (2014) 48 *Journal of World Trade Law* 3, 553–91, 557–65.

³¹ Article 2.1 of the TRIMs Agreement requires WTO members to refrain from applying any TRIMs (Trade-Related Investment Measures) that are inconsistent with the national treatment obligation under Article III or XI of the GATT Treaty (1994). See Trade-Related Investment Measures (TRIMs) Agreement. Agreement on Trade-Related Investment Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1868 U.N.T.S. 186; also General Agreement on Tariffs and Trade (GATT) (1994) TS 56 (1996) Cm 3282; 33 ILM 28.

ruled that Canada's LCRs violate the obligation not to discriminate against foreign products contained in the GATT.³² A number of other decisions have highlighted the deep tensions and trade-offs between domestic LCRs and the implementation of trade, investment and environment treaties.³³ In addition to creating misalignment with trade and investment treaty obligations, discriminatory and protectionist LCRs in the energy sector can stifle progress in the transfer of environmentally preferable technologies and products needed to advance environmental protection, energy security and sustainable development.

Similarly, restrictive LCRs can be detrimental to the flow of foreign direct investment (FDIs) to energy-producing countries.³⁴ Several energy-producing countries have intensified efforts to attract FDIs in all sectors of national economies, as key ways to improve economic diversification, create jobs and eliminate poverty in line with SDG 8 on decent work and economic growth, and SDG 1 on poverty eradication.³⁵ However, while LCRs may specify the portion of total expenditures that must be comprised of locally sourced goods and services, lack of available capacity and material at the local level may delay projects and may ultimately result in loss of FDIs to less restrictive jurisdictions.³⁶ Such an outcome may ultimately stifle a country's path to sustainable development. For example, complying with product mandating requirements could mean project delays or higher costs on the part of the operator, especially when suitable and reasonably priced alternatives are not immediately available locally.³⁷ This can have a distorting effect on the profitability and viability of a project from the investor's standpoint or affect the timeline for investment activities. The imposition of domestic-level LCRs in the absence of required supporting capacity, institutional resources or adequate technological capabilities could ultimately reduce the attractiveness of a country as a desirable location for FDIs.³⁸ According to a study by the Organisation for Economic Co-operation and Development (OECD), total imports and total exports have declined in every region of the world as

³² Appellate Body Reports, Canada: Certain Measures Affecting the Renewable Energy Generation Section, Canada: Measures Relating to the Feed-in Tariff Program, 5.85, WTO Doc. WT/DS412/AB/R, WT/DS426/AB/R (adopted May 24, 2013) [hereinafter Canada: Renewable Energy] (finding that Canada's LCR programs – 'Minimum Required Domestic Content Levels' – violate Article III:4 of the GATT 1994 standards).

³³ See a full discussion in Chapter 3.

³⁴ J. Jensen and D. Tarr, 'Impact of Local Content Restrictions and Barriers against Foreign Direct Investment in Services: The Case of Kazakhstan's Accession to the World Trade Organization' (2008) 46 *Eastern European Economics* 5–26.

³⁵ UN General Assembly, Transforming Our World: The 2030 Agenda for Sustainable Development, 21 October 2015, UN Doc. A/RES/70/1.

³⁶ See Chapters 9 and 12 of this book for detailed discussion.

³⁷ P. Peek and P. Gantès, 'Skills Shortages and Local Content in the Sub-Saharan African Oil and Gas Industry: How to Close the Gap', Centre de recherches entreprises et sociétés (CRES), 2008.

³⁸ See United Nations Conference on Trade and Development (UNCTAD), 'Elimination of TRIMS: The Experience of Selected Developing Countries', 2007, pp. 9–10.

a result of LCRs and have shrunk world imports and exports by USD 12 billion and USD 11 billion, respectively.³⁹ Furthermore, according to the study, almost all cases where LCRs are introduced, final goods exports have been reduced from 0.05 per cent to as much as 5.0 per cent.⁴⁰ Investors that are unable to meet a country's LCRs may seek alternate and less restrictive markets for their investments. Such an outcome could impact the ability of energy-rich countries to meet their sustainable development aims.

Furthermore, LCR implementation, especially obligations relating to state involvement in procurement processes, compliance reporting and data localisation requirements, as seen in some LCRs in Africa and the Middle East, could raise the legal risks, cost and feasibility of investing in energy sectors in those regions.⁴¹ For example, recent studies show that LCR compliance costs can increase an investor's information technology expenditure by as much as 40 per cent.⁴² Likewise, the cost of training local employees and meeting mandatory corporate social responsibility (CSR) obligations of local communities, especially in indigenous communities, can be very significant and must therefore be carefully considered by energy operators at contract negotiation stages in order to avoid fines, protracted litigation and community protests. Analysing the general legal, fiscal and contractual framework governing LCRs, especially understanding contractual provisions and clauses such as employment of nationals, training, procurement, technology transfer and project participation requirements, is now very important to effective risk management and due diligence in the design and implementation of energy projects.

Additionally, despite the rise in LCRs in terms of providing employment and participation opportunities for nationals, there remains a considerable gender gap in the distribution of benefits and risks associated with the sector, as well as access to socio-economic opportunities for women across the energy industry value chain, especially in developing countries where the energy industry remains overwhelming male dominated.⁴³ LCR implementation in a number of countries has yet to pay sufficient attention to studying, analysing and unpacking patterns of opportunity

³⁹ S. Stone, J. Messent and D. Flaig, 'Emerging Policy Issues: Localisation Barriers to Trade', OECD Trade Policy Papers, No. 180, 2015, pp. 10–11.

⁴⁰ Ibid.

⁴¹ See National Board of Trade (NBT), 'No Transfer, No Trade: The Importance of Cross-Border Data Transfers for Companies Based in Sweden', 2014.

⁴² Ibid.; Ponemon Institute, 'The True Cost of Compliance' January 2011.

⁴³ For example, according to a report, the Nigerian 'oil and gas industry is still overwhelmingly male, with surveys showing that the executive boardrooms of petroleum companies are mostly a boys' club'. See BBC News, 'Nigeria's Growing Number of Female Oil Bosses', September 11, 2014, www.bbc.com/news/business-29127436. See also African Development Bank, Women's Economic Empowerment in Oil and Gas Industries in Africa, www.afdb.org/fileadmin/uploads/afdb/documents/publications/anrc/afdb_womeneconomicempowerment_v15.pdf, stating that in African extractive industries, 'while benefits accrue mostly to men in the form of employment and compensation, the costs (e.g. family or social disruption, environmental degradation) fall most heavily on women'.