

# Developing Local Content Policy in Pursuit of Sustainable Development Goals

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**Abstract.** The Sustainable Development Goals (SDGs) constitute a set of ambitious steps adopted to transform our world. They comprehensively outline action plans for social inclusion, environmental sustainability, and economic development. Achieving the SDGs by 2030 requires an unusual combination of action and partnership between various governmental and non-governmental organizations, development partners, the private sector, and civil society. While decision-makers are responsible for prioritizing and implementing strategies to ensure the various strategies embedded in the SDGs come to fruition, the private sector and civil society also play leading roles in implementing national plans. Local content policies (LCPs) are strategic policy frameworks focusing on diversification and technologically-led transformation in resource-rich economies. They are generally expressed through laws compelling stakeholders to procure services, create jobs within the host nation, and transfer technology. This paper stipulates that LCPs must be linked to the SDGs as this will help resource-rich countries fully benefit from their natural resources.

Keywords: Local content policies, Sustainable Development Goals, oil and gas development

If well managed, oil and gas resources found in commercial quantities can play a significant role in the development of communities. The upstream activities include exploration and production of fossil fuels (i.e., crude oil and natural gas) which are transported to refineries and processing plants where other by-products, such as feedstocks, are produced from the raw material. Electricity generation and fuels for the residential, commercial, transportation, industrial, and agricultural sectors emerge from oil and gas production.

Despite a clarion call for a cleaner energy transition globally (i.e., renewable energy resources), the use of oil and gas will continue to play a leading role in the world's

UDC: 339.9 Received: March 10, 2022 Accepted: October 15, 2022 energy mix. According to the International Energy Agency<sup>1</sup>, global energy demand is expected to increase to 37% by 2040, and more than 50% of energy consumers will still use oil and gas resources. There is no doubt that the COVID-19 pandemic has had some negative consequences for the oil and gas sector. Apart from energy, the oil and gas industry also contributes to the socio-economic development of a country by creating jobs. Revenue is generated at the local and national levels, along with infrastructure. Despite these incentives, there are also negative impacts, as upstream operations, such as drilling and production, are high-carbon processes, and there are safety and social acceptance issues.

Minimizing global CO2 emissions is difficult in any economy's oil and gas sector. The benefits and feasibility of oil and gas production as an efficient and cheap source of energy supply are persistently threatened by the emergence of innovative technologies using renewable energy resources. Against this backdrop, an array of solutions are being adopted to eliminate the use of oil and gas in the coming decades. However, currently, there are not enough technologically and economically mature innovative technologies to allow this to happen (Gupta 2019).

Ritchie and Roser<sup>2</sup> suggest that, in 2016, the contentious intentional flaring and release of methane gases during oil and gas production accounted for only 5.8% of the world's greenhouse gas emissions, while other vital sectors such as electricity production for residential use was responsible for 10.9%, iron, and steel processing 7.2%, chemicals and petrochemicals only 3.6%. The transport sector released the highest share of emissions at 11.9%. In essence, whatever methodology or mechanisms are employed to mitigate and minimize emissions while curbing a rise in the world's average temperatures, the remedies may, in the end, emerge from the oil and gas industry. Thus, it is essential to consider prospective innovations and decisively recognize technology's role in pursuing a sustainable future<sup>3</sup>.

The significance of hydrocarbons cannot be overemphasized as they play a crucial role in all facets of human endeavor. Due to how essential hydrocarbons are to human existence and the world, exploration and production have proliferated, particularly in middle- and low-income countries, as discoveries of commercial quantities, are made. However, without a doubt, the discovery of hydrocarbons and the impact on economic transformation in the countries that discover them varies due to how the commodity accelerates economic transformation. Hydrocarbons continue to play a vital role in the world's energy mix, and the world's energy market is proliferating, experienc-

<sup>&</sup>lt;sup>1</sup> World energy investment outlook: Paris. 2015. *International Energy Agency.* URL: https://www.iea.org/reports/world-energy-outlook-2015 (accessed 30.10.2022).

<sup>&</sup>lt;sup>2</sup> Ritchie H., Roser M. 2020. CO₂ and greenhouse gas emissions. *Our world in data*. URL: https://ourworldindata.org/co₂-and-other-greenhouse-gas-emissions (accessed 30.10.2022).

<sup>&</sup>lt;sup>3</sup> Verbeek G. 2020. Engineering for a greener oil and gas industry. *JPT*. URL://jpt.spe.org/engineering-greener-oil-and-gas-industry (accessed 30.10.2022).

ing a significant transformation over the last decade. Technological advancement; an increase in the world's primary energy demand; modification to traditional means of supplying and distributing energy; geopolitical inconstancy; environmental pollution; climate change; a sharp dip in the oil price since 2014; the eruption of the COVID-19 pandemic; and a rise in demand for the unbiased allocation of revenues accrued from hydrocarbon production, among other things, are changing both how hydrocarbons are produced and national oil companies' policies that allow economies to benefit from natural resources.

It is against this backdrop that local content policies (LCPs) have been adopted as a catalytic tool to stimulate broad-based economic development, which is required to reduce poverty while ensuring that the application of the United Nations (UN) Sustainable Development Goals (SDGs) result in radical shifts in domestic national energy policies. The SDGs were created to stimulate and measure progress while enhancing the quality of life for humanity. Agenda 2030 is a policy plan led by the UN and adopted by all 193 member countries, which identifies 17 goals that provide an outline roadmap for more significant social equity, environmental sustainability, and comprehensive economic development. The SDGs comprise 169 targets and 232 indicators which measure the 17 overarching goals, making a robust tool for measuring and reporting progress. The SDGs offer oil and gas companies significant opportunities to arrange their operations to ensure they are linked to host government objectives for sustainable development.

These global initiatives mean host governments address sustainability by establishing sustainable development management standards and policies in the oil and gas industry<sup>4</sup>. This objective is reinforced as the oil and gas industry is compelled to commit to the development goals of the Paris Agreement<sup>5</sup> and the United Nations Framework Convention on Climate Change<sup>6</sup>, which aim to minimize the pressure on the climate, environmental challenges, and other sustainability difficulties that impact the health and well-being of society<sup>7</sup>. In addition, oil and gas companies and their stakeholders are fully encouraged to submit voluntary reports as one of their main objectives, thus strengthening and complying with sustainable development policies.

This aim of this paper is to show that LCPs must be linked to the SDGs as this will help resource-rich countries fully benefit from their natural resources.

<sup>&</sup>lt;sup>4</sup> Schneider J., Ghettas S., Merdaci N., Brown M., Martyniuk J., Alshehri W. and Trojan A. 2013. *Towards sustainability in the oil and gas sector: benchmarking of environmental, health, and safety efforts.* URL: https://scholarworks.rit.edu/jes/vol3/iss3/6/ (accessed 30.10.2022).

<sup>&</sup>lt;sup>5</sup> Chemnick J. 2021. US Officially Rejoins Paris Climate Agreement. *Scientific American*. URL: https://www.scientificamerican.com/article/u-s-officially-rejoins-paris-climate-agreement/ (accessed 30.10.2022).

<sup>&</sup>lt;sup>6</sup> UN. The Paris Agreement. URL: unfccc.int/parisagreement/items/9485.php (accessed 30.10.2022).

<sup>&</sup>lt;sup>7</sup> Naceur K.B. 2019. How the oil and gas industry is contributing to sustainability. *JPT*. URL: https://jpt.spe.org/how-oil-and-gas-industry-contributing-sustainability (accessed 30.10.2022).

#### What are local content LCPs the SDGs?

According to Leyland and Eberhard (2018), local content is the composition and effective implementation of strategies that favor and boost local or indigenous industries in resource-rich countries over multinational suppliers of goods and services. Hansen et al. (Hansen et al. 2019) posit that they usually are policies forced upon multinational companies operating in host countries to raise and partner with indigenous suppliers in the economy, pursuing wide-ranging policy objectives such as creating jobs, industrial transformation, and the transfer of technology. Local content initiatives can be extended to the information communication technology (ICT), health, machinery, and equipment sectors, and extractive industries (Hansen et al. 2019). An attainable level of local content is sometimes required under the legal regulations which permit multinational firms to operate in a host nation. Although there is no universally accepted definition of the term in the oil and gas industry, local content or national content are strategies that allow the state to gain value addition from petroleum activities in addition to the direct revenues obtained through sales of hydrocarbons belonging to the state or taxes, service fees, state participation, and dues collected from companies operating within the oil and gas value chain.

Developing countries with natural resources continuously look for strategies to deepen the economic links between the extractive industry and economic transformation. Against this backdrop, countries continuously establish and strengthen local content policies to stimulate development while creating value for the host country (Ramdoo 2015). LCPs are critical policy interventions for that purpose. LCPs could prove catalytic for developing countries since there appear to be mixed results for natural resource extraction and economic development.

Local content in the context of this study encompasses "local procurement, the employment of indigenous people within the host country both at the national and local levels and services (value addition) from local or national firms" (Butler 2019). Butler asserts that local content, as a policy framework, can equip communities in resource-rich countries politically, economically, and socially, broadly increasing their stake in the supply chain.

LCPs are a series of policies geared towards creating value-added outcomes for citizens. They are a vital policy tool that compels multinational oil companies (MNOCs) to assist the host country's economy instead of simply pursuing profits in the host country (Ngoasong 2014). As most MNOCs are profit-oriented, LCPs are the most efficient way to enhance the economic well-being of society (Tordo, Tracy, Arfaa 2011). Thus, linking local content to the SDGs can generate value for the host government and stakeholders. In this light, several oil-producing economies have implemented LCPs to generate more significant profit from oil and gas discoveries.

It is essential to mention that, in the past, local firms lost out on innovative creation, that is, access to research, development, and skills enhancement. Local firms were

often left to only provide service delivery without gaining any value-added content. For this reason, LCPs have become a critical bridge allowing local firms to gain from their natural resources. One positive aspect of this is creating a multilateral trading system whereby trade flows are practical and accessible, one of the main principles of the World Trade Organization (WTO).

Agenda 21 is a policy plan established to forge global cooperation for sustainable development to enhance human lives while protecting the environment. In 2000, 178 nations agreed and endorsed the Millennium Development Goals (MDGs) (Hansson, Pargman, Pargman 2021). The MDGs had eight specific objectives, with the main aim of eradicating poverty and hunger by 2015. All parties accepted the SDGs and the 2030 Agenda for Sustainable Development in 2015. The principal aim, agreed upon by all UN-affiliated countries, is to build a 15-year plan, on which some progress has been made; however, some of the stipulated objectives are being met only slowly (Bjørner 2021). The SDGs have been restored to some extent due to the UN's consistent commitment to technological advancement in its Agenda 2030 plans. One of the critical conditions of this commitment is that development meets the needs of the current generation while ensuring that future generations are not compromised in their ability to meet their own needs. The SDGs expatiate on and combine three core areas of sustainability: the environment, society, and the economy, expanding on an array of acknowledged directions such as social and regulatory effects of industry, poverty reduction, biodiversity, etc.

The SDGs seek to advance the socio-economic development aspirations of rich and developing countries. They are ambitious, cooperative, and precise, with a clear message that every country must try to achieve these goals. The 17 SDGs are framed in a way that seeks to: eradicate poverty in its entirety<sup>8</sup>; address issues about how to exterminate hunger, achieve food security, foster food and enhance sustainable farming practices; ensure good quality of life and success for everyone at all ages; provide all-inclusive and impartial training and enhance long-lasting opportunities for everyone<sup>9</sup>; ensure access to clean of water for all; ensure cheap and affordable energy for all; maintain urban communities and human settlements; guarantee manageable utilization and creation patterns (Walker 2021); take critical action to secure and protect the environment; guarantee, restore, and advance the use of natural frameworks to fight desertification and land degradation and end biodiversity disaster. The SDGs from 2016 to 2030 (adopted by the United Nations General Assembly in September 2015) are part of the UN's global plan Transforming Our World: The 2030 Agenda for

<sup>&</sup>lt;sup>8</sup> Ritchie H., Roser M. 2018. Plastic pollution. *Our world in data*. URL: https://ourworldindata.org/plastic-pollution (accessed 30.10.2022); SDG Tracker 2021. Goal 1: No poverty - SDG tracker. *Our world in data*. URL: https://sdg-tracker.org/no-poverty (accessed 30.10.2022).

<sup>&</sup>lt;sup>9</sup> UN. Sustainable Development Goals Report 2016. URL: https://www.worldcat.org/title/sustainable-development-goals-report-2016/oclc/959869696 (accessed 30.10.2022).

Sustainable Development, a program outlining the policies, values, and obligations that should eventually lead to a more justifiable and sustainable future (Morton et al. 2017).

The oil and gas industry plays a significant role in the world's energy mix. It currently contributes approximately 55% of the global energy supply, and a rising population means it will continue to be an essential commodity, particularly for developing economies. Access to a cheap, reliable, and sustainable supply of oil and gas is key to economic change, job creation, poverty reduction, and global health.

According to IBIS World<sup>10</sup>, oil and gas contribute US\$3.2 trillion to the world economy. The UN (2018) suggests<sup>11</sup> that the oil and gas sector contributes considerable tax and other revenues to host governments and directly employs 4.5 million people. The fuels, by-products, and services that emerge from the sector support the running of day-to-day society while powering other industries, generating energy for heat and electricity, and producing fuel for transport. Refined oil is used in manufacturing products, materials, and chemicals, including plastics, medical equipment, clothing, and personal care products. Furthermore, the oil and gas industry is technologically driven. It requires modern technologies and products from investment in research and development and encourages local content and entrepreneurship with the associated capacity-building benefits. The energy, products, and services can help lift billions out of poverty, but progress must be made to support the aims of the Paris Agreement and 2030 Agenda.

If carefully designed and well implemented, the exploration and production of hydrocarbons can positively affect all SDGs as it contributes to the economy while mitigating the negative corollaries of hydrocarbon discovery. Baseline expansions and steps to mitigate the adverse effects of hydrocarbons, in essence, local content development, are identified as contributions to the SDGs. Overall, oil and gas development can be a catalyst for economic transformation and a tool for social development as it provides access to cheap energy sources, creates opportunities for decent jobs, encourages business and skills development, and enhances fiscal revenues while adding value to infrastructure. Nonetheless, the development of hydrocarbons has, in the past, contributed to some of the challenges that prevent the full manifestation of the SDGs, such as climate change, environmental pollution, economic and social inequality, civil war, gender-based violence, circumvention of tax, corruption, substantial health problems, and human rights abuses. For decades, the oil and gas industry has progressed as various stakeholders ensure steps are taken to avert, mitigate and manage the effects of hydrocarbon production.

<sup>&</sup>lt;sup>10</sup> IBIS World 2021. Global Oil & Gas Exploration & Production. URL: https://www.ibisworld.com/global/market-size/global-oil-gas-exploration-production/ (accessed 30.10.2022).

<sup>&</sup>lt;sup>11</sup> UN. Meetings Coverage and Press Releases. URL: https://www.un.org/press/en/2018/dsgsm1202.doc.htm (accessed 30.10.2022).

# Driving LCP implementation in light of the SDGs

The main stakeholders, which include multinational oil and gas companies and host countries, must show that they undertake their activities in a manner that maintains the socio-economic value of projects to attract investors and financiers. Given the current COVID-19 pandemic, these requirements have become more pronounced as many low- and middle-income economies endowed with commercial levels of oil and gas face unprecedented development difficulties.

The 2030 Agenda for Sustainable Development and 17 SDGs are geared towards peace and prosperity that works for both human beings and the planet<sup>12</sup>. The 17 SDGs, composed of 169 clearly defined targets, can be grouped into three central pillars of sustainability: economic (SDG 1, 2, 3, 8, and 9), social (SDG 4, 5, 10, 11, 16, and 17), and environmental (SDG 6, 7, 12, 13, 14, and 15).

The SDGs are broad and stem from necessities such as economic growth, innovation, and infrastructure creation (Ranjbari et al. 2019). Achieving the 2030 Agenda requires various sectors and disciplines to actively integrate and cooperate (Shula et al. 2020). For resource-rich economies to achieve the SDGs, in light of LCP implementation, there is a need for indigenous firms and multinational firms operating in host countries to work towards the SDGs coherently. Though this could be challenging, LCP implementation needs to be undertaken in light of the SDGs (Singh et al. 2018; van Soest et al. 2019; Weitz et al. 2018).

To a large extent, the implementation of LCPs in the oil and gas industry is aimed at stimulating indigenous participation and the development of national labor, goods, services, technology, and capital. The aims and principles guiding these policies are often defined as an overarching set of policy statements or economic plans. Usually, the strategies and aims are comprehensively incorporated into legislation or contractual agreements for issuing licenses or concessions. Implementing LCPs requires resource-rich developing countries to have an array of policy tools that take the key aims of the SDGs into account: no poverty, zero hunger, quality education, affordable and clean energy, decent work, economic growth, industry, innovation, infrastructure, reduced inequality, sustainable communities, responsible consumption and production, climate action, peace, justice, and strong institutions.

The all-encompassing goal of every business concerning sustainable development must be to carry out its activities responsibly, contribute to society, avert or reduce any risk, and ensure no harm is done. Since LCPs are regulatory policies usually embedded in law, they can leverage economic diversification or become a wheel upon which natural resources stimulate the potential of local economies (Ovadia 2015; Nwapi 2016).

<sup>&</sup>lt;sup>12</sup> UN 2015. Resolution adopted by the General Assembly on 1 September 2015. General Assembly, United Nations.

To enhance industrialization and long-lasting economic development, LCPs, and the selected SDGs discussed in this study can be used to activate or create productive links between the extractive industry and the economy in general, using domestic goods and services coupled with the recruitment of local indigenous people into the oil and gas industry.

All stakeholders with oversight of oil and gas activities must embark on strategies that align with the SDGs, as a good combination of LCP implementation and SDGs can speed up the development objectives of resource-rich countries. For instance, multinational oil and gas companies must ensure their contributions take account of the entire oil and gas value chain's local, social, political, and economic spheres (exploration, development, production, shutdown, and decommissioning). Local participation and the engagement of stakeholders in formal dialogue can promote positive outcomes. Both multinational and indigenous firms must align their activities in a manner which contributes to the SDGs, specifically the goals that relate to cheap and dependable energy (SDG 7), climate action, and life on land and in the water (SDG 13, 14, and 15), and economic development and innovation (SDG 8, and 9).

# A critique of some SDGs

Since sustainable development is a significant impetus for economic development, the SDGs provide reasonable goals and targets for LCP implementation in developing countries. Implementing LCPs through the lens of the SDGs can improve the extractive industry and promote broad-based development and structural transformation in resource-rich economies. This encompasses a significant contribution to SDGs. Thus, the analysis of this study pinpoints some synergies between the SDGs, which can be broadly grouped into three key dimensions, regarding oil and gas activities and humanity's ability to: personally, or collectively realize aspirations of creating wealth and protecting well-being; develop social and physical infrastructures for sustainable economic transformation; and achieve sustainable management of the environment and natural resources.

GOAL 1: No poverty

SDG 1 states that in all its manifestations, extreme poverty must be eradicated by 2030. This means that no individual would be living on less than \$1.25 per day. This goal seeks to minimize this situation for men, women, and children of all ages. Its principal objective is to protect poor and vulnerable individuals while providing access to essential services and support for people affected by extreme climate-related events and other economic, social, and environmental disasters. It seeks to put in place nationally recognized social protection systems for everyone, thereby ensuring that the deprived and vulnerable in society have the same access to economic resources, fundamental basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate technology, and financial services including microfinance.

Apart from the taxes and royalties generated from oil and gas discovery in commercial quantities, LCPs create substantial proceeds through taxes, royalties, and dividends for governments to invest in economic and social development. LCPs in the extractive sector ensure that the industry, through its activities, creates jobs for the community. Quentin and Quirion (Quentin, Quirion 2018) and Stavropoulos and Burger (Stavropoulos, Burger 2020) assert that LCPs create job opportunities in the local community. Multinational oil and gas companies can sub-let some sections of their contracts to local firms. LCPs can play a crucial role in allowing individuals in the local community to be employed and earn salaries that improve the standard of living for society.

# GOAL 2: Zero hunger

SDG 2, zero hunger, calls for collective public action to resolve environmental challenges such as biodiversity, and agricultural productivity, coupled with sustainable production systems while confronting the massive challenges posed by the climate. It seeks to eradicate hunger and malnutrition, curtail micronutrient deficiencies among all age groups and improve the socio-economic conditions of farmers and private enterprises. SDG 2 aims to end all forms of malnutrition by 2030 while ensuring that every person, especially children, has access to adequate nutritional food. The UN is taking steps to ensure that it achieves the aims of SDG 2 by, for example, promoting sustainable agricultural practices so that farmers can obtain better crops. Farmers must plant cover crops, practice crop rotation, permaculture, and soil enrichment, encourage natural pest predators, use bio-intensive integrated pest management, and undertake polyculture farming. Hunger and malnutrition are significant barriers to development, as can be seen in resource-rich countries that suffer environmental degradation, drought, and biodiversity loss. Oil spillages compound the process of deforestation and impact the biomass and agricultural productivity of the land. Oil spills directly affect agricultural productivity through the direct impact on arable land that destroys both cultivated and fallow land. The impact of an oil spill on cultivated forest or fallow land is measured using forest biomass, which is the proportion of fallow and forested land affected.

LCP frameworks are adopted and implemented by policymakers to ensure that host nations fully benefit from their oil and gas resources. The implementation of a sustainable LCP framework which takes into account the need to ensure that MNOCs conduct their activities in a manner that does not affect farmland belonging to indigenous locals means resource-rich countries' institutions are strengthened and play a pivotal role in ensuring that laws regarding local content initiatives are strictly adhered to by all stakeholders.

GOAL 4: Inclusive and equitable education and lifelong learning

SDG 4 seeks to transform lives through education, recognizing its significance as a primary driver of development. It ensures inclusive and fair education and promotes lifelong learning opportunities for all. Providing quality education is pivotal to the success of the development. Education leads to progress toward the SDGs and should be part of the strategy to achieve them. The new education agenda encapsulated in SDG 4

is comprehensive, holistic, ambitious, aspirational, and universal, inspired by a vision of education for the public's good.

Every sphere of education – primary, secondary, and tertiary – is a significant determinant of development<sup>13</sup>. It means that by implementing LCPs in conjunction with SDG 4, MNOCs, private enterprises, and decision-makers in the host nation can facilitate the delivery of proper education by creating innovative technologies. In the case of developing countries endowed with natural resources, local communities tend to lack sound educational systems, and therefore drafting LCPs in accordance with the SDGs compels all stakeholders to ensure that local communities benefit from the resources, as modern schools are built and equipped with learning tools and technologies fit for purpose for locals. Adopting a robust LCP means that MNOCs operating in a particular area must ensure that some indigenes are trained to acquire knowledge to develop themselves. Another aspect is providing local firms with technology training so that locals can keep abreast of innovative technologies.

GOAL 7: Affordable and clean energy

SDG 7 ensures access to affordable, reliable, sustainable, and modern energy for everyone, restricting emissions and intensifying decarbonization globally. By 2030, SDG 7 aspires to give 100% access to electricity, which is a critical tool for economic growth as it enhances the quality of life of humankind. However, currently, a billion people still do not have access to a dependable source of electricity, mostly in developing countries endowed with natural resources (Ritchie and Roser, 2019). Through LCPs, host nations, with the training they receive from MNOCs, can train the mechanical and environmental engineers who are key to the development of cheap renewable energy solutions, including wind, solar, wave, and geothermal energy, all of which provide access to electricity in remote regions while alleviating the effects of climate change. For instance, photovoltaic cells transform sunlight into electricity and are a safe, reliable, and affordable energy source. Currently, 20% of the world has access to solar energy, resulting in a reduction in greenhouse gas emissions. This is a key energy source in developed and developing economies rich in natural resources (Amelang, 2018). LCPs allow host nations to gain academic knowledge through training to enhance the production and distribution of household energy through mini-grids and smart grids, which are technologically driven and complex engineering mechanisms.

GOAL 8: Decent work and economic growth

SDG 8 aims to maintain per-capita economic growth while promoting development-oriented policies that support productive activities. It seeks to achieve at least 7% gross domestic product growth per annum in the least developed countries, eliminate forced labor, end modern slavery and human trafficking, and end child labor in all

<sup>&</sup>lt;sup>13</sup> Roser M., Ortiz-Ospina E. 2019. Global Extreme Poverty. *Our world in data*. URL: https://ourworldindata.org/extreme-poverty (accessed 30.10.2022).

its forms by 2025. The fundamental grounding is that sustained per-capita economic growth in combination with decent work leads to inclusive growth, full and productive employment, and decent work. Sustained growth depends on the ability of domestic financial institutions to encourage financial inclusion and on trade support being available to develop countries. However, economic growth should not be followed at the cost of other SDGs, which means that LCPs should be implemented in a progressive manner that considers economic growth models premised on enhancing global resource efficiency, consumption, and production, detaching economic growth from environmental degradation. For SDG 8 and LCPs to be fully realized, higher growth rates should go along with decent work opportunities for everyone, including young people and individuals with disabilities. This involves ensuring equal pay for work of equal value, protecting labor rights, securing work environments, and eradicating forced labor, slavery, and child labor. It is essential to create decent work opportunities in all areas of employment, encourage entrepreneurship and formalize micro-, small-and medium-sized enterprises.

# **Policy implications**

The formulation and implementation of SDGs in conjunction with LCP development denote a paradigm shift from just providing MNOCs a license to operate to a discourse that dominated the literature on the extractive industry from the end of the 1990s to the mid – 2000s. Ensuring equity between the key players in the oil and gas value chain requires a reference point that incorporates a modern system of governance and removes governance instruments that are inadequate or obsolete (given their sectorial and one-dimensional nature), and translates multifaceted commitments into a practicable and manageable set of requirements that can be employed by decision makers involved in the implementation of LCPs and SDGs in oil and gas activities.

In line with the reforms and strategies needed to fulfill the 2030 Agenda, the key players responsible for governing the oil and gas industry must endeavor to move towards a new multi-level, holistic, integrated, and multi-stakeholder governance structure, taking into consideration formal and informal arrangements. This structure must consist of governance institutions coupled with strategies considering the relevant SDGs and their incorporation into oil and gas activities. To a substantial extent, these SDGs can provide a high level of understanding of how activities in the extractive industry should be regulated and how resource rents should be used to boost economic and human development while protecting natural resources and safeguarding the natural environment for current and future generations. Against this backdrop, resource-rich countries must adopt and systemically implement a well-integrated approach that considers the complex inter-linkages and trade-offs among various natural resources, economic sectors, eco-systems, and development priorities and outcomes.

The significance of each SDG and how they connect to LCP implementation depends on various variables stemming from good public policies that govern the entire

oil and gas value chain<sup>14</sup>. According to Panwar et al. (Panwar et al. 2014) and Benites-Lazaro and Mello-Théry (Benites-Lazaro, Mello-Théry 2017), resource-rich countries' practices must focus on adherence to regulations, meaning that at the national and local levels there must be relevant laws and policies that regulate oil and gas activities.

More importantly, resource-rich host countries must fully take on the responsibility of creating an environment that fosters and compels accountable, robust institutions and governance mechanisms that enhance plans to achieve SDGs while ensuring effective LCP implementation. Thus, the main actors must ensure they draft, implement, and enforce policies, laws, and rules that govern civil society, including the oil and gas industry (IFC and UNDP, 2017).

To successfully implement SDGs while implementing LCPs in the oil and gas sector, host governments, the private sector, and other development agencies must cooperate and work collaboratively (IFC and UNDP, 2017). This can benefit all stakeholders in the oil and gas value chain as all the actors are compelled to address the challenges of a lack of transparency that can impede SDG and LCP implementation. Thus, adopting a collaborative approach can help attain a consensus, develop good practices, and set high regulatory standards.

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The principal aim of this study is to comprehensively analyze how the SDGs must be considered when adopting LCPs in the oil and gas industry and how they correlate with the targets of SDGs 1, 2, 4, 7, and 8. The major contribution of this study is its deduction that, with robust institutions, the SDGs and LCPs can be used to develop and implement concepts in the oil and gas industry, bearing in mind the role of resource-rich host countries, the private sector and various other stakeholders play in attaining the goals of the 2030 Agenda.

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<sup>&</sup>lt;sup>14</sup> International Finance Corporation (IFC) and United Nations Development Programme (UNDP) (2017) Mapping the oil and gas industry to the SDGs: An Atlas. UNDP.

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# Формирование политики в отношении местного содержания в контексте Целей устойчивого развития

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Цели в области устойчивого развития (ЦУР) представляют собой набор амбициозных задач по преобразованию всего мира. Они предполагают меры по содействию социальной интеграции, экологической устойчивости и экономическому развитию. Достижение ЦУР к 2030 году требует объединения усилий и сотрудничества между различными правительственными и неправительственными организациями, частным сектором и гражданским обществом. В то время как государственные акторы несут основную ответственность за определение приоритетов и реализацию стратегий, заложенных в ЦУР, частный сектор и гражданское общество также играют не менее важную роль в реализации национальных планов. Политика в отношении местного содержания (local content policy) представляет собой основу политики, ориентированную на диверсификацию и технологическую трансформацию в странах богатых природными ресурсами. Как правило, такая политика выражается в законах, обязывающих заинтересованные стороны приобретать услуги, создавать рабочие места и передавать технологии в принимающих странах. В статье обосновывается, что политика в отношении местного содержания должна быть увязана с ЦУР, поскольку это поможет ресурсно обеспеченным странам в полной мере использовать свои природные ресурсы.

**Ключевые слова:** политика в отношении местного содержания, Цели устойчивого развития, нефтегазовое развитие

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#### References:

Benites-Lazaro, Mello-Théry. 2017. CSR as a legitimatizing Tool in Carbon Market: Evidence from Latin America's Clean Development Mechanism. *Journal of Cleaner Production*. Vol. 149. P. 218-226. DOI: 10.1016/j.jclepro.2017.02.095

Bjørner T. 2021. How Can a Severe Game be Designed toPprovide Engagement with and Awareness of the Plastic Crisis as Part of the UN's SDGs? *Proceedings of the Conference on Information Technology for Social Good (GoodIT '21)*. New York, NY: Association for Computing Machinery. DOI: 10.1145/3462203.3475887

Blesh J., Hoey L., Jones A.D., Friedmann H., Perfecto, I. 2019. Development Pathways toward "Zero Hunger". *World Development*. Vol. 118. P. 1–14. DOI: 10.1016/j.worlddev.2019.02.004

Butler P. 2019. Global Governance via Local Procurement? Interrogating the Promotion of Local Procurement as a Corporate Social Responsibility Strategy". N. Andrews and A. Grant (eds). *Corporate Social Responsibility and Canada's Role in Africa's Extractive Sectors.* University of Toronto Press. P. 149-175.

Ericksen P.J. 2008. Conceptualizing Food Systems for Global Environmental Change Research. *Global Environmental Change*. Vol. 18. P. 234-245.

Gupta S.C. 2019. Promising Pathways to Lower Atmospheric Carbon without Sacrificing the Petroleum Advantage. Presented at the SPE Annual Technical Conference and Exhibition, One Petro. DOI: 10.2118/196109-MS

Hansen U.E., Nygaard I., Morris M., Robbins G. 2020. The Effects of Local Content Requirements in Auction Schemes for Renewable Energy in Developing Countries: A literature review. *Renewable and Sustainable Energy Reviews, Elsevier.* 1(2). May–August. 109843. DOI: https://doi.org/10.1016/j.rser.2020.109843

Hansson L.A., Cerratto-Pargman T., Pargman D. 2021. *A Decade of Sustainable HCI: Connecting SHCI to the sustainable development goals.* Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems. DOI: 10.1145/3411764.3445069

Leigland J., Eberhard A. 2018. Localisation Barriers to Trade: The Case of South Africa's Renewable Energy Independent Power Pprogram. *Development Southern Africa*. 35(4). P. 569-588.

Liu J., Dietz T., Carpenter S.R., Folke, C. 2007. Coupled Human and Natural Systems. *AMBIO: A Journal of the Human Environment*. No. 36. P. 639-649.

Morton S., Pencheon, D., Squires N. 2017. Sustainable Development Goals (SDGs) and their Implementation: A national Global Framework for Health, Development, and Equity Needs a Systems Approach at Every Level. *British Medical Bulletin*. 124(1). P. 81-90.

Ngoasong M.Z. 2014. How International Oil and Gas Companies Respond to Local Content Policies in Petroleum-Producing Developing Countries. A narrative enquiry. *Energy Policy*. Vol. 73. P. 471- 479.

Nwapi C. 2016. A Survey of the Literature on Local Content Policies in the Oil and Gas Industry in East Africa. SPP Research Paper No. 9/16. Nwapi, Chilenye and Nwapi, Chilenye, A Survey of the Literature on Local Content Policies in the Oil and Gas Industry in East Africa (April 13, 2016). SPP Research Paper No. 9/16. URL: https://ssrn.com/abstract=2764501 (accessed 30.10.2022)

Ovadia J.S. 2015. The Role of Local Content Policies in Natural Resource-Based Development. Rohstoffe und Entwicklung.

Ovadia J.S. 2016. Local Content Policies and Petro-development in Sub-Saharan Africa: A comparative analysis. *Resources Policy*. Vol. 49. P. 20-30.

Panwar R., Paul K., Nybakk R., Hansen E. Thompson D. 2014. The Legitimacy of CSR Actions of Publicly Traded Companies versus Family-Owned Companies *Journal of Business Ethics*. 125(3). P. 481-496.

Quentin P., Quirion P. 2018. How Shifting Investment towards Low-Carbon Sectors Impacts Employment: Three Determinants under Scrutiny. *Energy Economics*. No. 75. P. 464–483. DOI: 10.1016/j.eneco.2018.08.023

Ramdoo I. 2015. *Unpacking Local Content Requirements in the Extractive Sector: What Implications for the Global Trade and Investment framework.* Geneva: International Centre for Trade and Sustainable Development.

Ramdoo I. 2016. Local Content, Trade and Investment: Is there Policy Space for Linkages Development in Resource Rich Countries. Maastricht: European Centre for Development Policy Management.

Ranjbari M., Morales-Alonso G., Shams Esfandabadi Z., Carrasco-Gallego R. 2019. *Sustainability and the Sharing Economy: Modelling the Interconnections*. 12<sup>th</sup> International Conference on Industrial Engineering and Industrial Management.

Shulla K., Leal Filho W., Sommer J.H., Lange Salvia A., Borgemeister C. 2020. Channels of Collaboration for Citizen Science and the Sustainable Development Goals. *Journal of Cleaner Production*. Vol. 264. DOI:10.1016/j.jclepro.2020.121735

Singh G.G., Cisneros-Montemayor A.M., Swartz W., Cheung W., Guy J.A., Kenny T.A., McOwen C.J., Asch R., Geffert J.L., Wabnitz C.C.C., Sumaila R., Hanich Q., Ota Y. 2017. A Rapid Assessment of Co-benefits and Trade-offs among Sustainable Development Goals. *Marine Policy*. Vol. 93. P. 223-231. DOI: 10.1016/j.marpol.2017.05.030

Stavropoulos S., Burger M.J. 2020. Modelling Strategy and Net Employment Effects of Renewable Energy and Energy Efficiency: a Meta-Regression. *Energy Policy*. 136(111047). DOI: 10.1016/j.enpol.2019.111047

Tordo S., Tracy B.S., Arfaa N. 2011. *National Oil Companies and Value Creation*. World Bank. Working Paper No. 218.

Van Soest H.L., Van Vuuren D.P., Hilaire J., Minx J.C., Harmsen M.J.H.M., Krey V., Popp A., Riahi K., Luderer G. 2019. Analysing Interactions among Sustainable Development Goals with Integrated Assessment Models. *Glob. Transitions*. Vol. 1. P. 210–225.

Weitz N., Carlsen H., Nilsson M., Skånberg K. 2018. Towards Systemic and Contextual Priority Setting for Implementing the 2030 Agenda. *Sustainability Science*. 13(2). P. 531–548.

Wittman H., Chappell M.J., Abson D.J., Kerr R.B., Blesh J., Hanspach J., Perfecto I., Fischer J. 2017. A Social-Ecological Perspective on Harmonizing Food Security and Biodiversity Conservation. *Regional Environmental Change*. 17(5). P. 1291-1301.