

International Master's Degree in Sustainable Territorial Development:
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**Social Licence to Operate: assessing ENI's legitimacy, credibility, and trust in the Val
D'Agri Concession**

Tagliavini, Sofia

Supervisor: Prof. Alberto Diantini

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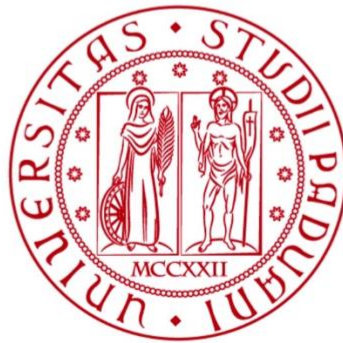
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UNIVERSITÀ DEGLI STUDI DI PADOVA
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International Master's Degree in Sustainable Territorial Development:
Climate Change, Diversity and Cooperation



Master Thesis

**Social Licence to Operate: assessing Eni's legitimacy,
credibility and trust in the Val d'Agri concession**

Supervisor:
PROF. Alberto Diantini

Candidate: Sofia Tagliavini
2034666

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*There is a fire in me
Burns all night and day
Flares at injustice
Leaps at oppression
Glow warmly in beauty*

(Ken Saro-Wiwa, Fire)

RINGRAZIAMENTI

È stato detto che una storia esiste solo se qualcuno la racconta e all'ombra di questo lavoro accademico corre una storia, fatta di esperienze condivise, momenti d'intesa, incontri tracciati dal destino, confronti e sinceri affetti, che merita di esistere, di essere raccontata. Una storia di relazioni, di persone, con un nome e un volto, verso le quali sento uno speciale debito di riconoscenza.

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I. INTRODUCTION

In recent decades, the social and natural world has undergone profound and radical changes. In the world context, a process of modification of living, production and consumption habits linked to the looming climate challenge is underway. According to the last IPCC report human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850-1900 in 2011-2020 (IPCC, 2023). Global greenhouse gas emissions have continued to increase with ongoing contributions arising from unsustainable energy, land use, lifestyles, patterns of consumption and production. Climate change is a symptom of a planetary emergency affecting fundamental human provisioning systems and implicating a series of socio-economic threats including violence, economic inequality, unemployment, systemic financial risk, political instability, and community vulnerability because of which both social and natural world have undergone profound and radical changes (Perreault et al., 2015). In the world context, as well as in Italy, a process of modification of living habits and reflection on the design and implementation of strategies to mitigate and adapt to global warming is underway. However, this debate would be deficient without an analysis of the role of hydrocarbons. Hydrocarbons have been the key scarce, strategic resource needed for almost all capitalist enterprises (Hein, 2021; Homer-Dixon, 1999; Klare, 2002) and in the 40-year period 1980-2019 annual CO₂ emissions produced by fossil fuels represented 83% of anthropogenic CO₂ emissions (Chen et al., 2022). One point to draw is that, in some sense, the future of our species, the living conditions of future generations and the standards of inter and intra-generational justice will depend upon the management of the oil and gas sector. This implies an honest evaluation from industry, institutions, and community stakeholders on the current

situation, not only from an economic but also socio-political and environmental point of view. Considering the socio-economic and environmental dimensions of the *petroculture* (Wilson et. al, 2017) we currently live in would provide a sort of preliminary map of the issues the world is facing from which envisioning pathways of alternative socio-economic development would become possible. The present research work stems from the belief that a real understanding and effective planning of upcoming paths could truly and only occur through the study of socio-political and environmental dynamics of those areas in which the oil and gas sector takes its first steps; extractive sites. The regions in which companies and local communities cohabit and build their relationships over the process of oil extraction.

I.I RESEARCH AIMS

Multiple territories and communities, on the development journey, crossed the *oil curse* (Behrends et al., 2011) finding themselves at the centre of economic dynamics that dictate the order of global downturns. Multiple communities relate to extractivism and its corporate embodiment. Among those, Basilicata, a small southern Italian region, has become a strategic hotspot in European and Italian development. Responsible for the production of 82.11% of Italy's crude oil for the year 2022 (UNMIG, 2023) Basilicata is home to the biggest onshore concession in Italy and continental Europe, the Val d'Agri concession. Extraction rights of this mother lode are granted to Eni S.p.A., Ente Nazionale Idrocarburi, an integrated energy company¹ that operates mainly in the hydrocarbon extraction sector. Eni is a leading stakeholder in the social fabric of Val d'Agri; the company, in its 20 years long presence, carried on extractive projects while braiding

¹ With over 30,000 employees in 62 countries around the world, and a turnover for 2022 of € 132.512 billion (Eni, 2023) Eni placed 81st in Forbes' Global 2000 ranking of the world's largest companies (Murphy & Tucker, 2023). Its share capital amounts to over EUR 4 billion and consists of more than 3.5 billion shares the main shareholder is the Italian state, divided into the Ministry of Economy and Finance (4,667%) and Cassa Depositi e Prestiti S.p.A. (27,731%) (Eni, n.d. b).

strong relations with local participants. The purpose of this work is to assess the usefulness and employability of concepts familiar to the extractive sector to examine how Eni and communities interact and engage with each other in the Val d'Agri context. In particular, the research aims to analyse the social dynamics through the lenses of two concepts Social License to Operate (SLO) and environmental conflict according to the political ecology paradigm. The rationale for pursuing this objective can be traced back to a convergence of academic interests and personal values.

The paradigm of Environmental Justice (EJ) inspired me in the quest for the right contribution to academic knowledge. EJ is a conceptual paradigm where the social relationships are recognized as historically situated and attached to *nature* as a socially constructed institution of power introduced upon the advent of colonialism (Woroniecki, 2020). In this sense, every environment is an inherited space of justice (Figueroa, 2023). All environments, especially those colonized, racialized, resource-dependent and ecologically bound are environments of justice (Figueroa, 2023). To this extent, the EJ discloses the power enforced on a specific environment imposing continuous trauma upon generations of communities made vulnerable by exploitation and environmental violence. It concerns social justice related to human activities and the impact they have on health and wellbeing, on living and working conditions, on the natural resources on which human beings depend, on the cultural values intimately connected to the natural environment, and on the ways in which power relations affect human interaction (Parsons et al., 2021). Environmental justice is a paradigm that allows to look at the very social fabric of our world through the lens of anthropogenic activity. It captures how social problems are intimately connected to environmental problems in a way that pushed me to look for tools to address the complexity of relations between corporations, communities, institutions and environment. Social License to Operate could serve as a

tool to grasp complexity embodying a vector thanks to which relations and the conditions of stakeholders facing environmental, social and economic injustices could be interpreted. The employment of SLO as the means of comprehending the complexity of the Lucanian context is the realisation of a willingness to give voice and space to the challenges of my own country. This research in Val d'Agri meant setting in motion an analytical perspective walking the tightrope between past and future, familiarity and extraneousness. It implied the recovery of the memory of the Italian and Lucanian history and culture and their intersections with the extractive sector, an analytical expedition in the Italian *petroculture* (Diantini, 2022). It determined the need to study a present-oriented to the future, to (re)discover and investigate those links between society and industry that could determine the future evolutions of a resilient and rich land that, like the rest of Italy, will have to keep pace with a changing world. This work implied behaving as a researcher willing to follow methodological rigour while portraying a glimpse of reality to the best of my subjective ability. The current research endeavour constitutes an earnest effort to depict the perspectives of individuals residing in Val d'Agri, with a dual aim of making a meaningful contribution to the academic research landscape and further enriching the body of literature surrounding Social License to Operate. No example of corporate use or literature research on SLO has been produced so far in Italy. SLO is the ongoing acceptance and approval of a project by local community members and other stakeholders that can affect its profitability (Thomson & Boutilier, 2011). The concept, as it will be further explored in Chapter II, emerged in the late 1990s in the mining industry as the sector was increasing its focus on stakeholder and social obligations (Greenwood, 2007; Wilburn & Wilburn, 2011). It was initially developed out of the literature on Corporate Social Responsibility and built over the key themes of social sustainability, reputation, and legitimacy, pivotal for the definition of industries' position with regard to

communities (Gunningham et al., 2004; Owen & Kemp, 2013). SLO became progressively relevant in consideration of its ability to reflect the dynamic and changes of stakeholder's relationship and engagement to the point that researchers consider that achieving an SLO is a "key condition for successfully establishing and running a project" (Falck & Spangenberg, 2014, p. 193). Still, Italy falls behind in literature representation. The ongoing scholarly endeavour seeks to address, even if only to some extent, this void by conducting an inaugural examination of Social License to Operate within the confines of an Italian regional milieu. Partially because, even if it incorporates insights gleaned from interviews and ethnographic observations, it is recognised how it only represents a first attempt on which it could be possible to build further investigation. The first-hand sources produced are indeed partial, not for a lack of willingness or methodological deficiencies but rather for reasons related to academic constraints, representing only a portion of the available data that could be gathered. Future, detailed and time-extensive research, based on the present work, could be carried out to increase the margin of development of SLO literature.

I.II RESEARCH QUESTIONS

On a practical level, this first-ever attempt will develop around two frameworks of analysis: SLO and political ecology paradigm. From one side, the main aspects, legitimacy, credibility, and trust, as theorized by Thomson & Boutilier (2011) and expanded by Jijelava & Vanclay (2017) will be employed to answer the questions:

- Could the concepts – legitimacy, credibility, and trust – be easily applied in the specific case of Val d'Agri concessions?
- Considering the study context, what are the specificities of these underlying concepts?

From the other side, through the lenses of the political ecology paradigm attention will be drawn to the aspect of conflict – identifiable by the presence of unequal power relations in a resource economy in which conflict emerges as violence in the broadest sense, in its physical, structural, and symbolic forms (Perreault et al., 2015) – to answer the question:

- Overall, could the Social License to Operate be considered a meaningful and useful conceptual tool to analyse conflict?

I.III RESEARCH STRUCTURE

Commencing from the research inquiries and objectives elucidated earlier, the dissertation unfolds across seven analytical chapters, ideally categorized into two distinct sections. The first of informative nature presents the theoretical, methodological and material framework within which the research is inscribed. In the second, of argumentative nature, the results emerging from empirical investigation are set and analysed. In detail, the first chapter proposes a reconstruction of the debate on SLO and its historical evolution, distinguishing the concept from other familiar and recurrent categories in the extractive sector and among academics engaged in the study of socio-environmental impacts. The chapter deals with the description of the main models of investigation developed and the relationship between SLO. Chapter two delineates the methodological framework within which the research is constructed, emphasizing its foundation in a qualitative approach. This approach draws upon concepts and interpretative lenses derived from the below and up close perspective of social reality as articulated by Cardano (2011). The methodological decisions guiding the empirical investigation underscore the preference for a closely situated form of observation and interaction, notably the utilization of semi-structured discursive interviews. Subsequently, the interview and data analysis process is elucidated emphasising empirical merits and limitations. Moving to the third chapter, it situates the research within the specific

temporal and spatial confines of the contemporary Val d'Agri. This framework is structured to account for the historical, cultural, geographic, and legislative dimensions inherent to the Lucanian extractive affairs. The fourth chapter transitions into the segment dedicated to field research. It presents the outcomes derived from the data collection process, organized in sections mirroring the labelling and coding methodology applied during the interview analysis. Within these sections, the perspectives, opinions, recurring themes, and linguistic patterns, all categorized under overarching thematic domains for analysis are impartially portrayed. The empirical data gathered, described, and presented are subsequently subjected to analysis in the fifth chapter, following the categorization principles articulated by Thomson & Boutilier (2011) and the reference model established by Jijelava & Vanclay (2017). This chapter is subdivided into four sections, with the initial three providing insights into Eni's legitimacy, credibility, and trustworthiness, thereby addressing the first two research questions. The final section endeavours to verify the presence of elements characterizing conflicts, addressing the third research question. In conclusion, the dissertation intends to shed light, from a qualitative and inductive approach, on the complexity of stakeholder relations that can determine the social conditions of communities and the ability to operate of companies whose profits are based on localised resource extraction. By observing the social reality and listening to the opinions of different actors, the goal is to paint a picture of the current state of relations in Val d'Agri using the underlying concepts of Social License to Operate and the emerging or missing indicators of conflict.

II. THEORETICAL FRAMEWORK AND LITERATURE REVIEW: THE SOCIAL LICENCE TO OPERATE

II.I ORIGINS AND HISTORY OF THE CONCEPT

The first use of the terms *social license* or *social licence* can be reported in “A World Without Soul” by John William Cunningham in 1805 wanting to express, in a debate around the proper respect and reverence of Sabbath, the extreme and excessive freedom of people (Cunningham, 1805). Social license in this sense was used for the majority of XIX and XX as a term pointing out excesses of freedom taken from socially accepted norms and regulations. However, the term shifted in meaning and assumed the contemporary significance of individuals' and communities' authority to grant permissions. In the modern connotation, social license was originally employed and conceived by James Cooney in 1997 while working for Placer Dome Inc. as Director of International and Public Affairs and being responsible for managing the mining company's political risk exposure in developing countries (Cooney, 2017). As mining executive of the largest gold mining in the world at the time, Cooney was invited to speak at the World Bank *Roundtable on Mining: The Next 25 Years* held in Washington DC on March 1997 where he underlined the increasing loss of money and reputation of the sector by community resistance:

“Mining companies could not ignore the concerns of those communities and their supporters without risking local conflicts erupting with potential financial and reputational damage. Consequently, on a separate track of political risk management, mining companies needed to engage with local communities that were directly affected, as well as their institutional supporters around the world, to seek their approval for the establishment of a mine in their vicinity [...] I decided to describe the objective of local political risk management as a ‘social license’.” (Cooney, 2017)

In the 1990s, the mining industry found itself under close public scrutiny following a series of well-publicized chemical spills, tailings dam failures, and increasing conflict with local communities around exploration and development projects becoming regarded as a problem industry causing unwanted pollution and undesirable social impacts (Cooney, 2017). Because of this situation, in 1998, World Bank representatives adopted the SLO analogy in a conference on mining and community relations in Quito, Ecuador, and the term became of common use in the mining industry. Since then, the term has gained popularity in the parlance of a wide range of actors including civil society, non-governmental organizations, research institutions, governments and consultants operating in industries such as paper manufacturing, energy generation and agriculture (Moffat & Zhang, 2014).

II.I.I Definitions

Social License to Operate can be defined as the ongoing acceptance and approval of a mining development by local community members and other stakeholders that can affect its profitability (Boutilier et al., 2011; Joyce & Thomson, 2000; Moffat & Zhang, 2014). It is associated with the extent to which a project, a company, or an industry that operates in a given area is acceptable or legitimate.

According Thomson & Boutilier (2011) SLO:

1. socially granted, being rooted in the beliefs, perceptions, and opinions held by the local population and other stakeholders about the project;
2. intangible, unless efforts are made to measure beliefs, opinions, and perceptions;
3. dynamic because beliefs, opinions, and perceptions are subject to change as new information is acquired, hence, must be earned and maintained.

SLO is an unwritten and everchanging social contract that exists between companies and communities that cannot be granted by formal civil, political, or legal authorities (Moffat et al., 2016). This is because extractive projects are made where economically viable deposits of resources are found and companies must adapt to the location and engage with the stakeholder networks operating there, not only from a normative point of view but also from a social perspective (Thomson & Boutilier, 2011). The use of the terms *communities* and *stakeholders* implies that the license is not granted by a single group or organization but is a collective approval granted by a network of groups and individuals (Meesters & Behagel, 2017). The requirement of the license being a sentiment shared across a network of groups and individuals introduces considerable complexity to the process and definition of SLO. Still, the concept of SLO has gained great traction in the past two decades. Part of its success is related to the fact that it can be easily and widely understood by both communities and companies (Bice & Moffat, 2014). Despite the spreading of its use, what univocally constitutes a SLO (Franks & Vanclay, 2013), how to measure it and the processes to obtain one are still under debate. In both the academic and corporate world no agreement on a single definition of SLO has been found, rather a multiplicity of connotations punctuate the literature on the topic [Annex 1].

III.II Interpretations and relation with other concepts and practices

It is fundamental to state how the SLO characteristics may convey a state of partial miscomprehension. The lack of a single or commonly agreed upon definition, the creation of a micro-cosmos of connotations of the same term, and its intangible and everchanging nature led to the development of a complex relation between SLO and other practices (Thomson & Boutilier, 2011). To prevent overlaps links between SLO and concepts and practices such as Social Impact Assessment, Legal Licensing, Free Prior and Informed Consent and Corporate Social Responsibility will be presented.

Social Impact Assessment (SIA)

Social Impact Assessment (SIA) is the process of identifying and managing the social issues of project development and includes the effective engagement of affected communities in participatory processes of identification, assessment, and management of social impacts (Vanclay, 2003; Vanclay et al., 2015). It arose in parallel with Environmental Impact Assessment (EIA) during the 1970s and was originally considered an integral part of it. Throughout the 1990s a shift in the way environmental and social impacts were perceived occurred and communities started becoming more active in challenging the nature of the costs and benefits associated with development expecting to receive a share of the benefits and requiring assurances on industries' proper regulation and management of costs and possible impacts (Moffat et al., 2016). Societal expectations influenced the way industries involved in the development or extraction of resources conducted their operations in the direction of increased scrutiny over societal impacts (Vanclay et al., 2015). The combination of pressures on industry performance summed to the need for societal acceptance meant for industries the urgency to recognize social relations as strategic for managing risk, benefits, and opportunities. This realization led to a differentiation between biophysical and social issues and the progressive independence of SIA from EIA that, whether legally required or not, could be undertaken by projects to manage the social impacts of development. Under these circumstances, SIA aims to ensure better development outcomes for people and communities and this ultimate objective has better chances to be achieved when companies and other actors see this practice as a form of investment in risk management (Vanclay, 2003). According to Vanclay (2015), the key element distinguishing social to environmental impact assessment is the very fact that SIA increasingly focuses on enhancing the benefits of projects to impacted communities, nevertheless, the identification and mitigation of

negative impacts – prominent in EIA – is still present to facilitate the earning of SLO. The relation between SLO and SIA lies in the fact that the development of a comprehensive and well-structured SIA can lead companies to have better access to SLO. Earning an SLO in the framework of SIA implies the setting of meaningful, transparent, and ongoing community engagement practices from the earliest stages of any intervention up to the final step of designing and implementing monitoring programs. Conducting SIA through processes of procedural fairness, community involvement, professional independence and methodological rigour is essential to build trust and respect, but it does not ensure that the project will be considered acceptable by local stakeholders (R. Parsons & Luke, 2021). Here is where SLO and SIA diverge. Even if SIA has been institutionalized as a theoretical framework and a practice for considering the social dimensions of mining and other industries, in some cases SIAs can appear flawed by the motive of proving the existence of a social license (Parsons & Luke, 2021: distortion might be present in SIA conducted to produce and/or prove the existence high levels of community approval while reaching those objectives is not an automatic product of it. Robust and reflexive SIA carried on contributing to the empowerment of vulnerable groups in the community (Vanclay et al., 2015) may reveal a low level of community approval, which would be equally important information in informing the merits of a proposed project, as it would indicate the need to reconsider or redesign the project.

Legal Licensing

According to Bice & Moffat (2014), SLO faces a problem of core bias. The very concept of Social License was introduced and shaped at a time when the mining and extractives industries worldwide were suffering reputational damage providing a rhetoric around which companies could coalesce and seek legitimacy on their terms. The emergence of the term SLO in the field of the mining industry was not a matter of causalities but the

product of the convergence of key factors, above all, the extractive and local nature of the industry itself. Extractive industries' return on investments is conditional to the ongoing, constant, and smooth access to resources embedded in the geography of a national context. The access and exploitation of such goods are conditional to the ability of the industry to obtain the institutional and formally regulated legal license to do so: governments legitimate the use and appropriation of public resources by private operators as a contribution to national or regional development defined in economic aggregate terms such as gross national product (Raufflet et al., 2013) Extractive industries accustomed to meeting the conditions of formal licensing or permitting processes found the language of SLO - mirroring the language of the legal license - intuitively appealing. Nevertheless, the resemblance between social license and legal license, as the grant of permission to undertake a trade or carry out a business activity, subject to regulation or supervision by the licensing authority (Nielsen, 2013), is deceptive. Although regulation may indicate the minimum standard of behaviour that will be expected of an operation, regulatory approval does not necessarily equate to SLO (Moffat et al., 2016). SLO leverages pseudo-regulatory discourses with which industries accustomed to environmentally impacting activities are generally comfortable but whereas a license in the legal meaning refers to formal approval issued by an authorized legal entity or institution (e.g., a city, state, province, or national government) authorizing activities with clear spatial, temporal, financial and social parameters, SLO refers to a more implicit form of licensing related to the perceptions of local stakeholders (Bice & Moffat, 2014; Moffat et al., 2016). Nevertheless, SLO's core bias, uncertain definition and intangible nature allow for different interpretations leading to an overlapping process not only with the process of social licensing but also with other procedures already part of the

corporative sector that, even if helpful to some extent the process of obtaining SLO (Boutilier et al., 2012; Ho et al., 2022), needs to be differentiated and clarified.

Free, prior, and informed consent (FPIC)

Free, prior, and informed consent (FPIC) is considered a core element of the international Indigenous rights regime involving close interaction with communities around resource development projects and has become a critical issue for the mining industry (Papillon et al., 2020). Superficially, they appear to have much in common with SLO but from an operational standpoint, however, there are significant differences between them. FPIC is defined as “a process that enables communities to exercise their fundamental right to give or withhold consent to all proposed activities, projects, legislative or administrative measures, and policies that will take place in or impact their lands, territories, resources, or livelihoods. FPIC has four elements, Free, Prior, Informed and Consent. The free element means that the community provides its consent (or decides to withhold it) without coercion from any other parties. The prior element means that the approval process is undertaken before the policy or activity is performed. Finally, the informed element means that before a decision is taken, the community must have genuinely received complete information in a language and a media which are easily understood by the community.” (UN-REDD, 2015, Pag.1). FPIC is limited in scope and timing to a period before exploration or development takes place, it is linked to a one-time decision-making process, generally addresses tribal/indigenous communities and it sets obligations for governments, not for the private sector (IFC, 2012; Thomson & Boutilier, 2011). In contrast, SLO is an expression of the quality of the relationship between a private sector project or company and its neighbours; it begins with first contact at the initiation of exploration and continues through the life of a project and it is not limited to a single group but to a multiplicity of stakeholders (Thomson & Boutilier, 2011).

Corporate Social Responsibility (CSR)

Corporate Social Responsibility (CSR) has been defined by COM (2011)0681 of the European Commission as the process through which “companies integrate social and environmental concerns in their business operations and their interaction with their stakeholders on a voluntary basis”. Corporate social responsibility concerns actions by companies over and above their legal obligations towards society and the environment generally achieved through programs providing infrastructure and development projects for communities. In the oil sector, CRS expresses itself through a corporate effort to ameliorate the social and environmental impacts of extractive activities in communities living in or near sites of extraction (Billo, 2015). CSR is a strategy of companies that claim to prioritize the minimization of social and ecological impacts in the places they work, and in doing so, satisfy shareholders and consumers in addition to the governments and local communities in the places that they operate (Pearson et al., 2019). CSR is typically assumed as a voluntary initiative rather than a legal mandate. Yet, over the past few decades, the world has witnessed the rise of explicit CSR legislation focused on mandatory reporting under which companies are required to disclose extensive information about their social and environmental plans, actions or performance (Lin, 2021). Face its essence, SLO can be (mis)understood as a goal of CSR strategies through which firms attempt to gain legitimacy and minimize socio-political risk (Ho et al., 2022). SLO can be addressed from a corporate perspective as a form of risk management, as part of CSR, a concept comfortably speaking the industry language focused on areas of interest such as business and profitability. In this framework, SLO provides companies a middle ground, in which to assert compliance or legitimacy without the formalized boundaries or enforceability of regulation still. Nonetheless, SLO is a separate practice (Harvey & Bice, 2014; Thomson & Boutilier, 2011). Despite some shared elements, none

of the presented concepts – Legal License, FPIC and CSR - capture or encapsulate SLO in its dynamic, granted by the community, descriptive of the quality of the relationship between the company and stakeholders' nature. It is crucial for the present research for SLO to be considered as part of the cosmos of extractive industry practice but still, to be approached as an independent, yet new and debated, practice.

II.II SLO MODELS

Since the first use of the term, there has been much discussion around the topic of what constitutes an SLO and how to measure it. Moreover, several studies have described SLO either as difficult if not impossible to measure (R. Parsons & Moffat, 2014) or of doubtful usefulness (Bice & Moffat, 2014; Owen & Kemp, 2013). Still, relevant academic research has been conducted to understand what constitutes an SLO, the processes to obtain and maintain one and its measurable drivers (Thomson & Boutilier, 2011; Jijelava & Vanclay, 2017; Moffat & Zhang, 2014). Over the last decade, SLO studies have focused on assessing how corporations have managed multiple community relations and expectations to generate support through the creation of models attempting to sharpen the SLO narrative. This section focuses on Thomson and Boutilier's (2011) cumulative pyramid model of Social License to Operate, its expansion carried on by Jijelava and Vanclay (2017) and the alternative model elaborated by Moffat and Zhang (2014).

II.II.I Thomson and Boutilier (2011) & Jijelava and Vanclay (2017) model

Jijelava and Vanclay in "Legitimacy, credibility and trust as the key components of a Social License to Operate: an analysis of BP's projects in Georgia" (2017) rely on Thomson and Boutilier's (2011) model to consider the applicability of SLO in actual practice. It is their belief by taking into consideration their level of SLO, organizations can design their actions in an attempt to achieve public approval for activities and projects

contributing to minimizing harm to communities as well as generating value for the company itself (Jijelava & Vanclay, 2017; Vanclay et al., 2015). In Thomson and Boutilier's model, SLO is viewed as a continuum of four levels arranged in a pyramidal hierarchy, which can be travelled both up and down, crossing three separating boundary criteria [Figure 1]. The positioning of a company on the spectrum depends on its ability to cross boundaries through legitimacy, credibility and trust assigned by the community.

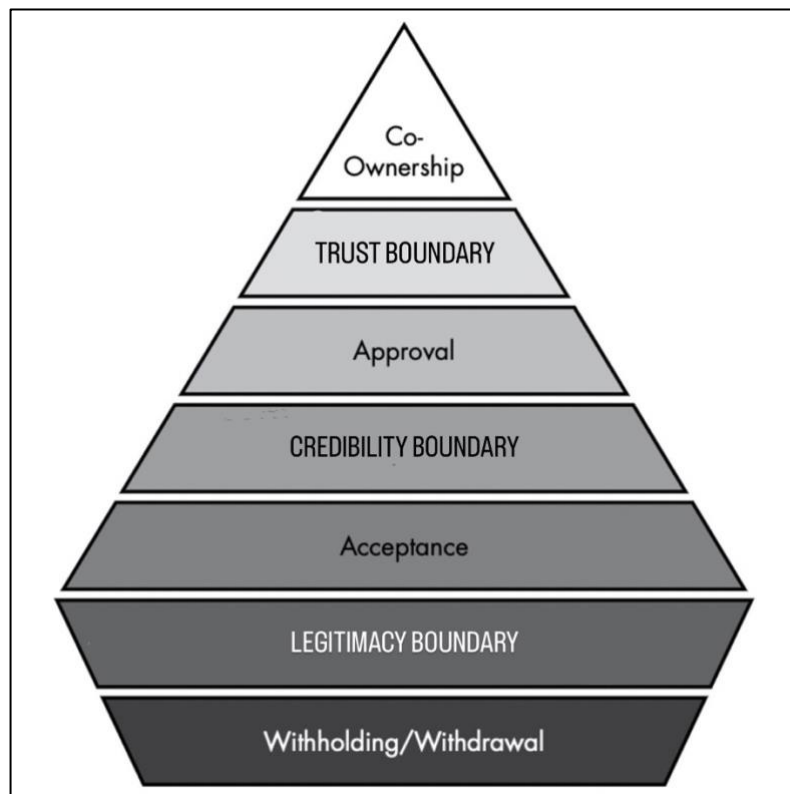


Figure 1: the Social Licence to Operate pyramidal continuum

Author's elaboration based on Thomson & Boutilier (2011)

Legitimacy

Starting from the bottom of the pyramid, the first layer in the continuum is withdrawal. It represents the worst-case scenario based on the ability of the community to reject and stop the progress of the project. In this case, resources cannot be, the project cannot be carried forward or it is strongly hindered because the community does not grant any level of social licence to proceed. In [Figure 1] the withdrawal level is shown as a narrower

base than the next level of acceptance with the intention to symbolize that generally more projects are accepted than rejected (Thomson & Boutilier, 2011). To move away from a state of withdrawal legitimacy is necessary. Legitimacy can be defined as the acceptance of the project by the host community especially in terms of its fairness and in terms of whether a fair procedure to approve the project has been conducted and whether fair distribution of benefits from the project has been ensured (Jijelava & Vanclay, 2017).

This conception of legitimacy derives from the socio-political dimension of the term that differs from other types of legitimacy – such as economic and legal (Esteves & Vanclay, 2009) – that are less suited to grasp the complexity of the social dimensions which SLO tackles. Specifically, Boutilier and Thomson (2011) distinguish between economic legitimacy and sociopolitical legitimacy. Economic legitimacy occurs when stakeholders perceive that the company delivers a benefit while sociopolitical legitimacy is presented as a broader concept. It refers to stakeholders' perception of the company's contribution to the region or community's wellbeing, of its ability to fairly meet expectations.

It is argued that taking into consideration and applying this specific type of legitimacy in the SLO context would mean for the companies abandoning one-fits-all approaches (Owen & Kemp, 2013; Prno, 2013) to rather focus on the heterogeneity of communities, designing contextualized approaches and having a deep understanding of the social, cultural, and political dynamics on the ground to be perceived as socially legitimate (Bice, 2014; Kemp & Vanclay, 2013; Vanclay et al., 2015).

Credibility

Once legitimacy is established, the acceptance level of SLO is settled: communities will listen to the company and consider proposals allowing the project to proceed. This constitutes a minimal objective for any company on which it is possible to build

credibility (Thomson & Boutilier, 2011). Credibility is a basic level of trust related to honesty and reliability that can be defined as the extent to which a project or company is considered to be believable - that what the company says and does is realistic and likely, together with a perception by the community that the company is honest and not engaging in any deception (Jijelava & Vanclay, 2017). Credibility is ultimately achieved by the company providing true, clear and believable information while delivering on all commitments made to the community (Jijelava & Vanclay, 2017). In this sense, if a company wants to build credibility, and ultimately trust, must provide proof of commitment to social performance. A company is considered credible if it can listen to the community, respond with action, provide transparent information and proposals, and implement such approved proposals in a way that is consistent, honest and non-discriminatory towards different groups inside the stakeholders-network (Thomson & Boutilier, 2011). To do so, effective community engagement, in its different forms, is pivotal, and underpins all aspects of credibility, especially in relation to the community's perception of the social and technical competency of the company (Moffat & Zhang, 2014; Prno, 2013). To earn such credibility, the company should make and keep short-term promises by using participatory processes to identify community priorities that the company can help make real. Nevertheless, in the process of crossing this boundary, according to Thomson and Boutilier (2011), even when relations with the community are good, there may still be attacks on the credibility of exploration companies from civil society sources that warn about the broken promises or problems experienced by groups.

Trust

If legitimacy and credibility have been secured, communities are likely to grant approval of the project meaning the company has now full access to resources because local stakeholders regard the project favourably and are pleased with it (Thomson & Boutilier,

2011). Companies could be strengthened by community support and socio-political risks are considered to be absent, even if, to a very small extent, an opportunity. Through trust, approval can be transformed into co-ownership level, at the top of the pyramid of social licence, in which the company becomes an insider in the community social network dissolution the us–them boundary (Williams 2001). In co-ownership, psychologically, both parties come to view their relationship as an arrangement based on full trust. Communities express their full trust believing that the company will always act in the community’s best interests but in order to gain it the company has to go beyond fulfilling its promises (Jijelava & Vanclay, 2017). Trust could be delineated as a strong form of credibility built over time where community members first trust that the company will engage in mutually respectful dialogue (interactional trust) to then trust the company will act in the common interest (institutionalized trust) (Thomson & Boutilier, 2011). Interactional trust is a transitional phase leading to established, institutionalized trust implying a shared perception of both company and local community as partners. In this sense, demonstration of high levels of trust can be found in an autonomous design and implementation of activities by the communities that want to be involved, are proud of and identify with the project (Jijelava & Vanclay, 2017). The companies have to develop a process aimed at strengthening the community’s ability to plan and achieve its goals for the future. Nevertheless, both Jijelava & Vanclay and Thomson & Boutilier point out how trust is very hard to earn, easy to lose, and difficult to recover once lost. Very few companies have taken their community relations to this level.

Jijelava & Vanclay (2017) empirical study and conclusions

From the theoretical framework presented, Jijelava & Vanclay focus on the case of BP p.l.c. - a British company – in Georgia in the Baku-Tbilisi-Ceyhan oil Pipeline (BTC) and the Baku-Tbilisi-Erzurum (or Southern Caucasus) gas pipeline. BP and its pipelines were

selected as an appropriate test case because of its polarizing nature. BP in Georgia has been presented as a good example of a corporation having both SLO and severe critics. To determine the level of SLO it is assessed the extent to which BP had acquired the threshold criteria for each level in the model; the level of acceptability is achieved by the gaining of legitimacy, approval is achieved by gaining credibility and co-ownership, or psychological identification is achieved by the gaining of trust.

It is concluded that BP had established its legitimacy having obtained the acceptance level from stakeholders, but still, even if several practices were being undertaken in the attempt to achieve credibility and trust, none of those were successful in convincing communities to grant BP approval or psychological identification. The SLO framework was proven, according to the authors, and the three threshold criteria, to be meaningful and aligned well with their corresponding levels.

II.II.II Moffat and Zhang

Moffat and Zhang's (2014) research paved the road to the possibility of quantitatively measuring SLO while providing a tool for consistent and robust benchmarking of social performance across time in extractive industries contexts. The authors criticize Thomson and Boutilier's (2011) model arguing that the attempts to empirically validate hypothesis of cumulative relationships between stakeholders based on the pyramid structure were unsuccessful leaving a literature gap. Moffat and Zang (2014) claim to fill this void through a model able to measure the main elements of SLO and to draw attention to social psychological research in intergroup relations (Moffat & Zhang, 2014). The main objective of their research is to provide a significant contribution to understanding what constitutes a social licence and how it is granted and maintained in the mining industry. Methodologically, the study runs sophisticated social science methods and analytical techniques to demonstrate how SLO can be quantitatively measured and modelled.

Specifically, they developed an integrative model to understand the paths to community acceptance of mining operations setting focus on trust as the degree to which the general public as a group holds a collective trust orientation toward a mining organization (Poppo & Schepker, 2010). It is suggested that what will shape community members' trust in the company, acceptance of operation, and thus, level of SLO are:

1. the extent to which companies manage and mitigate operational impacts (impacts on social infrastructure)
2. community engagement
 - a. quantity of contact
 - b. quality of contact
3. community involvement (procedural fairness)

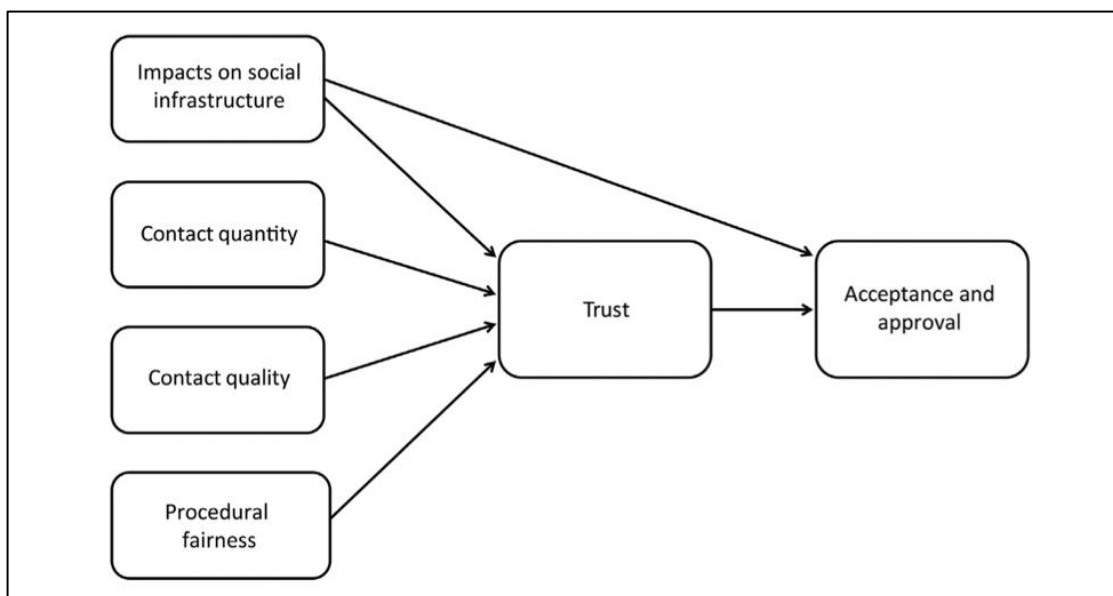


Figure 2: overview of relationships between concepts

(Moffat & Zhang, 2014)

The authors highlight the relevance of these four elements as exogenous predictors of trust and trust as a predictor of acceptance. The results of the analysis indicated that between predictors procedural fairness and high-quality engagement were the strongest.

According to Moffat and Zhang, through this model SLO can find practical applicability: companies can better understand the separate and proportional influence that operational impacts and community engagement activities have on the level of trust in companies and therefore predict and shape the level of acceptance of operations (Moffat et al., 2016).

II.III SLO AND CONFLICTS

From the perspective of political ecology, conflicts are identifiable by the presence of unequal power relations in a resource economy in which conflict emerges as violence in the broadest sense, in its physical, structural, and symbolic forms (Perreault et al., 2015). Prenzel & Vanclay (2014) define a conflict as a situation in which interdependent people express manifest or latent differences in satisfying their needs and interests, and they experience interference from each other in accomplishing these goals. A conflict is therefore, because of the interdependence and unbalances between actors in all human interactions, social in nature, causes and consequences. Although generally having a negative connotation, conflict constitutes an omnipresent characteristic of societies (Prenzel & Vanclay, 2014). Facing such naturally complex dynamics embedded in the societal structure, companies' projects can exacerbate or mitigate socio-environmental conflicts arising from the natural richness of the territory according to the type of policies and approaches they decide to take. Most large-scale conflicts are caused by the implementation of policies or development projects especially in situations of resource extraction because of the socio-environmental impacts such activities create (Kemp & Vanclay, 2013). Some examples of cases where large-scale socio-environmental conflict has occurred and is still occurring include mining projects, hydropower construction projects, environmental or cultural heritage protection; and policy decisions (Prenzel & Vanclay, 2014). Extractive industries can contribute significantly to the socio-economic development of communities but at the same time, lack of legitimacy, abuse of power or

socio-environmental negative externalities may fail to deliver on local expectations and the rise of conflictual dynamics (Wilson, 2016). Resource-related conflicts can destabilize, weaken communities and result in violence (Behrends et al., 2011). Communities might express their opposition to a project or state their interests through a wide range of actions damaging to the project, the reputation and the financial asset of the company such as physical damage to company property; project delays and lost production; court action; regulatory action against the company including additional conditions being imposed, fines, claims for compensation, or the revoking of legal licences to operate; financial implications and loss of access to new sites (Hanna et al., 2016; Vanclay et al., 2015; Vanclay & Hanna, 2019). Protests and confrontational interactions between stakeholders have the potential to escalate or de-escalate in socio-environmental conflict (Davis & Franks, 2014). Even if between the categories of costs time spent on risk and conflict management is considered the most affected effective conflict management and engagement will likely de-escalate conflict while ignoring needs and/or repressing protests is likely to provoke stronger reactions from groups seeking to have their concerns heard (Vanclay & Hanna, 2019). Therefore, it is argued that to prevent possible negative implications, to identify and address issues before they escalate, and ultimately to operate and grow, companies should have effective community engagement activities, social impact assessment processes, environmental and social impact management procedures carried on through a mindful and respectful approach (Vanclay & Hanna, 2019). According to Moffat & Zhang (2014), negative impacts of extractive projects such as mining can be mitigated, initially and to a certain degree, by the regulatory requirements of mining development. For example, the Social Impact Assessment (SIA) is most commonly conducted prior to the approval of large projects allowing regulators and companies to develop strategies to mitigate major social issues

before developments are permitted to proceed. Still, once the project has started, gaining and maintaining an ongoing state of social acceptance and approval is key to addressing the ever-modifying level of risk and conflict. As previously stated, SLO arose as a metaphor for the ability of communities to impose conditions on, or to completely reject, the advancement of or the operation of existing projects (Boutilier et al., 2012). Therefore, SLO may emerge as appealing for those operating in, for, or in correlation with extractive companies working in conditions of permanent operational risk. In such conditions, it is assumed that holding stable levels of approval can potentially set off the rise of conflictual dynamics (Behrends et al., 2011; R. Boutilier et al., 2012; Davis & Franks, 2014; Vanclay & Hanna, 2019; Wilson, 2016). The constant process of addressing stakeholders' and communities' concerns will ultimately reduce the risk of conflicts and enhance the level of SLO granted (R. G. Boutilier, 2014): the higher the SLO the more likely companies are going to reduce future expenditures in the form of litigation, delays to approval, management of protest, violence against staff and/or property, and business losses from reputational harm. SLO can be presented by extractive and other industries as a tool to legitimise large-scale processes and reduce risk through the incorporation of local voices. Nevertheless, it is important to state how SLO has been criticized because of its contradictory and ambiguous use (Ehrnström-Fuentes & Kröger, 2017; Meesters & Behagel, 2017; Owen & Kemp, 2013), Mining operations can employ a range of "neutralizations" (Meesters & Behagel, 2017, p. 281) and processes to change local practices and identities to support the silencing of protests or critiques. Some of these effects may be more intentional than others (Meesters & Behagel, 2017) but the achievement of a company's legitimacy should not be based on aspects such as co-optation and silencing (Meesters & Behagel, 2017).

III. METHODOLOGY

Having set out the research questions and the theoretical framework within which the present work is embedded, it is necessary to illustrate the methodological implications and detail the choices informing the research and the data collection process. This chapter will explore the key methodology within which the research took shape, its main elements - the qualitative approach, the semi-structured interview trial, the use of grounded theory for data analysis - strengths and limitations. The development of the research design was based on relevant scientific and grey literature on research methodology and the case study, together with a preliminary field mission.

III.I RESEARCH DESIGN

According to Cardano (2011), the term social research designates a particular type of strategic action, whereby the researcher opens to an experience with the aim of elaborating answers to a question about a certain social phenomenon. Similarly, Denzin & Lincoln (2005) affirm that a research methodology or strategy is determined by the nature of the research question and the subject being investigated. Research methodology is broadly categorized into two main paradigms: qualitative and quantitative research (Cardano, 2011). Qualitative research is an exploratory approach that seeks to understand and interpret human experiences, behaviours, and social phenomena in their natural contexts. The focus is on subjective meanings and the richness of data collected from participants. Quantitative research, on the other hand, involves the systematic collection and analysis of numerical data to establish patterns, correlations, and causal relationships between variables. In both cases, the research design used in an investigation should then be seen as a tool to answer determined inquiries (Cardano et al., 2011).

To provide an answer to the two interrogatives of this research, a form of observation and interaction close to the object of study itself (Cardano, 2011) has been favoured: the qualitative approach. The qualitative approach is characterized by context-sensitivity (Cardano, 2011; Czarniawska, 2004; Czarniawska, 2010) a methodological orientation founded on the collection of data through a bottom-up and close-up process (Cardano et al., 2011). The present work adopts such an approach aiming to analyse in-depth opinions, experiences, perceptions and values of stakeholders while favouring high-quality data.

III.1.1 Interview process

Typical qualitative research tools are participant observation, focus groups and interviews – which differ from one another in the way the contact and relationship with the participants are managed and carried forward (Cardano et al., 2011). The interview is defined as an *inter-view*, an interchange of views between two persons conversing about a theme or a topic of mutual interest (Kvale, 1994). Interviews are unique a form of conversation in which two or more persons engage in verbal interaction to reach a previously defined cognitive goal. The conversation set by interviews is peculiar in the sense that there is an asymmetry of power between the interlocutors: the interviewer sets the cognitive goals of the conversation and dictates its pace by asking questions to which the participant is called upon to respond (Cardano et al., 2011). The research interview can be generally configured as a communicative event but between its methodological framework, there are different levels of interactions (Cardano et al., 2011). Qualitative interviews exist on a continuum, ranging from free-ranging, exploratory discussions and semi-structured interviews to highly structured interviews (Magaldi & Berler, 2020). Structured interviews have a formalized, limited, and rigid set of questions while semi-structured interviews are flexible and allow questions to be brought forward during the interview as a consequence of what the participants affirm.

Between the spectrum of possibilities of qualitative mode of data collection for this research, the choice fell on the tool of the semi-structured guided discursive interview. Semi-structured guided discursive interviews imply for the researcher the use of a thematic approach where several topics, points of discussion and issues need to be covered (Kvale, 1994). The goal of semi-structured interviews is to create a safe space in which the participant feels comfortable presenting his or her own experiences providing the researcher with an in-depth understanding of a particular area of interest (Magaldi & Berler, 2020). Following this approach, the present research interviews were designed to have a fluid and flexible structure that allowed to acquire in-depth information. The objective of the interaction was to allow people to convey situations from their perspective and in their own words, therefore, flexibility was preferred face rigidity. Semi-structured interviews, employed for the whole research process, allowed to adjust to respondents' attitudes and discourses and to better understand subjects' points of view. Still, as it will be pointed out in the last paragraph of this chapter, the use of the tool of semi-structured interviews was subjected to some modifications and adaptations, as a result of practical limitations. A total of fourteen interviews were conducted, three by telephone and eleven face-to-face. The empirical material produced by conducting semi-structured interviews consists of a field notebook with notes from ethnographic observation and 12 interview recordings that were transcribed.

III.I.II Timing and access to the field

Given the desire to give the research a certain depth (Cardano, 2011), the relationship with space and time has been particularly crucial especially if considering the specific research context characterized by a considerable articulation, as it will be analysed in the next chapter. The complex set of factors and dimensions that mark the Val D'Agri made the issue fieldwork and the definition of clear timeframes focal to the collection of good

quality material. From the very beginning of the research work, it was clear to me that the objective was to deliver an academic product able to provide a reliable representation and insightful interpretation of the complexity of the empirical frame of reference. To achieve the goal maturing adequate field-based and first-hand knowledge was mandatory. Preference was given to conducting the interviews in person, and not online or by telephone, which allowed the acquisition of a certain familiarity with the territory, language and habits. Presence on the in addition, fieldwork favoured the development of a certain range of action and, recognizing the exceptional nature of my presence, of legitimacy to interface with interlocutors, mitigating possible phenomenon of extraneousness (Cardano, 2011).

The fieldwork took place in two different phases. The research started in February 2023 with an initial mission to familiarize with the context. In this first phase, the research was assisted by Professor Alberto Diantini who introduced me to the social arena of the study area and took place in Val D'Agri between the villages of Grumento Nova Calvello, Viggiano and Villa D'Agri, which are relevant for the oil activities of the area. It allowed to know the spatial dislocation of the main oil infrastructures in the territory, preliminarily understand some dynamics in the territory, meet and negotiate the conditions for the participation in the social context with social *gatekeepers* (Cardano, 2011) for the next phase of the fieldwork. I then solo travelled to Val D'Agri a second time, in June 2023 for the duration of 10 days, where the actual interviewing phase took place with pre-scheduled interactions conducted on the daily basis.

III.I.III Sampling

The selection of people to be interviewed followed the snowball sampling model. Snowball, as developed by Coleman (1958) and Goodman (1961) is a mean for studying the structure of social networks and can be identified as a convenience sampling method

(Naderifar et al., 2017). This method is applied when it is difficult to access subjects with target characteristics aiming to recruit future subjects among acquaintances. This method, also called *chain sampling* or *network sampling* (Cardano, 2011), is efficient and cost-effective to access people who would otherwise hardly be accessible. Through this method, I proceeded in the direction of asking initial acquaintances, selected via convenience sampling (Heckathorn, 2011) if they could put me in contact with someone with experience and/or opinion about the topic and potentially willing to take part in the research. This type of networking was found to be particularly useful for finding people who would not generally express their point of view on a sensible topic if not introduced by someone trusted (Bucerius, 2013; Naderifar et al., 2017). In this research case, it would have been challenging, if not impossible, to collect valid and reliable data without obtaining some level of reliance as a trusted outsider from local stakeholders. This was because of a general mistrust that I experienced during the fieldwork, especially in relation to the oil issue and Eni operations. Obtaining detailed information was conditional on the interviewees' perception of my role and intentions; participants were often reassured not so much by the statement of my intentions but by the word given by those who had acted as liaisons for our connection and acquaintance. In line with the characteristics of qualitative research, the number of subjects constituting the sample studied was deliberately small with a sampling of 14 people. As previously indicated, the aim of the study is not to produce large masses of data, which can be generalized and quantified in order to derive results, so the research setup was such that absolute priority was given to the exploration of experiences and opinions. The attempt was to go as deep as possible with each of the interviewees, to bring out points of view and feelings, which could not be achieved by enlarging the sample, reducing the time of interview or the use of quantitative methods.

Through snowball sampling, I was able to interview a total of 14 people [Annex 2]. Six women, all with positions of responsibility (a school principal, a youth party secretary, two heads of associations, a lawyer and a municipal secretary) between the ages of 29 and 63, and eight men with relevant administrative, political, corporate or social positions (a mayor, a deputy mayor, a former trade and foreign affairs minister, director of Petroleum Economics department of a Latin American country, the managing director of the Fondazione Eni Enrico Mattei (FEEM), an internationally renowned artist and activist, two heads of regional associations and a farmer) aged between 41 and 83. The decision to interview individuals with different social and work profiles was motivated by the need to consider the opinion and position of the most diverse sample possible in the analysis. In this regard, a problem of contact with the youngest population group, aged 18-29, was noted in the process. It was not possible to collect information due to a lack of contacts and the limited time for fieldwork. The selection of people to be interviewed followed the principle of extraneity and their participation was subjected to the ethical tool of informed consent throughout the inquiry (Klykken, 2021). The individuals, with which there was no familiarity, were contacted through telephone or in person. Each participant was informed of the purpose of the research, the nature of the interview and consent was explicitly asked. The possibility of recording the audio of the interviews conducted was also requested. 11 out of 14 total conversations were taped; two due to lack of consent and one due to technical malfunctioning of the voice recorder were not recorded. The interviews were conducted for their integrity in Italian and their transcription process was also made remaining faithful to the original language. The transcription produced attempts to account for the complexity of the interactions that took place during the interviews and follows rather faithfully the Analysis of Biographical

Transitions (ATB)² notation method (Cardano, 2011). The interviews were later revised and extended with the support of ethnographic notes made at the end of or during the interviews, in which I accounted for the ambience, contents and impressions. It is appropriate to specify how, in order to preserve the anonymity of participants, fictitious names will be used in reporting some of the conversations. In the interview extracts and notes reported, names, followed by profession will be found in brackets.

III.IV Data Analysis

The data analysis process has followed an inductive approach, a prominent methodology used in social sciences, humanities, and some areas of natural sciences, able to generate new theories or hypotheses based on empirical observations (Creswell, 2009). Inductive research involves developing theories or general principles based on observed patterns in data. The process involves a bottom-up approach; through attentive thematic and structural analysis of the empirical data interpretation can be made and conclusions can be drawn (Cardano et al., 2011). The procedure has been formalized according to Glaser and Strauss' methodological standpoint, the Grounded Theory (Glaser & Strauss, 2009). It is a technique that regulates with a set of principles the process of constructing the framework in which to inscribe the analysis of the documentation. This procedure, carried out manually, was based on the constant comparison of materials and resulted in the articulation of three steps: open, axial and selective coding. Open coding proposes text segmentation work based on the activity of coding (*labelling*), consisting of the meticulous attribution of descriptive labels to the entire text corpus. It substantially involved assigning codes of one or two words per concept, which were then placed on a

² The ATB notation system was adopted in the framework of the PRIN 2005 research "Biographical transitions: objects and models of analysis in confrontation", conducted by the Departments of Social Sciences and Psychology of the University of Turin, by the Department of Sociology and Social Research of the University of Trento and by the Department of Relational Sciences of the University of Naples.

list of research topics (Glaser & Strauss, 2009). This first coding activity, in my personal experience, has been crucial not only for the purpose of textual segmentation, but also to review, recast and recall the rather large body of data; the entire interview transcription was encapsulated in an 80 pages long document. Then, with axial coding, the codes were aggregated and placed into categories referring to trust, legitimacy, credibility and conflict. Finally, selective coding was carried on identifying relations between conceptual attributes, recurring terms, and sequences from the coded materials to highlight specific patterns from which conclusions could be drawn.

The conclusions on the data and their interpretation will be presented in Chapter V and VI of this research leaving space for the discussion of findings deriving from the data collection and analysis. For the sake of methodological rigor and transparency of the information presented in those chapters, it is necessary to point out how quotes from both interviews and notes will be presented in English. Language differences may affect the understanding and interpretation of meanings across all phases from participants to readers, thus jeopardising qualitative research trustworthiness (van Nes et al., 2010). The risk of loss of meaning increases when the research is published in a different language from which it was conducted or when the researchers and interviewees speak different languages, complicated by cultural differences surrounding the languages (Yunus et al., 2022). Because of this, the process of translation has been carefully carried out avoiding misinterpretations and ensuring the trustworthiness of the research.

III.II LIMITATIONS

The research course turned out to be an intense experience, which put the writer personally and directly at stake. The reasons for this intensity are partly related to the methodological choice itself, and partly to the specific object of research, which confronted me with limitations and problematic aspects. This section aims to point out

precisely the big-picture challenges faced in the different stages of fieldwork. I consider this phase crucial. To go into the merits of the problematic aspects that emerged during the research and, in particular, during the fieldwork, it is methodologically essential to give an honest restitution of the research work and to highlight the role played by reflexivity in the qualitative inquiry (Cardano, 2011). It is also through a transparent return of one's own positioning, of one's own choices and evaluations, of the problems and snags, of the research experience in a given context that it is possible to put the reader in a position to assess the reliability of the work and final products.

III.II.1 Interview phase

One of the issues that I was able to identify relates to methodology and could be disclosed as an offset between theory and practice, between theoretical framework and fieldwork. The initial carefully laid research design was challenged at its practical beginnings and subjected to a certain degree of change. While the objectives remained true to her original proposal, the interview questions, line-up, and general approach shifted from more formal and rigid to more flexible and receptive. The goal was to develop three predefined tracks of questions according to the type of actor - civil society, institutions, associations - to focus for each category on a main aspect of SLO. However, the pilot interview carried out on the second field mission showed how a rigid outline approach would have been difficult to maintain and implement for two main reasons: the intersectionality of the participants, placing some of them in different categories of actor, and the complexity of the topic under analysis, that could lead to a back and forth on different aspects of the same theme of analysis. The participant of the pilot interview, Maria (59) spoke both from the citizen and organization representative perspective while intersecting aspects that would have made the follow-up of the question meaningless and confusing. As a result of this first interaction, the interview process had to be redefined in a short amount of time,

one day, to be available and methodologically reliable for the next interview. This outcome was achieved by transforming the interview guideline, which was originally more rigid and based on some mandatory questions, to a manageable topic list considering a series of themes on which it was desirable to acquire answers. Both practically and methodologically, the optimal solution for the research appeared to be a thematic succession subjected to margins of variability rather than a predetermined sequence of issues to be forcefully covered in a pre-determined order. Within this flexible approach, the themes to be covered were outlined *a priori* while the most appropriate linguistic formulations (Cardano et al., 2011) and the order of the question were selected *a posteriori*, in the moment to suit the respondents' flow of argumentation.

III.II.II Timing and workload

In addition, the interview process underwent an additional change from intentions to practice: the length of the interviews was modified. During the initial phase of the research definition, the timing for each social interaction was estimated in a range of 30 to 40 minutes but it became clear from the second interview that the topic of analysis needed extra coverage. The answer to the questions generally needed to be extended, described and articulated with interlocutors often digressing and side-tracking to address the point. In this sense, a choice of keeping a reduced number of participants was made to favour interaction. It resulted in interviews inscribed in a time range between 33 minutes to 2 hours and 10 minutes with an average of one 1 hour and 3 minutes. Longer interviews with articulated answers also led to a more complex and lengthy process of transcription and analysis that inevitably increased the workload for the development of the research.

III.II.III Reflexivity and positionality

Positionality refers to the personal stance a researcher has within a given research study while reflexivity is a process that helps researchers to consider their position and influence during the study, and it also helps them to know how they have constructed and even sometimes imposed meanings on the research (Savin-Baden & Major, 2023). Reflexivity brings to the fore researchers' constant examination of actions and roles throughout the research process, calling for the scrutiny of oneself as data (Cardano, 2011). At the heart of reflexivity is the aim of developing an accountable identity analysis, where researchers recognize and address how they embody and enact symbolic and material power over the research process (Rodriguez & Ridgway, 2023). This acknowledges that social research is shaped by subjectivities, emotions, and unexpected responses inherent to human nature (Rodriguez & Ridgway, 2023). The concepts of reflexivity and positionality highlight how action and meaning-making are inextricably linked. The two concepts are interdependent, flexible and both function as a form of guarantee of methodological rigour helping the researcher to reflect upon the way research is carried out and the reader to grasp, at least partially, the background of the research work (Cardano, 2001). It is the awareness of the circularity between text and context that makes it possible to understand how the work presented is only one, and at the same time, the only one of the hundreds of possible works that could have been produced with the same data. The only *true story* in the infinite number of possible *true stories*. The true story that this research presents is the product of a precise positionality, a point of view made by merging identities: being a female researcher from northern Italy working in a predominantly male industry (Baum & Benschaul-Tolonen, 2021; Perks & Schulz, 2020) of the South. Such intersectionality³

³ Interpreted as theoretical framework rooted in the premise that human experience is jointly shaped by multiple social positions (e.g., race, gender), and cannot be adequately understood by considering social positions independently (Bauer et al., 2021; Crenshaw, 1989).

caused a unique localization in my observation and approach to reality, confronting me with some conditions influenced by perceptions based on my gender, geographical origins, and social status. In terms of my gender and age, as 24 years 24-year-old woman researcher, I was considered with little mistrust while also being often patronized and dismissed as I passed as an inoffensive interlocutor. This element impacted my work on psychological terms pushing me to question the perceptions on the seriousness of my work and my position. The age and gender dynamics were somehow compounded by geographical and social origins. I realized a level of lack of cultural knowledge, which the study of manuals could not have provided me in advance, that slowed down the process of understanding the reality of southern Italy, and Lucania specifically. Terminologies, specific languages, approaches, accents, and habits only became truly familiar - paradoxically - at the end of my first mission and for the sake of a full prehension would still need to be explored and investigated in depth. Face these elements, I, therefore, feel it is my duty, for the sake of intellectual honesty, to make it clear that the present work is only the product of my story, my point of view and of my world of interpreting the truth that the data collected narrate.

IV. STUDY AREA

This chapter is aimed to provide a general overview firstly of the study area, Basilicata region, to then move to an in-detail analysis of the Val d'Agri concession history, regulatory framework and organisation of activities from a practical standpoint.

IV.I BASILICATA REGION AND OIL EXTRACTION

Basilicata, also known as Lucania, its official name from 1932 to 1947, is a region in southern Italy, geographically framed between Campania to the west, Puglia to the north and east, and Calabria to the south. The region covers about 10,000 km² and in terms of environmental heritage, it hosts within its territory many protected areas: two national parks, the Pollino, divided between Basilicata and Calabria, and the largest national park in Italy, the Lucano Val d'Agri Lagonegrese Apennine National Park. It also recounts 18 between Sites of Community Interest (SCIs) and Areas of Zones of Special Protection (ZSPs) as part of Nature 2000, the EU-coordinated protection network of core breeding and resting sites for rare and threatened species, and rare natural habitats. According to the Basilicata Region website (Regione Basilicata, n.d.), the areas under protection occupy about 20% of the entire regional area with an extension of 198,047 hectares. As of December 31, 2020, the reference date for the third edition of the Permanent Population Census, there were 545,130 residents in Basilicata, 64.7% of Basilicata's population lives in the province of Potenza, which covers 65.5% of the territory (ISTAT, 2022). Over the past decade, including the years when the economic crisis hit Italy significantly, the GDP of the Basilicata region has remained constant. The region's GDP in 2018, the year of the latest report of socioeconomic analysis of the Italian territory and resources for cohesion policies provided by the Agency for Territorial Cohesion, GDP was about 12 billion euros

(at current values), accounted for 0.7% of Italian GDP and 3.1% of that of Mezzogiorno⁴ (Agenzia per la Coesione Territoriale, 2019). Basilicata region has strategic value for national development: in the year 2022, 82.11% of Italy's crude oil production was extracted (UNMIG, 2023) through the exploitation of the most important onshore hydrocarbon field in Europe located in this very area (Eni, 2014). According to Art. 38 co.1 of D.L. 133/2014 as converted by L. 164/2014 "the activities of prospecting, exploration and cultivation of hydrocarbons and those of underground storage of natural gas are of strategic interest and are of public utility, urgent and cannot be postponed" this is because in Italy the main energy source comes from the processing of fossil fuels (liquid and gaseous). The mix of oil and natural gas covers 73.8% of the country's entire primary energy demand (in terms of gross energy availability), in contrast to electricity imports, which cover 2.4%, solid fuels and renewable energy sources, which contribute 3.6% and 19.5%, respectively (MASE, 2023a). Nevertheless, according to the time series for the 20-year period 2002-2022, Italian hydrocarbon production, among the largest by volume in Europe, is following a discontinuous downward trend, especially for gas extraction. In the early 2000s, natural gas production in Italy was predominant and clearly higher than that of crude oil, but the difference has been smoothing out until it was nullified in 2018 when for the first time in was recorded a lower production of natural gas than oil (UNMIG, 2023). This negative trend is confirmed by the 2023 annual ministerial report on data for 2022, which provides a snapshot of Italy's declining energy reality. The natural gas production value of 2.78 metric tons is presented as a decrease of 2.68% compared to 2021, similarly, crude oil production, historically more erratic but still inscribed in a range of variability between 6.09 (2005) and 3.74 (2016) million ton of oil equivalent

⁴ The Mezzogiorno region, in Southern Italy, was roughly coextending with the former Kingdom of Naples. In current Italian administrative usage, it is a subregion consisting of the southern regions of Abruzzo, Molise, Campania, Puglia, Basilicata, and Calabria and an insular subregion composed of Sicily and Sardinia (Encyclopedia Britannica, 1998)

(TOE)/year, is presented as 4.45 TEP, down by 7.90%. Much of the domestic reserves of these hydrocarbons are located in onshore concessions, 56.5% of the total for gas and 93.1% for crude oil. For onshore fields, the majority of resources lie in the so-called *Texas of Italy*, the Val d'Agri and Gorgoglione concessions.

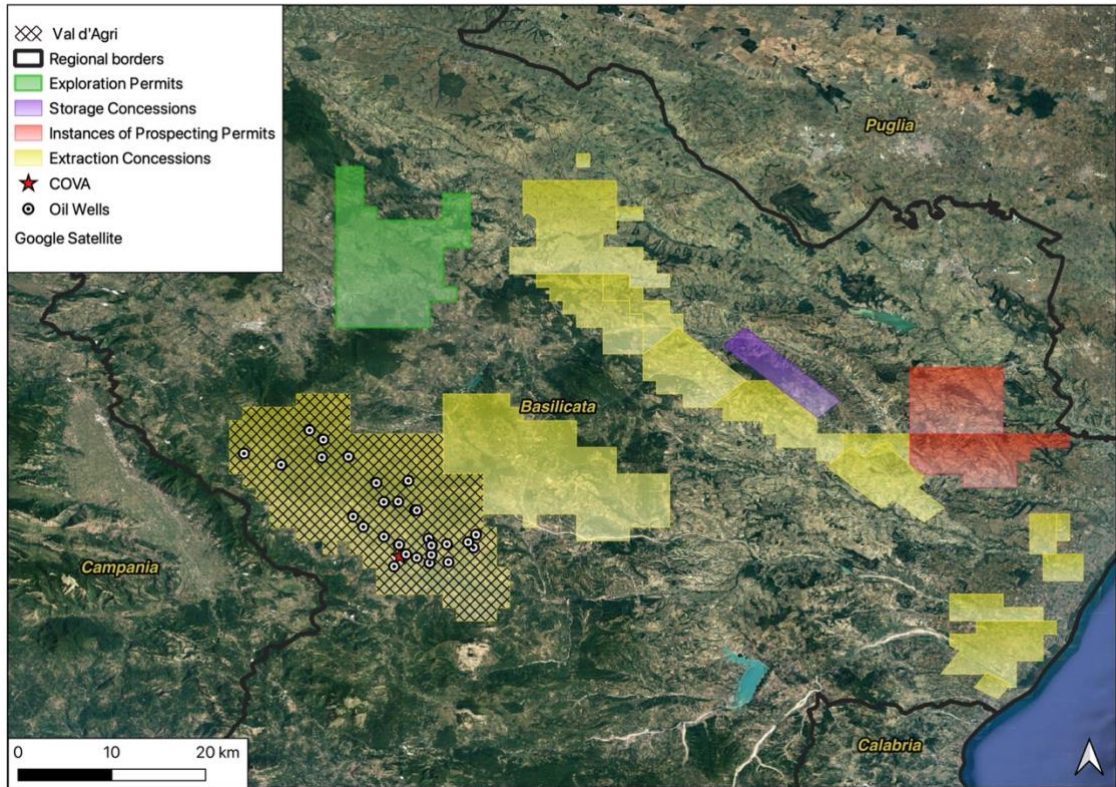


Figure 3: lucanian extractive landscape

Author's QGIS elaboration, based on this source data: MASE, 2022; MASE, 2023a; MASE, 2023b.

Basilicata region has under its belt 18 oil and gas concessions [Figure 3]; the research focuses on the 660.15 km² *Val d'Agri* concession, located between the Agri river valley floor and the Lucanian Apennines about 20 km southeast of the regional capital, Potenza. The concession, encompassing 19 municipalities, is located in an area of socio-environmental relevance due to the presence of the Lucanian Apennines National Park and 11 Natura 2000 protected sites, such as Sites of Community Importance (SCIs), Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) [Figure 4] (Osservatorio Val d'Agri, 2019).

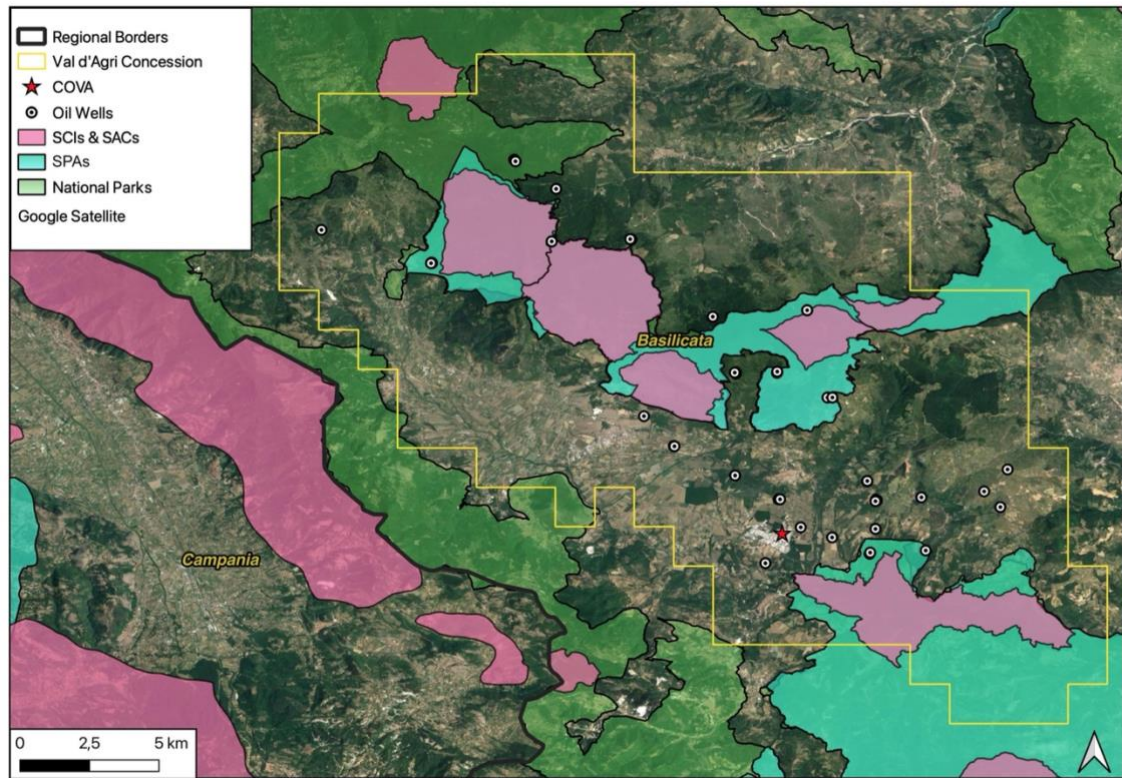


Figure 4: Val d'Agri concession and environmental areas of relevance

Author's QGIS elaboration, based on this source data: MASE, 2022; MASE, 2023a; MASE, 2023b; MASE 2023c; European Commission, 2023)

The mining site is built on the fundament of two constituent units: the deposits called *Trend 1* and *Trend 2* correspondingly consisting of the Monte Alpi - Monte Enoc, Cerro Falcone and Costa Molina structures, covering an area of 300 km², and Caldarosa and Tempa la Manara, occupying 20 km² of surface area (Osservatorio Val d'Agri, 2019). The concession is the result of a long authorization process and a history that goes back decades before its formal creation by unification in 2005.

IV.II HISTORY OF VAL D'AGRI CONCESSION

Lucanian petroleum activity has historically and culturally ancient and sedimented origins, first witnessed in the upper Val d'Agri town of Tramutola. The presence of hydrocarbons in the area was known *ab antio* because of the widespread acrid smell of hydrocarbons emerging freely, in the form of oily patches, in springs and rivulets. The

resource emerging from the underground, because of the ideological promises of early 20th century modernity, prompted spontaneous expressions of interest coming from the local government (Dijk et al., 2012). In 1901, Tramutola's city council approved a resolution to vote for the king's government to send a mining engineer to observe the oil zone. In the mining potential resided the expectation of economic development, which, however, was not recognized by the government and only began to be verified in 1912 when, an agreement between landowners and the Società Petroli d'Italia (SPI), made up for the government's refusal by inserting itself into a space left by the shortcomings of an undefined national subsurface legal system (Alliegro, 2012). The conclusion of concession contracts between private parties, however, did not lead to results due to technological inadequacies that did not allow obtaining sufficient information on the extent and location of the reservoir (Alliegro, 2012). Only in the 1920s, with the start of the expansionist assumptions of the fascist regime, did the issue of Lucanian oil begin to be perceived as central not only as a key to the public economy but also to the defence of the state. With this in mind, in 1927 Royal Decree 1443 was approved, regulating for the first time the extractive sector by shifting from a land-ownership system to a state-owned system in which resources belonged to the state. Therefore, from that point on those who wanted to start mining activities were obliged to interface with the state. Despite developments in the legal system of the Regno d'Italia, the researchers who were commissioned to conduct analysis of the Agri Valley territory remained cautious, not prejudging the possibility of positive and certain results from mining. It was only with the arrival of AGIP, Azienda Generale Italiana Petroli constituted in Milan and operating in the hydrocarbons sector since 1926, which was granted a prospecting permit in 1933, that the expectations of development were fulfilled: in four years, from 1939 to 1943, a total of 46 wells were drilled, 11 of which were found to be infertile, 6 with the presence

of oil and gas, 3 with gas only and 23 with oil only. With the onset of the post-war period, the need for post-war reconstruction and consequent local energy resources prompted new phases of study that despite expectations turned out to be sterile (Alliegro, 2012). By the end of 1959 the Tramutola 45 well, the last one drilled, which reached a depth of 2,000 meters, turned out in fact, not to be productive. Thus ended the first phase of exploration and extraction that made the oil issue in the valley put aside until the late 1970s when the cultivation of hydrocarbons resumed form and intensity always under the leadership of the public company AGIP which carried on until the Irpinia earthquake of November 1980, a complex, slow and full of complications research program which allowed, however, to lay the exploratory foundations for the drilling of the first productive wells. These included the drilling of the *Costa Molina 1* well, which led to the discovery of the Trend1 unit of which in 1984 the Ministry of Industry conferred the Cultivation Concession named *Costa Molina* to AGIP. In the 1990s, the real development phase of oil activity in Basilicata began; the Ministry of Industry granted AGIP the *Grumento Nova*, *Caldarosa* and *Volturino* cultivation concessions (Osservatorio Val d'Agri, 2019). While the extension of the Lucanian extractive system was being carried out, AGIP had been absorbed by the Ente Nazionale Idrocarburi (ENI)⁵, established by L. 136/1953. It was then Eni that took over from Agip in the process of awarding concessions and forming the first processing centre in the valley; in order to optimize the initial processing phase of the hydrocarbons extracted in the four concessions, in 1996 the *Monte Alpi* Oil Centre

⁵ Prior to its privatization functioned as a public economic entity with a holding company structure that controlled lead companies, including AGIP itself. By D.L. 333/1992 deliberated by the Amato I government, Eni was transformed into a joint stock company controlled by the Ministry of the Treasury, with Gabriele Cagliari as chairman, who in 1993 was involved in the Tangentopoli investigations of enormous political and cultural resonance for the Italian state. The CEO himself at the time, Bernabè, denounced within the group's companies the existence of a system of "slush funds" through which destined for financing political parties was transferred abroad in a process of mixing private and public interests (Oddo & Antoniani, 2022). As a result of the scandal Eni underwent a profound restructuring process that led the Italian state to sell a substantial part of its share capital between 1995 and 2001, retaining a share of more than 30% (Oddo & Antoniani, 2022).

was built and became operational in Viggiano with a processing capacity of 1,200 m³/day of oil, equivalent to 7,500 barrels/day and 300,000 m³/day of gas (Osservatorio Val d'Agri, 2019). Two years later, on October 7, 1998, the President of the Council of Ministers and the President of the Regional Council of Basilicata signed a Memorandum of Understanding on a plan of interventions aimed at accelerating the socioeconomic development of the areas affected by hydrocarbon extraction (Eni, 2013). On the 18th of the following month, 1998, the Basilicata Region and Eni signed a 30-year Memorandum of Understanding, approved by D.G.R. 3530/1998, in which environmental compensation measures and obligations on the part of the company to the region for the production concessions were specified. The implementing agreements also provided for environmental compensation measures, the planning and management of an environmental monitoring system and the creation of an Environmental Observatory (Eni, 2014). Between 1999 and 2001, the Costa Molina concession and the south-eastern portion of the Volturino concession were incorporated into the Grumento Nova concession, while the Volturino concession downsized from 348.37 km² to 261.76 km². Thus, only two concessions remained in the territory from the initial four and the *Monte Alpi Oil Centre* was expanded taking the name Centro Olio Val D'Agri (COVA). In 2005, the two concessions Grumento Nova and Volturino were finally unified in order to create a single concession named *Val d'Agri* with an expected expiration on October 26, 2019 (Osservatorio Val d'Agri, 2019). The new concession provided for a division of shares between Eni S.p.A. and Shell Italia S.p.A., with 66%, as of today 60.77%, and 34%, as of today 39.23%, respectively. Following years of production and as the end of the concession approached, on October 24, 2017, Eni submitted an application to the Basilicata region for a 10-year extension, which was granted following a process of negotiation between the company and the public administration that passed through the

definition of preliminary agreements first and the approval of a new protocol of intent later (Regione Basilicata, 1998a). It was with the Ministerial Decree on May 18, 2022, published in the Official Bulletin of Hydrocarbons and Georisources, B.U.I.G. - year LXVI, 5/2022, that the extension of the hydrocarbon production concession was granted, retroactively, until October 26, 2029 (Ministero della Transizione Ecologica, 2022) under the condition of a reduction of extent from 660,15 km² to 525,90 km² (Diantini, 2022).

IV.III REGULATORY FRAMEWORK

In Basilicata, as in the rest of Italy, the mining process is regulated by a system of ministerial mining concessions governed by L 613/1967. In Italy, mineral resources, including hydrocarbon deposits, belong to the State's unavailable assets, and their exploration and exploitation are considered activities of public interest to be carried out by private companies under concession, also known as mining titles (Camera dei Deputati, 2013). According to the state-owned legal system of ownership of mineral deposits, both the exploration and production of hydrocarbons in the are subject to the strict control of public administrations, and for this reason, mining titles are, legally, temporary concessions and not everlasting authorizations for activities that are granted in the public interest. Mining titles for hydrocarbons are divided into three types: (i) prospecting permits (ii) exploration permits and (iii) production concessions which allow for the regular production of hydrocarbons and are issued following discoveries and recognition as technically and economically cultivable (MASE, 2023a). This system of concessions, known as state-owned, was introduced in Italy during the Fascist era by Royal Decree July 29, 1927, No. 1443 "Norms of a legislative nature to regulate the exploration and cultivation of mines in the Kingdom". The issue of the management of hydrocarbon mining operations is to be analysed, juggling the labyrinth of distribution of competences and sources of law (Colasante, 2019), starting from that decree, which

defined hydrocarbons as a mining product and their extraction as an economic activity. In fact, it is noted precisely in subparagraph (b) of the first paragraph of Article 2 that mineral substances, including oil, must be expressly identified, not only as "workings" but also as "industrially usable subsoil energies". It seems clear from this source of primary law how the use of hydrocarbon substances is directed to the development of a real economic activity and in this perspective, the exploitation of these resources falls under the discipline of Article 41 of the Constitution. The constitutional article stipulates that although private economic initiative is free, it may not be carried out in conflict with social utility or in such a way as to be detrimental to health, the environment, security, freedom, and human dignity. The law determines the appropriate programs and controls so that public and private economic activity can be directed and coordinated for social and environmental purposes. It is in this perspective that the recent Directive 2014/52/EU defining the fundamental principles of the assessment of the significant direct and indirect effects of a project on factors such as (a) population and human health; (b) biodiversity; (c) land, soil, water, air, and climate; (d) material assets, cultural heritage, and landscape; and (e) interaction between the factors in (a) to (d) above. The directive, consistent with Directive 2011/92/EU, states that oil extraction projects should be subject to environmental impact assessment (EIA) procedures. In Italy, the current national legislation is represented by D.Lgs. 152/2006, "Norme in materia ambientale", as successively amended and supplemented (MASE, n.d.). The competence to assess environmental impacts resides at the national level in the hands of the Ministry of the Environment while at the regional level to the competent authority of environmental protection (Art. 7-bis, D.Lgs. 152/2006). The normative reference for Basilicata is Regional Law 47/1998, which provides the indications inherent in the guidelines for the procedure for the environmental impact of public and private projects relating to the

construction of plants, works and interventions that may have a significant impact on the environment, in order to verify their induced impacts on environmental components. The role of the regions in the hydrocarbon sector is not only related to the environmental issue but also to the framing of exploration and cultivation in both the context of mining law and energy sector, which according to Article 117 of the Constitution, constitutes a matter of concurrent state/region legislation. The competence confirmed by L. 239/2004, defines how the issuance of new titles for exploration and cultivation must be done by the state in prior agreement with the region affected by the concessions according to the principle of loyal cooperation (Camera dei Deputati, 2013). Extractive activity in Italy is thus regulated on a threefold level, by European regulations, national application and the competence, in specific sectors, of the regions. According to this regulatory framework, since the late 1980s, the Basilicata region has initiated long and complex negotiation processes with oil companies and the government, with the aim of obtaining a series of compensatory measures that would make the development of extractive operations compatible with the socio-economic and environmental protection of the territories involved (Eni, 2013). The historical negotiating path described in the previous paragraph led to the signing of a series of agreements, updated in recent times, such as the Memorandum of Understanding of October 7, 1998, between the Italian government and the Basilicata Region for the exploitation of oil resources in the Val d'Agri (Regione Basilicata, 1998b), the Memorandum of Understanding between the Basilicata Region and Eni SpA, signed on November 18, 1998 regarding the extraction of hydrocarbons in the Val d'Agri by the oil company (Regione Basilicata, 1998a), and recently, the New Protocol of Intent together with the Agreement of Development Projects approved after the Deliberation della Giunta Regionale di Basilicata 357/2022.

IV.III.I Memorandum of Understanding

The Memorandum of Understanding was signed on October 7, 1998, between the President of the Council of Ministers and the President of the Basilicata Regional Council with the aim of defining a plan of appropriate interventions to support the socio-economic development of the areas affected by hydrocarbon extraction (Regione Basilicata, 1998b). Subsequently, The Memorandum of Understanding between the Basilicata Region and Eni was signed on November 18, 1998, defining 11 Implementing Agreements and a Technical Protocol. The Agreements provided for: environmental compensation measures; measures to promote sustainable development; definition, implementation, and management of an environmental monitoring system; establishment of an environmental observatory; design and implementation of the Regional Program for the completion of methane distribution networks; anticipation of royalties for the portion exceeding 40.000 barrels per day; establishment of the Lucanian Energy Company; participation in the capital of the Regional Development Agency; establishment of scholarships; establishment of a Mattei Foundation (FEEM) office; and definition of a Technical Protocol for the management of emergency situations (Regione Basilicata, 1998a). The verification of the implementation of the commitments of the understanding and its implementation instruments is carried out periodically by the Joint Implementation Committee, which was created in order to take measures and appropriate steps to enable the rapid implementation of the planned measures. The protocol and stipulated agreements included investments with a total value of 184.1 million euros (Eni, 2014).

The Val d'Agri Environmental Observatory

The Val d'Agri Environmental Observatory was provided for under the Protocol of Intent between ENI and the Basilicata Region as an environmental compensation measure concerning the oil development project in the Val d'Agri area. It was established by

D.G.R. 272/2011. The Val d'Agri Environmental Observatory, based in Marsico Nuovo (PZ), is a highly scientific entity that works to study and develop systems and services aimed at better management and dissemination of environmental information. The Val d'Agri Environmental Observatory deals with the collection, cataloguing and archiving of information, the promotion of initiatives aimed at ensuring the citizens' right to correct and documented information on environmental issues of the territory and health, and the dissemination of the results of the activities carried out. The activities of the Val d'Agri Environmental Observatory also include the activation of studies and scientific collaborations, the experimentation of models and methodologies, the promotion of training courses aimed at environmental education, the dissemination of environmental culture and the professional updating of public and private operators in the sector (Osservatorio Val d'Agri, 2019). The governance of the observatory is managed through two main bodies first and foremost the Territorial Representation Committee, established by D.G.R. 272/2011, with the task of providing guidelines of a general nature to ensure the relationship with the institutions and the community and guidelines of a specific nature for the planning of activities. It is composed of the President of the Regional Council or delegated Councillor to the branch representing him, the Mayors of the Municipalities of the Val d'Agri area or their delegates, the Presidents of the Province of Potenza and Matera or their delegates, the President of the National Park Authority Appennino Lucano Val d'Agri Lagonegrese or his delegate, by the President of the Pollino Park Authority or his delegate, by three delegates indicated by the Environmental Associations, by a representative of the Industrial and Manufacturing Associations, by a representative of the Craft Associations, and by a representative of the Agricultural Associations. Second, the Technical-Scientific Committee, established by G.R.D. 272 of 03.01.2011, with the task of advising on scientific, technical, environmental and health

issues. It is composed of the Director General of the Department of Environment Territory and Sustainability Policies, who assumes coordination, the Manager of the Val d'Agri Project Structure, a representative of ARPAB, Agenzia Regionale per la Protezione dell'Ambiente, two representatives of the University of Basilicata, a representative of IMAA-CNR, a representative of ENEA, a representative of Metapontum Agrobios, a representative of the Italian Space Agency (ASI), by a representative of the Basilicata Basin Authority, by a representative of the Ministry of Economic Development, by a representative of the Ministry of the Environment, by a representative of ISPRA, by a representative of the Istituto Superiore di Sanità, and by any other individuals with high scientific relevance. The two committees are joined by the Observatory Chairman, corresponding to the President of the Regional Council, with the role of convening meetings and directing their work, as well as supervising the activities carried out, ensuring the concrete implementation of decisions. Additionally, an Operations Section should work to carry out the studies, monitoring and activities in line with the Observatory's mission. From what can be seen from the Observatory's website; however, this section has not yet been established and the activities are ensured by the staff of the Department of Environment, Territory, Sustainability Policies, of the Basilicata Region (Osservatorio Val d'Agri, 2019).

Regional Agency for Environmental Protection

Within this framework, The ARPAB or Regional Agency for Environmental Protection of Basilicata (ARPAB) is in charge of monitoring and controlling risk factors for environmental protection. It informs the public about the state of the environment and promotes culture and behaviour consistent with the principles and objectives of sustainable development while at the same time promoting the signing of voluntary agreements, the implementation of environmental management systems, the achievement

of eco-labels for the improvement of production processes of small and medium-sized enterprises, and administrative simplification (ARPAB, 2023). According to L.R. 1/2020, ARPAB carries out the technical and scientific activities related to the exercise of public functions for the protection of the environment referred to in Article 1 of D.Lgs. 496/1993, converted, with amendments, by L. 61/1994, “Urgent provisions on the reorganization of environmental controls and establishment of the national ARPAB for environmental protection”. In compliance with national law, ARPAB contributes to the pursuit of the sustainable development objectives of reducing land consumption, safeguarding, and promoting the quality of the environment, protecting natural resources, and fully realizing the Community *polluter pays* principle, also in relation to the national and regional objectives of promoting public health.

IV.III.II New Protocol of Intent

In anticipation of the forfeiture of the 30-year concession expiring in October 2019 on October 24, 2017, Eni, as operator, as specified previously, applied for a 10-year extension of the Concession and submitted in May 2019 a remodelled version of the work program. Confronted with the requests, the Basilicata Region has approved D.G.R. 352/2021 "Art. 1 paragraph 5 Law 239/2004 - Acknowledgment of the outline of the "Preliminary Agreement to the new Protocol of Intent Val d'Agri Concession and authorization to sign" and the Concession was extended by Ministerial Decree of May 18, 2022. In addition, the Parties signed a Development Project Operational Agreement having as its object the operational regulation of the disbursement of compensation measures and a gas agreement, having as its object the operational regulation of the disbursement of compensation measures related to the supply of a quantity of gas.

Within the agreements, a number of key points are defined to regulate the extension of the 10-year retroactive concession until 2029 in which the holders agree on:

1. recognizing and paying to the Basilicata Region a contribution parameterized to actual production equal to €1.05 per barrel produced in each reference year;
2. contributing to the financing of sustainable development projects amounting to 95,000,000 € for each five-year period, as described and regulated in detail in the Development Projects Agreement signed between the
3. disbursing through the supply of an amount of gas equal to 1,795,986 MWh/y to Basilicata Region, as regulated in the Gas Agreement signed between the Parties.

The objectives of the New Protocol of Intent are defined in terms of fostering environmental and territorial sustainability, enhancement and promotion of the environmental and cultural heritage and the monitoring and securing of the territory. The objective is fostering regional economic growth through lines of action related to "non-oil" activities inspired by principles of sustainability and environmental protection maximizing development opportunities, employment spin-offs, both direct and induced, employment continuity and professional growth (Regione Basilicata, 2022).

IV.IV ORGANIZATION OF OIL ACTIVITIES IN VAL D'AGRI CONCESSION

On a practical level, the extractive activities included in this historical, geographical and legal framework within the Val d'Agri concession are articulated in a series of extraction wells, a hydrodesulfurization centre, known as the *Centro Olio Val d'Agri* (COVA), the connecting pipelines for transporting oil, and the Monte - Alpi Taranto pipeline, deputed to transport treated oil from the Centro Olio to the Taranto refinery (Eni, 2014).

IV.IV.I Wells

The field cultivation of the concession is characterized by the drilling of 4 types of wells (Osservatorio Val d'Agri, 2019). The appraisal wells are located and drilled with the prospect of extending the productive area of an already partly developed reservoir, or to verify the existence and extent of hydrocarbon accumulations. Exploration wells are drilled in an unexplored area to ascertain the presence of hydrocarbon accumulations. Development wells are drilled within the limits of a hydrocarbon reservoir and to the depth of a stratigraphic horizon known as a productive one; if drilling results in the discovery of economically extractable hydrocarbons, the well becomes a production well. Productive wells in turn are divided into producing dispensing wells, which are currently extracting hydrocarbons from the reservoir, and non-dispensing wells. The dispensing/non-dispensing status can change several times during the lifetime of a production well (UNMIG, 2023).

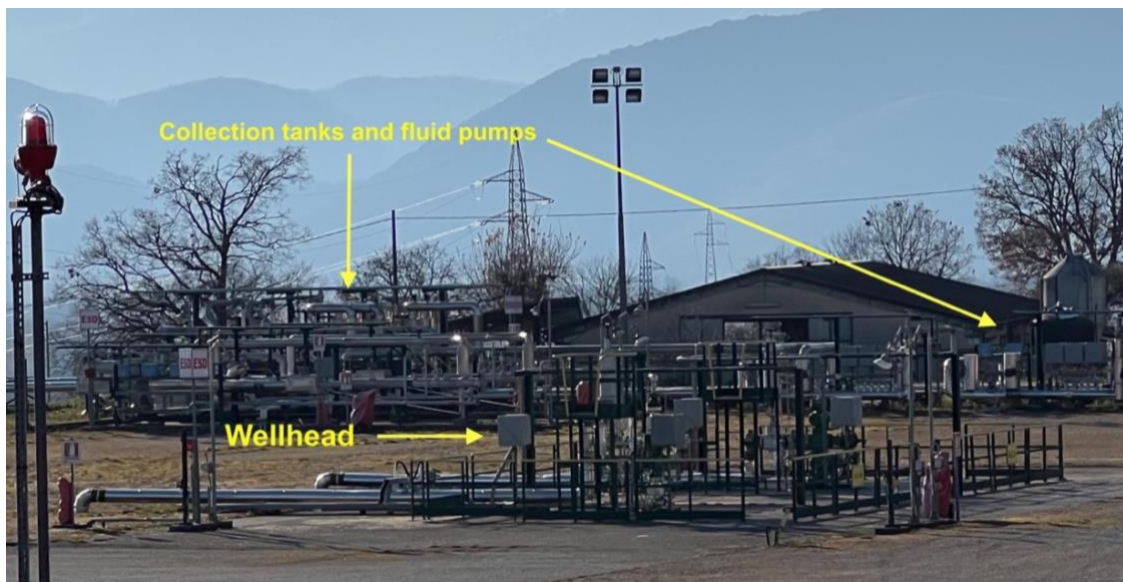


Figure 5: well area M. ENOC 4, Viggiano (PZ)

Photo: Sofia Tagliavini 16/02/2023

The well stations are generally presented as quadrangular areas, between 1 and 2 hectares wide, bordered by metal fences over 2 metres high, equipped with barbed wire (Osservatorio Val d'Agri, 2019) . The wellhead is generally located centrally while in a decentralised position other structures such as the drainage fluid pumps, the collection tanks and the network of collectors are located (Eni, 2013). Perimetrically to the area are buildings that house the electronic equipment and electric generators as it is possible to see in [Figure 5].



Figure 6: reinjection well Costa Molina 2, Montemurro (PZ)

Photo: Sofia Tagliavini 17/02/2023

An additional type of well is known as a reinjection well, which is a mineral shut-in exploited or sterile well, through which production water is injected into the reservoir. This process in Val d'Agri is carried out in the Costa Molina 2 well [Figure 6], converted into a reinjection well in which the treated processing water is sent to the COVA through a specially dedicated pipeline (Osservatorio Val d'Agri, 2019).

Currently, there are 40 wells in the Val d'Agri concession, of which 28 are disbursing (Eni, 2014; MASE, 2022) 8 are producing but not disbursing and 4 are minerally closed, of which one is the already mentioned *Costa Molina 2*, and another *Monte Alpi 09* is closed waiting to become a re-injector well. It is necessary to specify that the dataset from which the information is recovered is updated to 2012 and is so reported in the absence of detailed updates on the status of wells from the Val d'Agri Environmental Observatory, the region or the company. There are also wells organized into *clusters*, i.e., groups of two or three wells at the same location, and *single* wells, i.e., a single well at each location. In total, there are 10 clusters comprising 24 wells. Single wells, on the other hand, are 16 (Osservatorio Val d'Agri, 2019).

On March 20, 2023, Eni submitted to the Ministry of Environment and Energy the preliminary administrative procedure, preparatory to the EIA (Environmental Impact Assessment) applying the construction of a cluster area for two new wells in Civita di Marsicovetere named *Cerro Falcone 7* and *Sant'Elia 1*. The wells would be built in Civita di Marsicovetere where the well *Alli 5* was to be located but was rejected by the former Basilicata Regional Council in 2018 with proceedings filed in 2019 (MASE, 2023).

IV.IV.1 The pipeline network

Crude oil extracted from the different wells is pumped to the Val d'Agri Oil Centre (COVA) through about 93.1 km of pipelines [Figure 7] of varying diameters susceptible to the flow rates extracted from each location. All pipelines in the collection network are buried at a depth ranging from 1.5 m to 2 m, depending on the type of areas crossed. The pipelines undergo anti-corrosion treatment, periodic monitoring, and are protected by external coating and cathodic protection (Diantini, 2016).

A connecting backbone is represented by the COVA-Costa Molina 2 reinjection line, with a length of 9.4 km, dedicated to the transfer of treated production water at the Oil Centre to the Costa Molina 2 well (Osservatorio Val d'Agri, 2019)



Figure 7: schematic plan of Val d'Agri concession pipeline network

Based on Osservatorio Val d'Agri (2019), elaborated by (Diantini, 2016)

IV.IV.II Centro Olio Val d'Agri (COVA)

The pipeline system is used to ensure connection to the COVA Processing Centre [Figure 8], located in Viggiano, in the area known as *production zone for industrial settlements*.

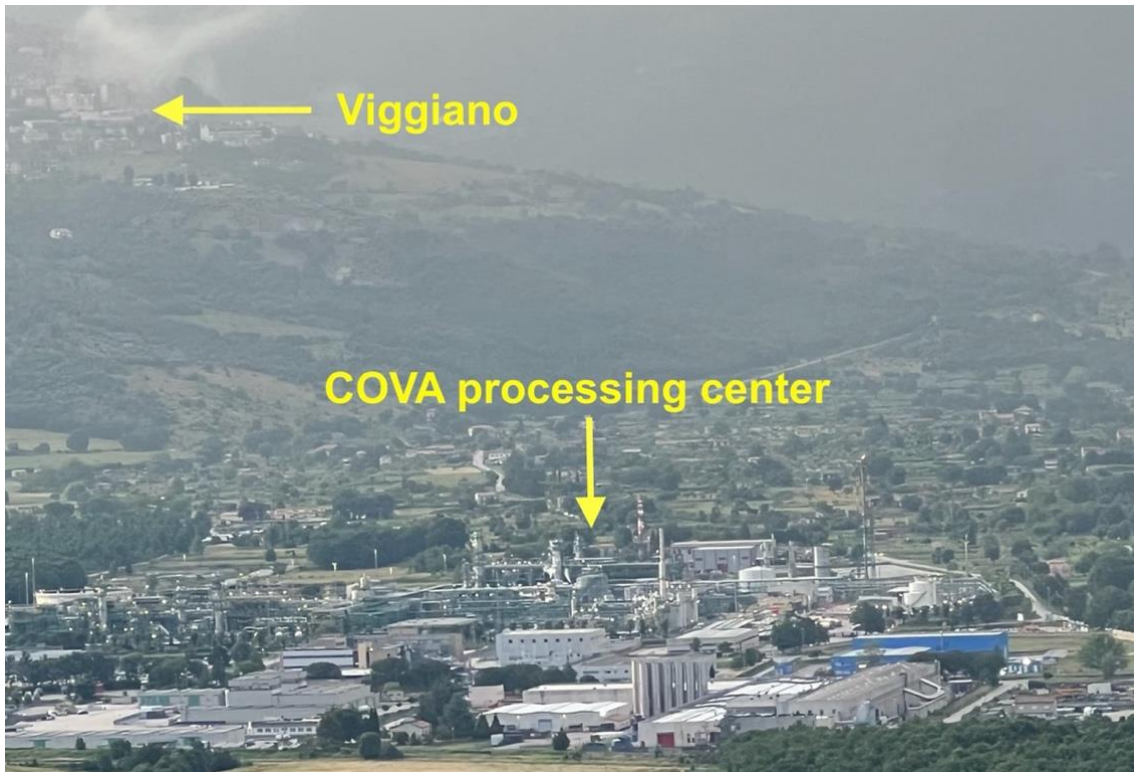


Figure 8: COVA processing center and Viggiano seen from Grumento nova (PZ)

Photo: Sofia Tagliavini 12/06/2023

The industrial area has been built since the beginning of 1990 in an area that was previously devoted to agricultural use. The entire complex came into operation in 2001, represents the expansion of the pre-existing *Centro Olio Monte Alpi* in production since 1996 and currently occupies an area of about 180,000 m² (Eni, 2014). In the Oil Centre takes place the first treatment of oil extracted from the wells. The fluid extracted from the reservoir and arriving at COVA is a multiphase mixture, that is, containing different proportions of the three oil, water and gas phases. The treatment occurring inside the COVA consists of separating the extracted oil from the gas and the formation water with which it is naturally associated, in order to be able to transport stabilized oil and gas (Eni,

2013). In COVA, the first treatment of the extracted crude oil takes place, which is then stored in special tanks to be transferred, through the pipeline, in operation since 2001 and owned by the company SOM S.p.A. (Società Oleodotti Meridionali, Eni 70%, Shell 30%), to the Taranto Refinery for further processing. As for the gaseous components, dehydrated, desulfurized and conditioned methane is fed into the Snam Rete Gas distribution network through the compression station present at COVA. Because of this processing the plant is equipped with a system of torches, three elevated and one ground torch, used as a safety measure for emergency discharges. The flames visible at the top of the torches are lit in case of unexpected repressuring needs. For what concerns the processing waste materials, strata water is deprived of hydrocarbons and gas through a specific treatment carried out at COVA to be ultimately either re-injected into the Costa Molina 2 well reservoir from which it is originally extracted or disposed of by tanker trucks. At present, ENI claims a nominal treatment capacity of the COVA of 104,000 barrels of oil/day, corresponding to 16,500 cubic meters per day, and 4,660,000 Sm³/g (Eni, 2014).

V. FINDINGS

The aim of this chapter is to present and describe the data that emerged during the research and was analysed through the coding process described above. To this end, the section has been subdivided into thematic macro-categories identified by closed coding – socio-economic and corporate-community relationship aspects - and analysed through the sub-categories of key codes or labels. This subdivision is done in order to present the large and interconnected amount of information collected as coherently as possible.

V.I SOCIO-ECONOMIC ASPECTS

V.I.I Royalties and services

Royalties are the remuneration paid to the owner of an asset as consideration for the concession to use the asset commercially. Pursuant to Article 826 of the Civil Code, hydrocarbon deposits on the Italian territory are the indisputable property of the Italian State, which issues concessions for extraction in favour of private companies, as described in the previous chapter. In Italy, private companies, depending on the granting of a concession, including Eni, produce hydrocarbons by paying rates of such production (royalties) to the State, Regions and Municipalities concerned according to Article 19 of D.Lgs. 625/1996. Royalties are therefore a share of the product of cultivation, which is calculated on the basis of average oil and gas market prices (Camera dei Deputati, 2023). Royalties for hydrocarbons from onshore fields, since 2009, are 7% plus 3% allocated to a specific fund of the Ministry of Economic Development, the Economic Development and Social Card Fund. According to the regulations, the beneficiaries of the rate, with different quotas, are the State, the Regions and the Municipalities where the crude oil is extracted. The quota destined to the State is 30%, that to the Regions 55%, and to the Municipalities 15%; nevertheless, according to Article 20, Paragraph 1-bis of D.Lgs.

625/1996, the rate destined to the State is paid directly to the Basilicata Region as a region with ordinary statute of the Mezzogiorno (MISEb). For the year 2022, Eni paid a total of €56 million to the Basilicata Region (Ministero della transizione ecologica, 2023). According to the data provided by the Ministero dell'Ambiente e della Sicurezza Energetica (MASE) (2023b) the trend of royalties paid has been fluctuating, with an important contraction in 2017 following the blocking of COVA in 2016 due to extraordinary inspections verifying the actions put in place by Eni to deal with the emergency of hydrocarbon spills. According to data provided directly by Eni during the interview [Annex 3], carried out with FEEM managing director, oil extraction in conjunction with the payment of royalties brings substantial economic benefits with a monetary impact on Basilicata's GDP of 10% in 2021. Royalties, therefore, represent tax revenues for the Region and the Municipalities due precisely to the use of land for extraction activities. The issue of royalties emerged organically in the interview process, highlighting the problematic nature of two aspects: the management of the funds and their distribution. About management, an awareness emerged from the interviews regarding the large sums paid by Eni to the region, but also highlighting the lack of a planned use of funds. Unexpected was the attribution of responsibility, which is largely given, even by company managers and other institutional representatives, to the Basilicata region⁶ which is blamed for the creation of *"a problem of administration of royalties that does not allow the circulation of the economy"* (Sara, lawyer) because:

"It is as if when Basilicata region takes royalties spends them immediately on health, infrastructure and other things. I believe that [...] Basilicata has funds that it doesn't know how to manage because the wealth will end, and you will need to have a trust to be able to reinvest." (Roberto, FEEM managing director)

⁶ The opinion of institutional voices from the Basilicata region could not be assessed as no attempt to connect with regional referents succeeded

During the interviews, the issue of royalties was then linked to the perception of a “*lack of social network and services*” (Giulia, School Principal). A gap was noted with respect to the provision and functioning of basic services such as transport, social assistance, infrastructure, education, and health, while at the same time, it was emphasised that the services provided were dependent on oil revenues. Explicit in this regard is Alessio's (head of regional association) opinion:

“The blackmail of royalties is fundamental. Without royalties, the region does not close its budget, and therefore without royalties, there is no transport, no health, no university, and many other important ancillary expenses.”

It also emerged that royalties are perceived as not being able to stimulate the development of a thriving and stable labour market and halt the depopulation trend.

V.I.II Distribution of benefits

In relation to economic inputs and services provided the region by Eni operations a correlated topic emerged: the distribution of such benefits and drawbacks. According to the data collected on perceptions on distribution and its fairness and equity could be analysed under two lenses: intra-generational (i), relating to notions of fairness across individual and groups in the communities within the present generation (Shelton, 2008) and inter-generational (ii) relating to to notions of fairness across individual and groups in the communities within different generations.

Using the first lenses of interpretation in relation to Eni operation the sample presented cases of evidence of a lack of fairness in the distribution of positive socio-economic impacts between stakeholders in the Val d'Agri context. For the benefits it seems that the company, institutional actors and people directly working for the company, even in a smaller extent, are benefitting the most out of the operations:

“Eni takes the profits; the state distributes the dividends, and the community is left with the problems.” (Alessio, head of regional association)

“Another thing has also been created with the oil industry, the anthropological change. Everyone wants to work for them (refers to Eni). Why? [...] Because they give jobs that are not there but have a salary, benefits, a kind of participation in an industrial world of opportunism” (Andrea, Mayor)

The *problems* to be intended as negative outputs of operations related to health, job security and economic wellbeing, as it will be analyzed in the next sections, are perceived as left to the majority of the population which seems not to gain from the equation in a way that was found similar to the way in which young people and future generations do. Moving the intergeneration lenses a high sense of worry surrounded the topic of fairness in the distribution of outcomes, especially negatives ones. The issue on how the services and benefits are not planned and managed, as mentioned before, in relation to institutional responsibility, in a way that would enable future and younger generation to prosper has emerged:

“But you administration when you get this money do not create a long-term investment plan, we young people need certainty, not the lift! You do the lift for the elderly, which with all due respect, is short-term. And if you ask me, social impacts are to blame for the inefficiency of the political class, regardless of political color” (Sara, lawyer)

“It is right that the royalties are there but there is nothing for afterwards, for the future of our children” (Annalisa, head of regional association)

“But no one is thinking about the future, about the fact that the oil runs out and these kids working on the wells won't have jobs, that's enough for them.” (Carlo, artist)

V.I.III Employment and depopulation

A recurring theme of conversation has been employment conditions. According to the June 2023 Basilicata socioeconomic situation report [Annex 3], the Southern District employs 2979 direct and indirect employees in the 150 companies of the supply chain with a full-time equivalent of 1483. According to the same report, 70% of these employees are residents of Basilicata. The perception of those interviewed is such that in Val d'Agri similar employment numbers are not guaranteed by any other reality. The awareness around the substantiality of Eni employment impact is widespread and the perspective of employment in the oil sector is desirable for reasons that are linked to job security, substantial remonstrations, company protection and social prestige. At the same time, parallel aspects, are perceived as problematic such as the:

1. temporariness: the oil sector activities that are destined to end due to the exhaustion of resources, clear is the concern about the ending and the risk, in the absence of a reconversion, of the *"lack of future employment"* (Roberto, *FEEM managing director*);
2. employment in other sectors: described as reduced and *"mortifying"* (Beatrice, *Municipal secretary*) mostly in the public sector offering project contracts;
3. employment blackmail: detected as implemented by Eni which uses employment as a bargaining chip.

Interconnected to employment conditions and the issue of services was the issue of the demographic decline from regional depopulation, a constant in Lucania, which has seen the loss, according to Istat data, of 36 thousand inhabitants in the last ten years. The worry about the precarity of the employment landscape is compounded by the perception of the abandonment of the land, especially from the young and middle-class strata of the population, which brought some participants to talk about a process of *"desertification"*.

Indeed, recurrent has been the use of the expression “*desert*” (*Sara, lawyer; Annalisa, activist; Carlo, artist and activist; Giulia, School Principal; Giuseppe, head of regional association*) to describe the socio-economic future of the region.

V.I.IV Environmental and health conditions

In September 2017, a document on the possible health effects of oil exploitation in Basilicata was published: the Health Impact Assessment, in Italian, Valutazione di Impatto Sanitario (VIS) (IFC- CNR, et al., 2017). This study reported the results of an analysis drawn up on the populations of Viggiano and Grumento Nova, the two towns most exposed to fumes from Eni's Val D'Agri Oil Centre. This is the first, and at the time of writing the only, epidemiological study carried out since the start of Eni's extraction activities. The picture that emerged showed increasing mortality indexes of residents in the period 2000-2014, in particular, a 19% increase in the mortality of women from all causes, and a 15% increase in the mortality of women and men in Viggiano and Grumento compared to the other 20 municipalities of the Agri Valley. There was also an increase in hospital admissions for circulatory diseases by 41% and 48% for respiratory diseases. The study focused above all on the plausible associations between environmental conditions and cancer of the trachea, bronchi, lung and diseases of the respiratory and circulatory systems. During this investigation, concerns were raised in relation to the right to health and health conditions, which the VIS addresses, mainly through two strands of narrative. The first raised the question of how the VIS was not a starting point but rather an end having been left without any practical follow-up:

“Why did you only do the health impact assessment once and never renew it again? That of the CNR in Pisa where it is written in black and white that women in Grumento die sooner because of the COVA's emissions. The study cost 1,200,000€, which the municipality of Viggiano also paid for, why wasn't it renewed?” (Alessio, head of regional association)

“There was the VIS as a health assessment on the population and it requested taking blood and hair to us and to the animals, but did we carry it out? We’ve been pushing it since 2009-2010, it was done once and then all was lost.” (Marco, farmer)

The second was made through direct accounts of health problems in communities, giving examples of premature deaths, illnesses and disabilities. Faced with the data provided by the VIS, Eni presented counterarguments, drawn up by a panel of experts made up of professors from La Sapienza and Tor Vergata Universities in Rome and researchers from the Istituto Superiore di Sanità⁷ who agreed that there was no health emergency and that there was no correlation between the values revealed and mining activity (Martino, 2017). Nevertheless, the perception detected in the area deviates from the counter-arguments presented by the panel financed by Eni with a perception of a causal link:

“Today the increase in illnesses is evident and it is clear that mining is to blame, there is no different industry in Val d’Agri. Just look at the last 15 years and at the VIS. There was a balance that has been destroyed” (Maria, activist)

“When there were then problems, spills, blockages of the power station, in practice, this study found a causal link between some cardiorespiratory diseases and perhaps cancer with those issues of mining activity, but it says it between the lines because I can’t say that we have all the evidence, but to me it is clear where the role of the industry” (Francesco, Deputy Mayor)

It seems that a general belief of correlation between health and environmental impacts is perceived. The responsibility for such link of causes is placed on the company on the one hand, and on the other hand, on legal constraints, Italian regulatory framework on pollution, that are not, according to participants, stringent enough.

⁷ The Istituto Superiore di Sanità (ISS) is the main centre for research, control and technical-scientific advice on public health in Italy. Alongside the Ministry of Health, the Regions and the National Health Service (NHS), the structures guide health policies on the basis of scientific evidence (Istituto Superiore di Sanità, 2019)

“The work done by the company ensures that the limits remain within the legal thresholds but does not allow for minimum pollutant values - this we say to each other - but if those minimum values are tolerated by law, then it means that the risk is accepted.” (Sara, lawyer)

“Why are the national values much lower than those in the United States? Why are they not in line with scientific studies? This is because when environmental and health laws were made, they were made badly.” (Marco, farmer)

This theme converged and mixed with that of monitoring, transparency and information, which will be dealt with in the following section.

V.II COMMUNITY RELATIONSHIPS ASPECTS

V.II.I Transparency

According to the Treccani encyclopaedia, transparency with reference to acts, behaviour, situations, and ways of proceeding, especially in public life and in relations with the community, means clarity, publicity, and absence of any desire for concealment and secrecy (Vocabolario Treccani, n.d.). During the interview analysis such transparency has been detected directly or with labels relating to the display or concealment of facts, events and information. The topic was particularly recurrent, brought up autonomously by the majority of participants, with no need of specific questions, presenting a generally homogeneous attitude of doubt towards the presence of transparency:

“I am convinced that there is no transparency because ‘homo homini lupus’: people when they get to manage such a huge economic patrimony become full of omertà”(Sara, lawyer)

Transparency is perceived as very scarce, if not totally lacking, due to economic interests and a general attitude of concealment verifiable in the cross-cutting and very frequent use of the term *omertà*. Originally, this term indicated the custom in force in the Italian southern underworld, also known as the law of silence, whereby silence had to be kept in

the name of the perpetrator of a crime so that he or she would not be affected by the laws of the state, but only by the revenge of the offended. In today's more general usage, it indicates that solidarity which, dictated by interests of imposed by fear of reprisals, consists in deliberately abstaining from accusations, denunciations, testimonies, or even from any judgement towards a certain person or situation (Vocabolario Treccani, n.d.). It is due to note that every single participant, except for the Eni representative, used this term with regard to the company or administrative stakeholder's attitude surrounding extractive activities. Along with it, other terms related to concealment were recurrent such as *corruption*, *lies*, *silence*, *secrecy*, and *tangents*. In liaison to this, one factor in the reported lack of transparency is the issue of industrial secrecy, which is perceived as limiting the verification of the company's activities, its environmental impacts, and the possibility of monitoring:

“We are going to find accumulations of heavy metals, substances that are today subject to company industrial secret and ministerial secret. What I always tell my fellow citizens is ‘how can you see the values, do the analysis if you don't know what to look for?’ if you don't know what to look for, it is logical that you don't find it because the moment you find something, a new substance, by chance - not because you have been told - then there you can look for it and do studies... but until then we don't know what to look for. (Andrea, mayor)

Because we know that there are chemical additives that they inject underground. They have injected millions of cubic meters of them in twenty years because it is all covered by industrial secrecy, and we don't even know the composition, not the effects.” (Alessio, head of regional association)

V.II.II Information

Closely related to the factor of transparency was the analysis of the issue of the flow of information between the company and other stakeholders. On one hand, communication, mainly linked to the extractive activities, is felt to be actively pursued by the company:

in the valley, there is free distribution of a company monthly, *Orizzonti* (Eni, n.d., subsidies for school projects, initiatives such as *Energie Aperte* (Eni, 2021) and projects carried out by the Fondazione Eni Enrico Mattei (FEEM, n.d.). On the other hand, the information provided by Eni is seen to some extent as fake or fictitious, constructed through financial resources:

*“Eni, starting from primary schools, has tried to create one and only expectation, the world of oil, so that politics cannot stop this activity [...] Eni make you believe that this, what they do, is the top; there is technology and there is money. [...] I have brought you these magazines. *The interviewee points at two magazines on the table* This is a magazine that comes for free in all homes, monthly, and if you read it, you are convinced of what they say, because it is well done. They try to impress the reader; nice places, nice offices...they do their job” (Francesco, Deputy Mayor)*

“ENI does not debate; Eni speaks in one direction. It has the financial capacity to talk and make plans, a monopoly, especially in schools” (Maria, activist)

V.II.III Monitoring

Monitoring was a widely discussed topic to which extensive and articulate conversations were devoted. In this regard, the role and function of the bodies in charge of monitoring was widely questioned. The lack of operational capacity of the Val D’Agri observatory and ARPAB was emphasized, and it was stated how often, this gap of competence, needed to be filled up for by independent analysis and research work made by environmental associations. The presence of both actors on the territory is acknowledged, still, more is assessed in relation to their absence, with the observatory remaining a body with minimal functions and ARPAB an “*incompetent*” (*Annalisa, head of association*) body with garrisons whose functions are unclear.

“In Viggiano, two years ago they opened the ARPAB headquarters in a small rural house on two floors that is not known what’s for. What does the ARPAB office actually do, let’s say, if there’s an industrial disaster? Does ARPAB in Viggiano have the means

to intervene? To do what? Or is there just a registered office that sits there using social media and pretending to keep the office open?” (Alessio, head of regional association)

“What do you think is the purpose of having it open?”

“To give a feeling of security to the population. The mayor will bring in his troops to tell ARPAB that it is an InfoPoint. No ways! It's not even an InfoPoint. If you ring up a girl who works there and ask her for data on oil, she tells you that you have to write to ARPAB Potenza, she doesn't have data, she doesn't give brochures, she doesn't organize meetings.” (Alessio, head of regional association)

Several conversations also revealed a perceived conflict of interest between the company, control agencies and institutions, intersecting with the issue of health and environmental protection:

“ARPAB has improved so much that it obtained certification a few years ago for some laboratories to do analyses. Three years ago, we obtained a branch office of ARPAB, then we got the environmental observatory in Marsico. They are a bit blunt because, as I said, they must be endorsed by the Ministry. However, if the Ministry gives the authorizations to extract to Eni, in which it has a 30% share, you can understand that it is a farce in the sense that if on the one hand the State invests with Eni for an energy policy in Basilicata, on the other hand it cannot push in the same way for environmental health policy, otherwise it goes against its own interests” (Francesco, Deputy Mayor)

V.II.IV Participation

Within the set of relational aspects between company and community, the factor of participation has also been identified as both a theory and practice related to the direct involvement of citizens or citizen action groups potentially affected by or interested in a decision or action. Participation is the act of engaging in and contributing to the activities, processes, and outcomes of a group (Lachapelle & Austin, 2014). The general tenet of community participation holds that those who are affected by a decision have a right to

be involved or have some degree of influence over any process and outcome related to its legislation, execution, and adjudication (Dare et al., 2014). Within the study context, the aspect of participation emerged with considerations. The opinions expressed regarding community participation ranged from the total absence of discussions with citizenship, which *"was not asked to participate"* (Sara, lawyer), to the existence of attempts by Eni, the institutions, and citizens to establish dialogues during the years of activity. These cases were difficult to verify as most of the meetings described were presented without a well-defined time framework, cases to look for, and surrounded by an aura of generality.

VI. DISCUSSION

Having constructed an itinerary of the history of extractive activities and presented the data collected from stakeholders' perceptions in Val d'Agri, what emerged will be now critically analysed. Through the theoretical frameworks of Social Licence to Operate and political ecology the present chapter will attempt to provide answers to the research questions drawing from the data presented in the previous chapter. A sort of dialogue between chapter VI and V will be conducted reviewing the topics emerged in the from the viewpoint of the framework concepts. In the first section of the chapter, SLO underlying concepts will put under scrutiny to assess whether the legitimacy, credibility and trust could be easily applied in the specific case of Val D'Agri concessions and, considering the study context, what specificities they present. In the second section findings will be discussed looking at evidence of frictions and hostilities to understand if Social Licence to Operate could be considered as a meaningful and useful conceptual tool to analyse conflicts. Still, before going into the in-depth discussion of this chapter, it is necessary to remind that the conclusions that will be drawn are the result of a partial analysis of the SLO in Val d'Agri. What emerged from the interview process and the interpretations drawn from it represent some of the many interpretations possible. This research is not reproducing an all-encompassing study of perceptions but an analysis of a specific sample.

VI.I.I Legitimacy

Looking for the use of the concept of legitimacy in the broader sense possible, Eni often conforms to a Weberian interpretation of the concept where legitimacy is perceived as conformity to social norms and laws (Weber, 1978):

“We conduct our activities with responsibility, fairness, correctness, and good faith, complying with internal and external source regulations” (Eni, 2020a, p. 5)

Still, bringing the attention to frame of reference, Thomson and Boutilier (2011) and Jijelava & Vanclay (2017) differentiated legal legitimacy and socio-political legitimacy.

Legal legitimacy is related to the perception on whether regulatory processes and procedures have been followed (Jijelava & Vanclay, 2017). From the legal perspective, the research found that Eni complies with normative requirements to operate, and its legal legitimacy is recognized by the sample of analysis. Multiple actors stated how the company operates legally and in the respect of constraints and from the sociopolitical point of view, a recognizing a provision of benefits, mainly economics, can be found.

Socio-political legitimacy, on the other hand, is the step necessary to provide acceptance of the project by the community in the SLO model pyramid and boils down to provision and fairness, of distribution and process (Jijelava & Vanclay, 2017). In this perspective, legitimacy encompasses the elements related to the provision of services and the balance between economic, social, and cultural rights such as employment, health, social security, and education (OHCHR, 2008). Eni emphasizes the importance of socio-political legitimacy in its documents, including its ethical codes (Eni, 2020a) and reports (Eni, 2014; Eni, 2020b):

“All our actions aim to make Basilicata a virtuous example of balanced and sustainable development and the center of Italy's energy culture. Sustainable development means respect for and protection of the environment, collaboration with institutions and transparent interaction with the population. It also and above all means a commitment to the citizens of Basilicata, who are asking for work, development, and growth” (Eni, 2013, p. 2)

This statement highlights Eni's commitment to legitimacy as a mean gain acceptance. It emphasises balance, compliance, ethical standards, and good behaviour. At the same time, it highlights a context-related sensibility. Because of the importance of understanding the

local context and of taking account of any specific local dynamics (Prno, 2013), this element was investigated and was found that Eni also refers to local dynamics:

“For the definition of an effective local development strategy, Eni starts with an in-depth knowledge of the context in which it operates” (Eni, 2022, p. 96)

From the interviews emerged how Eni is perceived to have taken the time and resources to understand and merge with the Lucanian context and particular attention to its socio-economic aspect as seen in the section related to royalties, services and employment. Reliability was found in royalties’ distribution, the increase of use of local labour and the desirability of working positions.

Still, the interview process provided perceptions that could be classified both as being evidence for and against the existence of strong legitimacy according to SLO parameters. As mentioned, evidence of provision of services and economic inputs Eni had generated was found. For example, employment, increase of regional economic availability, direct and indirect allowances for projects, education and cultural events were confirmed by both company narrative and interview participants. Nevertheless, levels of criticism arose in consideration of the balance between economic inputs and other aspects of social rights such as the selection of which services to provide, life expectancy, health conditions, infrastructures, future perspectives. A feeling of mismanagement and lack of long-term socio-economic planning – leading to a process of *desertification* and uncertainty – emerged from the interviews. However, it is due to note how this responsibility was only partially attributed to Eni by participants; on one hand, it was recognised by participants how Eni seemed to be able to influence the selection of the destination of the benefits it directly funds and designs – such as information with Orizzonti magazine, education with Eni funded School projects and Eni employment policies – on the other, the majority of fault for the lack of fairness in distribution of benefits is given to the local administrative

bodies, to Basilicata region especially, because of their lack of political will, planning and managing as presented in section V.I. Some level of lack of legitimacy is perceived in the way the resources proceeding from extractive activities are distributed and then located but responsibility is partially attributed to administrative actors.

In the context of SLO, Thomson and Boutilier (2011) situate legitimacy as a boundary criterion between Social Licence rejection and the minimal level of community acceptance for an operation to proceed. According to this conceptualization and the picture just presented, the data collected allows to state how Eni, even with some level of criticism, appears to be having trespassed the minimal amount of socio-political legitimacy in Val D'Agri. Even if not necessarily approved or trusted, as it will be analyzed as follows, Eni enjoys the freedom to pursue its activities that would not be possible in a state of withdrawal and lack of acceptance and legitimacy. In this sense, the legitimacy concept can be applied to the Val d'Agri context presenting specificities related to the balance of benefits and resource distribution.

VI.I.II Credibility

Credibility is the quality of being believed, the capacity to elicit belief (Thomson & Joyce, 2008). Credibility distinguishes projects that have been accepted from those that have been approved by stakeholders through formal negotiation and agreement on the roles and responsibilities of the company and stakeholders (Gehman et al., 2017). This is done primarily through community engagement, real transparency, and effective monitoring mechanisms. To ensure its credibility, according to Eni strategy documents, a system of “stakeholder’s involvement” (Eni, 2023, p. 96) aimed to increase transparency of action, information and engagement is put in place. This system is described in the “Eni in Basilicata 2014 Local Report” (Eni, 2014) which details the company’s activities, achievements, and future for the Lucanian context. In the document it is stated how:

“Eni is committed to strengthening and improving the quality of the dialogue with the territory and local communities through involvement of stakeholders with a continuous focus on communication and sharing of information.” (Eni, 2014, p.66)

The report goes on listing a series of activities aimed at strengthening participation and dialogue with stakeholders among which are public meetings, road shows visits to Eni plants (Eni, 2021) multistakeholder working tables and tables of transparency (CISL Basilicata, 2018; Confindustria Basilicata, 2021), dissemination events and information through the local website. Still, the reality pictured by the fieldwork and form data analysis appears to differ from the company’s declarations. An initial important element concerns the 2014 report itself: it is the last publicly available report on the Val d’Agri extractive project addressing issues of public interest, sustainability or operations testifying a lack of a regular process of reporting and information. Deficiencies were also detected in the data related to the information and participation process. The participants, as described in the previous chapter, referred about the participation process describing it with resignation and highlighting a feeling of exclusion from the space of debate, a sense of monopoly of the information held and exercised by the company and a general situation of *omertà* and lies surrounding extractive operations and the information provided by the company was highlighted. Another important element crucial for understanding the specificities, related to the perceptions sample in analysis, of credibility in Eni’s operations in Val d’Agri is the reliability monitoring process.

“For years Eni, in collaboration with the Basilicata Regional Environmental Agency (ARPAB), has established an environmental monitoring system that is unique in terms of the number of sampling points and innovative technologies” (Eni, 2014, p.44)

Although ARPAB plays an important role in increasing transparency for the Eni project its role and trustworthiness are doubted for reasons related to its operational capacity and conflicts of interest. The biggest concern relates to the credibility of the monitoring

process, the positioning of thresholds in the monitoring of polluting substances, which encompasses national competence, the sharing of knowledge on those same substances, in relation to the secrecy of industrial procedures and chemical, and the relational dynamics between Eni and ARPAB as presented in paragraph chapter V.VII. In addition, Eni credibility has been strongly shaken in reaction to two occurrences. Firstly, the 2013 events that led to the *Petrolgate* trial, ended with a first-degree conviction of Eni for the illegal trafficking of waste produced by the Viggiano Oil Centre and disposed of in sewage treatment plants on the national territory (Recommon, 2021). Secondly for events occurred between August and November 2016 during which four hundred tonnes of oil were spilled underground in Lucania (Totaro, 2017).

Whereas evidence was found about Eni's legitimacy, its credibility is debatable, according to the interviews carried out. Participants believed Eni is a respectable and competent corporate partner, however some still had negative feelings and perceptions towards its transparency and credibility of information. Remounting back to Thomson & Boutilier (2011) definition of credibility as an underlying element of SLO it is arguable that a basic level of trust related to honesty and reliability could not be detected.

The extent to which the project and the company are considered to be believable – analysing the contextual records in the light of the objective of this research – is minimal: what the company says was not found matching with participants' perceptions. If credibility is ultimately “achieved by the company providing true, clear, and believable information while delivering on all commitments made to the community” (Jijelava & Vanclay, 2017, p. 1078), Eni's credibility in the Val d'Agri extractive activity seemed hard to prove.

VI.I.III Trust

Trust is at the “pinnacle of the SLO continuum” (Jijelava & Vanclay, 2017, p.1084). High levels of trust are revealed when project proponents and local communities’ interests are aligned. SLO trust, as a form of strong credibility, is built over mutually respectful dialogue as an interactional trust (Thomson & Boutilier, 2011). Interactional trust is a transitional phase leading to institutionalized trust implying a perception of partnership, mutual respect and in the highest form, psychological identification between the project and community stakeholders. Furthermore, interactional trust is time and credibility-related; it can be built after an extended period of time in which prolonged credibility has been established. While legitimacy and credibility might be achieved in a relatively short timeframe, institutionalized trust takes several years and a strong commitment (Vanclay, 2012; Jijelava and Vanclay, 2017). Considering its 20-year-long key role in the Lucanian social fabric this sense, Eni could have been also potentially eligible for interactional trust and the company itself recognises the cruciality of trustworthiness itself. For example, in the 50th number of the Orizzonti monthly magazine, celebrating six years of journalistic activity, the role of trust, on behalf of the company, is clearly stated as follows:

“There are many tools to communicate, but there is only one way to dialogue with a community of which, while respecting roles, you want to be a part: to establish and consolidate a pact of mutual trust between those who live in that community and those who are welcomed into it. Eni has been present in Val d'Agri for more than 20 years and I can say that the DIME [Distetto Meridionale Eni], in this period, is experiencing a moment of extraordinary operativeness thanks also to the right synergies that led to the ten-year extension of the concession. A history that has known moments that have not always been easy, but which has always been marked by a spirit of collaboration, transparency, listening, and sharing a development path that never as in this period is fuelled by changed scenarios and prospects to be built.” (Racano, 2023, p.1)

This declaration is full of worthy and aspirational statements highlighting the company's acknowledgment of its role and need for social licensing, still, it leads one to wonder how and if this knowledge does translate into real actions. Did Eni put into practice those principles? Are those aspects of mutual trust and respect perceived by stakeholders? Was Eni able to compel a state of identification with local communities?

Considering what has been expressed in the previous chapter, it can be argued that little commitment to such claims has been perceived by the analysis sample. No sense of co-ownership or psychological identification was found during the present research, quite the opposite, a strong sense of separate identities, of opposition between an *us* – the Val d'Agri population – and *them* – as Eni – was emphasised by the majority of participants. As was the case with credibility, there is evidence that suggests that Eni recognises the role of the underlying concept of trust in gaining social permission for its activities and some efforts to gain it are being made, still, at the current state of events, it is possible to address how Eni seems to have achieved a low level of trust in Val d'Agri. This conclusion is not surprising, full trust would need a certain level of credibility and consequent approval which turns out to be quite missing. However, it would be interesting and needed for purposes of future research to assess the opinions of other stakeholders, such as for example Eni workers, and evaluate how their perception would encapsulate in the mosaic presents.

VI.II SOCIO-ENVIRONMENTAL CONFLICTS

Approaching the issue from the perspective of political ecology, conflicts are identifiable by the presence of unequal power relations in a resource economy in which conflict emerges as violence in the broadest sense, in its physical, structural, and symbolic forms (Perreault et al., 2015). Differences in access, such as the ability to benefit from things including material objects, persons, institutions, and symbols (Ribot and Peluso, 2003),

add to differences in interests. At the core of conflict situations is a disagreement between parties (or stakeholders) which is the reflection of a divergence of interests. Divergence is not necessarily objective but is strongly dependent on each party's perceptions (Prenzel & Vanclay, 2014). Thus, conflict can result from the subjective belief that the other party has opposing interests, regardless of the accuracy of perception (Wall and Callister, 1995).

The Val d'Agri landscapes present a resource economy based on long-lasting operations of hydrocarbon extraction where powers are distributed according to the access of direct resources, hydrocarbons, indirect resources, royalties, and economic assets. According to the data collected Eni is, and is perceived, as the key actor holding the majority of economic power in the context of analysis. At the same time, divergences and mismatches of interests between the different stakeholders could be observed especially between the company, in its document and representatives' declarations, and community stakeholders.

The Lucanian context has never faced situations of explicit and big-scale conflict such as rebellions, militarism, interregional conflict, or violence outbreaks. Still, the present research, carried on with the means and goals of SLO assessment, was able to identify some latent forms of conflicts related to the presence of failures of communication, attempts to sabotage, protests and feelings of opposition, fear, danger, silent rejection, and resignation. These forms of tensions can be seen as the product of conflict as a process in which one party perceives that its interests are being opposed or negatively affected by another party (Wall and Callister, 1995). A product that, according to conditions, can express itself in levels ranging from latent or explicit (Donohue and Kolt, 1992). The observation just presented was the product of the use of legitimacy, credibility, and trust as the lenses of interpretation of the data collected. It is believed that SLO could play the role of a conflict-sensitive tool. First, as expressed in the theoretical framework chapter, SLO arose as the mining industry's response to the risk of losing operational capacity and

has a strategy to manage the stakeholder's attitude toward projects. Specifically, SLO was developed as a form of risk management allowing companies to engage directly with local communities affected by projects that, whose needs and interests, if ignored, could provide opportunities for conflict and financial and reputational damage (Cooney, 2017). Community protest and other forms of conflict have considerable potential to adversely affect the implementation of large projects (Hanna et Al. 2015). Particular attention to factors of risk lies in the very nature of SLO; the implementation of strategies for enhancing or gaining legitimacy, credibility and trust would imply the verification of factors of danger and conflict. Second, SLO as a form of social contract, is characterized by an everchanging, time and context-sensible nature form of social contract (Moffat, 2016). The achievement of a certain level of SLO, even trust, does not imply overcoming the risk of conflict; efforts to maintain the level obtained remain crucial as long as the relationship between the company and the stockholders persists, which implies a constant process of assessment. Similarly, conflict is a dynamic process associated with social dynamics whose extent and range of expression may change through time and context (Prenzel & Vanclay 2014). Social tensions as well as SLO are not static but change according to new developments and circumstances. Therefore, SLO could provide both researchers and companies with a device that through the continuous assessment of legitimacy credibility and trust could provide information about the presence or absence of forms of conflict. From the corporate side, an important aspect of using the tools of SLO to assess and potentially prevent the development of conflict lies would be the use combined use of SLO with SIA mechanisms such as the grievance mechanisms. Those mechanisms are relevant in the sense that they represent a way of handling conflict seen as an expression of grievance or a perceived injustice evoking an individual's or a group's sense of entitlement, which may be based on law, contract, explicit or implicit promises,

customary practice, or general notions of fairness of aggrieved communities (Vanclay & Hanna 2019, p. 5). Projects may consider how to implement mechanisms that are effective at encouraging people to register their concerns before they escalate. Grievance mechanisms establish communication between the stakeholders that can allow the identification of conflict potential, and, in its early stages, prevent tension escalation (Kapelus et al., 2011). Nevertheless, the usefulness of SLO as a mechanism of tension estimation cannot be taken for granted. SLO could represent a double-edged sword if questioning the moral integrity of the use of the concept which could be biased. Communities, leveraging on the principle, could push companies to develop strategies and mechanisms to keep the community satisfied while companies could use the concept and the claim of having obtained a social Licence to pursue selfish interests (Boutilier, 2014). In this sense, SLO cannot be seen as a warrant or understood as a panacea for conflict. The effectiveness of SLO in conflict and risk appraisal and management and risk will vary with the ways in which monitoring, for company related purposes, and research, for academic aims, are carried forwards and implemented.

VII. CONCLUSIONS

VII.I FINAL EVALUATIONS

By applying the SLO framework to Eni extractive operations in Val d'Agri, the applicability of the use of legitimacy, credibility, and trust was demonstrated. Answering the first research question, the SLO concept seems to be useful, and its elements of legitimacy, credibility and trust were easily applied to the Val d'Agri helping recognize the context-related dynamics. The three thresholds - legitimacy, credibility, and trust - appeared to be comprehensive of all matters that would need to be considered in thinking about an SLO, especially if considering the cumulative and multi-layer nature of the social relationships taken into analysis. They aligned well with the data retrieved from interviews and their specificities have been described in a way that allowed an analysis of the corresponding level in the SLO spectrum: acceptance, approval, and psychological identification. The concepts referring to the SLO framework proved to be useful and can be relatively easily applied to an assessment of extractive activities in Basilicata providing a picture, even if partial considering the size of the sample of analysis, of the current SLO granted to the company by local stakeholders. Each of these concepts had its own, context sensible, specificities that enabled drawing general conclusions on the state of art of Eni operation in Val d'Agri. Eni, at the moment in which the fieldwork was carried forward, established its legitimacy, from the legal and socio-political perspective, obtaining the acceptance level of SLO. Although many practices were being undertaken to attempt to achieve credibility and trust, these attempts have not fully convinced all stakeholders. High levels of mistrust and lack of reliability have been identified. Eni could not be regarded as having either approval or psychological identification from all stakeholders due to specificities of credibility and trust related to transparency, information, monitoring and participation practices. The conclusions drawn by the means of the research questions

followed an accurate and robust methodological approach, however, it is important to note how the limits of the present research, related to time and resources, place the need to disclaim how further and in-depth analysis should be carried forward in order to provide an extensive analysis stakeholders' perception. This consideration is related to the issue that the concept of SLO should not be regarded as a singular concept that only needs to be established at a single point in time (Dare et al., 2014; Hanna & Vanclay, 2013). The unitary nature of the expression, *a* social Licence to operate, may unfortunately lead to considering that there is only one Licence that needs to be obtained from one homogenous community. Still, this is revealed to be untrue. Communities are never homogenous and consequently, multiple SLOs will always be required (Vanclay, 2012; Jijelava and Vanclay, 2014b). SLO should be considered as a holistic and multi-dimensional concept. The conclusions drawn from the applicability of SLO and its underlying concepts relative to Eni's position on Thomson & Boutilier's pyramid are related to *a* specific Social Licence to Operate that may and must probably vary over time and community.

The findings also suggest the use of SLO may contribute to the identification of factors of conflict. The analysis showed how the use of underlying elements of legitimacy, credibility and trust as an investigative lens could help the recognition of conflicts while if used to develop strategies to increase the overall SLO, supporting conflict prevention. It was debated how the lack of a minimum level of legitimacy, credibility or trust, and the consequently missed trespassing of the withdrawal, acceptance or approval phase, may lead to a wide range of expressions of conflict depending on the level of SLO such as physical damage to company property; project delays and lost production; court action against the company; regulatory action against the company including additional conditions being imposed, fines, claims for compensation being awarded against the

company, or the revoking of legal licences to operate; loss of reputation; share market reaction; extra costs including for additional staff and security, higher insurance premiums and increased cost of finance; implications of the diverted attention of staff and board time; and loss of access to new sites (Hanna et al., 2016 & Vanclay et al., 2015). Overall, the findings provided evidence of how, the use of the SLO framework of analysis could reveal to be a useful tool for company representatives and researchers to carry on conflict related analysis.

VII.II RECOMMENDATIONS FOR FUTURE RESEARCH

By inference, the type of SLO analysis just presented and its underlying concepts would be useful for a wide range of other resource extractive projects around Italy. As already mentioned, it is my belief that such a study on stakeholder's perception could and should be tested on a wider scale. The concept has great applicability and could lead to noticeable outcomes in Val d'Agri as well as in other backgrounds. Both companies and local administrations could benefit from it; an extensive study on the company-community relation could provide companies with information useful for the implementation of its social responsibility strategy while, similarly, local administrations, strong in their political will, could plan and invest resources responding to the needs of communities.

In relation to SLO's ability to represent an appropriate tool to assess conflict it could also be appealing to stakeholders dealing with risk and conflicts outside the corporate world. By gaining awareness of its usefulness institutions could employ SLO as an engine for assessing dynamics encompassing socio-environmental conflicts identifying conflicts, addressing needs, listening and responding to concerns and problems through the implementation and design of policies. It could be innovative for state institutions to take advantage of the concept to develop forms of conflict assessment on their territory through the recruitment and engagement of consulting companies developing not only

functional services for policy development and monitoring but also incentivising a market for consultancy for social responsibility, justice, reduction and prevention of conflicts.

Finally, an additional branch of future research emerged from the analysis related but not directly connected to SLO. The situation of extractivism which this thesis is rooted in is destined to change; the concession period, extended up to 2029, has six more years of implementation after which alternatives of development need to be imagined and put in place. An investigation into the alternatives to the extractive sector could be dreamed and enacted. This is in consideration of the fact that during the interviews, topics related to the future of Val d'Agri have been spontaneously introduced by interlocutors. Topics such as energy communities (Regione Basilicata 2023), solar communities (Centro per le comunità solaranti, 2023), hydrogen (Eni, 2022) innovative farming and sustainable tourism have been featured by the majority of participants, especially from the company itself. It is reasonable to therefore think how this opening could be an interesting and valid topic of analysis. If all environments, especially those colonized, resource-dependent dependent and ecologically bound are environments of justice (Figueroa, 2023), Basilicata is an environment of justice deserving to be a respectful space for an inclusive debate for the improvement of socio-environmental and economic conditions for present and future generations.

BIBLIOGRAPHY

- Agenzia per la Coesione Territoriale (2019). Schede regionali 2018. Analisi socioeconomica del territorio italiano e delle risorse per le politiche di coesione. Retrieved from: <https://www.agenziacoesione.gov.it/wp-content/uploads/2019/03/Schede-regionali-2018.pdf>
- Alliegro, E. V. (2012). *Il Totem Nero. Petrolio Sviluppo e Conflitti in Basilicata* (1st ed.). Roma: CISU.
- Bauer, G. R., Churchill, S. M., Mahendran, M., Walwyn, C., Lizotte, D., & Villa-Rueda, A. A. (2021). Intersectionality in quantitative research: A systematic review of its emergence and applications of theory and methods. *SSM - Population Health*, *14*, 100798. Doi: <https://doi.org/10.1016/j.ssmph.2021.100798>
- Baum, S., & Benschaul-Tolonen, A. (2021). Extractive Industries and Gender Equality. *Review of Environmental Economics and Policy*, *15*(2), 195–215. Doi: <http://dx.doi.org/10.1086/715525>
- Behrends, A., Reyna, S., & Schlee, G. (2011). *Crude domination: An anthropology of oil*. (2nd Ed). Berghahn books.
- Bice, S. (2014). What Gives You a Social Licence? An Exploration of the Social Licence to Operate in the Australian Mining Industry. *Resources*, *3*(1), 62–80. Doi: <https://doi.org/10.3390/resources3010062>
- Bice, S., & Moffat, K. (2014). Social licence to operate and impact assessment. *Impact Assessment and Project Appraisal*, *32* (4), 257–262. Doi: <https://doi.org/10.1080/14615517.2014.950122>

- Billo, E. (2015). Sovereignty and subterranean resources: An institutional ethnography of Repsol's corporate social responsibility programs in Ecuador. *Geoforum*, 59, 268–277. Doi: <https://doi.org/10.1016/j.geoforum.2014.11.021>
- Boutilier, R. G. (2014). Frequently asked questions about the social licence to operate. *Impact Assessment and Project Appraisal*, 32(4), 263–272. Doi: <https://doi.org/10.1080/14615517.2014.941141>
- Boutilier, R. G., Black, L., & Thomson, I. (2011). From metaphor to management tool: How the social license to operate can stabilise the socio-political environment for business. *International Mine Management 2012 Proceedings*, 227-237. Retrieved from: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=c6e7d9985e94abe550563db51952649656b8d14c>
- Boutilier, R. G., Cuernavaca, A., & Ian Thomson, M. (2011). Modelling and Measuring the Social License to Operate: Fruits of dialogue between theory and practice. Retrieved from: <https://sociallicense.com/publications/Modelling%20and%20Measuring%20the%20SLO.pdf>
- Bucerius, S. M. (2013). Becoming a “Trusted Outsider”: Gender, Ethnicity, and Inequality in Ethnographic Research. *Journal of Contemporary Ethnography*, 42(6), 690–721. Doi: <https://doi.org/10.1177/0891241613497747>
- Business for Social Responsibility (BSR), (2003) *The social license to operate*. Retrieved from https://static1.squarespace.com/static/5bb24d3c9b8fe8421e87bbb6/t/5c3bd87340ec9ab9b9f3fdf9/1547425908683/file_BSR_Social_License_to_Operate.pdf

- Camera dei deputati (2013). Attività petrolifere in Basilicata e relativo monitoraggio ambientale. Retrieved from: <http://documenti.camera.it/leg17/dossier/Testi/Am0040.htm>
- Cardano, M., Manocchi, M., & Venturini, G. L. (2011). *Ricerche: un'introduzione alla metodologia delle scienze sociali* (1st ed.). Roma; Carocci.
- Cardano, Mario. (2011). *La ricerca qualitativa* (1st ed.). Roma; Il Mulino.
- Chen C., Wang L., Zhang Y. (2023). Do short-lived companies need to consider a social license to operate? Learning from an urban renewal project in China. *Sustainable Production and Consumption*, 36.
- Chen J., Toledano P. & Brauch M., D. (2022) How Much Have the Oil Supermajors Contributed to Climate Change? Estimating the Carbon Footprint of the Oil Refining and Petroleum Product Sales Sectors. New York: CCSI.
- Colasante, P. (2019). La giurisprudenza costituzionale e il “labirinto” del riparto delle competenze in materia di idrocarburi. *Osservatorio AIC*, 6/2019, 193-207.
- Coleman, J. (1958). Relational Analysis: The Study of Social Organizations with Survey Methods. *Human Organization*, 17(4), 28–36. Doi: <https://doi.org/10.4324/9781315129945>
- Confindustria Basilicata. (2021). Comunicato Stampa - Tavoli della trasparenza Eni e Total: garantire il giusto equilibrio tra tutti i legittimi interessi in gioco. Retrieved from: http://www.confindustria.basilicata.it/wp-content/uploads/2021/04/CS_Tavoli-Trasparenza.pdf
- Cooney, J. (2017). Reflections on the 20th anniversary of the term ‘social licence.’ *Journal of Energy and Natural Resources Law*, 35(2), 197–200. Doi: <https://doi.org/10.1080/02646811.2016.1269472>

- Crenshaw, K. (1989). Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Policies. *University of Chicago Legal Forum*, 1989(1), 139–167. Retrieved from: <http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8/>
- Creswell, J. (2009). *Research Design. Qualitative, quantitative and mixed methods approaches* (3rd ed.). London; SAGE Publications Ltd.
- Cunningham, J. W. (1805). *A World Without Soul*. Hatchard, J.
- Czarniawska, B. (2004). *Narratives in social science research*. London; Sage.
- Czarniawska B. (2010) The uses of narratology in social and policy studies. *Critical Policy Studies*, 4(1), 58-76, Doi: <https://doi.org/10.1080/19460171003715002>
- Dare, M., Schirmer, J. & Vanclay, F. (2014) Community engagement and social licence to operate, *Impact Assessment and Project Appraisal*, 32:3, 188-197, Doi: <https://doi.org/10.1080/14615517.2014.927108>
- Davis, R., & Franks, D. (2014). *Costs of Company-Community Conflict in the Extractive Sector*. Corporate Social Responsibility Initiative Report, 66. Retrieved from: https://shiftproject.org/wp-content/uploads/2020/01/Costs_of_Conflict_Davis-Franks.pdf
- Denzin, N. K., & Lincoln, Y. S. (2005). *Handbook of Qualitative Research* (3rd ed.). London; SAGE publications.
- Diantini, A. (2016). *Petrolio e biodiversità in Val d'Agri: linee guida per la valutazione di impatto ambientale di attività petrolifere onshore*. Cleup.

- Diantini, A. (2022). Petroleumscape e petrocultura nelle concessioni Val d'Agri e Gorgoglione: analisi territoriale del paesaggio petrolifero della Basilicata. *Rivista Geografica Italiana*, 3, 29–49. Doi: <https://doi.org/10.3280/rgioa3-2022oa14589>
- Donohue, W. A., & Kolt, R. (1992). *Managing Interpersonal Conflict*. Sage. Doi: <https://doi.org/10.4135/9781483325873>
- Ehrnström-Fuentes, M., & Kröger, M. (2017). In the shadows of social licence to operate: Untold investment grievances in Latin America. *Journal of Cleaner Production*, 141, 346–358. Doi: <https://doi.org/10.1016/j.jclepro.2016.09.112>
- Eni (2013). Eni in Basilicata - Local Report 2013. Retrieved from: <https://covacontro.org/wp-content/uploads/2016/03/eni-local-report-2013.pdf>
- Eni (2014). Eni in Basilicata - Local Report 2014. Retrieved from: https://www.eni.com/docs/it_IT/eni-basilicata/documenti/local-report-2014.pdf
- Eni (2017). Centro olio val d'agri (COVA) piano di caratterizzazione. Revisione in Seguito al Verbale della Regione Basilicata – Dipartimento Ambiente ed Energia. Retrieved from: https://www.eni.com/docs/it_IT/eni-basilicata/ambiente/serbatoi-sicurezza-cova/Piano-caratterizzazione.pdf
- Eni. (2020a). Codice Eitco. Retrieved from: https://www.eni.com/assets/documents/codice_etico_eni.pdf
- Eni (2020b). Eni for 2020 - Sustainability performance. Retrieved from: <https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Sustainability-performance.pdf>
- Eni (2020c). Eni Rewind 2020. Retrieved from: <https://www.eni.com/assets/documents/enirewind/chi-siamo/Eni-Rewind-Report-Sostenibilita-2020.pdf>

Eni (2020d). Executive summary. Eni for 2020. Retrieved from: <https://www.eni.com/assets/documents/eng/just-transition/2020/Eni-for-2020-Executive-Summary-eng.pdf>

Eni (2022). Eni for 2022 - A Just Transition. Retrieved from: <https://www.eni.com/assets/documents/eng/just-transition/2022/eni-for-2022-just-transition-eng.pdf>

Eni (2023a). Eni: Bilancio consolidato e Progetto di Bilancio di esercizio 2022. Retrieved from: https://www.eni.com/assets/documents/press-release/migrated/2023-it/03/CS_Eni_Bilancio2022.pdf

Eni (2023b). Lista dei maggiori azionisti Eni. Retrieved from: <https://www.eni.com/it-IT/chi-siamo/governance/azionisti.html>

Esteves, A. M., & Vanclay, F. (2009). Social Development Needs Analysis as a tool for SIA to guide corporate-community investment: Applications in the minerals industry. *Environmental Impact Assessment Review*, 29(2), 137–145. Doi: <https://doi.org/https://doi.org/10.1016/j.eiar.2008.08.004>

FAO. (2016). Free Prior and Informed Consent. An indigenous peoples' right and good practice for local communities. Retrieved from: <https://www.un.org/development/desa/indigenouspeoples/publications/2016/10/free-prior-and-informed-consent-an-indigenous-peoples-right-and-a-good-practice-for-local-communities-fao/>

Falck E. & Spangenberg, J. H. (2014). Selection of social demand-based indicators: EO-based indicators for mining. *Journal of Cleaner Production*, 84, 193-203, <https://doi.org/10.1016/j.jclepro.2014.02.021>

- Figuroa, R. M. (2023). Environmental Justice. In Hale, B., Light, A., Lawhon, L., *The Routledge companion to environmental ethics*, 767–783. London; Routledge.
- Franks, D. M., & Vanclay, F. (2013). Social Impact Management Plans: Innovation in corporate and public policy. *Environmental Impact Assessment Review*, 43, 40–48. Doi: <https://doi.org/10.1016/j.eiar.2013.05.004>
- Gehman, J., Lefsrud, L.M. and Fast, S. (2017), Social license to operate: Legitimacy by another name? Canadian Public Administration, Forthcoming, University of Alberta School of Business Research Paper No. 2017-904, Retrieved at: <https://ssrn.com/abstract=2958532>
- Glaser, B. G., & Strauss, A. L. (2009). *The discovery of grounded theory: strategies for qualitative research*. Aldine Publications.
- Goodman, L. A. (1961). Snowball Sampling. *The Annals of Mathematical Statistics*, 32(1), 148–170. Retrieved from: <https://www.jstor.org/stable/2237615>
- Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business Ethics*, 74(4), 315–327. Doi: <https://doi.org/10.1007/S10551-007-9509-Y/METRICS>
- Gunningham, N., Kagan, R. A., & Thornton, D. (2004). Social License and Environmental Protection: Why Businesses Go Beyond Compliance. *Law & Social Inquiry*, 29(2), 307–341. Doi: <http://dx.doi.org/10.1086/423681>
- Hall, N., Lacey, J., Carr-Cornish, S., & Dowd, A. M. (2015). Social licence to operate understanding how a concept has been translated into practice in energy industries. *Journal of Cleaner Production*, 86, 301–310. Doi: <https://doi.org/10.1016/J.JCLEPRO.2014.08.020>

- Hanna, P., Vanclay, F., Langdon, E. J., & Arts, J. (2016). Conceptualizing social protest and the significance of protest actions to large projects. *Extractive Industries and Society* 3(1), 217–239. Doi: <https://doi.org/10.1016/j.exis.2015.10.006>
- Harvey, B., & Bice, S. (2014). Social impact assessment, social development programmes and social licence to operate: Tensions and contradictions in intent and practice in the extractive sector. *Impact Assessment and Project Appraisal*, 32(4), 327–335. Doi: <https://doi.org/10.1080/14615517.2014.950123>
- Heckathorn, D. (2011). Snowball versus respondent-driven sampling. *Sociological Methodology*, 41(1), 355–366. Doi: <https://doi.org/10.1111%2Fj.1467-9531.2011.01244.x>
- Hein C. (2021) *Oil Spaces: Exploring the Global Petroleumscape*. United States; Taylor & Francis.
- Ho, S. S. H., Oh, C. H., & Shapiro, D. (2022). Can Corporate Social Responsibility Lead to Social License? A Sentiment and Emotion Analysis. *Journal of Management Studies*. Doi: <https://doi.org/10.1111/joms.12863>
- Homer-Dixon, T. F. (1999). *Environment, Scarcity, and Violence*. Princeton University Press. Doi: <https://doi.org/doi:10.1515/9781400822997>
- IFC. (2012). *IFC Performance Standards on Environmental and Social Sustainability*. Retrieved from: <https://www.ifc.org/en/types/insights-reports/2012/publications-handbook-pps>
- IPCC (2023). Summary for Policymakers. *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, IPCC, Geneva, Switzerland, 1-34. Doi: <https://doi.org/10.59327/IPCC/AR6-9789291691647.001>

- Istituto di Fisiologia Clinica del CNR (IFC- CNR), Fondazione Toscana Gabriele Monasterio (CNR - Regione Toscana), Istituto di Scienze dell'atmosfera e del Clima del CNR (ISAC-CNR), Istituto per lo Studio degli Ecosistemi (ISE-CNR), Dipartimento di Biologia dell'Università degli Studi di Bari, & Dipartimento di Epidemiologia del Servizio Sanitario della Regione Lazio (2017). Realizzazione di una valutazione di impatto sanitario nei comuni di Viggiano e Grumento Nova in Val d'Agri, Basilicata. Retrieved from: http://www.comune.grumentonova.pz.it/docvar/Sintesi_VIS_VdA_092017.pdf
- Jijelava, D., & Vanclay, F. (2017). Legitimacy, credibility, and trust as the key components of a social licence to operate: An analysis of BP's projects in Georgia. *Journal of Cleaner Production*, 140, 1077–1086. Doi: <https://doi.org/10.1016/j.jclepro.2016.10.070>
- Joyce, S., & Thomson I. (2000). Earning a social licence to operate: Social acceptability and resource development in Latin America. *CIM Bulletin*, 93 (1037), 49–53.
- Kapelus, P., Richards, E., Sherwin, H. (2011) Conflict-sensitive impact assessment. In: Vanclay F, Esteves A.M., editors. *New directions in social impact assessment*. Cheltenham, UK: Edward Elgar Publishing; p. 288–305.
- Kemp, D., & Vanclay, F. (2013). Human rights and impact assessment: Clarifying the connections in practice. *Impact Assessment and Project Appraisal*, 31(2), 86–96. Doi: <https://doi.org/10.1080/14615517.2013.782978>
- Klare, M. (2002). *Resource Wars: The New Landscape of Global Conflict*. New York; Henry Holt and Company.
- Klykken, F. H. (2021). Implementing continuous consent in qualitative research. *Qualitative Research*, 22(5), 795–810. Doi: <https://doi.org/10.1177/146879412111014366>

- Kvale, S. (1994). *InterViews: An introduction to qualitative research interviewing*. New York; Sage Publications.
- Lachapelle, P. R., & Austin, E. K. (2014). Community Participation. In A. C. Michalos, *Encyclopedia of Quality of Life and Well-Being Research*, 1073–1078. Dordrecht; Springer Netherlands. Doi: https://doi.org/10.1007/978-94-007-0753-5_471
- Lin, L.-W. (2021). Mandatory Corporate Social Responsibility Legislation Around the World: Emergent Varieties and National Experiences. *University of Pennsylvania Journal of Business Law*, 23(2), 429-469. Retrieved from: <https://scholarship.law.upenn.edu/jbl/vol23/iss2/3>
- Magaldi, D., & Berler, M. (2020). Semi-structured Interviews. In T. K. Zeigler-Hill Virgil and Shackelford, *Encyclopedia of Personality and Individual Differences*, 4825–4830. Springer International Publishing. Doi: https://doi.org/10.1007/978-3-319-24612-3_857
- Meesters, M. E., & Behagel, J. H. (2017). The Social Licence to Operate: Ambiguities and the neutralization of harm in Mongolia. *Resources Policy*, 53, 274–282. Doi: <https://doi.org/10.1016/j.resourpol.2017.07.006>
- Ministero della Transizione Ecologica (2022). *Bollettino ufficiale degli idrocarburi e delle georisorse* (LXVI; 5). Retrieved from: <https://unmig.mase.gov.it/wp-content/uploads/2019/01/66-5.pdf>
- Ministero della transizione ecologica (2023). *Gettito Royalties - Anno 2022*. Retrieved from: <https://unmig.mase.gov.it/wp-content/uploads/dati/royalties/royalties2022.pdf>
- Moffat, K., Lacey, J., Zhang, A., & Leipold, S. (2016). The social licence to operate: A critical review. *Forestry*, 89(5), 477–488. Doi: <https://doi.org/10.1093/forestry/cpv044>

- Moffat, K., & Zhang, A. (2014). The paths to social licence to operate: An integrative model explaining community acceptance of mining. *Resources Policy*, 39(1), 61–70. Doi: <https://doi.org/10.1016/j.resourpol.2013.11.003>
- Naderifar, M., Goli, H., & Ghaljaei, F. (2017). Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*, 14(3). Doi: <https://doi.org/10.5812/sdme.67670>
- Nielsen, A. E. (2013). License to Operate. In N. and Z. L. and G. A. Das Idowu Samuel O. and Capaldi, *Encyclopedia of Corporate Social Responsibility*, 1585–1591. Berlin; Springer. Doi: https://doi.org/10.1007/978-3-642-28036-8_502
- Nelsen J. & Scoble M. (2006) Social License to Operate Mines: Issues of Situational Analysis and Process. *International Journal of Mining, Reclamation and Environment*, 20(3), 161-162. Doi: <https://doi.org/10.1080/17480930600804182>
- Oddo, G., & Antoniani, R. (2022). *L'italia nel petolio*. Milano; Feltrinelli Editorie.
- Office of the United Nations High Commissioner for Human Rights (OHCHR), (2008). Factsheet no. 33 frequently asked questions on economic, social and cultural rights. Geneva, United Nations
- Owen, J. R., & Kemp, D. (2013). Social licence and mining: A critical perspective. *Resources Policy*, 38(1), 29–35. Doi: <https://doi.org/10.1016/j.resourpol.2012.06.016>
- Papillon, M., Leclair, J., & Leydet, D. (2020). Free, Prior and Informed Consent: Between Legal Ambiguity and Political Agency. *International Journal on Minority and Group Rights*, 27(2), 223–232. Doi: <https://doi.org/https://doi.org/10.1163/15718115-02702015>
- Parsons, M., Fisher, K., & Crease, R. P. (2021). Environmental Justice and Indigenous Environmental Justice. In M. Parsons, K. Fisher, & R. P. Crease (Eds.), *Decolonising Blue*

- Spaces in the Anthropocene: Freshwater management in Aotearoa New Zealand*, 39–73. Cham; Springer International Publishing. https://doi.org/10.1007/978-3-030-61071-5_2
- Parsons, R., & Luke, H. (2021). Comparing reflexive and assertive approaches to social licence and social impact assessment. *Extractive Industries and Society*, 8(2). Doi: <https://doi.org/10.1016/j.exis.2020.06.022>
- Parsons, R., & Moffat, K. (2014). Constructing the Meaning of Social Licence. *Social Epistemology*, 28(3–4), 340–363. Doi: <https://doi.org/10.1080/02691728.2014.922645>
- Pearson, Z., Ellingrod, S., Billo, E., & McSweeney, K. (2019). Corporate social responsibility and the reproduction of (neo)colonialism in the Ecuadorian Amazon. *The Extractive Industries and Society*, 6(3), 881–888. Doi: <https://doi.org/10.1016/J.EXIS.2019.05.016>
- Perks, R., & Schulz, K. (2020). Gender in oil, gas and mining: An overview of the global state-of-play. *The Extractive Industries and Society*, 7(2), 380–388. Doi: <https://doi.org/https://doi.org/10.1016/j.exis.2020.04.010>
- Perreault, Tom, Bridge, Gavin, McCarthy, & James. (2015). *The Routledge Handbook of Political ecology* (1st ed.). London; Routledge.
- Poppo, L., & Schepker, D. J. (2010). Repairing public trust in organizations. *Corporate Reputation Review*, 13(2), 124–141. Doi: <https://doi.org/10.1057/crr.2010.12>
- Prenzel, P. V., & Vanclay, F. (2014). How social impact assessment can contribute to conflict management. *Environmental Impact Assessment Review*, 45, 30–37. Doi: <https://doi.org/10.1016/j.eiar.2013.11.003>
- Prno, J. (2013). An analysis of factors leading to the establishment of a social licence to operate in the mining industry. *Resources Policy*, 38(4), 577–590. Doi: <https://doi.org/https://doi.org/10.1016/j.resourpol.2013.09.010>

- Racano, E. (2023). Dialogo, trasparenza, condivisione. *Orizzonti*, 50, 1–2. Retrieved from https://www.eni.com/static/it-IT/orizzonti-magazine/Orizzonti_50.pdf
- Raufflet, E., Baba, S., Perras, C., & Delannon, N. (2013). Social License. In *Encyclopedia of Corporate Social Responsibility*, 2223–223. Springer Berlin Heidelberg. Doi: <https://doi.org/10.1007/978-3-642-28036-8>
- Regione Basilicata. (1998a). Accordi attuativi del protocollo di intesa: Regione Basilicata Eni S.p.A. Retrieved from: https://www.regione.basilicata.it/giuntacma/files/docs/DOCUMENT_FILE_546210.pdf
- Regione Basilicata. (1998b). Protocollo d'intesa relativo al piano di interventi per accelerare lo sviluppo socio-economico delle aree della regione Basilicata (Val d'Agri) interessate dall'estrazione di idrocarburi. Retrieved from: https://www.regione.basilicata.it/giuntacma/files/docs/DOCUMENT_FILE_546191.pdf
- Rodriguez, J. K., & Ridgway, M. (2023). Intersectional reflexivity: Fieldwork experiences of ethnic minority women researchers. *Gender, Work & Organization*, 30(4), 1273–1295. Doi: <http://dx.doi.org/10.1111/gwao.12977>
- Salim, E. (2003). Striking a Better Balance. In *The World Bank and Extractive Industries*, 1–92. Retrieved from: <https://openknowledge.worldbank.org/entities/publication/f07f882a-420b-5091-93a3-ce488e63c8d8>
- Savin-Baden, M., & Major, C. H. (2023). *Qualitative Research: The Essential Guide to Theory and Practice*. Boston; Taylor & Francis.
- Shelton, D. (2008) Equity. In *Oxford Handbook of International Environmental Law*, Chapter 1. Online edn, Oxford Academic. Doi: <https://doi.org/10.1093/oxfordhb/9780199552153.001.0001>

- Thomson, I., & Boutilier, R. (2011). The social license to operate. In P. Darling (Ed.), *SME Mining Engineering Handbook*, pp. 1779–1796. Society for Mining Metallurgy and Exploration.
- Thomson, I., & Joyce, S. (2008). The social licence to operate: What it is and why does it seem so difficult to obtain? In *Prospectors and Developers Association of Canada Convention, Toronto, Ontario, Canada*.
- UNMIG. (2023). *Databook 2023 attività 2022*. Retrieved from: <https://unmig.mite.gov.it/wp-content/uploads/2023/06/databook-2023.pdf>
- UN-REDD. (2015). Policy Recommendation: Free, Prior and Informed Consent (FPIC) Instrument for Indigenous Communities and/or Local Communities who will be Affected by REDD+ Activities. Retrieved from: <https://www.un-redd.org/document-library/policy-recommendation-free-prior-and-informed-consent-fpic-instrument-indigenous-1>
- Van Dijk, J.P., Affinito, V., Atena, R., Caputi, A., Cestari, A., D’Elia, N., Giancipoli, M., Lanzellotti, M., Lazzari, M., Oriolo, N. & Picone, S. (2012). Cento Anni di Ricerca Petrolifera. L’Alta Val d’Agri. Proceedings of the 1st Congresso dell’Ordine dei Geologi di Basilicata, “Ricerca, Sviluppo ed Utilizzo delle Fonti Fossili: Il Ruolo del Geologo”, Potenza. Retrieved from: <http://congresso.geologibasilicata.it/2012/atti/p.029-J.VanDijk.pdf>
- Van Nes, F., Abma, T., Jonsson, H., & Deeg, D. (2010). Language differences in qualitative research: is meaning lost in translation? *European Journal of Ageing*, 7(4), 313–316. Doi: <https://doi.org/10.1007/s10433-010-0168-y>
- Vanclay, F. (2003). International Principles for Social Impact Assessment. *Impact Assessment and Project Appraisal*, 21(1), 5–12. Doi: <https://doi.org/10.3152/147154603781766491>

- Vanclay, F., Esteves, A., Aucamp, I., & Franks, D. M. (2015). *Social Impact Assessment: Guidance for assessing and managing the social impacts of projects*. Retrieved from: www.iaia.org/uploads/pdf/SIA_Guidance_Document_IAIA.pdf
- Vanclay, F., & Hanna, P. (2019). Conceptualizing company response to community protest: Principles to achieve a social license to operate. *Land*, 8(6). Doi: <https://doi.org/10.3390/land8060101>
- Wall, J.A., & Callister R.R. (1995) Conflict and its management. *Journal of management*, 21(3):515–58. Doi: <https://doi.org/10.1177/014920639502100306>
- Wilburn, K., & Wilburn, R. (2011). Achieving social license to operate using stakeholder theory. *J. Int. Bus. Ethics*, 4, 3–16.
- Wilson S., Carlson A. & Szeman I. (2017). *Petrocultures: oil politics culture*. McGill-Queen's University Press.
- Wilson, E. (2016). What is the social licence to operate? Local perceptions of oil and gas projects in Russia's Komi Republic and Sakhalin Island. *The Extractive Industries and Society*, 3(1), 73–81. Doi: <https://doi.org/https://doi.org/10.1016/j.exis.2015.09.001>
- Woroniecki, S., Wendo, H., Brink, E., Islar, M., Krause, T., Vargas A., Mahmoud Y. (2020) Nature unsettled: How knowledge and power shape 'nature-based' approaches to societal challenges. *Global Environmental Change*, 65. Doi: <https://doi.org/10.1016/j.gloenvcha.2020.102132>
- Yunus, N. A., Hartman, T., Lucassen, P., Barton, C., Russell, G., Altun, A., & Sturgiss, E. (2022). Reporting of the Translation Process in Qualitative Health Research: A Neglected Importance. *International Journal of Qualitative Methods*, 21. Doi: <https://doi.org/10.1177/16094069221145282>

WEBLIOGRAPHY

ARPAB. (2023, May 9). *ARPA Basilicata*. Accessed July 202. <http://www.arpab.it/agenzia.asp>

Britannica, T. Editors of Encyclopaedia (2011, June 9). Mezzogiorno. Encyclopedia Britannica. Accessed July 2023. <https://www.britannica.com/place/Mezzogiorno>

Camera dei deputati (2023, February 11). Royalties per la produzione di idrocarburi. Accessed July 2023. <https://temi.camera.it/leg18/post/royalties-per-la-produzione-di-idrocarburi.html>

Centro Per le Comunità Solari. (2023, February 13). Chi Siamo. Accessed August 2023. https://comunitasolare.eu/chisiamo/?_gl=1%2A16t93dn%2A_ga%2ANDc2MTg4NDc2LjE2OTI5MTU5Njg.%2A_up%2AMQ

CISL Basilicata. (2018, July 14). Eni, dopo il tavolo della trasparenza riparte il dialogo. Accessed August 2023. <https://www.cislbasilicata.it/eni-dopo-il-tavolo-della-trasparenza-riparte-il-dialogo/>

Eni (n.d.). *Orizzonti*. Accessed August 2023. <https://www.eni.com/it-IT/media/orizzonti-magazine.html>

Eni (2021, October 26). Energie aperte al Centro Olivo Val d'Agri | Eni in Basilicata. Accessed August 2023. from: <https://www.eni.com/eni-basilicata/it-IT/territorio/energie-aperte.html>

Eni (2022, June 10). *L'Hydrogen valley è in Basilicata*. Eni in Basilicata. Accessed August 2023. <https://www.eni.com/eni-basilicata/it-IT/media/news/2022/06/hydrogen-valley-basilicata.html>

European Commission (2023) Landscape heritage art. 142 c.1, letter f D. Lgs. 42/2004 — National or regional parks and reserves. Regione Basilicata, coordinatore del Centro

Cartografico del Dipartimento Ambiente ed Energia. Retrieved September 2023, from <http://data.europa.eu/88u/dataset/beni-paesaggistici-art-142-c-1-let-f-d-lgs-42-2004-parchi-e-riserve-nazionali-o-regionali>

Fondazione Eni Enrico Mattei (FEEM), (n.d.). FEEM Basilicata. Accessed August 2023. <https://www.feem.it/ricerca/progetti-territorio/feem-basilicata/>

Ierace, L. (2023, April 26). *Buon compleanno DIME*. Eni in Basilicata. Accessed August 2023. <https://www.eni.com/eni-basilicata/it-IT/storie/orizzonti-2023/48/buon-compleanno-dime.html>

ISTAT. (2022, March 15). Censimento permanente della popolazione in Basilicata. Anno 2020. Accessed August 2023.

<https://www.istat.it/it/archivio/267910#:~:text=Distribuzione%20della%20popolazione%20residente,Basilicata%20si%20contano%20545.130%20residenti>

Istituto Superiore di Sanità. (2019, October 29). Missione ISS. Accessed August 2023. <https://www.iss.it/missione2>

Murphy, A. & Tucker, H. (2023, June 08). *The Global 2000*. Forbes. Accessed August 2023. <https://www.forbes.com/lists/global2000/?sh=5d5c63005ac0>

Ministero della transizione ecologica (2023). *Progetto per la realizzazione dell'area Cluster Sant'Elia 1. Cerro Falcone 7 in località la Civita del Comune di Marsicovetere (PZ)*. Accessed August 2023. <https://va.mite.gov.it/it-IT/Oggetti/Info/9716>

MASE (n.d.). *Norme di Settore*. Accessed August 2023. <https://unmig.mase.gov.it/normativa-di-settore/>

MASE (2022). *Pozzi Produttivi*. Accessed August 2023. <https://unmig.mite.gov.it/pozzi-produttivi/>

MASE (2023a). *Petrolio - produzione greggio*. Accessed August 2023, from:
<https://www.mase.gov.it/energia/gas-naturale-e-petrolio/petrolio/produzione>

MASE (2023b). *Royalties*. Accessed August 2023. <https://unmig.mase.gov.it/ricerca-e-coltivazione-di-idrocarburi/royalties/>

MASE (2023c) *Schede e cartografie*. Accessed September 2023
<https://www.mase.gov.it/pagina/schede-e-cartografie>

Osservatorio Val d'Agri. (2019, October 26). *Osservatorio Val d'Agri*. Accessed July 2023
from: <http://www.osservatoriovaldagri.it>

Recommon. (2021). *Traffico illecito di rifiuti, Eni condannata al processo a Potenza - ReCommon*. Accessed August 2023. <https://www.recommon.org/traffico-illecito-di-rifiuti-eni-condannata-al-processo-a-potenza/>

Regione Basilicata. (2023). *Latronico: "Comunità Energetiche Nuova sfida da affrontare."*
Accessed August 2023.
<https://www.regione.basilicata.it/giunta/site/giunta/detail.jsp?sec=100133&otype=1012&id=3089545&value=regione>

Totaro, M. T. (2017). *Eni, il gruppo ammette: "Sversate 400 tonnellate di petrolio in Basilicata, 6mila metri quadri contaminati"*. Il Fatto Quotidiano. Accessed July 2023.
<https://www.ilfattoquotidiano.it/in-edicola/articoli/2017/05/06/eni-ammette-sversate-400-tonnellate-di-petrolio/3565801/>

Vocabolario Treccani. (n.d.). *Omertà*. Accessed August 2023.
<https://www.treccani.it/vocabolario/omerta/#:~:text=%E2%80%93%20In%20origine%20C%20la%20consuetudine%20vigente,soltanto%20dalla%20vendetta%20dell%27offeso.>

REGULATIONS, LEGISLATIVE GUIDELINES AND DECREES

COM (2011)0681 final, “Commission communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions. A Renewed EU strategy 2011-14 for Corporate Social Responsibility”

Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment

Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.

Deliberazione della Giunta Regionale di Basilicata 357/2022, “Approvazione degli schemi del "Nuovo Protocollo di Intenti" dell'”Accordo Progetti di Sviluppo”, dell'”Accordo Gas" ed autorizzazione alla sottoscrizione.”

D.L. 333/1992, “Misure urgenti per il risanamento della finanza pubblica”

D.L. 133/2014, “Misure urgenti per l'apertura dei cantieri, la realizzazione delle opere pubbliche, la digitalizzazione del Paese, la semplificazione burocratica, l'emergenza del dissesto idrogeologico e per la ripresa delle attività produttive”

D.Lgs. 496/1993 “Disposizioni urgenti sulla riorganizzazione dei controlli ambientali e istituzione della Agenzia nazionale per la protezione dell'ambiente.”

D.Lgs. 625/1996, “Attuazione della direttiva 94/22/CEE relativa alle condizioni di rilascio e di esercizio delle autorizzazioni alla prospezione, ricerca e coltivazione di idrocarburi”.

- D.Lgs. 152/2006, “Norme in materia ambientale.”
- D.M. 81/2022, “Proroga decennale della concessione di coltivazione Val d’Agri della società Eni S.p.A.”
- L. 613/1967, “Ricerca e coltivazione degli idrocarburi liquidi e gassosi nel mare territoriale e nella piattaforma continentale e modificazioni alla legge 11 gennaio 1957, n. 6, sulla ricerca e coltivazione degli idrocarburi liquidi e gassosi”
- L. 136/1953 “Istituzione dell'Ente Nazionale Idrocarburi (E.N.I.)”
- L. 61/1994 “Conversione in legge, con modificazioni, del decreto-legge 4 dicembre 1993, n. 496, recante disposizioni urgenti sulla riorganizzazione dei controlli ambientali e istituzione dell'agenzia nazionale per la protezione dell'ambiente”
- L. 239/2004, “Riordino del settore energetico, nonché delega al Governo per il riassetto delle disposizioni vigenti in materia di energia.”
- L. 164/2014, “Conversione in legge, con modificazioni, del decreto-legge 12 settembre 2014, n. 133, recante misure urgenti per l'apertura dei cantieri, la realizzazione delle opere pubbliche, la digitalizzazione del Paese, la semplificazione burocratica, l'emergenza del dissesto idrogeologico e per la ripresa delle attività produttive.”
- L.R. 47/1998, “Disciplina della valutazione di impatto ambientale e norme per la tutela dell'ambiente.”
- L.R. 1/2020, “Riordino della disciplina dell’Agenzia Regionale per la Protezione dell’Ambiente della Basilicata (ARPAB)”
- Regio Decreto 1443/1927, in materia di “Norme di carattere legislativo per disciplinare la ricerca e la coltivazione delle miniere nel regno”
- Trib. Potenza, 10 marzo 2021, n. 1753 in RGT, 2017, con nota di R. Baglioni

ANNEXES

ANNEX 1

Table 1: examples of SLO definitions

<p>“Gaining a social license to operate simply means gaining support for the project from concerned groups, or stakeholders, over and above meeting any legal requirements”</p>	<p>BSR (2003) p. 4</p>
<p>“Social licence to operate is not a singular licence granted by all of society, but a range of licenses based on prevailing social norms and expectations that are applicable across society, from local communities to the broader public.”</p>	<p>Dare et. al. (2014) p. 195</p>
<p>“We define social license as the demands on and expectations for a business enterprise that emerge from neighborhoods, environmental groups, community members, and other elements of the surrounding civil society.”</p>	<p>Gunningham et. al. (2004) p. 308</p>
<p>“Social licence to operate is an expression or turn of phrase that refers to the level of acceptance a company or project has from local communities.”</p>	<p>Jijelava & Vanclay (2017) p. 1077</p>
<p>“A Social Licence to Operate exists when a mineral exploration or mining project is seen as having the approval, the broad acceptance of society to conduct its activities.”</p>	<p>Joyce, S., & Thomson I. (2000) p. 7</p>

<p>“Indigenous peoples and other affected parties have the right to participate in decision making and to give their free prior and informed consent throughout each phase of a project cycle. This consent should be seen as the principal determinant of social license to operate”</p>	<p>Salim (2003) p. 21</p>
<p>“Ongoing approval within the local community and other stakeholders”</p>	<p>Thomson & Boutilier (2011) p. 1779</p>
<p>“Gaining, nurturing, and renewing legitimacy with local groups, stakeholders and communities”</p>	<p>Raufflet et al. (2013) p. 2229</p>

ANNEX 2

Table 2: list of participants

	Name	Profession	Age
1	Chiara	Youth Party secretary	29
2	Maria	Activist	59
3	Sara	Lawyer	33
4	Annalisa	Head of regional association	63
5	Beatrice	Municipal secretary	57
6	Marco	Farmer	61
7	Francesco	Deputy mayor	44
8	Alessio	Head of regional association	39
9	Carlo	Artist and activist	41
10	Andrea	Mayor	55
11	Giuseppe	Head of regional association	54
12	Federico	Former trade and foreign affairs minister and director of Petroleum Economics department	83
13	Giulia	School Principal	51
14	Roberto	Managing director of the Fondazione Eni Enrico Mattei (FEEM)	53

ANNEX 3

June 2023, Basilicata socioeconomic data.

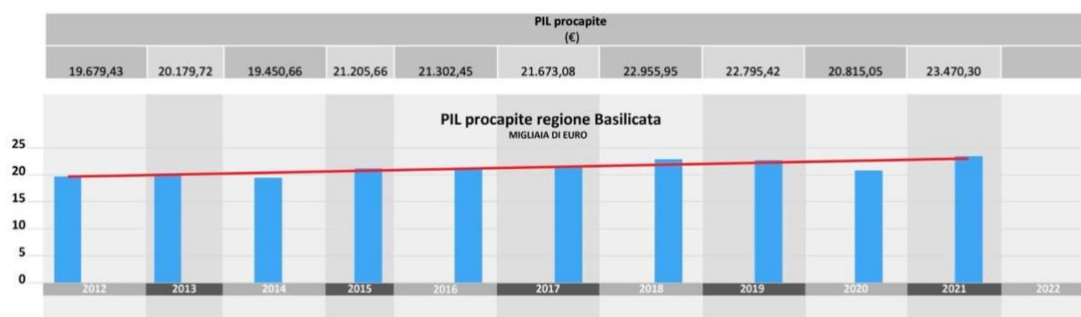
Provided by Eni, Italian original version

2023 Giugno Dati socioeconomici Basilicata



Dall'analisi dell'andamento del PIL regionale, è possibile notare come sia cresciuto da circa 11 miliardi del 2012 a 12 miliardi del 2021, osserviamo, infatti, una crescita lineare nel tempo che se paragonata all'andamento del Mezzogiorno, registra una performance superiore alla media. Viceversa, la caduta del PIL che vediamo nel 2020 è tendenzialmente dovuta alla pandemia globale Covid-19.

Altresì, però, è possibile notare come il PIL lucano, negli anni, sia stato influenzato in maniera crescente dall'attività estrattiva. Si può affermare quindi che la crescita del PIL sia direttamente correlata anche all'attività estrattiva che, attraverso lo speso del DIME, impatta positivamente sulla ricchezza regionale.



Lo stesso ragionamento vale per il **PIL pro-capite** che è pari alla sommatoria del valore di tutti i beni e servizi prodotti in un Paese o determinato territorio destinato alla vendita,

diviso per il numero degli abitanti. Dall'andamento del PIL pro-capite, così come osservato nei grafici precedenti, vediamo una crescita regolare che passa da circa euro 19mila del 2012 a euro 23mila del 2022. Anche in questo caso, osserviamo una leggera caduta nel 2020 sempre legata allo scatenarsi della pandemia da Covid-19. Dall'andamento del PIL pro-capite sembra emergere invece una correlazione positiva con lo speso dell'attività estrattiva di Eni. Un aumento dello speso comporta in termini di impatto economico un beneficio indotto al PIL regionale e quindi anche al PIL pro-capite. Tale fenomeno è riscontrabile soprattutto osservando l'appiattimento della curva di crescita del PIL pro-capite riscontrabile negli anni 2016 e 2017, in cui c'è stato il fermo COVA rispettivamente di 5 e 3 mesi, per poi riprendere l'incremento positivo dal 2018. La contrazione 2020 del PIL pro-capite, come detto, è stata determinata principalmente dalla pandemia che, come noto, ha bloccato gran parte delle attività economiche. Si può osservare che l'attività estrattiva è stata anticiclica al Covid-19 (non essendosi fermata), attutendo così la contrazione della ricchezza regionale.

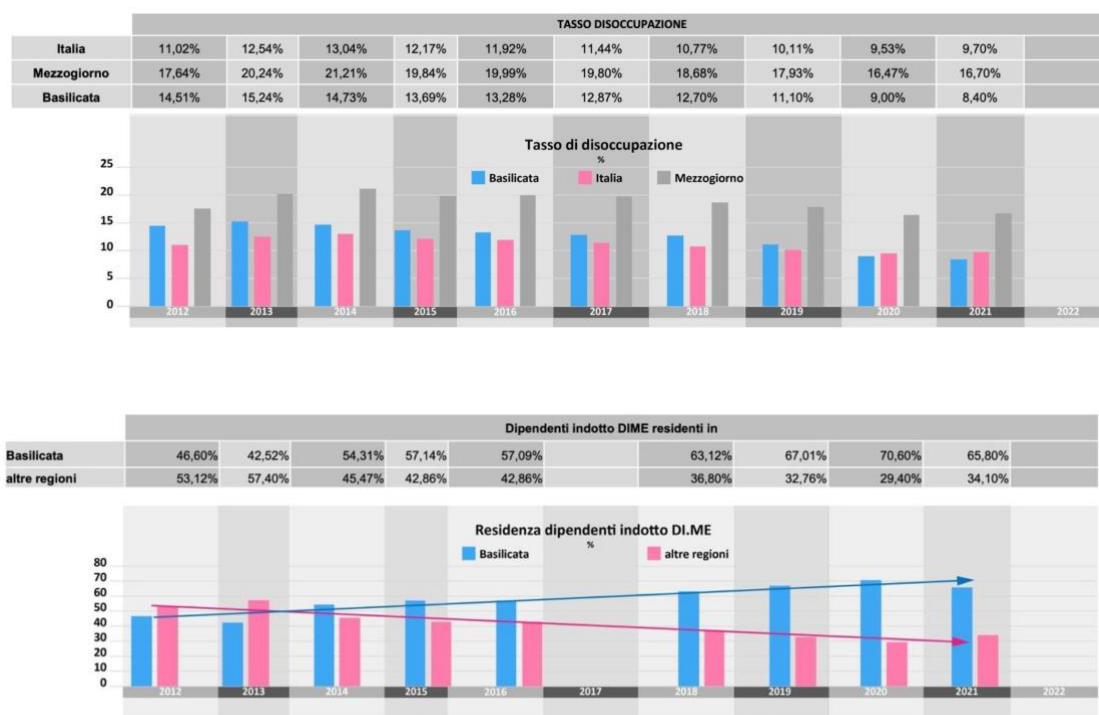


Le royalty rappresentano un'aliquota di prodotto, calcolata in percentuale sul valore della produzione che le compagnie che estraggono petrolio sul territorio italiano, versano annualmente allo Stato. Le royalty per gli idrocarburi dei giacimenti in terraferma, dal 2009, sono pari al 7% più un 3% destinato ad un fondo specifico del Ministero dello Sviluppo Economico (ex bonus benzina). Secondo la normativa, i beneficiari del valore dell'aliquota del prodotto, con quote differenti sono lo Stato, le Regioni e i Comuni in cui

si estrae il greggio. La quota destinata allo Stato è pari al 30% dell'aliquota stabilita, ed è corrisposta direttamente alla Regione Basilicata in quanto regione ex Obiettivo 1 o Convergenza. Le royalty, quindi, rappresentano, un introito fiscale per Regione e Comuni dovuto proprio all'utilizzo del territorio finalizzato all'attività estrattiva. Tale introito fiscale per gli enti regionali è determinato, come detto, dal volume di produzione ma anche dal prezzo del fondamentale (petrolio o gas). Dal grafico è possibile osservare come l'andamento sia fluttuante, con una crescita del gettito quando il prezzo e il volume di produzione sono alti e una diminuzione quando almeno uno dei due fattori viene a contrarsi. Osservando il 2013 le royalty versate ammontano a circa 200 milioni. È interessante osservare come nel 2017 le royalty abbiano subito una contrazione importante. Tale fenomeno è dovuto al fatto che nel 2016 c'è stato il blocco del COVA di Viggiano per alcuni mesi dell'anno. Tale blocco ha comportato una diminuzione del gettito royalty per enti locali, soprattutto per la Regione, con conseguenze dirette per la finanza pubblica locale.



L'impatto monetario dell'attività estrattiva è fondamentale per capire il contributo di questo settore industriale sulla ricchezza regionale. Lo studio dell'impatto è volto ad analizzare l'indotto del Distretto Meridionale Eni (DIME) in Val d'Agri. Specificatamente vengono presentati i dati relativi all'indotto generato da Eni sul suolo lucano, utilizzando il metodo delle tavole Input-Output simmetriche regionali. Grazie a questo modello è possibile calcolare l'indotto generato in termini di valore monetario dai dati degli input dei contratti Eni inerenti alla regione Basilicata (lo speso). Si evince che tale attività abbia un impatto di 1,87 euro per ogni euro speso. Osservando il grafico è possibile notare come si sia registrata una crescita storica dell'impatto passando da 567 milioni del 2012 a 1,2 miliardi del 2021. L'impatto economico passa da circa 6,5% del 2012 a superare il 10% del 2021, registrando una contrazione nel 2016 e 2017 dovuto al fermo COVA per poi riprendere la crescita negli anni seguenti.



È riscontrabile come l'andamento del tasso di disoccupazione abbia registrato delle performance non banali rispetto al resto del Mezzogiorno e quello nazionale. La regione

è passata dal 14,51% di tasso di disoccupazione al 2012 per arrivare all'8,40% nel 2021: la metà di quello del Mezzogiorno italiano pari all'incirca al 16,70%.

Questo dato fa emergere una significativa performance positiva del mercato del lavoro regionale confrontato con le regioni limitrofe e la performance nazionale. Considerando le circa 150 aziende dell'indotto è possibile osservare come il numero dei lavoratori residenti in Basilicata fosse nel 2012 pari al 47%, mentre quelli provenienti da altre regioni al 53%. Negli anni questa percentuale si è completamente invertita a favore dei lavoratori lucani. Di fatto nel 2020 tale dato presenta un numero di lavoratori residenti in Basilicata pari al 70% a fronte del 30% di lavoratori che provengono da altre regioni.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
POPOLAZIONE RESIDENTE											
Italia	60.105.185	60.277.309	60.345.917	60.295.497	60.163.712	60.066.734	59.937.769	59.816.673	59.641.488	59.236.213	59.030.133
	0,26%	0,29%	0,11%	-0,08%	-0,22%	-0,16%	-0,21%	-0,20%	-0,29%	-0,68%	-0,35%
Mezzogiorno	14.123.826	14.096.931	14.067.411	14.029.842	13.976.810	13.924.553	13.863.703	13.790.862	13.707.269	13.539.074	13.512.083
	0,02%	-0,19%	-0,21%	-0,27%	-0,38%	-0,38%	-0,44%	-0,53%	-0,61%	-1,24%	-0,20%
Basilicata	579.360	577.550	575.814	573.236	569.887	566.405	562.968	558.567	553.254	545.130	541.168
	-0,25%	-0,31%	-0,30%	-0,45%	-0,58%	-0,61%	-0,61%	-0,78%	-0,95%	-1,47%	-0,73%

Per fornire un ulteriore elemento d'analisi è stato studiato il tasso di spopolamento dei residenti regionali. È importante capire come lo spopolamento sia variato nel tempo e come possa realmente incidere sul tasso di disoccupazione e se questo sia correlato con il sentiment. I dati rappresentano un calo demografico dovuto allo spopolamento regionale costante negli ultimi dieci anni, sia in Basilicata come nel Mezzogiorno che su base nazionale. È possibile osservare che tendenzialmente l'andamento nel tempo è lineare, tranne che nel 2021 dove il tasso nazionale si abbassa dello 0,68%; il Mezzogiorno al -1,24% e in Basilicata ancora più accentuato a -1,47%.