Libya’s petroleum wealth has had both a positive and negative impact on fragility. Profits of petroleum sales have provided citizens and the state with an economic buffer, offsetting traditional impacts of weak state capacity and violence.

However, contestation over wealth distribution have driven communal and regional conflicts. The Petroleum Facilities Guard, tasked with securing oil infrastructure, has emerged as a key disruptor of production, repeatedly blockading oil fields.

These challenges require a synchronized strategy, involving targeted economic development, security sector reform, and national dialogue on resource sharing.
PEACE AND SECURITY

BLESSING AND CURSE

Petroleum Profits, Control and Fragility in Libya
# Contents

1 INTRODUCTION .................................................. 2

2 IMPACT OF OIL AND GAS RESOURCES ON STATE FRAGILITY .................................. 4

3 THE ROLE OF PFG .................................................. 8
   3.1 Evolution of the force ........................................ 8
   3.2 Present-day PFG .............................................. 10

4 CONCLUSION .................................................. 16
   Addressing vulnerabilities in the oil and gas sector ................. 17
INTRODUCTION

For the past decade, Libya has been a deeply fragile state. Disputes over political control and legitimacy have birthed several competing governments and centres of authority. At the sub-state level, political competition and tension are a mainstay in many areas, fuelling conflict between ethnic and tribal groups, and within these groups. Armed groups remain proliferate and well-equipped, exerting de facto security control in most areas, even as many are deeply enmeshed in profiteering off both the licit and illicit economies.

Libya’s fragility emanates from several underlying factors, such as disputes over political control, both at the national and local levels, as well profiteering and corruption linked to the illicit economy.

Libya’s petroleum product wealth, encompassing both oil and natural gas, is also a factor affecting fragility; however, unlike contentious politics or criminal activity, it has both positive and negative dimensions. The National Oil Corporation (NOC), the entity in charge of oil and gas production and sales, is one of the few official entities that has largely remained cohesive and unitary since 2011, enabling continued production and sales even during periods of protracted political unrest. The resultant resources have enabled Libya to continue to provide subsidies and payments to public servants, and more broadly an economic buffer for many citizens against gaps in service delivery by state institutions and chronic violence.

However, the central economic importance of petroleum products has also led to negative impacts on Libya’s fragility. Contestation and grievance over the distribution of oil profits have driven intercommunal and inter-regional conflicts. Further, a variety of actors have seized on the disruption of oil and gas production, transport, or export as a means of exerting pressure on the central government’s authorities or a means of waging economic warfare on the state. The financial ramifications can be substantial, with one two-day shutdown of an oil pipeline in western Libya in March 2022 leading to LYD320 million (Euro €63 million) in economic losses for the state.1

Because of the importance of oil and gas revenues as a stabilizing dynamic, and the impact on fragility of disruption, protection of petroleum product resources has emerged as a key challenge in post-revolutionary Libya. The responsibility is held by the Petroleum Facilities Guard (PFG, *haras al-munshaat al-naftiya*), a large force technically controlled by the Ministry of Defence (MOD). The NOC is one of the few functional governmental bodies in Libya. However, as the force mandated with protecting it, and protecting its operations, the PFG mirrors some of the worst of Libya’s institutional weaknesses and dysfunctionality.

Since 2011, the PFG has evolved into a hybrid force, composed of numerous armed groups linked to communities abutting oil- and gas-production facilities. The force has become the key actor threatening oil production and sales, with individual units involved – in part or in full – in nearly all instances in which the production, transport or export of oil has been disrupted in recent years. Because of this, it is important to understand the PFG, particularly its dysfunctions,

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given the substantial economic ramifications that the group’s actions have on Libya’s economic fortunes and on state fragility.

This report details the interlinkages between oil and natural gas production and fragility in Libya, and the impact of the PFG on these. It begins by detailing how oil and gas production has fuelled both stability and instability in Libya, both before and in the wake of the 2011 revolution. It then assesses the formal structure and mandate of the PFG, detailing its evolution and current disposition. Third, it details the security and PFG dynamics at key oil and gas production and export sites in western and eastern Libya, evaluating the connection between protection and fragility. Finally, the report concludes with a set of recommendations.

The report is based on the Gi-TOC’s Field Monitoring System. Between late 2021 and January 2022, the reporting period for this study, local field researchers in Libya conducted interviews and collected data at key oil-extraction, transportation, and export sites. Field data was supplemented by the collection of open-source data relevant to oil issues and the PFG, including from think-tank reports, media articles, organizational websites, and social-media platforms.
IMPACT OF OIL AND GAS RESOURCES ON STATE FRAGILITY

Libya is often regarded as a textbook case of a rentier state suffering from a resource curse due to its over-reliance on the export of natural resources – chiefly, oil – as part of its broader political economy. Indeed, Libya’s economy is heavily dependent on revenues from the petroleum products sector, which represents over 94% of total exports as well nearly 60% of GDP. 2

Until 2011, political control by Muammar Qaddafi’s Jamahiriya (‘State of the masses’) was largely sustained by the regime’s ability to control oil infrastructure, sustain production and profit from oil revenues. The oil economy gave Qaddafi’s government the financial ability to head-off dissent by providing jobs in an over-inflated public sector, offering subsidies on a host of consumer goods, as well as targeted patronage to key notables. 3 It also allowed for the funding of a well-equipped and large security and intelligence apparatus.

The actions of the Qaddafi government in the first days of the 2011 revolution underscored how its oil resources allowed for a dual-track approach to limiting unrest. Even as security and military forces were ordered to supress unrest in Benghazi and areas in the east of the country, Qaddafi publicly announced that wages and subsidies would be raised, and that financial disbursements would be provided to all families. 4

The attempt to buy support failed, however. The revolution expanded and overthrew the Jamahiriya, leading to the execution of Qaddafi. It also dislocated the levers of his governance system. The failure to introduce macro-economic and security reforms to a now-transformed Jamahiriya produced a counterintuitive relationship between the political economy of oil production and the country’s socio-economic and political developments. With Qaddafi’s demise, the ‘system’ lost its main architect and manager, as well as the monopoly on violence and control over oil rents. The result was an inherently fragile governance system suffering from institutional sclerosis, which paradoxically retained some features of Qaddafi’s system.

In practice, the centrality of oil production and Libya’s economic reliance on the resource was perhaps the only constant in post-revolutionary Libya. Mired by corruption, Qaddafi’s subsidy system collapsed. However, the policy of allocating government jobs, initially designed to create clientelist relations, was abused to appease increasingly disenfranchised communities, leading to massive recruitment in the

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2 OPEC, ‘Libya facts and figures’, https://www.opec.org/opec_web/en/about_us/166.htm#:~:text=Apart from%20oil,per%20cent%20of%20total%20GDP.


public sector. This was seen, among others, in the PFG, which became one of the mediums to collect a salary for many of the communities living in the vicinity of oil facilities.

More broadly, the public sector became a burden, with budgets of successive dysfunctional transitional governments ballooning, saddled by hiring sprees and salary hikes. However, throughout the post-revolution period, oil and gas production continued — though exports waxed and waned — bringing tens of billions of Euros in revenue to the state annually.\(^5\)

The sheer wealth that the extraction of oil and gas resources afforded Libya’s centralized authorities had a stabilizing effect on Libya’s macro-economic situation and allowed a feeble government to continue to provide salaries and services even during substantial political and military conflicts. It also enabled politicians, notably Government of National Unity (GNU) Prime Minister Abd al-Hamid Dabaiba, to pursue political strategies predicated on economic patronage, leveraging state (rather than personal) resources.\(^6\)

Crucially to this was the continued functionality of the NOC, which remained largely apolitical and unitary. A key factor helping to further this unity was the insistence by the international community that only exports from this entity are legal. When other actors, notably in eastern Libya, attempted to export oil on their own, the international community – in particular, the United States – took aggressive steps, including seizing a North Korean tanker, to halt the practice. This approach has been arguably one of the only truly successful international interventions in Libya since 2011 and has been essential in limiting further fragility and fragmentation.

Petroleum product exports have so far allowed Libya to avoid the challenges faced by other states encountering situations of protracted instability and fragility, such as economic collapse, substantial internal and external population displacement, and the supplanting of the government as a service provider by contending non-state armed groups. Oil and gas profits have allowed for a remarkably stable instability in Libya, with the situation for stakeholders not becoming catastrophically worse, even as the state remained divided, with largely ineffective institutions and an often-limited ability to address underlying spoilers.

However, even as Libya’s oil and gas resources have allowed for this idiosyncratic stable instability, the central importance of the resources has produced its own challenges. An under-emphasized effect of the post-revolution loss by the Libyan state of its monopoly on violence, and the later hybridization of the security and defence sectors, is that it also brought to the fore a new challenge for post-revolutionary Libyan authorities: ensuring the protection of Libya’s oil and gas producing infrastructure, much of which was dispersed across large, often remote zones in the southern, central, and eastern areas of the country.

Actors in these areas — including communities, armed groups (some of them nominally incorporated into government structures) and political entrepreneurs — came to perceive oil and gas infrastructure as a target and a tool for achieving personal or political goals. At the local level, declining government security capacity led communities in oil and gas producing areas to use the disruption of oil production or transport to assert claims for a greater share of the country’s earning from petroleum products, or to demand jobs at the facilities.

The most long-standing example of this is the 2013–2016 shutdown of oil exports from central Libya’s Oil Crescent, which was justified as the expression of local demands for an equitable division of petroleum product

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profits.\(^7\) Despite a resolution to the crisis, involving promises of developmental support and payment to PFG forces, communal frustrations largely remain.

‘There have been no direct military attacks [on the Oil Crescent facilities], but there have been many recent attempts by social and civil groups of tribal notables and youth to impact operation. The reasons for this were [economic] marginalization and [poor] job opportunities for young people.’

Interview with contact in the Oil Crescent, November 2021

A similar dynamic exists in the Fezzan, where declining living standards, perceptions of marginalization, and frustration over a lack of local employment at the al-Sharara and El-Feel oilfields drove the emergence of the Fezzan Rage protest movement, which led to a shutdown of the al-Sharara field in 2018.\(^8\) The shutdown lasted three months, but as with the Oil Crescent, government promises of support had little practical impact on the ground, leading to further threats and several brief disruptions.\(^9\) One survey conducted in the Fezzan in 2021 found continued high levels of frustration in the area, with some 18% of youth surveyed supporting actions against oil and gas export infrastructure in order to capture government attention and response.\(^10\)

Armed groups, primarily hybrid PFG units, have also looked to take control over infrastructure as a means for pressing demands. These primarily have revolved around unpaid salaries or political disputes. In January 2021, for example, the PFG unit in Tobruk closed the Marsa el-Hariga export terminal, claiming they had not been paid since September 2019.\(^11\) Eleven months later, PFG units in the country’s west, at the al-Sharara, El-Feel, al-Wafa and al-Hamada fields staged a similar protest, shutting down production to demand unpaid salaries and the resolution of other grievances.\(^12\) The history of protests by PFG units underscores that grievances and blockades are a systemic, national challenge, not linked to just one region or unit.

Finally, control of the export infrastructure for petroleum products has been instrumentalized by political entrepreneurs as a means of waging economic warfare. The 2013–2016 Oil Crescent shutdown had echoes of this, with PFG commander Ibrahim Jadhran leveraging his control over the situation to gain political benefits vis-à-vis the Libyan government. However, if Jadhran pioneered this approach, the Libyan Arab Armed Forces (LAAF) under Khalifa Haftar more fully adopted it as a tool of war, recurrently shutting down oil and gas production and/or exports in order to support both military initiatives and political objectives.\(^13\) A contact in the Oil Crescent explained that the PFG unit there ‘implements the instructions of the General Command of the army to allow or stop the export based on direct and public instructions from Field Marshal Khalifa Haftar.’\(^14\) As detailed below, the most long-standing closure attributed to Haftar occurred during the 2019/2020 war for Tripoli; however, LAAF instrumentalization of its control to pressure national and international actors for political goals has been pervasive and, at the time of writing, continues.

It is notable that neither terrorism nor armed clashes figure highly as dynamics threatening Libya’s oil and gas industry. Such incidents have occurred in the past, with the Islamic State staging high-profile attacks on export infrastructure in the Oil Crescent and on the NOC headquarters in Tripoli, while rival armed groups have clashed over control of the El-Feel oilfield in the Fezzan. However, at present, such incidents are rare and are not among the primary drivers of disruptions in the export


\(^11\) GI-TOC interview with contact in north-eastern Libya, December 2021.

\(^12\) The Arab Weekly, Libyan key oil fields resume production after 3-week shutdown, 12 January 2022, https://thearabweekly.com/libyan-key-oil-fields-resume-production-after-3-week-shutdown.

\(^13\) GI-TOC interviews with contacts in the Cyrenaica and the Fezzan, November and December 2021.

\(^14\) GI-TOC interview with a contact in the Oil Crescent, November 2021.
of petroleum products, with threats of disruption rather emanating from communities, the PFG and political actors.

As one Fezzan contact noted in late 2021: ‘LAAF control on oil facilities in [oil] area[s], including the El-Feel appears very tight, preventing any possible security challenges or disruption... However, the oil sector in these areas remains fragile due to LAAF politicization of [it], therefore enforcing closure on production, and Zintani PFG up in Nafusa mountains turning off the pipeline taps to pressure for delayed salaries.’

As communities and actors in the country’s internal conflict came to view control of oil and natural gas infrastructure as both as a means of self-funding and as a political bargaining chip with the government and the international community, the costs to the NOC and the Libyan government have mounted. The 2013–2016 shutdown of exports from the Oil Crescent, for example, were reported by the head of the NOC to have ‘cost the country over $120 billion in lost revenues and most of its financial reserves.’ With Libya a rentier state, the losses resulting from disruptions and diversions to the country’s oil exports are not only detrimental to its short-term stability, but also its long-term economic prospects and the ability of its institutions to operate. In broader terms, the inability of the PFG to protect oil infrastructure, and prevent the active instrumentalization of oil as spoilers, is a hindrance to stability and impedes the solidification of centralized control. Only by solving the problem of adequate protection of oil infrastructure – alongside the introduction of appropriate economic interventions – can this cycle of self-perpetuating instability be broken. Given the PFG’s mandate, the group’s conceptual and practical centrality to such an effort cannot be understated.

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15 Gi-TOC interview with contact in southern Libya, November 2021.

3
THE ROLE OF THE PFG

The salience of oil and gas to Libya’s stability, and the political instrumentalization of it, heightens the importance of the actors and entities nominally tasked with securing the resource against diversion. Officially, responsibility for such tasks rests with the PFG, which has experienced significant hybridization post-2011 as armed groups forces – often structured around communal lines – were integrated en masse into it. This has significantly eroded the capacity and cohesion of the force, with the head of the NOC noting in 2017 that it had ‘devolved into local fiefs.’

Mirroring challenges in the broader reform of Libya’s institutions, the challenges in reforming and professionalizing security forces mandated to protect natural-resource infrastructure have proven pernicious and entrenched. The hybridization of the PFG since 2011 has been compounded overtime, particularly given the fact that the organizational structure of the force was segregated along regional lines. This dynamic has meant that the PFG’s operations have gradually became enmeshed in broader conflict dynamics tied to regional and communal divides. As the political economy around oil protection, production and income distribution became more contested and instrumentalized, the PFG increasingly developed into a central actor in all three dimensions of conflict that crystallized in Libya over time. This was both by virtue of the force’s explicit mandate, its geographical areas of control, and its vulnerability to being co-opted by communal factions or national level politico-military players that used the force’s legal legitimacy to wage a de facto form of economic warfare against perceived opponents (most notably, through blockades).

Functionally, the hybridization and localization of the PFG have transformed it from a protective actor to a disruptive one within Libya. The following section briefly details the evolution of the force, as well as its current mission, structure and disposition.

3.1 Evolution of the force

The PFG was established in 2007 by the government of Qaddafi and was tasked with defending the country’s oil and natural-gas infrastructure. Based at Brega in northern Libya, the PFG came to be attached to the Interim General Committee for Defence, despite being funded by the NOC. It was originally a relatively minor player within Libya’s broader security architecture, with a force no greater than 2 000 people.

Nonetheless, even with a small force size, the pre-2011 PFG was largely sufficient for securing oil and gas export infrastructure. The force was functionally backstopped by – and embedded within – a far more expansive constellation of security, intelligence, and military units, which together addressed both the extremely limited threats to infrastructure at the time.

17 Mustafa Sanalla, ibid.
18 General People’s Committee Decree No. (186) of 1375 FDP (2007 AD) on establishing the Petroleum Facilities Guard Organization.
19 General People’s Committee Decree No. (34) of 1378 FDP (2010 AD) on transferring the dependency of the Petroleum Facilities Guard Organization.
In the wake of the 2011 revolution, the structure and composition of the PFG changed dramatically, though the mandate of the force remained constant. Between 2011 and 2014, the force increased from 2,000 to 30,000 members, as the initial post-revolutionary governments sought to demobilize and control armed groups by incorporating them into formal structures. During the revolution, armed groups from communities proximate to oil and gas fields, as well as pipelines and export terminals, had seized the facilities. In many cases, these groups’ de facto control became formalized via their incorporation into the PFG. In other cases, sectarian considerations dominated, with Zintani armed groups (which exerted significant influence within the MOD) incorporating armed groups from allied, but previously marginalized, communities into the PFG and sidelining armed groups from perceived rivals.

The expansion in the size of the PFG did not, however, lead to a rise in its operational capacity. Incorporation largely brought full units into the force, which continued to operate as discrete entities following long-standing commanders. The locally rooted field units of the PFG tended to preference the concerns and viewpoints of their communities, rather than the formal national-level mission of PFG.

The shift by the PFG between 2011 and 2014 towards a large but loosely connected force, composed mainly of locally rooted units, had practical implications, as it was during this period that attitudes by communities in oil and gas producing or exporting areas began to harden on equitable profit sharing. When protests by communities broke out, including efforts to block or shutdown production or transport to press the government for concessions, PFG units at the affected sites often stood aside or avoided interfering. It is likely that demands by communities for resource sharing were further exacerbated by the presence of sympathetic security forces, with protesters facing only limited risks in pressing for their goals.

In some instances, PFG field commanders became more actively embroiled in demands for resource sharing, leveraging their formal positions (and the control of infrastructure that this allowed them) for personal political gain. Jadhran, the commander of the PFG force in central Libya’s Oil Crescent is the most well-known of these commanders, using his role to position himself as the public face of demands for increased distribution of petroleum products profits to the Cyrenaican population. To press for these demands, as well as other grievances, the 2,500-member PFG unit he controlled halted exports of oil through the Brega, Sidra, Ras Lanuf and Zuwetina terminals in July 2013, with full reopening only occurring in 2016.

The localization of the PFG, which led field units to primarily focus on issues of control and power in areas proximate to their communities, rather than be responsive to national-level dynamics, also made the force vulnerable to fracturing along regional lines. This began to occur in 2016, as Haftar’s LAAF, an armed group based in Benghazi, began to expand their control in eastern Libya, quickly encompassing oilfields such as Sarir and those in the Oil Crescent, as well as export terminals in Tobruk, Brega, Sidra, Ras Lanuf and Zuwetina. In 2019, LAAF control expanded to the south-western Fezzan region, encompassing major fields such as El-Feel and al-Sharara.

Rather than relocating to government-held areas, or being demobilized, PFG field units in areas under LAAF control largely continued to operate as before. However, the authority they nominally responded to shifted to an a new eastern-based PFG force, which existed apart from the official, Tripoli-based PFG. For the LAAF, leaving PFG field units in place mirrored its broader approach to gaining control, which was

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predicated more on flipping the allegiance of armed groups than on direct conquest. For the local units, switching allegiance from the government to the LAAF ensured that they, and their communities, continued to exert primary control over oil and gas infrastructure in their areas, guaranteeing continued communal control over a key resource.

For the LAAF, control over the field units (which controlled most of Libya’s oil and gas infrastructure) allowed it to instrumentalize oil blockades as a conflict tool. It has used this tool repeatedly in recent years, most notably during the 2019/2020 war for Tripoli, when the LAAF instituted an eight-month oil blockade in support of its military efforts, largely relying on local PFG units to affect the actual shutdowns.\(^{26}\) It has also been used on its own, however, with the LAAF instituting or tacitly allowing oil blockades at fields and export terminals in order to press political objectives without risking all-out conflict.\(^{27}\)

However, under the LAAF, hierarchical command of PFG field units in the Cyrenaica and the Fezzan has remained just as loose as under the formal, Tripoli-based entity. Most units enjoy substantial operational autonomy. In several instances, this has led to units individually choosing to shut down the infrastructure they control, often in order to protest late salary payments (an issue also in areas of Tripolitania under the control of the government-affiliated PFG).

### 3.2 Present-day PFG

Both the instrumentalization of oilfield control by the LAAF and the more chaotic, but regular, shutdowns by field PFG units are indicative of how the rapid growth and hybridization of the force in the wake of the 2011 revolution have constrained its ability to fulfill its mandate. This section will assess the dynamics of the current force, both in formal structure and its de facto operational activity in field locations.

#### Formal structure and size

As of mid-2022, two rival entities claim the PFG title. The formal entity is led by Brigadier General Ali al-Deeb and operates as part of the MOD of the GNA, the internationally recognized government in Tripoli. In Benghazi, a rival PFG continues to operate; led by Major General Naji al-Maghribi, it operates as part of the LAAF.

Attempts have been made in the wake of the war for Tripoli to unify these forces into a national force. The peace agreement ending the war included clauses on the creation of a unitary ‘Oil Protection Force’, based on the Tripoli and Benghazi PFG factions.\(^ {28}\) As part of the 5+5 negotiations, both al-Deeb and al-Maghribi met in 2020 and stressed their support for force reunification, potentially starting with the creation of a ‘model’ unit.\(^ {29}\) As of mid-2022, this rhetorical support has not yet led to any appreciable reunification of the two forces.

Both entities accept the structural disposition of the force as it existed before the force split, which involves six or seven geographical branches.\(^ {30}\) These branches include:

1. The Tripoli branch, which encompasses the area in and around the capital city.
2. The western, Zawiya-based branch, which stretches from al-Heisha in the east (70kms south of Misrata), to the border with Tunisia, and from the Mediterranean in the north to the southern terminus of the Nafusa mountains and Bani Walid. This branch also covers gas-production platforms located off the western coast.
3. The eastern, Benghazi branch, which stretches from the Egyptian border in the east to Zuweitina


\(^{30}\) Petroleum Facilities Guard, https://pfguard.ly/
on the Gulf of Sidra in the west, and from the Mediterranean to the Booster station (near the al-Sarir field).

4) The al-Wahat branch, based at the Nafoura oilfield, which encompasses the zone from the Egyptian border in the east to Tazirbu and the al-Ahrash field in the west, and from the Booster station in the north to Libya’s southern border.

5) The central, Brega-based branch, which encompasses the zone between Zuweitina in the east and al-Heisha in the west, and from the Gulf of Sidra in the north to Libya’s southern borders.

6) The southern, Zintan-based branch, which controls the area between al-Jufra in the centre of the country, and Libya’s western borders, and from the Nafusa mountains and Bani Walid to the country’s southern border.

Despite holding formal legitimacy, the Tripoli-based PFG has limited territorial control, with only the Tripoli and western branches falling under its command. The rest of the branches – including the eastern, al-Wahat, central and southern branches – nominally report to the Benghazi-based PFG.

Within these branches, PFG units are tasked with providing security for a variety of different types of infrastructure and facilities, including production sites, pipelines and pumping facilities, storage depots and export terminals. In Tripoli, the PFG also maintains responsibility for protecting the NOC headquarters and other administrative buildings, as well as maintaining units dedicated to operational administration, public affairs and training.

The manpower of the PFG – including both forces reporting to Tripoli and to Benghazi – is unclear. Limited information suggests that around 9,000–10,000 men were on the force’s payroll in late 2021, though the number is thought to oscillate, with some personnel hired on short-term contracts. One interviewee explained: ‘More than 80% of them work full time, with contracts that are renewed annually. There are also some individuals who are assigned [to the PFG] from time to time who come from other military units, such as special forces, intelligence or others, and their contracts are often seasonal.’

Official numbers may be higher, however, than actual operational strength. One contact, for example, explained that some PFG personnel based at the Marsa el-Hariga export terminal in Tobruk continue to receive salaries from the force despite having moved to Egypt. While no further evidence of such instances has been identified, it hints at the fact that the fractured nature of the force may have increased the risk of non-active or ghost personnel inflating the actual size and capabilities of the PFG.

Salaries for all PFG personnel are paid by the Tripoli-based entity, with the 2021 budget for the force reportedly having stood at LYD282 million (€47 million). Funding for the PFG comes from the NOC, leading to a relatively complicated process for even routine disbursements (such as salaries), with funds first transferred from the NOC to the MOD, and only then going to the PFG. This financial structure has routinely resulted in long delays in payments by the PFG. Delayed salary payments have been the main driver of local shutdowns of oil and gas infrastructure by PFG units, though to date this has not resulted in a long-term fix to the system.

Though the PFG has maritime capacity, largely focused on the protection of export terminals and offshore platforms, the entity is overwhelming a land force. The equipment provided to PFG units is often relatively basic, though equipment gaps are not perceived to be high among the operational challenges facing the force.

Training and professionalization gaps are a substantial challenge, made acute both by the lack of available training after the revolution and the large-scale incorporation of untrained or minimally trained personnel into the force between 2011 and 2014. Over the past two years, the Tripoli-based PFG administration

31 GI-TOC interview with Libyan oil-security analyst, August 2021; GI-TOC interview with contact in the Oil Crescent, December 2021.
32 GI-TOC interview with contact in the Oil Crescent, December 2021.
33 GI-TOC interview with contact in north-eastern Libya, December 2021
34 Draft 2021 GNU budget synopsis, leaked Summer 2021.
has increasingly attempted to address these training gaps, increasing the amount of training offered to new recruits and the number of courses accessible to personnel in subjects such as weapons use, law and administration.\(^\text{36}\)

Most courses have been held in Tripoli, Zawiya or Misrata, and are likely to have catered primarily to personnel assigned to the Tripoli or western branches of the force. There is little evidence that field units in areas under control of the Benghazi PFG have benefited from increases in training, sharply limiting the impact of such initiatives on the force as a whole.

**Operational realities in the field**

Mapping the formal structure of the PFG and its units provides a useful guide for understanding the entity as a whole. However, because of the hybridity and accompanying localization of the force post-2011, this structure has only limited salience on what protection of oil and gas infrastructure looks like in the field. Commanders in both Tripoli and Benghazi have a limited degree of control over the activities of field units, with the force(s) in practice acting more as a federation of armed units than a hierarchical entity.

There is a nominal hierarchal order to the PFG structure, but likely less in terms of direct chain-of-command from up to down. In other words, the PFG at Sarir oilfield officially operates under the al-Wahat PFG commander Brigadier Abdulrahman Dorman. However, PFG subcommanders at al-Sarir appear largely independent from Dorman, where he has limited control of the group’s missions and duties.\(^\text{37}\)

The PFG field units continue to be overwhelming composed of personnel drawn from communities in the areas they serve. In some cases, such as at the Marsa el-Hariga facility in Tobruk, units involve a mix of different tribal groups who operate within a single formation. More commonly, however, PFG units are drawn from a single ethnic group, In Cyrenaica, one contact noted that ‘only certain communal constituencies can guard an oilfield under the PFG banner – for example, the Tebu at the Sarir and Messla oilfields, the Zway at the Nafoura field, the Majabera at the Abu Tifil field, or the Awajila at the Amal field.’\(^\text{38}\) In the Oil Crescent, the Maghraba tribe dominates the local PFG, while in Zawiya, in Tripolitania, the PFG unit draws from the al-Nasr Battalion, composed of members of the Awlad Buhmeira tribe. In the Fezzan, the PFG unit at the al-Sharara field is composed of Tuaregs, with a rival unit of drawn from the Tebu ethnic group and Zintanis expelled in 2014.\(^\text{39}\)

The local roots of many PFG field units have both benefits and challenges when dealing with communities in areas around oil and gas infrastructure. A clear benefit is that PFG–community relations are often positive and robust, lessening the likelihood of abuses or violence meted out on the civilian population.\(^\text{40}\) One contact in south-eastern Libya explained that most disruptions in the area are linked to ‘job-seekers and fresh university graduates who demand employment, [and] the PFG does not approach such incidents with lethal force, as the protestors are mainly part of the same community they belong to.’\(^\text{41}\)

This same embeddedness, however, also affects PFG operations. Community notables, for example, are often able to strongly influence PFG activities, even in areas such as the Oil Crescent that are nominally under relatively strict LAAF control.\(^\text{42}\)

**Composition of forces and operations**

The field units vary greatly in size, from the 40–60 personnel guarding the Sarir field in the east to the 1 200–1 400 personnel that make up the al-Zawiya PFG

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\(^{36}\) TOC interview with Libyan political analyst, December 2021

\(^{37}\) TOC interview with contact in south-eastern Libya, November 2021.


\(^{39}\) TOC interview with contact in Oil Crescent, November 2021.

\(^{40}\) TOC interview with contact in south-eastern Libya, November 2021.

\(^{41}\) TOC interview with contact in Oil Crescent, November 2021.
unit in the west. In general, it appears that units based in coastal areas that host refineries or export terminals are substantially larger than PFG units based at rural and remote fields, such as al-Sharara, El-Feel, Wafa and Sarir.

The exact focus of forces at various fields and infrastructure sites differs, but in general their mandate is relatively narrow. At the Mellitah refinery, for example, PFG duties are limited to managing who enters the complex, in addition to perimeter control and protection against attacks. In some areas, the force may also be responsible for countering fuel smuggling, which has reportedly brought some into conflict with other security forces, who have claimed that PFG forces operating outside of oil and gas facilities are overstepping their mandate.

The level of rigour in providing security differs, though as noted previously, the number of physical threats by terrorist and armed groups in recent years has been limited. In some locales, such as at the Sarir field, PFG field units are perceived by observers to be highly competent and fair in their security provision, in part a byproduct of many field-unit personnel having served in the same location and on the same mission for many years. In other areas, however, the PFG has been challenged in controlling sometimes geographically sprawling facilities with relatively limited numbers of personnel. At the al-Sharara field, the lack of sufficient staff has affected interior patrolling of the site, leading to several incidents in which criminal actors have broken through the perimeter fence and stolen equipment.

The field units typically focus on maintaining localized control, even if that means defecting between sides in the national-level conflict between the Tripoli based governments and the LAAF. One interviewee explained: ‘The PFG in al-Sharara are totally pragmatic. They were part of the [Government of National Accord] GNA, then became [LAAF] in April 2019. They can come and go. Basically, they see the area around al-Sharara as their ancestral land, so they have to control it come what may.’

A variation of this dynamic has prevailed further south at the El-Feel oilfield. There, the LAAF fought and expelled a Tebu-composed PFG unit in 2019, handing control over to another Tebu-led Salafist armed group, the Khalid Bin Walid Brigade, which also included non-Tebu individuals. A contact noted, however, that ‘after withdrawing from the field as a result of the attack by Haftar forces, a significant part of [the PFG] members returned to secure the field under the Khalid Bin Walid Brigade.’ The choice by PFG members to incorporate themselves into the brigade underscores the pragmatic approach adopted by many field units, who are overwhelmingly focused on how to uphold local claims to key infrastructure.

**A complex ecosystem of security**

Dynamics at the El-Feel field also underscore the involvement of non-PFG units in oilfield protection. El-Feel is the only known site where an entirely non-PFG unit has essentially supplanted the force; however, at a number of locales throughout Libya, primarily involving oil and gas fields, armed groups operate alongside PFG units. At the al-Sharara field, for example, the PFG unit operates alongside both the 173 Brigade and members of the 116 Brigade (the latter linked to the dominant Awlad Suleiman tribe in Sebha). A similar dynamic prevails at the Sarir field and refinery, where the 129 Brigade and the Ahmed al-Shareif Brigade, both Tebu forces (as is the PFG unit at the field), are involved in...

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43 GI-TOC interview with contact in south-eastern Libya, November 2021; GI-TOC communication with Libyan political analyst, August 2021.

44 GI-TOC interview with contact in Zuwarah, November 2021.


46 GI-TOC interview with contact in south-eastern Libya, November 2021.

47 GI-TOC interview with contact #3 in southern Libya, November 2021.

48 GI-TOC interview with contact in Libya, 2020.

49 GI-TOC interviews in the southern Libya, November 2021.

50 GI-TOC interview with contact #2 in southern Libya, November 2021.

protection of the facility. One contact noted that the PFG force at Sarir is just a puppet, and is accepted by the 129 Brigade and Ahmed al-Shareif Brigade as long as it doesn’t interfere outside the field, such as with smuggling activity.

There is also a degree of coordination and engagement between PFG units and the wide constellation of security and military actors operating in the broader areas surrounding oil and gas infrastructure. In particular, coordination with military units appears robust, possibly due to the official designation of the PFG as a military entity. One contact noted that in the Oil Crescent, ‘there is good coordination between the PFG and other military groups affiliated with the [LAAF] General Command. This coordination is observed during sit-ins or closures, in addition to during security planning, as happened in 2019 between the various battalions of the army, such as 128, 106, Tariq Bin Ziyad and the PFG in the Oil Crescent.’ Contacts observed a similar dynamic in the southern Fezzan, with forces at El-Feel reportedly engaging in joint-security operations around the field with armed groups from Ubari, Murzuq and Sebha.

Finally, foreign mercenaries also play a role in the protection of oil and gas infrastructure in Libya, though this is largely limited to areas under the control of the LAAF. Most are from Sahelien states, mainly Sudan and Chad, though some mercenaries affiliated with the Russian Wagner Group have also been linked to protection activities.

In some instances, as is the case with the Oil Crescent, mercenaries are located close to oil and gas infrastructure, such as at Ras Lanuf or Brega. At points in the Fezzan, however, mercenaries have been more directly incorporated into field protection. At El-Feel, for example, between 40 and 70 fighters from the Sudanese Liberation Movement of Minni Minnawi are based in the vicinity of the field and are reportedly tasked with assisting the Khalid Bin Walid Brigade if an attack or other challenge occurs.

Also in the Fezzan, there has been some mercenary activity at the al-Sharara field, though this has been intermittent. In mid-2020, for example, a joint force of Wagner personnel and Sudanese fighters linked to the LAAF deployed to the field. The Wagner personnel were reportedly involved in assessing infrastructure, according to one contact, underscoring the multifunctional role of some such forces in the fields. Protecting the Wagner Group, and reportedly responding to their orders, were a large contingent of Sudanese fighters, encompassing some 100 vehicles. In contrast to most other Sudanese mercenaries in Libya, which are composed of minimally trained fighters, linked to anti- or pro-Sudanese government groups, those accompanying the Wagner contingent evidenced a high-level of operational sophistication and were well equipped, potentially a confirmation that Sudan’s Rapid Support Force personnel were active in providing field security in Libya.

It is important to stress that while mercenary numbers at many fields are relatively small, particularly in the Fezzan, their presence has a strong deterrent impact. This is particularly the case with the Wagner forces, with the fear that the group can call upon Russian fighter jets based in Libya for airstrikes if needed. Concerns over this risk have reportedly stopped communities and armed groups in the south disaffected with the LAAF from switching sides to the Tripoli-based government, effectively ‘freezing’ control over oil and gas infrastructure in south-western Libya.

A key takeaway of this analysis of the PFG’s model for security governance is that it demonstrates that there are disparities in its practical applications in time and across locales. A reform effort should therefore consider the regional inclinations of PFG units, the intricate networks that the group has built over time, as well as the geographically adjacent groups with whom the force coexists or cooperates. This implies that a

52 Gi-TOC interview with contact in south-eastern Libya, November 2021.
53 Gi-TOC interview with contact in Libya, 2020.
54 Gi-TOC interview with contact in Oil Crescent, November 2021.
55 Gi-TOC interview with contact #2 in southern Libya, November 2021.
56 Gi-TOC interview with contact in southern Libya, November 2021.
reform of the PFG cannot solely focus on the institution itself but should rather be broadened to take stock of the various ecosystems of security governance around oil infrastructure. The end goal – rather than the immediate objective – should be for a revamped version of this ecosystem to sustainably function under the mantle of the PFG.

Another important facet stems from the various degrees of encroachment of foreign troops and mercenaries in the ecosystems of security provision around oil facilities in Libya. Until relatively recently, Libya’s foreign troops were best labelled as ‘pay-for-hire’ groups, which, at best, had group-level political goals to be achieved in other countries, such as Sudanese or Chadian mercenaries, who had the objective of affecting the Sudanese landscape. However, the legacy of the 2019 conflict transformed Libya’s proxy dynamics, introducing a new transnational political dimension to the role of mercenaries and foreign troops in Libya. Sudanese and Russian mercenaries positioned near oil facilities have become explicitly more tied to foreign power centres and capitals. The Wagner Group is known to be covertly linked to the Kremlin, while UN Panel of Experts reports having noted that Sudanese commanders in control of mercenaries have fostered direct links with Abu Dhabi. Absent a concerted effort to force the repatriation of these groups, it is probable that they will continue to operate near oil facilities and grow increasingly more likely to leverage that territorial proximity to serve foreign agendas (such as by enforcing blockades). This dynamic would, in turn, affect – and likely impede – any national-level reform efforts in the realm of oil-infrastructure protection. Adapting to this reality means that an exclusively technical focus on national-level PFG units will not yield proper results, as a real reform effort would necessitate a degree of geopolitical capital exerted over states who have influence on foreign troops and mercenaries in Libya.

Libya’s hydrocarbon economy is essential for the state and for society, with profits from the sale of oil and natural gas allowing for the provision of state services, and the continuation of economic activity, even during the current period of prolonged instability. The importance of the sector, however, also leaves Libya in a vulnerable position when oil and gas production, transportation or exports are disrupted. Unlike other key challenges facing the country, such as terrorist attacks, which are frequently bloody but unlikely to affect the broader functioning of state, any sustained interruption of the petroleum product economy poses considerable challenges to the viability of the Libyan government.

This vulnerability is well understood within Libya and has led a number of different actors to instrumentalize the interruption of oil and gas production and export to achieve personal or group interests. Communities in oil and gas producing areas or regions, such as the Cyrenaica and the Fezzan, have pressed for jobs and the equitable sharing of profits from the petroleum economy. Perhaps most problematically, political entrepreneurs such as Khalifa Haftar have transformed the control of oil and gas infrastructure into an economic weapon.

The official entity tasked with protecting infrastructure and ensuring production, the PFG, has demonstrated limited functionality. While in many cases the organization has secured oil and gas facilities against terrorist or armed-group attacks, the hybridity and localization of the entity in the wake of the 2011 revolution have left it ill-suited to address the most probable threats to oil and gas production and export. Repeatedly, the field units of the PFG have been involved in oil blockades, including as a means to press demands for late salaries.

Functionally, the incorporation of local armed groups into the PFG, without reform, has created a challenge around interest alignment between communities in oil-producing or -shipping areas, from whom the PFG field units are drawn, and the national government(s). When interests align, there can be an illusion of functioning command and control and a unitary force. However, as soon as interests diverge – either on oil or on other issues – the mirage dissipates, and the field units return to operating largely according to local focus.

This also brings to the fore a broader challenge, which is that of resource allocation. An impetus towards building a nationally responsive force responsible for the protection of oil infrastructure is necessary for opening up a space for discussions around equitable resource allocation, and for these discussions to bear fruit. In Libya, the current status quo is predicated on fear that resources could be taken away.

While community-linked groups may assuage the fear within their communities, they exacerbate it for other groups, especially communities or tribes that are rivals. Moreover, the status quo also allows a minority of political spoilers to leverage territorial control over oil facilities to hijack the discussion around resource allocation and distribution, forcing solutions that are ad-hoc and generally meant to serve personal agendas.

At the time of writing, the contemporary solutions considered – namely, a freeze on oil revenues and a resource-sharing committee – in response to the blockade implemented by the LAAF, constitute a band-aid solution. It is likely that moving forward, outlining a viable plan to transition to a national-level force is the only way to begin to move away from reactive solutions, remove communal measures of fear, and engage in UN convened conversations around resource allocation.
Addressing vulnerabilities in the oil and gas sector

Addressing the vulnerabilities in Libya’s petroleum product sector is complicated precisely because it is not one single area or dynamic that fuels weakness and risk. Rather, it is a confluence of separate, though often reinforcing, dynamics, including poor economic and employment prospects in petroleum-product-producing areas; fears and concerns around adequate profit sharing in the Cyrenaica and the Fezzan; and the extremely weak, divided and hybrid nature of the PFG.

Nonetheless, it is likely that these challenges, though numerous, are more readily addressable than some of the other major dynamics driving Libya’s fragility, such as the struggle for political control (at the local, regional, and national levels) and the empowerment of non-state armed groups via illicit economies. Further, successful efforts to address issues around Libya’s petroleum product industry could potentially deflate tensions preventing the resolution of other points of fragility. For example, lessening antagonism between regions over resource sharing and economic opportunity may reduce sectarian fears that currently impede agreement on issues of political control, security, and identity.

Addressing the different dynamics fuelling Libya’s hydrocarbon fragility would necessarily need to be long-term (with initiatives likely to need to conceptualize duration in years, if not a decade), would need to tackle multiple different levels at the same time, and would likely benefit substantially from international support.

A basic interlinked strategy could include the following:

1) To lessen localized tension and the risk of communities in the Fezzan and the Cyrenaica blockading hydrocarbon infrastructure, focus targeted economic development efforts in communities in and around key oil- and gas-producing areas. This could include a mix of projects supported by donor states as well as initiatives by international oil producers operating in the different fields. In addition to broader economic development and employment promotion, a commitment could be made to increase job options for local residents within the fields themselves (most workers there now are not recruited locally).

2) Develop comprehensive Security Sector Reform (SSR) and Disarmament, Demobilization and Reintegration (DDR) plans for the PFG. The goal should not simply be to create a unitary entity, bringing together the Tripoli and Benghazi factions (such as what the NOC and 5+5 negotiations envision), as this would have only a limited impact on the major weaknesses and deficiencies of the force. Rather, the goal should be to address hierarchic weaknesses within the force, aiming to transform it from its current federation of field units into a hierarchical, national force. While some of the challenge in the reform involves training, equipment and promotion, a substantial aspect is catering to concerns and fears by local communities about the risk of giving up control, and the impact on economic opportunity and power.

3) Target similar SSR and DDR efforts at other armed groups operating in oil- and gas-production areas. The PFG does not functionally operate as a siloed force; it was designed to operate as part of a constellation of security forces. Initiatives should be created that widen efforts to reform these secondary security providers, ideally with an eye towards providing more robust security to citizens in remote areas. This may provide a further entry point to broader SSR and DDR processes, and trust-building initiatives, throughout the country.

4) Finally, develop an ongoing Track-II national reconciliation and dialogue process specifically around equitable resource sharing. As one Libyan analyst noted, ‘The issues and fears on resource sharing are known, but nobody has ever even tried to sit down and calculate the amounts, how they can be divided, and how much everyone would get.’ Aiming reconciliation and dialogue around the hydrocarbon issue would be an emotive issue,


60 GI-TOC interview with Libyan analyst, October 2021.
but one that offers more opportunity for quantitative analysis, discussion and perhaps resolution when compared to political dialogue and reconciliation. If positive results and guarantees can be gleaned from such dialogue, it may offer an opening to tackle more contentious political or security issues that need resolution as part of a social contract to ease fear within Libya’s tribal, ethnic, and regional divisions.
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ACKNOWLEDGEMENTS

This brief would not have been possible without the continuous support and advice of Mark Micallef, Rupert Horsely, Alice Fereday, Jessica Gerken, Raouf Farrah, and Harry Johnstone. Mark Ronan, Sophy Kohler, Peter Bosman, and Christian Jaggers have been key collaborators, editing and laying out, producing visuals and maps for this research report.

We would also like to acknowledge the dedicated efforts of a large number of local researchers engaged by the Global Initiative Against Transnational Organized Crime in Libya. While we will not name them for their safety, they have our profound gratitude and respect for the excellent work they do under difficult circumstances. The research for this report was supported by the Friedrich-Ebert-Stiftung.
Libya’s petroleum product economy is essential for the state and for society, helping to ensure economic resilience via profits from the sale of oil and natural gas, even during the current period of prolonged state crisis and violence. However, the central economic importance of petroleum products has also led to negative impacts on Libya’s fragility. Perceptions of unfair resource allocation have led communities in oil and gas producing areas to disrupt production, in order to press for jobs and a more equitable sharing of profits. Conflict and political entrepreneurs have also transformed the control of oil and gas infrastructure into an economic weapon, repeatedly blockading production as a tool for state capture.

The official entity tasked with protecting infrastructure, the PFG, has demonstrated limited functionality. While in many cases the organization has secured hydrocarbon facilities against terrorist or armed-group attacks, the hybridity and localization of the PFG in the wake of the 2011 revolution have left it ill-suited to address the threats to oil and gas production and export. Repeatedly, PFG field units have been involved in oil blockades, including as a means to press demands for late salaries.

Functionally, the incorporation of local armed groups into the PFG, without reform, has created a challenge around interest alignment between communities in oil-producing or shipping areas, from whom the PFG field units are drawn, and the national government(s). When interests align, there can be an illusion of functioning command and control and a unitary force. However, as soon as interests diverge, the mirage dissipates, and the field units return to operating largely based on local motivations.

For further information on this topic: http://libya.fes.de/