Reframing Responsibility

A Systems Approach to Ending Flaring

A thought piece by capterio

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Executive summary

Who is, really, responsible for gas flaring?

Gas flaring is one of the oil and gas industry's most visible and costly failures — yet also one of its greatest untapped opportunities. Every second, $1,000 in potential value is burned away, releasing emissions that damage climate, health, and reputation. Despite decades of pledges, global flaring is rising, not falling. This isn't because the solutions are unknown — it's because responsibility is fractured across a web of governments, operators, financiers, and others, each with partial control but limited power to act. Ending flaring demands that we reframe responsibility: replacing blame with shared ownership, unlocking coordinated action, and treating flaring not as a liability to hide, but as a resource to capture. This is not a technical problem. It's a leadership challenge that will require bold, collaborative, and sometimes radical approaches to break the cycle.

Gas flaring is a global problem hiding in plain sight

Gas flaring (the deliberate burning of waste gas from oil and gas facilities) is one of the most visible, and arguably, wasteful practices in the oil and gas industry. Every second, oil and gas facilities lose $1,000 in potential revenue. In 2024, the latest figures from the World Bank and Energy Institute[1] show that flaring has increased again, reaching a record high of 176[2] Billion Cubic Metres (BCM). That's equivalent to 4% of global gas consumption. If gas flaring were a country, it would be the fifth-largest gas consumer in the world.

Yet fixing flaring has been a stated objective of many for decades, underpinned by many commitments, including endorsement of the World Bank's "Zero Routine Flaring" initiative[3] (by 60 oil and gas companies, 36 governments and 15 development institutions), the "Oil and Gas Decarbonisation Charter" (which has ambitious commitments from 56 producers, including 33 National Oil Companies), and others.

But progress is not being made fast enough. Globally, the needle isn't even moving in the right direction[4] – on either flaring or "flaring intensity"[5] (see Figure).

[1] Energy Institute Statistical Review of World Energy, 2025: https://www.energyinst.org/statistical-review and World Bank Gas Flaring Tracker Report: https://www.worldbank.org/en/programs/gasflaringreduction/publication/2025-global-gas-flaring-tracker-report. Note that the World Bank dataset is for upstream and selective midstream assets only.
[2] Note this figure is from the Energy Institute because it includes all flaring sources. The figure also includes emissions of methane through incomplete combustion, as estimated by the IEA's 2025 Methane Tracker: https://www.iea.org/reports/global-methane-tracker-2025
[3] https://www.worldbank.org/en/programs/zero-routine-flaring-by-2030/endorsers
[4] See Capterio's July 2025 paper "Unpicking the alarming increase (despite some pockets of excellence) in global gas flaring" and also EDF's commentary: https://library.edf.org/AssetLink/ot7pg7bs0s0154a84m33si2p31t34661.pdf
[5] "Flaring intensity" is flaring per unit of oil and condensate production (its underlying driver), which is arguably a measure of operational performance.

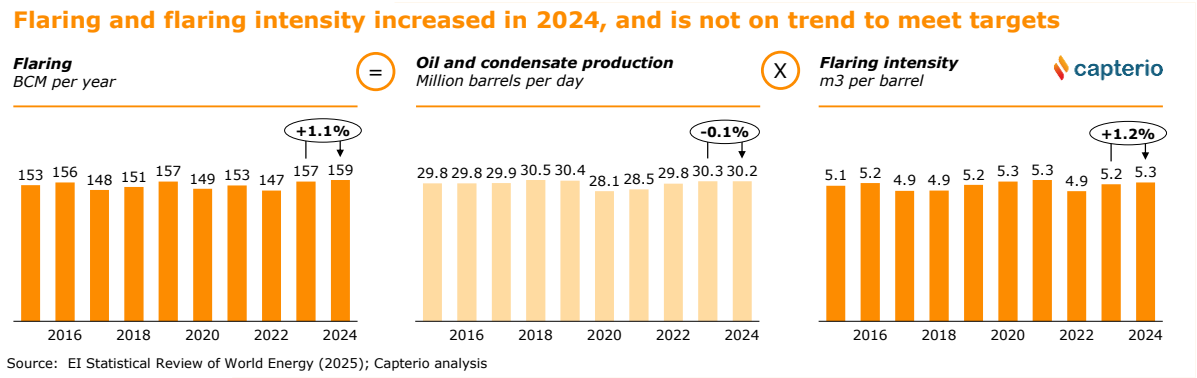

Figure: profile of gas flaring (left), its underlying driver (oil and condensate production, middle) and the derived "flaring intensity", which is a measure of operational performance (right). Flaring amounted to 159 BCM in 2024 (from all sources); the higher figure of 176 BCM includes the gas released as methane through incomplete combustion (so-called "methane slip) at gas flares.

The irony is that gas flaring is not just an environmental liability — it's an economic opportunity that can create value, strengthen energy security, and deliver real returns. Many companies, spurred by rising awareness, policy pressure, and better technology, have acted and profited in the process — as shown in our recent paper with case studies from six countries. Governments, regulators, financiers, and buyers are also signalling support.

Yet progress remains elusive. It's tempting — and convenient — to blame oil and gas operators, particularly the "operator" managing day-to-day field operations. But that's oversimplified thinking: the reality is far more complex.

Flaring results from a broader *system failure* which involves many interdependent actors — governments, regulators, financiers, consumers, and more — each with partial responsibility and limited agency. As such, every element of the system could be optimising its own objective function whilst the *whole* (the system) is held back by misaligned incentives and fragmented responsibility. Even the most committed organisations frequently lack the power to act, leaving them with little agency — and even less influence over others.

The truth is that no single party can solve flaring alone. We need to step back and view the system from the outside to understand fully what needs to be fixed.

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So, who is, really, responsible for gas flaring?

Flaring persists not because the solutions are unknown, but because responsibility is scattered across a complex web of players. So if we're serious about reframing responsibility, we first have to understand how it is currently distributed — and how that distribution locks in inaction.

To show how complex the current system is, consider a simple question: "*Who is, really, responsible for gas flaring?*" Is it:

The oil and gas companies?

- The *operating oil and gas company* that extracts oil and flares the associated gas (sometimes with little clarity on flaring rates due to lack of metering and in some cases, limited interest in credible remote-sensing data) often due to suboptimal equipment maintenance or planning, infrastructure gaps, technical constraints, or economic disincentives?
- The *non-operating joint venture partners* of flaring assets who may have different objectives from the operator and other partners, and may not be aligned on flare reduction priorities (and often are not fully aware of the levels of flaring due to patchy reporting), and/or cannot get support from their shareholders to commit required capital (thereby blocking actions of the whole joint venture)?
- The *National Oil Company*, often burdened by institutional challenges or whose management is too distracted by other urgent priorities (such as oil production) to create bandwidth to prioritise gas flaring reduction? Or who, in many cases, underreports, ignores of even denies that flaring happens? Or who doesn't reward those who focus on flaring with exciting career opportunities that motivate?
- The *leadership of companies* that articulate genuinely ambitious goals with impressive rhetoric, but fail to follow up with grit and translate statements into consistent real-world action, resulting in a cycle of repeated, unmet commitments?

The government?

- The *host government's Ministry of Petroleum/Mines/Energy* that grants (or has to live with difficult-to-change) production license terms without stipulating what happens to any discovered gas? Or insists on collecting high royalties and taxes that push the company's expected returns (which can, for flare capture projects at least, sometimes be challenging) below an acceptable hurdle rate, despite the project being intrinsically attractive (i.e. on a pre-tax basis)? Or is it fiscally-driven to block the flow of capital to its National Oil Company (in preference to funding social programmes or others), stalling progress and prioritising short-term oil revenues over long-term sustainability?

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- The *host government's Ministry of Finance (or gas off-taker)*, which (in many countries) often has large payments arrears owed to the oil and gas companies, in part due to chronic hard currency shortage, thereby reducing the willingness of parties to invest further? Or who subsidises the market price of gas or power to be so low as to undermine the investment case for gas flaring (whilst also – e.g. in Iraq or Egypt – importing expensive LNG to meet domestic demand)?
- The *regulator*, who may lack the authority, capacity, or political backing to enforce flaring limits, even when clear penalties exist on paper? Or perhaps has not even put any penalties in place (let alone tried to enforce them), or is unaware of the true level of flaring (relying only on incomplete self-reported as opposed to credible and independent satellite data)?

The financiers?

- The *multilateral lenders and development banks*, who are increasingly shying away from financing fossil fuel–related projects[6]. This is happening despite the fact that flare reduction initiatives offer some of the highest emissions reduction potential per dollar spent (and arguably should be viewed as "decarbonisation" projects, not "oil and gas" projects) – and many can be delivered without creating long-term fossil fuel "lock-in". Equally, many financiers are only willing to back projects that are already finance-ready, despite the reality that significant (and commercially risky) technical and commercial work is needed to bring such projects to a "sign the papers here" stage. Yet, if incumbents aren't doing the project development work, then (without a reliable source of funding), who will[7]?
- The *importers and consumers* (you and me), who (perhaps until now) have been demanding cheap hydrocarbons but rarely question how they were produced or what their implied imported emissions are?

Other influencers?

- The *industry trade associations*, which are sometimes so focussed on "keeping everyone in the tent" (and not losing engagement, let alone voluntary membership fees) and on occasions can water down their objectives and members' commitments so as not to be seen to be too provocative, thereby their impact?

[6] Hopefully, with the initiative of the "Methane Financing Working Group" (see below) this situation is likely to improve.
[7] This work demands significant investment of time, capital, and close collaboration with asset owners — often relying on sensitive, confidential data. Yet if incumbents fail to recognise the opportunity, or are focused elsewhere, it raises a critical question: who will step up? While project developers or service companies might fill the gap, the commercial risk and upfront cost are high. Without targeted incentives or support, this vital work is unlikely to happen at the scale or speed required.

- Some *NGOs*, which have concentrated their advocacy mainly on reducing methane emissions (unburned CH_4[8]) rather than flaring. Yet, by giving more attention to flaring — which has concentrated sources, clearer commercial incentives, and potential co-benefits — they could speed up progress.
- The *activists* who make the issue so uncomfortable to discuss (potentially raising fears of litigation, back taxes and more) that companies prefer to bury the issue to avoid it distracting from their core activities or damaging their reputations?

This web of partial responsibility makes solving gas flaring a slow, complex process, marked by misalignment, sluggish decision-making, and endless opportunities to shift the blame. It's a classic tragedy of the commons: everyone is affected, no one is fully accountable—yet the rational solution is hiding in plain sight.

Solving the system challenge through reframing responsibility

Flaring is uniquely hard to solve because it isn't entirely a technical problem — far from it. The real barriers are commercial, organisational, social, and political. With so many stakeholders, complexity runs high, and the failure is systemic rather than the fault of any single player

"Business as usual" won't cut it. Breaking the self-perpetuating cycle of doing things the same way will demand extraordinary organisational energy. We need to reframe responsibility — to shift from blaming individual actors to recognising shared ownership of the problem — and build a new model that delivers actionable strategies to disrupt the status quo. That means seeing flaring not as a liability to be downplayed, ignored, or denied, but as a valuable opportunity to drive progress.

This reframed approach must be led by data, integrated, multi-stakeholder, and highly collaborative, seeking out hidden points of leverage. It must unite the essential elements of a successful system: operations, regulation, integration, intelligence, and philosophy

That means bringing not only the "usual" core industry practitioners, but also some "unusual" suspects with fresh perspectives, into a trusted space to problem-solve across sectoral, national, and commercial boundaries. Data and objectivity should be paramount. Chatham House rules should apply. Focus on the ball, not the player. Commercial hats must be set aside in favour of the greater good. Together,

[8] Methane is clearly key to solve. But the global conversation is sometimes weighted towards methane at the expense of flaring. One of the most promising and underappreciated outcomes of a focus on methane vents and leaks (and improving combustion efficiency at flares) is that reported flaring may actually rise. At first glance, this seems at odds with our ambitions to reduce flaring. But in reality, it's a climate win: flaring methane is far better than letting it escape unburned into the atmosphere.

participants could begin to see interdependencies and synergies, rather than isolated problems and stranded assets.

Various practical approaches are conceivable — from a genuinely independent "national flaring taskforce" reporting jointly to the Ministries of Energy, Environment, and Finance, to an international body convened (but operating at true arm's length) from heavyweight platforms such as the World Bank, or the Energy Institute. But the point is not to re-badge the usual suspects or create another talking shop. The real intent is to create a body that can break from institutional inertia, bring in unconventional voices and wield the independence and authority needed to disrupt the status quo.

There are some examples of multi-stakeholder efforts to tackle these challenges. For example, the Methane Finance Working Group[9], launched at COP28, is a collaborative effort between financial institutions, environmental organisations, and industry leaders to deploy finance mechanisms to rapidly scale spending in methane and flaring reduction projects. More such efforts are needed to deploy capital towards solutions.

If you're part of this system — and if you're reading this, you almost certainly are — then you have both the power and the responsibility to help change it. Flaring isn't an engineering problem; it's a leadership problem disguised as a technical one. And it's not someone else's problem — it's everyone's opportunity.

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About Capterio: Capterio is a British company founded in 2018 with a mission to drive real-world reductions in gas flaring. Its award-winning analytics platform, FlareIntel, uses proprietary algorithms to track every flare, for every asset, across every company and country, by satellite multiple times per day. Capterio partners with oil and gas producers, governments, regulators, service companies, and the financial sector to improve flaring transparency, enhance operational performance, and identify and prioritise projects that capture and monetise flared gas.

[9] https://methanefinance.org/

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