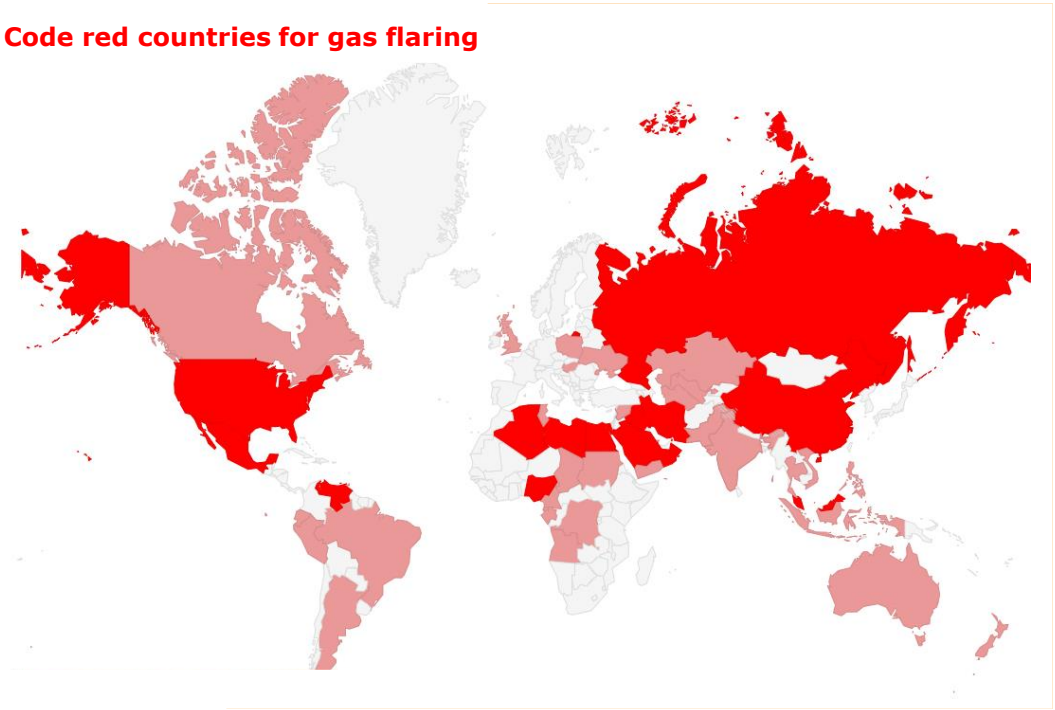
# Critical outcomes from COP26 for "code red" gas flaring countries




A thought piece by capterio

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## EXECUTIVE SUMMARY

- **49 countries flag as "code red" on gas flaring today – meaning that flaring is material in scale and urgent action is required to reduce it.**
- **Whilst most of these countries have already been making bold promises on gas flaring reduction, delivery so far has been insufficient.**
- **As world leaders meet at COP26 this week, the world requires a step-change in focus on gas flaring as a quick win decarbonisation lever that reduces emissions, creates value and accelerates the energy transition.**
- **This paper outlines specific and tangible impact-orientated outcomes framed around the three themes of ambition, action and acceleration.**

## INTRODUCTION

Whilst there is a lot of focus on "methane" (including yesterday's impressive announcement on behalf of the signatories of the "global methane pledge" to cut methane emissions by 30% by 2030), gas flaring is somewhat overlooked.

In 2020, 142 BCM of gas was flared, leading to a potential revenue loss of $30-40 billion and 1.2 billion CO2-equivalent tonnes of GHG emissions per year (1.5x airlines). Gas flaring is a source of economic and environmental waste so large that, if it were a country, it would be the world's 5th largest. Most of this occurs due to a lack of investment into capture solutions. This needs fixing.

The sad truth is that, despite many bold commitments to reduce flaring, for example, as part of the World Bank's Zero Routine Flaring by 2030 initiative, flaring has changed little in a debate, and the world is seriously off track.

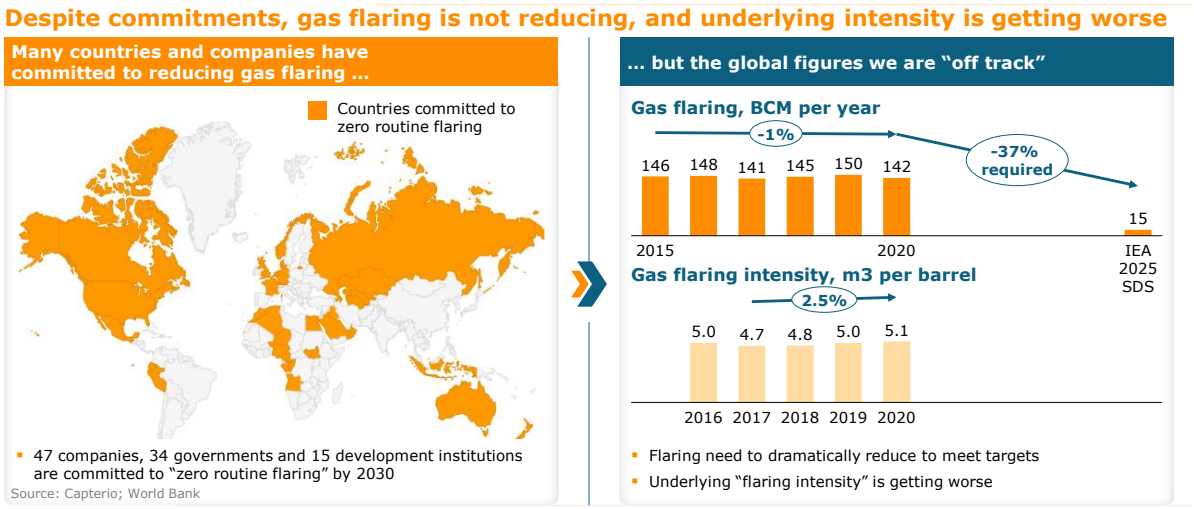


*Figure 1: Overview of the countries that have committed to "zero routine flaring" by 2030 (left) and the global figures on flaring and flaring intensity (right).*

Many of these gas flares have operated continuously for years, if not decades, with no indication of a serious plan to reduce the volumes. We know this because we track every flare worldwide in real-time by satellite with FlareIntel Pro. And since Paris, the aggregate figures have gone up, not down (see "flaring and COP".)

Yet, we know how to solve flaring with technically-proven solutions. Gas can be reinjected (for disposal, enhanced recovery or storage), be used to generate power (for local or grid operations), can be recovered by pipeline, virtual pipeline (e.g. as CNG or LNG), or be used for value-adding products.

And we also know that recovering flared gas creates economic value and is a quick-win decarbonisation lever that accelerates the energy transition. Therefore – except when it is safety-related – flaring, especially routine flaring, should be eliminated.

The upside of flaring reduction is substantial in all areas of "ESG". On "E", flaring reduction will reduce emissions of CO2, methane, NOx, SOx and particulates. On "S", it will improve the health and livelihood of people, and on "G", it will improve the investment credentials and the "social license to operate" for oil and gas producers.

Our analysis of global flaring data highlights that 49 countries are "code red" (figure 2). Each of these countries not only has significant oil production, but also has either significant gas flaring (above 1 billion cubic metres per day – the equivalent of the consumption of Sweden or Morocco), or has substantial flaring intensity (more than 3 cubic metres per barrel of production – in the top half of the global rankings). Of the 49, 14 flare more than 2 BCM per year (the consumption of Denmark – deep red).

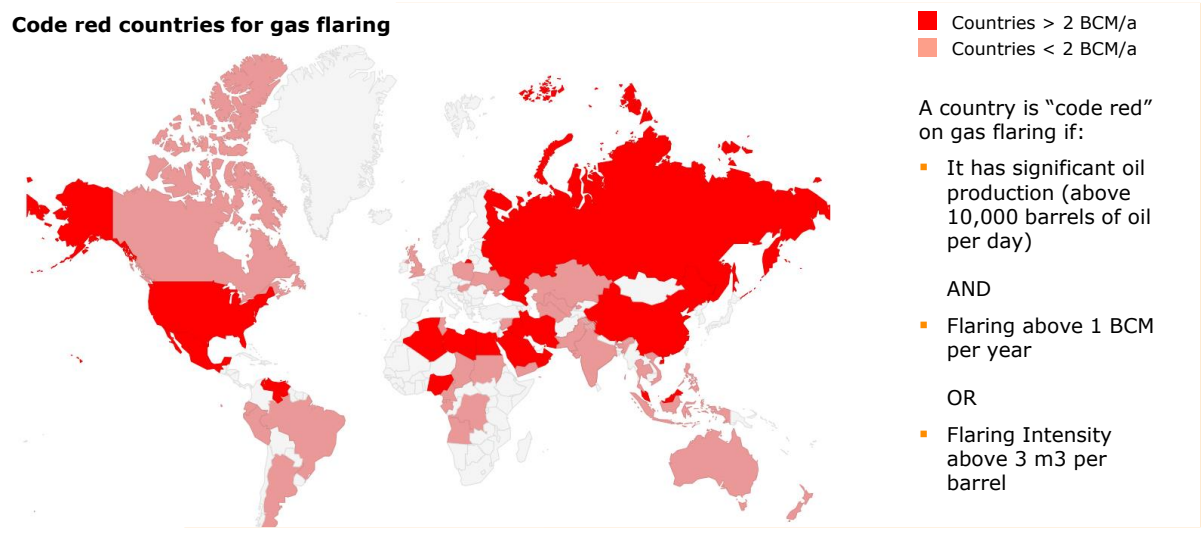


*Figure 2: Capterio's analysis of "code red" countries for gas flaring in 2021. These 49 countries collectively account for 98% of all observed gas flaring. Of these, 14 countries represent 80% of the opportunity. By inspection with Figure 1, many "code red" countries have also endorsed the World Bank's Zero Routine Flaring programme (but are not delivering fast enough). We need to move from talk-the-talk to walk-the-walk.*

The key missing ingredient is global leadership. COP26 is the moment to act. We just need the right global leadership, focus and investment. We outline here practical outcomes we would like COP26 to focus on.

## DESIRED OUTCOMES AT COP26

COP26 must ensure all "code red" countries focus on stepping up ambition levels, driving action and accelerating reduction to reduce flaring. However, we must acknowledge that real action will require conviction, collaboration and investment. And as unpopular as this may seem to some, invest we must. We estimate that some $10-15 billion will be required over the next 3-4 years to eliminate routine flaring (that's 3-5% of industry CAPEX). After all, flaring is inevitable without major investment even in a world of dramatically lower oil demand, since the countries with the lowest supply cost often have the highest flaring intensities. Figure 3 has the summary.

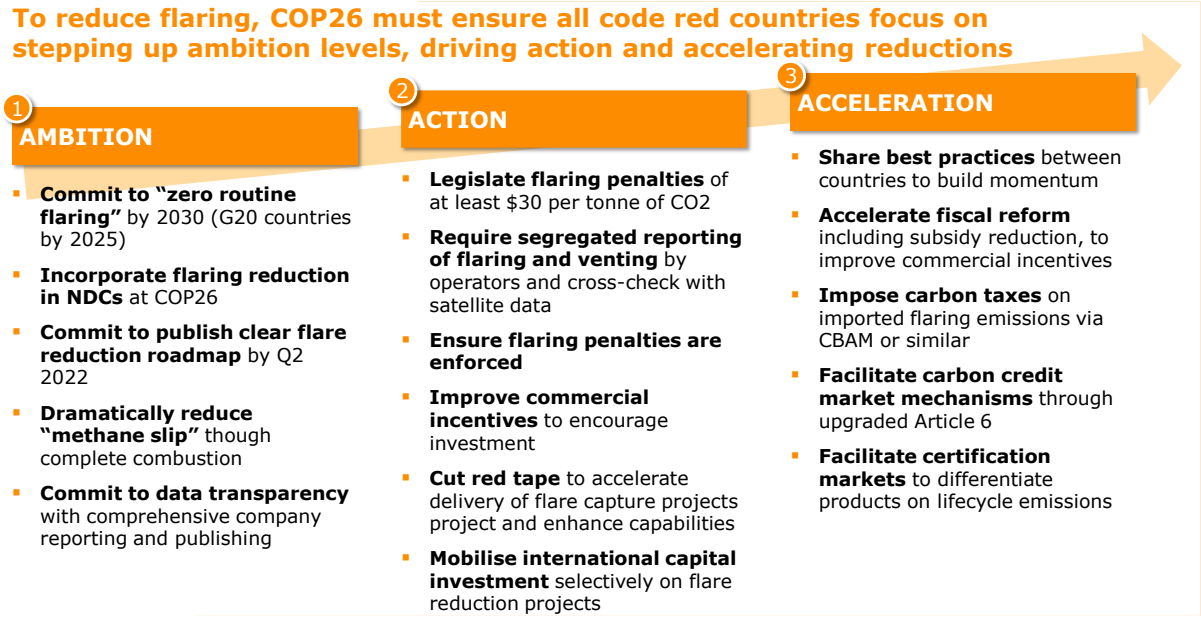


*Figure 3: We are looking to see key several outcomes from "code red" countries at COP26.*

To expand a little on the three areas:

### Firstly, we need to set bold ambitions

Whilst many countries have committed to Zero Routine Flaring ("ZRF") by 2030, this needs to be a comprehensive commitment from all "code red" countries. Many must go further, and it was pleasing to see that Nigeria (flare rank #7 at 7 BCM/a) has committed to ZRF by 2025, and was joined last week by Iraq (#2 at 17 BCM/a per year) and Shell. In addition, countries must specifically include flaring in their updated NDCs (only 11 did so at Paris) and draft and publish clear flare reduction roadmaps (supported by international institutions where necessary). Given that many flares also emit more CO2-equivalent emissions as methane through "methane slip" (which itself a billion-tonne problem), it is also critical that governments have a zero-tolerance policy of unlit flares and flares with low combustion efficiencies. To do this, governments should also commit to data transparency and clear reporting of credible company- and country-level data. Where data is not missing or not reliable, satellite estimates of flaring should be used. Similarly, companies must step-up their

own monitoring and improve their disclosure (especially for non-operated assets, see our paper "why we need clearer ESG metrics").

### Secondly, we must drive actual action in the short term

But ambitions alone are not enough, and so far, the rhetoric isn't matched by reality (somewhat justifying Greta's *"bla bla bla"* accusation). And despite many promises, the 11 countries *that made specific commitments on gas flaring* at COP21 in Paris *increased* their flaring by 5% (to 2020, whilst the total global flaring declined by 5% – see our paper). Loopholes and excuses (such as "*we are not the operator and cannot influence*") no longer cut it. Therefore, it is good to see the OGCI member companies committing to drive towards net zero operations for non-operated assets.

Governments need to set clear anti-flaring policies, mandates and regulations. Flaring penalties have been shown to be particularly effective in Norway (rank #47, where penalty rates are $61 per tonne of CO2), but (despite being material) they have largely been unenforced in, e.g. Nigeria and Algeria (rank #5, despite being material at $38 and $48 per tonne respectively). Governments must also act to improve reporting of flaring (and its associated venting, at a company/site level – for all operations) and its enforcement (and there are positive signs in Nigeria, which has increased flaring penalty receipts from $15m to $300m in one year).

But governments must also figure out how to improve the commercial incentives for companies to act (for example, by reducing effective tax rates and/or through innovative "midstream" commercial structures which tax gas not as a primary resource, but – for associated gas – as a secondary waste product). Governments must also unlock bureaucratic red tape to accelerate project delivery, encourage new players to bring capabilities and technology. International development banks and other multilateral organisations must ensure finance is available *for selective decarbonisation projects* rather than apply blanket "no fossil fuel" policies.

### Thirdly, we must scale, accelerate and sustain progress in the medium term

The international community can help to accelerate progress by making market mechanisms work. These include mobilising capital through clearer and deeper international carbon markets (including offsetting) with an upgraded Article 6, facilitating the differentiation of products through certification based on life-cycle emissions, and imposing carbon taxes on imports (see our paper on the EU's CBAM). Governments can help by removing subsidies and other market distortions and promoting best practice sharing and international collaboration.

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It's one minute to midnight, and we can't afford to continue to delay further. But since flare projects reduce emissions and create value and accelerate the energy transition, there should be even-greater incentives to act.

Together we can make it happen, so let's make this moment at COP26 really matter.