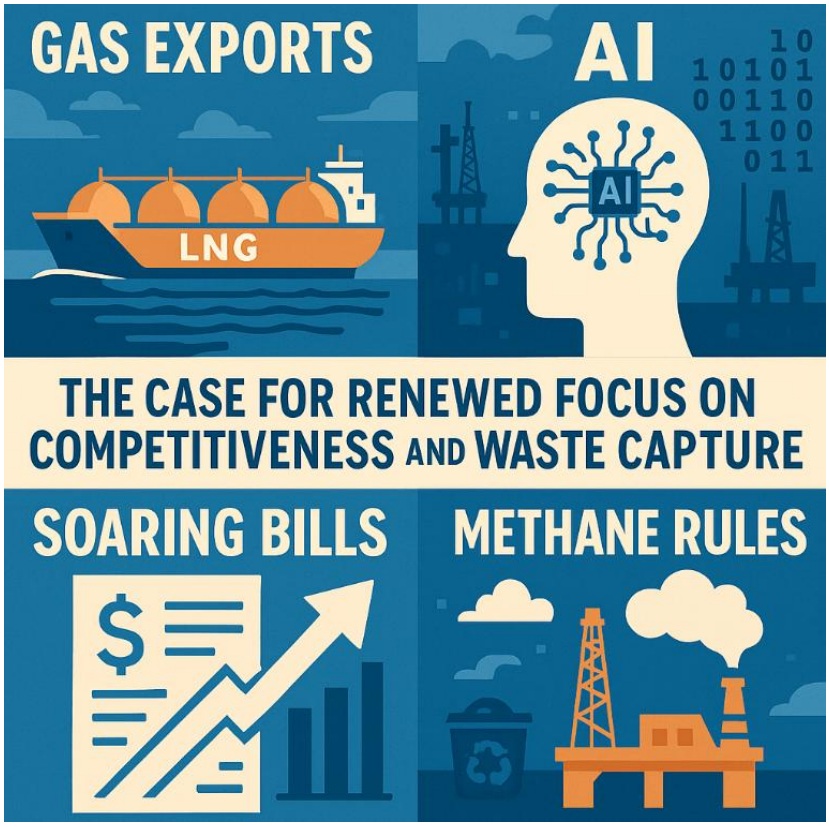
Gas Exports, AI, Soaring Bills, and Methane Rules:

The Case for Renewed Focus on Competitiveness and Waste Capture



A thought piece by capterio

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This article was inspired by the author's reflections from attending #Gastech (the world's biggest gas conference) and #ClimateWeekNYC (the world's biggest pre-COP climate gathering in New York). The piece tries to pull together threads from many conversations and ideas to offer an integrated perspective.

TLDR: Gas markets are oversupplying, electricity is straining under AI demand, and methane rules are raising the bar. Together, these forces are rewriting competitiveness in energy.

A Reset Is Called For. And Narratives Are Quietly Shifting

Whilst the world is at or close to peak emissions, enthusiasm for the current path wavers. Climate change is certainly not "*the greatest con job ever perpetuated on the world*". But many are calling for a "reset" but (as the Jeremy Oppenheim notes in the April Blue Whale Inquiry) not one that "*gives up on our goals, our values, or on the science*". The transition was always likely to be bumpy, and now the reset should be "pragmatic" (as per Michael Liebreich's July essay in Bloomberg). Most importantly, it should reignite our societal mandate for system change.

Against this backdrop, motivated by their "low carbon" carbon credentials and spurred on by the apparently insatiable demands from AI data centres, gas market players are sensing an opportunity. At Gastech (the world's largest gas conference, held in September in Milan), producers are subtly evolving their narrative. Rightly or wrongly, gas is no longer being vocalised as a "bridge" or a "transition fuel": instead, it is increasingly marketed as a "destination fuel". The phrase *energy transition* is being reframed by these groups (and others) as *energy addition* - even though the evidence is that low-carbon energy growth, which is growing faster than *final energy,* meaning that through the miracle of compound analysis, that the energy transition is, in fact, inevitable.

For some, gas is seen as meeting the moment. But for others - and in many markets - because of its role in setting marginal electricity prices, it underpins a broader societal issue: electricity.

Meanwhile, Will Electricity Become the New Gasoline?

The cost-of-living crisis has well and truly bitten, not only in Europe, but also in America and elsewhere. Spot gas prices in Europe are three to four times higher on international markets than in the US, and gas prices are double. The drivers are Russia's war in Ukraine, distorted market structures, misguided policy implementation, rather than the bold net zero ambitions.

The US too is seeing the direct impact of rising electricity prices, despite its *Unleashing American Energy* strategy, powered by *drill, baby, drill.* AI data centres are partly to blame, not least because there is 116 GW of new capacity already committed to come online. But so too are other demands on domestic gas, the surge of LNG (liquefied

natural gas), insufficient infrastructure and weakened enthusiasm for solar and wind, as Simon Flowers outlines in his piece ("*Upside pressure on gas prices*").

As the ordinary working people become increasingly aware of the link between new datacentre power loads, cooling needs and water use, there is an increasing consumer backlash. According to Datacentre watch, $64 billion of datacentre projects have been blocked or delayed amid local opposition.

It should be noted that datacentre operators are quick to point out not only that, according to report from the IEA, they account for just 1.5% of all electricity today, but also that their loads can be flexible and respond (either temporally or spatially) to time-of-use pricing. AI itself will, they highlight, dramatically improve energy efficiency through optimisation, leading to a net negative climate impact (unless efficiency gains are offset by further growth; the "Jevons paradox"). On that note, Shell (perhaps talking up its own book?) goes further and suggests that the economic growth created by AI will itself lead to a further acceleration in the demand for natural gas.

Nevertheless, electricity prices in the US could soon be the "new gasoline" — a throwback to the long queues, rationing, and civil unrest that followed the oil shocks of the 1970s. Politicians facing perilous mid-terms polls pay heed: punishment may pounce not at the pump, but at the plug.

Part of electricity's challenge - political and otherwise - relates to the system strain from a surge in LNG.

The Elephant in the Room Is the Looming LNG Bubble

In addition to piling into renewables, Europe's response to soaring prices and a desire to exit Russian gas is to secure new gas supplies. Conveniently, LNG output is surging (from the US, Qatar, Australia, Canada, Mozambique and others), adding an astonishing additional c. 400 BCM of capacity (or 70%) by the early 2030s, according to analyst Anne-Sophie Corbeau.

No wonder that the US contingent was present at Gastech in full force, inking long-term purchasing contracts, in a reverse land grab, for their soon-to-double LNG output. It is clear that the US rationale is part politically motivated (Secretary of State for the Interior Doug Burgum notes that the US wants to "*sell energy to our friends so they don't have to buy from our adversaries*"), but part commercial (eyeing up to $50+ billion in annual revenues).

But almost no-one at Gastech was talking about the elephant in the room - LNG oversupply. Yet that, or a Fear Of Missing Out, was perhaps that very sentiment that was driving each LNG player to attempt to outmanoeuvre its competition in an attempt to lock in a sales agreement. Looming LNG oversupply will create migraines for many.

LNG's Surge Creates At Least Three Headaches

Despite the bullish gas producers, the surge in LNG creates might be creating a tension headache, a cluster headache and a migraine:

- **Firstly, many exporters in the US (and beyond) may find it challenging to meet the EU methane standards (a "*tension headache*"?)**, which will start in full force by 2030. Some US suppliers claim they cannot comply today (even one that with a methane intensity of 0.007%, well below the expected target). Perhaps that's what was leading to the US Secretary of State, Chris Wright, to lobby Brussels to water-down its regulations, whilst also hinting that failure to do so might risk Europe's energy security or lead to increased tariffs. And whilst the details of the methane standards are not yet defined (and some member states fear that putting penalties on imports could drive up domestic prices), all indications are that the EU has no intention of yielding. A report out last week ("*A workable solution*") by RMI, CATF and EDF outlines what a sensible approach could look like. Other LNG supplying countries (many of which apparently have not yet engaged in dialogue) should take note.
- **Secondly, LNG exports are already putting strain on US domestic supplies (a "*cluster headache*"?)** today, and the situation could get worse. Combined with the surge in power for AI data centres and the new administration's lack of enthusiasm for wind and solar, electricity prices are up in the last year in all but four of the 50 US states. This is the exact opposite of Trump's pledge to "*halve power prices within a year*". Any backlash might become pivotal by the mid-term elections.

Another related uncertainty is driven by the one-third of US gas production that is "associated gas", i.e. co-produced with oil. These volumes are vulnerable: with oil prices already low (and expected to remain around $50 per barrel through 2026), drilling is slowing, putting future supply at risk. The pressure could intensify as/if OPEC+ continues to unwind its voluntary production cuts (coupled this week, with Kurdistan's reopening of its oil export pipeline via Türkiye), adding more barrels to the market and keeping prices subdued. A resulting crunch in associated gas production could make Australia an undesirable role model for the US. Down Under, 74% of all gas produced is already exported to high-priced international markets. And LNG-linked prices have pushed up electricity prices, especially whenever gas is the marginal generator (i.e. coal or renewables are constrained).

There is a sense that these US factors are less of a concern right now for Secretary for Energy Chris Wright. The Department of Energy's July 2025 report, perhaps in a piece of "climate creativity" suggested rebranding ocean acidification as "ocean neutralisation". Scientists have widely criticised the report, yet it is already being used to justify delaying coal retirements and to tilt policy further towards lucrative exports.

- **Thirdly, the global outlook for gas is highly uncertain (a "*migraine*")**, but certainly well below the "*implausible scenarios and flawed assumptions*" that

underpinned a US Department of Energy report that had LNG demand *almost double* (at 1600 BCM per year) that of other credible parties. As Anne-Sophie notes in her "*Qatar's energy decisions*" piece, that country's response (itself soon to surge LNG export capacity) is unclear: it could flood global markets and act as an OPEC-style pressure point, driving down prices and crushing higher-cost producers. Furthermore, outlooks for China are uncertain (LNG imports are down for the 11th consecutive month), yet increased imports are planned from Arctic LNG 2 and Sakhalin 2 (according to Russia's Energy Minister), and Russia now powers ahead with its new *Power of Siberia 2* gas pipeline. LNG actors seem to be showing "peak hubris", as Seb Kennedy notes, with "*deal-making frenzy and reality denial*". Executives from Shell and TotalEnergies hint at irrational exuberance, noting that many projects are being approved that are "*at the higher end of the cost curve*", just as Carbon Tracker's "*Turning Tides*" report forewarned, in October 2024. Proposed developers of new LNG facilities in Saudi Arabia and Argentina are biding their time. Buyers locked into high long-term contracts will be exposed. Equity investors in projects requiring prices significantly above $10-12 per mmbtu should start to worry. Meanwhile, consumers in Europe will eagerly anticipate the inevitable price falls, although (unless they go below $5 per mmbtu, which is unlikely), LNG will probably not drive gas substitution of either renewables or coal.

These three headaches today will create winners and losers tomorrow. Gas buyers and consumers (outside of the US, at least) will reap the rewards. So-too, those that meet the methane mandates.

A Buyers' Market Will Recognise the Masters of Methane

In an oversupplied international market (which most analysts say is highly likely), gas prices will fall, buyers will gain leverage and consumers and industries will benefit. Increasing supply options for major purchasing blocks will enable importers to select their energy, in part, on its end-to-end carbon intensity. For gas, the proposed-yet-not-fully-defined EU Methane Emissions Regulation (EU MER) will matter more than ever. That's why the EU is right to not to cave in to US pressure to water down its own rules. And why the concept of *differentiated gas* is key and will be enduring.

Countries with significant supply chain waste, e.g. through flaring, venting and leaking, will be under pressure and may have to cede market share, lower price expectations or face penalties. Globally, these three sources of waste account for 7% of all gas supply, some 270 BCM per year (perhaps $60+ billion of annual revenues).

Within the LNG supply chain (according to a Capterio paper to be published at the ADIPEC conference in November), there is a 100x variation in the "flaring intensity" between the best and most challenged LNG liquefaction plants globally. Africa's average intensity is many times greater than the Americas'. This should be a wake-

up call for those exporters. Especially since capturing this waste gas creates value, improves energy security and helps to provide or maintain a competitive edge.

Real-world projects actually deliver emissions reduction, as a report in June by Columbia and Capterio highlights, improve energy security and make money. But they need to be replicated, scaled and accelerated. But the journey starts with data, such as with Capterio's FlareIntel platform. And why? Because data reveals opportunities, and those that reduce methane (a potent greenhouse gas) are also the fastest and cheapest methods to limit global warming in the short- to medium-term.

Put that into perspective: AI today consumes 415 terawatt hours per year of electricity according to the IEA. But if 50% of the wasted flared, vented and leaked gas (roughly what the IEA says has a negative marginal abatement cost) were put towards AI datacentres, it could *triple* (adding 780 TWh per year, or 89 GW of continuous power), whilst dramatically reducing emissions on the scale of 3-4 gigatonnes of CO2-equivalent emissions.

Methane Mastery Matters

So given that competition on embedded emissions is likely to be a thing, producers should have every incentive to act. Exporters that are today choosing to dilute their own standards (such as the US, whose EPA is rolling back on its more stringent regulations) could materially undermine their long-term competitiveness. Moves in the US to weaken or halt emissions reporting could prompt the EU to adopt a "guilty until proven innocent" stance, assuming the worst unless exporters can show otherwise.

This is why it is encouraging that investors are increasingly federating to stress to regulators the imperative to maintain high emissions standards. This week, 42 leading institutional investors, collectively accounting for more than €4.5 trillion in managed assets, wrote to the EU Commission to quickly adopt the proposed regulations. They argue not only that it is the right thing to do, but the EU regulations (and their equivalents in the US) fundamentally help to improve companies' operational performance, competitiveness and resilience.

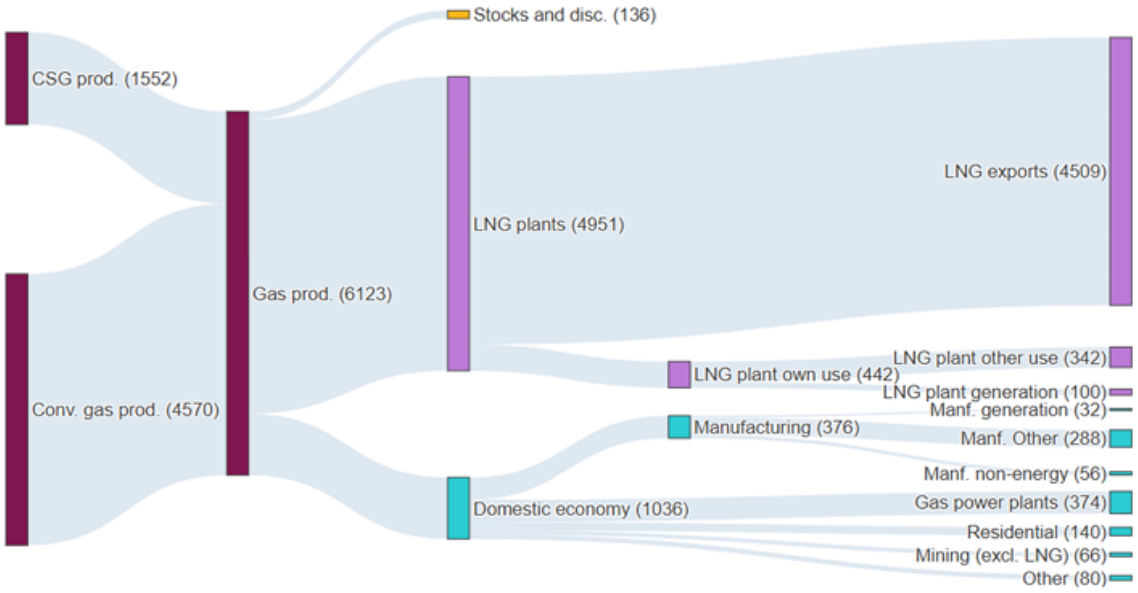
The time to act is now. As Michael Liebreich argues in *The Pragmatic Climate Reset*, contrary to the opinion of many, the energy transition is already one-third underway. As long as low-carbon technologies continue to grow - as they are - at a rate greater than the growth in "useful energy" (accounting for the heavy conversion losses with "primary energy" from fossil fuels), then the transition not only is the shifting narrative incorrect, but the transition is inevitable. Slowly at first, but amplified by compound growth, the clean revolution will win.

Producers, better to realise this and drive up, not down, competitiveness in your own self-interest.

The winners will be the masters of methane.

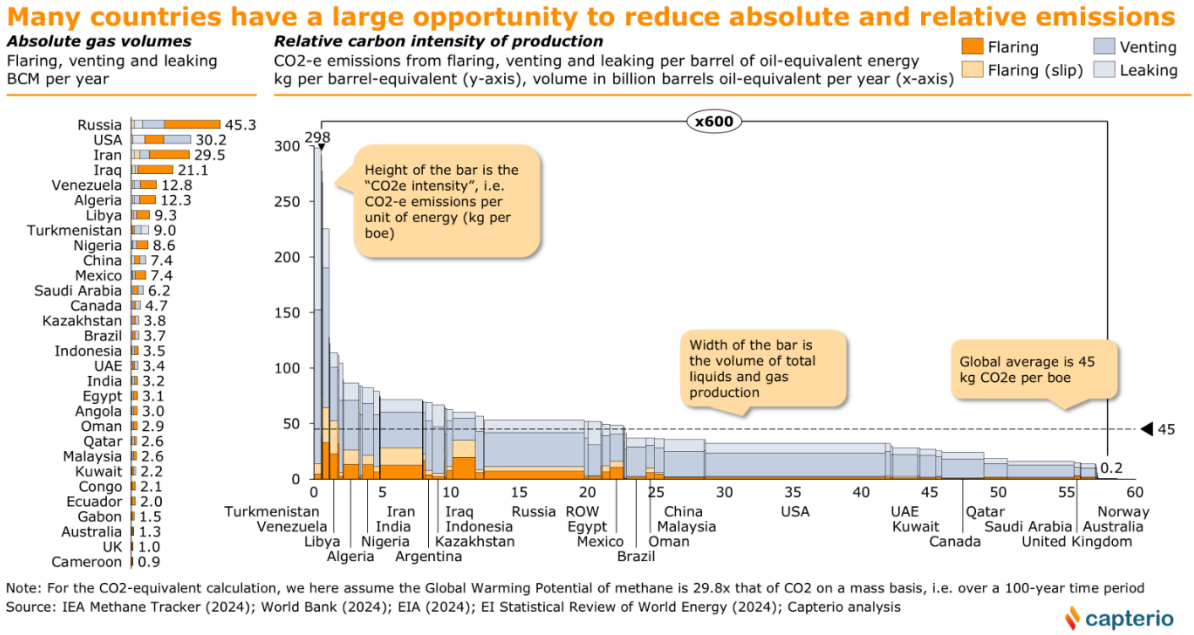
Below – selected figures.

Figure 3 Australian natural gas flows, petajoules, 2023–24



Note: Components may not sum due to rounding.

Source: DCCEEW (2025) Australian Energy Statistics, Tables A and F and internal sources



Note: For the CO2-equivalent calculation, we here assume the Global Warming Potential of methane is 29.8x that of CO2 on a mass basis, i.e. over a 100-year time period
Source: IEA Methane Tracker (2024); World Bank (2024); EIA (2024); EI Statistical Review of World Energy (2024); Capterio analysis