



Investor Guide to Company Comments on EPA Proposed Standards for Oil and Gas Methane Emissions

ESG BY EDF: ACTIONABLE INSIGHTS FOR A DECARBONIZING WORLD

ESG By EDF is a suite of investor-oriented research products providing insights on transition issues in carbon-intensive sectors informed by EDF expertise in science, policy and industry.

Highlights

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- **The Supreme Court's recent climate change decision does not affect EPA's ability and obligation to move forward with methane regulation.**

The Court's decision recognized EPA authority and obligation to address climate pollution under the Clean Air Act. Last year, Congress also explicitly reinforced EPA's obligation to address climate pollution from the oil and gas sector when it passed a resolution with bipartisan majorities in the House and Senate restoring methane regulation.

- **A wide range of stakeholders have expressed high-level support for federal methane regulation.**

EPA received many comments on its proposed oil and gas methane rules, including supportive input from major energy and financial companies, public health organizations and environmental groups.

- **Despite record levels of overall industry support, significant opportunity remains for further positive engagement from leading companies.**

EDF analysis of comments from energy and investment companies as well as industry trade associations shows a troubling divide between those that support strong rules and those trying to weaken key provisions. Supportive, detailed comments from industry leaders can counter input from those aiming to undermine action.

- **Leading companies can raise the floor for industry-wide climate performance.**

If responsible operators already acting on methane emissions do not take advantage of this unique policy opportunity, industry's worst actors will continue to bring down the reputation of the whole. Company silence on relevant regulation acts as an endorsement of lobbying from some trade associations.

- **To support an effective final rule companies must back three key provisions.**

When EPA's next comment period opens later this year, it will be critical for leading companies to clearly express support for EPA's overall goal and for three provisions that will be key for the final rules' overall impact: monitoring small leak-prone wells, eliminating pollution associated with non-emergency flaring, and phasing out polluting pneumatic controllers.

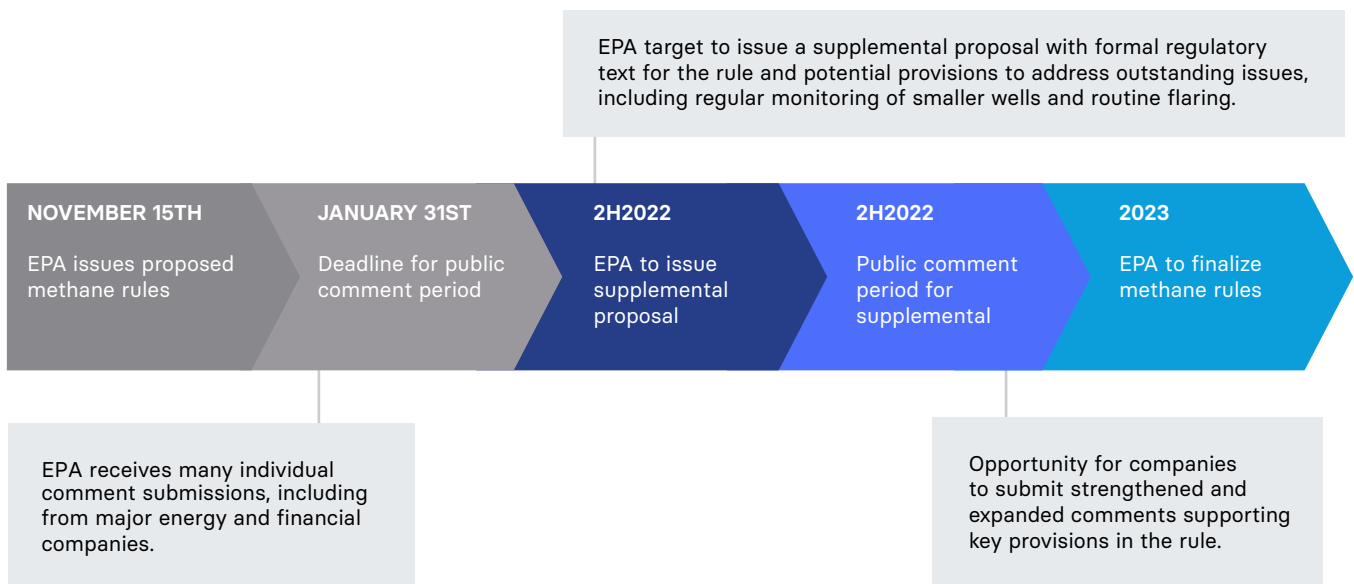
Background and Timeline

In November 2021, the U.S. Environmental Protection Agency published [proposed rules](#) to reduce methane and other harmful air pollution from both new and existing sources in the oil and natural gas industry. The regulations would update the emission standards for newly built facilities and, critically, extend regulation to older wells by allowing states to develop mitigation plans for existing sources based on EPA's emission guidelines.

Over the course of a 60-day public comment period that ended in January, EPA received many individual comment

submissions including energy and financial companies that support the regulation to reduce emissions of this powerful greenhouse gas.

However, public engagement is not yet over. EPA plans to issue a supplemental proposal later this year, which will kick off a second comment period. This supplemental proposal will include regulatory text and may address a number of outstanding issues not covered in EPA's initial proposed rule, including natural gas flaring and monitoring of smaller wells.



While leading oil and gas companies have been broadly supportive of new methane regulation, there has been a push by some parts of industry and other stakeholders to weaken or slow the implementation of the rules. Responsible operators supportive of acting on methane emissions can speak up to balance the input of industry's worst actors, which risks damaging the reputation of the whole.

With many U.S. operators speaking about the low emissions of U.S. hydrocarbon production as compared to those of other export regions, this regulation provides a unique opportunity to deliver significant pollution reductions. Many of the comments received by EPA capture industry and investors' views of its importance. For example, [bp noted](#) that “a federal framework helps support the global competitiveness of American natural gas,” while Wellington Management [stated in its comments](#) that strengthened final rules “will improve the overall image of gas and the role it can play in improving grid stability.”

Next steps in the regulatory process

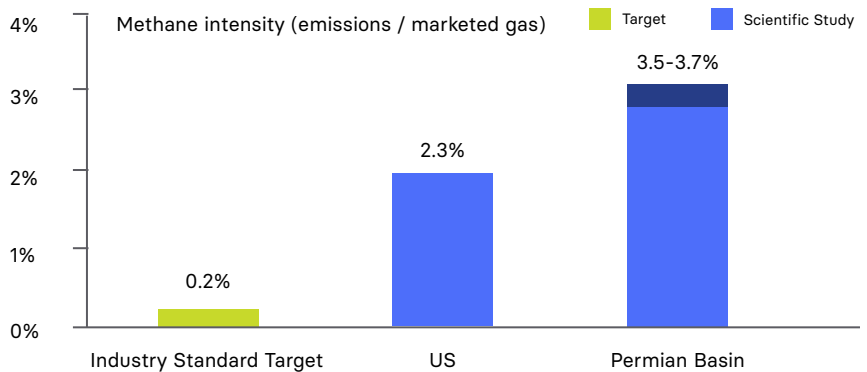
Strong public statements, press releases and public letters to the Biden administration will continue to be important to support climate action. During the second comment period later this year, stakeholders will have an additional opportunity to clearly express support for EPA's overall goal of reducing pollution and encourage EPA to take action on three key provisions:

- 1 Expand regular leak monitoring to cover all potentially significant emission sources, including smaller leak-prone wells;
- 2 Eliminate pollution associated with routine venting and flaring of associated gas, following the examples of Colorado and New Mexico to allow flaring only during safety-related emergencies;
- 3 Maintain strong provisions to phase out polluting pneumatics in favor of zero-emitting alternatives.

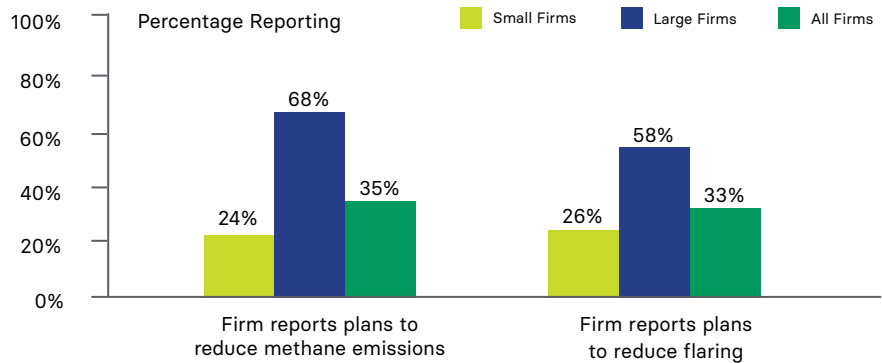
Methane Regulation is Low-Hanging Fruit on the Path to Net-Zero

Despite voluntary efforts, U.S. oil and gas methane emissions remain far too high. Federal standards can cost-effectively reduce this pollution industry wide.

The American Petroleum Institute's [Environmental Partnership](#) has been in place since 2017, with membership now including companies accounting more than a third of U.S. oil and gas production, but methane emissions in the U.S. remain sky high.



And many operators, particularly smaller firms, still have no plans to reduce methane and flaring emissions.¹



EDF estimates net compliance costs of the proposed rules would be around **\$0.10 per BOE**



EPA estimates net compliance costs would come out to a little over **\$2 per ton of CO2e abated**



EPA estimates net compliance costs would account for **0.2% of industry revenues** and **0.3% of capital expenditures**

¹ <https://www.dallasfed.org/research/surveys/des/2020/2004>.

To support effective standards to reduce pollution, companies and their investors can back three key provisions:

1. Regular monitoring of all potentially significant emission sources, including smaller wells that are currently not required to undertake regular monitoring under EPA’s proposal.



Smaller low-producing wells are estimated to contribute to **50% of U.S. production site methane emissions, but only account for 6% of U.S. oil and gas production.** EPA's proposal did not address many small but significant emissions sources, and the supplemental proposal must be strengthened to address these important pollution sources.



Many of these wells are owned by **large sophisticated operators with significant revenue streams.** Over 75% of these marginal well sites are owned by companies with more than 100 active wells.

2. Eliminating pollution associated with non-emergency routine flaring of natural gas, only allowing flaring during safety-related emergencies.



While some minimal flaring in oil and gas operations is unavoidable for safety reasons, research by Rystad Energy has found that that **flaring above 0.2% is excessive for oil and gas producers.**



However, major U.S. oil and gas producing basins such as **the Bakken in North Dakota or the West Texas Permian regularly see flaring rates of 5-7%,** despite the broad availability of cost-effective solutions.



Operators including **Apache, bp, Conoco, Diamondback, EOG, Exxon and Pioneer** have already committed to eliminating routine flaring in the US by 2025 or sooner.

3. Phasing out polluting pneumatic controllers, in favor of zero-emitting alternatives.



EPA's current proposal to address pneumatic devices would decrease methane emissions by 19 million tons by 2035, the climate equivalent of taking over **300 million cars** off the road for a year.



EQT, the largest gas producer in the U.S., has already committed to phasing out all of its polluting pneumatics over the next few years. **It estimates this will cost \$3/ton CO2e abated.**

Industry Comment Analysis

Key Takeaways

Record number of investors speak up.

From major global investors including [Legal & General](#), [PIMCO](#), [Allianz](#) and [Wellington](#) to U.S.-based oil and gas private equity firms such as [Quantum](#) and [EIG](#), a record \$9 trillion in assets under management came out in support of protective federal methane policy. That's great news. But these firms are still a fraction of the \$130 trillion in capital publicly committed to net-zero. The largest U.S. money managers including [Blackrock](#), [Vanguard](#), [State Street](#), [Fidelity](#) and [JP Morgan](#) did not submit individual comments.

Despite surface support, comments from certain trade associations attempt to undermine climate action.

Some trade groups have stated public support for methane regulation, but their EPA comments advocate to weaken the rule. The [American Petroleum Institute](#) and [American Exploration and Production Council](#) argued for weakening key provisions, while questioning the legal basis for EPA to act.

New independent producers stepped forward.

[Oxy](#) and [Devon](#) submitted clear statements of support for federal regulation, specifically touching on regular monitoring of smaller wells ([Oxy](#)) and generally supporting phasing out emitting pneumatics ([Devon](#)), setting them both ahead of their independent producer peers on these two issues; others should follow their lead.

Big names can further raise ambition.

[bp](#) and [Shell](#) — longtime industry leaders in their advocacy for federal methane policy — submitted broadly supportive comments backing the regulation generally and supporting a transition to zero-emitting pneumatics. [Exxon](#) did not weigh in on key provisions in the rules but has been supportive of EPA regulation in the past, notably through their participation in the EPA Methane Detection Technology Workshop last year. All three companies have room to strengthen comments, particularly on routine flaring and regular monitoring of smaller wells.

Many opportunities remain for strengthened comments.

[Chevron](#) and [Pioneer](#) were silent on key provisions and echoed some trade association comments aimed at weakening the rules. [Vaquero](#), [Kinder Morgan](#) and [Williams](#) did not voice clear support for the rules in their submissions, while companies including [ConocoPhillips](#), [EOG](#), [Diamondback](#), [Marathon](#), [Chesapeake](#) and [Hess](#) did not submit comments.

Opportunities for new voices to speak out

Later this year, EPA plans to publish a supplemental proposal and open the next comment period. We would encourage those stakeholders who have not yet made their voices heard to submit constructive comments in support of federal methane regulation.

Table 1: Comments from top 10 largest US onshore energy producers

Company	Comment or Statement of Support
ConocoPhillips	Statement of Support
Chevron	Comments
ExxonMobil	Comments
Oxy	Comments
EQT	Statement of Support
Southwestern Energy	None
EOG Resources	None
Chesapeake	None
Coterra Energy	None
bp	Comments

Table 2: Comments from top 10 largest owners of marginal wells

Company	Comment or Statement of Support
Diversified Energy	None
Chevron	Comments
Scout Energy Partners	None
Hilcorp	None
ExxonMobil	Comments
Oxy	Comments
Merit Energy	None
Aera Energy	None
OWS Acquisition Co.	None
United Production Partners	None
Apache Corp	None

Opportunities for new voices to speak out

EPA's recent comment period garnered support from the oil and gas industry sector. A total of 12 upstream oil and gas operators have now stated support for federal methane regulation, including seven that filed comments directly with EPA. While some companies stood out particularly for their support of key provisions in the regulations, many opportunities remain for strengthened comments in the next public comment period to come later this year.

What follows is a summary of individual company and trade group comments on the proposed rule and on its key provisions, including from major upstream and midstream oil and gas operators as well as a selection of influential trade groups. Analysis was limited to company comments submitted to EPA during the most recent public comment period, which closed on January 31st, 2022.

Key Provision	Company Support
Stated Support for Federal Methane Regulation	Seven companies stated their support of federal methane regulation in comments, including Oxy, Devon, bp, Shell, Exxon, Chevron and Pioneer .
Monitoring of Smaller Wells	Oxy and bp voiced support for extending regular monitoring to all well sites.
Eliminating Pollution from Routine Flaring	Three operators – Oxy, Devon and Exxon – expressed support for EPA's proposal to address routine flaring of associated gas. However, given the need to strengthen EPA's proposed flaring provisions, these operators now have an opportunity bolster their statements by directly supporting eliminating pollution from non-emergency routine flaring in their next round of comments.
Phasing-Out Polluting Pneumatics	Devon and bp voiced support for phasing out polluting pneumatics, though both raised concerns about the timeline and requested potential exemptions.

	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	<p>"bp supports direct federal regulation of methane emissions from the oil and gas industry across the value chain. EPA regulation of new, reconstructed, modified and existing sources of methane emissions from the onshore oil and gas production, processing, transmission, and storage segments is the right thing to do for the environment and will support consistency in robust regulation across the U.S. Such regulations can build upon cost-effective solutions that are actively being developed, demonstrated and deployed across industry today."</p>	<p>bp provides clear, vocal and unequivocal support for federal regulation of methane emissions from the oil and gas industry.</p>	<p>bp sets the bar for statements of support for federal methane regulation, other companies should follow their example.</p>
Monitoring of Smaller Wells	<p>"With modifications to the OGI follow-up provisions, bp supports extending the coverage of the advanced screening requirements to include wellsites with a potential to emit between 0 to 3 tons per year of methane, as well as wellhead only sites."</p> <p>"However, [this] is viable only if (1) EPA establishes reasonable emissions thresholds for these sites, below which the deployment of an OGI follow-up survey would not be required and (2) these sites receive the same follow-up survey exemption for intermittent leaks as described in the following section."</p>	<p>In their comments, bp appears to support extending monitoring to smaller well sites ("with a potential to emit between 0 to 3 tonnes per year of methane"), but bp's submission falls short of supporting comprehensive monitoring in two key ways:</p> <p>(1) By advocating that smaller wellsites <i>only</i> be covered with "advanced screening" technologies (e.g. planes, drones), which are considered optional in the proposal.</p> <p>(2) By advocating for exemptions for follow-up surveys after intermittent leaks are found.</p>	<p>Years of scientific research from EDF and academic partners has unequivocally shown that a layered approach utilizing a mix of monitoring technologies, including OGI which would be omitted under bp's proposal, remains the most effective system to drive significant emissions reductions from methane leaks.</p> <p>bp could strengthen its comments by clearly advocating for an approach that would pair frequent monitoring with advanced technologies, with less frequent monitoring using technology such as OGI capable of picking up smaller leaks.</p>
Eliminating Pollution from Routine Flaring	<p>"bp is pleased EPA is soliciting comment on control device efficiency and operation of flares as flaring is a significant source of methane for our sector."</p> <p>"We also support EPA exploring ways to enhance regulatory oversight through standards that incorporate assurances to reduce flaring"</p> <p>"In April 2021, bp announced our intention to eliminate routine flaring in our US onshore operations by 2025 or sooner."</p>	<p>While bp did cite its own efforts to eliminate flaring from its operations, bp provided very little specifics on its stated support for regulation to meaningfully address flaring.</p> <p>Nonetheless, bp was also one of the only companies to comment on improved flare efficiency, in particular offering detail on how they are addressing unlit and malfunctioning flares in their own operations.</p>	<p>While bp's comments on flaring are generally positive, bp should more clearly and directly support potential provisions for EPA to eliminate pollution from routine flaring. This would build on bp's advocacy in Texas for policy to address routine flaring as well as bp's own target to achieve zero routine flaring its US operations by 2025.</p> <p>Separately, bp's comments on flare efficiency were welcome given recent research from the Permian Basin that found 1 in 10 flares to be malfunctioning or entirely unlit, contributing to over 10% of basin-wide methane emissions.</p>

	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Phasing-Out Polluting Pneumatics	<p>“bp supports EPA’s goal to replace all low and intermittent bleed pneumatics with zero-emitting devices at new and existing facilities over time.”</p> <p>“bp recommends EPA design its rulemaking to [...] implement a phased approach to pneumatic controller retrofits at existing sites.”</p> <p>“Key characteristics of a well-designed phase-in program include: (1) an ambitious yet realistic time horizon to achieve 100% zero emitting devices; (2) a tiered approach that adjusts for operators that are further ahead on existing retrofits; and (3) an exemption program for the rare circumstance where, for safety reasons, an operator must continue to operate an emitting device.”</p>	<p>Along with Devon, bp was one of the few companies to express support for EPA’s efforts to eliminate pollution from gas-driven pneumatics. However, some of the language in bp’s comments may be interpreted to suggest weakening EPA’s current proposal.</p> <p>In particular, bp states that it supports a “phased-approach” to pneumatic controller retrofits on a “realistic time horizon” and with “an exception program [...] for safety reasons.” However, EPA’s proposal would already allow for a 3-year phase out.*</p> <p>Similar timelines have been proposed or passed in Colorado, California, New Mexico and Canada. Moreover, many of these jurisdictions have implemented regulations requiring the phase out of pneumatics without providing feasibility exemptions.</p> <p>*EPA’s proposal would require a 2-year phase out from the time of state plan submittal and a 3-year phase out from rule finalization.</p>	<p>bp states in its own comments that they believe they will have the ability to replace polluting pneumatic controllers at over 95% of their Permian operations by 2023.</p> <p>Other operators, including EQT, the largest natural gas producer in the country, have voluntarily committed to transitioning all of its pneumatic controllers by end of 2022, estimating this project will only cost \$3/ton CO2e. Diamondback, a Texas Permian operator, plans to transition “nearly all” of its pneumatic controllers to compressed air units over the next four years.</p> <p>Given the rapid progress bp and other companies have made and are making on replacing pneumatics, bp can help raise the bar nation-wide by more clearly advocating in favor of EPA’s current proposed pneumatics provision and timeline.</p>

	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	<p>"Chevron supports the regulation of methane for new and existing sources and is committed to working with EPA on this important topic."</p> <p>"For purposes of the administrative record, Chevron incorporates the comments from the American Petroleum Institute (API) on the proposal, which were submitted under separate cover."</p>	<p>For the first time, Chevron has expressed public support for federal methane regulations. While this is an important first step for the company, particularly following its years of silence on methane rulemakings, Chevron's submission also echoed comments from API aimed at weakening key provisions in the rule.</p>	<p>Chevron can help raise ambition by clearly distinguishing themselves from API's comments and stating where they would like to see increased ambition.</p>
Monitoring of Smaller Wells	<p>"We encourage EPA to ensure the rule text gives operators the ability to optimize both the frequency of inspections as well as the technology used during LDAR inspections based on the likelihood and size of potential leaks."</p>	<p>Chevron's comments included language asking EPA to allow operators greater flexibility in both the frequency of and technology used for leak inspections, while also falling short offering comments on the importance of addressing smaller leak-prone wells.</p>	<p>Chevron has long prided itself as a leader in operational excellence in the field and notes in its 2021 Sustainability Report that it has piloted eight advanced methane detection solutions since 2016, among other investments to reduce methane emissions.</p> <p>Comments from Chevron on such steps it is taking within its own operations to address methane emissions from smaller wellsites could help raise ambition of the rules and provide valuable information to regulators crafting the regulation.</p>
Eliminating Pollution from Routine Flaring	No comments	<p>Chevron did not comment on a key provision of EPA's proposed rules.</p>	<p>Chevron stands out on flaring as one of the only majors to have set a flaring intensity target. In 2015 Chevron was also one of the first large operators to pledge not to bring any new wells online in the Permian Basin without gas offtake capacity. Chevron can build on this leadership by supporting rules that will address flaring industry wide.</p>
Phasing-Out Polluting Pneumatics	No comments	<p>Chevron did not comment on a key provision of EPA's proposed rules.</p>	<p>Chevron can help raise ambition by commenting to EPA in support of the proposed provision to phase out polluting pneumatic devices.</p>

Devon		Comments on Regulations	
	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	"Devon supports [...] the direct federal regulation of methane for both new and existing oil and natural gas sources. [...] Devon generally supports the comments submitted by [API and AXPC]"	Devon offers clear, direct support for EPA's proposed regulations. However, Devon also supports comments submitted by API and AXPC, which both include language aimed at weakening or undermining the rules.	Given Devon's partial endorsement of comments from API and AXPC, there is an opportunity for Devon to more clearly state where their views misalign with those of their trade associations and where they would like to see increased ambition.
Monitoring of Smaller Wells	No comments	Despite Devon's efforts to address methane emissions in their own operations through regular leak monitoring (described in Devon's 2021 Sustainability Report), Devon did not comment on provisions to regularly monitor all potentially significant emission sources.	Devon can help raise ambition by commenting to EPA in support of expanded provisions to regularly monitor all potentially significant sources of emissions, including smaller wells.
Eliminating Pollution from Routine Flaring	"Devon supports the proposed standard to limit venting of associated gas from oil wells."	Devon's comments state support for EPA's proposal to address venting of associated gas, but do not state support for the rules to limit flaring.	While this statement of support is a helpful first step, Devon should clearly and directly support potential provisions for EPA to address flaring. In particular, Devon can clearly state its support for EPA action to eliminate routine venting and flaring, as Devon has committed to do in its own operations .
Phasing-Out Polluting Pneumatics	"Devon supports the phase out of gas-driven pneumatic controllers with appropriate considerations for technical feasibility...[and] encourages EPA...to [include] routing existing pneumatic controllers to a process, sales line, or to a combustion device [as a permissible non-emitting technology.]"	Devon was one of a few companies to express support for EPA's efforts to eliminate pollution from gas-driven pneumatics. However, their comments also included language asking for exemptions and for a lesser standard for existing sources that would allow operators to route to a process in lieu of installing zero-emitting devices.	Devon notes in their 2021 Sustainability Report that "we have installed air-driven pneumatic pumps and controllers at all new legacy" facilities in the Delaware basin since 2019. Using their own actions as an example, Devon can strengthen its comment by removing the suggestion that existing pneumatics be allowed to route to a process and instead support EPA's provision requiring that they be replaced by zero-emitting pneumatic devices.

	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	<p>"We have long supported the direct regulation of methane under the Clean Air Act, through reasonable, cost-effective and legally sound federal regulations that mitigate industry emissions."</p> <p>"While voluntary efforts by individual companies are important, they only capture a fraction of industry's overall emissions."</p>	Exxon states support for federal regulation of methane.	Exxon could strengthen its comments potentially by elaborating further on why it supports federal regulation of methane for the oil and gas industry, how the rules build upon cost-effective solutions available today, and/or how regulation can help raise the bar for the industry as a whole.
Monitoring of Smaller Wells	<p>"We support EPA's proposal to strengthen its current LDAR methodologies and programs and expand the scope of regulation to cover all sources not currently included (e.g., liquids unloading, pneumatic pumps and associated gas from oil wells)."</p> <p>"ExxonMobil supports EPA's proposal to focus attention and effort on the larger emitting sources, and the related proposal to establish volume-based baselines and exemptions rather than production-based exemptions."</p>	There is room for interpretation, but Exxon's submission seems to advocate in support of EPA maintaining its current proposal of only requiring regular monitoring of larger well sites, called "larger emitting sources" by Exxon, potentially leaving 50% of emissions from leaks unaddressed.	<p>Exxon's has a history of technology leadership, most recently including deployment of a range of innovative methane mitigation technologies at their Poker Lake facility in New Mexico, participating in Project Astra with University of Texas and EDF, and being the first operator to apply to EPA for the usage of LiDAR technology for leak detection and repair.</p> <p>Exxon would be well placed to extend its leadership position by advocating for regular monitoring of all potential sources of emissions, including smaller leak-prone well sites.</p>
Eliminating Pollution from Routine Flaring	"ExxonMobil supports EPA's proposals to address flaring of associated gas and to apply monitoring requirements to ensure flares are operating properly."	<p>Exxon's comments appear to support potential EPA efforts to address routine flaring, but in reality they do not constitute support for eliminating pollution from routine flaring as EPA's draft proposal does not limit flaring.</p> <p>EPA's proposal as drafted does <i>not</i> contain any meaningful limits on flaring as it effectively only addressing venting of associated gas.</p> <p>However, Exxon was one of the few companies to state support for ensuring that flares operate properly, limiting methane leakage from unlit and malfunctioning flares.</p>	While this statement of support is a helpful first step, Exxon should more clearly and directly support potential provisions for EPA to eliminate pollution from routine flaring, as they have committed to do by year-end 2022 in the Permian basin .
Phasing-Out Polluting Pneumatics	No comments	Exxon did not comment on a key provision of EPA's proposed rules.	Exxon can help raise ambition by commenting to EPA in support of the proposed provision to phase out intentionally polluting pneumatic devices.

	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	<p>"Oxy supports regulation of methane emissions from new and existing oil and gas operations."</p>	<p>Oxy offers clear, direct support for EPA's proposed regulations.</p>	<p>Oxy's stated support for federal regulation of methane emissions from the oil and gas industry is welcome, though its comments could be strengthened by elaborating further on why it supports EPA's proposal, how the rules build on cost-effective solutions available today, and/or how regulation can help raise the bar for industry as a whole.</p>
Monitoring of Smaller Wells	<p>"While, Oxy believes lower emitting facilities that have lower potential for emissions should have a reduced survey frequency compared to locations with a higher potential for fugitives, we do see value in on-going surveys at these locations and do not think a one-time survey is appropriate."</p> <p>"A proactive approach to reducing the size and potential of fugitives is more effective than increased survey frequency."</p>	<p>Oxy's comments provide clear support for on-going and regular surveys of smaller well-sites (facilities with "lower potential for emissions") as well as for "locations with a higher potential for fugitives" (i.e. a higher potential for leaks).</p>	<p>Oxy's comments place them as an industry leader on this issue, however Oxy could build on these comments by providing EPA with further detail on the frequency and type of emissions monitoring that Oxy would support at both large and small facilities.</p> <p>In particular, Oxy should give specific information on the most effective ways to reduce fugitive emissions, including proactive approaches that reduce the potential for leaks.</p>
Eliminating Pollution from Routine Flaring	<p>"Oxy supports EPA's proposal to eliminate routine venting and flaring of associated gas."</p>	<p>Oxy's comments appear to support potential EPA efforts to address routine flaring, but in reality they do not constitute support for eliminating pollution from routine flaring as EPA's draft proposal does not limit flaring.</p> <p>EPA's proposal as drafted does not contain any meaningful limits on flaring as it effectively only addressing venting of associated gas.</p>	<p>While this statement of support is a helpful first step, Oxy should more clearly and directly support potential provisions for EPA to address flaring, in particular by supporting action to eliminate pollution from routine venting and flaring.</p> <p>This would build on Oxy's stated support for flaring policy in Colorado and New Mexico as well as Oxy's existing zero-routine flaring target, which has already been achieved in parts of its operations.</p>
Phasing-Out Polluting Pneumatics	<p>No comments</p>	<p>Oxy did not comment on a key provision of EPA's proposed rules.</p>	<p>Oxy can help raise ambition by commenting to EPA in support of the proposed provision to phase out polluting pneumatic devices.</p>

Pioneer		Comments on Regulations	
	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	<p>"Pioneer has been outspoken on the company's support of reasonable federal regulation of methane and has been a leader among the independent oil and gas exploration and production companies in advocating our position"</p> <p>"A clear regulatory program would provide operators with certainty and predictability in their capital spending, strategic planning and operations."</p> <p>"Pioneer also supports the comments submitted by [AXPC] in their entirety."</p>	<p>Pioneer states support for the federal regulation of methane emissions, if not the EPA's proposed rules themselves.</p> <p>However, in its submission Pioneer also states support for comments from AXPC, which include language aimed at weakening or undermining key provisions in the rules.</p>	<p>Pioneer has historically been one of the earliest and most outspoken supporters of federal methane regulation among US independent operators. However, Pioneer's stated support for comments from AXPC undermine the potential ambition of EPA regulations and put this leadership position in jeopardy.</p>
Monitoring of Smaller Wells	<p>"Pioneer strongly urges EPA to reduce the frequency of the aerial alternative to 3 or 4 times/year, while retaining the annual OGI, as that has been demonstrated to be equivalent (or greater than equivalent) to quarterly OGI in detecting emissions."</p> <p>"Pioneer recommends that the site visit with OGI be at least 30 days from the aerial screening."</p>	<p>Among major operators who filed comments independently of their trade associations, Pioneer was unique in its request that EPA reduce the frequency of aerial leak monitoring from 6 times per year to 3 or 4 times annually.</p>	<p>EDF analysis has shown that very frequent aerial monitoring accompanied by regular OGI surveys can be achieved at reasonable cost and are necessary to meaningfully reduce emissions nationally. Aerial surveys in particular are estimated to cost only \$100-300 per site.</p> <p>In line with this research, Pioneer can help raise ambition with support for EPA's efforts to cost-effectively cover all potential sources of emissions with regular and frequent monitoring.</p>
Eliminating Pollution from Routine Flaring	No comments	Pioneer did not comment on a key provision of EPA's proposed rules.	<p>Pioneer CEO Scott Sheffield has been outspoken on the issue of flaring. In 2020 he called flaring the "black eye" of the oil field and asked investors to divest from companies that cannot reduce flaring below 2%. This year, Scott Sheffield stated that "somehow we need to rein in the privates through regulation, whether it's the EPA, state, investors, [or] bond investors."</p> <p>Pioneer has been an early leader on flaring within its own operations and recently set an "aspiration" to eliminate pollution from routine flaring by 2025. Pioneer can continue to build on this leading position by clearly stating support for EPA to take action to eliminate pollution from routine flaring.</p>
Phasing-Out Polluting Pneumatics	No comments	Pioneer did not comment on a key provision of EPA's proposed rules.	Pioneer can help raise ambition by commenting to EPA in support of the proposed provision to phase out polluting pneumatic devices.

Shell		Comments on Regulations	
	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	"Shell strongly supports EPA's efforts to regulate methane emissions from all onshore segments within the crude oil and natural gas source category, including onshore production, processing, transmission, and storage segments of the source category."	Shell offers clear, direct support for EPA's proposed regulations.	<p>Shell has also been a longtime vocal public supporter of methane regulation in the past and continues this trend with a strong, topline level of support.</p> <p>Note: Shell sold its last US onshore oil and gas production in 2021. As its assets are no longer impacted by EPA's proposed methane regulation, Shell did not engage on the specifics of the rule.</p>
Monitoring of Smaller Wells	"[EPA's] new control requirements will achieve very significant methane emissions. [...] We believe [they] generally reflect best available control measures that are generally aligned with any methane intensity target considered by the European Union."	<p>Shell is the only upstream operator without US onshore oil and gas production to comment on EPA's proposal.</p> <p>As such, Shell's comments offer broad support for EPA's rules as currently drafted and advocate that EPA should establish a Monitoring Reporting and Verification (MRV) program to evaluate methane intensity for equivalence with prospective 0.20% methane intensity import standard in the EU.</p> <p>While Shell's high-level support for the proposed rules is welcome, it is unclear as to whether EPA's rules as drafted would in fact lead a US-gas methane intensity of 0.20% – particularly without strong provisions to address flaring or smaller wells.</p>	<p>As mentioned in Shell's own comments, given the company's exposure to US LNG it is in Shell's long-term interest to ensure EPA implements rigorous standards to mitigate methane emissions from US oil and gas production.</p> <p>Shell can support this goal by providing more detailed comments that clearly, specifically and vocally support key provisions, including –</p> <ul style="list-style-type: none"> • Eliminate pollution from routine venting and flaring - as Shell has supported in Texas and committed to achieve within its own operations by 2025, ahead of other global operators; • Phasing out polluting pneumatics; • Ensuring all potentially significant sources of emissions are covered by regular monitoring.
Eliminating Pollution from Routine Flaring			
Phasing-Out Polluting Pneumatics			

	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	No comments	Vaquero did not state that it supported EPA's efforts to regulate methane emissions from the oil and gas industry.	Vaquero has an opportunity to clearly state for the first time that it supports federal regulation of methane emissions from the oil and gas industry.
Monitoring of Smaller Wells	"Vaquero Energy requests that the proposed rule provide a categorical exemption for wells and well-sites with baseline emissions less than 3 tons per year."	Vaquero is advocating to EPA to exempt well-sites that are considered – under EPA's definition – to have "baseline emissions less than 3 tons per year." Vaquero's request would further weaken EPA's current proposal, which only requires these wells to have a one-time inspection.	Vaquero can help raise ambition by commenting to EPA in support of expanded provisions to regularly monitor all potentially significant sources of emissions, including smaller wells.
Eliminating Pollution from Routine Flaring	<p>"Vaquero Energy requests that the proposed rule provide a categorical exemption from control requirements for associated gas that has a heating value below its lower flammability limit (LFL). Operators may demonstrate this exemption by maintaining records of associated gas composition and LFL."</p> <p>"Vaquero Energy maintains that US EPA should maintain [flaring as a] viable and, oftentimes, the only option available."</p>	<p>Vaquero's submission to EPA advocates for an exemption to EPA's limits on gas venting to the atmosphere, allowing operators to vent gas directly to the atmosphere in certain situations.</p> <p>Vaquero also advocates for EPA to continue to allow the use of flaring as a control option for natural gas, though without defining the situations in which it would be the "only option available."</p>	Limiting routine venting and flaring would significantly reduce these wasteful and polluting practices. Vaquero could raise ambition by clearly stating support for phasing out routine venting and flaring, only allowing flaring in cases of emergencies.
Phasing-Out Polluting Pneumatics	No comments	Vaquero did not comment on a key provision of EPA's proposed rules.	Vaquero can help raise ambition by commenting to EPA in support of the proposed provision to phase out polluting pneumatic devices.

AXPC		Comments on Regulations	
	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	<p>"AXPC companies believe collaboration amongst policy makers and industry partners is needed to find solutions that will meaningfully drive down emissions."</p>	<p>AXPC fails to provide clear stated support for EPA's proposed federal methane policy.</p>	<p>AXPC could strengthen its comments by stating clear and specific support for federal methane regulation, and EPA's proposed rules in particular.</p>
Monitoring of Smaller Wells	<p>"AXPC appreciates EPA recognizing that a wellhead only site should be subject to different fugitive emissions standards, but as written, the definition of major production and processing equipment is too broad."</p> <p>"[I]nclusion of control devices, including flares, with emissions resulting from the device operating in a manner that is not in full compliance with any federal rule, state rule, or permit as a fugitive emission is wholly inappropriate for multiple reasons."</p>	<p>In its comments AXPC is requesting carve-outs to exempt wells with polluting and failure-prone equipment from regular leak monitoring. AXPC is also requesting that flares not be subject to monitoring, even though they regularly malfunction and lead to large emission events.</p>	<p>AXPC can help raise ambition by expressing support for coverage of all potentially significant sources of methane emissions.</p>
Eliminating Pollution from Routine Flaring	<p>"Flaring should be allowed as a control option: Though there are scenarios that would not support a flare as a control option for liquids unloading venting, there are also opportunities to use flares in many cases."</p>	<p>AXPC not only does not support the elimination of pollution from routine flaring by EPA, but expressly requests that routine flaring be allowed to continue as a practice.</p>	<p>AXPC can strengthen its comments by expressing support for eliminating pollution from routine flaring in oil and gas operations.</p>
Phasing-Out Polluting Pneumatics	<p>"AXPC supports efforts to reduce emissions from pneumatic devices across our sites [...] however, we believe some clarification is needed."</p> <p>"We recommend EPA allow for the use of various technologies in order to achieve 'non-emitting' status, including the option of routing to an existing control device if it is feasible to do so."</p> <p>"At a minimum, a three-year phase-in from finalized rules and guidelines should be allowed [...] at existing locations. And for both new and existing source requirements, EPA should grant additional implementation time in light of the global supply chain challenges..."</p>	<p>Despite surface level support, AXPC is asking EPA to weaken its proposed requirements by allowing operators to route to process, and to extend the phase-out period for existing sources beyond 3 years.</p>	<p>AXPC has an opportunity to strengthen its comments by expressing support for the zero-emission technologies required by EPA's proposal and its purposed timeline, rather than the significantly less effective technologies and deadline extension.</p>

API		Comments on Regulations	
	Key Quote(s)	EDF Commentary	Opportunities to Strengthen
Stated Support for Federal Methane Regulation	<p>"API supports the cost-effective direct regulation of methane from new and existing sources across the supply chain, and directionally supports the EPA proposal to reduce VOC and methane emissions."</p> <p>"Guidance issued to state programs along with the Emission Guidelines should allow a minimum 3-year implementation period."</p>	<p>After years of fighting sensible methane regulations, API has for the first time stated some level of support for EPA's proposal to directly regulate methane emissions from the oil and gas industry.</p> <p>However, API's comments go on to outline a number of ways (highlighted below) in which the organization would like to see the implementation of the regulation weakened or delayed.</p>	<p>While API's turnaround on its support for federal methane regulation is positive, its timing comes at a point when there is no longer reasonable debate on whether the federal government should regulate methane emissions. What matters now is speed and ambition.</p> <p>API, as supported by its member organizations, can help raise ambition by going beyond a high-level endorsement of the regulation and by stating support for key provisions that will actually reduce emissions in the field. API can also support regulators by providing relevant cost data for methane emissions reduction technology as well as pragmatic solutions to support ambitious policy.</p>
Monitoring of Smaller Wells	<p>"API supports EPA's effort to improve and expand the methane emissions control program, however, the cost effectiveness threshold for methane used in the Proposal is not adequately justified."</p>	<p>API argues in its comments that EPA has underestimated the cost of its methane emissions control program outlined in its proposal. The implication of this claim is that EPA's standards are less justified in its cost-benefit analysis.</p>	<p>Rather than attempting to undermine EPA's cost-benefit analysis, API could support EPA's efforts to craft ambitious and cost-effective rules by offering broad-based, representative anonymized cost-data to EPA on methane leak monitoring technologies for smaller well-sites.</p>
Eliminating Pollution from Routine Flaring	<p>"API supports [the] elimination of venting [...] If associated gas cannot feasibly and economically be recovered to a sales line, API supports capturing the gas for a beneficial use or flaring the gas."</p> <p>"API agrees that EPA correctly characterized scenarios "when gas capture may not be feasible, such as when there is no gas gathering pipeline to tie into, the gas gathering pipeline may be at capacity, or a compressor station or gas processing plant downstream may be off-line, thus closing in the gas gathering pipeline.""</p>	<p>API states support for EPA's current proposal which would only address venting of natural gas and would not put in place meaningful limitations on flaring. API further advocates for a number of situations where operators should be exempt from prospective limits on flaring, essentially allowing companies to flare without restriction.</p>	<p>With the breadth of cost-effective flaring abatement options available to industry today, flaring represents a potentially easy, early win for companies looking to demonstrate climate progress.</p> <p>API should follow the lead of many of its members who have already committed to eliminating pollution from routine flaring within their own operations in the next few years, by supporting regulation that would achieve this goal industry wide.</p>
Phasing-Out Polluting Pneumatics	<p>"EPA should amend its proposal to allow the use of "non-emitting" instead of "zero-emitting" controllers and allow for various technologies to achieve "non-emitting" status including the option of routing certain controllers to an existing combustion device if it is technically feasible to do so."</p> <p>"There is a 3-year phase-in precedent that has been established for the oil and gas sector, [...] A more appropriate time period [...] would be 5 years from the finalized rules/guidelines."</p>	<p>API's submission is advocating that EPA broaden its definition of "zero-emitting" pneumatic controllers to "non-emitting" controllers in order to allow the use of pneumatic controllers that would still utilize natural gas to function, rather than ones that are fully electrified. Utilizing "non-emitting" natural gas powered controllers, even with emissions capture, still risks leaking methane when cost-effective "zero-emitting" solutions are available.</p> <p>API is further asking EPA to extend its implementation timeline from the phase-out of pneumatic controllers from 3 to 5 years.</p>	<p>API has an opportunity to strengthen its comments by expressing support for the phase out of the vast majority of polluting pneumatic controllers in favor of zero-emitting alternatives within the reasonable timeline proposed by EPA.</p> <p>EPA's proposed 3-year* phase-out timeline is based on regulations in Colorado and New Mexico, passed with the support from many members of industry in those states and without public pushback from API.</p> <p>*EPA's proposal would require a 2-year phase out from the time of state plan submittal and a 3 year phase out from rule finalization.</p>