

# The Inflation Reduction Act Key Provisions & FAQ (Frequently Asked Questions)

The Inflation Reduction Act (IRA) was signed into law by President Biden on August 17, 2022.

### Timing, Context, and Next Steps

#### What happens next?

- Now that the bill has become law, the federal agencies that are directed to implement the new law, such as the EPA (Environmental Protection Agency) and the Department of Interior, are required to interpret the Act, propose new rulemakings to enable implementation, take comments from the public on the rulemakings, and then publish final rules. This process typically takes 18 – 24 months.
- These rules will inform if and how affected parties (companies) must change their business practices to comply.
- In some cases, an affected party may decide to sue the government for perceived failure in the rules to implement the law. This litigation can delay the date upon which the affected parties must comply if the court enjoins enforcement of the rule pending the outcome of the litigation.
- The federal rules promulgated by agencies to implement the law might allow states to carry out some aspects of implementation under a delegation of authority. If such a delegation is available, a state may adopt the federal laws into state law. In any event, states will still have the authority to adopt more stringent environmental rules than federal standards.
- Due to the process, we will not know the answers to many implementation questions for some time.
- See details specific to each provision below.

### **Eight Specific Provisions of Interest in the IRA**

1. Federal lands - requires **royalties** be paid on methane vented, flared, or negligently released. ROYALTIES ON ALL EXTRACTED METHANE. (a) IN GENERAL — For all leases issued after the date of enactment of this Act, except as provided in subsection (b), royalties paid for gas produced from Federal land and on the outer Continental Shelf shall be assessed on all gas produced, including all gas that is consumed or lost by venting, flaring, or negligent releases through any equipment during upstream operations. (b) EXCEPTION.—Subsection (a) shall not apply with respect to— (1) gas vented or flared for



not longer than 48 hours in an emergency that poses a danger to human health, safety, or the environment; (2) gas used or consumed within the area of the lease, unit, or communities area for the benefit of the lease, unit, or communalized area; or (3) gas that is unavoidably lost.

## What's New, What's Different?

- Here is a comparison of the IRA law with the existing BLM rules.
  - The existing rule imposes royalties on gas produced and sold. The IRA imposes royalties on gas produced, including natural gas consumed or lost by venting, flaring, or negligent releases through any equipment during upstream operations.
  - The IRA law puts a 48-hour limit on the exception for gas vented or flared and restricts it to emergency situations.
  - Unlike the existing rule, the IRA also appears to leave "unavoidably lost" gas more open-ended (not subject to determination by the Supervisor).
- The Department of Interior will need to propose a new rule to accommodate these changes. We expect that rule to be proposed in September. It will then take 18 24 months to finalize.

	Existing Rule (NTL-4A)	IRA Section 50263
Subject to Royalties	Gas production (both gas well gas and oil well gas) subject to royalty shall include that which is produced and sold on a lease basis or for the benefit of a lease under the terms of an approved communitization or unitization agreement.	For all leases issued after the date of enactment of this Act, except as provided in subsection (b), royalties paid for gas produced from Federal land and on the outer Continental Shelf shall be assessed on all gas produced, including all gas that is consumed or lost by venting, flaring, or negligent releases through any equipment during upstream operations.
Exceptions	No royalty obligation shall accrue on any produced gas which (1) is used on the same lease, same communitized tract, or same unitized participating area for beneficial purposes, (2) is vented or flared with the Supervisor's prior authorization or approval during drilling, completing, or producing operations,	<ul> <li>(2) gas used or consumed within the area of the lease, unit, or communitized area for the benefit of the lease, unit, or communitized area; or</li> <li>(1) gas vented or flared for not longer than 48 hours in an emergency situation that poses a danger to human health, safety, or the environment.</li> </ul>



(3) is vented or flared pursuant to the rules, regulations, or orders of the appropriate State regulatory agency when said rules, regulations, or orders have been ratified or accepted by [the] Supervisor, or	(3) gas that is unavoidably lost.
(4) the Supervisor determines to have been otherwise unavoidably lost.	

Methane Monitoring - \$20 million in federal grants for methane mitigation and monitoring.
 (e) METHANE MONITORING — In addition to amounts otherwise available, there is appropriated to the Administrator of the Environmental Protection Agency for fiscal year 2022, out of any money in the Treasury not otherwise appropriated, \$20,000,000, to remain available until September 30, 2031, for grants and other activities authorized under subsections (a) through (c) of section 103 and section 105 of the Clean Air Act (42 USC 7403(a)-(c), 7405) for monitoring emissions of methane.

# What Is This Funding For?

 Sections 103 and 105 of the Clean Air Act provide for research and development programs to prevent and control air pollution. This funding would be available for a wide variety of purposes related to EPA's internal research, grants to other air pollution agencies (like states), air modeling, etc. See <u>https://www.law.cornell.edu/uscode/text/42/7403</u>

#### 3. Incentives for methane mitigation and monitoring

(a) INCENTIVES FOR METHANE MITIGATION AND MONITORING.—In addition to amounts otherwise available, there is appropriated to the Administrator for fiscal year 2022, out of any money in the Treasury not otherwise appropriated, \$850,000,000, to remain available until September 30, 2028—"(1) for grants, rebates, contracts, loans, and other activities of the Environmental Protection Agency for the purposes of providing financial and technical assistance to owners and operators of applicable facilities to prepare and submit greenhouse gas reports under subpart W of part 98 of title 40, Code of Federal Regulations; "(2) for grants, rebates, contracts, loans, and other activities of the Environmental Protection Agency authorized under subsections (a) through (c) of section 103 for methane emissions monitoring; "(3) for grants, rebates, contracts, loans, and other activities of the Environmental Protection Agency for the purposes of providing financial and technical assistance to reduce methane and other greenhouse gas emissions from petroleum and natural gas systems, mitigate legacy air pollution from petroleum and natural gas systems; "(B) improving and deploying industrial equipment and processes that reduce methane and other greenhouse gas emissions and waste; "(C) supporting innovation in reducing methane and other greenhouse gas emissions and waste from petroleum and natural gas



> systems; "(D) permanently shutting in and plugging wells on non-Federal land; "(E) mitigating health effects of methane and other greenhouse gas emissions, and legacy air pollution from petroleum and natural gas systems in low-income and disadvantaged communities; and "(F) supporting environmental restoration; and "(4) to cover all direct and indirect costs required to administer this section, prepare inventories, gather empirical data, and track emissions. "(b) INCENTIVES FOR METHANE MITIGATION FROM MARGINAL CONVENTIONAL WELLS —In addition to amounts otherwise available, there is appropriated to the Administrator for the fiscal year 2022, out of any money in the Treasury not otherwise appropriated, \$700,000,000, to remain available until September 30, 2028, for activities described in paragraphs (1) through (4) of subsection (a) at marginal conventional wells.

#### Who Can Apply?

- EPA will be required to interpret this section in a future rulemaking and set specific criteria. Although we do not know yet what those criteria will be, we can see in the language above that Congress intends this funding to be available to a wide variety of applicants for a wide variety of purposes.
- We do know that the provision is, in part, connected to companies that already report their greenhouse gas (GHG) emissions to EPA under Subpart W, which includes these industry segments: offshore and onshore oil/gas production, onshore natural gas processing, onshore natural gas transmission compression, underground natural gas storage, LNG (Liquefied Natural Gas) storage, LNG import and export equipment, onshore oil/gas gathering and boosting, and onshore natural gas transmission pipelines.
  - Under Subpart W, owners or operators of facilities that contain petroleum and natural gas systems and emit 25,000 metric tons or more of GHGs (greenhouse gas) per year report GHG emissions data to EPA. Owners or operators collect GHG data, calculate GHG emissions; and follow the specified procedures for quality assurance, missing data, recordkeeping, and reporting. Subpart W consists of emission sources in ten segments of the petroleum and natural gas industry. <u>https://www.epa.gov/ghgreporting/subpart-w-petroleum-and-naturalgas-systems</u>

#### What Technologies Will Qualify?

- The law does not limit which technologies can take advantage of the funding. However, we do not know how EPA will interpret and implement this section in future rulemaking.
- We believe various technologies should be eligible, including those with low detection limits and high frequency of detection.

#### When Might We Know?

• We know that EPA will be required to set criteria and specific rules for how this money is distributed and that this rulemaking process can take around 18 - 24 months.

#### 4. Waste Emissions Charge or the "Methane Fee"

(c) WASTE EMISSIONS CHARGE —The Administrator shall impose and collect a charge on methane emissions that exceed an applicable waste emissions threshold under subsection (f) from an owner or



> operator of an applicable facility that reports more than 25,000 metric tons 3 of carbon dioxide equivalent of greenhouse gases emitted per year pursuant to subpart W of part 98 of title 40, 5 Code of Federal Regulations, regardless of the reporting threshold under that subpart. "(d) APPLICABLE FACILITY —For purposes of this section, the term 'applicable facility' means a facility within the following industry segments, as defined in subpart 10 W of part 98 of title 40, Code of Federal Regulations: "(1) Offshore petroleum and natural gas production. "(2) Onshore petroleum and natural gas production. "(3) Onshore natural gas processing. "(4) Onshore natural gas transmission compression. '(5) Underground natural gas storage. "(6) Liquefied natural gas storage. "(7) Liquefied natural gas import and export equipment. "(8) Onshore petroleum and natural gas gathering and boosting. "(9) Onshore natural gas transmission pipeline.

> "(e) CHARGE AMOUNT —The amount of a charge under subsection (c) for an applicable facility shall be equal to the product obtained by multiplying— "(1) the number of metric tons of methane emissions reported pursuant to subpart W of part 98 of title 40, Code of Federal Regulations, for the applicable facility that exceed the applicable annual waste emissions threshold listed in subsection (f) during the previous reporting period; and "(2)(A) \$900 for emissions reported for calendar year 2024; "(B) \$1,200 for emissions reported for calendar year 2025; or "(C) \$1,500 for emissions reported for calendar year 2026 and each year thereafter.

	Subpart W Segment	Waste Emissions Threshold	
	(Section 136(d))	(Section 136(f))	
1	Offshore petroleum and natural gas	0.20 percent of natural gas sent to sale from the	
	production	facility; or, if no gas was sent to sale, 10 mt of	
		CH <sub>4</sub> /million barrels of oil sent to sale from the	
		facility	
2	Onshore petroleum and natural gas	0.20 percent of natural gas sent to sale from the	
	production	facility; or, if no gas was sent to sale, 10 mt of	
		CH <sub>4</sub> /million barrels of oil sent to sale from the	
		facility	
3	Onshore natural gas processing	0.05 percent of natural gas sent to sale from the	
		facility	
4	Onshore natural gas transmission	0.11 percent of natural gas sent to sale from the	
	compression	facility	
5	Underground natural gas storage	0.11 percent of natural gas sent to sale from the	
		facility	
6	Liquefied natural gas storage	0.05 percent of natural gas sent to sale from the	
		facility	

#### The Section Sets These Segment Waste Emission Thresholds:



7	Liquefied natural gas import and export	0.05 percent of natural gas sent to sale from the
	equipment	facility
8	Onshore petroleum and natural gas	0.05 percent of natural gas sent to sale from the
	gathering and boosting	facility
9	Onshore natural gas transmission	0.11 percent of natural gas sent to sale from the
	pipelines.	facility

#### What Are the Implications of These Thresholds?

- We do not know yet. Many parts of this program will require rulemaking by EPA, so, some details will not be known until we have a final rule.
- In comments on Twitter on July 27, 2022, University of Texas researcher Arvind Ravikumar (@arvindpawan1) asserts that these thresholds are low enough that even quarterly aerial surveys may not be sufficient. He asserts that getting to 0.2% within a 10% error band likely requires "quasicontinuous" monitoring.
- Ravikumar also asserts that \$900 per ton in 2024 equates to ~\$17/mcf of gas, which is roughly twice the current Henry Hub price. \$1,500 equates to ~\$29/mcf of gas. He also states that this amount will drive significant switching of gas engines to electric drive motors.

#### When Will EPA Start Imposing This Fee?

• The provision requires the EPA to impose the fee starting in 2025 on the basis of2024 emissions reported in the Subpart W program. This means that EPA must propose a rulemaking with the specific requirements for the fee and have it finalized in time to analyze 2024 emissions. Depending on how fast EPA can get a rule finalized, this could be in place any time through that year.

#### EPA Will Allow For "Netting"? What Does That Mean?

"(4) COMMON OWNERSHIP OR CONTROL — In calculating the total emissions charge obligation for facilities under common ownership or control, the Administrator shall allow for the netting of emissions by reducing the total obligation to account for facility emissions levels that are below the applicable thresholds within and across all applicable segments identified in subsection (d).

- This means that when EPA defines "facility" with specificity in a final rulemaking, a facility owner will
  essentially be able to put a 'bubble' over the whole facility or, depending on EPA's final rule, a group of
  their facilities, and average the total emissions under that bubble that are subject to the fee. This is
  common in parts of the Clean Air Act where complex facilities have many emission sources. So, this
  allows a facility owner to over-control one part of the facility emission sources, or groups of facilities,
  to make up for sources in the bubble that are over the waste emission threshold. This can net out
  overall as under the waste emission threshold and could be a cost-effective approach for a facility
  owner because the owner can choose the most efficient way to use their capital.
- There are also some other issues that EPA will need to sort out. For example, it is unclear whether the agency will allow a company to use netting only if it nets across all the applicable facilities it



owns, thereby preventing a company from using a few strong performers to offset high emitters. In addition, it is unclear whether EPA would allow netting between applicable facilities in different Subpart W segments.

#### 5. Exemptions to the Methane Fee

'(5) EXEMPTION — Charges shall not be imposed pursuant to paragraph (1) on emissions that exceed the waste emissions threshold specified in such paragraph if such emissions are caused by unreasonable delay, as determined by the Administrator, in environmental permitting of gathering or transmission infrastructure necessary for offtake of increased volume as a result of methane emissions mitigation implementation.

"(6) EXEMPTION FOR REGULATORY COMPLIANCE.—"(A) IN GENERAL.—Charges shall not be imposed pursuant to subsection (c) on an applicable facility that is subject to and in compliance with methane emissions requirements pursuant to subsections (b) and (d) of section 111 upon a determination by the Administrator that— "(i) methane emissions standards and plans pursuant to subsections (b), and (d) of section 111 have been approved and are in effect in all States with respect to the applicable facilities; and "(ii) compliance with the requirements described in clause (i) will result in equivalent or greater emissions reductions as would be achieved by the proposed rule of the Administrator entitled 'Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review' (86 Fed. Reg. 63110 (November 15, 2021), if such rule had been finalized and implemented. "(B) RESUMPTION OF CHARGE — If the conditions in clause (i) or (ii) of subparagraph (A) cease to apply after the Administrator has made the determination in that subparagraph, the applicable facility will again be subject to the charge under subsection (c) beginning in the first calendar year in which the conditions in either clause (i) or (ii) of that subparagraph are no longer met.

#### There Are Two Exemptions to the Fee – What Do They Do?

- The first one applies if a facility's emissions reduction plan is "unreasonably" delayed by federal, state, or local permitting issues. This could apply, for example, where a well has started producing, but permits have not been issued for gathering lines, thereby forcing the well operator to flare or vent significant volumes.
- The second exemption applies to Subpart W facilities if they are in compliance with EPA Clean Air Act Section 111 regulations governing methane mitigation—for which a rulemaking is now underway. This exemption is dependent on three things: 1) that the Section 111 rules and corresponding state rules are at least as stringent as the Biden Administration's draft proposed Section 111 rule, which was released in November 2021 (but has not yet been finalized); 2) that the EPA Section 111 rules are in effect for *all states* in which there are facilities subject to the rules, and 3) that the applicable facility seeking the exemption is in compliance with the relevant EPA rule. If a future Administration finalizes less stringent rules than the November 2021 proposal, the methane fee goes back into effect. This exemption is designed to ensure that a future Administration will not put in place new rules that are less stringent than the Biden rules.



• Under Section 111 of the Clean Air Act, regulation of existing facilities is implemented through a federal-state process. In this process, EPA sets guidelines for states, and the states submit compliance plans for EPA approval. This process can take anywhere from 12 months to 3 years. Given this structure, if EPA finalizes its Section 111 methane regulations (and the guidelines for states) by sometime in 2023, there will be a need for expedited action by states and the EPA to ensure that the exemption is available in 2025 to cover 2024 emissions. Therefore, the exemption provision in the IRA creates an incentive for owners of applicable facilities to become advocates for expedited action by the states and EPA to get the Section 111 legal regime in place. Otherwise, they will be subject to the fee while waiting for the Section 111 regulations to go into effect.

#### To Whom Does the Regulatory Compliance Exemption Apply?

• The exemption only applies to applicable facilities *subject to* and in compliance with the ultimate Biden Administration regulations. However, these proposed rules do not cover all the Subpart W industry segments covered by the bill. For example, the proposal does not cover any offshore production facilities or LNG facilities. Therefore, those facilities presumably would remain subject to the bill's Waste Emissions Fee.

#### How Will We Know If the Final Section 111 Rule Is as Stringent as the November 2021 Proposal?

 As noted above, one of the conditions for the Regulatory Compliance exemption is that the final Section 111 rule must achieve equal or greater emission reductions than the version proposed in November 2021. It is unclear how EPA will make this determination. Notably, the Biden Administration's November Section 111 proposed rules do not set limits on methane intensity. Instead, as proposed, they will primarily impose leak detection and repair requirements. Therefore, it is unclear how EPA will determine if its final Section 111 rules or any future Section 111 rules will achieve equal or greater emission reductions than the November proposed rule. EPA will have to sort this out in their upcoming methane fee rulemaking. EPA might address the interaction between its Section 111 regulations and the methane fee in a supplemental proposed rulemaking for the Section 111 regulations expected this Fall.

#### 6. Revisions to Subpart W reporting to reflect total methane emissions through empirical data

REPORTING — Not later than two years after the date of enactment of this section, and as necessary after that, the Administrator shall revise the requirements of subpart W of part 98 of title 40, Code of Federal Regulations, to ensure the reporting under such subpart. Calculation of charges under subsections (e) and (f) of this section are based on empirical data, including data collected pursuant to subsection (a)(4), accurately reflect the total methane emissions and waste emissions from the applicable facilities, and allow owners and operators of applicable facilities to submit empirical emissions data, in a manner to be prescribed by the Administrator, to demonstrate the extent to which a charge under subsection (c) is owed.

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# Does This Section Imply That the Bill Is Directing EPA to Shift from Estimated Emissions Factors to Different or Higher Quality Data?

- It is unclear. The bill establishes that the emission mechanism for reporting is Subpart W. Currently, Subpart W relies heavily on emission factors rather than reporting actual emissions. The bill addresses this issue by requiring that the EPA, not later than two years after enactment (by the Fall of 2024), revise the requirements of Subpart W to ensure that emissions reporting and calculation of charges are "based on empirical data" that "accurately" reflect emissions.
- We believe this provision would require EPA to move to direct emissions reporting in the next two years due to the bill requirement that the data be accurate and empirical instead of relying on emission factors. Still, we will need to see how EPA interprets and implements this in new rules. Again, this can take from 18-24 months.
- In the November 2021 proposed Section 111 rules, EPA did not propose to require continuous emission monitoring. Instead, it proposed to require quarterly OGI (Optical Gas Imaging) monitoring while allowing owners of covered facilities to propose alternative emissions monitoring approaches that would be at least as effective. EPA emphasized in this proposed rule that they are offering to give owners/operators the flexibility to use advanced methane detection technologies for leak surveys at well sites and compressor stations. Any technology that meets a rigorous minimum detection threshold would be allowed. EPA is seeking comment and information on this approach, including whether this advanced technology pathway is the "best system of emission reduction" and should be required for leak surveys at well sites and compressor stations. The EPA also is seeking comments on how continuous monitoring technology could be used for leak surveys. Importantly, these rules were not aimed at quantifying fugitive emissions, which will not be required under the IRA. Continuous emissions monitoring is a technology that helps detect leaks. We believe it is essential for accurately quantifying them.
- Note that EPA has already commenced rulemaking to update the requirements of the GHG Reporting Program, including Subpart W. The proposal is available here <u>https://www.govinfo.gov/content/pkg/FR-2022-06-21/pdf/2022-09660.pdf</u>.

#### What Is the Range of Outcomes for Measurement and Empirical Data?

- As there is no current definition of "empirical data" in the IRA or the underlying laws, the EPA will have to define the term through the rulemaking process. EPA will propose a definition, and the public will have an opportunity to comment.
- We believe that the best way to achieve the principle goal of the bill, which is to reduce emissions, is to include direct monitoring as the ideal option to ensure maximum compliance with the law while recognizing that each asset must be evaluated to determine the best available technology.



# Will Monitoring Technology Have To Be Approved For Use? Will Project Canary Have to Get Its Technologies Approved by the EPA?

- We do not know yet because we will need to see how EPA addresses this issue in the new proposed rules.
- Due to its own restrictive rules on acceptance of alternative means of emission limitation currently, EPA has only approved two methods for natural gas leak detection, neither of which are quantitative [40 CFR 60 Appendix A-7 Method 21; 73 Fed Reg 78199-78219]. The current GHG reporting system relies on companies providing data based on emissions factors and equipment counts.
- We expect that EPA will update the approved methods in their upcoming rulemakings, and all new technologies will need to be approved by EPA, including Project Canary's technologies.

#### Does Project Canary Think Operators Will Be Able to Mix Technologies?

- We do not know yet because we will need to see how EPA addresses this issue in the new proposed rules.
- Project Canary supports a "digital canopy" approach which would promote the creation of a more comprehensive and granular range of technologies measuring from the bottom up and the top down to better understand and quantify emissions.

#### **Does Project Canary Have Advice for Customers?**

• Continuous monitoring will provide the highest measured data level for operators to comply with the law and regulations. Actual measurements will assure operators that their reporting is accurate and limit opportunities for challenges from the government, non-governmental entities, and other stakeholders. Furthermore, continuous monitoring helps achieve the IRA's key goals: to reduce emissions, properly account for them, and ensure proper payments for the methane fee. It also is a harmonizing factor that enables robust reporting, regulatory compliance, and risk management.

#### Will There Be an External Verification of Data Requirement?

- The Act does not address this. We do not know if EPA will take this approach in their new rulemaking.
- We think it would be a logical outcome considering the enormous amount of data that will need to be
  produced and processed for both the methane fee and for EPA's forthcoming methane rules. Also,
  states will face a similar administrative burden. We believe that actual measurements will assure
  operators that their reporting is accurate and limit opportunities for challenges from the government,
  non-governmental entities, and other stakeholders.
- This is not an uncommon approach for agencies, including the EPA. EPA regularly uses accredited third-party entities to expand its coverage of widely dispersed facilities and/or to provide specific technical expertise. Such as:
  - EPA relies on authorized contractors to conduct inspections and other compliance monitoring activities. *See https://www.epa.gov/compliance/what-epa-inspector-credential*.
  - EPA and the Department of Energy certify third parties to determine whether products meet Energy STAR standards. *See* <u>https://www.energystar.gov/partner\_resources/products\_partner\_resources/third\_party\_cert.</u>



- EPA has established a program for third-party certifiers under the formaldehyde emission standards for the Composite Wood Products rule under the Toxic Substances Control Act. *See* https://www.epa.gov/formaldehyde/recognized-third-party-certifiers-under-formaldehyde-emission-standards-composite-wood.
- The California Air Resources Board Mandatory Reporting of Greenhouse Gas Emissions program requires the verification of greenhouse gas (GHG) emissions data reports by CARB-accredited independent third parties. See <a href="https://ww2.arb.ca.gov/verification">https://ww2.arb.ca.gov/verification</a>.
- This is also regularly used in other venues, such as organized electric markets.
- Monitoring Analytics was established in 2008 as the fully independent external market monitor for PJM Interconnection by the Market Monitoring Unit of PJM. PJM Interconnection, a regional transmission organization, ensures the reliability of the electric power supply system in 13 states and the District of Columbia. See

https://www.monitoringanalytics.com/home/index.shtml.

#### 7. Greenhouse Gas Corporate Reporting

(a) IN GENRAL —In addition to amounts otherwise available, there is appropriated to the Administrator of the Environmental Protection Agency for the fiscal year 2022, out of any money in the Treasury not otherwise appropriated, \$5,000,000, to remain available until September 30, 2031, for the Environmental Protection Agency to support — (1) enhanced standardization and transparency of corporate climate action commitments and plans to reduce greenhouse gas emissions; (2) enhanced transparency regarding progress toward meeting such commitments and implementing such plans; and (3) progress toward meeting such commitments gue plans.

#### How Will These Funds Be Spent?

- This funding will allow the EPA to improve its GHG reporting and Subpart W operations. Importantly, this funding is directed towards standardizing voluntary corporate commitments, which could provide a better understanding and acknowledgment of voluntary activities.
- We do not know how they will use the funding. The agency will not be required to go through rulemaking to set criteria for applicants.

#### 8. Extension of 45Q Carbon Capture and Sequestration (CCS) Tax Credit

SEC (Securities and Exchange Commission) (Securities and Exchange Commission). 13104. EXTENSION AND MODIFICATION OF CREDIT FOR CARBON OXIDE SEQUESTRATION Increases the value of the 45Q tax credit for carbon oxide geological sequestration to \$85 per ton (up from the current \$50 per ton), among other changes, among other changes.

#### Is Project Canary Involved in CCS?

- We believe CCS is essential in decarbonizing the energy supply chain, and Project Canary is actively exploring how to assist operators in measuring and verifying emission capture at CCS facilities.
- This section makes several changes:



- Any carbon capture, direct air capture, or carbon utilization project beginning construction before January 1, 2033, will qualify for the federal 45Q tax credit.
- Project developers will have the option to access direct pay for the full value of the tax credit for the first five years of a project once the carbon capture equipment has been placed in service, with the option for direct pay entirely phasing out for the remaining seven years of the credit. Nonprofit organizations, cooperatives, and municipal utilities, however, have the option of direct pay for the full 12 years of the lifetime of the credit.
- Credit values to accelerate project deployment and emissions reductions in key sectors are increased

   the value of the 45Q tax credit for industrial facilities and power plants that capture their carbon
   emissions is increased to \$85 per metric ton for CO2 stored in secure geologic formations, \$60 per
   ton for the beneficial utilization of captured carbon emissions and \$60 per ton for CO2 stored in oil
   and gas fields.
- Credit values for direct air capture technologies are also increased to \$180 per metric ton for those projects seeking to securely store captured CO2 in secure geologic formations, \$130 per ton for carbon utilization, and \$130 per metric ton for CO2 stored in oil and gas fields.
- Project eligibility is expanded for industry, electric power, and direct air capture projects by lowering the annual CO2 capture thresholds for the 45Q program. This change will dramatically expand access to the incentive for a broader range of carbon management technologies and applications, spurring further innovation and emissions reductions across multiple industries.
- CCS advocates are saying that this legislation, coupled with the carbon management provisions included in the bipartisan infrastructure law last year, could deliver an estimated 13-fold increase in the deployment of carbon management technologies and between 210 and 250 million metric tons of annual emissions reductions by 2035.

If you have further questions, please reach out: info@projectcanary.com