



METHANE
GUIDING
PRINCIPLES

Methane Guiding Principles Supporting Organisation Reporting

Environmental Defense Fund

January 15th 2021





COMPANY: **Environmental Defense Fund**

DATE: **January 15th 2021**

YEAR OF JOINING METHANE GUIDING PRINCIPLES: **2017**

SENIOR REPRESENTATIVE: **Mark Brownstein, Senior Vice President, Energy**



Principle One:
Continually reduce methane emissions

2020 completed activity	2021 intended activity
<p>Supporting Industry Action on NOJVs. In June 2020, bp and EDF convened a workshop on non-operated joint venture (NOJV) assets in order to identify potential opportunities to expand the coverage of methane efforts and commitments. A core working group including Total and Chevron joined with bp and EDF to conduct outreach and workshops in order to develop an NOJV workplan for 2021.</p>	<p>Initiative sponsor of the “Shaping Future Deal Terms” NOJV initiative. This initiative seeks to translate the Methane Guiding Principles into standardized deal terms on emissions and to apply these terms to live and future JV deals.</p>

Principle Two:
Advance strong performance across the gas supply chain

2020 completed activity	2021 intended activity
<p>Engaging with private equity firms, and with small and mid-cap oil and gas companies within their portfolio. We engaged with private equity firms including Quantum, EIG, helping them understand why and how to ask for methane data from their oil and gas portfolio. EDF held a private equity solutions summit for Quantum and EIG’s portfolio companies on why they must start addressing methane urgently, and practical ways to begin their methane management journey.</p> <p>Establishing advanced technologies in the utility sector. EDF’s work with utilities across the U.S., including National Grid, Public Service Electric and Gas Company, and Washington Gas Light Company, and with collaborators at Colorado State University has helped support the development of advanced methane leak detection technology and Advanced Leak Detection technology and data analytics (ALD+) as a scientifically and commercially established technology for the utility sector.</p>	<p>Continue engagement on methane with small independent producers in the U.S. Hold second methane solutions summit for small cap upstream and midstream operators. Continue to engage small U.S. independents on shifting from emission factor-based approaches, to direct measurement methodologies</p> <p>In 2021, EDF will leverage recent state endorsements of ALD+ and advocate for additional utilities to incorporate ALD+ into their operations.</p>



Principle Three: Improve accuracy of methane emissions data

2020 completed activity	2021 intended activity
<p>Project Astra - Continuous detection mesh network pilot. Entered Memorandum Of Understanding with the University of Texas, Pioneer Natural Resources, ExxonMobil and Chevron for “Project Astra,” a proof of concept for a shared mesh network of sensors that could reduce cost and increase speed of detection.</p> <p>Pathway to equivalence project. Along with bp, working worked on a research initiative led by Colorado State University that will improve the pathways to regulatory acceptance for emerging methane detection technology.</p> <p>High Frequency Monitoring (HFM) standard. With bp and The National Physical Laboratory in the UK started work to define a standard for HFM required to provide adequate site level coverage and assure that no event of significant impact upon total reported methane can go unaccounted.</p> <p>PermianMAP project. EDF designed and deployed a robust data collection program, of aerial, ground and tower-based measurements, creating a monitoring system covering 10,000 sq. km of the Delaware sub basin, tracking the emissions of more than 150 operators and nearly 11,000 wells.</p> <p>OGMP 2.0. The new gold standard reporting framework will improve the reporting accuracy and transparency of methane emissions from the oil and gas sector. This initiative was led by UNEP, the European Commission, and EDF.</p> <p>Making progress on MethaneSAT. EDF affiliate MethaneSAT, LLC has made significant progress and successfully completed a critical design review milestone in early June. We have secured the New Zealand Ministry of Business, Innovation, and Employment to build and host the mission operation center for the satellite, and are on track for a launch in the latter half of 2022.</p>	<p>Project Astra: Participate in the building of the digital twin and launch the full-scale pilot by the end of 2021.</p> <p>Conclude development phase of the Pathway to Equivalence project.</p> <p>Complete phase 2 of High Frequency Monitoring (HFM) standard with bp and NPL.</p> <p>Execute PermianMAP year 2 science studies and publish data.</p> <p>Continue to support OGMP 2.0 activities, including EDF participation in Reporting, Technical Guidance Documents, and Uncertainty task forces, as well as representation on the steering committee.</p> <p>EDF and partners develop data sets on global methane emissions derived from the international studies for use in validating MethaneSAT data when it comes online.</p>



Principle Four:

Advocate sound policy and regulations on methane emissions

2020 completed activity	2021 intended activity
<p>Supporting European Union (EU) Methane Policy Advocacy. Engaged EU policy makers stating methane policy recommendations including advocating for a robust Measurement, Reporting and Verification standard, a legislative proposal on Leak Detection And Repair and a gas performance standard.</p> <p>Alongside other Methane Guiding Principles (MGP) signatories, participated in the EU Policy core working group to support timely EU legislation that achieves ambitious methane emissions reduction outcomes across the supply chain of natural gas sold and used in the EU.</p> <p>Defending the EPA Rule Against Rollbacks. In 2020, EDF worked to defend the Environmental Protection Agency’s (EPA) rule limiting emissions from new and modified sources. EDF filed legal and technical comments strongly opposing the EPA’s proposed rollbacks, released an online mapping tool on the impacts of the rollbacks, and filed a legal challenge with partners to the EPA’s rollbacks.</p> <p>Opposing the Repeal of the BLM Waste Prevention Rule. EDF and partners successfully challenged in court the Trump administration’s decision to rescind the Bureau of Land Management (BLM) rule aimed at reducing natural gas waste on public and tribal lands and is appealing a lower court decision that vacated the rule. Supporting U.S. state-level methane policy. EDF supported progress on state-level methane policy, including: in Colorado, rules to increase the frequency of leak inspections and high-frequency monitoring during pre-production phases; in Pennsylvania finalized methane controls for new and modified sources, and a final rule on existing sources is expected in summer 2021; and in New Mexico methane rules to be enacted in 2021.</p>	<p>In 2021, EDF will advocate for the Biden administration to swiftly take administrative action to reinstate methane regulation, strengthen EPA’s rules for new facilities and expand standards to existing sources as well as to restore and strengthen BLM’s Waste Prevention Rule. EDF’s advocacy will include opportunities to leverage technology innovation to encourage a comprehensive and robust emissions mitigation framework for industry.</p> <p>Continued engagement with the EU Commission and participation with MGP members in EU Policy core working group to support EU legislation that achieves ambitious methane emissions reductions.</p> <p>Multilaterally, work with the UK as COP26 host, to elevate reduction of oil and gas methane emissions at COP 26, scheduled to be held in Glasgow in fall of 2021.</p> <p>Work with the UN Environment Program (UNEP) to secure commitments by major oil and gas producing and consuming countries to join the Global Methane Alliance .</p> <p>Work with the UNEP to establish an independent international body for improving the quality of national and corporate reporting of methane emissions and to serve as clearinghouse for international studies and data.</p>

Principle Five:
Increase transparency

Historical completed activity	2021 intended activity
<p>PermianMAP data release. In April 2020, we released the first round of data, which included an estimate of regional emissions. Our science team found an approximately 3.5% loss rate for upstream activities in our study area. Subsequent data releases have been disclosed through the PermianMAP.org microsite and data platform.</p> <p>Methane Science Studies. During 2020 EDF worked with international research partners to publish six papers on peer-reviewed scientific journals:</p> <ul style="list-style-type: none"> • Two papers on offshore emissions in the U.S. Gulf of Mexico. • One paper on offshore emissions in the North Sea. • Two papers on local distribution emissions one for the cities of Hamburg, Germany and Utrecht, Netherlands, and one for emissions in Toronto, Canada. • One paper on offshore/onshore emissions in Mexico. 	<p>Execute PermianMAP year 2 science studies and publish data.</p> <p>EDF and partners complete measurements for the third tranche of Climate and Clean Air Coalition international methane studies.</p>

Commentary:

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