

Subject: EARSC Position to the EU Regulation on methane emissions reduction in the energy sector and amending Regulation (EU) 2019/942

The European Commission is demonstrating unprecedented leadership with the Green Deal flagship to tackle climate change and will require an abundance of resources, including viable data and services which will allow decision-makers to identify risks, tailor policy response and resource allocation, monitor progress and identify trends.

Focused on Innovation, the **European Association of Remote Sensing Companies (EARSC)**, a trade organization representing more than 135 company members from all over Europe, represents the Earth Observation (EO) services industry and very much welcomes the efforts of the European Commission in reducing methane emissions in the oil, gas and coal sectors and fully supports the initiative to submit legislation on Measurement, Reporting and Verification (MRV) and Leak Detection and Repair (LDAR), therefore increasing the understanding of where and how emissions occur in the energy sector.

In December 2021, EARSC launched the « **Green Deal Working Group** » gathering the Earth Observation services industry, with the objective to advocate for the use of EO-based solutions to achieve the European Union's ambitious climate objectives.

Thanks to unprecedented technological innovations and continuous monitoring of our planet, Earth observation information, such as data coming from the European flagship programme [Copernicus](#) complemented with higher spatial, temporal and spectral resolution and a variety of services are required to monitor in detail and across decades to better protect the planet.

In the context of the **Methane emissions reduction in the energy sector Regulation**, Earth Observation data and added-value services provide capabilities for the measurement of progress and the assurance of data while providing a foundational tool to ensure the sustainable transition is data-driven and evidence-based allowing for better estimates of emissions and mitigation providing an enhanced understanding for monitoring methane emissions in any country/location across the globe.

Therefore, EARSC believes that the proposal for a legislative act to reduce methane emissions in the oil, gas and coal sectors should provide a framework in which assets owners and EO operators are free to translate methane monitoring concentrations in parts per million into parts per billion column concentrations reported by satellite- based monitoring technologies.

With our contribution to the amendments (in Annex of this letter), EARSC wants to highlight the importance of including satellite-based data and services for the measurement, reporting and verification of energy sector methane emissions.

Marc TONDRIAUX
Chairman of EARSC.




Annex: Suggested changes in the Regulation’s amendments

Regulation Proposal	Suggested changes
<p><i>Article 2- Definitions</i> (13) ‘direct measurement’ means direct quantification of the methane emission at source-level with a methane measuring device;</p>	<p><i>Article 2- Definitions</i> (13) ‘direct measurement’ means direct quantification of the methane emission at source-level with a ground, water, air or space based methane measuring device;</p>
<p><i>Article 2- Definitions</i> (15) ‘site-level measurement’ means a top-down measurement and typically involves the use of sensors mounted on a mobile platform, such as vehicles, drones, aircrafts, boats and satellites or other means to capture a complete overview of emissions across an entire site;</p>	<p><i>Article 2- Definitions</i> (15) ‘site-level measurement’ means a top-down measurement and typically involves the use of sensors mounted on a mobile platform, such as vehicles, drones, aircrafts, boats and satellites or other means to capture a complete overview of emissions across an entire site, or gas network.</p>
<p><i>Article:8- Verification activities and verification statement</i></p> <p>2. In carrying out the verification activities referred to in paragraph 1, verifiers shall use free and publicly available European or international standards for methane emissions quantification as made applicable by the Commission in accordance with paragraph 5. Until such date where the applicability of those standards is determined by the Commission, verifiers shall use existing European or international standards for quantification and verification of greenhouse gas emissions.</p>	<p><i>Article: 8 - Verification activities and verification statement</i></p> <p>2. In carrying out the verification activities referred to in paragraph 1, verifiers shall use free and publicly available European or international standards for methane emissions quantification as made applicable by the Commission in accordance with paragraph 5. Until such date where the applicability of those standards is determined by the Commission, verifiers shall use existing European or international standards, or methane emissions quantification data provided by methane emission monitoring service providers, for quantification and verification of greenhouse gas emissions.</p>
<p><i>Article 12 - Monitoring and reporting</i></p> <p>3. By ... [36 months from the date of entry into force of this Regulation] and by 30 March every year thereafter, operators shall submit a report to the competent authorities containing direct measurements of source-level methane emissions for operated assets referred to in paragraph 2, complemented by measurements of site-level methane emissions, thereby allowing assessment and verification of the source-level estimates aggregated by site.</p>	<p><i>Article 12 - Monitoring and reporting</i></p> <p>3. By ... [36 months from the date of entry into force of this Regulation] and by 30 March every year thereafter, operators shall submit a report to the competent authorities containing direct measurements of source-level methane emissions for operated assets referred to in paragraph 2, complemented by measurements of site or gas network level methane emissions, thereby allowing assessment and verification of the source-level estimates aggregated by site or gas network.</p>

<p>5. By ... [48 months from the date of entry into force of this Regulation] and by 30 March every year thereafter, undertakings established in the Union shall submit a report to the competent authorities containing direct measurements of source-level methane emissions for non-operated assets as set out in paragraph 4, complemented by measurements of site-level methane emissions, thereby allowing assessment and verification of the source-level estimates aggregated by site.</p> <p>7. For site-level measurements referred to in paragraphs 3 and 5, appropriate quantification technologies shall be used which can provide such measurements.</p> <p>8. In the case of significant discrepancies between the emissions quantified using source-level methods and those resulting from site-level measurement, additional measurements shall be carried out within the same reporting period.</p>	<p>5. By ... [48 months from the date of entry into force of this Regulation] and by 30 March every year thereafter, undertakings established in the Union shall submit a report to the competent authorities containing direct measurements of source-level methane emissions for non-operated assets as set out in paragraph 4, complemented by measurements of site or gas network-level methane emissions, thereby allowing assessment and verification of the source-level estimates aggregated by site or gas network.</p> <p>7. For site-level or gas network level measurements referred to in paragraphs 3 and 5, appropriate quantification technologies shall be used which can provide such measurements.</p> <p>8. In the case of significant discrepancies between the emissions quantified using source-level methods and those resulting from site-level or gas network level measurement, additional measurements shall be carried out within the same reporting period.</p>
<p><i>Article: 14 - Leak detection and repair</i></p> <p>3. In carrying out the surveys, operators shall use devices that allow detection of loss of methane from components of 500 parts per million or more.</p> <p>4. Operators shall repair or replace all components found to be emitting 500 parts per million or more of methane.</p> <p>5. Notwithstanding paragraph 2, operators shall survey components that were found to be emitting 500 parts per million or more of methane during any of the previous surveys as soon as possible after the repair carried out pursuant to paragraph 4, and no later than 15 days thereafter to ensure that the repair was successful.</p> <p>Notwithstanding paragraph 2, operators shall survey components that were found to be emitting below 500 parts per million of</p>	<p><i>Article: 14 - Leak detection and repair</i></p> <p>3. In carrying out the surveys, operators shall use devices that allow detection of loss of methane from components of 500 parts per million or more or an equivalent measured in parts per billion column concentrations.</p> <p>4. Operators shall repair or replace all components found to be emitting 500 parts per million or more of methane or an equivalent measured in parts per billion column concentrations.</p> <p>5. Notwithstanding paragraph 2, operators shall survey components that were found to be emitting 500 parts per million or more of methane or an equivalent measured in parts per billion column concentrations during any of the previous surveys as soon as possible after the repair carried out pursuant to paragraph 4, and no later than 15 days thereafter to ensure that the repair was successful.</p> <p>Notwithstanding paragraph 2, operators shall survey components that were found to be emitting below 500 parts per million of methane or an</p>

<p>methane, no later than three months after the emissions were detected, to check whether the size of loss of methane has changed.</p>	<p>equivalent measured in parts per billion column concentrations, no later than three months after the emissions were detected, to check whether the size of loss of methane has changed.</p>
<p><i>Article: 14 - Leak detection and repair</i></p> <p>5. Notwithstanding paragraph 2, operators shall survey components that were found to be emitting 500 parts per million or more of methane during any of the previous surveys as soon as possible after the repair carried out pursuant to paragraph 4, and no later than 15 days thereafter to ensure that the repair was successful.</p> <p>Notwithstanding paragraph 2, operators shall survey components that were found to be emitting below 500 parts per million of methane, no later than three months after the emissions were detected, to check whether the size of loss of methane has changed.</p>	<p><i>Article: 14 - Leak detection and repair</i></p> <p>5. Notwithstanding paragraph 2, operators shall survey components that were found to be emitting 500 parts per million or more of methane or an equivalent measured in parts per billion column concentrations during any of the previous surveys as soon as possible after the repair carried out pursuant to paragraph 4, and no later than 15 days thereafter to ensure that the repair was successful.</p> <p>Notwithstanding paragraph 2, operators shall survey components that were found to be emitting below 500 parts per million of methane or an equivalent measured in parts per billion column concentrations, no later than three months after the emissions were detected, to check whether the size of loss of methane has changed.</p>
<p><i>Article 29 - Methane emitters global monitoring tool</i></p> <p>1. By ... [two years after the date of entry into force of the Regulation], the Commission shall establish a global methane monitoring tool based on satellite data and input from several certified data providers and services, including the Copernicus component of the EU Space Programme.</p>	<p><i>Article 29 - Methane emitters global monitoring tool</i></p> <p>1. By ... [two years after the date of entry into force of the Regulation], the Commission shall establish a global methane monitoring tool based on satellite data and input from several certified data providers and services, including the Copernicus component of the EU Space Programme complemented by commercial sources.</p>