BRIEFING NOTE

1. Executive Summary

- Reducing emissions at joint ventures (JVs) is a critical part of a company’s efforts to address climate change.

- The foundation of JV governance lies in contractual agreements. However, for historical reasons, existing joint operating agreements (“JOA”) typically do not include contractual terms that seek to calculate, reduce, and/or manage greenhouse gas emissions (such contractual terms, “GHG Clauses”).

- In February 2023, the Association of International Energy Negotiators (“AIEN”) published the latest version of its Model International Joint Operating Agreement (the “2023 JOA”). The 2023 JOA included several updates to the previous model JOA, including clauses addressing the industry’s approach to greenhouse gas emissions and the threat of climate change.

- The purpose of this briefing note is to raise awareness of the 2023 JOA’s GHG Clauses which address greenhouse gas emissions. While the clauses are optional, the clauses reflect the widespread realization and consensus that the international oil and gas industry has a role to play in addressing climate change.

2. Background

- In 2020, an industry gap analysis found a low prevalence of GHG Clauses in the contractual agreements of joint ventures in the oil and gas industry. Even when present, the GHG Clauses lacked precision and specificity.
• To address this critical gap, an industry and NGO coalition developed a plan to promote the inclusion of GHG Clauses in future model JOAs by incorporating specific GHG Clauses into next revision of the AIEN JOA as an industry-wide resource.

• The AIEN publishes model contracts that oil and gas companies around the world use as a basis for their contract negotiations.

• In 2021, the AIEN initiated a process to update its model JOA for the first time since 2012 and solicited proposed revisions from its members. The 2012 Model International Joint Operating Agreement (the “2012 JOA”) has been widely accepted and used as the standard form JOA in the international oil and gas industry since its adoption.

• Three articles in the AIEN’s model JOA were identified for inclusion of GHG Clauses:
  o Article 4.2 – Rights and Duties of Operator
  o Article 4.4 – Information Supplied by Operator
  o Article 6.6 – HSE Plan

• The proposed GHG Clauses were submitted to the AIEN in 2021 and accepted for inclusion in the draft model JOA. In February 2023, AIEN published the latest version of its Model International Joint Operating Agreement (the “2023 JOA”), which includes the GHG Clauses.

3. Considerations

• Strategic relevance of joint ventures
  o Joint ventures account for approximately 77% of total production by supermajors and represent 35% of total global upstream production.

• Commercial ventures are highly sensitive and confidential
  o As such, the AIEN’s model JOA – an industry-wide resource with a substantial peer review process – was selected to house the GHG Clauses.

• Negotiations require independence and flexibility
  o The terms developed serve as a guide for negotiators.
  o The GHG Clauses are presented as a menu of model terms or alternative provisions with broad enough language to have wide applicability across different markets, regions, and company ambitions.
  o Companies may leverage the language independently and adapt and incorporate relevant provisions for use in their in-house model contracts.
• **Collaboration with joint venture partners to reduce emissions**
  
  o A standardized data reporting template ([Exhibit G](#)) was developed to promote transparency, collaboration and alignment amongst joint venture partners.

4. **Recommendations**

• Companies should incorporate GHG Clauses terms into in-house model JOA contracts that are derived from the 2023 JOA, as well as other in-house model contracts where the GHG Clauses could be applied.

• Companies should introduce the GHG Clauses into negotiations of future joint venture deals and advocate for their inclusion.

• Companies should engage in bilateral and multilateral discussions with joint venture partners on the importance of GHG management and transparent data reporting. Having these discussions early in the joint venture deal process will ensure that all partners have similar ambitions.

• The company (or companies) proposing the resolution should be prepared to offer technical support for implementation of the items included within the resolution, such as access to technical expertise.

5. **Appendix**

The following information contains the GHG Clauses in their entirety and guidance on their corresponding objectives for inclusion in contractual agreements.
Art. 1.1 Definitions

Greenhouse Gas or GHG means the following six gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride, or as an internationally recognized body (such as the Intergovernmental Panel on Climate Change (IPCC)) may determine from time to time.


Commentary:

This definition of Greenhouse Gases does not include nitrogen trifluoride (NF3), which is required to be reported under the IFRS Sustainability Disclosure Standards (see IFRS S2 Climate-related Disclosures) and the mandatory GHG reporting regulations of the US Environmental Protection Agency.
Art. 4.2 Rights and Duties of Operator

4.2.B In the conduct of Joint Operations Operator shall:

4.2.B.1 perform Joint Operations in accordance with the Contract, the Laws, and this Agreement, and consistent with approved Work Programs and Budgets (and if applicable, approved AFEs), and the decisions of the Operating Committee not in conflict with this Agreement;

4.2.B.2 conduct Joint Operations in a diligent, safe, and efficient manner in accordance with good and prudent petroleum industry practices and field conservation principles generally followed by the international petroleum industry under similar circumstances;

Optional Provision, choose one:

Alternative 1: ...and in a manner which, as far as commercially reasonable, [limits] [mitigates] the Greenhouse Gas emissions resulting from the Joint Operations;

Alternative 2: …and in a manner which, as far as reasonably practicable, [limits] [mitigates] the Greenhouse Gas emissions resulting from the Joint Operations;

Alternative 3: …and in a manner which [limits] [mitigates] the Greenhouse Gas emissions resulting from the Joint Operations;

If one of the optional provisions accompanying Article 4.2.B.2 is selected, the following provision may be added to Article 4.2.B.20 with respect to independent contractors:

4.2.B.20 to the extent practical and lawful, include in its contracts with independent contractors [and Operator Affiliates], and procure that Operator’s Affiliates include in their contracts with independent contractors provisions that:

(h) require such contractors to seek to [limit] [mitigate] Greenhouse Gas emissions resulting from their operations, products, and services, where such operations, products and services are being provided or delivered to or on behalf of Operator.

Commentary:

This optional provision accompanying Article 4.2.B.2 has the Operator acknowledge that limiting (or mitigating) GHG emissions is a critical element of diligent, safe, and efficient Operations. To supplement this broad acknowledgement, there are clauses proposed elsewhere in the document that describe specific measures that an Operator should take to operate in line with this principle.
Art. 4.4  Information Supplied by Operator

4.4.A Subject to Article 15.3, Operator shall provide Non-Operators in a timely manner with copies of the following information, data and reports relating to Joint Operations (to the extent to be charged to the Joint Account) in digitized format when available and when not available, in hard-copy, as they are currently produced or compiled from Joint Operations:

4.4.A.16 monthly and annual HSE key performance data and reports; provided that, in respect of data relating to Greenhouse Gas emissions, such data shall be reported on a quarterly basis in accordance with: (i) the reporting standards that Operator is required to report to the Government under applicable Laws and/or the Contract; or (ii) where the applicable Laws and/or the Contract do not impose any reporting standards or such standards do not otherwise meet the requirements of GHG Reporting Guidelines, Operator shall report Greenhouse Gas emissions data in accordance with the GHG Reporting Guidelines,

*Optional Provision, choose, if desired:*

in the format of Exhibit G.

Any of the Parties can request that the Operating Committee direct that Operator, in accordance with Article 4.4.A.18, provide additional data which is consistent with an additional framework or initiative, such as a framework that may be dedicated to specific emissions such as methane or another Greenhouse Gas;

Commentary:

This proposed language supplementing Article 4.4.A.16 standardizes the GHG emissions data that an Operator gathers and reports to Non-Operators. Where applicable laws or contracts require a standard of reporting that meets the GHG Reporting Guidelines, that standard is adopted. If there is no required reporting standards, or the required reporting standard does not meet the requirements of the GHG Reporting Guidelines, the GHG Reporting Guidelines are adopted. The defined term GHG Reporting Guidelines refers to the IPIECA/API/IOGP guidelines for reporting GHG emissions, which represent one of the most commonly used and accepted set of GHG reporting guidelines for the oil and gas industry. The purpose of the IPIECA/API/IOGP guidelines is to promote consistency in the voluntary accounting and reporting of oil and gas industry GHG emissions.\(^1\)

Exhibit G is provided as an optional reporting template for Operators to use.
Art. 6.6.A.1  HSE Plan – Preparation of

6.6.A  Operator shall in the conduct of Joint Operations:

6.6.A.1  prepare and establish an HSE Plan designed to achieve safe and reliable conduct of operations and activities, to avoid significant and unintended impact on the safety and health of people, on property, and on the environment, and to comply with the Contract and Laws relating to HSE

Alternative Provision, choose one alternative if desired:

Alternative 1:  …and [limit] [mitigate], [to the extent commercially reasonable / as far as reasonably practicable], the emission of Greenhouse Gas in the conduct of Joint Operations;

Alternative 2:  …and [limit] [mitigate], [to the extent commercially reasonable / as far as reasonably practicable], the emission of Greenhouse Gas in the conduct of Joint Operations, including through the inclusion of specific emissions targets which are revised on an [annual / other defined term] basis.

Alternative 3:  …and [limit] [mitigate] the emission of Greenhouse Gas in the conduct of Joint Operations, including through the inclusion of specific emissions targets which are revised on an [annual / other defined term] basis.

Commentary:

This optional provision accompanying 6.6.A.1 requires the Operator to conduct Joint Operations in a manner that either limits or mitigates GHG emissions, including by providing for this in the HSE plan. This recommendation builds on the broad acknowledgement in Article 4.2.B.2 that limiting (or mitigating) GHG emissions is a critical element of diligent, safe, and efficient Operations.

The proposed language has options to use either “limit” or “mitigate” to apply to GHG emissions efforts. “Limit” means a restriction or upper bound on GHG emissions. “Mitigate” means to reduce GHG emissions, either by reducing sources of GHG emissions or enhancing the “sinks” that capture and store GHG emissions.
Art. 6.6.A.4  HSE Plan – Utilization of Technology and Processes

6.6.A  Operator shall in the conduct of Joint Operations:

6.6.A.4 design and operate Joint Property consistent with the HSE Plan, […..]

Alternative Provision, choose one alternative if desired:

Alternative 1: …and utilizing, as far as [commercially reasonable] [reasonably practicable], available technology and processes to [limit] [mitigate] Greenhouse Gas emissions, and in particular to:

(a) minimize potential fugitive and venting sources;
(b) conduct detection surveys to identify unintentional sources, and subsequent repair and mitigation of these emissions
(c) optimize operational efficiencies; and
(d) eliminate or reduce flaring.

Alternative 2: …and utilizing available technology and processes to [limit] [mitigate] Greenhouse Gas emissions, and in particular to:

(a) minimize potential fugitive and venting sources;
(b) conduct detection surveys to identify unintentional sources, and subsequent repair and mitigation of these emissions
(c) optimize operational efficiencies; and
(d) eliminate or reduce flaring.

Commentary:

This optional provision accompanying Article 6.6.A.4 describes measures that an Operator may use to implement Article 6.6.A.1. The measures listed are recognized as best practices according to industry groups like IPIECA, IOGP, the Oil & Gas Methane Partnership, and Methane Guiding Principles. No specific technology or processes is mandated in this provision.

The sub-bullets can be applied to both the design and operate phases of the Joint Operations. For example, facilities can be designed to minimize potential fugitive and venting sources, as well as be operated to minimize potential fugitive and venting sources.
Art. 6.6.A.5  HSE Plan – Energy Efficiency and GHG emissions Abatement

6.6.A  Operator shall in the conduct of Joint Operations:

6.6.A.5 conduct [every X years] the analysis of energy efficiency and GHG emissions abatement opportunities and present to the Parties the results of such analysis (including the cost-benefit assessment) along with the opportunities recommended for execution by the Parties as part of the relevant Work Program and Budget review and approval process.

Commentary:

This new article 6.6.A.5 requires the Operator to periodically assess energy efficiency and GHG emissions abatement opportunities, with the aim of identifying cost-effective GHG emission reduction opportunities for the operating committee to consider as part of the work program and budget review process. Many emission reduction projects can be achieved using technologies available today and at no net cost; this new article encourages the exploration and identification of cost-effective emissions reduction projects.

Exhibit G  GHG Reporting Guidelines Data Reporting Template

Template on following page.

Commentary:

This new Exhibit G provides a standardized reporting template mechanism for Operators to use when carrying out the reporting obligations proposed in Article 4.4. The exhibit is a detailed representation of the GHG Reporting Guidelines, which are cited as the reporting standard in Article 4.4.A.16. The exhibit may be referenced in the proposed Article 4.4.A.16 optional provision.
### Exhibit G

<table>
<thead>
<tr>
<th>Reporting quarter / year</th>
<th>Emissions source</th>
<th>Volume (scf)</th>
<th>Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CO2e (metric tons)</td>
<td>CO2 (metric tons)</td>
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<td></td>
<td>Combustion</td>
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<td></td>
<td>Flaring</td>
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<td></td>
<td>Emissions</td>
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<td>Volume flared</td>
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<td>Venting</td>
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<td>Fugitive</td>
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<td></td>
<td>Other</td>
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</tr>
</tbody>
</table>

Emissions associated with exported/sold electricity and/or steam

**Indirect (Scope 2)**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions associated with imported electricity</td>
<td>Activity Data (MWh)</td>
</tr>
<tr>
<td>Emissions associated with imported steam/heat</td>
<td>Activity Data (GJ)</td>
</tr>
</tbody>
</table>

**Additional information for Scope 2**

<table>
<thead>
<tr>
<th>Grid factor:</th>
<th>Unit:</th>
<th>Source of grid factor:</th>
</tr>
</thead>
</table>

[i.e., location or market-based factor] 3
### Avoided and/or Mitigated GHG Emissions

<table>
<thead>
<tr>
<th>Reporting Option #1</th>
<th>Reporting Option #2</th>
<th>Reporting Option #3</th>
<th>Reporting Option #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon capture, utilization or storage (CCUS) – all GHGs</td>
<td>Carbon capture, utilization or storage (CCUS) – all GHGs</td>
<td>GHG Project 1 – Name and description</td>
<td>GHG emission reductions</td>
</tr>
<tr>
<td>Renewable Energy Credits – RECs – all GHGs</td>
<td>Renewable Energy Credits – RECs – all GHGs</td>
<td>GHG Project 2 – Name and description</td>
<td>Permanently Sequestered CO2 using CC(U)S</td>
</tr>
<tr>
<td>Offsets – all GHGs</td>
<td>Offsets – all GHGs</td>
<td></td>
<td>GHG removals from atmosphere</td>
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<td></td>
<td></td>
<td></td>
<td>Carbon offsets</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>GHG emissions reduced due to shutdowns or conversion of existing facilities</td>
</tr>
</tbody>
</table>

1. Emissions associated with exported/sold electricity and/or steam should not be deducted from a facility’s direct (scope 1) emissions (i.e., this figure should not be subtracted from the “combustion” category).

2. Activity data (MWh and GJ) recommended but optional for indirect (Scope 2).

3. The World Resources institute’s (WRI) “GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard” (2015) details two methods for determining the emissions associated with electricity consumption: the location and market-based methods. The market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice) through the use of supplier specific emissions factors, while the location-based method reflects the average emissions intensity of grids on which energy consumption occurs through the use of grid average emissions factors for defined geographic locations, including local, subnational or national boundaries.
• This Exhibit may be amended, supplemented or modified from time to time in accordance with Article 5.9 of this JOA, in accordance with the applicable terms of this JOA.
• A facility’s direct (scope 1) emissions are those from sources that fall within the ‘fence line’ of the facility (i.e., are under the operational control of the operator of the facility). Emissions associated with exported/sold electricity and/or steam should not be deducted from a facility’s direct (scope 1) emissions but should rather also be reported here as a separate line item.
• Report TOTAL GHG emissions, both emitted and mitigated, and volumes flared by the JV asset; partner will apply its equity share percentage of the JV asset/operation to figures provided above.
• Indirect (scope 2) emissions are those associated with the generation of electricity and/or steam imported/purchased by the facility. For reporting of indirect (scope 2) emissions from imported electricity, it is important to include evidence for correct application of the emission factor and its source.
• Utilize the 100-year time horizon global warming potential (GWP) values, relative to CO2, from the Intergovernmental Panel on Climate Change’s (IPCC) Fourth Assessment Report (AR4) (e.g., 25 for CH4, 298 for N2O).
• Reference IPIECA’s “Petroleum industry guidelines for reporting greenhouse gas emissions – Second edition” (2011) for more specific guidance on emissions source types etc.

Notes Relevant to Reporting Option #1:
• Carbon capture, utilization and storage includes CO2 sold to third parties, and CO2 (and other gas) captured at the facility and injected for geologic carbon storage. For more information, see API’s reporting template at API | GHG Reporting.
• RECs or similar renewable energy certificates (e.g., Guarantees of Origin [GOs] system in Europe) are credits generated from renewable energy generation and used, for example, in the U.S. and Canada. Only emissions reductions associated with RECs retired by the Operator in that reporting quarter/year for the facility should be included. Note that Scope 2 emissions should be net of contractual instruments such as RECs. Reference WRI’s “GHG Protocol Scope 2 Guidance, an amendment to the GHG Protocol corporate standard” (2015) for guidance on how to report Scope 2 emissions and convert RECs into CO2e emissions avoided. For more information, see API’s reporting template at API | GHG Reporting.
• Offsets are credits generated from the avoidance or reduction of GHG emissions or the removal of GHGs from the atmosphere, excluding RECs, and include offsets retired in compliance programs. Only offsets that are purchased or developed and then retired by Operator in that reporting quarter/year for the facility should be included. For more information, see API’s reporting template at API | GHG Reporting.

Notes Relevant to Reporting Option #2:
• ‘Other GHG mitigations’ may refer to emissions reductions achieved through non-CCUS projects, such as projects related to fuel switching, energy efficiency, flare mitigation etc.
Notes Relative to Reporting Option #3:

- GHG Project is defined as a specific project or activity designed to achieve GHG emission reductions, storage of carbon, or enhancement of GHG removals from the atmosphere. GHG projects may be stand-alone projects, or specific activities or elements within a larger non-GHG related project. This definition is in accordance with ‘IPIECA/API/IOGP petroleum industry guidelines for reporting greenhouse gas emissions’, 2nd Edition, May 2011, and as amended from time to time.
- Describe each GHG Project including any relevant information, including type of emission reduction, such as GHG removal from atmosphere, operational efficiency project, CC(U)S or carbon offset. One would need to judge from the description of the GHG reduction in what category this project falls. Note: GHG emissions reduced due to shutdowns or conversions of existing facilities does not feature in IPIECA guidance.
- Report both applicable direct (scope 1) and indirect (scope 2) emission reductions where this information is relevant and preferred by the Parties.
- Report avoided and/or mitigated emissions from a baseline in accordance with the GHG Reporting Guidelines. The baseline in this case means a hypothetical scenario for what GHG emissions, removals, or storage would have been in the absence of a GHG project or project activity.

Notes Relative to Reporting Option #4:

- Regulations related to GHG mitigation are evolving and there are indications that correct classification of the emission reduction is becoming a requirement, i.e., differentiation between GHG removals from atmosphere, CC(U)S, offsets and greenhouse gas abatement projects. Check for the most updated standards and where definitions and reporting of GHG mitigation activities are not explicitly defined in standardized guidance then definitions would need to be developed and negotiated to determine appropriate methodologies.
- Report both applicable direct (scope 1) and indirect (scope 2) emission reductions where this information is relevant and preferred by the Parties.