

GLOBAL METHANE COMMUNICATIONS PLAN (DRAFT: 18TH MAY 2017)

Strategic objective: promote the reputation of gas, the industry and Shell			
Actions	Timing	Tactical objective	Indicators of success
1. ECMW engagement with the World Bank / International Finance Corporation	June 29 2017	<ul style="list-style-type: none"> • Demonstrate Shell's commitment to reduce methane emissions. • Discuss opportunities to collaborate on methane emissions reduction, including: Columbia panel (Action 3), OGCI reduction target (Action 4), Roundtable (Action 5). 	<ul style="list-style-type: none"> • World Bank support for partnership proposals and opportunities.
2. Shell sponsored Politico 'Energy Visions' event on role of gas in energy transition (Brussels)	Sept 2017	<ul style="list-style-type: none"> • Demonstrate Shell's commitment to reduce methane emissions of gas / LNG in Europe and communicate support for practicable EU legislative methane proposals. • Leverage event to hold 1-2-1 meetings with top European NGOs (e.g. new head EDF Europe, Baroness Worthington) and policy makers to secure support for future actions, including Columbia panel (Action 3), OGCI reduction target (Action 4), Roundtable (Action 5). • Identify partners for Roundtable (Action 5). 	<ul style="list-style-type: none"> • Near-term: Recognition and support for Shell's commitment to reduce methane emissions. • Mid-term: Identification and support of top tier European stakeholders for Roundtable (Action 5) and One Future Europe (Action 12). • Longer-term: Practicable EU policy/regulation on methane emissions reduction.
3. Columbia University Panel Debate "Do methane emissions undermine the credibility of gas?" (Jason Bordoff (Columbia), Fred Krupp (EDF) and Riccardo Puliti (World Bank))	Oct 2017	<ul style="list-style-type: none"> • Build on CEBB's Columbia keynote address on the energy transition. • Build support for OGCI methane emissions reduction target and investment (Action 4). • Identify potential co-hosts, partners and develop plans for Roundtable (Action 5). • Discuss with Columbia University their potential role in establishing an independent review board (Action 6). 	<ul style="list-style-type: none"> • Gain support for OGCI reduction target (Action 4). • Gain support from Columbia University for the independent review board (Action 6). • Increased awareness of issue.
4. Announcement of OGCI methane emissions reduction target and financial commitment to methane emission reduction	27 Oct 2017	<ul style="list-style-type: none"> • Ahead of announcement: Consult and identify opportunities for key stakeholders to provide practical support to OGCI. Encourage positive endorsement of OGCI pledge. • Identify key milestones for OGCI methane emission reduction programme. • Media and social media targeted engagement. 	<ul style="list-style-type: none"> • Positive public recognition from key influencers on joint industry commitment to cutting methane emissions. • Positive media and social media coverage demonstrating Shell / OGCI commitment to reduce methane emissions
5. Global Roundtable on Methane Emissions from the gas supply chain	Nov 2017	<ul style="list-style-type: none"> • Hook: IEA World Energy Outlook 2017 report on gas • Co-host global roundtable with credible top tier methane emissions stakeholders – including World Bank and EDF. • Move to a solutions-oriented dialogue; identify potential 	<ul style="list-style-type: none"> • Reduce the noise and impact of negative publicity on gas. • Gain support for establishment of independent review board (Action 6).

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			<ul style="list-style-type: none"> members of an independent review board (Action 6). Seek greater alignment on monitoring, reporting and reducing methane emissions from gas supply chain. Identify significant data gaps and actions to close them. 	<ul style="list-style-type: none"> Gain support for OGCI & World Bank Joint Programme (Action 8).
6.	Launch independent review board.	Dec 2017	<ul style="list-style-type: none"> May-October: Seed idea and engage potential conveners: Columbia, Stanford, Tsinghua University, Rocky Mountain Institute, Sustainable Gas Institute etc. Credible independent review board of methane emissions experts created to peer review and provide commentary on methane emissions studies and programmes. 	<ul style="list-style-type: none"> Credible and independent review of emerging methane emissions studies and data – debunks and reduces traction of weak and biased data and studies.
7.	Global Roundtable on the Role of Gas in Energy Transitions, World Economic Forum, Davos	January 2018	<ul style="list-style-type: none"> Convene top tier stakeholders to discuss the role of gas in energy transitions and provide an update on Shell / OGCI / World Bank methane emissions reduction programmes. 	<ul style="list-style-type: none"> Natural gas recognised as a central component of the energy transition and development agenda.
8.	Announcement of OGCI & World Bank Joint Programme.	Q1 2018	<ul style="list-style-type: none"> Leverage work of OGCI and give credibility through partnership with World Bank. Address the need for knowledge transfer, capacity building and policy support to developing countries with significant gas opportunity, and ensure establishment of appropriate methane emissions regulatory frameworks. 	<ul style="list-style-type: none"> Introduction of competitive and effective policy outcomes in developing countries.
9.	Shell sponsored Harvard Rational Middle event on efforts to report on and reduce methane emissions in the gas supply chain.	March 2018	<ul style="list-style-type: none"> Platform to promote role of gas in energy transitions. Demonstrate Shell's commitment to reduce methane emissions. 	<ul style="list-style-type: none"> Increased awareness of methane emissions management, and role of gas. Recognition of OGCI methane reduction target (Action 4).
11.	Bid for Shell Secretariat of the CCAC	Q2 2018	<ul style="list-style-type: none"> Increase scope and ambition of CCAC Oil and Gas Methane Partnership (OGMP): a) Widen scope to include full value chain; b) Establish Policy-focused Taskforce; c) Leverage membership – including government and NGOs. 	<ul style="list-style-type: none"> Secure support for industry standard (Action 13).
12.	Shell joins One Future-US and leads to establishment of One future Europe	Q2 2018	<ul style="list-style-type: none"> Leverage existing platform to demonstrate Shell's commitment to reducing methane emissions Shell's membership raises awareness of the issue and increases pressure on wider industry to step up efforts to 	<ul style="list-style-type: none"> Shells commitment recognised and endorsed by top US stakeholders (e.g. US EDF). Increased awareness of issue and broader

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			reduce methane emissions from their portfolios.	<p>industry support and commitment to emissions reduction.</p> <ul style="list-style-type: none"> European companies join growing movement to commit to reducing methane emissions.
13. Launch industry standard for methane intensity reporting	Q3 2018		<ul style="list-style-type: none"> Lead Global benchmarking Group (Shell, BP, Exxon, Chevron, Total, Conoco) to improve cross industry understanding on reporting methane emissions from gas value chain. 	<ul style="list-style-type: none"> Consistent industry standard becomes part of the IPIECA/IOGP/API reporting guidance.
14. Engage IPIECA's Methane Task Force of Climate Change Working Group	Q4 2018		<ul style="list-style-type: none"> Promote best practice in methane management via IPIECA. (IOCs and NOVs represent 65% O&G production). Secure support for One Future Europe. 	<ul style="list-style-type: none"> Gain support from IPIECA members for One Future Europe (Action 12).

Shell will deliver targeted traditional and social media communications, which run in line with our behaviour and performance in monitoring, reporting and reducing methane emissions across the natural gas supply chain.

Key to colours

Business as usual	Relatively low internal effort and cost, low risk of poor alignment with external parties, low risk of schedule delay
Stepping Up	Modest internal effort and cost, moderate risk that external parties will not align, moderate risk of schedule delay
Trail blazing	High internal effort and potential cost, high risk that not all external parties will align, potential high risk of schedule delay

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APPENDIX 1: OVERVIEW OF RELEVANT EXTERNAL COALITIONS AND PLATFORMS

Organisation	Contact	Background	Relationship owner
Climate and Clean Air Coalition (CCAC)	Rita Cerutti, Co-Chair	<ul style="list-style-type: none"> The CCAC is a global effort to improve air quality and reduce short-lived climate pollutants. Its members comprise of 51 country partners, 17 IGO partners and 45 NGO partners. The CCAC has 11 initiatives, which include Oil & Gas Methane Partnership (OGMP), which Shell joined in Jan 2017 and is a member of the Steering Committee. OGMP's objective is demonstrable upstream oil and gas methane emissions reductions, focused on nine upstream emissions sources and 3-5 recommended work practices/technology solutions for each of those sources. Individual companies have some flexibility to apply other solutions. Southwestern is pushing CCAC to include a methane emission reduction target workstream within the OGMP, but has received little traction to date. As a member, Shell commits to conducting surveys at selected assets and reporting the results to CCAC annually for inclusion in a CCAC-compiled report for public disclosure. The pace of inclusion of assets is at the discretion of the company, but there is an expectation that projects will be implemented to reduce CH4 emissions where justified. Shell has six months to draft a plan that includes discreet assets. 	Rupert Thomas (VP Environment)/Charlie Wood (Environment Manage Improvement)
Harvard University		<ul style="list-style-type: none"> Shell has a history of collaborating with Harvard (Belfer Center & Kennedy School of Government), on energy and environmental policies. Harvard is an opinion leader in this space but has no position on methane reductions. Recently, Harvard completed a comprehensive evaluation with Boston Consulting group and presented a positive outcome on natural gas. The report outlined suggested actions industry should take to ensure natural gas' future. Harvard also hosts the Rational Middle Series, a platform which Shell has participated in on the topic of gas. 	Niel Golightly (VP Energy Transitions Strategy) Amanda Vitulli (Business Adviser US Pipeline)
Oil and Gas Climate Initiative (OGCI)		<ul style="list-style-type: none"> Shell is a member of the OGCI ExCom, Chair of the Board of the Climate Investments Fund, and has a seat in various working groups. The ExCom is principally focused on policy-related discussions, amongst others, whilst the Climate Investment (CI) Fund is focused on methane 	Angus Gillespie (VP CO2) - Excom member John MacArthur VP Integrated Gas Technology - Chair of CI

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		<p>technology.</p> <ul style="list-style-type: none"> • Approximately 1/3 of the USD1 billion of the Climate Investments Fund is allocated to methane reduction activities, principally focused on developing a better understanding of the gas life cycle, and developing and demonstrating innovative technologies. 	Fund
One Future	<p>Mark Boling (Executive Vice President, General Counsel and Secretary of the Board of Directors, and President – V+ Development Solutions, Southwestern Energy Company)</p> <p>Fiji George (Director Strategic Solutions at Southwestern University)</p>	<ul style="list-style-type: none"> • One Future is a coalition of 10 companies with operations in all four parts of the natural gas value chain. Formed in 2014, One Future is developing policy and technology solutions to environmental and operational challenges across the natural gas industry. • One Future member companies aspire to improve the energy delivery efficiency of the natural gas supply chain by reducing total methane emissions to less than one percent of gross production. It promotes the application of performance based policy approaches, which it views as most cost effective and which convey advantage to first movers. • It worked with EDF to develop the target, and maintains close dialogue. In May 2017, One Future participated in a CCAC event and was asked to provide a proposal for how a performance based policy approach could be applied. At this meeting, it was also asked by a leading O&G company whether it would consider expanding One Future outside of the US. • Current members of One Future are: Apache, BHP Billiton, Hess, Southwestern Energy, Kinder Morgan, TransCanada, Southern Company Gas, Statoil, Summit Utilities and National Grid. • Members of the Shell Methane Working Group have spoken with BHP Billiton on their experiences with One Future (all positive), and subsequently had a call with Mark Boling and Fiji George to learn more about the initiative. 	Dick Francis (Team Lead Onshore US – Onshore Regulatory)
World Bank	<p>John Roome (Senior Director for Climate Change)</p> <p>Riccardo Puliti (Head of the Energy and Extractives Global Practice)</p> <p>Michael Stanley (Sector Lead – Oil / gas / mining)</p>	<ul style="list-style-type: none"> • World Bank (Michael Stanley / Riccardo Puliti) is keen to engage Shell on methane, CCUS and data (demand side in places like India etc.). • On methane, the WB is still considering how to approach this, but is considering a partnership with the oil and gas sector, possibly via OGCI. Areas they are looking at include knowledge transfer and capacity building, possibly policy advisory services as well as potentially a fund to support methane reduction initiatives. • Michael Stanley advised Jeff Edwards that the WB would be interested in participating in a round table and an independent review panel. 	Sachin Kapila (VP GR International Organisations) Jeff Edwards (GM Gas Advocacy)

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Columbia University - School of International & Public Affairs	Jason Bordoff (founding Director of Columbia's Center on Global Energy Policy) Jeffrey Sachs (Quetelet Prof. of Sustainable Development, Prof. of Health Policy and Management, Director of the Earth Institute)	<ul style="list-style-type: none"> Publicly recognises the GHG benefits of gas (relative to other fuels) but advocates for methane reduction (regulation?) to ensure the benefits are realised. 	Jeff Edwards (GM Gas Advocacy)
Sustainable Gas Institute (SGI)	Nigel Brandon (Founding Director of the Energy Futures Lab at Imperial College London) Paul Balcombe (Research Associate)	<ul style="list-style-type: none"> Academic-industry partnership, founded by BG Group and continued to be part funded by Shell. Provide thought leadership and research into technology that could underpin role for gas. Carried out a study of studies in 2015. Modest contributor to the Methane Chapter in IEA WEO 2017. Despite funding from Shell to SGI, retain strong independence and therefore credibility. Continuation of Shell funding is under review. In a recent meeting (May) with Jeff Edwards, Nigel Brandon expressed interest in participating in a round table convened by Shell. 	Jeff Edwards (GM Gas Advocacy)

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