

	A	B
1	Guiding Principle	Action #
2	GP-1 Continually Reduce Methane Emissions	1
3		2
4		3
5		4
6		5
7		6
8	GP-2 Gas Value Chains	7
9		8
10	GP-3 Improve Data Accuracy	9
11		10
12		11
13	GP-4 Sound Advocacy &	12
14		13
15	GP-5 Transparency, Communications & Reporting	14
16		15
17		16

	C
1	Action
2	Develop and embed carbon price to support operational interventions to deliver Real Sustainable Reductions and Methane Intensity Targets
3	Develop and implement a Near Zero Methane Project Standard
4	Update L48 Facility Design Manual (FDM) to incorporate design focus on reducing methane emissions from new & modified facilities
5	Develop integrated methane technology plan to drive reductions in methane emissions in projects
6	Develop and execute prioritised plan to drive significant reductions in operational flaring emissions (prioritising Angola)
7	Develop and execute prioritised plan to reduce L48 methane emissions from pneumatic controllers and pumps and develop long term solution for remote power
8	Develop and execute prioritised plan to influence reduction of methane emissions in non-operated JVs
9	Build on blockchain project to develop accredited low emissions gas scheme for the gas value chain
10	Develop integrated methane technology plan to drive improvements in methane data accuracy
11	Develop plan to evaluate and improve the accuracy of flare emissions data (metered volumes & combustion efficiency)
12	Design and implement a standardised Upstream Leak Detection and Repair (LDAR) programme
13	Develop and implement consistent Group, Segment and Regional policies and advocacy positions on methane
14	Develop and implement US methane advocacy plan
15	Deliver External Gas & Methane Communications Campaign to demonstrate BP's leadership on methane
16	Develop and deliver internal communications plan to educate BP employees on carbon and methane science and BP's role in reducing carbon/methane emissions
17	Develop industry leading position on methane reporting transparency

	D	E
1	Year	Owner
2	2018	Gordon Birrell
3	2019	David O'Connor
4	2019	David Lawler
5	2019	Ahmed Hashmi
6	2020	Fuzzy Bitar
7	2020	David Lawler
8	2019	Fuzzy Bitar
9	2020	Morag Watson
10	2018	Ahmed Hashmi
11	2019	Fuzzy Bitar
12	2019	Fuzzy Bitar
13	2018	Dominic Emery
14	2018	Mary Streett
15	2019	Rachel Woods
16	2019	Steve Shaw
17	2020	Dave King

A	B	C	D	E	F
1			Upstream Methane Plan - L48 Actions		
2	Guiding Principle	Action #	Action	Year	Owner
3	GP-1 Continually Reduce Methane	1	Real Sustainable Reduction - Methane L48 committed to reducing CO2e emission by 700,000 MT CO2e between 2017 and 2025 versus 2016 CO2e baseline inventory a. 350,000 MT CO2e to be reduced between 2017 and 2019 b. 350,000 MT CO2e to be reduced between 2020 and 2025	2019+	Dave Lawler
4		2	LDAR Focus on find and fix LDAR. Implement LDAR prioritized on 30% of production in 2018/19, 60% of production in 2019/20, and 100% of production by 2020/21. Perform LDAR utilizing existing technology and continue trials to identify efficient and effective alternative means to accomplish LDAR aligned with L48 IO mission.	2018/19/20	Dave Lawler
5		3	Remote Power Initiate further evaluation in 2018 of additional remote power options for L48's dispersed facilities for pneumatic controllers and pumps.	2018/19	Dave Lawler
6		4	High Bleed Controller Replacement Replace all HB's in L48 by mid 2019.	2019	Brian Pugh
7		5	NBU Pneumatic Pumps (Heat Trace Pumps) Install identified technology (T12 temp switches) in west area of NBU.	2018	Brian Pugh
8		6	NBU Pneumatic Pump & Liquid Unloading Trials Continue ongoing trials, solar pumps, routing pump vents to location fired equipment, removing select pumps, placing pumps in series and Project Kelvin.	2018/19	Brian Pugh
9		7	Select and Implement Tried Technology Select technologies to be implemented L48 wide and execute successfully piloted technologies for pneumatic pumps, liquids unloading and LDAR.	2019+	Dave Lawler
10		8	Crowd Source Pneumatic Solution Use crowd-sourcing or other creative ways to find solutions to the big problem, e.g. pneumatics.	2019	Dave Lawler
11		9	L48 Facility Design Manual (FDM) Update FDM to incorporate design focus on reducing methane emissions from new & modified facilities as appropriate.	2019	Dave Lawler
12	GP-2 Advance strong methane performance across the gas value chain	1	API Environmental Partnership Take a leading role in driving forward the Environmental Partnership and identifying natural gas value chain partners to join the program.	2019	Dave Lawler
13		2	L48 NOJV's Build NOJV and other business partners into L48 Carbon Road Map.	2020+	Dave Lawler
14		1	L48 Emission Inventory Improvement Hold peer assist to review L48 internal GHG calculation approach (inventory, emission factors, calculation methodology). Implement annual review of internal GHG approach and emissions by L48 RCE Mgr.	2018	Kola Fagbayi

	G
1	
2	Responsible
3	Brian Pugh/ Kola Fagbayi
4	Brian Pugh
5	Kola Fagbayi
6	Will Burton
7	Kevin Lanan
8	Kevin Lanan
9	Brian Pugh
10	Kola Fagbayi
11	Kola Fagbayi
12	Kola Fagbayi
13	Kola Fagbayi
14	Bob Chou

A	B	C	D	E	F
15	GP-3 Improve accuracy of methane emissions data	2	Leak Detection & Quantification Trials Continue current and proposed expanded leak detection and quantification trials (mAIRsure, Providence, drones, satellites, Rebellion). Continue evaluation and decision through L48 governance of emerging technology.	2018	Kola Fagbayi
16		3	Peer Benchmarking Develop benchmarking approach to understand peer performance and best practices in methane management.	2019	Dave Lawler / Gordon Birrell
17		4	GHG Reporting - Data Improvement Ensure accuracy of data in L48's systems of record that are used as inputs to emissions calculations; including equipment inventory, production data, operational runtime, and episodic events (i.e. liquid unloading).	2019	Brian Pugh
18	GP-4 Advocate sound policy and regulations on methane emissions	1	Methane Leadership Define what methane leadership means for L48. Reframe L48 Carbon Road Map to align and support that definition.	2018	Kola Fagbayi
19		2	US/L48 Communications Plan Develop and implement US/L48 methane communications plan. Align with Group Communications Campaign, US Advocacy Principles and "what we stand for" work from the C&EA Team.	2018	Mary Streett/Kola Fagbayi
20		3	State Industry Group Participation Develop state industry group participation level for methane related issues (for each state) (chair, lead from within, participation, observe).	2018	Steve DeGiusti
21		4	L48 Tactical Advocacy Strategy Develop list of top 5 advocacy points associated with Methane and weave into the already developed advocacy strategy. Continue to implement strategies and update to incorporate elements of the US Advocacy Plan and the "what we stand for".	2018	Kola Fagbayi
22		5	L48 Leadership Workshop Develop and conduct a L48 Leadership workshop.	2019	Dave Lawler
23		6	Develop a L48 "Methane Mindset" Develop communications to engage leaders and workforce to build zero methane emissions mindset.	2019	Dave Lawler
24		7	API Environmental Partnership Develop API Environmental Partnership Plan to define how L48 participates in the broader mission of industry collaboration in the program.	2019	Kola Fagbayi
25	GP-5 Increase transparency	1	Communicate Externally on L48 Actions Report on L48 historical and current actions to proactively reduce methane emissions through the Group Sustainability Report & US/ L48 External Communications Plan (C&EA).	2019	Dave Lawler

	G
15	Kirk Steinle
16	Kola Fagbayi (US) and Liz Rogers (Global)
17	Will Burton
18	Kirk Steinle
19	Liz Sidoti
20	Gabrielle Sitomer/ Kirk Steinle
21	Dana Wood
22	Kola Fagbayi
23	Kola Fagbayi
24	Kirk Steinle
25	Kola Fagbayi

	A	B
	Action #	Action
1		
2	1	Develop and embed carbon price to support operational interventions to deliver Real Sustainable Reductions and Methane Intensity Targets
3	1.1	Develop proposal for a carbon price for operations including how this could be embedded through existing processes
4	1.2	Roll out carbon price approach across Group (subject to learnings from 1.1)
5	1.3	Develop Group-level carbon forecast and pricing model with 10-year projection and embed in planning process
6	2	Develop and implement plan to deliver 'Near Zero' Methane Emissions in Upstream
7	2.1	Revisit GPO Carbon Principles and include specific guidance to project teams emphasising the focus on methane.
8	2.2	Review current methane emissions performance from equipment sources across upstream (e.g. flare, vapour recovery, flanges, valves, compressor seals etc)
9	2.3	Assess and recommend the best available technologies for methane source control for use across upstream
10	2.4	Review actions from other relevant industry projects for potential inclusion into JIP 33
11	2.5	Benchmark and internally report the methane 'intensity' of projects in Appraise and Select
12	2.6	Review inclusion of low emission (CO2 and CH4) specs as part of scope of work for next phase of JIP 33
13	2.7	Review how to set and verify GHG/methane emissions targets for commissioning and start up and incorporate into GPO carbon principles
14	2.8	Define process to integrate well flowback considerations GWO considerations into project concepts and incorporate into rapid screening assessment / project concept selection process
15	2.9	Engage with suppliers on low carbon (methane and CO2) at supplier contractor forums to identify next generation of low emission technologies (supplier led solutions)
16	2.91	GFH (Global Facilities Hardware) to require suppliers of equipment to provide GHG operational performance data specifications
17	2.92	Lead development of Methane Reducing Best Practices (Methane Guiding Principles) and share implementation strategies e.g. engineering practices and procedures
18	2.93	Update L48 Facility Design Manual (FDM) to incorporate design focus on reducing methane emissions from new & modified facilities
19	3	Develop and implement prioritised plan to drive significant reductions in operational flaring emissions (prioritising
20	3.1	Agree and implement plan to enable (Angola) PSVM and (N.Sea) Glen Lyon to operate to their low-emission designs
21	3.2	Develop Segment Flaring Practice to drive improved flaring performance in the regions
22	3.3	Develop plan to change operational mindset (GOO leadership to operators) to continually improve flare performance
23	3.4	Implement plan to instill operational mindset to continually improve flare performance
24	4	Develop and implement prioritised plan to reduce L48 methane emissions from pneumatic controllers and pumps and develop long term solution for remote power
25	4.1	Remote Power: Initiate further evaluation in 2018 of additional remote power options for L48's dispersed facilities for pneumatic controllers and pumps.
26	4.2	High Bleed Controller Replacement: Replace all HB's in L48 by mid 2019.
27	4.3	NBU Pneumatic Pumps (Heat Trace Pumps): Install identified technology (T12 temp switches) in west area of NBU.
28	4.4	NBU Pneumatic Pump & Liquid Unloading Trials: Continue ongoing trials, solar pumps, routing pump vents to location fired equipment, removing select pumps, placing pumps in series and Project Kelvin.
29	4.5	Select and Implement Tried Technology: Select technologies to be implemented L48 wide and execute successfully piloted technologies for pneumatic pumps, liquids unloading and LDAR.
30	4.6	Crowd Source Pneumatic Solution: Use crowd-sourcing or other creative ways to find solutions to the big problem, e.g. pneumatics.
31	5	Develop and implement prioritised plan to influence reduction of methane emissions in non-operated JVs
32	5.1	Develop plan to influence PAE to reduce methane emissions with focus on largest sources (e.g. venting)
33	5.2	Develop plan to influence GUPCO to reduce methane emissions with focus on largest sources (e.g. venting)
34	5.3	Develop plan to influence L48 NOJV partners to reduce methane emissions with focus on largest sources

	C	D	E	F	G	H	I	J	K	L	M
1	Date	Accountable	Responsible	milestone agreed with owner (Y/N)	Comments/Queries	Est. Cost to Complete Action (\$)	Est. Front line time to implement the action (days effort)	No. of OMS documents will need to be changed	No. of new OMS documents needed		
2	2019	Gordon Birrell									
3	3Q18	Gordon Birrell	Bruce Price	yes							
4	2019	Dominic Emery	Dominic Emery	yes							
5	2Q18	Dominic Emery	Dominic Emery	yes							
6	2019	David O'Connor	Richard Mortimer								
7	2Q18	Richard Mortimer	Amrita Lulla and John Kennedy	yes							
8	3Q18	Aleida Rios	Amrita Lulla and John Kennedy	no	need follow up conversation with Aleida, M. Laney will confirm GWO tag						
9	3Q18	Aleida Rios	Amrita Lulla and John Kennedy	no	need follow up conversation with Aleida, M. Laney will confirm GWO tag						
10	3Q18	Richard Mortimer	Amrita Lulla and John Kennedy	yes							
11	3Q18	Richard Mortimer	Amrita Lulla and John Kennedy	yes							
12	4Q18	Richard Mortimer	Amrita Lulla and John Kennedy	yes							
13	4Q18	Richard Mortimer	Amrita Lulla and John Kennedy	yes							
14	4Q18	Richard Mortimer	Amrita Lulla and John Kennedy	yes	M. Laney will confirm a GWO tag.						
15	1Q19	Aleida Rios	Amrita Lulla and John Kennedy	yes	M. Laney will confirm a GWO tag.						
16	1Q19	Richard Mortimer	Amrita Lulla and John Kennedy	yes							
17	4Q18	Dave King	Sue Ford	yes							
18	2019	David Lawler	Kola Fagbayi	yes							
19	2020	Fuzzy Bitar	Matt Werner								
20	3Q18	Matt Werner	Roger Boyce / Andy Johnston	yes							
21	4Q18	Dave Wall	Doog Wright & Graeme Gordon	yes	M. Laney will confirm a GWO tag.						
22	4Q18	Gio Cristofoli	Graeme Gordon	yes							
23	4Q19	Gio Cristofoli	Graeme Gordon	yes							
24	2020	David Lawler									
25	2018/19	Dave Lawler	Kola Fagbayi	yes							
26	2019	Brian Pugh	Will Burton	yes							
27	2018	Brian Pugh	Kevin Lanan	yes							
28	2018/19	Brian Pugh	Kevin Lanan	yes							
29	2019+	Dave Lawler	Brian Pugh	yes							
30	2019	Dave Lawler	Kola Fagbayi	yes							
31	2019	Fuzzy Bitar			Should we confirm GWO tag for any of the actions in this category?						
32	2019	Andy Collins	Alison Young	no	Alison working on it						
33	2019	Andy Collins	Alison Young	no	Alison working on it						
34	2019	Dave Lawler	Kola Fagbayi	yes							

	A	B
35	5.4	Develop strategy with the World Bank to influence flaring performance in Iraq (Rumaila)
36	5.5	Develop plan to encourage Rosneft to join the Methane Guiding Principles
37	5.6	Develop process to generate robust forecast for NOJV methane emissions
38	5.7	Equip OBO Business Managers to actively influence OBO projects and operations partners to lower carbon intensity (incl. methane)
39	6	Build on blockchain project to develop accredited low emissions gas scheme for the gas value chain
40	6.1	Review current portfolio already using xPansiv platform
41	6.2	Identify and engage suitable partners (inc. suppliers, partners Alternative Energy and IST) to develop accredited low emissions scheme for the gas value chain
42	6.3	Determine across L48, IST AE - (Gas & Environmental products) accreditation benchmarks and strategy
43	6.4	Work with industry partners (e.g. OGCI) to define industry methodology for determining methane emissions across the value chain
44	6.5	Work with industry partners (e.g. OGCI) to define what 'near-zero methane emissions' means for the value chain
45	7	Develop and implement integrated methane technology plan to drive improvements in methane data accuracy and support operational reductions
46	7.1	Develop a plan to use analytics to identify and quantify methane sources (including wells) and inform methane management interventions
47	7.2	Complete full stack test Ground, Flight & Orbit to prove measurement accuracy and technology choices
48	7.3	Run proof of concept for drone-mounted OGI camera in operations, DIO with L48
49	7.4	Leak Detection & Quantification Trials: Continue current and proposed expanded leak detection and quantification trials (mAIRsure, Providence, drones, satellites, Rebellion). Continue evaluation and decision through L48 governance of emerging technology.
50	7.5	Develop an upstream prioritised plan to achieve continuous methane monitoring using top down and bottom up emissions monitoring technologies enabling real time data collection, integration and analysis to inform decision making
51	7.6	Identify and trial at a site technology to improve flaring performance (e.g. technology to better monitor / detect unlit flare to allow pilot/purge rates to be minimised)
52	7.7	Complete heat map of methane related technology projects across all of BP (DIO, L48, Upstream etc)
53	7.8	Lead cross functional workshop (including DIO, IST, Tech) to agree methane technology focus areas and delivery of technology programmes
54	7.9	Finalise integrated methane technology plan
55	7.10.	Identify suitable test sites in BP for trialing methane detection and reduction technologies, e.g. wellsite power generation
56	8	Develop plan to evaluate and improve the accuracy of flare emissions data (metered volumes & combustion efficiency)
57	8.1	Evaluate flare uncertainty (metering and combustion) across GOO operations
58	8.2	Develop a plan to evaluate flare uncertainty in GWO operations
59	8.3	Define flare metering performance requirements and build maintenance requirements into existing maintenance processes
60	8.4	Define flare combustion performance requirements and build maintenance requirements into existing maintenance processes
61	8.5	Repair non-functioning flare meters in Angola
62	8.6	Develop plan to deliver flare metering and combustion performance requirements across GOO
63	9	Design and implement a standardised Upstream Leak Detection and Repair (LDAR) programme
64	9.1	Define GOO LDAR requirements
65	9.2	Embed standardised LDAR programme across GOO
66	9.3	Implement find and fix LDAR programme in L48: prioritized on 30% of production in 2018/19, 60% of production in 2019/20, and 100% of production by 2020/21. Perform LDAR utilizing existing technology and continue trials to identify efficient and effective alternative means to accomplish LDAR aligned with L48 IO mission.
67	10	Develop and implement consistent Group, Segment and Regional policies and advocacy positions on methane
68	10.1	Refresh the IMWG purpose and process and associated Advocacy Governance to make it fit for purpose to deal with fast-paced issues such as this Develop global advocacy principles for methane regulation and feed conclusions into the advocacy priority action within Methane Guiding Principles led by EXM/Shell
69	10.2	(note this milestone links to 11.1)
70	10.3	Review and make recommendation on future and continued participation in all methane-related voluntary programmes

	C	D	E	F	G	H	I	J	K	L	M
35	4Q19	Dave King	Sue Ford	yes	Alison working on it						
36	4Q18	David Campbell	Chris Mawer	yes							
37	2019	Andy Collins	Alison Young	no							
38	2019	Andy Collins	Alison Young	no							
39	2020	Morag Watson			If Morag, Julian do not already have a clear GWO tag, M. Laney will work with them to confirm						
40	4Q18	Morag Watson	Julian Gray	yes							
41	4Q19	Morag Watson	Julian Gray	yes							
42	4Q19	Morag Watson	Julian Gray	yes							
43	4Q18	Liz Rogers	Muhunthan Sathiamoorthy	yes							
44	4Q18	Liz Rogers	Muhunthan Sathiamoorthy	yes							
	2018	Ahmed Hashmi									
45			Ahmed Hashmi		Deliver integrated Methane Technology frame, including shaped components, as the outcome						
46	4Q18	Morag Watson	Julian Gray	yes							
47	4Q18	Morag Watson	Julian Gray	yes							
48	4Q18	Morag Watson	Julian Gray	yes							
49	4Q18	Kola Fagbayi	Kirk Steinle	yes							
50	2Q19	Morag Watson	Julian Gray	yes							
51	4Q18	Ahmed Hashmi	Dan Touzel	yes	M. Laney will confirm a GWO tag. Alaska trial complete and data being assessed, results to inform the						
52	2Q18	Ahmed Hashmi	Peter Evans	yes							
53	3Q18	Ahmed Hashmi	Peter Evans	yes							
54	4Q18	Ahmed Hashmi	Peter Evans	yes							
55	2019	Ahmed Hashmi	Ahmed Hashmi	yes	call with Ahmed on 16/8 -- Note that GWO is working with D. Touzel on drone technology project						
56	2019	Fuzzy Bitar	Fuzzy Bitar								
57	4Q18	Matt Werner	Ian Alleyne	yes							
58	2019	Andy Kreiger	Margaret Laney	yes							
59	2019	Matt Werner	Steve Beamer	yes							
60	2020	Matt Werner	Steve Beamer	yes							
61	4Q18	Matt Werner	Roger Boyce	yes							
62	4Q18	Matt Werner	Steve Beamer	yes	M. Laney working to confirm completion						
63	2019	Fuzzy Bitar	Fuzzy Bitar								
64	4Q18	Dave Wall	Doog Wright	yes							
65	2Q19	Dave Wall	Doog Wright	yes							
	2020	Dave Lawler	Brian Pugh								
66				yes							
67	2018	Dominic Emery	Dominic Emery								
68	2H18	Dominic Emery	Paul Jefferiss	yes							
69	2Q18	Mary Streett	Bob Stout	yes							
70	2018	Dave King/Liz Rogers	Dave King/Liz Rogers	yes							

	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD
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45	of a planned workshop - end 2Q; Deliver Live Integrated Methane Technology Plan, including SPAs and delivery target dates - end 3Q																
46																	
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50																	
51	e need for further quantification trials, e.g. capture high flare flow rates. Additional methane trials utilizing drone technology in Oman and NS are being considered.																
52																	
53																	
54																	
55	ect related to methane detection (Oman). If included in 9.5, we will confirm GWO tag. If not, we could add a 9.6.																
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	A	B
71	10.4	Be instrumental in encouraging at least 3 countries where we operate to sign up to CCAC and WB30 (AGT, Angola, Indonesia, Trinidad, Oman, Egypt), and those that have signed up to fully implement (subject to conclusion of 10.3) or action could be; Implement recommendation from review of methane-related voluntary programmes (milestone 10.3)
72	11	Develop and implement US methane advocacy plan
73	11.1	Create model framework for Methane Regulations that BP would support by assessing existing US federal/state regulations
74	11.2	Create US Methane Campaign strategy that would include plans for internal/external communications, engagement, and regulatory advocacy
75	11.3	Agree BP's level of leadership participation (strategical and tactical) within the API Environmental Partnership, including the role L48 will play
76	11.4	API Environmental Partnership: Take a leading role in driving forward the Environmental Partnership and identifying natural gas value chain partners to join the program (covered under 11.3, merged text agreed with L48)
77	11.5	Host US focused stakeholder event with the objective of making a meaningful contribution to the world's understanding of methane and BP's ability to act.
78	11.6	Build strategy to advocate for improvements to the EPAs GHG Reporting Rule, focused on intermittent pneumatic controllers
79	11.7	Recommend fit-for-purpose tracking tool for new proposed legislation across US from elected state/federal officials
80	12	Deliver External Gas & Methane Communications Campaign to demonstrate BP's leadership on methane
81	12.1	Deploy leaders to tell the gas story and increase BP's visibility on key global platforms e.g. World Gas Conference
82	12.2	Create agenda setting content to drive the campaign: deep dive features on methane management and film to depict the methane challenge
83	12.3	Proactively engage with stakeholders by hosting global stakeholder events in UK, US and Asia (TBC) to demonstrate BP's leadership on methane and ability to act.
84	12.4	Leverage milestones on BP's most significant gas projects as live proof points on the case for gas (SGC, Khazzan)
85	12.5	Announce technology partnership(s) and look to communicate their contribution to understanding methane emissions
86	12.6	Develop an open innovation challenge to crowd source ideas to solve a significant aspect of the methane challenge
87	12.7	Publish independent data on the methane science cycle with Princeton (their research will not be ready until 2019)
88	12.8	Run media/stakeholder visits to demonstrate how we are managing methane at key facilities e.g. Khazzan, Sangachal, L48
89	12.9	Show action in the business by sharing publicly what is happening from targets to reporting methodologies and standards (elevating the Upstream Leadership Plan)
90	12.9.1	Develop a cross-industry methane summit including e.g. agriculture and construction to tackle the methane challenge beyond O&G industry
91	13	Develop and deliver internal communications plan to educate BP employees on carbon and methane science and BP's role in reducing carbon/methane emissions
92	13.1	Develop Upstream methane employee communications plan
93	13.2	Develop and implement L48 internal methane communications plan aligned with Segment communication plan
94	13.3	Develop and implement internal (e.g. Helios) and external open innovation challenges for methane reduction
95	14	Develop and implement SLL/Executive Education Programme to instil culture of methane leadership across Upstream
96	14.1	Develop SLL/Executive education programme materials
97	14.2	Identification of target audience (Group Leadership & SLL in Upstream is the minimum audience – maybe more)
98	14.3	Development of delivery timetable, presenters, venues etc
99	14.4	Delivery of Education Programme
100	14.5	Develop OMS Academy module
101	14.6	Develop and implement 'zero methane emissions mindset' for L48 leaders
102	15	Develop industry leading position on methane reporting transparency
103	15.1	Conduct comparison of US with non-US methane emission methodologies e.g. calculate Upstream fugitive emissions using EPA emission factors
104	15.2	Review and update Upstream methane source surveys, incorporating lessons from first surveys to close gaps (this should include GWO)
105	15.3	L48 Emission Inventory Improvement: Hold peer assist to review L48 internal GHG calculation approach (inventory, emission factors, calculation methodology). Implement annual review of internal GHG approach and emissions by L48 RCE Mgr. Ensure accuracy of data in L48's systems of record that are used as inputs to emissions calculations; including equipment inventory, production data, operational runtime, and episodic events (i.e. liquid unloading).
106	15.4	
107	15.5	Update Group reporting guidelines to improve quantification e.g. a tiered approach to methane emissions reporting
108	15.6	Develop recommendation for independent external auditing of methane data and calculations (e.g. OGCI)

	C	D	E	F	G	H	I	J	K	L	M
		William Linn/Geoff Morrell									
71	2018		Regional C&EA teams	no	depends on outcome from milestone 12.4. should there be a follow opn milestone to 12.4 which is in						
72	2018	Mary Streett									
73	2Q18	Mary Streett/David Lawler	Bob Stout/Kola Fagbayi	yes							
74	3Q18	Mary Streett	Bob Stout/Liz Sidoti	yes							
75	3Q18	Susan Dio/Dave Lawler	Joe Ellis/Kola Fagbayi	yes							
	2019	Dave Lawler	Kola Fagbayi								
76				no							
77	4Q18	Mary Street	Bob Stout/Liz Sidoti	yes							
78	2019	Bob Stout/Kola Fagbayi	Jim Nolan/Dana Wood	yes							
79	2019	Mary Streett	Joe Ellis	yes							
80	2019	Rachel Woods									
81	2Q18	Rachel Woods	Isabel Miranda	yes							
82	3Q18	Rachel Woods	Isabel Miranda	yes							
83	3Q18	Rachel Woods	Isabel Miranda	yes							
84	3Q18	Rachel Woods	Isabel Miranda	yes							
85	3Q18	Rachel Woods	Isabel Miranda	yes							
86	1Q19	Rachel Woods	Isabel Miranda	yes							
87	1Q19	Rachel Woods	Isabel Miranda	yes							
88	1Q19	Rachel Woods	Isabel Miranda	yes							
89	3Q19	Rachel Woods	Isabel Miranda	yes							
90	2020	Rachel Woods	Isabel Miranda	yes							
	2019	Steve Shaw									
91											
92	2Q18	Steve Shaw	Marissa Walker	yes							
93	2018	Laura Leffler?	Marissa Walker	no							
94	1Q19	Steve Shaw	Paul Tuohy	yes							
95	2019	TBD									
96	4Q18	Head of Learning?	Muhunthan Sathiamoorthy	yes	methane guiding principles action						
97	1Q19	Head of Learning?	?	no							
98	2Q19	Head of Learning?	?	no							
99	4Q19	Head of Learning?	?	no							
100	4Q18	Liz Rogers	Muhunthan Sathiamoorthy	yes							
101	2019	Dave Lawler	Kola Fagbayi	yes							
102	2020	Dave King									
103	4Q18	Dave King	Rob O'Brien	yes							
104	2018	Dave King	Sue Ford	yes	M Laney to confirm GWO tag						
	2018	Kola Fagbayi	Bob Chou								
105				yes							
	2019	Brian Pugh	Will Burton								
106											
107	4Q18	Liz Rogers	Muhunthan Sathiamoorthy								
108	4Q18	Liz Rogers	Alejandra Castano								

	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD
71	Implement recommendation from the review?																
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	A	B
109	15.7	Develop and agree the key focus areas for the 2018 Sustainability Report on 'Addressing the methane challenge' (include consideration of sources, intensity, asset class etc)
110	15.8	Work with trade associations (GBG, OGCI, IPIECA) and L48 to develop consistent methane emission benchmarking methodology
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114	Proposed for Deletion	
115	16.3	Work with trade associations/Methane Guiding Principles to develop consistent methane emission reporting methodologies e.g. IPIECA/OGCI reporting guidance
116	16.6	Expand reporting scope to include material NOJVs emissions in BP reports - already do except for Iraq and Rosneft
117	12.3	Develop specific model elements of what good regulations should include, for use in advocacy globally (draw on lessons from post Macondo advocacy)
118	12.5	Develop and implement US/L48 methane communications and advocacy materials and plan aligned with Group campaign - is this not what is covered under 13?
119	12.6	Host event to engage and build alliances with key NGOs open a dialogue on the methane challenge - proposed to remove by Rachel/Bob/Mary S. Does this overlap w
120	7.6	Use Advocacy frame for the case for gas (GP4) to work with and influence NOJV partners
		Peer Benchmarking
121		Develop benchmarking approach to understand peer performance and best practices in methane management.
		Methane Leadership
122		Define what methane leadership means for L48. Reframe L48 Carbon Road Map to align and support that definition.
123		
		State Industry Group Participation
124		Develop state industry group participation level for methane related issues (for each state) (chair, lead from within, participation, observe).
		L48 Tactical Advocacy Strategy
125		Develop list of top 5 advocacy points associated with Methane and weave into the already developed advocacy strategy. Continue to implement strategies and update to incorporate elements of the US Advocacy Plan and the "what we stand for".
		L48 Leadership Workshop
126		Develop and conduct a L48 Leadership workshop.
127		
		API Environmental Partnership
128		Develop API Environmental Partnership Plan to define how L48 participates in the broader mission of industry collaboration in the program.
		Communicate Externally on L48 Actions
129		Report on L48 historical and current actions to proactively reduce methane emissions through the Group Sustainability Report & US/ L48 External Communications Plan (C&EA).

	C	D	E	F	G	H	I	J	K	L	M
109	3Q18	Geoff Morrell / Rachel / De	Tyrone Kalpee								
110	4Q18	Liz Rogers	Liz Rogers/Kola Fagbayi								
111											
112											
113											
114											
115	2018			no							
116	2020			no							
117	2018	Dominic Emery	Dominic Emery	no	covered elsewhere - check with Liz						
118	2018	Dominic Emery/Bob Stout	Rachel Woods/ Bob Stout	no	Check overlap with strategic action 13. We had an initial one in the UK On 24.04 .18 and the idea is to						
119	2018	Dominic Emery/Bob Stout	Dominic Emery/Bob Stout	no	do we want one in the US and one in the UK? And how does this relate to Rachel's campaign? Part of						
120	2019	Andy Collins	Alison Young	no	Unclear - propsoe deleting						
121	2019	Dave Lawler / Gordon Birrell	Kola Fagbayi (US) and Liz Rogers (Global)								
122	2018	Kola Fagbayi	Kirk Steinle								
123											
124	2018	Steve DeGiusti	Gabrielle Sitomer/ Kirk Steinle								
125	2018	Kola Fagbayi	Dana Wood								
126	2019	Dave Lawler	Kola Fagbayi								
127											
128	2019	Kola Fagbayi	Kirk Steinle								
129	2019	Dave Lawler	Kola Fagbayi								

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119	p have one in the US and a third one to be decided but possibly in India or China (All part of the UpstreamAdvocacy Campaign on Gas and Methane)																
120	of the how - which NGOs?																
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