# WRAP OGWG: 0&G EI PHASE 2 STATUS UPDATE

John Grant, Amnon Bar-Ilan February 12, 2019



## **OUTLINE**

Survey Compilation Forecast Scenarios Looking Forward

01 02 03



#### **01 SURVEY COMPILATION**

- Operator surveys in progress and expected to be completed per each state agency's survey timeline
- Compile and analyze survey data for each basin
  - Review and identify missing survey fields or survey fields where additional information is necessary to understand the data provided
    - Follow-up with operators (coordinate with state agencies to the extent necessary)
  - Estimate the fraction of activity represented by returned surveys
  - Estimate emission rates by basin
    - By source category
    - By well type (oil, gas, or cbm) and/or spud type (horizontal, directional, or vertical)
  - On-the-books controls status to be informed by survey results
  - Describe how these inputs will inform the future year inventory
- Documentation via technical memo
- Agency involvement: survey data provision, operator follow-up (to the extent necessary), memo review



#### **02 FORECAST SCENARIOS**

- Scope:
  - 2028 future year (based on 2023 emission rates and activity forecasts)
- Ramboll is currently identifying <u>O&G activity</u> forecasts methods
  - For basins with the most substantial O&G activity
  - Based on historical trends
  - Level-of-detail: well type (oil/gas/cbm) and/or spud type (horizontal, directional, vertical)
- Agency input/consultation:
  - Provide any input on the basin list by Feb. 19<sup>th</sup>
  - Review basin specific forecast *methods* in late-February
  - Consultation meetings in early-March
  - Review of forecast



State(s)	Basin / Forecast Area
AK	Arctic Coastal Plains Province, Cook Inlet Basin
CO, WY	Denver Basin, Piceance Basin
MT	Sweetgrass Arch
MT, ND, SD	Williston Basin
NM	Permian Basin
UT	Paradox Basin, Uinta Basin
WY	Big Horn Basin, Green River Basin, Powder River Basin, Wind River Basin
Other Alas	ka Basins
Other Rock	ky Mountain Basins

<sup>\*</sup>ARB to provide CA inventories

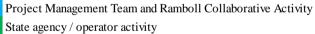
### 03 STATUS, SCHEDULE AND LOOKING AHEAD

- Task 1: Base Year Inventory
  - Complete: Base year (version 1) inventory and O&G activity complete
  - In-progress: Survey (as described in previous meetings, due to timeline, survey emphasis is on informing future year inventory)
  - Next steps: Support to operators filling-out of survey, WEA involvement, survey compilation
  - Agencies to provide completed operator surveys on state specific timelines & review subsequent survey compilation memo
- Task 2: Forecast 2028 Inventory (On-the-books controls)
  - Completed: Compilation of historical activity
  - In-progress: Developing O&G activity forecast scenarios
  - Agencies to review, comment and participate in teleconferences in late-February, early-March
- Not yet started
  - Task 3: Forecast 2028 Inventory (Additional reasonable controls)
  - Task 4: O&G Program and Emission Management Review
  - EPA Modeling Platform Review (pending EPA release)



# **03 STATUS, SCHEDULE & LOOKING AHEAD**

Activity		2019																
		Feb			Mar				Apr				May			Summer	Fall	Winter
Task 1: Ba	se Ye	ar I	nve	nto	ry 8	& St	ırve	ey										
Operators fill-out surveys																		
All surveys provided to Ramboll by																		
Ramboll compiles and analyzes survey data by March 22																		
Ramboll delivers survey results memorandum																		
WRAP OGWG members provide comments on survey results memo																		
Ramboll incorporates survey results into base year inventory																		
Ramboll delivers draft version 2 base year inventory and report																		
WRAP OGWG comments on draft base year inventory (v2) and report																		
Ramboll Modeling Platform Review																		
Ramboll delivers modeling platform review results																		
	7	Γask	2:	Fut	ure	Yea	ar I	[nve	nto	ry: (	On-tl	ne-b	ook	s aı	nd (	On-the-way	(OTB ar	d OTW)
	Controls																	
Identify forecast scenarios																		
OTB and OTW Emission Controls																		
OTB and OTW controls future year inventory and report																		
																Task	3: Future	Year
								Inventory: Additional										
																Reaso	onable Co	ntrols
Identify Additional Reasonable Controls for Oil and Gas Sources																		
Additional Reasonable controls future year inventory and report																		
																Task 4: C Emissi	&G Prog	
Identification and Review of Member Agency Oil & Gas Programs																		
Due is at Management Team and Dambell Collaboration Activity																		





# **QUESTIONS?**

