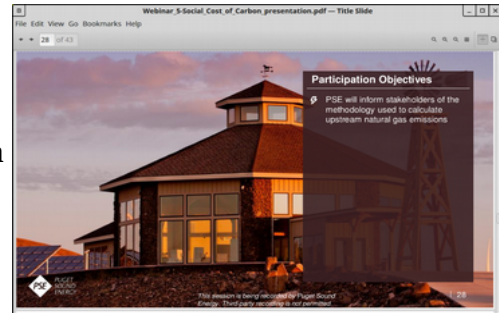
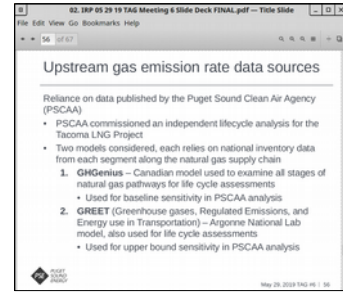
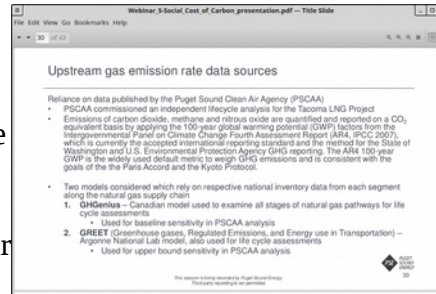


## Feedback questions regarding the level of public participation PSE selected for Webinar 5

For the section of Webinar 5 on upstream natural gas emissions methodology, PSE chose the lowest level of public participation possible: "**inform**" only (Webinar 5, Slide 28).



During Webinar 5, PSE informed us they would use the same emissions methodology (Webinar 5, Slide 30) they had proposed during the 2019 IRP process (TAG 6, Slide 56). In fact, all but one slide used for presenting this information for the 2019 IRP were the same as those in the 2021 IRP, so many stakeholders present at the 2021 IRP webinar were already informed of the proposed method.



During the 2019 IRP process, lively discussion ensued when PSE's proposed method was presented (TAG 6, Final notes, pg 13), so in addition to knowing that most stakeholders were already informed about the method, PSE should have known that stakeholders would be expecting to participate at a level higher than "inform."

Is this the first time in the 2021 IRP process that PSE has used a level of "inform" only? If it was used for a previous topic, why was it deemed appropriate for that topic? Also, why did PSE decide to go with "inform" only for this topic?

Thank-you for your attention to these questions.

Virginia Lohr  
Vashon Climate Action Group  
July 25, 2020

**IRP-TAG-Meeting-6\_Meeting-Notes-FINAL.pdf**

File Edit View Go Bookmarks Help

13 of 18

### Upstream gas emission methodology

Keith Faretta, PSE Senior Resource Scientist, presented on upstream gas emission methodology. Keith reviewed the data previously presented at TAG #2 on October 11, 2018, reviewed the upstream gas emission rate scope, provided new information to supplement the derivation of the upstream rate, and explained how the emission rate will be applied in the 2019 IRP. For details, see the *Upstream natural gas emission methodology* presentation as distributed in the meeting packet (available on slides 52 through 60 of the meeting materials posted to [www.pse.com/irp](http://www.pse.com/irp)). TAG members asked questions and discussed various topics throughout the presentation.

Doug Howell asked if PSE knows what percentage of gas delivered never makes it to the consumer because it is leaked upstream. Bill Donahue, PSE Manager of Natural Gas Resources, responded the numbers shown in the presentation slides include all GHGs from extraction through delivery, including combustion emissions released through compressors, converted to CO<sub>2</sub>. Fred Heutte asked if he could find the emissions factors PSE used by going to the Puget Sound Clean Air Agency (PSCAA) report. Keith responded the PSCAA has gas lifecycle spreadsheets available on their website for download and that all of the factors are available in that documentation.

Bill Westre noted the PSCAA valued methane as 25x more potent of a GHG than CO<sub>2</sub> and expressed concern this equivalency is lower than more recent estimates of methane's equivalency to CO<sub>2</sub> and would underestimate the impact of methane leakage in the atmosphere. Doug agreed, noting the PSCAA used the equivalency factor published in the Fourth Assessment Report (AR4) by Intergovernmental Panel on Climate Change (IPCC). AR4 estimated the equivalency at 25x CO<sub>2</sub>, while the Fifth Assessment Report (AR5) estimates the equivalency of methane at 30x CO<sub>2</sub>. Doug requested PSE's support in using the most recent science in their calculations to ensure the impact of methane leakage is not underestimated.

Doug Howell also expressed concern the analysis assumes all PSE natural gas being sourced from British Columbia (BC), when the use of BC gas pushes other buyers of natural gas to other sources in the western portion of North America. Doug proposed an assumption of western regional sourcing would provide a more accurate estimate of GHG.

Fred Heutte shared he appreciated the lifecycle approach PSE was using for determining emission rates but noted more work may need to be done in the future on CO<sub>2</sub> equivalence factors and gas sourcing. Fred agreed with PSE's approach to use the PSCAA report for the time being because it is a report from a state agency, but this will need to evolve to get a more accurate understanding of methane impacts. Doug Howell expressed hope that PSE will support a rigorous public process in rulemaking to determine emissions factors.

Rob Briggs expressed frustration TAG members had not yet received two pieces of information requested at TAG #2: the global warming potential factor PSE is using, and the percentage of leakage of methane as a percentage of methane delivered. Rob noted these numbers were requested so they can be compared to the Science Magazine study released on natural gas impacts on climate change. Keith explained the global warming potential factor used was the factor from AR4, meaning TAG members could use AR4 and the numbers provided in the upstream presentation materials to calculate the leakage of methane as a percentage of methane delivered. Keith also offered to provide a link to the PSCAA lifecycle spreadsheets mentioned earlier in the presentation. *Update since meeting: the links and other references are provided in the meeting notes as Appendix A. This will also be posted on [www.pse.com/irp](http://www.pse.com/irp) under "action items."*

Virginia Lohr expressed frustration that TAG members were being asked to calculate numbers the TAG requested at TAG #2. Keith asked for clarity on the percentage being asked for, and Virginia specified they would like the amount of methane leaked through the entire natural gas process as a percentage of methane delivered. Bill Donahue offered to work with Keith and members of the Vashon Climate Action Group to develop the percentage requested so Virginia could compare PSE's leakage rate with the scientific literature she mentioned.

13 PSE TAG 6 Meeting Summary – FINAL