Tad Anderson

My name is Tad Anderson. I am a retired Atmosphere Scientist from the University of Washington with expertise in climate forcing. Over the last few months I have attempted to familiarize myself with the current literature on climate forcing by methane, the main constituent of natural gas. And that is the topic I'd like to address today in regard to GAP rule-making. What I have found boils down to 3 main points. One, the concept of leakage rate is really the key to understanding methane's climate impact. Good policy requires good communication, yet existing reports on methane emissions are hard to understand due to a bewildering array of terms and units. Leakage rate is easy to understand and is the most important single number to consider. It is simply the amount of methane leaked to the atmosphere per unit of natural gas delivered to the end user. This quantity must be clearly stated and justified in all projects involving natural gas. Two, there is considerable scientific uncertainty over the appropriate values of leakage rate for the oil gas industry. Therefore, the GAP rule needs to incorporate mechanisms for assuring the accuracy of leakage rate numbers that are used by proposing entities. This is a difficult task given the rapidly evolving science and I recommend that Ecology hire an independent scientist with expertise in this area to help craft the rules. I hasten to add that I am not that person, my expertise is in aerosol particles more than methane though, I could help with recommendations. Three, there are strong reasons for giving priority to the 20-year, as opposed to the 100-year timeframe when considering methane. Global temperatures are rapidly approaching, what many scientists consider to be irreversible tipping points. If those analyses are correct, then preserving the long term habitability of our planet may hinge on our ability over the next few decades to slow the current rate of global warming. Because of its very short atmospheric lifetime, around 10 years as opposed to a century or more, methane represents one of our best tools for doing that. I have prepared a short document explaining these points with citations to the referee literature. I've shared it with ecology, but I would welcome the opportunity to share and discuss it with other participants as well. My email address is tadand99@gmail.com. Thank you.