

## VGI Initiative: Discussing PG&E's Proposed Use-Case Valuation Framework

On May 21 VGI stakeholders will have an interactive exercise to delve into PG&E's proposed Use-Case Valuation Framework. The goal of the exercise is to gain a better understanding of PG&E's proposed Framework and Methodology and to address any questions related to it. The exercise designed to explore this methodology is outlined below.

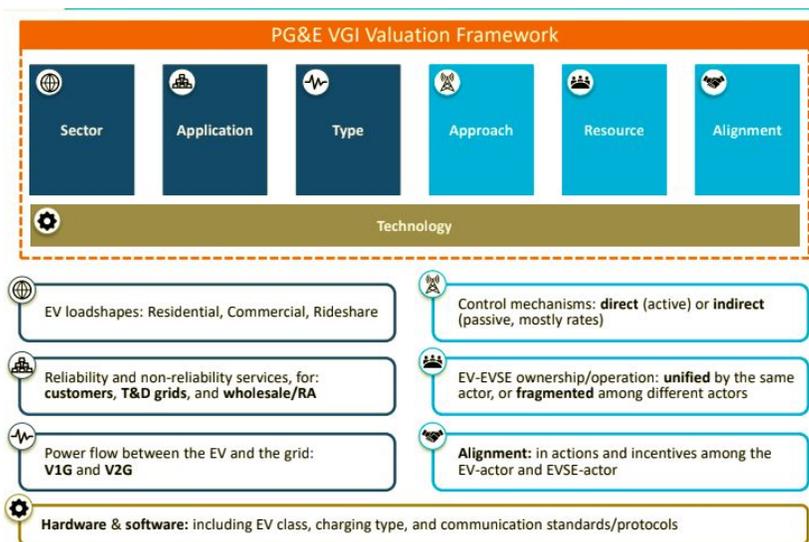
Participants should be familiar with PG&E's brief description of their framework before they begin, available at:

[https://drive.google.com/open?id=1RSoz4EIOpqf\\_cMiqKKODZpNO\\_nHMEwQ](https://drive.google.com/open?id=1RSoz4EIOpqf_cMiqKKODZpNO_nHMEwQ) .

Steps 1 and 7 of this exercise will be completed with the full group; the other steps will be completed through small groups pre-organized by Gridworks for diversity of perspective. PG&E will support with the exercise facilitation, to help address any questions or points of discussion.

### Step 1: Define the Valuation Framework (30 minutes)

To begin, refresh your orientation to the PG&E valuation framework and consider Questions 1 and 2 below.

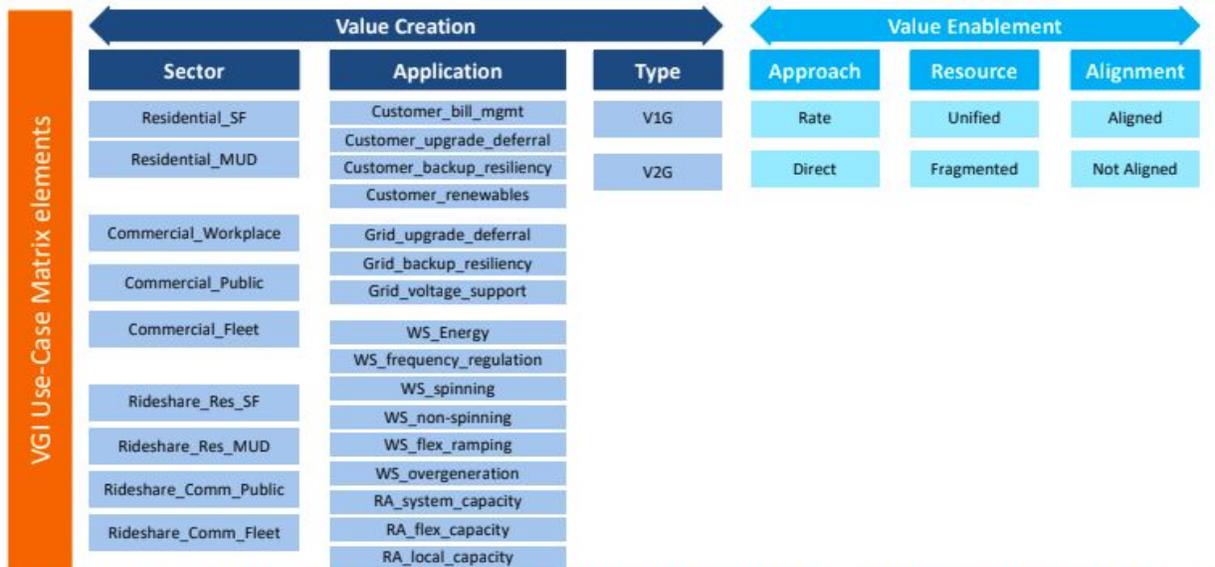


*Q1: Are the seven dimensions clear and well understood?*

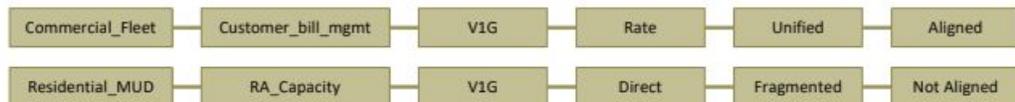
*Q2: Do the seven dimensions reflect key contours of today's VGI landscape?*

### Step 2: Define the Use-Case Matrix (30 minutes)

Next, consider in additional detail each of the following six elements of the framework. Create your own use case using the elements, as shown in the example.



*Example use-cases!*

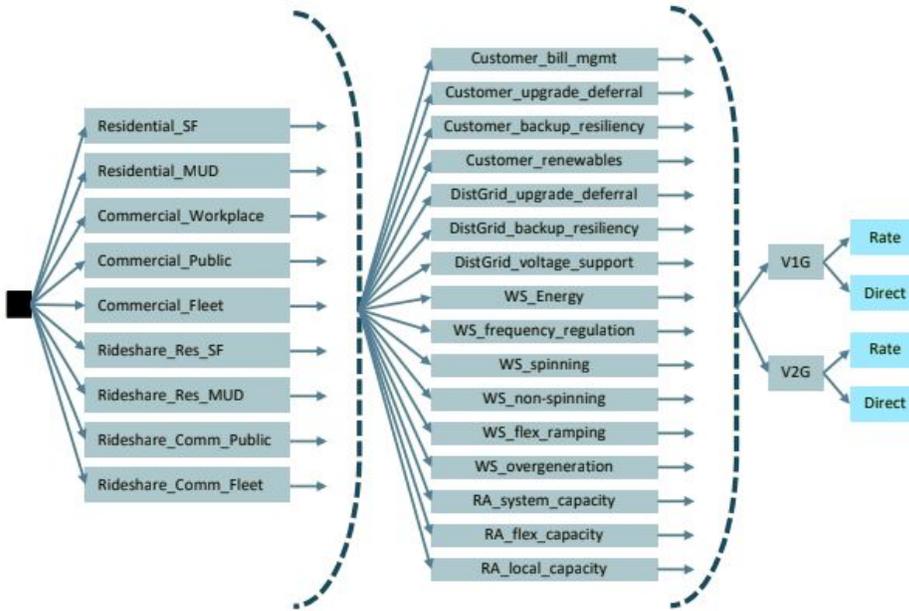


Q3: Is the Use Case Matrix clear and easy to understand?

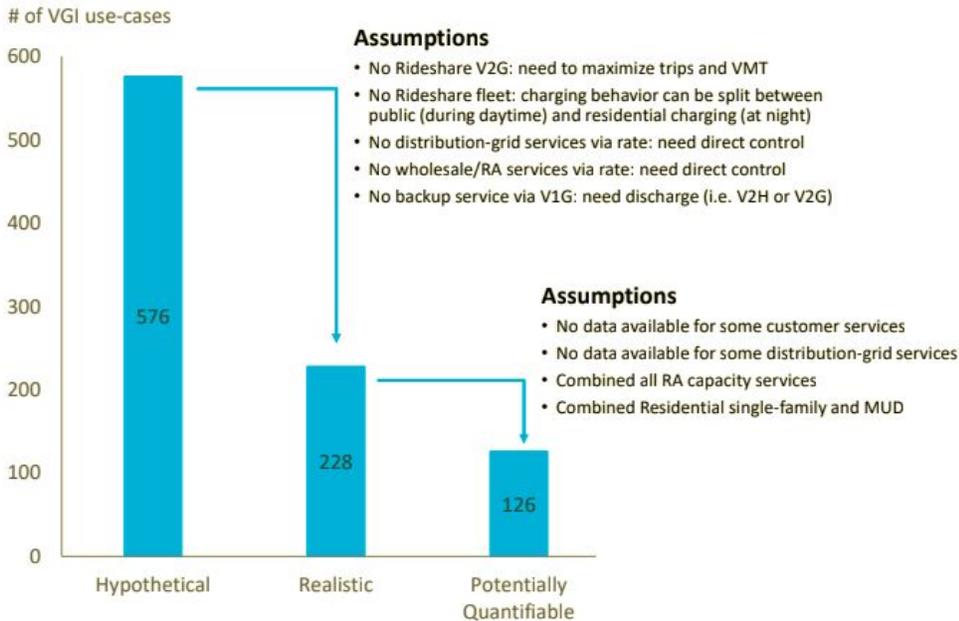
Q4: Based on your current activities in the VGI space, create your own use-case or set of use-cases, using the examples provided to guide you. (For now, keep it simple; do not combine sectors or applications.)

### Step 3: Refine Use-Cases (30 minutes)

Next, consider PG&E's suggestions for how hypothetical use cases may be narrowed down to a set of "potentially quantifiable" use cases and consider Questions 5 below.



**576 hypothetical VGI use-cases**

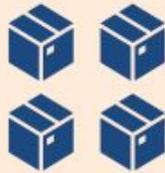


Q5: What assumptions do you agree with? Disagree with? Are missing and should be added?

**Step 4: Quantify Use Case Value (60 minutes)**

Next, consider how the quantification of value may be operationalized, beginning with how simple use cases may be combined into advanced use cases. Address questions 6-10.

### Phase 1: Building-block use-cases



- 1 sector loadshape
- 1 service / application
- V1G or V2G
- Active or passive control

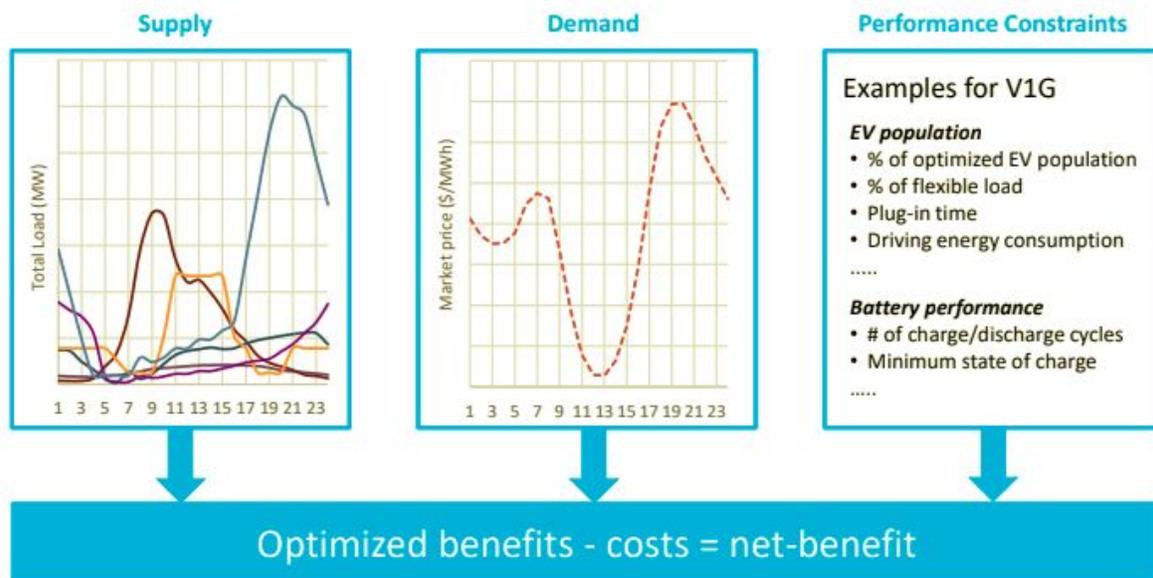
### Phase 2: Advanced use-cases



- Combined sectors loadshapes
- Combined services / applications
- Market saturation
- System infrastructure

Q6: Is your example use case “potentially quantifiable”?

Q7: Using your example use case, experiment with combining “building-block use cases” into “advanced use cases.” Can the building block use cases be combined without modification? If not, what stipulations are necessary to allow for multiple use cases to align?



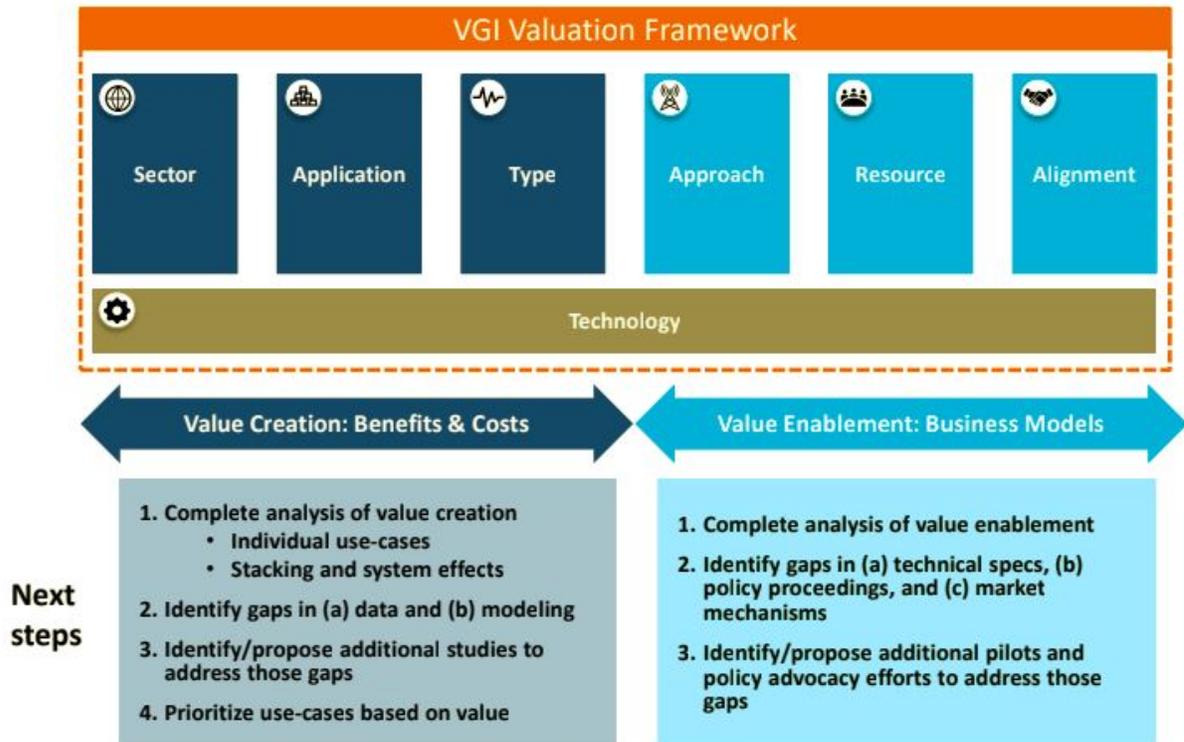
Q8 (PG&E leads response; stakeholders share questions/insights): Based on your current efforts and analyses, can you discuss how supply, demand, and performance constraints might be identified and characterized?

Q9: How would optimized benefits, costs, and net-benefits be determined? What metrics might be best to use?

Q10: What do you anticipate to be the biggest advantages and challenges of quantifying the value of use cases? How should those advantages and challenges inform next steps?

### Step 5 and 6: Prioritize Use-Cases and Assess Use-Case Maturity (30 minutes)

Finally, consider PG&E's suggested "next steps" and discuss question 10 below.



Q10: Using your example use case, think through PG&E's identified "Next Steps." What questions do you have about the implementation of these steps?

### Step 7: Stepping Back

Q11: What type of information or data is needed to use the proposed method? Is it publicly available? Should it be publicly available? Are there preparations to begin?

Q12: What additional information do stakeholders need to understand PG&E's Use-Case Valuation Methodology?