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May 14, 2020

**VIA ELECTRONIC MAIL AND E-FILING**

Ms. Brinda Westbrook-Sedgwick  
Commission Secretary  
Public Service Commission of the District of Columbia  
1325 G Street, NW, Suite 800  
Washington, DC 20005


**Re: Formal Case No. 1142**  
**[In the Matter of the Merger of AltaGas Ltd. and WGL Holdings,**  
**Inc.]**

Dear Ms. Westbrook-Sedgwick:

Enclosed for filing is AltaGas Ltd.'s and Washington Gas Light Company's Reply Memorandum Regarding Joint Motion for Second Enlargement of Time to Provide Comments to AltaGas Ltd.'s Merger Term Nos. 6 and 79 Filings.

If you have questions regarding this matter, please feel free to contact me.

Respectfully submitted,



Moxila A. Upadhyaya  
*Counsel for AltaGas Ltd.*

Copy to: Certificate of Service  
Christopher S. Gunderson, Esq.  
J. Joseph Curran, III, Esq.

**BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF THE DISTRICT OF COLUMBIA**

IN THE MATTER OF  
THE MERGER OF ALTAGAS LTD. AND  
WGL HOLDINGS, INC.

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FC 1142

**REPLY MEMORANDUM REGARDING JOINT MOTION FOR SECOND  
ENLARGEMENT OF TIME TO PROVIDE COMMENTS TO ALTAGAS LTD.’S  
MERGER TERM NOS. 6 AND 79 FILINGS**

On May 11, 2020, the District of Columbia Government (“DCG”) and Office of People’s Counsel for the District of Columbia (“OPC”) (collectively, “Movants”) filed a joint motion (the “Motion”) for a second enlargement of time to provide comments on the Climate Business Plan filed by AltaGas Ltd. and Washington Gas Light Company (“WGL”) (collectively, the “Companies”). Although the Companies are not opposed to the Movants’ request for extension of time to provide comments on the Climate Business Plan, and reply comments to the comments, the Companies disagree with the Movants’ representation that the sole basis for the Motion was the Companies’ alleged “failure to be open and transparent” about the contents and underlying methodologies contained within the Climate Business Plan. The Companies therefore feel compelled to correct the misstatements and misrepresentations made in the Motion so that the Public Service Commission of the District of Columbia (“Commission”) is presented with all facts pertinent to the Motion. The Companies also state that, consistent with the Commission’s orders in this case (including the Commission’s order (Order No. 20342) issued today denying Sierra Club’s Application for Reconsideration) and its Rules of Practice and Procedure, discovery at this stage of the case had ended, and therefore DCG’s discovery requests regarding the Climate

Business Plan (of which compliance entailed filing of the Plan and holding public input meetings) are inappropriate.

## **I. BACKGROUND**

Formal Case No. 1142's Merger Commitment/Settlement Term No. 79<sup>1</sup> requires only that AltaGas file the Climate Business Plan and then hold bi-annual public meetings "to report on and discuss its progress on the business plan."<sup>2</sup> The Commission is not required under the commitment to approve the Plan.

After AltaGas filed a consent motion for extension of time to file the Climate Business Plan on December 6, 2019, the Commission granted AltaGas's request and further ordered a brief comment period of 15 business days for initial comments, and 15 business days for any reply comments.<sup>3</sup>

Later, DCG and OPC requested an additional 60 days (up from the originally-allotted-for 15 days) to file their comments, on the ground that "the Climate Business Plan would contain highly technical information that involves long term policy considerations that requires careful review and analysis." The Commission granted this request on March 18, 2020.<sup>4</sup>

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<sup>1</sup> Commitment/Settlement Term No. 79 provides that "AltaGas will file with the Commission a long-term business plan on how it can evolve its business model to support and serve the District's 2050 climate goals (e.g., providing innovative and new services and products instead of relying only on selling natural gas). After the business plan is filed, AltaGas will hold bi-annual public meetings to report on and discuss its progress on the business plan." *See Formal Case No. 1142, In the Matter of the Merger of AltaGas Ltd. and WGL Holdings, Inc.* ("FC 1142"), Order No. 19936, Appendix A, rel. June 28, 2018, at ¶ 79.

<sup>2</sup> As noted above, this deadline was later extended by the Commission to March 16, 2020.

<sup>3</sup> FC 1142, Order No. 20276, rel. Dec. 19, 2019, at ¶¶ 4, 6, 8-11.

<sup>4</sup> *See* FC 1142, Order No. 20310, rel. March 18, 2020.

The Movants now seek an additional 42 days to file their comments on the Plan—to June 26, 2020—and also request that the Commission extend the deadline for reply comments by 42 days, to August 25, 2020.<sup>5</sup>

## II. RESPONSE TO THE MOTION

The Companies filed their Climate Business Plan on March 16, 2020.<sup>6</sup> The Companies are proud of the work that went into developing the Climate Business Plan and are encouraged by the response of many stakeholders. For example, the Environmental Defense Fund recently touted the Companies' Climate Business Plan as the “type of broad, system-wide thinking that is critical to maximize emission reductions,” an “illustrative” example of a plan that other states should use in framing their own climate needs.<sup>7</sup>

The accusatory tone of DCG's and OPC's Motion is not only unsupported (as discussed below), but it belies the purpose of the Climate Business Plan. The Companies see the Climate Business Plan as a launching point for further discussion of the best ways to implement regulatory and legislative policies to achieve the District's climate goals.<sup>8</sup> Like any business plan, the Climate Business Plan provides a flexible framework to guide the Companies' engagement with stakeholders in energy policy decisions over the long-term:

In creating the Plan, AltaGas recognizes that envisioning 30 years into the future represents the challenges of projecting the evolution of science and technology and the likelihood that there may well be

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<sup>5</sup> Motion at 1.

<sup>6</sup> As set forth in the Commission's Order No. 20310, the Companies included their renewable (bio) gas facility study conducted pursuant to Merger Commitment/Settlement Term No. 6. *See* FC 1142, Order No. 20310 at ¶ 8 (citing FC 1142, Order No. 19936, at ¶ 6 (“AltaGas will provide \$450,000 to fund a study to assess the development of renewable (bio) gas facilities in the Greater Washington, D.C. metropolitan area.”)).

<sup>7</sup> *See* Case No. 19-G-0678, *Proceeding on Motion of the Commission to Investigate Denials of Service Requests by National Grid USA*, Comments of Environmental Defense Fund (May 1, 2020) at 5, 6.

<sup>8</sup> In Formal Case No. 1162, Order No. 20314, the Commission noted that the Plan “is intended to be a prospective plan that will address AltaGas' future long-term business plan as it relates to the District's 2050 climate goals.” *See Formal Case No. 1162, In the Matter of the Application of Washington Gas Light Company for Authority to Increase Existing Rates and Charges for Gas Service* (“FC 1162”), Order No. 20314, rel. March 26, 2020, at ¶¶ 10-13.

revolutionary advances that could render today's thinking obsolete. It is in this spirit that the Plan is offered to provide a responsible and effective path forward. It will evolve over the coming decades to ensure a brighter, cleaner energy future that draws on an energy innovation vision, abundant resources and extensive carbon emissions reduction expertise.<sup>9</sup>

Said differently, this is the Companies' business plan for addressing climate change issues – the Companies are not asking the Commission (or DCG or OPC) to adopt this as the plan to address these issues.

Therefore, Settlement Term No. 79 does not include provisions for the Commission's approval of the Plan, but rather calls for bi-annual public meetings to facilitate continued dialogue and refinements to the Plan.<sup>10</sup>

Consistent with the Commission's initial 15-business-day comment period, the initial written comments could more broadly respond to the Plan, and the interested parties could expand on those comments during the course of the many bi-annual meetings to be held over the foreseeable future. So, unlike in litigated cases in which a Commission decision is forthcoming, the initial comment period regarding the Climate Business Plan is the beginning of this ongoing dialogue, not the final word.

DCG and OPC appear to be treating the initial comment period very differently. On March 26, 2020, DCG issued Data Request Set No. 30 to the Companies, seeking volumes of underlying

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<sup>9</sup> FC 1142, Dkt. No. 597, *Climate Business Plan for Washington, D.C.* at 3.

<sup>10</sup> Unlike other Settlement Terms, Settlement Term No. 79 does not require the Companies' plan to be approved by the Commission. *Compare* Settlement Term No. 5 (requiring "approval" of the Companies' plan to develop or cause to be developed 10 MW of renewable resources), *and* Settlement Term No. 54 (requiring the Commission to "approve" the PROJECTpipes consultant) *with* Settlement Term No. 79 (requiring only the "filing" of the Climate Business Plan and the holding of "bi-annual public meetings" on the Plan).

data.<sup>11</sup> Such requests are inconsistent with the purpose of the Climate Business Plan and the absence of any case or controversy pending before the Commission regarding the Plan. The Companies immediately reached out to DCG in response to this data request to explain that the Companies did not believe protracted discovery was necessary or appropriate because the Commission is not required to approve the Plan, but rather the Companies would be holding bi-annual meetings to engage stakeholders.<sup>12</sup> However, to assist DCG with its review of the Climate Business Plan, the Companies and DCG decided to exchange information informally.<sup>13</sup> DCG also agreed to “indefinitely” postpone the Companies’ deadline to object the data requests.<sup>14</sup>

Since that time, the Companies have provided DCG with an enormous amount of information,<sup>15</sup> including all of the information they sought in Data Request Set No. 30, as well as additional data DCG’s outside consultant requested thereafter.<sup>16</sup> The Companies even went so far as to arrange a lengthy conference call between the Companies’ consultant and DCG’s consultant<sup>17</sup>

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<sup>11</sup> See DR1142, Dkt. No. 363 (DCG’s Data Request No. 30 to Joint Applicants). .

<sup>12</sup> On Friday, March 27, 2020, counsel for the Companies attempted to contact counsel for DCG by telephone to discuss DCG’s data requests. Counsel for DCG and the Companies spoke by telephone about the data requests, first on March 30, and again on April 2, 2020. See **Exhibit 1** (email from J. Curran to B. Caldwell re: Formal Case No. 1142: DCG DR Set 30 (March 30, 2020)).

<sup>13</sup> Therefore, contrary to the Movants’ suggestion in their Motion, it was no surprise to the Movants “why” formal responses had not “been filed in the docket.” See Motion at 3.

<sup>14</sup> See **Exhibit 2** (follow-up email from J. Curran to B. Caldwell re: FW: Formal Case No. 1142 – DCG’s 30th Set of DRs (Apr. 2, 2020)).

<sup>15</sup> On April 8, 2020, the Companies sent DCG the requested ICF workpapers developed for the Climate Business Plan. See **Exhibit 3** (email from J. Curran to B. Caldwell re: Formal Case No. 1142 - DCG's 30th Set of DRs (April 8, 2020)). These materials were initially designated “Confidential” by the Companies, but, as explained further below, the “Confidential” designation was later removed and the materials were made publicly available.

<sup>16</sup> On April 23, 2020, DCG’s counsel wrote to the Companies’ counsel requesting additional information beyond the scope of Data Request No. 30. See **Exhibit 4** (email from B. Caldwell to J. Curran re: Follow Up from Climate Business Plan Call (April 23, 2020)).

<sup>17</sup> On April 16, 2020, counsel for the Companies arranged for a technical conference with DCG’s technical consultant (Dr. Hopkins) and the Companies’ technical consultant (ICF) to be held on April 21, 2020. See **Exhibit 5** (email from J. Curran to B. Caldwell re: F.C. 1142 JA's Data Response (April 16, 2020)). ICF technical consultants were made available to DCG’s consultant for the conference at the Companies’ expense.

so the two could freely interact regarding the contents of the Plan.<sup>18</sup> Further, to ensure that all stakeholders have access to this information, the Companies created a publicly available website (<https://washingtongasdcclimatebusinessplan.com/>) to make it easy for all stakeholders, including DCG and OPC, to access information regarding the Plan.<sup>19</sup>

Over a month ago, the Companies also received a request from OPC to hold a conference call to discuss the contents of the Plan. However, after the Companies promptly agreed to host such a call, OPC never provided proposed dates and still have not as of the filing of its Joint Motion with DCG.<sup>20</sup> It was not until this past Friday, after business hours, that OPC queried as to the production of the information DCG sought in its data request, despite being well aware that the Companies were engaging DCG outside any discovery process,<sup>21</sup> and despite being well aware that the relevant information was posted on the Company's Climate Business Plan website.

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<sup>18</sup> On April 21, 2020, DCG's and the Companies' experts held the (virtual) technical conference on the Climate Business Plan, with counsel for each party in attendance. The technical conference was accompanied by a slide deck prepared by the Companies' experts, ICF. The slide deck addressed in detail each of the requests contained in DCG Data Request 30. See **Exhibit 6**.

<sup>19</sup> On April 17, 2020, the Companies removed the confidential designation from the workpapers they provided to DCG, published the workpapers on their publicly available website <https://washingtongasdcclimatebusinessplan.com/>, and informed all of the parties (including DCG), and DCG separately, of the same. See **Exhibit 7** (email from S. Schipper to FC 1142 Service List re: FC 1142 - Climate Business Plan Website (April 17, 2020)) & **Exhibit 8** (email from J. Curran to B. Caldwell re: Formal Case No. 1142 - DCG's 30th Set of DRs (April 17, 2020)).

<sup>20</sup> On April 13, 2020, OPC contacted John O'Brien of WGL to inquire about whether WGL would "be able to do a Climate Business Plan conference call presentation next week for OPC". See **Exhibit 9** (email from L. Daniels to J. O'Brien re: [ External ] WGL Climate Business Plan presentation to OPC (April 13, 2020)). Mr. O'Brien responded to OPC, "Absolutely, send over some times" on that same day (April 13, 2020). *Id.* OPC did not respond to Mr. O'Brien with any proposed times for a conference call presentation, and, to date, has not responded to or acknowledged Mr. O'Brien's email. *Id.*

<sup>21</sup> On April 22, 2020, the Companies filed a public response in the Formal Case No. 1142 docket to the Sierra Club's Application for Reconsideration of its Out-of-Time Petition to Intervene, in which the Companies noted that the Companies "ha[d] not filed or served a response (or objections)" to DCG's data request set 30 because "DCG and the Companies are currently meeting and conferring in an effort to reach a mutually agreeable solution to DCG's request." See FC 1142, Dkt. No. 615 (Opposition to Sierra Club's Application for Reconsideration). On May 14, 2020, the Commission denied Sierra Club's Application for Reconsideration, holding that "the discovery period has ended, and the merger litigation has concluded. An opportunity to comment on the AltaGas Climate Business Plan does not reopen the case and any commenter, or intervenor for that matter, must take the case as they find it." See FC 1142, Order No. 20432, rel. May 14, 2020, at ¶ 11.

In short, the information the Companies have provided is not lacking nor was it was untimely provided.<sup>22</sup> Instead, the opposite is true.<sup>23, 24</sup>

### **III. FURTHER DISCOVERY SHOULD NOT BE PERMITTED AT THIS TIME**

In their Motion, DCG and OPC assert that “[t]o the extent it is AltaGas’ position that it does not need to file response to discovery requests in the docket because the discovery period has closed, that position is incorrect,” because “the compliance phase of the proceeding is ongoing,” and the “Commission has never issued a ruling that parties cannot seek information on compliance filings.”<sup>25</sup> By making this statement in a motion for extension of time, the Movants appear set to use the additional time (if granted) to seek even more discovery from the Companies, which is contrary to the intent of Settlement Term No. 79.

The only “compliance” portion of the Commitment is the filing of the Plan and the holding of bi-annual public meetings, neither of which requirements OPC or DCG disputes the Companies have met. Simply put, there is no dispute of material fact for the Commission to resolve related to this Commitment, therefore there is no pending ruling by the Commission upon which discovery

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<sup>22</sup> On April 27, 2020, Melissa Adams of WGL wrote to counsel for DCG, noting that WGL “expects to provide ICF’s written responses” to DCG’s follow-up questions “by May 7.” Counsel for DCG responded, “Thank you, Melissa. Obviously, given that our comments on the Plan are due by May 15th, the more expeditiously WGL/ICF can provide responses, the better.” Accordingly, Ms. Adams responded that “In that case, we will provide what we can sooner. Other items will follow by May 7.” In reply, on April 28, counsel for DCG wrote, “Thank you, Melissa. Very much appreciated.” See **Exhibit 10** (email from B. Caldwell to M. Adams, *et al.* re: [ External ] Re: Responses to Office of Attorney General Questions (April 28, 2020)).

<sup>23</sup> On May 1, 2020, Ms. Adams provided the first batch of data, to which DCG’s counsel responded, “Thank you, Melissa. I appreciate your efforts in getting us this information expeditiously.” See **Exhibit 11** (email from B. Caldwell to M. Adams (May 1, 2020)). That same day, Dr. Hopkins asked a “quick follow-up” on the materials that Ms. Adams had provided. Ms. Adams provided Dr. Hopkins with the information (with counsel for the Companies and DCG copied) within two hours of receiving Dr. Hopkins’ follow-up request. See **Exhibit 12** (email from M. Adams to A. Hopkins, *et al.* re: [ External ] Re: Responses to Office of Attorney General Questions (May 1, 2020)).

<sup>24</sup> On May 7, 2020, Ms. Adams provided the remaining responses to Dr. Hopkins’ questions. Counsel for DCG replied to Ms. Adams on May 8, 2020, thanking her for the information, and informing her (with counsel for the Companies copied) that DCG would “review and circle back if necessary.” See **Exhibit 13** (email from B. Caldwell to M. Adams, *et al.* re: Second set of Responses to District Office of Attorney General Questions (May 8, 2020)).

<sup>25</sup> Motion at 3-4.



is needed.<sup>26, 27</sup> Moreover, in its recent denial of the Sierra Club’s Application for Reconsideration of Sierra Club’s Out-of-Time Petition to Intervene, the Commission ruled that “the discovery period has ended, and the merger litigation has concluded,” and noted that “[a]n opportunity to comment on the AltaGas Climate Business Plan does not reopen the case and any commenter”<sup>28</sup>

The Companies have already made clear in numerous filings and letters to the parties (and non-parties such as the Sierra Club) that they intend to work with the parties, and with the public and all stakeholders, to ensure that the public understands the Plan, and that their comments on the Plan are received and taken into consideration. The Companies’ continued effort to work with DCG and OPC, detailed above, reflects this intention and commitment to outreach and public involvement. But extensive discovery on the Plan has never been contemplated, is unnecessary for the fulfillment of Commitment No. 79, and should be limited by the Commission.<sup>29</sup>

Instead, because the intent of filing the Climate Business Plan is to engage in an open dialogue with stakeholders, and because the Commission is not required to approve the Plan,<sup>30</sup> the Companies believe that additional questions regarding the Plan should be included in the public

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<sup>26</sup> See *Mampe v. Ayerst Laboratories*, 548 A.2d 798, 04 (D.C. App. 1988) (“discovery is intended as an aid to the litigation of a particular case or controversy”).

<sup>27</sup> The Commission’s orders in this case (and its Rules of Practice and Procedure) govern any discovery requests related to the Climate Business Plan and Commitment No. 79, and those orders and rules also show that further discovery on the Climate Business Plan is inappropriate. Per the Commission’s Order No. 18843 in this proceeding, and in accordance with Section 122 of the Commission’s Rules of Practice and Procedure, discovery in this proceeding was to be served after and regarding each round of testimony submitted, with the final deadline for responses to data requests on the rebuttal testimony filed in this case to be served on November 14, 2017. No testimony or Commission hearing is pending regarding the Climate Business Plan. Further, the Commission recently ruled that “the discovery period has ended, and the merger litigation has concluded,” and that “[a]n opportunity to comment on the AltaGas Climate Business Plan does not reopen the case”. FC 1142, Order No. 20342, rel. May 14, 2020, at ¶ 11.

<sup>28</sup> FC 1142, Order No. 20342, rel. May 14, 2020, at ¶ 11.

<sup>29</sup> The Companies do not dispute that discovery should be allowed in limited circumstances during the compliance phase of a Commission proceeding. However, such discovery should be limited to determining whether a condition of the Commission’s final order has been satisfied. Unlike the example of commitments in the Exelon-Pepco merger cited by the Movants, the language of Commitment No. 79 in this case does not require the Commission (or any parties) to review the Climate Business Plan for compliance with any sort of standard, nor, indeed, to review or approve the Climate Business Plan at all.

<sup>30</sup> See *supra* n.10.

comments, which can then be discussed at the bi-annual public meetings. This is only reinforced by the fact that the Commission opened the comment period to all “interested persons” – not just parties – thereby making compulsory discovery even more inappropriate and inconsistent with the Commission’s prior orders.<sup>31</sup> The required bi-annual meetings provide the opportunity for the public, including DCG and OPC, to ask the Companies questions.

#### **IV. CONCLUSION**

The Companies do not object to the extension of time to file comments on the Climate Business Plan, and reply comments to the comments, by 42 days each. The Companies wish to correct the misstatements and misrepresentations made in the Joint Motion filed by OPC and DCG so that the Commission is presented with all facts pertinent to the Motion. The Companies look forward to continuing an open dialogue with stakeholders and to hold the first of many bi-annual public meetings regarding the Climate Business Plan as soon as it is safe to do so.<sup>32</sup>

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<sup>31</sup> FC 1142, Dkt. No. 601, Public Notice of Comment Period on Climate Business Plan.

<sup>32</sup> On May 13, Washington, D.C. Mayor Muriel Bowser issued Mayor’s Order 2020-066 to extend the District’s public emergency and public health emergency and continue to require individuals to stay home through June 8, 2020. *See* <https://coronavirus.dc.gov/node/1477371>. In light of the extended COVID-19 restrictions, the Companies may hold the first meeting virtually on a date in the near future.

Date: May 14, 2020

Respectfully submitted,



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J. Joseph Curran, III  
Christopher S. Gunderson  
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750 E. Pratt St., Suite 900  
Baltimore, MD 21202

*Counsel for AltaGas Ltd.*

**From:** Curran, Max  
**Sent:** Monday, March 30, 2020 2:01 PM  
**To:** Brian.caldwell@dc.gov  
**Subject:** Formal Case No. 1142: DCG DR Set 30

Brain –

Let me know when you have a minute to discuss your recent set of DRs filed in Formal Case 1142.

Max

**J. Joseph “Max” Curran, III, Esq. | Venable LLP**  
t 410.244.5466 | f 410.244.7742 | m 443.845.8992  
750 E. Pratt Street, Suite 900, Baltimore, MD 21202

[JCurran@Venable.com](mailto:JCurran@Venable.com) | [www.Venable.com](http://www.Venable.com)

**From:** Curran, Max  
**Sent:** Thursday, April 2, 2020 1:49 PM  
**To:** Brian Caldwell (brian.caldwell@dc.gov)  
**Subject:** FW: Formal Case No. 1142 - DCG's 30th Set of DRs

**Confidential Communication**

Brian –

As a follow up to our call this afternoon, the Joint Applicants (AltaGas and WGL) have agreed to provide to DCG the ICF workpapers developed for WGL's Climate Business Plan and will do so on Wednesday April 8, 2020. On April 10<sup>th</sup>, WGL also intends to provide the Karl Racine with an update on the Climate Business plan as previously arranged.

After Asa Hopkins has a chance to review the ICF workpapers, if Dr. Hopkins wants, AltaGas and WGL can arrange a "web ex" between Dr. Hopkins and the appropriate people at ICF to answer any of his follow up questions.

In exchange for providing these workpaper, DCG will agree to indefinitely extend the deadline for the Joint Applicants to file any objections to DCG's 30<sup>th</sup> Set of Data Requests that were filed on March 26, 2020.

Let me know if you have any follow-up questions.

Max

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**From:** Curran, Max  
**Sent:** Wednesday, April 8, 2020 5:53 PM  
**To:** Brian Caldwell (brian.caldwell@dc.gov)  
**Subject:** RE: Formal Case No. 1142 - DCG's 30th Set of DRs  
**Attachments:** Draft Technical Study Report - Opportunities for Evolving the Natural Gas Distribution Business to Support DCs Climate Goals - April 2020.pdf

**Confidential**

Brian –

As a follow up to our conversation last week, we are providing the attached Confidential ICF Internal Draft Study (workpapers). The document is still undergoing internal ICF QC and formatting. However, you can forward this to Asa Hopkins in the meantime in accordance with the Non-Disclosure Agreement controlling the case. I will confirm with client shortly if we will have a public version of the same.

After Asa Hopkins has a chance to review the ICF workpapers, if Dr. Hopkins wants, AltaGas and WGL can arrange a “web ex” between Dr. Hopkins and the appropriate people at ICF to answer any of his follow up questions.

Call me if you have any follow up questions about the same.

Max

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**From:** Curran, Max <JCurran@Venable.com>  
**Sent:** Wednesday, April 8, 2020 4:04 PM  
**To:** Brian Caldwell (brian.caldwell@dc.gov) <brian.caldwell@dc.gov>  
**Subject:** RE: Formal Case No. 1142 - DCG's 30th Set of DRs

Brian

We are working to ensure we can get all the work papers in an electronic format. We will forward as quickly as we can. Hopefully shortly.

Max.

Sent with BlackBerry Work  
([www.blackberry.com](http://www.blackberry.com))

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**From:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Date:** Thursday, Apr 02, 2020, 1:48 PM

To: Brian Caldwell ([brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>

Subject: FW: Formal Case No. 1142 - DCG's 30th Set of DRs

**Confidential Communication**

Brian –

As a follow up to our call this afternoon, the Joint Applicants (AltaGas and WGL) have agreed to provide to DCG the ICF workpapers developed for WGL's Climate Business Plan and will do so on Wednesday April 8, 2020. On April 10<sup>th</sup>, WGL also intends to provide the Karl Racine with an update on the Climate Business plan as previously arranged.

After Asa Hopkins has a chance to review the ICF workpapers, if Dr. Hopkins wants, AltaGas and WGL can arrange a "web ex" between Dr. Hopkins and the appropriate people at ICF to answer any of his follow up questions.

In exchange for providing these workpaper, DCG will agree to indefinitely extend the deadline for the Joint Applicants to file any objections to DCG's 30<sup>th</sup> Set of Data Requests that were filed on March 26, 2020.

Let me know if you have any follow-up questions.

Max

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**From:** Caldwell, Brian (OAG) <brian.caldwell@dc.gov>  
**Sent:** Thursday, April 23, 2020 5:10 PM  
**To:** Curran, Max  
**Subject:** Follow Up from Climate Business Plan Call  
**Attachments:** FC 1142 Follow Up Questions.docx

**Caution: External Email**

Hi Max:

Thank you again for arranging the call with ICF and Dr. Hopkins on Tuesday to walk through areas of the CBP touched on by DCG Data Request Set 30. As you know, we were not able to get through all the information that ICF was prepared to discuss. After reviewing the slide deck and based on some of ICF's comments during the presentation, Dr. Hopkins has some follow up questions, which I have attached in writing. Would WGL / ICF be able to provide written responses to these questions in fairly short order since our comments are due May 15th? I guess the other alternative would be to issue formal data requests to receive responses on the record, but that would likely involve further discovery disputes and requests to extend the commenting period. Obviously, my preference would be to avoid the latter so please let me know how we can proceed.

As a final matter, I view this communication and efforts to obtain this requested information as a continuation of our meet and confer process. If the requested information is timely forthcoming, DCG would voluntarily withdraw our Data Request Set 30.

Thanks, Max and be well.

Brian



**From:** Curran, Max  
**Sent:** Thursday, April 16, 2020 4:24 PM  
**To:** Caldwell, Brian (OAG)  
**Subject:** RE: F.C. 1142 JA's Data Response

Brian –

We are good on Tuesday from 4 – 5. I will work on getting a call in number.

Max

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**From:** Caldwell, Brian (OAG) <brian.caldwell@dc.gov>  
**Sent:** Wednesday, April 15, 2020 6:22 PM  
**To:** Curran, Max <JCurran@Venable.com>  
**Subject:** Re: F.C. 1142 JA's Data Response

**Caution: External Email**

Max:

Dr. Hopkins can be available between 2 - 3 or 4 - 5 on Tuesday. Please let me know if either those time slots work for ICF.

Thanks  
Brian

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**From:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Sent:** Wednesday, April 15, 2020 5:36 PM  
**To:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Subject:** RE: F.C. 1142 JA's Data Response

**CAUTION:** This email originated from outside of the DC Government. Do not click on links or open attachments unless you recognize the sender and know that the content is safe. If you believe that this email is suspicious, please forward to [phishing@dc.gov](mailto:phishing@dc.gov) for additional analysis by OCTO Security Operations Center (SOC).

Does Asa have any time on Tuesday? Its pretty open.

---

**From:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Sent:** Wednesday, April 15, 2020 4:13 PM  
**To:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Subject:** Re: F.C. 1142 JA's Data Response

**Caution: External Email**

Dr. Hopkins is available this Friday from noon to 1 pm. Does that work?

Thanks  
Brian

---

**From:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Sent:** Wednesday, April 15, 2020 2:41 PM  
**To:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Subject:** RE: F.C. 1142 JA's Data Response

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Can you give us some dates and times that Asa Hopkins is available to talk with ICF.

---

**From:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Sent:** Tuesday, April 14, 2020 5:54 PM  
**To:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Subject:** Re: F.C. 1142 JA's Data Response

**Caution: External Email**

Hi Max:

Were you able to determine ICF's availability to have a call with Dr. Hopkins?

Thanks,  
Brian

---

**From:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Sent:** Monday, April 13, 2020 5:31 PM  
**To:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Subject:** RE: F.C. 1142 JA's Data Response

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Agreed.

---

**From:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Sent:** Monday, April 13, 2020 5:29 PM  
**To:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Subject:** Re: F.C. 1142 JA's Data Response

**Caution: External Email**

Hi Max:

I just wanted to memorialize our discussion today. You agreed to inquire into whether ICF would be willing and available to hold a call with Dr. Hopkins so that Dr. Hopkins could explain to ICF what exactly he would like to see, whether such information exists and whether there are any proprietary issues with producing such information. To accommodate this exchange the parties agree to extend the deadlines to meet and confer, and to file a motion to compel.

Thank you,  
Brian

---

**From:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Sent:** Monday, April 13, 2020 2:56 PM  
**To:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Subject:** RE: F.C. 1142 JA's Data Response

**CAUTION:** This email originated from outside of the DC Government. Do not click on links or open attachments unless you recognize the sender and know that the content is safe. If you believe that this email is suspicious, please forward to [phishing@dc.gov](mailto:phishing@dc.gov) for additional analysis by OCTO Security Operations Center (SOC).

Just tried your cell. Call me after 5pm.

---

**From:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Sent:** Monday, April 13, 2020 2:05 PM  
**To:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Subject:** F.C. 1142 JA's Data Response

**Caution: External Email**

Hi Max:

I just left you a voicemail concerning the data response to DCG Set 30 that you provided on April 8th. I shared it with DOEE and Dr. Hopkins. It is not what we were expecting to receive, and I wanted to meet and confer with you before taking any further steps such as filing a motion to compel. Please let me know when you have some availability today to discuss, or if you are willing to extend the meet and confer deadline, a time tomorrow to discuss. I will be on conference calls today from 3 to 5 pm, but could discuss afterwards today.

Thanks  
Brian

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transmission and delete the message without copying or disclosing it.

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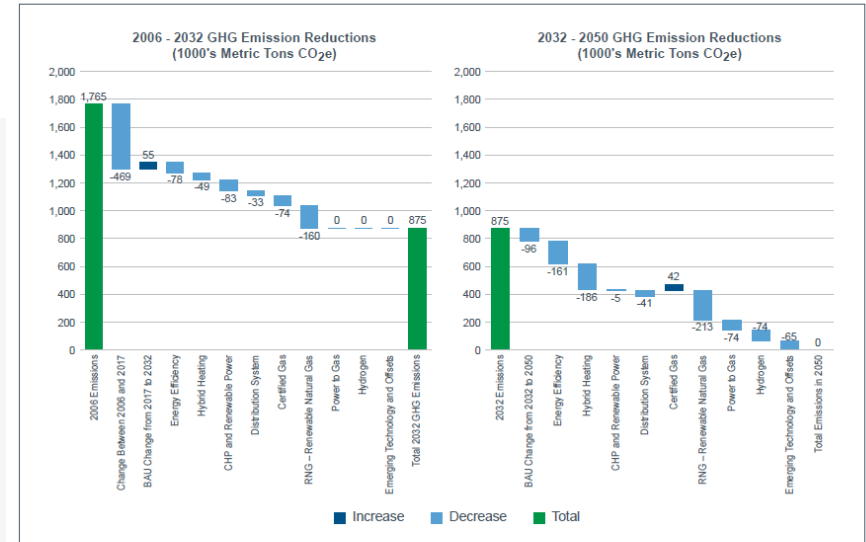
# CLIMATE BUSINESS PLAN DC OAG DISCUSSION

***AltaGas***

April 21, 2020

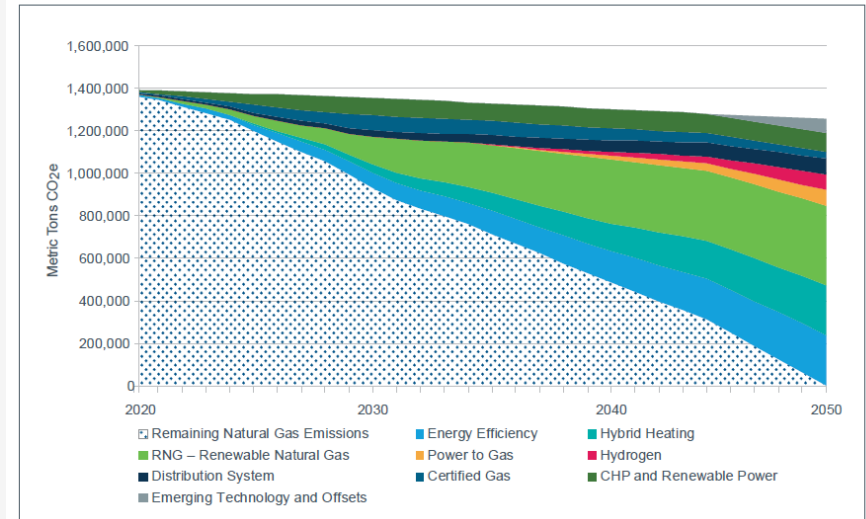
Analysis and assumptions used to generate the figures shown on page 10 of the Climate Business Plan.

Natural Gas Emission Reduction Measures in the WGL Climate Business Plan at 2032 and 2050



Emissions Reductions Over Time

The figure below offers a visual representation of the relative emissions reduction contributions of the various measures over time.



## Categories of GHG Emission Reductions

<b>2006 GHG Emissions (Metric Tons CO<sub>2</sub>e)</b>	<b>1,764,562</b>	<b>100.0%</b>
Change Between 2006 and 2017	-468,549	-26.6%
BAU Change Between 2017 and 2050	-41,372	-2.3%
Energy Efficiency	-239,177	-13.6%
Hybrid Heating	-234,812	-13.3%
CHP and Renewable Power	-88,240	-5.0%
Distribution System	-74,275	-4.2%
Certified Gas	-31,483	-1.8%
RNG	-372,400	-21.1%
Power to Gas	-74,480	-4.2%
Hydrogen	-74,480	-4.2%
Emerging Technology and Offsets	-65,295	-3.7%
<b>2050 GHG Emissions</b>	<b>0</b>	<b>0.0%</b>

**BAU Gas Demand Reduction**

**Gas Demand Reductions**

**Offset Carbon Emissions**

**Low Carbon Gas Supply**

**Remaining Balance of Emissions**

**Discussed  
in more  
detail on  
next three  
slides**



# Gas Demand Reduction Measures

## Behavioral Energy Efficiency

- 71% of residential households by 2050
- 0.85% demand reduction per customer

## High Efficiency Space Heating Appliances (Gas Heat Pumps & High Efficiency Furnaces)

- 38% of residential and commercial WGL customers install Gas Heat Pumps by 2050 through program
- Units have COPs of 1.4, for assumed 36% savings (vs. 90% efficiency baseline)
- Other participating customers install high-efficiency gas furnaces

## Other Energy Efficiency Measures

- 65% of buildings participate by 2050
- 2% demand reduction per customer

## Hybrid (Natural Gas & Electric) Heating Systems

- 40% of residential and 20% of commercial WGL customers use hybrid gas-electric heating systems by 2050
- On an annual basis, roughly 80% of heating load is electrified (~60% of total customer gas demand)
- Natural gas meters are maintained
- Winter peak electric demand impacts are minimized



# Low Carbon Gas Supply Measures

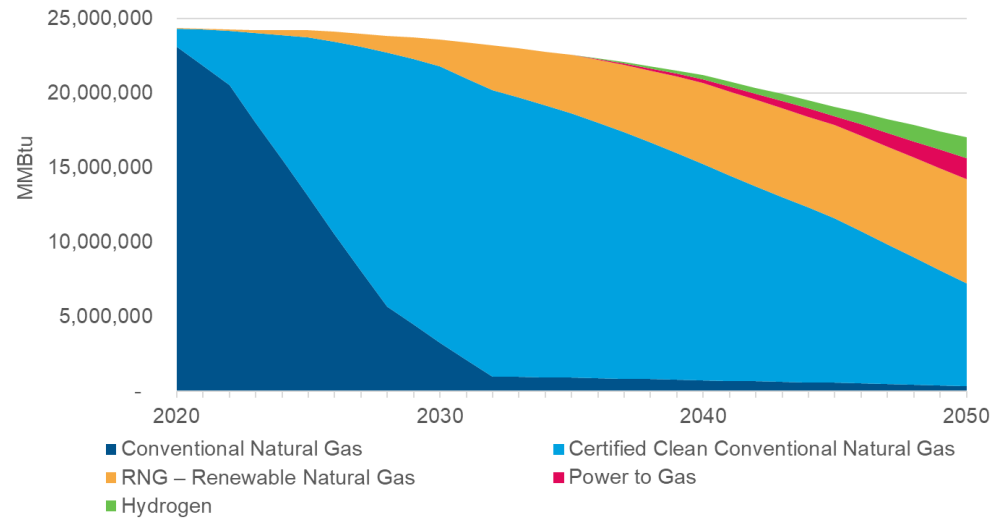
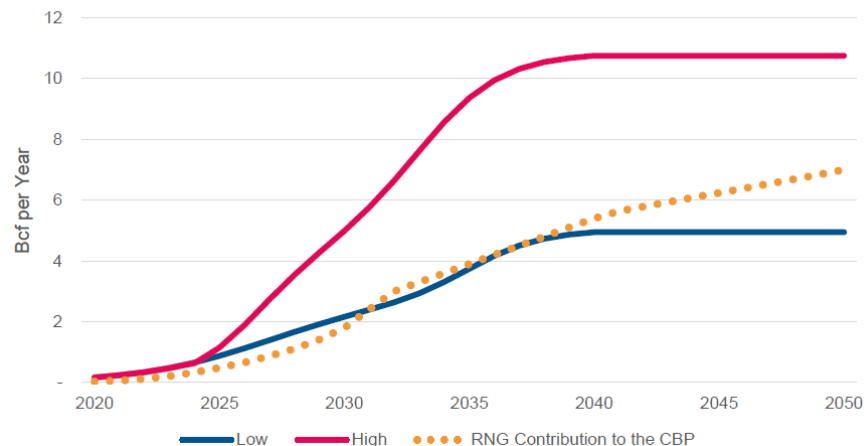


Figure 12. RNG Availability for the District of Columbia



## Renewable Natural Gas (RNG)

- 7 Bcf / year by 2050 or 41% of 2050 supply
- District potential allocated from South Atlantic Region RNG potential, and reflects 2% of that average regional supply (high- & low-cost sources)

## Hydrogen & Power-to-Gas

- Hydrogen: 1.4 Bcf / year by 2050 or 8% of 2050 supply
- P2G: 1.4 Bcf / year by 2050 or 8% of 2050 supply

## Certified Gas

- 95% of conventional gas to be 'certified' by 2050 (40% of supply)
- Production: Fugitives equal to 0.2% of methane through-put reduced
- Transport: Fugitives equal to 0.05% of methane through-put reduced

## Distribution System Fugitive Emission Reductions

- Covers all delivered methane (everything but hydrogen)
- 80% reduction in fugitive emissions by 2050 vs. 2017 baseline of 0.0039 Tons / MMBtu (from DC Emissions Inventory)

# Measures that Offset Carbon Emissions

Figure 19. Example of Future of 2040 Grid Resources Avoided with CHP Power

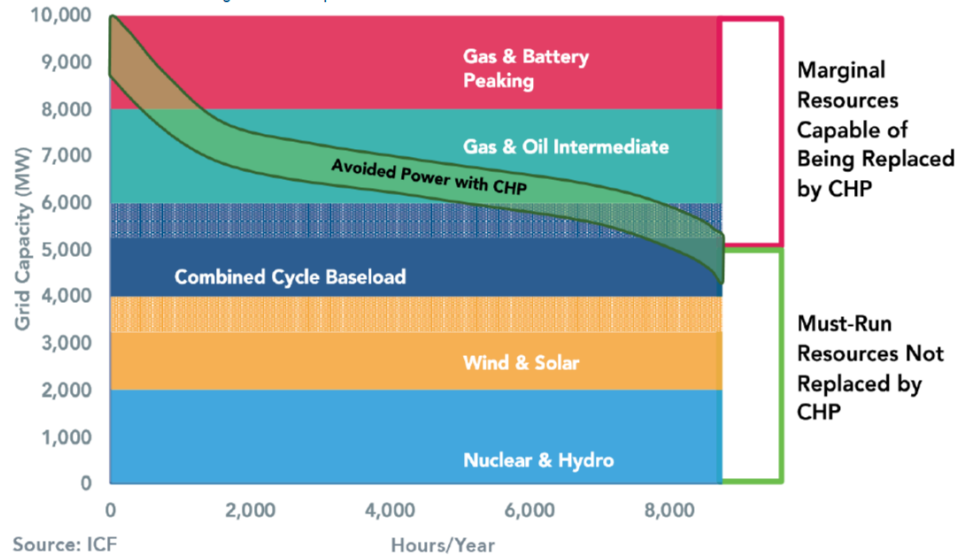
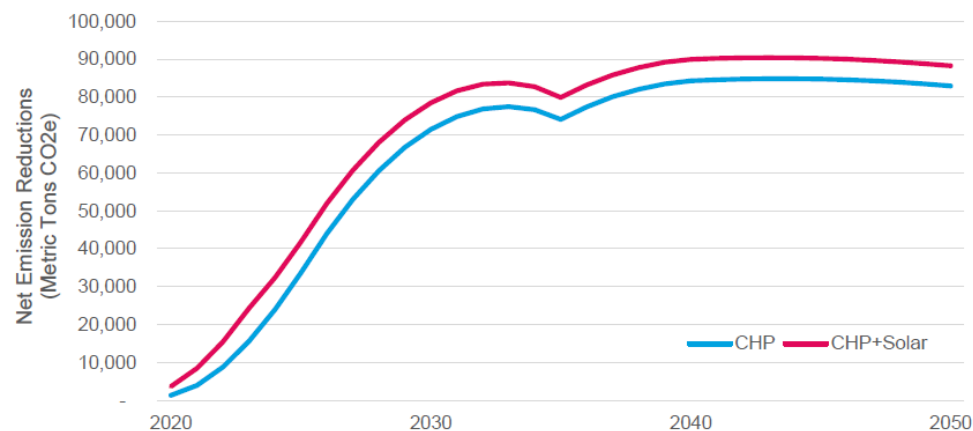


Figure 20. Total Emission Reduction Potential for CHP and Renewable Power Systems



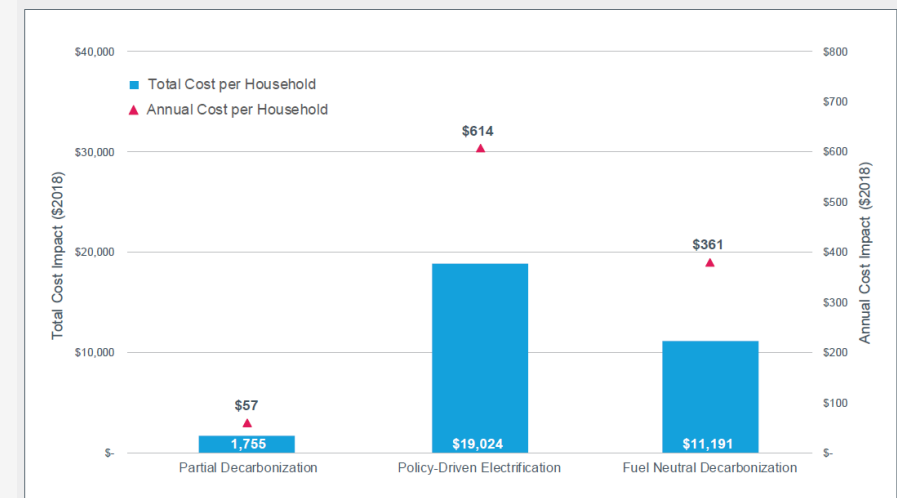
## CHP & Renewable Power

- 912 MW technical potential in ICF assessment
  - A single campus of government buildings with a steam loop represents 385 MW of potential
- 120 MW achievable is assumed (5 or 15% of technical for different sized units)
- Annual installations ramp up to 6 MW/year by 2026, start slowing in 2035 down to 2.5 MW/year by 2041 (maintained through 2050)
- 10 MW of WGL solar also included
- Assumed emission factors of displaced PJM electricity (shifting linearly between these milestones)
  - 1,441 lbs/MWh in 2020 (2016 non-baseload)
  - 898 lbs/MWh by 2035 (avg. gas generators)
  - 818 lbs/MWh by 2050 (efficient combined cycle gas unit)
- Profile of total emission reductions a result of changes in emissions intensity of displaced electricity (drops net emission reductions, particularly around 2035) and in CHP adoption levels
- Assume would still need to buy RECs for this generation

Analysis and assumptions used to generate the cost and GHG emissions of each scenario on pages 41 and 42 of the Climate Business Plan and in Section 4, pages 9 -18, of the ICF Technical Study Summary Report

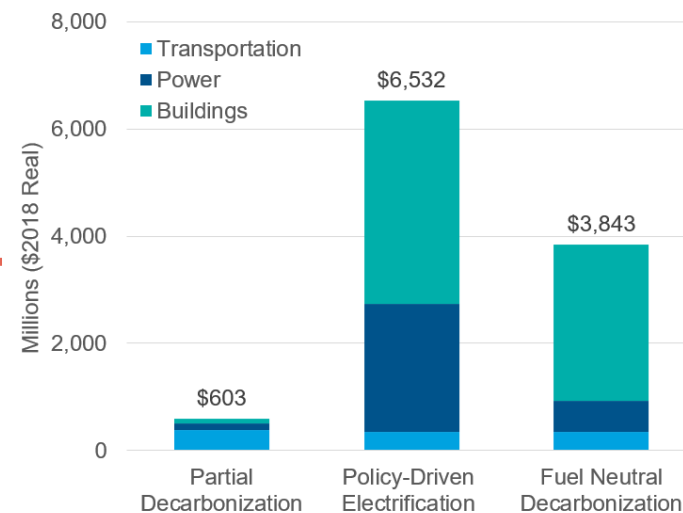
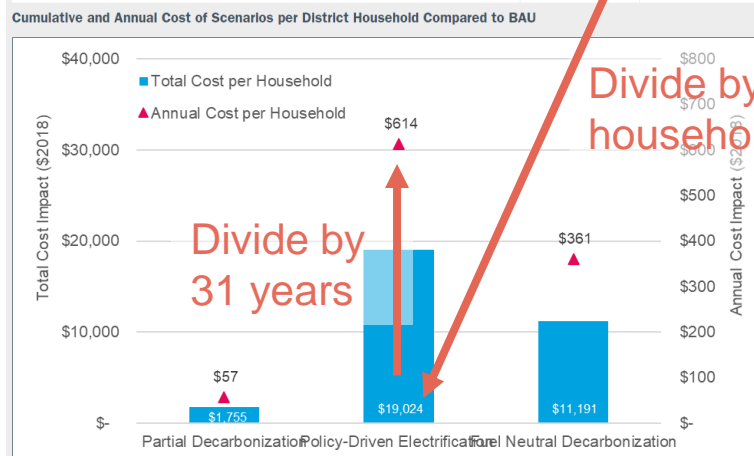
Summary of Scenarios, Benefits and Costs		2050 GHG reduction since 2006	Additional cumulative cost (above BAU)
<b>Business as Usual (Reference Case)</b> Based on the 100 percent renewable portfolio standard (RPS)		75%	–
<b>Partial Decarbonization</b> BAU plus: <ul style="list-style-type: none"> <li>moderate market penetration of EVs</li> <li>increased energy efficiency</li> <li>modest decarbonization of gas supply including introduction of RNG and certified gas</li> </ul>		82%	\$603 Million
<b>Policy-Driven Electrification</b> BAU plus: <ul style="list-style-type: none"> <li>requires homes and businesses using natural gas to convert to electricity</li> <li>electrification of all new construction</li> <li>aggressive market penetration of electric vehicles</li> <li>small volume of offsets (not included in costs)</li> </ul>		100%	\$6.5 Billion
<b>Fuel Neutral Decarbonization</b> BAU plus: <ul style="list-style-type: none"> <li>aggressive energy efficiency programming including gas heat pumps</li> <li>moderate introduction of dual fuel heating systems</li> <li>substantial decarbonization of gas supply introduction of renewable natural gas, certified gas, and green hydrogen</li> <li>leverages new and emerging technologies</li> <li>aggressive market penetration of electric vehicles</li> <li>small volume of offsets (not included in costs)</li> </ul>		100%	\$3.8 Billion

Cumulative and Annual Cost of Scenarios per District Household Compared to BAU



# Additional Details on Cost Assumptions

	2050 GHG reduction since 2006	Additional cumulative cost (above BAU)
<b>Business as Usual (Reference Case)</b> Based on the 100 percent renewable portfolio standard (RPS)	75%	–
<b>Partial Decarbonization</b> BAU plus: • moderate market penetration of EVs • increased energy efficiency • modest decarbonization of gas supply including introduction of RNG and certified gas	82%	\$603 Million
<b>Policy-Driven Electrification</b> BAU plus: • requires homes and businesses using natural gas to convert to electricity • electrification of all new construction • aggressive market penetration of electric vehicles • small volume of offsets (not included in costs)	100%	\$6.5 Billion
<b>Fuel Neutral Decarbonization</b> BAU plus: • aggressive energy efficiency programming including gas heat pumps • moderate introduction of dual fuel heating systems • substantial decarbonization of gas supply introduction of renewable natural gas, certified gas, and green hydrogen • leverages new and emerging technologies • aggressive market penetration of electric vehicles • small volume of offsets (not included in costs)	100%	\$3.8 Billion



Case Name	Sector (\$2018 Millions)			
	Transportation	Power	Buildings	Total
BAU	0	0	0	0
Partial Decarbonization	\$377	\$137	\$89	\$603
Policy-Driven Electrification	\$350	\$2,382	\$3,799	\$6,532
Fuel Neutral Decarbonization	\$350	\$576	\$2,916	\$3,843

**Figure 50** shows changes in:

- Fuel Price
- Charging Infrastructure
- Maintenance Costs
- Vehicle Prices

**Figure 54** shows changes in Capital Costs and Other Costs (Fuel, FOM, VOM)

**Table 15** shows changes in:

- Natural Gas Purchases
- Electricity Purchases
- RNG Cost Premium
- Res/Com Heat Pump Retrofit Costs
- Res/Com energy efficiency program costs
- CHP installation costs

# Additional Details on GHG Emission Reductions

Table 7 provides a more granular breakdown in the changes in emissions

Figure 3. District of Columbia GHG Emissions by Year and Case

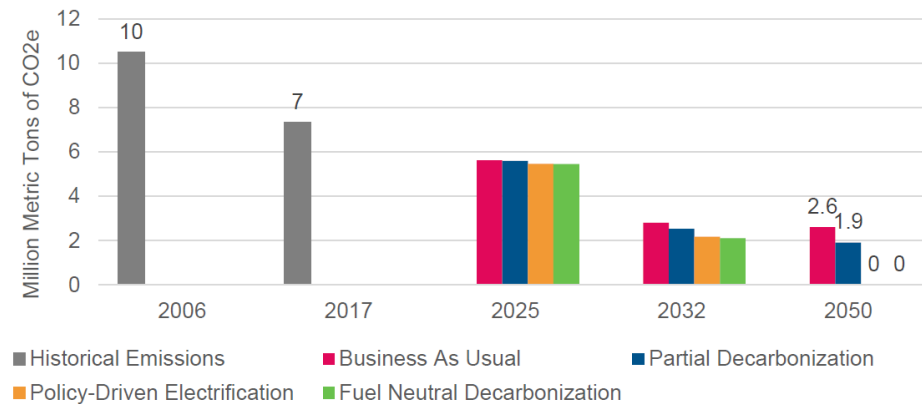


Table 7. District of Columbia Emissions by Source for 2032 and 2050

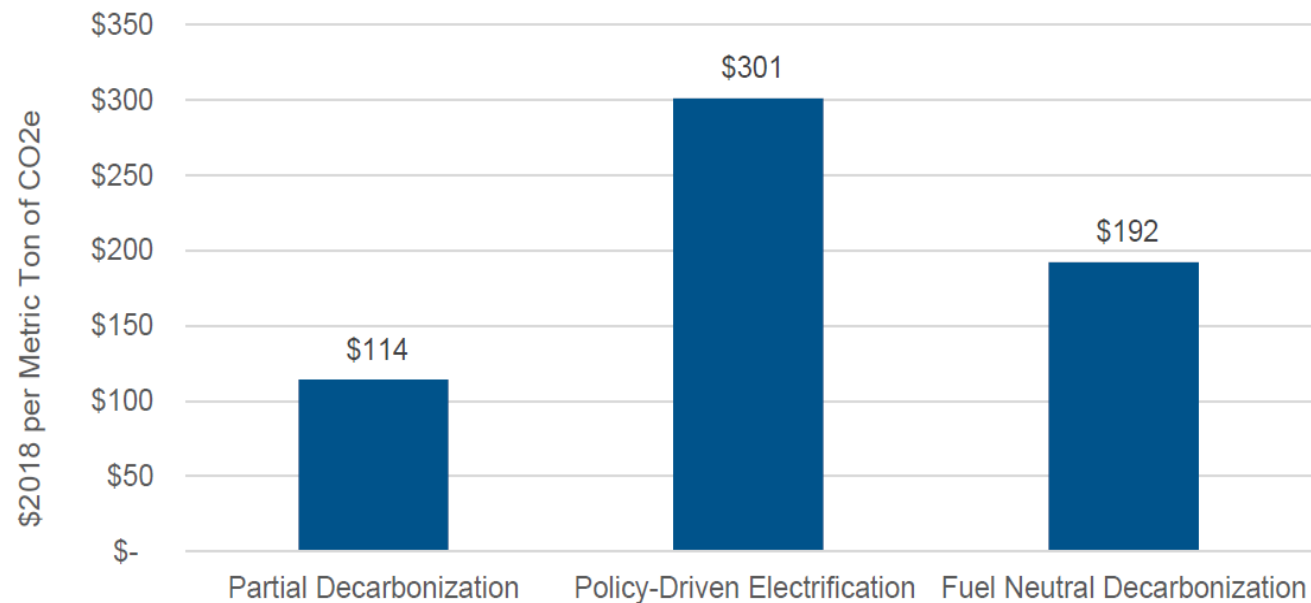
Sectors	2006	2017	2032			
			BAU	Partial Decarbonization	Policy-Driven Electrification	Fuel Neutral Decarbonization
			Million Metric Tonnes (MMT) of CO <sub>2</sub> e			
Electricity	6.35	4.15	0.00	0.00	0.00	0.00
Direct Fuel Use	3.78	3.78	2.49	2.31	2.01	1.98
Transportation	1.77	1.53	1.19	1.15	1.08	1.08
Buildings	2.01	1.34	1.30	1.15	0.93	0.90
Other Sectors <sup>[1]</sup>	0.36	0.31	0.31	0.22	0.16	0.16
Carbon Offsets						
District of Columbia's Emissions	10.49	7.33	2.80	2.52	2.17	2.13
Sectors	2006	2017	2050			
			BAU	Partial Decarbonization	Policy-Driven Electrification	Fuel Neutral Decarbonization
			Million Metric Tonnes (MMT) of CO <sub>2</sub> e			
Electricity	6.35	4.15	0.00	0.00	0.00	0.00
Direct Fuel Use	3.78	3.78	2.29	1.76	0.67	0.62
Transportation	1.77	1.53	1.08	0.87	0.56	0.56
Buildings <sup>[1]</sup>	2.01	1.34	1.20	0.89	0.12	0.065
Other Sectors <sup>[2]</sup>	0.36	0.31	0.31	0.16	0.06	0.06
Carbon Offsets					-0.73	-0.69
District of Columbia's Emissions	10.49	7.33	2.60	1.92	0.00	0.00

[1] Also includes Fugitive Emissions from natural gas distribution.

[2] Includes emissions from the Waste, Water & Wastewater emission sources.

## Emission Reduction Costs

Figure 6. Average Emission Reduction Costs Per Metric Ton of Carbon<sup>13</sup>

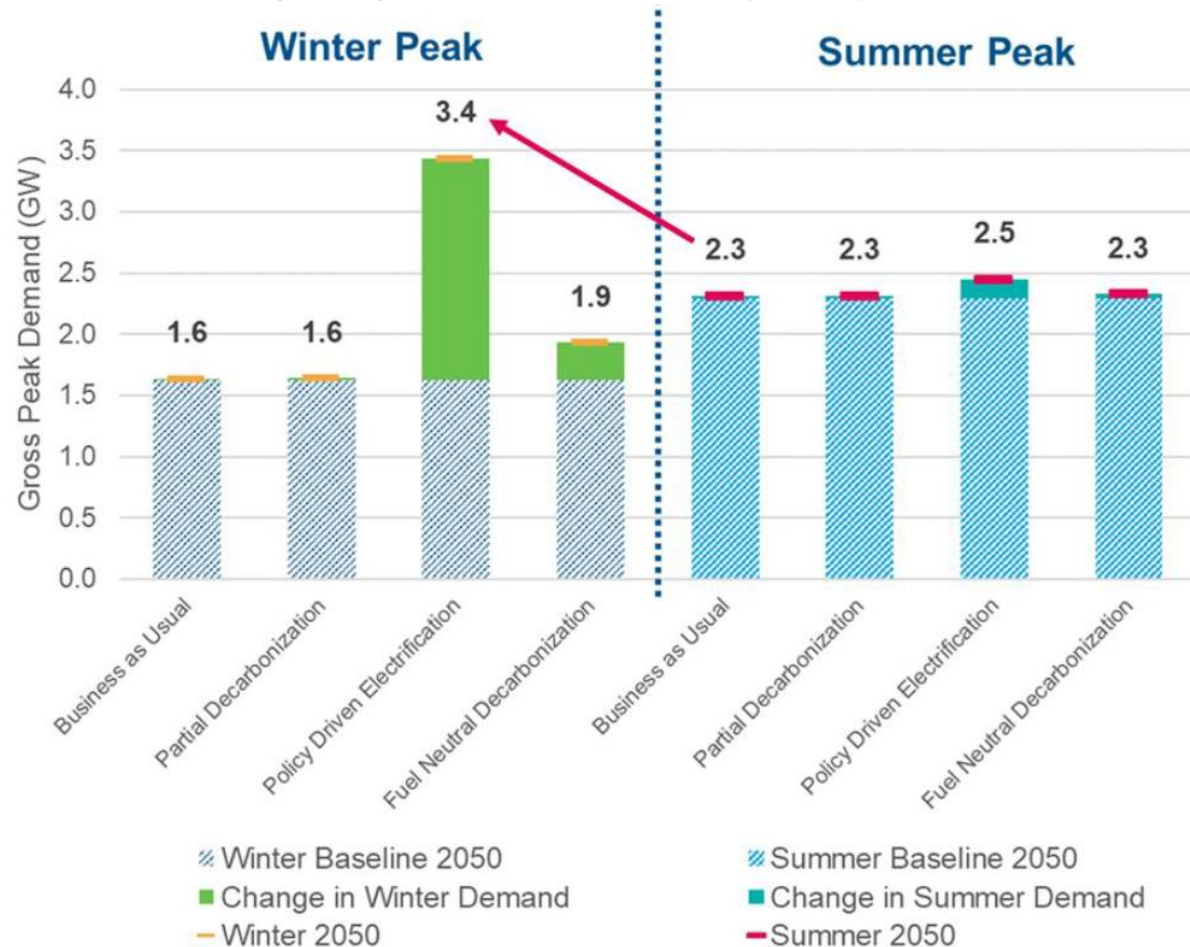


- Based on the annual costs and emission reductions from each of the previously discussed measures
- The cost of emission reductions is calculated based on the change in costs and emissions from the Business As Usual Case, on an annual basis from 2020 to 2050, using a 5% discount rate back to 2018 (for both costs and emissions)
- This approach avoids prioritizing long-term emission reductions over short-term emission reductions
- Using 'undiscounted' costs and emissions would result in a similar emission reduction cost (\$84 / \$283 / \$165)



# Peak Demand Impacts

Figure 7. Change in District Summer and Winter Peak Electricity Demand Requirements



- The Change in summer and winter peak demand is calculated in IPM, based on the 8760 profiles of incremental electrification demand from the transportation and buildings sectors.
- The summer and winter Baseline 2050 peak demand is estimated assuming that the District's distribution peak would be equivalent to 34% of Pepco's overall peak, in line with the District's current share of Pepco's annual electricity consumption.
- Incremental electric demand in the Policy-Driven Electrification Case results in a 1.1 GW (50%) increase in gross peak, shifting the District's distribution system shifting from summer to winter peaking.
- Because the District is part of a broader electricity marketplace for power generation, the impact of the District's electrification in these cases is not sufficient to shift Pepco's service territory from a summer peaking to a winter-peaking system (assuming other regions do not pursue similar policies).



## Approach taken to define the cases (scenarios)



## Scenario Definition and Selection

**Determined representative cases to assess comparative emissions reductions and costs in support of the District's climate goals. These included benchmark, partial decarbonization, and full decarbonization through fuel neutral and broadly discussed electrification cases.**

<b>Scenario 1</b> <b>Business As Usual</b>	<b>Scenario 2</b> <b>Partial Decarbonization</b>	<b>Scenario 3</b> <b>Policy Driven Electrification</b>	<b>Scenario 4</b> <b>Fuel Neutral Decarbonization</b>
<ul style="list-style-type: none"> <li>Benchmark case – assumes continuation of existing policies, energy/use trajectories</li> </ul>	<ul style="list-style-type: none"> <li>Layers practical, accessible, and lower cost tactics onto Business As Usual</li> </ul>	<ul style="list-style-type: none"> <li>Achieves DC climate goals in 2032 and 2050.</li> <li>Considered implications of broad electrification replacing thermal gas uses, including MEDSIS factors.</li> </ul>	<ul style="list-style-type: none"> <li>Achieves DC climate goals in 2032 and 2050.</li> <li>Takes portfolio approach that seeks to leverage the natural gas delivery infrastructure and considered MEDSIS factors.</li> <li>WGL system GHG reductions = DC 2032/2050 reductions</li> </ul>

## Key Assumptions for Selected Scenarios


An iterative process that was refined to maintain consistency across sectors and incorporate emerging information (e.g., results from the Renewable Natural Gas Study).

		Drivers by Sector (ICF Technical Study)		
Case	Approach	Building (p. 65)	Transport (p. 76)	Power (p. 92)
<b>Case 1 Business as Usual</b>	<ul style="list-style-type: none"> <li>Establishing current trends and 100% RPS</li> </ul>	<ul style="list-style-type: none"> <li>Continued increases in natural gas residential and commercial customers</li> <li>Increasing natural gas energy efficiency that offsets customer growth</li> </ul>	<ul style="list-style-type: none"> <li>Improvements to Federal CAFÉ standards based on current legislation.</li> <li>Limited LDV electrification and low-carbon fuel adoption.</li> </ul>	<ul style="list-style-type: none"> <li>As coal retires PJM emissions start to decrease, but demand growth and nuclear retirements in the mid-term results in higher emissions over time in PJM. Assumes REC purchases.</li> </ul>
<b>Case 2 Partial Decarbonization</b>	<ul style="list-style-type: none"> <li>Low-cost decarbonization measures</li> </ul>	<ul style="list-style-type: none"> <li>Continued increases in natural gas residential and commercial customers</li> <li>Increased natural gas energy efficiency investments, including gas heat pumps</li> <li>Decarbonization of gas supply with relatively low-cost RNG volumes</li> </ul>	<ul style="list-style-type: none"> <li>50% of LDV purchases in 2050 are electric or hybrid vehicles</li> <li>25% of MDV and HDV purchases in 2050 are EVs</li> </ul>	<ul style="list-style-type: none"> <li>Modest levels of vehicle electrification in the District of Columbia lead to slight increases in PJM emissions (&lt;0.1%) relative to the Business as Usual Case. Assumes REC purchases.</li> </ul>
<b>Case 3 Policy Driven Electrification</b>	<ul style="list-style-type: none"> <li>Electrification as the primary means for decarbonization</li> </ul>	<ul style="list-style-type: none"> <li>Electrification of all end-uses and sub-segments of buildings</li> <li>Assumed improvements in electric heat pump costs and performance</li> <li>Declining natural gas customer base</li> </ul>	<ul style="list-style-type: none"> <li>Same transportation sector assumptions used for Cases 3 and 4.</li> <li>Aggressive improvements in Federal CAFÉ standards and local/regional support for EV purchases.</li> </ul>	<ul style="list-style-type: none"> <li>Higher electrification levels across the District leads to slight decreases in PJM emissions (&lt;0.2%) relative to the Business as Usual Case. Very minor effect on price, assumes RECs are available and purchased.</li> </ul>
<b>Case 4 Fuel Neutral Decarbonization</b>	<ul style="list-style-type: none"> <li>Multi-fuel strategy approach to decarbonization</li> </ul>	<ul style="list-style-type: none"> <li>Large focus on natural gas energy efficiency investments and new gas technology developments like gas heat pumps</li> <li>Multiple fuel decarbonization approaches, including RNG and Hydrogen</li> <li>Targeted electrification of space heating with gas-electric hybrid systems</li> <li>Stable, to growing natural gas customer base</li> <li>Sharply reduced natural gas usage per customer</li> </ul>	<ul style="list-style-type: none"> <li>Aggressive Light-Duty Vehicle electrification, reaching 80% of new vehicles by 2050.</li> <li>Increased electrification of the Medium-Duty Vehicle and Heavy-Duty Vehicle segments, including Municipal fleet electrification.</li> <li>Limited use of low-carbon fuels in the Heavy-Duty Vehicle sector</li> </ul>	<ul style="list-style-type: none"> <li>Lower electrification levels in the District lead to slight decreases in PJM emissions, but at an even lower level compared to the Policy-Driven Electrification Case. Assumes REC purchases.</li> </ul>

## Fuel Neutral Case – Focus Areas and Key Assumptions

- Explored the costs and implications of utilizing a portfolio approach that leveraged the natural gas system to achieve the District's climate goals

Sourcing	End Use	Distribution/Transmission
<ul style="list-style-type: none"><li>▪ Carbon neutral fuel sources escalate to 58% of supply by 2050</li><li>▪ Certified gas is sourced for all remaining fossil gas</li></ul>	<ul style="list-style-type: none"><li>▪ Overall, usage declines by 36%, CPB p.4, drivers include:<ul style="list-style-type: none"><li>▪ Gas Heat pumps</li><li>▪ Dual use systems</li><li>▪ CHP</li><li>▪ Behavioral programs</li></ul></li></ul>	<ul style="list-style-type: none"><li>▪ Contributes emissions reduction of 4%</li><li>▪ Cumulative reduction of 973,968 tons of CO<sub>2</sub>e by 2050 by replacing/remediating 458 miles of main and 59,741 service lines. (CBP p. 15)</li></ul>



Provide the analysis used to generate the \$1 [m]billion figure on page 23 of the ICF Technical Study Summary Report (“...ICF has estimated the under-recovery of utility cost of service for the Policy-Driven Electrification Case to be about \$1 billion higher than in the Fuel Neutral Case, for the period from 2020 through 2050.”)

# Under-recovery of Utility Cost of Service

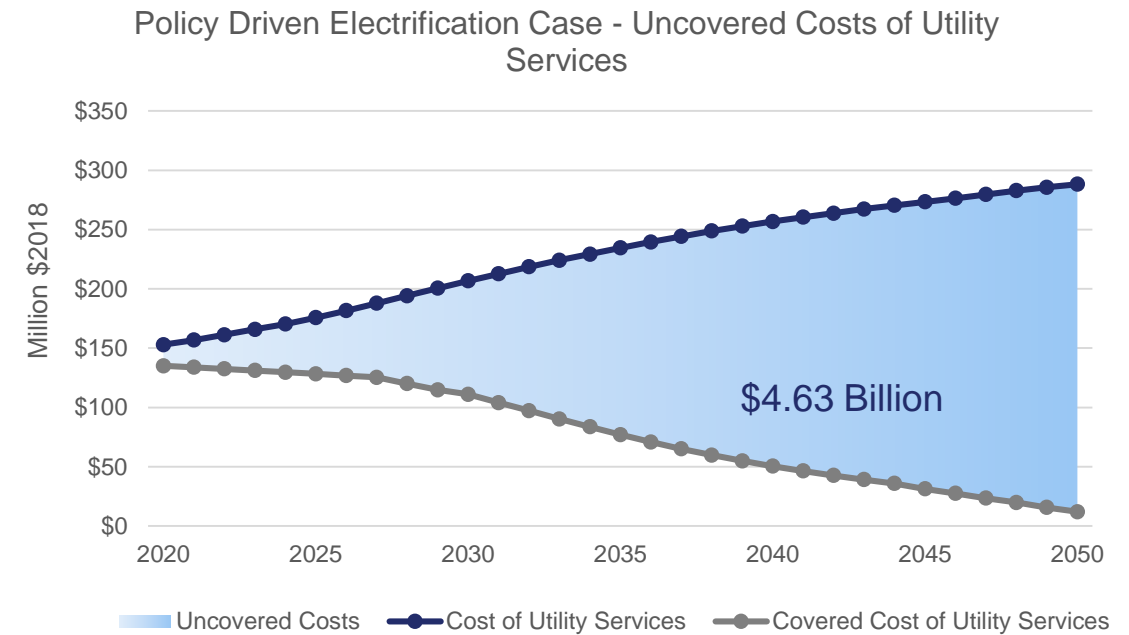
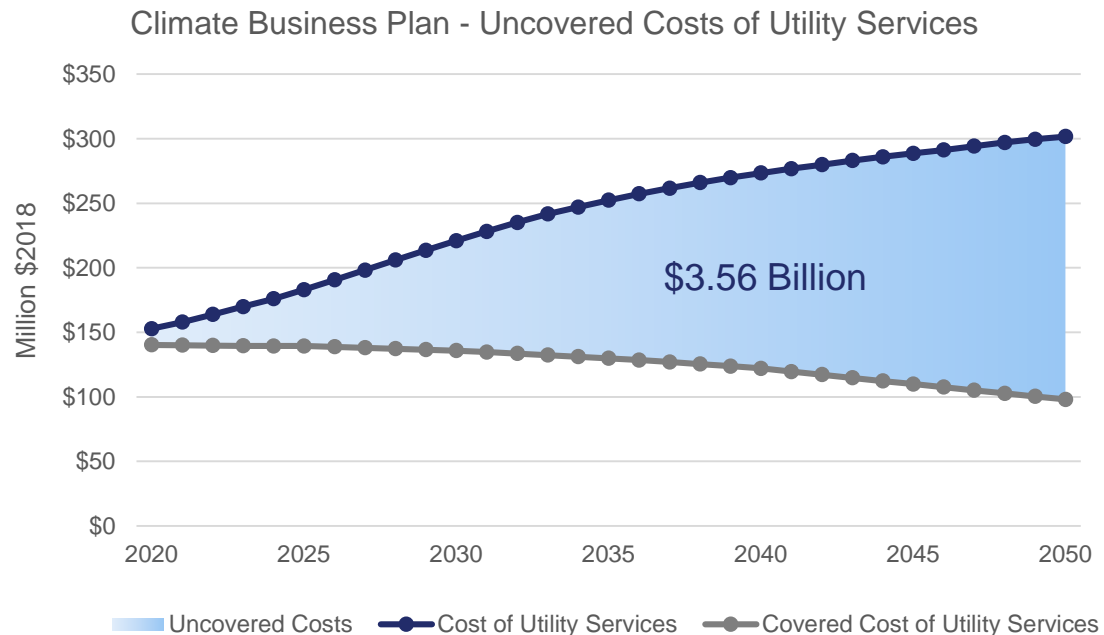
Table 9. Comparison of Additional Cumulative 2020 to 2050 Cost Elements Beyond Those Evaluated in Scenarios (\$2018 millions) – ICF Technical Study Report

The under-recovery of the utility cost of service as well as the costs associated with stranded rate base in 2050 have not been included in the costs of the carbon reduction scenarios since they reflect recovery of costs that would be incurred regardless of the CBP, hence would not be considered incremental costs.

Impact	Policy Driven Electrification Case	Fuel Neutral Decarbonization Case	Additional Costs in Policy Driven Electrification Case
<b>Cumulative Incremental Costs in Study Results (Million\$)</b>	6,532	3,843	+2,690
<b>High Level Estimation of Transmission and Distribution Costs to Accommodate Peak Demand Growth – Using SEU Approach</b>	\$2,800 +/-	0	+\$2,800 +/-
<b>Unrecovered Cost of Service 2020-2050 (at Current Rates)</b>	\$4,600 +/-	\$3,600 +/-	+\$1,100 +/-
<b>Stranded Rate Base in 2050</b>	1,500 to \$2,100 or more	0	+\$1,500 to \$2,100 or more
<b>Final Customer Transition Costs</b>	\$800 +/-	0	+ \$800 +/-
<b>System Decommissioning Costs</b>	+ Unknown	0	+ Unknown
<b>Reliability and Resiliency Costs</b>	+ Unknown	0	+ Unknown
<b>BAU Costs of 100% RPS – Not Included in incremental Power Generation Production Costs</b>	+ Unknown	+ Unknown	Negligible

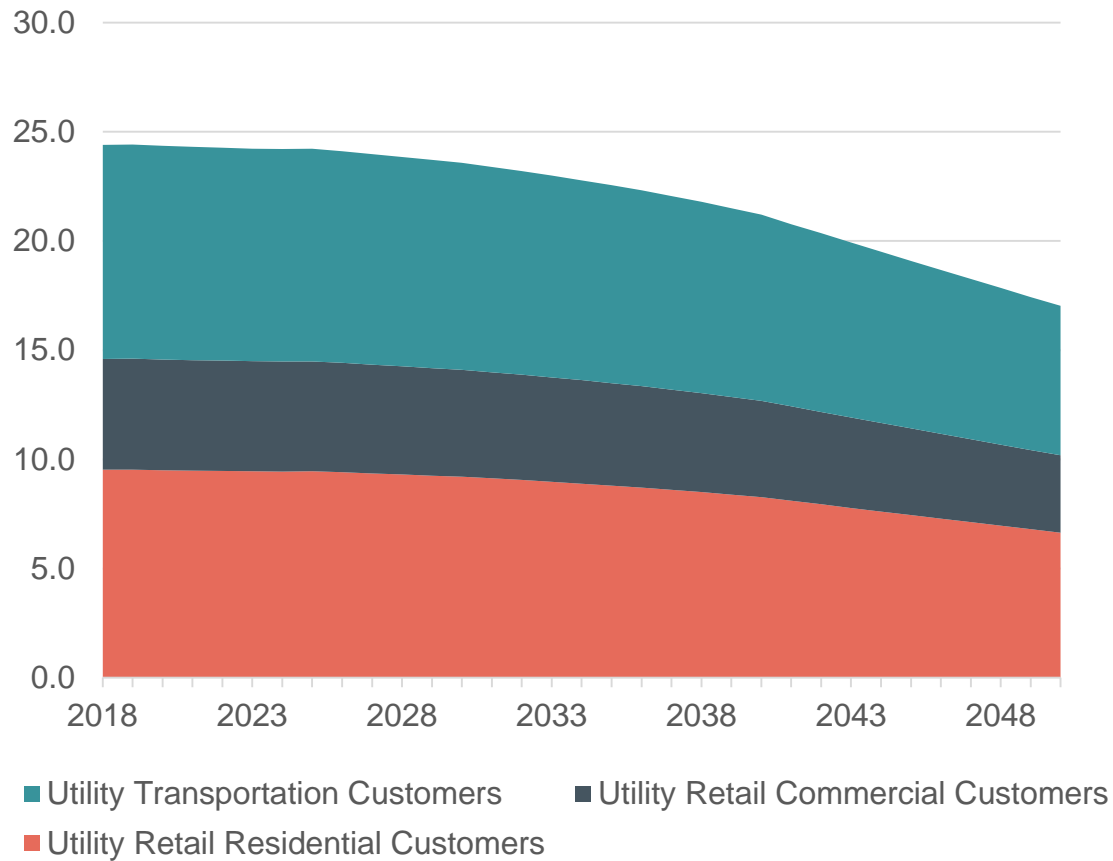
# Under-Recovery of Utility Cost of Service

- Utility cost of service calculation used to estimate under-recovery of costs exclude:
  - Gas supply costs (commodity and pipeline/storage costs), including RNG
  - CBP implementation costs and investments.
- Rate base includes Integrity Management Investments, which are assumed to be the same in both cases.

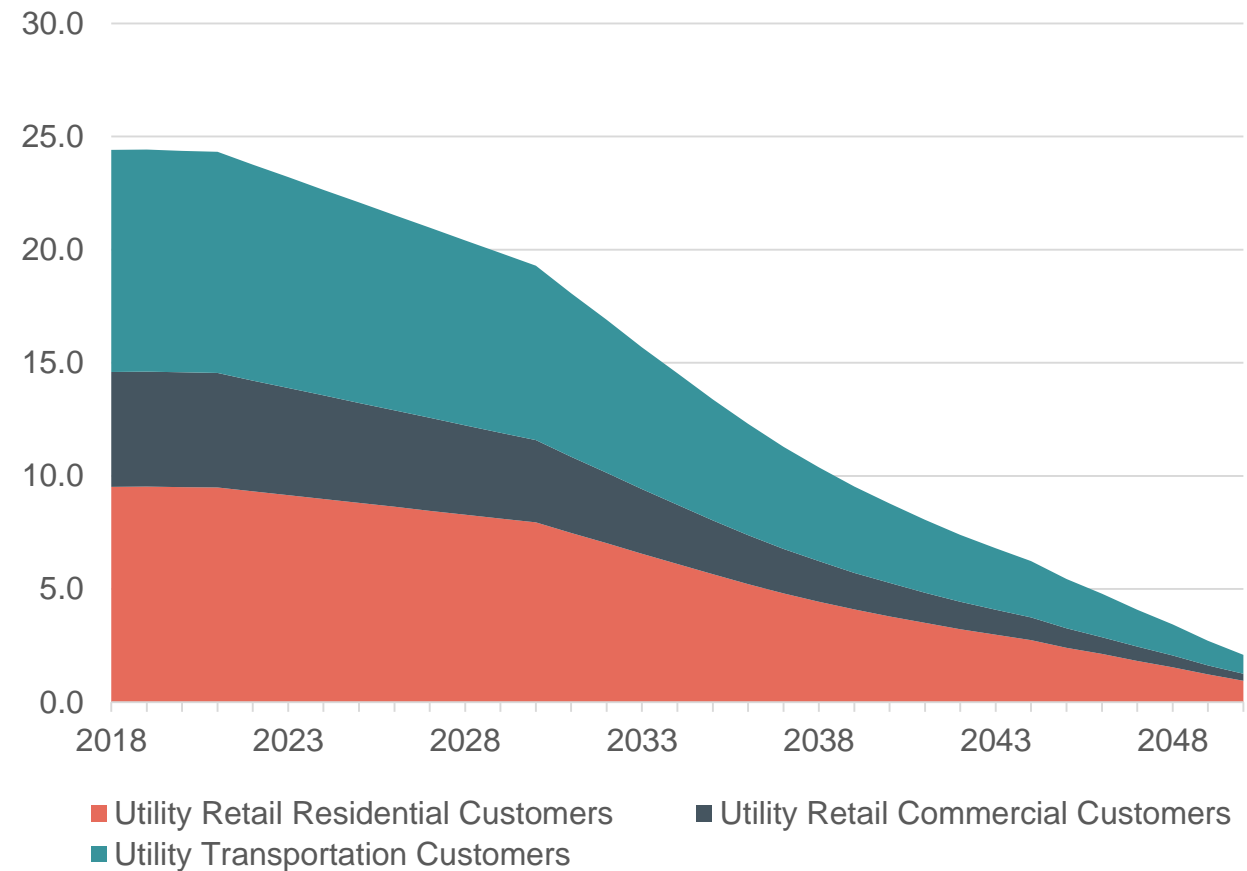


## WGL Delivered Gas Volumes (Million Dekatherms)

### Fuel Neutral Case



### Electrification Priority Case



**From:** Schipper, Susan R.  
**Sent:** Friday, April 17, 2020 2:23 PM  
**To:** bwestbrook@psc.dc.gov; clipscombe@psc.dc.gov; Walt, Lara (PSC); 'Frann Francis'; Bruce Oliver; apatel@opc-dc.gov; Brian Caldwell; 'Mark J. Murphy'; Alan Barak; Hussain Karim; Andrew Pizor; Scott Strauss; 'Emily W. Medlyn'; Dennis Jamouneau; 'James Wallington'; Brian Petruska; 'ddyer@opeiu-local2.org'; 'May Va Lor'  
**Cc:** Upadhyaya, Moxila A.; Curran, Max; Gunderson, Christopher S.; Thurston-Seignious, Cathy; O'Brien, John; Fan, Jillian (AG)  
**Subject:** FC 1142 - Climate Business Plan Website

*On behalf of Moxila A. Upadhyaya:*

To the parties in Formal Case 1142:

As you know, on March 16, 2020, AltaGas and WGL filed their Climate Business Plan with the Commission. Please be advised that the Company has created a website where it will provide the public with information and materials on the plan. The address for the site is: <https://washingtongasdcclimatebusinessplan.com/>

The Company has tentatively scheduled its first public meeting on the plan for June 1, 2020. The time and location for the meeting is being determined and will be posted on the website as well.

Thank you.

**Susan R. Schipper, Esq. | Venable LLP**  
t 410.494.6269 | f 410.821.0147 | m 202.421.3063  
210 W. Pennsylvania Avenue, Suite 500, Towson, MD 21204

[SRSchipper@Venable.com](mailto:SRSchipper@Venable.com) | [www.Venable.com](http://www.Venable.com)



**From:** Curran, Max  
**Sent:** Friday, April 17, 2020 1:44 PM  
**To:** Brian Caldwell (brian.caldwell@dc.gov)  
**Subject:** RE: Formal Case No. 1142 - DCG's 30th Set of DRs

Brian -

Please be advise that draft ICF workpapers I sent to DCG by email on April 8<sup>th</sup> is no longer a confidential document. The report is now available on Washington Gas's Climate Business Plan website. The address for the website is: <https://washingtongasdcclimatebusinessplan.com/>

Max

**J. Joseph "Max" Curran, III, Esq. | Venable LLP**  
t 410.244.5466 | f 410.244.7742 | m 443.845.8992  
750 E. Pratt Street, Suite 900, Baltimore, MD 21202

[JCurran@Venable.com](mailto:JCurran@Venable.com) | [www.Venable.com](http://www.Venable.com)

---

**From:** Curran, Max  
**Sent:** Wednesday, April 8, 2020 5:53 PM  
**To:** Brian Caldwell ([brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Subject:** RE: Formal Case No. 1142 - DCG's 30th Set of DRs

**Confidential**

Brian –

As a follow up to our conversation last week, we are providing the attached Confidential ICF Internal Draft Study (workpapers). The document is still undergoing internal ICF QC and formatting. However, you can forward this to Asa Hopkins in the meantime in accordance with the Non-Disclosure Agreement controlling the case. I will confirm with client shortly if we will have a public version of the same.

After Asa Hopkins has a chance to review the ICF workpapers, if Dr. Hopkins wants, AltaGas and WGL can arrange a "web ex" between Dr. Hopkins and the appropriate people at ICF to answer any of his follow up questions.

Call me if you have any follow up questions about the same.

Max

**J. Joseph "Max" Curran, III, Esq. | Venable LLP**  
t 410.244.5466 | f 410.244.7742 | m 443.845.8992  
750 E. Pratt Street, Suite 900, Baltimore, MD 21202

[JCurran@Venable.com](mailto:JCurran@Venable.com) | [www.Venable.com](http://www.Venable.com)

**From:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Sent:** Wednesday, April 8, 2020 4:04 PM  
**To:** Brian Caldwell ([brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Subject:** RE: Formal Case No. 1142 - DCG's 30th Set of DRs

Brian

We are working to ensure we can get all the work papers in an electronic format. We will forward as quickly as we can. Hopefully shortly.

Max.

Sent with BlackBerry Work  
([www.blackberry.com](http://www.blackberry.com))

---

**From:** Curran, Max <[JCurran@Venable.com](mailto:JCurran@Venable.com)>  
**Date:** Thursday, Apr 02, 2020, 1:48 PM  
**To:** Brian Caldwell ([brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Subject:** FW: Formal Case No. 1142 - DCG's 30th Set of DRs

**Confidential Communication**

Brian –

As a follow up to our call this afternoon, the Joint Applicants (AltaGas and WGL) have agreed to provide to DCG the ICF workpapers developed for WGL's Climate Business Plan and will do so on Wednesday April 8, 2020. On April 10<sup>th</sup>, WGL also intends to provide the Karl Racine with an update on the Climate Business plan as previously arranged.

After Asa Hopkins has a chance to review the ICF workpapers, if Dr. Hopkins wants, AltaGas and WGL can arrange a "web ex" between Dr. Hopkins and the appropriate people at ICF to answer any of his follow up questions.

In exchange for providing these workpaper, DCG will agree to indefinitely extend the deadline for the Joint Applicants to file any objections to DCG's 30<sup>th</sup> Set of Data Requests that were filed on March 26, 2020.

Let me know if you have any follow-up questions.

Max

**J. Joseph "Max" Curran, III, Esq. | Venable LLP**  
t 410.244.5466 | f 410.244.7742 | m 443.845.8992  
750 E. Pratt Street, Suite 900, Baltimore, MD 21202

[JCurran@Venable.com](mailto:JCurran@Venable.com) | [www.Venable.com](http://www.Venable.com)

**From:** "O'Brien, John" <JOBRIEN@WASHGAS.COM>  
**Date:** April 13, 2020 at 2:35:40 PM EDT  
**To:** Laurence Daniels <ldaniels@opc-dc.gov>  
**Subject:** Re: [ External ] WGL Climate Business Plan presentation to OPC

Absolutely, send over some times

Sent from my iPad

On Apr 13, 2020, at 2:05 PM, Laurence Daniels <ldaniels@opc-dc.gov> wrote:

John:

Will WGL be able to do a Climate Business Plan conference call presentation next week for OPC?

Laurence

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**From:** Caldwell, Brian (OAG) <brian.caldwell@dc.gov>  
**Sent:** Tuesday, April 28, 2020 8:58 PM  
**To:** Adams, Melissa  
**Cc:** ahopkins@synapse-energy.com; Curran, Max; Gunderson, Christopher S.; O'Brien, John  
**Subject:** Re: [ External ] Re: Responses to Office of Attorney General Questions

**Caution: External Email**

Thank you, Melissa. Very much appreciated.

Brian

---

**From:** Adams, Melissa <MelissaAdams@washgas.com>  
**Sent:** Tuesday, April 28, 2020 8:08 PM  
**To:** Caldwell, Brian (OAG) <brian.caldwell@dc.gov>  
**Cc:** ahopkins@synapse-energy.com <ahopkins@synapse-energy.com>; Curran, Max <JCurran@venable.com>; Gunderson, Christopher S. <CSGunderson@venable.com>; O'Brien, John <JOBRIEN@WASHGAS.COM>  
**Subject:** Re: [ External ] Re: Responses to Office of Attorney General Questions

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Brian,  
In that case, we will provide what we can sooner. Other items will follow by May 7.  
Thanks,  
Melissa

Melissa E. Adams  
Chief Corp. Social Responsibility Officer  
WGL / Washington Gas  
Office 703-750-4530  
Mobile 703-843-3664

Sent from my iPhone

On Apr 28, 2020, at 6:54 PM, Caldwell, Brian (OAG) <Brian.Caldwell@dc.gov> wrote:

Thank you, Melissa. Obviously, given that our comments on the Plan are due by May 15th, the more expeditiously WGL / ICF can provide responses, the better.

Best,  
Brian Caldwell

---

**From:** Adams, Melissa <MelissaAdams@washgas.com>  
**Sent:** Monday, April 27, 2020 11:26 AM  
**To:** Caldwell, Brian (OAG) <brian.caldwell@dc.gov>; ahopkins@synapse-energy.com <ahopkins@synapse-energy.com>  
**Cc:** 'Curran, Max' <JCurran@Venable.com>; Gunderson, Christopher S. <CSGunderson@Venable.com>; O'Brien, John <JOBRIEN@WASHGAS.COM>  
**Subject:** Responses to Office of Attorney General Questions

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Thank you for forwarding Dr. Hopkins' follow up questions.

Washington Gas expects to provide ICF's written responses to these questions by May 7.

Sincerely,  
Melissa

## MELISSA E. ADAMS

Chief Corporate Social Responsibility Officer | WGL  
P 703.750.4530 | M 703.843.3664 | [madams@washgas.com](mailto:madams@washgas.com)  
1000 Maine Ave. SW, Washington, DC 20024

### ENERGY ANSWERS. ASK US.

<image001.jpg>

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**From:** Caldwell, Brian (OAG) <brian.caldwell@dc.gov>  
**Sent:** Friday, May 1, 2020 1:31 PM  
**To:** Adams, Melissa  
**Cc:** ahopkins@synapse-energy.com; Curran, Max; Gunderson, Christopher S.; O'Brien, John; Thurston-Seignious, Cathy  
**Subject:** Re: [ External ] Re: Responses to Office of Attorney General Questions

**Caution: External Email**

Thank you, Melissa. I appreciate your efforts in getting us this information expeditiously.

Brian Caldwell

---

**From:** Adams, Melissa  
**Sent:** Friday, May 1, 2020 8:51 AM  
**To:** Caldwell, Brian (OAG)  
**Cc:** ahopkins@synapse-energy.com ; Curran, Max ; Gunderson, Christopher S. ; O'Brien, John ; Thurston-Seignious, Cathy  
**Subject:** RE: [ External ] Re: Responses to Office of Attorney General Questions

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Brian,  
Attached is the first set of responses to Dr. Hopkins' questions about the assumptions used in ICF's analysis that supported the development of the Climate Business Plan.  
We will provide the remaining information by May 7 or sooner if possible.

Thanks,

Melissa

Melissa e. adams

**AVP & Chief Corporate Social Responsibility Officer | WGL**  
**P** 703.750.4530 | **M** 703.843.3664 | [madams@washgas.com](mailto:madams@washgas.com)  
1000 Maine Ave. SW, Washington, DC 20024

energy answers. ask us.



---

**From:** Caldwell, Brian (OAG)  
**Sent:** Tuesday, April 28, 2020 8:58 PM  
**To:** Adams, Melissa  
**Cc:** ahopkins@synapse-energy.com; Curran, Max ; Gunderson, Christopher S. ; O'Brien, John  
**Subject:** Re: [ External ] Re: Responses to Office of Attorney General Questions  
Thank you, Melissa. Very much appreciated.  
Brian

---

**From:** Adams, Melissa <[MelissaAdams@washgas.com](mailto:MelissaAdams@washgas.com)>  
**Sent:** Tuesday, April 28, 2020 8:08 PM

To: Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>

Cc: [ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com) <[ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com)>; Curran, Max <[JCurran@venable.com](mailto:JCurran@venable.com)>;

Gunderson, Christopher S. <[CSGunderson@venable.com](mailto:CSGunderson@venable.com)>; O'Brien, John <[JOBRIEN@WASHGAS.COM](mailto:JOBRIEN@WASHGAS.COM)>

Subject: Re: [ External ] Re: Responses to Office of Attorney General Questions

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Brian,

In that case, we will provide what we can sooner. Other items will follow by May 7.

Thanks,

Melissa

Melissa E. Adams

Chief Corp. Social Responsibility Officer

WGL / Washington Gas

Office 703-750-4530

Mobile 703-843-3664

Sent from my iPhone

On Apr 28, 2020, at 6:54 PM, Caldwell, Brian (OAG) <[Brian.Caldwell@dc.gov](mailto:Brian.Caldwell@dc.gov)> wrote:

Thank you, Melissa. Obviously, given that our comments on the Plan are due by May 15th, the more expeditiously WGL / ICF can provide responses, the better.

Best,

Brian Caldwell

---

**From:** Adams, Melissa <[MelissaAdams@washgas.com](mailto:MelissaAdams@washgas.com)>

**Sent:** Monday, April 27, 2020 11:26 AM

**To:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>; [ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com)

<[ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com)>

**Cc:** 'Curran, Max' <[JCurran@Venable.com](mailto:JCurran@Venable.com)>; Gunderson, Christopher S. <[CSGunderson@Venable.com](mailto:CSGunderson@Venable.com)>;

O'Brien, John <[JOBRIEN@WASHGAS.COM](mailto:JOBRIEN@WASHGAS.COM)>

**Subject:** Responses to Office of Attorney General Questions

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Thank you for forwarding Dr. Hopkins' follow up questions.

Washington Gas expects to provide ICF's written responses to these questions by May 7.

Sincerely,

Melissa

Melissa e. adams

**Chief Corporate Social Responsibility Officer | WGL**

**P** 703.750.4530 | **M** 703.843.3664 | [madams@washgas.com](mailto:madams@washgas.com)

1000 Maine Ave. SW, Washington, DC 20024

energy answers. ask us.

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**From:** Adams, Melissa <MelissaAdams@washgas.com>  
**Sent:** Friday, May 1, 2020 10:56 AM  
**To:** Asa Hopkins; Caldwell, Brian (OAG)  
**Cc:** Curran, Max; Gunderson, Christopher S.; O'Brien, John; Thurston-Seignious, Cathy  
**Subject:** RE: [ External ] Re: Responses to Office of Attorney General Questions

**Caution: External Email**

Asa,

Here you go ...

Here is the South Atlantic region version of the table:

Lifecycle Carbon Intensity (gCO <sub>2</sub> e/MJ)	Low	High
LFG	22	26
Dairy	-299	-294
Swine	-399	-394
Beef / Poultry	36	
WRRF	22	26
Food Waste	-90	-82
Thermal Gasification	25	55
P2G	0	
Natural Gas	65	

## MELISSA E. ADAMS

Chief Corporate Social Responsibility Officer | WGL

P 703.750.4530 | M 703.843.3664 | [madams@washgas.com](mailto:madams@washgas.com)

1000 Maine Ave. SW, Washington, DC 20024

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---

**From:** Asa Hopkins <ahopkins@synapse-energy.com>  
**Sent:** Friday, May 1, 2020 9:03 AM  
**To:** Adams, Melissa <MelissaAdams@washgas.com>; Caldwell, Brian (OAG) <brian.caldwell@dc.gov>  
**Cc:** Curran, Max <JCurran@venable.com>; Gunderson, Christopher S. <CSGunderson@venable.com>; O'Brien, John <JOBRIEN@WASHGAS.COM>; Thurston-Seignious, Cathy <CThurston-Seignious@washgas.com>  
**Subject:** Re: [ External ] Re: Responses to Office of Attorney General Questions

Thank you, Melissa.

One quick follow-up on Question 5, if I may: Table 40 does not include the South Atlantic region – only the other regions. Could you provide the values for the South Atlantic?

Thanks,

Asa

-----  
Asa S. Hopkins, PhD  
Vice President  
Synapse Energy Economics  
485 Massachusetts Ave., Suite 3  
Cambridge, MA 02139  
617-453-7060 (direct)  
[ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com)

---

**From:** "Adams, Melissa" <[MelissaAdams@washgas.com](mailto:MelissaAdams@washgas.com)>

**Date:** Friday, May 1, 2020 at 8:51 AM

**To:** "Caldwell, Brian (OAG)" <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>

**Cc:** Asa Hopkins <[ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com)>, "Curran, Max" <[JCurran@venable.com](mailto:JCurran@venable.com)>, "Gunderson, Christopher S." <[CSGunderson@venable.com](mailto:CSGunderson@venable.com)>, "O'Brien, John" <[JOBRIEN@WASHGAS.COM](mailto:JOBRIEN@WASHGAS.COM)>, "Thurston-Seignious, Cathy" <[CThurston-Seignious@washgas.com](mailto:CThurston-Seignious@washgas.com)>

**Subject:** RE: [ External ] Re: Responses to Office of Attorney General Questions

External Email:

Brian,

Attached is the first set of responses to Dr. Hopkins' questions about the assumptions used in ICF's analysis that supported the development of the Climate Business Plan.

We will provide the remaining information by May 7 or sooner if possible.

Thanks,

Melissa

## MELISSA E. ADAMS

AVP & Chief Corporate Social Responsibility Officer | WGL

P 703.750.4530 | M 703.843.3664 | [madams@washgas.com](mailto:madams@washgas.com)

1000 Maine Ave. SW, Washington, DC 20024

**ENERGY ANSWERS. ASK US.**



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**From:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Sent:** Tuesday, April 28, 2020 8:58 PM  
**To:** Adams, Melissa <[MelissaAdams@washgas.com](mailto:MelissaAdams@washgas.com)>  
**Cc:** [ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com); Curran, Max <[JCurran@venable.com](mailto:JCurran@venable.com)>; Gunderson, Christopher S. <[CSGunderson@venable.com](mailto:CSGunderson@venable.com)>; O'Brien, John <[JOBRIEN@WASHGAS.COM](mailto:JOBRIEN@WASHGAS.COM)>  
**Subject:** Re: [ External ] Re: Responses to Office of Attorney General Questions

Thank you, Melissa. Very much appreciated.

Brian

---

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**Sent:** Tuesday, April 28, 2020 8:08 PM  
**To:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>  
**Cc:** [ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com) <[ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com)>; Curran, Max <[JCurran@venable.com](mailto:JCurran@venable.com)>; Gunderson, Christopher S. <[CSGunderson@venable.com](mailto:CSGunderson@venable.com)>; O'Brien, John <[JOBRIEN@WASHGAS.COM](mailto:JOBRIEN@WASHGAS.COM)>  
**Subject:** Re: [ External ] Re: Responses to Office of Attorney General Questions

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Brian,  
In that case, we will provide what we can sooner. Other items will follow by May 7.  
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Melissa

Melissa E. Adams  
Chief Corp. Social Responsibility Officer  
WGL / Washington Gas  
Office 703-750-4530  
Mobile 703-843-3664

Sent from my iPhone

On Apr 28, 2020, at 6:54 PM, Caldwell, Brian (OAG) <[Brian.Caldwell@dc.gov](mailto:Brian.Caldwell@dc.gov)> wrote:

Thank you, Melissa. Obviously, given that our comments on the Plan are due by May 15th, the more expeditiously WGL / ICF can provide responses, the better.

Best,  
Brian Caldwell

---

**From:** Adams, Melissa <[MelissaAdams@washgas.com](mailto:MelissaAdams@washgas.com)>  
**Sent:** Monday, April 27, 2020 11:26 AM  
**To:** Caldwell, Brian (OAG) <[brian.caldwell@dc.gov](mailto:brian.caldwell@dc.gov)>; [ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com) <[ahopkins@synapse-energy.com](mailto:ahopkins@synapse-energy.com)>

Cc: 'Curran, Max' <[JCurran@Venable.com](mailto:JCurran@Venable.com)>; Gunderson, Christopher S. <[CSGunderson@Venable.com](mailto:CSGunderson@Venable.com)>; O'Brien, John <[JOBRIEN@WASHGAS.COM](mailto:JOBRIEN@WASHGAS.COM)>

**Subject:** Responses to Office of Attorney General Questions

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Thank you for forwarding Dr. Hopkins' follow up questions.

Washington Gas expects to provide ICF's written responses to these questions by May 7.

Sincerely,  
Melissa

## MELISSA E. ADAMS

Chief Corporate Social Responsibility Officer | WGL

P 703.750.4530 | M 703.843.3664 | [madams@washgas.com](mailto:madams@washgas.com)

1000 Maine Ave. SW, Washington, DC 20024

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<image001.jpg>

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**From:** Caldwell, Brian (OAG) <brian.caldwell@dc.gov>  
**Sent:** Friday, May 8, 2020 11:10 AM  
**To:** Adams, Melissa; ahopkins@synapse-energy.com  
**Cc:** Curran, Max; Gunderson, Christopher S.; O'Brien, John; Thurston-Seignious, Cathy  
**Subject:** Re: Second set of Responses to District Office of Attorney General Questions

**Caution: External Email**

Thank you, Melissa. We will review and circle back if necessary.

Best,  
Brian

---

**From:** Adams, Melissa <MelissaAdams@washgas.com>  
**Sent:** Thursday, May 7, 2020 7:05 PM  
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**Subject:** Second set of Responses to District Office of Attorney General Questions

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Brian,

Here are the remaining responses to Dr. Hopkins' questions.

Sincerely,  
Melissa

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I, the undersigned counsel, hereby certify that on this 14th day of May, 2020, I caused copies of the foregoing to be hand-delivered, mailed, postage-prepaid, or electronically delivered to the following:

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