



To: Kate Kirby, APS Chief Executive Officer

From: C. William McCurdy, GHG Inventory Advisory Committee Chair *C. William McCurdy*

Date: September 7, 2017

Re: GHG Inventory – Next Steps & Proposed Actions

Background

As a follow-up activity to the APS 2015 Statement on Earth's Changing Climate, APS elected to conduct an internal analysis of its greenhouse gas (GHG) inventory for fiscal year 2015.

The GHG Inventory project has been managed by the GHG Inventory Advisory Committee, which is overseen by the APS Panel on Public Affairs and reports directly to the APS CEO. Additionally, APS selected the Anthesis Consulting Group – a global specialist consultancy skilled in GHG inventory development – to support the Committee and assist APS in determining its inventory. Anthesis was also charged with helping APS develop the tools and institutional knowledge necessary for the Society to conduct its own GHG inventory going forward.

Status

APS has completed the vast majority of its 2015 GHG inventory, including all of the Society's Scope 1 and 2 emissions and two Scope 3 emission categories: APS member travel to/from six of its national meetings and APS's investment portfolio, which are by far the two most dominant contributors to APS's GHG footprint.

APS's Scope 1 & 2 emissions were verified by an independent third party (Cameron-Cole) and publicly posted online with the Climate Registry. APS is the first professional scientific society to broadly evaluate its GHG emissions and publicly post the results.

Recommendations

The GHG Inventory Advisory Committee reviewed the results-to-date and held a meeting to determine what – if any – actions APS should consider taking going forward. The Committee unanimously agreed to recommend the following set of actions for consideration by the APS Board:

Scopes 1 & 2: APS Daily Operations

- **Consider Purchasing Renewable Energy Certificates (RECs):** APS should investigate the possibility of purchasing RECs for the electricity used by APS at each of its three locations – Ridge, NY; College Park, MD; and Washington, DC. OPA staff should work with the appropriate APS staff at College Park and Ridge to determine the practical and economic feasibility of purchasing RECs at each location.

- **Improve Buildings' Energy Efficiencies:** OPA staff should work with building management at the National Press Building and the co-owners of the American Center for Physics (ACP) to improve the energy efficiencies of the buildings, where possible.

Scope 3: APS Meetings Travel and Investments

- **Include GHG Impact in Choosing Meeting Locations:** APS should encourage the Meetings Department and Unit leaders to include the GHG impact of proposed meeting locations as one of APS's selection criteria when choosing national meeting locations. For instance, this may involve giving preference to locations that have energy efficient convention centers, are airline hubs, or have demonstrated emissions reductions programs. OPA staff can work with Meetings staff and Unit leaders to evaluate GHG emissions for potential meeting locations.
- **Consider Offering Carbon Offsets for Meeting Travel:** APS should consider developing a program/mechanism to enable APS meeting attendees the opportunity to purchase carbon offsets for the emissions associated with their travel to/from the meeting as a part of the registration process. OPA staff should research and evaluate various carbon offset programs to determine their impact and accountability. OPA staff should develop a short list of appropriate programs for consideration by the APS Board. Additionally, an appropriate badge marker/sticker indicating participation in the carbon offset program should be awarded to participating attendees at registration, which will help to spread awareness and encourage participation.
- **Explore Ways to Improve Travel Data and Model:** The OPA should determine if refinements to its current model for calculating emissions from attendee travel could significantly improve its accuracy. If so, then APS should determine the feasibility of collecting additional information at registration (mode of transportation to/from airport, connecting flights/layovers, etc.) to provide better estimates of the GHG impact associated with attendee travel. APS should assure attendees that any collected data would be anonymized prior to data analysis by APS or a third party in a way that would ensure it cannot be attributed to individuals.
- **Engage Investment Managers:** APS should develop contacts with the asset managers responsible for managing mutual funds within the APS portfolio. OPA staff should work with the APS CFO to engage fund managers and advocate that they support – via voting shares – shareholder resolutions aimed at addressing climate change and its potential impacts.

Community Outreach

- **Promote GHG Activities:** APS should inform its membership through a “Back Page” article in APS News. To encourage scientific societies and other like-minded organizations to take similar action, APS should also publicize its GHG inventory activities more broadly, potentially through an article in the National Academies “Issues in Science and Technology.”