



# Streamlining Your Emissions INVENTORY UPDATES

By John Stokes, LEED AP

Of the 677 school presidents that have signed on to the American College and University Presidents Climate Commitment (ACUPCC), approximately 200 of them are presidents of community colleges.[1] This measure of involvement at the community college level is promising for two reasons: 1) these schools have emerged as a major provider of public higher education, enrolling nearly as many students in their programs as public four-year universities,[2] and 2) community colleges are often uniquely positioned to promote change within and across communities.[3] However, the challenges in meeting the ACUPCC commitments are substantial—for all types of institutions. As reported by Adams, a small number of signatories have actually left the program and many others continue to fall behind the deadlines for submitting required plans and updated emissions inventories. Regardless of the enormous savings needed to meet a neutrality goal, many schools continue to struggle with the basic act of creating and maintaining an accurate emissions inventory.

## THE IMP

Strapped with competing demands, leaders must find ways for small colleges to make the most with few resources. This article revisits the idea of an Inventory Management Plan (IMP)—a somewhat tedious but highly effective tool that can be particularly valuable for community colleges, where there is an elevated need for efficiency and continuity of knowledge from one year to the next.

## THE NEED

As a case in point, a small New England community college created their first ACUPCC Climate Action Plan (CAP). This CAP included an updated GHG inventory that was compared against the original baseline, which had been completed years ago with the help of students who are no longer at the school. The Facilities and Engineering staff remembered using the Clean Air-Cool Planet (CA-CP) calculator tool and even had the old CA-CP spreadsheet containing raw data entries…but they had kept very little in terms of detailed documentation, backup source data files, or supporting calculation methods and assumptions. Upon further review, some inconsistencies were found within the data entries, raising even more questions about the original inventory and how reliably they could draw comparisons moving ahead.

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Like so many schools, they faced the unnecessary challenge of essentially relearning the inventory process, starting back at the beginning. What data had to be collected? What was considered within scope? Where were the boundaries drawn around the campus buildings and transportation fleet? How and where could they find the various pieces of source data on campus? Were those personnel still in their positions? What assumptions were made in calculating the commuter emissions for students and staff? At a time when they could have been quickly updating their previous inventory, it seemed like there were more questions than answers. And with limited resources and time to dedicate toward the task, it took months of digging to relocate much of the underlying data.

This example illustrates the importance of a good IMP to ensure continuity of emissions data and analysis. You should think of an IMP as being separate from a Climate Action Plan, which is primarily focused on identifying emission reduction measures and charting the path toward climate neutrality. The IMP should focus more on data *quality* by establishing reliable systems for data collection and process improvement. In fact, as with the project mentioned above, a CAP might even include the creation of an IMP as one of the initial strategies or measures to be taken by the institution. In other words, build the IMP directly into the action plan.

People often want to rush through the inventory process to "get it done," not realizing that a poorly or hastily constructed inventory is only a disservice in the long run. The inventory is the foundation of the entire ACUPCC commitment, and a solid foundation needs to be accurate, transparent, repeatable, and easily "update-able." An IMP helps schools institutionalize this process by treating knowledge as a manageable asset and providing a framework for collecting and incorporating new information.

## BASIC CONTENTS

Anyone familiar with the EPA's Climate Leaders program is probably already familiar with the idea of an IMP. While Climate Leaders is being phased out over the course of this year, their guidance is useful for any institution. The EPA highlights seven major sections of an IMP:[4]

- **Institutional Information:** name, address, and inventory contact information
- **Boundary Conditions:** organizational and operational boundary descriptions
- **Emissions Quantification:** quantification methodologies and specific emission factors by year
- **Data Management:** specific data sources, people, and collection processes on campus
- **Base Year:** base year adjustments for structural and methodology changes
- **Management Tools:** roles and responsibilities and file maintenance
- **Auditing & Verification:** auditing, management review, and corrective action

For those just getting started, schools should refer to examples that are available at the ACUPCC website. Many institutions are uploading versions of an IMP along with their inventory data, but they do range in quality and completeness. You can also consider following the Simplified Inventory Management Plan available through the EPA at: *http://www.epa.gov/climateleaders/reporting/index.html#imp*. A Google search will also result in several corporate examples that follow the Climate Leaders model.

While it may seem like the creation of an IMP is an additional burden, most of this information is already being discussed and determined during the initial inventory process. It should not be a huge step to formally document them in an IMP for future use.

## FACILITATING CONSISTENCY AND FINDING TIME

There are several benefits of a thorough IMP. Most importantly, it will help ease the process of maintaining and updating an accurate and comparable emissions inventory. This can be especially important for community colleges that have limited resources and continuous turnover but still need to provide ACUPCC inventories at least every other year.

Consider the fact that many institutions use students to complete their greenhouse gas inventories and climate action plans. Community colleges are facing interesting changes in student populations that are directly relevant to the need for an IMP. Turnover and completion rates are especially challenging at community colleges where students are only enrolled for two years and may not live on campus. Many community colleges have a second year retention rate of 30 percent or less.[5] What

happens to the thread of emissions data when that group of students leaves? At a two-year school, each subsequent inventory update might be the responsibility of an entirely new set of students. Similarly, how will the school transition knowledge and responsibility when or if the facilities or sustainability director retires?

This enforces the need for an IMP to facilitate that turnover and ease the transition from one class to the next or from one administration to the next. Schools can combat student and staff turnover by having a well-planned process with consistent methods for tracking, aggregating, analyzing, and reporting data. The key is to avoid recreating the wheel every time new people are involved. It is worth spending additional effort to establish these tools and processes up front, since it is more expensive and time-consuming to repeatedly reinvent the wheel.

One thing working in favor of community colleges is that—in addition to these challenges—they have become "magnets for a new generation of professionals with new ideas about campus life, involvement, activities, and the culture of the community college."[6] This suggests there will be a steady stream of willing and active participants. The trick is to use their time most effectively. Time saved while updating the emissions inventory can then be more effectively applied toward generating and implementing meaningful and lasting solutions.

END NOTES:


1. Dan Adams, "Climate commitment reaches crossroads," *Community College Times*, August 30, 2010, *http://www.communitycollegetimes.com/Pages/Sustainability/Climate-commitment-reaches-crossroads.aspx* (accessed February 22, 2011).
2. A. M. Cohen and F.B. Brawer, *The American Community College*, 3rd ed. (San Francisco: Jossey-Bass, 1996).
3. Adams, "Climate commitment reached crossroads."
4. Environmental Protection Agency (EPA), Climate Leaders Reporting website *http://www.epa.gov/climateleaders/reporting/index.html#imp* (accessed March 13, 2011).
5. Mark Smith, Jim Salt, and Louanne Whitton, "Taking Charge of Change: The Call for Accountability and Supporting Student Success" (Taking Charge of Change 2010 Annual Conference, Bend, OR, November 4-6, 2010). *http://www.occa17.com/index.php?option=com_content&view=article&id=27* (accessed March 13, 2011).
6. Michael Miller, Myron Pope, and Thomas Steinmann, "A profile of contemporary community college student involvement, technology use, and reliance on selected college life skills," *College Student Journal* (September 2005). *http://findarticles.com/p/articles/mi_m0FCR/is_3_39/ai_n15944505/* (accessed March 14, 2011).



John Stokes is a sustainability specialist with Sebesta Blomberg, Roseville, MN. E-mail him at *jstokes@sebesta.com*. This is his first article for *Facilities Manager*.