Colorado Association for Recycling
PO Box 11130
Denver, CO 80211-0130
Turning today's waste into tomorrow's resources.

Proposal for the Capitol Building Advisory Committee to Improve Recycling at the Capitol

TO: Capitol Building Advisory Committee
DATE: November 21, 2014

FROM: Colorado Association for Recycling

This proposal is meant to offer assistance to the Advisory Committee, custodial staff and other interested parties in the Capitol who want to improve their recycling collection rate, maintain consistency of the recycling program throughout the Capitol and enhance recycling education for staff, legislators, lobbyists and visitors to the Capitol.

The Colorado Association for Recycling is a 501(c)3 nonprofit organization that has been in existence since 1991. We work regularly with legislators to advocate for the advancement of recycling in the state and occasionally host an electronics collection event at the Capitol. It has been brought to our attention that the recycling program has not been as successful or as visible as it could be. We would like to offer our assistance to remedy this for the following reasons:

- Studies show that the recycling and composting industries create 4 - 10 times more jobs than landfilling or waste-to-energy projects. Here in Colorado, according to preliminary data, the total job impact of the recycling, reuse and remanufacturing industry (RRR) is more than 85,000 gainfully employed citizens of Colorado. That total labor impact is nearly $5.8 billion while the total tax revenue impact is $1.3 billion.
- Recycling decreases the need for extracting, transporting and processing raw materials, thereby saving energy and reducing pollution and greenhouse gas production inherent in those processes. For example, by recycling an aluminum can, you use 95% less energy than if you make one from raw material.
- Newer studies looking at the cost differential to reduce $MTCO_2E$ (metric ton of CO_2 equivalent) find that recycling programs cost far less to achieve the same $MTCO_2E$ reduction as energy efficiency programs and are able to be implemented much sooner.
- The Capitol, which is the symbol of the government of our great state, should lead by example and embrace a simple service that can offer so much benefit, both economically and environmentally, to all of Colorado.
- A well-run recycling program will increase the quantities of paper collected, thereby increasing the credit currently received for sale of that material, offsetting costs.

We propose to improve the recycling program at the Capitol by working with Capitol staff and legislators to take the following steps:

1) Begin discussions about what a successful program would look like at the Capitol
2) Determine infrastructure needs, including bins, signage, service, and costs
3) Understand the interactions of all people and systems that may impact recycling
4) Determine educational needs
5) Apply for grants that will cover the major costs of the program
6) Begin an educational campaign working with the Legislative Legal Services Greening Committee

Colorado Association for Recycling
PO Box 11130
Denver, CO 80211-0130
Turning today's waste into tomorrow's resources.

7) Install three-bin systems throughout the building, with appropriate signage (for trash, paper and co-mingled container streams)
8) Train staff on proper usage prior to the legislative session
9) Be available during the session to host a table, offer additional education and outreach, and troubleshoot as necessary
10) Help staff gather data and develop reports
11) Work with staff on contracting issues related to recycling at the time of renewal
12) Assist in holding an electronics collection event

We believe it is necessary to take time to develop and implement the program to ensure its success. Education is very important, as is proper signage and consistency of all visuals and language pertaining to the program. A hurried approach reduces the chances of achieving the goal of improving recycling. Proposed timeline:

- Dec 2014 / Jan 2015: meet with staff and volunteers to envision program needs
- Jan – Mar 2015: Apply for grant funding
- Jun 2015: Begin development of education and outreach tools / signage
- July – Sept 2015: Install bins, begin staff training
- Oct – Dec 2015: Continue to fine tune program and make needed changes
- Jan 2016: Be ready for the 2016 legislative session

Receiving grant funding will be critical to fulfilling all these tasks. We intend to apply to the Recycling Resource Economic Opportunity (RREO) grant fund in Mar of 2015. There are two other national bin grant programs that we shall also apply to for funding, as well as a program in the City & County of Denver Environmental Health division that may be able to be of some assistance. Receiving any one of these funding sources should be sufficient to cover the capital costs of the program.

Organizations such as Boulder County and NREL (National Renewable Energy Laboratory) are just two examples of successful recycling programs in large, complex institutions.

NREL Recycling Program

NREL's recycling program began informally in the early 1980s and was formalized in 2000. By 2008 they were diverting 49% of their waste from landfills. By FY 2014 they increased that diversion to 76%. 87% of all construction waste was diverted from landfills.

2008 – 1364 employees	Campus Sq. Ft: 460,318
2013 – 2547 employees	Campus Sq. Ft: 1,129,668
2014 – 2918 employees	Campus Sq. Ft: 1,129,668

Boulder County Case Study

Boulder County's in-house zero waste program dates back the mid-2000s, when composting services became available, and the county made a commitment to pursue Zero Waste, both as an organization and within our community. The program allows the county's over 2,000 employees (in over 30 buildings) to conveniently recycle and compost at work. Confidential paper collection and shredding is also provided as needed. Periodic collections are also provided for hazardous waste, electronics, batteries, Styrofoam, bubble wrap, plastic bags and books. Zero waste training is provided on an ongoing basis and is included in all new employee orientations. Annually, program costs are $122,000 excluding staff time.

Colorado Association for Recycling
PO Box 11130
Denver, CO 80211-0130
Turning today's waste into tomorrow's resources.

In 2013 the county's zero waste program recycled 130 tons of single-stream recyclables and 194 tons of food waste and other organics and landfilled 398 tons of trash, resulting in a waste diversion rate of 41%. When other waste diversion is included (confidential paper, electronics, books, etc. and diverted materials from construction and property management) actual diversion is close to 80%.

For collection of recyclables and compost in meeting rooms, kitchens and public areas, the program uses Rubbermaid Slim Jim containers ($95 each) as well as Clear River zero waste stations ($1,300 each for a three-bin unit). Smaller Rubbermaid deskside recycling containers ($21.56 each) are provided at each work station along with a trash container. Black, custom-made containers are used at some locations in the county courthouse and the courts building.

More information on containers can be found at: http://www.grainger.com/Grainger/wwg/search.shtml?searchQuery=slim+jims&op=search&Ntt=slim+jims&N=0&sst=subset and www.cleanriver.com The cost and vendor of the County's custom containers are being researched at this time.

Both NREL and Boulder County have offered to assist in a number of ways:

- Offering graphics for signage and assistance in creating signs appropriate to the Capitol recycling program
- Helping determine proper bin size and spacing
- Providing educational materials and ongoing education for Capitol staff
- Participating in twice yearly meetings to assess progress and recommend any changes

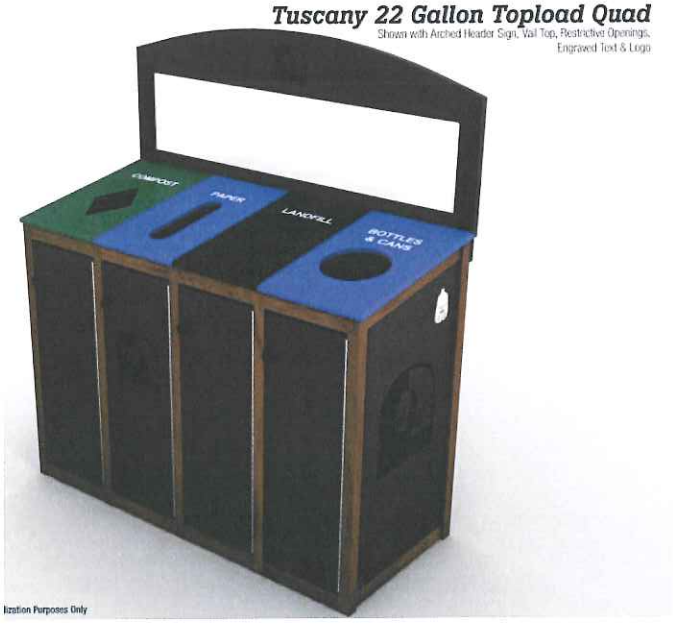
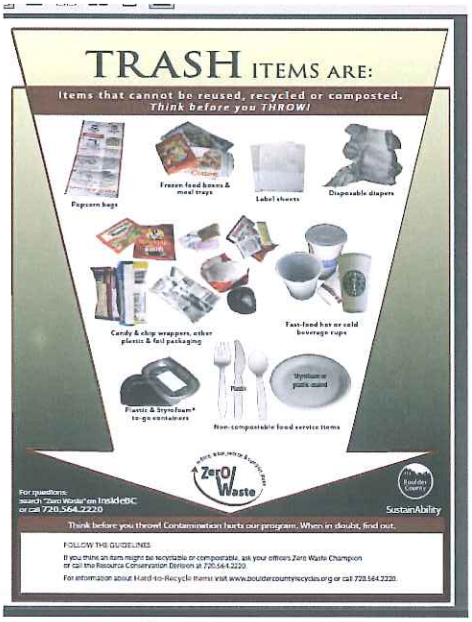
In addition, there are many other CAFR organizational members with successful recycling and composting programs who have offered to assist in whatever way that makes sense in order to achieve a highly visible, successful and exemplary recycling program.

We hope that the Capitol Building Advisory Committee and Capitol custodial staff believe that this is an important program for their facility and are willing to partner with the Colorado Association for Recycling to make it a reality.

Colorado Association for Recycling
PO Box 11130
Denver, CO 80211-0130
Turning today's waste into tomorrow's resources.

Appendix A: Additional sample recycling bins and signage

Tuscany 22 Gallon Toploads Quad
Shown with Arched Header Sign, Vail Top, Restrictive Openings, Engraved Text & Logo



Colorado Association for Recycling
PO Box 11130
Denver, CO 80211-0130
Turning today's waste into tomorrow's resources.