

U.S. Governmental Advisory Committee

Independent Federal Advisors on the North American Agreement on Environmental Cooperation Chair

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October 23, 2017

#### **Committee Members**

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Charles J. Striplen *California* 

Kelly C. Wright Shoshone-Bannock Tribes The Honorable Scott Pruitt Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

**Dear Administrator Pruitt:** 

The Governmental Advisory Committee (GAC) to the U.S. Representative to the North American Commission for Environmental Cooperation (CEC) held its forty-ninth meeting in Washington, D.C. on September 14-15, 2017. This letter represents our full advice resulting from that meeting.

The advice sought by EPA pertained to how the CEC Council can engage States, tribal nations and the private sector in North America to share their experiences advancing green growth, North American trade and environmental protection; and which exemplary green growth activities and best practices being carried out by States, tribal nations and the private sector could be highlighted at the 2018 Council Session.

Ms. Jane Nishida, Acting Assistant Administrator for the Office of International and Tribal Affairs at EPA briefed the committees on the three items: 1) results from the CEC June Council Session in Canada, 2) plans for the 2018 CEC Council Session and 3) update on NAFTA negotiations. She also requested advice in developing the 2018 Youth Innovation Challenge on the theme of green growth. The NAC and GAC chairs both attended the 2017 Council Session and reported that the presentations of the first Youth Innovation Challenge were remarkable. Both chairs advocated for the continuation and expansion of the program, preferably through partnerships with foundations, NGOs and private industry.

Next, Ms. Felicia Wright, Acting Director for the American Indian Environmental Office, in OITA, EPA, provided an update on upcoming activities and initiatives with Tribal Nations. In addition, we had a morning working session to discuss criteria for identifying exemplary green growth projects.

In the afternoon, the committee received a report from César Rafael Chávez, Executive Director of the CEC Secretariat, who provided a progress report on the 2017-2018 Operation Plan projects and other activities at the Secretariat. Mr. Chavez also provided an update on JPAC activities. Robert Varney, JPAC Chair was not able to participate in the meeting. Some of the highlights included JPAC advice to Council on: 1) advancing sustainable clean energy in North America, 2) reducing and managing food and organic waste streams in North America, 3) environmental considerations in the further elaboration of the North American Agreement on Environmental Cooperation in the event of a further elaboration of the NAFTA, and 4) increasing resilience through cooperation: empowering coastal,

shoreline, and riverbank communities in North America. Additionally, Robert Moyer, SEM Director for the CEC also provided a thorough overview and analysis of the current and historical Article 14-15 submissions in the CEC.

The GAC wishes to acknowledge the excellent support provided by the Federal Advisory Committee Management Division (FACMD) and thank Director Monisha Harris and NAC/GAC Designated Federal Officer Oscar Carrillo and all of the FACMD staff for their support, before, during and after the meeting.

Sincerely,

Jeffrey Wennberg, Chair Governmental Advisory Committee

cc:

Jane Nishida, Acting Assistant Administrator for the Office of International & Tribal Affairs

Monisha Harris, Director, Federal Advisory Committee Management Division (FACMD), EPA

Oscar Carrillo, Designated Federal Officer (FACMD), EPA Mark Kasman, Director, Office of Regional & Bilateral Affairs, OITA, EPA Luis Troche, Senior Advisor, North American Affairs, OITA, EPA Robert Varney, Chair, Joint Public Advisory Committee César Rafael Chávez, Executive Director, CEC

Members of the U.S. National and Governmental Advisory Committees

## Governmental Advisory Committee (GAC) to the U.S. Representative to the Commission for Environmental Cooperation (CEC)

#### Advice 2017-2 (October 23, 2017):

Charge Question 1: Provide advice on how the Council can engage States, tribal nations and the private sector in North America to share their experiences advancing green growth, North American trade and environmental protection.

At the end of our meetings the GAC and the NAC take a few minutes to reconvene in joint session and share summaries of our independent discussions as a preview of the advice soon to be formalized in these letters. When we compared our responses to this Charge Question we discovered that the two committees had very different interpretations of the Charge. The GAC focused on the means by which the CEC could identify and reach out to the target communities and the NAC focused on how the CEC might interact with the groups once identified. The GAC expects that taken together our two responses to this question should provide a comprehensive response to the Charge Question.

The GAC believes the CEC should begin by recognizing that many national associations of public, private and nonprofit organizations have already sought, evaluated and published exemplary examples of green growth and sustainability programs from among their members. The National Association of Counties<sup>1</sup>, the National League of Cities<sup>2</sup>, the National Governor's Association<sup>3</sup>, and the U.S. Conference of Mayors<sup>4</sup> have all developed policy papers and identified case studies of local and state initiatives as a resource to their members.

There are also several national and international NGOs that have done the same for local affiliates, communities and private companies. The private sector has developed associations of corporate sustainability officers such as the Global Association of Sustainability Professionals<sup>5</sup>, the Sustainability Management Association<sup>6</sup>, and general associations such as the National Association of Manufacturers<sup>7</sup> have developed programs or affiliates to promote green growth and sustainable business practices among their members.

Social media might also be a good way to reach out to individuals working in the field. Both Facebook and LinkedIn provide forums for members with shared interests to connect, and the members of these groups will certainly be involved with or aware of projects and organizations that the CEC would want to include.

<sup>&</sup>lt;sup>1</sup> http://www.naco.org/search?keys=green%20growth

http://www.nlc.org/economic-development

<sup>&</sup>lt;sup>3</sup> https://www.nga.org/cms/center/eet

<sup>4</sup> https://www.usmayors.org/?s=green+growth

<sup>&</sup>lt;sup>5</sup> http://www.gacso.org/

<sup>&</sup>lt;sup>6</sup> http://www.sustainabilityma.org/

<sup>&</sup>lt;sup>7</sup> http://www.nam.org/Issues/Energy-and-Environment/Sustainability/

Finally, the Institute for Tribal Environmental Professionals<sup>8</sup> at Arizona State University is an excellent resource for reaching individuals with direct knowledge of the efforts of Tribal Nations to promote green economic development.

<sup>&</sup>lt;sup>8</sup> http://www7.nau.edu/itep/main/Home/

## Governmental Advisory Committee (GAC) to the U.S. Representative to the Commission for Environmental Cooperation (CEC)

#### Advice 2017-3 (October 23, 2017):

Charge Question 2: Provide advice on which exemplary green growth activities and best practices being carried out by States, tribal nations and the private sector could be highlighted at the 2018 Council Session.

The Charge Question focuses on local, state and tribal successes in the area of trade and green growth for the purpose of showcasing their programs and enabling others to emulate their success. Three weeks before the meeting committee members were asked to identify up to three candidate programs for consideration by the committees and sixteen diverse programs were identified, documented and evaluated by the committee.

Prior to our independent deliberations, the NAC and GAC met together to establish consistent project evaluative criteria. The joint committees brainstormed a list of 30 descriptors of exemplary green growth programs which were then consolidated into 12 attributes, and further grouped by the GAC into three criteria. Stated as questions they are:

- 1. Does the project provide meaningful economic, environmental, or green growth benefits?
- 2. Does the project effectively engage the community and provide well-defined objectives with measurable results?
- 3. Is the project replicable, scalable, adaptable, and affordable?

Projects judged to satisfy all three criteria are recommended for consideration as exemplary. Some project descriptions looked very promising but lacked sufficient information for the committee to make a determination under one or two of the criteria. These projects are referred to EPA as potentially exemplary with the recommendation that EPA seek additional information to confirm that they meet all the criteria. The following is a summary of the projects and the committee's evaluation.

## Project: Wilmington, Ohio Green Enterprise Zone<sup>9</sup>

Summary: The Wilmington GEZ project uses targeted financial incentives and local capacity building to promote green business growth and job creation. The Green Enterprise Zone (GEZ) seeks to promote research and development, advanced manufacturing, and energy efficient construction, as well as services that have a direct positive impact on increasing energy and material efficiency as well as the economic sustainability of the city by:

1. promoting the retrofitting of businesses to promote sustainability and energy efficiency;

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<sup>&</sup>lt;sup>9</sup> http://ci.wilmington.oh.us/incentives.cfm

- 2. attracting green-collar jobs in research and sustainable renewable energy production and services; and
- 3. assisting citizens, businesses, secondary schools, universities, and community organizations in green training for the purpose of economic development and professional growth for the City and its citizens.

Incentives include grants, reduced permit fees, job training and assistance seeking additional state or federal funding.

GAC Recommendation: The committee concluded that the project provides meaningful economic, environmental, and green growth benefits and therefore satisfies the first criteria. If the GEZ has successfully and affordably met its stated goals the remaining criteria might also be satisfied. Unfortunately the online information did not address this and the individual at City Hall who could have answered the questions was not available. Therefore the committee recommends that EPA further investigate whether the Wilmington, OH GEZ program has been successful in meeting the stated goals and whether the cost and design of the program recommend it for highlighting as something other communities might want to duplicate.

## Project: Catawba County, N.C./Blackburn Resource Recovery Facility EcoComplex<sup>10</sup>

*Summary*: The Harvard Kennedy School's Ash Center for Democratic Governance and Innovation described the EcoComplex in its "Bright Ideas 2015" publication as follows:

"The EcoComplex strives to create a system of symbiotic relationships where all workable products and byproducts from a close-knit group of public and private organizations are utilized economically, ecologically, and efficiently. This system also provides a conduit for moving "green" science from the laboratory to real-world application by partnering a publicly-owned methane capture generator with nearby businesses, creating energy and heat for the local community while growing the local business economy to increase the community tax base."

In addition to this recognition the EcoComplex has won multiple national awards and includes partnerships with multiple universities and nonprofits. The heart of the EcoComplex is a landfill with methane capture and generation of electricity, but the site also hosts a pallet recycler, a biofuels processor, an immigrant agriculture program and a processing facility for feed crops grown on the closed landfill property.

GAC Recommendation: The committee believes this project meets all three criteria and is a particularly good example of the type of project the Charge Question sought. The economic and environmental benefits are substantial, the project goals are well-defined and progress is measurable. There is excellent community engagement and the project should be replicable and scalable for other jurisdictions. The committee does not have information about the cost of the project but given the national awards and recognition it has received over the last five years we

<sup>&</sup>lt;sup>10</sup> http://www.catawbacountync.gov/EcoComplex/default.asp

assume it has proven to be financially sustainable. The GAC recommends the EcoComplex as an exemplary green growth project.

### Project: New England Governors-Eastern Canadian Premiers Regional Climate Change Action Plan<sup>11</sup>

The Conference of New England Governors and Eastern Canadian Premiers (NEG-ECP) adopted a regional Climate Change Action Plan (CCAP) in 2001. The two main objectives of the regional CCAP were to reduce greenhouse gas (GHG) emissions and to reduce the impacts of climate change through adaptation. The CCAP was the first, international, multi-government effort to tackle climate change to be officially adopted in the world. Data collected for the 1990-2015 regional GHG inventory shows that the region exceeded its 2010 target recording a 4.1% reduction in GHG emissions. In 2015, regional GHG emissions were at 10.4% below 1990 levels, exceeding the regional target set for 2020. In addition, between 2001 and 2015 the population of the region grew by more than six per cent while GHG emissions per capita decreased by 21%, and the economy grew by 32% while numerous climate change policies and measures were being implemented in the region.

GAC Recommendation: This program operates at the state, interstate and international levels. It offers clear environmental benefits and while there is no evidence that the climate policies and measures contributed to economic growth, significant regional growth occurred during the project period. The project has contributed to making the regional economy distinctly 'greener'. The committee notes that other jurisdictions around the nation and the world have adopted similar agreements so the policy is replicable and scalable. The GAC recommends the NEG-ECP Regional Climate Change Action Plan as an exemplary green growth project.

# **Project:** STAR Communities<sup>12</sup>

The STAR Community Rating System (STAR) is the nation's leading comprehensive framework and certification program for evaluating local sustainability, encompassing economic, environmental, and social performance measures. The STAR framework is comprised of seven goals (e.g., "economy and jobs" or "health and safety"), 45 objectives, and 500+ outcome/action measures to support local communities in setting and meeting sustainability goals. STAR provides documentation on best practices related to the objectives, and the process for obtaining STAR Certification, as well as hosting training webinars. Sixty-one communities across the nation are currently STAR-certified.

GAC Recommendation: There are a number of systems for assessing community sustainability around the nation. They all seek to incorporate consideration of sustainability in local decision making around budgets and policy. As such they promote decisions that reduce environmental impacts and economic stability. These programs typically involve community engagement through citizen input and discussion. The STAR rating system also tracks progress through

http://coneg.org/Data/Sites/1/media/documents/reports/2017-rccap-final.pdf
 http://www.starcommunities.org/

annual reporting of published indicators across multiple sectors including health, the environment, and economics. The number of communities participating in STAR and similar programs demonstrates that the program is replicable, scalable, adaptable and affordable. The GAC recommends the STAR Community Rating System as an exemplary green growth program.

#### Project: North Carolina Pollinator Projects<sup>13</sup>

The North Carolina Wildlife Resources Commission is working with a solar energy company, Strata Solar, to develop best practices for creating pollinator habitat on solar farms, and helping the City of Raleigh convert existing fields that are used for wastewater treatment into pollinator habitat. The Commission has also has created a statewide forum for sharing information and best practices about pollinator conservation efforts in the state. This is a new initiative, with test plots being planted this summer to be monitored through 2019.

*GAC Recommendation*: The project appears to have promise but has not been operating long enough to demonstrate results. The committee recommends that EPA monitor the project over the next three to four years but cannot recommend it for recognition at this time.

## Project: Wetland Restoration in Sagebrush Habitat/Sage Grouse Initiative 14

Local groups in the Gunnison River Watershed of western Colorado are installing low-cost structures made of natural materials to slow erosion and help maintain moisture in degraded wetlands within sagebrush habitats. The program is also used as a training platform to "scale up" wetland restoration within sage brush habitats. Since 2012, 1,112 wet meadow restoration structures have been installed along 21 stream miles, largely by volunteers or via training events. The restored habitats support 350 species (including elk, mule deer, and the endangered Gunnison Sage Grouse) and 23,000 people (including improved grazing on cattle ranches). Partners in the project include private landowners/ranchers, local water conservation district, The Nature Conservancy, Western Colorado Conservation Corps, private consulting firms Zeedyk Ecological Consulting and BIO-Logic Inc., Colorado Parks and Wildlife, The Natural Resources Conservation Service, and CSU's Colorado Natural Heritage Program.

GAC Recommendation: The project has demonstrated environmental and economic (private landowner) benefits, is an excellent example of community-based partnerships and has clearly defined objectives and demonstrated results. The training aspect is designed to enable replication for which there is evidence of success. The GAC recommends the Wetland Restoration in Sagebrush Habitat/Sage Grouse Initiative as an exemplary green growth program.

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<sup>13</sup> http://www.ncwildlife.org/

https://blog.nature.org/science/2017/08/23/stream-whisperer-thinking-like-water-restores-sage-grouse-habitat/

### Project: I-75 Corridor Conservation Action Plan<sup>15</sup>

The I-75 Corridor Conservation Action Plan, funded through the Federal Highway Administration (FHWA), is a pilot project led by the Michigan Department of Transportation (MDOT), Southeast Michigan Council of Governments (SEMCOG), and the Michigan Natural Features Inventory (MNFI), to use the Eco-Logical approach to align environmental priorities with the reconstruction of the I-75 corridor in Monroe County over the next 20 years. This is considered by FWHA to be an excellent example of the use of their "Eco-Logical Framework" best practices designed to incorporate environmental benefits early in a highway planning project. A multi-sector Technical Advisory Committee worked with the MDOT to identify environmental priorities that included coastal tributaries, coastal wetlands, migratory birds and bats, migratory fish, reptile and amphibian connectivity, and rare natural communities.

GAC Recommendation: The project demonstrates excellent community engagement and as an example of successfully applied FHWA best practices is clearly designed to be scalable and replicable. The committee recommends the I-75 Corridor Conservation Action Plan as an exemplary example of green growth with the caveat that it is still a bit early in the project's life to demonstrate measureable results.

### Project: Omaha Green Schools<sup>16</sup>

The Omaha Public Schools hired Verdis Group to help them achieve Energy Star certification for every school in the district. The focus is energy conservation, reduced water use, and waste/materials management. Since 2010 the schools in the district have been collecting data, which is now summarized and analyzed every month based on a focused set of metrics. To date cumulative energy savings total \$8M, saving more than 75,000 metric tons of CO<sub>2</sub> emissions. Avoided costs of waste management total \$81,000 and recycling has more than doubled. The district has received multiple awards related to these achievements.

GAC Recommendation: Many schools across the nation have undertaken similar projects with varying degrees of success. The Omaha project is clearly one of the best with clear objectives, continuous tracking of progress, excellent youth engagement and impressive results. The committee recommends the Omaha Green Schools program as an exemplary green growth project.

# Project: North Carolina Green Growth Toolbox 17

The North Carolina Green Growth Toolbox is a project of the North Carolina Wildlife Resources Commission that helps growing communities conserve high quality habitats. It is a program of technical assistance designed to help communities plan for growth in a way that will protect important species and habitats, generate economic and social dividends, enhance recreation opportunities and attract new development.

http://semcog.org/Environmentalhttp://verdisgroup.com/case\_studies/omaha-public-schools/

http://www.ncwildlife.org/Conserving/Programs/Green-Growth-Toolbox

*GAC Recommendation*: The information available to the committee was limited at the time of our meeting so the committee was unable to complete its evaluation. We recommend that the North Carolina Green Growth Toolbox be studied further.

### Project: Colorado State University Compositing Program<sup>18</sup>

Colorado State Housing & Dining Services has invested in a state of the art, fully-automated composting system called the Earth Flow. This enclosed, 30-yard capacity compost bin accepts pre- and post-consumer food waste from CSU Dining Centers. The program is in its sixth year and last year diverted 181,248 pounds of food waste. Materials produced were used by the student farm, community non-profit organizations and as soil amendment for the new Laurel Village complex.

*GAC Recommendation*: Like the Omaha Green Schools program, many colleges and universities have established food waste composting programs. The Colorado State program is recommended because the program has successfully focused on finding markets and uses for the compost product. The committee recommends the Colorado State University Compositing Program an exemplary green growth project.

### **Project:** GRID Alternatives 19

GRID Alternatives Colorado is expanding access to the benefits of solar for families living with low or fixed incomes. GRID, in partnership with cooperative, municipal and investor-owned utilities, is developing the first community solar arrays in the country that exclusively benefit underserved communities, as well as collaborating with for-profit community solar developers to help ensure that the energy generated by their community solar systems are accessible to all. Eight projects have been completed around Colorado totaling 852 kW of generation and benefitting over 200 subscribing households.

*GAC Recommendation*: The committee believes this is another good example of community involvement, economic and environmental benefits bringing together public and private sector partners. Objectives are clear and the results are highly measurable. The committee recommends the GRID Alternatives program an exemplary green growth project.

## Project: Lakota Solar Enterprises 20

Lakota Solar Enterprises builds solar air furnaces and in partnership with environmental nonprofit *Trees, Water & People*, Lakota Solar Enterprises offers a wide-range of green job training opportunities for Native Americans. The presence of solar heating systems on reservations not only provides substantial economic and environmental advantages, but important cultural benefits as well.

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<sup>&</sup>lt;sup>18</sup> <u>https://housing.colostate.edu/about/sustainability/</u>

<sup>19</sup> https://www.gridalternatives.org/regions/colorado/get-solar/community-solar?

http://www.lakotasolarenterprises.com/

*GAC Recommendation*: The committee believes Lakota Solar Enterprises could be an excellent example of a green growth project but could not find information about the program's results, especially in the area of training and employment. We recommend that Lakota Solar Enterprises project be studied further.

### Project: General Motors Zero Waste-Landfill Free Program 21

In 2016 General Motors added 23 new landfill-free facility sites for a total of 152 landfill-free sites worldwide. With this addition, GM now counts 52 nonmanufacturing and 100 manufacturing sites, which means the company has exceeded their 2020 landfill-free target four years early. As a result, GM generates less waste, maximizes the use of the materials they require, and repurposes and recycles wherever they can. Altogether, they recycle or reuse approximately 2.5 million metric tons of byproducts a year. In recent years, GM generated over \$1 billion in revenue and savings from recycling and reuse activities. In addition, GM mentors about 25 companies a year, from small businesses to large multinational corporations, on how to manage challenging waste streams.

GAC Recommendation: The committee believes General Motors' comprehensive program of converting manufacturing and non-manufacturing facilities to landfill-free status is creating a substantial benefit for the environment and the company. GM's efforts to transfer what they have learned to other businesses is laudable; therefore the GAC recommends General Motors zero waste-landfill free program as an exemplary green growth initiative.

#### **Conclusion:**

The GAC was impressed with the diversity and quality of the best of these projects, and given the limited time available to find them the committee believes there must be a significant number of exemplary projects yet to be discovered, both within our borders and in Mexico and Canada. We therefore strongly recommend that EPA advocate and the CEC pursue the engagement proposed by the first Charge Question.

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<sup>&</sup>lt;sup>21</sup> http://www.gmsustainability.com/act/operations/operations4.html

## Governmental Advisory Committee (GAC) to the U.S. Representative to the Commission for Environmental Cooperation (CEC)

Advice 2017-4 (October 21, 2017): CEC Youth Innovation Challenge (Meeting – September 14-15, 2017)

**DATE**: October 11, 2017

**TO**: Jane Nishida, Assistant Administrator for the Office of International and Tribal

**Affairs** 

Luis Troche, Senior Advisor, North American Affairs, OITA, EPA

**FROM**: Theresa A. Pardo, Chair, NAC

Jeffrey Wennberg, Chair GAC

#### **SUBJECT:** Input from the NAC and GAC on the CEC Youth Innovation Challenge

Thank you for the opportunity to provide input into the Environmental Protection Agency's consideration of ways to improve the CEC Youth Innovation Challenge Program. The following ideas were collected over two sessions during the September 2017 NAC/GAC meeting. The discussion focused primarily around the amount and nature of the prizes, branding and marketing the Challenge, increasing submissions, and securing program funding for the Challenge. Each set of ideas is presented below.

**Amount of the Prizes.** The NAC and GAC Committees discussed the amount of the prizes and agreed, in general, that the amounts awarded, are in line with other such competitions and no changes to the award amounts are recommended.

The Nature of the Prizes. The NAC and GAC Committees discussed motivations and agreed, in general, that what motivates people is access to opportunity. The Committees discussed creating awards that, in addition to a cash prize, include unique access to internships, mentors, interviews, and jobs. For example, one scenario discussed was that award winners would come to the Council meeting to present their work, but also, spend time in a workshop with experts who might help them build a better business case for their product or spend time meeting with venture capitalists pitching their ideas. Many commented that this kind of in-kind contribution of time and expertise might be a way to engage private sector partners. This model might also be a good way to engage groups such as the US Business Council for Sustainable Development and the US Business Council. These groups might not be able to give "cash" but their participation but the cost of their participation, which would be borne by them might be in alignment with their programmatic and philanthropic priorities.

**Engaging the Tech Sector.** The NAC and GAC Committees discussed the idea that engaging individuals from tech companies in the process might incentivize more submissions. Individuals consider submissions might be incentivized to know that some of those who might ultimately invest in some of the ideas submitted to the Challenge would be

at the Council Session. Such companies might be invited to serve on the review panels, come to the presentations, and be part of the mentoring and post-award support provided to the winners.

**Partner with the National Labs.** The NAC and GAC Committees discussed the idea of engaging the national laboratories in conversations about the Challenge and to explore ways they might participate in the award program. Again, the idea of the winners being awarded access and opportunity to, for example, job interviews, internships, and mentoring.

**Branding and Marketing.** The NAC and GAC Committees discussed the need for a clearer branding of the initiative and the creation of a marketing strategy. The Committees agreed, for example, that an elevator pitch is needed as a way to quickly communicate the focus and value of the program. What is it about? What do you get if you win? Why should you participate?

*Naming.* The NAC and GAC Committees discussed the name of the initiative and recommend a renaming. We agreed, in general, that the use of the term "youth" is nonspecific and a bit confusing. Committee members discussed cases where the label "youth" has been applied to individuals ranging from childhood to graduate school. Calling college age students youth was seen as "odd" to some of the members. Changing the name, in the eyes of some committee, might generate more interest. Unfortunately, no specific alternatives are recommended.

Cultivate Diversity. The NAC and GAC Committees agreed that regardless of the changes to the Youth Innovation Challenge going forward, maintaining the foundational commitment to diversity is critical. Advice in this regard urges that the Challenge not be overly focused on submissions from institutions of higher education, but be vigilant in cultivating submissions from community-based efforts as well, such as tribal youth programs that focus on sustainability and green growth. The Committees recommend ensuring that any outreach related to the program be designed to build awareness among groups such as Historical Black Colleges & Universities (HBCU's) and Hispanic Serving Institutions (HSA's). Another idea is to create new categories that might incentivize joint submissions from teams that draw from university-based and community-based youth.

Find and Partner with Entrepreneurship Programs. The NAC and GAC Committees discussed the existence of both community level and university level entrepreneurship programs. These programs were recognized as the source of the submissions. The Committees agreed that systematically reaching out to such programs and ensuring that they are aware of the Innovation Challenge and are provided with the information they need to present it as a viable and attractive option to the "youth" in those programs is likely to increase submission levels. Members identified several such centers including those at University of Iowa and Morehouse College in Atlanta. Both of these institutions have well developed innovation competitions each year and might see the CEC Youth Innovation Challenge as an opportunity for their students. In some cases, universities are offering semester long entrepreneurship courses where students are developing innovative products; ensuring that faculty and students in those programs know about the Innovation Challenge might result in new submissions.

**Find and Partner with Sustainability Programs.** The NAC and GAC Committees discussed the existence of both community level and university level sustainability programs. These

programs too, provide a potential new source of interest and submissions. Findings lists of such programs might be difficult, however, discussion reveal the idea that related professional associations might be tapped for such lists, and in turn they themselves might be good partners. For example, The Association for the Advancement of Sustainability in Higher Education <a href="http://www.aashe.org/">http://www.aashe.org/</a> and the Global Association of Corporate Sustainability Officers, <a href="http://www.gacso.org/">http://www.gacso.org/</a>. Such associations might be amplifiers of the Challenge or they might even be interested in partnering in some way, in terms of the award package provided to the winners. A further example is Green for All. This program is a coalition in Oakland, CA, that focuses on communities of color and low income and encourages economic development in the green space. <a href="https://www.greenforall.org/">https://www.greenforall.org/</a>. All of these associations are communities of practice and have knowledge sharing platforms that could be used to raise awareness of the Challenge – both in terms of submissions and to generate interest among potential partners, funders and others.

**Expanding Funding for the Program.** The NAC and GAC Committees discussed the opportunities that might exist in securing funding to expand the program from foundations, in particular. Discussions about groups such as the Gates Foundation, the Coca Cola Foundation, Doris Duke Foundation, Apple and Google all resulted in the agreement that a systematic and focused outreach to these groups is likely to generate some financial support. Overall the Committees agreed that substantial financial support sometimes has a multi-year lead time, but some discussion focused on the fact that in many cases, small awards are possible to turn around quickly. The Committees recommend a plan to pursue such funding and partnerships with an eye toward long term partnerships around the Challenge, but also to consider what might be possible in the short term in terms of financial support.