This is the second in a series of Briefing Papers for youth commissions and councils offered by the Institute for Local Government (ILG). These briefing papers provide background information and ideas for activities related to topics of concern to young people and their communities. They are disseminated to the staff of youth commissions and councils throughout California and can also be downloaded without cost at www.ca-ilg.org/briefingpapers.

This second briefing paper addresses climate change. Included you will find background information, ideas for specific actions that youth commissions or councils can take to address climate change and a number of online and other resources where staff and youth can learn more about the issue.

This briefing paper is provided by the Public Engagement and the Sustainability programs of the Institute for Local Government. The Institute for Local Government is the nonprofit research and education affiliate of the League of California Cities and the California State Association of Counties. Its mission is to promote good government at the local level with practical, impartial and easy to use resources for California communities.

For more information, please visit www.ca-ilg.org/engagement and www.ca-ilg.org/sustainability.

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1. Background

What is Climate Change?

The scientific consensus is that climate change is caused by greenhouse gases emitted into the atmosphere by human activity. Transportation is the largest source of greenhouse gas; electricity generation and natural gas use in buildings are the second largest source. The impacts of climate change include higher temperatures and more extreme weather, such as heavy rain and storms, extreme heat events, flooding and reduced snow pack.

While the terms climate change and global warming are frequently used interchangeably, climate change is usually the better term as it more accurately reflects the broader impacts of increased greenhouse gas emissions on the earth’s climate and weather systems. For example, higher temperatures are just one result of climate change.

Climate change is addressed both by reducing greenhouse gas emissions and by adapting to the impacts of climate change. Because of the diversity of California’s topography and different local climates, the localized effects of climate change in California are complex and will differ from community to community. This means that ways to address and adapt to climate change will also vary among communities.

Virtually all of the strategies that reduce greenhouse gas emissions also promote local sustainability, thus promoting and providing additional benefits. For example, the way communities are designed (including land use and transportation patterns, accessibility to parks and open space, pedestrian, and bicycle-friendly features) all have positive direct and indirect benefits for the community in addition to reducing greenhouse gas emissions.

Why Should Youth Be Involved in Addressing Climate Change?

Climate change will have direct and indirect impacts on the lives of everyone in California, including young people who could be most impacted as the effects become more pronounced over time.

Reducing greenhouse gas emissions will help slow the rate at which our climate changes and therefore limit the severity of these impacts. For many youth, this is an immediate concern. They can get involved and take positive steps, individually and with others, to address climate change through efforts to reduce greenhouse gas emissions and help communities adapt to its effects. A number of these strategies are included in this briefing paper.

Youth hear about climate change from a variety of sources and they have varying degrees of awareness and information on the topic. This is a significant issue that will continue to occupy the attention of individuals, communities, businesses and governments.
throughout the lives of present youth commission members and other young residents in California. Enhancing young peoples’ familiarity with the subject will help create a public that is better informed about and more involved with climate change-related efforts now and well into the future.

Finally, many youth commissions are formal components of local government. Almost all youth commissions and councils have the potential for impacting climate change plans and actions in their cities and/or counties. California has set ambitious goals to address the causes and consequences of climate change and reduce greenhouse gas emissions.3 Both the California State Association of Counties and the League of California Cities have each adopted policy principles to guide their advocacy responses to climate change. A broad array of local actions by cities and counties are underway throughout California to reduce greenhouse gas emissions, promote sustainability and address climate change. Youth commissioners and council members can add the voices and actions of young people to these efforts.

2. What Can Youth Commissions and Councils Do?

There are a variety of ways that youth commissions and councils can become more informed about climate change; can help educate others; or can take or support actions to address climate change personally or as part of a larger community-wide effort.

A number of specific ideas are described below. This is certainly not a complete list and each commission or council will respond to its own and its community’s interests and capacities.

Learn More about Climate Change

- Youth commissions or councils can educate themselves about the science of climate change and the need for action. The resources in the Where to Get More Information section below offer many online avenues for learning, some designed specifically for youth. Also, check to see if there are relevant workshops or lectures at local colleges or universities that youth commissioners could attend, or have a climate change documentary film night.

- Commission members might choose to research how their community is likely to be affected by climate change, and how they will need to adapt to these changes. Examples might include whether the community is susceptible to: a) flooding due to rising ocean levels; b) reduced snow pack which could impact tourism for a community that relies on winter sports such as skiing; c) reduced
water availability due to smaller snow pack (which could impact agriculture and drinking water supplies); d) more extreme heat events if the community is in the desert; or e) higher temperatures or heat waves in communities that previously had not experienced them.

**Learn More about Local Efforts to Address Climate Change**

- Commissions or councils can research what their own city, county or other local organizations are doing to address climate change. Examples of information gathering could include whether the city or county has conducted a greenhouse gas inventory and/or has prepared a climate action plan. If your agency is participating in the Institute's Beacon Award program, detailed information about agency activities is available at [www.ca-ilg.org/BeaconAward](http://www.ca-ilg.org/BeaconAward).

- Youth commissioners can research what types of policies or programs their city or county has adopted to reduce greenhouse gas emissions. Examples include green building ordinances, policies or programs to reduce automobile use (such as making the downtown more pedestrian friendly or encouraging use of transit), or green purchasing policies. Consider using the Sustainability Best Practices Framework of the Institute's Sustainability program as a guide to possible activities (see [www.ca-ilg.org/sustainabilitybestpractices](http://www.ca-ilg.org/sustainabilitybestpractices)).

- Youth could also contact the local energy utilities to see if they offer rebates that could help residents, businesses and local governments to reduce their energy use. With this background, youth commissioner members could identify current or potential opportunities for youth voice and engagement in these efforts.

**Take Personal Action to Address Climate Change**

One way that youth and adults can address climate change is to learn about ways to reduce individual greenhouse gas emissions by changing personal behavior. Simply turning off unused lights and electronic devices or replacing incandescent bulbs with fluorescents can make a difference in our **carbon footprint**. A **carbon footprint** is the measurement of total greenhouse gas emissions directly and indirectly contributed by a person, household, business, facility or community over the course of a year.

- A **carbon calculator** estimates carbon footprints by measuring greenhouse gas emissions at a point in time. The CoolCalifornia Carbon Calculator is a tool to measure individual direct and indirect greenhouse gas emissions and compare the results to typical households in your city or region and to the U.S. and global average. Visit: [www.coolcalifornia.org/article/tools](http://www.coolcalifornia.org/article/tools), and see **Calculating Carbon Emissions** at [www.ca-ilg.org/post/climate-action-whitepapers-tip-sheets](http://www.ca-ilg.org/post/climate-action-whitepapers-tip-sheets).
• For ideas on how youth and adults can reduce their carbon footprint by reducing their own greenhouse gas emissions, as well as learn how much a specific action reduces your personal or group greenhouse gas emissions, visit: www.cooltheearth.org/action-coupons.

• To learn how much greenhouse gas emissions are reduced by purchasing recycled products, visit the Recycled Content Tool website: www.epa.gov/climatechange/wycd/waste/calculators/ReCon_home.html.

• To determine how much carbon is removed from the atmosphere by planting a tree, try the Center for Urban Forest Research Tree Carbon Calculator tool at www.fs.fed.us/ccrc/topics/urban-forests/.

Work as a Group to Address Climate Change

There is a range of work that youth commissions or councils can do as a group to address climate change:

• Make recommendations on how a specific project or facility could be designed in a way that reduces greenhouse gas emissions. In Indio, California, the Youth Advisory Council and other youth in the community were asked to share ideas about how to design a new teen center. The resulting center is not only fun but solar-powered, thanks to the climate and energy conscious youth who were involved in the planning.

• Find out if there is a current role for youth in local climate change efforts. Some cities and counties have involved interested youth in designing their local plans to address climate change. For instance, in San Carlos, California, both youth and adults participated in community meetings that resulted in the development of a twenty-eight point climate action plan. In Manhattan Beach, California, two resident seats on a city-appointed Environmental Task Force were set aside for youth. The task force has made recommendations that were implemented by the city council, including new green building requirements and water conservation measures.

• If there isn’t a local government effort underway to address climate change, youth commissioners could approach their city or county and suggest a partnership to develop a city or county climate change action plan or sustainability policies.

• Educate other youth and adults in the community, including local officials, about the science of climate change, the need to take action and specific ways to do so. This could include educational presentations to schools and youth groups or to local officials. A more interactive approach would be to organize a dialogue...
The Institute for Local Government’s Public Engagement and Sustainability programs would like to share your organization’s efforts to address climate change with other youth commissions or councils. Please contact Carmen Pereira at cpereira@ca-ilg.org or 916.658.8208 to share your story.

for youth or youth and adults in the community to raise awareness about the possible impacts of climate change and to discuss how the community might choose to adapt in response to these changes. Find dialogue how-to resources at: info@everyday-democracy.org.

- Learn how to conduct a sustainability and efficiency assessment of local public buildings and businesses, and make recommendations addressing energy and other ecological issues as well as cost saving measures. The DoRight Leadership Corps has created DoRight Enterprises, a youth-run consulting firm that can conduct sustainability and efficiency audits. For more information about the DoRight Leadership Corps contact Scott Beall at scott@scottbeall.com.

- Hold a “carbon diet” contest to see who can reduce their personal greenhouse gas emissions the most. Encourage commissioners to share their efforts with other youth and adults in order to inspire them to do the same. Teens could also try to measure the carbon footprint of their entire family or class and work with them to reduce it. One useful resource is the Low Carbon Diet 30 day program workbook, available at: www.empowermentinstitute.net/index.php/community/low-carbon-diet.

- Volunteer with the city, county or a non-profit community organization that helps frail or elderly people in the event of extreme heat or assists low-income residents in conducting energy audits and making their homes more energy efficient.

- Fill out the Act Now! matrix at www.dosomething.org/actnow and click on “Environment” under “WHAT CAUSE?” to download customized action kits designed to help groups get active around climate change and other environmental issues.

3. Where to Get More Information

The Sustainability Program (www.ca-ilg.org/sustainability) of the Institute for Local Government offers resources, examples, best practices and opportunities to connect with local officials and staff involved in sustainability and climate change. To learn how other California communities are working to reduce greenhouse gas emissions, visit www.ca-ilg.org/ClimateLeadershipStories and www.ca-ilg.org/participant-accomplishments.

The Institute’s Sustainability Best Practices Framework offers options to reduce greenhouse gas emissions in ten areas. It is available at www.ca-ilg.org/sustainabilitybestpractices.

State of California Climate Change Portal (www.climatechange.ca.gov/) includes a wide range of basic information about the science of climate change, Frequently Asked Questions, impacts, etc.
The California Air Resources Board ([www.arb.ca.gov/cc/cc.htm](http://www.arb.ca.gov/cc/cc.htm)) provides information about science, regulations and technical assistance related to climate change. For links to educational materials that may be appropriate for youth, visit [www.arb.ca.gov/cc/curriculum/curriculum.htm](http://www.arb.ca.gov/cc/curriculum/curriculum.htm) and [www.arb.ca.gov/cc/kids/kids.htm](http://www.arb.ca.gov/cc/kids/kids.htm).

The CoolCalifornia youth website ([www.coolcalifornia.org/youth](http://www.coolcalifornia.org/youth)) offers ways for youth to get involved in raising awareness and reducing greenhouse gas emissions in the community. It also has an annual competition that selects teens to be California Climate Action Champions who take part in international youth summits, links to scholarship opportunities and awards, and an extensive list of educational links where young people can learn more about the science behind climate change and its impacts.

The Bay Area Air Quality Management District offers, among other resources, free online educational materials, speakers and teacher training within the nine county San Francisco Bay Area to help students understand air pollution and climate change. Visit [www.baaqmd.gov/Divisions/Communications-and-Outreach/Community-Outreach/Youth-Outreach-and-Education.aspx](http://www.baaqmd.gov/Divisions/Communications-and-Outreach/Community-Outreach/Youth-Outreach-and-Education.aspx) or call 415-749-4754.

The Intergovernmental Panel on Climate Change (IPCC) ([www.ipcc.ch](http://www.ipcc.ch)) is the premier scientific authority on climate change.

[DOSomething.org](http://www.DOSomething.org) offers educational materials and youth action guides for youth groups or individuals on many issues, including ways to address climate change.

The Campus Climate Challenge ([www.climatechallenge.org](http://www.climatechallenge.org)) is a network of youth organizations seeking to reduce greenhouse gas emissions by passing clean energy policies in schools and communities.

TakingITGlobal, an international youth-led group has authored *Climate Change: Youth Guide to Action* ([www.climate.takingitglobal.org](http://www.climate.takingitglobal.org)) with ideas to address climate change from around the world.

Find other resources by entering “youth and climate change” in your search engine.

**Endnotes**

1. While there can be a distinction between the terms, we will use *youth commissions* and *youth councils* interchangeably.
2. While the scientific consensus is that climate change is primarily caused by human activity, some individuals question whether human activity is the primary cause. Nevertheless, most of these skeptics generally support sustainability activities (such as water and energy conservation and sustainable community design) because of the other positive community benefits of these activities.
3. AB 32, the Global Warming Solutions Act of 2006, establishes a process for California to reduce its statewide greenhouse gas emissions to 1990 levels by 2020.