DATE: July 14, 2021

TO: Board of Supervisors

SUBJECT
FRAMEWORK FOR OUR FUTURE: DEVELOPING A REGIONAL SUSTAINABILITY PLAN - UPDATE (DISTRICTS: ALL)

OVERVIEW
The global climate is changing and nowhere are the effects felt more acutely than at the local level. Furthermore, the growing economic, social, and environmental impacts associated with a changing climate are causing immediate and long-term damages to our communities, ecosystems, food production, health, safety, jobs, businesses, and our overall quality of life in San Diego region. This includes a higher frequency and intensity of extreme heat events, droughts, wildfires, storms and sea level rise.

In light of these realities, on January 27, 2021 (3), the County of San Diego (County) Board of Supervisors (Board) directed the Chief Administrative Officer to develop a framework for a regional zero carbon sustainability plan in partnership with the University of California San Diego School of Global Policy and Strategy (UCSD-GPS) and the University of San Diego Energy Policy Initiatives Center (USD-EPIC) which includes strategies and initiatives to achieve zero carbon in the region by 2035. The framework is intended to provide science-based pathways for reducing carbon that are tailored to the key sectors of San Diego’s economy.

Decarbonization (i.e. reduction in carbon intensity) consists of a three-pronged approach: zero emissions of carbon dioxide; reduction of “super-pollutants” such as black carbon (or “soot”) and ground-level ozone (the main ingredient of “smog”), much of which are directly harmful to human health; and the drawdown of atmospheric pollution through technological and natural means. The impacts of climate change in the form of extreme weather events are disproportionately impacting our lowest-income communities and workers. Hence, local policy measures that decarbonize the economy are intended to save lives, benefit underserved and frontline communities, create high-quality green jobs, and ensure economic resilience. The framework will intentionally address the gaps that exist between the decarbonization goals and existing realities for Black, Indigenous and People of Color communities in terms of air quality, infrastructure, jobs and housing.

Today’s action is to receive an update on the Regional Decarbonization Framework. At the direction of the County’s Land Use and Environment Group, UCSD-GPS will lead a team of technical experts in the preparation of the report. The report would serve as a roadmap for future
actions. Overall, the decarbonization effort will be based on three guiding principles: (1) Data-Driven Approach, (2) Regional Collaboration, and (3) Stakeholder Input. Stakeholder outreach and regional collaboration efforts will be led by County staff.

RECOMMENDATION(S)

CHIEF ADMINISTRATIVE OFFICER

1. Find that the proposed actions are not subject to CEQA per Section 15060(c)(3) of the CEQA Guidelines because receiving an update on the Regional Decarbonization Framework is administrative in nature and is not a project as defined in CEQA Guidelines Section 15378(b)(5).

2. Receive an update on the Regional Decarbonization Framework, including the plan for regional collaboration and stakeholder outreach.

EQUITY IMPACT STATEMENT

The Regional Decarbonization Framework is centered on equity. It will be prepared in coordination with the Office of Equity and Racial Justice, Office of Environmental and Climate Justice, and stakeholders that have been historically marginalized in regional conversations. This includes nonprofit advocates and coalitions active in environmental justice communities. The framework will intentionally address the gaps that exist between the decarbonization goals and existing realities for low-income communities of color, in terms of air quality, infrastructure, jobs and housing. A two-phased outreach plan is described in the Stakeholder Input section, that incorporates both issue-based as well as generalized interest. The challenge will be to continue to maintain interest and engagement of equity stakeholders as we move into the implementation of the decarbonization framework. Therefore, some of the input would be channeled into the ongoing sustainability initiatives (such as departmental Sustainability Plans) being undertaken by the County in a meaningful way, demonstrating an institutional commitment to interweave sustainability and equity.

FISCAL IMPACT

There are no fiscal impacts associated with this action. Funds for the initial University of San Diego (UCSD) School of Global Policy and Strategy contract are included in the Fiscal Year 2021-22 Operational Plan for the Land Use and Environment Group Executive Office. Staff will return to the Board of Supervisors with future actions related to the Regional Decarbonization Framework that could have a fiscal impact, which would be included in future Operational Plans.

BUSINESS IMPACT STATEMENT

The proposed actions will help businesses and workers in San Diego County through the advancement of technological innovation, economic resiliency, investment opportunities, renewable energy projects and high-quality job creation in the green economy.

ADVISORY BOARD STATEMENT

N/A
BACKGROUND
Each of the last three decades has been successively warmer at the Earth’s surface than any preceding decade since mid-nineteenth century. Scientists attribute this global warming trend observed to the human expansion of the "greenhouse effect" — warming that results when the atmosphere traps heat radiating from the earth toward space. Certain gases in the atmosphere block heat from escaping - they include water vapor, methane, nitrous oxide, chlorofluorocarbons and carbon dioxide. Carbon dioxide (CO$_2$), although a minor component of the atmosphere has the most significant effect on global warming, as it lives long and is not affected physically or chemically by the changes in temperature. The industrial activities that our modern civilization depends upon have raised atmospheric carbon dioxide levels from 280 parts per million to 416 parts per million in the last 150 years.

Climate scientists are sounding the alarm over the recent acceleration of global warming, and our County’s Draft Vulnerability Assessment and Adaptation Report in the Safety Element Update predicts severe climate change impacts on the unincorporated areas of the region, including higher frequency and intensity of extreme heat events, droughts and wildfires. To illustrate, the impacts of climate change on the County’s unincorporated areas will vary based on medium-to-high greenhouse gas (GHG) emissions scenarios from the historical average (1961-1990) to mid-21st century as follows:

- Maximum temperatures will increase from 75.3˚F to between 80.5-81.4˚F average annually.
- Extreme heat days will increase from 4 days to between 34-45 days average annually.
- Heatwaves (which are four or more consecutive extreme heat days) will increase from a frequency of one every five years to between 6-8 heat waves per year.

According to the Intergovernmental Panel on Climate Change, substantial cuts in greenhouse gas emissions over the next few decades can substantially reduce risks of climate change by limiting warming in the second half of the 21st century and beyond. Such a limit would require that global net emissions of CO$_2$ and other long-lived greenhouse gases eventually decrease to zero. Cities and countries across the globe have therefore pledged to reduce their carbon intensity.

Decarbonization is the process by which an entity aims to achieve a zero carbon fossil carbon existence, or by which individuals aim to reduce their consumption of carbon. For San Diego, getting to zero carbon by 2035 would consist of a three-pronged approach: zero emissions of CO$_2$; reduction of “super-pollutants” such as black carbon (or “soot”) and ground-level ozone (the main ingredient of “smog”), much of which is directly harmful to human health; and the slowdown of atmospheric pollution through technological and natural means. The development of negative emissions technology includes methods such as bioenergy with carbon capture and storage. Nature-based methods for carbon sequestration include climate-smart practices in forestry, wetland, agriculture, and oceanography. These include reforestation, restorative crop rotation and soil cover crops where greenhouse gases are drawn down from the atmosphere and stored in trees, plants and soil.

The County has made progress in reducing GHG emissions in the unincorporated areas and within its facilities through implementation of the 2015-2020 Strategic Energy Plan, 2018 Climate Action Plan (CAP), and the Electric Vehicle Roadmap. However, even with the adoption
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of a CAP Update by the County, a goal to reach net zero carbon emissions by 2035-2045, and the adoption of CAPs by most of the region's local agencies, more must be done.

Regional collaboration between agencies, universities, schools, businesses, workers, and communities is essential to develop policies and programs to generate momentum, learn from each other, and provide a standardized regulatory structure. A regional approach will incorporate strategies tailored to the region's local context to achieve zero carbon in key sectors including energy, transportation, and land use. In addition to rapidly reducing GHG emissions, these climate mitigation measures and investments will have substantial co-benefits, including improving public health and quality of life in the region, reducing the burden of transportation costs on working families, increasing the dynamism of our regional economy, addressing our region's affordable housing crisis, and providing San Diegans with thousands of well-paying jobs building the infrastructure that will propel our region into the future.

Under direction of the LUEG Program Manager of Regional Sustainability and Climate Action, the proposed effort would anchor the San Diego Regional Decarbonization Framework (RDF) in emerging best practices from across the nation and globally, positioning the County in a leadership role on climate action in the region. The County is retaining the University of California San Diego - School of Global Policy and Strategy (UCSD-GPS) and University of San Diego School of Law - Energy Policy Initiatives Center (USD-EPIC) to create a long-term RDF that prioritizes greenhouse gas reduction strategies and initiatives, within a feasible and expeditious timeline. This framework is separate from but complements the County’s Climate Action Plan Update process as well as other regional plans, such as SANDAG’s 2021 Regional Plan.

The modeling of the RDF, based on the latest available science, can offer concrete pathways and put decarbonization priorities into sequence. The RDF will provide a technical roadmap, gap analysis, and recommended policy actions across all jurisdictions. It will provide a tool for cities regionwide to help plan and execute meaningful reductions in GHG pollution. The regional approach to decarbonization is not bound by state or local mandates but by a scientific understanding of the needed actions to achieve net-zero emissions. The pathways that result from the RDF will require mechanisms for ongoing regional coordination and engagement to ensure the recommended policies are implemented during the coming years. Adoption of such mechanisms would require subsequent action by the Board as well as other participants.

The County’s RDF will be based on three guiding principles:

1. **Data-driven Approach:** Sound evidence-based science will articulate the path towards zero carbon. Regional baseline conditions will be based on greenhouse gas emissions and criteria air pollutants across various sectors and jurisdictions, with particular emphasis on EJ communities. Greenhouse gases that are typically inventoried in CAPs are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, nitrogen trifluoride, and sulfur hexafluoride, which have varying degrees of heat-trapping abilities and atmospheric lifetimes. Criteria pollutants are the six common pollutants in outdoor air regulated under the Clean Air Act: carbon monoxide, lead, ground-level ozone, nitrogen dioxide, particulate matter, and sulfur dioxide.
Modeling and analysis of transportation, renewable energy, land-use, buildings and jobs will form the basis of the policy recommendations. This innovative framework can take advantage of rapidly changing technology, empirical evidence from other places and explore cross-sectoral pollution mitigation. One such example is the infrastructure implications of the adoption of hydrogen-fueled vehicle fleets for freight and passenger transport sectors. Emphasis would be placed on measures that address place-based and population-based inequities for Black, Indigenous, and People of Color communities. Although they often overlap, place-based inequities are typically identified through geographic indicators, such as the concentration of poverty in certain census tracts; whereas population-based inequities are broader and have structural/societal characteristics, such as language barriers and lack of employment opportunities for immigrants and youth.

2. **Regional Collaboration:** Research and information-sharing with other local and regional agencies will identify potential areas of cooperation. As the climate crisis takes on a renewed urgency, several new and ongoing regional efforts are underway. For example, the San Diego County Air Pollution Control District is implementing the Community Air Protection Program to deploy clean technologies in the communities of Barrio Logan, Logan Heights, Sherman Heights, and National City (also known as AB 617 Communities). USD-EPIC will be compiling a database of local efforts to map out the initiatives currently being undertaken, analyze the gap between the decarbonization pathway and the inventory of regulations and policies, and identify local policy opportunities. Our regional outreach would identify the additional role that the County could play in convening public agencies, including cities, tribes, transportation agencies, the Port of San Diego and the San Diego Airport Authority, San Diego Air Pollution Control District, school districts and community college districts; as well as leveraging resources at the state and federal levels.

3. **Stakeholder Input:** Potential measures for achieving decarbonization span across activities of both the public and private sectors. Input will be sought from subject-matter experts, stakeholders and the public on the potential benefits as well as the challenges of implementing this roadmap. This would include the impacts of these measures on equity, employment/jobs, housing, conservation, open space and agriculture, as well as the projected impacts of climate change on the regional economy. There will be targeted outreach to communities that are particularly vulnerable to the impacts of climate change, and EJ communities that have historically borne a disproportional impact of environmental pollutants. For example, considerations for an equitable and just transition to decarbonization will be highlighted, so that policy-makers are cognizant of consequences of policy decisions on jobs and distributional impacts across demographic groups.

Stakeholder input is organized into two phases: pre-draft framework, and post-draft framework. Pre-draft input will be focused on specific issue areas and solicit input from subject-matter experts and nonprofit advocates into the research and development of the measures and technical reports. Post-draft input will be conducted by supervisory district - it will be more broadly targeted for a general audience, and will focus on the integrated report, including the technical findings and recommendations, the non-technical narrative, and the balance of elements within the framework.
Timeline and Tasks
Regional outreach and stakeholder input will be overseen by the County’s Land Use and Environment Group (LUEG) and will be conducted in concert with the Department of Planning & Development Services (PDS), the Office of Environmental and Climate Justice (OECJ), and other LUEG departments. Initial outreach commenced in June 2021 and will extend throughout the development of the framework. The following table lists the major tasks, subtasks and estimated 2021-22 timeline for developing the framework.

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Sustainability is a multi-faceted concept that continually seeks to balance the present and future needs, in terms of the environment, equity and the economy. The development of the decarbonization framework is therefore an initial step that maps out potential regional efforts in sustainability, and there will be subsequent phases in planning and implementation of the framework. It will be functionally connected to other measures on sustainability that the County is undertaking, such as departmental reorganization based on sustainability, resource conservation and equity. Depending on the scale and scope of each action, these subsequent phases following the adoption of the framework will necessitate a broader and deeper regional collaboration and stakeholder participation.

Relationship to Other Sustainability Initiatives
Local policy opportunities and sustainability measures that are relevant to the County’s unincorporated area within its municipal control can be used by the Climate Action Plan. Furthermore, we will explore publishing our measures and progress in SANDAG’s Climate Action
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Data portal. As part of this framework, USD-EPIC will develop a new database of climate actions and commitments by businesses in the San Diego region.

There are numerous natural resource and sustainability actions spread out among different County departments. On May 5, 2021 (6), the Board of Supervisors directed all County Departments and programs to develop and implement Sustainability Plans, as well as issue solicitations for services to assess the capacity of the current organizational and staffing structure of departments across the County enterprise to achieve the County's sustainability goals, consult with relevant stakeholders, suggest organizational structure alternatives that maximize sustainability and equity, and promote comprehensive natural resource management. These sustainability initiatives are currently in progress. It is expected that the departmental Sustainability Plans that follow the conclusion of this initial enterprise-wide assessment and reorganization would utilize measures identified in the decarbonization framework.

ENVIRONMENTAL STATEMENT
This action is for the Board to receive an update on the Regional Decarbonization Framework. Therefore, the action is not subject to the California Environmental Quality Act (CEQA) because it is not a “project” as defined in CEQA Guidelines Section 15378(b)(5) as it is administrative in nature and will not result in direct or indirect physical changes in the environment. No environmental determination is required for this action.

LINKAGE TO THE COUNTY OF SAN DIEGO STRATEGIC PLAN
This action to receive an update on the Regional Decarbonization Framework supports the County of San Diego's 2021-2026 Strategic Plan's Sustainable Environments/Thriving Initiative by enhancing the quality of the environment by focusing on sustainability, environmental justice, and strategic planning.

Respectfully submitted,

SARAH E. AGHASSI
Deputy Chief Administrative Officer

ATTACHMENT(S)
N/A
SUBJECT: FRAMEWORK FOR OUR FUTURE: DEVELOPING A REGIONAL SUSTAINABILITY PLAN - UPDATE (DISTRICTS: ALL)

AGENDA ITEM INFORMATION SHEET

REQUIRES FOUR VOTES: ☐ Yes ☒ No

WRITTEN DISCLOSURE PER COUNTY CHARTER SECTION 1000.1 REQUIRED
☐ Yes ☒ No

PREVIOUS RELEVANT BOARD ACTIONS:

BOARD POLICIES APPLICABLE:
N/A

BOARD POLICY STATEMENTS:
N/A

MANDATORY COMPLIANCE:
N/A

ORACLE AWARD NUMBER(S) AND CONTRACT AND/OR REQUISITION NUMBER(S):
N/A

ORIGINATING DEPARTMENT: Land Use and Environment Group

OTHER CONCURRENCE(S): N/A

CONTACT PERSON(S):

Murtaza Baxamusa
Name
(619) 531-6256
Phone
Murtaza.Baxamusa@sdcounty.ca.gov
E-mail

Click here to enter text.
Name
Click here to enter text.
Phone
Click here to enter text.
E-mail