

SARAH E. AGHASSI DEPUTY CHIEF ADMINSTRATIVE OFFICER LAND USE AND ENVIRONMENT GROUP 1600 PACIFIC HIGHWAY, ROOM 212, SAN DIEGO, CA 92101 (619) 531-6256 www.sdcounty.ca.gov/lueg

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TO: Supervisor Nora Vargas, Chair

Supervisor Terra Lawson-Remer, Vice Chair

Supervisor Joel Anderson Supervisor Nathan Fletcher Supervisor Jim Desmond

FROM: Murtaza Baxamusa

Program Manager for Regional Sustainability

# UPDATE ON REGIONAL DECARBONIZATION FRAMEWORK: DRAFT IMPLEMENTATION PLAYBOOK

#### Overview

Throughout the past two years, the County's "Getting to Zero" carbon emissions journey has been dynamic and rewarding, and it is not yet complete. It started with the Board's call for its creation which led to thoughtful work with area academics and renowned workforce experts to create a comprehensive, integrated Regional Decarbonization Framework. And along the way, we ensured equity was incorporated and the approach was aligned with the County's other major sustainability initiatives such as the Climate Action Plan Update and enterprise-wide sustainable commitments. After detailed scientific analysis, consideration of workforce implications and broad collaboration, we are now pleased to share this first-ever locally generated resource (Implementation Playbook) to guide everyone in the region toward a healthier, more sustainable future for all.

#### Background

The global climate is changing, and the effects are felt acutely at the local level through higher frequency and intensity of extreme heat events, droughts, wildfires, storms, and sea level rise. Furthermore, the growing economic, social, and environmental impacts associated with a changing climate are causing immediate and long-term impacts to our ecosystems, food production, health, safety, jobs, businesses, and communities across the San Diego region, particularly in underserved populations that are impacted disproportionately.

In light of these realities, and in support of the County of San Diego's (County) commitment to sustainability and environmental justice, on January 27, 2021 (03), the County's Board of Supervisors (Board) directed the Chief Administrative Officer to develop the Regional Decarbonization Framework (RDF), a guide to achieve zero carbon emissions for the region. The Technical Report of the RDF, drafted in partnership with the University of California San Diego (UC San Diego) School of Global Policy and Strategy and the University of San Diego (USD)

School of Law's Energy Policy Initiatives Center (EPIC), includes strategies and initiatives to achieve zero carbon emissions in the region by mid-century to align with State goals and mandates to reach carbon neutrality by 2045 or sooner, under Governor Brown's Executive Order B-55-18. Assembly Bill 1279, the California Climate Crisis Act, enacted this year, declares State policy to both achieve net zero greenhouse gas (GHG) emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, Statewide anthropogenic GHG emissions are reduced to at least 85% below the 1990 levels.

Subsequent Board direction on July 14, 2021 (03) and November 17, 2021 (06) recognized the need for workforce development and implementation to be included with the Technical Report; therefore, the integrated RDF has three key components: the Technical Report, the Workforce Development Study, and the Implementation Playbook. The Technical Report provides policymakers, private industry, and stakeholders in the San Diego region the information needed to chart a path forward, starting with policies necessary to reach interim goals to reduce GHG emissions to 40 percent below 1990 levels by 2030, as laid out in B-30-15. It also provides a framework of regional institutional governance that emphasizes collaborative policy experimentation and review. The Workforce Development Study, jointly authored by Dr. Carol Zabin (UC Berkeley Labor Center), Betony Jones (Inclusive Economics), and Maggie Jones (Inclusive Economics) ensures that, with the implementation of the RDF, the region has high-quality, family-supporting green jobs. For a full summary of past Board direction, please refer to Attachment A – Summary of Past Board Direction.

The Implementation Playbook (see Attachment B – Draft Implementation Playbook), developed in partnership with USD EPIC, is a user-friendly resource for stakeholders, which includes individuals, local/regional governments, tribal governments, businesses, community, labor, and environmental organizations in the region looking to adopt and implement decarbonization policies, programs, and/or projects.

#### **Draft Implementation Playbook**

The draft Implementation Playbook (Playbook) is a resource guide that outlines areas for local governments, organizations, and businesses to consider as they move toward zero carbon emissions. As a resource, the Playbook does not mandate what actions to take or implement but provides a portfolio of activities that could be implemented to reach the zero carbon emissions goal of the RDF, while ensuring good green jobs and that equity is upheld in the framework.

The draft Playbook is organized into five special topics in alignment with the RDF Technical Report in order to categorize the type of actions possible to help contribute to regional decarbonization. Three of these special topics represent the highest emitting sectors of our region and highlight where we have opportunities to reduce emissions: on-road transportation (i.e., passenger vehicles, buses, and trucks) represents 48%; electricity generation represents 20%; and buildings' natural gas use represents 12%, based on regional emissions data. Additionally, the special topics of Land Use & Natural Climate Solutions and Food Systems & Circular Economy represent relatively small regional emissions (~1-2% of regional emissions) but provide opportunities to reduce emissions and to actively remove and naturally store carbon dioxide from the atmosphere and/or reduce carbon emissions associated from making materials. Together, these special topics make up the vast majority (more than 80%) of regional emissions and highlight the opportunities for interconnected actions that can simultaneously reduce GHGs. For example, reducing regional methane emissions through capturing methane at landfills and then using that captured methane to replace fossil-based methane in buildings reduces emissions from

landfills (Circular Economy) and provides a lower carbon fuel for buildings while they are transitioning to electric systems (Buildings). The five special topics are:

- **Buildings** this topic considers how to reduce emissions from existing buildings and prevent emissions from future buildings;
- **Electricity** this topic considers how to reduce regional emissions from electricity generation;
- Land Use & Natural Climate Solutions this topic considers ways to both reduce emissions from natural and working lands, and ways that those lands can draw down more carbon dioxide from the atmosphere;
- **Transportation** this topic considers how to reduce emissions from on-road (including cars, trucks, and buses) and off-road transportation (including marine vessels, farm equipment like tractors, aviation, etc.);
- Food Systems & Circular Economy this topic considers aspects of food, including all processes, sustainable agricultural practices, infrastructure, and inputs utilized to produce, use, distribute, and dispose of food. This topic is also focused on the circular economy, which reduces use of materials, reuses materials, and converts "waste" into renewable resources, including energy, new materials, and other products.

#### **Public Outreach and Engagement**

Engaging the public is central to achieving a zero carbon emissions future for the region. Since July 2021, County staff has shared information and held conversations with interested residents and city councils, conducted workshops focused on the special topics listed above, and held one-on-one meetings with groups and organizations upon request to further collaboration efforts. Since September 2022, County staff has hosted over 25 outreach events that included government agencies, businesses, tribal governments, educational institutions, and environmental, community, and labor organizations through the workshops and meetings conducted by the County. These meetings and outreach events were key in engaging with technical experts and stakeholders from our region, as well as provided a space for feedback, sharing ideas for future collaboration, and best-case examples in our region that the RDF could highlight for implementation.

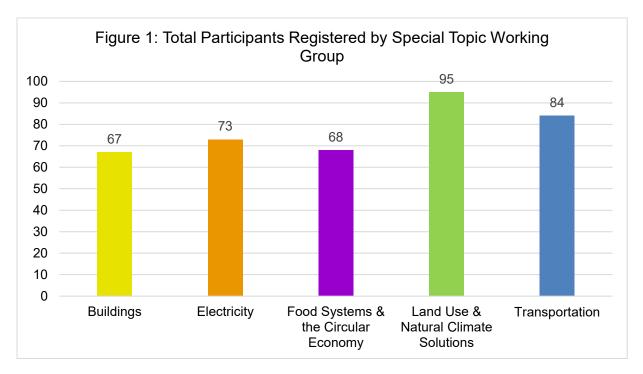
In addition, County staff presented the RDF at the following conferences and events:

- 13<sup>th</sup> Annual California Climate and Energy Forum, an event that engaged hundreds of local government staff, elected officials, and community organizations on efforts to advance fair and equitable climate change and energy practices;
- Global Conference on Sustainability in Higher Education to provide background on what motivated the RDF, how it was completed, and how universities can be critical partners for regional jurisdictions in decarbonization;
- 14<sup>th</sup> annual Lesley K. McAllister Symposium on Climate and Energy Law hosted by the University of San Diego School of Law, along with the Energy Policy Initiatives Center (EPIC) and the San Diego Journal of Climate & Energy Law, to moderate a panel on natural climate solutions.
- Annual International Conference on Sustainable Development, in partnership with the Sustainable Development Solutions Network (SDSN), presenting the RDF to an international audience.

The public also had the opportunity to engage with the project team and post ideas on our engagement site: <a href="https://engage.sandiegocounty.gov/rdf">https://engage.sandiegocounty.gov/rdf</a>. More information on the Special Topic Working Groups is described below.

The development of the draft Playbook was guided by stakeholder collaboration. Feedback was primarily provided through five Special Topic Working Groups: Buildings, Electricity, Land Use & Natural Climate Solutions, Transportation, and Food Systems & Circular Economy. The intent of having multiple working groups was to allow the simultaneous discussions of multiple decarbonization strategies within one emissions topic, and the possibility for some of the strategies to involve multiple topics. Working group meetings were led by County staff and supported by the USD EPIC consulting team to brainstorm, craft, and strategize implementation activities across each special topic. Working groups met twice virtually between September and November with simultaneous interpretation provided in Spanish. The first session for each topic included a presentation from the County team on the RDF process and introduced key background information on each special topic (such as federal and State laws and regulations, and examples of various existing policies) to ensure that all participants understood the background of the sector and their role in the developing the draft Playbook. Each sector was then broken down into subtopics to guide discussions and gain valuable feedback from participants, which was all documented on a virtual whiteboard (see Appendix E in Attachment B - Draft Implementation Playbook).

The second session for each topic included stakeholder presentations from business, advocacy, and academia that highlighted presenters' experiences or implementation actions in their area of focus relevant to getting to zero carbon emissions in the region. Workshop participants also had the opportunity to discuss the special topic and related implementation opportunities with peers and experts, County staff, and USD EPIC. This format for workshops provided a space to learn from peers, discuss current activities and programs, and discuss case study examples to highlight in the draft Playbook. The following two figures show the level of interest from stakeholders across the special topics, as well as representation from various types of organizations such as universities, environmental, business, and regional agencies.



**Figure 1. The Total Participants by Special Topic Working Group.** These totals represent unique individuals that registered for the working groups. Land Use & Natural Climate Solutions had the highest interest with 95 individuals, and Buildings had the lowest interest with 67 individuals.

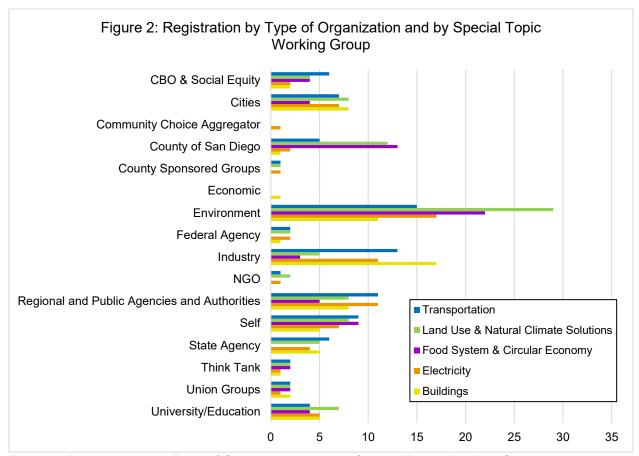


Figure 2. Participation by Type of Organization and by Special Topic Working Group. These totals show the individuals registered for the working groups by the type of organization, and further broken down by special topic. Environmental organizations are the highest represented for all special topics except buildings, in which Industry organizations had the highest participation. Economic organizations are least represented throughout all special topics, with only participation in the Buildings Special Topic Working Group.

At the end of the Special Topic Working Group meetings, feedback, ideas, and comments from participants were organized and shared with the USD EPIC team, and then incorporated and addressed in the draft Playbook, as feasible. See Appendix E of Attachment B - Draft Implementation Playbook for feedback and ideas received from the Special Topic Working Groups.

# Public Workshops and Other Events

County staff is continuing this important conversation about decarbonization at public meetings of city councils and regional agencies, as well as conferences. This includes the City of National City in September 2022 and the City of Carlsbad in October 2022. In October 2022, the County presented at the 13th Annual California Climate and Energy Forum, which drew climate professionals from across the State. In November 2022, the County presented at the San Diego Association of Government's Sustainable Communities Working Group, which serves to carry out and promote cross-agency coordination on the development and implementation of the Sustainable Communities Strategy in the region. County staff held an evening Spanish-language public workshop on December 6, 2022.

## Other Partnerships and Outreach

Partners For Places - The Funders Network

The County partnered with San Diego Foundation (Foundation) on a Partners for Places grant application to support the RDF. Partners for Places strives to build equitable and sustainable communities by assisting frontline communities to acquire the resources needed to participate and engage in programmatic decision-making processes on sustainability initiatives. These awards support the planning and implementing of urban sustainability projects, and the primary partners are local governments and local foundations. Partners for Places is a collaboration between The Funders Network (TFN) and the Urban Sustainability Directors Network (USDN), a network of over 250 municipalities across North America for peer-based support on sustainability initiatives.

The Partners for Places program resulted in \$160,000 from TFN and the Foundation to support the participation of refugee, asylee, and immigrant communities in the implementation of the RDF. Local community-based organizations: Youth Will, Partnerships for the Advancement of New Americans, and the Arab Community Center of San Diego were the recommended recipients of the Partners for Places grant. The Partners for Places grant will be used to support the focused engagement of refugee, asylee, and immigrant communities as part of the County's larger regional engagement strategy, ensuring that implementation plans are equitable, prioritize community needs, and offer solutions to climate change that are informed and shaped by those most impacted.

Alliance for Community Engagement, Climate and Health – National Institute of Health (NIH) This is a proposed academic-community consortium that includes researchers at UC San Diego as well as several community partners. It would test community engagement methods over two years to understand how community engagement and education influences public policies related to climate change. The proposal for a Protection of Public Health from Climate Change Community Initiative is to create a transformative shift of climate change health impacts based on testing community engagement and implementation science. If awarded, the County's Office of Sustainability and Environmental Justice would co-lead the project with UC San Diego to coordinate with the consortium on RDF community outreach. The application is for \$1.4 million over two years, with about a third of the funds going to community groups.

## Career Grant: National Science Foundation (NSF)

The County submitted a Letter of Support for San Diego State University's Department of Computer & Electrical Engineering that is proposing to NSF a 5-year transportation electrification project through a resilient and carbon-free electricity grid. The broader impacts of the proposal: Transforming the Transportation Electrification Challenge into an Opportunity to Build a Carbon-Free Resilient Power Grid, are to mitigate the carbon footprint of energy and mobility, enable energy supply continuity under extreme events, and diversify electric vehicle (EV) access through designing justifiable incentives. The Technical Advisory Committee for the project would consist of the County's Land Use and Environment Group, San Diego Gas & Electric (SDG&E), CleanTech San Diego, Center for Sustainable Energy, cleantech startups as Ivy Energy and Universal Devices, and housing builders, Communities for Global Sustainability ZedPower. This \$500,000 grant would seed a regional partnership for clean renewable energy to decarbonize the electricity and transportation sectors.

The County continues to pursue partnership opportunities with other governmental agencies, tribes, academia, businesses, and nonprofits to attract federal and State funds to the San Diego region to implement decarbonization plans, programs, and pilot projects.

## **Next Steps**

Implementation Playbook (January through March 2023)

The draft Playbook will be available for public comment from January 17 to February 2 at: <a href="https://engage.sandiegocounty.gov/rdf">https://engage.sandiegocounty.gov/rdf</a>. Following the public comment period, County staff and its consultant team will review, assess, and address comments and suggestions as feasible for a final Implementation Playbook, as well as continue to conduct public outreach efforts including educating stakeholder groups and agencies about decarbonization and the components of the integrated RDF.

#### Regional Convenings (January 2023)

These will be community conversation events organized within each of the five supervisorial districts led by the County and community-based organizations. They will be hosted by professional facilitators to seek input on the draft Playbook. The facilitators and partnering community-based organizations were selected through a competitive and open solicitation process administered by the County's Department of Purchasing and Contracting. The facilitators are a team led by Murakawa Communications, and the community-based partnering organizations are teams led by the Climate Action Campaign (Districts 1, 2, 3, and 5) and The Urban Collaborative (District 4). The goal of these convenings will be a combination of education and facilitating public comment and feedback. We want to educate the public on the role climate change impacts on the region, community, and individual lives with a focus on issues such as, public health and resiliency to extreme heat events, and wildfires. We are also asking for input on the draft Playbook and on ways to implement the five decarbonization areas of focus. These regional convenings are scheduled for: January 17 - District 4, January 18- District 1, January 23- District 3, January 30- District 2, and January 31- District 5.

#### Sustainable Food & Agriculture Policy Implementation Guide

On a parallel track to the Implementation Playbook, the County has been working on how to best encourage movement toward local, sustainable, and organic agriculture production in the San Diego region to reduce carbon emissions. To better understand the role of agriculture and food systems when it comes to reducing GHG emissions, the County is working with UC San Diego School of Urban Studies and Planning to develop an actionable roadmap with policies and strategies the County could advance regionally. The guide will build on existing policy recommendations and programs by identifying specific opportunities, policy levers, and potential role(s) for the County and other key stakeholders in pursuing these strategies. The draft may include focus areas, such as: land management strategies; procurement & labeling; food loss & waste; and diverse research needs. Each focus area will outline practical steps for policy action, as well as highlight best-case examples and points of alignment with existing programs. A draft will be prepared for around Summer 2023.

#### **Board Direction**

In March 2023, the three components of the integrated Regional Decarbonization Framework will be presented to the Board for consideration and adoption. This will include the final Implementation Playbook, the Technical Report by UC San Diego, and the Workforce Development Study by Inclusive Economics.

Recognizing that climate change cannot be addressed in silos, and that we can achieve more if we all work together in the region, the County will continue working with local governments, agencies, organizations, and residents for the benefit of all San Diego area residents and visitors who deserve a more sustainable and equitable quality of life. Work will continue throughout the Winter and Spring on co-created implementation actions that will collectively guide our region,

local governments, agencies, business, labor and environmental groups, and stakeholders to a zero carbon and resilient future.

Please contact me if you have further questions or to request further information.

Respectfully,

MURTAZA BAXAMUSA

Program Manager for Regional Sustainability
Office of Sustainability and Environmental Justice

Cc: Sarah Aghassi, Deputy Chief Administrative Officer, Land Use and Environment

Group

Andrew Potter, Clerk of the Board of Supervisors

Attachment A – Summary of Past Board Direction Attachment B – Draft Implementation Playbook

# ATTACHMENT A – SUMMARY OF PAST BOARD DIRECTION

#### **ATTACHMENT A - Past Board Direction**

Below is a brief timeline of Board updates and direction on the Regional Decarbonization Framework (RDF) to date:

- January 27, 2021 (03) Board direction to develop the RDF.
- July 14, 2021 (03) Board update on initiation of the Technical Report in partnership with UC San Diego.
- October 20, 2021 (04) Board direction on exploring alternative renewable energy sources.
- November 17, 2021 (06) Board update on draft Technical Report by UC San Diego.
- February 9, 2022 (06) Board update On Local Policy Opportunity analysis by USD EPIC. Also Board direction to engage with farming community and report back to the Board on how to best encourage movement toward local, sustainable, and organic agriculture production in San Diego county to reduce carbon emissions from food transportation, support our local economy, reduce stormwater run-off from fertilizer, and promote low carbon impact to agriculture.
- March 16, 2022 (05) Board direction on partnership with USD. County staff provided a second update on Technical Report from UC San Diego, and draft Workforce Development Study by Dr. Carol Zabin of UC Berkeley Labor Center.
- April 24, 2022 (24) Board direction to develop a proposal for County operations to align with the goals of the RDF.
- June 29, 2022 (05) Board adoption of a resolution to apply for and accept grant funds from the California Strategic Growth Council for the Transformative Climate Communities (TCC) grant. County staff applied for a \$300,000 planning grant to support sustainability and unincorporated environmental justice communities.
- June 29, 2022 (07) Board direction for research on options to enhance community resiliency to energy emergencies and direction to coordinate with the RDF analysis on emissions and opportunities for coordination.
- August 31, 2022 (05) Board update on the Implementation Playbook and community outreach process.
- August 31, 2022 (06) Board action on sustainability initiatives for County facilities and operations, and the unincorporated area in alignment with the RDF and Climate Action Plan.