

9. San Diego as a Model

A Guide for aligning pathways, policies, and resources to realize win-win scenarios in the transition to net-zero

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9.1 Purpose

The County of San Diego Regional Decarbonization Framework is a novel demonstration of collaborative long-term planning which other regions and jurisdictions should adapt and replicate in order to keep global warming below 1.5 degrees C. With the Intergovernmental Panel on Climate Change (IPCC) now sounding the alarm on climate change with their 2021 Global Warming of 1.5 °C Special Report, communities around the world are beginning to reflect on what reducing and eliminating emissions means for their specific contexts. While scientists agree we now have the technologies we need to enable the transition to net-zero, the exact configuration of those technologies, accompanied by supporting policy frameworks and financing, will need to be calibrated for specific conditions around the globe. Each local process must take into consideration their greenhouse gas emissions inventory, local economy and workforce, and long-term emissions reduction goals in a collaborative and transparent planning process. The process undertaken by the County of San Diego can serve as a case study for other jurisdictions across the U.S. and globally to learn from and replicate. In order to facilitate this dissemination, the project team is working closely with the UN Sustainable Development Solutions Network (SDSN) to showcase this effort alongside various international fora. Additionally, the project team will develop an accompanying Guide to serve as a toolkit for other municipalities and communities to follow in their pursuit of net-zero emissions. This Guide will serve as an addendum to the larger Regional Decarbonization Framework report. The purpose of this Guide is to distill the high-level process undertaken by the County, highlight the enabling factors for success, and provide a step-by-step instruction manual for other communities who wish to undertake similar long-term planning processes in their efforts to combat climate change.

9.2 Motivation

With broadband access now extending to the most remote parts of the world and the COVID-19 crisis encouraging professionals around the world to adapt to a virtual workplace, the opportunity for engaging stakeholders and sharing experiences is greater than ever. Over the last several decades there have been new consortiums and networks established that work

both vertically and horizontally across our societies to align development agendas and resources to accelerate growth in the framework of sustainable development. One such consortium is working globally to elevate the academic and science community to highlight the multidisciplinary approach required to understand and achieve sustainable development, the UN Sustainable Development Solutions Network (SDSN).

SDSN was set up in 2012 under the auspices of the UN Secretary-General. SDSN mobilizes global scientific and technological expertise to promote practical solutions for sustainable development, including the implementation of the Sustainable Development Goals (SDGs) and the Paris Climate Agreement. SDSN works closely with United Nations agencies, multilateral financing institutions, the private sector, and civil society. SDSN is guided by a Leadership Council, which brings together global sustainable development leaders from all regions and all sectors, including civil society, public, and private sectors. Much of SDSN's work is led by National or Regional SDSNs, which mobilize knowledge institutions around the SDGs. Their research & policy work mobilizes experts from around the world on the technical challenges of implementing the SDGs and the Paris Climate Agreement. The SDG Academy leads the education work of the SDSN. As a member of the SDSN, UC San Diego has brought on SDSN as a consulting partner in order to ensure that the process and results of this project is firmly integrated into various multilateral fora, both within and alongside formal UN processes.

The SDSN is working to share the RDF project within three horizontal levels across its network. First **nationally**, the SDSN USA currently hosts nearly 150 institutions in over 44 states, Puerto Rico, and Washington, DC. These academic institutions all have local networks of sustainability practitioners working in various aspects of the SDGs. SDSN USA builds pathways towards the achievement of the UN Sustainable Development Goals in the United States by mobilizing research, outreach, collective action, and global cooperation. To accomplish this, they: facilitate and lead coalitions to address U.S. sustainability challenges; build sophisticated, practical systems for assessing progress; facilitate public awareness, education, and engagement; and link these efforts with policymakers and community leaders throughout the U.S. to result in lasting change.

The SDSN USA network is also part of a larger network of national and regional networks which make up the **international** framework of SDSN. With more than 1,500 members working across 44 national and regional networks worldwide, the SDSN USA is part of a global multidisciplinary consortium of experts and has access to thought-leaders around the world. This allows the network to share the results of the RDF directly with like-minded sustainability experts across various geographies and spectrums around the world who can glean important lessons learned from the RDF process and Guide.

Lastly, the SDSN serves as an observer organization to the United Nations Economic and Social Council (ECOSO) and United Nations Framework Convention on Climate Change (UNFCCC) processes and are also a partner in the Cities and Climate Change Science Conference which was co-sponsored by the IPCC in 2018. In 2021, this effort continued under the auspices of the [Innovate4Cities Conference](#) in October 2021, co-hosted by UN-Habitat and the Global Covenant of Mayors for Climate & Energy (GCoM). The RDF project was presented during the forum and the inputs of this event will serve to inform the 2022 IPCC Sixth Assessment Report on impact, adaptation and vulnerability to global climate change. These **global** consortiums provide an opportunity to showcase the results of this project and San Diego as a model to the world. With access to these foras, the RDF project can help inform global roadmaps and pathways to net-zero.

Outline of Guidebook:

- Background, Motivation and Target Audience
 - Process Overview (description and graphic)
 - How to Identify key sectors and stakeholders
 - Start by outlining supply and demand of emissions intensive commodities and activities in given jurisdiction (set boundary conditions)
 - Meet the Team (skills mapping)
 - Power Mapping – Stakeholder Identity and Agency
 - Private, Public, Academia
 - Project Methodology Summary: Open Mod tools available and requisite data
 - Key Decision Trees / project milestones
 - Community and Labor Union Engagement – Important Criteria for Success
 - Outcome Gap Analysis
 - Planning alongside uncertainty
 - Getting Started: Step by Step
- +Toolkit library – annotated bibliography of resources available from esteemed NGOs to support decarbonization planning
- How should the toolkit/guidebook be hosted? PDF and Online webpage
- Examples:
- [U.S. Climate Resilience Toolkit](#): This toolkit has a helpful "Explore the toolkit" function that walks site visitors through the resources available of the website.

- The Sierra Club's [Building Electrification Action Plan for Climate Leaders](#) has an action-plan format which could be a useful reference template for designing the decarbonization toolkit.
- RMI's [Regulatory Solutions for Building Decarbonization Toolkit](#) features both a downloadable report and a website visualization component.
- [New Zealand's climate toolkit for business](#) starts out with a quiz that then provides tailored recommendations for climate action.
- [Oregon State University's Climate Impacts Research Consortium](#) took the approach of posting a wide array of resources for climate change adaptation and mitigation on a single website.

Questions to be answered in the Guidebook:

- What are the key enabling factors to achieving net-zero?
Technological capacity; political support; sound financial opportunities/economic growth assurances; collaborative and transparent process
- What are the replicable parts of this project for other jurisdictions?
Technical/Political/Community Engagement; Scalability of this approach
- Who is the primary audience for the Toolbox?
City, County, and regional governing bodies (US focus)
- What elements of the project require specialized skills?
Energy and spatial modeling; Policy GAP analysis; Community engagement
- What were the enabling conditions that enabled this project (what's missing)?
Political will, regulatory framework, local and state goals (medium and long-term)
- Which elements of this project are specific to San Diego and which can be applied to other regions?
Multijurisdictional goal alignment – federal, state, local; History of Climate Action Planning; Climate impact risk assessments Ex. SLR; GHG Inventory
- Identify and mitigate areas of contention from the start
Identify winners and losers; Quantify impacts of inaction; Supply Chain uncertainties; Risk profiles of stakeholders; Local industry and labor force; Tax revenue sources; Political cycles; Lobbies; etc.
- How to identify motivating elements of the transition to bridge industries and political parties?
Ex. Public transport