

Regional Decarbonization Framework

**A Collaborative Effort
to Lower the Region's
Carbon Footprint**

Jobs Sector Workshop

May 5, 2022



Learning from Our Past

There is harmony between land, nature and its people. While true for all neighborhoods, one specific group of people have endured displacement from their lands, persecution, and systemic oppression and deserve special recognition today.

As we begin our journey of regional decarbonization, we acknowledge the unceded territory and homelands of the 17 tribal nations in the region – the most in any county in the United States.

Kumeyaay/Diegueño

Luiŋeño

Cupeño

Cahuilla



GETTING TO **ZERO**

SAN DIEGO COUNTY
REGIONAL DECARBONIZATION FRAMEWORK

Integrated Regional Decarbonization Framework



**Technical Report
led by UC San Diego**

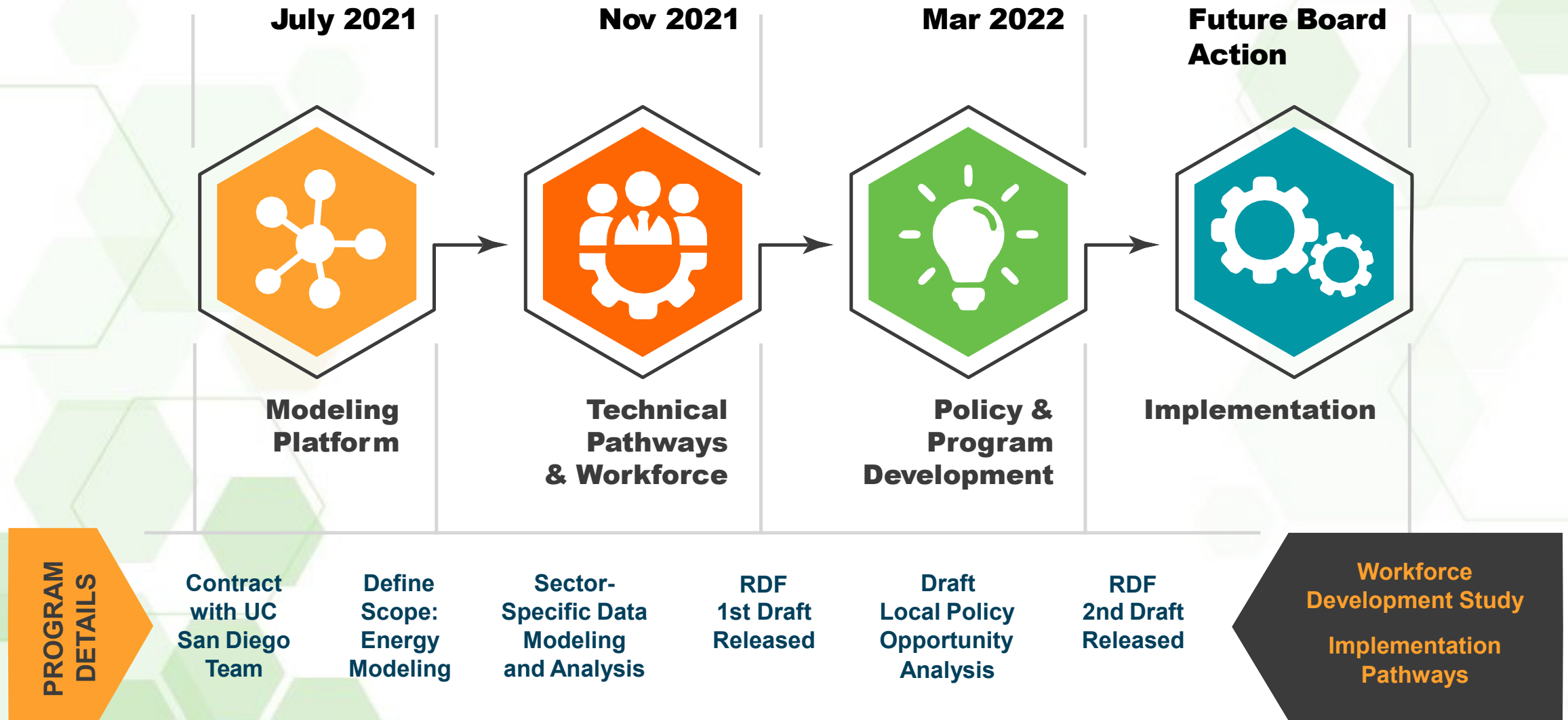


**Workforce Development
Study by Inclusive
Economics**



**Implementation
Pathways**

Timeline



Four Decarbonization Pathways

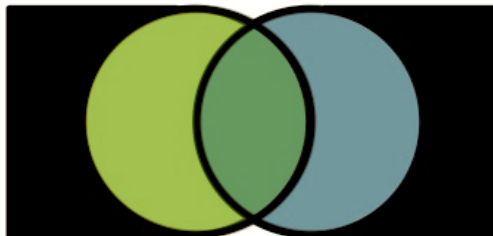


RDF Technical Report Employment Chapter and Workforce Development Report



POLITICAL ECONOMY
RESEARCH INSTITUTE

INCLUSIVE



ECONOMICS



Initial Comment Period

Individual members of the San Diego regional community

American Federation of Teachers Local 1931

California Air Resources Board

Climate Action Campaign

IBEW Local 569

San Diego 350

San Diego and Imperial Counties Labor Council

San Diego Regional Policy & Innovation Center

UA Local 230

UNITE HERE Local 30

United Domestic Workers, American Federation of State County and Municipal Employees Local 3930

Vice Chair Vargas's staff



A PROGRAM FOR ECONOMIC RECOVERY AND CLEAN ENERGY TRANSITION IN CALIFORNIA



PERI REPORT
MARCH 2021

Employment Impacts of Proposed U.S. Economic Stimulus Programs:

*Job Creation, Job Quality, and
Demographic Distribution Measures*

Key Takeaways on Employment Impacts Analysis Projected 2021 - 2030 Annually

Investment Area	Representative Occupations	Annual Expenditure (in millions)	Direct Jobs	Total Jobs	Average Annual Compensation
ENERGY DEMAND					
Vehicles	Freight movers, bus drivers	\$ 7,700	3,428	6,362	\$ 62,000
HVAC	Mechanical trades	\$ 897	1,345	2,808	\$ 72,000
Refrigeration	Machinists, laborers, heavy vehicle technicians	\$ 762	1,315	2,517	\$ 77,000
ENERGY SUPPLY					
Fossil fuels	Welders, operators, electricians, pipelayers	\$ 4,400	2,538	10,120	\$ 181,000
Clean Renewables	Misc. trades	\$ 630	1,488	2,937	\$ 97,600
OVERALL WORKFORCE					
Full-time year-round					\$ 80,900

Key Takeaways on Employment Impacts Analysis Projected 2021 – 2030 Annually

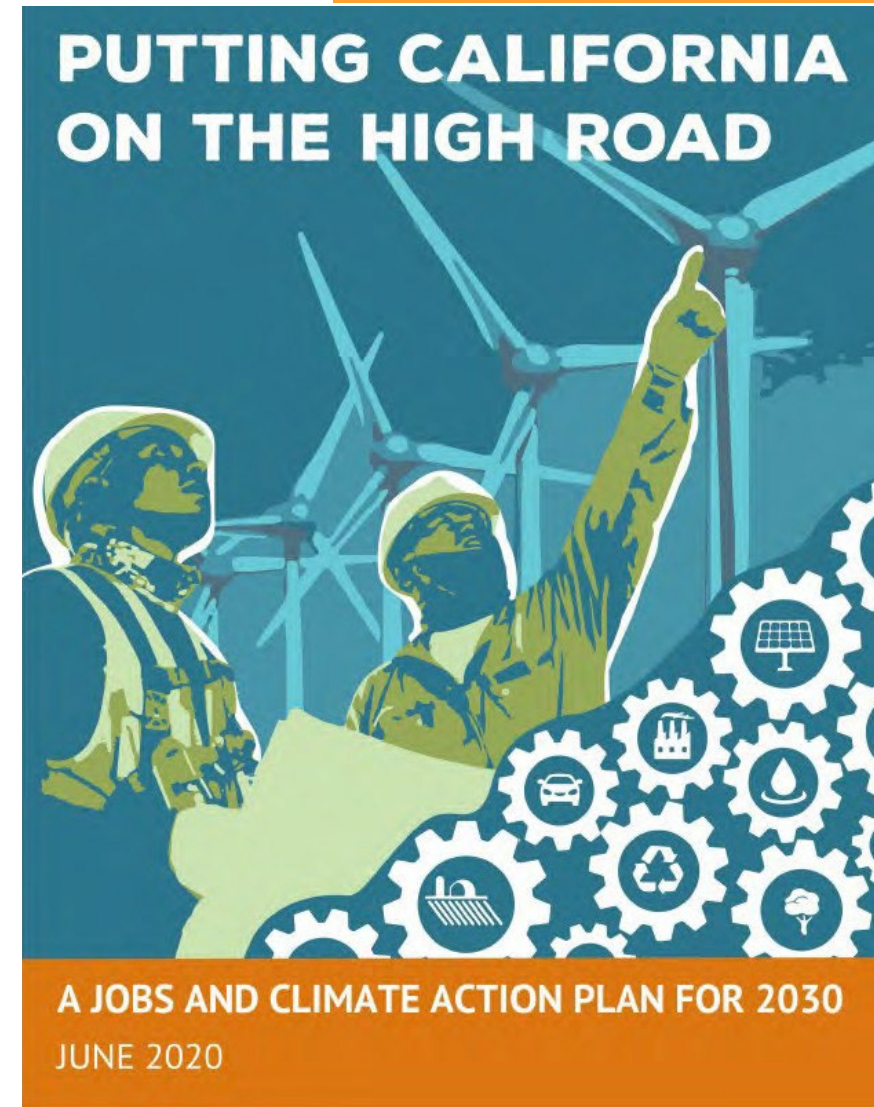
Investment Area	Representative Occupations	Healthcare Coverage	Union Membership	Education: High School or Less	People of Color	Female
ENERGY DEMAND						
Vehicles	Freight movers, bus drivers	58.1%	14.9%	45.0%	70.0%	20.8%
HVAC	Mechanical trades	53.8%	12.9%	58.8%	70.0%	12.2%
Refrigeration	Machinists, laborers, heavy vehicle technicians	55.2%	14.7%	60.5%	70.4%	10.7%
ENERGY SUPPLY						
Fossil fuels	Welders, operators, electricians, pipelayers	82.9%	18.0%	31.1%	62.7%	23.0%
Clean Renewables	Misc. trades	59.5%	11.5%	46.5%	64.8%	19.0%
OVERALL WORKFORCE						
Full-time year-round		62.2%	13.3%	33.7%	61.4%	45.8%

Putting San Diego County on the High Road

- Board directed a comprehensive "green jobs" plan
- Preliminary report out for public comment until May 31
- Modelled after the State of California's Jobs and Climate Action plan



Putting San Diego County on the High Road: Climate Workforce Recommendations for 2030 and 2050



Putting California on the High Road: A Jobs and Climate Action Plan for 2030

Dr. Carol Zabin

Purpose of the Workforce Development Study

- What can we do to make sure that the jobs created by decarbonization are good jobs and there are pathways into them?
- What can we do to support workers who may lose their jobs?



What is a “High Road” Job?

JOB QUALITY

- ◆ Family-supporting wages and benefits
- ◆ High standards for health and safety
- ◆ Long-term career pathways
- ◆ Worker protections including the right to organize

JOB ACCESS

- ◆ Access and entry-points to good jobs for local workers
- ◆ Training to support advancement

How to Ensure Good Outcomes for Workers?

Strategies to support job quality and job access for workers in the growing sectors:

- Ensure that jobs that are created or expanded are family-supporting
- All demographic groups have access to special training and preparation

Strategies to support transition for workers in declining sectors:

- Place workers in jobs with comparable pay, benefits, and working conditions
- Take advantage of new funding for industrial strategies to reduce GHG emissions
- Robust training investments for workers who want to change careers
- Safety nets for remaining workers

The Growth Side: Why Do We Need to Worry about Job Quality and Job Access?

Without incorporating workforce goals into climate policy, the transition to a carbon-neutral economy may simply replicate—or even exacerbate—deep-seated trends of wage inequality and *disparities by race and gender*.

- Workers in “green jobs” are really in greening occupations.
- Most jobs that contribute to reductions in GHG emissions are blue collar, and many are construction jobs.
- Green jobs are not necessarily good jobs, as they follow the same trends as other jobs of the same occupation and industry.
- Blue collar occupations can be low wage, particularly if they are not public sector or unionized.



Low Wage Trouble Spots Where Policy Can Improve Job Quality

- Distributed generation, rooftop solar
- Energy efficiency
- Trucking
- Ride-sourcing/Transportation Network Companies
- Waste management
- Lands conservation and restoration
- Agriculture
- Manufacturing



“High Road” Job Quality Standards and Job Access Agreements

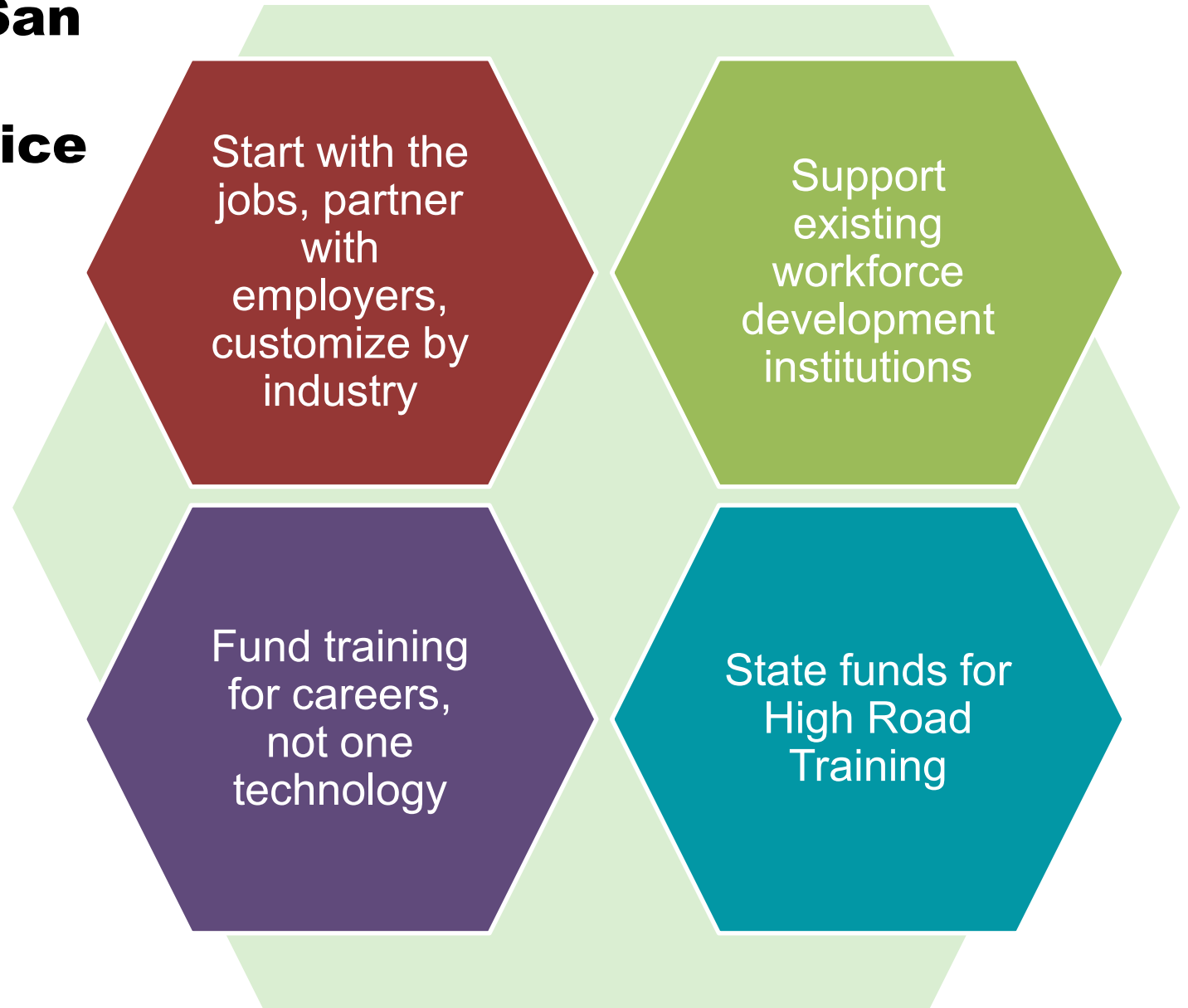
Construction:

- Project Labor Agreements with Targeted Hire (CWAs)
- Skilled and Trained Workforce
- Prevailing Wage
- Responsible Contractor Requirements

Non-Construction:

- Inclusive Procurement Requirements
- Wage and Benefit Standards
- Skill Standards
- Community Benefit Agreements

Key Takeaway - The San Diego Region Can Implement Best Practice Training strategies



High-Road Job Takeaways Per Sector



Opportunities in construction, installation, maintenance, and operations jobs



Different options for non-residential buildings vs. residential/small commercial buildings



Numerous opportunities in vehicle electrification via charging infrastructure and fleet composition; numerous opportunities for vehicle miles traveled reductions via construction, maintenance, and operation of transit, active transport, and infill development



Opportunities in habitat restoration, carbon farming, and land management

The Declining Side: Strategies to Support Workers at Risk of Job Loss

A truly just transition can be accomplished in San Diego Region because:

Relatively minor dependence of jobs on fossil fuels

Alignment of vision and proactive approach by economic development leaders

Unique moment of federal investment in emerging climate technologies



Inclusive Economics: Climate Investments can Redeploy Fossil Fuel Workers

Waste to Energy

District Thermal Energy

Lithium Valley

Onsite Water Reuse

This takes planning and stakeholder engagement!



Inclusive Economics Toolkit for Displaced Workers

Preparation is needed in case re-employment is incomplete.

- Bridges to retirement and pension guarantees for all workers in fossil fuel-based industries
- Wage insurance for all displaced workers who get placed in lower wage jobs
- Retraining support that includes career counseling, stipends during training, and job placement



Key Takeaways on Workforce Development Study

- Develop a technical assistance team to help local agencies identify and incorporate labor standards recommended in this report
- Assess need to shore up pre-apprenticeship via High Road Construction Careers funding, and develop industry training partnerships, via High Road Training Partnership funding
- Convene a just transition task force that includes affected stakeholders



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