SANDAG Climate Action Strategy

Public Workshop on the Preliminary Draft

February 11, 2010
What is SANDAG?

Orange County
- Oceanside
- Carlsbad
- Encinitas
- Solana Beach
- Del Mar

San Diego County
- Vista
- San Marcos
- Escondido
- Poway

Imperial County
- Imperial Beach
- Chula Vista
- National City
- Lemon Grove
- La Mesa
- El Cajon
- Santee
- San Diego

Riverside County

PACIFIC OCEAN

MEXICO
Who Plans for the Region?

Local/Regional Agencies:
- Local Cities and the County of San Diego
- **SANDAG**
- San Diego Unified Port District
- San Diego County Water Authority
- Transit Agencies (MTS and MCTD)
- San Diego Airport Authority
- Air Pollution Control District
- Southern California Tribal Chairmen’s Association

State/Federal Agencies:
- Caltrans
- Regional Water Quality Control Board
- California Coastal Commission
- California Department of Fish and Game
- U.S. Fish and Wildlife Service
- U.S. Department of Defense
What Does SANDAG Do?

- Forum for regional decision-making
- **Transportation planning and implementation**
- Obtain and allocate resources
- Provide information and technical assistance
- No land use authority
DRAFT 2050 Results:
Population, Jobs, Housing

Source: Draft SANDAG 2050 Regional Growth Forecast, 2010
Business as Usual and Where We Need to Go

Figure 13. Theoretical GHG Reduction Targets for San Diego County

Source: Energy Policy Initiatives Center, 2008
What Are Sources of Our Greenhouse Gas Emissions?

Source: Energy Policy Initiatives Center, 2008
SANDAG’s Climate Action Strategy

- Provides policy guidance on climate change
- Identifies options – not prescriptive
- Focuses on opportunities and authorities of SANDAG and local governments
- Foundation for addressing climate change as existing plans are updated
- Implementation of options will occur in updates to RTP, RCP, etc.
San Diego Regional Comprehensive Plan

- Urban Form
- Transportation
- Housing
- Healthy Environment
- Economic Prosperity
- Public Facilities
- Borders

Adopted by SANDAG in 2004
2030 Regional Transportation Plan

- Land Use-Transportation Connection: Growing Smarter
- Systems Development: More Travel Choices
- Systems Management: Making Better Use of What We Have
- Demand Management: Taking Pressure off the System
Smart Growth Concept Map

- Show where smart growth is planned
- Provide infrastructure that supports smart growth
  - Transportation
  - Public Facilities
  - Environmental
- Provide incentives
Defining “Smart Growth”

- Compact mixed use development
- Good urban design and walkable
- More travel and housing choices
- Protected open space and habitat areas
SANDAG Energy and Climate Change Planning Program
SANDAG Energy and Climate Planning Program

- Develop Climate Action Strategy (now)
- Update Regional Energy Strategy (2009)
- Implement Sustainable Region Program (ongoing)
- Assess Alternative Transportation Fuels, Vehicles & Infrastructure for Region (2009)

www.sandag.org/energy
Why Address Climate Change Now?

- “Business-as-usual” path will not get us where we need to be
- Global scientific consensus and increasing public awareness
- California Global Warming Solutions Act of 2006 (Assembly Bill 32)
- Growing Focus on Regional and Local Planning
  - Senate Bill 375 (2008)
  - California Attorney General/CEQA
What Do Current Policies Get Us?

On-Road Transportation GHG Emissions, 1990-2030

Source: Energy Policy Initiatives Center, 2008
What Do Current Policies Get Us?

Electricity GHG Emissions, 1990-2030

Source: Energy Policy Initiatives Center, 2008
What Do Current Policies Get Us?

Natural Gas GHG Emissions (non-electricity), 1990-2030

Source: Energy Policy Initiatives Center, 2008
Where Do We Need to Go?

Figure 13. Theoretical GHG Reduction Targets for San Diego County

Source: Energy Policy Initiatives Center, 2008
What Are the Impacts to Our Region?

- Extreme heat events
- Sea level rise
- Water shortages
- More frequent and intense wild fires
- Public health risks
- Loss of native plant and animal species
- Increase in peak electricity demand
How Does California Get There?

- AB 32 requires return to 1990 level by 2020
- “Scoping Plan” proposes comprehensive actions to achieve the 2020 target
- Regulations in place by 2012 to implement Scoping Plan
- Senate Bill 375 (2008) establishes requirements for regional agencies like SANDAG
What is the Focus of the Strategy?

- Land Use and Transportation
- Energy and Buildings
- Local Government
Focus Area #1
Smart Growth Land Use and Low-Carbon Transportation
Emission Reduction Strategies for San Diego County to Meet Hypothetical AB 32 Targets by 2020

- Pavley Standard (includes CAFE)
- Renewable Portfolio Standard 33% (includes 20% RPS)
- On-Road Low-Carbon Fuel Standard
- Reduce Vehicle Miles Traveled 10%
- Phase out of HFCs
- Reduce Electricity Consumption 10%
- Cleaner Electricity Purchases (≤ 1100 lbs/MWh)
- Light/Heavy Duty Vehicle Efficiency Measures
- Off Road - 15% Reduction in Fuel Consumption
- Reduce Natural Gas Consumption 8%
- Civil Aviation Low Carbon Fuel Standard
- Capture 80% of Landfill Gas
- Replace Boardman Contract (Electricity)
- 400 MW of Distributed Photovoltaics
- Increase Cogeneration by 200 MW
- Off Road - Low Carbon Fuel Standard
- Off Road - 35% Reduction in Pleasure Craft Fuel Use
- Tree Planting and Preservation
- Phase Out SF6

Source: Energy Policy Initiatives Center, 2008
Senate Bill 375 (2008)

- GHG reduction targets from cars and trucks
- SANDAG creates Sustainable Communities Strategy (SCS) in Regional Transportation Plan
- If target not met, Alternative Planning Strategy (APS) prepared
- Integrates Transportation, Land Use, Open Space and Affordable Housing Planning
- No requirement for consistency between local plans and SCS
Goals for Land Use and Transportation

- Reduce total miles of vehicle travel
- Minimize GHG emissions when vehicles are used
- Support increased use of alternative fuels
- Protect transportation infrastructure from impacts
Focus Area #2
Clean Energy and Efficient Buildings
Top 10 GHG Emitting Subcategories
San Diego County (2006)

Light Duty Trucks
Passenger Cars
Electricity - Commercial
Electricity - Residential
Natural Gas - Residential
Heavy Duty Trucks
Civil Aviation - Interstate
Industrial - HFC Refrigerants
Natural Gas - Commercial
Electricity - TCU

Source: Energy Policy Initiatives Center, 2008
Regional Energy Consumption

Natural Gas Consumption by Sector

San Diego County Electricity Usage

Note: 2030 is CCSE projection based on CEC 2020 forecast.
Largest Energy-Reduction Measures for San Diego Region

Projected Impacts of Energy Efficiency Measures in the San Diego Region 2010-2030 (above and beyond business as usual)

Source: California Center for Sustainable Energy, 2009
Figure EE-1 in SANDAG Regional Energy Strategy
Emission Reduction Strategies for San Diego County to Meet Hypothetical AB 32 Targets by 2020

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Source: Energy Policy Initiatives Center, 2008
Goals for Energy and Buildings

- Reduce energy use in residential and commercial buildings
- Increase use of renewable energy
- Reduce water-related energy use and GHG emissions
- Protect energy infrastructure from climate change impacts

The Sycamore Canyon Open Space Reserve and its buildings are owned by the cities of Santee and Poway, the County of San Diego, and the California Department of Fish and Game
Focus Area #3
Local Government Operations

Pacific Highlands Ranch Fire Station #47
Nobel Recreation Center and North University Community Branch Library
Goal: SANDAG and Local Governments Lead by Example

- Local governments can adopt climate plans (if they haven’t already)
- SANDAG can determine energy use baseline from its operations and set reduction targets
- SANDAG and local governments can:
  - Use cleaner energy and reduce energy use
  - Integrate climate change into plans and policies governing own operations
Resources for Local Governments

- SANDAG’s Sustainable Region Program: “Energy Roadmaps” for local governments
- ICLEI, IGR, Local Government Commission
  - Details not yet known
- State Energy Efficiency/Renewable Programs
- SANDAG’s Commute
- Peer examples from other local governments
Next Steps in Climate Strategy Development

- Revised Draft Climate Strategy
  - Energy Working Group (2/25)
  - SANDAG Board (2/26)
- Final Climate Strategy
  - Regional Planning Committee (3/5)
  - Board of Directors (3/26)

Public comments are welcome at any/all of these meetings. Comments can be emailed, faxed, or mailed to staff through February to be considered for final draft.
Next Steps in SANDAG’s Climate Change Planning

- Regional Transportation Plan Update
  - Sustainable Communities Strategy
- SANDAG Sustainable Region Program
  - Energy Roadmaps for Local Governments
  - Assess SANDAG operations
- Climate discussions with similar regional planning agencies across the state
- Regional Comprehensive Plan Update
Thank You!

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