



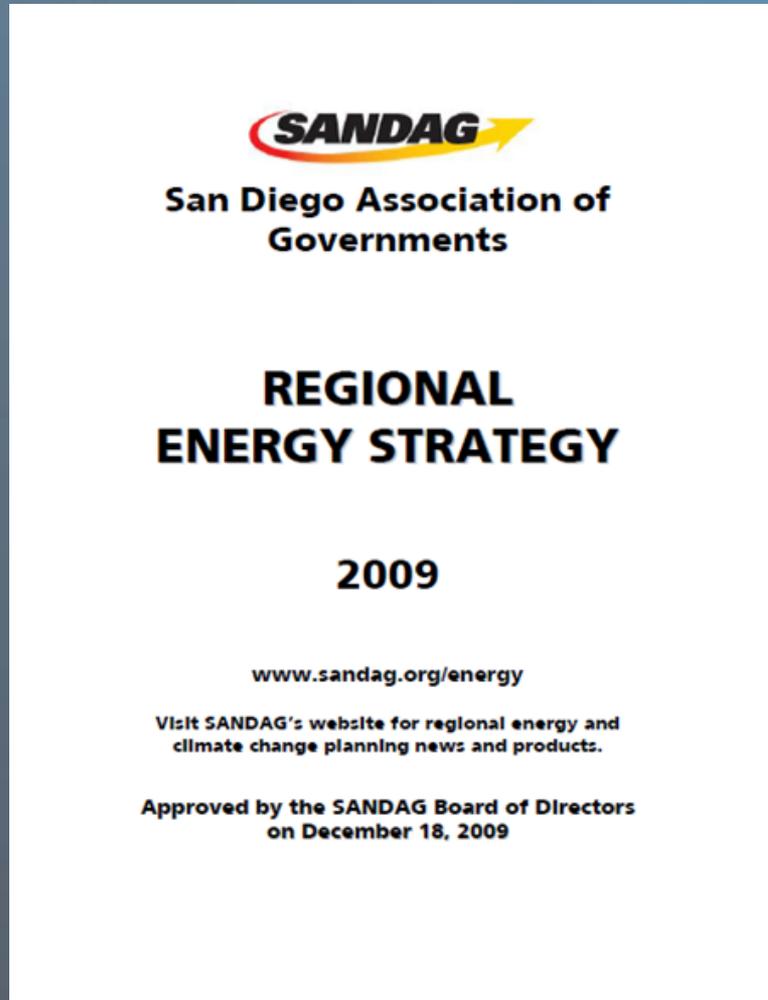
Regional Energy Strategy

City of San Diego
Sustainable Energy Advisory Board

July 8, 2014



Regional Energy Strategy (RES)



- Energy policy guide for the region
- Used by:
 - SANDAG
 - Member agencies
 - Regional stakeholders
- Last updated in 2009

Regional Energy Strategy Goals

1. Energy efficiency and conservation
2. Renewable energy
3. Distributed generation
4. Energy and water
5. Peak demand
6. Smart energy
7. Natural gas power plants
8. Transportation fuels
9. Land use and transportation planning
10. Energy and borders
11. Clean energy economy

San Diego Forward: The Regional Plan



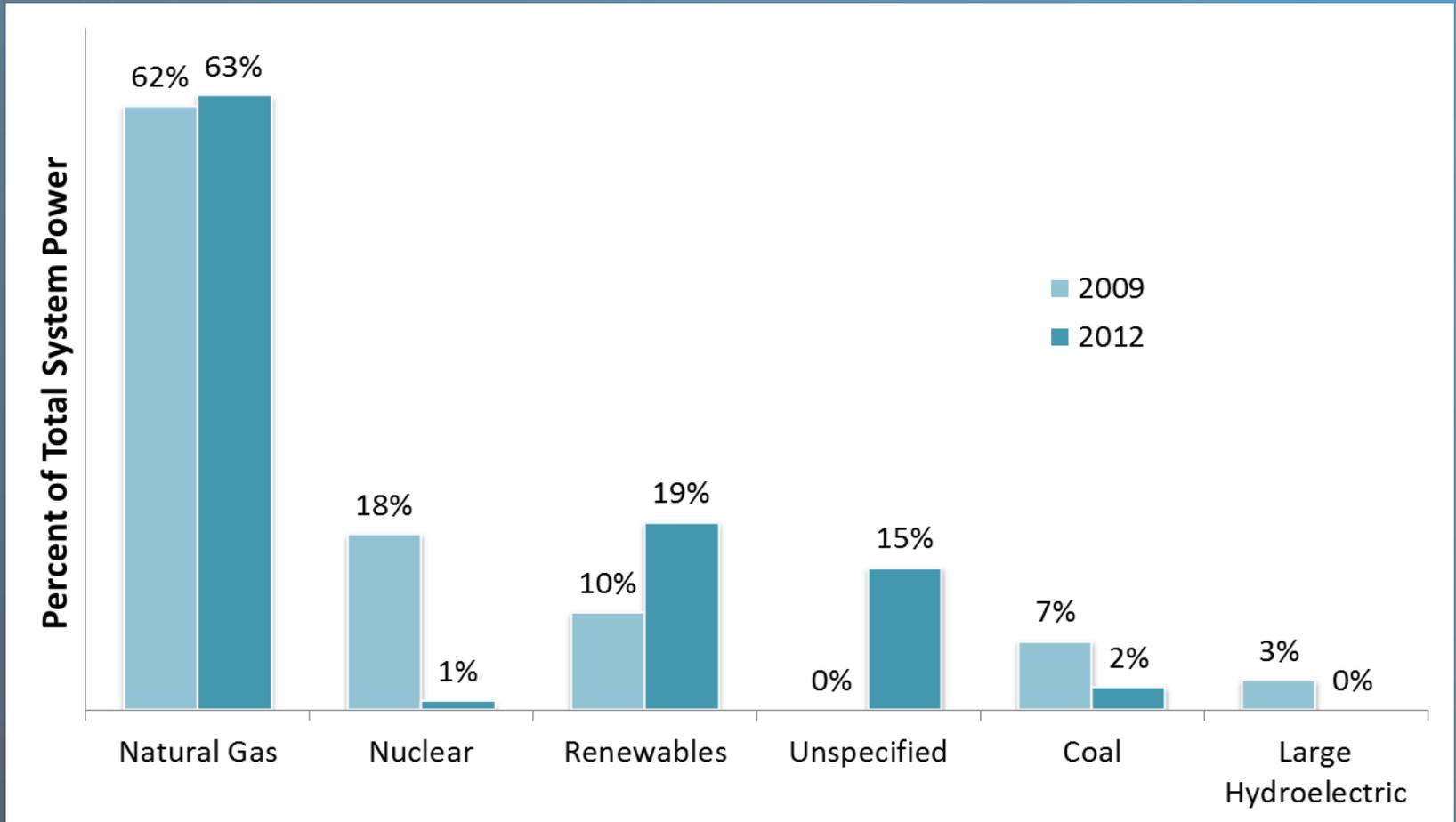
RES Technical Update Components

- Existing conditions and future projections
 - Greenhouse gas emissions inventory
- Goal summary reports
 - Progress since 2009
 - Data/monitoring
 - Recommendations for continued progress
- Updates to RES document
 - Reflect changes in state policies/programs

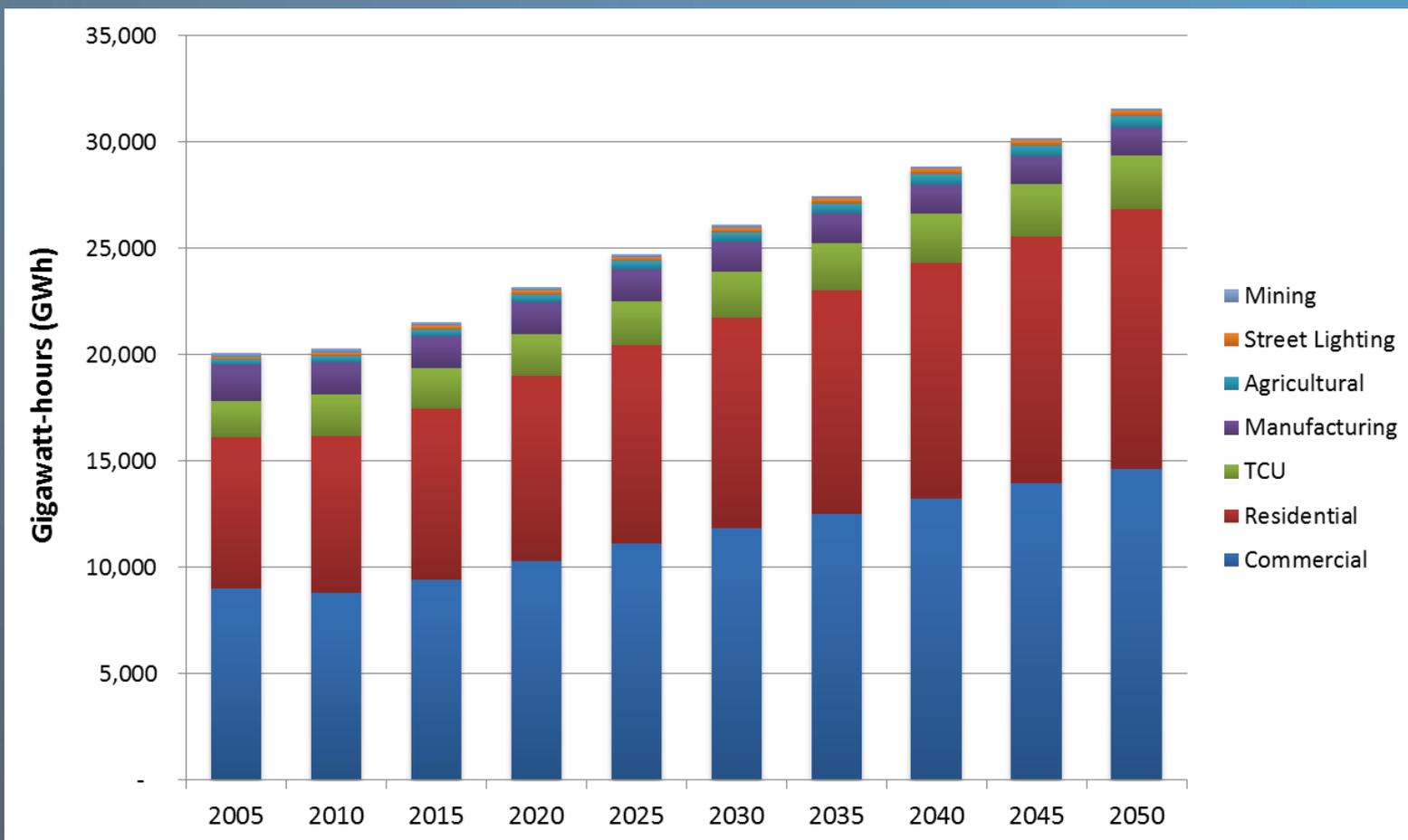
Existing Conditions and Future Projections

- 2012 Baseline Data and 2050 Projections:
 - Electricity
 - Natural Gas
 - Transportation
 - Greenhouse Gas Emissions
- Data Sources:
 - CEC 2013 Integrated Energy Policy Report (IEPR)
 - San Diego Gas & Electric
 - Energy Policy Initiatives Center

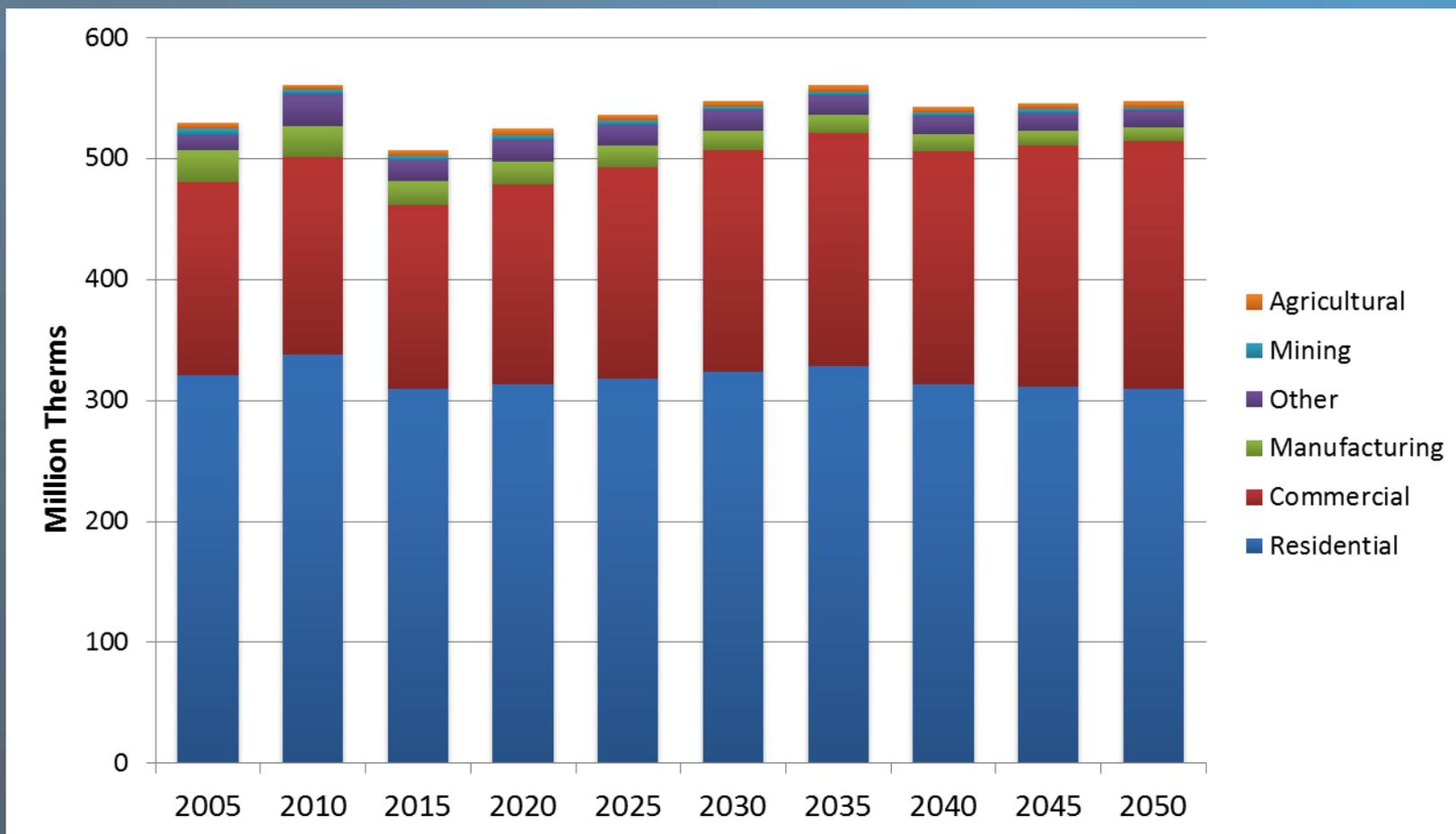
SDG&E Electricity Power Mix



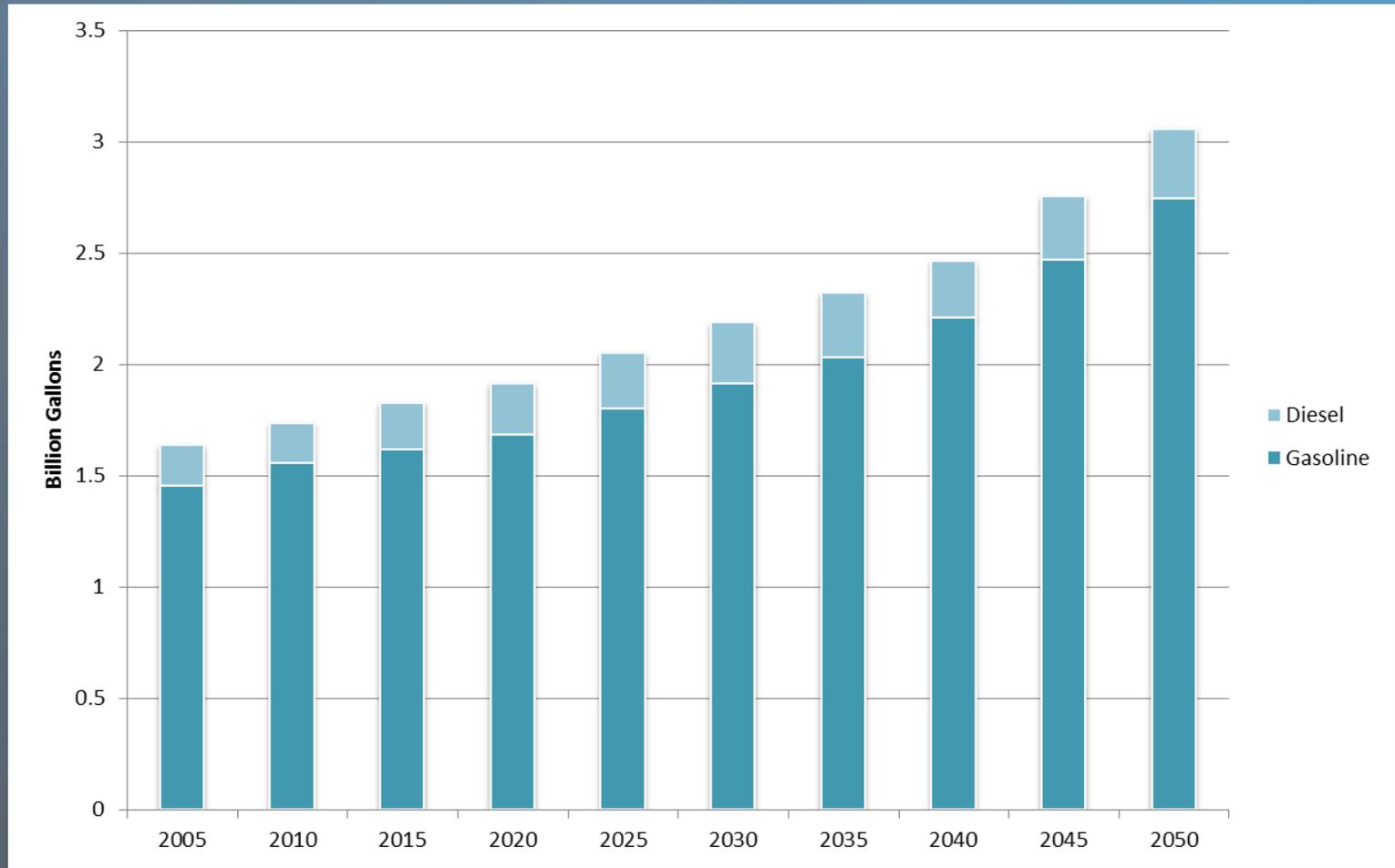
Existing and Projected Electricity Consumption, SDG&E Territory



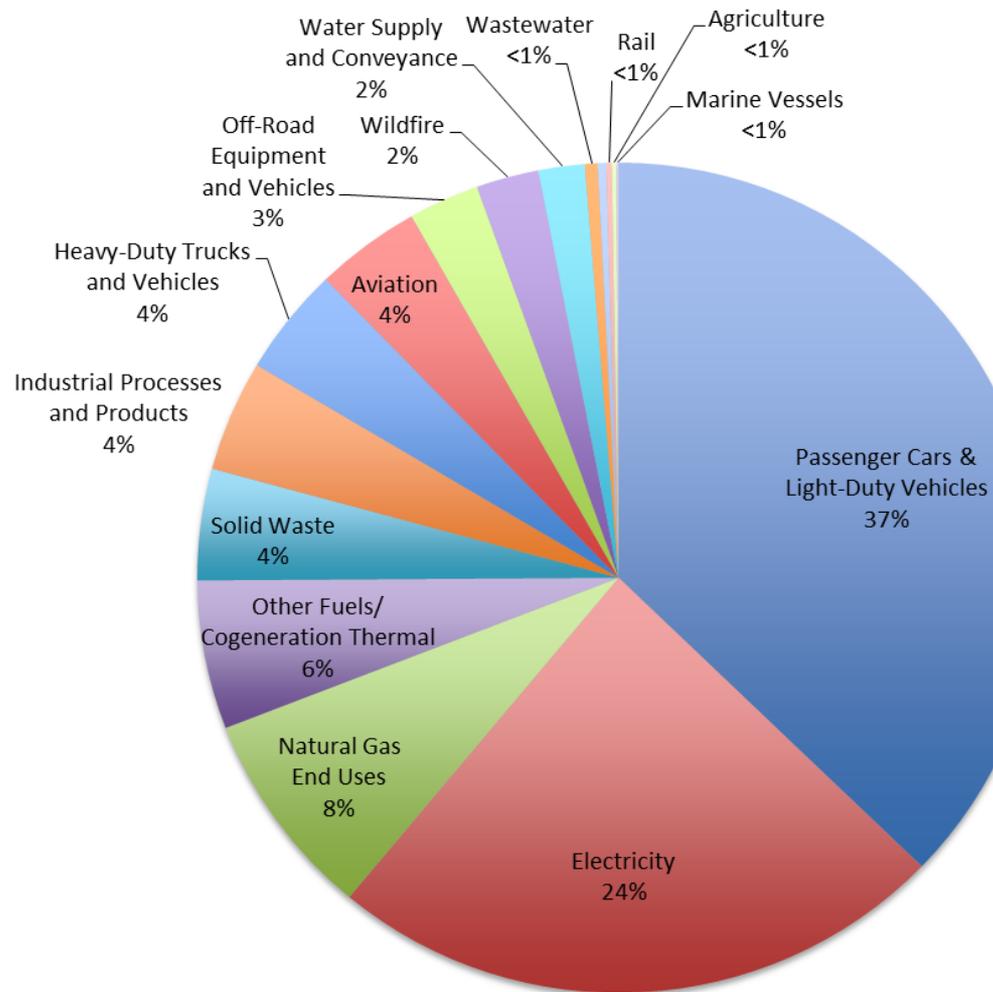
Existing and Projected Natural Gas Consumption, SDG&E Territory



Existing and Projected On-Road Fuel Consumption



2012 Regional GHG Inventory



Source: Energy Policy Initiatives Center (EPIC)

Comparison with Previous Inventories

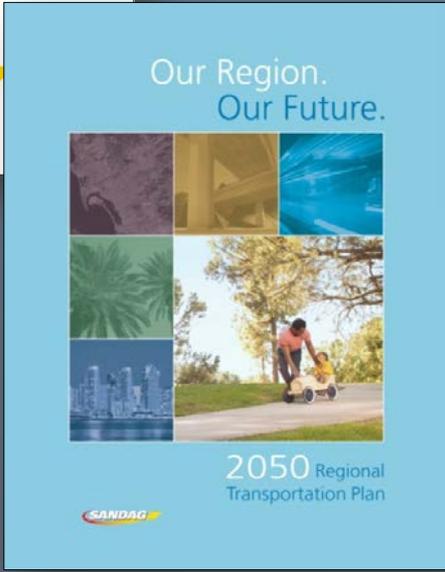
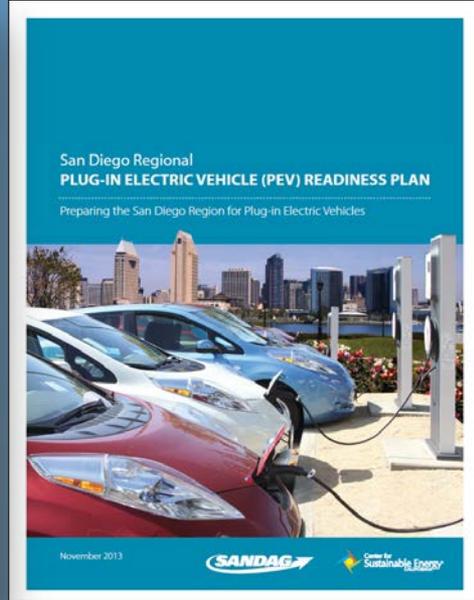
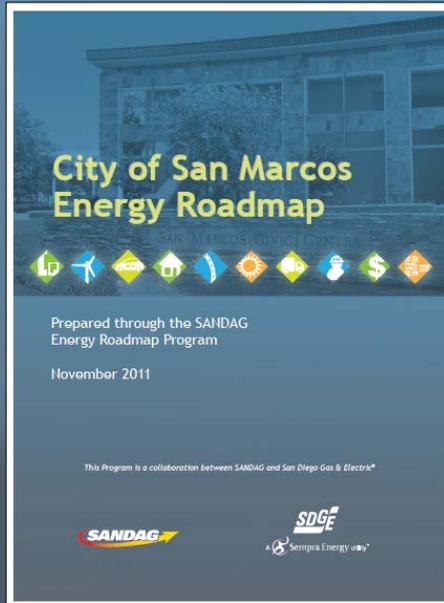
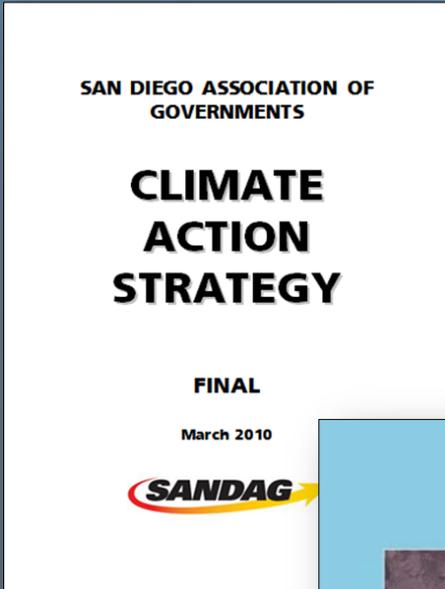


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Key Updates: *Policy Drivers*

- Focus on largest drivers for:
 - Clean energy supplies
 - Energy efficiency
 - GHG reductions
- 2013 Scoping Plan Update
- 2013 Integrated Energy Policy Report
- CA Long-Term Energy Efficiency Strategic Plan (2008, 2011)
- Prop 39 and Cap & Trade funding

Key Updates: SANDAG Efforts



Key Updates: *Regional Achievements*

energy
upgradeTM
CALIFORNIA

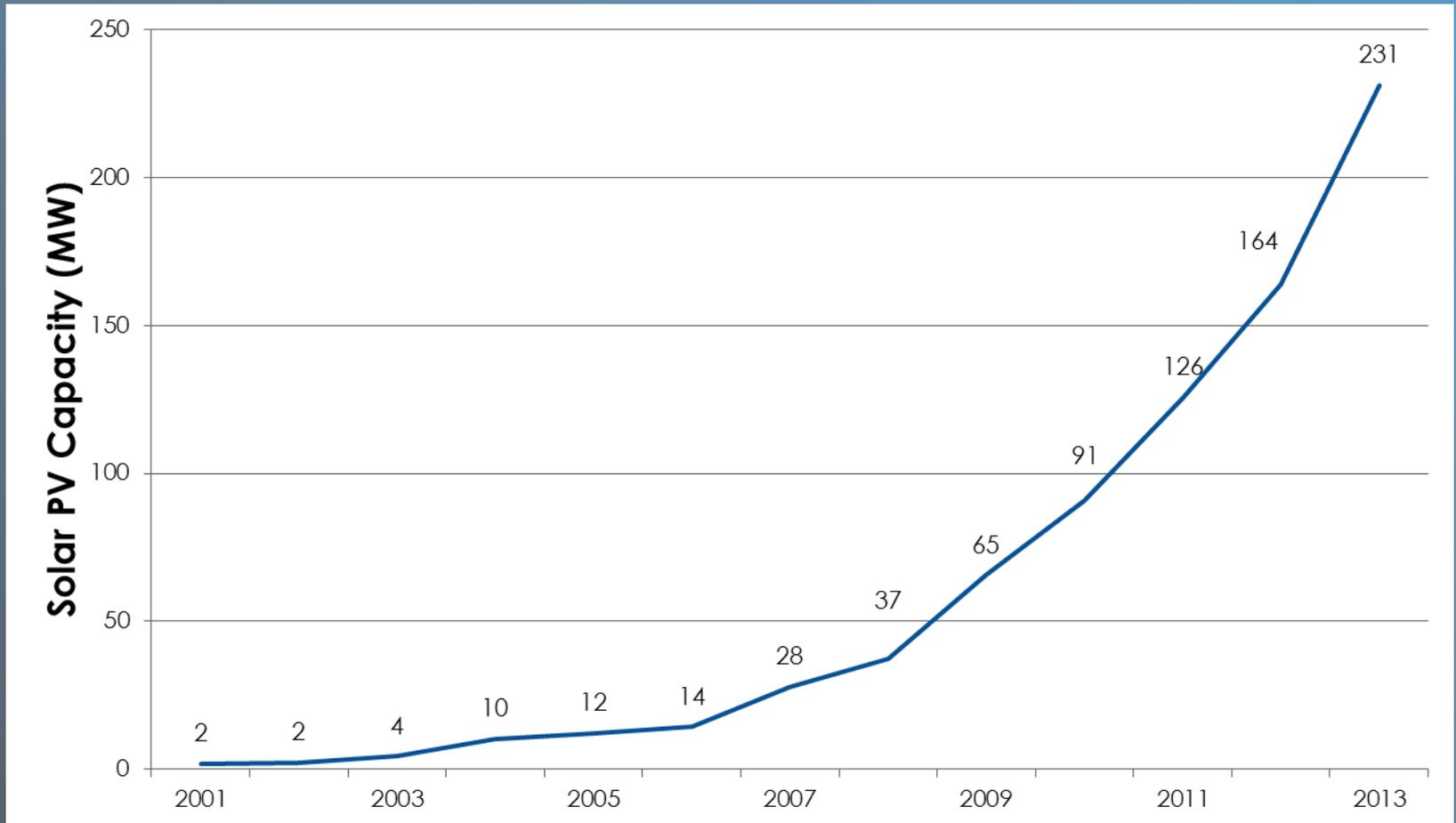


Energy Efficiency and Conservation

- SDG&E Local Government Partnerships
- Building Upgrade Programs
 - ARRA funds
 - Energy Upgrade California
- Financing Programs
 - Property Assessed Clean Energy (PACE)
 - On-Bill Financing



Distributed Generation



Energy and Water

- Collaborative SDG&E and SDCWA activities:
 - High-efficiency clothes washer rebates (100,000+ residential and 9,100+ commercial)
 - Energy efficiency assessments for water agencies (103 facilities)
 - Showerhead distributions (500,000+)
 - Pre-rinse spray valve installations at 300+ restaurants

Peak Demand

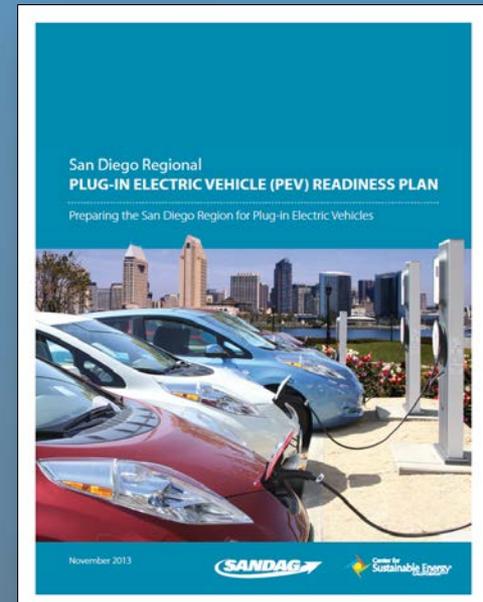
- SDG&E Demand Response Programs
 - Reduce Your Use, Summer Saver, Critical Peak Pricing
- Time-of-Use Rates for EV Charging
- AB 2514 (2010) Energy Storage Targets
 - SDG&E storage targets (MW), by 2020:

Transmission	80
Distribution	55
Customer	30
TOTAL	165

Transportation Fuels

San Diego Region's Electric Vehicle Landscape

Plug-In Electric Vehicles (PEV)	Rebates Issued	Rebate Funding
Zero Emission Vehicles (battery electric)	3,761	\$10,207,994
Plug-in Hybrid Electric Vehicles	1,962	\$2,939,817
TOTAL	5,723	\$13,147,811
PEV Chargers	Home/Fleet	Public Use
Level 2 Chargers	975	610
DC Fast Chargers	1	18



Land Use and Transportation Planning

- SANDAG Sustainable Communities Strategy
- Climate Action Planning
 - 19 completed GHG inventories
 - 12 adopted/in progress Climate Action Plans
- Active Transportation
- San Diego Regional Climate Collaborative

Clean Energy Economy

- ARRA Clean Energy Workforce Training
- CleanTECH San Diego Cluster Database
- CleanTECH-SANDAG Economic Studies

Clean Tech Sector	Direct Jobs	Direct Wages	Direct and Indirect Economic Activity
Algal Biofuels	466	\$41.1 million	\$80.9 million
Clean Transportation	1,050	\$92.6 million	\$311.3 million
Clean Energy Storage	561	\$56.3 million	\$133.9 million
Energy Efficiency	1,013	\$89.6 million	\$299.8 million
Smart Grid	460	\$37.2 million	\$91.5 million
Solar Energy Generation	1,133	\$143.2 million	\$517.6 million



Questions?

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SANDAG

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