

Energy Code Messaging – Effectively Targeting Stakeholder Priorities

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CITY OF SAN ANTONIO
OFFICE OF SUSTAINABILITY

Office of Sustainability

Energy Management Responsibilities

Municipal Facility
Retrofits

Energy Reporting
Measurement &
Verification

Municipal Energy
Design &
Standards

City-Wide Energy
Codes and Policies

COSA's Building Portfolio



13,900,000 sqft of building area



Projects Accomplished & Underway

Retro-Commissioning

- Low-\$ system tune-ups
- 5 buildings, 3M sqft
- \$316K annual savings



Interior Lighting

- Fluor., LED, control
- 135 sites
- \$1.5M annual savings



Exterior Lighting

- Fluor., LED
- 108 sites
- \$155 annual savings



Chillers & DX Units

- Eff. equip. w/ control
- 40 buildings
- \$154K annual savings



Immed.

1yr

3yr

4yr

5yr

9yr

25yr



PC Energy Mgmnt

- Software solution
- 6,500 devices
- \$200K annual savings



Pool Pump Control

- Stop over-circulating
- 21 Public Pools
- \$64K annual savings



Window Film

- Reduce solar heat gain
- 39 buildings, 184Ksqft
- \$289K annual savings

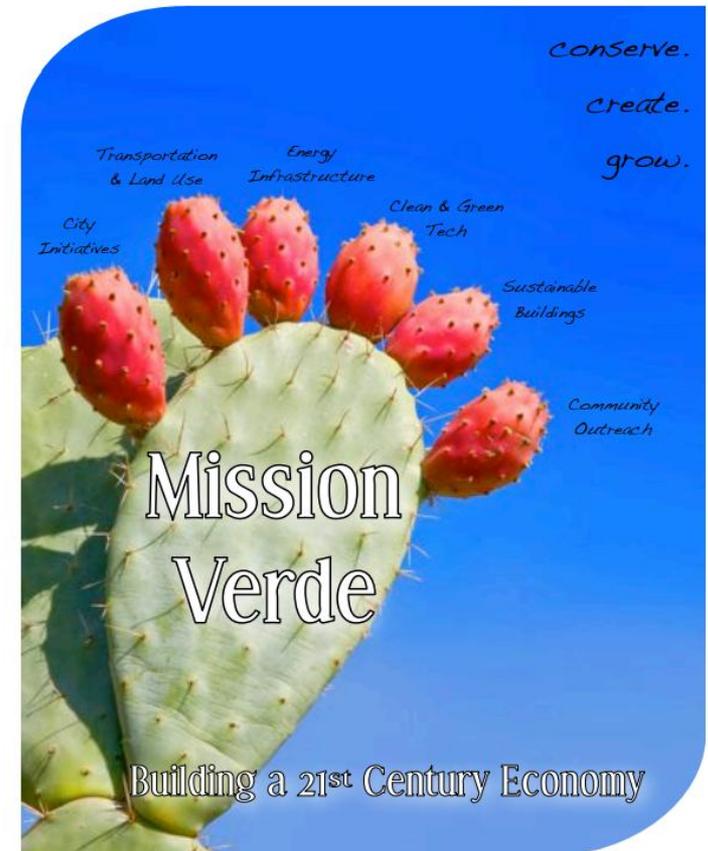


LED Street Lighting

- Replace high wattage fixt.
- 25,000 fixtures
- \$1.4M annual savings

Background on Code Adoption

- In 2008 OEP formed (Now OS)
- In 2009 Mayor Phil Hardberger led formation of the Mission Verde Plan
- Took an approach of fostering job creation and economic growth
- Tech boom was seen as a missed opportunity for our city: “21st Century Economy”



Background on Code Adoption

- SA Under 2000/2001 IECC
- Updating code was central to immediate and long-term goals
- Messaging from Architecture 2030 and local/national code experts
- Mayor-drive initiative: Adoption was almost certain

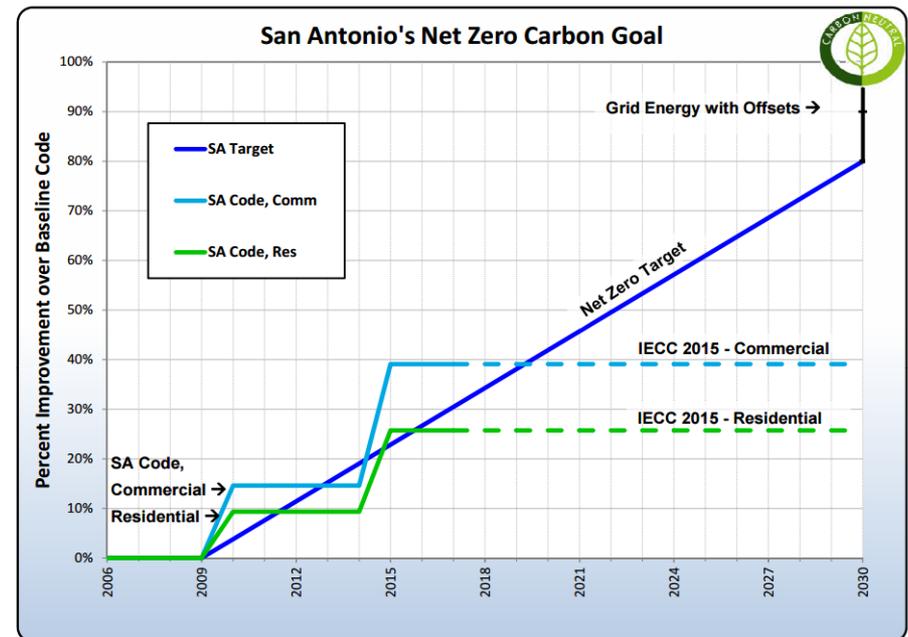
City of San Antonio, Texas | 5
Mission Verde: Building a 21st Century Economy |

Mission Verde Initiatives, Overview

	Initiative	Description	Near Term Action Steps
Energy Infrastructure	#1: Build a 21 st Century urban energy infrastructure in San Antonio with distributive energy	Generate energy from renewable energy sources such as solar, wind, biomass and geothermal, originated from buildings and homes, stored until needed and connected with a multi-directional grid	<input checked="" type="checkbox"/> Dec 08 <input type="checkbox"/> Feb 09 <input type="checkbox"/> Mar 09 <input type="checkbox"/> Apr 09 <input type="checkbox"/> Apr 09 Conference call with lead consultant Hire Jeremy Rifkin & his team Bring consultant team to SA Receive plan from team Begin implementation
	#2: Create a multi-tech venture capital fund in San Antonio	Build a regional fund headquartered in San Antonio, capitalized at \$100 million and managed by Brooke Private Equity Advisors	<input checked="" type="checkbox"/> Nov 08 <input checked="" type="checkbox"/> Dec 08 <input type="checkbox"/> May 09 <input type="checkbox"/> Fall 09 Feasibility study Commission Market Assessment Complete Market Assess. report Capitalization
Clean and Green Technology	#3: Create a Green Jobs Program in San Antonio	Collaborate with employers and educators to match training for existing and emerging green and clean jobs with employer needs.	<input checked="" type="checkbox"/> Nov 08 <input type="checkbox"/> Feb 09 <input type="checkbox"/> Apr 09 Assessment of needs Hire consultant Implement program
	#4: Use the City's economic development strategies to foster development of a 21 st Century sustainable economy	Use tax abatements, cluster development strategies, business attraction and retention programs focused on clean and green tech companies.	<input checked="" type="checkbox"/> Nov 08 <input type="checkbox"/> Ongoing Target the clean/green tech industry Pursue clean/green tech businesses
Sustainable Buildings	#5: Adopt a green, high-performance building code for new residential and commercial construction	Move in phases toward building codes that produce zero carbon by 2030	<input checked="" type="checkbox"/> Jul 08 <input checked="" type="checkbox"/> Jan 09 <input type="checkbox"/> Mar 09 <input type="checkbox"/> Jan 10 Task Force Recommend new code Adopt Recommendations New Code effective
Sustainable Buildings	#6: Build a Green Retrofit Program for existing homes and buildings	Expand free weatherization program combined with retrofit program paid for by a "Pay As You Save"® surcharge	<input checked="" type="checkbox"/> Jan 09 <input type="checkbox"/> Mar 09 <input type="checkbox"/> Spring 09 Green Retrofit report completed Design & implement pilot program Consolidate/expand programs

Background on Code Adoption

- Resulted in a Sustainable Buildings Ordinance
- Adoption of IECC 2009/ASHRAE 90.1 2007 - 1st city in Texas to do so
- Codified 2030 net zero carbon goal and called for creation of SSBC
- Elevated energy code adoption from a staff-level function

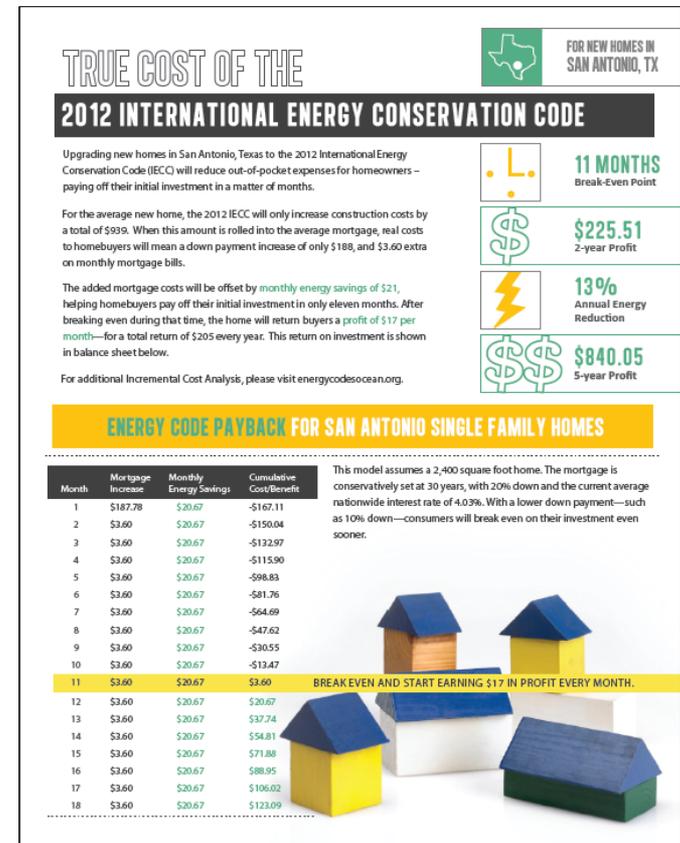


Background on Code Adoption

- In 2012 all I-Codes were adopted except for IECC and Chapter 11 of IRC
- Recent recession cited as main reason
- SSBC reconvened and met from December 2012 – December 2013
- Focus was scattered and no conclusion was reached regarding code adoption
- No strong support from elected or administrative leadership, until...

Background on Code Adoption

- October 2013 CCR calling for Comp. Air Quality Policy Review
- SA only of 10 largest still within Attainment Status (but just barely)
- No significant movement until 2013 CCR calling for 2012 IECC adoption
 - BCAP Summary Cited →
- DSD recommended waiting to evaluate 2015 IECC
- Changed narrative from “if” to “when” energy codes would be adopted



Background on Code Adoption

- Review overseen by a 17 member building code review board (BRFCBAAB) was created to review code iterations
- Technical review, unlike SSBC
- Energy subcommittee voted for full 2015 IECC adoption with strengthening amendments
- City Council voted to adopt 2015 IECC with amendments, including 59 ERI
- Energy code expected to go into effect July 2015

Broader Significance of Messaging

- HB 1736/SB 929
 - Has the potential to take away local code making decisions
 - Could delay code adoption (6 years between code cycles)
 - Would create a State-level review board (would take some review capacity away from the experts – ESL)
- Energy codes are likely to become an increasingly political issue
- Clear and targeted messaging especially important now

Potential Messaging Strategy

- Turn the economic impact argument on its head – Consider the costs of not advancing codes:
 - Lack of grid reserve margins
 - Cost and time impacts of building new generating capacity
 - Higher electricity costs
 - Deter businesses from moving here
 - Don't forget water scarcity (energy/water nexus)

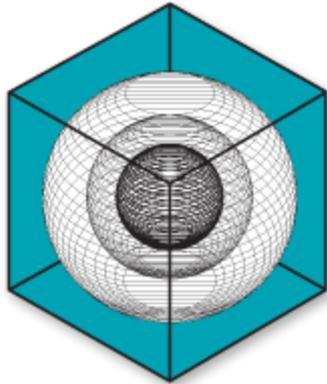
Challenges

- I. Misinformation – both in support and in opposition**
- II. Fragmented efforts**
- III. Lack of big picture perspective**
- IV. Unequal access among different interest groups**

Takeaways

- **Identify champion(s) and their priorities/concerns**
- **Link benefits of energy codes to a solution**
- **Draw from available resources (PNNL, DOE, BCAP) – these were invaluable**
- **Engage key decision makers. Local engagement > outside engagement**
- **See the big picture – all of these items tie together**

Many Thanks To Our Partners



CITY OF SAN ANTONIO
DEVELOPMENT SERVICES
DEPARTMENT



BCAP



U.S. DEPARTMENT OF
ENERGY



CENTRAL TEXAS - BALCONES



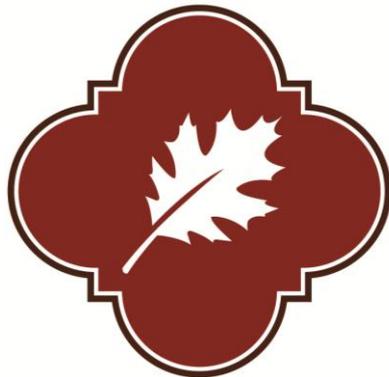
Thank you!

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