

Policy Initiatives to Increase Energy Efficiency

Martha Brook & Bill Knox
California Energy Commission

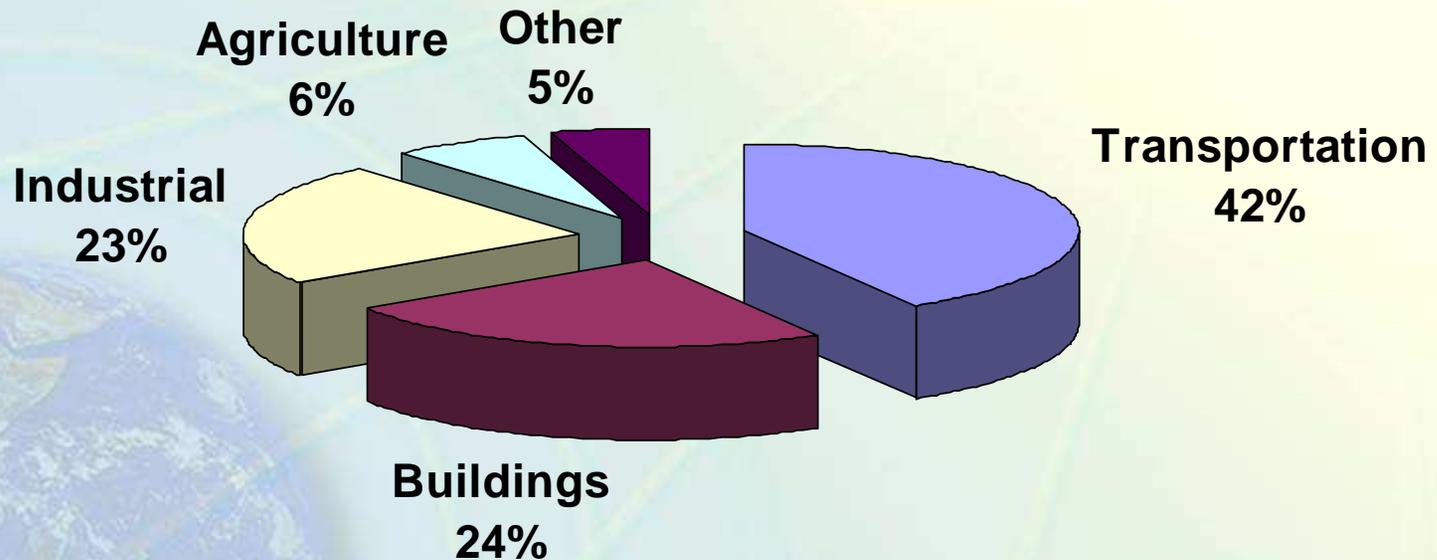


IEPR Recommendations

- Adopt EE target of 100% of economic potential
- Enlist publicly owned utilities in collaborative relationship to ramp up EE
- Pursue legislation that would require cost-effective EE improvements at time of sale
- Increase efficiency levels of standards and combine with PV for zero energy buildings
- Investigate “white tags” for EE, analog to renewable energy credits

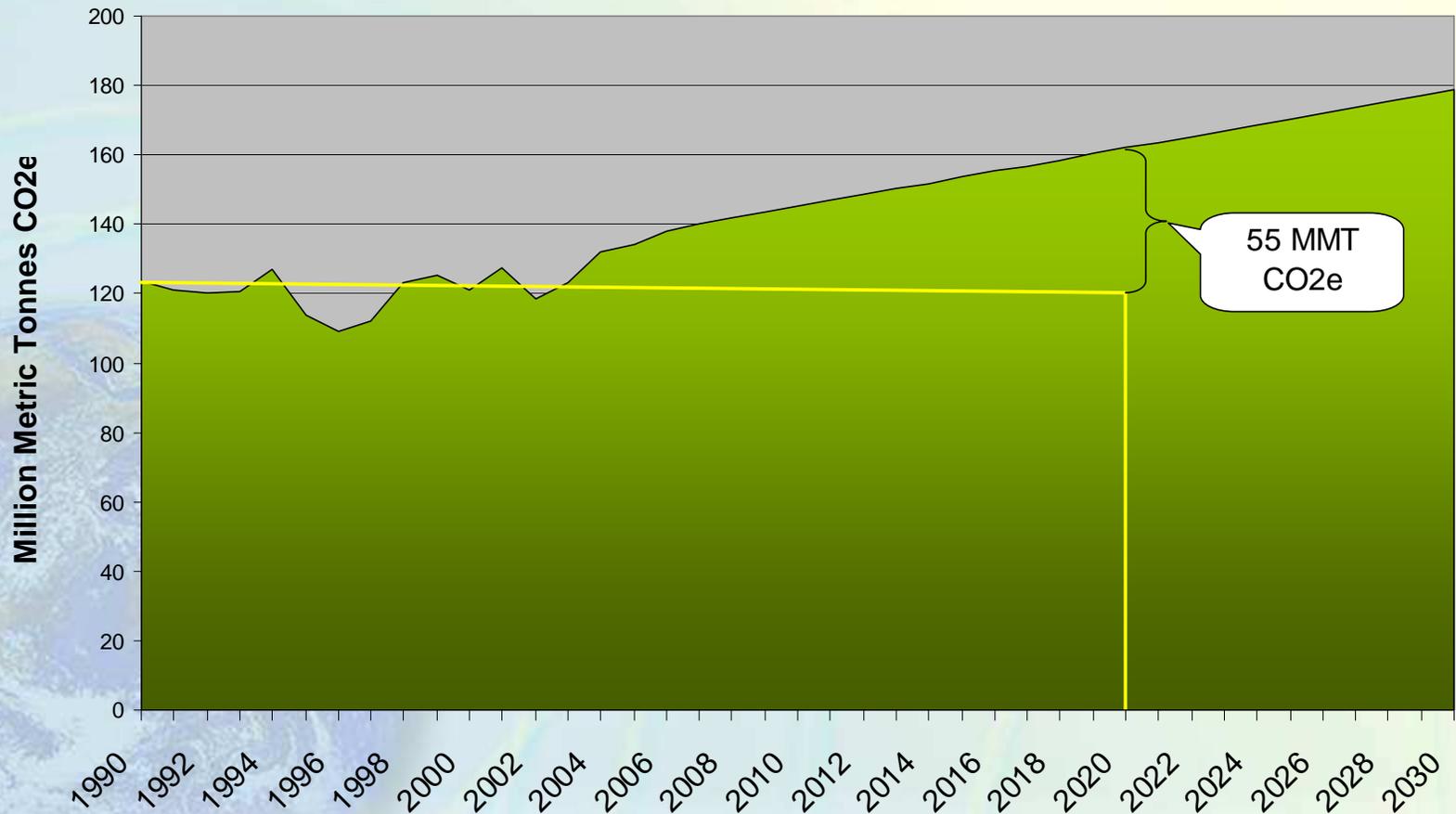
GHG Inventory for California

California GHG Emissions



GHG Inventory for California

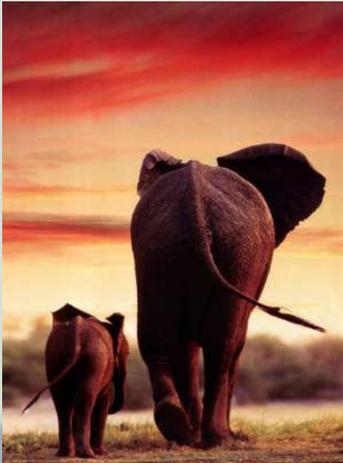
Building Greenhouse Gas Emissions
1990-2004 from the CARB GHG Emissions Inventory
future estimates based on CEC Electricity Demand Forecast





Building Energy Efficiency Standards

- Emissions forecast includes average level of future Standards improvements
- Need to accelerate Standards to change slope of forecast
- Progress to Zero Net Energy will require:
 - a new paradigm for Standards **development** & **compliance**
 - more & better collaboration with PIER, CPUC & CA utilities



Efficiency Standards: Progress to Zero Net Energy

- Quicker migration from R&D and IOU emerging technology programs to Standards
- Redefining Standards' cost effectiveness criteria
- Use of scenario analyses to understand impacts & gauge uncertainty
 - e.g. fuel costs, technology costs, demographics, market acceptance, field performance, climate change
- Expansion of scope – for both Appliance & Building Efficiency Standards

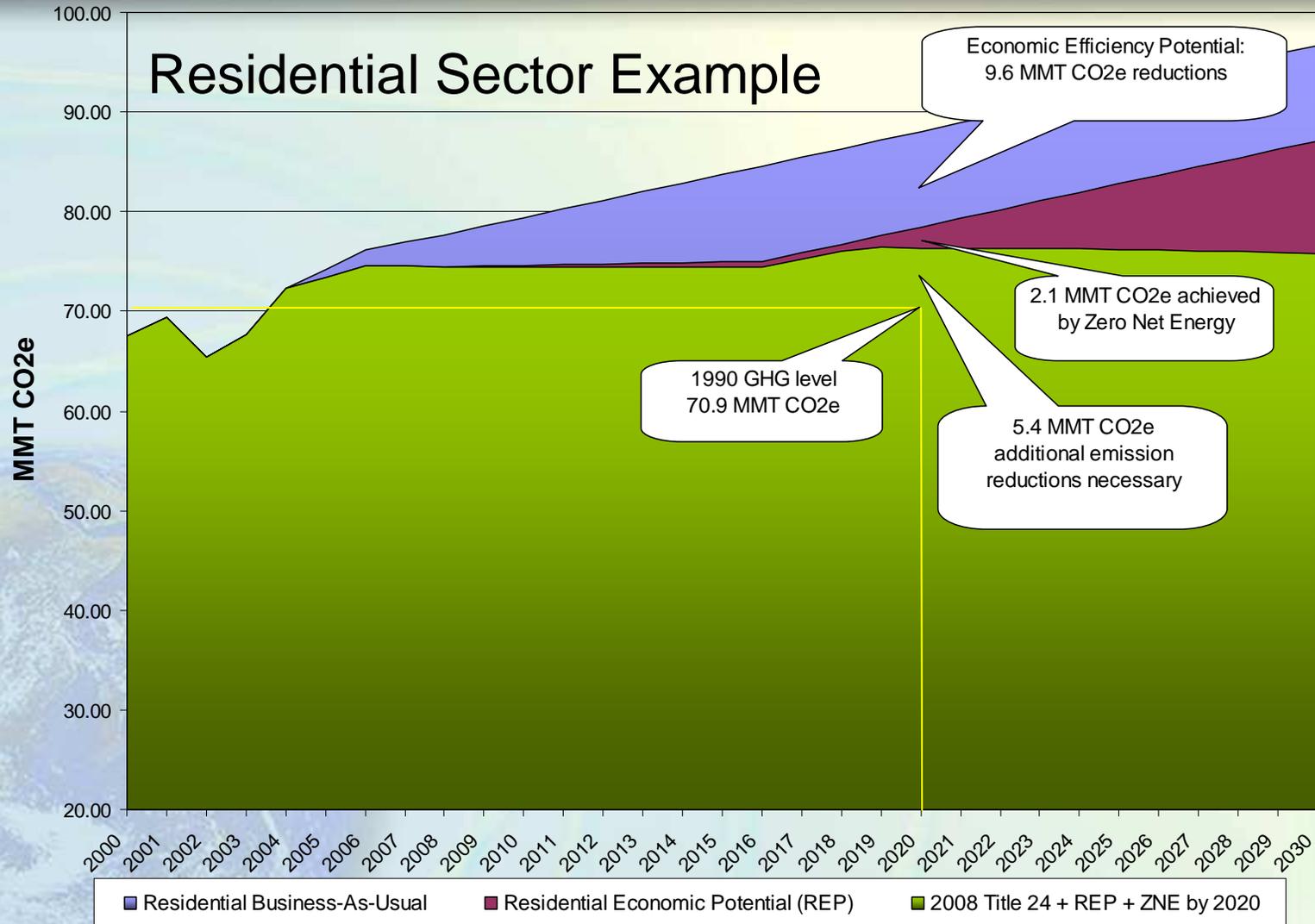


“Reach” Standard for Title 24

Voluntary Standard for more energy efficiency & on-site renewable energy

- Similar approach as mandatory Standards
 - Public process w/ stakeholder workshops
 - Energy performance budgets
 - Written in code language
- Advanced Standard will become:
 - New Construction program targets
 - Future versions of Green Building Standard
 - Energy basis of regional green building codes
- Advanced Standard will provide:
 - List of measures for migration to mandatory Standards

Achieving AB32 goals...



What about Existing Homes?



- Efficiency at Point of Sale
 - Energy Use Disclosure
 - Mandatory Improvements
- Home Energy Ratings
 - HERS Proceeding
- Education & Training
- Local Pilot Projects

Existing Commercial Buildings



- AB 1103 – Energy Use Benchmarking at time of Lease, Lend or Sale
- Create Regional Markets for Efficient Commercial Property
- More Energy Audits & Retro-Commissioning
- More Trigger Points for Renovation Efficiency Standards
- Mandatory Efficiency at time of Commercial Transactions

Energy Conservation

*“You can never
get enough of
what you don’t
really need”*

- Conservation Ethic
- Social Marketing
- Education & Outreach
- Facilitate with technology innovation & behavioral research
 - Feedback devices
 - Carbon calculators & games
- Reward Conservation Heroes

Revisiting AB32 goals...

