



Center for
Clean Air Policy

Beyond CAFE: Why How Much we Drive Matters A Lot

Steve Winkelman
Center for Clean Air Policy (CCAP)

BEYOND CAFE: Tackling Transportation in Climate Policy
EESI Briefing
January 17, 2008

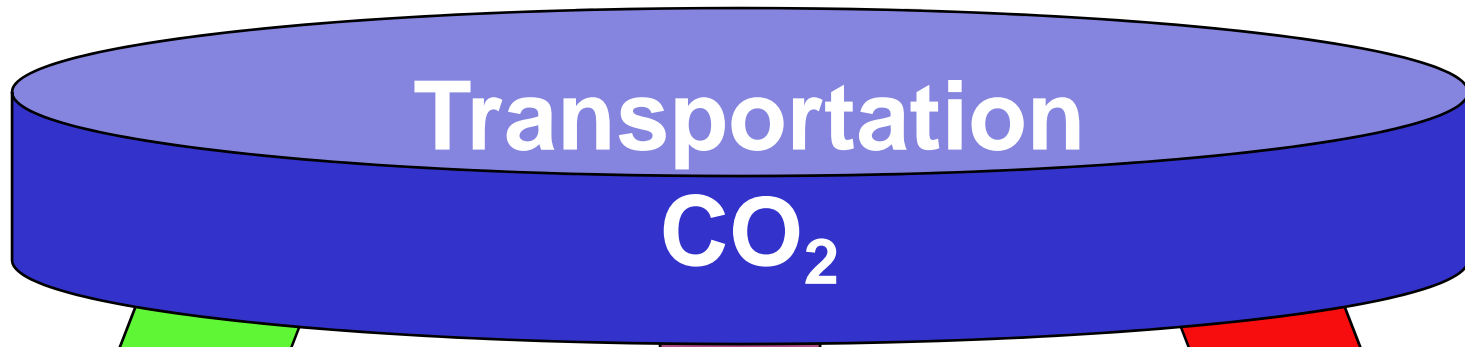
Center for Clean Air Policy

- Since 1985 CCAP has been a recognized world leader in climate and air quality policy and is the only independent, nonprofit think-tank working exclusively on those issues at the local, national & international levels.
 - » Assistance with enacting state climate plans: CA, CT, NY...
 - » Smart Growth and Climate Change
 - Linking **Green-TEA** and Climate Policy dialogue
 - *Growing Cooler*
 - CCAP Transportation Emissions Guidebook
 - » Urban Leaders Adaptation Initiative
 - » US and European Climate Policy Dialogues
 - » GHG policy projects in China, Mexico, Brazil, India
 - » Dialogue on future international climate actions



Climate Change Context

- Emerging consensus: limit warming to 2 to 3°C
 - » Amazon rainforest & Great Lakes ecosystems at risk of collapse; 100s of millions displaced from coastal areas; deglaciation of Greenland begins: sea level rise of 4-6 meters over centuries
- US must cut GHGs **60-80% below 1990 levels by 2050**
 - » 15-30% below 1990 by 2020 to keep on track
 - » Not easy, but possible
 - » Delayed action means higher risks and costs
- Transportation: 1/3 of US CO₂ emissions, growing fast
 - » Major reductions will be needed in all sectors
 - » Other sectors unable to overcompensate for transportation



Vehicles

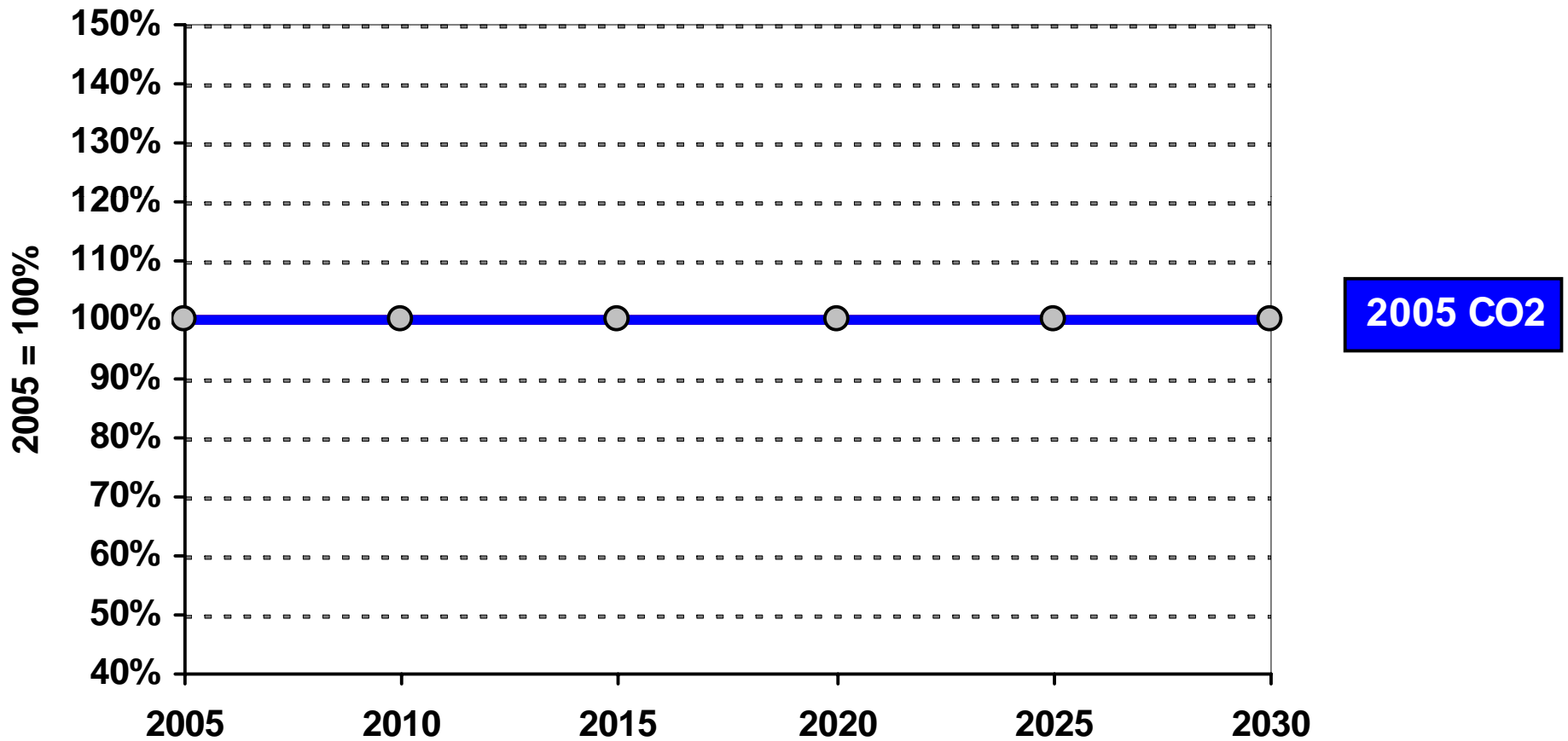
Fuels

VMT



Center for
Clean Air Policy

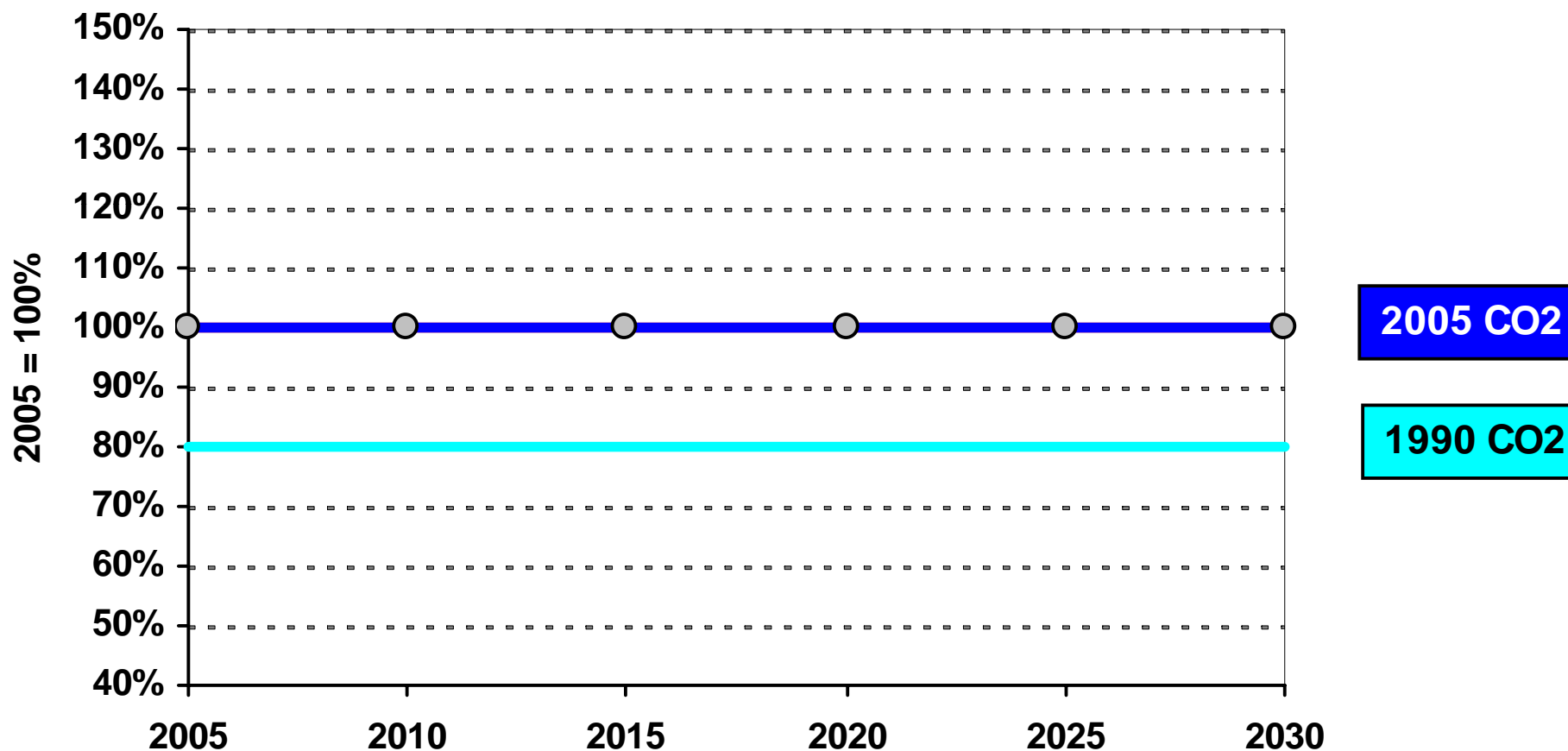
2005 Transportation CO2 Levels



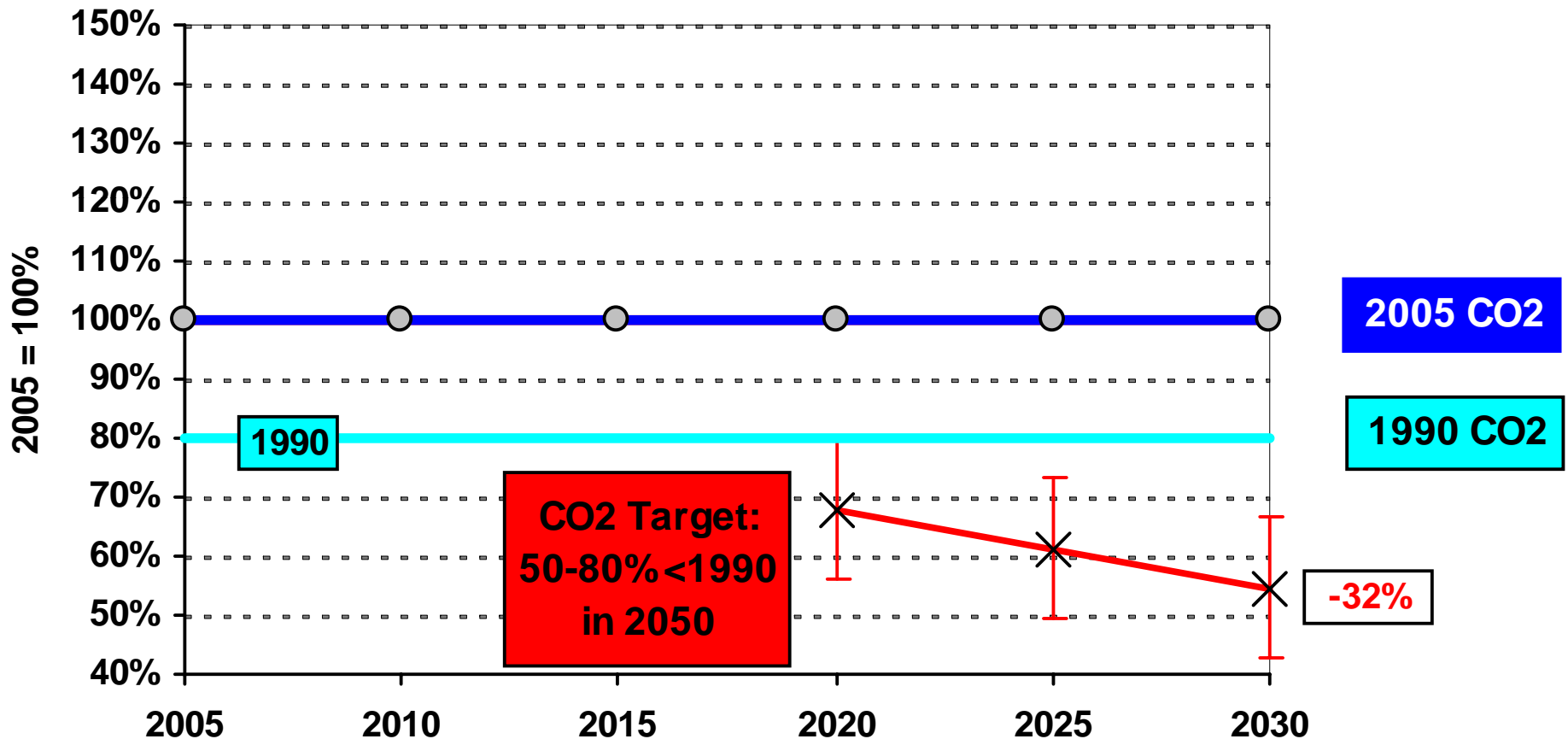
Source: S. Winkelman based on EIA AEO 2008.

2005 CO2 Levels are 25% above 1990 levels

(1990 levels are 20% < 2000 levels)

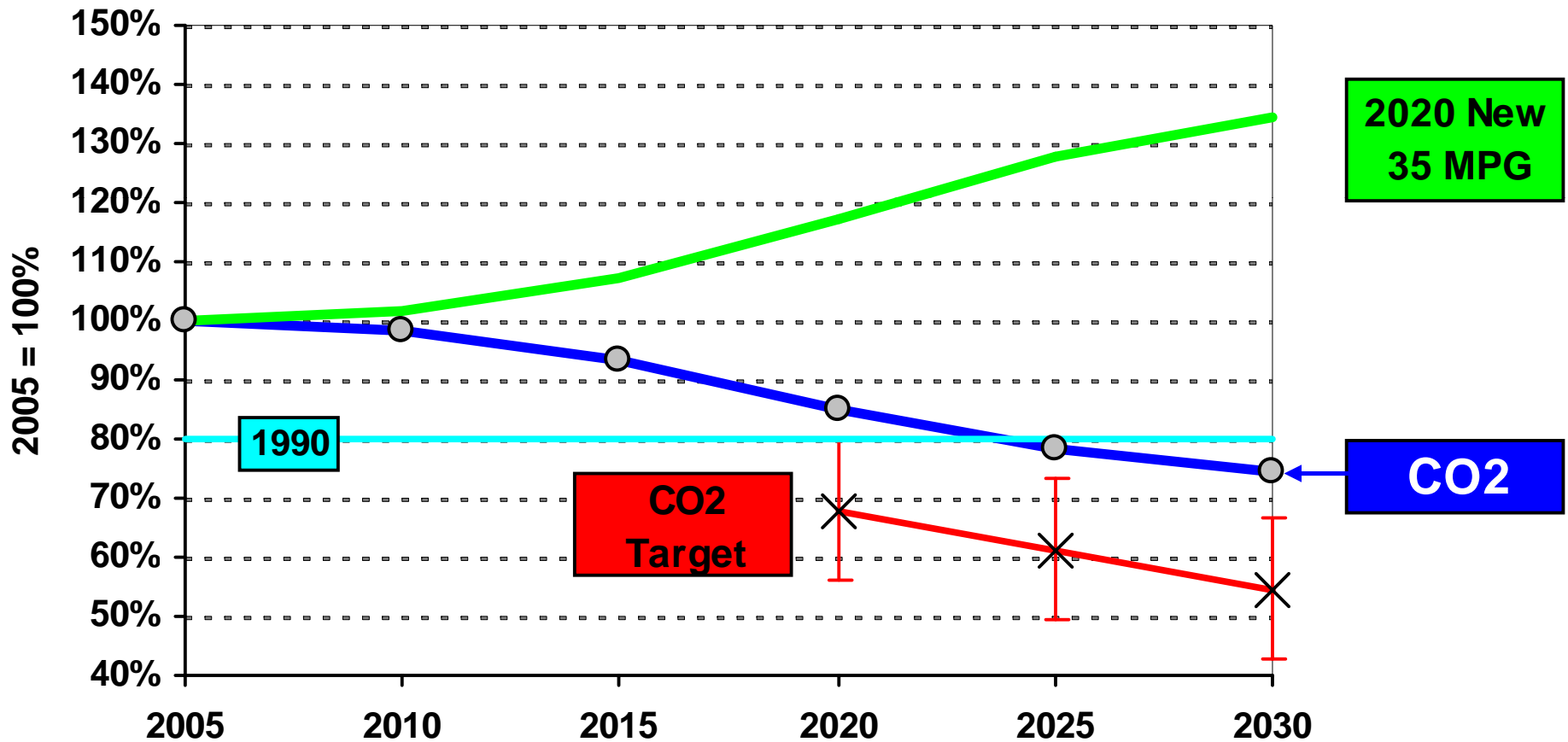


CO2 Targets: 50-80% < 1990 in 2050 ≈30% < 1990 in 2030 or "30 by 30"

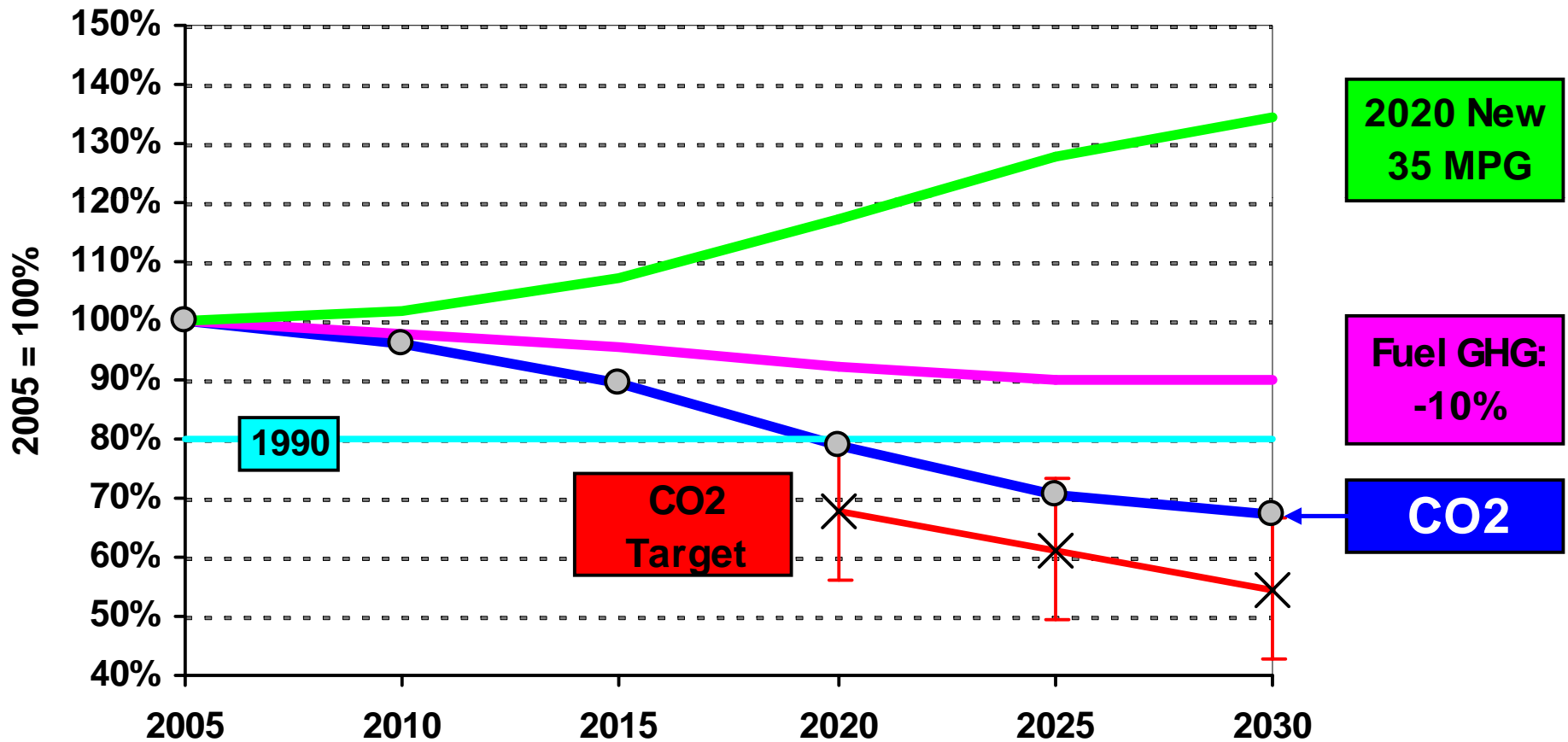


Source: S. Winkelmann based on EIA AEO 2008 and sources cited in *Growing Cooler*.

CAFE: **35 MPG** for new vehicles in 2020
→ 2030 CO2 is 7% < 1990

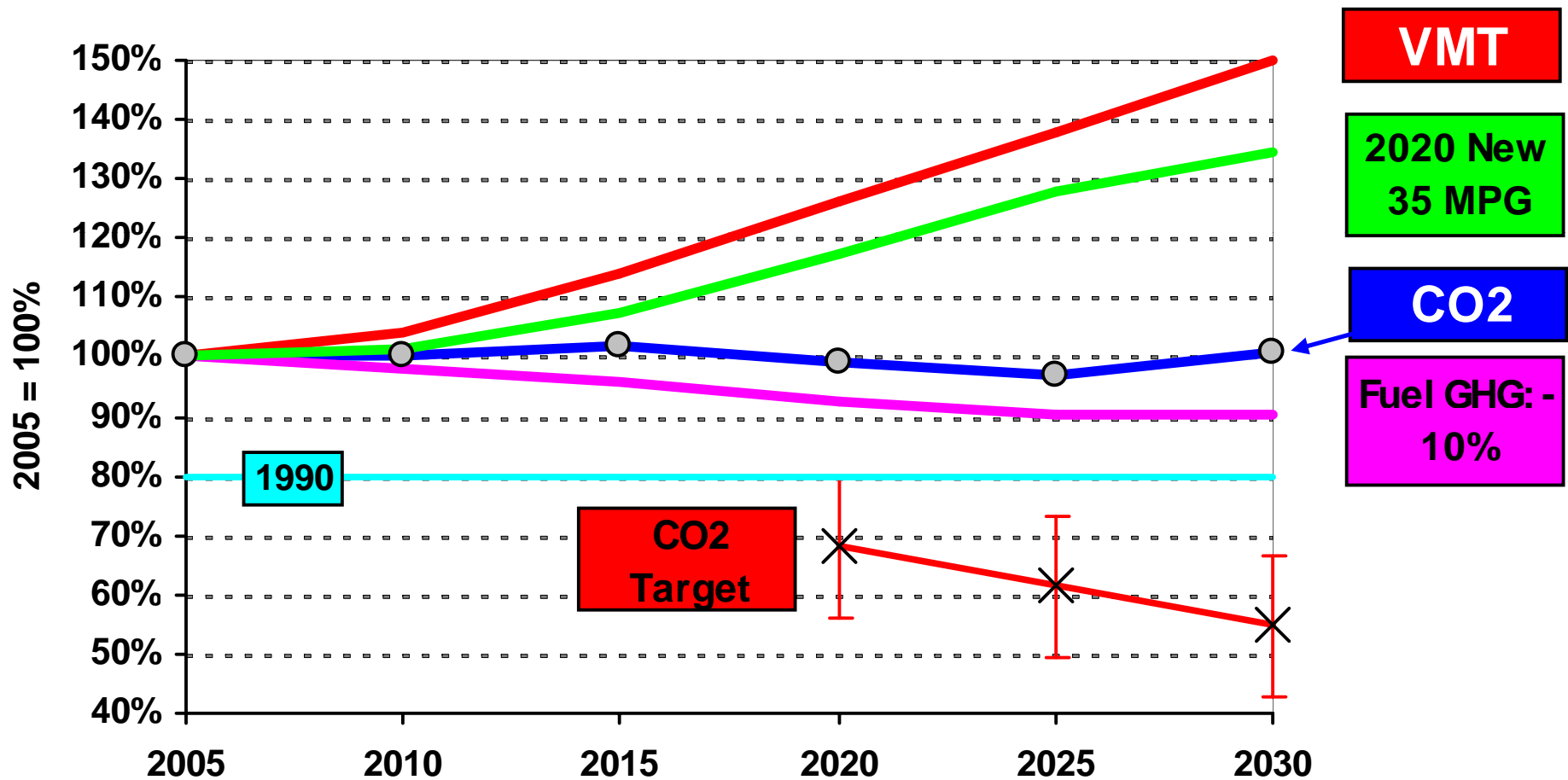


Energy Bill: CAFE & -10% Fuel GHG by 2025 → 2030 CO2 is 16% < 1990

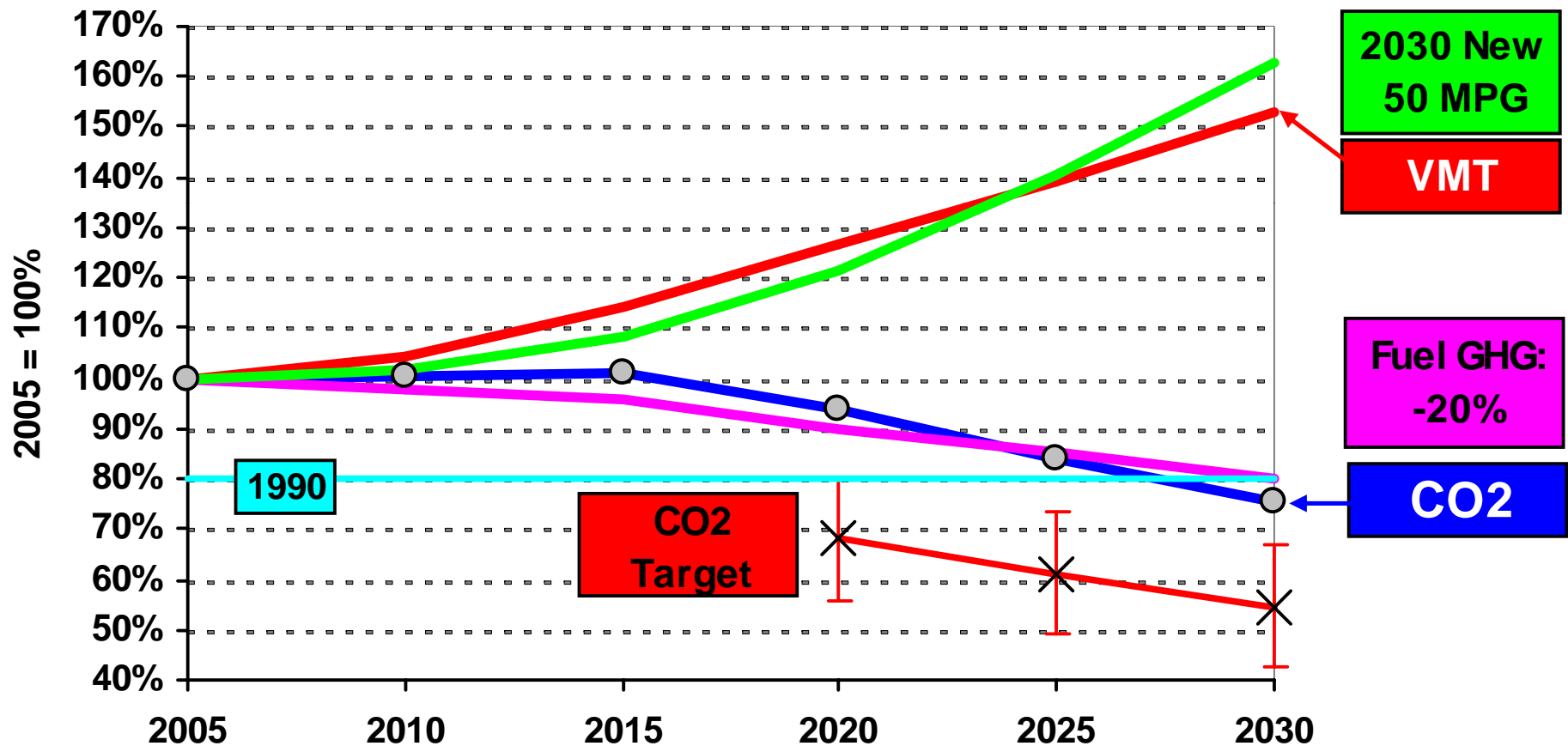


VMT Growth to Wipe Out Energy Bill Savings

Savings → 2030 CO2: 26% above 1990

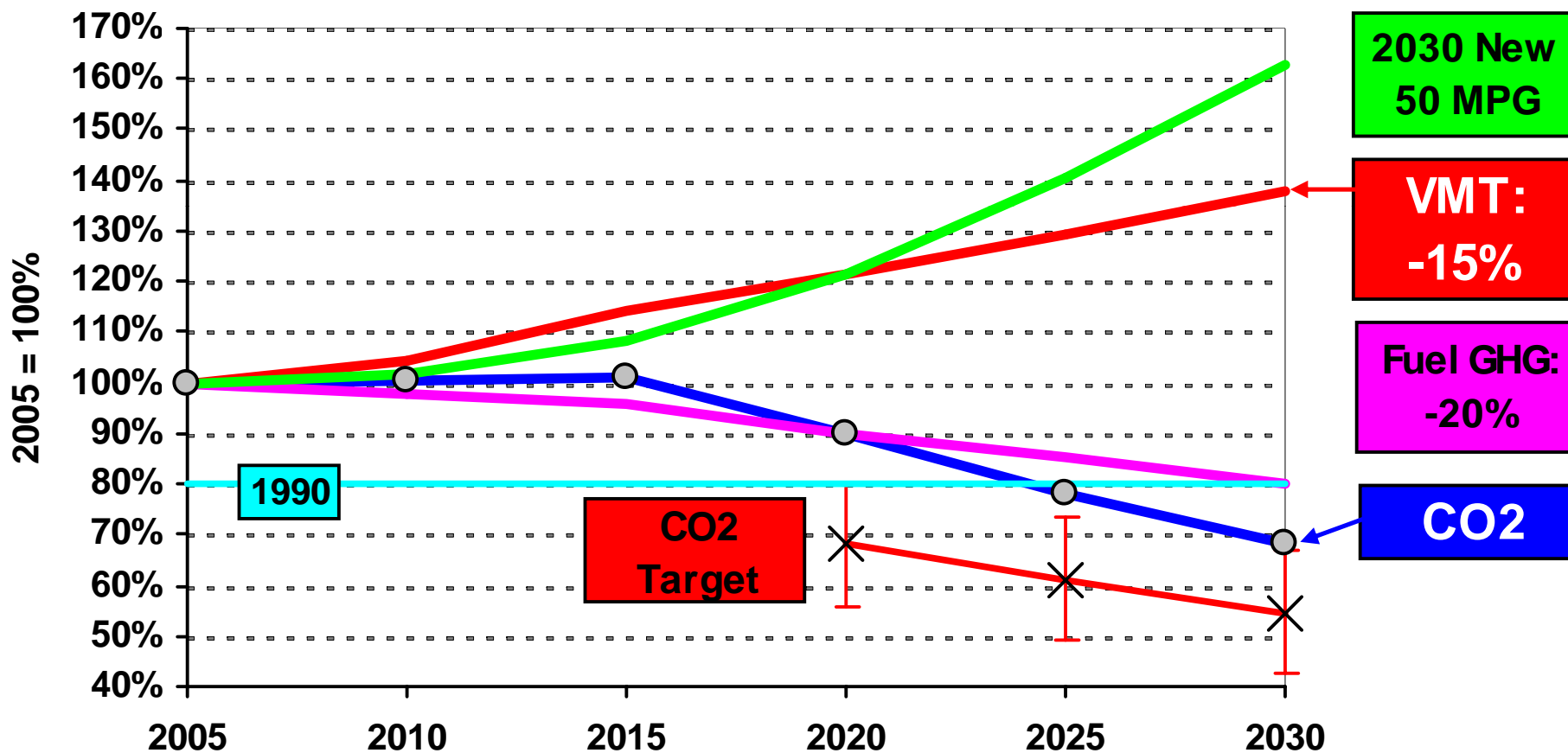


Aggressive Case: 50 mpg in 2030 & -20% Fuel GHG → CO2 6% < 1990



Source: S. Winkelmann based on EIA AEO 2008, HR6, stock model calculations and sources cited in *Growing Cooler*.

Add Smart Growth -15% VMT → 2030 CO2 is 15% below 1990



By how much can Smart Growth slow VMT growth?

- ***Growing Cooler: The Evidence on Urban Development and Climate Change (ULI)***
(Ewing, Bartholomew, Winkelman, Walters, Chen)
 - » 4% national VMT reduction by 2030 (from trend)
 - » \$260 billion fuel cost savings through 2030
 - » 80 MMTCO₂ savings: 50% of 35 MPG CAFE
 - » Just from land use -- excludes pricing, other policies
- **Cowart/NRDC: -23% VMT by 2030**
 - » Pay-as-you-drive insurance, smart growth, transit, parking measures, TDM, bike/walk
- **AASHTO goal: -117% by 2055**
 - » 4.5 trillion instead of 8 trillion VMT in 2055 (from 3T now)

National Climate Policy

- Use allowance auction revenues to support transit, smart growth, capacity building
 - » Lieberman-Warner: ≈\$1 billion per year for transit
 - » Important to include \$ for smart growth, bike/walk
 - » State, regional, local capacity building on smart growth planning: data, tools, scenario analyses
- Opportunity to set the stage for climate-friendly transportation bill

Green-TEA

A Legacy for the Planet?

- Business as usual policy will increase VMT
 - » Funding formulas *reward* VMT, fuel use, lane miles
- **Will the next transportation bill make the climate problem better or worse?**
 - » Policy choice: build upon GHG savings from Energy Bill or cancel them out?
- Federal government must be accountable for how the next \$250-300 billion is spent
 - » Nested responsibilities: Federal, state, regional, local
- Contribute to national GHG reduction targets
 - » E.g., 30 by 30: 30% below 1990 levels by 2030

Green-TEA

Key Principles

- **Tie funding to GHG performance**
 - » Rework apportionment formulae to reward GHG savings and increase transportation choices for all communities.
 - » Same match, requirements for transit and road
- **Increased planning support, state/local capacity bldg**
- **Set State and/or MPO VMT/GHG Targets**
 - » Consistent, in aggregate, with national GHG goals
 - » Reflect existing conditions and growth projections
 - » CCAP technical/policy workshop in April
- **Require alternative transportation and land use scenario analyses for transportation programs and long range plans**

1 km walk



+



Sidewalks...

...are as
sexy as
hybrids!

=



Questions? Comments?

Thank You!

For more information:

Steve Winkelman

Director, Transportation & Adaptation Programs

Center for Clean Air Policy

Transportation: www.ccap.org/transp.htm

Adaptation: www.ccap.org/domestic/ULAI.htm

swinkelman@ccap.org

