

UCSB Core Energy GHG Reduction Goals

Includes all energy used by State
funded buildings at UCSB



Goals

- Reduce GHG Emissions to Year 2000 Levels by 2010
- Reduce GHG Emissions to Year 1990 Levels by 2020
- Goals Satisfy First Part of Executive Order S-3-05
 - Excludes 80% Below 1990 Levels by 2050 for now

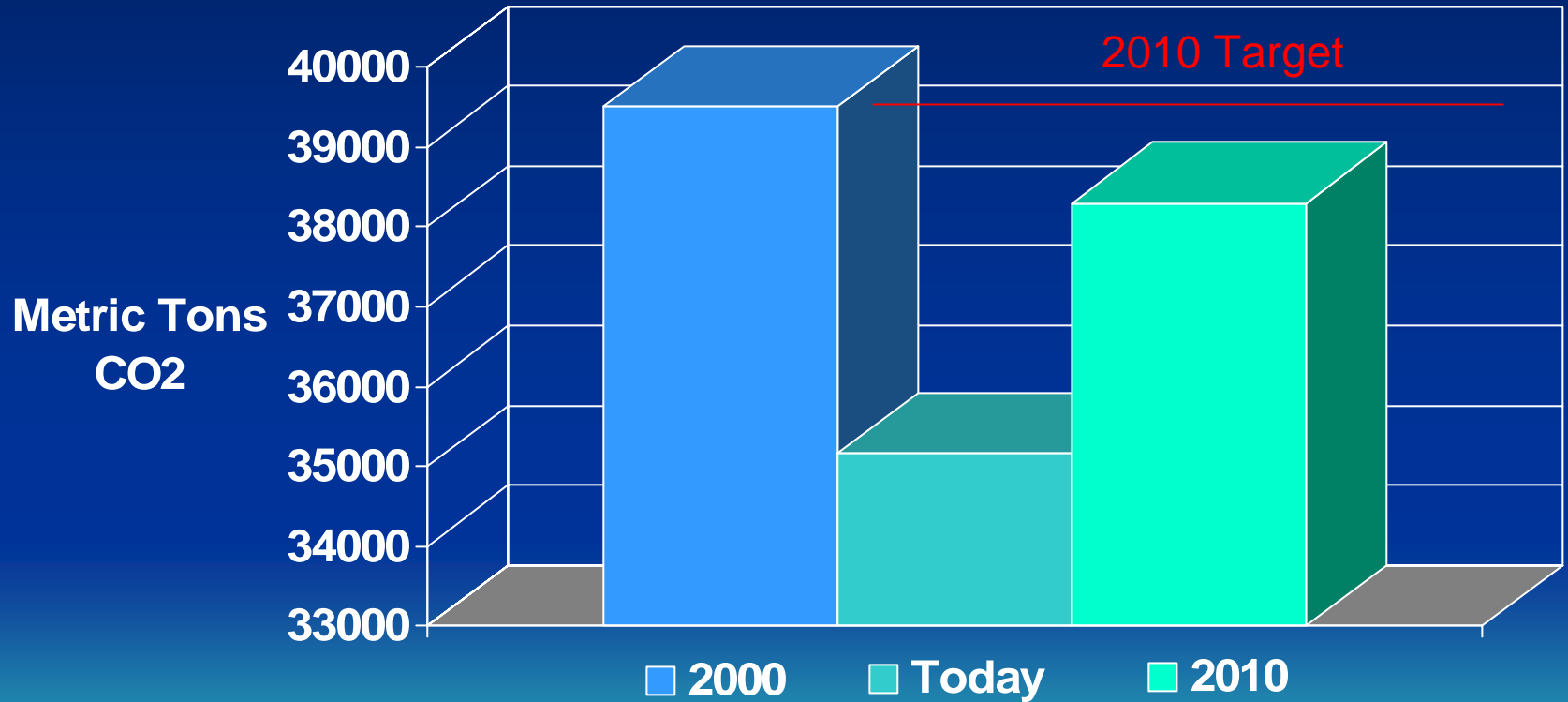


2010 Goal

- 2010 Baseline Set at Year 2000 – 39,500 Metric Tons CO₂ Per Year
- Today, Due to Extensive Energy Conservation, Our CO₂ Emissions are 35,167 MT Per Year
- Projecting Load Growth, UCSB Will Meet its 2010 Reduction Target at 38,294 MT



2010 Goal



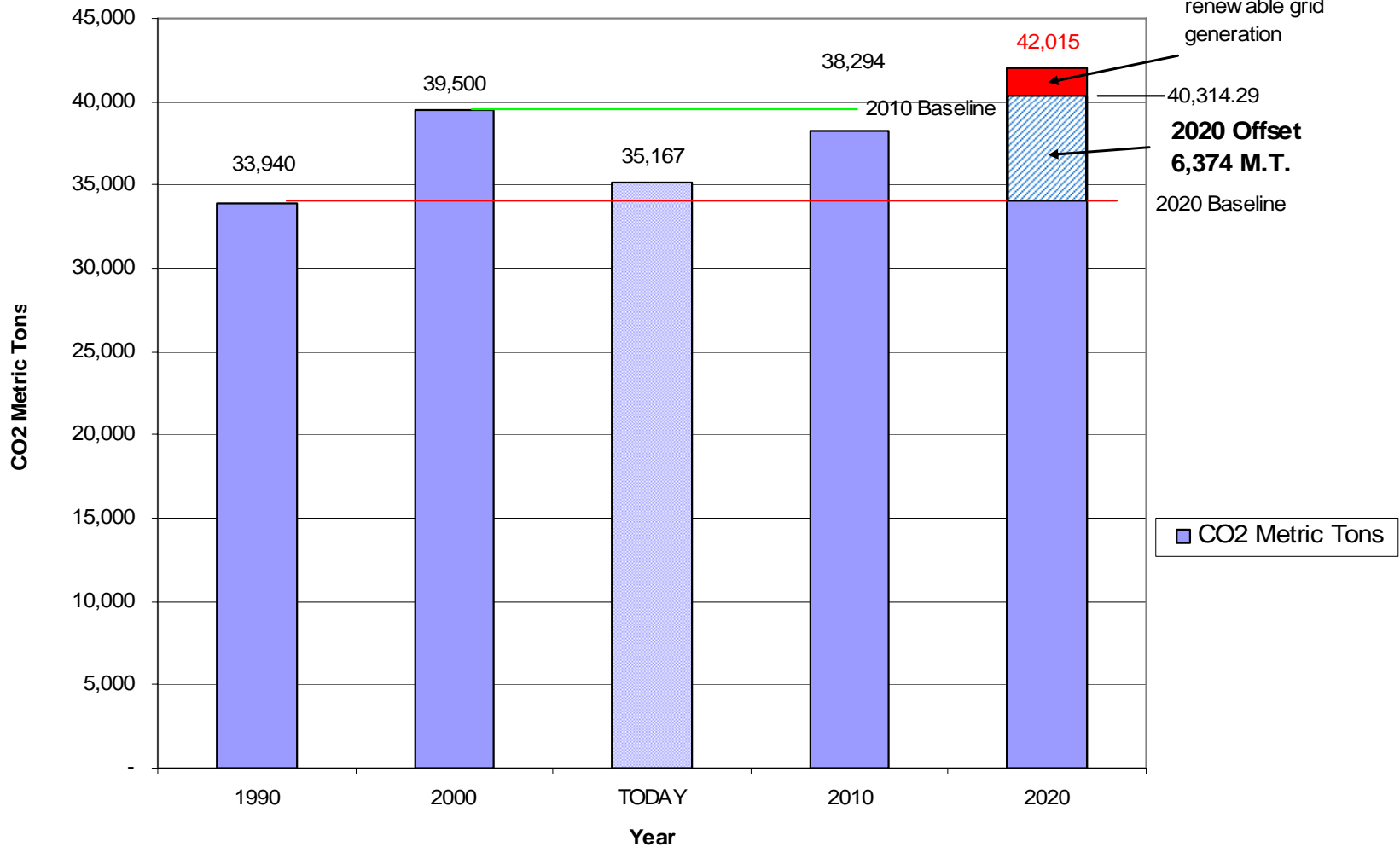
2020 Goal

- 2020 Baseline Set at 1990 Level – 33,940 Metric Tons of CO₂
- Projecting Growth to 2020, and Adjusting for 10% Increase in Renewable Grid Generation – 40,314 MT
- Offsets to Reduce CO₂ Emissions by 6372 MT
 - Energy Conservation
 - Photovoltaic Electrical Generation



Goals Summary

CO2 Reduction Forecast
State Funded "Core" Buildings Only



Meeting 2020 Goal

- Goal: Reduce CO₂ Emissions by 6,374 MT
- Methods
 - Energy Conservation Projects
 - First Cost \$7.3 Million
 - 21% Rate of Return over 20 Years
 - Photovoltaic Electrical Generation
 - First Cost \$75.8 Million
 - No Economic Return over 20 Years



Cash Flows for Reduction Projects

Aggregate 20 Year Cash Flows

2007 Dollars



Questions?

