US CO₂ Emissions by Sector and Fuel in 2000

Millions of metric tons per year carbon equivalent



Source: U.S. EPA Inventory of Greenhouse Gas Emissions, April 2002

Technology is Key ... Significant Advances Needed to Achieve the Base Case



where today's technology will take us

2100

- 75% of electricity non-fossil
- End-use efficiency increases 1%/yr

2050

- Electric generation 67% efficient
- Passenger vehicles average 50mpg

where more advanced versions of current technologies will take us

path we need to be on to stabilize atmospheric CO_2

To stabilize at 550ppm, Carbon/\$GDP must be <10% of today's by 2100

Why is Electricity Growth in the US (Globally) Relatively Unaffected by Climate Policy??

2. Electricity displaces non-electric enduses



Sources: EPRI, Jae Edmonds

