

BRIEF OVERVIEW OF PAST EFFORTS: STRENGTHS AND LIMITATIONS

Guido Franco

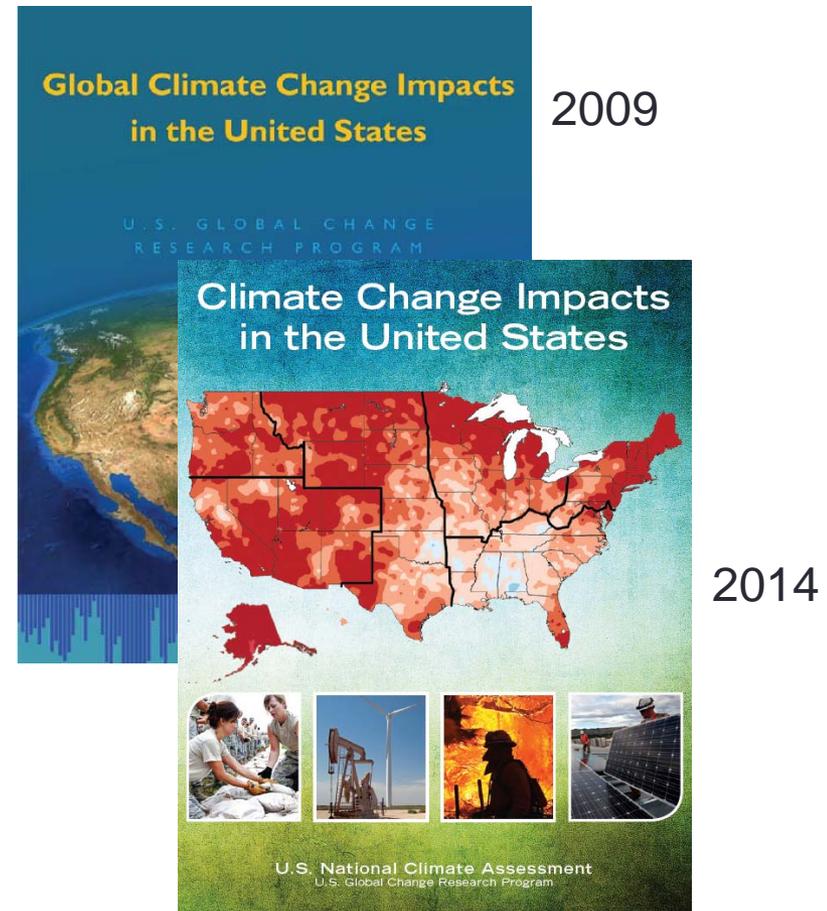
Team Lead for Environmental Research

Research Division

California Energy Commission

Climate Change and the Energy System

- California is a national leader in supporting research on potential impacts and adaptation options for the energy sector
- California studies have been used and cited in prior National Assessments
- However, our work is far from over. According to the 2013 IEPR: “California’s energy system must change drastically over the next few decades in response to policy goals to reduce GHG emissions and increase the amount of renewable energy in the electricity mix. This evolution will require information that helps create a more climate-resilient energy system”



Strengths and Limitations (partial list)

- Prior climate scenarios had some deficiencies that should be addressed
- Development of energy scenarios without considering implications of climate change (e.g., resilience, demand)
- Estimation of climate impacts assumed that the current energy system would remain in place for the rest of this century
- Separate studies for high and low elevation hydropower units
- Did not differentiate between potential exposure and actual vulnerabilities
- Some studies focused on impacts after 2050
- Did not fully identify potential barriers to adaptation and ways to overcome them
- No dedicated funding available to study the network (e.g., refineries, oil pipelines) that supplies transportation fuels

Solutions?

Let's explore them together

