

# We Will Always Underestimate Costs of Real World Policies



- Avoid the modeling illusion – don't eat the menu
- The informational economy of price-based systems
- Deadweight losses of regulation arise from the manifold decisions it cannot control directly
- If the model had enough detail on individual decisions to identify all distortions, it would be possible to design the social engineer's dream regulation
  - Example – CAFE studies included VMT takeback effect and new source bias but not costs of nontradable targets, import vs U.S., car vs truck, flex fuel distortions, diversity across consumers
- No model can – so however hard we try, we will miss some of the distortions caused by command and control

# “Horses for Courses” Gets Closer



NERA  
Economic Consulting

## RIA

## Policy Choice

### Level of Analysis

- Detailed analysis of the deadweight losses of a specific proposed rule or subsidy
- Broad characterization of the avoidable costs of a regulatory approach

### Targets

- Regulatory agency or legislature considering a specific action
- Public awareness and congressional action to slow or roll back a regulatory agenda

### Methods

- Partial equilibrium, economics of regulation approach that details the margins on which incentives are distorted and resulting deadweight loss
- Broad characterization of the overall economic consequences of broadly defined regulatory vs economic approaches at a sectoral level

# Obtaining Accurate Estimates of Costs of Real-World Climate Policy



- A Dilemma
  - Sufficiently detailed representation of firm and household decisions to identify all costs is impossible
  - Broad characterization of relative costs of market and regulatory measures is not sufficient for IA of mitigation costs and avoided damages of concentration targets
- Addition of adequately detailed representation of key policy directions is possible
  - Generation-side electric sector regulatory policies are easy
  - Transportation sector policies – LCFS and CAFÉ – are feasible
  - End use efficiency much harder to do right
- The best we may be able to do is combine political economy perspective on likely policy design with modeling of stylized programs to estimate lower bounds on costs

# IA Is a Different Challenge



- Do we seriously expect to model a regulatory approach to policy lasting over centuries (or even decades)?
- Possibilities
  - Redefine the question – policy commitments are not made for centuries
    - And they will not necessarily improve with time
    - Address the implications for mitigation of a sequence of non-credible commitments to policy
  - Use stylized policies suited to each region’s political economy
    - Create index of departures from optimality (e.g. Lerner index)
    - Implement as a generic wedge between price and cost
    - Reflect assumptions about institutional change by shrinking or increasing the wedge



## Contact Us

**W David Montgomery**

Senior Vice President  
NERA—Washington, DC  
+1 202 466 9294  
[w.david.montgomery@nera.com](mailto:w.david.montgomery@nera.com)