

# Green Power and the Economy

**Hillard Huntington**  
**Energy Modeling Forum**  
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# Today's Panel Discussion

- **Does *renewable power* expand**
  - Total economic activity (GDP)
  - Jobs
  - Taxes
- **All three economic issues are important but ...**

# Polycymaking Focus

- **Is renewable power the right instrument?**
  - Do we have better options for economic stimulus?
- **“Judge a man by his questions rather than by his answers.”**
  - **Voltaire**

# Why promote renewable power (RP)?

- **Mitigate greenhouse gas emissions**
- **Tradeoffs are critical**
- **When is RP preferred?**
  - High avoided cost
  - Steady power source (wind, sunpower)
  - Integrated transmission system with congestion pricing
- **Problem with Renewable Portfolio Standards (RPS)**
  - Targets can be arbitrary
  - Future costs are hidden
  - Ignore energy efficiency & other GHG options

# Are these the right metrics for tradeoffs?

- **GDP** measures the size of the pie but does not compare different slices.
  - GDP excludes many activities including carbon damages.
- **Employment**: are all **jobs** created equal?

31



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4

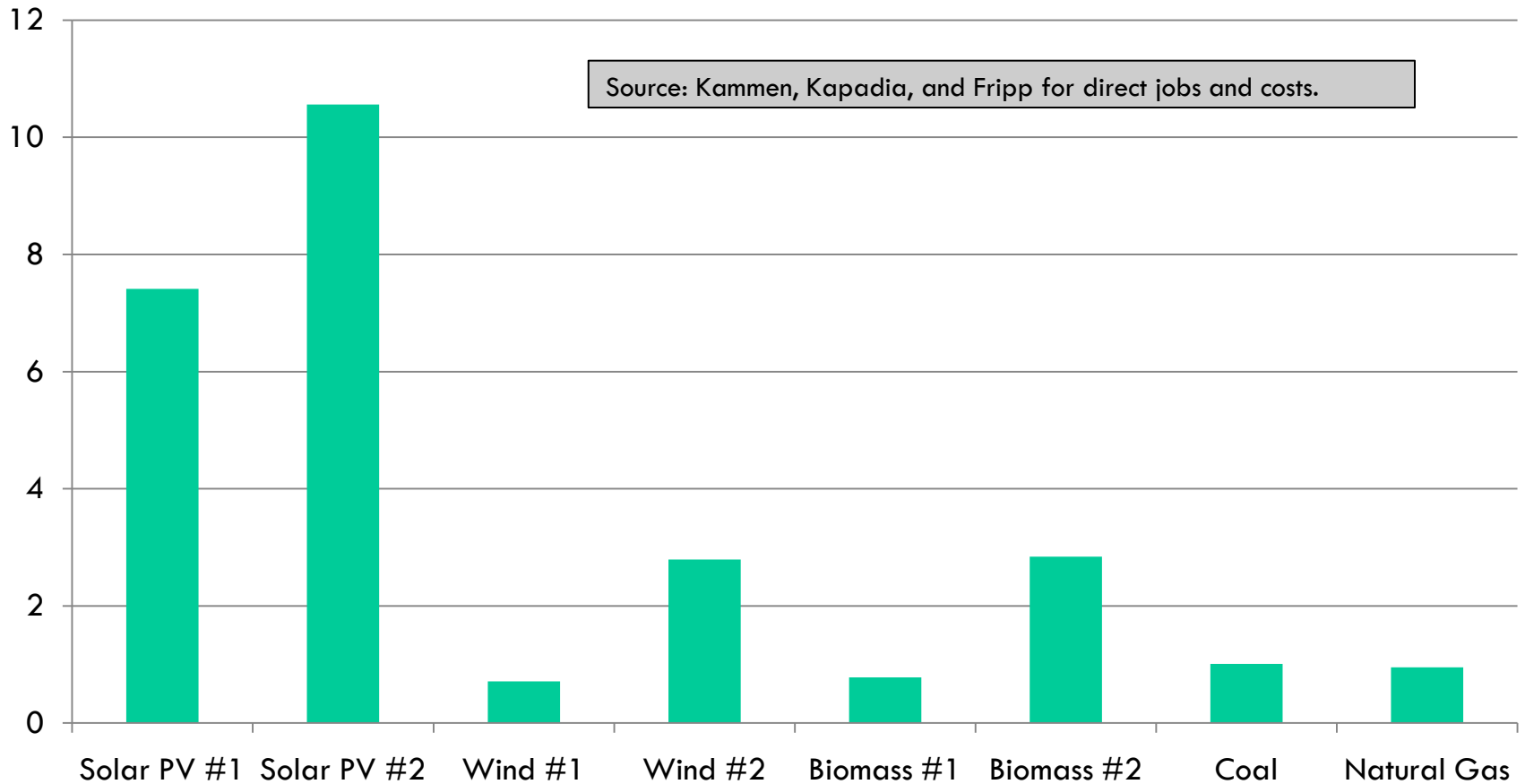


For the same million dollars.

- **Taxes**: carbon fees probably the best **GHG** policy for increasing federal taxes.

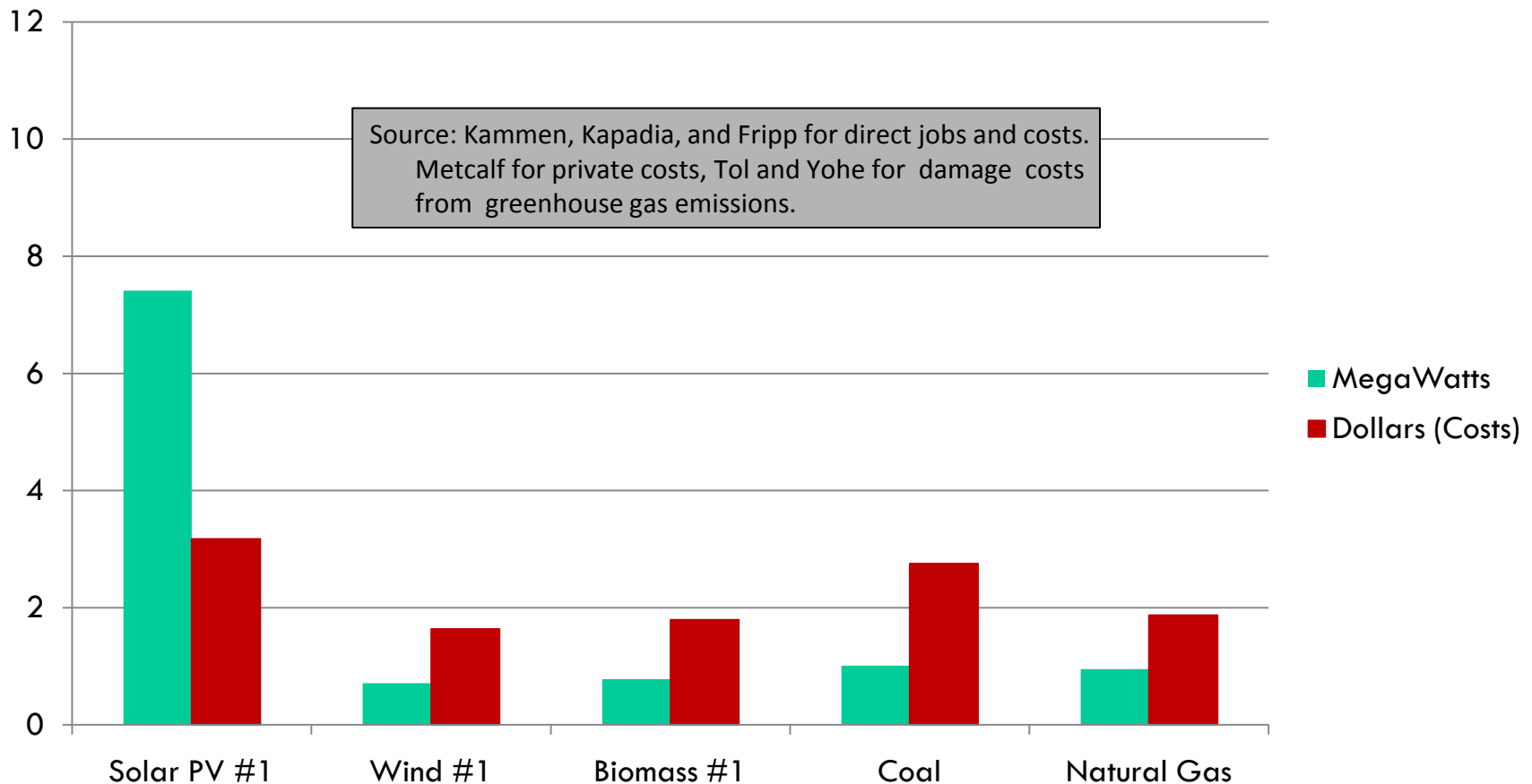
# Job Intensity for the Same MWH

Jobs per MegaWatts Used



# Job Intensity with Lower RP Job-Creation

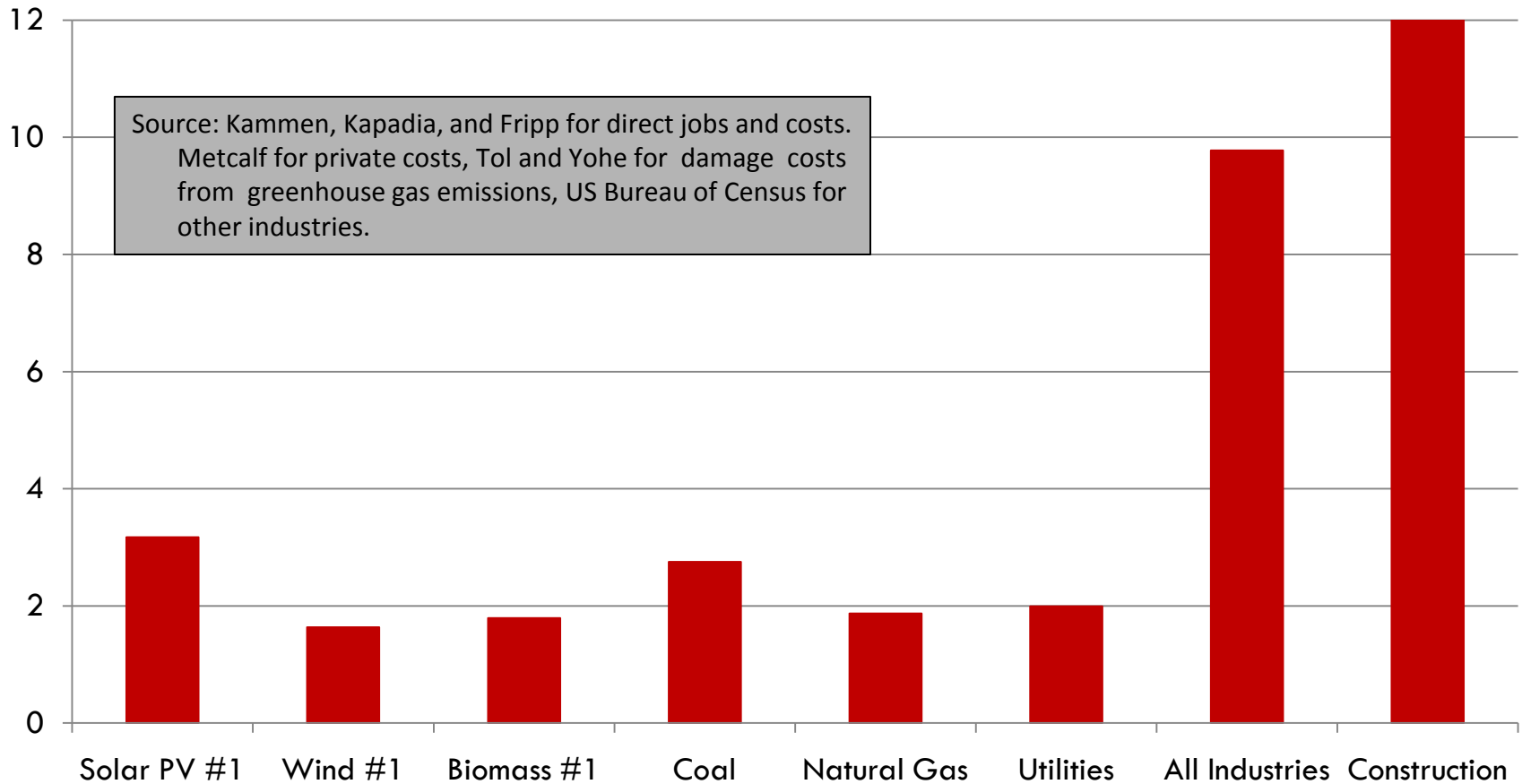
Jobs per MegaWatts Used versus Jobs per Million Dollars



Lower job-creation estimates exclude several Greenpeace estimates.

# Power Generation is **not** Jobs Intensive

**Jobs per Million Dollars**



# Modeling Impacts of RP Expansion

- **What resources does RP expansion require?**
  - Standards, subsidies or government spending
- **How will RP expansion affect energy prices and economic activity in different industries?**
  - If RP is more costly than fossil fuels, energy prices will increase.
  - Energy-intensive activity might be outsourced.
- **Spanish subsidies for green power led to job destruction.**
  - 2.2 regular jobs lost for each green job created (after 8 years).
  - A study from King Juan Carlos University in Spain.
- **Assumptions need to be **transparent** and **credible** if policymakers are to believe the conclusions.**

