

The Effect of Damage Based Emissions Fees on Future US Emissions

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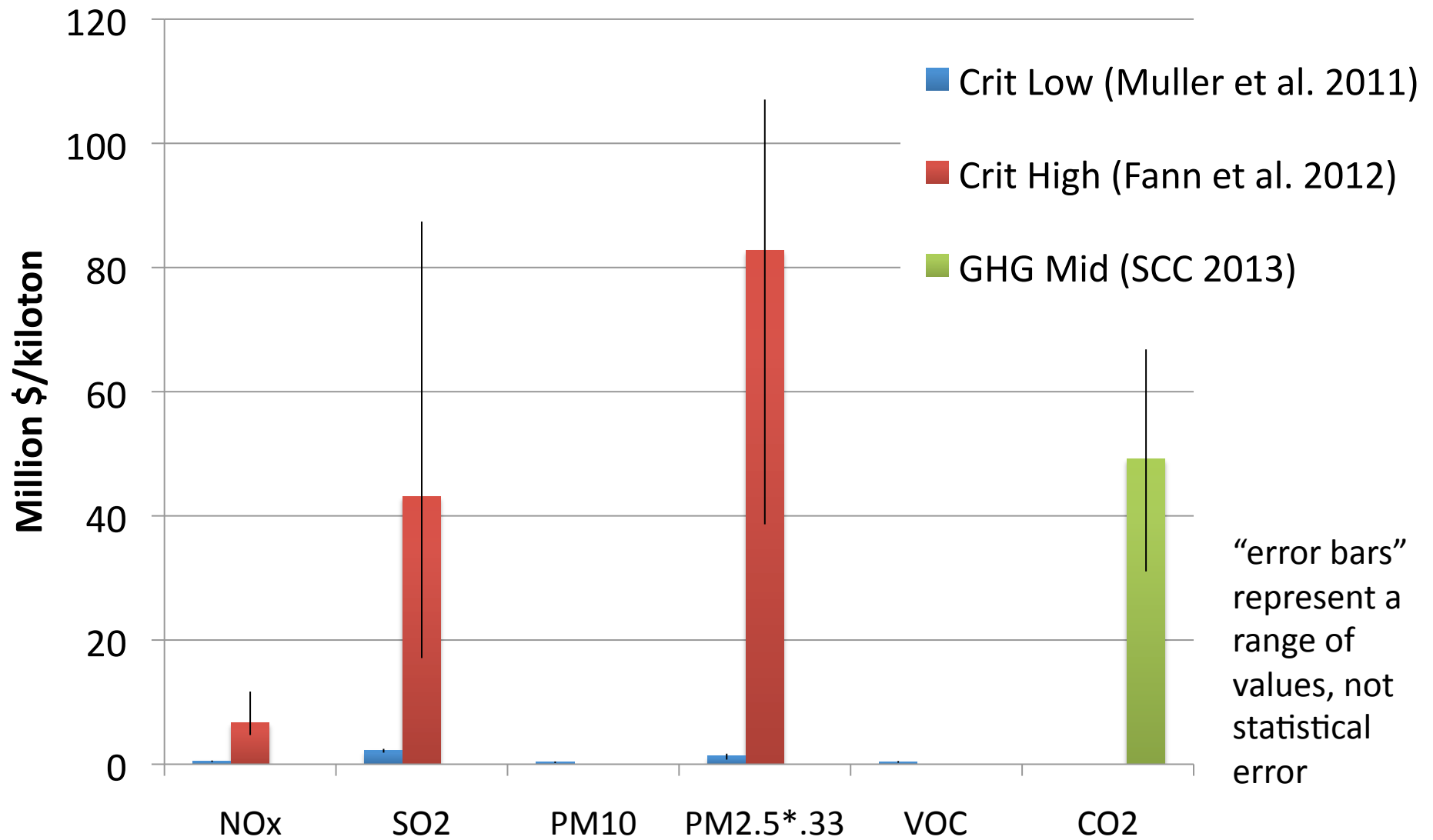
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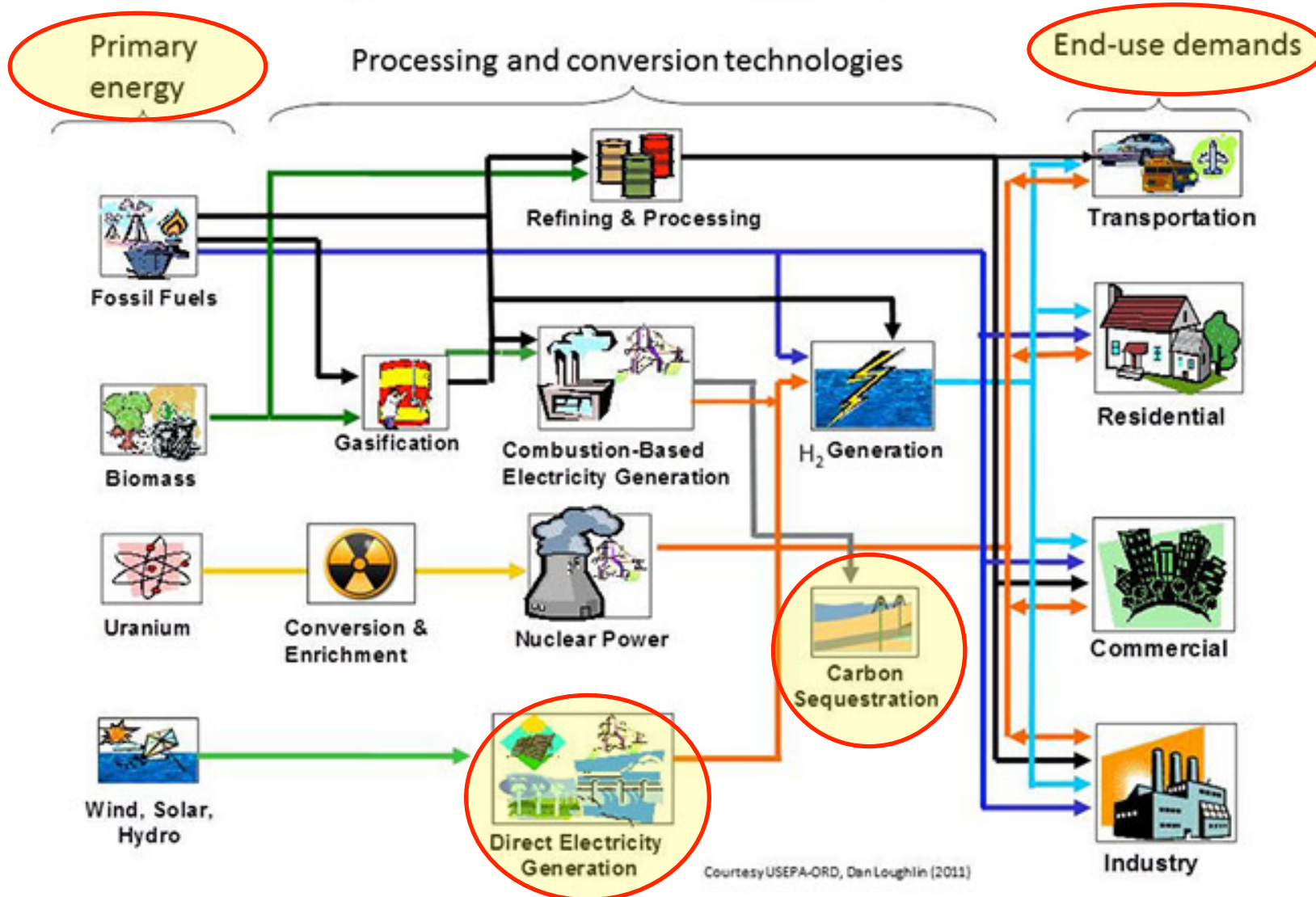
- Emissions are reduced with fees in place
 - Control devices
 - Efficiency improvements
 - Fuel switching
- Inform future policy decisions

Thanks to NASA for funding

Fees Based on Externalities

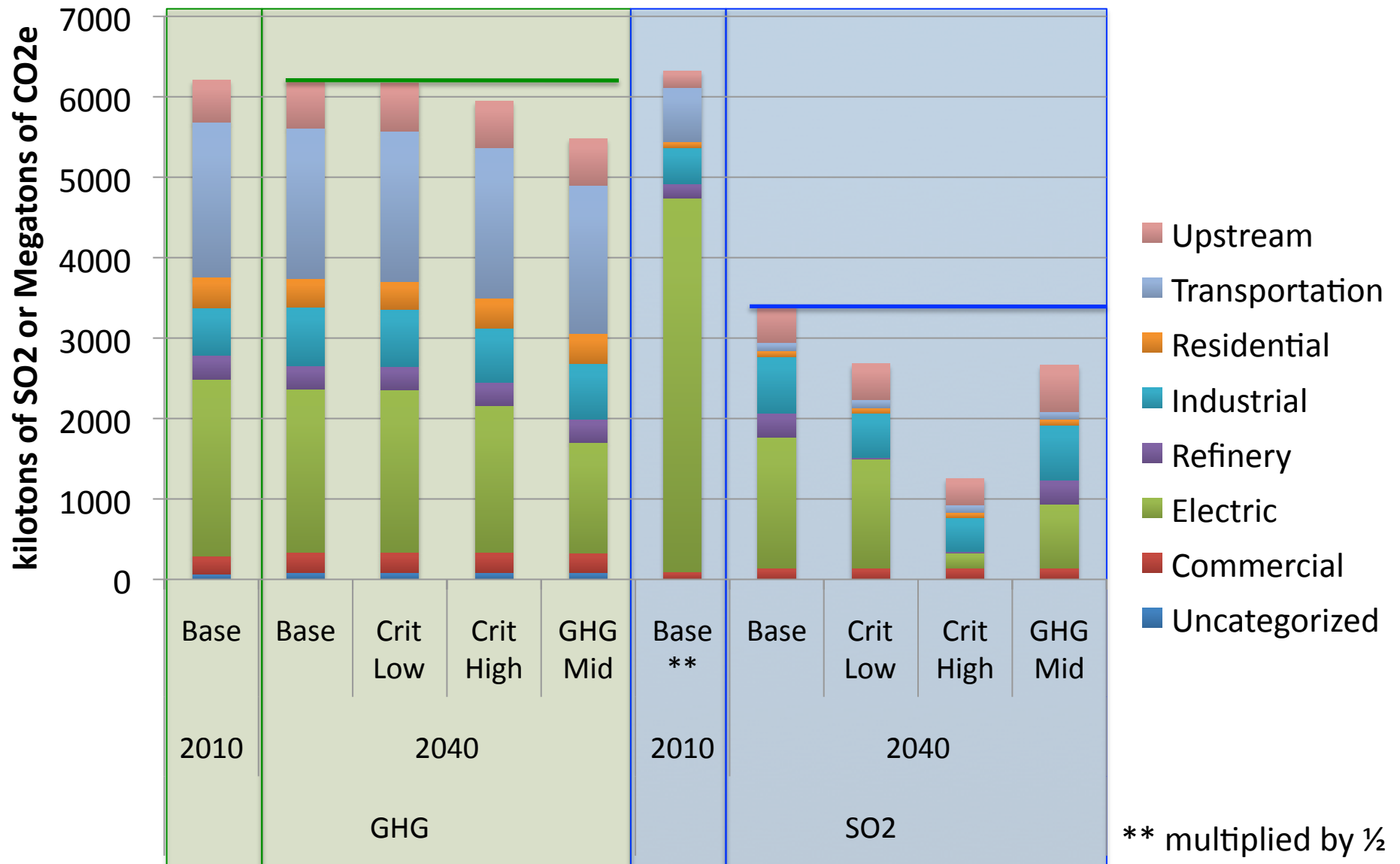


MARKAL/TIMES Energy System Model



MARKAL determines the least cost way to meet energy demand

U.S. Emissions



Emissions Reductions

- Fuel Use changes
 - Less coal
 - More natural gas
 - More biomass with GHG fees
- Control Devices Used
 - Criteria pollutant control devices
 - Carbon capture not used
- Efficiency
 - Used more for GHG fees

References

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