

The Land Use Stabilization Wedge

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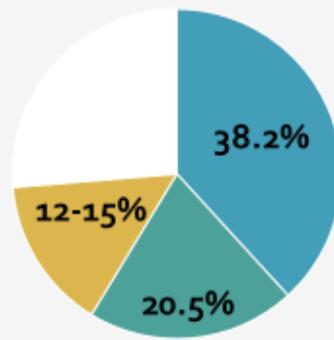
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In 2004, Princeton Professor Robert Socolow provided a framework for mitigating climate change through “stabilization wedges,” each capable of preventing at least a billion metric tons of carbon emissions annually using existing technology.¹ We present a variation—the land use stabilization wedge.² Whether, in the aggregate, local land use mitigation efforts will prevent a billion or more metric tons of emissions each year depends on how many, and to what extent, local governments embrace them. This, in turn, may depend on how well their role in climate change mitigation is understood and supported by state and federal governments.

Why Land Use?

- CO₂ accounts for 82% of the US GHG emissions
- Land Use Touches 73.7% of CO₂
 - Commercial and residential sectors contribute **38.2 %**
 - Personal vehicles contribute **20.5%**
 - Sequestration reclaims **12-15%**

2015 End-Use Sector Emissions of CO₂ from Fossil Fuel Combustion



- Commercial and Residential Sectors
- Personal Vehicles
- Sequestration

¹ Stephan Pacala & Robert Socolow, *Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies*, 305 SCI. 968, 970 (2004), <http://science.sciencemag.org/content/305/5686/968>.

² See John R. Nolon, *The Land Use Stabilization Wedge Strategy: Shifting Ground to Mitigate Climate Change*, 34 WM. & MARY ENVTL. L. & POL'Y REV. 1 (2009) [hereinafter *Land Use Wedge Strategy*].