

## Implications of U.S. Energy Policy on the Pulp and Paper Industry

From the universe of energy and climate policies being debated in the United States, we have analyzed five policy initiatives with potentially large impacts on the U.S. pulp and paper industry. These include:

- a federal renewable electricity standard,
- a U.S. greenhouse gas (GHG) cap and trade system,
- stronger federal renewable fuels standards,
- state incentives for biomass pilot projects, and
- taxation of forest property based on current use.

All but one of the policies examined are anticipated to increase the price and supply of timber and other forest-based biomass inputs, relative to a business-as-usual scenario. The one exception (taxation of forest property based on current use) would also increase the supply of available forest-based biomass inputs, but it would do this in conjunction with placing downward rather than upward pressure on the price of forest-based inputs.

These same four policies are also anticipated to inflate the price of paper products because of the upward pressure they would exert on the cost of forest-based inputs. In turn, the higher output prices would likely reduce the final demand for domestically produced paper products, which is already affected by the increasing use of electronic communication and increasing competition from foreign suppliers. The one policy exception (reduced forest property taxes) would have the opposite directional influence: it would decrease output prices, which would lead to increased domestic paper production.

### KEY REPORT

"Potential Impacts Of Energy And Climate Policies On The U. S. Pulp And Paper Industry", Marilyn A. Brown and Nilgun Atamturk – *in preparation*

### RESEARCHERS

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*In addition to more than 150 publications, her latest edited book (Energy and American Society – Thirteen Myths) was published in 2007 by Springer. She recently completed a research portfolio review for the U.S. Climate Change Technology Program, an analysis of technology deployment barriers, and a study of strategies to achieve a climate friendly built environment. She is a co-recipient of the Nobel Peace Prize 2007, recognizing her work for the IPCC on the "Mitigation of Climate Change." Her attention is currently focused on characterizing the carbon footprints of the nation's 100 largest metropolitan areas. She serves on several boards and is a member of the National Commission on Energy Policy.*

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**Summary of Energy and Climate Policy Impacts:  
Expected Directional Changes**

	<b>Federal Renewable Electricity Standard</b>	<b>U.S. GHG Cap and Trade</b>	<b>Stronger Federal Renewable Fuels standards</b>	<b>State Incentives for Biomass Pilot Plants</b>	<b>Taxation of Forest Property Based on Current Use</b>
<b>Point of Impact</b>	Electricity suppliers	Mostly "upstream" sources of GHGs	Refiners and other fuel producers	Biomass energy producers	Forestland owners
<b>Status</b>	<b>Federal</b>	Pending	Pending	Just enacted	
	<b>State</b>	In place in 33 states	Regional - pending	In place in 9 states	In place in numerous states
<b>Short-term Impact on Inputs:</b>					
Price of Forest-Based Inputs	↑↑	↑↑	↑	↑	↓↓
Supply of Forest-Based Inputs	↑↑	↑↑	↑	↑	↑↑
<b>Short-term Impact on Outputs:</b>					
Price of Paper Products	↑	↑↑	↑	↑	↓↓
Supply of Paper Products	↓	↓↓	↓	↓	↑↑
Price of Biomass Power	↓	↓↓	-	↓	↓↓
Supply of Biomass Power	↑↑	↑↑	-	↑	↑↑
Price of Ethanol	-	↓	↓	↓	-
Supply of Ethanol	-	↑	↑	↑	-