

# Assessing the bioeconomy

## October 2006 survey results

Major changes are taking place in agriculture because of the new bioeconomy. This rapidly growing sector is producing fuel, energy and products from agricultural crops, grasses, and forest materials. There is the potential for positive outcomes such as higher farm crop prices, less export dumping, less dependence on polluting fossil fuels and stronger rural communities where local ownership is entrenched in development policies. But there are also concerns about negative impacts on food security, natural ecosystems and rural development.

Many in nongovernmental organizations, government, and the business sector are grappling with the new opportunities and challenges posed by the bioeconomy, including how to define trade, fiscal and budgetary policies that will promote equitable growth and sustainability. To better understand what others in the U.S. and around the world think about this emerging economy, IATP conducted an informal survey in September. The survey went out to multiple networks that IATP has developed over the years as part of its international trade work, as well as U.S.-based domestic farm and environmental networks. The survey was also present on our various web sites and open to anyone who wanted to contribute.

### Summary of findings

The survey is by no means comprehensive, but it does give us a snapshot of where many leaders following the bioeconomy think this new sector is going. We received numerous informal comments from respondents that their organization, government or business were debating many of the same issues described in our survey. In all, over 275 respondents from more than 50 countries took the survey.

Benefits and risks for the environment seemed to be at the front of respondents' thinking about the bioeconomy. Most saw the greatest benefits of the bioeconomy coming from less reliance on oil for energy, more jobs for the rural economy, more opportunity for sustainable, perennial biomass, and less pollution. Most were concerned about the increased use of genetically engineered crops to grow energy crops, increased market power for agribusiness and energy companies and more intensive, industrialized agriculture. Most identified the biggest gap in knowledge as the impact on biodiversity and the environment, followed by corporate concentration, impact on food security, and impact on greenhouse gas emissions. Most respondents saw the bioeconomy being developed for local or national use, not for export.

There was strong support for the development of international sustainable biomass standards. Ecosystem protection was the most important element of developing international standards for the bioeconomy. One hundred and seventy respondents said they would be willing to participate in a process to develop international standards.

Enthusiasm for the bioeconomy is clear from the survey. But so are the strong concerns about risks, particularly in the areas of environmental damage and corporate market concentration. Strong support for participating in the development of international sustainability standards for the bioeconomy indicates that it is a necessary and worthwhile endeavor.

### About the respondents

Respondents identified themselves as from the following sectors: nongovernmental organizations (92), higher education (47); government (20); UN Agency (10); private sector (22); lending and aid organizations (3); and foundations (8).

Respondents came from 51 countries from all five continents including:

United States	Turkey	Sudan
Philippines	Sweden	South Africa
Ireland	Pakistan	Belgium
Panama	Denmark	Morocco
Brazil	France	Columbia
United Kingdom	Germany	Guatemala
Canada	Senegal	Austria
Uruguay	Chile	Norway
Netherlands	Jamaica	Paraguay
Switzerland	Mexico	Algeria
New Zealand	New Zealand	Cameroon
Fiji	Nepal	Bangladesh
Indonesia	Oman	Finland
Mongolia	Kenya	
Australia	Egypt	
Thailand	Mozambique	
India	Sri Lanka	
Italy	Tunisia	

Seventy three percent of the respondents were connected to organizations that worked in agriculture, and 63 percent had some overlap with the environment. Fifty seven percent worked locally, 64 percent nationally, 55 percent regionally, and 69 percent internationally.

### Defining the bioeconomy

Of those working directly within the bioeconomy, 37 percent were focused on fuels, and 25 percent on biomass energy. In their region, 57 percent said that corn was the predominant crop for biomass energy, followed by woody biomass (39 percent), soybeans (32 percent), sugar (23 percent), and canola (20 percent). Most did not see the bioeconomy as being built for export (only 14 percent). They expect most of it to be built for local and national use.

### Positives

In exploring possible positive outcomes for the bioeconomy, less reliance on oil topped the list at (62 percent), followed by more jobs for rural communities (57 percent), more opportunities for sustainable biomass (53 percent), less pollution (50 percent) and better prices for farmers at (49 percent). Ten percent saw no real benefits from the bioeconomy.

### Negatives

Concerns about the bioeconomy were topped by: increased use of genetically engineered crops (63 percent), increased power for multinational agribusiness and energy companies (63 percent), more intensive industrialized agriculture (62 percent), depletion of water resources (56 percent), and damage to biodiversity (48 percent).

### Information gaps

Respondents identified the impact on biodiversity (80 percent) as the top information gap concerning the new bioeconomy, followed by impact on market concentration (67 percent), impact on food security (65 percent), impact on pollution (62 percent), and impact on prices paid to farmers (53 percent).

### Interest in international standards

International standards are being discussed as a way to ensure the positive benefits from the bioeconomy, and limit or eliminate negative outcomes. Forty eight percent of respondents considered ecosystem protection the most important of such standards, 34 percent thought local ownership was most important, and 23 percent thought local regional use was most important.

Sixty four percent (170 respondents) said they would be willing to participate in a process to set sustainable international standards.

### Conclusion

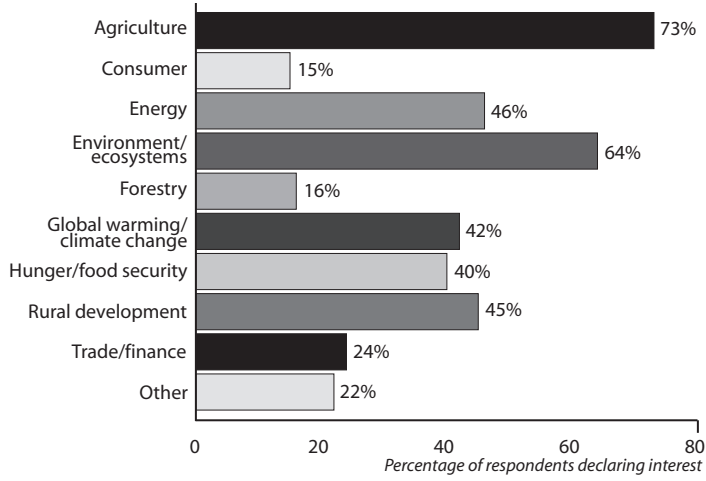
Responses to the survey fully reflected the multifaceted aspects of the bioeconomy—excitement about the possibilities, concern about the risks. The survey reflected the global development of this sector with respondents from over 50 different countries around the world. The responses also support the clear need for more research to better understand the consequences of an emerging bioeconomy. Finally, strong interest in supporting international standards reflects the critical importance of a well-planned, informed, and democratic approach to the growth of this sector.

### Participate in the survey

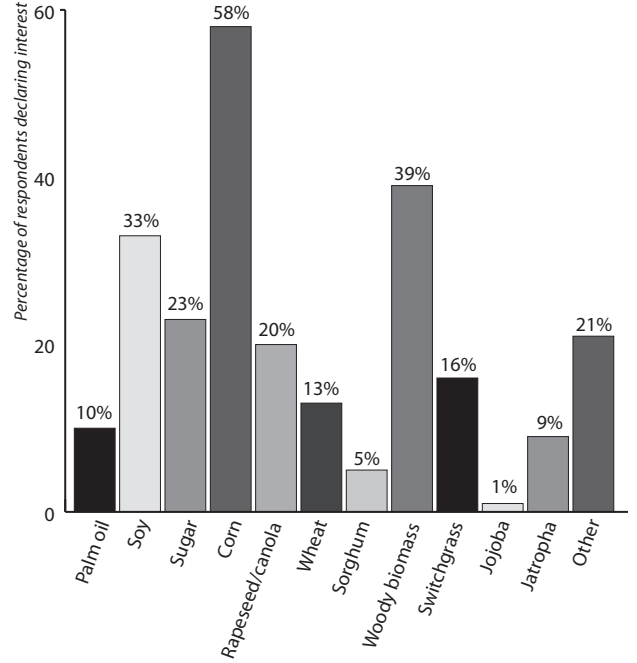
IATP's survey on the bioeconomy is an ongoing project. To participate and to read periodic result updates, visit IATP's Ag Observatory at [agobservatory.org](http://agobservatory.org).

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**Contact Jim Kleinschmit** [jkleinschmit@iatp.org](mailto:jkleinschmit@iatp.org)  
Director, Rural Communities Program

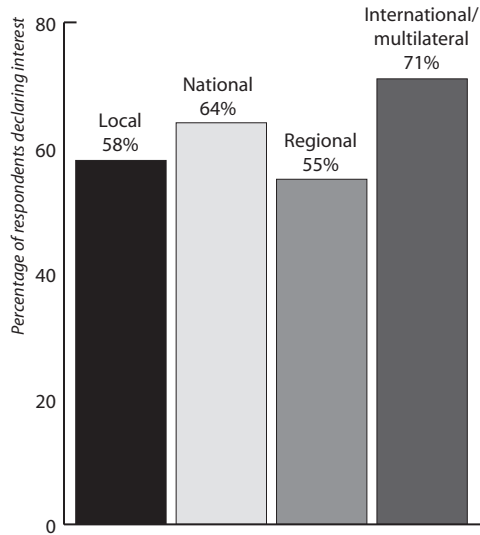
### What is your issue interest?



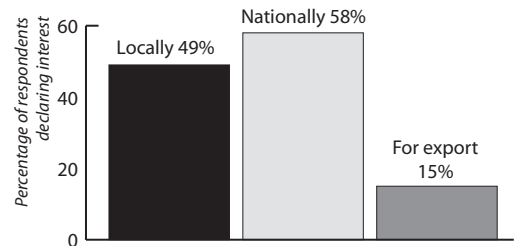
### What crops are predominantly used (or proposed) for biomass energy in your country or region?



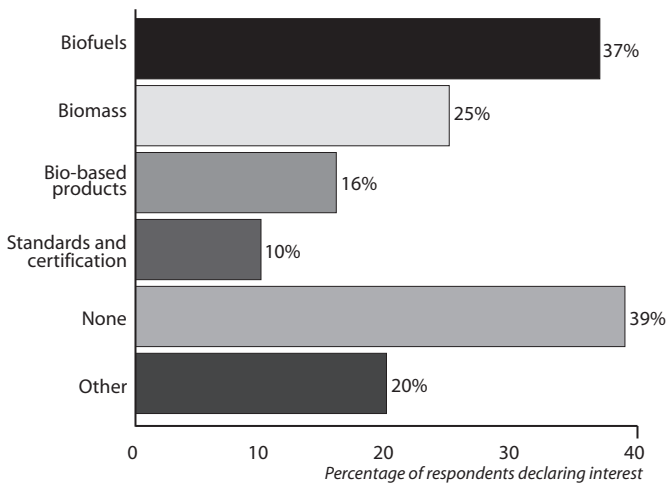
### What is your geographic interest?



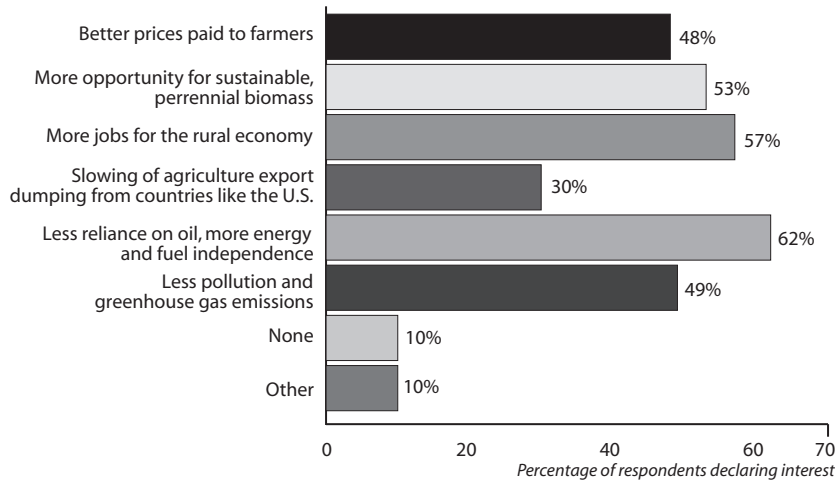
### At what scale do you expect most bioeconomy-driven projects to be in your region over the next five years?



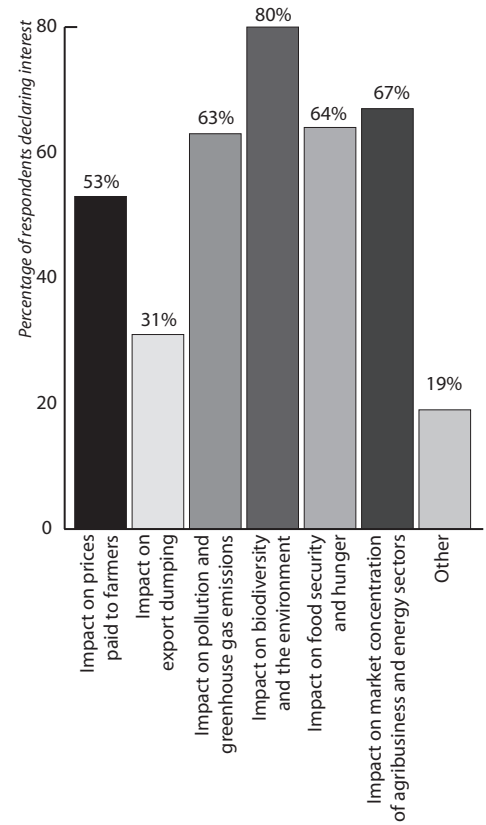
### Are you currently working on policy or programs related to the bioeconomy, and if so, in which general area?



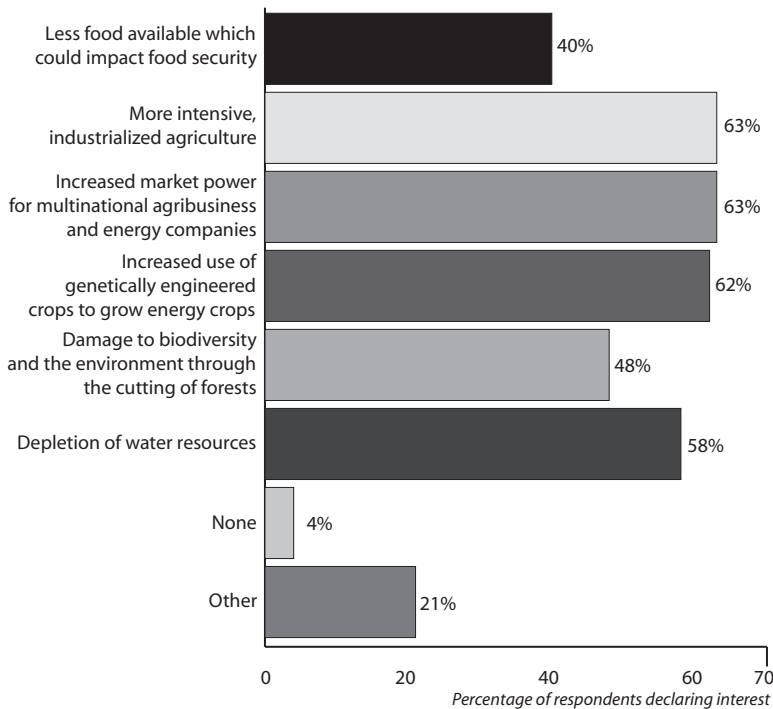
**In your country/region what positives do you see potentially occurring from a shift toward the bioeconomy in the U.S. and around the world?**



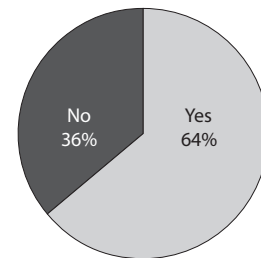
**What are the gaps in knowledge and research on the bioeconomy that need to be addressed?**



**In your country/region what negatives do you see potentially occurring from a shift toward the bioeconomy in the U.S. and around the world?**



**Would you be willing to participate in a process to develop international sustainable biomass production standards?**



**International standards are being discussed to try to ensure the potential positives from a bioeconomy, and to limit or eliminate the potential negatives.**

**If such sustainable biomass standards were created, which elements would you consider the most important?**

