



## **An Atlantic Agenda for Biofuels**

*Food-for-Thought Paper*  
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The Atlantic is the cradle of the modern biofuels industry and home to well over four-fifths of current global biofuels production and trade. Any Atlantic agreements or collaborative ventures in biofuels-related areas are likely to define the global governance of biofuels for decades to come.

While current world production of biofuels (both ethanol and biodiesel) accounts for only about 2%-3% of the global market for transportation fuel, over the past decade global ethanol production has more than quadrupled and biodiesel production has grown by a factor of 15. Some 40 countries have now mandated obligatory use of biofuels as a blending fuel to reduce the consumption of petroleum-based fuels like gasoline and diesel, and to establish the market and investment horizon for biofuels. Most of these countries are located in the Atlantic Basin. Total global absolute output of biofuels is projected to triple by 2035 and account for one-third of all global primary energy by 2050.

Over 85% of global biofuels production (and most consumption) takes place within the Atlantic Basin. The only other biofuels producers are in Southeast Asia, where production has focused mainly on biodiesel and rising transportation fuel demand has easily swamped Asian supply. As a result, the Atlantic's current dominance in biofuels will be extended indefinitely into the future, as most expected future biofuels production will occur within the Atlantic Basin.

The evolving Atlantic Basin biofuels system consists primarily of (1) U.S. production of *corn-based* ethanol; (2) Brazilian production of *sugarcane-based* ethanol; and (3) EU production of various grain-based biodiesels. The U.S. is world's largest biofuels producer, consumer and exporter, followed by Brazil as the second largest producer and exporter, and by Europe as the world's 2<sup>nd</sup> largest consumer of biofuels. Brazil and the United States together account for 87% of total global production. U.S. biofuels have traditionally been far more heavily supported and protected than their Brazilian sugarcane-based counterparts. While most global biofuels production is consumed domestically within the original national production markets, almost all biofuels trade takes place within the Atlantic Basin.

Biofuels offer many potential vectors for transnational collaboration within the Atlantic Hemisphere. Biofuels can diversify energy supplies; mitigate greenhouse gas emissions; generate new markets for agricultural commodities, strengthen export income; attract investment; and enhance local technological capacities. In future, biofuels will also be capable of producing an increasing amount of electricity. Because biofuels are located at the complex scientific and policy nexus of energy,

agriculture, land-use, climate change and sustainable development, much could be gained by deepening collaboration and sharing good practice across the Atlantic space.

Nascent cooperation is already under way. Africa also holds enormous biofuels potential, which Brazil is exploring together with its African partners, supporting extensive agricultural R&D in Africa focused on both foodstuffs and commodities as well potential biofuels production and export. Brazil and the U.S. have also been collaborating on biofuels R&D, biofuels assistance to Latin-American, Caribbean and Africa countries, and consultative discussions aimed at designing a standardized international commodity regime for biofuels.

These collaborative ventures offer an initial foundation for broader pan-Atlantic cooperative engagement that would include the EU -- – the Basin's most important net biofuels importer – as well as additional African, North and Latin American countries.

An Atlantic biofuels initiative could usefully address (1) the international effort to create an effective multilateral commodity regime for biofuels; (2) collaboration in the realm of biofuels research, development, investment, production, distribution and regulation, particularly regarding second-generation “cellulosic” biofuels technology; (3) the potential distortions of, or risks posed by, large-scale public support and/or use of biofuels, to food security, the environment, economic development and trade; (4) rationalization and standardization of current biofuels data, which is plagued by inconsistencies. Pan-Atlantic agreements in these areas would not only advance this industry across the Atlantic Basin, they could form the core of global approaches.