

Latin American feedstock trends

South America is emerging as a major player in the global biofuels market. It is experiencing a rapid increase in new feedstock investment, biofuels production, and import/export trade in both ethanol and biodiesel

Brazil is the leader in Latin American biofuels and has created an integrated government-agriculture-petrol model that is spawning new government and market initiatives from Argentina, Colombia, Central America and the Caribbean.

In Latin America, the key trends in national and international biofuels initiatives are primarily in feedstock growth, biofuels production, trade and exports. The first major trend in Latin America is government oriented, country-specific growth targets for national markets and international trade. Many countries are now following the Brazilian model and establishing National Biofuel

Plans with key targets aimed at energy independence, biofuels production growth, replacement of petrol transport fuels with biofuels, and expansion plans generating investment in new feedstocks, biofuels production plants and export-related facilities.

Argentina, Colombia, Peru, Ecuador, Mexico, El Salvador, Costa Rica, Jamaica, and the Dominican Republic are now establishing national biodiesel programmes and targets for domestic markets; planning feedstock initiatives; providing production incentives for investors; and mitigating future production target volumes for use in national consumption and international trade interests. Each of these country's national biofuels

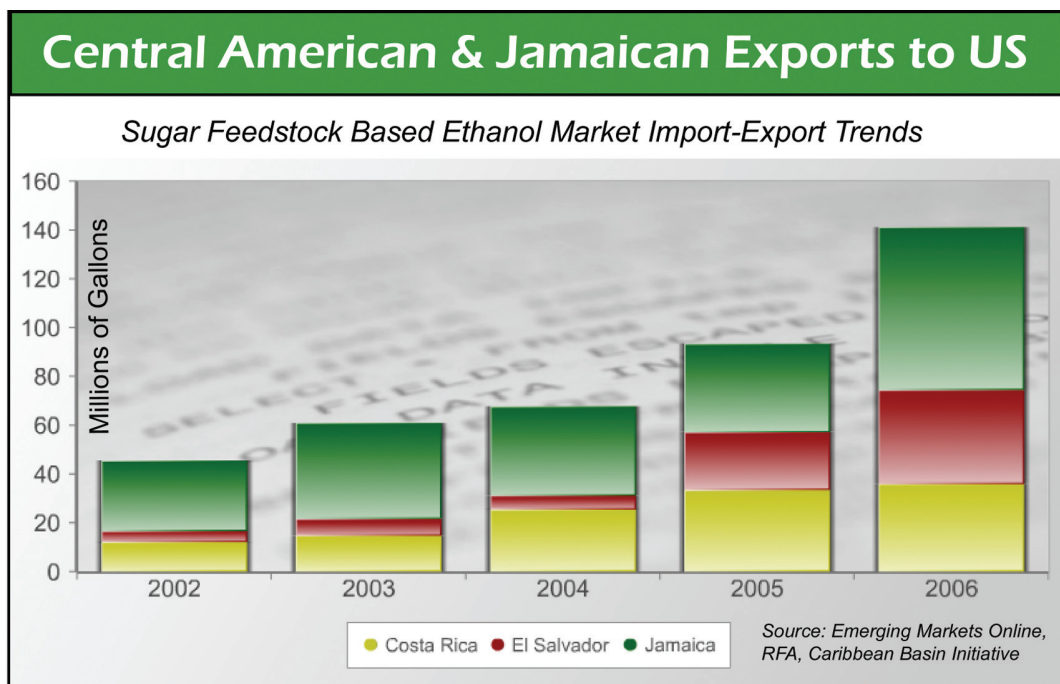
programmes is heavily focused on the expansion of biofuels feedstock growth to address national and international petroleum independence initiatives for environmental, economic and national security reasons.

Most national biofuels programmes seek three key economic advantages from investment in biofuels feedstock and production. The first economic advantage sought is by encouraging direct foreign investment in new biofuels feedstock and production projects. The second economic advantage anticipated from national biofuels plans is to increase international capital and trade from the export of biofuels. Third, these government

strategies seek to attract investment and growth in biofuels feedstocks as a policy instrument to promote the socio-economic benefits for poor, rural areas – an advantage both for farmers and elected politicians.

Economic advantages and alliances

The second major trend in Latin American biofuels is observed in the formation of regional alliances and associations to promote the growth of feedstocks, production, growth, trade, and import-export growth in biofuels. These include the Inter-Americas Ethanol Commission (IAEC), formed by the Inter-American Development Bank, Brazil, the US (starting in 2006 with former governor Jeb Bush), and other nations. The focus of the IAEC is to promote regional trade and establish alliances linking ethanol producing and exporting nations (i.e. Brazil) with ethanol consuming nations such as the US and other petroleum-importing countries seeking alternative fuels. The IAEC was also borne from the foresight that nations capable of producing and exporting environmental-friendly biofuels at lower costs would be of benefit to other nations facing feedstock growth and price challenges. For example, this would provide a win-win scenario for the US (in need of lower cost, more environmentally friendly



feedstocks), and for Brazil in exporting surplus ethanol and biodiesel fuels.

Emerging feedstock markets

The third key trend in Latin America is the emergence of feedstocks for biofuels production including new sugarcane-based projects for ethanol, and increasing investment and growth in alternative biodiesel feedstocks such as palm oil, jatropha, castor oil, tallow, and algae. Brazil and Argentina are the leading producers of soybeans in Latin America. Colombia is the leader in palm oil production, and is the fifth largest producer of palm oil in the world. Ecuador and Peru are also increasing palm oil production. Jatropha projects are also on the rise, as seen in many new plantations and plants in Brazil, Central America and the Caribbean. Many jatropha projects are being developed for local use as well as for export. Castor beans, another feedstock, have been grown in Brazil for many years, and are now being cultivated in Jamaica for local consumption and export. Tallow projects are also increasing, with Brazil and Argentina leading the pack for the potential of tallow-based initiatives based on the local livestock industries.

Outlook – a sustainable economic environment

While Latin America, Central America and the Caribbean show a great deal of promise in terms of feedstock production capacity, based on competitive advantages in land for agricultural use and favorable labour rates, sustainability is a concern. The term sustainability has two meanings. The first meaning relates to the long term economic sustainability of business models for biodiesel producers, retailers and distributors. Among these

groups, without lower cost feedstocks, biodiesel and ethanol producers will continue to struggle until the commercialisation of cost-competitive cellulosic and algae-based biofuels production arrives – not expected to happen for 5-10 years.

If feedstock prices remain at a sustained high level as seen in the rapeseed, soyabean and palm oil markets, biofuels producers will have a very difficult challenge to produce affordable biofuels for retail consumption. Consequently, if affordable retail biofuels can not be made available due to sustained, elevated feedstock prices, most governments will not realise their biofuels development goals and targets. Lower cost feedstocks will help to support the sustained economic profitability of biofuels production, and will continue to bring a renewable economic resource to rural farmers, biofuels producers, and host governments. Latin America is now stepping up to this challenge.

The second meaning for sustainability deals with the natural environment – preserving habitats, rainforests, and indigenous agricultural species. The introduction of

new feedstocks to these environments presents both opportunities and challenges. The opportunity to profit from these ventures is encouraging a great deal of interest, investment and development in Latin American feedstocks. Despite the economic benefits of biofuels development for governments, rural farmers, increased employment, foreign investment, and business interest, there are some key concerns to anticipate when entering new biofuels ventures.

The use of foresight in planning biofuels feedstock ventures and programmes will be paramount to the long-term success of larger, government biofuels initiatives. The key challenge for governments and developers is to expect concerns for responsible development practices; to anticipate and prepare for the potential of eco and political repercussions from deforestation practices; to prepare a proper evaluation of the impact of introducing GMO crops vis a vis indigenous species, and to achieve sustained goodwill with local partners and governments in these ventures. Many developers of new feedstock and biofuels ventures do not anticipate these concerns and

find themselves in a quandry.

These issues should be addressed in any business or government plan prior to implementation to achieve long-term success. Amidst these concerns, opportunities to invest in feedstocks for biofuels are achievable and present economic benefits for developers, foreign investors, rural farmers, and host governments.

How can these benefits be achieved? Firstly, the use of foresight in the governance of biofuels programmes, and the anticipation of corporate responsibility for these issues will be of benefit to all parties. Secondly, if these economic and environmental sustainability challenges can be effectively addressed and mitigated, the opportunity for long-term, sustained economic success and bio-energy growth are far more likely to be realised. The Latin American biofuels markets and ventures have the potential for success over the long term if the proper use of strategic foresight is exercised in the near-term. ●

For more information:

Will Thurmond is president of biofuels consulting firm Emerging Markets Online and author of Biodiesel 2020: A Global Market Survey. Email info@emerging-markets.com or visit the website at www.emerging-markets.com

