

# Food versus Fuel? The Biofuels Debate in South Africa

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# What are biofuels?

- Two main types
- Bioethanol: is alcohol produced by fermenting and then distilling sugars from sugar-rich plants (e.g. sugarcane, maize and cassava). Usually blended with gasoline. A blend of 10 percent ethanol in gasoline is denominated E10
- Biodiesel: is produced from the reaction of vegetable oil with alcohol in the presence of a catalyst. The oil comes from oily crops or trees (e.g. rapeseed, sunflower and soya) but can also come from animal fats and waste cooking oil. A blend of 5 percent biodiesel in gasoline is denominated B5
- In both cases, a second generation of biofuels is underway that will draw on a greater variety of feedstocks
- Promoting biofuels a popular policy option because they served multiple agendas: (i) energy security, (ii) reduction of greenhouse gas emissions and (iii) support for rural economies

# The Food versus Fuel Debate

- 2006-2007 total cereals import bill for food deficit countries rose by 15 percent
- Growth of the biofuels industry identified as a key factor - contributed to rising demand for agricultural commodities
- FAO: 'Food and fuel compete. The grain required to fill the fuel tank of a sport utility vehicle with ethanol could feed one person for a year'
- Jean Ziegler (UN): 'Crime against humanity'
- The Guardian Newspaper (UK): 'If governments promoting biofuels do not reverse their policies, the humanitarian impact will be greater than the Iraq war'
- The Economist: 'The end of cheap food'

## Biofuels in South Africa

- 1970s: International isolation and economic protectionism of apartheid regime – biofuels offered energy security, reduced imports and support for agriculture
- 2000s: Kyoto Protocol, Johannesburg Plan of Implementation, SADC study
- 2006: Accelerated and Shared Growth Initiative (AsgiSA) – maintain economic orthodoxy but 'leverage' informal economy with the formal economy through targeted sector strategies
- Biofuels identified as a key area for growth
- Biofuels Task Team (BTT) established to conduct research, make recommendations regarding incentives and regulatory infrastructure

# Interested Parties



- Commercial Farmers (AgriSA, Grain SA)
- Emerging Farmers (NAFU)
- Agricultural supplies and technology companies (Monsanto, Omnia)
- Biofuel companies and investors (Ethanol Africa, Siyanda Biodiesel, Sterling Waterford Securities)
- Biofuel lobby group (SABA)
- Parastatal investors (EDC, IDC and CEF)
- Image: [www.ecology.com](http://www.ecology.com) (accessed on 14/05/2009)

# The Draft Biofuels Industrial Strategy

- Based on BTT findings published in National Biofuels Study in October 2006
- Recommended market penetration for biofuels of 4.5 percent – amounting to 75 percent of renewable energy target
- Amend licensing and regulation under Petroleum Products Act by making uptake of biofuels a condition for wholesale licenses
- Recommends blending scenario of E8 (8 percent ethanol in petrol) and B2 (2 percent biodiesel in diesel)
- Recommends continuation of 40 percent fuel levy exemption for biodiesel and the extension of a percentage of this exemption to bioethanol
- Multi-feedstock approach



## Responding to the Draft Strategy: Civil Society

- Part of growing international anti-biofuels consensus – biofuels identified as key factor in rising food price increases
- Becomes a platform for the expression of broader issues
- Biofuels workshop organised by UKZN Centre for Civil Society and NGOs on 5 March in Durban
- African Centre for Biosafety, an NGO, focus on genetically modified seed varieties and protection of African biodiversity and knowledge systems
- Congress of South African Trade Unions (COSATU) took aim at broader ideological foundations underpinning Mbeki administration's free market orthodoxy – part of long running tensions within the tripartite alliance

# Biofuels lobby hits back



- Food versus fuel debate cause for concern – investments and profits at stake
- SABA: Activists and media misrepresented the impact of biofuels on food – biofuels may in fact *improve* food security
- AgriSA: Seek assurances from Mbeki – argue that biofuels create opportunities for agricultural development
- Grain SA: Biofuels help tackle climate change, improve energy security – request greater flexibility in biofuel markets and improved incentives to attract investors

• Image: [www.ifp.com](http://www.ifp.com) (accessed on 14/05/2009)



## The Final Strategy

- Represents a significant retreat from the government's initial ambitions - from playing an important developmental role, state reduces financial and regulatory support
- Reduction of liquid fuels market penetration target to 2 percent
- Biofuels uptake no longer mandatory for petroleum wholesalers
- Exclusion of maize from the basket of available biofuel feedstocks
- Increase in fuel levy exemption for biodiesel from 40 percent to 50 percent

## The Losers

- Brings into question viability of private sector interest in biofuels industry
- *Engineering News*: 'At the 2 percent level only the Central Energy Fund and Industrial Development Corporation projects could be accommodated'
- Sterling Waterford: 'Maize was supposed to be the foundation of a South African biofuels project'
- Full impact felt at Bothaville plant – two years later the multi billion rand bioethanol plant was left unfinished, rendered unworkable because of maize ban

## Some Conclusions

- SA bucks the trend – other African countries eager to attract investment in biofuels. Why?
- Biofuels debate driven by international agencies, NGOs and news media – lack of understanding of how actors operate/interact at a national level
- Placed in SA socioeconomic context – a more complex picture emerges
- Explains why government chooses the anti-developmental option
- A missed opportunity?

## Selected References

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