The Brazilian Biodiesel Program
Biodiesel auctions and the “Social Fuel Seal”

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The Brazilian Biodiesel Program: Main Directives

- Create jobs and income, particularly in rural areas for family farmers;
- Reduce regional disparities and develop the North and Northeast regions;
- Reduce GHG emissions;
- Reduce diesel imports;
- Technological and regulatory flexibility;
- Tax incentives and public policies.
Biodiesel

Brazil
Wide range of feedstocks for production of biodiesel

- Castor
- Sunflower
- Soy
- Palm or dende
- Cotton seed
The Brazilian Biodiesel Program: Regulatory framework

- Regulatory framework and tax system established and implemented since 2005.

- Federal Law # 11.097, 2005: legal definition of biodiesel as fuel; determined the mandatory mixture of 2% biodiesel (B2) from January 2008 which should be expanded to 5% (B5) until 2013.

- Federal Law # 11.116, 2005 (biodiesel tax incentives): exemptions or reductions of federal taxes according to the region, kind of producer and/or feedstock.

- “Social Fuel Seal” (for biodiesel producers who buy feedstocks from family farmers and provide them agricultural technical assistance).
The Biodiesel Auctions: Supply the mandatory biodiesel blend

- Auctions driven by Petroleum, Natural Gas and Biofuels Agency (ANP) to fulfill the biodiesel demand to the mandatory blend.
- In the auctions, 80% of the biodiesel total volume to the mandatory blend is reserved to biodiesel producers with Social Fuel Seal.
- In the other 20%, free competition among producers with and without Social Fuel Seal.
- Winners are the biodiesel producers which offer lower prices, since they show compliance in relation to technical standards of the biodiesel.
- 92% of auctions winners suppliers have “Social Fuel Seal”.
Family Farmers

According the Law # 11.326, 2006, family farmers are who comply with the following requirements:

- Small farms (area enough for subsistence and for socioeconomic progress of the family, taking into account the agricultural vocation, the soil quality and market conditions of each region);
- Work and manage the land with family members;
- Main amount of family income must come from the economic activities undertaken at the farm.

In Brazil there are 4.3 million of small farms (agricultural or ranching) ⇒ 84.4% of the total ⇒ that occupy 24% of the total agricultural area ⇒ and represent 33% of the Agribusiness GDP ⇒ providing jobs and occupation to 12.3 million people.*

* Source: Ministry of Agrarian Development.
5% (B5) mandatory mixture since 2010.

56 units authorized by Petroleum, Natural Gas and Biofuels Agency (ANP) with 6,724,000 m³ per year of production capacity (88% with Social Fuel Seal).

2,717,500 m³ of biodiesel produced in 2012.
The main feedstock used in biodiesel production has been **soy (75%, as an average)**, followed by **animal fats (17%)** and **others (8%)** – cotton, palm, sunflower, castor.

The **Middle-West region** is the major producer (43%), followed by South (34%), Northeast (11%), Southeast (9%) and North (3%).

The biodiesel production provided employment to **103,991 family farmers** in 2012 (25% in Northeast region).
**Biodiesel Regional Capacity of Production Distribution**

<table>
<thead>
<tr>
<th>Region</th>
<th>Plants</th>
<th>Production capacity (m³)</th>
<th>Production capacity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle West</td>
<td>27</td>
<td>3,073,000</td>
<td>45.7%</td>
</tr>
<tr>
<td>South</td>
<td>8</td>
<td>1,818,000</td>
<td>27%</td>
</tr>
<tr>
<td>Southeast</td>
<td>11</td>
<td>890,000</td>
<td>13.2%</td>
</tr>
<tr>
<td>Northeast</td>
<td>6</td>
<td>741,000</td>
<td>11%</td>
</tr>
<tr>
<td>North</td>
<td>4</td>
<td>202,000</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56</strong></td>
<td><strong>6,724,000</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Biodiesel Production in Brazil - 1000 m³

Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (1000 m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.167</td>
</tr>
<tr>
<td>2009</td>
<td>1.608</td>
</tr>
<tr>
<td>2010</td>
<td>2.397</td>
</tr>
<tr>
<td>2011</td>
<td>2.673</td>
</tr>
<tr>
<td>2012</td>
<td>2.717</td>
</tr>
</tbody>
</table>

Source: ANP
Comparative Prices: Biodiesel x Diesel: 2008-2012

Prices at Producers Level (with federal taxes; without state taxes) - R$/liter

- Biodiesel (weighted average: ANP auctions)
- Diesel

Biodiesel is more expensive than diesel, but the auctions have stimulated competition and participation of family farmers.
Family farmers involved with biodiesel production

Source: Ministry of Agrarian Development - MDA
Brazilian Biodiesel Social Benefits

- **Employment:**
  - 103,991 jobs and occupations to family farmers in rural areas;
  - 86,112 skilled jobs (biodiesel industry);

- **Income:**
  - around R$ 14,566,00/family/year or US$ 7,283.00 (revenue with the sale of feedstocks to biodiesel production).

* Source: Socioeconomics impacts of biodiesel industry in Brazil. Brazilian Biodiesel Producers Association (Aprobio) and Economic Research Institute Foundation (FIPE), São Paulo, 2012.
Indicator 9: Allocation and tenure of land for new bioenergy production:

(9.1) a legal instrument or domestic authority establishes title and procedures for change of title; and

(9.2) the current domestic legal system and/or socially accepted practices provide due process and the established procedures are followed for determining legal title.

Indicator 11: Change in income:

(11.1) wages paid for employment in the bioenergy sector in relation to comparable sectors;

(11.2) net income from sale, barter and/or own-consumption of bioenergy products, including feedstocks, by self-employed households/individuals.

Indicator 12: Jobs in the bioenergy sector:

(12.1) total;

(12.2) skilled/unskilled;

(12.3) indefinite/temporary.
Thanks for your attention!

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