

**LMC INTERNATIONAL**

## **US Sugar Policy**

*Prepared for:*

**Global Sugar Alliance**

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# US Sugar Policy<sup>1</sup>

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<b>SUMMARY OF CURRENT SUPPORT MEASURES</b>	
<b>Sugar Specific Support</b>	<b>General Agricultural Support</b>
Marketing Allotments	Farm Support
Import Tariffs	
Sugar Loan Program	
Management of Domestic Supply	
Sugar Storage Facility Loan Program	
Re-export Programs	

The US sugar sector operates in a highly regulated environment. The government operates a price support program by managing the amount of domestically-produced and imported sugar that can be sold in the domestic market. These marketing instruments are underpinned by a loan system, whereby the government acts as a buyer of last resort. This sugar-specific support operates within a broader framework of farm support measures, which are administered by the United States Department of Agriculture (USDA).

High Fructose Corn Syrup (HFCS) is excluded from the support measures provided to the sugar sector and does not have its own specific support program. However, the high level of support that has been granted to the sugar sector since the mid 1970s has allowed for the development and expansion of HFCS production to approximately half of the US caloric sweetener market at the expense of sugar.

## **SUGAR SPECIFIC SUPPORT PROGRAMS**

### **Market Access**

Individual producers market their sugar independently, both domestically and for export. However, the quantity of sugar that may be sold in the US market is strictly controlled through marketing allotments for US producers and the Tariff Rate Quota (TRQ) and other import quotas for third-country suppliers.

The marketing allotments are assigned to domestic processors of sugarcane, sugarbeet and in-process beet sugar for the purpose of sugar production on an annual basis, whether such sugarbeet or in-process beet sugar is produced domestically or imported. At the beginning of every fiscal year<sup>2</sup>, the USDA is required to estimate total domestic human consumption of sugar. Under the 2008 Farm Bill, not less than 85% of this demand must be allocated to domestic sugar producers. This is defined as the Overall Allotment Quantity (OAQ).

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<sup>1</sup> LMC identifies support measures on the basis of economic impact, and does not intend to imply any sort of legal evaluation.

<sup>2</sup> The US government fiscal year runs from October 1 to September 30.

The OAQ is then divided between beet processors (54.35%) and cane millers (45.65%). If sugar is produced in excess of the OAQ, US sugar producers must store this sugar at their own expense (so-called blocked stocks).

The legislation provides for a number of contingencies that may require reassignment of allotments during the crop year. If a sugarcane processor is unable to market its allocation, the USDA's agency the Commodity Credit Corporation (CCC) will first reassign the deficit allocation to other processors within that state. If, after the reassignment, the deficit cannot be eliminated, the CCC will reassign the deficit proportionately to allotments for other cane sugar states. If this deficit cannot be eliminated, the CCC can fill the gap by selling CCC sugar stocks, unless such sales would have a significant effect on the price of sugar. If the deficit still has not been eliminated, the CCC will reassign the remainder to imports of raw cane sugar. Likewise, if a sugarbeet processor is unable to market its allocation, the CCC will reassign the deficit to other sugarbeet processors, then to the CCC and then to imports of raw cane sugar.

In addition to the system of marketing allotments, the government limits market access by restricting sugar imports. The US provides duty-free access to third countries via the TRQ. The TRQ applies to imports of raw cane sugar and refined sugar and is subject to the WTO minimum access commitment of 1.14 million tonnes. Included in this amount is a commitment to import at least 22,000 tonnes of refined sugar.

The TRQ is set annually by the USDA at the beginning of the fiscal year and consists of two separate categories for imports of raw cane sugar and refined sugar. Under the new Farm Bill, the TRQ is meant to remain at the minimum commitment level until April 1<sup>st</sup>, except in the event of emergency circumstances, as declared by the USDA. After April 1<sup>st</sup>, the USDA can adjust the TRQ to allow imports to make up for any shortages in the domestic market<sup>3</sup>. The April 1<sup>st</sup> date has been established so the USDA can get a clearer picture of the domestic supply situation as the crop progresses and make adjustments to the TRQ accordingly, minimising the risk of forfeitures.

In addition to the TRQ, the US imports sugar duty free from Mexico, CAFTA/Dominican Republic and Peru.

- From January 2008, Mexican sugar has been granted unlimited duty-free access under the provisions of NAFTA.
- The US also has a separate trade agreement with the Dominican Republic (DR) and the Central American Free Trade Areas (CAFTA), which has specific provisions for trade in sugar. The agreement includes country-specific TRQs for the DR-CAFTA countries, starting at a total of 107,000 tonnes in the first year and growing to 151,140 tonnes in year 15. Thereafter, the TRQ is set to grow by 2,640 tonnes per year, into perpetuity.
- Since mid-January, Peru has been granted a duty-free TRQ of 9,000 tonnes in 2009 rising to 11,520 tonnes in 2023 (and increasing by 180 tonnes per annum thereafter). However, the country must have a trade surplus of sugar to qualify for access under the TRQ, although it has been granted permanent access for 2,000 tonnes of specialty sugar that is not subject to this restriction.

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<sup>3</sup> The USDA increased the quota for refined sugar by 272,128 tonnes in August of 2008; however, this was prior to the implementation of the new Farm Bill, which went into effect on October 1.

There are also pending Free Trade Agreements (FTAs) with Chile and Colombia that could increase the US's import obligations by over 60,000 tonnes. However, these FTAs, along with the accession of Costa Rica into the CAFTA free trade agreement, are still pending congressional approval.

Any imports of sugar outside the arrangements described above are subject to the full import tariff (Table 1). In addition to these tariffs, the US applies additive safeguard duties, which depend on the value and type of sugar imported. These rates are applied on a step graded scale and are inversely related to the world sugar price. The additive duties are listed in Table 2.

**Table 1: Import Tariffs**

	Raw Sugar	Refined Sugar
<b>Current Tariff Rate</b>	US\$14.6/tonne	US\$36.6/tonne
In quota (TRQ) <sup>1</sup>	-	-
Out of quota	US\$338.7/tonne	US\$357.4/tonne
<b>GATT Commitments</b>		
Tariffs		
Base Rate	US\$398.5/tonne	US\$420.5/tonne
Final Rate	US\$338.7/tonne	US\$357.4/tonne
Minimum Access (mt, rv)	1,117,195	22,000

Note: 1. For most countries this duty is waived under either the Generalised System of Preferences or the Caribbean Basin Initiative (Source: USDA Sugar Backgrounder, July 2007).

**Table 2: Additive Import Safeguard Duties**

World Sugar Price		Raw Sugar		Refined Sugar	
cents/lb	US\$/tonne	cents/lb	US\$/tonne	cents/lb	US\$/tonne
0 to 2.27	0 to 50	5.85	129	9.8	216
2.27 to 4.54	50 to 100	3.95	87	7.76	171
4.54 to 6.80	100 to 150	2.49	55	5.94	131
6.80 to 9.07	150 to 200	1.36	30	4.35	96
9.07 to 11.34	200 to 250	0.68	15	3.22	71
11.34 to 13.61	250 to 300	0	0	2.09	46
13.61 to 15.88	300 to 350	0	0	1.41	31
15.88+	350+	0	0	0	0

### Sugar Loan Program

Beet processors and cane millers can obtain loans from the USDA to cover their operating costs at a rate specified in the legislation. Under the 2008 Farm Bill, the loan program has been authorised to increase from 2009 through 2013. Table 3 presents the loan rates for raw and refined sugar over the period 2008-2013.

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**Table 3: Loan Rates for Raw and Refined Sugar, 2008-2013**

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Fiscal Year	Sugarcane Processors		Sugarbeet Processors	
	cents/lb	US\$/tonne	cents/lb	US\$/tonne
2008	18.00	396.8	22.90	504.9
2009	18.00	396.8	22.90	504.9
2010	18.25	402.3	23.45	517.0
2011	18.50	407.9	23.77	524.1
2012	18.75	413.4	24.09	531.2
2013	18.75	413.4	24.09	531.2

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Loans can be taken for a maximum period of nine months and must be paid off in full (including interest charges) at the end of the fiscal year in which the loan was made. These loans are non-recourse, meaning that the processor can forfeit sugar as collateral in lieu of the full cash payment at any time with the decision being at the discretion of the processor. This effectively establishes a floor price for sugar because the USDA – via the CCC – is obliged to accept the forfeited sugar in lieu of the cash payment. Therefore, if the US market price was to fall below the loan rate for sugar plus marketing costs, processors would be very likely to choose to forfeit their sugar. By forfeiting the sugar, the processor effectively withdraws sugar from the market, thereby reducing excess supply and helping to support the market price of sugar.

Under the legislation, the loans also apply to in-process beet and cane syrups at 80% of the loan rate for the processed product. However, syrups must be converted into raw or refined sugar to be accepted as collateral by the CCC.

The main requirement that the regulation places on processors is that a minimum proportion of the loan rate is passed on to farmers in the form of beet/cane payments to ensure that the benefits of price support are shared between growers and processors.

### **Management of Domestic Supply**

Under the 2008 Farm Bill, the USDA is instructed to operate the loan program, to the maximum extent possible, at no cost to the Federal Government by avoiding forfeitures to the CCC. In practice, this means that the USDA must take measures to minimise the risk of forfeitures of sugar to CCC. The domestic allotment must account for no less than 85% of domestic consumption. If the combination of domestic production and imports through the TRQ and Mexico exceeds 100% of domestic demand, an adjustment mechanism is required to bring the market into balance. To this end, the Bill provides for three market balancing tools. These measures are designed to limit the amount of domestically produced sugar and TRQ imports available on the market to ensure that prices are sustained above forfeiture level.

**1. Inventory Reduction:** Prior to planting, processors can voluntarily reduce their production in exchange for sugar held in inventory at the Commodity Credit Corporation (CCC). This measure already existed in previous legislation – it was known as the Payment-In-Kind program (PIK) – and the provision was retained under the 2008 Farm Bill.

**2. Bioenergy Feedstock (Sugar to Ethanol Program):** This provision was introduced for the first time in the 2008 Farm Bill and applies from the 2008 to the 2012 crop years. Under this provision, the USDA can buy excess sugar from the market pre-

emptively and divert it to ethanol production in order to prevent it from being forfeited to the CCC. This measure will only be used when imports lead to an oversupplied market. It is not designed to be used to clear domestically produced blocked stocks.

The Bioenergy Feedstock provision is implemented via the Feedstock Flexibility Program for Bioenergy Producers. This is included in separate title of the 2008 Farm Bill (Title IX – Energy). Under the Feedstock Flexibility program, raw and refined sugar and in-process sugar eligible for human consumption (defined as ‘eligible commodity’ in the regulation) can be purchased directly from the market by the USDA and sold to bioenergy producers. CCC stocks can also be sold in this way. The program is to be operated only in years when there is a risk of forfeitures. As a result, it is unlikely that this measure will be used in the 2008/09 crop year as sugar supplies are tight.

While it is difficult to predict the price that biofuel producers will be willing to pay for this sugar, it is unlikely that it will match the price paid by USDA to sugar producers. (The USDA will invite bids from sugar producers to supply sugar and ethanol producers to buy sugar, with the lowest bidding sugar producers and highest bidding ethanol producers being chosen to participate.)

In the event of difference between the cost of sugar purchases and sales to the ethanol sector will be met by the US taxpayer. For example, in 2007, a small amount of sugar was purchased for ethanol at a price between 4-7 cents per pound. In the future, the price received will depend on several factors, most notably the prevailing price of ethanol. However, based on its own calculations, the USDA expects the price to average between 7-11 cents per pound. In this scenario, the cost to the taxpayer would be equal to the difference between the loan rate and this price, plus the cost of administering the program.

**3. Buyback of Certificates of Quota Eligibility (CQEs):** CQEs are import certificates issued by the USDA that must accompany all raw sugar that is imported at the TRQ rate. CQE buybacks represent a management tool that allows CCC to exchange raw sugar held in inventory for CQEs, effectively limiting the amount of third-country sugar that enters market during a particular crop year. This measure was last used by the USDA in 2002, when around 276,000 tonnes of raw sugar held by the CCC were made available for exchange. Of this, 104,000 tonnes were accepted in exchange for 161,000 tonnes of CQEs.

### **Sugar Storage Facility Loan Program**

Processors of domestically produced sugarcane and sugarbeet can obtain finance for the construction or upgrade of storage and handling facilities for raw and refined sugar.

### **Re-Export Programs**

While the system of marketing allotments helps to support prices above forfeiture levels by limiting domestic supply, it constrains the extent to which US refiners are able to utilise their processing capacity when supplying the domestic market.

To address this, the USDA administers one key policy tool, the Refined Sugar Re-Export Program, designed to help US refiners boost their throughput. This program establishes a licence against which a refiner can import world-priced sugar, provided a corresponding amount of refined sugar is exported onto the world market. If this sugar originates in a country that benefits from special trade arrangements, the sugar is imported duty-free. Otherwise, it is subject to a tariff of 1.4606 cents per kg.

Once the sugar is refined, there are three outlets for it:

- Sugar Containing Products Re-Export Program, where the refined sugar can be re-exported as a product ingredient.
- Polyhydric Alcohol Program, which is established to provide world-priced sugar to U.S. manufacturers of polyhydric alcohols.
- Export market.<sup>4</sup>

Considerable flexibility is built into the program regarding the timing of re-exports. A refiner can:

- Export domestically produced refined sugar and later import world market raw sugar for refining and distribution into the domestic market.
- Import raw sugar for refining and distribution in the domestic market and later export refined sugar.
- Or import world market raw sugar, refine it and export it to the world market.

With the 2002 Farm Bill, the program was expanded such that all refined sugars, including beet sugar, are substitutable for export under the Refined Sugar and Sugar-Containing Products Re-Export Programs. The programs were also expanded to allow toll refining and third party exports.

The raw cane sugar imported under the Refined Sugar Re-Export program is not subject to the limits of the raw sugar TRQ.

## **GENERAL SUPPORT TO THE AGRICULTURAL SECTOR**

### **Farm Support**

In addition to sugar specific-support measures, beet and cane farmers are also eligible for farm support, which is available to farmers of all crops. This support comes in a number of different layers, most of which are complicated by combinations of state and federal law and the specific circumstances of an individual farm. Below, we list the key support measures that are available at a federal level.

**Tax Breaks for On-farm Fuel:** There is a federal credit for fuel used on the farm. For some states, credit is also available at a state level. Thanks to the credit, farm diesel (dyed red) is on average between 60-65 cents per gallon cheaper than diesel designated for road use.

**Direct Farm Loans:** These are made by USDA. The main types of loans are the Direct Farm Ownership Loan (FO) and the Operating Loan (OL). To be eligible for a FO loan, the applicant must own and operate the farm, while for an OL loan the producer need only be an operator. The funds obtained under a FO loan can be used to purchase farmland, repair and construct infrastructure and promote soil and water conservation. OL loans may be used to purchase farm inputs and to pay for operating expenses. They can also be used to pay for minor improvements to buildings, costs associated

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<sup>4</sup> With free trade under NAFTA, Mexican *maquiladoras* can purchase re-export program sugar, process it and sell it back into the US market.

with land and water development, family subsistence, and to refinance debts under certain conditions. Under the 2008 Farm Bill, the borrowing limit for both types of loan has been set at US\$300,000 per farming entity.

**Disaster Assistance:** This is available to the states/counties that are deemed disaster areas by the federal government. Under the 2008 Farm Bill, agricultural assistance programs are covered by the Supplemental Agricultural Disaster Assistance (SADA) provision. Under SADA, beet and cane producers are covered by the Supplemental Revenue Program (SURE), which provides aid to producers that suffered production or quality losses or both during the crop year. In addition to these measures, emergency farm loans are available to farmers that have suffered losses due to drought, flooding, natural disaster and quarantine.

**Federal Crop Insurance Programs:** These allow producers of selected crops to purchase insurance policies at a subsidised rate.

For sugar crops the only type of crop insurance available is yield insurance.

- Beets are insured by beet yield at coverage between 50-85%. The value of lost yields is determined at the beginning of the season by the Risk Management Association.
- Sugarcane is insured on the basis of raw cane sugar per acre at coverage between 50-75% of the yield.

The policies are sold through private insurance companies, but the government subsidises the insurance premiums and pays a portion of the companies' administrative and operating expenses. The level of subsidy varies depending on the level of coverage and insurance plan selected by the farmer, ranging between 50% and 70% of the premium. There are limits on the amounts that can be paid out to policy holders for a given incident. In 2005, US\$2.3 billion was paid by the government to finance all commodities insured through crop insurance, rising to US\$3.8 billion in 2007 due to rising crop prices.

***Accelerated Depreciation of Farm Machinery/Infrastructure/Property Taxes Associated with the Agricultural Value of Land rather than the Market Value:***

Similarly to the measures listed above, the level of support provided by these two measures vary by state. In many cases, growers can depreciate farm machinery and infrastructure over a shorter period than non-farm items and, consequently, pay less tax on it. For agricultural land, growers pay property taxes on the basis of the agricultural value of the land rather than the market value (which can be dictated by the value of residential and commercial buildings).

## **DOMESTIC AND EXPORT PRICES**

Table 4 summarises the average sugar prices in the domestic and export markets over the period 2005/06 to 2007/08. Domestic prices are well above the level prevailing in the world market, where prices of raw and refined sugar averaged US\$271 per tonne and US\$360 per tonne, respectively, during the same period.

**Table 4: Domestic and Export Prices, Average 2005/06-2007/08 (US\$/tonne)**

	Raw Sugar Price <sup>1</sup>	Refined Sugar Price <sup>2</sup>
Domestic Sales	476	669
World Market (Re-Export) Sales <sup>3</sup>	-	369

Note: 1. The price of raw sugar is based on the No.14 domestic raw sugar futures price quotations.  
 2. The domestic refined price is based on the Midwest refined sugar price.  
 3. The re-export price for white sugar is presented on an f.o.b. basis, and has been derived from the world white sugar price plus an allowance for the premium that US refiners earn from sales of sugar in regional markets.

Source: Intercontinental Exchange (ICE), United States Department of Agriculture.

## TOTAL SUPPORT TO SUGAR PRODUCERS

Table 5 presents the Organisation for Economic Development and Cooperation's (OECD) estimates for a number of indicators of support to US sugar producers for the period 2000-2007.

Overall support to sugar arising from sugar-specific policies is estimated using the Producer Single Commodity Transfer (Producer SCT) indicator. This is the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policies linked to the production of a single commodity such that the producer must produce the designated commodity in order to receive the transfer.

**Table 5: US Sugar Support (US\$ million)**

	2000	2001	2002	2003	2004	2005	2006	2007
Producer Single Commodity Transfers	1,064	1,163	1,185	1,327	1,053	896	519	809
- of which								
Market Price Support <sup>1</sup>	975	1,088	1,035	1,330	1,039	756	521	806
Payments Based on Output <sup>2</sup>	62	44	1	1	1	1	2	2
Payments based on Current Area Planted, Production Required <sup>3</sup>	27	31	149	-4	14	138	-4	1

Notes: 1. The annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, arising from policy measures that create a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farm gate level.  
 2. These are transfers from taxpayers to agricultural producers from policy measures based on current output. The payments consist of sugar loan forfeit, sugar loan interest subsidy and sugar payments in kind (grower share).  
 3. These are transfers from taxpayers to agricultural producers from policy measures based on current area and requiring production. The payments consist of crop insurance and sugar disaster payments.

Source: Producer and Consumer Support Estimates, OECD Database 1986-2007

The table reveals that the largest share of transfers consists of the Market Price Support (MPS). For the US sugar sector, this consists exclusively of transfers to producers from consumers arising from the difference between the domestic price of sugar and the reference price (calculated at the farm gate) of world market imports of raw sugar. Based on the OECD's estimates, there are no budgetary transfers to producers from taxpayers.

However, a small share of this support is borne by taxpayers via the payments based on output and area, which are provided by the government through USDA. In the future, as we discussed above, taxpayers could be responsible for a larger share of this support in the years when the Sugar-to-Ethanol program is implemented.

The OECD has also calculated the Market Price Support (MPS) for other major sugar producers. The latest year for which these data have been prepared for a broad range of sugar producers is 2005 (Table 6), although data are available for OECD countries up to 2007 (Table 7). To contrast the level of MPS in these industries, we present the OECD's estimates measured on a tonne of refined sugar output. The results are summarised in Diagram 1.

On this basis, the US offers a broadly similar level of market price support as Mexico, but less than the EU, but is higher than that offered in the other featured countries. The MPS for Australia and Brazil was calculated as zero.

In the case of the EU, a far-reaching programme of reform was introduced in 2006 that will result in a much reduced level of market price support when the reform are fully implemented in the 2009/10 season, and the initial effects of this are illustrated in the data for 2007. However, beet growers will be partially compensated for this via *decoupled* direct farm payments, i.e., they will receive these payments for the area on which they historically grew sugar beet but will not be required to grow sugar beet to receive the payment.

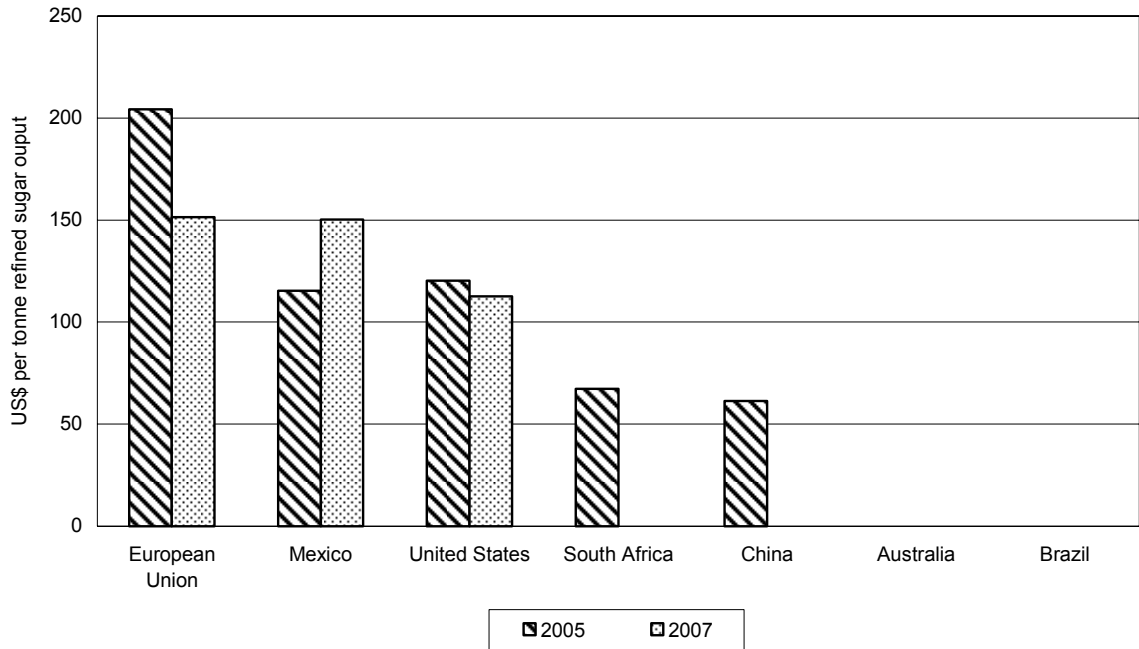
**Table 6: US Sugar Support as Measured by Market Price Support, 2005**

	<b>MPS</b> <i>millions local currency</i>	<b>MPS</b> <i>million US\$</i>	<b>Sugar Production</b> <i>million tonnes refined value</i>	<b>MPS</b> <i>US\$ per mt</i>
United States	756	756	6.29	120.3
EU	3,509	4,364	21.37	204.2
Australia	0	0	4.90	0.0
Mexico	7,207.9	662	5.74	115.4
Brazil	0	0	58.18	0.0
China	4,810	587	9.56	61.4
South Africa	1,062	167.0	2.48	67.3

**Table 7: US Sugar Support as Measured by Market Price Support, 2007**

	<b>MPS</b> <i>millions local currency</i>	<b>MPS</b> <i>million \$US</i>	<b>Sugar Production</b> <i>million tonnes refined value</i>	<b>MPS</b> <i>US\$ per mt</i>
United States	806	806	7.16	112.6
EU	1,935	2,648	17.49	151.4
Australia	0	0	4.47	0.0
Mexico	8,634	790	5.26	150.2
Brazil	n.a.	n.a.	n.a.	n.a.
China	n.a.	n.a.	n.a.	n.a.
South Africa	n.a.	n.a.	n.a.	n.a.

**Diagram 1: Market Price Support per tonne of Refined Sugar Output, 2005 & 2007  
(OECD Countries Only)**



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