Abstract

Under the competing pressure of alternative economic integration projects and the deterioration of US hegemony in the global economy, we have seen the rise of agrofuels as a “green alternative” for energy restructuring in the developed world, focussed mainly on the transportation sector. Based on a wide domestic power bloc and searching for external alliances with Brazil to isolate Venezuela and Cuba’s influence over the rest of Latin America, the US has proposed agro-fuels as an alternative. In reality, it is deepening the regionalization of North America. As well, this strategy is searching for a structural change in the Mexican energy sector and opening it up to private investment without making any significant changes to the Constitution. The Security and Prosperity Partnership is a new and sophisticated strategy that makes a detailed array of recommendations for all energy activities, including oil, gas and electricity. This comes at a time when we have seen a decline in domestic reserves and a rush to begin the exploitation of oil in the deep waters of the Gulf of Mexico. At the same time, Felipe Calderón’s administration announced public financial resources under the Puebla Panama Plan umbrella, to promote the incorporation of Mexican Southern States in the strategy of agrofuels. All these policies put new predatory pressure on land and water use, and more specifically, on domestic food production.

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Introduction

This paper is divided into three parts, in which we will analyze the strategies followed by the United States in its efforts to implement the free trade model across the continent, with special emphasis on the cases of North American regions and the Puebla-Panama Plan (PPP).
In the first section we will review the problem of US competitiveness and the challenges of Latin American integration, as well as the project for deepening integration in North America. In the second section we will reconstruct the origins and prospects of the hemisphere’s deficit, beginning with a characterization of this unfavorable condition, and then reconstructing the predatory nature of the neoliberal model in Mexico’s energy sector, and the still-distant prospect of deepwater oil drilling in the Gulf of Mexico. The third section is dedicated to reconstructing the dynamics of energy deregulation, converging toward the US model. We will look at the Security and Prosperity Partnership of North America, and the implementation of the agro-fuel program and its impacts in the United States, Mexico and Latin America, and will present a table with some preliminary conclusions.

I. US economy’s competitiveness problems; challenges in Latin American integration and US integration projects

I.1 Competitiveness challenges and Deepen and Expanded integration.

Of the various problems mentioned by authorities in reference to the deterioration in US competitiveness, we will address three of them here. First of all, we will consider the increase in commercial and productive competition by Asian and European Union countries, as expressed in commercial terms in the sizeable deficit in the US current account, and in monetary terms in the significant rise in the Euro as the reserve currency, in the concentration of reserves in dollars in various Asian countries, and in the deterioration of the US domestic industrial production base. Secondly, the decline can be explained by the extremely high level of US energy consumption, its low proportional level of energy reserves and its dependency on energy supply sources in remote or politically unstable regions. Thirdly, we would mention its aging population and its growing dependence on imported flows of a migrant labor force, while its productive base is being taken abroad in the search for a long-lasting advantage in wage costs.

The first process can be traced back to the 1980s, when the vulnerability of the US economy was characterized by what were referred to as “twin deficits” (fiscal deficit and current account deficit). The major central economies were demanding at that time that these imbalances be corrected by the U.S. in a coordinated response with G-5. However, beyond what was formally agreed upon in Plaza (1985) and Louvre (1987) agreements, the United States sought its own strategy for overcoming its deteriorating hegemony, formalizing an advantageous trade agreement, first with Canada and then with Mexico.

When NAFTA is analyzed by government officials, it is always emphasized that this agreement has served to increase investments, multiply trans-border trade and improve the rules of trade. But no mention is made of the promises made particularly to Mexico with regard to an improvement in macroeconomic performance, employment growth, an end to migration pressures, and a future of regional convergence toward higher levels of income and well-being.

More objective analyses\textsuperscript{2} indicate that since NAFTA went into effect, the growth rates in the Mexican economy, specifically in the Gross Domestic Product (GDP), per capita GDP, investment, employment, wages, human development and technological diffusion, have been, in short, mediocre and clearly frustrating. The signing of this agreement was preceded by strong criticism and a massive rejection of free trade policies, and consequently it is not surprising to find intense, generalized dissatisfaction with this project among sectors of the workers’ population in the three member countries.\textsuperscript{3}

I.2 Deepen integration in North America, as a regional response to its deteriorated position in global competitiveness; fundamental features of the Security and Prosperity Partnership

One of the effects of the September 11 attacks on the United States was that in addition to previous concerns regarding its competitiveness, there were new concerns regarding its security. These concerns fit perfectly in a discourse that combined ideas for relaunching its imperial projection, now systematized by various US think tanks into a new project. The fundamental aspect of this new project called for a unique replication of European integration, through a proposal to deepen unification efforts in order to establish a “North American Community.”

In addition, the United States would simultaneously intensify its struggle to establish a Free Trade Area of the Americas (FTAA), in order to expand economic integration to the entire hemisphere. As we know, the FTAA project was partially halted nearly two years ago, and the United States was forced to resort to signing bilateral agreements. This is a slower and more complex solution, since at the same time it must confront new challenges such as the Bolivarian Alternative for the Americas (ALBA, its Spanish acronym), launched by the Venezuela-Cuba alliance.

We will take a moment here to briefly reconstruct the evolution of the new US project for North America. In June 2002 the Woodrow Wilson International Center for Scholars sponsored an international conference designed to examine the state of relations between the United States, Canada and Mexico, entitled “Toward a North American Community?”\textsuperscript{4} By January 2003, the major corporate leaders in Canada had written “An Initiative for Security and Prosperity” (the seed for the Security and Prosperity Partnership of North America). And in 2004 an ad-hoc committee in the United States created by the Foreign Relations Council and headed by Robert Pastor\textsuperscript{5} had already clearly sketched out three of the project’s security and prosperity objectives for intensifying the integration process: first, to establish a security perimeter around the


\textsuperscript{3} A detailed account of the negative effects in the three countries can be found in Robert E. Scott, Carlos Salas and Bruce Campbell, “Revisiting NAFTA, still not working for North America’s workers,” Economic Policy Institute, Briefing Papers, No. 173, Washington, D.C., USA, September 2006.


\textsuperscript{5} See a presentation on and critique of Pastor’s ideas in Alejandro Álvarez, “México en el Siglo XXI: ¿hacia una comunidad de Norteamérica?” in Memoria, No. 162, August 2002.
three countries by 2010; secondly, to eliminate NAFTA’s rules of origin, moving toward a Customs Union (establishing a common external tariff), and thirdly, to greatly expand “guest workers programs” in the United States and Canada, with prior efforts to assure public acceptance.

Following these guidelines, the emphasis was modified until a “new project” was publicly formulated in 2005 in Waco, Texas, in a meeting of the presidents of the United States, Canada and Mexico. The Security and Prosperity Partnership (SPP) of North America was presented as a way to confront the challenges of security and competitiveness. However, it is nothing but an attempt to intensify economic integration, while shedding the bad image that NAFTA has acquired throughout North America.

In this new project the respective executive branches are responsible for delegating responsibilities within government bureaucracies and defining specific instructions for “working groups” and “ministerial meetings.” This format succeeds in avoiding uncomfortable legislative scrutiny, and predominant corporate interests are removed from the noisy criticism of anti-establishment social movements.

It was not until 2006 that a Trinational Committee was formed, composed of 30 top executives from powerful corporations in the three countries. Representing Mexico in this North American Competitiveness Council (NACC) are leaders from the country’s most powerful business groups. In early 2007, this NACC prepared a “Report to the Ministers” in which the high-level authorities of the three countries were presented with a complex agenda of priorities with 51 highly-detailed recommendations.6

Judging by the SPP agreements announced at the end of the Ministerial Summit in Montebello, Quebec in August 2007, four priorities are evident: a North American Plan against Avian Influenza and Pandemic, a Regulatory Cooperation Scheme, a Strategy on Intellectual Property Rights and an Agreement for Cooperation in Energy Technology and Science.7

We can say that from the beginning, the issue of trans-border security was unilaterally placed on the table, with a proposal in which the United States first specified closing its territorially-defined borders, and then tightening border control measures, to then offer Canada and Mexico a reduction in such restrictions, in exchange for a commitment from the two governments to physically control their own borders. The proposal was justified with the “fight against terrorism,” which is the focus of the new security strategy since the so-called “Bin Laden effect.”8

In terms of bilateral relations between the United States and Mexico, it is clear that the elements defining the trans-border security agenda were not previously nor are

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7 Ibid, p. i.

they currently determined by the issue of terrorism. Instead, the real focus encompasses drug and arms trafficking, migration and smuggling—problems occurring in both directions across the border. It is precisely with the pretext of control over drug trafficking that new security policies are imposed, with a particular emphasis on US interests. This is evident in the recent launching of the “Merida Initiative,” a plan that is formally presented as intended to fight illegal drugs and with a scope that is unprecedented. It has popularly been named “Plan Mexico” due to its similarity to “Plan Colombia.”

But the context of the economic, political and social deterioration experienced in the country and Central America for several years now adds a new worry for the United States, specifically whether the growing political dissidence and civil disobedience in Mexico will spread to its northern neighbor and migration increase due to CAFTA can become an unstoppable avalanche.

In the case of energy, we can sum up by saying that in the formulations made by the Competitiveness Council with respect to Mexico, especially noteworthy for the moment are the areas of research cooperation and the application of developments in the areas of renewable energy and energy efficiency, nuclear energy, fossil fuels and the production of zero-carbon-emission energy. There is a clear reference to the energy infrastructure security (of strategic facilities, informatics security and oil and gas pipeline security), and also electricity generation and transmission.

And as we know well, the core of the issue is the need for Mexico to move toward opening up opportunities for private capital investment “without modifying the country’s Constitutional law.” This is necessary to resolve the security problem that most concerns the United States—its regional energy supply—in order to reduce its vulnerability to imports from more distant and less secure regions such as the Middle East.

II. The energy situation in the hemisphere

II.1 A characterization of the Hemisphere’s and Mexico’s energy deficit

The situation for hydrocarbons in the Americas is ambivalent. As a region, the hemisphere ranks second in the world in terms of reserves and production, fourth (of five) in the reserves/production (R/P) relation and first in consumption. In December 2006 the hemisphere had a total of 163.4 billion barrels (mMb: \(10^9\)-b) of oil reserves. But of the 35 countries making up this region, only five possess 93.2% of these resources, specifically: Venezuela (49.0%), United States (18.3%), Canada (10.5%), Mexico (7.9%) and Brazil (7.5%). In terms of natural gas, the situation appears to be a bit more concentrated, given that only three countries possess 80.1% of the region’s

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9 See “Destapa Bush el plan antinarco para México,” in La Jornada, Mexico, October 23, 2007, front page. This article reveals that Bush is asking for Congressional approval for a 1.5 billion dollar program for “fighting drug trafficking, transnational crime and terrorism in the hemisphere.” Of this amount, 500 million dollars would enter directly into the US budget for 2008. Through this article, the “secret” that Mexico would contribute 7.5 billion dollars to the Security Plan was made public (a typical way for the Mexican public to learn of such agreements)! In other words, we will contribute three and a half times more than the United States—for the security of that country. And part of the equipment to be obtained with the funds is to detect the smallest amount of radioactive substances being transported and another part of the equipment is to control Mexico’s southern border.

10 According to the Organization of American States (OAS).
14.86 billion cubic meters (MM-m\(^3\): 10\(^{12}\)-m\(^3\)): United States (39.9%), Venezuela (29.0%) and Canada (11.2%).\(^{11}\)

Historic figures indicate that, as a result of the industry’s development period, reserves in Mexico hit a peak value of 57.1 billion barrels (mMb) in the early 1980s. This was the decade in which, according to president José López Portillo, our problem would be how to “manage the abundance.” In reality, however, the abundance was short-lived and a decline soon began. Between 1980 and 1997, crude reserves began to slowly drop at an annual average rate of 1.1%, for a total decline of 19.2% during that period.

By 1998 there was an abrupt 55% drop in reserves, supposedly due to a change in the calculation system. This coincided with the formal initiation of a financial system known as Pidiregas (a Spanish acronym for Productive Infrastructure Projects with Differed Impact on the Public Expenditure Registry) that had been designed two years earlier to open up some room for private investment in energy infrastructure, a process that today has PEMEX with a debt of 50 billion dollars. From that year on, reserves continued to diminish at an average annual rate of 6.7%. By 2006 total reserves amounted to only 12.9 mMb.

This situation has naturally had an effect on the reserves/production (R/P) relation, or the number of years that resources will last, since in the last 26 years the situation for Mexico has changed from having reserves for 61 years to only 9.6 years. The situation is even worse when we consider that the primary oil field being exploited, Cantarell, is declining at an annual rate of 14%, to continue for the rest of its useful life. Graph 1.

![Graph 1](image-url)


\(^{11}\) Figures calculated on the basis of data from British Petroleum’s 2007 Statistics Report.
As one might expect, the scenario for natural gas is not any better. The peak in natural gas occurred in 1983, at 2.18 billion cubic meters (MM-m3), and a decline subsequently began at a rhythm of 1.4%, and with a total amount of 21.4% for the period. Beginning in 1998, reserves dropped by 53% and by another 48% in 2002, arriving at a value of only 388 billion cubic meters by 2006. In this case the R/P relation dropped from 64 years to nearly nine years during the period from 1980 to 2006. Graph 2.

The above is a result, as pointed out earlier, of the intensive, irrational exploitation of Mexico’s hydrocarbons—not to supply its own domestic needs, but to meet external needs, specifically those of the United States. This is clear from the information on reserves provided here, and also based on the growth in production, increasing from 1.4% (as an annual average) to 44% for the entire period.

Both Mexico and Canada—because have hydrocarbon resources, are located geographically next to the United States, and their governments have leaned toward fulfilling the interests of their neighbor—have supplied US energy needs, and therefore are certainly included in the US search for closer and more secure energy sources. This discourse has been maintained for nearly two decades now, and has been the basis for intense US promotion of regional energy integration, at the North American level, and even better, including the entire hemisphere.

However, the situation for hydrocarbons in North American and the hemisphere does not support this discourse on a secure supply to confront the increasing US deficit. The explanation lies more clearly with the Monroe Doctrine, in the sense that if the United States has its “own” assured energy base, it can become militarily involved in other regions of the world. If we review the evolution in the difference between the hemisphere’s production and consumption, divided by subregions (Graph 3), we can

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13 A surplus, if the difference is positive, and a deficit, to the contrary.
see that during the 1980-2006 period, Canada (6.0%) and Mexico (15%) have only been able to supply 21% of the US crude deficit, and if we add Central and South America (CA+SA), we can add another 14%. This means that the remaining 65% has been obtained from sources considered by this nation to be distant and insecure.

The case of natural gas is somewhat different, particularly due to the technical difficulty and especially the cost of bringing it from distant locations, since it must be liquefied. It has therefore been Canada’s “mission” to supply practically 90% of US needs during this same time period. Graph 4.

An analysis of this overall situation indicates that Mexico has obtained the worst effects of this US “mandate.” While its contribution to correcting the US energy deficit has been diminishing, (Graph 5), its energy integration with the United States, in financial and technological terms, has been increasing, through the Pidiregas model. This strategy has greatly increased Mexican debt, while contributing little or nothing (except losses) in terms of knowledge and new hydrocarbon resources. Therefore, hope has been placed on deepwater oilfields—which prospectively exist—and are the basis for the constant tendency in US crude reserves over the last eight years (Graph 6). Experts say this hope will not become a reality for Mexico until 2020 in the best case scenario (Graph 7).

![Graph 3. AMERICAS: Crude Surplus - Deficit (Production - Consumption) (Mbd)](image)

Source: Developed by authors, based on British Petroleum's 2007 Statistics Report.

14 Venezuela is the main reason for this surplus, since only five nations in this region have a surplus, and the rest are net importers. The net balance is positive, with Venezuela contributing 160% of the total, and it is therefore the main country from this region exporting to the United States.

Graph 4. AMERICAS: Natural Gas Surplus-Deficit (mM-m3)

Graph 5. AMERICAS: Percentage of US Deficit

Source: Developed by authors, based on British Petroleum's 2007 Statistics Report.
In summary North America does not have the capacity—nor does the entire hemisphere—to satisfy the voracious US energy needs, partly because of the inefficient, ravaging (environmentally speaking) US consumption model. Once again, this is reflected in statistics: although the American continent ranks second in terms of the world’s crude reserves, with 13.5% of the total and an R/P of nearly 22 years, it is far behind the Middle East, with 61.5% and an R/P of 80 years. Its natural gas situation is similar: 8.2% versus 40.5% for the Middle East, and 35.4% for Europe-EuroAsia, and an R/P of 16.5 versus 218.5 (Middle East) and 60 (Europe-EuroAsia) years, respectively.

An obvious key question for Mexico emerges from this information: in the future, whether short, medium or long term, which integration model best fits its interests: SPP or ALBA?

**Graph 7. PEMEX: Future prospects for crude oil and natural gas production**

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All of the above explains why the hemisphere is strategically important for the United States, in terms of hydrocarbons. In addition, the fact that various oil companies continue to be classified as “national,” but are not necessarily governed by free trade precepts, makes it necessary for the United States to pressure the region’s countries—by any means within its reach—to guarantee its supply. We mentioned earlier that given the FTAA’s failure, one of these means has consisted of bilateral free trade agreements. Energy integration is included or pursued in most of these agreements. This was blatant in the case of Canada (in the Canadian-US Free Trade Agreement), concealed in the case of Mexico in NAFTA, and now very secretive in the SPP initiative.

III.3 The US model of regulation; proposals from the SPP Working Group on Energy; the ministerial agreements in Montebello-Quebec

a) Energy Profile and Regulatory imperialism

It is important to note that the attention to the energy problem currently expressed in the agreements from the Montebello ministerial meeting is not new, since a trinational group, the North American Energy Working Group (NAEWG) was created in 2001.

The purpose of this group was to implement fluid communication and greater cooperation between governments and private enterprise. In June 2002 the first profile became explicit and in 2006, the second. The NAEWG has covered all aspects (production, transportation, distribution and consumption) of energy sources, efficient use criteria, shared rules on trade and infrastructure, as well as corporate standards defining regulatory criteria.

In a quick review of North America’s energy profile (including the United States, Canada and Mexico), we would begin by recalling that this region generates approximately a third of the world’s gross production, however in the area of energy, it only produces a fourth of what it consumes, which is nearly a third of the world’s total consumption, while it has only 7% of the world’s total population.

Consequently, its per capita consumption is four times higher than the world average (while it is important to clarify that most of the consumption is in the United
States, since in 2004 it daily consumed 20.7 million barrels of the region’s daily total of 24 million barrels of oil, while Canada consumed 2.0 million and Mexico, 1.4 million barrels.

With regard to energy production by fuel type, in 2003 North America generated 18% of the world’s oil production, 29% of the world’s natural gas production, 21% of the world’s coal production and 29% of the world’s electricity generation. In 2001 approximately 33% of US net energy imports were from Canada (24%) and from Mexico (8%). In short, there is no lack of evidence of asymmetries.

b) Criteria of the SPP’s Energy Working Group and ministerial agreements from Montebello-Quebec

The North American Competitiveness Council (NACC) has identified its greatest challenges as maximizing the benefits from regional economic integration and the need to reform Mexico’s energy sector. However, the latter is not recognized as a domestic matter corresponding to Mexico, but instead the Council specifies a need for “intermediary initiatives” to ensure that the fundamental guidelines for the reforms will be based on the logic of an integrated market, instead of waiting for any progress to be reversed.

The main recommendation made by the NACC can be summarized is a phrase used in Mexico: “sacarle la vuelta a la Constitución, (to round up the mexican Constitution)” which suggests that the trade, storage and distribution of refined products must be liberalized, and include the construction, property and operation of gas pipelines—in the same way that the 1995 changes to Article 27 of the Mexican Constitution permitted the partial liberation of natural gas and liquid petroleum gas imports, while restricting the rights of PEMEX (the national oil company) on the reserves.

The NACC also proposes making organizational changes in the PEMEX corporation, and it clearly states the need to publicize a comparison of the performance by PEMEX and by private companies, in order to show the operational gap between them. The intention here is to reveal inefficiencies and draw attention to the enormous potential of liberalization in this area.

NACC also mentions the protection of critical infrastructure and establishes a link to the need for more effective trans-border energy distribution. NACC argues that Mexico is confronting an increasing demand for electricity that cannot be satisfied by its inefficient public system that lacks the necessary resources, and suggests that US producers all along the Gulf of Mexico coast have excess capacity, and could sell energy to Mexican companies if the inter-connecting network between the two countries would be expanded. Concretely, the NACC proposes that by 2010 Mexico should have already begun to permit Mexican companies to purchase electricity from US companies.


18 Independent energy producers (IEPs) have already progressed a great deal de facto in northern Mexico. Preparations are being made for an electricity inter-connection with Texas, with the potential for bidirectional flow, although the current tendency is from south to north. This is being developed at the cost of shutting down the “obsoleto” facilities of Mexico’s electricity company (which have completely depreciated) with the aim of guaranteeing the profitability of the IEPs.
In addition to problems of restricted flows of investment and trade, the NACC identifies the lack of skilled personnel as a creating a bottleneck for the expansion of Mexico’s energy sector. And it backs the Canadian experience of temporarily exchanging skilled workers in the energy sector, including those specializing in nuclear energy. Finally, the NACC proposes that a “North American Energy Council” be instituted as an ongoing forum for government-private company interaction.

In July 2007 a Trilateral Agreement for Cooperation in Energy, Science and Technology was signed by the Ministries of Energy and Natural Resources from the three countries. It will not, however, enter into effect until the three countries have completed their respective processes of making legal adjustments and have notified each other in this regard.

Less than a year later and giving as a pretext the strengthening of PEMEX rather than promoting its privatization, in April 8 2008, Felipe Calderon sent to the Senate five Initiatives for energy reform. It was a huge package based in a deregulation strategy without modifying the mexican Constitution. He included an Initiative of New Organic Law for Pemex; an Initiative to modify the Organic Law of Public Administration; an Initiative of Decree to reform specific regulations belonging to the Reglamentary Law or Article 27 of the Constitution; it is an Initiative of Decree to Reform specific regulations related to Energy Regulatory Comission. In a second package presented to the Senate in May 14 of this same year, Felipe Calderón sent an Initiative of Law for Ordinary Hidrocarbons Rights and for Oil Incomes Stabilization Fund, both related to the fiscal regime of PEMEX. It is still lacking a general reform of the fiscal regime of PEMEX and another Initiative of changes to the Law for Procurement and Public Constructions.

We have no room for entering into big details, but we can signal several aspects that correspond totally with the criteria elaborated by NACC: private capital could participate in exploration, exploitation and refinery works. And specifically, open the activities of transportation, storage and gas distribution as well as in all refined oil and petrochemical products; in case of controversy over contracts bidding, adjudication or execution, it is accepted the jurisdiction of international courts. It is proposed to legalize and extend Multiple Service Contracts through a new pattern of Extended Service Contracts opening room even for Contracts without bidding. There is a proposal to give PEMEX financial and operational autonomy through a new administrative structure. Finally, it proposes to strengthen the rol and functions of Energy Secretary. It is remarkable the propagndistic effort to roll back the image of crisis due to the decay of oil reserves and depletion of giant oil fields such as Cantarell, now talking of the “Treasure of Deep Waters in the Gulf of Mexico”.

III. The agro-fuel strategy

The information we have presented in the section on the US energy deficit clearly reveals the origin of the current US interest in developing agro-fuels: specifically, an immense need to supply the most demanding energy sector, with a partial alternative to oil that has been found in the agro-food sector (another lucrative business for powerful

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19 Las iniciativas se derivan de un extenso documento que presentó la Secretaria de Energía, Georgina Kessel, SENER, Diagnóstico: situación de PEMEX, México, 2008 en el que se reconoce a PEMEX como un organismo público descentralizado, encargado de todas las actividades relacionadas con los hidrocarburos, reservados constitucionalmente, en exclusiva, al Estado mexicano.
US transnational corporations).

The transportation sector has been demanding agro-fuels since environmental standards demanded improvements in fuel emissions. Ethanol first appeared as an oxygenizer, or a gasoline additive. However, in countries highly dependent on crude oil imports, its use as an oil substitute emerged during the “oil clashes” of the 1970s. This was the case in Brazil. With significant sugar cane production and through considerable concessions of subsidies, Brazil has managed to develop an entire comprehensive ethanol industry for the transportation sector. Here we mean a chain that begins with agricultural production, continues with the refining process (ethanol production), the transformation of consumer systems (autos) and commercialization.

Another oil-dependent country that entered in this strategy was the United States, using corn as a raw material and also implementing very significant subsidies to these agricultural producers. The United States, however, only reached the point of using ethanol as an additive and in low-percentage mixtures (with up to 15%).

The strategy basically followed in the European Union was biodiesel, which uses different processes and raw materials than ethanol, but which also connects the agricultural sector with the transportation sector. In this case basically vegetable oils are used, and most of them are cultivated in the high seas by transnational corporations. In other words, these are also imported products, just like oil.

Nevertheless, George W. Bush proposed that the region join the US strategy of practically duplicating its consumption of ethanol in a period of only twelve years. This means reaching a level equivalent to 20.45% of the estimated demand for gasoline in 2017, corresponding to 35 billion gallons (miles de millones de galones, or mM-gal).

What must first be emphasized in relation to this figure is that it does not appear to be the result of an environmental policy that is seeking a comprehensive solution. Rather, it only expresses the value of a strategic business that curiously coincides precisely with the simple extrapolation of US consumption of gasoline between 1982 and 2004, multiplied by a percentage of that level. Secondly, this strategy is turned into a frenzied policy on domestic production which, despite such a tendency, will be insufficient to cover such an ambitious goal. The increase in capacity currently programmed is 2.55 mM-gal, together with the current capacity, will only be able to satisfy 18.3% of the requirements that Bush has established for 2017.

And here we find the explanation for the “call” to the entire American continent to join the strategy for developing bio-fuels as an energy alternative. What is true is that despite the high subsidies granted to the agricultural sector, together with technological development assistance, and even certain fiscal incentives for industrial processing, the United States will be unable to cover the significant differential between its ambitious consumption strategy and its domestic production potential.

In Mexico the information available thus far indicates that corn-based ethanol will be limited, for political and social reasons. There are indicators, however, that the state of Sinaloa, a major producer of white corn, may become an important ethanol producer and potential exporter to the United States.20

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20 See article by Lourdes Edith Rudiño, “Agrocombustibles a Debate,” in La Jornada del Campo, La Jornada, Mexico, October 9, 2007, pp. 4-5.
The country’s first ethanol distillery, property of the Destilmex company, will reportedly begin to operate sometime during 2008. It will consume 290,000 metric tons of white corn for the production of approximately 120 million liters of ethanol.\textsuperscript{21} Eventually, other plants will also begin operations, including Mex-Starch under construction by Los Mochis, and a project in the planning stages in Guamúchil. The promoters of these projects report that the raw material to be used is “the state’s surplus corn,” in the amount of approximately 2 million metric tons. This amount will, first of all, have to be subtracted from the total 9.7 million metric tons of corn destined for human consumption in tortillas throughout Mexico, and secondly, it is questionable to speak of “corn surpluses” in a country like Mexico, which during at least the last six years, has been importing 20-26% of its requirements for this grain. Because of this deficit, yellow corn is increasingly used for human food (although this is not customary), and especially for tortillas.

There are plans for other plants, however they are not yet fully confirmed, in anticipation of the corresponding legislation. Investors from Russia, China, Canada and the United States are involved, and it is estimated that about 30 million dollars are needed per plant. If we consider that corn production is important in states like Sonora, Nayarit, Jalisco and others, we can begin to see that the dilemma between feeding people or feeding machines is beginning to take shape in Mexico. The Felipe Calderón administration has announced its intention to dedicate public resources to promoting the production of ethanol for use as a gasoline additive, and this appears to be the case at the first distillery, which received support from the country’s Ministry of Agriculture.

III.3 Importance of south-southeastern region in relation to energy; characterization of the region and its likely importance in the strategy for sugar-cane-based ethanol

Mexico’s south-southeastern (S-SE) region is very important for this US strategy, due to both its positive and negative aspects. First of all, this region has a great wealth of natural resources (energy, hydraulic and biodiversity) and shares a maritime border with the United States and Cuba. Secondly, because of its socioeconomic conditions many of its residents leave to seek work elsewhere and the area also serves as a connecting point in the migration flow north from Central America. Basically, there are high levels of poverty, linked to a population with large numbers of indigenous people and the worst human development indicators.\textsuperscript{22}

A few basic statistics quickly give an idea of this region’s wealth. Nearly 80% of the country’s oil reserves are concentrated in four of the region’s states (the main maritime oilfields are located off the coasts of Tabasco, Campeche, Yucatan and Veracruz). Practically all of the gas processing complexes (10 out of 12), where the basic petrochemical industries have originated (after surviving the dismantling of this industry), are located in Veracruz and that is where approximately 80% of these products (those consumed in Mexico) are manufactured. In terms of the secondary petrochemical sector (artificially separated from the primary petrochemical sector, for

\textsuperscript{21} Which, as an initial production value, contrasts sharply with the annual production of sugar-cane-based alcohol, which in 2006 increased to only 50 million liters.

purposes of privatization, not yet achieved), five of the country’s eight installations are in Puebla-Panama Plan (PPP) states and the primary ones are in the southeastern states, where 97% of these products are processed. Two of the six refineries are also located in this region, providing 36% of the nation’s petroleum products. Four states along the country’s southern border (Chiapas, Tabasco, Campeche and Quintana Roo) possess a third of the nation’s hydraulic resources, and the main hydroelectric plants are located in these states. This south-southeastern region consequently provides 40% of the nation’s electricity. In summary, this region is extremely important for the country in energy terms. And in addition, there are significant levels of agricultural, fishing and tourism activities.

This explains the most recent maneuver that is not yet precisely identified but it supposedly designed to fight drug trafficking (Plan Mexico or Plan Merida). At the end of October last year, there was not yet official information regarding its particular characteristics or the resources to be used, but in may 2008 supposedly the US government is fighting for a Congressional approval of 1.5 billion dollars package. We have antecedents for this type of action, such as the Plan Maya-Jaguar in Guatemala, through which the United States seeks to militarize a region to “safeguard” its resources.

The underlying reason for this military presence, however, is that these states are also the site of actions in protest of increasing social inequalities and the lack of a response—other than repression—from the local and federal government to their demands.

And this region is also where events such as the attacks on Pemex facilities have taken place. According to federal authorities, these actions were committed by the guerrilla group known as the EPR (Revolutionary Popular Army). However, many political and national security analysts have doubted this version, since the EPR is not known to operate in the areas where these events occurred, and because they are not convinced this guerrilla group has the strategic capacities for such actions. It is appropriate, therefore, to maintain some skepticism as demonstrated by Baker, who has pointed out that such actions require at least four abilities: (i) to have knowledge of explosives; (ii) to be familiar with Pemex infrastructure, in terms of both sites and operations; (iii) to be able to make a sophisticated selection of strategic objectives, since both old and new pipelines were selected; and (iv) to have skill in carrying out covert operations. Baker also pointed out that this set of skills is possessed by very few groups in Mexico, and our conclusion is that the EPR is not in fact within that “select circle.”

And to complete this scenario, we now know that since some unknown date during the Vicente Fox administration, the Mexican Army, which is clearly charged with protecting the nation’s strategic infrastructure, has a contract signed with Pemex to provide these very services. In other words, this contract specifies a task for which the army already receives federal budget money, and this makes it even more doubtful that the EPR is responsible for the actions discussed here.

III.4 US strategic response to pressure related to climatic change, and political pressure in the Caribbean and South America: the ethanol strategy

23 According to information from Pemex for 2006; www.pemex.com.mx
24 Which, it is worth pointing out, are totally controlled in Mexico by the army.
The contrasts in Mexico and undoubtedly in Central American nations, characterized by severe socioeconomic inequality in their populations that is intensifying over time, is certainly reason for great concern in the security agenda for the United States and also for the governments in the Puebla-Panama Plan (PPP) region. The neoliberal model views the projects proposed in the PPP as precisely the solution, together with military reinforcement in the area.

In the case of Mexico, this is precisely the region where the Felipe Calderón administration is concentrating its attention. In April 2007 it made a commitment to a program for Mexico to export 7,840 barrels of ethanol daily (equivalent to 455 million liters a year, in comparison to the 50 million produced currently) to the United States. Incorporated as part of this effort was a National Agricultural Program for the Industrialization of sugar-cane intended to make the hiring of sugar-cane workers more “flexible” through a system of differentiated payment (for producers of sugar for human consumption and for producers of ethanol).

And in particular the Felipe Calderón administration incorporated a project for the restructuring of the automotive industry, to include the use of ethanol. This “call” received an immediate response from Chrysler, which announced a program costing more than 500 million dollars of investment in its plant in Saltillo, Coahuila, to develop the manufacturing of motors that will use this type of fuel. At the same time the government will invest in an increase of 13 million metric tons of sugar-cane production (which amounted to a total of 50 million metric tons in 2006), an effort that will require 29 billion pesos of public money and a considerable area of agricultural land.26

Two days after Calderón’s announcement, the House of Representatives approved (with 243 PRI and PAN votes in favor, 128 Frente Amplio Progresista votes against, and 8 abstentions) a total of 16 legislative bills, which included a rough draft, approved by the full Senate days earlier, on the Promotion and Development of the Law on Bioenergy, the basis for promoting corn-based agro-fuels: ethanol and biodiesel.27

It is an initial modest project that has great prospects, as confirmed by the Inter-American Development Bank (IADB) and Mexico’s Ministry of Energy (SENER) in a joint announcement made in May 2007. The plan is to produce agro-fuels for which a state tax will be applied, in order to guarantee the viability of a higher level of processing. While private industries are welcomed, the basic funds will come from the government, which will gradually substitute between 2% and 10% of the diesel and gasoline used in the Valle de México metropolitan area.28

As specified in the official SENER-IADB document, the expectation is that by 2012, on the basis of ethanol from sugar-cane grown in seasonal agricultural grasslands and marginal lands, as well as in ethanol projects to be developed with other inputs, that 5.7% of all the gasoline in metropolitan areas could be replaced, corresponding to a demand of 1,100.6 thousand cubic meters. And from 2012 on, and based on sugar cane and other inputs, such as the multiple annual crop of sweet sorghum or corn, that 10% of all gasoline in Mexico could be replaced with ethanol, corresponding to a production

level of 4,406.3 thousand cubic meters.\textsuperscript{29}

With that specified, it is important to consider some realities in Mexico’s rural areas. To begin with, nearly 80\% of the cultivated land is dedicated to producing corn, sorghum and beans. However, Mexico depends on imported products to cover its national consumption of the following: 25\% of corn, 50\% of wheat, 50\% of rice and nearly 90\% of oilseed consumption. This should be reason enough to concentrate the debate on what is the most important to guarantee: the right to food or the right to energy for cars and trucks. And if this were not enough, we must also take into consideration that systems for efficient water use are not widespread in Mexico, and that the country’s extreme poverty is an essentially rural, indigenous phenomenon, affecting people depending on subsistence farming on commonly-owned land (\textit{ejidos}) with seasonal, very small-scale agriculture (50\% of farming plots are smaller than five hectares). Also, the trade liberalization policies implemented by neoliberal governments in Mexico have, according to a World Bank study, led to 6.2 million unemployed who have abandoned agriculture. In this context the subsidies offered to companies like Destilmex and Mex Starch (50 and 25 million pesos, respectively) could have been better used in promoting agro-industries in the country’s small rural communities.

Evidence abounds in the case of Mexico—that the ethanol project is based on natural security and commercial motivations, more than on environmental or energy (diversification and efficiency) motivations, and these motivations are external, not internal in nature. If we look at agro-fuels in general, from a hemispheric perspective, the development of agro-fuels will bring us many disadvantages, in comparison to what might be a few advantages. Some examples of the disadvantages include encouraging \textit{latifundism} through the plundering of lands, and creating poorly-paid waged and even slave work, with police support. Not any less important is the intensification of monocultures, with the consequent increased loss in biodiversity and expanding “green deserts.” As we have already seen, it will lead to a rise in prices of raw materials (+70\% between September 2006 and January 2007 in the case of corn), with severe impacts on the chain of associated food products. And as proven in recent Mexican experience, it will generate competition in the allocation of public expenditures (government aid). We have listed here only some of the more outstanding negative aspects. As for references to a social pact for developing rural communities, we seriously doubt that on this occasion any such promise will be fulfilled, given the long history of past negative experiences in this regard.

\textbf{Conclusions}

Based on what has been presented here, we can reach the following conclusions.

1. The United States has problems in global competitiveness, as well as in the areas of production, trade, energy and population and to confront these problems, it has opted, for the economic regionalization of the hemisphere, intensifying this process in North America and expanding it as much as possible through the rest of Latin America.

2. This regionalization has been expressed in (NAFTA), which after more than a decade and with especially negative results, is politically “worn out”. That explains the decision to continue this process through a less democratic, silent, secretive and “top-down”

\textsuperscript{29} See SENER-BID, \textit{Potenciales y Viabilidad del Uso del Bioetanol y Biodiesel para el Transporte en México}, Mexico, 2007, p. 3.
manner, the SPP.

3. Events like what took place on 9/11 “support” such an “agreement,” and the topic of security has since then defined the US agenda and strategy toward the hemisphere, both near and far. It has managed to move the SPP systematically forward and it has continued up to the present time without any opposition (the Mexican Congress, for example, has not demanded any sense of accountability in this regard, despite the fact that it was not consulted before the partnership was established).

4. With the topic of security well established in the Mexico-US agenda, the fight against drug trafficking has been introduced without difficulty, with the consequent militarism and criminalization of social movements. The intention is to guarantee that Mexico will continue its supply energy, but also to assure its key role in US financial parasitism and use of technology.

5. The emphasis on regional energy security is actually linked to having a secure supply that allows the United States to project its military force in regions of the world that are rich in reserves.

6. This incomplete supply, however, must be effectively secure, and therefore North America, in particular, is moving rapidly in the direction of the US model of energy deregulation. In Canada this task is nearly complete, and in Mexico the process is advancing, threatening the few sovereign spaces remaining. In particular, the Puebla-Panama Plan will open up the way for this route to the south.

7. In this context Mexico seems to now be one of the points receiving attention in the US energy strategy. The focus is currently on conventional exploitation in the hydrocarbon industry, however the intention is to expand the exploitation to deepwater and ultra-deepwater (including methane hydrates) oilfields, and of course agro-fuels.

8. What we are seeing are two prongs of the same strategy. On the one hand, the SPP moves promoting energy reforms without constitutional changes. On the other hand, by promoting agro-fuels, official discourse refers to rural development, environmental protection and working against climatic change.

9. But in reality, the intention is to divide Latin America and impede any potential alliances between ALBA and MERCOSUR projects, and in their place, consolidate alliances within the nucleus of powerful corporations in agro-business, energy, banking and the automotive industry.

10. In Mexico’s south-southeastern region, the promotion of agro-fuels, defined and promoted by the Felipe Calderón administration, will grant continuity to the plundering neoliberal scheme, expanding over land and water, and intensifying the already ancient ravaging of indigenous communities in this region.

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