UPDATE ON FOREIGN INVESTMENT IN CUBA 1997-98 AND FOCUS ON THE ENERGY SECTOR

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FOREIGN INVESTMENT TO DATE

Compared to the previous year, "opportunities" for business in Cuba seem to have experienced renewed international attention. This is the likely result of a redoubling of public relations' efforts by the Cuban government together with the Pope's January 1998 visit, several high-profile visits and events held in Cuba and considerable media coverage of certain joint venture investments. But, despite reports of many business and diplomatic delegations visiting Cuba, a scarcity of actual or materialized deals seems to have been the rule.

We might attempt to decipher what has transpired in the area of foreign investment by looking at figures provided by the U.S.-Cuba Trade and Economic Council (USCTEC) in Table 1. The Council obtains most of its data from Cuban government sources and has the official support of Cuban authorities.² But, problems with its table of foreign investment illustrate the chronic difficulty of working with data provided by Cuba and attempting to uncover how much is actually being invested. Let's look at just a few of many gaps and discrepancies.

- 1. To begin with, the Council's unique terminology "committed/delivered investment" is highly unusual. It certainly doesn't meet industry standards of foreign direct investment or net foreign direct investment. All efforts to clarify exactly what this means or to obtain from the Council a breakdown of what is included have been unsuccessful.
- 2. Canadian investment: "Announced" Canadian investment of US\$1.3 billion and "committed/delivered" investment US\$600 million are cited (on a cumulative basis) for June 1998. Yet, the table itself notes that Canada's ambassador to Cuba had reported that Canada-based companies had delivered investment in Cuba of US\$200 million. Accordingly, committed/delivered investment would drop to \$1.35 billion (from the reported \$1.7 billion).

Meanwhile, the *Economist Intelligence Unit* reports US\$404 million in Canadian foreign direct investment (FDI) by 1997, twice as much as the figure cited by the Canadian Ambassador to Cuba.³ Complicating matters further, another re-

^{1.} Discussion of the papers by Demetria Tsoutouras and Julia Sagebien, "Mexico-Cuba Commercial Relations in the 1990s" and Jonathan Benjamin-Alvarado, "Investment and International Cooperation in Cuba's Energy Sector," both included in this volume.

^{2.} For more on the Council, see María C. Werlau, "Foreign Investment in Cuba: The Limits of Commercial Engagement," *Cuba in Transition—Volume 6* (Washington: Association for the Study of the Cuban Economy, 1996), p. 458, footnote 9.

^{3.} Economist Intelligence Unit, *Business Latin America* (June 29, 1998). This figure of \$404 million is reported as an increase of 13.2% from the previous year. This would mean that Canadian FDI rose \$53.3 million during 1997 (implying a rise from an accumulated total of \$350.7 million in 1996. The annual report of Canada's most visible investor—Sherritt Corporation—rules out this high level of investment from this source.

Table 1. Foreign Investment in Cuba (in U.S. dollars)

| | | Committed/ |
|--------------------|---------------|---------------|
| Country | Announced | delivered |
| Australia | 500,000,000 | |
| Austria | 500,000 | 100,000 |
| Brazil | 150,000,000 | 20,000,000 |
| Canada | 1,341,000,000 | 600,000,000 |
| Chile | 69,000,000 | 30,000,000 |
| China | 10,000,000 | 5,000,000 |
| Dominican Republic | 5,000,000 | 1,000,000 |
| France | 100,000,000 | 50,000,000 |
| Germany | 10,000,000 | 2,000,000 |
| Greece | 2,000,000 | 500,000 |
| Honduras | 7,000,000 | 1,000,000 |
| Israel | 22,000,000 | 7,000,000 |
| Italy | 397,000,000 | 387,000,000 |
| Jamaica | 2,000,000 | 1,000,000 |
| Japan | 2,000,000 | 500,000 |
| Mexico | 1,806,000,000 | 450,000,000 |
| The Netherlands | 300,000,000 | 40,000,000 |
| Panama | 2,000,000 | 500,000 |
| Russia | 25,000,000 | 2,000,000 |
| South Africa | 400,000,000 | 5,000,000 |
| Spain | 350,000,000 | 100,000,000 |
| Sweden | 10,000,000 | 1,000,000 |
| United Kingdom | 75,000,000 | 50,000,000 |
| Uruguay | 500,000 | 300,000 |
| Venezuela | 50,000,000 | 3,000,000 |
| TOTAL | 5,636,000,000 | 1,756,900,000 |

Notes: At the end of June 1998, H.E. Keith Christie, Ambassador of Canada to the Republic of Cuba, reported that Canada-based companies had *delivered* investment of US\$200 million to the Republic of Cuba. Figures in the table represent the amounts of announced, committed, and delivered investments since 1990 by private sector companies and government companies from various countries to enterprises within the Republic of Cuba *as of June 29, 1998*. Information complied through the media, other public sources, individual discussions with company representatives, non-Republic of Cuba government officials, and Republic of Cuba-based enterprise managers and government officials.

Source: U.S.-Cuba Trade and Economic Council, Inc.

puted source which provides financial analysis to the international financial markets reports US\$430 million in Canadian investment in Cuba at the end of 1997.⁴ For its part, Sherritt International Corporation's audited financial

- statement of 12/31/97 states the value of its assets in Cuba at CA\$406 million, equivalent to approximately US\$282 million. Although this doesn't specify how much capital has actually been invested in Cuba (FDI), it does give an indication of the generally low level of investment involved, given that Sherritt is reported to be the largest foreign investor on the island.
- 3. Mexican investments: Committed/delivered Mexican investment of US\$450 million, as cited in the table, seems highly exaggerated given the nature of existing Mexican operations reported in Cuba. Bancomext, for example, is understood to be involved mainly in financing. Swaps were reportedly behind many of the Mexican "investments" announced in recent years. For example, Grupo Domos' joint venture with Cuba's telephone company, the island's first privatization, was from inception based on a debt-equity swap, which does not involve fresh capital. (See Appendix for a more detailed account of Domos' failed investment in Cuba. This case provides a unique example of the pros and cons to investors of doing business in Cuba.)

Tsoutouras and Sagebien do not provide an estimate of what Mexican FDI in Cuba could be. They do, however, indicate that most companies from Mexico have found the barriers to investment too great. This would explain the noticeable drop from 1996 levels, when Mexican companies are said to have made up "arguably the largest share of investments in Cuba." Tsoutouras and Sagebien do refer to Mexican investments, seemingly at their highest level, of US\$1.5 billion. But, a table previously provided by the USCTEC cites committed/delivered Mexican investments as \$250 million as of August 1, 1996. The wide discrepancy is puzzling.

^{4.} Business Monitor International Ltd., *Caribbean*, Vol. II, No. 6 (June 1998). This report also cites French investment at \$100 million, which is the figure cited in the Council's table for announced investment; committed/delivered being half of that amount.

- 4. Cuba's Ministry of Basic Industry reported that, during the last 5 years, foreign companies have invested approximately US\$185 million in oil exploration and US\$100 million in oil production.⁵ Additionally, US\$60 million had been spent on mining prospecting through April 1998.⁶ Given capital-intensive nature of theses industries and that investments in these sectors are said to be the highest, a sum total of \$345 million seems very low. This might be indicative of the overall low rate of investment in Cuba.
- 5. Committed/delivered investments are merely 30% of announced investments. This wide disparity (committed/delivered investment hovering around 20 to 30% of announced investment) has prevailed since the Council began publishing tables on foreign investment in Cuba.

Number of Joint Ventures

- The total number of joint ventures and economic associations at the end of September 1998, was said to be 317; of this only 154 were actual joint ventures.⁷
- Official reports are, as usual, vague and contradictory. In January 1998, Cuba's Minister of Foreign Investment and Economic Cooperation reported more than 300 joint ventures⁸ with ownership levels from less than 50% to more than 80% and with most the capital originating in Canada, Spain, Italy, France, Holland, Mexico, and the United Kingdom. Additionally, he stated that of the 190 companies operating within the Free Trade Zones, 57 were engaged in

manufacturing, while the remainder were service-related.9 This does not clarify if the 190 businesses operating in the Free Trade Zones (FTZs) are included in the 300. Most, as I explained in an earlier paper, do not represent FDI.¹⁰ The following month, the same Minister reported 17 more joint ventures, for a total of 317. The same total of 190 foreign companies operating in three FTZs, 140 service-related.¹¹ This number would leave 50 companies engaged in non-service related activities, the ones which could be assumed to represent more direct capital invested. Nonetheless, from the Minister's report of the previous month, 133, not 140, were implied to be service-related. The discrepancies with the data, thus, render it unreliable.

In June of 1998 the Vice Minister of Foreign Investment and Economic Cooperation reported that 340 joint ventures and economic associations were currently operating, compared to approximately 300 at the beginning of 1998. In addition, she stated, another sixty projects near signing and an additional 100 were in their initial stages of negotiation. Most foreign investment was concentrated in basic industry, tourism, light industry, food processing, agriculture, and construction. Companies from Italy, France, Spain, and United Kingdom accounted for 50% of existing foreign investment, companies from Canada for 20%, and companies from Mexico, Argentina, Venezuela, and Chile for 18%. Companies from Canada, however, accounted for nearly 25% of all foreign capital invested within the Republic of Cu-

^{5.} The U.S.-Cuba Trade and Economic Council's *Economic Eye on Cuba* (23-29 March 1998). A total of fifteen companies from Canada, Spain, France, Germany, Sweden, and the United Kingdom have operations within the Republic of Cuba. Toronto, Canada-based Sherritt International Corporation is the largest of the companies operating within the Republic of Cuba, producing oil and natural gas, along with investments in nickel plus cobalt production, power generation, agriculture, and tourism.

^{6. 52} contracts are in place with foreign companies to prospect for nickel, gold, silver, copper, lead, zinc and other minerals. Nickel plus cobalt production was also reported to have increased by more than 100% since 1994 thanks to foreign investment and foreign commercial bank credits of US\$200 million, *Economic Eye on Cuba* (13-19 April 1998).

^{7.} Data provided confidentially by a reliable source.

^{8.} This is 40 more than the 260 reported by the end of 1996.

^{9.} Economic Eye on Cuba (12-18 January 1998).

^{10.} For more detail on Free Trade Zones, see Maria C. Werlau, "Update on Foreign Investment in Cuba, 1996-97," *Cuba In Transition—Volume 7* (Washington: Association for the Study of the Cuban Economy, 1997), pp. 82-85.

^{11.} Economic Eye on Cuba (16-22 February 1998).

ba.¹² This would allow us to derive some interesting calculations from the Council's table, but, since we have no time to do this here, I urge you to do this on your own.

The Minister of Foreign Investment and Economic Cooperation reports that at the end of 1996 foreign companies—260 approved joint ventures *and economic associations*—"had committed capital of" (or "had invested") US\$2.2 billion.¹³ Both the vague terminology employed and the inclusion of economic associations are peculiar, as these are said to represent management contracts instead of FDI. ¹⁴

Amount of Foreign Investment

At the end of 1997, Cuba's Minister of Economy and Planning¹⁵ reported that foreign investment had increased 7% in 1997, 3% below government estimates, and was expected to increase 22% in 1998 (as a number of joint ventures "moved from the announced/committed to the delivered/operational stages"). With this information we have some indication of the maximum level of foreign investment that could have taken place. Using the figure provided by Cuba of US\$2.2. billion, despite the belief that it is highly overstated, a 7% rise in foreign investment would represent investment of US\$154 million during 1997. If we use the Council's figures as of April 1997 (\$705 million in committed/delivered investment), the 7% rise would represent a rise of \$87.3

million from April to December 1997 and an accumulated total of merely US\$792 million.

According to the International Monetary Fund (IMF), net direct investment in developing countries, which grew at a steady pace throughout the decade, amounted to US\$106.2 billion in 1997 and totaled \$441.8 billion in the period 1992-96, averaging US\$54.6 billion annually.16 If we calculate the annual average of Cuba's official number for accumulated foreign investment, \$2.2 billion, overstated as it is, over the 9 year period 1988 to 1997, this \$314 million average annual investment would equal 0.6% of the average annual FDI going into the developing world during the shorter period 1990-96. In turn, if we used the 1996-97 annual average of \$103.9 billion¹⁷ reported for developing countries, Cuba's proportion would decrease to 0.03%. This is hardly exciting for what some have reported to be a "hot" new emerging market.

Cuba's Minister of Foreign Investment declared in February 1998 that since the first joint venture was established in 1988, a total of 380 joint ventures had been established, but sixty-three had been dissolved for various reasons (the failure rate would be 16.6%). This is the first reference ever to be found to a number of failed joint ventures and could be indicative of an effort to prepare public opinion for less enthusiastic reports than has been the norm up to now. 19

^{12.} Economic Eye on Cuba (15-21 June 1998).

^{13.} Economic Eye on Cuba (11-17 August 1997). This number has been fairly consistently repeated by Cuban authorities for some time

^{14.} The Council itself reported that actual "committed-delivered" foreign investment as of 1 April 1997 was estimated to be US\$705 million. In August, just a few months later, the numbers rise significantly, to announced: US\$5,401,000,000; and committed /delivered: US\$1,246,900,000. No reason is given for the steep rise in investment and no deals of significance are reported for that period. *Economic Eye on Cuba* (21-27 April 1997).

^{15.} Economic Eye on Cuba (15-21 December 1997).

^{16.} International Monetary Fund, Interim Assessment (December 1997), p. 32.

^{17.} Net direct investment in developing countries amounted to US\$101.6 billion in 1996 and US\$106.2 billion in 1997.

^{18.} Economic Eye on Cuba (16-22 February 1998).

^{19.} Cuban defector Jesús Marzo Fernández, a former high-ranking official of the Ministry of the Economy, has reported that new foreign investment for 1997 was a mere US\$8 million and that US\$60 million have left the island in recent times. Reported during taping of Radio Martí's "Mesa Redonda" Economic Roundtable, August 11, 1998 and in conversations with the author.

Table 2. Cuban Energy Statistics

| | Petroleum Availability Thousands of tons | | | | Generation of GWH | |
|------|--|------------|---------------------------|---------------|-------------------|---------------|
| - | | Crude | | % change from | | % change from |
| Year | Imports | Extraction | Total Availability | previous year | Electricity | previous year |
| 1985 | 13.3 | 0.9 | 14.2 | - | 12199 | _ |
| 1986 | 12.9 | 0.9 | 13.8 | -2.8% | 13176 | 8% |
| 1987 | 13.3 | 0.9 | 14.2 | 2.9% | 13594 | 3.2% |
| 1988 | 13.1 | 0.7 | 13.8 | -2.8% | 14542 | 7% |
| 1989 | 13.1 | 0.7 | 13.8 | - | 15240 | 4.8% |
| 1990 | 9.9 | 0.7 | 10.6 | -23.2% | 15025 | -1.4% |
| 1991 | 7.8 | 0.5 | 8.3 | -21.7% | 13247 | -11.8% |
| 1992 | 5.4 | 0.9 | 6.3 | -24.1% | 11538 | -12.9% |
| 1993 | 5.3 | 1.1 | 6.4 | 1.6% | 11004 | -4.6% |
| 1994 | 5.6 | 1.3 | 6.9 | 7.8% | 11967 | 8.8% |
| 1995 | 6.0 | 1.5 | 7.5 | 8.6% | 12458 | 4.1% |
| 1996 | 6.6 | 1.6 | 8.2 | 9.3% | 13000a | 4.4% |

Source: 1998 paper by Jesús Marzo Fernández, based on statistical information from Cuba's Energy Department, Ministry of the Economy; Mining Regulation, Ministry of Basic Industry, and personal experience. Percentages calculated by the author.

a. U.N.'s CEPAL report cites 13, 236 (est.).

Tourism

In 1997, tourism generated gross revenues of US\$1.54 billion from 1,170,000 tourists. As of 31 December 1997 there were 23 joint ventures in tourism, "of which 21 had been established."²⁰ It is generally presumed, however, that most are economic associations based on management contracts which earn the foreign firms 3 to 4% of earnings. FDI in tourism is said to be around 10% of the total investment in tourism.²¹

To help put Cuba's possible tourism investment into perspective, it should be noted that between 1989 and 1997 foreign investment in Mexico's tourist sector alone amounted to US\$5.4 billion.²² On the other hand, Cuba's total accumulated investment for all sectors of the economy is overstated at US\$2.2 billion.

References to net revenues from tourism for 1997 are notably absent. This figure is crucial in analyzing the impact of tourism on the economy. My guess is that,

given the high cost of inputs and the inefficiencies of the industry, net revenues would be around 20%, if that much. Officially, net revenues are said to range between 26 to 35%.

Employment in Foreign Joint Ventures

The Ministry of Culture reported²³ that the tourism sector directly employed approximately 71,000 workers; the number employed in the foreign sector was not clarified. At the beginning of 1998 the Vice Minister of Labor and Social Security reported that 3% of the island's 4.5 million workforce worked under the auspices of joint ventures and economic associations (135,000 workers).²⁴ Workers employed in the foreign sector remain surprisingly unchanged from last year's figures, which is puzzling given the steep rise in the number of joint ventures (80) reported by the Cuban government since the end of 1996.

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By the end of 1997, Cuba's energy consumption was increasing at a 6% annual rate. Residential use was

^{20.} Economic Eye on Cuba (23 February-1 March 1998). In February 1998, the Ministry of Culture reported 179 hotels of varying quality (most two and three-star) with 27,400 rooms.

^{21.} Data provided confidentially by a high-placed source.

^{22.} Nicolás Crespo, "Back to the future, Cuban tourism in the year 200: An analysis of economic, social and cultural impact of tourism in Cuba," Presented at the VIII annual Meeting of the Association for the Study of the Cuban Economy (Miami, August 6-9, 1998).

^{23.} Economic Eye on Cuba (23 February-1 March 1998).

^{24.} Economic Eye on Cuba (5-11 January 1998).

^{25.} The information herein contained is cited by USCTEC as provided by Cuba's Ministry of Basic Industry.

35% to 40% of total consumption and 95% of Cuba's residents had electricity.²⁶ Total oil consumption in 1997 was 8.23 million tons.²⁷ (See Table 2.)

Oil Imports

In 1997, the island spent approximately US\$1.2 billion to import oil and oil byproducts.²⁸ In June 1998 the Minister of the Economy reported that international oil prices in the six months to June 1998 had averaged approximately 60% to 75% of their 1997 levels. If this trend continues, oil import savings would be between US\$250 million and US\$350 million in 1998.²⁹ This, however, fails to account for energy consumption said to be increasing at a 6% annual rate.

Non-Oil/Alternative Energy Sources

The President of the Cuban Society for the Promotion of Renewable Energy Sources (CUBASOLAR), reported that non-fossil fuels, hydro, and solar, accounted for 30% of the energy produced within the country in 1997. Non-fossil fuels are expected to continue to gain importance, especially from such sources as sugar cane biomass. Many farm cooperatives are using windmills to power irrigation and other equipment and solar panels are increasingly being used in tourism facilities. There are approximately small hydro-powered generators located throughout the country, 65 of which, including the largest, are located in the Guantánamo Province. In this province, 57% of the energy consumed is generated by small hydroelectric plants and by solar panels.30 It should be noted, however, that a serious drought affecting especially the western part of the country should have a negative impact in the area alternative energy generation.

Domestic Oil Production

Most of Cuba's crude oil is extremely heavy with a high sulfur content, mainly used as fuel for electricity-producing plants and as fuel at nickel and cement plants. Domestic oil production has increased from 526,800 tons in 1991 to 1.45 million tons in 1997,³¹ when 17% of the country's total oil consumption was produced domestically.³² During the six months to May 1998, Cuba produced approximately 32,000 to 33,000 barrels of oil per day—said to be around 25% of current daily consumption.

Foreign Participation in Domestic Oil Production: Cuba reports 40 contracts with fifteen companies from Canada, Spain, France, Germany, Sweden, and the United Kingdom to explore and produce oil and natural gas: 22 exploration agreements and 18 production agreements.³³ In the last five years, approximately US\$185 million has been invested in oil exploration and US\$100 million in oil production.³⁴

Twenty oil wells are currently producing. Oil exploration is being conducted in 32 different tracts located throughout the country—10 offshore and 22 onshore. 90% of the oil wells drilled to date are located in Havana and Matanzas Provinces. 35 23 blocks onshore and offshore are still available for exploration. 36

In 1997, Cuban enterprise Cupet began to engage foreign companies to develop plans to use an estimated 200 million cubic meters of natural gas burned off each year from existing oil wells. Currently, only ap-

^{26.} Economic Eye on Cuba (15-21 December 1997).

^{27.} Economic Eye on Cuba (23-29 March 1998).

^{28.} Economic Eye on Cuba (23-29 March 1998) and (15-21 June 1998).

^{29.} Economic Eye on Cuba (15-21 June 1998).

^{30.} Economic Eye on Cuba (13-19 April 1998).

^{31.} Economic Eye on Cuba (18-24 May 1998) and (23-29 March 1998).

^{32.} Economic Eye on Cuba (18-24 May 1998) and (23-29 March 1998).

^{33.} This number is contradicted by another report from Cuban authorities that 20 foreign companies had permits to explore for oil in Cuba. *Economic Eye on Cuba* (18-24 May 1998).

^{34.} Economic Eye on Cuba (23-29 March 1998).

^{35.} Economic Eye on Cuba (18-24 May 1998).

^{36.} Economic Eye on Cuba (23-29 March 1998).

proximately 100,000 cubic meters of natural gas are being delivered to the city of Havana for use by residential consumers. Plans include the following:

- A joint venture was established in 1997 with Canada's Sherritt International Corporation to use natural gas in Matanzas Province. The project is to be completed in the year 2000 and would replace the need for approximately 350,000 tons of oil per year. (See more on Sherritt in the Appendix.)
- A joint venture was established with France's Elf Acquitaine to supply gas in Santiago de Cuba, the island's second-largest city. 80% of the residents in Santiago de Cuba currently use kerosene as fuel for cooking.
- An unnamed United Kingdom-based company is negotiating an agreement similar to that of Elf Acquitaine to supply gas to Havana residents.³⁷

Jonathan Benjamin-Alvarado has noted that in 1998, Cuba was upgrading generating capacity at eight existing thermoelectric units with the potential of 800MW. This required investments of \$315 million, which were allegedly "completely underwritten by foreign firms." A look at each individual deal, however, offers a telling story of how Cuba is actually generating the financial resources so vaguely described. According to existing reports, Cuba is not, as could be interpreted by the uncanny observer, obtaining foreign investment for this purpose. For example, the five plants in Santiago, Nuevitas, and Mariel are being upgraded with equipment purchased from France using US\$15 million in short-term credits. (It should be noted that short term financing for a capital intensive investment is highly undesirable.) Post-1998, Cuba plans to boost generating capacity by 16%, or 600 MW, and is reported to have secured US\$350 million of the \$600 million required for the projects. The source of the funds is not identified,

but no foreign investment deals have been announced. Moreover, the remaining funds—almost half of what is needed for the project—are still unavailable.

An issue of importance in assessing the economic feasibility of energy-sector investments is to look at revenues in the mining industry, which allegedly most of the new capacity is to serve. Nickel prices, for example, experienced a worldwide drop in 1997, which contributed to Sherritt Corporation's inability to turn in an operating profit for 1997.

Cuba's Nuclear Energy Generation Program: The Juraguá Nuclear Plant

In 1983 Cuba began construction of Cuba's first nuclear power plant in Juraguá, Cienfuegos, 250 kilometers southeast of Havana. But the project was suspended in September 1992 allegedly when the former USSR, which had invested most of the US\$1.1 billion in the construction, demanded a \$200 million payment to continue the project. The two 440 megawatt nuclear reactors are 75% and 30% complete, respectively. According to the director of the plant, US\$750 million would be required to complete the first VVER-440 reactor. In the meantime, the plant is being maintained with an annual US\$30 million Russian Federation grant.

Beginning in 1997, Cuba renewed efforts to complete the project. In mid-1997 the Russian Federation's Minister of Nuclear Energy said that construction would resume in 1998 through a Russian Federation-controlled consortium of companies from various countries. Companies in Germany, United Kingdom, and Brazil had reportedly expressed interest and financing "was being sought" for the project. Interested parties were to recoup their investment plus interest in eight years. Nonetheless, nothing seems to have come of these plans. In fact, it seems that nothing will happen with the nuclear plant.

^{37.} Economic Eye on Cuba (23-29 March 1998).

The Russian Federation's support for the Juraguá project is highly questionable. It holds Cuba's U.S.S.R.-issued ruble based debt, estimated at US\$17 billion, a figure which is challenged by the Cuban government. Additionally, there are 12 major development projects in Cuba stalled since the 1991 collapse of the former U.S.S.R.38 Furthermore, the Soviet-designed reactors are said to be deficient even by Soviet standards; evidence of defects and faulty instrumentation has been documented. Equipment has been improperly stored for four years in the corrosive sea air. Containment domes are too weak to withstand pressure levels that might be reached in an accident. Cuba lacks a well-trained cadre of nuclear technicians and the site is located in a seismically active zone.39

Experts have pointed out that the cost component of the project was huge and that the plant is already "tremendously redundant." Hence, from its inception, it seems to have been economically irrational. This lack of financial feasibility is not surprising given the non-competitive socialist economy, in which the project was conceived and carried out. Economic/financial feasibility has been typically divorced of the decision-making process of centrally planned economies. Economic indicators and concepts such as pricing, demand, supply, cost allocation, efficien-

cy, and competition are absent. The plant is a sad reminder of an endemic problem of the Cuban economy.

In conclusion, the plant appears destined to become a white elephant—and a hugely expensive one at that. It is doubtful that Cuba will find willing partners for this apparent aberration.

The Energy Sector in the Future

Cuba faces tremendous challenges in the area of energy generation and distribution—today and in the future. While the island's energy infrastructure is in appalling decay and already direly deficient for the needs of the country, the energy sector requires very heavy capital investments with a typically long-term return. Russia, for example, is estimated to have only been able to collect 1.5 cents on the dollar of energy generated and sold to domestic customers.⁴¹ Due to the economics of the business and Cuba's pitiful economic condition, the private sector will, in my opinion, only play a secondary role for some time to come. For this reason, actual development in the energy sector might be accomplished only once a transition to a rational economic system is in place and with considerable official, multilateral, financial support in the way of loans and assistance.

Annex UPDATE ON SHERRITT AND DOMOS

Sherritt's Investments

As is widely reported and confirmed by Cuban authorities, Canada-based Sherritt International Corporation is the largest of the foreign companies operating within Cuba. It produces oil and natural gas, and has made investments in nickel plus cobalt pro-

duction, power generation, agriculture, and tourism.⁴²

During 1997 Sherritt continued diversifying into different sectors of the Cuban economy and solidifying its privileged position within the island. At fiscal year end 1997 (12/31/97) Sherritt valued its assets in Cuba at CA\$406 million (approximately US\$282

^{38.} Economic Eye on Cuba (2-8 June 1997).

^{39.} See Maria C. Werlau, "The state of the Cuban environment," Coalition for a Green and Free Cuba, June 1997.

^{40.} Confidential source.

^{41.} Jonathan Benjamin-Alvarado, "Non-issue: Cuba's mothballed nuclear power plant," International Policy Report (July 1998).

^{42.} Ibid.

million). In April 1997, Sherritt Power was formed in order to enter into a three-way joint venture with Cuba's Cupet (Unión Cubana del Petróleo) and UNE (Unión Eléctrica). The aggregate purchase price of CA\$53.3 million entitled Sherritt Power to ownership of a third of the joint venture. In March of 1998, Sherritt Power issued a CA\$105 million (approximately US\$73 million) debt-equity offering to finance the project, consisting of 2 gas processing plants and power generating facilities in the Varadero area of the Matanzas province, near Havana. The project, to be built in four phases, is calculated to involve an investment of \$215 million; Sherritt is responsible for financing three of the four phases. The offer's prospectus appears to visibly downplay the high-risk nature of specific aspects of investing in Cuba. This is notable given the typically overly cautious tone of investment prospectus issued by reputable underwriters worldwide.

For fiscal year 1997, Sherritt International's Cuba operation generated a 20.6% operating return, down from the 27.2% of the previous year. Cuba, accounted for 92.1% of the corporation's consolidated operating earnings.43 Sherritt's nickel-cobalt joint venture, which includes the Moa plant in Cuba, increased its average daily production by 13%, but earnings were affected by lower international nickel prices. Sherritt's new role as lender to the Republic of Cuba—rather, to unnamed parties within Cuba explains its avoidance of losses for fiscal year 1997: 84.4% of its consolidated operating earnings resulted from very high financing income, derived from short term high-interest loans to "a third party in Cuba." The company continues to hold a significant portion of its debenture issue of CA\$675 million, which were originally earmarked for investment opportunities in Cuba.

On a consolidated basis, however, Sherritt's return on equity was a mere 4.1%, down from an already disappointing 5.5% in 1996. Given this discouraging performance, which is particularly unfavorable in a high-risk scenario, it remains to be seen if investors will continue to support Sherritt's operations with the enthusiasm reported by the media.

In February 1998 Sherritt acquired a 37.5% interest in Teléfonos Celulares de Cuba, S.A. (Cubacel), the sole provider of both digital and analog communications within the 800 MHZ band throughout Cuba. The US\$38.3 million purchase gave Sherritt a 75% interest in "a corporation whose primary asset is 50% of the outstanding shares of Cubacel."44 Curiously, both Sherritt's Annual Report and press release announcing the purchase fail to name this holding company and instead refer to its unidentified owners as "private investors." This is remarkable given that Cuban citizens are not allowed to own property or engage in joint ventures with foreign interests There are however, many reports of businesses operated by members of the Cuban political and military elite, some involved in joint ventures with foreigners. The nature of the capital or ownership structure of these ventures remains shrouded in secrecy.⁴⁵ Sherritt's Cubacel investment thus, is illustrative of the degree of influence the company enjoys in Cuba as well as the unusual nature and lack of transparency of its investment arrangements with the Cuban government and/or its representatives.

Domos' Failed Telecommunications Investment 46

Cuba has offered lucrative telecommunications possibilities for foreign investors since the Cuban Democracy Act of 1992, which authorized gateway-togateway service to Cuba and laid the groundwork for guidelines that allow a 50/50 split of telecommunica-

^{43.} Sherritt has operations in metals and oil/gas in Canada, Spain and Italy.

^{44.} Sherritt International Corporation, 1997 Annual Report, p. 40.

^{45.} For more on this, refer to Maria C. Werlau, "Foreign Investment in Cuba: The Limits of Commercial Engagement," *Cuba In Transition—Volume 6* (Washington: Association for the Study of the Cuban Economy, 1996), pp. 488-490.

^{46.} Ibid, p. 463 and footnote 45 for more detail on the Domos' deal and sources of information.

tions revenues from traffic between the U.S. and Cuba.⁴⁷

In June 1994, Mexican Grupo Domos, a Monterrey-based family enterprise focused on real estate development and waste management, entered into a joint venture with Cuba's Empresa de Telecomunicaciones de Cuba (ETECSA) to modernize its service and equipment. The deal, announced with much media hype, became Cuba's largest privatization. Then-Mexican President Carlos Salinas de Gortari was said to have been directly involved in the investment negotiations and flew to Havana to celebrate the signing the of the agreement. Domos reportedly formed a subsidiary, CITEL (Compañía Interamericana de Telecomunicaciones) to run the Cuban operation.

Accounts of the deal have been widely divergent. It appears that an initial \$200 million was to be used to buy \$300 million in face value Cuban debt from the Mexican National Development Bank; the debt bonds were to be delivered to the Cuban government. As part of the deal the Development Bank was to grant Cuba a \$300 million credit line for purchases from Mexico during 1995.

Aside from agreeing to invest via the described debtequity swap, Domos reportedly promised to invest an additional \$500 million in coming years in exchange for 49% of ETECSA. But different sources cited investment amounts ranging from US\$734 million to US\$1,442 million. In mid-1997 Domos sources reported it had agreed to pay US\$706 million for its stake in ETECSA, pledging to invest US\$750 million over the next seven years to expand

services. The Dutch subsidiary of the Italian state telecommunications company STET—now privatized—was reported to have promptly entered into the deal by acquiring 25% of Domos' share, equal to a 12.25% share of ETECSA.⁴⁸

By 1996 Domos was looking to sell and it was obvious the deal was falling apart. The Mexican government allegedly refused to extend the loan for the US\$300 debt-equity swap that was part of the original deal and Domos was unable to obtain alternative financing. When Domos' debt came due in October 1996, Cuba's Ministry of Communications filed suit in Cuban courts against Domos, with the Court ruling in favor of the government in January 1997. The unpaid amount is said to have totaled \$296-320 million. One report states that Domos was ordered by the Cuban government to return US\$300 million worth of ETECSA stock for failure to pay around \$350 million to Cuba for the 1994 deal. The Cuban government offered to take back Domos' share in ETECSA in order to satisfy the debt, but fixed the price of the shares at the original value, rather than the market value calculated by Domos. In early 1997, the STET -soon to be privatized- purchased Domos' participation of 49% at a cost of US\$300 million, increasing its 12.25% share in ETECSA to 29.9%.

The actual amount of the first installment Domos had actually paid is not clear, but in July 1997 Domos' chief counsel claimed that the company had invested US\$450 million and had been unable to come up with the remainder. Also, he declared that the company might claim compensation from STET for a minimum of \$900 million and was studying its op-

^{47.} A US\$1.20 per minute accounting rate is split 50/50, while Cuba is allowed a US\$1.50 surcharge for each collect call made from Cuba to a party in the United States. (*U.S.-Cuba Policy Report*, Vol. 3, No.10, October 31, 1996, p. 2.) Since 1994 telecom traffic has been increasing steadily, and is estimated at 125 million minutes in 1996 (up from 20 million minutes in 1994. Eight U.S. telecommunications companies paid Cuba \$32.6 million for the period July1 thru December 31, 1996. (*U.S.-Cuba Policy Report*, Vol. 4, No. 4, April 30, 1997.) The President of Grupo Domos has said that ETECSA netted a profit of US\$1230 million in 1996, with Cuba earning \$53.8 million just from calls from the U.S. See "Domos out, but questions linger," *CubaNews* (July 1997), p. 8.

^{48.} Domos was said by one source to have invested \$734 million of the \$1.442 billion purchase price, with a promise to invest \$700 million more in seven years to modernize the system. Another source described the deal as follows: Domos would pay \$500 million for its share in Emtel Cuba, of which at least half was said to be expected from a technological partner. \$200 million would be obtained through a swap of Cuban debt with the Mexican government. In a period of 7 years, \$800 million would be invested, of which half would have to be provided by the Cuban government as partner in the venture. (For details and sources see Werlau, "Foreign Investment in Cuba," footnote 45, p.463, and "Domos out," p. 8.)

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tions to reclaim the \$450 million it paid for the original investment.⁴⁹ It appears that Domos indeed sued STET, apparently due to the forced relinquishment of its shares to the Cuban government, which were then sold to STET at an enhanced value.

Currently ETECSA is reportedly owned by STET's successor—a recently privatized company- (29.9%) and the Cuban government, with the Ministry of Communications holding 51% and UTISA, a wholly-owned subsidiary of the same ministry, holding 19.1%.⁵⁰

^{49. &}quot;Domos out," p. 8.

^{50.} U.S.- Cuba Policy Report, Vol. 4, No.3 (March 31, 1997), p. 8 and Larry Rohter, "Mexican conglomerate abandons Cuban phone venture," The New York Times (June 30, 1997).