

Table I.1. Ghana: Quantitative Performance Criteria and Benchmarks, PRGF Arrangement, 2004 1/
(Cumulative flows from beginning of calendar year 2004 to end of month indicated, unless otherwise indicated)

| | <u>End-March</u> Benchmark | <u>End-June</u> Benchmark | <u>End-September</u> Benchmark | <u>End-December</u> Perf. Criterion |
|---|---|------------------------------|-----------------------------------|--|
| | Rev. Prog. 2/ | Rev. Prog. 2/ | Rev. Prog. 2/ | Rev. Prog. 2/ |
| | (In billions of cedis) | | | |
| Performance criteria | | | | |
| Net domestic financing of government (ceiling) 3/ | 629 | 522 | -994 | -1,101 |
| Net domestic assets of the Bank of Ghana (ceiling) 4/ 5/ | -644 | 1,511 | 793 | 548 |
| Stock of net domestic banking sector credit to TOR (ceiling) | 1,389 | -48 | -192 | 521 |
| | (In millions of U.S. dollars) | | | |
| Net international reserves of the Bank of Ghana (floor) 6/ | -110 | -262 | -197 | 100 |
| The contracting or guaranteeing of new nonconcessional external debt with original maturity greater than or equal to 1 year by the government or the Bank of Ghana (ceiling) 87 | 0 | 0 | 0 | 0 |
| Outstanding stock of external debt with original maturity of less than one year owed or guaranteed by the government or the Bank of Ghana 8/ | 23 | 75 | 75 | 75 |
| Stock of external payment arrears 9/ | 0 | 0 | 0 | 0 |
| | (In billions of cedis) | | | |
| Indicative benchmarks | | | | |
| Government domestic primary surplus (floor) | -626 | 158 | 578 | 1,253 |
| Reserve money stock | 6,180 | 6,964 | 6,836 | 9,270 |
| Government revenue, excluding grants and divestiture proceeds (floor) | 3,686 | 7,911 | 12,688 | 18,187 |
| Stock of government road sector arrears | 22 | 11 | 0 | 0 |
| Poverty related expenditures (floor) | 1,049 | 2,534 | 4,414 | 5,466 |
| | (In millions of U.S. dollars, unless otherwise specified) | | | |
| Memorandum items: | | | | |
| External program support (loans and grants) | 41 | 57 | 227 | 255 |
| Paid public and publicly guaranteed debt service (after debt relief) 10/ | 33 | 70 | 88 | 122 |
| Divestiture receipts | 9 | 19 | 31 | 45 |
| o/w: in foreign exchange | 0 | 0 | 8 | 15 |
| Average petroleum spot price (APSP in \$/barrel) 11/ | 31.5 | 31.0 | 30.5 | 30.0 |
| Petroleum subsidy (in billions of cedis) | 192 | 313 | 320 | 300 |

1/ Definitions of line items and terminology are elaborated in the technical memorandum of understanding (TMU).

2/ Before application of adjusters, as indicated in the TMU.

3/ Value at end of month indicated. Program targets adjusted for cumulative differences between actual and projected amounts of program support, public and publicly guaranteed debt service paid, and divestiture receipts with an upside cap of \$75 million, as explained in the TMU.

4/ Based on a fixed exchange rate of 9,012 cedis/\$, the rate prevailing at end-March 2004.

5/ Value at end of month indicated. Program targets adjusted for cumulative differences between actual and projected amounts of program support, public and publicly guaranteed debt service paid, and divestiture receipts with an upside cap of \$75 million, and for higher-than-programmed oil prices, with an upside cap of \$30 million, as explained in the TMU.

6/ Program targets adjusted for cumulative differences between actual and projected amounts of program support, public and publicly guaranteed debt service paid, and divestiture receipts with a downside cap of -\$75 million, and for higher-than-programmed oil prices, with a downside cap of -\$30 million, as explained in the TMU.

7/ This performance criterion applies not only to debt as defined in point No. 9 of the Guidelines on Performance Criteria with Respect to Foreign Debt adopted by Decision 12274-(00/123) of August 24, 2000 but also to commitments or contracted for which value has not been received, as specified in paragraph 15 of the TMU.

8/ The term "debt" has the meaning set forth in point No. 9 of the Guidelines on Performance Criteria with Respect to Foreign Debt adopted by Decision 12274-(00/123) of August 24, 2000, as specified in paragraph 14 of the TMU.

9/ This is a continuous criterion. The TMU stipulates the precise program definition of payment arrears.

10/ Debt service to be paid by Ghana after projected 2004 HIPC relief.

11/ Average from beginning of 2004 to end of month indicated, as explained in the TMU.

Table I.4. Ghana: Petroleum Products Pricing Formula, January 2004 1/

| Variable Name | Description | Source | Premium | Kerosene | Gasoil | Premix | RFO | LPG | Total |
|---|--|---------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Product Price | f.o.b. Mediterranean price, averaged for the previous three calendar months. The respective prices used are: from Platt's Oilgram Price Report and Platt's LPGwire Oilgram: Premium 0.15 G/L, Jet Av. Fuel, Gasoil 0.2, 1% Fuel Oil, and from Bloomberg: LPG Butane fob Mid-price. | | 286.93 | 282.60 | 259.41 | | 155.34 | 312.69 | |
| Suppliers commission (\$ per metric ton) | Outcome of a tendering process for the various products. | NPTB from TOR | 12.87 | 33 | 11.45 | | 15.84 | 69.05 | |
| Insurance (\$ per metric ton) | Suppliers' insurance cost | NPTB from TOR | 0.36 | 0.32 | 0.30 | | 0.20 | 0.34 | |
| CIF (\$ per metric ton) | Total cost of insurance & freight | Sum of 1+2+3 | 300.16 | 315.92 | 271.16 | | 171.38 | 382.08 | |
| Related charges (% of CIF) | Pegged at 13.85% and include off loading, in transit losses, inspection, L/C costs, purchasers commission, demurrage, financial costs, storage, in-plant losses, rack loading cost, operation margin. | NPTB from TOR | 13.85 | 13.85 | 13.85 | | 13.85 | 13.85 | |
| Related charges (\$ per metric ton) | | Product of 4 x 5 | 41.57 | 43.75 | 37.56 | | 23.74 | 52.92 | |
| Total cost (\$ per metric ton) | | Sum of 6 + 4 | 341.73 | 359.67 | 308.71 | | 195.12 | 434.99 | |
| Conversion (liters per metric ton) | Constant | NPTB | 1,379.70 | 1,238.10 | 1,187.60 | | 1,110.30 | 1,000.00 | |
| Ex-refinery full-cost price (\$ per liter) | | Product of 7 x 8 | 0.2477 | 0.2905 | 0.2599 | | 0.1757 | 0.4350 | |
| Cedis per US dollar exchange rate | Average of the exchange rates on the 26th day (or the last work day before the 26th day) of the previous three calendar months. | Bank of Ghana/Bloomberg Fin. Svcs. | 8,808.08 | 8,808.08 | 8,808.08 | | 8,808.08 | 8,808.08 | |
| Ex-refinery full-cost recovery price (cedis per liter) | | Product of 9 x 10 | 2,181.60 | 2,558.78 | 2,289.63 | 2,185.20 | 1,547.90 | 3,831.46 | |
| Ex-refinery current price (cedis per liter) | | Previously Gazetted | 2,251.69 | 2,116.43 | 1,768.60 | 2,148.33 | 912.56 | 1,800.00 | |
| 15% ad-valorem excise tax | | Legislated | 337.75 | 317.46 | 265.29 | 322.25 | 136.88 | 270.00 | |
| Specific charge | | Legislated | 200.00 | 100.00 | 200.00 | 0.00 | 200.00 | 100.00 | |
| Road fund | | Legislated | 400.00 | 0.00 | 400.00 | 0.00 | 0.00 | 0.00 | |
| Energy fund | | Legislated | 5.00 | 5.00 | 5.00 | 0.00 | 5.00 | 0.00 | |
| Exploration | | Legislated | 3.00 | 3.00 | 3.00 | 0.00 | 3.00 | 0.00 | |
| Stock fund | | Legislated | 30.00 | 30.00 | 30.00 | 0.00 | 30.00 | 0.00 | |
| Debt recovery levy (up to amount indicated) | | Act 642 | 640.00 | 640.00 | 640.00 | 640.00 | 640.00 | 640.00 | |
| Boost margin | | Set Jan. 2003 | 88.00 | 88.00 | 88.00 | 0.00 | 0.00 | 0.00 | |
| Prim. Distr. margin | | Set Jan. 2003 | 44.00 | 44.00 | 44.00 | 0.00 | 0.00 | 0.00 | |
| Ex-depot prices (cedis per liter) | | Sum of 13+14+15+16+17+18+19+20+21+22 | 3,999.44 | 3,343.89 | 3,443.89 | 3,110.58 | 1,927.44 | 2,810.00 | |
| UPPF margin | | Set Jan. 2003 | 130.00 | 230.00 | 130.00 | 130.00 | 0.00 | 0.00 | |
| Dealers margin | | Set Jan. 2003 | 110.00 | 110.00 | 110.00 | 110.00 | 0.00 | 0.00 | |
| Marketers margin | | Set Jan. 2003 | 205.00 | 205.00 | 205.00 | 205.00 | 0.00 | 990.00 | |
| Ex-pump current maximum price (cedis per liter) | | Sum of 23+24+25+25 | 4,444.44 | 3,888.89 | 3,888.89 | 3,555.58 | 1,927.44 | 3,800.00 | |
| Trigger mechanism: | | | | | | | | | |
| Volume sales in previous month (in liters) | | NPTB from TOR | 49,617,550 | 7,214,850 | 79,770,125 | 3,901,500 | 3,917,850 | 5,983,574 | 150,405,449 |
| Previous month's actual refinery sales | | Product of 28 x 13 | | | | | | | 282,420,215,616 |
| Refinery sales at full cost recovery | | Product of 28 x 11 | | | | | | | 338,341,070,447 |
| Percent difference (relative subsidy) | | Sum of 30/29 | | | | | | | -19.8 |
| Triggered if actual and full cost recovery total sales differ by more than 2.5 percent | | | | | | | | | |

1/ Calculations based on October 1-December 31 Platt prices, existing ex-refinery prices, and December 2003 volumes.

2/ Premix price computed as a weighted average of full cost recovery prices for premium gasoline (96.67 percent) and gasoil (3.33 percent), the latter as a proxy for engine oil when that market price unavailable.

Table I.4. cont. Ghana: Petroleum Products Pricing Formula, April 2004 1/

| Variable Name | Description | Source | Premium | Kerosene | Gasoil | Premix | RFO | LPG | Total |
|---|--|---------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Product Price | f.o.b. Mediterranean price, averaged for the previous three Platt's Oilgram Price Report calendar months. The respective prices used are: from Platt's and Platt's LPGaswire Oilgram: Premium 0.15 G/L, Jet Av. Fuel, Gasoil 0.2, 1% Fuel Oil, and from Bloomberg: LPG Butane fob Mid-price. | | 333.47 | 297.43 | 266.46 | | 150.19 | 316.10 | |
| Suppliers commission (\$ per metric ton) | Outcome of a tendering process for the various products. | NPTB from TOR | 12.87 | 33 | 11.45 | | 15.84 | 69.05 | |
| Insurance (\$ per metric ton) | Suppliers' insurance cost | NPTB from TOR | 0.36 | 0.32 | 0.30 | | 0.20 | 0.34 | |
| CIF (\$ per metric ton) | Total cost of insurance & freight | Sum of 1+2+3 | 346.70 | 330.75 | 278.21 | | 166.23 | 385.49 | |
| Related charges (% of CIF) | Pegged at 13.85% and include off loading, in transit losses, inspection, LC costs, purchasers commission, demurrage, financial costs, storage, in-plant losses, rack loading cost, operation margin. | NPTB from TOR | 13.85 | 13.85 | 13.85 | | 13.85 | 13.85 | |
| Related charges (\$ per metric ton) | | Product of 4 x 5 | 48.02 | 45.81 | 38.53 | | 23.02 | 53.39 | |
| Total cost (\$ per metric ton) | | Sum of 6 + 4 | 394.71 | 376.56 | 316.74 | | 189.26 | 438.88 | |
| Conversion (liters per metric ton) | Constant | NPTB | 1,379.70 | 1,238.10 | 1,187.60 | | 1,110.30 | 1,000.00 | |
| Ex-refinery full-cost price (\$ per liter) | | Product of 7 x 8 | 0.2861 | 0.3041 | 0.2667 | | 0.1705 | 0.4389 | |
| Cedis per US dollar exchange rate | Average of the exchange rates on the 26th day (or the last work day before the 26th day) of the previous three calendar months. | Bank of Ghana/Bloomberg Fin. Svcs. | 8,991.49 | 8,991.49 | 8,991.49 | | 8,991.49 | 8,991.49 | |
| Ex-refinery full-cost recovery price (cedis per liter) | | Product of 9 x 10 | 2,572.34 | 2,734.70 | 2,398.10 | 2,566.53 | 2,153.66 | 3,946.14 | |
| Ex-refinery current price (cedis per liter) | | Previously Gazetted | 2,251.69 | 2,116.43 | 1,768.60 | 2,148.33 | 912.56 | 1,800.00 | |
| 15% ad-valorem excise tax | | Legislated | 337.75 | 317.46 | 265.29 | 322.25 | 136.88 | 270.00 | |
| Specific charge | | Legislated | 200.00 | 100.00 | 200.00 | 0.00 | 200.00 | 100.00 | |
| Road fund | | Legislated | 400.00 | 0.00 | 400.00 | 0.00 | 0.00 | 0.00 | |
| Energy fund | | Legislated | 5.00 | 5.00 | 5.00 | 0.00 | 5.00 | 0.00 | |
| Exploration | | Legislated | 3.00 | 3.00 | 3.00 | 0.00 | 3.00 | 0.00 | |
| Stock fund | | Legislated | 30.00 | 30.00 | 30.00 | 0.00 | 30.00 | 0.00 | |
| Debt recovery levy (up to amount indicated) | | Act 642 | 640.00 | 640.00 | 640.00 | 640.00 | 640.00 | 640.00 | |
| Boost margin | | Set Jan. 2003 | 88.00 | 88.00 | 88.00 | 0.00 | 0.00 | 0.00 | |
| Prim. Distr. margin | | Set Jan. 2003 | 44.00 | 44.00 | 44.00 | 0.00 | 0.00 | 0.00 | |
| Ex-depot prices (cedis per liter) | | Sum of 13+14+15+16+17+18+19+20+21+22 | 3,999.44 | 3,343.89 | 3,443.89 | 3,110.58 | 1,927.44 | 2,810.00 | |
| UPPF margin | | Set Jan. 2003 | 130.00 | 230.00 | 130.00 | 130.00 | 0.00 | 0.00 | |
| Dealers margin | | Set Jan. 2003 | 110.00 | 110.00 | 110.00 | 110.00 | 0.00 | 0.00 | |
| Marketers margin | | Set Jan. 2003 | 205.00 | 205.00 | 205.00 | 205.00 | 0.00 | 990.00 | |
| Ex-pump current maximum price (cedis per liter) | | Sum of 23+24+25+25 | 4,444.44 | 3,888.89 | 3,888.89 | 3,555.58 | 1,927.44 | 3,800.00 | |
| Trigger mechanism: | | | | | | | | | |
| Volume sales in previous month (in liters) | | NPTB from TOR | 60,670,500 | 5,972,850 | 79,674,199 | 2,166,500 | 3,431,250 | 4,463,065 | 156,378,364 |
| Previous month's actual refinery sales | | Product of 28 x 13 | | | | | | | 301,328,803,922 |
| Refinery sales at full cost recovery | | Product of 28 x 11 | | | | | | | 386,336,340,509 |
| Percent difference (relative subsidy) | | Sum of 30/29 | | | | | | | -28.2 |
| Triggered if actual and full cost recovery total sales differ by more than 2.5 percent | | | | | | | | | |

1/ Calculations based on January 1-March 31 Platt prices, existing ex-refinery prices, and March 2004 volumes.

2/ Premix price computed as a weighted average of full cost recovery prices for premium gasoline (96.67 percent) and gasoil (3.33 percent), the latter as a proxy for engine oil when that market price unavailable.

Table I.5. Ghana: Automatic Adjustment Formula for Electricity Tariffs

| Item number | Variable | Source | Symbol | Oct-2003 | Jan-2004 ¹ | Jan-2004 Calc. | Apr-2004 ¹ | Apr-2004 Calc. |
|-------------|---|--|------------------------------|----------|-----------------------|-------------------|-----------------------|-------------------|
| 6 | Base thermal variable energy prices: | | Po | | | | | |
| 7 | Oil fired simple cycle plant (cents/kWh) | Gazetted 26 July 2002 | | 4.61 | | | | |
| 8 | Oil fired simple combined plant (cents/kWh) | Gazetted 26 July 2002 | | 3.03 | | | | |
| 9 | Fuel price (for liquid fuels, Bonny Crude Oil) | The average of three months futures prices, as quoted on the NYMEX on the last working day of the quarter, plus US\$0.15. | FP | 30.00 | 32.00 | 32.00 | 34.75 | 34.75 |
| 10 | Base fuel price US\$/bbl | Gazetted 26 July 2002 | FPo | 22 | 22 | 22 | 22 | 22 |
| 11 | CPI of the USA | The change in the US CPI during the latest three-month period for which data is available as reported by the International Financial Statistics. | CPI | 1.1% | 1.2% | 1.2% | 1.3% | 1.3% |
| 12 | Base CPI of USA | Gazetted 26 July 2002 | CPIo | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| 13 | Annual fuel coefficient | Gazetted 26 July 2002 | a | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| 14 | Annual CPI coefficient | Gazetted 26 July 2002 | β | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| 16 | Adjusted variable energy price (cents/kWh), simple cycle plant | Sum of 7 x (13 x 9/10+14 x (1+11)/(1+12)) | P2 | | | | | |
| 17 | Combined cycle plant | Sum of 8 x (13 x 9/10+14 x (1+11)/(1+12)) | P3 | 6.10 | 6.47 | 6.47 | 6.98 | 6.98 |
| 18 | Percentage of hydro contribution to the generation mix | | X1 | 4.01 | 4.25 | 4.25 | 4.59 | 4.59 |
| 19 | Percentage of simple cycle thermal energy in the total generation mix | Projection for the next tariff period of three months. | X2 | 50% | 50% | 50% | 60% | 65% |
| 20 | Percentage of combined cycle thermal energy in the total generation mix | Projection for the next tariff period of three months. | X3 | 16% | 20% | 20% | 15% | 15% |
| 21 | Hydro cost (cents/kWh) determined by PURC | Long-run marginal cost of hydro production or the average VRA cost for the past 5 years. | Hc | 34% | 30% | 20% | 35% | 20% |
| 22 | System capacity price (cents/kWh) | Gazetted 26 July 2002 | K | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 |
| 23 | Effective percentage thermal capacity contribution to system demand | Percentage of thermal capacity contribution to meet domestic demand as Gazetted 26 July 2002. | n | 1.67 | 1.70 | 1.70 | 1.70 | 1.70 |
| 24 | Bulk generation charge adjusted (cents/kWh) | Sum of (16 x 19 + 17 x 20 + 18 x 21) + 23 x 22 | 3GCadjust (cents/kWh) | 56% | 50% | 50% | 50% | 50% |
| 25 | Bulk generation charge adjusted (cedis/kWh) | Sum of 24 x 32/100 | 3GCadjust (cents/kWh) | 4.05 | 4.17 | 3.89 | 4.25 | 3.82 |
| 26 | Transmission service charge (cents/kWh) | Gazetted 26 July 2002 | TSC (Cents/kWh) | 360.02 | 368.89 | 344.53 | 389.35 | 349.26 |
| 27 | Transmission service charge (cedis/kWh) | Product of 26 x 31/100 | TSC (Cedis/kWh) | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 28 | Bulk supply tariff (cedis/kWh) | Sum of 25 + 27 | BST (Cedis/kWh) | 80.10 | 79.61 | 79.61 | 82.37 | 82.37 |
| 29 | Bulk supply tariff (cents/kWh) | Sum of 28/32 x 100 | BST (Cents/kWh) | 440.1 | 448.5 | 424.1 | 471.7 | 431.6 |
| 30 | Distribution service charge for the previous period (cedis/kWh) | Gazetted 26 July 2002 | DSC _{t-1} | 4.95 | 5.07 | 4.79 | 5.15 | 4.72 |
| 31 | Previous period's exchange rate (cedis/US\$) | As used in the previous period's calculation. | EXCH _{t-1} | 285 | 298 | 298 | 297 | 297 |
| 32 | Exchange rate (cedis/US\$) | The interbank transaction rate quoted by the Bank of Ghana for the last day of the second month in the preceding quarter, multiplied by the percentage change in that rate from the last day of the second month in the quarter before that. | EXCH _t | 8500 | 8900 | 8900 | 8846 | 8846 |
| 33 | Distribution service charge for the next period (cedis/kWh) | Sum of 30 x 32/31 | DSC _t (Cedis/kWh) | 8900 | 8846 | 8846 | 9152 | 9152 |
| 34 | Distribution service charge for the next period (cents/kWh) | Sum of 33/32 x 100 | DSC _t (Cents/kWh) | 298.41 | 296.60 | 296.60 | 306.86 | 306.86 |
| 35 | Average end-user tariff (cedis/kWh) | Sum of 33 + 28 | EUT _t | 3.35 | 3.35 | 3.35 | 3.35 | 3.35 |
| | Memo: | | | 738.5 | 745.1 | 720.7 | 778.6 | 738.5 |
| | Average end-user tariff (cents/kWh) | Sum of 29 + 34 | EUT | 8.30 | 8.42 | 8.15 | 8.51 | 8.07 |

1. Assuming the percentage of the hydro-contribution capped at 50 percent as specified in the TMU (EBS/03/161).