PART 5. REVENUES

1. Introduction

Major revenues of Timor-Leste comes from oil and gas, while Domestic Revenues (taxes, user fees and charges, autonomous agencies, and others) are a small component of the total revenues (Table 5.1). Total Revenues in 2011 is estimated to be $2.4 billion with the bulk of it ($2.29 billion) being Petroleum Revenues and the remaining $110 million Domestic Revenues. Going forward, Petroleum Revenues will continue to dominate for the next five years and beyond. Domestic Revenues show an increasing trend in collections. In 2010, the projection is for Domestic Revenue of $94.7 million, and in 2011 it is projected to be $110 million. By 2015, Domestic Revenues are projected to reach $163.3 million. The Government's objective is to achieve $200 million before 2015 but this will be dependent on the introduction of significant reforms.

Table 5.1: Total Revenue Projections, 2009-2015 ($ million)

	2009	2010	2011	2012	2013	2014	2015
	Actual	Estimate			Projection		
Total Revenues	1,918.4	2,111.0	2,398.1	2,520.0	2,293.5	2,609.4	2,606.4
Domestic Revenues	90.8	94.7	110.1	121.4	133.7	148.5	163.4
Petroleum Revenues	1,827.6	2,016.3	2,288.0	2,398.6	2,159.8	2,460.9	2,443.0

2. Domestic Revenues

Domestic Revenues are comprised of Taxes (Direct and Indirect), User Fees and Charges, and revenues from autonomous agencies. Additionally, revenues also come from the sale of subsidized rice, a measure introduced by government to ease the hardship caused by the spike of world food prices in 2008.

Table 5.2 shows that taxes, fees and charges, and autonomous agencies continue to increase from 2009 through 2015. These increases off-set the reduction of revenues from rice sales, which will continue to decrease as world food prices stabilize.

Table 5.2: Domestic Revenues, 2009-20l5 ($million)

	2009	2010	2011	2012	2013	2014	2015
	Actual	Estimate			Projection		
Direct Taxes	13.3	16.0	**22.3**	26.9	31.4	35.9	40.4
Indirect Tax	30.3	31.5	**42.6**	44.5	46.3	50.3	54.4
Fees and Charges	16.4	14.1	**16.2**	17.5	19.6	21.9	24.2
Rice Sales	20.4	20.0	**10.0**	9.6	9.6	9.6	9.6
Interest	0.0	0.1	**0.1**	0.1	0.1	0.1	0.1
Autonomous Agencies	10.4	13.0	**18.9**	22.8	26.7	30.7	34.6
Total	90.8	94.7	110.1	121.4	133.7	148.5	163.3

Source: Macroeconomic Directorate, Ministry of Finance, 2010

Taxes

Table 5.3 shows revenue projections by category and type of taxes. Direct taxes, adversely affected by the Tax Reforms of 2008, have recovered and show an upward trend.

Direct taxes are projected to be $22.3 million in 2011. This is due to stronger prospects for economic growth and the efforts of increasing compliance and improved tax administration. The projection for Indirect Taxes is $42.6 million in 2011, and expected to increase to $54.4 million in 2015.

Table 5.3: Total Tax Revenue Projections, 2009-2015 (S million)

	2009	2010	2011	2012	2013	2014	2015
	Actual	Estimate			Projections		
Direct Taxes	**13.4**	**16.0**	**22.3**	**26.9**	**31.4**	**35.9**	**40.4**
Income Tax	5.1	6.0	**7.1**	8.8	10.5	12.2	13.9
Corporate Tax	2.0	2.4	**5.7**	6.9	8.1	9.3	10.5
Witholding Tax	6.3	7.6	**9.5**	11.2	12.8	14.4	16.0
Indirect Tax	**30.3**	**31.5**	**42.6**	**44.5**	**46.3**	**50.3**	**54.4**
Service tax	2.9	3.4	**4.0**	4.9	5.3	5.9	6.6
Sales Tax	7.3	7.5	**11.4**	10.7	11.2	12.2	13.1
Excise Tax	13.8	14.2	**17.7**	20.7	21.6	23.5	25.5
Import Duties	6.3	6.4	**9.5**	8.2	8.2	8.7	9.2

Source: Macroeconomic Directorate, Ministry of Finance, 2010

User Fees and Charges

Table 5.4 contains the projected income from User Fees and Charges, which are expected to increase to $16.2 million in 2011 from $14.1 million in 2010. There is a core upward trend of growth in User Fees and Charges which is projected to continue in 2011 and beyond.

Table 5.4: User Fees and Charges, 2009-2015 ($ million)

	2009	2010	2011	2012	2013	2014	2015
	Actual	Estimate			Projection		
Fees and Charges	**16.4**	**14.1**	**16.2**	**17.5**	**19.6**	**21.9**	**24.2**
Business Registration Fees	0.2	0.5	0.7	0.9	1.1	1.3	1.5
Postage Fees	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Property Rentals	1.9	2.8	2.4	2.6	2.8	3.1	3.3
Water Fees	0.1	0.1	0.1	0.1	0.1	0.1	0.1
National University Fees	0.4	0.7	0.5	0.5	0.5	0.5	0.6
Vehicle Registration Fees	1.0	0.9	0.9	0.9	1.1	1.1	1.3
Vehicle Inspection Fees	0.0	0.2	0.2	0.0	0.0	0.0	0.0
Drivers Licence Fees	0.0	0.3	0.3	0.0	0.0	0.0	0.0
Other Transport Fees	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ID and Passport	0.4	0.6	0.8	1.0	1.1	1.4	1.6
Visa Fees	1.2	1.8	1.5	1.7	1.9	2.1	2.3
Hospital and Medical Fees	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Dividents, Profits, and Gains	4.6	4.8	7.3	8.1	9.1	10.1	11.2
Mining and Quarrying	0.1	0.0	0.1	0.1	0.1	0.2	0.2
Radio and Television Fees	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bid Document Receipts	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Auctions	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Other Non-Tax Revenue	6.4	1.2	1.1	1.2	1.4	1.6	1.7

Source: Macroeconomic Directorate, Ministry of Finance, 2010

Rice Sales and Interest

Rice subsidies were introduced to buffer the Timorese people from spikes in world food prices in 2008. The need for the government to intervene in this market has now subsided with the stabilization of world food prices. As government intervention reduces, revenues in this area are projected to fall to $10 million in 2011, and stabilize at $9.6 million.

interest, being monies received on government bank account balances, represents only a small portion of Domestic Revenues. Interest receipts are projected to be $0.1 million in 2011 and then increase modestly in the medium term.

Autonomous Agencies

Revenues from Autonomous Agencies (Equipment Management, Aviation, Port, and EDTL) have improved in recent times as shown in Table 5.5. The share of total revenues is expected to increase from 12% in 2009 to 14% for 2010. For 2011, the share of this category of revenue is projected to increase to 17%, being $18.9 million.

The most significant revenue item is EDTL. It outperformed expectations for 2009 ($7million) by 16%. This growth trend is likely to increase further with continued efforts to increase pay for use among electricity consumers. This will be complemented by increased tariffs. The current projection for EDTL revenues for 201 I is $14.5 million. It is anticipated that the customer base will increase and result in additional revenue.

Aviation and Port performance has been strong relative to the 2010 Budget projections, and sustained growth in revenues is likely to continue.

Table 5.5: Revenues from Autonomous Agencies, 2009-2015 ($ million)

	2009	2010	2011	2012	2013	2014	2015
	Actual	Estimate			Projection		
Institute of Equipment Management	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aviation	0.9	1.1	1.3	1.6	1.7	2.0	2.2
Port	1.4	2.5	3.1	3.5	4.0	4.5	5.0
EDTL	8.1	9.4	14.5	17.7	21.0	24.2	27.4
Total	**10.4**	**13.0**	**18.9**	**22.8**	**26.7**	**30.7**	**34.6**

Source: Macroeconomic Directorate, Ministry of Finance, 2010

3. Petroleum Revenues

The Petroleum Revenues are expected to remain high in 2011 and 2012 due to relatively stable production and oil price forecasts during this period. This Revenue is estimated at $2.29 billion and $2.4 billion in 2011 and 2012 respectively. This is an increase from $1.84 billion in 2009 and the forecast for 2010 of $2.02 billion, mainly due to higher expected oil prices. Table 5.6 shows actual revenues in 2009, estimates of 2010 and the Petroleum Revenue forecast through 2015.

Table 5.6: Estimated Petroleum Revenues, 2009-2015 ($ million)

	2009 Actual	2010 Estimate	2011 Budget	2012 Projection	2013 Projection	2014 Projection	2015 Projection
Total Petroleum Revenue	**1,828**	**2,016**	**2,288**	**2,399**	**2,160**	**2,461**	**2,443**
Royalties	122	136	147	162	137	149	143
Profit oil	871	916	1,057	1,075	946	1,055	1,009
Income Tax	283	368	355	393	296	362	381
Additional Profit Tax	343	341	395	381	327	385	333
Value Added Tax	15	9	6	6	9	7	7
Wages Tax	10	8	8	8	8	9	9
Pipeline Payments	5	6	6	6	6	6	6
Other Payments	1	20	10				
Withholding Tax	9	12	8	9	12	9	10
Petroleum Fund Interest Received*	167	200	296	359	419	479	546

*) Actual Cash flow for 2009

Source: Petroleum Fund Directorate, Ministry of Finance, 2010

After the oil price skyrocketed in the first part of 2008, and the West Texas Intermediate (WTI) oil price peaked at $145 per barrel in June 2008, it dropped to $30 per barrel six months later. Since then the WTI oil price has recovered and averaged $62 per barrel in 2009. The average oil price by end of August 2010 was $78 per barrel, which is $16 per barrel higher than the oil price projection used in the Budget 2010, and the average price for 2010 is estimated at $76 per barrel. The Petroleum Revenue forecast for 2011 and 2012 is based on an oil price of $68 and $71 per barrel respectively. Chart 5.1 shows the historical WTI oil price and oil price forecast used in Budget 2011.

A scheduled shut down at Bayu Undan in 2010 has resulted in lower production and revenues from the field in 2010 than otherwise would have been the case. The production in 2010 is estimated at 57 million barrels of oil equivalents, which is down from 62 million barrels of oil equivalents in 2009. The production at Bayu Undan in 2011 and 2012 is expected to increase to 62 and 60 million of oil equivalents respectively, before it declines gradually until the production is expected to cease in 2024.

Development Plan for the Kitan field has been approved in 2010 and the production will commence in 2011. The total production is modest compared to the Bayu Undan field. Kitan's Low and Base Production Cases are 23 and 35 million barrels of oil respectively over the life time of the project. The total revenue stream based on the Low Production Case is equivalent to $145 million.

Chart 5.1: **Historical Changes and Future Projections in the WTI Oil Price (S per barrel)**

Source: Petroleum Fund Directorate, Ministry of Finance, 2010

The total production from the two fields is estimated at 65 and 68 million of oil equivalents for 2011 and 2012 respectively. Table 5.7 shows the oil price, total production volumes, undiscounted and discounted Petroleum Revenues for Timor-Leste over the life time of the two projects[11].

[11] Includes revenue streams from Bayu Undan and Kitan fields

Table 5.7: Oil Price Assumptions, Total Production and Timor-Leste Revenue Forecasts 2002-2024

Timor-Leste Petroleum sector				
	Average WTI oil price	Production	Total Discounted Petroleum Revenues (Factor of 4%)	Total Undiscounted Petroleum Revenues
	$/Barrel	million barrels oil equivalent	$ million	$ million
Total		**991**		**30,613**
Total from 1 January 2011		**647**	**17,847**	**22,461**
to 2002				
2003				10
2004	44	17		175
2005	54	29		336
2006	65	57		612
2007	72	58		1,258
2008	103	64		2,284
2009	62	62		1,660
2010	76	57		1,816
2011	68	65	1,954	1,992
2012	71	68	1,923	2,040
2013	75	57	1,579	1,741
2014	79	61	1,727	1,981
2015	81	57	1,590	1,897
2016	85	49	1,341	1,664
2017	88	51	1,462	1,887
2018	92	45	1,308	1,755
2019	95	38	1,025	1,431
2020	98	41	1,104	1,602
2021	101	39	1,032	1,558
2022	104	32	765	1,202
2023	107	33	793	1,295
2024	110	9	215	365
2025	114	0	28	50

Source: Petroleum Fund Directorate, Ministry of Finance, 2010

Investment Return

Gross investment return for 2011, before management fee, is estimated at $296 million. The similar investment return forecast for 2010, including both Petroleum Fund interest and change of value of the Petroleum Fund, is $241 million. These estimates are significantly higher than the investment return in 2009 of $34 million. The reason is that US interest rates have declined during the period, with a corresponding increase the market value of the Fund.

So far in 2010, from January to July, the gross return has been $188 million. The Petroleum Fund interest has been $117 million during this period and change in value of the Fund (market revaluation) equivalent to $71 million. Net investment return, gross return less management fee, is estimated at $235 million for 2010, of which Petroleum Fund interest is estimated at $200 million, change in the Fund's value estimated at $41 million and management fee of $6 million. The investment return forecast is included in Table 5.8.

The nominal investment return from January to July 2010 has been equivalent to 3.2% of the Petroleum Fund. The annual return for the 12 months to July 2010 was 4.2 %, while the annual return on the investments since inception of the Fund is now 4.6 %.

Table 5.8: Estimated Petroleum Fund Savings 2009-2015 ($m)

	2009 Actual	2010 Estimate	2011 Budget	2012 Projection	2013 Projection	2014 Projection	2015 Projection
Opening Balance	**4,197**	**5,377**	**6,617**	**8,165**	**9,817**	**11,223**	**12,923**
Petroleum Revenue excluding PF Interest	1,660	1,816	1,992	2,040	1,741	1,981	1,897
Petroleum Fund Interest*	177	200	296	359	419	479	546
Change in Value of the Fund	-143	41	0	0	0	0	0
BPA Management fee	-3	-6	-6	-6	-6	-6	-6
Withdrawal	-512	-811	-734	-741	-748	-755	-762
Closing Balance	**5,377**	**6,617**	**8,165**	**9,817**	**11,223**	**12,923**	**14,598**

*) includes accrued interest

Source: Petroleum Fund Directorate, Ministry of Finance, 2010

La'o Hamutuk note: table 5.8 above assumes that the Government will withdraw only the ESI in future years. However, table 4.2 in the expenditure part of this book states that the Government will withdrawal of $418-$526 million above the ESI for each year from 2012 to 2015. Recalculating this table with that information reduces the balance in the Petroleum Fund at the end of 2015 by more than $2 billion, as follows:

Revised Table 5.8: Estimated Petroleum Fund Savings 2009-2015 ($m) (green shaded cells have changed):

	2009 Actual	*2010 Estimate*	*2011 Budget*	*2012 Projection*	*2013 Projection*	*2014 Projection*	*2015 Projection*
Opening Balance	***4,197***	***5,377***	***6,617***	***8,165***	***9,390***	***10,316***	***11,480***
Petroleum Revenue excluding PF Interest	*1,660*	*1,816*	*1,992*	*2,040*	*1,741*	*1,981*	*1,897*
Petroleum Fund Interest	*177*	*200*	*296*	*350*	*392*	*432*	*477*
Change in Value of the Fund	*-143*	*41*	*0*	*0*	*0*	*0*	*0*
BPA Management fee	*-3*	*-6*	*-6*	*-6*	*-6*	*-6*	*-6*
Withdrawal	*-512*	*-811*	*-734*	*-1,159*	*-1,202*	*-1,244*	*-1,288*
Closing Balance	***5,377***	***6,617***	***8,165***	***9,390***	***10,316***	***11,480***	***12,559***

Source: La'o Hamutuk

Petroleum Fund

The balance of the Petroleum Fund as of 31 July 2010 was $6.45 billion. This is an increase of $1.07 billion during the financial year. The balance is expected to increase only modestly for the rest of the year as the major part of the withdrawals in 2010 will take place in the second part of 2010. By the end of 2010, the balance of Petroleum Fund is expected to be $6.62 billion.

The current forecast shows the total value of the Fund to be $8.17 billion by the end of 2011, $9.82 billion by the end of 2012 and $14.6 billion by end of 2015. The forecasts of the future Petroleum Fund balance are shown in Table 5.8.

The Government has over the last three years gradually implemented the investment strategy of the Petroleum Fund. The objective is to diversify, the portfolio into a range of asset classes, regions and currencies in order to reduce risks and increase expected return, within the limitations of the Petroleum Fund Law. The first step was taken in 2009 when the Bank for International Settlements (BIS) was appointed as the Fund's first external manager. The BIS is responsible for investing 20 per cent of the portfolio. Now the portfolio includes Government bonds issued by Australia, Japan, EU and UK as well as bonds issued by Supranational Organizations, such as the European Investment Bank and the World Bank.

In 2010, the Government appointed the External Manager, Schroeder Investment Management Ltd as the first Equity Manager and 4% of the portfolio is now allocated to global equities. With the latest allocation to equities, the flexibility in the current Petroleum Fund Law to diversify the portfolio is now fully exploited. Further diversification of the portfolio requires changes to the Petroleum Fund Law.

The fund is currently overweighted to bonds and this represents an exposure to financial risk associated with potential US interest rate increases. The Government will continue diversifying the portfolio away from US

Government bonds once the amendments to the Petroleum Fund Law are approved by the National Parliament. This will include an increased exposure to equities.

Petroleum Wealth and ESI calculation

Total Petroleum Wealth, which comprises the balance of the Fund plus the net present value (NPV) of future Petroleum Revenues, is estimated to be $24.47 billion as of 1 January 2011. The estimated Petroleum Wealth has increased by $7.82 billion compared to the calculations provided in the Budget 2010.

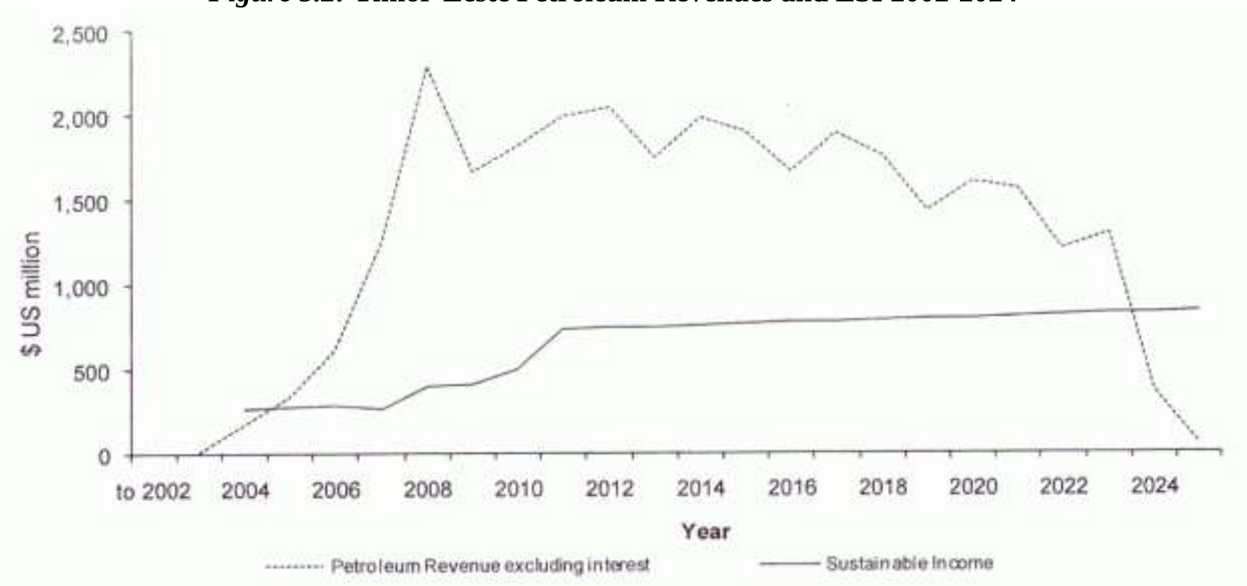
According to the Petroleum Fund Law, the Estimated Sustainable Income (ESI) shall be 3% of the Petroleum Wealth. Correspondingly, the ESI for the Financial Year 2010 is estimated at $734 million. This is an increase of $232 million compared to the ESI for 2010. Table 5.9 shows the ESI calculation for 2011 up to 2015 and Chart 5.2 the ESI together with the petroleum revenue forecast.

Table 5.9: ESI as of 1 January 2011 Onward Compared to Figures in Budget 2010

US$ million	2010 Budget	2011 Budget	2012 Budget	2013 Budget	2014 Budget	2015 Budget
Petroleum Fund Balance	5,272	6,617	8,165	9,817	11,223	12,923
+ Net Present Value of future revenues	11,446	17,847	16,529	15,110	13,939	12,476
Total Petroleum Wealth (PW)	16,718	24,465	24,695	24,927	25,162	25,399
Estimated Sustainable Income (PWx3%)	502	734	741	748	755	762

Source: Petroleum Fund Directorate, Ministry of Finance.

Figure 5.2: **Timor-Leste Petroleum Revenues and ESI 2002-2024**



Source: Petroleum Fund Directorate, Ministry of Finance, 2010

Change of Methodology

The Ministry of Finance together with the IMF have reviewed the methodology used for calculating the Petroleum Wealth and ESI in 2010 prior to the ESI calculation for 2011. Although most of the methodology remains unchanged, two major changes have been made:

Oil price forecast

ESI Petroleum Revenue forecasts use West Texas Intermediate (WTI) as the benchmark oil price. For ESI calculations between 2007 and 2010, WTI has been forecasting deterministically using the Energy Information

Administration (EIA) low case oil price forecast provided in its annual report, Annual Energy Outlook12. EIA is an independent organization that applies a consistent and rigorous methodology, and the only such organization to provide both a low and reference case forecast for WTI oil prices.

Oil prices are inherently difficult to forecast, and there is much academic debate as to their underlying properties, including whether the market upheaval in 2008 and 2009 signals a permanent shift to a higher oil price world. The EIA low and reference case forecasts have been reviewed against current futures prices and other sources to evaluate whether these ESI cases serve as a reasonably prudent guideline for sustainable consumption of Timor-Leste's petroleum wealth. Based on this assessment, the EIA low case forecast is felt to be overly prudent and the 2011 ESI calculation will instead use the average of EIA low and reference case forecasts.

Discount rate

Previous ESI used a single observation of the US government bond yields close to the date of the ESI calculation, weighted simply according to the proportion of forecast petroleum revenues occurring against each maturity period. The further liberalisation of US monetary policy following the global financial crisis has resulted in unusually low bond yields, as reflected in a discount rate of 2.6% for 2010 ESI.

The methodology has been revised to use (1) the 10 year historic average of bond yields for each maturity date; and (2) a refined calculation of the average discount rate. This results in a discount rate of 4.0 percent for 2011 ESI.

Changes in the ESI from 2010 to 2011

Several factors have affected the outcome of the ESI calculation for 2011 compared to the calculation in the previous year:

Oil prices

The forecast WTI oil price for 2010 has increased from $62 to $76 per barrel reflecting the average of actual oil prices to August 2010 and the EIA forecast for 2010 for the remainder of the year. For years after 2010, the move from ETA low case to the average of EIA low and reference case forecasts involves moving from long term real prices that converge to $50 per barrel to real prices that increase by around 2 percent per year between 2012 and 2025.

Liquids price differentials

The assumed value of Bayu Undan (BU) condensate and LPG relative to WTI have been slightly revised consistent with actual average differentials since the start of the project, leading to a modest further increase in ESI.

Production

The Bayu Undan low case production forecasts provided by Conoco Philips increased for all three product types. The range of uncertainty around future production volumes has narrowed reflecting revised reservoir estimates taking into account further production history and data gathered during recent development drilling. The higher production forecast, when valued using the average of EIA low and reference case oil prices, adds $61 million to ESI.

LNG prices

LNG contract prices until end of 2009 are now settled and these were largely reflected in 2010 ESI. Prices for 2010 to 2012 are close to being finalized and have resulted in a modest increase relative to prudent assumptions made for the 2010 ESI forecast. The forecast differential between JCC and WTI has been refined slightly consistent with historical actual average since the start of LNG shipments.

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[12] Annual Energy Outlook 2010: http://www.eia.doe.gov/oiaf/aeo/index.html

Petroleum Fund withdrawals

Withdrawal of $512 million in 2009 (compared to Budget 2010 assumed withdrawal equalling ESI of $408 million) and $811 million now planned in 2010 (against ESI of $502 million) reduce the projected opening Petroleum Fund balance on 1 January 2011.

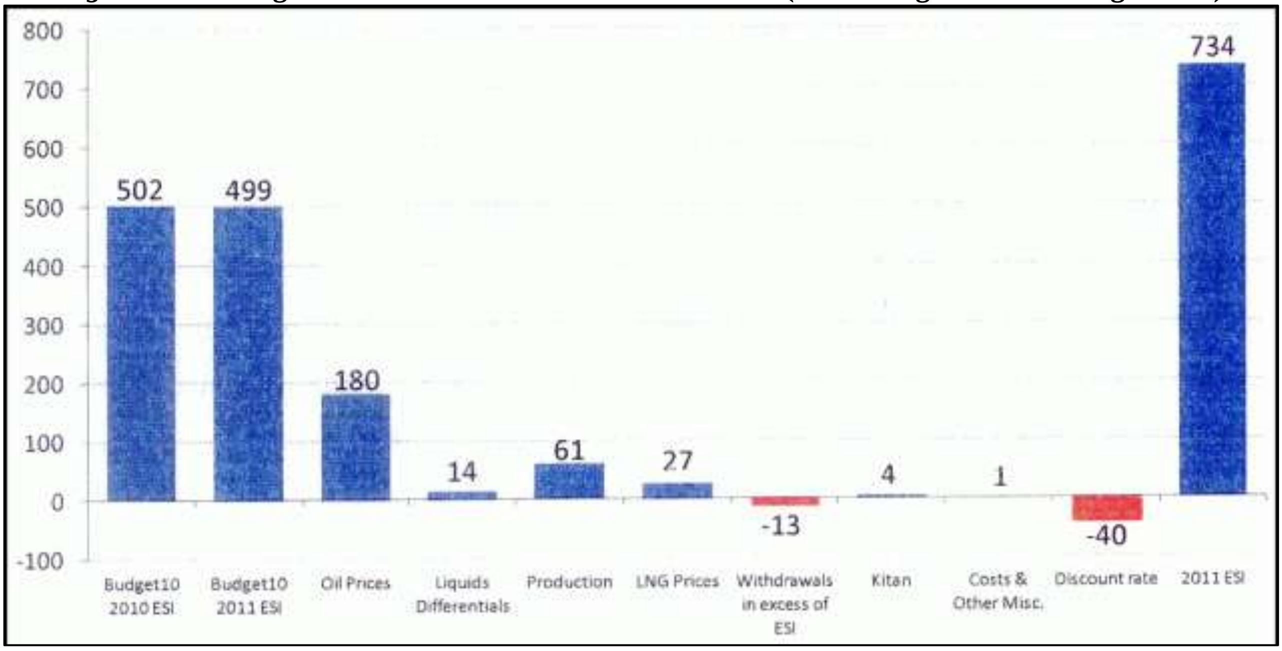
Kitan

The development plan for Kitan was approved by the Autoridade Nacional de Petroleo (ANP) or National Petroleum Agency (regulator) during 2010 and forecast revenues from Kitan are therefore included in the ESI calculation. The $4 million ESI increase reflects the Kitan low production case.

Discount rate

The discount rate has increased from 2.6% to 4.0% due to a change in methodology. A higher discount rate reduces the present value of future petroleum revenues. The magnitude of various factors affecting the PSI is illustrated in Chart 5.3.

Figure 5.3: **Changes in the Estimated Sustainable Income (from Budget 2010 to Budget 2011)**

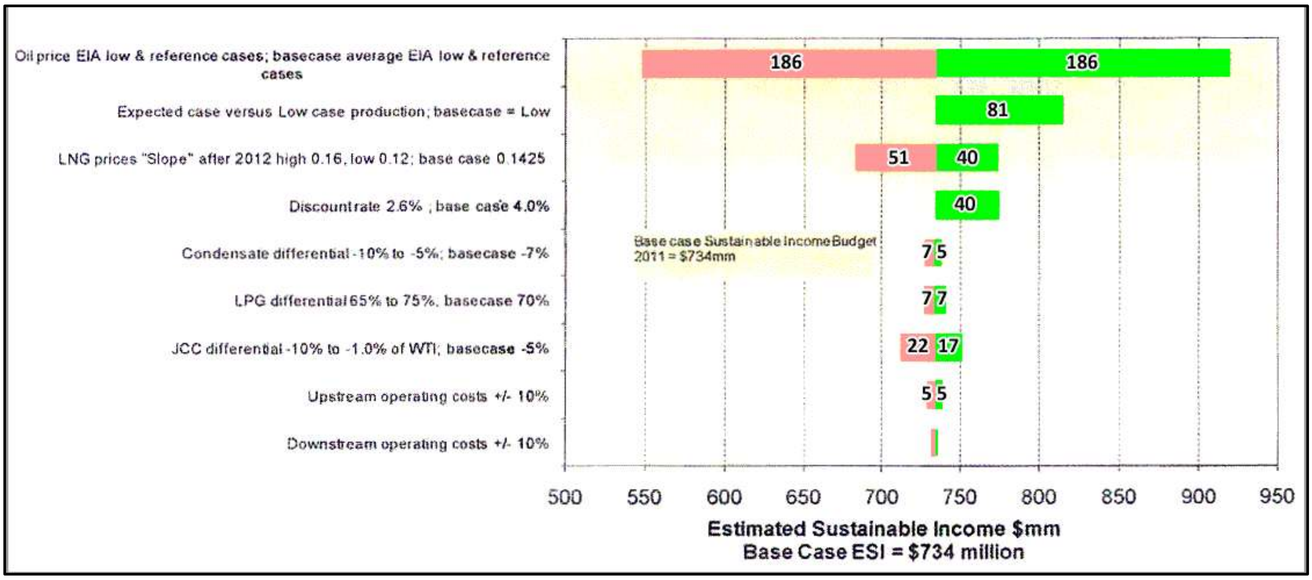


Source: Petroleum Fund Directorate, Ministry of Finance, 2010

Sensitivity analysis

There are a range of risks and uncertainties in any forecast of petroleum revenue. The most sensitive assumption is the oil price, as the forecast of petroleum revenues changes substantially for even a relatively small change in assumed oil prices. Chart 5.4 shows the sensitivity of ESI to changes in the most relevant variables.

Figure 5.4: **Sensitivity Analysis – Estimated Sustainable Income, 2011 ($ million)**



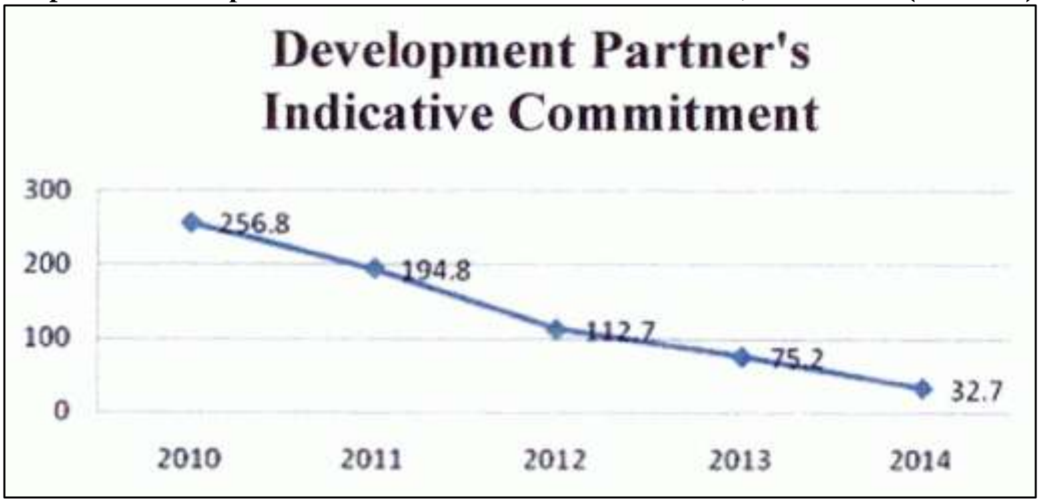
Source: Petroleum Fund Directorate, Ministry of Finance. 2010.

4. Development Partners

Timor-Leste's Development Partners will provide a total of $194.8 million to the Timor-Leste in 2011. This represents 17% of the total Combined Sources Budget of $1.18 billion.

Development partner funding is expected to reduce significantly from 2012 onwards. Current projections are that contributions will reduce by $82.2 million (42.2%) between 2011 and 2012, $47.4 million 142.0%) between 2012 and 2013, and $42.5 million (56.5%) between 2013 and 2014. These figures reflect actual information to date and accordingly do not reflect an absence of future international support and commitment.

Graph 5.4: **Development Partners' Indicative Commitment, 2010 - 2015 ($ million)**



Source: Aid Effectiveness Directorate Ministry of Finance, 2010

PART 6. FINANCING

Timor-Leste is a developing economy with a nominal non-oil per-capita income of $594.50. 41% of the population live below the poverty line, down from 49.9% in 2007. The number of people entering the work force continues to increase at a faster rate than employment creation in public and private sectors. The challenges of building a sustainable economy, absorbing the increased workforce participation rate, and reducing poverty, are enormous. The Timor-Leste economy is primarily driven by public investment but for long term growth and sustainability private investment is critical. The prerequisites for private investment include security and political stability, basic infrastructure, skilled labour force, attractive tax rate, land laws, rule of law, and legal framework. Public investment and regulatory reform are essential to deliver these prerequisites.

The Government is finalising the Strategic Development Plan (SDP) 2011-2030, which calls for substantial investment in two fundamental pillars to create the basic conditions to attract private investment for growth and sustainability. These two pillars are basic infrastructure and human capital.

This budget year marks the beginning of the SDP with an immediate need for funding to operationalise the SDP.

The main source of revenue for Timor-Leste is Petroleum Revenues, which is derived mainly front Bayu Undan in the Timor Sea. These revenues are deposited in the Petroleum Fund, from which withdrawals are made to finance the State Budget guided by the Estimated Sustainable Income (ESI) benchmark of 3% of the Petroleum Wealth.

Domestic Revenues and donor funding constitute a small component of the Budget revenues.

Beyond what can be spent from traditional funding sources (ESI and Domestic Revenues), additional amounts are envisaged to be required in the first five years of the SPD. The Government is, therefore, exploring other options towards funding strategic public investments. These financing options range from judicious withdrawals from the Petroleum Fund ensuring long term sustainability, access to concessional and non-concessional borrowings, and Public Private Partnerships (PPP).

Starting 2011, the Government will establish two Special Funds in accordance with section 32 of Law No. 13/2009 on Budget and Financial Management. The purposes of the funds are to finance large-scale, multi-year capital investments in infrastructure and human development. The special funds will be known as:

1. Infrastructure Fund (FI), and
2. Human Capital Development Fund (HCDF).

The creation of Special Funds is provided for in section 32 of the Budget and Financial Management Law. These funds will be financed through the budget and provide a more transparent and effective governance and reporting mechanism on the use of the money. The Government in accordance with article 115(1)(e) of the Constitution has the competency to establish the rules and regulations for the Special Funds. Parliamentary authorisation is required pursuant to article 32 of the Budget and Financial Management Law.

The use of Special Funds will fast track the implementation of the SDP. The Special Funds will be governed by a board consisting of the Prime Minister and relevant line ministers. One of the benefits of the Special Funds is the centralisation of decision making, which will ensure projects are coordinated between line ministries and integrated within the SDP. The board will prioritise and sequence projects, with the scope to realign projects to accommodate changes arising from factors outside its control. Another benefit of the Special Funds is that it will provide an avenue to allow donors to participate in the SDP.

A National Development Agency (ADN) will be established under the Prime Minister staffed with technical expertise to quality control project submissions to ensure specifications and costings are appropriate. The ADN will also provide supervision and monitoring of the projects including quarterly reporting to the National Parliament through the Council of Ministers.

The Minister of Finance is responsible for the management and control of the Special Funds in accordance with the Budget and Financial Management Law. The purposes of the Special Funds are included in Article 9 of the State Budget 2011.

Under articles 20 and 21 of the Budget and Financial Management Law the Government has a legal basis to borrow. The primary goal of external borrowing is to fill the deficit between desired development needs and domestically available resources over the medium and long-term. A Debt Management Unit (DMU) has been established within the Ministry of Finance to ensure efficient and effective management of public debt should it arise. The Government is assessing the benefits of borrowing as opposed to relying exclusively on the Petroleum Funds revenue.

The Government is considering the financing option of Private Public Partnerships (PPP), which will enable more infrastructure investments whilst sharing associated risks with other parties.

ANNEX 1 - Estimated Sustainable Income Calculation 2011

Introduction

According to the Petroleum Fund Law the Estimated Sustainable Income (ESI) the maximum amount that can be appropriated from the Petroleum Fund in a financial year while leaving sufficient resources to appropriate an amount of equal real value in subsequent years. This means that the ESI is a benchmark indicating the sustainable level of withdrawal from the Petroleum Fund that does not reduce the real value of Timor-Leste's total petroleum wealth in the long-term.

The Petroleum Fund Law requires that all assumptions underlying the calculation of the ESI be prudent. reflecting international best practice and be based upon internationally recognized standards. Currently approximately 2/3 of Timor-Leste's Petroleum Wealth included in the ESI calculation is still under the seabed in Timor Sea, while 1/3 is already in the Petroleum Fund. The future revenues are highly uncertain and subject to production and oil prices in the future.

Moreover, currently only one field. Bayu Undan, is in operation. The risk, however small, is that an event on the Bayu Undan field will cause a deferral of the revenue stream to the State of Timor-Leste. Such a deferral may last for months, years or even indefinitely, depending on the event. Furthermore, oil prices are very volatile, and it should not be ruled out that oil prices fall to or below the price assumptions used in the calculations of the Petroleum Fund.

Review of methodology

The Ministry of Finance (MoF) has reviewed the methodology used for the ESI calculation and has broadly re-confirmed the approach used previously with the exceptions noted below.

Asset recognition policy

The forecast of future petroleum revenues used for ESI includes projects with approved development plans and firm investment commitment from the oil company. This has been reconfirmed as an appropriate basis for ESI and revenues from Bayu Undan (BU) and the recently approved small Kitan project are included in the forecast. Because of significant uncertainty and potential for material delay no revenues are included for the Sunrise project. Though exploration continues, at this time there have been no other significant petroleum discoveries in the Joint Petroleum Development area or Timor-Leste exclusive areas.

Petroleum Reserves and Production Forecasts

The operators, ConocoPhillips and Eni, have provided three production scenarios, “high”, “expected” and “low” production, based on different assumptions of the total petroleum resources available at Bayu Undan and Kitan fields respectively.

The State Budget estimates production on the basis of the Operators' “Low” estimate, which reflects a 90% likelihood that predicted production levels will he achieved. This is considered to be in accordance with the prudent requirements in the Petroleum Fund Law.

ConocoPhillips update production forecasts annually, taking into account new production data, including results from 2009 development drilling, There were no major revisions in underlying production plans, but as the Bayu Undan field matures, the low, base and high case production forecasts are converging, reflecting the reducing level of uncertainty. The key difference between the three production cases now lies in the estimated size of the total producible reserves, as reflected in differing cut off points and production volumes in the final years of the field.

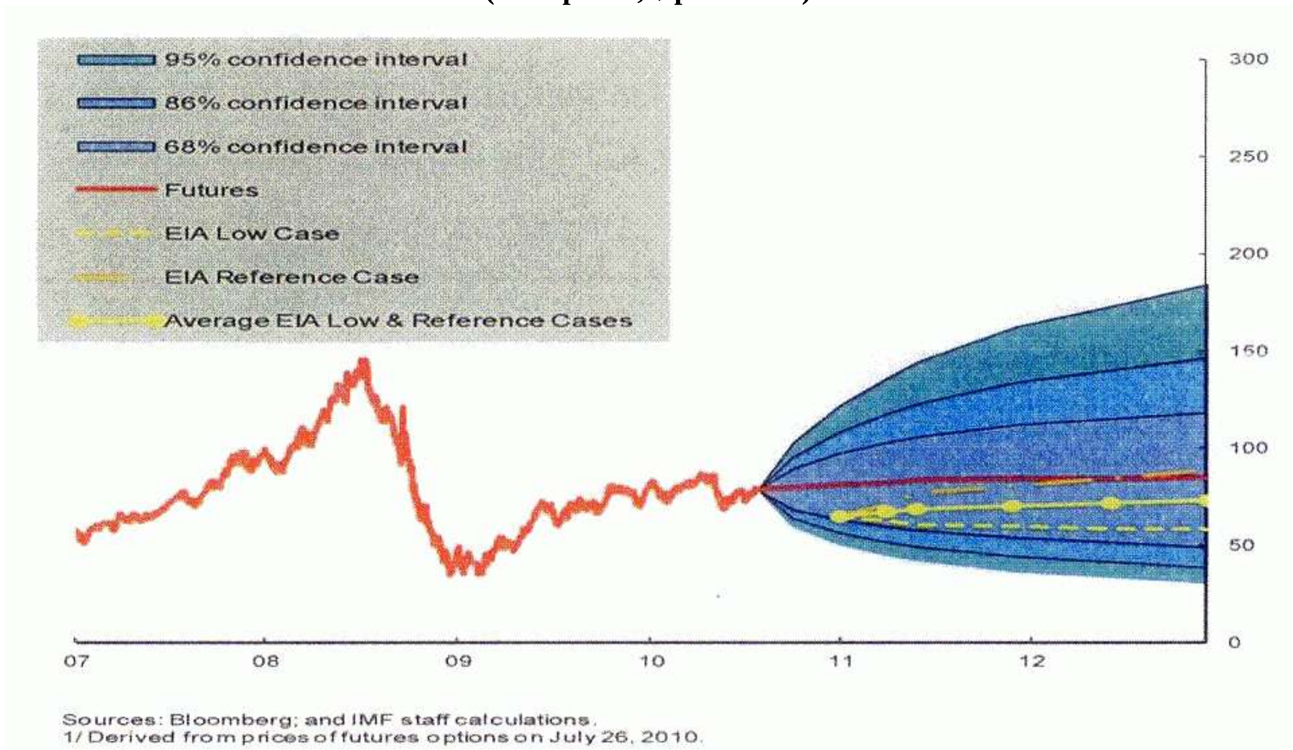
Oil prices

ESI petroleum revenue forecasts use West Texas Intermediate (WTI) as the benchmark oil price. For ESI calculations between 2007 and 2010, WTI has been forecast deterministically using the Energy Information

Administration (EIA) low case oil price forecast provided in its annual report, Annual Energy Outlook[13] 13. EIA is an independent organization that applies a consistent and rigorous methodology, and the only such organization to provide both a low and reference case forecast for WTI oil prices.

The 2011 ESI calculation uses the average of the EIA low case and reference case forecasts as the WTI oil price benchmark for the ESI calculation. The average of the two EIA cases lies well within the 68 percent confidence interval around average futures prices, and significantly below the average of futures prices, as shown in Chart A1.

Figure Al: **Comparing EIA Oil Price Forecasts to Market Futures Prices (WTI prices, $ per barrel)**

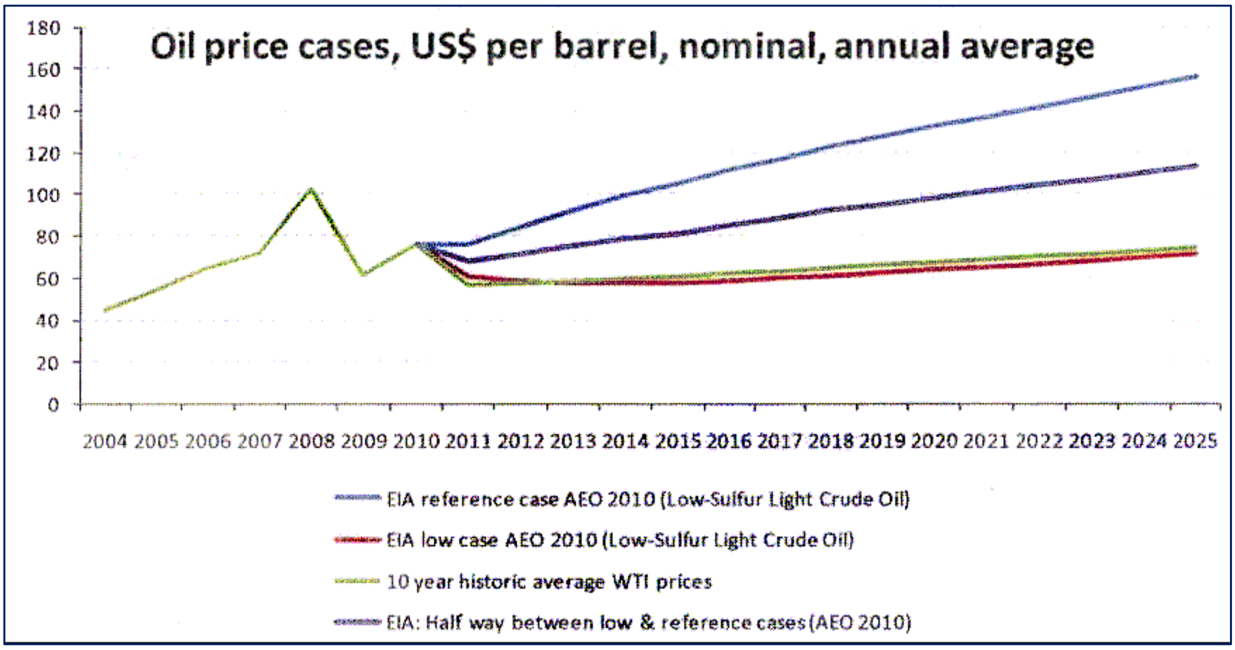


Source: Petroleum Fund Directorate. Ministry of Finance, 2010

Moreover, the average of the EIA low case and reference case is significantly lower than the ETA's Reference Case, and the difference between the two projections increases with the time horizon. The EIA's Low, Reference and average of Low and Reference Case are shown in Chart A2 together with the historical average WTI prices.

[13] Annual Energy Outlook 2010: http://www.eia.doe.gov/oiaf/aeo/index.html

Figure A2: **EIA Forecasts and 10 years Historical Average WTI Prices 2004-2025**



Source: Petroleum Fund Directorate, Ministry of Finance, 2010

There are many institutions providing oil price forecasts. Nonetheless, the EIA is the only one, as the Ministry of Finance is aware, that provides both Low and Reference Price Cases. As shown in Table Al, the oil price projection used in the ESI calculation is significantly lower than most other oil price forecasts made by other institutions.

Table A1: World Oil Price Forecasts, 2015 – 2025 ($ million)

World Oil price forecasts, USD/barrel, real 2008 USD	**2015**	**2020**	**2025**
INFORUM	92.5	108.0	109.7
DB	93.2	105.5	114.7
IHSGI	85.1	81.9	74.9
IEA		100.0	115.0
EVA	80.4	84.5	91.0
SEER (Business-as-usual)	79.2	74.3	69.7
SEER (Multi-Dimensional)	99.0	101.5	105.8
EIA Reference Case	94.5	108.3	115.1
EIA: Half way between low & reference	73.6	80.4	84.4
EIA Low Price Case	51.6	51.9	51.7

Source: AEO 2010, EIA

Budget 2010 forecast a WTI oil price of $62 in 2010. For the seven months to the end of July 2010, WTI spot prices averaged $78.1[14]. For the remaining five months of 2010, prices are assumed to average the most recent EIA forecast for WTI in 2010 of $72.4. The weighted average 2010 price is therefore $75.7. Oil price forecasts for 2011 and 2012 are US$68 and US$71 per barrel.

Discount rate

The Petroleum Fund Law stipulates that the discount rate used for calculating the present value of the future

[14] Source: Daily WTI spot prices from Energy Information Administration (EIA) (http://tonto.eia.doe.gov/dnav/pet/pet_pri_spt_1_d.htm)

cash flow from the petroleum sector be the nominal yield on a US Government security averaged over the years, in which the Petroleum Fund receipts are expected.

Previous ESI used a single observation of the US government bond yields close to the date of the ESI calculation, weighted simply according to the proportion of forecast petroleum revenues occurring against each maturity period. The unprecedented loosening of US monetary policy following the global financial crisis has resulted in unusually low bond yields, as reflected in a discount rate of 2.6% for 2010 ESI. The methodology has been revised to use (1) the 10 year historic average of bond yields for each maturity date; and (2) a refined calculation of the average discount rate. This results in a discount rate of 4.0 percent for 2011 ESI.

Other assumptions

Actual realized prices for condensate and liquefied petroleum gas (LPG) relative to WTI have been reviewed and the forecast differential set consistent with average actual percentage differentials since the start of shipments in 2004.

Liquefied Natural Gas (LNG) prices for 2010-2012 are forecast using the provisional price formula negotiated between Darwin LNG and Japanese LNG buyers. For 2013 onwards, a prudent assumption has been made for long term LNG prices relative to oil prices, taking into account advice front Poten & Partners (LNG consultants advising the ANP). The percentage differential between WTI and the JCC[15] is forecast consistent with the historic actual average.

Operating and capital costs are the operator's forecast consistent with base case production. Advice from the operators is that costs would not be materially different for the low production case, therefore base case costs are used without adjustment as a prudent estimate of low case production costs.

Certification of the ESI calculation

According to the Petroleum Fund Law Art. 8 no transfer shall be made from the Petroleum Fund in the Fiscal Year unless the Government has first provided Parliament with reports:

a) specifying the Estimated Sustainable Income for the Fiscal Year for which the transfer is made;

b) specifying the Estimated Sustainable Income for the preceding Fiscal Year; and

c) from the Independent Auditor certifying the amount of the Estimated Sustainable Income in paragraphs (a) and (b) above.

The reports are attached as Annex 3 and 4.

[15] Japanese Crude Cocktail, price index of all oil imported into Japan, reported by Japanese Ministry of Finance

ANNEX 3 — Transfer from Petroleum Fund

Kay Rala Xanana Gusmão
Prime Minister
Democratic Republic of Timor-Leste

Dear Prime Minister,

SUBJECT: REQUIREMENT FOR TRANSFERS FROM PETROLEUM FUND

This report is provided in accordance with Article 8 (a) and (b) of the Petroleum Fund Law.

The Estimated Sustainable Income is calculated in accordance with provisions outlined in Schedule 1 of the Petroleum Fund Law.

Estimated Sustainable Income For Financial Year: 2011	**Amount (USD)** $734 million
Estimated Sustainable Income For preceding Financial Year: 2010	**Amount (USD)** $502 million

A review of the methodology which the ESI-calculations are based on is included as an attachment to the Budget 2011.

According to Art. 8 (c) of the Petroleum Fund Law, the Independent Auditor, shall certify the amount of the Estimated Sustainable Income. The certification report is attached.

Yours sincerely,

Emilia Pires
Minister of Finance

ANNEX 4 — Deloitte Report

Deloitte.

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AUDITOR'S REPORT TO THE MINISTRY OF FINANCE, DEMOCRATIC REPUBLIC OF TIMOR-LESTE

We have audited the Estimated Sustainable Income calculation for the Petroleum Fund of Timor-Leste for the fiscal year ending 31 December 2011 for purposes of the Fiscal Year 2011 Budget ("the Calculation"). The preparation of the Calculation is the responsibility of the Government of Timor-Leste. Our responsibility is to express an opinion on whether the Calculation has been prepared in compliance with Article 8 and Schedule 1 of the Petroleum Fund Law of the Democratic Republic of Timor-Leste ("the Law").

We conducted our audit in accordance with International Standards on Auditing applicable to compliance auditing. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the Calculation has been prepared in compliance with the Law. An audit includes examining appropriate evidence on a test basis. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the Estimated Sustainable Income Calculation for the Petroleum Fund of Timor-Leste for the fiscal year ending 31 December 2011 for purposes of the Fiscal Year 2011 Budget which has been calculated by the Government of Timor-Leste as 734 million United States Dollars, has been prepared, in all material respects, in compliance with Article 8 and Schedule 1 of the Petroleum Fund Law of the Democratic Republic of Timor-Leste.

Deloitte Touche Tohmatsu

DELOITTE TOUCHE TOHMATSU
Chartered Accountants
Darwin, 20 October 2010