



# ANNUAL REPORT

2016



# TABLE OF CONTENTS

Table of Contents.....	1
1. AUTORIDADE NACIONAL DO PETRÓLEO E MINERAIS IN BRIEF.....	5
1.1 ANPM Regulatory Jurisdiction .....	5
1.2 Values, Vision, Mission and Goals.....	6
Our Values .....	6
Our Vision .....	6
Our Mission.....	6
Our Goals .....	7
1.3 Organizational Structure and Development .....	7
Structure .....	7
Board of Directors (BoD).....	7
Single Auditor.....	8
Management Committee .....	8
1.4 Major Achievements and Projects Highlights in 2016.....	9
LICENSING INSTALLATION AND OPERATION OF FUEL FILLING STATION (FFS). ....	9
ESTABLISHMENT OF MINERAL DIRECTORATE AND LICENSING OF MINERAL OPERATORS.....	9
OBTAIN INFORMATION SECURITY MANAGEMENT SYSTEM-ISO 27001 .....	9
SIGNING OF VOCATIONAL-ELECTRICAL AND INSTRUMENTATION TRAINING PROGRAM. ....	10
1.5 Joint Commission and Sunrise Commission.....	10
Members of the Timor Sea Treaty Joint Commission in 2016.....	10
Members of the Sunrise Commission in 2016 .....	10
1.6 ANP Human Resource Development.....	11
Staffing.....	11
Temporary Staff .....	11
Training and Capability Development .....	111
1.7 Corporate Procurement.....	12
1.8 Single Auditor.....	12
1.9 Financial Statement and Auditor's report .....	14
ANP - CORPORATE EXPENSES REPORT.....	14
ANP - CORPORATE FINANCIAL STATEMENT .....	15
ANP - REVENUE AUDIT REPORT .....	19
2. CONTRACT OPERATOR'S ACTIVITY .....	20
2.1 Contracts in JPDA and TLEA .....	20
2.2 Exploration performance .....	21

The Implementation of IAGS.....	22
2.3 Production Performance.....	23
Production in Bayu Undan field (PSC 03-12 & 03-13) .....	23
Kitan Field (PSC JPDA 06-105) .....	24
2.4 Health, Safety and Environmental Performance .....	24
HSE Performance in JPDA.....	25
Incidents in JPDA .....	255
Gas Disposal in production facilities in the JPDA.....	26
HSE performance in TLEA.....	27
2.5 Marketing performance.....	27
Liquefied Petroleum Gas (LPG) .....	28
Liquefied Natural Gas (LNG) .....	29
Kitan PSC 11-105 .....	29
2.6 Exploration Expenditure Performance.....	30
A. Joint Petroleum Development Area (JPDA) - Exploration PSCs .....	30
B. Timor Offshore Area - Exploration PSCs.....	30
2.7 Development Expenditure Performance .....	31
2.8 Local Content Performance.....	32
Procurement of Local Goods and Services .....	32
Training and Employment.....	33
3. REGULATORY PERFORMANCE .....	34
3.1 Upstream... 34	
Legal framework revision .....	34
Petroleum data and reports .....	34
ANPM Inspections, Supervisions, Monitoring and Approval of Petroleum Operation.....	Error! Bookmark not defined.
Regulatory Assessment in JPDA .....	36
Submission and Regulatory Review .....	36
HSE Inspection.....	38
Revenue Distribution.....	38
Agreed Local Content Projects .....	39
SERN-FULBRIGHT .....	39
TIMOR-LESTE BAYU UNDAN-GRADUATE INTERNSHIP PROGRAM.....	39
TIMOR-LESTE SKILL VOCATIONAL AND EDUCATION TRAINING CENTER.....	40
National Library .....	400
Core Storage Data Tape Facilities (PSC S-06-04) .....	41
3.2 Downstream Petroleum.....	411

Amendment of Decree-Law No.1/2012 on Downstream Sector .....	411
Establishment of Ancillary Downstream Regulations.....	41
Regulation on Trading Activities .....	42
Storage Regulation .....	42
Directive of Storage and Retail Kerosene .....	42
Establishment of Downstream Procedure .....	42
Inter-Ministerial Cooperation .....	42
Dissemination of Information & Data Collection at Municipal level.....	422
Dissemination of Storage Regulation.....	44
Establishment of Memorandum of Understanding on Environmental License .....	44
Supervising and Monitoring Downstream Activities .....	44
Licensing Installation and Operation of Fuel Filling Station (FFS) .....	45
Subsequent Inspection .....	46
Health, Safety and Environment Monitoring Program.....	46
Hazard, Risk and Safety Measures Awareness .....	46
Fees Collected in 2016 .....	47
Supervising and Monitoring Fuel Trading Activity .....	48
Monitoring and Supervising fuel quality.....	49
Investigation Activity .....	50
Fuel Consumption in 2016 .....	51
4. MINERAL PERFORMANCE .....	51
4.1 Overview of Mining Sector .....	51
4.2 Regulating the Quarry Operation.....	52
4.2.1 Diploma Ministerial .....	52
4.2.2 Intergovernmental Cooperation .....	52
4.2.3 Commercial Quarries and Borrow Pit Management .....	53
4.3 License and Production in 2016.....	53
4.3.1 Location Approval .....	53
4.3.2 License .....	54
4.3.3 Production in 2016 .....	55
4.4 Revenue Collected .....	55
5. CORPORATE INITIATIVES .....	56
5.1 Graduate Internship Program .....	56
5.2 University Final Year Project.....	57
5.3 Public Events.....	58
National & International Exhibition and Sepfope job fair .....	58

List of Figures.....	59
List of Graphs.....	59
List of Tables .....	60
List of Abbreviations.....	60

# 1. AUTORIDADE NACIONAL DO PETRÓLEO E MINERAIS IN BRIEF

Autoridade Nacional do Petróleo e Minerais (ANPM) is Timor-Leste's public institution established under Decree Law No.1/2016 of 9<sup>th</sup> February, 1<sup>st</sup> amendment of Decree Law No.20/2008 of 19<sup>th</sup> June.

ANPM is vested with administrative and financial autonomy to act as regulatory authority for the oil, gas and mineral related activities in accordance with the provisions of the Petroleum Activities Law, Interim Petroleum Mining Code, the Timor Sea Treaty and the Diploma Ministerial.

## 1.1 ANPM REGULATORY JURISDICTION

In the JPDA, ANPM is responsible to the Joint Commission and carry out the day today regulation and management of upstream petroleum activities thru regular supervision and control of petroleum activities including health, safety, environmental protection and assessments and work practices.

In the TLEA, apart from being responsible for the upstream petroleum activities equivalent to those in the JPDA, ANPM is also responsible to regulate downstream petroleum activities including supply, processing, storage, transportation, trading and marketing of oil and gas products.

ANPM is also responsible to regulate mineral activities in all territory including acknowledgement, exploration, assessment, development, exploitation, processing, refining, transportation and commercialization.

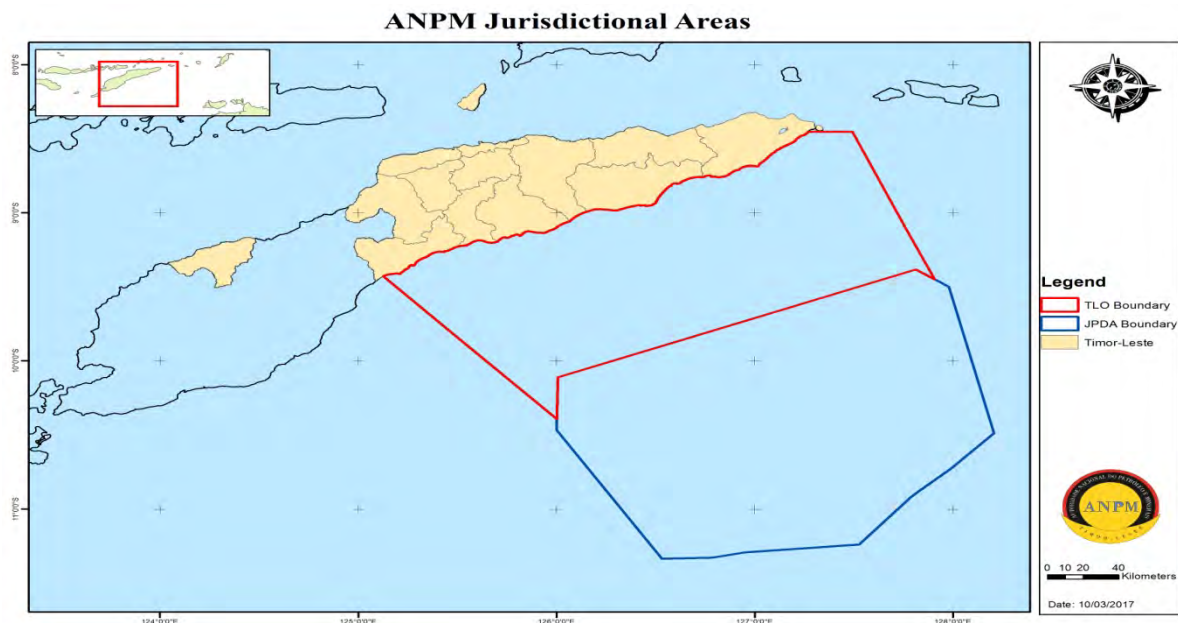


FIGURE 1: ANPM JURISDICTIONAL AREAS (MAP NOT TO SCALE)



## 1.2 VALUES, VISION, MISSION AND GOALS



### OUR VALUES

#### Collaboration

To conduct efficient and effective collaborating among (i) ANPM's internal Directorates, and (ii) with its stakeholders.

#### Openness

Honesty and transparency – underpinned by a culture of trust and respect

#### Unity

ANPM promotes and displays a high degree and of teamwork and integration of its employees and Directorates. Whilst appreciating and respecting the cultural intellectual diversity of the individuals that works within it, the ANPM is united in its ambition to become a world class organization in Timor-Leste.

#### Responsibility

As true leaders, ANPM team members take full responsibility for the results of their actions

#### Accountability

ANPM and its team members are fully accountable for their ethical standards, behavior and performance at all times. Furthermore the ANPM is accountable for the governments of Timor-Leste. In performing the task in and for the JPDA, the ANPM is accountable for Timor-Leste and Australia.

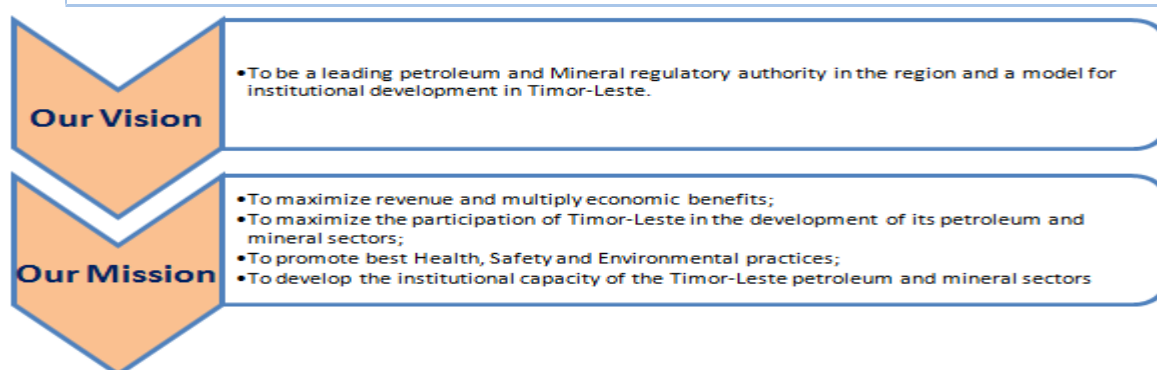
#### Global view

Whilst operations for the ANPM reside in Timor-Leste, its view is a global one. It works with and coordinates activities with operators that are multi-national in nature, size and scope.

#### Excellence

In line with developing a world class organization, the ANPM believes in excellence – in everything that it does.

### OUR VISION & MISSION



## OUR GOALS

Ensure that petroleum and mineral resources are effectively explored, developed, managed and regulated;

Ensure that economic benefits are delivered to the contracting states;

Maximize employment opportunities for Timor-Leste nationals;

Develop organizational excellence;

Promote and ensure best HSE practices;

Regulate all downstream petroleum activities in Timor-Leste;

Maximize economic activities of petroleum and mineral sectors in Timor-Leste;

## 1.3 ORGANIZATIONAL STRUCTURE AND DEVELOPMENT

### STRUCTURE

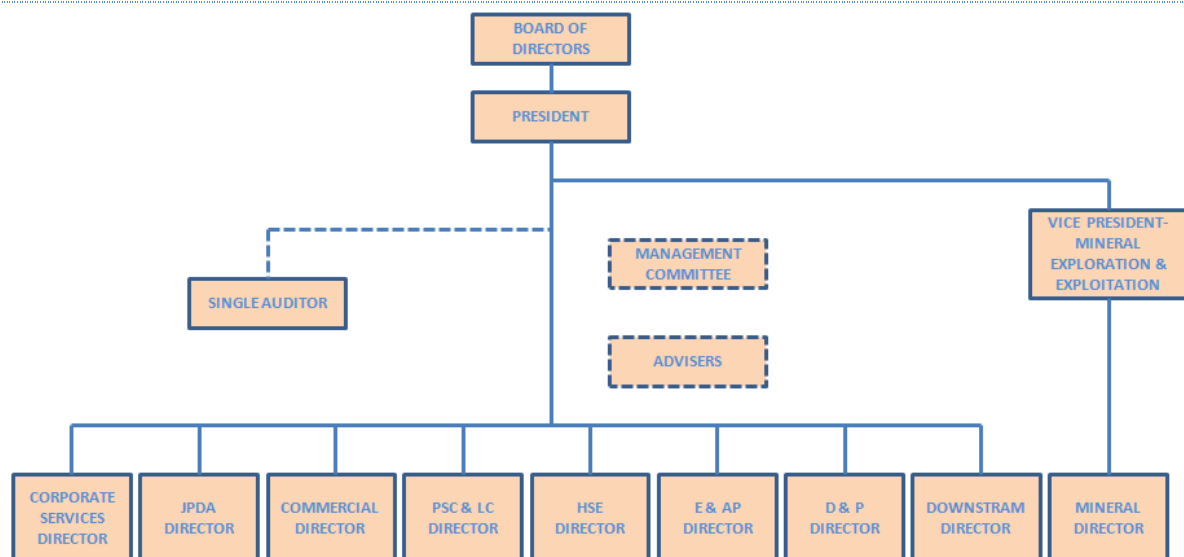


CHART 1: ANPM ORGANIZATIONAL STRUCTURE

### BOARD OF DIRECTORS (BoD)

ANPM Board of Directors in 2016 composed of:

Gualdino da Silva ,BEng(GeoEng) Hons.	Chairman
Jorge Dasilaku Martins, Msc	Non executive member
Jose Manuel Gonçalves, BEng(MiningEng)	Executive member
Verawati Corte Real de Oliveira, BS	Executive member
Nelson de Jesus, SE	Executive member

This composition based on ANPM Decree Law article 7.



BoD is responsible for defining directions and policies for the ANPM. In doing so, the board is responsible for approving internal regulations, strategic directions, technical regulations and directives under the Petroleum Act and approving ANPM's consolidated work plan and budget as prescribed under Article 8 of the ANPM decree law.

## SINGLE AUDITOR

The roles and functions of the Single Auditor (SA) are stipulated under Article 12 and 14 of the Decree Law on the establishment of the ANPM. The Single Auditor is the organ responsible for monitoring legality, regularity, and proper financial and patrimonial management of the ANPM.

## MANAGEMENT COMMITTEE

Management committee is established by the President which consists of the vice president and all executive directors. The Management committee holds meeting at least once in a month to address day to day management of ANPM and to address projects in JPDA and TLEA.

Jose Manuel Gonçalves	Vice President - Mineral Exploration & Exploitation
Dionisio Martins	Director - Corporate Services
Florentino Pereira	Director - JPDA
Emanuel Angelo Lay	Director - Commercial
Rui Soares	Director - Development and Production
Verawati Corte Real de Oliveira	Director - Health Safety and Environment
Mateus da Costa	Director - Exploration and Acreage Release
Amado Hei	Director - PSC and Legal Compliance
Nelson de Jesus	Director - Downstream

## 1.4 MAJOR ACHIEVEMENTS AND PROJECTS HIGHLIGHTS IN 2016

### LICENSING INSTALLATION AND OPERATION OF FUEL FILLING STATION (FFS)

In the process of granting a license, there are steps of approval processes namely location and project approval. During 2016, 13 (Thirteen) Automotive Fuel Filling Stations (AFFS) were approved and licenses were issued. Among those AFFS, 2 (two) were newly constructed.



FIGURE 2: INSPECTION ACTIVITIES FOR NEWLY CONSTRUCTED AFFS

### ESTABLISHMENT OF MINERAL DIRECTORATE AND LICENSING OF MINERALS OPERATORS

During 2016, ANPM has established the Mineral Directorate according to the Decree Law No.1/2016, 9 February, and at the same year the ANPM has issued 29 (twenty nine) license for 16 (Sixteen) minerals operators in all territory.



FIGURE 3: LICENSING GRANTED AWARD FOR MINERAL OPERATORS

### OBTAIN INFORMATION SECURITY MANAGEMENT SYSTEM-ISO 27001

ANPM certified in ISO 27001 on Information Security Management System in October 2016 by British Standard Institution (BSI Group).



FIGURE 4: HANDOVER CERTIFICATE OF ISO-27001



FIGURE 5: ISO-27001 TRAINING FOR ANPM STAFFS

## SIGNING OF VOCATIONAL-ELECTRICAL AND INSTRUMENTATION TRAINING PROGRAM

In December 2016, ANPM initiated a sustainable vocational training program on electrical and instrumentation with Centro Nacional de Emprego e Formação Profissional, CNEFP Tibar to train 40 selected Timorese and 6 trainers.



FIGURE 6: SIGNING CEREMONY OF VOCATIONAL TRAINING

## 1.5 JOINT COMMISSION AND SUNRISE COMMISSION

### MEMBERS OF THE TIMOR SEA TREATY JOINT COMMISSION IN 2016

- Mr. Francisco da Costa Monteiro Timor-Leste
- Mr. Antonio de Sousa Loyola Timor-Leste
- Mr. Bruce Wilson Australia
- Mr. Domingos Lequisiga Timor-Leste alternate Commissioner
- Mr. Vicente Lacerda Timor-Leste alternate Commissioner

Two Joint Commission Meetings were held in 2016

- 45<sup>th</sup> JCM on 7<sup>th</sup> April 2016 in Australia
- 46<sup>th</sup> JCM on 14<sup>th</sup> September 2016 in Dili

2016 Timor Sea Treaty JCM major resolutions, amongst others, were:

- Approval of the ANPM 2017 WP&B

### MEMBERS OF THE SUNRISE COMMISSION IN 2016

- Bruce Wilson Australia
- Francisco da Costa Monteiro Timor-Leste

During 2016, no Sunrise Commission Meeting.

## 1.6 ANPM HUMAN RESOURCE DEVELOPMENT



ANPM has invested significantly to its staffs in order to capacitate its staffs. The investments commitment is supported the staffs' trainings, workshop, conferences and secondment.

### STAFFING

During 2016, ANPM conducted 16 recruitment for new and replacement positions in order to respond to the ANPM's activities. By end of 2016, ANPM has a total of 97 staff spread across different directorates, including President and Single Auditor's office.

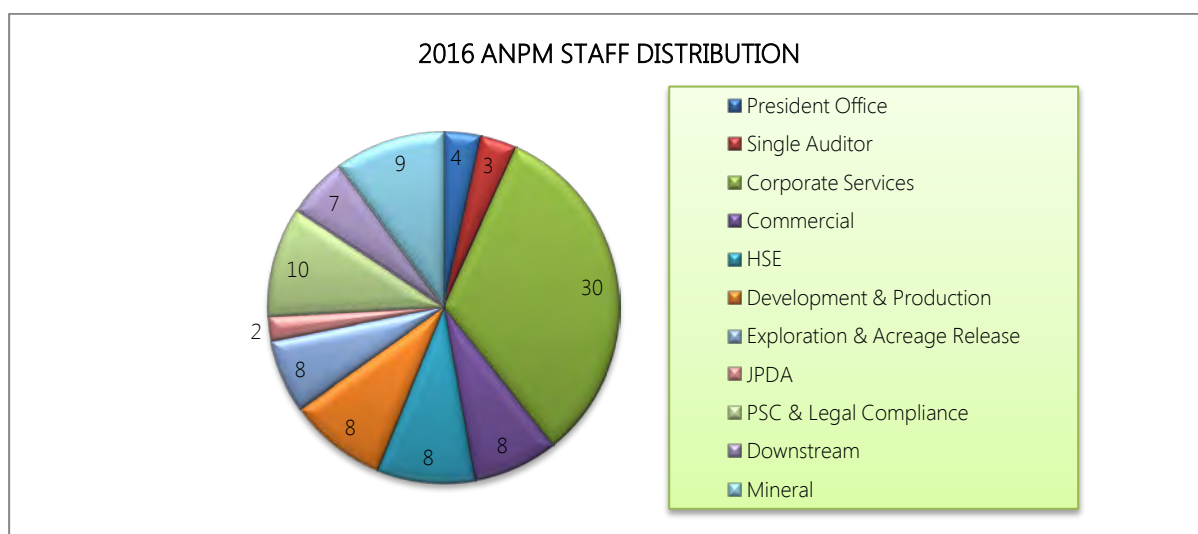


CHART 2: ANPM STAFF DISTRIBUTION IN 2016

### TEMPORARY STAFF

During the period of 2016, the ANPM engaged the Twelve (12) Temporary Employees, undertaking specific short term project in area Mineral 11 staff and President Office 1 staff as Portuguese Language Specialist.

### TRAINING AND CAPABILITY DEVELOPMENT

A total of thirty eight individual training programs were attended by relevant ANPM employees. Most of these training programs were in the area of Management and Technical that been attended in overseas. Besides that there were twenty four other collective training programs conducted within the state for designated employees from various directorate within the ANPM. ANPM also facilitated participations of its senior staff to take part at international

workshops and conferences either as participants or speakers to share our experiences whilst also learning from others in the industry. Further details can be found in annex 1 of this report.

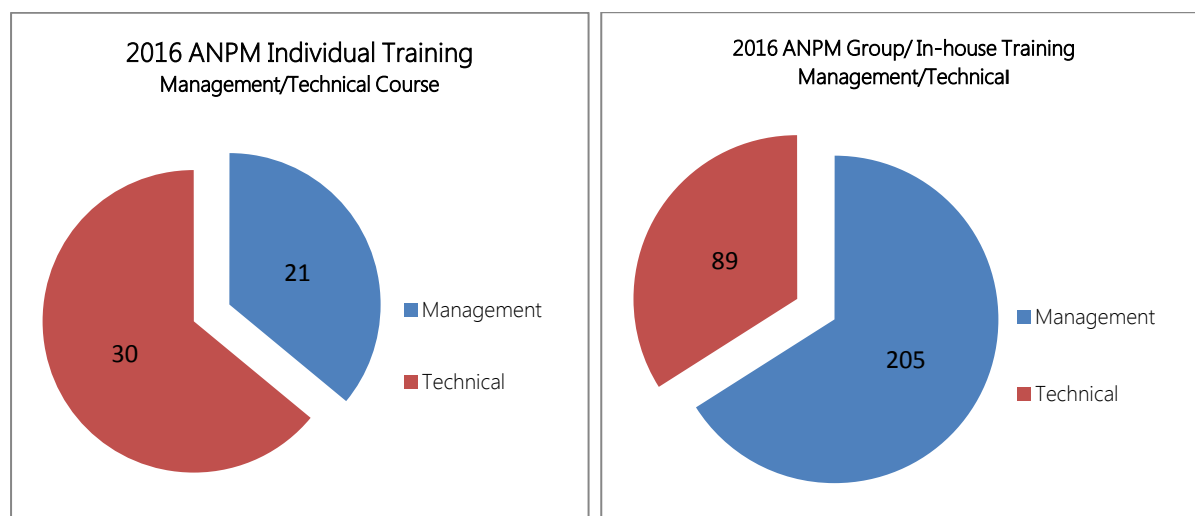


CHART 3: TRAINING AND CAPABILITY DEVELOPMENT IN 2016

## 1.7 CORPORATE PROCUREMENT

Corporate procurement is categorized into five major items; Consultancy, Audit, Goods and Services. In 2016, Corporate procurement amounts to a total of USD \$ 1,047,158.11. In terms of value distribution, corporate procurement in 2016 mostly expend on Services, Goods and Consultancy. Further details can be found in annex 2 of this report.

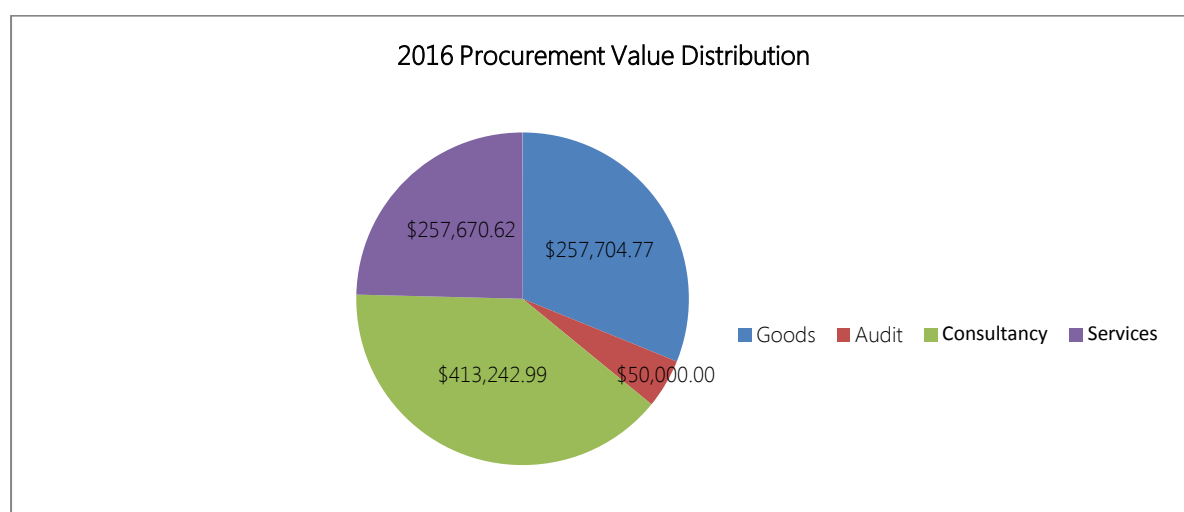


CHART 4: 2016 ANPM PROCUREMENT BY CATEGORIES

## 1.8 SINGLE AUDITOR

In mid of 2016, a new SA was appointed as per the ANPM Decree Law and effectively Joined the Single Auditor Unit (SAU) in the beginning of June 2015. The SA together with the internal audit team revisited previous audit reports and working papers, including files which gave a good guidance to develop sophisticated audit plans and programs that will extensively cover internal control and compliances.

Facilitating the team to carry out a proper internal audit exercise, audit plans and work programs have to be developed as such to address scope of audit. The programs covered ANPM's corporate internal control compliance of human resources and training, travel, procurement, control environment as well as the finance. The final report with findings and recommendations were presented and issued to Board of Directors (BoD) to consider and to make decision. Other roles of the SA is to provide technical opinion on the annual budget so the team issued and presented the 2016 annual budget opinion to management and BoD. SA also regularly provides advice and reviews on the systems of internal control, processes, procedures and policies.



## 1.9 FINANCIAL STATEMENT AND AUDITOR'S REPORT

### ANPM - CORPORATE EXPENSES REPORT

Below is the ANP's audited expenses report for 2016. All figures presented are in United States Dollar.

<b>Expenses Report Per 31 December 2016 (Audited)</b>		
	<b>Actual</b>	<b>Budget</b>
Development Fees	\$ 3,983,200	\$ 3,153,000
Contract Services Fees	\$ 815,695	\$ 880,000
Subsidy from Timor - Leste Government for ANP Operation	\$ 2,800,000	\$ 2,800,000
Timor-Leste Government Funding for petroleum audits *	\$ 220,000	\$ -
Downstream Fees	\$ 94,424	\$ -
Profit and disposal of assets	\$ 182	\$ -
Other Income	\$ 2,644	\$ -
<b>Total Income</b>	<b>\$ 7,916,145</b>	<b>\$ 6,833,000</b>
<b>EXPENSES</b>		
Employee Cost	\$ 2,289,266	\$ 2,499,670
General and Administration	\$ 3,293,475	\$ 3,606,150
Depreciation and Amortization	\$ 490,958	\$ 375,601
Purchase of Intangibles and Property, Plant & Equipment (assets)	\$ -	\$ 111,000
Government petroleum audit cost*	\$ 220,000	
Net Loss in Foreign Exchange	\$ 1,341	
Contingency		\$ 197,773
<b>Total Expenditure/Budget</b>	<b>\$ 6,295,040</b>	<b>\$ 6,790,194</b>
<b>Surplus</b>	<b>\$ 1,621,105</b>	<b>\$ 42,807</b>

\* non ANPM asset fund (an income to execute specific Timor-Leste Government program)

The ANPM actual total expenditure was USD \$ 6,295,040. This represents 93 % of Petroleum Audit cost inclusion to approved budget of USD \$6,790,194. It will decrease to 89 % of execution if petroleum audit cost is excluded.



# ANPM - CORPORATE FINANCIAL STATEMENT

## AUTORIDADE NACIONAL DO PETRÓLEO

2016 Financial Report (audited)

### STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR END 31 DECEMBER 2016

	Notes	2016 \$	2015 \$
<b>REVENUE AND OTHER INCOME</b>			
Development fees		3,983,200	3,153,000
Contract service fees		815,695	897,884
Subsidy from Timor-Leste Government		2,800,000	2,500,000
Timor-Leste Government funding for petroleum audits		220,000	470,000
Downstream fees		94,424	9,294
Gain on disposal of property, plant and equipment		182	-
Interest		-	32
Other income		2,644	-
<b>TOTAL REVENUE AND OTHER INCOME</b>		<b>7,916,145</b>	<b>7,030,210</b>
<b>EXPENSES</b>			
Employee costs	12	2,289,266	2,099,061
General and administrative	13	3,293,475	3,327,846
Depreciation and amortization		490,958	439,064
Government petroleum audit costs		220,000	470,000
Net loss in foreign exchange		1,341	7,231
<b>TOTAL EXPENSES</b>		<b>6,295,040</b>	<b>6,343,202</b>
<b>SURPLUS FOR THE YEAR</b>		<b>1,621,105</b>	<b>687,008</b>
<b>OTHER COMPREHENSIVE INCOME</b>		<b>-</b>	<b>-</b>
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>		<b>1,621,105</b>	<b>687,008</b>

*The above Statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes.*

# STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2016

	Notes	2016 \$	2015 \$
<b>ASSETS</b>			
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	4	11,053,423	7,953,910
Cash and cash equivalents - Joint Petroleum Development Area	4, 11	5,517,756	22,212,204
Trade and other receivables	5	39,367	907,488
Other current assets	6	37,576	17,690
<b>Total Current Assets</b>		<b>16,648,122</b>	<b>31,091,292</b>
<b>NON-CURRENT ASSETS</b>			
Property, plant and equipment	8	526,200	424,955
Intangibles	7	208,772	327,007
<b>Total Non-Current Assets</b>		<b>734,972</b>	<b>751,962</b>
<b>TOTAL ASSETS</b>		<b>17,383,094</b>	<b>31,843,254</b>
<b>LIABILITIES AND EQUITY</b>			
<b>CURRENT LIABILITIES</b>			
Trade and other payables	9	973,084	1,370,358
Payable in respect of Joint Petroleum Development Area Funds	9, 11	5,517,756	22,212,204
Contract service fees, development fees & downstream fees received in advance	10	1,592,308	581,851
<b>Total Current Liabilities</b>		<b>8,083,148</b>	<b>24,164,413</b>
<b>TOTAL LIABILITIES</b>		<b>8,083,148</b>	<b>24,164,413</b>
<b>EQUITY</b>			
Initial contribution	18	2,153,168	2,153,168
Accumulated funds		7,019,778	5,249,973
Capital asset reserve		127,000	275,700
<b>Total Equity</b>		<b>9,299,946</b>	<b>7,678,841</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>17,383,094</b>	<b>31,843,254</b>

*The above Statement of Financial Position should be read in conjunction with the accompanying notes.*

# STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2016

	Initial Contribution	Capital Reserve	Accumulated Funds	Total Equity
	\$	\$	\$	\$
At 1 January 2015	2,153,168	-	4,838,665	6,991,833
Transfer into capital reserve	-	275,700	(275,700)	-
Total surplus for the year	-	-	687,008	687,008
At 31 December 2015	<b>2,153,168</b>	<b>275,700</b>	<b>5,249,973</b>	<b>7,678,841</b>
Transfer out of capital reserve	-	(275,700)	275,700	-
Transfer into capital reserve	-	127,000	(127,000)	-
Total surplus for the year	-	-	1,621,105	1,621,105
<b>At 31 December 2016</b>	<b>2,153,168</b>	<b>127,000</b>	<b>7,019,778</b>	<b>9,229,946</b>

## ALLOCATION OF SURPLUS

FOR THE YEAR ENDED 31 DECEMBER 2016

<b>15. ALLOCATION OF SURPLUS</b>			
	Joint Petroleum Development Area	Timor-Leste Exclusive Area	Total for the year
<b>YEAR ENDED 31 DECEMBER 2016</b>	\$	\$	\$
Development fees	3,983,200	-	3,983,200
Contract service fees	815,695	-	815,695
Subsidy from Timor-Leste Government	-	2,800,000	2,800,000
Timor-Leste Government funding for petroleum audits	-	220,000	220,000
Downstream fees	-	94,424	94,424
Gain on disposal of property, plant and equipment	-	182	182
Other Income	-	2,644	2,644
Total Income	4,798,895	3,117,250	7,916,145
Expenses split per JPDA Joint Commission approved budget	(3,624,393)	(2,670,647)	(6,295,040)
<b>Surplus for the year</b>	<b>1,174,502</b>	<b>446,603</b>	<b>1,621,105</b>

## STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2016

	Notes	2016 \$	2015 \$
<b>Operating activities</b>			
Operating surplus before tax		1,621,105	687,008
Adjustments to reconcile profit before tax to net cash flows:			
Depreciation of property, plant and equipment	8	244,954	236,280
Amortization of intangible assets	7	246,006	202,784
		<b>2,112,065</b>	<b>1,126,072</b>
Operating surplus before working capital changes			
Working capital adjustments:			
Decrease (Increase) in trade and other receivables		868,121	65,608
Decrease (increase) in other current assets		(19,886)	(11,027)
Decrease in trade and other payables		(17,091,722)	(1,278,101)
Increase (Decrease) in unearned income		1,010,457	35,221
Cash generated from operations		(13,120,965)	(62,227)
<b>Net cash flow provided by (used in) operating activities</b>		<b>(13,120,965)</b>	<b>(62,227)</b>
<b>Investing activities</b>			
Purchase of intangibles	7	(127,771)	(179,836)
Purchase of property, plant and equipment	8	(346,199)	(136,941)
<b>Net cash flow used in investing activities</b>		<b>(473,970)</b>	<b>(316,777)</b>
Net decrease in cash and cash equivalents		(13,594,935)	(379,004)
Cash and cash equivalents at beginning of year		30,166,114	30,545,118
<b>Cash and cash equivalents at end of year</b>	4	<b>16,571,179</b>	<b>30,166,114</b>

*The above Statement of Cash Flows should be read in conjunction with the accompanying notes.*



# ANPM - REVENUE AUDIT REPORT

## AUTORIDADE NACIONAL DO PETRÓLEO OF TIMOR-LESTE STATEMENT OF PETROLEUM REVENUE RECEIPTS AND PAYMENTS

FOR THE YEAR ENDED 31 DECEMBER 2016

	Note	2016 \$	2015 \$
Revenue receipts by field			
Bayu-Undan	3	140,175,166	591,341,441
Kitan	4	59,278	4,161,828
Total revenue receipts received		140,234,444	595,503,269
Bank interest			
- Interest from Term Deposit	6	3,894	1,231
- Interest from Profit oil/gas interest		526	4,476
Total receipts received		140,238,864	595,508,976
Bank charges		(1,084)	(5,856)
Receipts less bank charges for the year		140,237,780	595,503,120
Cash at beginning of year		22,212,204	23,485,758
		162,449,984	618,988,878
Less: cash at end of year	5	(5,517,756)	(22,212,204)
<b>Amount available for distribution</b>		<b>156,932,228</b>	<b>596,776,674</b>
<b>Distributed as follows:</b>			
Distribution to Petroleum Fund of Timor-Leste		127,136,408	537,099,007
Distribution to Department of the Resources, Energy and Tourism, Australia		29,795,820	59,677,667
<b>Total payments made</b>		<b>156,932,228</b>	<b>596,776,674</b>

*The above Statement of Petroleum Revenue Receipts and Payments should be read in conjunction with the accompanying notes*

## 2. CONTRACT OPERATOR'S ACTIVITY



FIGURE 7: PARTICIPANTS OF THE TRAINING IN TIBAR

ANPM role is to ensure contractors' compliances in undertaking Petroleum Operations through processes of evaluating industries report on Petroleum Operations investigations, audit and inspections on facilities, vessel, rigs as well as audit as required by applicable laws in the Timor Leste Offshore Area (TLOA) and Joint Petroleum JPDA. ANPM uses information from reports, investigations, inspections and audit to analyze trends for better improvement and decision making.

Overall, the quantity and scope of reports in 2016 reflected the contract operators' activities associated evaluation of the result of with development drilling, 3D Seismic surveys, processing and interpretation, as well as ANPM's increasing proactive involvement to enforce regulatory requirements when dealing with oil and gas operator operating in the JPDA and the TLOA.

### 2.1 CONTRACTS IN JPDA AND TLEA

In 2016, there were nine (9) contract areas that consist of nine (9) Production Sharing Contracts with in both the TLOA and JPDA. Are open for further investment

Contract Operator	PSC	Locality	Status
ConocoPhillips JPDA 03-12 & 02-13 Pty Ltd	PSC JPDA 03-12 PSC JPDA 03-13	JPDA	Production
Eni JPDA 06-105 Pty Ltd	PSC JPDA 06-105	JPDA	This field has been temporary shut by the end of December 2015 due low price and productions decline. The wells have been temporarily shut in and awaiting for the oil price to recover.
Woodside Energy Limited 03-29 Pty Ltd	PSC JPDA 03-19 PSC JPDA 03-20	JPDA	Exploration-Development Concept studies
Eni JPDA 11-106 Pty Ltd	PSC JPDA 11-106	JPDA	Exploration
Eni Timor-Leste SPA	PSC S-06-04	TLOA	Exploration
TIMOR GAP Offshore Unipessoal Limitada	TL-S-15-01	TLOA	Exploration

TABLE 1: PSCS IN JPDA AND TLEA

Figure below outlines active PSCs in JPDA and TLO by the end of 2016. Two PSCs located within TLOA, the Eni Timor Leste (TL) PSC S-06-04 and the newly awarded PSC TIMOR GAP Offshore Unip. Lda. PSC TLS-15-01, whilst in the JPDA there are 7 active PSCs

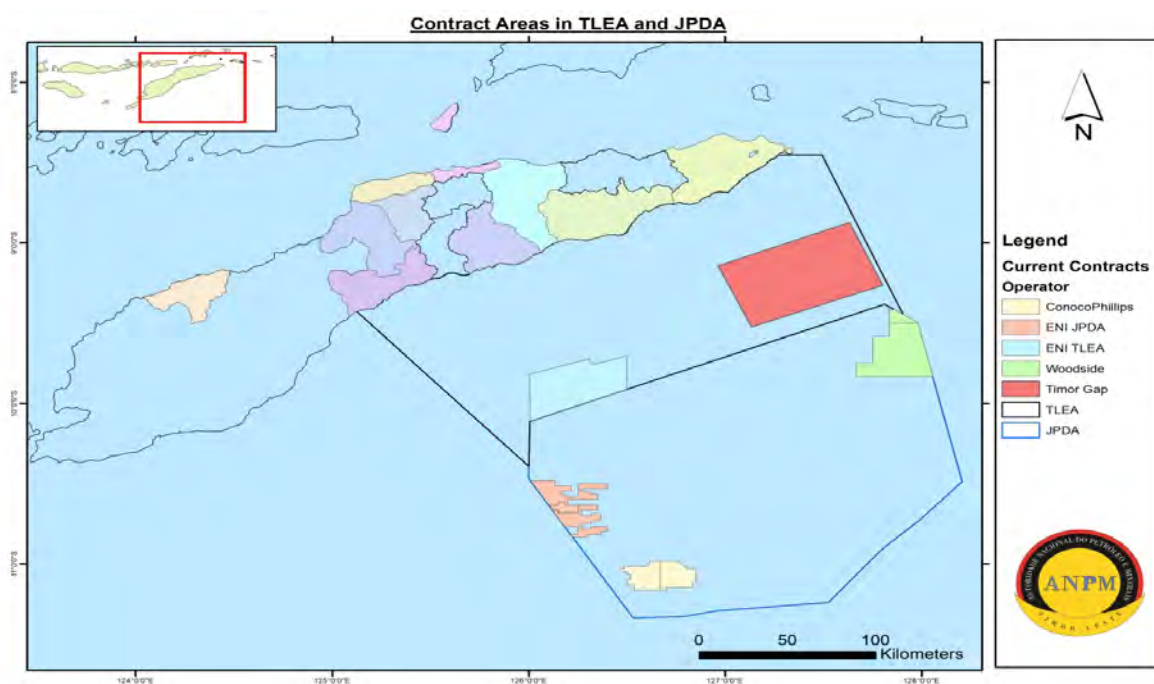
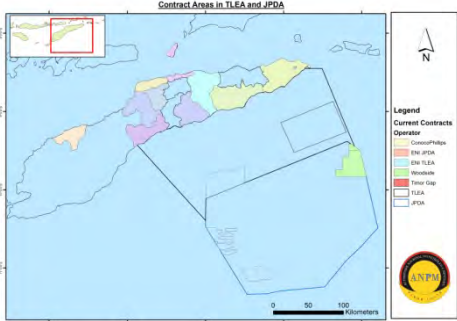


FIGURE 8: MAP OF ACTIVE PSCs IN JPDA AND TLEA

## 2.2 EXPLORATION PERFORMANCE

During the period of 2016, there was two exploration PSCs within the Timor Leste Offshore Area and five (5) PSCs within the JPDA. Two (2) of the five (5) PSCs within the JPDA are production fields, two PSCs are still under the development concept studies and the remaining one is an exploration PSC.

PSC	Activities
<b>JPDA PSC 03-19 and 03-20</b> 	<ul style="list-style-type: none"> <li>A joint study on third party opinion the Sunrise-Troubador Resources estimate conducted by a third party on behalf on both Australian and Timor-Leste Joint Commissions.</li> <li>Each party has taken note on the advice made</li> </ul>
<b>JPDA PSC 11-106</b>	<ul style="list-style-type: none"> <li>Result of the 2014 technical studies and early 2015 indicated that there is an upside potential Triassic play which shall further in-depth the investigation to qualify the Play becomes a secondary target.</li> </ul>




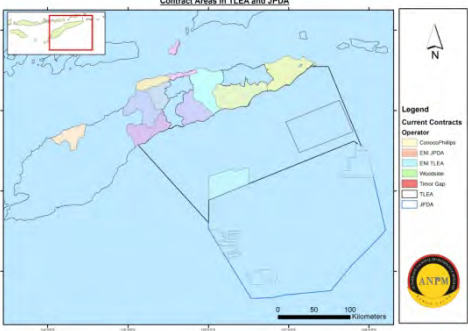
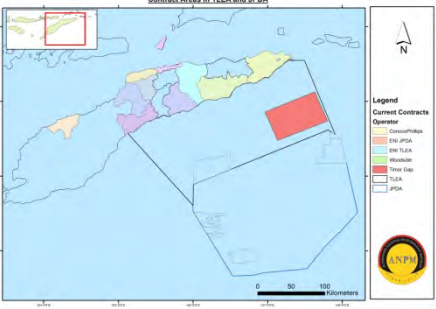
	<ul style="list-style-type: none"> <li>An in depth structural, geochemical and petroleum systems studies is currently on the way to further investigate the previously identified Triassic play potential.</li> </ul> <p>Due to the technical studies, operator and the regulator after several communications agreed to defer the two commitments well drilling to the last period of the PSC terms.</p>
<p><b>TLO PSC S-06-04</b></p> 	<ul style="list-style-type: none"> <li>Geological and geophysical studies and technical studies,</li> <li>Given the current market price conditions, the operator to extend for another two year period of extension to the expiry date of the PSC in order to perform further technical works to investigate the potential of Triassic as secondary drillable targets while waiting for the market price to slowly recover by 2017-2018.</li> </ul>
<p><b>TLO PSC TL-S-15-01</b></p> 	<ul style="list-style-type: none"> <li>The PSC was awarded in December 2015 and fully operated by TIMOR GAP Offshore Unip. Lda as subsidiary of TIMOR GAP E.P.</li> <li>An acquisitions and processing of the Seismic data was completed by December 2016.</li> <li>The interpretation of the acquired data is expected to be carried for the within the first quarter of 2017.</li> </ul>

TABLE 2: SUMMARY OF EXPLORATION PSCs ACTIVITIES

## THE IMPLEMENTATION OF THE INTEGRATED AIRBORNE GEOPHYSICAL SURVEY - IAGS

The Integrated Airborne Geophysical Surveys (IAGS) is considered to be as a continuation of the phase 1 LiDAR project which are initiated and funded by the Ministry of Planning and Strategic Investment or Ministerio do Planeamento e Investimento Estrategico (MPIE). The first phase of LiDAR project was basically to acquire a high resolution and close condense spacing GPS coordinate data collections and acquisitions of aerial photographs. The IAGS project aims to collect four different geophysical data (gravity, magnetic, radiometric and radiometric surveys) over the Timor Island, the enclave of Oecussi, Atauro and Jaco Islands. The IAGS project involves three different ministries, the Ministry of Planning and Strategic Investment, Ministry of Finance and the Ministry of Petroleum and Mineral Resources. The Ministry of Petroleum and Mineral Resources through the ANPM's technical team to coordinate and collaborate with PT. Karvak to ensure that the project is implemented in accordance with the timeline and quality of the progress delivery is in accordance with the term of reference of the project. This project commenced in September 2016, and by December

2016, PT. Karvak and its subcontractor Airborne Petroleum Geophysics (APG) commenced gravity survey starting from the eastern municipality of Lautem and moving westward until the Timor Leste Onshore border area of Indonesia. This project is currently ongoing.

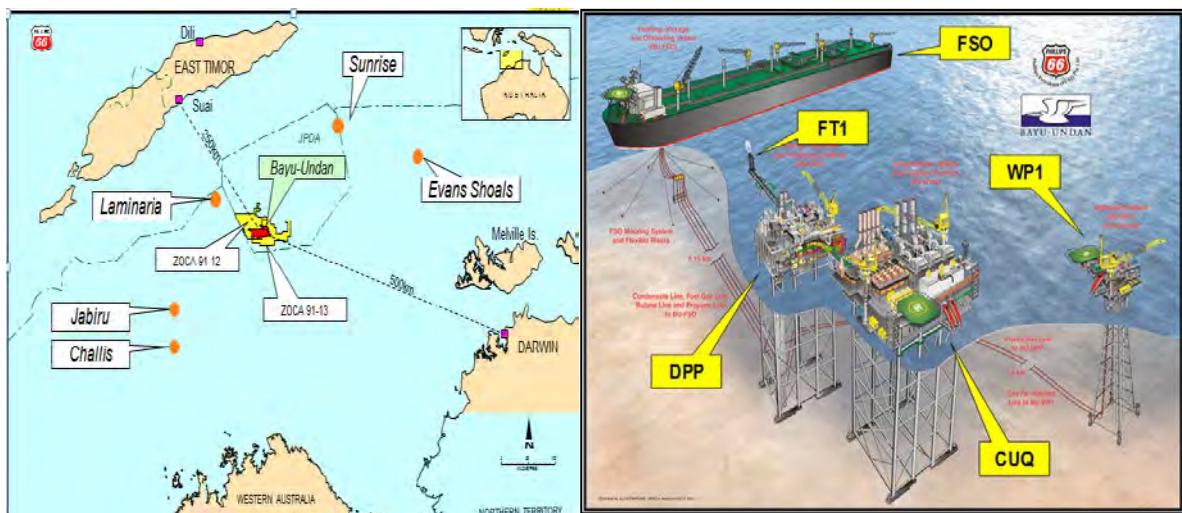


FIGURE 9: LUNCHING OF IAGS SURVEY BY H.E. XANANA GUSMÃO

## 2.3 PRODUCTION PERFORMANCE

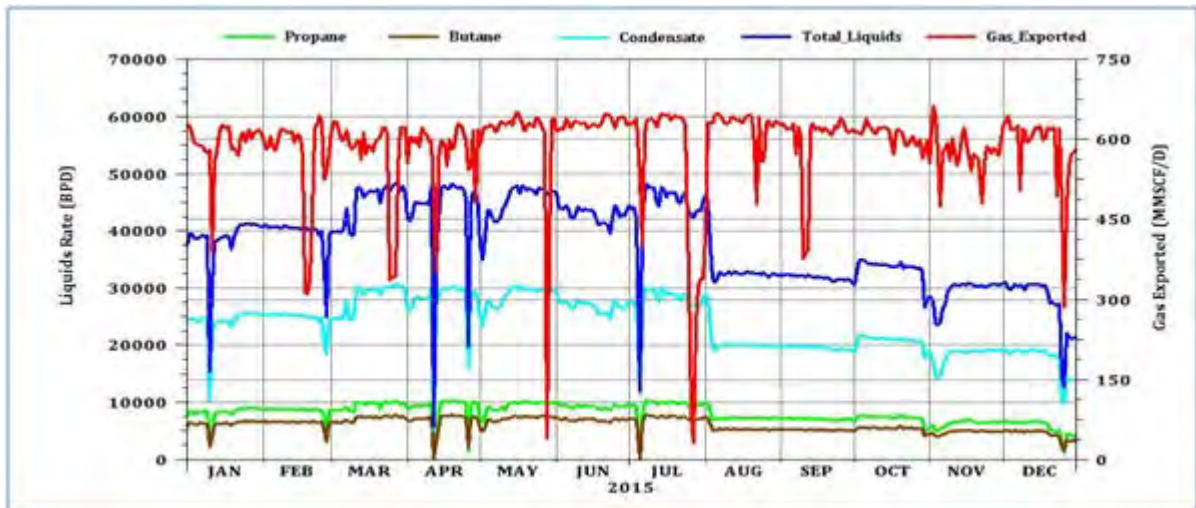
### PRODUCTION IN BAYU UNDAN FIELD (PSC 03-12 & 03-13)

Bayu Undan (BU) Field is located in the Joint Petroleum Development Area (JPDA), The field is operated by ConocoPhillips and located 250 km from south-east of Suai, Timor Leste and 480 km from north-west of Darwin, Australia. BU facilities include a Central Production and Processing Complex (DPP and CUQ), FSO, WP1, subsea in-field pipelines and gas export pipeline to Darwin. In 2016 the field has 11 producing wells, 3 gas injection wells, 2 water disposal wells available.



GRAPH 1: COURTESY OF CONOCOPHILLIPS

The average liquid production (Condensate and LPG) from January to December 2016 was 32 kbpd (37.8 kbpd in 2015) and the exported gas to Darwin LNG remains steady at an average of 565 MMscf/day (588 MMscf/day in 2015).



GRAPH 1: TOTAL LIQUID PRODUCTION AND GAS EXPORTED

The field performance was continuously declining due to natural reservoir pressure depletion, lean gas breakthrough and water encroachment in the most productive wells. The liquids production varied over the year due to interventions, process shutdown, some wells were coming on and offline due to higher water production and difficult to unload. The average gas exported was slightly affected by DLNG Shutdown to avoid tank top at the DLNG plant.

#### KITAN FIELD (PSC JPDA 06-105)

The Kitan field is located in the Timor Sea JPDA with approximately 500 km north of the Australian coast and approximately 170 km south of the Timor Leste coast. No production for Kitan field as Kitan field was Shut-in on 16 December 2015. Risers were disconnected and completed topside process cleaning by flushing and purging of production plant. FPSO departed from Kitan field on 27 February 2016. ANPM is in continuous discussion with Eni on the method and time for final abandonment.

The average total Kitan Oil Production per day in 2014 and 2015 were 6.2 kbpd and 5 kbpd.

## 2.4 HEALTH, SAFETY AND ENVIRONMENTAL PERFORMANCE

Health, Safety and Environment (HSE) Directorate within ANPM is tasked to regulating and enforcing relevant upstream petroleum HSE legislation in both the Joint Petroleum Development Area (JPDA) and Timor-Leste Area. Whilst noting that the primary responsibility for safe operations lies within the contract operators, ANPM HSE directorate implements and maintains an effective monitoring and compliance framework to ensure that the contract operators control and manage HSE risks to As Low as Reasonably Practicable (ALARP).

ANPM through HSE directorate has been implementing proactive and reactive monitoring to monitor HSE performance of the contract operators. One of our focuses is to encourage the operator to adopt best HSE practices hence securing continuous improvement.

## HSE PERFORMANCE IN JPDA

### INCIDENTS IN JPDA

Operators are required to report both work and non-work related incidents from petroleum activities to the ANPM.

Overall in 2016 there were 90 incidents reported in relation to Bayu-Undan production and Kitan decommissioning. Graph below represent percentage of each incident by category and the spread of each incident category across the month during this reporting period.

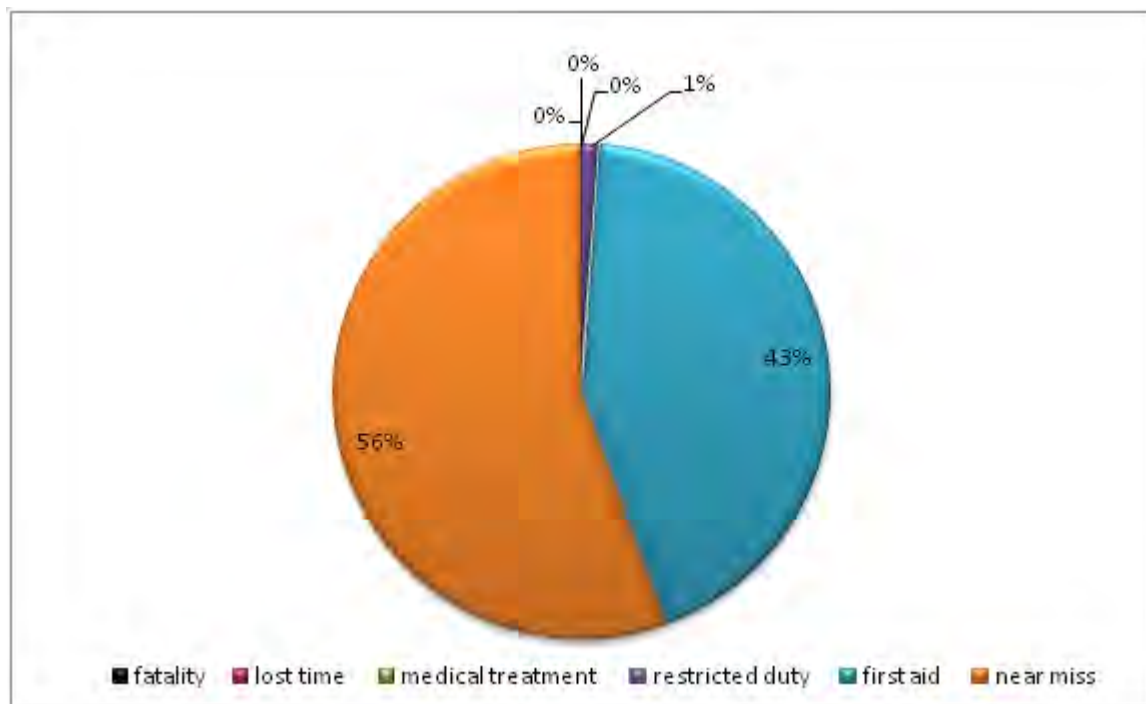
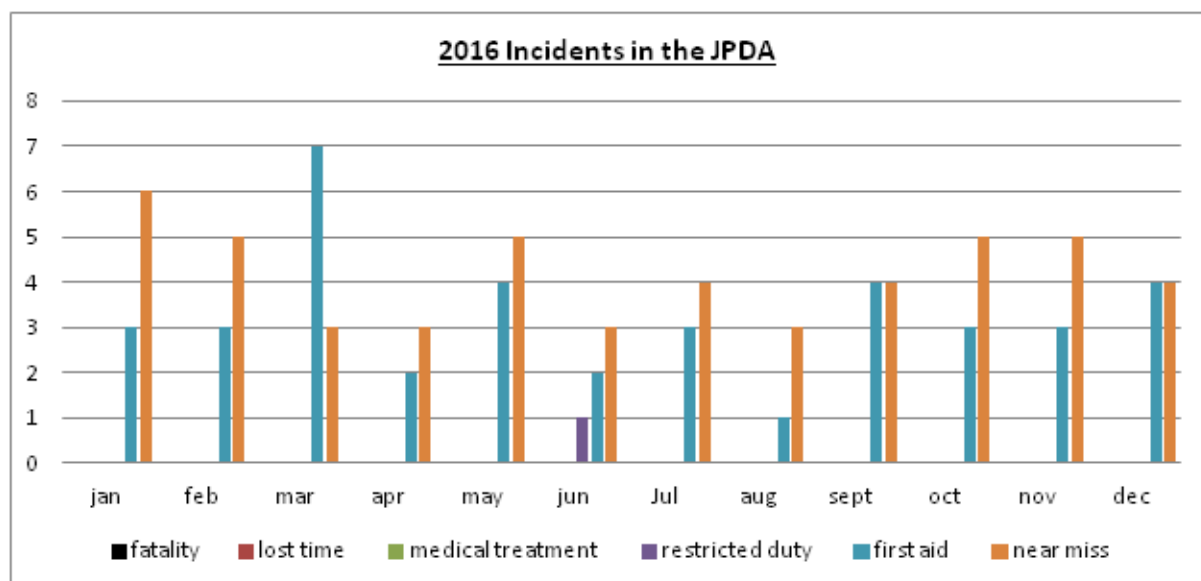


CHART 5: 2016 JPDA ANNUAL PERCENTAGES BY INCIDENT CATEGORY



GRAPH 3: 2016 INCIDENTS IN THE JPDA

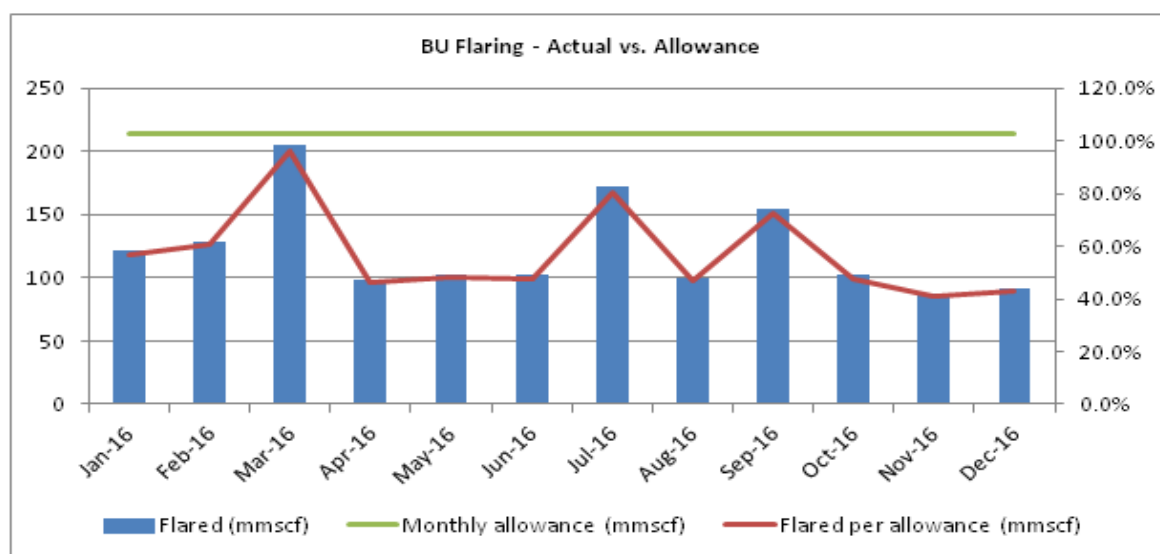
No fatality, LTI or medical treatment recorded for production and decommissioning activities in the JPDA.

In addition to the above, three (3) non-work related incidents and seven (7) environmental related incident were recorded during petroleum operations. All environmnental incidents fell within low risk ranking.

## GAS DISPOSAL IN PRODUCTION FACILITIES IN THE JPDA

Flaring allowance was approved annually based on the activities to be undertaken each year. In 2016, a total of 2561 MMSCF was requested and subsequently approved to flare. The requested allowance for flaring from the planned non-routine activities such as; 2016 rate reduction, well intervention, well maintenance campaign and de-pressuring WP1 pipeline.

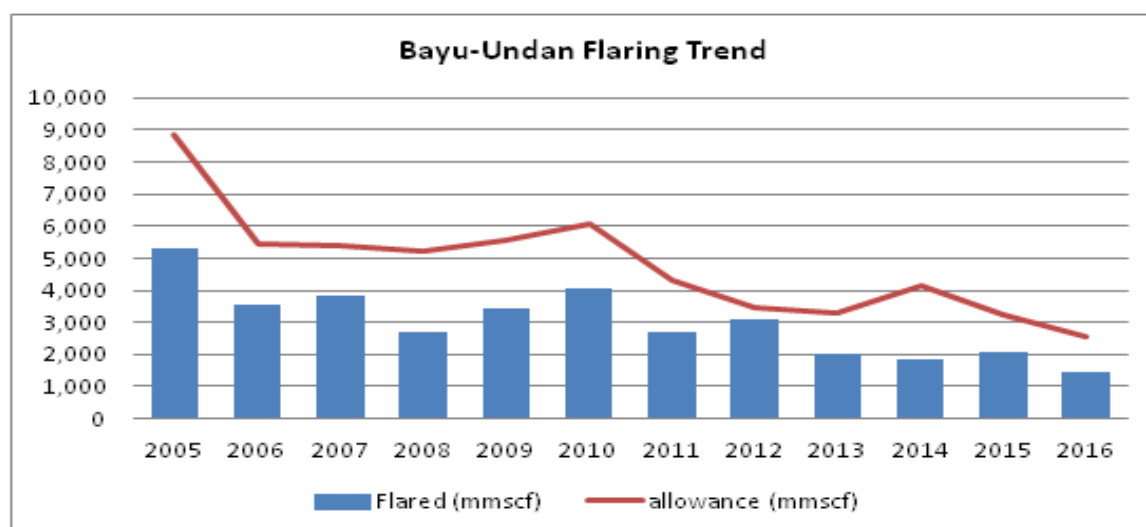
The graph below shows flaring allowance and the actual volume flared gas during 2016.



GRAPH 4: 2016 BAYU UNDAN FLARING, ACTUAL VS ALLOWANCE

The total volume flared during 2016 was 1468 mmscf which is lower than the approved volume by the ANPM for the duration of the twelve months periods.

Effort for flaring reduction has also been one of the main focuses of discussion with the contract operator.



GRAPH 5: BAYU UNDAN FLARING FROM 2005 TO 2016



The graph above shows annual trend of flaring from 2005 to 2016. Volume of the gas flared has always been well below the approved allowance. Moreover, the graph shows a steady downward trend.

## HSE PERFORMANCE IN TLEA

Crocodile 3D seismic survey by TIMOR GAP.E.P. continued during this reporting period. The survey was completed in March, 2016 with no major accident events affecting the personnel onboard the seismic vessel namely BGP Prospector and its support vessel namely Geo Service-1. Nonetheless, the execution was impacted by vessel BGP Prospector's engine failure in which extension to continue carrying out seismic survey in PSC TL SO 15-01 was granted for an additional 4 days.

In addition to the above, data processing and interpretation were also performed during this reporting period and no HSE performance was recorded for this activity.

Detailed airborne geophysical survey program for the territory of Timor-Leste started in this reporting period. HSE directorate carried out assessment of technical documents and inspection to the facilities located at the Dili International Airport Presidente Nicolau Lobato.

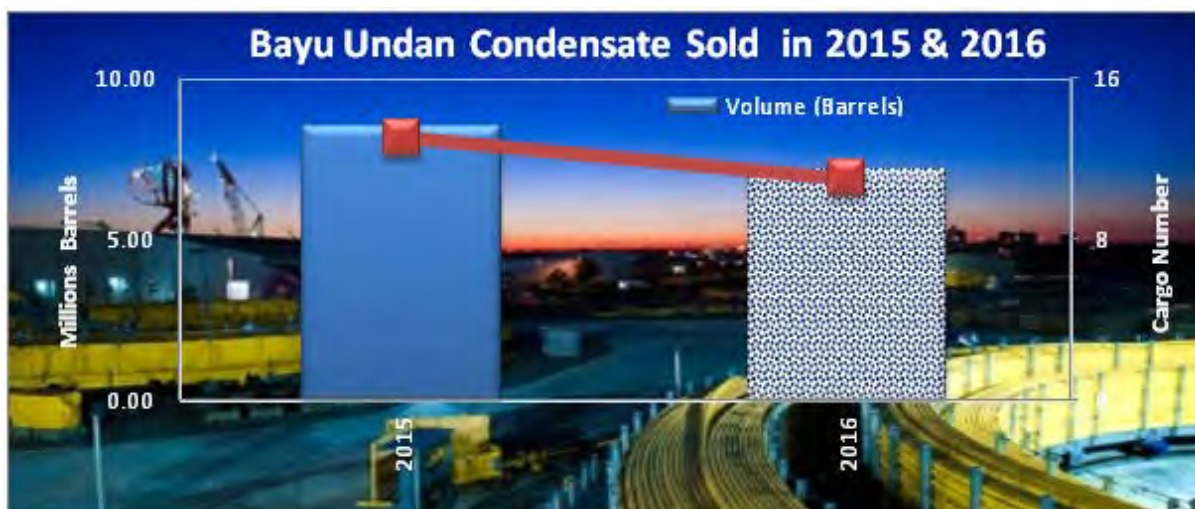
## 2.5 MARKETING PERFORMANCE

The Bayu-Undan project produces three types of petroleum product; Condensate, Liquefaction Petroleum Gas and Liquefaction Natural Gas. LPG and LNG continue to sell under term basis, while condensate used to be sold under a mixture of spot and term basis. However, in 2016, condensate was sold under a mini term contract. The decision to award the term cargo of condensate was considered right and based on the view on the potential tightness of global condensate supply in 2016. The outcome suggested that such term contract received premium over the North West Shelf condensate. As the result of carried over sustained low oil prices, it is inevitable that Crude oil prices started at low level in the beginning of the year and it has then improved after the last OPEC meeting, where members of OPEC agreed to trim down or freeze their production to help elevate the crude oil price. In average, realized price achieved in 2016 was slightly lower than 2015, this was due to the fact that in 2015, crude oil prices continued hover at lower level of USD 45/bbl.

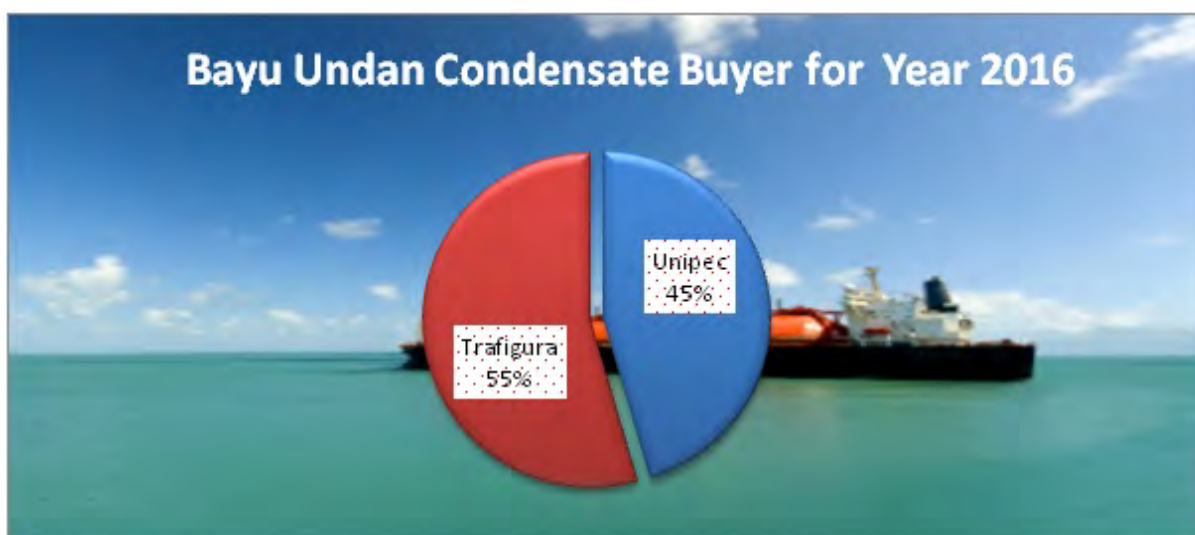
Bayu-Undan LPG and LNG marketing continued under the term basis with the main destination is Japan. Both products were also impacted very much by the global crude prices, due to both products usage in relation to crude prices. Darwin LNG production was stable with no significant issue on lifting and all cargoes produced were delivered to the buyers. Details of each of the product marketing are discussed at below.

### CONDENSATE

As the field continued declining, total production in 2016 was lower than previous year. This can be witness from total volume sold for BU condensate in 2016 was recorded at 7.156 mmbbls slightly lower compared to 2015 that was at 8.513mmbbls.



GRAPH 6: 2016 BAYU UNDAN CONDENSATE VOLUME SOLD



GRAPH 7: PERCENTAGE OF THE BU CONDENSATE BUYERS

## LIQUEFIED PETROLEUM GAS (LPG)

A sharp drop in 2016 LPG price recorded from \$ 420/MT to \$ 310/MT due to plunging crude oil price and slow demand from Chinese LPG market because of seasonally lower demand and high inventory caused limited storage capacity to absorb more LPG supply. However, LPG demand from India and Indonesia continuously high as kerosene consumption has slowed sharply in line with government regulation to maximize LPG consumption. In addition, demand for butane from Chinese importers and traders in December helped to maintain butane's price premium to propane over the year despite the onset of winter in northeast Asia which traditionally lifts propane consumption.

Bayu-Undan LPG continued sold under term contract. Astomos was the term buyer in 2016 and will be for 2017 contract year.



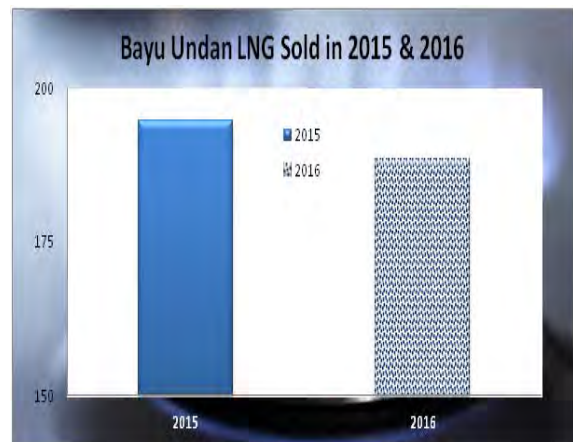


GRAPH 8: BAYU UNDAN LPG VOLUME SOLD IN 2016

### LIQUEFIED NATURAL GAS (LNG)

Production of Darwin LNG continued at stable rate. As can be seen from the graph suggests that 2016 total LNG sold was slightly lower to the previous year. In 2016, DLNG managed to sell 57 cargoes to the term buyers Tokyo Electric and Tokyo Gas. It was anticipated with the increase in supply will have significant downward pressure on LNG prices. It was indeed that DLNG sold price was impacted very much of global crude prices. Since DLNG pricing is the JCC prices linked to crude oil, DLNG revenue in 2016 was slightly lower than the previous year.

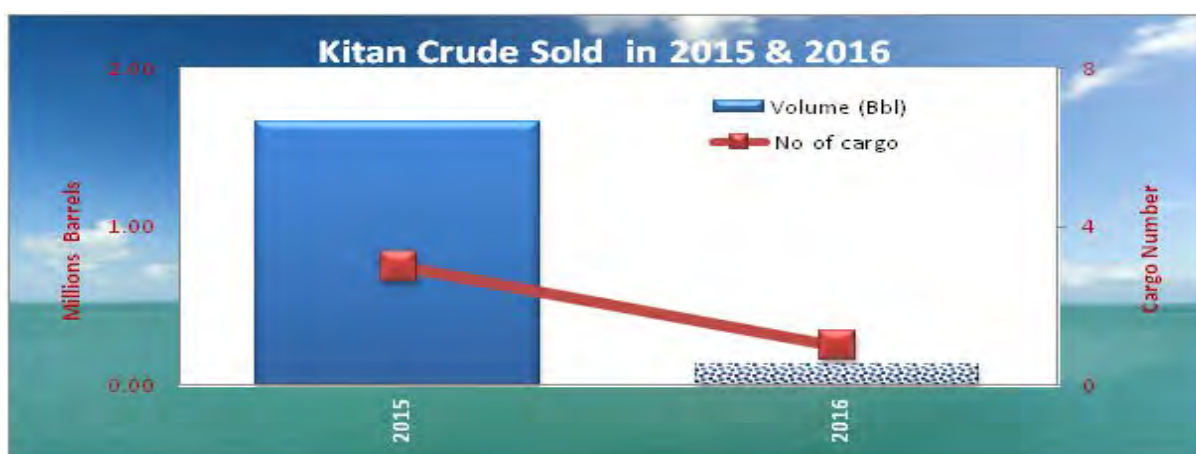
Overall, Japanese LNG demand was declining in 2016 as mainly due to fact that the LNG use by the power utilities were decreased as some nuclear power units are brought back into operation.



GRAPH 9: BAYU UNDAN LNG VOLUME SOLD IN 2016

### KITAN PSC 06-105

Kitan crude oil quality had been the flag ship of Kitan and had attracted buyers's attention in the region. Unfortunately that Kitan production had been impacted by the depletion in production, crude oil prices and technical problem has forced the Contract Operator to shut in production in Dec 2015. This has resulted only 1 cargo was sold in 2016 as residual volume prior to the disconnection of flowline as of phase 1 decommissioning.



GRAPH 10: KITAN CRUDE OIL VOLUME SOLD IN 2016

## 2.6 EXPLORATION EXPENDITURE PERFORMANCE

### A. JOINT PETROLEUM DEVELOPMENT AREA (JPDA) - EXPLORATION PSCs

- **PSC 06-103**

Oilex JPDA 06-103 is the operator of this Production Sharing Contract (PSC). This PSC was terminated in July 2015 as a result of consequences of non-performance. ANPM and Oilex, as the contract operator has been under negotiation, demand for penalty from Oilex and its JVs for failure to deliver its work commitment under the contract. Both parties have agreed to continue discuss without prejudice to settle amicably.

- **PSC JDPA 11-106**

Eni, a Milan base oil firm is the operator of this field. Eni is in partnership with Inpex, and Timor GAP, E.P has a 24% interest under this PSC. This PSC has been extended until 2018, where Eni plans to drill its two wells commitment in first quarter of 2018.

- **PSC 03-19 & 03-20**

Woodside Petroleum, an Australia oil company is the operator of the Sunrise PSC together with ConocoPhillips, Shell Royal Dutch and Osaka Gas are the Joint Ventures. Sunrise and Troubadour is a proven discovered gas field with associated condensate. of the development of this project is very much subject to the on-going negotiation between the two countries. For permit maintenance, this PSC continued maintain its present with annual minimum work programs and budget for its local office, permits and corporate initiative investments.

### B. TIMOR-LESTE OFFSHORE AREA – EXPLORATION PSCs

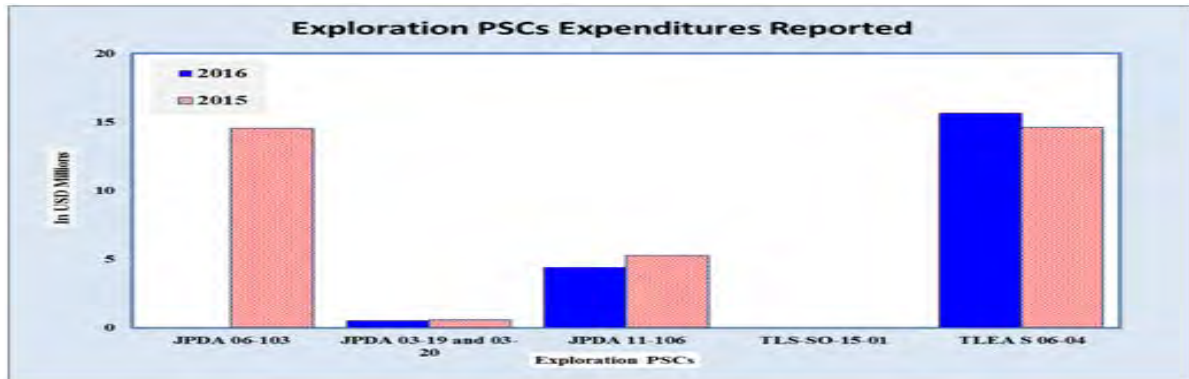
- **PSC TLEA S06 – 04 block E**

Eni SpA, a Milan base oil firm together with Galp Petroleum and Korean Gas acquired this PSC in 2006. Eni SpA as the operator of this PSC, has requested an extension to the deferral of its drilling commitment as a result of the sustained low oil prices. ANPM granted its extension in 2016, the extension would enable Eni to finalise its G&G studies to firm up its exploration economics.

- **PSC TLS – SO-15-01**

This PSC is 100% owned and operated by Timor GAP. Late 2015 until early 2016, BCG and Timor GAP, E.P had carried out its seismic survey and acquisition and interpretation. Major expenditure was G&G, seismic costs, including permit maintenance and local content.

In summary, the total Exploration expenditures, below graph tries to outline the expenditure with comparison of previous year, those expenditure are inclusive of the investment credit and uplift for the period.



GRAPH 11: JPDA AND TLEA EXPLORATION EXPENDITURE

## 2.7 DEVELOPMENT EXPENDITURE PERFORMANCE

- Bayu-Undan 03-12 & 03-13

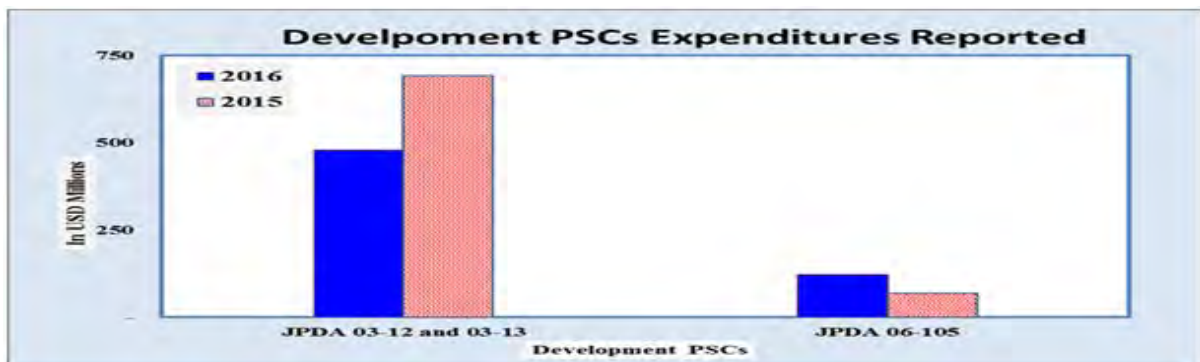
ConocoPhillips as the contract operator proposed to drill 3 infill wells to maintain the production and guarantee export gas to Darwin LNG. Bayu-Undan field continues experience natural decline of production, as a result of water influx and lean gas breakthrough. Bayu-Undan annual operating costs mainly to cover the operation of the production of liquids as controllable costs which to cover lifting costs, logistic, supply, minor and major maintenance. In 2016, there was no major capital for AIMS, other than expenditure to fund the 3D loriko seismic surveys and interpretation.

As can be seen from the graph that 2016 expenditure was slightly lower than previous year, this was mainly the resultant of optimization of expenditure focusing on critical maintenance.

- PSC JPDA 03-12 & PSC JPDA 03-13 (Bayu Undan field) & PSC 06-105 (Kitan field)

The operation of this PSC 06-105 was suspended due to the impact of low oil price to the economics of the Kitan field and preparation of decommissioning and potentially reserved for future re-development of the field. Expenditures reported and incurred for year ended 31<sup>st</sup> December 2016 are mostly related to expenditures associated to the disconnection of the FPSO, uplift, other general and administrative in order to support the disconnection operations.

The development PSCs expenditures for year 2016 are shown in the below graph:



GRAPH 12: JPDA PSCs DEVELOPMENT EXPENDITURE

## 2.8 LOCAL CONTENT PERFORMANCE

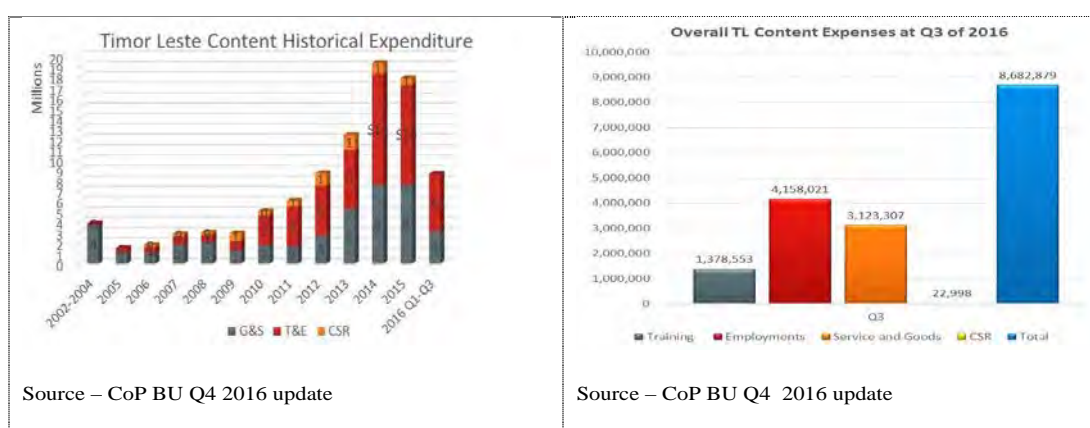
The ANPM as Designated Authority has been working closely with oil and gas companies operating in JPDA and TLEA in ensuring that all petroleum operations are complied with the law and Timor-Leste as resource owner makes efforts to improve the local economy by leveraging linkages to extractive projects, beyond the revenues these generate. The approach to enhance local content to ensure that a company is hiring local labour and procuring local goods and services to the oil and gas industry operations and which can be measured in monetary terms to promote local content with lasting sustainable benefit to the country.

The annual Timor-Leste Local Content Performance within the Timor-Leste jurisdiction area should have been reflected the local participation in procuring and supplying of local goods and services and the preferential shall be given to the Timorese suppliers for petroleum operations in the JPDA. In addition to the supply chain of goods and services, petroleum operator is required to grant preference in employment to Timor-Leste nationals and permanent residents with due regard to occupational health and safety requirements for the petroleum activities.

According to the 2016 trend of annual performance activities shows graph 13 below that the local content expenditures was affected by the reduction of services in Bayu-Undan and the decommissioning of Kitan Project in the JPDA, which has lead to the national economic downturn of the petroleum operation in the JPDA.

### PROCUREMENT OF LOCAL GOODS AND SERVICES

In 2016, the procurement of local goods and services designated for Bayu-Undan was affected by 2015 expenditure pattern, in which there were reduction on services associated with Bayu-Undan Phase Three (BUP3), Helicopter services and reduction of the capacity for Accomodation Support Vessel. Having this services reduction for Bayu-Undan activities has lead to the reduction on expenditure of procurement of goods and services. Due to the decommissioning, the Kitan operation activivites on procurement of goods and services, including training and employment is no longer continued and the Kitan - 2016 local content performance was significantly unobtainable.



GRAPH 13: BAYU-UNDAN 2016 LOCAL PROCUREMENT OF GOODS AND SERVICES

## TRAINING AND EMPLOYMENT

Below chart 6, shows the percentages of Timor-Leste Nationals and Permanent Residents in 2016 were decreased compared to 2015 and 2014 due to the reduction of the activities in Bayu-Undan operation (Shutdown, AIMS, Phase 3 project and Seismic project). Ongoing negotiations to create a comprehensive Bayu Undan Enhanced Local Content Plan between operators and ANPM shall aim to support the improvement of Timor-Leste skilled labours and promoting the participation of local suppliers in the process of procuring of goods and services for the Bayu-Undan operation.

Due to the Kitan field decommissioning, the activities for training and employment is no longer continue in 2016.

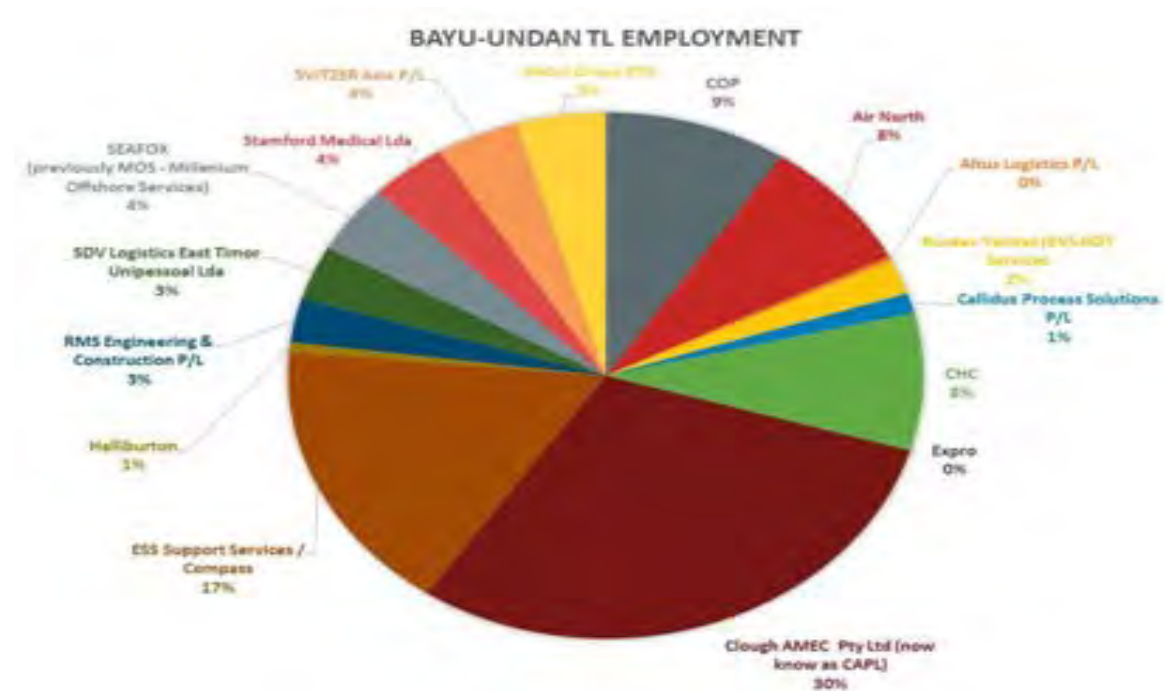


CHART 6: BAYU-UNDAN EMPLOYMENT 2016

## 3. REGULATORY PERFORMANCE

### 3.1 UPSTREAM

#### LEGAL FRAMEWORK REVISION

Within the period of 2016, the ANPM continued to revise the latest draft of the upstream legal framework aiming for better governance of the Petroleum resources exploration and exploitation in the Joint Petroleum Development Area (JPDA). The working group established by the Joint Commission of Timor-Leste and Australia where the group consisted of the delegation from both countries in which ANPM who chair and coordinate the continuation of the review of JPDA technical regulation.

For upstream Territory of Timor-Leste, Decree-Law No. 32/2016 of 17 August on Offshore Petroleum Operations in Timor-Leste has been enacted, promulgated and published at the country official gazette G

Despite of developing the above legislation, the ANPM also prepared Offshore Model PSCs which has been approved by Minister of Petroleum and Mineral Resources and was published at the National Gazette. The onshore Model PSCs still under revision in order to consolidate some provisions prior to the publication.

While developing and approving the aforesaid legislations and model PSCs, the ANPM is currently reviewing draft Decree-Law for Employment in extractive activities. A working group comprising of representative from both ANPM and SEPFOPE was established to coordinate discussion and revision of the draft decree-Law.

To support Petroleum Operations in Onshore territory of Timor-Leste, draft decree-law for onshore petroleum activities has been drafted by an international law firm and the draft still under an internal discussion within ANPM prior to public consultation in the earlier of first quarter 2017.

#### PETROLEUM DATA AND REPORTS

As part of the ANPM's efforts in managing Petroleum data and information to support petroleum and resources management; ANPM is currently had established an integrated fiscal data room and an interactive online information display called a LAFAEK database system with its function is to manage data and reports information from all the Petroleum activities in both TLEA and JPDA. This database was first established to serve the interest of data storage and data management regarding petroleum sector, however, upon the establishment of the Mineral Directorate at the ANPM; slowly this data base systems is further expanded to also serve the needs for mineral sectors related data management.

The ANPM continues to improve the data inventories systems by collecting all the relevant seismic and non-seismic data acquired, as well as various information and reports in relation to the mineral resources management in our systems.



## ANPM INSPECTIONS, SUPERVISIONS, MONITORING AND APPROVAL OF PETROLEUM OPERATION



FIGURE 10: METERING PERFORMED DNLG AUDIT & OBSERVED METERING SUPERVISORY COMPUTER AT CUQ

The ANP JPDA Interim Petroleum Mining Code (IPMC), Petroleum Mining Code (PMC) and JPDA interim Regulations issued under article 37 of the IPMC provides basis for inspections, supervision, monitoring and approval of petroleum production operations in both Bayu Undan and Kitan fields.

The objective of the regulatory function of Development and Production Directorate as mandated by the above mentioned legal framework is to ensure the production operation carried out in prudent manner. This objective has been reflected under ANP 2012-2017 strategic action plans through:

- Monitoring the performance of petroleum production from all fields.
- Carrying out regular process, maintenance, metering inspections.
- Ensuring the application of secondary and tertiary recovery methods on the existing producing fields
- Actively involving in the review of BU and Kitan decommissioning plan

INSPECTION		
TITLE	LOCATION	SCHEDULE
Asset Integrity Maintenance	ConocoPhillips Perth Office	2-5 August 2016
Asset Integrity Maintenance	BU Offshore	11-13 August 2016
Metering	DLNG, Darwin Australia	16-18 December 2016
BU Maintenance	ConocoPhillips Perth Office	25-28 July 2016
BU Maintenance	BU Offshore	22-23 August 2016

TABLE 3: D & P INSPECTION DURING 2016



SUPERVISION AND MONITORING		
TITLE	LOCATION	SCHEDULE
BU Field Metering Validation	BU FSO Facility	11-18 April 2016 & 17-24 October 2016
BU Field Metering Validation	BU CUQ Facility	27-30 June 2016 & 28 Nov-1 Dec 2016
BU Field Metering Validation	DLNG, Darwin Australia	4-8 April 2016
PWC Fiscal Metering Validation	DLNG, Darwin Australia	4-6 August 2016

TABLE 4: D&P SUPERVISION & MONITORING DURING 2016

## SUBSURFACE

Development and Production subsurface team initiated the cooperation and consultation with third party to carry out BU reservoir models building in 2016; the scope covers the domain of Geology and Geophysics such as geomodeling phase, petrophysics and reservoir simulation to support the decision of BUIW approval. These studies include the assessment of number of wells and its optimum location and also its economic evaluation.

D&P subsurface team continues to monitor performance of Bayu Undan reservoir performances through constant review of reservoir performances reports and engagement with operators in regular meetings and workshop.

D&P subsurface team participated in subsurface workshop to discuss the performance of the well and has project update on infill wells drilling for the Bayu Undan field development.

## REGULATORY ASSESSMENT IN JPDA SUBMISSION AND REGULATORY REVIEW

HSE Directorate is responsible for the administration of the HSE regulations for the JPDA. Various submissions and assessment were carried out during the reporting period. The main focus in 2016 was on WP1 subsea pipeline repair, Kitan decommissioning, and Bayu-Undan Infill Wells (BUIW) project.

Table 5 below summarizes type of applications/documents submitted and the assessment outcome during the reporting period.

No.	Application/submission	Activity	Remarks
1.	Entry authorization for 2 vessels (Svitser	Infield support vessel for	2 times extension in the year

	Brani, and Svitzer Forti)	Bayu-Undan operations	of 2016
2.	2016 flaring and venting for Bayu-Undan operations	Operational requirements	1 annual approval for flaring and venting granted
3.	Saturation diving project plan and diving safety management system	WP1 to DPP pipeline repair	1 approval granted for saturation diving project plan
4.	Entry authorization for 1 vessel (Seven Eagle)	Diving vessel for WP1 to DPP pipeline repair	Entry authorization granted for the duration of the project
5.	Aircraft entry authorization for aircraft Sikorsky S92	S92 was authorized as substitute aircraft for EC225 following the grounding of EC225	<ul style="list-style-type: none"> <li>• 1 month entry authorisation was granted due to the emergency nature for the need to have substitute aircraft</li> <li>• Entry for the same aircraft was also subsequently granted to cater for cyclone season in the month of November onward</li> </ul>
6.	2 Aircraft entry authorization for the Airbus AS332	AS332 is the substitute aircraft for EC225 following the grounding of EC225	Entry authorization granted
7.	ANPM agreement to the appointment of the Independent Verifying Body (IVB) for Bayu-Undan WP1 18-Inch Subsea Spool Replacement.	WP1 to DPP subsea pipeline repair	1 agreement for appointment of IVB
8.	Dispensation to release of hydrosure – WP1 pipeline preservation	WP1 to DPP subsea pipeline repair	1 Dispensation granted for hydrosure to be released
9.	WP1 Pipeline Repair Consent to construct and install flowline.	WP1 to DPP subsea pipeline repair	1 Consent to construct and install granted for WP1 pipeline spool replacement
10.	Consent to use pipeline	WP1 to DPP subsea pipeline repair	1 Consent to use pipeline granted for WP1 to DPP subsea pipeline
11.	Vessel entry authorization for four vessels to support Kitan phase 1 pre-decommissioning (Crest Hydra, Deep Orient, Pacific Valkyrie and Pacific Vulcan).	Kitan Phase I decommissioning	4 entry authorizations granted for 4 vessels for the purpose of Kitan Phase I decommissioning
12.	Acceptance to Kitan Phase 1 Pre-decommissioning Safety Case	Kitan Phase I decommissioning	1 Safety Case acceptance granted
13.	Approval of air diving operations during Kitan Glas Dowl disconnection campaign.	Kitan Phase I decommissioning	1 approval for diving project plan and diving safety management system
14.	Approval for FPSO Glas Dowl Departure from Kitan Field to the final destination as	FPSO Glas Dowl left Kitan	1 approval granted

	intended.	field	
15.	Approval of oil spill contingency plan (OSCP) for Kitan decommissioning	Kitan Phase I decommissioning	1 approval of OSCP granted
16.	Acceptance to Kitan EMP for kitan decommissioning	Kitan Phase I decommissioning	1 acceptance to Kitan EMP
17.	Entry authorisation for one Platform Supply Vessel "Mermaid Inscription"	Bayu-Undan Platform supply vessel as replacement vessel to previously utilized PSV "Mermaid Leveque".	1 entry authorization granted
18.	Application for dispensation to allow discharge to sea of a small amount of garnet and coating material	asset integrity maintenance activities – FSO hull remediation	1 dispensation letter granted
19.	Approval for crane alteration	Bayu-Undan crane alteration	1 Approval granted
20.	Entry authorisation for one infield support vessel Beagle Bay	Infield support vessel for Bayu-Undan operations replacing Svitzer vessels	1 approval granted
21.	Offtake vessels – Condensate and LPG	Offtake vessels	20 approval granted

TABLE 5: TYPE OF DOCUMENTS SUBMITTED & ASSESSMENT OUTCOME

## HSE INSPECTION

During the reporting period, the HSE directorate conducted a total of 8 inspections across a range of facility types such as; fixed production and storage facility, Accommodation Support vessel (ASV), infield support vessels, helicopter operations and diving support vessels. The main objectives of these inspections were to ensure contract operators' compliance to the JPDA legal framework and conformance to their HSE management system.

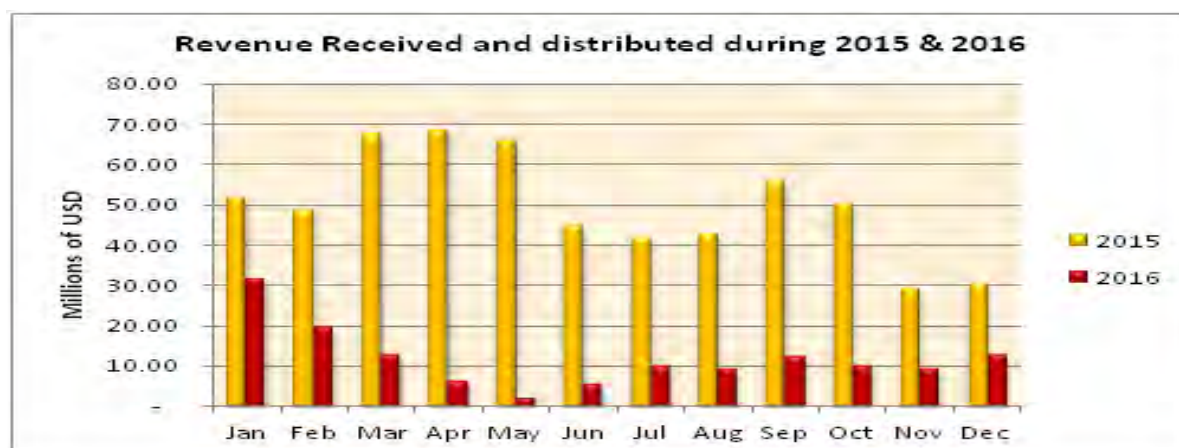
Asset integrity maintenance (AIM) campaign was one of the focuses for 2016 inspection. In addition, various scopes such as lifting operations, incident reporting and investigation, pressure vessel inspection, permit to work system, emergency response and oil spill contingency plan were also covered during the inspection. ANPM HSE directorate also performed a verification activity to corrective actions and recommendations arisen from previous inspections.

A total of 105 total findings required corrective action plan from the contract operator. Out of these findings, one finding was categorized as non-compliance to the JPDA Interim Regulations while the rest of the findings were categorized as non-conformance to the contract operator HSE management systems.

## REVENUE DISTRIBUTION

Bayu-Undan field has been in steady declined as a result of natural depletion which has direct implication to the total government's receipts. Below graph illustrates the comparison of total revenue receipted and distributed by ANPM to both States for 2015&2016. It is obvious to note that revenue distributed to State in 2016 was lower than last year.

Revenue distributed in 2016 has decreased to about 73% compare to last year. This suggests that the sustained of low crude oil prices and the offset of taxes refund were the main contributing factor to the total receipts.



GRAPH 14: REVENUE RECEIVED DURING 2015 – 2016

## AGREED LOCAL CONTENT PROJECTS SERN-FULBRIGHT

The Ministry of Petroleum and Natural Resources (MPRM) through ANPM has been working collaboratively with the United States Embassy in Timor-Leste, United States Institute of International Education (IIE) and ConocoPhillips Pty Ltd through the Bayu Undan cost recoverable program were sending the potential SERN-Fulbright scholars to obtain Masters and PhDs in the energy and environmental studies across various universities in the United States.

There were 15 students have graduated and returned to Timor-Leste. This represented 75% of the success for the 1<sup>st</sup> Fulbright-SERN Scholarship program.

The 2016 Fulbright-SERN program as the 2<sup>nd</sup> Fubright-SERN Scholarship program has four (4) Timorese scholars to the United States as a result of successfully selection process conducted in fourth quarter 2015, one of the scholars shall undergo a long term English Training at a selected University in the United States. The other three scholars have commenced their academic years starting June 2016 until May 2018 academic year at the selected university across the United States and have been progressing well with their respective accademic studies program.

The Fulbright-SERN scholarship program's Working Group is now in negotiation to discuss the new scholars' recruitment for the 2018 intake for the 3<sup>rd</sup> Fulbright-SERN scholarship program. The main objectives of the 2018 intake shall focus on oil and gas and mineral study areas in order to support petroleum and mineral field, to contribute to in-country's socio-economic.

## TIMOR-LESTE BAYU UNDAN-GRADUATE INTERNSHIP PROGRAM

After various efforts made to develop human capacity in Timor-Leste, the ANPM in close collaboration of Bayu-Undan operator and its Joint Ventures recognizes the pressing need to focus on enhancing Timorese specialized skilled and work force that correspond to the need of industry requirements specifically the extractive industry sector. Therefore, over one year a combination of theoritical and practical skills and relevant industrial skills are a was conducted through

Bayu-Undan Graduate Internship Program to enable the Timor-Leste national and permanent residents to participate in the industry world and labour market both national and regional.

Five Timorese Graduate interns have been successfully graduated from the Bayu-Undan Graduate Internship Program under ConocoPhillips Project since February 2015 – Jun 2016. After the graduation, three potential Bayu-Undan interns have been recruited for further job placement both at ConocoPhillips ABU-West Perth Office and ConocoPhillips Dili Office. The placement contract or industrial secondment or real career deployment are negotiated for a minimum 12 months contract and a maximum of 18 months within both Perth and Dili Offices, as well as with ConocoPhillips contracting companies. The first batch of the Bayu-Undan graduate internship program is a myriad success after more than a decade of operations ever conducted under the Bayu-Undan project in the Joint Petroleum Development Area (JPDA).

The full program report coupled with monitoring and evaluation program including the detailed expenditures for the first batch of the graduate internship program has been submitted to ANPM by ConocoPhillips – Bayu Undan JPDA. ANPM and ConocoPhillips have agreed to continue the discussion and further improvement of the next batch of Bayu Undan Graduate Internship Program commencing 2018- onwards.

## **TIMOR-LESTE SKILL VOCATIONAL AND EDUCATION TRAINING CENTER**

Over a decade, after various efforts made to develop human capacity in Timor-Leste, the Government of Timor-Leste recognizes the pressing need to focus on enhancing Timorese specialized skilled work force to correspond to the need of industry requirements. This effort required further cooperation and collaboration between relevant industry sector, government and state institutions aimed to increase specialized skill development and competency training based on industry standards in response to the national strategic development plan of Timor-Leste. Therefore, a two year pilot training programme for Electrical and Instrumentation was identified as one of important areas which aligned with the government strategic preference for the national skilled workforce development plan that market-demanded in the extractive industry both at national and regional labour market in the real industry world. In that view, SEPFOPE, ANPM and ConocoPhillips were collaboratively in a Working Group for Skill Vocational Training Program establishing a two years pilot specialized training program on Electrical and Instrumentation which aligned and adopted world standard and national qualification framework and curriculum development for the existing Training Centres in Timor-Leste.

The agreements for the two years pilot training program on Electrical and Instrumentation between all relevant stakeholders was signed in 15<sup>th</sup> December 2016 as the following:

- Memorandum of Understanding between SEPFOPE, ConocoPhillips and ANPM
- Implementation agreement between SEPFOPE, CEGELEC and ConocoPhillips;
- Funding Agreement between CoP and CEGELEC - Funding Agreement between CoP and CNEFP (Centro Nacional de Emprego e Formação Profissional) Titar.

## **NATIONAL LIBRARY**

The commitment under the PSC 06-105, the State Secretary of Arts and Culture (SETAC) has facilitated the Project Site clearance and compensated the 11 household residing within the project site.

Progress on National Library Project Construction is in its Project Conceptual Design Development for tender process. Major detail works is carried out by Eni and its contractor P.T. Bitu including following stages of Project development Program, Construction Estimates, and Conceptual design Report and Preparation of tender Documentation for tender in 2017.

In parallel P. T. Bitu also provided support in finalizing the project site work design which is expected to hand-over to SETAC for next step process which is procurement process which will take around 3-6 months.

Furthermore, a total budget of US\$ 1 Million as contribution from government for site works has been allocated under the Ministry of Finance, through Fundo Contrapartida, the execution will follow normal procurement process which is aimed to start mid of 2016. The first part of work on site works require to be completed in order to facilitate major mobilization heavy equipment to start construction and second part will be executed after the construction.

### CORE STORAGE DATA TAPE FACILITIES (PSC S-06-04)

The Local Content commitment under the PSC S-06-04; Eni remained committed to continue the construction of core storage facilities in Timor-Leste within the University of Timor-Leste grounds of Hera.

In 2016, there were no major activities carried out in relation with project identification and securing of land, reviewing the functionality of the facilities including further review on the existing scope of work.

Plan for the implementation of the project starting 2017 to 2020; the Working Group to resume discussion to define the scope of work and seek endorsement from steering committee, engineering works for basic and detailed design, with endorsement of final engineering by steering committee, Tendering process and start of construction phase and the completion of construction and final installation of fixed equipment.

## 3.2 DOWNSTREAM PETROLEUM

### AMENDMENT OF DECREE-LAW No.1/2012 ON DOWNSTREAM SECTOR

After four (4) years the enactment of Decree-Law No. 1/2012 on the Downstream sector, the ANPM put forward its proposal to amend this Decree-Law No.1/2012. This proposal was initiated due to the increasing commercial and technical abilities, and the good performance of Timorese citizens involved in the construction and the operations of Fuel filling stations in accordance with the requirements of existing Downstream Decree-Law and the Regulation on Installation and Operation of Fuel Filling Station. This proposal of amendment aims to only allow the Timorese citizen to perform Downstream Activities on non-retrospective basis, specifically for the activities related to the Fuel filling stations for automotive retail. This amendment is to provide more opportunity and maximize the Timorese citizens' participation in the petroleum Downstream sector.

This proposal was submitted to Counsel of Minister through the Minister of Petroleum and Mineral Resources and had been approved. It is expected by early 2017, this proposal will be approved and promulgated by the President of Republic Democratic of Timor Leste.

### ESTABLISHMENT OF ANCILLARY DOWNSTREAM REGULATIONS

Downstream Strategic Action Plan foresees Ancillary Downstream Regulations to be approved and effective in 2016. One of the Regulations is on Trading Activity which was approved on 10<sup>th</sup> October 2016 and effective on 28 December 2016.



Regulation on Storage activity was approved on 23<sup>rd</sup> October 2015 and came into force on 2 March 2016. Kerosene Directive was one of the legal documents the Downstream Directorate initiated in late 2015 and entered into force on 19<sup>th</sup> February.

## REGULATION ON TRADING ACTIVITY

This Regulation builds up rules and requirement to be complied with in the performance of Trading Activity (import and export) of Natural Gas, Biofuels, and any other forms of Fuels, and other products processed and derived from Crude Oil and Condensate for commercial purposes.

With the approval and effective date of this Regulation, the Directorate is able to start the licensing process of companies currently perform import activity.

## STORAGE REGULATION

The Storage Regulation sets up technical rules and requirement for the installation and Operation of Storage Activity. This regulation is applicable for both existing and new facilities. The effective date of Storage Regulation in early 2016 had enable the Downstream Directorate to put forward its planned task in licensing the existing facilities within the country.

## DIRECTIVE OF STORAGE AND RETAIL KEROSENE

This Directive sets up rules and requirement for the retail and storage of Kerosene within the country. It was first initiated in late 2015 due to fire incident occurred at Delta on 2 November 2015. Having this Directive in force, the Directorate has legal power to start regulating and licensing the storage and retail of Kerosene activity throughout the country.

## ESTABLISHMENT OF DOWNSTREAM PROCEDURE

In 2016, the directorate established a procedure on Downstream Incident Investigation. This procedure sets out the process and action to be followed by the ANPM inspectors in the performance of investigation activity towards incident(s) involved in the performance of downstream activity of Supply, Processing, Transportation, Trading, Storage and Marketing. The establishment of this procedure aims to ensure a uniform and consistent response from all ANPM inspectors towards the performance of incident investigation activity.

## INTER-MINISTERIAL COOPERATION

Directorate has been committed to continue its coordination and relationship with relevant government entity and institution in Timor-Leste in order to expedite the licensing process of Downstream Activities. This commitment was implemented through several meeting with DNTPSC on land clearance, APOTIL and Custom Authority on Trading activity, Direcção Nacional da Edificações (DNE) and Direcção Nacional Planu Urbano (DNPU) on location of Fuel Filling Station and National Police of Timor-Leste (PNTL) on Fuel Filling Station and inspection activity.

## DISSEMINATION OF INFORMATION AND DATA COLLECTION AT MUNICIPAL LEVEL

### a. Dissemination Information

In compliance with applicable technical requirements and rules, and administrative procedures and reporting duties, in second quarter of 2016, the Downstream Directorate conducted a workshop at Municipal level to disseminate the Decree-Law No. 1/2012 on Downstream Sector and its ancillary regulations namely Installation and Operation of Fuel

Filling Station, Kerosene Directive, Installation and Operation of Storage Activity and Fuel, Biofuel, and Lubricant Quality Standards and Specifications. The workshop was conducted in four (4) Municipal including Covalima, Alleu, Baucau and Bobonaro. The target audiences of this workshop were is the business operator and local government entity such as MCIA, DNTPSC and DNCPIA. This workshop was successfully conducted since most of the business operators and government entities participated in the event.

The workshop aimed to inform the business operators of Kerosene retail and storage and Fuel Filling Station the technical requirement foresees under the Directive and Fuel Filling Station Regulation. This workshop is the Directorate approaches in starting the licensing process at district level in order to achieve its target as outlined in Strategic Action Plan.

Following the execution of workshop, by end of 2016, several business operators filled their application to the ANPM for the licensing process and one business operator has obtained license for its activity of Fuel Filling Station.



FIGURE 11: DISSEMINATION ACTIVITIES IN MAUBESSY-AINARO AND BAUCAU

#### b. Data Collection

Data collection was one of the activities the Downstream Directorate conducted prior to the execution of the One day workshop on May 2016. This data collection was performed on 24 April 2016 to 7 May 2016 covering 11 Municipals. This data collection activity was assisted by Extractive Industry Professional Association (EIPA); a professional organization of Timor-Leste's engineers. The activity aimed to collect business operators' information, inform the operators the existence of Downstream Decree-Law and its ancillary Regulations, and inform the Downstream Directorate plan for one day workshop. The information on the existence of Downstream Decree-Law and its ancillary Regulations and the workshop plan were also be made known to the local authorities and Government Institution such as MCIA Regional, DNTPSC Regional and DNCPIA Regional.



FIGURE 12: DATA COLLECTION AT MUNICIPALITY LEVEL

## DISSEMINATION OF STORAGE REGULATION

On September 30, 2016, the Directorate conducted one day workshop on Storage Regulation. This workshop aims to disseminate the rules and requirements foresee under Storage Regulation. This workshop was successfully conducted since all companies involved in the Storage activity including the companies wishing to carry out Storage activity participated in the event.



FIGURE 13: DISSEMINATION OF STORAGE REGULATION ACTIVITIES

## ESTABLISHMENT OF MEMORANDUM OF UNDERSTANDING ON ENVIRONMENTAL LICENSE

On April 2016, a Memorandum of Understanding on Environmental License was signed between Minister of Commerce, Industry and Environment and Minister of Petroleum and Mineral Resources. The establishment of this MoU has enabled the ANPM to take part in the review of environmental applications for Upstream, Downstream and Mineral Activities.

Upon the establishment of this MoU, joint commissions were formed and 2 staff from Downstream Directorate was appointed to be part of joint commission together with 2 staff from National Directorate for pollution Control and Environmental Impact.

Till end of 2016, a joint commission for Downstream Sector had reviewed three (3) environmental applications on Fuel Filling Station, Aviation Fuel Filling Station and Storage Facility. These three applications belong to Pertamina International Timor, SA (PITSA).

## SUPERVISING AND MONITORING DOWNSTREAM ACTIVITIES

### LICENSING INSTALLATION AND OPERATION OF FUEL FILLING STATION (FFS)

Existing Installation and Operation of Fuel Filling Stations refers to Fuel Filling Station facilities that had been in place before the Regulation came into force. In the process of granting a license, there are steps of approval processes namely location and project approval.

During 2016, the Downstream inspectors carried out 13 (thirteen) inspections for project application of Automotive Fuel Filling Stations (AFFS). Among those AFFS 2 (two) were new constructed AFFS and they all have been approved and issued a license. The issuance of the license was subject to the payment of a fee. The details of license Fuel Filling Station in 2016 are highlighted in table 6 below.

License Granted in 2016					
No	Name of Company	Owner of Company/Legal representative	Percentage of Share	Type of Activity	Licensing number
1	TIMOR GAP, E.P.	TIMOR GAP E.P	100%	AFFS	ANP/PRAC/2016/001

2	68 Petroleum, Lda	YUANQIONG WEI	70%	AFFS	ANP/PRAC/2016/002
		GUOWEI LIU	25%		
		JOAO BAPTISTA DA COSTA BELO	5%		
3	Chong Ti Petroleum, Lda	GUOHAO LIU	70%	AFFS	ANP/PRAC/2016/003
		SEN LIU	25%		
		ELVIS MOTA TOU	5%		
4	99 Petroleum, Lda	YUANQIONG WEI,	90%	AFFS	ANP/PRAC/2016/004
		SIMAO DA COSTA M. GUTERRES	10%		
5	De Shun Fuel Station, Lda	GUOWEI LIU	50%	AFFS	ANP/PRAC/2016/005
		MEIPING CHEN	25%		
		LONGJIANG LIU	20%		
		JACINTO TOU	5%		
6	Culu Hun Fuel Station, Lda	QIN LIU	40%	AFFS	ANP/PRAC/2016/006
		LUNYONG WEI,	35%		
		WEIQING WEI	20%		
		JACINTO TOU	5%		
7	Realistic Fuel Unipessoal, Lda	MANUEL XIMENES	100%	AFFS	ANP/PRAC/2016/007
8	Super Fuel, Lda	JUNG MIN SONG,	95%	AFFS	ANP/PRAC/2016/008
		MARIANO F. MOTA	5%		
9	Ruvic Unipessoal, Lda (Hera)	RUI MANUEL DE CASTRO PEREIRA	100%	AFFS	ANP/PRAC/2016/009
10	Arjumar Unipessoal, Lda	ARNALDO MENDES ARAUJO	100%	AFFS	ANP/PRAC/2016/010
11	Global Fuel and Product Trading PYT,Lda	STEVAN CHIANG MUN HOONG	90%	AFFS	ANPM/PRAC/2016/011
		JULIAN CHIANG MUN KIT	5%		
		CARMELITA S.NORONHA	5%		
12	Abom Kase Unipessoal.Lda	JOSE MAU PIRES	100%	AFFS	ANPM/PRAC/2016/012
13	Belak Fuel Unipessoal.Lda	CARLOS MANUEL MAGNO E NEVES	100%	AFFS)	ANPM/PRAC/2016/013

TABLE 6: LICENSING INSTALLATION AND OPERATION OF FFS IN 2016

In addition, there were 6 (six) location inspection of new and existing applications that have been approved by the year of 2016. Prior to approving the location, Downstream Inspectors carried out site verification and location inspection for the proposed location. Those locations consist of, Nusabe II proposed location in Aileu as new AFFS as well as Aidalau Furak (Same-Manufahi), Nuviniex (Maliana-Bobonaro) and Andikalima (Liquica). Also two (2) application of existing AFFS located in Dili such as Pertamina International Timor, SA and Mãe da Graça.

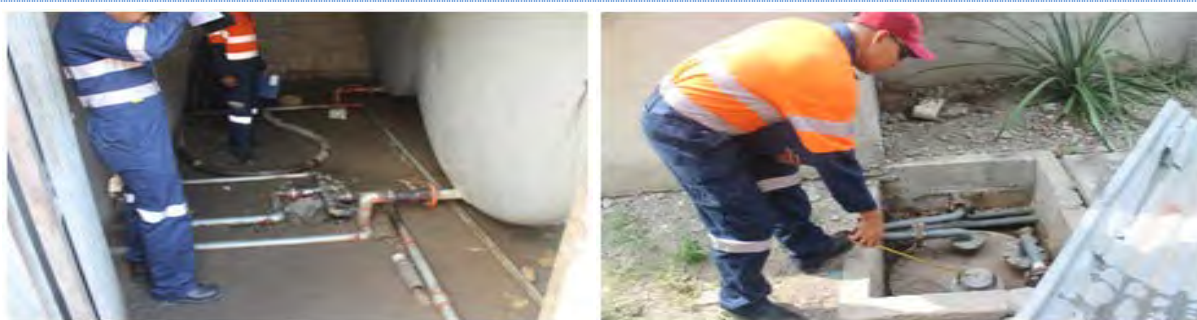
Moreover, in the end of 2016 the Directorate has issued a certificate of approval of Project to four (4) new and existing AFFS that have fulfilled all the requirements for granting the approval of project. The fourth applications are the

Pertamina International Timor, SA project for rehabilitation and upgrading the existing facility in Bebora, Dili previously operated by Queen Fuel, Nusabe II new project of installation and operation of AFFS in Aileu as well as new installation and operation of AFFS by Aidatau Furak in Same-Manufahi and the existing facility of Global Fuel station in Suai - Covalima that will be renovated as to inline with the regulation.



FIGURE 14: HAND OVER LICENSE TO THREE FFS AND INAUGURATION TIMOR GAP,EP'S NEW FFS-SUAI

## SUBSEQUENT INSPECTION



In 2016, the Directorate conducted 26 subsequent inspections towards Fuel Filling station licensed in 2014, 2015 and 2016. This inspection aims to verify the implementation of corrective actions listed under preliminary reports.

## HEALTH, SAFETY AND ENVIRONMENT MONITORING PROGRAM

The Directorate in 2016 executed its plan activity towards each Fuel Filling Station licensed in 2014 and 2015. The scope of this inspection covered verification to the implementation of Health Safety and Environmental Plan, Emergency Response Plan, Fire Protection System, Personal Protective Equipment and First Aid provision. The result of this activity was informed to each respective company for improvement.

## HAZARD, RISK AND SAFETY MEASURES AWARENESS

Safe operation is one of the most essential parts of Fuel Filling stations daily operational. To effectively supervise the operation of fuel filling stations, the Downstream Directorate conducted a two-day workshop to introduce and raise the level of awareness of hazard and safety measures arising from the operation of Fuel filling stations and access the dominant safety practices at each Fuel filling station. This provision has brought an advantage to FFS's employees in their daily activities as pump attendant as well as support staff in fuel filling station facility.





FIGURE 15: TWO DAYS' WORKSHOP ON HSE AND MONITORING PROGRAM

## FEES COLLECTED IN 2016

The Downstream Directorate in 2016 collected \$126,025.00 fees. This fee resulted from the issuance of the license during 2016 and the annual fee of 2016 paid by the Fuel Filling Station Operators licensed in 2014 and 2015. The detail of operator, Fuel Filling Station and the amount of fees are summarized in table below.

No	Name of Fuel Filling Station	Address	License Number	Fee Received
1	TIMOR GAP, E.P.	Camanaça, Suai Villa Covalima Timor-Leste	ANP/PRAC/2016/001	\$8,200.00
2	68 Petroleum, Lda	Rua de Bairro Pite, Dom Aleixo, Dili	ANP/PRAC/2016/002	\$11,800.00
3	Chong Ti Petroleum, Lda	Avenida Becora Culuhun, Cristo Rei, Dili	ANP/PRAC/2016/003	\$6,700.00
4	99 Petroleum, Lda	Rua do Bairro Pite, Dom Aleixo, Dili	ANP/PRAC/2016/004	\$6,700.00
5	De Shun Fuel Station, Lda	Avenida Presidente Nicolao Lobato Fatu Hada, Dom Aleixo, Dili	ANP/PRAC/2016/005	\$6,700.00
6	Culu Hun Fuel Station, Lda	Rua Liberdade da Imprensa Culuhun, Cristo Rei, Dili	ANP/PRAC/2016/006	\$6,700.00
7	Realistic Fuel Unipessoal, Lda	Avenida de Balide Cristo Rei, Dili	ANP/PRAC/2016/007	\$4,500.00
8	Super Fuel, Lda	Avenida Becora Culuhun, Cristo Rei, Dili	ANP/PRAC/2016/008	\$7,750.00
9	Ruvic Unipessoal, Lda (Hera)	Sukaer Laran Hera, Cristo Rei, Dili	ANP/PRAC/2016/009	\$3,500.00
10	Arjumar Unip, Lda	Rua de Manleuana ,Efaca, Bairro Pite, Dom Aleixo, Dili	ANP/PRAC/2016/010	\$3,700.00
11	Global Fuel and trading product PYT, Lda (Suai)	Ailok Laran, Camanasa , Sua i Vila ,Covalima	ANPM/PRAC/2016/011	\$1,600.00
12	Abon Kase Unip. Lda	Bilicou Holsa, Maliana, Bobonaro	ANPM/PRAC/2016/012	\$1,200.00
13	Belak Fuel, Unp. Lda	Rua Fomento , Comoro, Dom Aleixo, Dili	ANPM/PRAC/2016/013	\$5,950.00

14	Esperança Timor Oan (ETO), Unip. Lda Sucursal	Sau, Manatuto	ANP/PRAC/2015/001	\$3,450.00
15	East Gas Corporation, Lda	Avenida 20 de Maio, Nain Feto, Dili	ANP/PRAC/2015/002	\$2,350.00
16	Vida Diak Petroleum, Lda	Rua Lauhata, Liquica	ANP/PRAC/2015/003	\$2,400.00
17	Borala, Lda	Rua Nicolau Lobato Comoro, Dom Aleixo, Dili	ANP/PRAC/2015/004	\$4,500.00
18	Mae da Graca Fuel. Lda	Rua Praia dos Coqueiros, Dom Aleixo, Dili	ANP/PRAC/2015/005	\$2,200.00
19	Specialized Vehicle Services, Lda	Rua da Palapaso, Dom Aleixo, Dili	ANP/PRAC/2015/006	\$11,300.00
20	Mega Petroleo, Lda	Rua Martires da Patria Comoro, Dom Aleixo, Municipio Dili	ANP/PRAC/2015/007	\$9,250.00
21	Xalila Fuel. Unipessoal, Lda	Rua Manleuana, Dom Aleixo, Dili	ANP/PRAC/2015/008	\$7,750.00
22	Esperança Timor Oan (ETO) Dili	Rua de Paiol Lahane Oriental, Dili	ANP/FFS/001/2014	\$8,350.00
23	Aitula Fuel, Lda	Avenida Nicolau Lobato Comoro, Dom Aleixo, Dili	ANP/FFS/002/2014	\$3,850.00
24	E Silva, Lda	Avenida Nicolau Lobato Comoro, Dom Aleixo, Dili	ANP/FFS/003/2014	\$1,200.00
25	Ruvic Fuel. Lda (Dili)	Rua do Bairro Pite, Dom Aleixo, Dili	ANP/FFS/004/2014	\$1,200.00
26	Mekar Fuel, Lda	Rua Nicolau Lobato Comoro, Dom Aleixo, Dili	ANP/FFS/005/2014	\$2,450.00
Payment received as of 31 December 2016				\$126,025.00

TABLE 7: AUTOMOTIVE FFS FEES COLLECTED IN 2016

## SUPERVISING AND MONITORING FUEL TRADING ACTIVITY

There has been more than 17 companies performed Trading activity throughout the year of 2016. The products imported consist of Diesel, Gasoline, JET-A1, Asphalt, Lubricant as well as LPG to territory of Timor-Leste. In the absence of Trading regulation, Downstream Directorate constantly supervise and monitor the performance of Trading activity by putting forward the requirements based on industry best practices for Trading activity including but not limited to vessel insurance, pollution insurance, vessel inspection report, manifest, bill of lading and documentation on products to be imported namely Fuel Quality and Quantity Certificate and Certificate of Origin. These requirements were imposed to all companies importing fuel in vessel whilst for companies importing fuel through ISO Tank, only certain requirements applied. Notwithstanding the requirements highlighted above, companies perform Trading activity were also required to fulfil minimum requirements stipulated under Decree-Law No. 1/2012.

The approval of trading activity on Gasoline and Diesel for automotive was subject to the compliance with specification stipulated under Fuel, Biofuel and Lubricant Standard and Specification Regulation.

No.	Name of Company	Type of Fuel
1	Pertamina International Timor, SA (PITSA)	Gasoline, Diesel, Jet Fuel, LPG, Lubricant and Asphalt
2	Esperanca Timor Oan (ETO)	Diesel
3	Global F&P PTY, Lda	Diesel and Gasoline
4	LAI-ARA Unipessoal,Lda	Diesel
5	MATO Unipessoal,Lda	Diesel
6	Far Ocean PTY ,Lda	Diesel and Gasoline
7	NM Timor Petroleum,Lda	Diesel
8	Arjumar Unipessoal,Lda	Diesel
9	Start TL	Jet Fuel
10	Xalila	Diesel
11	Gafung Petroleum,Lda	Diesel
12	Agora Fuel	Diesel
13	Crossland Shipping Agency	Diesel
14	Mega Petroleum	Gasoline
15	Vida Diak Petroleum	Diesel
16	Nico Fuel	Diesel
17	Naroman Klibur Rovi	Diesel

TABLE 8: NUMBER OF COMPANIES IMPORTED FUEL TO TIMOR-LESTE DURING 2016

## MONITORING AND SUPERVISING FUEL QUALITY

As part of Directorate Annual Strategic Plan and the execution of the Fuel Quality Assurance program, the Directorate has performed random inspection to ensure the quality of fuel available for sale in Timor-Leste. The activity was conducted on Four (4) Automotive Fuel Filling Stations and One (1) Storage Facility. The samples taken were limited to Gasoline and Automotive Diesel to confirm their specification established in the Amendment Regulation No.1/2015 on Fuel, Biofuel and Lubricant Quality Standards and Specifications.

The collected samples were sent to a laboratory for analysis and the results of the testing have been received by ANPM – Downstream Directorate. The result shows that the parameter of Gasoline were in alignment with the specifications set under Fuel, Biofuel and Lubricant Quality Standards and Specifications. However, the parameter for Diesel shows that one of four samples was off specification.



FIGURE 16: FUEL SAMPLING AT PERTAMINA STORAGE FACILITY & RUVIC FFS

## INVESTIGATION ACTIVITY

In 2016, the Downstream inspector conducted three investigative activities namely, fuel off specification, fuel spill and fire incident at Delta. The two investigative activities were started and concluded within 2016 whilst one investigative activity on fire incident at Delta was started in November 2015 and concluded in 2016.

a. Investigation on Fuel Off Specification

In last quarter of 2015 the Downstream Directorate executed its plan on Fuel Quality Monitoring Program to verify and monitor fuel quality at different supply points within Dili. The laboratory analytical results showed that one diesel sample was off specification and this sample was taken from Ruvic Fuel Filling Station located in Fatumeta. Based on this analytical result, the ANPM formed an investigation team to find out the causes of diesel off specification. This investigation was started on 25 January 2016 and concluded with no conclusive to know the causes of diesel off specification. To prevent the reoccurrence, several recommendations were presented to both ANPM and the company

b. Investigation on Fuel Spill

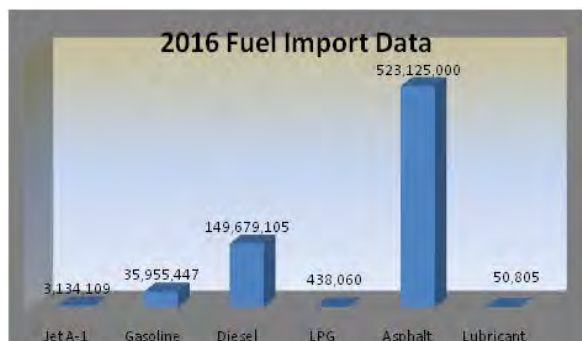
On July 7 2016, a fuel spill incident occurred at East gas Corporation Fuel Filling Station. The investigation team was formed and started on 16<sup>th</sup> July 2016. The investigation concluded with conclusive that the incident was due to failure (crack) of impact check valve.

c. Investigation to Fire Incident at Kerosene Retail Facility

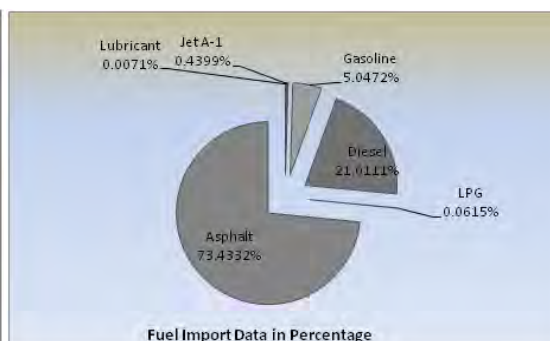
Fire incident involved Kerosene Retail Facility at Delta Comoro on 2<sup>nd</sup> November 2015 required an action by the ANPM as the regulatory body for petroleum activity. An investigation team was formed soon after the incident; however, the scope of the investigation was limited to obtain information related to the incident and the administrative data only as there has not been any license issued for this activity. The investigation was started in November 10 and concluded on July 2016. The investigation concluded with no conclusive evidence on the causes of the incident. Therefore, the investigation objective of finding the root causes to prevent reoccurrence of similar incident in the future was not possible to attain based on the information available gathered during the investigation activities. However, to prevent the reoccurrence in the future, several recommendations were proposed by the investigator to ANPM as the regulatory body for petroleum activity as well as to the Owner of kerosene retail facility.

## FUEL CONSUMPTION IN 2016

According to the data established by the Downstream Directorate, there are six (6) type of Fuel been imported during 2016. Below figure indicates types of Fuel and their corresponding volume and percentage based on the data recorded.



GRAPH 15: 2016 FUEL IMPORT DATA



GRAPH 16: 2016 FUEL IMPORT DATA IN PERCENTAGE

Importation of Asphalt in 2016 has been very significant; it makes up 73.44 % of total fuel imported to the country. Importation of Diesel compared to last year has slightly increased 1% whereas gasolines remain constant. On the other hand, importation of Jet A1 has slightly decrease 1% compared to last year.

The main consumption of Diesel (60.05%) is for power plant generation for the country, followed by transportation (39.95%).

## 4. MINERAL PERFORMANCE

### 4.1 OVERVIEW OF MINING SECTOR

Amendment of the ANP Decree law No. 20/2008 by the new decree law No. 1/2016, February 16, marks a new change in the management of mineral sector in the country from the then Direcção Nacional de Minerais (DNM) to Autoridade Nacional do Petróleo e Minerais (ANPM).

To ensure continuous administration of the sector, ANPM work closely with DNM to migrate all records and information and ensure that they are kept safely

for ease of access and retrieval. Additionally, ANPM also work closely with the industry to establish mutual cooperation and set the right path for future cooperation to develop the sector which has been focusing only on mining of construction materials, mostly sand and gravel.



FIGURE 17: ROCK QUARRY IN BEDUKU, TIBAR, LIQUICA



In general, the demand for sizeable volume of construction materials mined in Timor-Leste is used for infrastructure development including government and private funded projects such as roads, buildings and ports.

To recover these materials companies often utilize simple methods. These methods include land clearance followed by recovery of the in-situ rock or boulders by breaking the rock using excavator fitted with jack hammer and load into truck for direct use or further crushing into gravel of different sizes.

This method requires high energy consumption and very small output, hence less efficient. Often direction of mining is dictated by availability and breakability of the rock. Consequently, where rock hardness increases companies tend to leave the site and move to other preferable sites.

The use of such method also creates challenges when it comes to planning for closure of the site with appropriate rehabilitation plan.

On the other hand, sand mining in Timor-Leste has been mostly done by using excavator and trucking for direct use or further processing including washing and sizing. It is well observed that major rivers in Timor-Leste are mined due to the thickness of the sand deposit and their quality.

## 4.2 REGULATING THE QUARRY OPERATION

### 4.2.1 DIPLOMA MINISTERIAL

In 2008, Ministerial Diploma No. 01/2008 was established to regulate mining of all construction materials. This Diploma Ministerial was further amended in Ministerial Diploma No. 1/2009, of 12 August and later the Ministerial Diploma No. 2/2014, of 19 February.

In 2016, a new Diploma Ministerial was created with improved requirements both technical and administration and to also take into account basic principals in the draft Mining Code. Some of the improvement were made to the administrative processes and procedures for licensing, general obligations of the license holders, classification of activities and their associated fees assessment, improve technical requirements for evaluation, planning, implementation and monitoring, inspection, audit and reporting of relevant in the territory of Timor-Leste;

In addition to the above, the scope of the Diploma Ministerial was also expanded to cover some process materials and dimension and ornamental stones.

### 4.2.2 INTERGOVERNMENTAL COOPERATION

To streamline the administration and regulation the mining sector, particularly for borrow pit operations to support road construction projects carried out by various international companies, Ministry of Petroleum and Mineral Resources, Ministry of Public Works and Telecommunication and Ministry of Commerce and Industry signed a Memorandum of Understanding for the purpose of streamlining the process of issuance of mineral license and environmental license for road construction projects.

Similarly informal cooperation is in place with several ministries and agencies for improving the efficiency of management of the mining sector including with, SERVE for issuance of business license, National Directorate for Land and Property for land and property clearance, and Local Authorities.

### 4.2.3 COMMERCIAL QUARRIES AND BORROW PIT MANAGEMENT

#### a. Commercial Quarries Management

Commercial quarries are those quarries established to commercialize construction materials for public or private project consumption, fabrication of subsequent products for use in public or private construction projects. There are not many commercial quarries established due to cost and demand for the materials produced.

#### b. Borrow Pit Management

Borrow pits are those purposely established to support specific project with specific durations and abandoned as soon as the project scope is delivered.



FIGURE 18: COMMERCIAL QUARRY IN DILI AND BORROW PIT ALONGSIDE AILEU-MAUBISSE ROAD

Managing the commercial quarries and borrow pit has been a challenging journey. Prospective license holder is required to carry out adequate material search through desktop works and detail site investigation prior to planning for site selection and preparation to extract material for subsequent processing and supply with due consideration to social and environmental affairs

## 4.3 LICENSE AND PRODUCTION IN 2016

### 4.3.1 LOCATION APPROVAL

Approximately 26 locations were requested to be approved for mining activity. The proposed locations are mostly for supporting specific road construction projects within the country. In 2016, 14 locations were approved for both local and international company and 12 locations were under technical assessment. These locations are newly proposed locations and exclude those which have already obtained license.

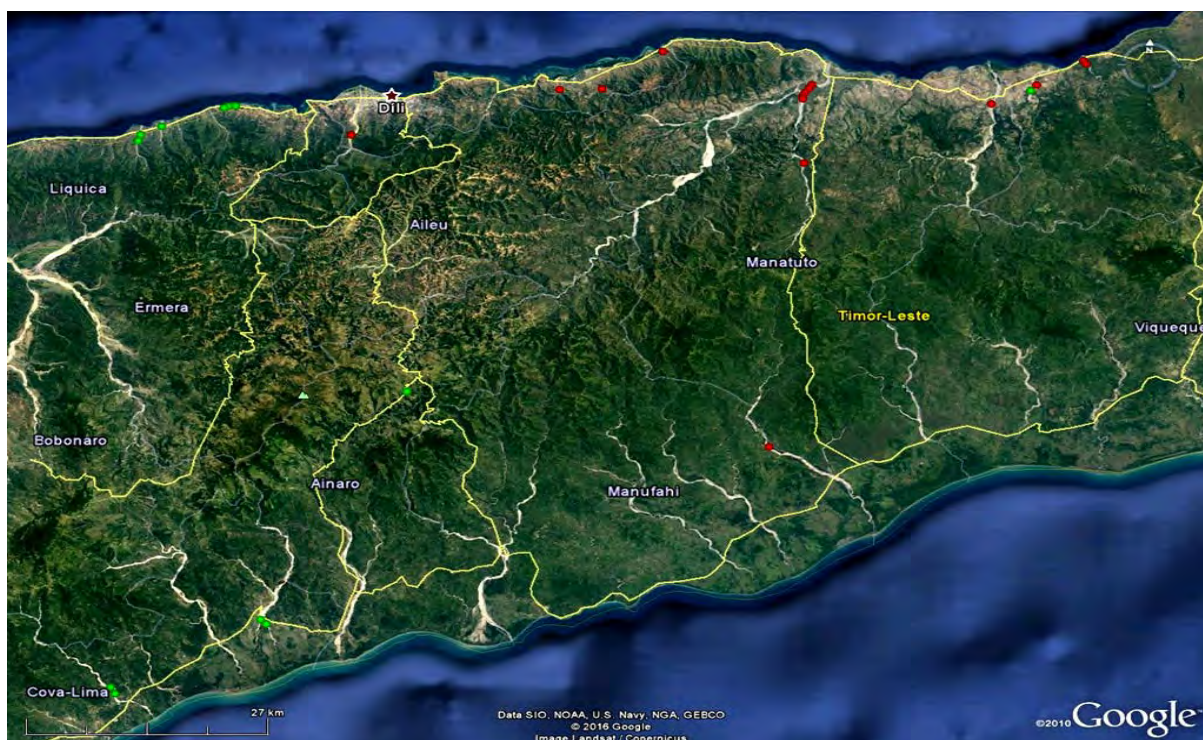


FIGURE 19: LOCATION APPROVAL STATUS

#### 4.3.2 LICENSE

Issuance of mining license is subject to approval the proposed quarry location. Furthermore, the 2016 Ministerial Diploma requires the mining license to be granted to a natural or legal person holding valid license for economic activities pertaining to mining sector, with more than fifty (50) percent owned and controlled by Timor-Leste citizen. However, for Government funded projects, Government may decide to waive the requirement for control and ownership by Timor-Leste citizen on the ground of technical and commercial circumstances.

In 2016, ANPM registered licenses issued to both local or national and International companies. Additionally the licenses are issued for mining of construction materials for commercial and construction category. The summary of distribution of mining licenses issued to local and international and their associated categories are shown in the following charts.

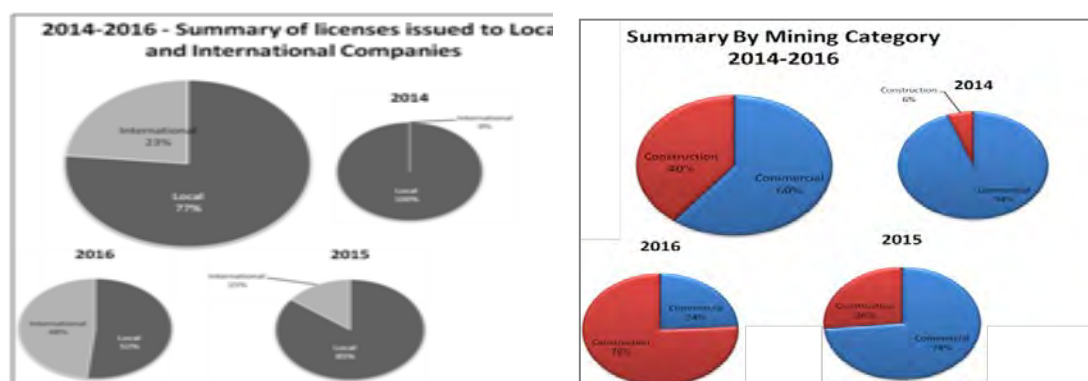
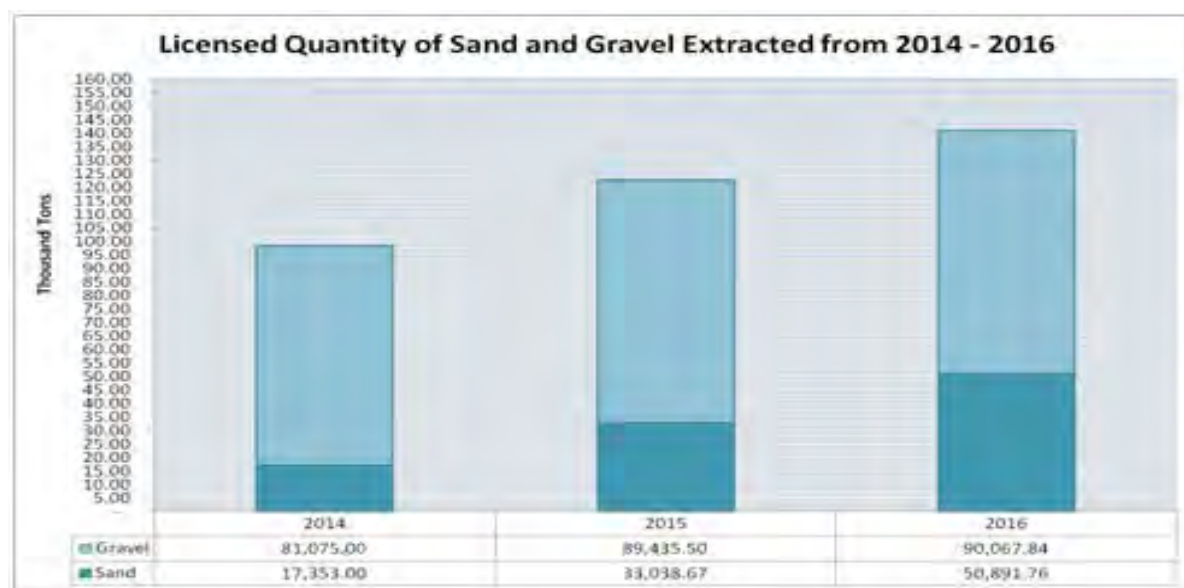


CHART 7: LICENSES ISSUED TO LOCAL AND INTERNATIONAL COMPANIES AND MINING ACTIVITIES FOR COMMERCIAL AND CONSTRUCTION

### 4.3.3 PRODUCTION IN 2016

Total estimated licensed construction materials production in 2016 is 140,959.60 tons. This number corresponds to 50,891.76 tons of sand production and 90,067.84 tons of rock removed for gravel/aggregate production. In 2014 and 2015, the total estimated licensed construction materials production was 98,428.00 tons and 122,474.17 tons respectively. The construction materials production trend for these periods is shown in the graph below.



GRAPH 17: ESTIMATED LICENSED CONSTRUCTION MATERIAL PRODUCTION FROM 2014 TO 2016

Construction material production increase observed in 2016 had been mainly driven by the increase in use of construction materials in the country, mostly for infrastructure development, particularly road construction by both national and international companies. In addition to this, the increase has also been contributed by improved administration of the sector, by way of reporting, improvement made on technical assessment such as resource estimation and close engagement with the industry through ad hoc inspection.

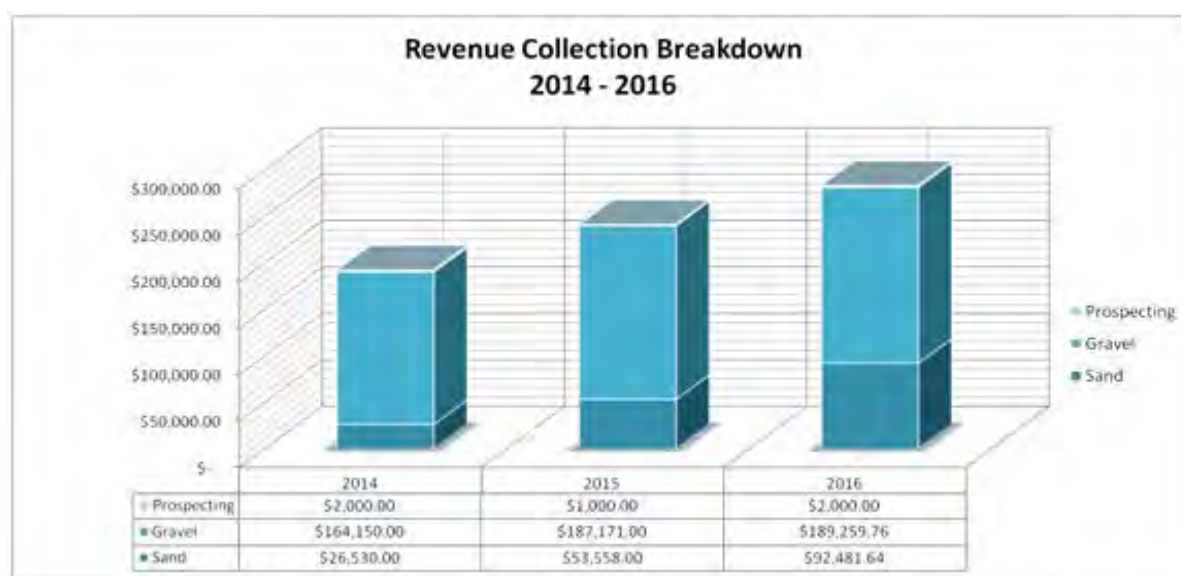
It is expected that the same trend of increase will continue to be observed in 2017.

## 4.4 REVENUE COLLECTED

The Mineral revenue constitutes the license fee (mining license fee, prospecting license fee and exploration license fee) and the mining fee. The rates of the fees are established under the Ministerial Diploma and payable prior to issuance of the mining license.

In 2016, total revenue distributed to the Ministry of Finance is USD 283,741.40, which is the sum of USD 260,041.40 collected from mining fee and USD 23,700.00 collected from license fee. In comparison with previous year, this has been the highest collection so far and contributed by factors referred to earlier. Revenues collected in the past three years are shown in the following figure.





GRAPH 18: REVENUE COLLECTION BREAKDOWN FROM 2014 TO 2016

## 5. CORPORATE INITIATIVES

As a Timorese Autonomous organization, ANPM assumes obligation to share knowledge and experience on its core business with relevant stakeholders and academic graduates within the country and those from overseas. In 2016, our initiatives in sharing of knowledge and experience have been stepped up by not only increasing the number but also expanding the areas of disciplines. This is primarily contributed by opportunities and lessons learnt from previous years.

### 5.1 GRADUATE INTERNSHIP PROGRAM

Graduates are attached to the ANPM by means of a Graduate Internship Program. The successful candidates are offered with the opportunity to learn firsthand from the knowledge and experience of our experienced staffs in different disciplines and have the opportunity to get exposed to some field activities to gain knowledge and experience on real projects. The ANPM run GIP twice in a year which is divided into two different periods with 6 months duration. A total of 30 graduates were selected to be attached to the directorates within the ANPM.

Program Type	Number of Student	Area of Interest	University
Graduated Internship Program (GIP)			
	2	Petroleum Engineering	China University Science and Technology, The University of New South Wales Sidney
	4	Geology and Geophysics	Mapua Institute of Technology, Philippines, Universitas Gajah Mada (UGM) Yogyakarta, UPN Veteran & Adamson University, Philippines
	1	Environmental Engineering	UNPN Veteran Yogyakarta
	1	Health & Safety	UNPAZ



	3	Oil and Gas Commercial	Dili Institute of Technology, Mapua Institute of Technology Philipines
	2	Oil and Gas Legislation	UNPAZ
	2	Downstream Administration	Dili Institute of Technology
	2	Technical Downstream	Dili Institute of Technology & Universitas Warmadewa, Bali
	2	Local Content	UNPAZ
	2	Corporate Administration	STIMI Handayani Denpasar, Institute of Business (IOB)
	2	Corporate Finance	IOB & Universitas Atmajaya, Yogyakarta
	4	Information and Technology	AKPRIND; STIMIK AKAKOM Yogyakarta; IOB; STIMIK Bandung
	3	Training & Human Resources	Universitas Ianabra, Yogyakarta, STIPRAM Yogyakarta; Universitas Warmadewa, Bali

TABLE 9: 2016 GRADUATION INTERNSHIP PROGRAM

## 5.2 UNIVERSITY FINAL YEAR PROJECT

The ANPM offers mentoring opportunity for final year students at university level to gain some work experiences and data collection for their thesis writing purpose as a part of university curriculum's requirements. A total of 29 students were assisted in completing their field study program and 14 students for data collection with different directorate within the ANPM in 2016.

Program Type	Number of Student	Area of Interest	University
Final Year Project (FYP)			
Data Information Collection	5	Exploration & Acreage Release	Universidade de Coimbra & UNTL
	9	Development & Production	UNDIL, UP 45 Yogyakarta, UNP Veteran Yogyakarta
Field Study Program	2	Development and Production	UNDIL
	6	Exploration & Acreage Release	UNTL
	21	Commercial; D&P	DIT

TABLE 10: 2016 FINAL YEAR PROJECT

## 5.3 PUBLIC EVENTS

### NATIONAL & INTERNATIONAL EXHIBITION AND SEPFOPE JOB FAIR

In 2016, ANPM has been invited to take part at two National Exhibitions for commemorating 14th Anniversary of Restoration of Independence of Timor-Leste and 41th Anniversary of Independence Day and one International Industrial Exhibition organized by Ministry of Trading, Industry & Environment and one Job Fair organized by Secretariat of State for Employment Policy and Vocational Training (SEPFOPE).



FIGURE 20: ANPM ON INTERNATIONAL & NATIONAL EXHIBITION AND SEPFOPE JOB FAIR 2016

## LIST OF FIGURES

Figure 1: ANPM Jurisdictional Areas (Map Not to Scale).....	5
Figure 2: Inspection Activities for Newly Constructed AFFS .....	9
Figure 3: Licensing Granted Award for Mineral Operators .....	9
Figure 4: Handover Certificate of ISO-27001 .....	9
Figure 5: ISO-27001 Training for ANPM staff .....	9
Figure 6: Signing Ceremony of Vocational Training .....	10
Figure 7: Participants of the Training in Tibar .....	20
Figure 8: Map of PSCs Active in JPDA and TLEA .....	21
Figure 9: Lunching of IAGS Project by H.E. Xanana Gusmão .....	23
Figure 10: Metering performed DNLG Audit & Observed metering supervision computer at CUQ.....	35
Figure 11: Dissemination Activities in Maubessy and Baucau .....	43
Figure 12: Data Collection at Municipality level.....	43
Figure 13: Dissemination of Storage Regulation Activities .....	44
Figure 14: Handover License to 3 FFS and Inaguration Timor Gap,EP's New FFS in Suai.....	46
Figure 15: Two Days' Workshop on HSE and Monitoring Program.....	47
Figure 16: Fuel Sampling at Pertamina storage facility and Ruvic FFS.....	50
Figure 17: Rock Quarry in Beduku, Tibar, Liquica .....	51
Figure 18: Commercial Quarry in Dili and Borrow Pit alongside Aileu-Maubesse road .....	53
Figure 19: Location Approval Status .....	54
Figure 20: ANPM on International & National Exhibition and Sepfope Job Fair 2016 .....	58

## LIST OF GRAPHS

Graph 1: Courtesy of ConocoPhillips.....	23
Graph 2: Total Liquid Production and Gas Exported.....	24
Graph 3: 2016 Incidents in the JPDA .....	25
Graph 4: 2016 Bayu Undan Flaring, actual vs. allowance.....	26
Graph 5: Bayu Undan Flaring From 2005 to 2016.....	26

Graph 6: Bayu Undan Condensate Volume Sold.....	28
Graph 7: Percentage of the BU Condensate Buyers.....	28
Graph 8: Bayu Undan LGP Sold in 2016.....	29
Graph 9: Bayu Undan LNG Volume Sold in 2016.....	29
Graph 10: Kitan Crude Oil Volume Sold in in 2016 .....	30
Graph 11: JPDA and TLEA Exploration Expenditure .....	31
Graph 12: JPDA PSCs development expenditure .....	31
Graph 13: Bayu Undan 2016 Local Procurement of Goods and Services .....	32
Graph 14: Revenue Received during 2015-2016.....	39
Graph 15: 2016 Fuel Import Data .....	51
Graph 16: 2016 Fuel Import Data in Percentage .....	51
Graph 17: Estimated licensed construction material production from 2014 to 2016 .....	55
Graph 18: Revenue Collection Breakdown from 2014-2016.....	56

## LIST OF TABLES

Table 1: PSCs IN JPDA AND TLEA .....	20
Table 2: SUMMARY OF EXPLORATION PSCS ACTIVITIES.....	22
Table 3: D & P Inspection During 2016.....	35
Table 4: D & P Supervision & Monitoring .....	36
Table 5: Type of Documents Submitted & Assessment Outcome.....	38
Table 6: Licensing Installation and Operation of FFS in 2016 .....	45
Table 7: Automotive FFS Fees Collected in 2016 .....	48
Table 8: Number of Companies Imported fuel to Timor-Leste during 2016 .....	49
Table 9: Graduted Internship Program 2016.....	57
Table 10: 2016 Final Year program .....	57

## LIST OF ABBREVIATIONS

2D: Two Dimension, 28	APORTIL: Port Authority of Timor-Leste, 42, 43
ANP: Autoridade Nacional do Petróleo, 6, 7, 8, 9, 10, 12, 13, 14, 15, 20; Autoridade Nacional doPetróleo, 22, 25, 31, 45	BoD: Board of Directors, 8
	BU: Bayu Undan, 28
	CUQ: Compression, Utilities and Quarters, 24

DIT: Dili Institute of Technology, 45, 46  
DNTPSC: Direcção Nacional de Terras, Propriedades e Serviços Cadastrais, 42  
DPP: Drilling Processing and Production Platform, 24  
ERP: Emergency Response Plan, 46  
FPSO: Floating Production, Storage and Offloading, 25  
FSO: Floating Storage and Offloading, 24  
IOB: Institute of Business, 45, 46  
JCM: Joint Commission Meeting, 11  
JPDA: Joint Petroleum Development Area, 6, 7, 9, 22, 24, 25, 26, 28, 31  
kbpd: Thousand barrels per day, 24  
km: kilo meter, 24, 25  
LNG: Liquefied Natural Gas, 24  
LPG: Liquefied Petroleum Gas, 24  
MMscf: Million Standard Cubic Feet, 24

MODU: Mobile Offshore Drilling Unit, 26, 36  
NZ: New Zealand, 45  
OPEC: Organization of Petroleum Exporting Countries, 28  
PNTL: Polícia Nacional de Timor-Leste, 42  
PSC: Production Sharing Contract, 22, 23, 31  
SCM: Sunrise Commission Meeting, 11  
SEMA: Secretario do Estado E Meio Ambiente, 42  
SERVE: Serviço de Registo e Verificação Empresarial, 42  
TLEA: Timor Leste Exclusive Area, 6, 9, 22, 25, 28, 31  
UGM: Universitas Gadjah Mada, 45  
UNPAZ: Universidade da Paz, 45  
UNPROK: Universitas Proklamasi, 45  
US: United States, 28  
USD: United States Dollar, 13  
WP1: Well Head Platform 1, 24

ANNEX 1 – LIST OF INDIVIDUAL AND COLLECTIVE TRAINING IN 2016

Type of training	Individual and Collective Training					
	Management	Participants		Technical	Participants	
		Male	Female		Male	Female
Individual Training						
	Professional Development for Office Professionals and Executive Assistants	0	1	Extend HUET (TBOSIET) Certificate	0	1
	Procurement and Inventory Management	1	0	Secondment on Fuel Terminal Operations	3	2
	Procurement Best Practice	1	0	Asia Pacific Well intervention conference	2	0
	Public Relation and Corporate Communication	1	0	HUET (TBOSIET) Training	2	0
	Effective Cash Flow Management, budgeting & Analysis	0	2	ISO/IEC 27001 Lead Auditor Training Course	0	1
	Procurement Risk Management and Fraud Control	2	1	Asset Integrity Management and Risk Based Inspection Master class	1	0
	Human Capital National Conference (HCNC) - Building High Performance Organization	1	0	Asset Integrity Management and Risk Based Inspection Masterclass	1	0
	Managing Regulation, Enforcement and Compliance.	1	0	ISO/IEC 27001 Lead Auditor Training Course	0	1
	Compensation Benefit & Payroll Management	1	0	Transportation of Liquefied Natural Gas	1	0
	Basic Accounting	0	1	Bowtie Risk Management Masterclass and Certified Tripod Beta Practitioner course	2	0
	Competency Based Framework and assessment	1	0	FGE's 26th Pacific Petroleum Insiders (PPI) Briefing 2016	0	2
	Managing and Improving Strategic of Information Security Governance	1	0	HUET Training (Certificate renewal)	1	0
	Plant Maintenance Cost reduction strategies	2	0	Practical Training for Petroleum Quality Management System	1	0
	Strategic Human Resource Management	0	2	ISO 27001 Lead Auditor Training and Exam	1	0
	Project Management Tools and techniques	1	0	Advanced Petroleum Economics & Risk Analysis	1	0



	Competency Based Recruitment and Selection Training	0	1	Gas/LNG Contracts: Structures, Pricing & Negotiation	1	0
				EPCIC Contract Management & Essentials Elements of International Law	0	1
				ISO 27001 Lead Auditor	1	0
				TBOSIET Certificate extension	1	0
				Insurance of Upstream Oil and Gas Assets & Liabilities	1	0
				MS Office Excel 2010: Intermediate & Advance	1	0
				IT Cisco Data Centre Training	1	0
	Total	21		Total	30	
Collective / In-house Training						
	Work Effectively with Others (CBS for Interns)	8	7	NEBOSH HSE in Process Industries	8	2
	Leadership and Management Training	9	3	NEBOSH Environmental Awareness	8	2
	Participate in Meetings (CBS – Interns)	6	6	Fundamental Audit Principals and Techniques in Oil and Gas Industries	10	2
	Write a Workplace Report (CBS-Interns)	6	6	NEBOSH Environmental Certificate	8	2
	CBS – 01:Provide Quality Customer Service	3	1	Petrophysics Training	3	2
	CBS – 02:Write a Workplace Procedure	3	3	Geomodeling Training	7	0
	CBS – 03: Work Effectively with Others	1	1	Introduction and Implementing to ISO/IEC 27001 Information Security	11	3
	GIP – BS 01: Set Goal and Plan Work	7	5	Behaviour Based Safety Training	7	3
	GIP – BS 2: Organise & Complete Daily Activity	7	5	Advance Excel 2016 training	5	6
	GIP – BS 3: Work Effectively with Others	5	5			
	ANPM + GIP – BS 4: Participate in the meetings	8	6			
	ANPM + GIP – BS 5: Write a workplace Report	9	5			

ANPM BS – 08: Process and Maintain Workplace Information	4	1			
Portuguese Course	50	25			
<b>Total</b>	<b>205</b>		<b>Total</b>	<b>89</b>	

Type of Program	GIP and FYP				
	ANPM Directorate	University Name	Participants		
			Male	Female	
Final Year Project (FYP)					
Data Information Collection	D&P	UNDIL	4	2	
	D&P	UP 45 Yogyakarta	0	1	
	E&AR	Universidade de Coimbra	1	0	
	E&AR	UNTL	4	0	
	D&P	UPVY	1	0	
	D&P	UNP Veteran Yogyakarta	1	0	
Total students			14		
Field Study Program	Commercial; D&P	DIT	7	14	
	E&AR	UNTL	6	0	
	D&P	UNDIL	2	0	
Total students			29		
Graduate Internship Program (GIP)					
1st Intake 2016	Technical Group				
	Petroleum Engineering		0	1	
	Geology and Geophysics	Mapua Institute of Technology, Philippines & UGM	2	0	
	Health and Safety	UNPAZ	1	0	
	Oil and Gas Commercial	DIT	0	1	
	Oil and Gas Legislation	UNPAZ	1	0	
	Local Content	UNPAZ	1	0	
	Downstream Administration	DIT	0	1	
	Technical Downstream	DIT	1	0	
	Corporate Group				
	Corporate Administration	STIMI Handayani Bali - Indonesia	0	1	
	Corporate Finance	Universitas Atmajaya, Yogyakarta	1	0	
	Information and Technology	AKPRIND Yogyakarta & IOB	1	1	
	Training & Human Resource	Universitas Janabadra, Yogyakarta & STIPRAM Yogyakarta	0	2	
	Total Interns			15	
	2nd Intake 2016	Technical Group			
Petroleum Engineering		The University of New South Wales Sydney	0	1	

Geology and Geophysics	Adamson University , Philippines & UPN Veteran Yogyakarta	1	1
Oil and Gas Commercial	DIT	2	0
Oil and Gas Legislation	UNPAZ	1	0
Local Content	UNPAZ	1	0
Downstream Administration	DIT	1	0
Technical Downstream	Universitas Warmadewa, Bali	1	0
Enviriomental Engineering	UNPN Veteran Yogyakarta	0	1
<b>Corporate Group</b>			
Corporate Administration	Institute of Business (IOB)	0	1
Corporate Finance	Institute of Business (IOB)	1	0
Information and Technology	STIMIK AKAKOM Yogyakarta & STIMIK Bandung	1	1
Training & Human Resource	Universitas Warmadewa, Bali	0	1
<b>Total Interns</b>		<b>15</b>	

## ANNEX 2- CORPORATE PROCUREMENT IN 2016

### Audit, Consulting, Project and Office Maintenance Services Updates (January - December 2016)

I	Consultancy	Contract Fee /Items Price	Successful Company/Vendors
1	ANP Risk Management and Internal Control	\$ 30,000.00	Ernst & Young, S.A Portugal
2	Contractual Insurance Review for Autoridade Nacional do Petroleo (ANP) Timor Leste	\$ 6,000.00	Total Risk Solution (London) Ltd
3	Providing Training on Fundamental Compliance Audit Principals and Techniques in Oil/Gas Industry	\$ 29,800.00	MDT International Limited
4	Building Bayu Undan Reservoir Modeling Static & Dynamic Models - Payment for month of January 2016	\$ 58,777.77	Sproule International Limited, Canada
5	Building Bayu Undan Reservoir Modeling Static & Dynamic Models - Payment for month of February 2016	\$ 45,111.11	Sproule International Limited, Canada
6	Building Bayu Undan Reservoir Modeling Static and Dynamic Models for 3rd phases	\$ 39,777.77	Sproule International Limited, Canada
7	In House Training on Introduction and Implementing ISO/IEC 27001 on Information and Security Training	\$ 4,333.33	BSI Jakarta
8	First Aid Training for the ANPM staffs on the basic training and refresher training	\$ 6,060.00	Cruz Vermelha Timor Leste (CVTL)
9	Metering Inspection at Darwin LNG	\$ 8,008.00	Gas Measurement & Auditing Pty Ltd
10	Accommodation Services	\$ 100,682.41	COFI Agencia Tour & Travel Unipessoal Lda
11	Review of LNG Market Pricing, Demand, and Supply and Future Development	\$ 45,000.00	Poten & Partners
12	Basic Fundamental Marketing, Finance and Accounting Competency Assessment Matrix	\$ 51,240.00	Ernst and Young S.A Portugal
13	Provision of Environmental Survey Services ( Drone Operations) in Relation to Timor Leste Quarries and Alluvial Extraction Site.	\$ 47,084.78	Ambiente Services Lda
14	Completion of Mass Balance On Line training - Continuation	\$ 611.11	Gas Measurement & Auditing Pty.Ltd
15	Building Bayu Undan Reservoir Modeling Static and Dynamic Models for 4rd phases	\$ 41,439.12	Sproule International Limited, Canada
	<b>Sub Total</b>	<b>\$ 413,242.99</b>	

II	Services	Contract Fee /Items Price	Successful Company/Vendors
1	License or Leased OFM and Avocet (production data core) and petrel software	\$ 65,237.73	Schlumberger Australia Pty Ltd
2	Petrel License Renewal Software Maintenance for one year for the duration, start from January - December 2016	\$ 49,947.87	Schlumberger Australia Pty Ltd
3	New Contract of Internet (IP Services)	\$ 90,000.00	GlobalNet Unipessoal Lda
4	Renewal Maintenance for the Avocet /OFM	\$ 15,289.86	Schlumberger Australia Pty Lta
5	Document Translation of Decree Law for Extractive Industry from English to Tetum	\$ 960.00	Agusto Mendonca
6	Renting Venue for 10th JPDA Legal Framework working Group meeting in Adelaide, Australia	\$ 1,458.33	Stamford Plaza Adelaide, South Australia, Australia
7	Document Translation of ANP Mining Code from English to Tetum	\$ 2,779.00	Tomas Fernandes
8	Renting Venue for Public Consultation on Decree Law on Extractive Industry hosted by ANPM Local Content and SEPFOPE	\$ 2,550.00	Centro De Formasaun Joao Paulo II
9	Salary Survey Report for 12 Months Access to the Market Data	\$ 1,666.66	Birches Group LLC, New York, USA
10	Translation Document of Storage	\$ 2,191.00	Tomas Fernandes
11	Renting Venue for in House Training on Fundamental Compliance Audit Principle and Techniques in Oil and Gas Industry	\$ 2,731.00	Hotel The Ramelau
12	Renting Venue for Local Content and PSC Direction Workshop and 12th JPDA LFWG meeting	\$ 2,105.00	Timor Plaza Hotel & Apartments
13	Subscription of Reporting LPG marketing Information	\$ 6,005.56	Argus Media Limited, London, UK
14	Subscription of Reporting LNG marketing Information	\$ 11,600.00	Argus Media Limited, London, UK
15	Downstream Document translation	\$ 689.60	TF Tradocoes, Unipessoal Lda
16	Design and supervise construction of garage, post guard and additional room at Multi-function meeting hall at ANPM Farol Office	\$ 2,459.01	Arch. Vitor da Costa B Ribeiro
	<b>Sub Total</b>	<b>\$ 257,670.62</b>	

III	Audit	Contract Fee /Items Price	Successful Company/Vendors
1	ANP Financial Statement and Compliance Audit Services ( Ref: ANP/CRM/RFP/16/001)	\$ 50,000.00	Merti & Partners. Darwin NT
	Sub Total	\$ 50,000.00	
IV	Goods	Contract Fee /Items Price	Successful Company/Vendors
1	New Filling Cabinet Sliding Door	\$ 1,750.00	Superindo Dili
2	Minor IT equipments to support daily operational activities	\$ 2,760.00	Royal Electric
3	Anti Malware bytes 150 units	\$ 4,875.00	GlobalNet Unipessoal Lda
4	External HDD with trade mark Seagate 8TB	\$ 2,320.00	GlobalNet Unipessoal Lda
5	Network Cabling Installation and re-structured in IT and Server rooms	\$ 1,585.00	GlobalNet Unipessoal Lda
6	Network Cabling Installation and re-structured in Farol Office (from Downstream office to Mineral Office)	\$ 1,125.00	GlobalNet Unipessoal Lda
7	Microsoft Visual Professional 2012 with MSDN	\$ 3,000.00	GlobalNet Unipessoal Lda
8	Symantec End Point Encryption Powered BY PGP technology 11.1 Xplat per device BNDL STD for 100 licenses within 12 months	\$ 7,400.00	Zeon International
9	Toner for Downstream Office Printer HP Laserjet 100 MFP M 175nw	\$ 1,400.00	Sylvia Dili
10	Freezer Showcase GEA Expo 280 to deployed at Multi-Function Hall in Downstream	\$ 480.00	Bravo International
11	Printer Machine HP LaserJet Pro MFP M277n complete with one full set of Tonners as reserve	\$ 1,020.00	Superindo Dili
12	Personal Protection Equipment (PPE) including Coverall - Blue Dark 82R, Safety Boots - Blundstone and Hard Hat	\$ 557.00	Esset
13	Lenovo Laptops x260 i7 17 Units	\$ 29,750.00	GlobalNet Unipessoal Lda
14	Autodesk AutoCad 2017	\$ 1,295.00	Zeon International
15	IT Minor tools of GFI Web Monitor for 100 licenses	\$ 5,215.00	GlobalNet Unipessoal Lda
16	IT Minor tools of GFI Language for 100 licenses	\$ 2,488.00	GlobalNet Unipessoal Lda



17	Reallocation of V-sat Antenna from Palacio to Downstream Office in Farol	\$ 2,600.00	GlobalNet Unipessoal Lda
18	Motorcycle	\$ 1,125.00	UD. PALMA MTC
19	Lotus Notes Domino Renewal Licenses	\$ 19,706.50	ISW Development Pty Ltd
20	5 units new Vehicles ( 2 units pick up and 3 units station wagon)	\$ 211,000.00	Toyota Auto Timor Leste
21	Motor Vehicles insurance for 5 units new vehicles	\$ 8,450.00	Sinar Mas
22	CCTV Indoor and Outdoor with Brand Samsung	\$ 1,315.00	Globalnet Unipessoal Lda
23	Installing new voice lines in Downstream Technical Office 7 lines	\$ 665.00	NTECH
24	Symantec Endpoint Protection License for 150 Units for one year ( 25 Nov 2016 until 24 Nov 2017) Yearly basis	\$ 2,801.00	ISW Development Pty Ltd
25	Minor IT equipment for data recovery in Downstream Office	\$ 9,462.00	Loro Sae Computer Services
26	An additional supportequipment for 24x7	\$ 2,100.00	Loro Sae Computer Services
	<b>Sub Total</b>	<b>\$ 326,244.50</b>	
	<b>Total</b>	<b>\$ 1,047,158.11</b>	

## ANNEX 3-ANP 2015 ANP FINANCIAL AND REVENUE AUDITED REPORTS