



**THE MINISTRY OF
ENERGY AND ENERGY AFFAIRS**

2015

ADMINISTRATIVE REPORT



TTEITI Trinidad and Tobago
Extractive
Industries
Transparency
Initiative



**Fiscal 2015
EITI - Promoting Transparency & Advocating
Accountability in the Energy Sector
Achievement of EITI Compliant Country Status**

Preface

The 2015 Annual Administrative Report of the Ministry of Energy and Energy Affairs (MEEA) is submitted in accordance with Section 66D of Act No. 29 of 1999 cited as the Constitution (Amendment) Act 1999. The Constitution (Amendment) Act 1999 states that Government Ministries “*shall submit to the President before 1st July, in each year a report on the exercise of its functions and powers in the previous year, describing the procedures followed and any criteria adopted by it in connection therewith and the President shall cause the report to be laid within sixty days thereafter in each House.*” The Report satisfies the statutory obligations of Section 66A of the Constitution (Amendment) Act 1999 by providing a detailed account of its activities in the fiscal year and planned initiatives for the future.

Vision

“A global leader in the strategic development of the energy and mineral sectors”.

Mission

The mission of the Ministry of Energy and Energy Affairs (MEEA) is to contribute to Trinidad and Tobago’s prosperity through the sustainable development of energy and mineral resources.

Overview

The MEEA is responsible for the overall management of the oil, gas and minerals sectors in Trinidad and Tobago. In combination, these sectors have contributed over 40% annually to the Gross Domestic Product (GDP) of the country over the last five (5) years, and therefore provide a significant portion of the revenue necessary to achieve the development objectives of the Government of the Republic of Trinidad and Tobago (GORTT). The MEEA has defined some basic roles for the achievement of the Country’s vision. These include:

1. Leveraging the energy sector to create conditions for long-term development;
2. Gaining for Trinidad and Tobago an economic competitive advantage; and
3. Setting and maintaining core values for the energy sector.

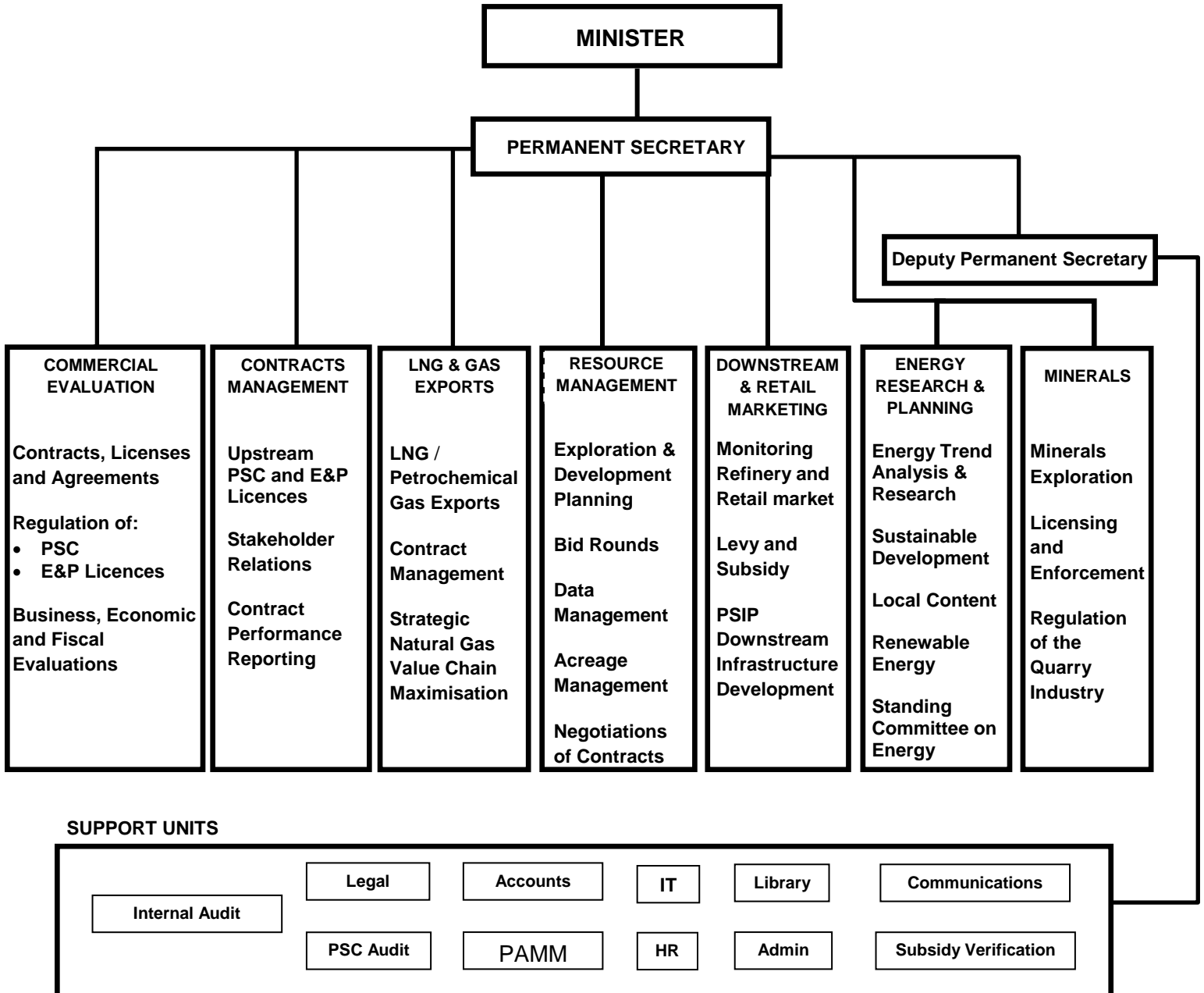
Organisational Structure of the MEEA

The MEEA comprises seven (7) Technical Divisions and eleven (11) Support Units as follows:

Technical Divisions	Support Units
Commercial Evaluation	Accounts
Contracts Management	Administration
Downstream and Retail Marketing	Communications
Energy Research and Planning	Petroleum Asset Monitoring and Measuring
LNG & Gas Exports	Human Resource
Minerals	Information Technology
Resource Management	Internal Audit
	Legal
	Library
	Production Sharing Contract Audit
	Subsidy Verification

ORGANISATION CHART

Fiscal 2015



DRAFT ADMINISTRATIVE REPORT
FISCAL 2015

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LIST OF ACRONYMS

AG Office	Office of the Attorney General
ALNG	Atlantic LNG
bbls	barrels
BCF	Billion Cubic Feet
BG	British Gas Group
BGTT	British Gas Trinidad and Tobago Limited
BHP	BHP Billiton Trinidad and Tobago Limited
BOLT	Beach Oilfield Limited
bopd	barrels of oil per day
bpTT	British Petroleum Trinidad and Tobago Limited
CEC	Certificate of Environmental Clearance
CED	Commercial Evaluation Division
CEIS	Caribbean Energy Information Systems
CGCL	Caribbean Gas Chemical Limited
Chevron	Chevron Trinidad and Tobago Resources SRL
CLF	Compact Fluorescent Lamp
CMD	Contracts Management Division
CNG	Compressed Natural Gas
CO ²	Carbon Dioxide
CPC	Chief Parliamentary Counsel
CRS	Carbon Reduction Strategy
DGUG	Downstream Gas Utilisation Group

DRM	Downstream and Retail Marketing
E&P	Exploration and Production
ECMA	East Coast Marine Area
ECTT	Energy Chamber of Trinidad and Tobago
EE	Energy Efficiency
EITI	Extractive Industries Transparency Initiative
EMA	Environmental Management Authority
EOG	EOG Resources Trinidad Limited
EOR	Enhanced Oil Recovery
ERPD	Energy Research and Planning Division
FCCU	Fluidised Catalytic Cracking Unit
FMV	Fair Market Value
FOB	Free on Board
FSV	Field Storage Value
GF	Green Fund
GIS	Geographic Information Systems
GOP	Gasoline Optimisation Project
GORTT	Government of the Republic of Trinidad and Tobago
HDR	High Daily Rate
HR	Human Resource
HSE	Health, Safety and Environment
ICS	Incident Command System
ICT	Information and Communications Technology

IHRIS	Integrated Human Resource Information
IPSC	Incremental Production Service Contract
IT	Information Technology
LACT	Lease Automatic Custody Transfer
lge	Litre Gasoline Equivalent
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
M ³	Cubic Metres
MAC	Mineral Advisory Committee
MARPOL	International Convention for the Prevention of Pollution from Ships
Massy	Massy Holdings Limited
MC	Mitsubishi Corporation
MDTF	Multi-Donor Trust Fund
MEEA	Ministry of Energy and Energy Affairs
MGCC	Mitsubishi Gas Chemical Company Inc.
MMbtu	Million British Thermal Unit
MMscf/d	Millions standard cubic feet per day
Moraven	Mora Oil Ventures Limited
MT	Metric Tonnes
MTBE	Methyl Tert-Butyl Ether
MTPD	Metric Ton Per Day
MTPY	Metric Ton Per Year
NCMA	North Coast Marine Area

NDC	National Defence College
NE	The National Energy Corporation of Trinidad and Tobago Limited
NESC	National Energy Skills Centre
NGC	The National Gas Company of Trinidad and Tobago Limited
NGC CNG	NGC CNG Company Limited
NGL	Natural Gas Liquids
NIHERST	National Institute of Higher Education, Research, Science and Technology
NIKO	Niko Resources Trinidad Limited
NOSCP	National Oil Spill Contingency Plan
NPMC	Trinidad and Tobago National Petroleum Marketing Company Limited
OAS	Organization of American States
OEM	Original Equipment Manufactured
OLADE	Latin American and Caribbean Energy Organisation
OSH	Occupational Safety and Health
PAMM	Petroleum Asset Monitoring and Measurement
PDVSA	Petroleos de Venezuela SA
Petrotrin	Petroleum Company of Trinidad and Tobago Limited
PFRC	Petroleum Fiscal Review Committee
PLCC	Permanent Local Content Committee
PLIE	Point Lisas Industrial Estate
PMCD	Public Management Consulting Division
ppm	Parts Per Million
PSC	Production Sharing Contract

PSIP	Public Sector Investment Programme
PV	Photovoltaic
RE	Renewable Energy
Repsol	Repsol YPF Trinidad and Tobago Limited
RLE	Royalty Lease Evaluation
RM	Resource Management
RML	Retail Marketing Licence
RTW	Road Tank Wagon
SCE	Standing Committee on Energy
SCEBI	Sustainable Energy Capacity Building Initiative
SEW	Single Electronic Window
Shell	Shell Trinidad Limited
SVU	Subsidy Verification Unit
T&TEC	Trinidad and Tobago Electricity Commission
TED	Trinidad Exploration and Development Company Limited
TTBS	Trinidad and Tobago Bureau of Standards
TTDAA	Trinidad and Tobago Deep Atlantic Area
TTEITI	Trinidad and Tobago Extractive Industries Transparency Initiative
UAN	Urea Ammonium Nitrate
UNDP	United Nation Development Programme
UNIPET	United Independent Petroleum Company Limited
UTT	The University of Trinidad and Tobago
UWI	The University of the West Indies

WIEGL	West Indian Energy Group Limited
WML	Wholesale Marketing Licence
WPAC	Work Permit Advisory Committee
WRAP	Wind Resource Assessment Programme

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EXECUTIVE SUMMARY

The energy sector plays a pivotal role in sustaining Trinidad and Tobago's domestic economy by contributing substantially to GDP, revenue and exports. The Ministry of Energy and Energy Affairs, monitors and regulates the sector through its policies, plans and programmes, which aim to maximize the returns from the country's energy and mineral resources for the benefit of its citizenry. The Annual Administrative Report for Fiscal 2015, which was prepared in accordance with statutory requirements under Sections 66A and 66D of the Constitution of the Republic of Trinidad and Tobago, gives an account of the MEEA's stewardship of the sector during fiscal 2015. The Report highlights the major accomplishments of the Ministry, based on its mandate to monitor, control and regulate the energy and minerals sector in Trinidad and Tobago and outlines plans for the upcoming fiscal year.

As a regulator of the oil, gas and minerals sector, the MEEA played an instrumental role in the achievement of a major milestone in fiscal 2015, namely, the achievement of EITI Compliant Country status by Trinidad and Tobago. The EITI is a global initiative that was launched in 2003 with the aim of increasing accountability over revenues paid to host governments by companies engaged in the exploitation of natural resources in their respective extractive sectors and is recognized as the global gold standard for natural resources management. The EITI International Board admitted Trinidad and Tobago to the EITI with Candidate Country status in March 2011, and within a period of four (4) years, with the participation of the major upstream oil and gas companies, Trinidad and Tobago published four (4) EITI Reports covering fiscal years 2010 to 2015. These reports reconciled payments made by the upstream energy companies with Government's revenue receipts. A review of the published reports by the EITI International Board found no major discrepancies and Trinidad and Tobago was judged to have met the requirements of the EITI Standard. In January 2015, Trinidad and Tobago was granted EITI Compliant Country status, the highest level of membership of the EITI.

With the closure of the 2013 Deep Water Bid Round and the award of two blocks, TTDA A3 and TTDA A7 to the consortium of BHP Billiton and BG International, the sector is expected to generate investment in the sum of US \$250 million, with the consortium's commitment to the Minimum Exploration Work Programme. Revenue is also expected to accrue to the country via the Government's Share of Profit Petroleum and other revenue streams to be realized from several

financial obligations, including contributions to scholarships and research and development. The steep fall in oil and gas prices, which began around October 2014, has had a negative effect on the promotion of further bid round activity within the MEEA. Nevertheless, the Ministry used this period of inactivity to re-evaluate its strategy in a bid to attract investors in this difficult economic climate. As a result, the MEEA explored several initiatives in preparation for potential onshore and offshore bid rounds in the near future. These included, inter alia:

- Evaluation of open deep-water acreages to identify those most suitable for inclusion in the next Deepwater Bid round;
- Evaluation of open blocks nearshore as well as those in shallow to average water depths to determine their prospectivity;
- Evaluation of onshore blocks relinquished by Petrotrin to determine their suitability for inclusion in a proposed Onshore Bid Round ; and
- Review of the Ministry's current pre-qualification and Competitive Bidding Order in line with best practices.

Focus on the Petrotrin's farm-out and IPSC programmes during the reporting period resulted in a higher level of drilling and workover activities. However, in spite of the increase in these activities, key statistics reflected a marginal decline in total crude production by 0.16% from the level recorded in fiscal 2014. Average daily gas production also declined by 5% in fiscal 2015, brought about by ongoing maintenance activities as well as natural base decline. It is expected that planned exploration activities in the upcoming fiscal period would arrest this rate of decline in production experienced in fiscal 2015. During the review period, LNG production was restricted to below maximum capacity because of shortfalls in contracted supply as well as deliberate cutbacks to facilitate maintenance activities. With respect to LNG exports, there were no restrictions; however, total exports to global destinations still reflected a decline when compared with the previous fiscal period. Total LNG exports to Chile, Argentina, USA, Brazil and Spain, in fiscal 2015, amounted to 681, 261,575 MMBtu. Petrochemical plants were affected by gas curtailment issues, however they experienced little to no changes in production which fluctuated between +5% and -5% between the current review period and the past review period.

The MEEA's initiatives are supported by efforts to promote cooperation in energy. Most notable among these initiatives in fiscal 2015 was the signing of the following agreements:

- (i) *The Unitization Agreement for the Exploitation and Development of Hydrocarbon Reservoirs of the Manakin-Cocuina Field that Extends across the Delimitation Line between the Republic of Trinidad and Tobago and the Bolivarian Republic of Venezuela (28 February, 2015, Port of Spain); and*
- (ii) *The Framework Agreement on Energy Cooperation between the Government of the Republic of Trinidad and Tobago and the Government of the Bolivarian Republic of Venezuela (24 February, 2015, Port of Spain).*

The signing of these agreements was of significant relevance in the context of Latin American and Caribbean integration. These agreements contribute towards the further deepening of the energy relationship between the two countries and lay the foundation for the development of cooperation mechanisms for the identification and joint implementation of projects within the hydrocarbon value chain.

In its role as regulator of the minerals sector, the MEEA developed a White Paper on Minerals Policy as well as new draft Regulations under the Minerals Act, which were both approved by Cabinet and laid in Parliament in June 2015.

HUMAN RESOURCE UNIT

The mission of the Human Resource (HR) Unit is to adequately staff the MEEA with people who possess the right skills and competencies to propel the achievement of the Ministry's key objectives, in a harmonious and motivating environment. The mission's intent is therefore, to strengthen the organisation through recruitment when necessary, to build human resource capacity through training and development and to develop incentives to attract, motivate and retain employees.

The objectives of the HR Unit are:

- To assist the MEEA in achieving its mandate by effectively resourcing it with the right people who possess the right skills, abilities, attitudes and who are capable of responding to a highly technical and dynamic work environment;
- To develop well-trained and highly motivated employees;
- To increase employees' job satisfaction and self-actualisation;
- To continuously seek to improve the quality of work life;
- To maintain and implement ethical policies; and
- To encourage socially responsible behaviour.

Achievements for Fiscal Year 2015

In fiscal 2015, the MEEA operated with a staff establishment of 288 permanent positions. Of the 288 positions, 140 were filled by permanent officers, 66 were filled by temporary/acting officers and the remainder of posts on the establishment remained vacant. During the review period however, the Unit vigorously pursued the filling of vacancies in conjunction with the Service Commissions Department, in order to comply with a mandate given to the Director of Personnel Administration to fill all Public Service vacancies. Pursuant to this directive, 45% of the vacant positions within the MEEA's staff establishment were filled but 45 of these positions remained vacant despite the Unit's effort to fill them all. As a result, the MEEA remained challenged in its attempt to address technical staff shortages, which arose from a number of resignations and retirements from the Public Service including positions such as Geologist, Geophysicist,

Petroleum Engineer, Petroleum Inspector, Petroleum Chemist, Chemical Engineer and Draughtsman I.

The contract establishment comprised 176 positions. Forty-five (45) of these positions were filled while 131 remained vacant. In addition, 11 positions of Energy Professional Assistants and 17 positions of daily-rated employees were filled. Further, the HR Unit continued to collaborate with the Ministry of Public Administration, Scholarships Division, to accommodate 15 returning scholars, also known as Associate Professionals, with qualifications in the engineering and geoscience fields. Twenty-three On-the-Job Trainees were also engaged to provide additional technical/clerical support to all Units and Divisions of the MEEA. The Communications Unit was also fully staffed following the hiring of three (3) additional employees on a contractual basis.

Approximately 90 percent of staff members were engaged in technical, professional and personal development training. Participants attended both in-house courses conducted by local and foreign-based training providers, as well as other publicly held seminars.

With respect to Benefits Management, 88 percent of retirement benefits for Public Officers and Daily Rated Employees were processed, and 46 percent of Pension and Leave Records were updated. In addition, 80 percent of Contract Gratuity in respect of Contract Officers were processed; 90 percent of Leave Applications (i.e. sick leave, casual leave, personal leave, vacation leave, maternity leave, no-pay leave, and extension of sick leave) were processed; 40 percent of incremental awards were processed to Public Officers and 18 Confirmations of Appointments were completed. Counselling Services under the Employee Assistance Programme were extended to all staff who requested the service.

The HR Unit also ensured the payment of salaries and allowances to all members of staff with minimum error and delay through the utilisation of its Integrated Human Resource Information System (IHRIS). Four (4) percent of MEEA's staff requested assistance with grievance issues and two (2) percent of these were successfully mediated.

ADMINISTRATION UNIT

The vision of the Administration Unit is to strengthen the operational relationship among all Units and Divisions and to ensure the timely delivery of relevant services within its purview to all internal clientele. Its mission is to ensure that the organization has the tools needed to execute professionally and effectively its mandate and to strive to deliver quality and efficiency while preserving the integrity of the Unit.

The Unit's strategic objectives are:

- To clearly establish formal authority lines and responsibility;
- To minimise costs;
- To increase the availability of persons to carry out physical handling functions; and
- To follow proper technical guidance.

The following deliverables guide the Administration Unit in its day-to-day operations:

- Handle the physical needs of the Ministry in a timely manner;
- Ensure that assets are kept in such a manner that business continuity is not compromised;
- Ensure that costs of operation are minimized;
- Ensure that staff are duly authorized to carry out functions;
- Process Official Overseas Travel and Domestic Travel arrangements and documents for staff on a timely basis; and
- Distribute mail in a timely manner and ensure that services are performed smoothly and efficiently.

Achievements for Fiscal Year 2015

During the period under review, the Unit completed the following:

- Completion of inventory exercise;
- Implementation of the stock cards according to the stores regulations; and
- Training of staff in Registry Procedures.

ACCOUNTS UNIT

The Petroleum Act 62:01 of 1969 and Petroleum Regulations of 1970 regulate the following financial operations of the MEEA:

- (i) the Petroleum Impost, which is paid by “*every licensee in respect of all petroleum won and saved, at such rates as the Minister may determine by issue of a Rating Order.*” Funds from the Petroleum Impost are used to recover the recurrent expenditure of the MEEA disbursed by the Ministry of Finance under the various sub-heads for the previous calendar year;
- (ii) Royalty payments on oil and gas production; and
- (iii) Payments made under the terms of various licenses and contracts administered by the MEEA.

The MEEA also collects revenue on behalf of the Government of the Republic of Trinidad and Tobago (GORTT), through the administration of Production Sharing Contracts (PSCs) with respect to Government’s share of profit from oil and gas produced under the terms of those contracts.

In addition, from the Government’s share of profit and on behalf of companies operating under PSCs, the MEEA meets liabilities incurred according to the following:

- The Petroleum Production Levy and Subsidy Act (Chapter 62:02);
- The Petroleum Taxes Act (Chapter 75:04); and
- The Income Tax Act (Chapter 75:01)

Budget Allocation and Expenditure

For the financial year ending September 30, 2015, the Ministry was allocated the revised sum of **TT\$ 5,267,742,400**. The actual expenditure was **TT\$4,729,126,586**. The breakdown of the allocation and actual expenditure are outlined at **Table I**.

Table I
Ministry of Energy and Energy Affairs
Revised Estimates and Actual Expenditure
(October 2014- September 2015)
Head 40: Ministry of Energy and Energy Affairs

Sub-Head	Revised Estimates TT\$	Actual Expenditure TT\$	Variance TT\$
01: Personnel Expenditure	58,732,600	43,036,899.07	15,695,700.93
02: Goods and Services	121,477,027	79,070,546.31	42,406,480.69
03: Minor Equipment Purchases	3,890,000	100,362.44	3,789,637.56
04: Current Transfers and Subsidies	5,062,759,773	4,590,710,510.27	472,049,262.73
09: Development Programme	20,883,000	16,208,267.76	4,674,732.24
TOTAL	5,267,742,400.	4,729,126,585.85	538,615,814.15

Calculation and Reconciliation of Royalty

A breakdown of revenue collected for the last three (3) fiscal years is outlined at **Table II**. During the period under review, the Ministry collected **TT\$1,554,862,498** in royalties which represented a decrease of approximately **TT\$ 851,579,648** or 35 percent **from** the previous year.

Table II
Revenue Collected by the Ministry of Energy and Energy Affairs
(October 2014- September 2015)

		2012/2013	2013/2014	2014/2015
		TT\$	TT\$	
Royalty Collected		2,380,977,922	2,406,442,146	1,554,862,498
Other Sources of Revenue Collected*		800,000,000	125,217,726	144,193,486
Total Revenue Collected		3,180,977,922	2,531,659,872	1,699,055,984

**Other Sources of Revenue include the Oil Impost, Retail Marketing Licences, CNG Licences and Bunkering Licences*

Revenue and Disbursements under Government's Share of Production Sharing Contracts

Receipts from PSCs include the profit share from Production Sharing Blocks, Financial Obligations, including Administrative Charges, Training Contributions, payment towards Research and Development and Scholarship Funding. Disbursements under PSCs comprised the transfer of funds from the Government share of profit account to meet tax obligations, other Government liabilities to the contractor and payments and expenses for Scholarships, Training and Research and Development.

The excess of disbursements over receipts in a fiscal year relates to the payment of contractors' tax liabilities from the Government Share Profit and is met from the brought forward surplus from previous year. **Table III** below, provides a breakdown of the receipts and disbursements from fiscal 2013 to fiscal 2015

Table III
Production Sharing Contracts
Government's Revenue and Disbursements

	2012/2013	2013/2014	2014/2015
	TT\$	TT\$	TT\$
Receipts	3,974,868,424.	5,412,060,066.	4,068,932,224
Disbursements	5,596,398,556.	4,796,333,090.	3,228,810,723

INTERNAL AUDIT UNIT

The Internal Audit Unit operates with a staff complement of one (1) Auditor II, one (1) Auditor I, two (2) Auditing Assistants and one (1) Service Provider who provides the services of Audit Officer. The Unit undertakes key internal audit responsibilities, which requires it to have an independent appraisal function. In this capacity, the Unit has the responsibility to examine and evaluate the financial as well as the operational activities of government entities and to give support to Accounting Officers in the effective discharge of their pecuniary responsibilities. Internal Audit provides an objective assurance designed to help the organization accomplish its objectives, and it adds value by adopting a systematic disciplined approach to the evaluation and improvement of the effectiveness of controls, risk management and governance.

The scope of internal auditing encompasses, but is not limited to, the examination and evaluation of the adequacy and effectiveness of the organization's governance, risk management, and internal controls. The internal auditing process also requires an evaluation of the quality of performance that an organization exhibits in carrying out its responsibilities in fulfillment of its stated goals and objectives.

Accomplishments for Fiscal Year 2015

During the 2015 fiscal period, the Unit placed emphasis on the following areas:

Performance and Efficiency Audits

Performance Audits were conducted to determine whether the Ministry's operations, programmes and systems were being managed effectively and efficiently. Efficiency Audits were conducted to determine whether the resources of the Ministry were being managed in an economical and efficient manner in terms of appropriate utilization of manpower, equipment and assets. These entailed the performance of objective and systematic examinations of the workings of the MEEA to provide management with an independent assessment of its performance as well as information to improve public accountability and facilitate accurate decision-making. To this end, the Unit conducted Performance and Efficiency Audits on the following:

- The Accounting Unit;
- The Renewable Energy Secretariat;

- The Sports and Family Day event; and
- The System for recovery of overpayments.

The results of the Audits showed that the MEEA had appropriate processes, practices, procedures and controls in place to manage its various functions and that the existing internal control system provided reasonable assurance with respect to mitigating risks despite some control weakness noted during the audit. Based on its findings, Internal Audit recommended the strengthening of these controls to ensure efficiency in the delivery of service.

Financial Audits/Operational Audits

The Internal Audit Unit conducted Financial and Operational Audits to provide an independent report on whether the Ministry's financial system was robust and in accordance with recognized criteria; to offer reliable information and feedback with respect to internal control as well as to confirm compliance with existing laws and regulations.

Expenditure Audit

For fiscal 2015, the recording of all expenditure under the Ministry's various Heads, Sub-Heads, Items and Sub-Items were checked, cross-checked and verified to ensure that acceptable and reliable procedures were being followed. Verification of the Ministry's expenditure also served the dual purpose of ensuring the accuracy of the Appropriation Account for fiscal 2015. Areas targeted for special audit scrutiny included the certification of the correctness and accuracy of entries with respect to Departmental Vouchers, Schedules of Accounts and Vote-Books. These exercises were undertaken to assess the adequacy of the processes and controls in place, to accurately manage the accounting functions as outlined in Financial Regulations, Instructions and other Circulars, as well as to ensure that the Ministry's financial performance was being accurately recorded and appropriately reported.

Some shortcomings and weaknesses were observed during the audit examination, including lack of evidence of official approval for authorization of payment and absence of specimen signatures of certifying officers. The advice and assistance of the Public Management Consulting Division

(PMCD) was enlisted and the system, as required by the Comptroller of Accounts, was re-established to facilitate sound operating and financial controls.

Contract Management Audit

Scrutiny of the system of Contract Management formed an integral part of the Unit's programme of work in fiscal 2015, consequent on the increase in contract employment in the Ministry. This exercise was undertaken to ensure that contracts were valid, as well as to establish whether procedures were appropriately structured to permit assessment of the quality and timeliness of services provided by contractors.

From the documents examined, Internal Audit was able to ascertain that contracts were awarded in a timely manner, desired outputs were managed and monitored appropriately by supervisors and contracts were in accordance with terms and conditions as outlined by the Ministry of Public Administration in its guidelines for devolved functions.

Revenue Audit

Revenue and Revenue Accounting also formed a significant part of Internal Audit's programme of work. This exercise was undertaken to establish whether appropriate policies, procedures, controls and systems were in place to ensure that the revenue system complied with Treasury directives. In addition, the adequacy of the Revenue system was assessed to ensure efficient and timely collection and deposit of all revenues.

In the review period, the system of accounting for revenue was strengthened by the addition of two (2) members of staff and Internal Audit was able to provide assurance with respect to the accuracy of the Ministry's cashbook. The Unit recommended that the responsibilities which govern the 'Receipt of Public Moneys', as outlined in the Exchequer Audit Act, be adhered to and the required segregation of duties be put in place with immediate effect.

Inventory Audit

Specific attention was placed on the system of Inventory Control in fiscal 2015 to ensure the safeguarding of the assets of the Ministry and to establish that there was neither wastage, misappropriation nor theft and that goods and services were procured in accordance with sound procurement procedures and in accordance with applicable rules and regulations. In addition,

efforts were made to verify that the Ministry received value for money expended. In this regard, the Unit conducted surveys at the Port of Spain and South offices as well as the MEEA's warehouse. In accordance with Stores regulations (1965), Internal Audit recommended the performance of periodic inspections regarding the condition of goods in stock, the manner in which they were being stored as well as timely Boards of Survey for unserviceable items.

Additional Services

Special Projects

Internal Audit undertook special audits during this reporting period. The Unit provided subject advice on request and offered non-audit services to the Ministry, which included, but was not limited to providing members of staff with tools, techniques and training in core financial areas. Some of these projects included:

- Reinforcing and advising the HR Unit on the system of award of increments;
- Advising on the structure and staffing in the Accounts Unit as prescribed by the Treasury Division; and
- Reconciling quarry production data with quarry operators for further action by the Minerals Division.

Observations

All audits were conducted in accordance with Regulations, circulars, guidelines and accepted practices within the Public Sector's Financial Management System. In an effort at strengthening the adequacy of internal control, Internal Audit recommended training for the accounting staff in "**Accounting Procedures in Government**" offered by the Ministry of Public Administration. Internal Audit determined that the records examined, provided sufficient evidence to give reasonable assurance that the MEEA had adequate systems in place to ensure effective management of its functions.

COMMUNICATIONS UNIT

The Communications Unit is responsible for efficiently managing communication with all of the Ministry's stakeholders, both internal and external. The promotion of the Ministry's initiatives, strategies and plans – which include the management and coordination of ceremonies, functions and programmes – also falls under the Unit's remit.

Achievements for Fiscal Year 2015

Meetings/Conferences/Functions

During the period under review, the Unit facilitated the hosting of the following meetings/conferences/functions:

- MEEA's Divali Function – October 2014;
- Setting up of an Energy booth at Divali Nagar – October/November 2014;
- The MEEA's End of Year Function – December 2014;
- Signing of PSCs;
- Setting up of an Energy Pavilion at the Energy Conference – January 2015;
- Hosting of MEEA's Emancipation Function – August 2015;
- Decoration of MEEA's North and South offices for Independence and Republic Day – August/September 2015;
- Launch of Ryder Scott Report - July 2015; and
- Launch of the DME Plant – September 2015

Public Education

The Unit undertook the following public education campaigns in fiscal 2015:

- **The Energy Capsule** – a one-minute on-going television series used to promote the many initiatives of the MEEA to the public; and
- **The Energy Report** – 2-3 minute video features also used to highlight the initiatives of the MEEA in detail.

Internal, External and Internal Publications

The Unit also engaged in the development of the following content for publication during the review period:

- **In de Loop** – Disseminated three (3) issues of this internal newsletter during the period. The goals of the newsletter are to highlight the work of various Units/Divisions within the MEEA and to foster camaraderie amongst staff members;
- **Facebook** – Updated/populated the MEEA’s Facebook account with information/photos related to energy events/projects/initiatives;
- **YouTube** – Updated the MEEA YouTube channel with 14 energy-related videos; and
- **External** – Produced published and distributed another issue of the *Energy Platform* to the MEEA’s stakeholders in the Energy Sector as well as to the various State Agencies, which fall under the Ministry’s purview.

INFORMATION TECHNOLOGY UNIT

The mission of the Information Technology Unit (ITU) is to strategically integrate cutting-edge technologies in all MEEA's business processes, in adherence with world-class standards, to ultimately provide superior services to clients.

The strategic objectives of the Unit include the following:

- Make industry data easily and securely accessible to its internal and external stakeholders;
- Provide a highly robust, secure and resilient ICT network infrastructure;
- Ensure that the MEEA obtains the highest level of business value from its IT investments;
- Provide clients with high levels of services delivery;
- Implement tools for improved communication and knowledge sharing;
- Implement tools to support process and workflow improvement; and
- Manage ICT risks and recommend measures to manage information security.

Consistent with its strategic objectives, the Unit continued to perform a number of functions over the short, medium and long term with a view to enhancing its service delivery and support to its clients. Toward this end, in fiscal 2015, the Unit upgraded its ICT infrastructure, updated its Data Hub with current industry data, and launched a system to capture production data from the minerals sector.

Achievements for Fiscal Year 2015

Client Service Delivery and Support

- Provided ongoing IT support services to the Ministry and external IT stakeholders;
- Resolved approximately 3,352 IT incidents during the period under review;
- Deployed new personal computers, laptops and tablets to users;
- Provided management and support for access-control swipe card programming; system administration; telephone systems provisioning and repair; mobile phone technical support; multimedia and videoconferencing systems and printers and printer consumables;
- Renewed IT support contracts; service level agreements and annual maintenance and support for all special purpose engineering, geoscience and economic applications; and
- Continued to manage the IT datacentre using standard Service Level agreements.

Information Systems and Application Support

- Undertook an analysis on the requirements for Enterprise GIS for the MEEA utilizing data from interviews, data gathered by the GIS Committee, briefs, presentations and consultant reports up to 2015;
- Completed design of the hardware solution for the Enterprise GIS and submitted recommendations for the formation of a GIS committee for the Enterprise GIS implementation;
- Continued system development work on the upgraded online Upstream Petroleum Data Management System to be launched in November 2015;
- Continued providing support for MEEA's Geology and Geophysics users to maximize usage of seismic interpretation applications;
- Provided onsite consultancy support for data loading, application support and other issues related to the usage and workflows of Landmark upgraded R5000 Openworks and DecisionSpace seismic interpretation applications;
- Conducted training in Openworks (OW) R5000 fundamentals, OW data tools for interpreters and Petrel seismic interpretation application;
- Commenced a capacity planning exercise for moving the existing and future seismic data that were in a state of readiness, to disk storage; and
- Provided ongoing support in the installation and maintenance of all special technical engineering, economic, geoscience and other special purpose applications used by the staff of the Ministry.

Server Systems, Security and Infrastructure

- Acquired, installed, configured and tested print management software to reduce wastage and improve the management of the networked and desktop printers;
- Commenced installation of an upgraded physical access control system at POS and South offices;
- Acquired equipment for upgrading the core switch infrastructure as well as the core firewall infrastructure;

- Commenced work on implementation of the enterprise backup solution to meet the demand for the increasing quantity of MEEA's data that needed to be backed-up as a sub-set of the disaster recovery strategy;
- Implemented a schedule of server system images to facilitate recovery in the event of hardware failure;
- Upgraded servers that were running Windows 2003, in keeping with Microsoft's End of Life support for Windows 2003 Servers in July of 2015;
- Completed installation and configuration of the Energy Data Hub hardware infrastructure; and
- Provided ongoing infrastructure systems support and maintenance for regular server patching; fixes and upgrades; backups; server management; policy change implementation; active directory; email; file access management; cooling systems; backup battery power maintenance and repair; and email on phones and tablets.

LIBRARY UNIT

The Library serves as the information hub and repository for its clients in the energy and mineral sectors in Trinidad and Tobago. It is responsible for acquiring, managing and disseminating information on these sectors from relevant and authoritative sources. Its main clientele is the Ministry's staff, which comprises a wide range of disciplines including petroleum, chemical and mechanical engineers, petroleum inspectors, energy analysts, economists, administrators, geologists, geophysicists, accountants, legal officers, and their support staff. The Library's collection therefore, reflects these varied subject areas. A branch library, which caters to the specific needs of the Petroleum Asset Monitoring and Measurement (PAMM) Unit, is located at the South office. Other stakeholders include teachers and students at all levels, personnel of the oil, gas, petrochemical and service companies and their affiliates.

The role and responsibilities under which the Library operates are as follow:

- Direct provision of information services;
- Selection, acquisition and processing of documents;
- Selective dissemination of information;
- Processing of bibliographic information contained in the computerized database for the production of indexes and bibliographies;
- Repository for the relevant documents and audio visual material; and
- Responsible for all activities related to its role as the National Focal point of the Caribbean Energy Information Systems (CEIS)

Achievements for Fiscal Year 2015

During the period under review, the library accomplished the following objectives:

- Met the information needs of internal and external users and continued the subscription of some of the online resources readily used by the Ministry's staff in the execution of their duties, including Platts, Rubali, Bloomberg and LexisNexis;
- Promoted free local and international online research resources, which were beneficial to the Ministry's staff personally and professionally;

- Participated in training related to book and document repair and conservation management through external organizations;
- Participated in workshops on Performance Management, Records Management, Occupational Safety and Health (OSH), Introduction to Intellectual Property and Copyright, and Cataloguing and Classification;
- Fostered/strengthened relationships with other libraries and institutions in order to share resources;
- Filled key professional posts of Librarian III and Librarian I. As a result, the backlog of print material to be catalogued, classified or double-checked were attended to and were considerably reduced;
- Resumed the clean-up of database to ensure the upkeep and continuous maintenance as well as the ease of retrieval and relevance of information;
- Commenced digitization of older or original print items relating to the history and development of the local energy industry as well as local articles for research and archival purposes; and
- Started an Optical Character Recognition (OCR) initiative in which digitized historical print material that were not searchable were undergoing the OCR process in order to become searchable.

LEGAL SERVICES UNIT

The vision of the Legal Services Unit (LSU) is to be regarded as a highly valued and well-respected team within the MEEA and by other stakeholders, through provision of first class legal services. Its mission is to provide specialized legal expertise to the MEEA on matters pertaining to the oil, gas, minerals and petrochemical sectors, in a proficient, expedient and professional manner.

The Unit's key functions include **advising** the Government of the Republic of Trinidad and Tobago (GORTT) on legal issues in the energy and minerals industry; **preparing** contracts, licences, deeds, agreements, Memoranda of Understanding; **negotiating**, as part of GORTT's team, with international and local energy companies; and **revising** and updating petroleum and minerals legislation.

The strategic objectives listed below guide the performance of the LSU:

- To prepare legally sound and accurate contracts and agreements, which include, inter alia, Production Sharing Contracts, Guarantees, and IT Contracts;
- To prepare legally sound and accurate Licences which include Exploration and Production (E&P) Licences and Retail Marketing (RM) Licences;
- To prepare legal opinions on energy sector matters;
- To reform energy legislation;
- To review the legislative framework in the minerals sector;
- To prepare draft legislation for Chief Parliamentary Counsel (CPC);
- To participate in negotiations as part of MEEA's team;
- To review documents submitted by State Agencies that fall under the purview of the MEEA and provide advice and collaboration as needed;
- To vet and draft documents that require legal input e.g. Cabinet Notes, letters etc.;
- To serve on or assist Cabinet appointed and other Committees including the Minerals Advisory Committee and the Technical Evaluation Committee;
- To attend and participate in meetings on matters that affects the energy industry;
- To provide timely legal advice;
- To establish and maintain the Petroleum Register as required by the Petroleum legislation;
- To establish a legal database to manage and access all legal documentation; and

- To ensure adherence to legislative requirements and contractual obligations.

Achievements for Fiscal Year 2015

In fiscal 2015, the LSU prepared legal opinions/advice on the following matters:

- Trinity Exploration and Production (Galeota) Limited- request to purchase diesel at the subsidized rate for its production business in the Galeota Block;
- Queries regarding Trinidad and Tobago Pilots Association's application for approval of a new diesel tank at Caribbean Dockyard compound to supply Bridge Control Services Limited Pilot Boats;
- EITI standard requirement - beneficial ownership/contracts and register of licences/allocation;
- Assignment of interest from Lennox Production Services Limited to Petroleum Contracting Services Limited- Lease Operatorship Block WD-16;
- Phoenix Park Gas Processors Limited;
- Renewal of Exploration and Production (Public Petroleum Rights) Licences;
- Request by Lease Operators Limited for data within and outside the Rio Claro Block;
- BHP Billiton CO-138 Tanker Loading; and
- Surplus income from the sale of petroleum products.

The following agreements/contracts/licences were prepared/reviewed by the Unit in fiscal 2015:

- Project Agreement for the Establishment of a Natural Gas to Petrochemicals Complex by and among the Government of the Republic of Trinidad and Tobago, The National Gas Company of Trinidad and Tobago Limited, Mitsubishi Gas Chemical Inc., Mitsubishi Corporation, Massy Holding Ltd., Caribbean Gas Chemical Limited and Caribbean Gas Chemical (Barbados) Limited;
- Debt Tail Buy-Down Agreement relating to the Trinidad Methanol and Dimethyl Ether Project among the Government of the Republic of Trinidad and Tobago, The National Gas Company of Trinidad and Tobago Limited, Caribbean Gas Chemical Limited and MUFG Union Bank, N.A;

- Environmental Indemnity Agreement by and among the Government of the Republic of Trinidad and Tobago and Caribbean Gas Chemical Limited;
- Consent and acknowledgement for the Project Agreement and the Environmental Indemnity Agreement relating to the Trinidad Methanol and Dimethyl Ether Project among the Government of the Republic of Trinidad and Tobago, Caribbean Gas Chemical Limited and MUFG Union Bank, N.A;
- Dimethyl Expansion Agreement among the Government of the Republic of Trinidad and Tobago, The National Gas Company of Trinidad and Tobago Limited, NGC Petrochemicals Limited and Mitsubishi Corporation, Mitsubishi Gas Chemical Company, Inc., Massy Holdings Ltd and Caribbean Gas Chemical Limited;
- PSC Amendment Agreement for Block 5(b);
- Framework Agreement on Energy Sector Cooperation between the Government of the Republic of Trinidad and Tobago and the Government of the Bolivarian Republic of Venezuela signed on 24 February 2015;
- Unitisation Agreement for the Exploitation and Development of Hydrocarbon Reservoirs of the “Manakin-Cocuina Field” that extend across the delimitation line between the Republic of Trinidad and Tobago and the Bolivarian Republic of Venezuela;
- Execution of the Project Development Agreement for the Establishment of a Mid-Scale LNG Facility in Trinidad (Gasfin); and
- Memorandum of Understanding relating to the Establishment of a Natural Gas to Petrochemicals Complex.

The following contracts were prepared/executed:

- Contract for the Provision of Consulting Services for the Development of a Natural Gas Master Plan 2014-2024 for the Ministry of Energy and Energy Affairs dated 12 December 2014;
- Contract for employment of staff;
- Contract on Mini-scoping Study of the T&T Extractive Sectors for the period 2009-2013; and
- Contract for the Services of an Auditor to audit the World Bank MDTF.

The LSU issued/executed the under-mentioned licences/PSCs:

- Issuance of the Wholesale Marketing Licences to Trinidad and Tobago National Petroleum Marketing Company Limited and United Independent Petroleum Marketing Company Limited;
- Issuance of the Compressed Natural Gas Marketing Licence to Peake Petroleum Limited;
- Issuance of Mining Licence to Palo Seco Agricultural Enterprises Ltd;
- Issuance of Mining Licence to Keno Construction and Quarrying Ltd;
- Execution of Exploration and Production licences for St. Mary's, Rio Claro, Ortoire and East Brighton Marine Blocks; and
- Execution of PSC for Blocks TTDA3 and TTDA7.

The Unit reviewed the following legislative matters during the fiscal 2015:

- Draft Trinidad and Tobago Extractive Industries Transparency Initiative Bill;
- Draft Protection of Offshore Installations Bill; and
- Legal Notice No. 111 of 2015 for the enactment of the Minerals (General) Regulations, 2015.

Cabinet Notes prepared by the Unit in fiscal 2015 included:

- *'Final Version of Documents necessary to secure Financing by Senior Lenders to Caribbean Gas Chemicals Limited for the Methanol/DME Project'*.
- *'Terms for Finance Documents between the Ministry of Finance and Economy and Senior Lenders of the Mitsubishi Methanol/DME Project'*.

The Unit completed the following miscellaneous tasks during the period under review:

- Signing and execution of Project Funding Agreement with the University of the West Indies 03 September 2015;
- Execution of Project Funding Agreement with Arthur Lok Jack Graduate School of Business on 03 September 2015;
- Draft Competitive Order for Onshore Bid Round 3015;
- Execution of a Facilities Audit Contract for a National Facilities Audit of the Energy Sector between MEEA and DNV Trinidad Limited;

- Freedom of Information response to several individuals as well as preparation of MEEA's Freedom of Information statement;
- Execution of new Trinidad and Tobago Extractive Industries Transparency Initiative Memorandum of Understanding;
- Preparation of EITI Letters of Consent on Waiver of Confidentiality Clauses in the PSCs and E&P Licences for several multinational energy companies;
- Preparation of brief to Solicitor General on the execution of a new MOU on the Implementation of the EITI in Trinidad and Tobago; and
- Preparation of responses to legal queries from foreign and local individuals and corporations on matters affecting the MEEA.

SUBSIDY VERIFICATION UNIT

The Subsidy Verification Unit was established in 2011 with a mandate to increase the efficiency of the monitoring of the diesel supply chain. The Unit commenced operations in 2012 with a staff complement of one (1) Accountant/Auditor, one (1) Statistical Analyst and one (1) Subsidy Clerk. In 2013, one (1) additional position, Statistical Analyst, was created and this position was filled in the said year.

Achievements for Fiscal Year 2015

The Unit implemented measures in 2012 to increase the efficiency of the diesel supply chain and continued to operate according to these measures, into the period under review. As a result, the unit undertook the following:

- Processed, verified, approved and recorded 33 applications by end consumers to purchase diesel at the subsidised price;
- Processed five (5) new fishing vessel applications in accordance with a pre-approved quota system established by the Ministry of Agriculture, Land and Fisheries in 2012, for the purchase a specified volume of diesel per month at the subsidised price by categories of fishing vessels registered and operating locally;
- Approved 19 new marine vessel applications for fuel at subsidized price according to established guidelines. The value of savings achieved on the petroleum subsidy cost for diesel for fiscal 2015 for marine vessels is outlined at **Table IV** below.

Table IV
Savings in Petroleum Subsidy Cost for Diesel Sold

Total volume of diesel applied for by marine vessels	15,803,292 litres
Total volume approved	14,239,618 litres
Savings in volume of diesel approved	1,563,674 litres
Value of savings in subsidy costs	TT\$3,147,797

- Trained existing staff in audit techniques and best auditing practise in accordance with International Auditing Standards to facilitate audits of:
 - Monthly subsidy claims submitted by the Wholesale Marketing Companies;
 - Purchases and sales of subsidised fuel by the Service Stations and Marinas; and
 - Purchases and sales of subsidised fuel by the Peddling Companies.

PRODUCTION SHARING CONTRACT AUDIT UNIT

The Production Sharing Contract (PSC) Audit Unit was established in January 1999 to provide assurance to the Minister that contractors complied with the terms and conditions stated in the PSCs which they signed with the MEEA. The Unit began operation with 15 active PSCs and a staff complement of seven (7), comprising one (1) Audit Manager, two (2) Senior Audit Analysts and four (4) Assistant Audit Analysts.

The vision of the unit is to be a Model PSC Audit Unit applying auditing techniques and practices, consistent with the requirements of the PSCs that meet and exceed International Standards. Its mission is to consistently ensure contractors' compliance with the requirements as outlined in the PSCs, through the conduct of timely and thorough audits.

The Unit's strategic objectives focus on providing assurance to the Minister that contractors comply with the PSCs by ensuring that:

- Financial Obligations have been satisfied by contractors, in terms of Administrative Charges, Research and Development, Training Contributions, Technical Bonus and Minimum Lease Payments);
- The Minister's Share of Profit Petroleum is accurately calculated in accordance with the provisions of Articles 18.11 and 18.14 of the PSC;
- Sales of Petroleum Products are made at arms' length prices and all amounts are brought to account; and
- Amounts claimed for Cost Recovery are properly classified and supported by adequate audit evidence.

Achievements for Fiscal Year 2015

During the review period, two (2) deep water Production Sharing Contracts were signed bringing the number of active PSCs to 30. The following highlights the achievements of the Unit in the period under review:

- Completed 46 quarterly expenditure audits, 19 quarterly revenue audits and four (4) annual audits of amounts expended in the Market Development Phase as well as 17 audits of contractors' financial obligations towards the Minister;

- Completed 20 quarterly expenditure audits, eight (8) quarterly revenue audits and four (4) annual audits of amounts expended in the Market Development Phase, all of which were ongoing from the previous period;
- Attended inventory counts in respect of 19 Blocks held by contractors, to confirm the physical existence and verify the accuracy and reliability of inventory records;
- Conducted an audit of “sole costs” incurred by one operator for years 2007 – 2012. Audit work paper files were prepared for each audit conducted and these were reviewed and audit reports were issued for same;
- Participated in meetings held by contractors. At the end of the fiscal year, the audits conducted by PSC audit staff resulted in added value of approximately USD 2.4 million; and
- Provided support to the Secretariat of the Trinidad and Tobago Extractive Industries Transparency Initiative(TTEITI), with respect to the preparation of its Report for fiscal 2012/13 as follows:
 - Completion of templates of receipts of revenue in respect of petroleum operations to facilitate the reconciliation of the amounts received by the MEEA with payments made, as reported by the various contractors; and
 - Participation in the evaluation exercise to hire an Administrator to conduct the reconciliation exercise as well as a Validator to validate the report prepared by the Administrator for the TTEITI.

PETROLEUM ASSET MONITORING AND MEASUREMENT UNIT

The Petroleum Asset Monitoring and Measurement (PAMM) Unit regulates all surface facilities in the energy sector value chain from an Engineering/Health Safety and Environment and Measurement (HSEM) standpoint. The PAMM Unit seeks to ensure that there are no errors in the determination of quantity and quality of petroleum produced (fiscalization) and retail products (taxation/quality control) or unauthorized deviations in exploration, development and operational plans. The Unit works towards minimizing cost overruns on projects that are granted tax concessions and promotes business continuity.

The Unit operates under two (2) portfolios, Engineering/Health Safety Environment and Measurement. Although distinct and separate, these two portfolios share a commonality owing to the energy-based installations where processing, handling and commercial transactions occur. They both function to manage energy sector assets as per the legal requirement of the Petroleum Act 62:01 and subsidiary Regulations.

The HSE portfolio operates from a risk management perspective with respect to energy sector assets in order to prevent or reduce harm, damage or undesirable consequences to people, property and the environment. This portfolio is intended to safeguard the State from transfer of economic or other liabilities associated with downtime, pollution and accidents. The main goal is to properly manage HSE risks from manifesting and becoming incidents that could impact negatively on people, property and the environment and cause socio-economic liability to be transferred to the State.

The Measurement portfolio seeks to accurately determine the quality and quantity of extracted and sold crude petroleum resources as well as manufactured products retailed to end users. On the upstream side, this ensures that the State derives fair and equitable returns on produced resources, while on the downstream side; it ensures that end use consumers get the correct quality and quantity of refined or processed product purchased.

The core duties of the Unit include the following:

- ***Facility Approval Governance*** – New-built, modified/upgraded, reinstatement after a major accident and imported new/used facilities;

- ***Loss Prevention Inspection Programmes*** - Annual inspections and audits of process safety management systems;
- ***Loss Control Intervention Activities*** - Incident investigations, emergency preparedness and response, pollution compensation issues;
- ***Monitoring of Fiscal Measurement Operations*** - Crude cargoes for sale, natural gas and condensate sales, investigate measurement breaches/infractions and assessment and approval of measurement devices.

These duties are sub-divided to facilitate the monitoring of the following segments:

- ***Inspection*** – Facilities regulated include the Exploratory Rigs, Seismic Survey Vessels, Onshore Terminals, Offshore Platforms, Gathering Stations and Contracted Vessels, etc.
- ***Pipeline and Oil Loss*** – Facilities regulated include Transmission/Distribution Pipelines and well site (above ground). This function is also responsible for the coordination of oil spill management.
- ***Storage and Marketing*** – Facilities regulated include crude petroleum, petroleum and dangerous petroleum storages in excess of 100 imperial gallons at end-user sites. This includes inspection of diesel and LPG storages at various commercial and industrial establishments.
- ***Refining and Petrochemical*** – Facilities regulated include LNG Terminals, Gas Processing, Methanol/Ammonia/Urea Plants, Petrotrin Refinery, Service Stations and CNG Stations. Quality control monitoring of all refined products sold to end consumers as well as the management of chemical spills and gaseous release events are the responsibility of this sector.
- ***Measurement*** – Facilities regulated include all quality and quantity devices or equipment used at fiscal points for Crude Sale Tanks, Gas Metering Skids and Provers Sampling.

Achievements for Fiscal Year 2015

The achievements of the Unit during the review period are listed below:

Upstream Inspection

- Approved 14 gas-processing facilities; and

- Inspected 12 drilling rigs, 107 workover production rigs, 91 offshore platforms, 79 gathering stations, 21 clusters, 17 contracted vessels, 14 gas compressor facilities, 49 lease/farm-out fiscal facilities and 52 accidents in all classes.

Storage and Marketing

- Inspected 102 diesel and four (4) LPG storage facilities in Trinidad and 26 diesel and three (3) LPG storage facilities in Tobago; and
- Convened 11 external and three (3) internal meetings with companies to address issues affecting them.

Pipeline and Oil Loss

- Inspected 166 well sites including Petrotrin well sites, lease and farm out well sites and 11 oil catches;
- Inspected 24 oil-spill equipment stock sites. Under the new National Oil Spill Contingency Plan (NOSCP) system, each operator including lease operators is required have a Tier 1 type response capability;
- Conducted site visits to companies that stock equipment at several locations;
- Audited Lease-Out, Farm-Out and Incremental Production Service Contract companies;
- Conducted effluent sampling at 30 sites in conjunction with Petrotrin and Territorial Services Ltd; and
- Investigated 19 reports of pollution.

Refinery and Petrochemicals

- Conducted fuel quality monitoring inspections at 148 service stations and 36 bunds in Trinidad as well as in Tobago;
- Calibrated 1,082 fuel dispenser pumps at 135 service stations in Trinidad and 181 dispenser pumps at eight (8) service stations in Tobago; and
- Inspected four (4) CNG service stations.

Measurement

- Monitored fiscal sale of 31 crude sales shipments;
- Monitored 158 crude oil Royalty Lease Evaluation (RLE) samples blended and 36 RLE samples obtained; and
- Conducted Calibration and Lease Automatic Custody Transfer (LACT) of 18 gas meters, 29 condensate meters and 29 LACT unit.

Project Evaluation

- Managed Certified verification Agent (CVA) approval for:
 - Universal Pegasus- CVA Manufacturer of pipe in China for KGC Company Ltd;
 - BHP Billiton- Angostura Phase 3 (AP 3) Project CVA (DNV-GL);
 - Petrotrin- No.21 Boiler Point-a-Pierre Refinery;
 - BGTT- Starfish Development Project;
 - BPTT- Juniper development project and Trinidad accommodations Project; and
 - EOG Resources- Sercan Project
- Reviewed 10 Environmental Impact Assessments (EIAs) and Risk Assessments for various projects; and
- Attended several regulatory meetings of Hazard and Operability Studies (HAZOP) and conducted site visits.

Loss Control Related Matters

- Investigated several accidents:
 - Upstream – injuries to personnel and small fires;
 - Refinery and Petrochemicals - fuel spillage, RTW fire at Brentwood service station, line rupture and fire at Petrotrin; and
 - Storage and Marketing - release of gases, minor fuel spillage and the largest LPG explosion, which occurred at Royal Palm Plaza, Maraval; and
- Investigated cases of oil spillage.

Statistical Analysis and Data Management

- Developed an electronic web based management system called the “Incident Management Regime (IMR)” to assist in reviewing and analyzing incidents.

Emergency and Disaster Management

- Evaluated the following emergency response drills:
 - BPTT Emergency Drill – Port of Spain and Guayaguayare;

- EOG Resources Emergency Drill – Port of Spain;
- Office of Disaster Preparedness and Management Drill – Dark Storm;
- BHP Drill – Port of Spain and Toco;
- BGTT Spill Drill – Chaguaramas;
- Petrotrin Refinery Drill – Pointe-a-Pierre; and
- Atlantic LNG Full Scale Exercise – Point Fortin

National Disaster Risk Reduction Committee No.4

- Represented the Ministry at monthly meetings of the National Disaster Risk Reduction Committee No. 4 hosted by the Office of Disaster Preparedness and Management (ODPM).

National Hydrocarbon and Chemical Spill Contingency Plan Committee

- Continued in-house development plans for the following areas:
 - Surveillance, Fingerprinting and Environmental Sensitivity Index Mapping;
 - Incident Command System (ICS) Training for Government and Industry;
 - Oiled Wildlife Management;
 - Incident Command System;
 - Emergency Operations Centre;
 - Chemical Spill Contingency Plan; and
 - National Oil Spill Contingency Plan (NOSCP).

Chemical Approvals

- Approved 218 applications for chemicals including degreasers, solvents and corrosion inhibitors for various uses in the Petroleum and Petrochemical Sectors.

Research and Development

- Conducted research to prepare new Codes of Practice, Guidelines and Plans as follows:
 - Chemical Management Plan;
 - Drill Cuttings Management Plan;
 - Guideline for Compensation for Seismic Operations; and
 - Code of Practice for Road Tank Wagons.

TECHNICAL DIVISIONS

ENERGY RESEARCH AND PLANNING DIVISION

The Energy Research and Planning Division (ERPD) is structured to undertake its functions through inter-disciplinary teams, which perform specific roles related to various aspects of development in the Energy Sector. Areas of primary focus include policy development, implementation and research as well as secretariat support to strategic committees, including the Standing Committee on Energy and the Trinidad and Tobago Extractive Industries Transparency Initiative (TTEITI). The Division is also the focal point for the many international organisations with which the MEEA is engaged to support global energy development.

Achievements for Fiscal Year 2015

Standing Committee on Energy

The ERPD provides logistical and secretariat support to the Standing Committee on Energy (SCE). The SCE was appointed by Cabinet to deliberate and make recommendations on strategic energy related issues, which are brought to its attention. The objective of the SCE is to ensure that the energy sector operates in an effective, efficient and transparent manner. The ERPD provided support to the SCE throughout the review period as follows:

- Notified members of dates, times and venues for SCE meetings;
- Prepared minutes of all SCE meetings;
- Prepared copies of SCE minutes and presentations prior to meetings;
- Prepared Cabinet Notes based on the recommendations of the SCE, and followed up on the relevant Cabinet decisions;
- Monitored and reviewed all SCE decisions, and took necessary action to facilitate and support the implementation of said decisions; and
- Maintained an electronic as well as a hard-copy database with a record of all actions and decisions taken by the SCE.

Work Permit Advisory Committee

The Division represents the MEEA on the Work Permit Advisory Committee (WPAC), which advises the Minister of National Security on applications for work permits for non-nationals

applying to work in Trinidad and Tobago. The Chairman of the WPAC is the Permanent Secretary, Ministry of National Security. The Ministry of Energy and Energy Affairs reviews work permit applications for the energy sector. In fiscal 2015, the Ministry processed over 1,400 work permit applications of which 220 were submitted via the Single Electronic Window (SEW), a trade facilitation portal, available to all Government Departments, for cross border submission of regulatory documents to a single location..

Applications for positions ranged from aircraft engineers and pilots, maritime officers and other crew for vessels operating in the sector, as well as energy specific positions, including, well site geologists and engineers, hired by several upstream companies to conduct seismic surveys of deep-water acreage. The Ministry of Energy and Energy Affairs also contracted ARKeX to conduct an aerial geophysical survey of Trinidad in December 2014 and this resulted in the need for specialist personnel.

Renewable Energy and Energy Efficiency

In keeping with the Government's thrust to mitigate climate change (as a signatory to the Kyoto Protocol), and to conserve the country's finite petroleum resources, the ERPD continued with the creation of an enabling environment for renewable energy (RE) and energy efficiency (EE) in fiscal 2015. In this regard, the Division focused, inter alia, on the development of a regulatory environment to allow for Renewable Energy Grid Interconnection; the establishment of a Photovoltaic Industrial Park and the development of standards for RE technologies. These initiatives are highlighted below.

Renewable Energy Grid Interconnection

The MEEA received technical assistance from the Department of Sustainable Development, Organization of American States (OAS), under the Sustainable Energy Capacity Building Initiative (SECBI). The OAS assisted with the design of a toolkit for the development of renewable energy power purchase agreements and contracts. The technical assistance focused on the following main goals:

- To provide capacity building for local stakeholders in developing a supportive legislative framework for RE in Trinidad and Tobago;

- To provide training for the development of a model Power Purchase Agreement; and
- To provide training for the development of a monitoring and evaluation plan.

In August 2015, technical meetings and a workshop were held with relevant stakeholders to inform of the work being undertaken under the Technical Assistance.

Establishment of an Integrated Photovoltaic Industrial Park

A pre-feasibility study was completed for the establishment of a Photovoltaic (PV) Industrial Park at a site to be determined, at the Point Lisas Industrial Estate. This project comprises the construction of four (4) separate plants processing along the photovoltaic value chain.

An oversight committee was established for the implementation of this project. It was led by the Ministry of Trade Industry Investment and Communication and included representation from the MEEA and National Energy (NE). In fiscal 2015 prospective international investors/technology, providers were being sought for the project.

Construction of a Model Solar House

The UTT officially launched a fully functioning Model Solar House in July 2015, which was established through funding provided by the MEEA. The aim of this initiative was to support the creation of greater awareness of RE and EE by practical demonstration of various RE conversion technologies and energy efficient equipment.

Elaboration of a Carbon Reduction Strategy for Trinidad and Tobago

Following the approval of the National Climate Change Policy in 2011, the Ministry of the Environment and Water Resources (MEWR) had engaged in activities related to climate change mitigation in support of implementation of a Carbon Reduction Strategy (CRS). In this regard, MEWR with the assistance of the UNDP developed a CRS for Trinidad and Tobago, focusing on the mitigation of carbon emissions in the three (3) major emitting sectors—Industry, Power-Generation and Transportation. The MEEA was represented on the multi-stakeholder committee set up to provide oversight to this initiative. Cabinet approved the Strategy in July 2015.

RE Product and Technical Standards

The Trinidad and Tobago Bureau of Standards (TTBS) develops product and technical standards related to RE technologies. In mid-2014, the TTBS launched a PV Systems Specifications Committee to develop technical standards and guidelines relating to PV systems and this culminated in August 2015 with the advertisement of a draft standard for public comment. The ERPD represented the MEEA, on the PV Systems Specifications Committee, and agreed to the adoption of the UL Standard, **UL1741** Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources. The committee also adopted UL Standard, **UL1703** Standard for Flat-Plate Photovoltaic Modules and Panels.

Pilot Study for the Impact Assessment of the Waiver of Import Duties on the Utilisation of Compact Fluorescent Lamps

In 2013, the Ministry of Energy and Energy Affairs requested a waiver of custom duties payable on the import of Compact Fluorescent Lamps (CLFs) to encourage the utilisation of energy-efficient lighting in Trinidad and Tobago. This request was granted under the Common External Tariff (Variation of Duty) (No.2) Order, 2014. A preliminary analysis was undertaken in 2015 to determine the impact of the waiver. The findings revealed that the prices of the bulbs included in the analysis actually increased during the representative period. This was contrary to expectations and it was felt that a more in-depth analysis was necessary.

Wind Resource Assessment Programme

Consistent with the MEEA's thrust to promote the use of RE to reduce Greenhouse Gas emissions and to diversify the local energy mix for power generation, a Green Fund (GF) application to source funding, in the sum of TT \$36,288,194 for a 3-Phase Wind Resource Assessment Programme (WRAP) was submitted by the UWI on 26 May, 2014. The main objective of the WRAP was the selection of candidate sites for the establishment of wind energy projects. In fiscal 2015, the parties engaged in the preparation of the application, MEEA, UWI and NE were still awaiting approval for funding from the GF.

Energy Trends, Research and International Relations

Quarterly Cabinet Note: 'Oil and Gas Review'

The ERPD prepares an Oil and Gas Review, on a quarterly basis, for the information of Cabinet. This report outlines the average rates of crude oil production, exploration activity and prices of local and benchmark crudes; natural gas production and sales; LNG production; petrochemical production and prices; and refinery throughput and gross margin. Reviews were submitted for each quarter in fiscal 2015.

Bilateral/International Relations

During fiscal 2015, the ERPD continued to be the interface between the MEEA and its local, regional and international stakeholders. In this regard, the Division continued initiatives to support Trinidad and Tobago's participation in various international energy organizations, to explore strategic opportunities and manage ongoing relations as outlined below.

Participation in OLADE Meetings

The Division participated at the following OLADE meetings held in San Salvador, El Salvador, in which members of staff of the MEEA presented papers and/or engaged in discussion on energy matters relevant to Trinidad and Tobago:

- Ninth Regional Energy Integration Forum held on 3-4 November 2014;
- Eighty-third Directive Committee Meeting held on 5 November 2014;
- Forty-fourth Council of Experts Meeting held on 6 November 2014; and
- Forty-fourth Meeting of Ministers held on 7 November 2014.

Hosting of Delegation from the Ministry of Energy and Mineral Development, Uganda

A five-member official delegation from the Department of Petroleum Exploration and Production, Ministry of Energy and Mineral Development of the Republic of Uganda visited Trinidad and Tobago prior to the launch of their first Licencing Round in 2015. The purpose of their visit was to learn from Trinidad and Tobago's experience in launching bid rounds as well as its expertise in planning and implementing stratigraphic licensing. The delegation was hosted by the MEEA and the ERPD attended meetings and presentations with the delegation during their visit to the National Gas Company (NGC) and the Petroleum Company of Trinidad and Tobago (PETROTRIN).

Participation in Meetings with Delegation from the Ministry of Energy and Minerals, Tanzania
During the period February 2-7, 2015, the Energy Chamber hosted four (4) officials from the Ministry of Energy and Minerals of the United Republic of Tanzania who were in the process of developing a National Local Content Policy for their country. The purpose of the delegation's visit was to learn from the MEEA's engagement with energy operators and service companies as well as Trinidad and Tobago's progress with respect to Local Content. The ERPD participated in meetings with the delegation.

Participation in Meeting for Signing of Unitisation Agreement with Venezuela

His Excellency, Nicolás Maduro Moros, President of the Bolivarian Republic of Venezuela visited the Republic of Trinidad and Tobago on February 24, 2015 to advance the process of the Unitization of Hydrocarbon Reservoirs between the two Republics. The Unitization process seeks to develop important natural gas reserves, which cross the delimitation line between the two States. The ERPD provided secretariat support for the Steering Committee, which was set up to provide the necessary political, socio-economic and institutional platform for the use of such hydrocarbon reserves by both States guided by and in accordance with the principles of reciprocity, solidarity and respect for sovereignty.

Both Governments welcomed the signature of the ***Unitisation Agreement for the Exploitation and Development of Hydrocarbon Reservoirs of the Manakin-Cocuina Field that Extends across the Delimitation Line between the Republic of Trinidad and Tobago and the Bolivarian Republic of Venezuela***, as well as the ***Framework Agreement on Energy Cooperation***.

The conclusion of these Agreements was of significant relevance within the context of Latin American and Caribbean integration. These agreements would contribute towards the further deepening of the energy relationship between the two countries and lay the foundation for the development of cooperation mechanisms for the identification and joint implementation of projects within the hydrocarbon value chain of both countries.

Hosting of Delegation from the Ministry of Petroleum, Ghana

The MEEA hosted a fifteen-member delegation representing a Parliamentary Sub Committee on Mines and Energy as well as the Ministry of Petroleum, both of the Republic of Ghana, during the period 18-22 April 2015. At the time, the Ghanaian Parliament was considering the passage of a

new Exploration and Production Bill to replace its 1980s Act. The Parliamentary Sub Committee on Mines and Energy was reviewing the Bill before it went before the full House and visited Trinidad and Tobago:

- To meet the Regulators and understand their role in regulating the sector;
- To garner information on issues affecting Trinidad and Tobago's E&P legislation; and
- To learn about the experiences of the Regulators and the State companies.

The ERPD accompanied the delegation during their visits to the offices of the NGC and PETROTRIN for meetings and presentations.

Public Sector Investment Programme

The ERPD is charged with responsibility for the monitoring and evaluation of Public Sector Investment Programme (PSIP) projects which fall under the purview of the MEEA. Monitoring and evaluation ensures that the country gets value for money spent on these projects. In this regard, financial monitoring of the projects takes place on a monthly basis and reports are submitted to the Ministry of Planning and Development. Site visits are also conducted as part of the monitoring exercise. The following projects were monitored by the Division during fiscal 2015:

Development of New Industrial Sites

Union Industrial Estate

During the period October 2014 to September 2015, the National Energy (NE) completed the detailed designs for the drainage work for the Union industrial Estate and tenders were being evaluated. Approximately 91 households were identified for relocation from the estate, with the process estimated to take two years. Among the industries being given consideration for establishment on the estate was a methanol/DME Facility.

Oropouche Bank Reclamation

In February 2010, Cabinet approved funding for the Oropouche Bank Reclamation Project. In 2011, NE was forced to terminate its contract with TECHNITAL due to the non-granting of the Certificate of Environmental Clearance from the Environmental Management Authority. After

negotiation in respect of the claims submitted, NE and the contractor agreed to a final close out payment, which was paid in 2015.

Development of New Port Facilities

Galeota Port Phase 1B

Works on the Galeota Port Phase 1B were ongoing in fiscal 2015. This involved the establishment of several facilities to make the port operational as approved by Cabinet in January 2014. These works followed on the heels of the official opening of the Galeota port Phase 1A, on September 5 2014.

The main thrust of the operationalization was to complete the finishing works required to make the port operational. This included upgrade of the power supply; upgrade of the water supply; installation of fire pumps and a fire detection system; office accommodation; paving of the port apron and warehousing.

Galeota Port Phase 2

Preliminary design work for a Phase 2 Galeota Port Expansion was also ongoing in 2015 based on the said Cabinet decision of January 2014.

Brighton Port Study

In August 2013, Cabinet approved funding for the conduct of a planning and evaluation study for the Port of Brighton by the NE. The purpose of the study was to determine the spatial and port facilities requirements to service the new energy industries at La Brea. The contract for the project was awarded and work was ongoing in fiscal 2015.

Liquid Fuel Pipeline Project

In 2007, Cabinet agreed that the NGC construct a liquid fuel pipeline network for the distribution of liquid petroleum fuels from Pointe-a-Pierre to Caroni and Piarco. At the end of fiscal 2015, the project was 95 percent completed and work was ongoing towards completion of the project.

Dredging of the Sea Lots Main Channel and Turning Basin

Work started in September 2015 on the dredging of the Sea Lots Main Channel and Turning Basin utilizing funds under the Development Programme of the MEEA. Cabinet agreed that the National

Infrastructure Development Company Limited would engage a navigational contractor, and the Drainage Division of the Ministry Works and Transport would provide guidance on the execution of the project. The Sea Lots Main Channel and Turing Basin is one of the major transportation arteries for the movement of fuel around Trinidad and Tobago. The Channel had not been dredged in 15 years and silt had built up during that time, making navigation of the channel increasingly difficult.

Installation of Mobile Pump Tanks at La Ruffin Fishing Depot

In May 2014, Cabinet agreed to the installation of above ground storage tanks at La Ruffin and Grand Chemin, Moruga. Based on inspection of the sites and recommendations from the Petroleum Asset Monitoring and Management Division of the MEEA, the National Petroleum Marketing Company (NPMC) Limited was advised that only La Ruffin was approved for installation of the above ground storage tanks. NPMC was further advised of its responsibility for the installation of the 10,000 US Gallon, single product, mobile, pump tank with dispenser for the fishing community at La Ruffin. The tank was installed in August 2015

Extractive Industries Transparency Initiative

In fiscal 2015, the Cabinet-appointed Trinidad and Tobago Extractive Industries Transparency Initiative (TTEITI) Secretariat guided by its operational arm, undertook a number of initiatives, which significantly advanced EITI implementation in the domestic energy sector. These are highlighted below.

Validation and EITI Compliant Status

During the validation process, the TTEITI Steering Committee made an application to the EITI Board requesting an extension of Trinidad and Tobago's validation deadline to 28 February 2014. The EITI Board granted an extension until 01 May 2015, to complete remedial actions. By the end of 2014, the EITI Board was satisfied with the corrective actions taken and the country was granted Compliant Country status in January 2015.

Publication and dissemination of the third EITI Report and Stakeholder Engagement

The third TTEITI Report (for fiscal 2013) was published on 30 September 2015, in accordance with the EITI standard. The TTEITI Steering Committee continued to engage in activities to

increase the awareness of the EITI process within its main stakeholder groups: civil society, the public, the public sector and the energy sector, through outreach sessions. The outreach sessions generally focused on the findings of the TTEITI Reports and ways in which the data could be used by civil society to promote and advocate for better transparency and accountability.

Participation in Conferences

The TTEITI participated in three major conferences during the review period. These were:

- ***The Trinidad and Tobago Energy Conference 2015***- In January 2015, Chair of the EITI, delivered the feature address on Day 2 of the Energy Conference and met with Parliamentarians, Industry and Civil Society leaders.
- ***British High Commission Prosperity Fund Project***- This project was developed to undertake a regional EITI Outreach Programme to introduce the EITI to other natural resource rich countries in the region. In 2015, awareness sessions in collaboration with the Trade and Economics Department of the University of the West Indies were held in Jamaica, Guyana and Suriname. These awareness sessions targeted parliamentarians, civil society organization and extractive industries company representatives in the respective countries.
- ***Workshops on Sustainable Mining Practices, Corporate Governance and International Auditing Standards***- This workshop was hosted for the mining sector in collaboration with the Canadian High Commission, the Energy Chamber of Trinidad and Tobago, National Quarries Company Limited and the Association of Chartered Certified Accountants (ACCA).

Community Visits/Outreach Activities

The TTEITI Steering Committee arranged a community visit to Mayaro, a fenceline community, to engage the residents in discussions about the EITI. The Committee also hosted a series of outreach sessions with Non-Governmental Organizations (NGOs), civil society organizations and tertiary institutions to promote the awareness of the TTEITI and the findings of the first three (3) EITI Reports. The Youth Advisory Committee (YAC) also remained active in fiscal 2015, meeting

on a regular basis to discuss ways to engage the nation's youths and to engage with tertiary students.

Innovation

In fiscal 2015, the TTEITI Multi-Stakeholder Group Steering Committee continued to exhibit its willingness to 'think outside of the box', embrace creativity and be innovative in its approach to EITI implementation. In summary, the innovations included the following:

- Adoption of a vision to be the EITI Champion for the Caribbean Region and to seek ways and means to spread the EITI message to other countries, with a view to recruit new members to the EITI movement. In this regard, the TTEITI Secretariat successfully applied for a UK Prosperity Fund grant to undertake a project, which introduced the EITI to other natural-resource rich countries in the region, namely Jamaica, Guyana and Suriname;
- Development of effective strategies for capacity building among stakeholders through a targeted communication campaign and a series of outreach events;
- Continued support of a YAC to promote the EITI among young people; and
- Production and dissemination of EITI Report 2013.

RESOURCE MANAGEMENT DIVISION

The mission of the Resource Management Division (RMD) is to ensure the timely and sustainable development of the nation's petroleum resources and reservoirs and its mandate is to manage the nation's hydrocarbon resources. The Division's core functions include:

- Management of Competitive Bid Rounds;
- Management of Oil and Gas Audits;
- National Non-Associated Natural Gas Reserves Audit;
- National Crude Oil Reserves Audit;
- Optimization of Production;
- Cross Border Unitization;
- Oil Production Forecasting; and
- Enhanced Oil Recovery.

The job functions of the Division fall within two main areas of responsibility:-Exploration and Production Planning and Acreage Management and their main functions are summarized in **Table V** below.

Table V
Areas of Responsibility
Resource Management Division

Exploration and Production Planning	Acreage Management
Technical evaluation of open and idle acreage, including preparation of and making acreage available for competitive tender.	Review annual production and reservoir performance for optimizing economic recovery from fields.
Recommend strategies and policies with respect to underutilized and open acreage.	Evaluate company development plans with respect to oil and gas optimization of reservoir performance through cross-functional teams.
Participate in and/or lead cross-functional Bid Round teams.	Develop and recommend policies and strategies to optimize producing acreage (Enhanced Oil Recovery schemes).
Plan and deliver ad hoc technical projects.	Perform technical projects as assigned including Gas and Heavy Oil Audits and Open Acreage Audits.
Participate in meetings with external organizations for the purpose of developing upstream strategies and networking.	Review and validate oil/gas reserves annually, including oil production forecasting.
Provide technical support to the Ministry charged with the Foreign Affairs portfolio to facilitate cross border and law of the sea issues.	Ensure appropriate use and maintenance of technical data.

Achievements for Fiscal Year 2015

Management of Competitive Bid Rounds

Deep Water Bid Round Work Programme

The consortium of BHP Billiton Petroleum Ltd and BG International Ltd, that was awarded Blocks TTDA3 and TTDA7 under the 2013 Deep Water Bid Round, committed to the first phase Minimum Exploration Work Programme, which includes the acquisition of 2,400 sq. kilometres of 3D seismic and the undertaking of additional geologic studies at a cost of US\$23.9 million. For the second and third phases, the consortium proposed to drill four (4) wells, each to a depth of 2,200 meters. Total investment for both blocks is estimated at US\$250 million. Revenue is expected to accrue to the country via the Government's Share of Profit Petroleum and other revenue streams realized from several financial obligations including contributions to scholarships and research and development. The award of these two blocks will bring to nine, the number of deep-water blocks operating under this contractual arrangement.

Preparation for Future Bid Rounds

Since the closing of the deep-water bid round 2013 and the award of blocks in fiscal 2014, there was no further action by the MEEA to put on offer, acreage for bidding. This course of action was attributable to the steep fall in oil and gas prices, which began around October 2014, with no hope of a rebound in the near future, according to market analysts. The MEEA therefore took the initiative to rethink its strategy with respect to attracting investors in a difficult economic climate. As a result, the RMD continued to prepare for potential onshore and offshore bid rounds by undertaking the following:

- Conducted a preliminary analysis on the number of open deep-water blocks covered by the recent BHP Billiton 3D surveys, to identify which ones would be most suitable for further evaluation and inclusion in the next Deepwater Bid Round;
- Evaluated other open blocks nearshore as well as those in shallow to average water depths to determine their prospectivity;
- Evaluated onshore blocks in the Central range and southern areas, relinquished by Petrotrin, to determine their suitability for inclusion in a proposed Onshore Bid Round;
- Reviewed the Ministry's current pre-qualification and Competitive Bidding Order (CBO) documents;

- Conducted in-depth review of case studies of South American deep-water development, in particular the Lula and Roncando fields in Brazil, for best practice with respect to development plans and cost structure; and
- Analyzed the bidding procedures of various international oil producing countries and compared them to the procedures currently used in Trinidad and Tobago, with a view to identify best practices.

Optimization of Production

Oil and Condensate Production Forecasting

RMD undertakes annual oil production forecasting as part of its work programme and the data obtained is submitted to the Ministry of Finance to compute royalty estimates for the fiscal budgets. These forecasts are determined by decline curve analysis and production trends from companies and their respective fields. Companies' work programs are also reviewed to understand future operational plans and their impact on production. The Annual Technical Meetings (ATMs), Coordination Committee meetings (CCMs), Technical Committee meetings (TCMs), the Oil and Gas Reserves audits review meetings, the monthly production data in the energy bulletins and the well production data from the Prod 1's are the major sources of information for these forecasts. The actual oil and condensate production for fiscal 2015 was 80,541 barrels per day.

Enhanced Oil Recovery

Enhanced Oil Recovery (EOR) uses various techniques for increasing the amount of crude oil that could be recovered from an oil reservoir, including, injection of water, steam and carbon dioxide into oil reservoirs. There are currently eleven active enhanced and secondary oil recovery projects in Trinidad and Tobago comprising two (2) waterfloods, seven (7) steamfloods and two (2) Water Alternating Steam Projects. For fiscal 2015, the average oil production from EOR projects was 4,641 barrels per day, down 261 barrels per day from the previous fiscal period. **Table VI** below highlights the companies that undertake EOR projects in their respective fields.

**Table VI
Enhanced oil Recovery Projects**

Waterflood			
Company	Field	Project	Comments
Repsol	Teak	Waterflood	Inactive
Petrotrin	Main Field	8011 Waterflood	Active
	Catshill	CO-30, N sand EOR 39 and 40	Inactive
	Trinity	EOR 27	Inactive
	Pt fortin	Cruse 'G'	Inactive
	Forest Reserve	EOR14	Inactive
	Fyzabad	Forest I and II	Inactive
Trincan	Morne Diablo	Morne Diablo	Active
SteamFlood			
Petrotrin	Guapo	GU T1	Active
	F.Reserve	UMLE EOR47 ,48	Active
	Central Los Bajos	CL T1	Active
	Parrylands	EOR37, 38, 41	Active
	Cruse E/Area IV	EOR 46,35,42	Active
	North Palo Seco	PST1	Active
	New Steamflood	EOR 49, 50, 51,52	Active
CO² injection			
Petrotrin	Forest Reserve	Zone 5	Inactive
		Middle Field	Inactive
		Exp CO2 Cyclic	Inactive
		UCWE	Inactive
		Phase 1 East	Inactive
	Oropouche	CO2 flood	Inactive
Water Alternating Steam Projects			
Petrotrin	Apex quarry	ASQ T1	Active
	Palo Seco	Bennett Village	Active

COMMERCIAL EVALUATION DIVISION

The vision of the Commercial Evaluation Division (CED) is to be a first-rate, dynamic and effective group, structured to achieve maximum benefits for the citizens of Trinidad and Tobago and its mission is to optimize value of this country's energy resources, and energy related projects.

The strategic objectives of the Division are outlined below:

- To ensure that Trinidad and Tobago remains competitive by reviewing fiscal terms and incentives on an ongoing basis;
- To provide technical/commercial support, review and make recommendations with respect to Trinidad and Tobago's petroleum fiscal regime;
- To review the financial capability of petroleum companies wishing to invest in energy projects in Trinidad and Tobago;
- To monitor and evaluate the financial performance of state energy companies and other related entities;
- To ensure the maximization of GORTT's revenues re: Profit sharing, financial obligations and marketing contracts;
- To develop and support the use of business, economic and/or fiscal models;
- To evaluate upstream and downstream projects to support contract negotiations and optimize value through the life of the contract/agreement;
- To participate in contract negotiations as well as downstream LNG and gas marketing arrangements;
- To monitor and regulate compliance requirements as set out in the various laws that govern operations in the energy sector; and
- To participate in the review of prices for crude oil, natural gas and petrochemicals as a member of the *Permanent Petroleum Pricing Committee*.

Achievements for Fiscal Year 2015

On Shore Bid Round 2013

During the review period, the CED completed the financial evaluation of companies that submitted pre-qualification applications to participate in the 2013 On Shore Bid Round. The purpose of such

evaluation was to establish the companies' financial competence to finance on-going and prospective oil and gas projects. As a result of the Division's participation in the process, the Minister of Energy and Energy Affairs executed Exploration and Production (E&P) licences, on October 31, 2014, for land-based blocks, namely, St. Mary's, Ortoire and Rio Claro Blocks with Range Resources Limited, Primera Oil and Gas Limited (Touchstone Exploration Inc.) and Lease Operators Limited respectively. Petrotrin holds a 20 percent interest in each block.

Deep Water Competitive Bid Round 2013

During fiscal 2015, the Division was responsible for evaluating Government's Profit Share based on submission by bidders in respect of the Deep Water Competitive Bid Round 2013. The Bids were evaluated on the award of points based on a system outlined in the Competitive Bidding Order. On December 2, 2014, the MEEA executed two (2) Production Sharing Contracts for Deep Water Blocks TTDA 3 and TTDA 7 with a consortium comprising BHP Billiton and BG International Limited. BHP Billiton is the operator of both Blocks with 65 percent interest, while BG International Limited holds the remaining 35 percent interest in each block

Block 2(c) Crude Oil Marketing Arrangements

CED is responsible for monitoring an agreement dated June 30, 2005 in which the then MEEI appointed BHP Billiton Marketing Inc. as the sole agent for the marketing of its petroleum under Block 2c PSC and ensuring that Government's revenue from the sale of the petroleum is accurate and received in a timely manner. During fiscal 2015, six (6) joint cargoes were sold, from which the Government realized revenues of US\$78.9 million. The accumulated Government receipts to date from the disposal of the petroleum stands at US\$2,216.4 million.

Revision of Tax Estimates for Ministry of Finance Fiscal Budget 2015

During the period under review, the CED revised the estimates of PSC taxes payable for fiscal 2015, using several price scenarios. The new estimates were submitted to the Budget Division of the Ministry of Finance, in a timely manner, to facilitate the completion of the fiscal 2015 budget.

Assignments

In fiscal 2015, the CED played an important role in two (2) assignments, which took place on 10 July, 2015, in which Niko Resources transferred 65 percent of its interest in the Guayaguayare Shallow Horizon Block and 80 percent of its interest in the Guayaguayare Deep Horizon Block to Range Resources Limited. Petrotrin owns the remaining 35 percent in the Guayaguayare Shallow Horizon Block as well as the remaining 20 percent in the Guayaguayare Deep Horizon Block.

CONTRACTS MANAGEMENT DIVISION

The focus of the Contract Management Division (CMD) is the creation and management of all contracts in terms of monitoring and compliance. All stakeholder contract management is managed within the CMD to ensure that there is a single point of contact and expertise assigned to each of the major operators, for example, BHP Billiton (BHP), British Petroleum Trinidad and Tobago (bpTT), British Gas Trinidad and Tobago (BGTT). CMD brings together a combination of business and technical multi-disciplinary teaming and skills. Also included within CMD is a finance function with responsibility for determining the Minister's share of profit oil and gas, financial obligations and royalty computation.

CMD's key roles are:

- Management of all contracts with focus on issues related to cost recovery, cost tracking, cost benchmarking, data confidentiality, calculation of profits, royalties and cost streams and marketing arrangements;
- Execution of PSC Audits;
- Appraisal of exploration and development well programmes and review and approval of field development plans in conjunction with other Divisions;
- Administration of technical aspects of contracts e.g. drilling, workovers, completions and well testing work programmes;
- Collaboration with existing Technical and Operations Divisions for input to finalize approvals;
- Management of Production Sharing Contracts and Exploration and Production Licences to ensure compliance with local content as well as the national oil spill contingency plan requirements; and
- Monitoring of crude oil production.

The following companies operated under Exploration and Production (E&P) licences during the review period:

- Petrotrin - Lease-out, Farm-out, Incremental Production Service Contracts Operatorships, Joint Ventures and Trinmar;

- bpTT;
- BGTT - Central Block;
- New Horizon Trinidad and Tobago;
- Trinity Exploration and Production Limited (formerlyTen Degrees North);
- Beach Oilfield Limited (formerly Trinidad Exploration and Development);
- Massy Energy Resources (formerly Neal and Massy Energy Resources Limited);
- SOOGL – East Briton
- Touchstone Exploration Inc. (formerly Primera Oil and Gas Limited);
- Voyager Energy;
- Mora Oil Ventures Limited;
- EOG Resources Ltd. - SECC Block
- Trinity Exploration and Production Limited (formerly Bayfield Energy Limited);
- Repsol; and
- Advance Oil Company Trinidad Ltd.

The list below provides details of operators with PSC obligations and their respective assets:

- EOG Resources Ltd – Blocks 4(a), U(a) and U(b);
- AMOCO Trinidad Gas BV – Block 5(b);
- BHP Billiton - Blocks 2(c), 3(a), TTDA 5, TTDA 6, TTDA 28 and TTDA 29;
- bpTT - Blocks 23(a) and TTDA 14;
- BGTT - Blocks NCMA 1, 5(a), 5(b), 5(c), 6, 6(b), 6(d) and Block E;
- West Indian Energy Group Limited (formerly Parex Resources Trinidad Ltd) – Central Range Block (Shallow and Deep) and Cory-Moruga Block D E F;
- Centrica Energy - Blocks 1(a), 1(b), 22 and NCMA-4; and
- NIKO Resources – Blocks NCMA 2 and 3, 4(b), Guayaguayare (Shallow and Deep-water) and Mayaro-Guayaguayare Bay Blocks.

Summary of Activities by PSC and E&P Operators for fiscal 2015

Although the level of drilling activity during fiscal 2015 surpassed that of fiscal 2014, total crude production fell marginally (0.16 percent) in fiscal 2015, in spite of the increase in production levels by Petrotrin's Farm-out operators and Incremental Production Services Contracts (IPSCs). **Table VII** below gives a summary of activities by PSC and E&P operators as well as a comparison of the number of wells drilled and workovers performed in the review period and fiscal 2014.

Table VII
Summary of Activities by PSC and E&P Operators
Fiscal 2014 and Fiscal 2015

Activities	Year	
	2013-2014	2014-2015
Development Wells Drilled	73	88
Exploration Wells Drilled	7	6
Total Wells Drilled	80	94
Recompletions Performed	111	133
Conversions Performed	39	34
Sand Controls Performed	21	28
Repairs Undertaken	19	0
Total Workovers Performed	208	217
Total Crude Production (bbls)	29,472,128	29,425,184
Crude Production (bopd)	80,677	80,617

Achievements for Fiscal year 2015

The operational activities of each operator for the 2015 fiscal period are highlighted below. CMD monitored the activities undertaken by the operators in fiscal 2015.

Petrotrin

Land Operations

Drilling

In fiscal 2015, Petrotrin spudded 22 development wells with a total footage of 36,593 feet in 263 rig-days. These wells were drilled by Petrotrin Rig #1, in the Forest Reserve, Pt Fortin East, Pt Fortin Central, Parrylands and Guapo fields. No exploration wells were drilled during the review period.

Workovers

Petrotrin performed 81 workovers during fiscal 2015 comprising 34 conversions, 31 recompletions, 12 sand control and four (4) repairs. Conversion and new reserve-type workovers were the most dominant types performed because of a steam enhanced oil recovery (EOR) project and the thrust to increase production from new horizons.

Production

Petrotrin's production for fiscal 2015 totaled 4,700,596 barrels of oil at an average of 12,878 bopd, representing a decrease of 158 bopd or 1.2 percent, when compared to production in fiscal 2014 which totaled 4,575,992 barrels of oil at an average of 13,036 bopd.

Marine Operations (TRINMAR)

Drilling

In fiscal 2015, Trinmar drilled five (5) development wells with a total footage of 33,972 feet in 204 rig days utilizing the WSL Rig #110. One (1) well was drilled in the East Soldado field and the other four (4) were drilled as part of the South-West and West Soldado Development project. At the end of the review period one (1) of the wells was awaiting completion.

Workovers

In fiscal 2015, workover activities were focused on maximizing production from existing wells. As a result of this thrust, 19 workovers were performed, consisting of six (6) sand controls, one (1) abandonment, five (5) repairs, six (6) recompletions and one (1) alteration. Other workovers, which did not require MEEA's approval, were also completed as part of the West and Southwest Soldado Development Project and these included Gas Lift revamps, PCP revamps and other maintenance related work.

Production

Trinmar's production decreased by approximately three (3) percent in fiscal 2015, totaling 7,911,963 barrels at an average of 21,677 bopd. In fiscal 2014, Trinmar's production was 8,186,950 barrels at an average of 22,430 bopd. The decrease in crude oil production in fiscal 2015 was attributed to problems with the PC pump wells as well as increased downtime on gas lift compressors for revamps, particularly in the North Soldado Field.

Lease and Farm-out Operatorship

Drilling

During fiscal 2015 Lease and Farm-out operators drilled 38 new development wells of which 24 were drilled by Lease operators and 14 by Farm-out operators.

Workover

During the review period, 73 workovers were performed. Lease operators completed 51 workovers while farm-out operators completed the remaining 22. Most of the workovers performed during this period were recompletions.

Production

The Lease and Farm-out Operators produced a total of 2,524,331 barrels of oil at an average rate of 6,916 bopd. The Lease Operators contributed 2,234,745 barrels at an average rate of 6,123 bopd, to the total amount, while the Farmout Operators contributed 289,586 barrels at an average rate of 793 bopd.

Incremental Production Service Contract Operators

Drilling

Incremental Production Service Contract (IPSC) Operators drilled 12 new development wells in the Goudron field in fiscal 2015.

Workover

During the period, IPSC Operators performed six (6) workovers.

Production

In fiscal 2015, IPSC Operators' production increased significantly, by 87 percent, resulting in the production of 774,749 barrels of oil at an average rate of 2,123 bopd. In fiscal 2014, production was 425,437 barrels at an average rate of 1,166 bopd. The increase in production in fiscal 2015 was attributed to the coming online of new wells in the Catshill and Goudron Blocks.

bpTT

Drilling

bpTT drilled seven (7) development wells with a combined footage of 44,042 feet in 387 rig days, in fiscal 2015. The development activity comprised the drilling of three (3) development wells in the Kapok field, two (2) in the new Juniper field and one (1) each in the Cashima and Mahogany fields. Three (3) drilling rigs, the Rowan Exl II, the Seadrill West Jaya and the Diamond Ocean Victory, were engaged to complete this exercise.

Workovers

In fiscal 2015, eight (8) workovers were completed, comprising seven (7) recompletions and one (1) sand control. Five (5) of the recompletions were done in the Amherstia field utilising a Hydraulic Workover unit, while one (1) each was performed in the Cashima and Mahogany fields.

Production

bpTT's total crude and condensate production increased by approximately 12 percent in fiscal 2015, totalling 4,295,187 barrels of oil at an average rate of 11,768 bopd. In fiscal 2014, production was 3,820,952 barrels of oil at an average of 10,468 bopd. The increase in the level of production in fiscal 2015 was attributed to the corresponding increase in development activity, as a result of more wells coming on production during the review period.

New Horizon Energy Trinidad and Tobago

Drilling

No drilling activity took place by New Horizon Exploration TT for the period under review.

Workovers

Eighteen (18) workovers were performed in fiscal 2015, including nine (9) recompletions and nine (9) sand controls.

Production

New Horizon Exploration TT's total crude production declined by 10 percent, to 27, 648 barrels of oil with a daily average value of 76 bopd, in the period under review. In the previous fiscal period, production was 30, 698 barrels at an average of 84 bopd. The effects of natural decline in the mature and developed Parrylands 'E' block caused the decline in production in fiscal 2015.

BHP Billiton

No drilling or workover activities took place in fiscal 2015.

Production

BHP Billiton's total crude and condensate production decreased by approximately 17 percent, amounting to 2,756,793 barrels of oil at an average of 7,553 bopd in fiscal 2015. In the previous fiscal period, BHP Billiton's production was 3,335,489 barrels of oil at an average of 9,138 bopd. The decrease in production in fiscal 2015 resulted from the natural decline of producing reservoirs.

Massy Energy Production Resources Limited

During fiscal 2015, negotiations continued between MEEA and Massy Energy Production Resources Limited (MEPRL) for the grant of an Exploration and Production Licence for the Moruga West Block.

Drilling

During the 2015 fiscal period, no wells were drilled in the Moruga West Block.

Workovers

During the review fiscal period, the company performed one (1) workover, which was a conversion conducted on well MW 155 to convert it from a producer to an injector well, as part of the implementation of a water-flood project.

Production

MEPRL experienced a minimal decline in production by approximately one (1) percent in fiscal 2015, causing production to drop to 39,703 barrels of oil at an average of 109 bopd, from 40,275 barrels of oil at an average rate of 110 bopd, in fiscal 2014. This small decline in production in

fiscal 2015 resulted from natural decline of the fields, compounded by the failure of the company to drill new wells to arrest this trend.

West Indian Energy Group Limited

Drilling

WIEGL drilled one (1) onshore exploratory well, the Snowcap-2ST1, in the Cory/Moruga E Block. This well was drilled to test for hydrocarbons in the Karamat-Herrera and Cipero-Herrera sands. Its approved total depth was 7,000 feet but drilling stopped at a depth of 5,692 feet when both objectives were penetrated at shallower depths than initially forecasted. The well was under testing in fiscal 2015.

Workovers

No workovers were executed during the review period

Production

West Indian Energy Group Limited (WIEGL) continued to operate in the Cory-Moruga Block under an Exploration and Production license. This block was in the exploratory phase in fiscal 2015 because of the grant of an extension for the exploratory phase. As a result there was no production to report.

Touchstone Exploration Inc.

Drilling

No drilling activity took place by Touchstone Exploration Inc. during the period under review.

Workovers

Three (3) ministry-approved workovers, comprising three (3) recompletions, were completed in fiscal 2015.

Production

In fiscal 2015, there was an increase in production, of approximately seven (7) percent, by Touchstone Exploration Inc. resulting in 144,599 barrels of oil at an average rate of 396 bopd. In fiscal 2014, production was 134,879 barrels of oil at an average of 370 bopd. The primary

contributor to the increase in crude oil production in fiscal 2015 was the execution of recompletions and other non-ministry approved workovers done in fiscal 2015.

SOOGL Antilles (Trinidad) Limited

There was no drilling, workover or production activities during the review period. In 2014, SOOGL Antilles entered into an Agreement to assign an undivided 45.5% interest in the East Brighton Block to Primera East Brighton Limited. The Minister of Energy and Energy Affairs granted consent for the assignment on March 19, 2015. As a result of this decision, SOOGL Antilles ceased to be an operator in Trinidad and Tobago as its licensed acreage was assigned to another operator.

Centrica Energy

There were no drilling, workover or production activities during fiscal 2015.

NIKO Resources

No drilling, workovers or production activities were undertaken by NIKO Resources during fiscal 2015. One of its initial blocks, Block 2(ab), was relinquished due to the failure in finding commercial quantities of hydrocarbons in the three (3) exploration wells, Shadow-1ST3, Maestro-1 and Stalin-1ST.

Trinity Exploration

Drilling

No drilling activities occurred in fiscal 2015.

Workovers

Two (2) Ministry-approved workovers, comprising one (1) recompletion and one (1) sand control were completed in the period under review.

Production

Trinity Exploration's production in fiscal 2015 was approximately twenty-two percent less than in fiscal 2014. In fiscal 2015, the company produced 159,048 barrels of oil at an average rate of 436 bopd. In fiscal 2014, production was 203,903 barrels of oil at an average rate of 559 bopd.

The contributors to the decrease in crude oil production in fiscal 2015 were lack of drilling activity, reduced workover activity as well as natural decline in producing wells.

Beach Oilfield Limited

No drilling or workover activities occurred in fiscal 2015.

Production

Beach Oilfield Limited's cumulative oil production of 1,649 barrels at an average rate of five (5) bopd, in fiscal 2015, was lower than its level of production in fiscal 2014, when cumulative oil production was 2,488 barrels at an average rate of seven (7) bopd. The low level of production in fiscal 2015, resulted from tight sands with slow fluid intake in the existing Bonasse wells compounded by the natural decline of producing wells as well lack of drilling and workover activities.

BGTT

ECMA

There was no drilling or workover activities in the ECMA in fiscal 2015.

Production

BGTT's cumulative production from its ECMA field increased by twelve percent in fiscal 2015 and totaled 277,012 barrels of oil at an average rate of 759 bopd. In fiscal 2014, cumulative production from the ECMA field was 247,589 barrels of oil at an average of 678 bopd. The primary contributor to the increase in crude oil production in the review period, was the addition of production from the Starfish 6ST1 well.

Central Block

No drilling or workover activities took place in the Central Block during fiscal 2015.

Production

BGTT recorded a 28% decrease in production in its Central Block in fiscal 2015, with a cumulative production of 280,537 barrels of oil at an average rate of 769 bopd. In fiscal 2014, the company reported a cumulative production of 388,115 barrels of oil at a rate of 1,063 bopd. The fall in production in fiscal 2015 was attributed to the natural decline of the fields and scheduled maintenance shutdowns in fiscal 2015.

NCMA

There was no drilling or workover activities in the North Coast Marine Area (NCMA) in fiscal 2015.

Production

Production from the NCMA in fiscal 2015 consisted of dry gas. There was therefore, no crude or condensate production to be reported.

REPSOL

Drilling

No drilling activity occurred during fiscal 2015.

Workovers

Five (5) ministry-approved workovers were conducted in fiscal 2015, comprising three (3) recompletions and two (2) stimulations.

Production

Repsol's production increased by 12% in fiscal 2015, amounting to 4,632,073 barrels of oil at an average rate of 12,691 bopd. In fiscal 2014, Repsol produced 4,140,731 barrels at a rate of 11,344 bopd. The increase in the level of production in fiscal 2015 was attributed to the coming online of new wells in the Teak Bravo field in October 2014.

Mora Oil Ventures Ltd.

No drilling or workover activities took place during this fiscal period.

Production

Mora Oil Ventures' total field production decreased by 12% in fiscal 2015 to 90,417 barrels at an average of 248 bopd. Total production in fiscal 2014 was 102,412 barrels crude oil at an average of 281 bopd. The decreased production in fiscal 2015 was caused by a halt in production for over one (1) month during the period November- December 2014 due to a leak on the receiving line on the Poui-Alpha platform.

EOG Resources Ltd.

Drilling

In fiscal 2015, EOG Resources drilled five (5) wells in 85 rig days utilizing the Rowan Gorilla III Rig. Three (3) of these were development wells with a total footage of 25,721 feet and the other two (2) were exploration wells with a footage of 25,624 feet.

Workovers

There was no workover activity for fiscal 2015.

Production

In fiscal 2015, production fell by 10 percent to 488,047 barrels of oil at an average rate of 1,337 bopd. In fiscal 2014, EOG Resources' cumulative production was 540,071 barrels at an average of 1,480 bopd. The primary contributor to the decrease in crude oil production in fiscal 2015 was the natural decline of producing reservoirs.

Trinity Exploration and Production Limited

There was no drilling or workover activities in fiscal 2015.

Production

Trinity E&P Ltd. experienced a production decrease of approximately 15 percent fiscal 2015 with 370,476 barrels of oil produced at an average rate of 1,015 bopd. In the previous fiscal period Trinity's production was 432,624 barrels at a rate of 1,185 bopd. The decline in production in fiscal 2015 was due to the natural decline of the fields coupled with a lack of workover activity during the period.

Advance Oil Company (Trinidad) Limited

Drilling

Advance Oil Company Ltd. drilled two (2) wells in 30 rig days utilizing the SPSCCL Rig #7, in fiscal 2015. One was an exploration well (Herrera 1) and the other was a development well (Herrera-2). The combined footage of both wells was 1,492feet.

Workovers

There was no workover activity for fiscal 2015.

Production

No crude production was recorded for Advance Oil Company Ltd. for fiscal 2015.

Touchstone Exploration

Ortoire Block

An Exploration and Production Licence was signed with Primera Oil and Gas Limited (a subsidiary of Touchstone Exploration) and Petrotrin for the Ortoire Block on 31 October, 2014.

No drilling workover or production activities took place in the Ortoire Block in fiscal 2015.

Lease Operators Limited Exploration

Rio Claro Block

An Exploration and Production Licence was signed with Lease Operators Limited and Petrotrin for the Rio Claro Block on 31 October, 2014.

No drilling, workover or production activities took place in the Rio Claro Block in fiscal 2015.

Chevron-Texaco

Chevron-Texaco is a partner with BGTT in Production Sharing Contracts for one of three (3) offshore blocks in the East and South East Coast areas of Trinidad, namely Blocks 5 (a), 6 (b) and 6 (d). Blocks 5(a) and 6(b), operated by BGTT contain the Dolphin Deep and Dolphin fields respectively, which both produce gas via the Dolphin 'A' platform.

Block 6(d) contains the cross-border accumulations of the Manatee field, straddling the Venezuela-Trinidad international boundary to the Southwest of Trinidad. The Trinidad acreage of Block 6 (d) is contracted under PSC to Chevron-Texaco and BGTT. The Venezuelan acreage which has been designated the Loran field is under concession to partners PDVSA (Venezuela) and Chevron Global. As the common entity on both sides of the border, Chevron was selected to be the unit operator of the unitized Loran-Manatee field. Negotiations are currently ongoing between the Governments of Trinidad and Tobago and Venezuela, as well as between the various operator companies in order to finalize agreements and treaties, ahead of finalizing a development plan for this unitised field.

LNG AND GAS EXPORTS DIVISION

The LNG and Gas Exports Division is sub divided into the following Groups:

- Natural Gas Supply and Transmission;
- LNG; and
- Downstream Gas Utilisation.

Achievements for Fiscal Year 2015

Natural Gas Supply and Transmission

The performance objective of the Natural Gas Supply and Transmission Group is to maintain a reliable natural gas supply/ demand balance within the country, throughout the year. In order to achieve its performance objective, the Group monitors and coordinates stakeholder activities which affects natural gas supply to consumers.

In fiscal 2015, the Group continued to carry out related activities to ensure the maintenance of a reliable natural gas supply within the country. In this regard, the Group facilitated gas supply meetings with representatives from stakeholders in the upstream, midstream and downstream industry. Through these meetings, the MEEA was able to advise stakeholders with respect to:

- Optimization of upstream shutdowns;
- Alignment of upstream and downstream shutdowns,
- Redistribution of gas supplies between Atlantic and PLIE during shutdowns; and
- Proposals for compression and natural gas storage facilities to increase the stability of long-term gas supply.

The average daily gas production for fiscal 2015, of 3,893MMscf/d was five (5) percent lower than production in fiscal year 2014, when daily gas production averaged 4,104 MMscf/d. (See **Table VIII** and **Figures I and II**). Ongoing maintenance activities as well as natural base decline accounted for the decrease in production by upstream operators. It is expected that planned exploration in upcoming fiscal 2016 would arrest the rate of decline in production.

Table VIII
Average Natural Gas Production
Fiscal 2014 and 2015
[Million Standard Cubic Feet per Day (MMscf/d)]

Company	Natural Gas Production	
	2013-2014	2014-2015
BPTT	2153	2022
TRINMAR	16	22
PETROTRIN	4	4
EOG RESOURCES	550	544
BGTT	941	902
BHP	409	368
REPSOL	31	31
TOTAL	4104	3893

Figure I
Natural Gas Production Fiscal 2014

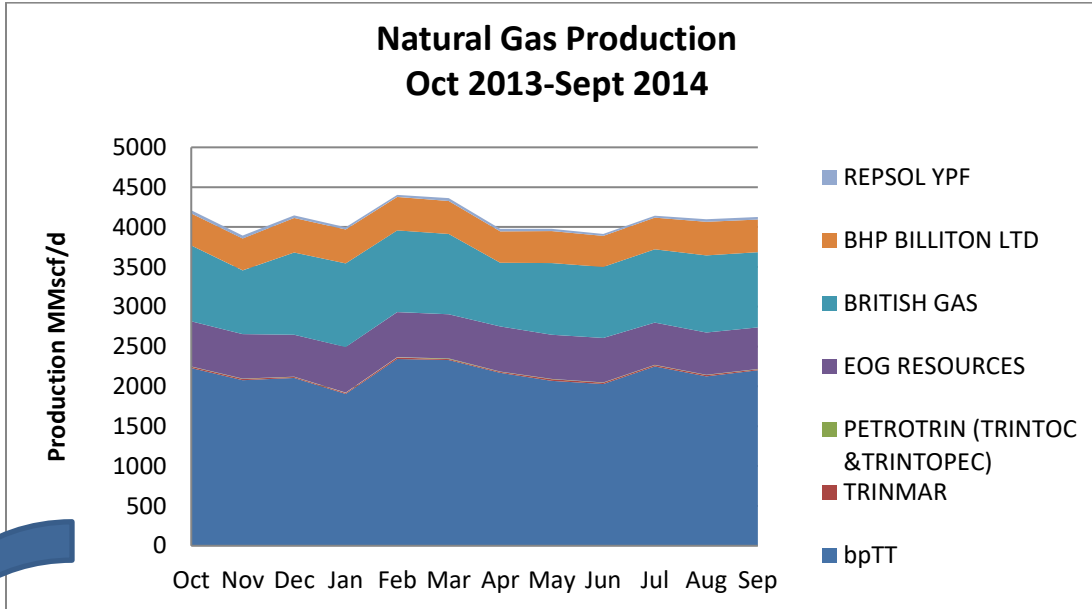
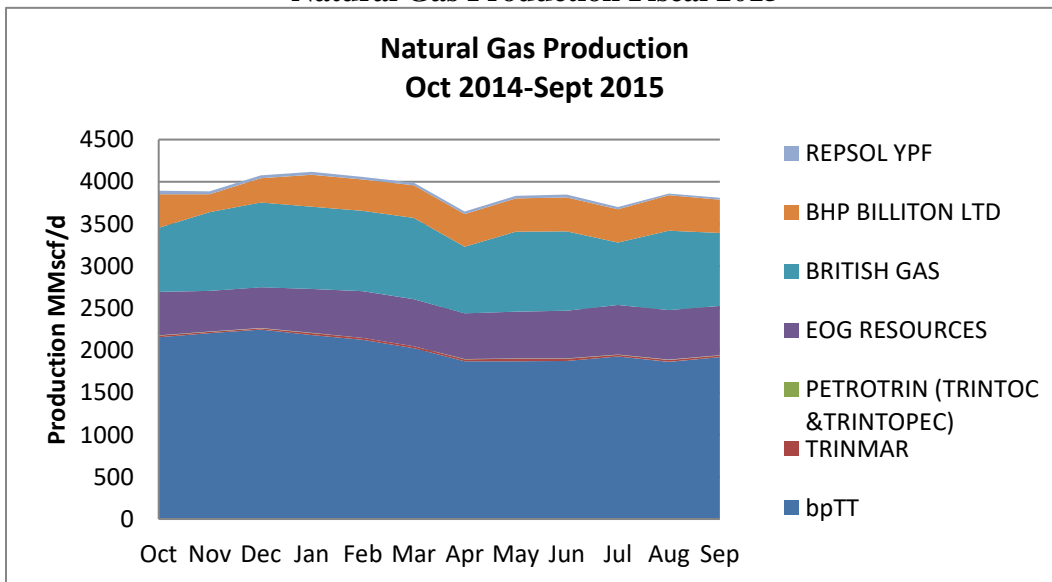


Figure II
Natural Gas Production Fiscal 2015



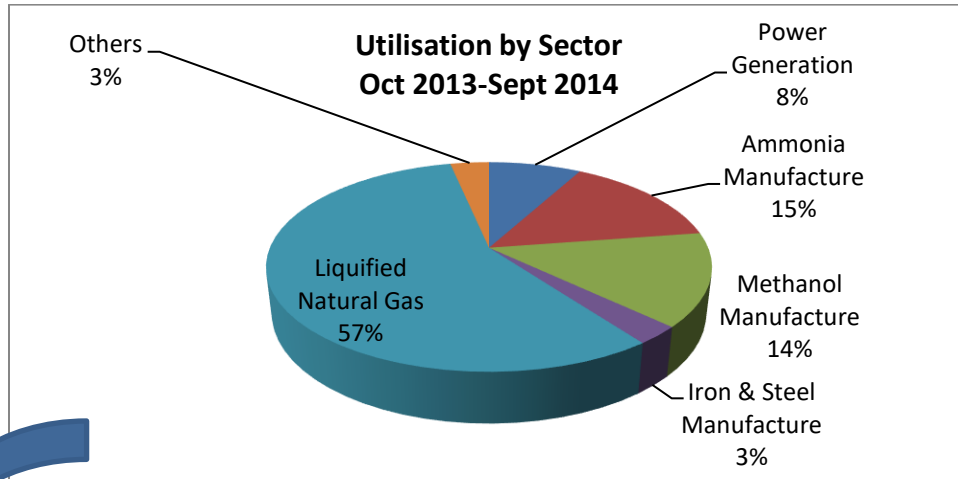
Natural gas utilisation decreased from 3,817MMscf/d in fiscal 2014 to 3,643MMscf/d in fiscal 2015 as outlined in **Table IX**. As in the previous fiscal year, gas utilisation was affected by supply constraints from the upstream companies in addition to maintenance work carried out by the downstream companies. Gas utilization for LNG production fell by five (5) percent from 2,169 MMscf/d in fiscal 2014 to 2,053 MMscf/d in fiscal 2015 however; usage for urea and melamine processing increased by 5.8 percent moving from 128 MMscf/d in fiscal 2014 to 136 MMscf/d in fiscal 2015. **Figures III and IV** show a comparison of natural gas usage by sector between fiscal 2014 and fiscal 2015.

Table IX
Average Natural Gas Utilisation
Fiscal 2014 and 2015
Million Standard Cubic Feet/ Day

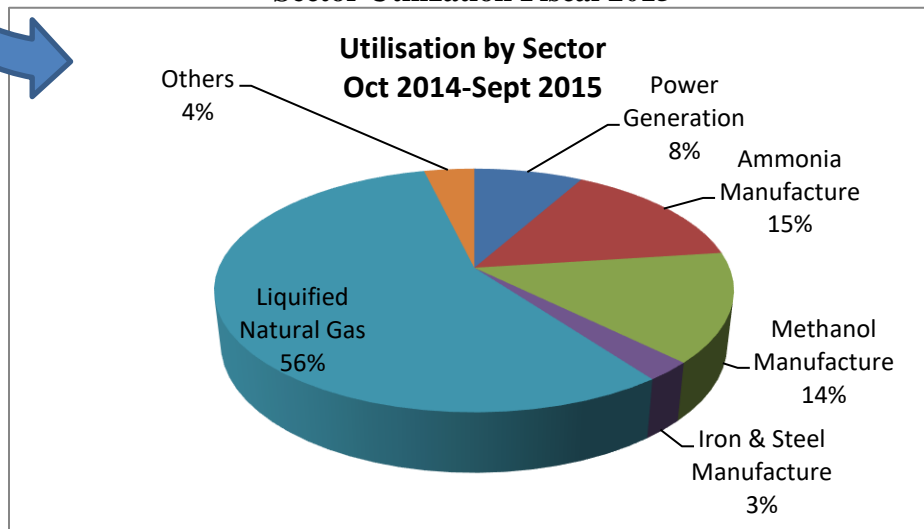
Sector	Natural Gas Utilisation	
	2013-2014	2014-2015
Power Generation	306	295
Ammonia Manufacture	558	540
Methanol Manufacture	548	527
Iron & Steel Manufacture	108	92
Liquefied Natural Gas (LNG)	2169	2053
*Others	128	136
TOTAL	3817	3643

*Others include Refinery, Cement, Urea and Melamine Gas Processing, and Small Consumers

**Figure III
Sector Utilization Fiscal 2014**



**Figure IV
Sector Utilization Fiscal 2015**



LNG and Gas Export

The strategic objective of the LNG Group is to evaluate the revenue returned to Trinidad and Tobago from the marketing of natural gas as Liquefied Natural Gas (LNG) and advise the Permanent Secretary on the options for maximizing Government's Take.

During the period under review, Trinidad and Tobago's LNG Trains processed all the natural gas delivered, but production was restricted to below maximum capacity due to shortfalls in the contracted supply of natural gas and normal production cutbacks, to facilitate equipment

maintenance activities. In fiscal 2015 a total of 679,020,794 MMBtu of LNG was produced from ALNG Trains I-IV, which was 5.6 percent lower than the quantity produced in fiscal 2014, which totaled 39,929,230 MMBtu. The factors, which contributed to the decrease in production, were increased downtime particularly with respect to Trains I, III and IV, as well as ongoing gas supply issues.

Unlike restrictions with respect to LNG production, there were no restrictions on the export of LNG produced. Total LNG exported for the review fiscal period was 681,261,575 MMBtu, but this was 34,456,559 MMBtu lower than the quantity exported in the previous fiscal period, which amounted to 715,718,134 MMBtu. In fiscal 2015, ALNG cargo destinations, as in previous years continued to be global and main export destinations in descending order of LNG quantities exported were Chile, Argentina, USA, Brazil and Spain.

International LNG prices in all the major export markets declined from the previous year and the companies marketing Trinidad and Tobago's LNG aggressively pursued strategies to maximize revenue from export sales. In this regard, the LNG Group completed all revenue evaluations, cash flow analysis and statistical data on exported cargoes and identified several issues related to underpricing of LNG and NGL cargoes, which were investigated by the MEEA in collaboration with the marketing company.

In fiscal 2015, total revenue from LNG exports, FOB Point Fortin, US \$2,736,049,991 was lower by US \$1,025,475,062 than the revenue that accrued to GORTT in fiscal 2014. The average fiscal 2015 price, indicative of wellhead gas price was US \$2.07 per MMBtu and the average fiscal 2014 wellhead gas price was US \$3.31 per MMBtu.

Downstream Gas Utilization

The strategic objectives of the Downstream Gas Utilisation Group is to promote the development of downstream gas based industries/plants and improve energy efficiency in the major natural gas based downstream industries. The Group fulfils its objectives in accordance with its short, medium and long-term plans aimed at:

- Ensuring that gas intensive industries, including the petrochemicals and heavy industry, remain competitive and are encouraged to expand and modernise existing operations;
- Encouraging technical and management best practices for improving energy efficiency at gas based industries;
- Implementing the Petrochemical Licence;
- Increasing foreign direct investment (FDI) in secondary and tertiary plants;
- Promoting the development of new industries and innovation and fostering awareness and acceptance of new technologies; and
- Developing appropriate strategies to monetize the discovery of reserves of natural gas found in deep waters and classified as expensive gas.

Petrochemical plants reported natural gas curtailment, however most experienced little to no changes in production and export in the review period, when compared with the previous reporting period. This was based on a threshold value of +/-5percent difference between the review year and fiscal 2014. The exceptions to this were:

- **TTMC I (M1)**-increases of 11 and 13 percent in production and exports respectively, attributed to a Turnaround (TAR) in fiscal 2014;
- **Titan**-increase of 6 percent in exports;
- **Tringen I**-decreases of 10 and 9 percent in production and exports respectively attributed to a TAR from September to November 2014;
- **Yara and Tringen II**-increases of 14 and 7 percent respectively in exports;
- **N2000**-decreases of 10 and 6 percent in production and exports respectively, attributed to a TAR from September to October 2014;**PCS Urea**-a decrease of 7 percent in production, attributed to a TAR from September to November 2014; and
- **AUM UAN**-increases of 11 and 16 percent in production and exports respectively, attributed to a TAR for the full complex in fiscal 2014.

In general, the country's production and export of methanol, ammonia and melamine were flat in fiscal 2015 when compared to production in fiscal 2014. There was one (1) percent increase in the production of methanol and melamine and no change in exports for these same products; while there was a one (1) percent decrease in the production of ammonia and a one (1) percent increase in exports of ammonia. These comparisons are highlighted in **Tables X to XVI** below.

Table X
Methanol Production Comparison
Fiscal 2014 and 2015

Production (MT)	FY 2013/2014	FY 2014/2015	% Variance
TTMC I	537,299	595,407	11%
CMC	325,826	325,331	0%
TTMC II	451,411	450,136	0%
MIV	461,723	460,276	0%
Titan Methanol	485,633	469,727	-3%
Atlas Methanol	709,937	723,594	2%
M5000	1,492,875	1,484,828	-1%
TOTAL	4,464,703	4,509,298	1%

Table XI
Methanol Export Comparison
Fiscal 2014 and 2015

Export (MT)	FY 2013/2014	FY 2014/2015	% Variance
TTMC I	189,727	213,534	13%
CMC	1,992,139	1,997,717	0%
TTMC II	419,910	412,620	-2%
Titan Methanol	696,733	741,004	6%
Atlas Methanol	1,511,390	1,465,188	-3%
M5000	864,097	829,886	-4%
TOTAL	5,673,996	5,659,948	0%

Table XII
Ammonia Production Comparison
Fiscal 2014 and 2015

Production (MT)	FY 2013/2014	FY 2014/2015	% Variance
Yara	217,597	219,769	1%
Tringen I	371,899	335,988	-10%
Tringen II	465,781	479,908	3%
PCS (1,2,3 & 4)	2,045,784	2,056,874	1%
PLNL	565,558	568,435	1%
CNC	508,769	518,657	2%
N2000	468,987	419,853	-10%
AUM (Net Ammonia)	181,037	187,192	3%
TOTAL	4,825,412	4,786,676	-1%

Table XIII
Ammonia Export Comparison
Fiscal 2014 and 2015

Export (MT)	FY 2013/2014	FY 2014/2015	% Variance
Yara	202,585	230,161	14%
Tringen I	390,543	353,530	-9%
Tringen II	447,490	479,711	7%
PCS (1,2,3 & 4)	1,673,214	1,745,669	4%
PLNL	584,453	575,455	-2%
CNC	454,578	449,868	-1%
N2000	602,152	564,389	-6%
TOTAL	4,355,014	4,398,783	1%

Table XIV
Urea Production and Export Comparison
Fiscal 2014 and 2015

Urea (MT)	FY 2013/2014	FY 2014/2015	% Variance
Production	533,445	493,575	-7%
Export	526,858	525,371	0%

**Table XV
UAN Production and Export Comparison
Fiscal 2014 and 2015**

UAN (MT)	FY 2013/2014	FY 2014/2015	% Variance
Production	1,147,195	1,275,777	11%
Export	1,060,358	1,225,928	16%

**Table XVI
Melamine Production and Export Comparison
Fiscal 2014 and 2015**

Melamine (MT)	FY 2013/2014	FY 2014/2015	% Variance
Production	25,168	25,376	1%
Export	24,580	24,580	0%

Status of Projects in Fiscal Year 2015

The status of the following projects as at fiscal 2015 are outlined below.

Methanol-DME Complex at Union Industrial Estate, La Brea

On April 10 2015, GORTT signed a project agreement for the establishment of a Natural Gas to Petrochemicals Complex at Union Industrial Estate in La Brea utilizing approximately 100 MMSCF/D of natural gas. As at September 2015, the final investment decision was taken and the sod was officially turned for the commencement of construction of the project. The overall progress of the project was at 15 percent completion.

Caribbean LNG – Mid-scale LNG project

A Project Development Agreement was executed with respect to the Caribbean LNG project. As at the end of fiscal 2015, an Environmental Impact Assessment was submitted to the Environmental Management Authority for consideration and negotiations were ongoing with respect to essential contract clauses.

CHEMTECH – Integrated Melamine Formaldehyde Oriented Strand Board and Veneer

A Certificate of Environmental Clearance was granted on August 23 2013 for the CHEMTECH – Integrated Melamine Formaldehyde Oriented Strand Board and Veneer project. Town and Country Outline Planning approval was granted and pre-feasibility studies were completed. Negotiations between National Energy and CHEMTECH on the Project Development Agreement were ongoing and discussions commenced between CHEMTECH and the raw material supplier, the technology provider and the financiers.

DOWNSTREAM AND RETAIL MARKETING DIVISION

The vision of the Downstream and Retail Marketing (DRM) Division is to be an innovative team driving excellent service in petroleum product marketing industries and, the accurate collection of revenue from petroleum production and petroleum product marketing. Its mission is to facilitate the operation of petroleum product marketing industries and the collection of revenue from petroleum production and petroleum product marketing, through the improvement of the existing, and the creation of new systems, processes and procedures.

DRM's strategic objectives are as follows:

- Development of Compressed Natural Gas (CNG) as a major vehicular fuel in Trinidad and Tobago;
- Administration of the Petroleum Production Levy and Subsidy Act;
- Administration of Marketing Licences for petroleum products;
- Administration of the Petroleum Impost;
- Monitoring of refinery operations;
- Forecasts and reconciliation of royalty payments;
- Monitoring of crude oil prices and exports;
- Monitoring of the Liquefied Petroleum Gas (LPG) Industry; and
- Monitoring of revenue collection from petroleum production and petroleum product marketing.

The Division has responsibility for the functions listed below:

- Issue CNG Service Licences (CSLs);
- Issue CNG Marketing Licences (CMLs);
- Issue modernized Retail Marketing Licences (RMLs);
- Develop application and operational guides for bunkering operations;
- Update CNG Regulations and Licences; and
- Draft LPG Regulations.

Achievements for Fiscal Year 2015

CNG Development

The new CNG retail price of TT\$1.00 per litre of gasoline equivalent and its price structure were made effective on 03 October 2014 by *Legal Notice No. 294 of 2014* under *The Price of Compressed Natural Gas (Amendment) Order, 2014*. One CNG Service Licence (CSL) was also issued in April 2015.

Administration of Marketing Licences for Petroleum Products

The MEEA regulates the distribution of petroleum products undertaken by wholesale marketing companies (wholesalers) as well as retailers. In order to strengthen the compliance requirements of the operators particularly with regard to HSE, reporting of accidents and submission of data, the MEEA worked with several stakeholders to review and update the existing Wholesale Marketing Licence (WML). The modernized WML was issued to both wholesale marketing companies in July 2015.

Administration of Petroleum Production Levy and Subsidy Act

The Government subsidy liability at end of fiscal 2015 was approximately TT\$549 million as compared to the sum of approximately TT\$3.24 billion in Government subsidy liability at end of fiscal 2014.

Royalty

Royalty is statutorily paid on a quarterly basis on the 21st of the month following the end of the quarter. Under the Petroleum regulations, companies are allowed to pay royalty based on an estimate of liability, which ensures that they meet the statutory deadline. The royalty rate is 12.5 percent for land and marine crude oil production. Royalty on natural gas is paid according to provisions stipulated in each Exploration and Production Licence. Payments for royalty as well as minimum rent are made under the revenue item “*Royalty on Oil and Gas*”. In fiscal 2015, the total revenue received was approximately TT\$1.10 billion, comprising royalty payments of TT\$ 1.08 billion and minimum rent payment of TT\$.02 billion. Of the sum of TT\$ 1.08 billion, TT\$256

million represented payments for arrears of royalty for the period July to September 2014, while the remainder represented royalty payments for the review period.

Subsidy/Levy

The average price of WTI crude oil for fiscal 2015 was US\$56.63 per barrel, a 43 percent decrease from the average price of US\$99.26 per barrel in the previous fiscal period. Following this trend, the subsidy claimed by the wholesale marketing companies for fiscal 2015, amounted to TT\$2,121,531,889.33, a 49 percent decrease in subsidy claimed in fiscal 2014. The levy paid by the oil producing companies in fiscal 2015 amounted to TT\$355,104,520.88 and represented a decrease of 42 percent in the amount paid in fiscal 2014.

Retail Marketing

The MEEA regulates the distribution of petroleum products undertaken by wholesale marketing companies, retailers, peddlers and bunkering companies. A network of 143 service stations served the driving public as at September 2015, with 135 located in Trinidad and eight (8) in Tobago. Five (5) companies conduct peddling operations in Trinidad and Tobago. In fiscal 2015, the Division ensured the timely payment of all fees for the renewal of retail marketing and peddlers licences and in the process received the sum of TT\$483,100. Included in this sum were two payments of TT\$40,000 (totaling TT\$80,000) for the renewal of wholesale marketing licences for the two wholesale marketing companies.

The Division also liaised with the Health Safety Environment and Measurement Section to ensure that all service stations were inspected to ascertain their level of HSE compliance. Requests for the transfer of ownership and change of name of service stations were also reviewed and where applicable, persons were informed of the need for submission of outstanding documents to complete the process. One new service station at Orange Grove, Trincity commenced operations in fiscal 2015.

Compressed Natural Gas

In fiscal 2015, a total amount of TT\$29,000 was collected for application fees for CNG Service and Marketing Licences. Additionally, as part of the Government's plan to accelerate the

development of CNG as a major alternate vehicular fuel, a five-year plan was developed for the use of CNG in Trinidad and Tobago.

Five Year Plan for the Development of CNG

The NGC CNG Company Limited was established in 2013 with a mandate to incentivize the use of CNG as a major transportation fuel in Trinidad and Tobago. Since its establishment NGC CNG Ltd. Has been overseeing Phase I of the CNG Programme, which entails the construction of 22 new CNG stations; conversion of approximately 17,500 vehicles and ancillary works. In fiscal 2015, under the operationalization of the five-year plan, the Public Transport Service Corporation (PTSC) procured 35 out of the approved 100 new, dedicated CNG buses and successfully integrated them into its fleet. To facilitate the project NGC CNG Company Limited (NGC CNG) constructed a temporary CNG filling station at the PTSC Compound, City Gate to fuel the CNG buses. This temporary CNG filling station was commissioned in February 2015.

The Board of NGC, CNG also approved the proposed terms and conditions related to its role and contribution in the acquisition of Original Equipment Manufactured (OEM) CNG Maxi Taxis. Subsequent to this, a Memorandum of Understanding (MOU) was signed on 15 May 2015 between the NGC CNG and the Maxi Taxi Association of Trinidad and Tobago for, inter alia, the change-out of approximately 1,200-diesel maxi taxis to OEM CNG Maxi Taxis over the next three (3) years. The NGC CNG has been accepting applications for the grant outlined in the MOU since 03 August 2015.

Petrotrin Refinery

The Petrotrin Refinery processes both indigenous and imported crude oil and produces refined products for the entire local market as well as for export to regional and international markets. In fiscal 2015, the refinery processed a total of 44,599,920 barrels of crude oil and produced 43,059,276 barrels of refined and intermediate products, (excluding refinery gas and loss). Crude oil imports amounted to 26,509,090 barrels. There were 10,640,196 barrels of petroleum products sold on the local market while 33,818,483 barrels of petroleum products were exported. See **Tables XVII-XX** below.

Table XVII
Refinery Throughput

Unit	Throughput (2014/2015)
Refinery Throughput (barrels)	44,599,920
Refinery Throughput (barrels per day)	122,192

Table XVIII
Refinery Output (barrels)

Product	Quantity (2014/2015)
Liquefied Petroleum Gas	(180,960)
Motor Gasoline	11,683,708
Aviation Gasoline	(7,212)
White Spirits	-
Kerosene	4,528,444
Diesel/ Gasoil	9,949,435
Fuel Oils	15,742,177
Lubes/Greases	-
Petrochemicals	-
Bitumen	257,524
Sulphur	27,568
Other Refined/Unfinished Products	1,058,592
Refinery Gas and Loss/(Gain)	1,540,643
TOTAL Refinery Output	44,599,919

Table XIX
Crude Oil Imports (barrels)

Crude Type	Quantity (2014/2015)
Lucina Blend	1,457,390
Mandji Crude	524,967
Ogeundjo Blend	9,788,648
Ogeundjo	588,399
Urals/Russian Blend	5,075,363
Varandey	2,965,385
Vasconia	5,840,503
Woodbourne	268,435
Total Crude Oil Imports	26, 509,090

Table XX
Product Sales (barrels)

Product	(2014/2015)	
	Local Sales	Export Sales
Liquid Petroleum Gas	603,205	31,648
Premium Gasoline (95 UL)	249,885	3,290,887
Premium Gasoline (92 UL)	4,258,558	-
Premium Gasoline (UL Other)	-	3,868,043
Regular Gasoline	30,089	-
Platformate	-	-
Naphtha	-	-
Aviation Gasoline and Aviation Alkylate	733	145
White Spirit	-	-
Kerosene/Avjet	1,174,610	3,428,570
Gas Oils/Diesel	4,061,898	5,626,709
Marine Diesel	-	-
Fuel Oils	-	16,101,891
Lubes and Greases	-	-
Petrochemicals	-	-
Methanol	-	-
Bitumen	261,218	-
Sulphur	-	24,605
Other Refined and Unfinished Products	-	1,445,985
TOTAL	10,640,196	33,818,483

Petrotrin Gasoline Optimization Programme

The Gasoline Optimization Programme (GOP) was designed to improve the profitability and competitiveness of the Pointe a Pierre Refinery by implementing projects to achieve the following:

- Replacing obsolete and inefficient equipment and thereby improving plant integrity and reliability;
- Reducing sale of unfinished, lower value products and increasing sale of finished, higher value products; and
- Satisfying more stringent Gasoline Specifications:
 - Increased Octane

- Lower Benzene, Sulfur, Olefins and RVP; and
- Elimination of MTBE.

The aim of the GOP was to enable the refinery to become a premier supplier in the regional and international market, of high quality environmentally friendly gasoline. The benefits of the project included:

- Increased Gasoline Quantity:
 - Total from 24.7 to 30.7 percent
 - Eliminate unfinished products (Naphtha & VGO).
- Improved Gasoline Quality:
 - Increase in MON from 82.3 to 86.0
 - Reduction in benzene from 1.6 to 0.7 percent
 - Reduction in sulphur from 41 ppm to 8 ppm.
- Improved Operations of the Pointe-a-Pierre Refinery:
 - Energy efficient & Environmental Compliant
 - Maintain throughput at 168 MBPCD.
- Customer Satisfaction:
 - Lower olefins in LPG
 - Elimination of MTBE.

Progress/Status

The GOP, which commenced in November 2005, consisted of:

- Installation of an Isomerisation Complex;
- Installation of a Continuous Catalytic Reforming Platformer Complex;
- Installation of an Alkylation Unit and Sulphuric Acid Regeneration Plant;
- Upgrade of the Fluidised Catalytic Cracking Unit; and
- Installation of Offsite Facilities and Upgrade of Utility Systems.

The GOP overall cumulative progress at end May 2015 attained 100 percent completion. The project was considered closed:

- The Isomerisation Complex was fully commissioned and placed in commercial production in May 2009;
- The Continuous Catalytic Reforming Complex was fully commissioned and placed in commercial production in April 2010;

- The Acid Plant was brought online for commercial production on 29 October 2013;
- The Alky Unit was commissioned on 07 December 2013;
- The FCCU was brought back online at the end of January 2015; and
- All work on Offsites and Utilities works were completed in May 2015.

As at May 2015, Performance Tests were completed on the Alkylation Unit and the FCCU/GCX/Merox complex. The Performance Test on the Acid Plant was previously completed in February 2015. As a result of all the performance tests being successfully completed; all units were handed over and were under the full responsibility of the Refinery. The GOP Budget for fiscal 2015 was TT\$ 98.2 million. As at end May 2015, the total GOP expenditure was TT\$ 9,086.30 million, of which TT\$1.40 million was incurred in fiscal 2015, during the period October 2014 to May 2015. The total GOP commitment and expenditure incurred in fiscal 2015, for the months of October 2014 to May 2015, was TT\$ 49.62 million.

MINERALS DIVISION

The Minerals Act Chap. 61:03 governs the Minerals Sector in Trinidad and Tobago. As provided for under the Act, the Minister is responsible for the general administration of the Act, and the Director of Minerals is responsible for the implementation of the Act. The Permanent Secretary serves as Chairman and the Director of Minerals serves as Deputy Chairman, of the Minerals Advisory Committee (MAC). The Permanent Secretary is the receiver of revenue from the Minerals Sector.

The duties and powers of the Director of Minerals as mandated under the Minerals Act include, inter alia: promoting and facilitating the effective and efficient management and development of mineral resources in general and the State mineral resources in particular. As provided for under Section 9 of the Minerals Act, the Director of Minerals delegates his functions and duties to other officers of the Minerals Division.

The Minerals Advisory Committee

The Minerals Advisory Committee (MAC) is an independent statutory committee established under Section 15 of the Minerals Act Chap. 61:03, and comprises the following members:

- Permanent Secretary of the Ministry responsible for mines (Chairman);
- Director of Minerals (Deputy Chairman);
- Commissioner of State Lands;
- Chief Technical Officer of the Ministry of Works and Transport;
- Director of Forestry (now Conservator of Forests);
- A representative of the Town and Country Planning Division;
- A representative of the Water and Sewage Authority;
- A representative of the Environmental Management Authority;
- A legal officer of the Ministry responsible for mines;
- A representative of the Factories Inspectorate (now OSHA);
- A technical officer representing the Tobago House of Assembly;
- A representative of the Ministry of Finance; and
- A representative of the Ministry of Health.

Duties of the Minerals Advisory Committee

- Advising the Minister on matters of general policy with respect to exploration, mining, processing, import and export of minerals and other minerals related matters;
- Receiving and considering applications for licences and making recommendations thereof to the Minister;
- Advising the Minister on the establishment of mining zones and the establishment of mining blocks therein;
- Advising the Minister on the quantum on bonds;
- Advising the Minister on matters of the environment as they relate to mines;
- Reviewing the provisions of the Act and the Regulations from time to time and making recommendations to the Minister as may be considered necessary; and
- Advising the Minister on all such matters that may be referred to it.

Duties of the Minerals Advisory Committee Secretariat

- Receives and collates applications for exploration, mining, processing, import and export of minerals;
- Communicates with applicants who have submitted incomplete applications, and with applicants seeking information on the status of their applications;
- Prepares documents to be laid before the MAC for their consideration, recommendation and advice to the Minister;
- Coordinates meetings of the MAC and manages all correspondence to and from MAC members;
- Prepares meeting agendas and minutes of meetings of the MAC;
- Prepares all correspondence and dispatches to applicants and other agencies as required by the MAC; and
- Prepares draft notes to Cabinet based on MAC advice given to Minister.

Achievements for Fiscal Year 2015

Minerals Advisory Committee

- Convened 12 meetings to address matters related to mining and quarrying;
- Reviewed and made recommendations on new draft Regulations made under the Minerals Act, which were subsequently approved by Cabinet and laid in Parliament in June 2015;
- Reviewed and made recommendations on a new Green Paper on Minerals Policy which received Cabinet's approval and was subsequently put-out for public comments and consultations in Trinidad and Tobago;
- Incorporated feedback from public consultations and comments into the White Paper on Minerals Policy, which was subsequently approved by Cabinet and laid in Parliament, in June 2015; and
- Convened 16 meetings to address licences for 103 operations in Trinidad and Tobago.

Exploration and Development Section

Exploration Surveys

- Completed the 115-acres, sand and gravel survey in the Melajo Forest Reserve, Matura, which commenced in Fiscal 2014;
- Conducted a reconnaissance survey of 10 acres of yellow limenstone in the Plum Mitan area, as well as on the site earmarked for allocation to National Quarries Company Limited for quarrying yellow limestone;
- Conducted a reconnaissance survey of 70 acres of oil sands in Parrylands / Guapo area based on a request by the Ministry of Works and Infrastructure, for quarrying oil sand; and
- Conducted reconnaissance surveys in areas in Tattoo Trace, Valencia which were found to be unsuitable for quarrying because of the presence of a large number of squatters on the lands of interest.

Minerals Advisory Committee Secretariat

- Performed secretariat functions for the Minerals Advisory Committee;
- Developed, tested and refined operating procedures and record-keeping methods to ensure efficiency of MAC operations;

Minerals Sub-Registry and Database Management:

- Conducted quarry audit exercise with the assistance of the Internal Audit Unit, to expand data collecting functions, to capture data on production from the Minerals Sector.

Applications and Licences Processing

- Processed 30 applications for mining licences, all but two of which were incomplete; and
- Executed two new, five-year Mining Licences to Palo Seco Agricultural Enterprises Limited, for a 27.5961-hectare parcel of State lands for oil sands mining; and to Keno Construction and Quarrying Limited, for a 2.8329-hectare parcel of private lands for sand and gravel mining respectively.

Allocation of State Lands (Bid Rounds and National Interest)

- Pre-approved the companies listed below for the award of mining licences for six (6), forty-acre parcels of State lands located in the Melajo Forest Reserve, Matura. These awards were done in the national interest:
 - Motilal Ramhit and Sons Contracting Limited;
 - Fides Limited;
 - I&U Limited;
 - West and Associates;
 - Kall Company Limited; and
 - Namalco Construction Services Limited

Operations Section

Licence Monitoring

- Monitored activities and conducted site visits to seven (7) quarries operating in Trinidad and Tobago, to ensure compliance with the terms and conditions of the licences, and the Minerals Act.

Minerals Audit

- Conducted mineral audit exercise with the assistance of the Internal Audit Unit, to capture data on production for the computation of royalties owed to the State. The sum of \$4,134,059 in revenue was collected from the Minerals Sector; and
- Conducted 63 mineral audit field visits.

Enforcement of Minerals Act and Regulations

- Conducted nine (9) field visits to monitor complaints received.

The Division's fiscal 2015 medium and long-term plans are outlined in **Tables XXI and XXII** below.

**Table XXI
Medium Term Plans-Fiscal 2015**

No.	Initiatives	Performance Objectives	Accomplishment	Status
1	Establish a Minerals Ranger Squad	To better regulate the Minerals Sector and to enforce against illegal quarrying activities	Draft structure and staffing for a Ranger Squad and a DCN prepared	Establishment of Ranger Squad currently being considered in overall MEEA restructuring
2	Establish Mining Zones in Trinidad and Tobago	To identify areas in Trinidad for the zoning and effective planning of quarrying activities	SEIA Study submitted to the MAC for review	SEIA Report under review by the MAC and other regulatory agencies
3	Restructure the Minerals Division	To provide adequate staffing and resources to better regulate the Minerals Sector	Proposed structure and staffing developed for the Minerals Division	Restructuring exercise ongoing

**Table XXII
Long Term Plans-Fiscal 2015**

No.	Initiatives	Performance Objectives	Accomplishment	Status
1	Amend the Minerals Act and related Legislation	To better regulate the Minerals Sector and to remove gaps and overlaps in the various pieces of legislation governing the Sector	Provisions in Legislation identified which need amendment; Cabinet approved amendments and referred to AG's Office for action	Amendments under review by the AG's Office for preparation of a draft Bill to amend the Minerals Act