



2022

SECOND SESSIONS OF THE 12TH PARLIAMENT

FINANCIAL SCRUTINY UNIT

Office of the Parliament of Trinidad and Tobago

HEAD 40:

MINISTRY OF ENERGY AND ENERGY

INDUSTRIES

Total Allocation - \$584,055,810.00

Summary of the Ministry's Expenditure, Divisions and Projects.

Publication

An electronic copy of this Guide can be found on the Parliament website: www.ttparliament.org

Contacts

All correspondence should be addressed to:

The Secretary

Standing Finance Committee

Office of the Parliament

Parliamentary Complex

Cabildo Building

St Vincent Street, Port of Spain, Trinidad and Tobago

Tel: (868) 624-7275; Fax: (868) 625-4672

Email: standingfinance@ttparliament.org

Table of Contents

<i>Table of Contents</i>	2
<i>About this Guide</i>	3
<i>Head 40: Ministry of Energy and Energy Industries</i>	4
<i>Key Statements from 2020 Standing Finance Committee Debate</i>	13
<i>Auditor General Report Findings for the Fiscal year 2020</i>	14
<i>Review of the Public Sector Investment Programme 2021</i>	17
<i>The Ministry's total allocation as a percentage of the National Budget for the period 2016 to 2022</i>	19
<i>Where the Ministry spends its money</i>	20
<i>Summary of Recurrent Expenditure for the period 2016-2022</i>	22
<i>Staff and Pay</i>	27
<i>Analysis and Summary of Expenditure</i>	28
<i>Analysis of Expenditure Unique to the Ministry of Energy and Energy Industries</i>	29
<i>Public Sector Investment Programme 2022 Projections</i>	31
<i>Noteworthy Development Programme Estimates in 2019-2022</i>	33
<i>Status of New Projects from the Financial Year 2019</i>	34
<i>New Projects for the Financial Year 2022</i>	35
<i>Similar Ministries/Departments Internationally</i>	36

About this Guide

This guide provides a summary of expenditure for the Ministry of Energy and Energy Industries for the period 2016-2022. It provides Members of Parliament and stakeholders with an overview of the Ministry's responsibilities. The primary purpose of this guide is to consolidate the information contained within the various Budget Documents pertaining to the Ministry of Energy and Energy Industries and provide readers with an analysis of same. This guide is based primarily on:

- the Draft Estimates of Recurrent Expenditure 2022;
- the Draft Estimates of Development Programme 2022;
- the Public Sector Investment Programme 2022; and
- the Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Financial Year 2020.

Head 40: Ministry of Energy and Energy Industries

Ministerial Overview 1

The Ministry of Energy and Energy Industries (MEEI) is responsible for the overall management of the oil, gas and minerals sectors in Trinidad and Tobago. These sectors are the largest single contributors to the GDP of the country and the revenues generated provide the resources for the future development objectives of the Government of the Republic of Trinidad and Tobago (GORTT).

The MEEI is also responsible for monitoring, controlling and regulating of the energy and mineral sectors of Trinidad and Tobago. Its early years began in 1904 when the Mines Department was established to manage Manjak production. In 1948 the Mines Department was re-designated the Petroleum Department. In June 1962, the Ministry of Petroleum and Mines was established. Since then there has been nine name changes with corresponding changes in ministerial responsibility. As the energy sector expanded so have the roles and functions of the MEEI.

Mission Statement

To provide strategic leadership and effective regulation and management of the energy and mineral sectors to create sustainable value for Trinidad and Tobago.

Vision Statement

To be a highly responsive, client-oriented organisation to drive the sustainable development of the energy and mineral sectors

¹ Ministry of Energy and Energy Industries website, accessed on August 30, 2021. <https://www.energy.gov.tt/about-us/>

Core Values

- Commitment – to create an enabling environment in the energy and mineral sectors.
- Professionalism – strengthening competencies towards creating a team with expertise.
- Integrity – operating based on the tenets of honesty and diplomacy.
- Accountability – functioning within a robust system of checks and balances.
- Transparency – bound by legislation, rules and regulations.
- Service Oriented – striving for excellence in customer service delivery.
- Equity and Equality- ensuring that all services of the MEEI are available and accessible to stakeholders.

Within this context, the following Strategic Goals and Objectives were defined to guide the operations of the organisation for the 2017–2021 period:

- Growth and Sustainability;
- Maximising Our Potential;
- Operational Efficiency;
- Governance Service Excellence; and
- Health, Safety, Security and the Environment.

Functions of the Ministry of Energy and Energy Industries²

The Ministry operates a range of activities including:

- Leasing and/or licensing of areas for petroleum exploration and production

² Ministry of Energy and Energy Industries website, accessed on August 30, 2021. <https://www.energy.gov.tt/about-us/our-roles-and-functions/>

- Regulation and management of all oil and gas development activities
- Regulation and management of upstream operations in oil refining activities
- Administration of domestic marketing of petroleum products, natural gas transmission/sales, petrochemical manufacture and other natural gas based industries
- Formulation and implementation of legal instruments for the petroleum industry
- Acquisition, analysis and dissemination of both local and international petroleum information
- Sharing responsibility with the Ministry of Finance for the collection of petroleum revenues accruing to the State
- Representation of the interests of Trinidad and Tobago at international petroleum fora and institutions
- Long term planning, development and implementation of policy initiatives in the petroleum sector.
- Sharing of the management of the State's interests and assets in the oil and gas industry
- Sharing responsibility for the administration and management of the minerals sector.

Divisions³&Units⁴

- | | | |
|--|---------------------------------------|--|
| ➤ <u>Office of the Permanent Secretary</u> | ➤ <u>Contract Management</u> | ➤ <u>Commercial Evaluation</u> |
| ➤ <u>Downstream Petroleum Management</u> | ➤ <u>Energy Research and Planning</u> | ➤ <u>Petroleum Operations and Management</u> |
| ➤ <u>Legal</u> | ➤ <u>LNG and Gas Exports</u> | ➤ <u>Minerals</u> |
| ➤ <u>Resource Management</u> | ➤ <u>Corporate Communications</u> | ➤ <u>Financial Service</u> |
| ➤ <u>General Administration</u> | ➤ <u>GIS/Draughting</u> | ➤ <u>Human Resources</u> |
| ➤ <u>Information Technology</u> | ➤ <u>Internal Audit</u> | ➤ <u>Library</u> |
| ➤ <u>PSC Audit</u> | ➤ <u>Subsidy Verification Unit</u> | |

³ Ministry of Energy and Energy Industries website, accessed on August 30, 2021. <http://www.energy.gov.tt/about-us/the-organisation/divisions/>

⁴ Ministry of Energy and Energy Industries website, accessed on August 30, 2021. <http://www.energy.gov.tt/about-us/the-organisation/support-units/>

Ministry of Energy and Energy Industries' Oversight

The Ministry of Energy and Energy Industries (MEEI) has a wide range of oversight over several companies as published in the Gazette on September 9th, 2020⁵ as follows⁵:

Responsibilities

The Ministry is responsible for the following areas:

Energy Industries

Energy Policy Planning and Research

Hydrocarbons

Natural Resources

Power Generation

Quarries and Mines

The following State Enterprises fall under the portfolio of Ministry of Energy and Energy Industries (MEEI)⁶:

Wholly Owned Enterprises

Lake Asphalt of Trinidad and Tobago (1978) Limited

Union Estate Electricity Generation Company Limited

Trinidad Petroleum Holdings Limited

National Quarries Company Limited

Trinidad and Tobago National Petroleum Marketing Company Limited

The National Gas Company of Trinidad and Tobago Limited

⁵ Trinidad and Tobago \ Gazette No. 61, Vol. 60 website. Accessed on August 30, 2021: <http://news.gov.tt/sites/default/files/E-Gazette/Gazette%202021/Gazettes/Gazette%20No.%2061%20of%202021.pdf>

⁶ Ministry of Energy and Energy Industries website, accessed on August 30, 2021: <https://www.energy.gov.tt/about-us/companies-shareholding-list/>

Majority Owned Enterprises:

Alutrint Limited

Alutech Limited

Indirectly Owned Enterprises:

- Atlantic 1 Holdings LLC (A1HLLC)
- Block 1 (a) (T&T)
- Downstream Petrochemicals Research and Development Limited
- Heritage Petroleum Company Limited
- Liquid Fuels Company of Trinidad and Tobago Limited
- NATPET Investments Company Limited
- NGC CNG Company Limited
- NGC E&P Investments (Barbados) Limited
- NGC E&P Netherlands Cooperatief U.A
- NGC E&P (Netherlands) B.V.
- NGC NGL Company Limited
- NGC Pipeline Company Limited (NPL)
- Atlantic LNG 4 Holdings Limited (ALNG4HL)
- Caribbean Gas Chemical Limited
- Eastern Caribbean Gas Pipeline Company Limited
- La Brea Industrial Development Company Limited
- National Energy Corporation of Trinidad and Tobago Limited
- NEL Power Holdings Limited
- NGC E&P (Barbados) Limited
- NGC E&P Investments Limited
- NGC E&P Investments (Netherlands) B.V
- NGC Group Captive Insurance (Barbados) Limited
- NGC Petrochemicals Limited
- NGC Trinidad and Tobago LNG Limited (formerly NGC LNG (Train 4) Ltd.)

- Paria Fuel Trading Company Limited
- Petrotrin Panama Incorporated
- South East Coast Consortium
- TSP Assets (Teak, Samaan, Poui)
- Trinidad and Tobago Marine Petroleum Company Limited
- Trinidad Northern Areas Limited
- Trintoc Services Limited
- Trinidad Generation Unlimited
- World GTL Trinidad Limited
- Petroleum Company of Trinidad and Tobago Limited
- Phoenix Park Gas Processors Limited
- The Guaracara Refining Company Limited
- Trinidad and Tobago LNG Limited
- Trinidad Nitrogen Company Limited
- Trinmar Limited
- Trinidad and Tobago NGL Limited
- Point Fortin LNG Exports Limited (PFLE)
-

Statutory Board and Other Bodies:

- The Power Generation Company of Trinidad and Tobago Limited (PowerGen)

Government Policy Context for the Ministry of Energy and Energy Industries.⁷

The energy sector is one of the main drivers of the Trinidad and Tobago economy, contributing 34.9% to real GDP and almost 39% to the Government's revenue. The GORTT's focus is on creating partnerships and innovations that foster self-reliance and a resilient energy sector through an ethical, efficient and evolving regulatory framework. The GORTT began the process of having open, transparent and formal discussions with all major players in the Trinidad and Tobago energy sector, upstream, midstream and downstream, to achieve consensus on appropriate improvements to our oil and gas taxation regime, incentives and gas pricing regime.

The Policy Initiatives For the Energy Sector Are Geared To:

- Ensure that we have an attractive, competitive and responsible fiscal and regulatory environment, that will maximize recovery of our hydrocarbon resources and national income;
- Support and encourage local professionals and service companies to export energy services to new and emerging oil and gas producing countries, within CARICOM, in Africa, and elsewhere;
- Encourage and facilitate partnerships, investment and joint ventures with oil and gas companies and state agencies overseas, focusing in particular on Guyana and Suriname, Ghana and Tanzania;
- Utilise the National Gas Company as an investment vehicle for new energy and hydrocarbon based industries, both in Trinidad and Tobago and overseas;
- Facilitate and encourage the growth of locally owned energy sector companies through appropriate fiscal and monetary incentives and concessions;
- Maximize local content and local value added through appropriate guidelines and legislation;

⁷ Ministry of Energy and Energy Industries website, accessed on August 30, 2021 <http://www.energy.gov.tt/about-us/gortt-policy-context/>

- Ensure that the local private sector obtains a larger share of the activity generated by the energy sector, especially in exploration and production, in addition to more traditional areas such as fabrication, remediation, construction, design, logistics, well services, platform operations and maintenance and support services;
- Maximize efficiency in the use of natural gas in the downstream sector;
- Promote the development of new industries and innovation and foster awareness and acceptance of new technologies;
- Maximize, where practicable, the use of renewable energy (such as solar, wind and wave energy) through incentives, concessions and enabling legislation, and make reduction of Trinidad and Tobago's carbon footprint a priority by setting appropriate renewable energy production targets, as has been done in the European Union, where EU countries have been mandated to achieve a target of 20% of energy production from renewable energy sources by the year 2020;
- Work in partnership with business and labour to maximize output, while ensuring fair wages and equitable wealth distribution, appropriate economic returns and social justice;
- Continue building our reputation for integrity, transparency and respect for signed contracts and agreements;
- Create an environment in which producer companies, both existing and new, become aggressive about seeking new discoveries in oil and gas;
- Accelerate and conclude negotiation of new gas supply contracts, to replace long-term contracts that are due to expire in the next few years, in the best interest of the country and all stakeholders;
- Develop appropriate strategies to monetize the discovery of reserves of natural gas found in deep waters, which are classified as expensive gas;
- Create an appropriate fiscal regime and incentives to encourage the production of "Stranded" oil and gas, both on land and offshore;
- Ensure that the gas intensive industries, such as petrochemicals and heavy industry, remain competitive and are encouraged to expand and modernize existing operations;

- Develop strategies to counter the major difficulties which the LNG industry of Trinidad and Tobago (T&T) now faces, including renegotiation of arrangements for a more equitable share of the revenue for all players from the sale of LNG in our major markets in South and Central America, Europe and the Far East;
- Recover the projects that have been abandoned with respect to downstream industries that are still relevant, in order to provide the country with the basic building blocks for the manufacturing industry;
- Attract and retain first class professionals to the management and boards of state enterprises in the energy sector, while minimizing political risk and ensuring job security for these individuals;
- Build Trinidad and Tobago's reputation as a preferred destination for investment in the energy sector; and
- Overhaul and revamp the institutional framework of the state agencies in the energy sector to ensure that they can meet the demands of the global energy environment and respond promptly, transparently and effectively to proposals from potential investors.

Minister of Energy and Energy Industries⁸ - The Honourable Stuart Young, MP

Permanent Secretary (Ag) of the Ministry of Energy and Energy Industries⁹ - Mrs. Penelope Bradshaw-Niles

⁸ Ministry of Energy and Energy Industries website, accessed on August 30, 2021. <https://www.energy.gov.tt/minister-of-energy-and-energy-industries/>

⁹ Ministry of Energy and Energy Industries website, accessed on August 30, 2021. <https://www.energy.gov.tt/about-us/the-organisation/permanent-secretary/>

Key Statements from 2020 Standing Finance Committee Debate

During the Standing Finance Committee debate of 2019, the following statement was made in relation to the emphasis of the Ministry of Energy and Energy Industries for fiscal year 2020/2021¹⁰:

“The Ministry of Energy and Energy Industries is responsible for the overall management of the oil, gas and minerals sectors in Trinidad and Tobago. The Petroleum Act and regulations bestow about the Minister of Energy and Energy Industries the responsibility of the overall management of the oil and gas sector in Trinidad and Tobago as regulator. Pursuant to the Petroleum Act and regulations, the Ministry has responsibility also for the execution and supervision of exploration and production licenses, production-sharing contracts and to ensure the investment levels are maintained in the industry. The capital investment is very large, but it is undertaken not by the Government nor the Ministry of Energy and Energy Industries, but by foreign multi-national energy companies, domestic private energy companies and state energy companies. Similarly, under the Minerals Act and regulation, the Ministry of Energy and Energy Industries is responsible for the regulations of the mineral sector. There is a great demand for quarry aggregates in the country now, both from the limestone quarrying point of view..., so we are looking at the National Quarries, its management and its operation, and this year we plan to take some serious restructuring action in that company. In addition, we also have line responsibility for power generation. Despite the significant contributions of these sectors to GDP, revenue and foreign direct investment, the Ministry of Energy and Energy Industries has a relatively small budget allocation. This operational expenditure, however, is covered by the petroleum in-posts. Allocation of Recurrent Expenditure for the Ministry of Energy and Energy Industries for fiscal 2021 is just around \$642 million. The allocation for the Development Programme is a mere 9.27 million, of which 1.27 million is funded under the Consolidated Fund and 8 million is to be funded under the IDF. Nevertheless, the Ministry of Energy and Energy Industries stands prepared to optimize the use of the allocated resources in fulfilling its role and functions on behalf of the citizens and for the benefit of the citizens of Trinidad and Tobago.”

- Minister of Energy and Energy Industries

- Past Senator the Honourable Franklin Khan

Auditor General Report Findings for the Fiscal year 2020

Ref: Auditor General's Report¹¹

NOTES TO THE ACCOUNTS

13. PRODUCTION SHARING CONTRACTS pg.47

Under the provisions of the Production Sharing Contracts, the Government of the Republic of Trinidad and Tobago is entitled to a share of the production of natural gas and crude oil from the operations of the contractors. The moneys received are placed in the Deposit Account Head 111/570 (Production Sharing Contract). From this share of production, the Minister of Energy and Energy Industries is responsible for meeting the respective Contractor's tax and similar financial obligations to the Government. Total Payments made to the Board of Inland Revenue in respect of the financial year 2020 was \$1,136,373,654.00. Revenue collection decreased by 55% when compared to the receipts collected in the financial year 2019. Details of payments made in the financial year 2020 are shown below:

DATE	AMOUNT
02/07/2020	\$359,492,264.00
04/08/2020	\$278,570,251.00
07/02/2020	\$196,378,438.00
09/17/2020	\$195,649,926.00
09/29/2020	\$106,582,775.00
TOTAL	\$1,136,373,654.00

¹¹ Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Financial Year ended September 30, 2020,

<http://138.128.179.50/sites/default/files/Auditor-General-Report-2020.pdf>

14. PETROLEUM SUBSIDY PAID TO CONTRACTORS pg.48

In accordance with Sub-section (2) of Section 5 of the Petroleum Production Levy and Subsidy Act 1974, Chapter 62:02, the total advances made in the financial year 2020 from the Petroleum Products and Subsidy Fund, for the purpose of subsidizing the prices at which Petroleum Products are sold by persons carrying on marketing business is \$249,405,675.92. The details are available for Audit scrutiny.

INVESTMENTS - GENERAL - \$40,665,466.89 pg. 87-88

2.35 These investments comprised fixed deposits held at the Central Bank of Trinidad and Tobago and funds in money market accounts at a financial institution. A difference of \$10,000.00 was noted between the amount stated under Non-Current Assets - Investments General Treasury Deposits of \$40,665,466.89 and the amount posted in the Treasury's Trial Balance of \$40,655,466.89. This has resulted in a difference of \$10,000.00 between Total Assets of \$29,016,032,199.31 and Total Liabilities and Funds of \$29,016,022,199.31. This difference was due to a typographical error.

2.36 The investments were held on behalf of the under-mentioned:

	2020	2019
	\$	\$
Administrator General	682,904.42	682,904.42
Pool Betting Deposits	750,000.00	750,000.00
Ministry of Energy and Energy Affairs - Mora Oil Ventures Limited	11,222,562.47	111,079,095.27
Members Club	<u>28,000,000.00</u>	<u>28,500,000.00</u>
TOTAL	<u>40,655,466.89</u>	<u>41,011,999.69</u>

MONITORING pg.110

3.80 Evidence of the Strategic Management and Executive Office (SMEO) monitoring the votes in respect of the COVID-19 expenditure to ensure funds were applied for the purposes intended was not seen.

Ministry of Energy and Energy Industries

3.86 The Ministry's response to the Circular, disclosed, as at 30th September, 2020, COVID-19 expenditure totalled \$3,894,685.26. Audit verification indicated that total expenditure was \$3,699,405.26, a difference of \$195,280.00. This difference represented monies paid in the financial year 2020/2021.

EN1- Permanent Secretary, Energy and Energy Industries pg.133

06/03/EN1/003 - Quarries, Sand and Gravel Pits

4.18 As at 30th September 2020, revenue collected totalled \$2,576,409.15. This represented a shortfall of \$3,923,590.85 or 60.36 % of the 2020 estimated figure of \$6,500,000.00.

4.19 The Ministry reported that this shortfall in estimated revenue was due to the general decline in the construction industry in the period under review. Additionally, the emergence of COVID-19 resulted in the shut-down of quarrying activities during the restriction periods.

4.20 The status of forty-seven (47) Operational Quarries on state lands was submitted to the Auditor General's Department on the 6th August 2020. Details are as follows:

Status of the Operational Quarries as at July 2020	No. of Quarries
Operating with licenses	7
Operating without 5-years licenses	25
Operating without 1-year licenses	15

4.21 It was noted that twenty five (25) quarries were operating without five year licenses and fifteen (15) quarries were operating without five year licenses and fifteen (15) quarries were operating without one year licenses. This contravenes the Minerals (General) Regulations 2015

Review of the Public Sector Investment Programme 2021¹²

An overall allocation of \$9.3 million was provided to the MEEI in fiscal 2021, of which \$1.3 million was allocated under the Consolidated Fund and \$8.0 million under the Infrastructure Development Fund. Due to the COVID-19 pandemic some of the project schedules were delayed and as a result the allocation was not utilised in fiscal 2021. However, the following project activities were undertaken under the MEEI:

Renewable Energy and Energy Efficiency Initiatives (RE&EE)

The development of the renewable energy and energy efficiency initiatives by the MEEI is as follows:

- Installation of two (2) Electric Vehicle (EV) Charging Stations and Purchase of One (1) Electric Vehicle for the MEEI – the proposed site for the installation of the charging station was provided by UDECOTT.
- Wind Resource Assessment Programme (WRAP) and the Solar Traffic Light Project.

Synthetic Aperture Radar System

The Synthetic Aperture Radar Systems will aid in the detection and monitoring of oil spills in the Gulf of Paria. Cabinet by Minute 1758 of August 29, 2019 approved PSIP funding of \$0.270 million for annual maintenance (inclusive of insurance), upgrade of ICT and contingency fees for both the Synthetic Aperture Radar Systems at Chaguaramas and Port of Spain from fiscal 2020 for three (3) years. However, due to the delays in the procurement and installation of the systems, the funding was not utilised in fiscal 2021.

Acquisition of Equipment for the National Quarries

¹² Public Sector Investment Programme 2022, pages 159-160. <https://www.finance.gov.tt/wp-content/uploads/2021/10/Public-Sector-Investment-Programme-2022.pdf>

The new Furukawa rock drill was fully installed and commissioned and the average monthly haulage of blast rock has since increased from five thousand [5,000] (metric tonnes) MT to fifteen thousand (15,000) MT. The installation and commissioning of the stone crusher was delayed due to the COVID-19 restrictions.

Dredging of the Sea Lots Main Channel and Turning Basin

Heavy siltation of the Sea Lots Main Channel and Turning Basin has posed a challenge for vessels as its depth is below the minimum requirement of seven (7) metres for safe navigation. As such, an updated Bathymetric Survey on the Sea Lots Main Channel and Turning Basin is being conducted.

The Ministry's total allocation as a percentage of the National Budget for the period 2016 to 2022

Year ¹³	Total Allocation ¹⁴	National Budget ¹⁵	Percentage of National Budget
2016	\$1,008,809,409.00	\$56,573,913,053.00	1.78%
2017	\$467,776,331.00	\$54,883,153,410.00	0.85%
2018	\$87,100,243.00	\$54,211,726,813.00	0.16%
2019	\$336,255,939.00	\$54,581,467,181.00	0.62%
2020	\$583,907,428.00	\$57,388,076,726.00	1.02%
2021	\$480,598,804.00	\$57,292,169,264.00	0.84%
2022	\$581,055,810.00	\$57,917,018,000.00	1.00%

- Total allocation for the Ministry as a percentage of the National Budget illustrated an increase in the allocation to the Ministry of Energy and Energy Industries by **0.16%** between the years 2020/2021 and 2021/2022.

¹³ For the Financial Years 2016-2020, actual figures were used to calculate total allocation. However, estimates were used to calculate the total allocation for the Fiscal Years 2021 and 2022.

¹⁴ Total Allocation for the Ministry of Energy and Energy Industries=Recurrent Expenditure + Consolidated Fund Expenditure

¹⁵ The National Budget =Recurrent Expenditure + Development Programme Expenditure Consolidated

Where the Ministry spends its money

2022 Estimates of Expenditure

The budget allocation of **\$584,055,810.00** for the Ministry of Energy and Energy Industries is comprised of:

- The Draft Estimates of Recurrent Expenditure¹⁶ in the sum of **\$569,285,810.00**;
- The Draft Estimates of Development Programme¹⁷ in the sum of **\$14,770,000.00**;
 - Consolidated Fund in the sum of **\$11,770,000.00**; and
 - Infrastructure Development Fund¹⁸ of the sum **\$3,000,000.00**.

The Estimates of Recurrent Expenditure include:

- 01 Personnel Expenditure - **\$44,384,585.00**;
- 02 Goods and Services - **\$88,502,286.00**;
- 03 Minor Equipment Purchases **\$2,100,310.00**; and
- 04 Current Transfers and Subsidies **\$434,298,629.00**.

The Ministry of Energy and Energy Industries':

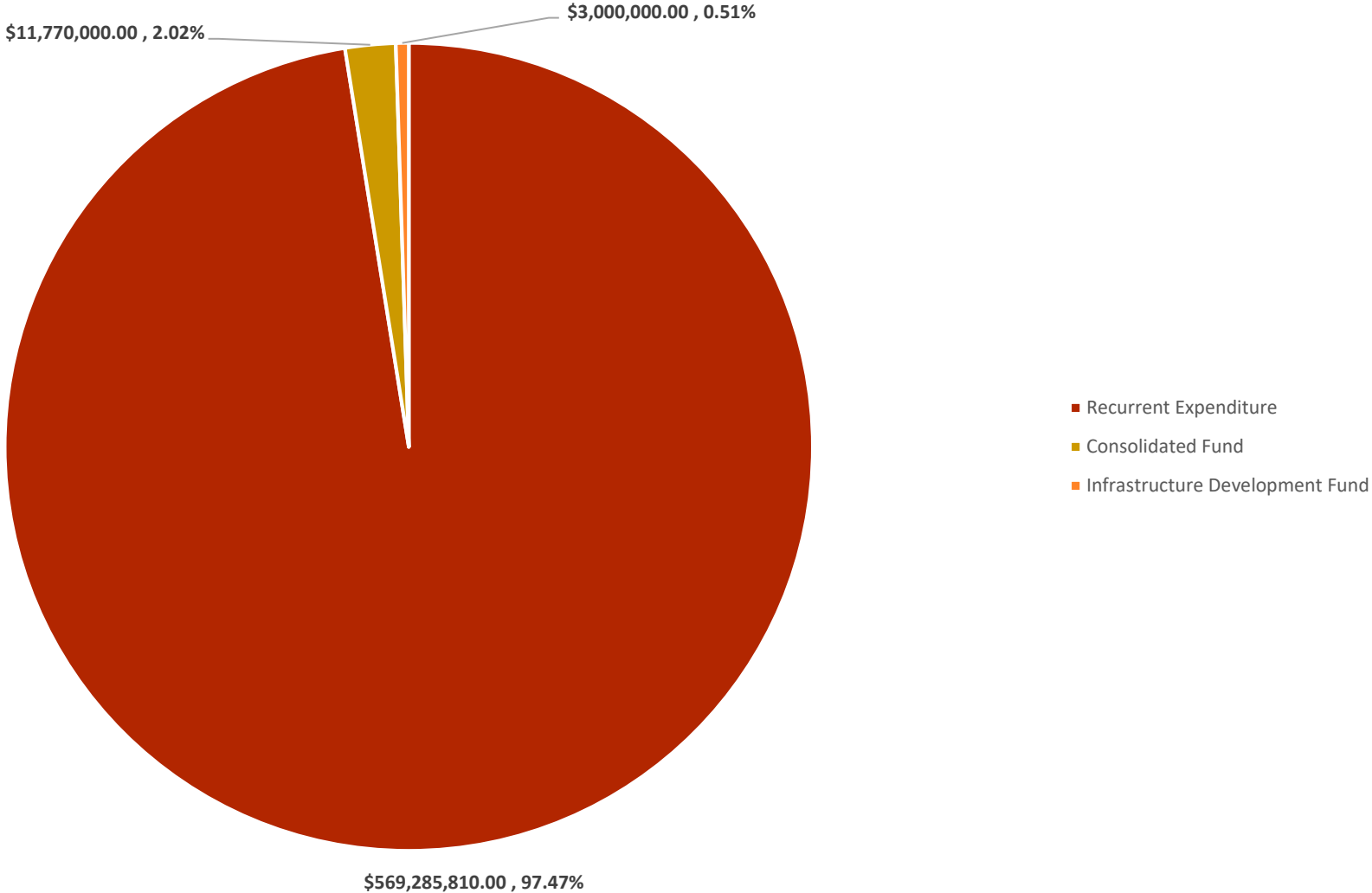
- Total allocation as a percentage of National Budget = **1.01%**;
- Recurrent Expenditure as a percentage of the total Recurrent Expenditure budget is **1.03%**
- Consolidated Fund allocation as a percentage of the total Consolidated Fund allocation is **0.47%**; **and**
- Infrastructure Development Fund allocation as a percentage of the total Infrastructure Development Fund is **0.18%**.

¹⁶ Draft Estimates of Recurrent Expenditure 2022. <https://www.finance.gov.tt/wp-content/uploads/2021/10/Numbered-Draft-Estimates-of-Expenditure-2021-2022.pdf>

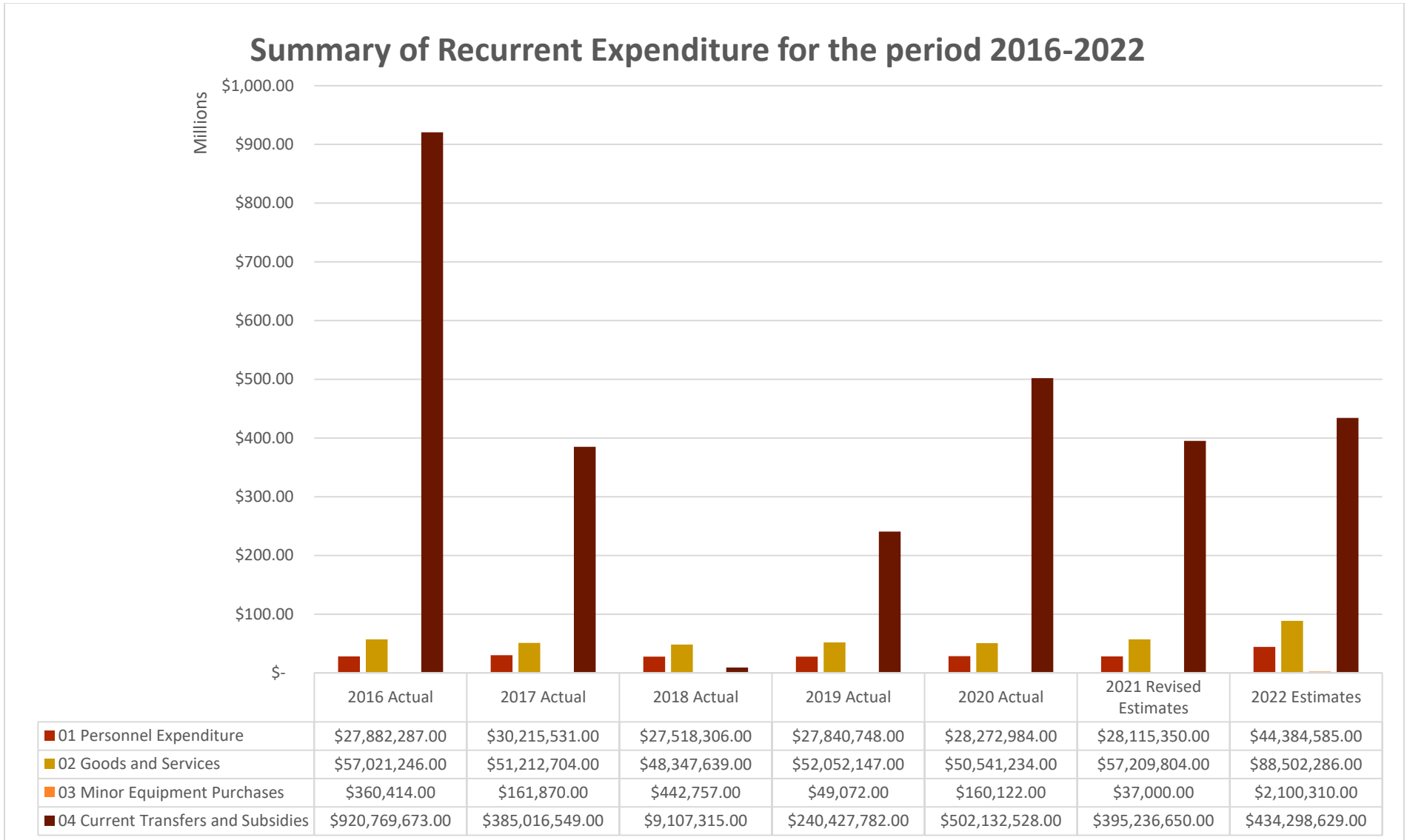
¹⁷ Draft Estimates of Development Programme 2022. <https://www.finance.gov.tt/wp-content/uploads/2021/10/Numbered-Draft-Estimates-of-Expenditure-2021-2022.pdf>

¹⁸ Head 18 -Ministry of Finance, Sub-Head 04 – Current Transfers and Subsidies, Sub-Item 11- Infrastructure Development Fund (IDF) (Infrastructure Development Fund allocation is part of the Ministry of Finance allocation for the financial year. *Therefore, the total budget allocation for the Ministry of Energy and Energy Industries does not include the IDF funding.*

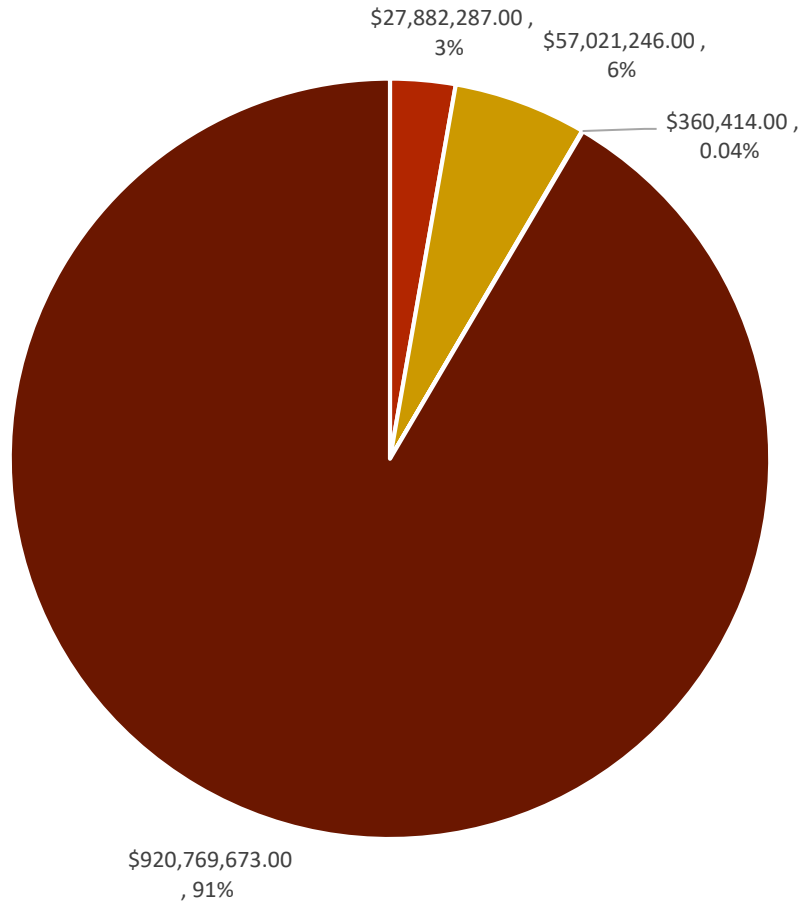
**Ministry of Energy and Energy Industries
Total Allocation - \$ 584,055,810.00**



Summary of Recurrent Expenditure for the period 2016-2022

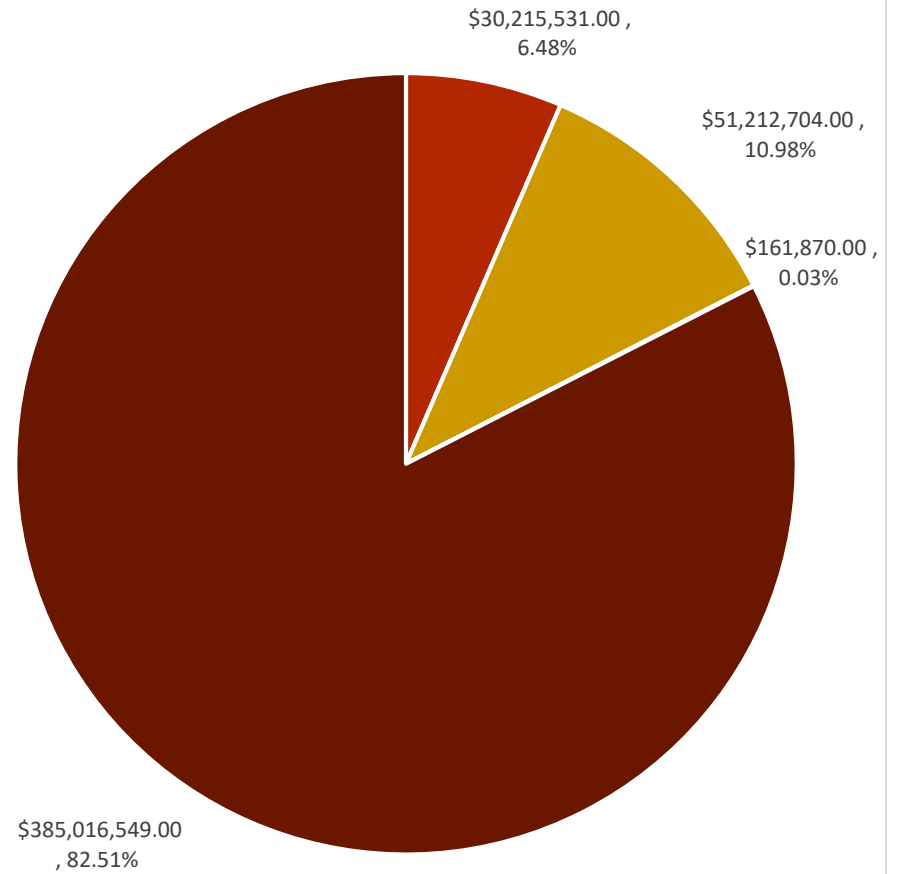


2016 Actual - \$ 1,006,033,620.00



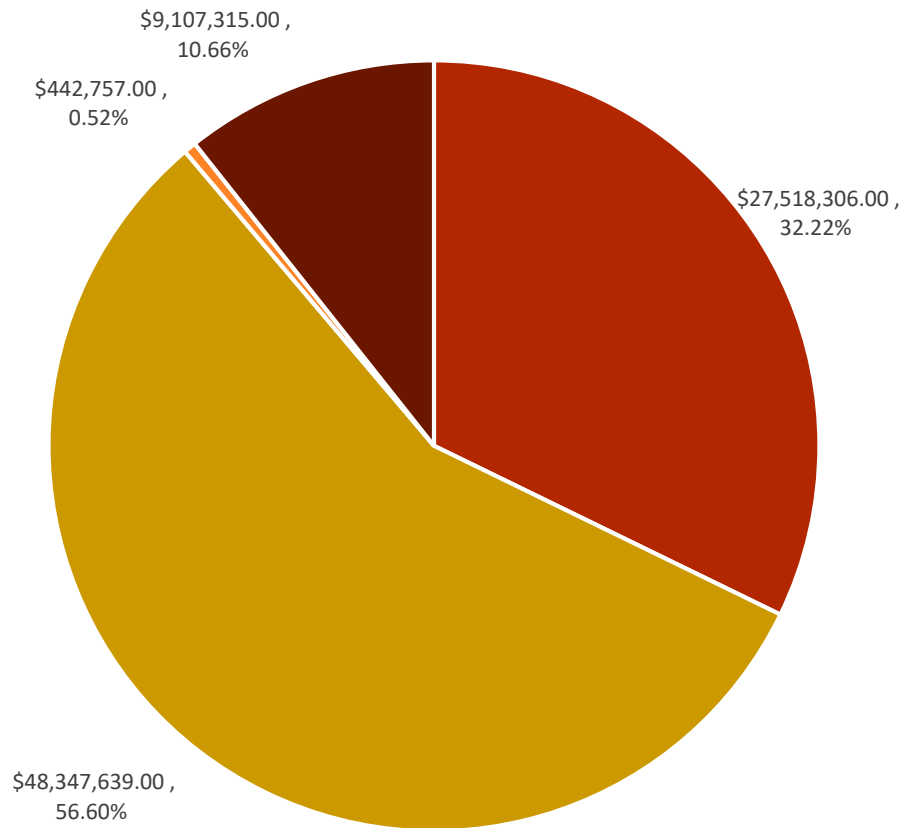
- 01 Personnel Expenditure
- 02 Goods and Services
- 03 Minor Equipment Purchases
- 04 Current Transfers and Subsidies

2017 Actual - \$ 466,606,654.00



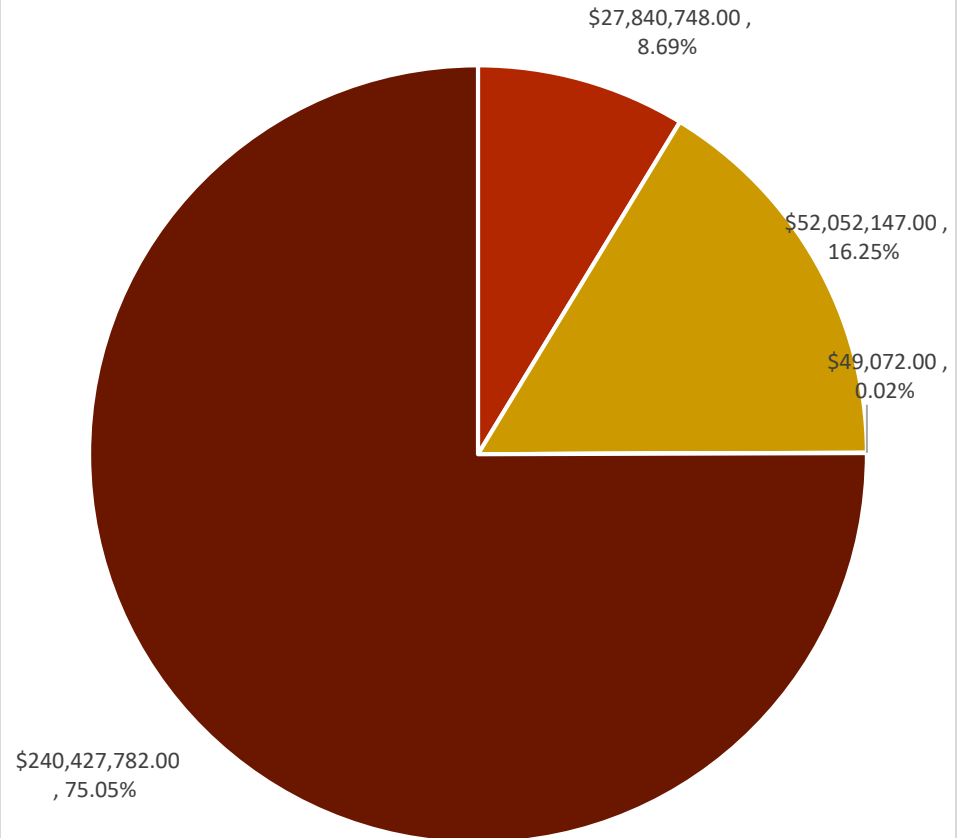
- 01 Personnel Expenditure
- 02 Goods and Services
- 03 Minor Equipment Purchases
- 04 Current Transfers and Subsidies

2018 Actual - \$ 85,416,017.00



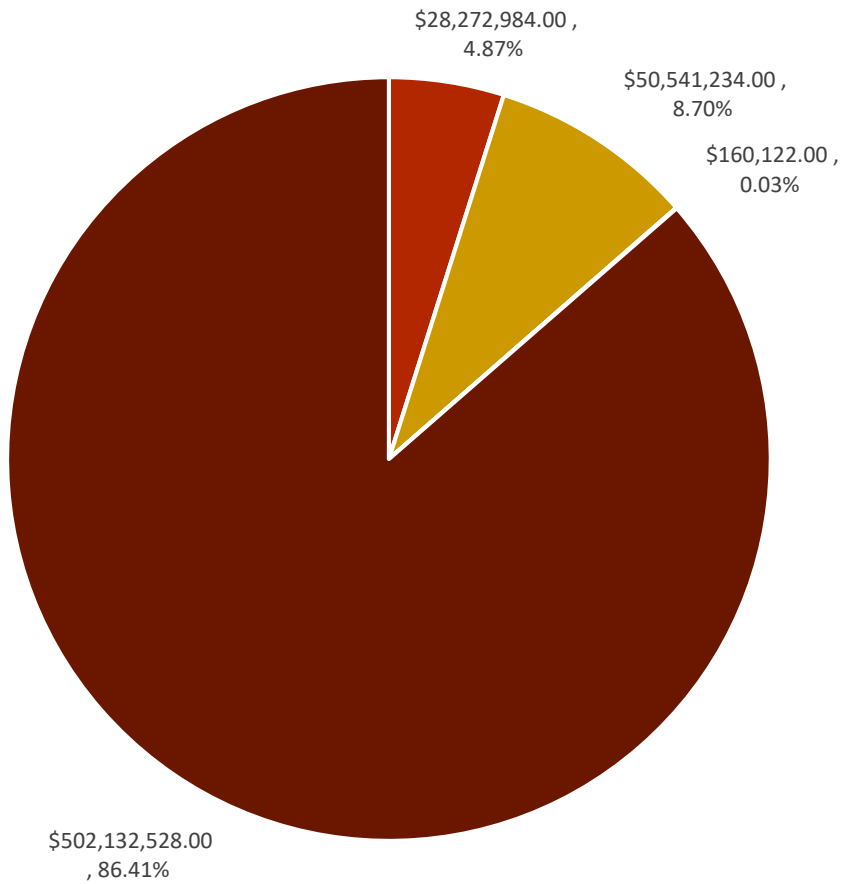
- 01 Personnel Expenditure
- 02 Goods and Services
- 03 Minor Equipment Purchases
- 04 Current Transfers and Subsidies

2019 Actual - \$ 320,369,749.00



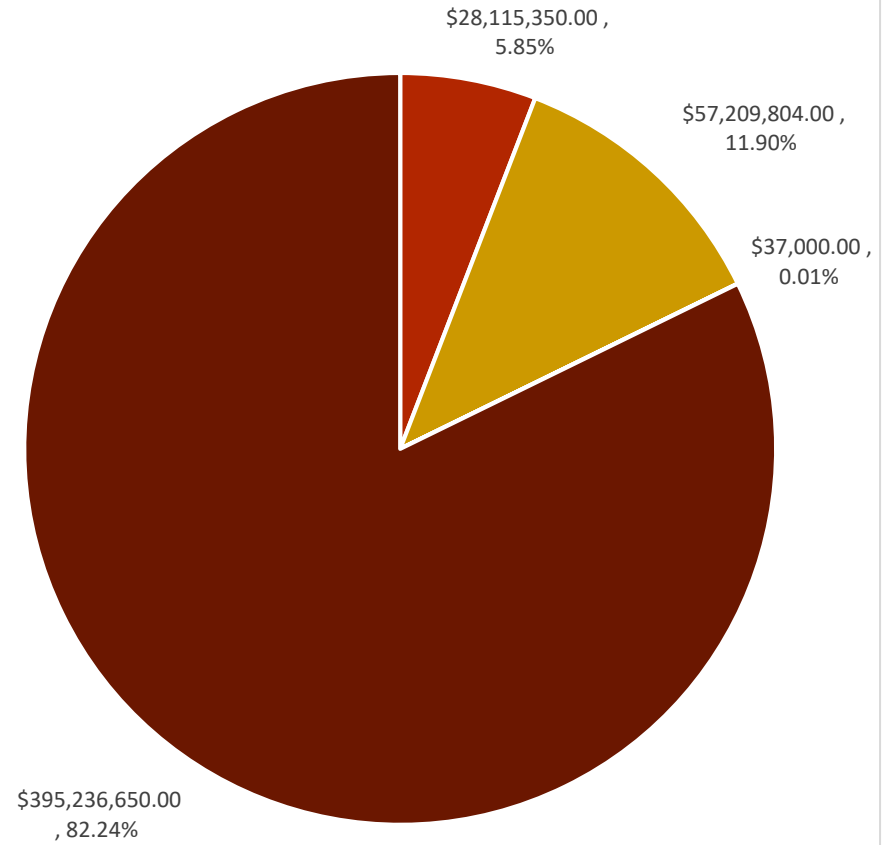
- 01 Personnel Expenditure
- 02 Goods and Services
- 03 Minor Equipment Purchases
- 04 Current Transfers and Subsidies

2020 Actual- \$ 581,106,868.00



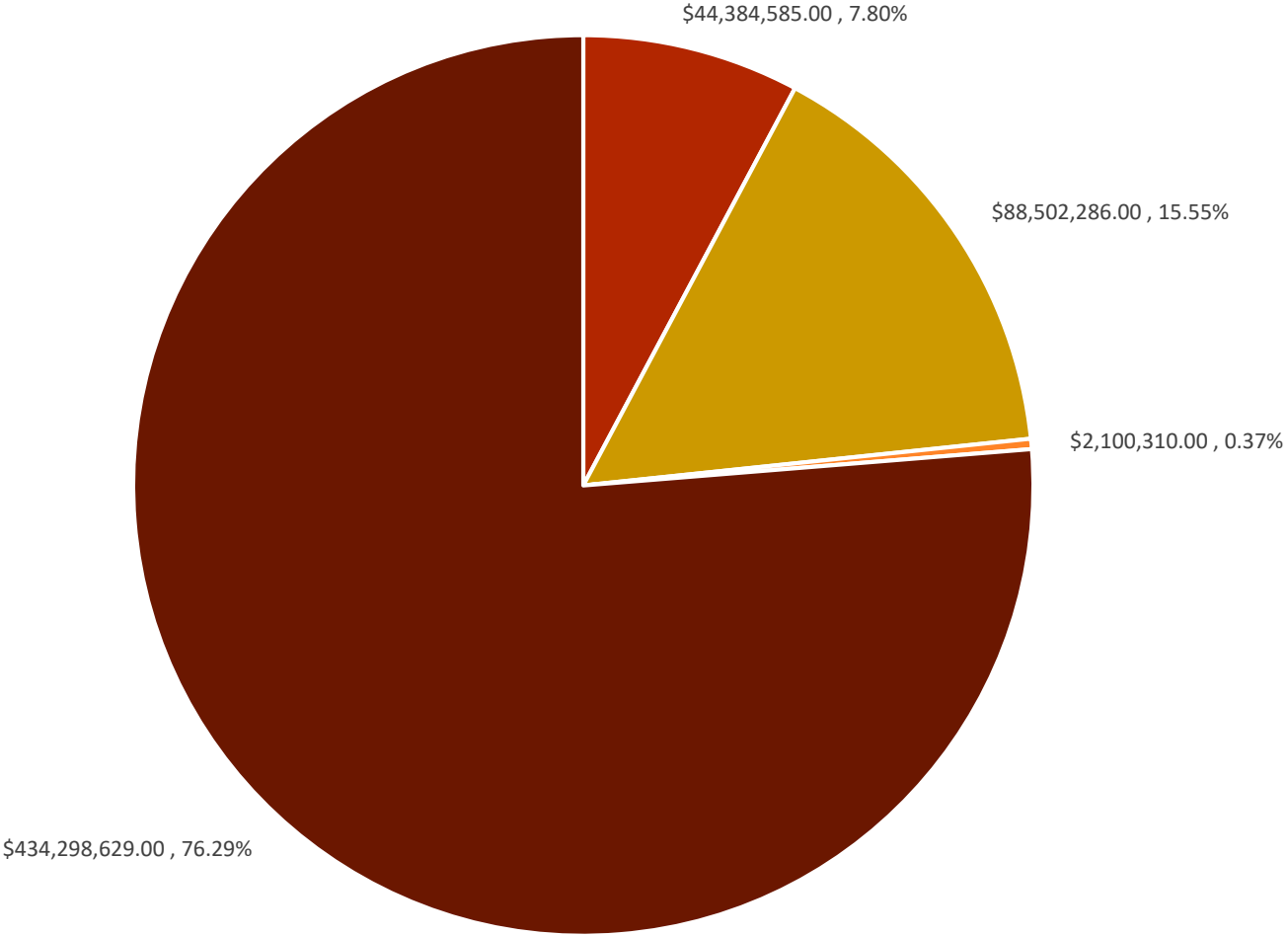
- 01 Personnel Expenditure
- 02 Goods and Services
- 03 Minor Equipment Purchases
- 04 Current Transfers and Subsidies

2021 Revised Estimates- \$ 480,598,804.00



- 01 Personnel Expenditure
- 02 Goods and Services
- 03 Minor Equipment Purchases
- 04 Current Transfers and Subsidies

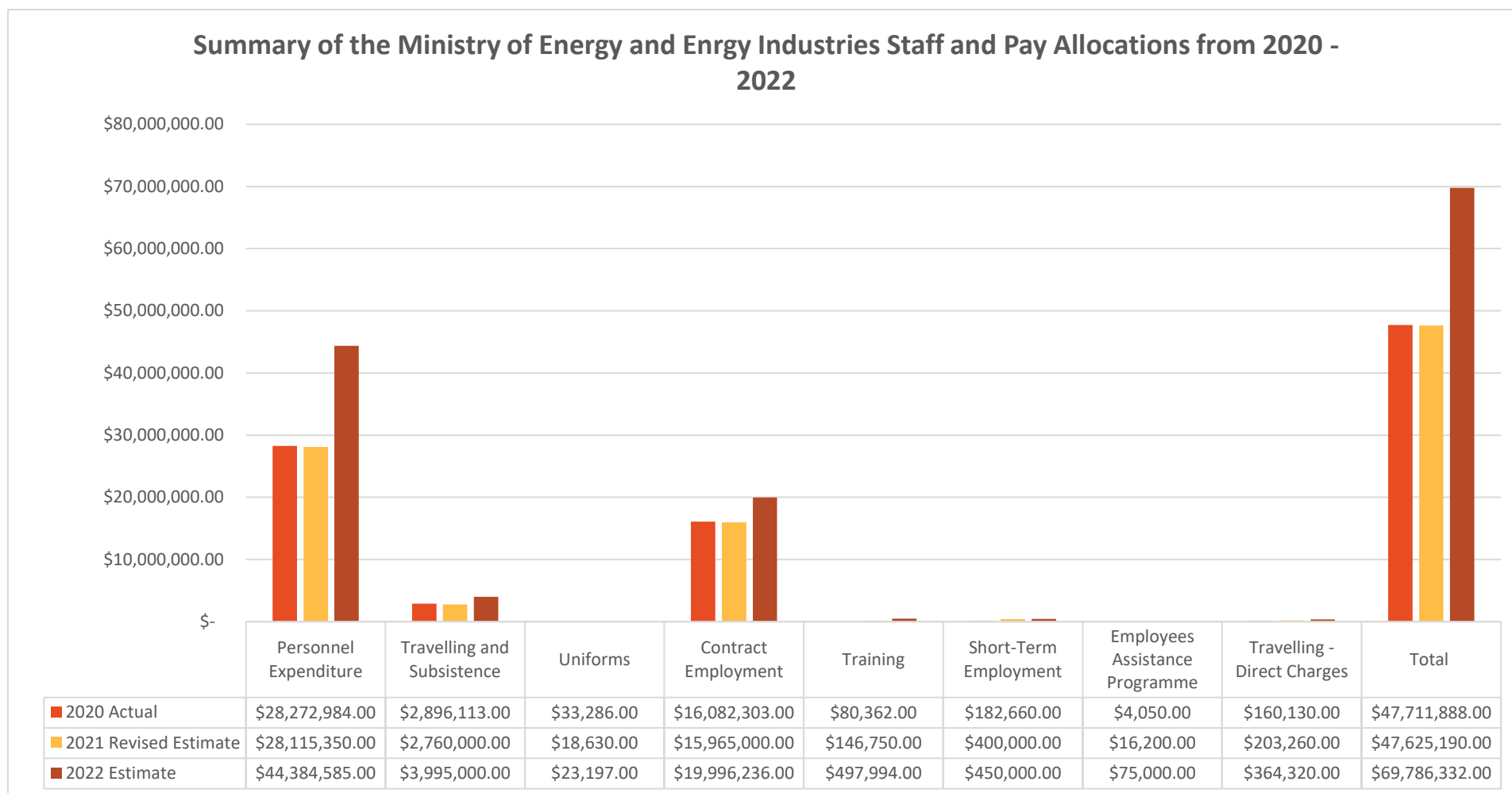
2022 Estimates - \$ 569,285,810.00



01 Personnel Expenditure 02 Goods and Services 03 Minor Equipment Purchases 04 Current Transfers and Subsidies

Staff and Pay¹⁹

The allocation of staff expenditure for the fiscal year 2022 was **\$69,422,012.00** which represents an increase of approximately **46.39%** from the fiscal year 2021 expenditure of **\$47,421,930.00**. The following chart provides a breakdown of all expenditure related to staff from 2020-2022.



¹⁹ Draft Estimates of Recurrent Expenditure 2022. <https://www.finance.gov.tt/wp-content/uploads/2021/10/Numbered-Draft-Estimates-of-Expenditure-2021-2022.pdf>

Analysis and Summary of Expenditure

Recurrent Expenditure refers to the payments for expenses, which are incurred during the day-to-day operations of the Ministry for Personnel Expenditure, Goods and Services, Minor Equipment Purchases and Current Transfers and Subsidies. Recurrent Expenditure for Fiscal Year 2022 is **\$569,285,810.00**.

- Recurrent Expenditure (Revised) for Fiscal Year 2021 was **\$480,598,804.00**. Comparing this figure with Fiscal Year 2022, there is an increase of **\$88,687,006.00** or **18.45%**.
- The **largest** portion of the allocation has gone to **Sub Head 04 Current Transfers and Subsidies** for each year between 2016 and 2022 except for 2018. This figure has been fluctuating over the period 2016-2022, accounting for approximately **72%** of total funding for the Ministry for the period.
- **Sub Head 03 Minor Equipment Purchases** received the **lowest** portion of the total allocation for the Ministry over the period 2016 to 2022 overall. The Sub-Head received approximately **0.37%** of the Ministry's total funding for fiscal year 2022.
- **Sub Head 02 Goods and Services** has received the **second largest** portion of the allocation over the period 2016-2022, except in 2018, where it received the majority of the allocation. The Sub-Head received approximately **15.55%** of the Ministry's total funding for fiscal year 2022.
- **Sub Head 01 Personnel Expenditure** received the **second lowest** portion of the allocation and has been fluctuating over the period 2016-2022. The Sub-Head received approximately **7.80%** of the Ministry's total funding for fiscal year 2022.
- The actual/estimated expenditure for the Recurrent Expenditure over the seven (7) year period, had been at a high of **\$1,006,033,620.00** in 2016 to a low of **\$85,416,017.00** in 2018.

Analysis of Expenditure Unique to the Ministry of Energy and Energy Industries²⁰

Unique Expenditure refers to expenditure items incurred by the Ministry of Energy and Energy Industries that may not feature in other ministries or departments.



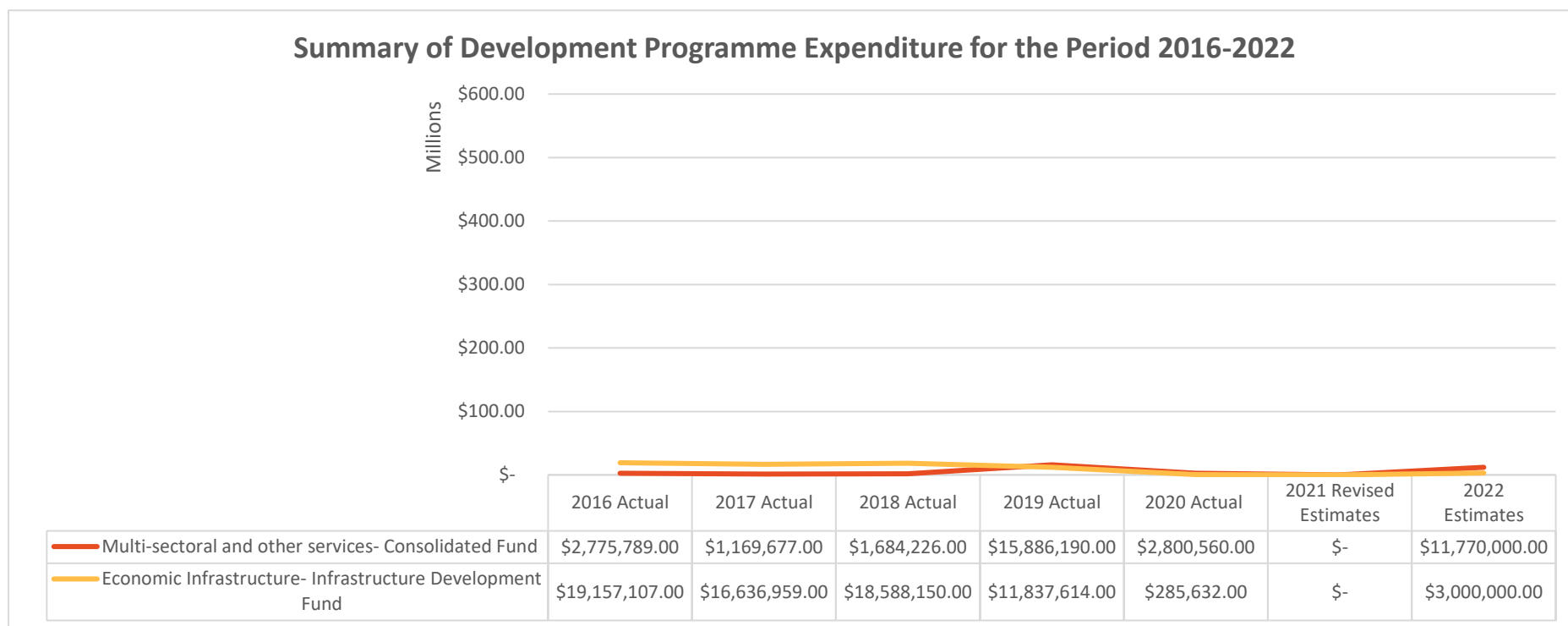
²⁰ Draft Estimates of Recurrent Expenditure 2022. <https://www.finance.gov.tt/wp-content/uploads/2021/10/Numbered-Draft-Estimates-of-Expenditure-2021-2022.pdf>

Summary of Development Programme Expenditure for the period 2016-2022²¹

Development Programme is capital expenditure aimed at improving and enhancing development in different areas of Trinidad and Tobago which includes; human resources, economic and social development.

The allocation of **\$14,770,000.00** for development programmes and projects for fiscal year 2021 are presented in two parts as follows:

- Funds appropriated by Parliament and disbursed directly from the Consolidated Fund total **\$11,770,000.00** or **79.69%** and
- Funds disbursed from the Infrastructure Development Fund total **\$3,000,000.00** or **20.31%**.



²¹ Draft Estimates of Development Programme 2022. <https://www.finance.gov.tt/wp-content/uploads/2021/10/Numbered-Draft-Estimates-of-Development-Programme-2022.pdf>

Public Sector Investment Programme 2022 Projections ²²

Government remains committed to ensuring the sustainability of the energy sector through the promotion of renewable energy alternatives which is aligned to the National Development Strategy's Development Theme V: "Placing the Environment at the Centre of Social and Economic Development." To this end, in fiscal 2022, the Ministry of Energy and Energy Industries (MEEI) will receive an allocation of \$3.8 million for the promotion of renewable energy initiatives.

Renewable Energy and Energy Efficiency Initiatives

The following initiatives geared towards the promotion of sustainable development of the nation will be undertaken under the RE&EE programme in fiscal 2022 at a cost of \$0.5 million:

- *Conduct of a Wind Resource Assessment Study* - which will contribute to the development of alternative energy sources and reduce the nation's carbon footprint. The study will produce a wind resource map that will identify the quantity and frequency of wind, as well as the most optimum areas for the resource within Trinidad and Tobago. Various sites will be used as points of wind measurements; and
- *Implementation of a Solar Traffic Lights Project* - which will contribute to fuel cost savings for Trinidad and Tobago as well as a reduction in greenhouse gas emissions. This initiative will aim to highlight that traffic lights can operate on solar energy and raise awareness for the use of solar technology applications. A pilot project will be launched utilising three [3] stand-alone solar photovoltaic (PV) systems and will be undertaken by the MEEI in collaboration with the MOWT, MPU and the T&TEC. The MEEI will lead in the planning and implementation of the project whilst the MOWT will spearhead the procurement of the necessary equipment. The solar powered traffic lights will be installed at specific locations which will be determined by the MOWT.

²² Public Sector Investment Programme 2022. Pages 286-288 <https://www.finance.gov.tt/wp-content/uploads/2021/10/Public-Sector-Investment-Programme-2022.pdf>

Installation of Electric Charging Stations for Electric Vehicles

The Government is committed to reducing this country's Green House Gas (GHG) emissions through the use of cleaner forms of energy and the promotion of Renewable Energy (RE) and Energy Efficiency (EE) in the transport sector. In fiscal 2021, the sum of \$11.0 million will be allocated for the Installation of Electric Charging Stations for Electric Vehicles (EVs), which will be spearheaded by the MEEI. EVs are significantly more energy-efficient when compared to the internal combustion engine vehicles. Additionally, due to growing concerns on the impacts of climate change and the need for reduction in carbon dioxide (CO₂) emissions, there have been numerous commitments globally aimed at reducing the use of liquid fuels in the transportation sector.

Acquisition of Synthetic Aperture Radar (SAR) System

In the fiscal 2022, an allocation of \$0.3 million will be provided for the payment of annual maintenance, insurance premiums and contingency cost as well as for the upgrade of information and communications technology (ICT) for the radar systems located at Chaguaramas and Port of Spain. These systems are used for the early detection of oil spills in the Gulf of Paria.

Dredging of the Sea Lots Main Channel and Turning Basin

Heavy siltation of the Sea Lots Main Channel and Turning Basin has posed a challenge for safe navigation of vessels. In this regard, an allocation of \$3.0 million will be provided in fiscal 2022 to conduct an updated Bathymetric Survey on the Sea Lots Main Channel and Turning Basin, which is necessary to determine the extent of dredging required.

Noteworthy Development Programme Estimates in 2019-2022

The table below lists the projects that have been noted due to uncharacteristic variances in estimates for funding: ²³

Sub-Item Head Description	Project	2019 Actual	2020 Actual	2021 Revised Estimate	2022 Estimate
CF 005-06-A003	Renewable Energy and Energy Efficiency Initiatives ²⁴	\$5,922,266	\$16,968	-	\$500,000
IDF 003-05-D005	Development of New Port Facilities	\$11,837,614	-	-	-
IDF 003-05-D011	Dredging of Sea-Lots Main Channel and Turning Basin	-	\$285,632	-	\$3,000,000

²³ Draft Estimates of Development Programme 2022. <https://www.finance.gov.tt/wp-content/uploads/2021/10/Numbered-Draft-Estimates-of-Development-Programme-2022.pdf>

²⁴ During fiscal year 2020, this allocation was intended to finance three initiatives namely a Renewable Energy Public Awareness Campaign; Installation of Electric Vehicle (EV) Chargers and the purchase of two (2) EVs for the MEEI's fleet and of a Solar LED lighting programme for the nation's basketball courts and children's play parks

Status of New Projects from the Financial Year 2019

For the financial year 2019, the following new projects were scheduled for implementation under the Ministry of Energy and Energy Industries, and as such require further inquiry on the progress of completion ²⁵:

Sub-Head Description	Project -Item	2019 Actual	2020 Actual	2021 Revised Estimate	2022 Estimate
CF005-06-G001	Acquisition of Synthetic Aperture Radar (SAR) ²⁶ for the Detection of Oil Spills	\$1,999,999	\$2,000,000	-	\$270,000
CF 005-06-G002	Acquisition of Equipment for National Quarries Co. Ltd ²⁷	\$7,963,925	\$783,592	-	-

²⁵ Draft Estimates of Development Programme 2022. <https://www.finance.gov.tt/wp-content/uploads/2021/10/Numbered-Draft-Estimates-of-Development-Programme-2022.pdf>

²⁶ 'Synthetic Aperture Radars (SARs) are advanced forms of side-looking imaging radar. A radar is essentially a ranging or distance measuring device. It consists fundamentally of a transmitter, a receiver, an antenna, and an electronics system to process and record the data. The same antenna is often used for transmission and reception. By measuring the time delay between the transmission of a pulse and the reception of the backscattered "echo" from different targets, their distance from the radar and thus their location can be determined. SARs are well suited to surveillance and disaster managements for:

- **Maritime surveillance:** ice detection, oil and ship detection
- **Maritime safety:** ocean wind speed, atmospheric fronts, waves, currents, eddies, internal waves
- **Geology:** accurate measurements of distance (interferometry), surface change, coastal erosion, measuring glacier motions, detecting effect of earthquakes
- **Hydrology:** estimating soil moisture, surface water content' cited from An Introduction to Synthetic Aperture Radars Observations by Marjolaine Rouault
http://www.bilko.org/eamnet/pdf/eamnet_SAR_introduction.pdf

During fiscal year 2020, one SAR would be placed at Chaguaramas and a second at the Towers in Port of Spain.

²⁷ The 2020 allocation was to fund the purchase of a rock drill.

New Projects for the Financial Year 2022

The following new project that received funding in the 2022 financial year²⁸:

Sub-Head Description	Project -Item	2022 Estimate
CF 005-06-G004	Installation of Electric Charging Stations for Electric Vehicles	\$11,000,000

²⁸ Draft Estimates of Development Programme 2022. <https://www.finance.gov.tt/wp-content/uploads/2021/10/Numbered-Draft-Estimates-of-Development-Programme-2022.pdf>

Similar Ministries/Departments Internationally

- Department of Energy, Guyana: <https://dpi.gov.gy/tag/department-of-energy/>
- Ministry of Science, Energy & Technology, Jamaica: <https://www.mset.gov.jm/>
- Division of Energy, Barbados: <http://www.energy.gov.bb/>
- World Energy Council: <https://www.worldenergy.org/>
- Natural Resources, Canada: <https://www.nrcan.gc.ca/energy>
- Department of Energy, USA: <https://www.energy.gov/>
- Department of Industry, Science, Energy and Resources, Australia <https://www.energy.gov.au/>
- Department of Energy & Climate Change, UK: <https://www.gov.uk/government/organisations/department-of-energy-climate-change>