#### COMISIÓN FEDERAL DE ELECTRICIDAD

#### (Productive State Enterprise and Subsidiaries and Affiliated Companies) Unaudited Condensed Consolidated Statements of Financial Position (Amounts in thousands of Mexican pesos)

Item	As at 30 June 2019	As at 31 December 2018
ASSETS		
Current assets	191,709,595	193,196,623
Cash, cash equivalents and other investments	58,728,405	78,483,263
Accounts receivable	112,669,949	99,175,895
Materials for operation	20,311,241	15,537,465
Loans to workers (Housing Fund)	13,126,608	12,367,879
Plants, facilities and equipment	1,179,224,458	1,186,590,258
Derivative financial instruments	10,645,929	17,783,141
Other assets	44,843,555	34,281,864
Right of use asset	371,075,784	337,493,233
Deferred tax asset, net	173,551,467	176,616,976
TOTAL ASSETS	1,984,177,395	1,958,329,975
LIABILITIES		
Current liabilities	163,335,236	165,074,500
Short-term debt	34,819,687	39,829,270
Other accounts payable and accrued liabilities	113,051,552	109,234,093
Taxes and duties payable	4,135,844	3,724,408
Income tax	2,721,745	3,709,859
Short-term lease liability	8,606,409	8,576,870
Long-term liabilities	1,151,575,218	1,114,204,900
Long-term debt	317,141,148	314,795,714
Labor obligations	331,257,961	327,452,589
Other long-term liabilities	22,240,884	20,451,195
Long-term lease liability	480,935,225	451,505,402
TOTAL LIABILITIES	1,314,910,454	1,279,279,400
Equity	669,266,941	679,050,575
Contributions received from the Federal Government	5,251	5,251
Contributions in kind received from the Federal Government	95,004,417	95,004,417
Accumulated deficit	97,528,028	100,338,214
Components of other comprehensive income	459,827,489	466,206,051
Non-controlling interest	16,901,756	17,496,642
LIABILITIES + EQUITY	1,984,177,395	1,958,329,975

# **COMISIÓN FEDERAL DE ELECTRICIDAD**

# (Productive State Enterprise and Subsidiaries and Affiliated Companies) Statement of Income From January 1 to June 30, 2019 and 2018 (Amounts in thousands of Mexican pesos)

ltem	Accumulated	to June
	June 2019	June 2018
Revenues	\$259,220,673	\$217,449,443
Revenue from the sale of electricity	\$196,394,645	\$158,499,443
Revenue from the sale of fuel to third parties	\$23,185,425	\$21,067,800
Revenue from the transmission of electricity	\$5,750,328	\$1,321,820
Revenue from subsidies	\$26,042,900	\$23,571,436
Other income and gains	\$7,847,375	\$12,988,943
Costs	\$245,474,933	\$246,903,750
Energy and fuel supplies	\$142,015,481	\$137,137,531
Energy and fuel supplies to third parties	\$11,038,487	\$16,728,848
Employee compensation	\$32,447,451	\$31,125,900
Maintenance, materials and general services	\$4,462,468	\$1,632,532
Taxes and duties	\$1,266,785	\$1,411,925
Wholesale Electricity Market (MEM) costs	\$1,527,265	\$1,286,886
Cost of labor obligations	\$17,366,999	\$14,471,918
Depreciation	\$35,349,997	\$35,407,126
Other expenses	\$0	\$7,701,083
OPERATING INCOME (LOSS)	\$13,745,740	(\$29,454,307)
Financing cost	\$11,623,615	\$23,376,061
Other financial (income) expense, net	\$11,421,521	\$5,087,350
Interest expense, net	\$13,121,152	\$6,541,174
Foreign exchange (gain) loss, net	(\$12,919,058)	\$11,747,536
INCOME BEFORE INCOME TAX	\$2,122,125	(\$52,830,368)
Income tax	\$4,932,310	(\$4,341,987)
NET (LOSS) INCOME	(\$2,810,185)	(\$48,488,381)

#### Comisión Federal de Electricidad, Productive State Enterprise and Subsidiaries

#### Consolidated Statements of Cash Flows

#### For the Periods Ended 30 June 2019 and 31 December 2018

#### (Amounts in thousands of Mexican pesos)

	30 June 2019	31 December 2018	
Operating activities: Net (loss) income	\$ (2,810,185)	\$ 38,436,233	\$
Items related to operating activities: Net period cost of employee benefits Increase (decrease) in the current and deferred income tax provision Items related to investing activities:	17,366,999 4,932,310	20,539,778 (54,990,576)	
Depreciation Right of use asset Retirements of plants, facilities and equipment	35,349,997 (33,582,551) (6,958,016)	57,535,932 (64,461,084) 1,008,377	
Unrealized loss on foreign exchange, interest expense and changes in the fair value of financial instruments	8,920,799	33,581,200	
Changes in other operating assets and liabilities:			
Accounts receivable	(14,342,137)	(4,108,384)	
Inventory of operating materials	(4,773,776)	(894,472)	
Taxes and duties payable	(1,595,294)	(5,735,959)	
Other assets	(11,320,419)	(1,473,563)	
Other accounts payable and accrued liabilities	5,607,149	(1,537,420)	
Payment of employee benefits	(13,561,627)	(39,534,335)	
Net cash flows used in operating activities	(16,766,752)	(21,634,273)	
Investing activities:			
Acquisition of plants, facilities and equipment	(21,026,181)	(51,268,665)	
Financing activities			
Debt contracting	16,896,867	91,373,548	
Non-controlling interest contribution	(594,886)	18,744,119	
Payment of dividends	-	(1,247,450)	
Payment of debt	(14,790,012)	(73,914,357)	
Interest paid	(10,623,791)	(22,053,366)	
Lease liabilities	29,459,362	72,287,709	
Payment of financial instruments	(2,309,465)	(1,041,903)	
Net cash flows from investing activities	18,038,075	84,148,300	
Cash surplus to be (obtained from) applied to financing activities	(19,754,857)	11,245,361	
Cash and cash equivalents:			
At beginning of period	78,483,263	67,237,901	
At end of period	\$ 58,728,406	\$ 78,483,262	\$

The accompanying notes are an integral part of these consolidated financial statements.

#### Comisión Federal de Electricidad, Productive State Enterprise and Subsidiaries

Consolidated Statements of Changes in Equity

As at 31 December 2017 and 2018 and 30 June 2019

(Amounts in thousands of Mexican pesos)

		Contributions received from the Federal Government	Contributions in kind received from the Federal Government	Retained earnings (accumulated deficit)	Accumulated other comprehensive income items		Total equity of equity holders of the parent	n-controlling interest		Total equity
Balances as at 31 December 2017	\$	5,251	\$ 95,004,417	\$ 100,140,833	\$ 416,780,451		611,930,952	 -	\$	611,930,952
Adoption of IFRS 16				(38,238,852)			(38,238,852)			(38,238,852)
Balances as at 1 January 2018	\$	5,251	\$ 95,004,417	\$ 61,901,981	\$ 416,780,451	•	573,692,100	 -	\$	573,692,100
Non-controlling interest		-	-	-	-		-	15,494,065		15,494,065
Comprehensive income (loss) for the period		-	-	44,666,931	49,425,600		94,092,531	3,250,027		97,342,558
Distributions to the holders of Fibra E		-	-	-	-		-	(1,247,450)		(1,247,450)
Balance as at 31 December 2018	•	5,251	\$ 95,004,417	\$ 106,568,912	\$ 466,206,051	\$	667,784,631	 17,496,642	\$	685,281,273
Adoption of IFRS 16				(6,230,698)			(6,230,698)			(6,230,698)
Balances as at 1 January 2019		5,251	\$ 95,004,417	\$ 100,338,214	\$ 466,206,051	\$	661,553,933	 17,496,642	\$ _	679,050,575
Comprehensive income (loss) for the period				(2,810,185)	(6,378,562)		(9,188,747)	(594,886)		(9,783,634)
Balances as at 31 March 2019	•	5,251	\$ 95,004,417	\$ 97,528,029	\$ 459,827,489	\$	652,365,186	 16,901,756	\$ _	669,266,941

# 1. Incorporation, Business Purpose and Relevant Events

## • Incorporation and business purpose

Comisión Federal de Electricidad, Productive State Enterprise, and Subsidiaries (the Group), is a Mexican entity located in Mexico that was initially incorporated by Decree as a Decentralized Public Entity of the Federal Government on August 14, 1937 and published in the Official Gazette on August 24, 1937. CFE's registered address is Paseo de la Reforma 164, Colonia Juárez, C.P. 06600, in Mexico City. The accompanying consolidated financial statements include the accounts of Comisión Federal de Electricidad, Productive State Enterprise, and its subsidiaries (hereinafter referred to as the Group or CFE).

As of the date of its incorporation, CFE's business purpose is to provide electricity-related services in Mexico which include the generation, transformation, transmission, distribution and commercialization of electricity to consumers in Mexico.

The Comisión Federal de Electricidad Law (CFE Law) was published on August 11, 2014 and became effective on October 7, 2014. The CFE Law mandated the transformation of CFE into a Productive State Enterprise.

CFE's business purpose as of the date of its transformation into a Productive State Enterprise is to provide public transmission and distribution of electricity services on behalf of the Mexican State. CFE also engages in activities related to the generation and commercialization of electricity, as well as activities related to the import, export, transportation, storage and trading of natural gas, among others.

#### Relevant events

#### a) <u>Infrastructure investment trust</u>

On February 7, 2018, CFE placed an issue for the first Energy and Infrastructure Investment Trust or Fibra E, specialized in the Mexican electricity sector, placing Fiduciary Stock Certificates (CBFEs, Spanish acronym) for investment in energy and infrastructure through the Mexican Stock Exchange. The total placement was for 16,388 million pesos and it is the first Fibra E in which domestic and foreign investors participated, highlighting the participation of institutional investors, private banks and investment funds from Mexico, the United States, Canada, Australia and Europe.

The structure of the Fibra E comprises the Irrevocable Trust of Administration and Source of Payment No. 80757 (hereinafter the Promoted Trust), the Irrevocable Trust of Issuance of Stock Certificates CIB/2919 (hereinafter Fibra E) and to CFE Capital.

A detailed description of the activities of each one of these CFE Capital Trusts is as follows:

#### Promoted Trust

The Irrevocable Trust of Administration and Source of Payment No. 80757 (hereinafter the Promoted Trust) was incorporated on January 22, 2018 to acquire the collection rights derived from

the Agreement for the Technical and Commercial Operation of Electricity Transmission entered into with the National Energy Control Center (CENACE) on March 28, 2016.

As part of the structure of the Promoted Trust, CFE Transmisión, irrevocably transferred and assigned the collection rights of the Agreement entered into with the CENACE for a term of 30 years to the Promoted Trust. In exchange for the assignment of such collection rights, the Promoted Trust granted full title of the trust rights to CFE Transmisión. Subsequently, through the issuance of the Fibra E in the market, it acquired up to 6.78% of the instruments in exchange for \$15,454,653 in cash and \$5,403,571 in instruments in favor of CFE Transmisión, equal to 25% of the issue of shares in Fibra E.

The main activities of the Promoted Trust are as follows:

- 1. Receive, manage and hold the collection rights contributed;
- 2. Open, manage and maintain the trust bank accounts;
- 3. Make the transfers and payments set out in the trust agreement;
- 4. Evaluate the reimbursement of non-budgeted expenses requested by CFE Transmisión;
- 5. Receive any payments arising from the collection rights and other rights derived from the agreement entered into with the CENACE;
- 6. Exercise any other rights arising from the agreement entered into with the CENACE;
- 7. Carry out the instructions issued by the Trustor, the Technical Committee or the Beneficiaries, to the extent that they are authorized to do so in accordance with the terms of the trust agreement.

## Issuing Trust (Fibra E)

The Fibra E trust entered into with CI Banco, S. A., Institución de Banca Múltiple, Monex Casa de Bolsa, S.A. de C.V. and Monex Grupo Financiero (FIBRA E) was created on January 22, 2018, as a trust for the issuance of Fiduciary Stock Certificates (CBFEs).

The primary purpose of the trust is to invest in eligible entities, whose exclusive activity consists of:

- 1. Investing in assets and projects related to Generation, Transmission and Distribution of Electricity, and Infrastructure Projects.
- 2. Investing in or performing any other activity provided for in the tax regulations related to the FIBRA E, as well as in Rule 3.21.3.9. of the Miscellaneous Tax Resolutions or any other tax law that supersedes it.

The initial asset of the Trust consists of beneficiary rights that have an economic ownership interest in the Promoted Trust. <u>CFE Capital</u>

# The primary purpose of this entity is to manage all types of trusts and their property, including the Fibra E and the Promoted energy and infrastructure investment trusts created in conformity with current tax legislation, including but not limited to, all the activities and acts deemed necessary or suitable for such purpose, and to provide all types of management, operation, development and regulatory compliance services.

# b) Incorporation of the Productive Subsidiary Entities of CFE

In accordance with the CFE Law, the Subsidiary Productive Entities are productive entities of the State that have legal personality and their own equity, which will be organized and operate as set forth in the provisions of said Law and in the provisions that derive from such.

The Subsidiary Productive Entities shall be subject to the provisions of Articles 3, 7 and 8 of the CFE Law, and their business purpose shall be the activities defined by CFE's Board of Directors, and they shall be bound by the provisions of the Electric Industry Law, and shall operate under the special scheme provided for in this Law in terms of budget, debt, acquisitions, leases, services and works, administrative responsibilities, remunerations, assets and State dividend.

The terms of the strict legal separation that the CFE had to observe to carry out Generation, Transmission, Distribution, Commercialization and Supply of Primary Inputs activities, and of its participation in the market that was to be carried out independently through the units it was separated into, were issued on January 11, 2016, generating economic value and profitability for the Mexican State as its owner.

The resolutions for the incorporation of the following Productive Subsidiary Entities (EPS, Spanish acronym) were published on March 29, 2016 in the Official Gazette:

- CFE Generación I EPS, CFE Generación II EPS, CFE Generación III EPS, CFE Generación IV EPS, CFE Generación V EPS and CFE Generación VI EPS, whose business purpose is to generate electricity using any type of technology in Mexico, as well as to commercialize electricity in conformity with the terms set forth in Article 45 of the Electric Industry Law, excluding the supply of electricity to end users. Each of these entities may fully or partially represent the Power Plants under their control or those owned by third parties in the Wholesale Electricity Market.
- CFE Distribución, EPS; whose business purpose is to carry out the activities necessary to
  provide public services related to the distribution of electricity, as well as to finance, install,
  maintain, manage, operate and enhance the required infrastructure to provide the distribution of
  electricity public services as set forth in the CFE Law, the Electric Industry Law, the Terms for
  the Strict Legal Separation of the CFE and other applicable legal provisions.
- CFE Transmisión, EPS; whose business purpose is to carry out the activities necessary to
  provide the public services related to the transmission of electricity, as well as to finance, install,
  maintain, manage, operate and enhance the required infrastructure to provide the transmission
  of electricity public services as set forth in the CFE Law, the Electric Industry Law, the Terms for
  the Strict Legal Separation of the CFE and other applicable legal provisions.
- CFE Suministrador de Servicios Básicos, EPS; whose business purpose is to provide the services related to the basic supply of electricity referred to in the Electric Industry Law, to any person who requests such services as required by such Law.

The aforementioned resolutions establish the rules regarding the business activities, the corporate governance and the oversight and monitoring of, as well as the responsibilities, disclosure obligations and oversight mechanisms applicable to, the Productive Subsidiary Entities.

As of January 1, 2017, Comisión Federal de Electricidad, EPE (Holding Entity) ceased to carry out the Transmission, Distribution, Basic Supply and Commercialization (other than the basic supply and supply of primary inputs) independent activities, and of such date these activities are carried out by the Productive Subsidiary Entities.

As of February 1, 2017, Comisión Federal de Electricidad, EPE (Holding Entity) no longer directly carries out the Generation independent activity nor does it participate in the Wholesale Electricity Market; and as of such date, these activities are carried out by the Productive Subsidiary Entities.

#### Incorporation of Affiliated Entities

According to the CFE Law, affiliated entities are those in which the CFE participates, directly or indirectly, with more than fifty percent of their share capital, regardless of whether they are incorporated under Mexican or foreign legislation.

The affiliated entities shall not be state-owned entities and shall have legal nature, and they shall be organized in accordance with the private law of the place of their incorporation or creation.

CFE Intermediación de Contratos Legados, S.A. de C.V. was incorporated on March 29, 2016, in which CFE made an initial contribution of \$99,900 on February 1, 2017. The purpose of this entity is to manage, on behalf of the CFE, the legacy interconnection contracts, the agreements for the purchase and sale of surplus electricity and all the other related agreements entered into by the CFE, and to represent the Power Plants and Load Centers included in the legacy interconnection contracts as an Intermediation Generator, and will not carry out electricity supply activities.

CFE Calificados, S.A. de C.V. was incorporated on May 23, 2016, in which CFE made an initial contribution of \$19,980 and \$10,020 on September 27 and 29, 2016, respectively. The purpose of this entity is to carry out commercialization of electricity activities and other related services in Mexico or abroad.

CFE Capital, Sociedad de Responsabilidad Limitada de Capital Variable (S. de R.L. de C.V., Spanish acronym) was incorporated on December 7, 2017. This entity may set up offices, agencies or branches anywhere in the United States. Its business purpose is described on page 3.

#### c) Mexican Wholesale Electricity Market

As a result of the operation of the Mexican Wholesale Electricity Market (MEM) and pursuant to the Third Transitory Article of the Electricity Industry Law, the Ministry of Energy extended the term for CFE to continue carrying out the Transmission, Distribution, Basic Supply and Commercialization (other than basic supply and supply of primary inputs) independent activities, including its participation in the Wholesale Electricity Market to December 31, 2016.

#### d) Long-Term Auctions and Clean Energy Certificates

The Wholesale Electricity Market allows for Medium and Long-term Auctions, which are defined in the Wholesale Electricity Market Rules as follows:

Section 2.1.134 states that long-term auctions are those in which basic service suppliers and other load serving entities are allowed to enter into hedging agreements for electricity generation, Electricity Certificates, Cumulative Energy and Clean Energy Certificates (CELs, Spanish acronym) with maturity terms of 15 and 20 years.

Section 2.1.135 states that Medium-term auctions are those in which basic service suppliers and other load serving entities are allowed to enter into hedging agreements for electricity generation, Electricity Certificates, Cumulative Energy Certificates and CELs with maturity terms of 3 years. The first Long-Term Auction in 2015 resulted in 18 awarded bids deferred among 11 companies involved. In total, these bids amount to 5.4 million MWh of energy and 5.3 million of CELs (annual committed volume, except for the first year which will have a different volume based on the Bid Commercial Operation Date). The hedging agreements resulting from this Auction will be effective in 2018.

The second Long-term Auction in 2016 resulted in 56 awarded bids and 23 companies involved. In total, these bids amount to 1,187 MW per year of energy, 8.9 Million MWh of energy, and 9.275 million of CELs (annual committed volume, except for the first year which will have a different volume based on the Bid Commercial Operation Date). The hedging agreements related to this Auction will be effective in 2019.

In the third Long-term Auction in 2017 (SMP No. 01/2017), four companies participated as sellers, namely CFE Generación VI, Vitol, Azteca X (Integen) and PGP, and the following companies participated as buyers: CFE Suministrador de Servicios Básicos, Vitol, Enel and Iberdrola; in this auction no awarding was made for CFE Suministrador de Servicios Básicos EPS.

#### e) Assets contributed by the Federal Government

On October 7, 2015, the Ministry of Public Administration (SFP, Spanish acronym) through the Institute of Management and Valuation of National Assets (INDAABIN, Spanish acronym), terminated the commodatum agreement of the assets contributed by the Federal Government, and delivered the assets with a certificate of delivery that includes annexes for the different types of assets to the CFE.

The CFE also obtained the legal and physical possession of the related assets, as per the aforementioned annexes. The procedures for the legal divestiture of the assets from the Federal public domain regime began as of such date. These assets were included in the consolidated statements of financial position as at 31 December 2015, at a value of \$95,004,417, as determined by the Asset Management and Divestiture Service (SAE, Spanish acronym), which will be adjusted based on the detailed breakdown by each of the corresponding areas. In 2016, these assets are included in the Plants, facilities and equipment and Other intangible assets captions (see Notes 8 and 9), and an additional amount of \$63,000 was recognized related to these types of assets. As at 30 June 2019, this activity is still ongoing.

#### f) <u>Amendments to the Collective Labor Agreement</u>

On May 19, 2016, CFE carried out a review of the terms of the Collective Labor Agreement it entered into with the Sole Union of Electricity Workers of the Mexican Republic ("SUTERM", Spanish acronym).

As shown in Note 15, as a result of this review, various clauses that mainly affect the retirements caption were amended and are presented as a reduction in CFE's labor obligations.

# g) Assumption of CFE's employee benefits liability by the Federal Government

On November 14, 2016, the Ministry of Finance and Public Credit (SHCP, Spanish acronym) published the "Agreement through which the general provisions related to the assumption by the Federal Government of CFE's employee benefits liability are issued" in the Official Gazette, whereby the Federal Government through the SHCP, assumes a portion of the pension and retirement payment obligation actuarially recognized and accounted for in CFE's financial statements, that correspond to the workers that were hired on or prior to August 18, 2008.

The Federal government had stated that it would assume a portion of CFE's labor liabilities, and this would be equal, peso by peso, to the reduction that would be achieved from the labor obligations liability at the time the Collective Labor Agreement is renegotiated. On December 29, 2016, the Federal Government announced the it had completed the review process of the savings amount of CFE's labor obligations, resulting from the amendments to the collective labor agreement.

On December 19, 2016, through official document No. 35.-187/2016, the Public Credit Unit of the SHCP, informed the CFE that the Federal Government's commitment to pay would be assumed by the SHCP through the issue of debt instruments by the Federal Government in favor of the CFE for a total amount of \$161,080,204, distributed in amounts that will be delivered annually to cover such commitment.

#### 2. Basis of preparation of the consolidated financial statements.

a) Basis of preparation

The accompanying unaudited condensed interim financial information has been prepared in accordance with International Accounting Standard (IAS) 34 Interim Financial Reporting and does not include all the information required for a complete set of annual financial statements prepared under International Financial Reporting Standards (IFRS) as issued by the International Accounting Standard Board (IASB).

This financial information should be read in conjunction with the financial statements as at 31 December 2018 and 2017 prepared under IFRS.

The consolidated unaudited consolidated interim financial information has been prepared on a historical-cost basis, except for CFE's derivative financial instruments and plants, facilities and equipment (as at 31 December 2016), which are recognized at fair value, and the defined benefits plans which are recognized at the present value of the defined benefit obligation less the fair value of the plan's assets.

(a)Functional and reporting currency of the unaudited consolidated interim financial information

The accompanying unaudited consolidated interim financial information and notes thereto are presented in Mexican pesos (reporting currency), which is the same as its functional currency.

For purposes of disclosure in the notes to the unaudited consolidated financial information, all references to "pesos" or "\$" refer to Mexican pesos, all references to "dollars" refer to U.S. dollars, all references to "euros" refer to the legal currency of the European Union, all references to "yen" refer to the legal currency of Japan; and all references to "Swiss francs" refer to the legal currency of Switzerland. The financial information is presented in thousands of pesos and has been rounded to the nearest unit, except where otherwise indicated.

(b)Unaudited condensed consolidated statements of comprehensive income

CFE has elected to present comprehensive income in a single Statement of Comprehensive Income that includes net profit or loss and other comprehensive income (OCI).

CFE prepared the unaudited consolidated statements of comprehensive income, and presented ordinary costs and expenses based on their nature, since it considers that the information presented in this way is much clearer. CFE also presents operating income (loss) in the statement of comprehensive income. Operating income is the difference between CFE's revenue and costs, and it is an important indicator for evaluating CFE's financial and economic performance.

# 3. Summary of Significant Accounting Policies

The accounting policies applied in the preparation of the unaudited condensed consolidated interim financial information are the same as those applied by CFE in the financial statements for the year ended 31 December 2018, except for those referred to below:

# a) Financial instruments

IFRS 9 Financial Instruments sets out the requirements for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard supersedes IAS 39 Financial Instruments: Recognition and Measurement

# b) Initial recognition and measurement

Accounts receivable are recognized as they are generated. All other financial assets and liabilities are recognized initially when CFE becomes a party to the contractual provisions.

Financial assets (unless it is an account receivable that does not contain a significant financing component) or financial liabilities are initially measured at fair value plus, in the case of an item not measured at fair value through profit or loss, the cost of the transaction directly attributable to the acquisition or issue. An account receivable that does not contain a significant financing component is initially measured at the price of the transaction.

# i. Classification and subsequent measurement - Financial assets

Financial assets are classified as follows: financial instruments measured at amortized cost (AC), fair value through other comprehensive income (FVOI) and fair value through profit or loss (FVTPL). As a result of the adoption of IFRS 9, the existing categories under IAS 39 of held-to-maturity, loans and receivables and available for sale have been eliminated.

IFRS 9 retains almost all of the existing requirements from IAS 39 regarding the classification and measurement of financial liabilities.

The adoption of IFRS 9 has not had a significant impact on CFE's accounting policies related to financial liabilities and derivative financial instruments (for derivatives that are used as hedging instruments, see Note 11).

For an explanation of how CFE classifies and measures financial instruments and recognizes the related gains and losses under IFRS 9, see Note 11.

# CFE recognizes revenue primarily from the following sources:

Sale of fuel: revenue is recognized at a point in time, which is when the fuels are delivered to customers.

**Transmission and distribution services** - revenue is recognized over time, as the public electricity transmission services are provided.

**Third-party contributions** - revenue from the contributions received from customers to connect them to the national transmission and distribution network is recorded in the statement of comprehensive income after CFE has completed the customer's connection to the network. Customers have the option to choose their electricity provider between either CFE or another company. The revenues are presented as part of the Other revenue caption.

Through 31 December 2016, the contributions received from customers to provide electricity connection and supply services were recorded as deferred income and recognized in profit or loss on a systematic basis over the useful lives of the fixed assets financed by said contributions, Since the electricity supply services contracts entered into with such customers were for an indefinite term, they were recognized in profit or loss based on the useful lives of the asset that funded the contributions.

Contributions received from the State and Municipal Governments to electrify rural villages and poor neighborhoods, to expand the distribution network, as well as other contributions, were recorded as deferred revenue and recognized in profit or loss as Other income over the useful lives of the fixed assets financed by said contributions.

As a result of the legal separation of CFE into several legal entities and the changes in the laws that allow for the existence of other qualified suppliers besides CFE, as of 1 January 2017 contributions received from customers and the State and Municipal Governments to provide electricity connection and supply services are recorded as income in the statement of comprehensive income after CFE has completed the customer's connection to the network, since customers now have the option to choose their electricity provider between either CFE or another company.

In view of the above, the deferred income liability recognized as Third party contributions in the "Other Long-Term Liabilities" as at 31 December 2016, in the amount of \$ 33,701,253, has been recognized in the income statement as Other income from 2017. As at 31 December 2018 and 2017, revenue from third party contributions amounted to \$ 1,798,471 and \$ 1,735,011, respectively.

**Revenue from subsidies**: revenue from subsidies received from the Ministry of Finance and Public Credit is recognized at a point in time, when the subsidies are received by CFE.

# 4. Financial Instruments – Fair Value and Risk Management

#### Fair values

An analysis of the carrying amounts and fair values of the financial instruments recognized as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

	30 June 2019	31 December 2018	31 December 2017
Financial assets:			
Cash and cash equivalents (1)	\$ 58,728,405	\$ 78,483,263	\$ 67,237,901
Accounts receivable (2)	112,669,949	99,175,895	95,067,520
Loans to workers (2)	13,126,608	12,367,879	12,339,193
Derivative financial instruments (1)	10,645,929	17,783,141	16,084,937
Financial liabilities:			
Short- and long-term debt (2)	\$ 351,960,835	\$ 354,624,984	\$ 335,550,690
Suppliers and contractors (1)	50,234,234	60,377,913	59,849,154
Deposits from users and contractors (1)	28,604,220	25,619,843	22,974,717

(1) Fair value

(2) Amortized cost

CFE's Financial Officer's functions include, among others, implementing strategies, coordinating access to domestic and international financial markets, and supervising and managing financial risks related to CFE's operations through internal and market risk reports that analyze the degree and magnitude of CFE's exposure to financial risks. These risks include market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk.

To mitigate the effects of its debt related risks, CFE uses hedging derivatives.

The Treasury Department is bound by the Ministry of Finance and Public Credit cash management policies that hold that investments must be made in low-risk short-term instruments. Monthly status reports are issued to the Treasury Investment Committee.

# Credit risk

Credit risk is the risk of financial loss to CFE if a counterparty to a financial instrument fails to meet its contractual obligations. CFE is subject to credit risk mostly in respect of its financial instruments comprising cash and short-term investments, loans and accounts receivable, and derivative financial instruments. In order to mitigate the credit risk in its cash, short-term investments and derivative financial instruments, CFE conducts transactions exclusively with counterparties that are financially solvent and that have a good reputation and high credit quality. CFE also obtains sufficient guarantees, when appropriate, to mitigate the risk of financial losses due to non-performance.

The carrying amount of CFE's financial assets represents the maximum exposure to credit risk.

For credit risk management purposes, CFE considers that the credit risk on loans and accounts receivable from consumers is limited. CFE determines the allowance for doubtful accounts based on the incurred loss model.

An aging analysis of the past due receivables, for which an allowance has not been deemed necessary as at 30 June 2019 and 31 December 2018 and 2017, is as follows:

	-	30 June 2019	31 December 2018	31 December 2017
Less than 90 days	\$	2,808,252	\$ 3,778,989	\$ 2,431,134
From 90 to 180 days		3,255,791	3,498,198	2,350,281
More than 180 days	-	12,684,869	13,812,362	10,795,106
	\$	18,748,912	\$ 21,089,549	\$ 15,576,521

# Liquidity risk

Liquidity risk is defined as the risk that an entity will encounter difficulty in meeting its obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

The financing obtained by CFE is mainly through contracted debt, the leasing of plants, facilities, and equipment and PIDIREGAS. To manage liquidity risk, CFE periodically performs cash flow analyses and maintains open lines of credit with financial institutions and suppliers.

In addition, CFE's budget is controlled by the Federal Government, consequently, the net debt ceiling authorized on an annual basis by the Federal Congress based on CFE's budgeted revenues, cannot be exceeded.

The following table shows the contractual maturities of CFE's financial liabilities based on the payment terms:

The following table shows the contractual maturities of CFE's financial liabilities based on the payment terms:

30 June 2019		Less than one year	_	More than 1 year and less than 3 years	 More than 3 years and less than 5 years	More than 5 years		Total
Documented debt	\$	16,704,447	\$	44,050,474	50,756,398 \$	105,465,918 \$	;	216,977,237
Interest payable on documented debt		12,667,478		20,990,780	17,377,146	51,435,010		102,470,414
PIDIREGAS debt		18,115,241		26,163,729	20,210,870	70,493,759		134,983,599
Interest payable on PIDIREGAS debt		8,584,028		13,384,392	9,890,518	30,299,509		62,158,447
Suppliers and contractors		50,234,234		-	-	-		50,234,234
Other liabilities	_	28,833,909	-	-	 <u> </u>	-		28,833,909
Total	\$	135,139,337	\$	104,589,375	\$ 98,234,932 \$	257,694,196 \$	5	595,657,840

As at 31 December 2018	_	Less than one year	 More than 1 year and less than 3 years	_	More than 3 years and less than 5 years	More than 5 years	Total
Documented debt	\$	15,554,180	\$ 47,006,781	\$	21,496,201 \$	\$ 131,988,076	\$ 216,045,238
Interest payable on documented debt PIDIREGAS debt		12,751,923 16,780,375	22,239,932 25,402,698		17,887,246 19,973,829	56,627,971 68,928,130	109,507,072 131,085,032
Interest payable on PIDIREGAS debt		7,979,683	12,824,805		9,391,087	30,219,922	60,415,497
Suppliers and contractors		60,377,913	-		-	-	60,377,913
Other liabilities		18,007,260	-		-	-	18,007,260
Total	\$	131,451,334	 107,474,216	\$	68,748,363 \$	\$ 287,764,099	\$ 595,438,012,

As at 31 December 2017	 Less than one year	More than 1 year and less than 3 years	More than 3 years and less than 5 years	More than 5 years	Total
Documented debt	\$ 25,918,516 \$	29,320,404 \$	20,473,272 \$	131,209,737 \$	206,921,929
Interest payable on documented debt PIDIREGAS debt	12,101,655 21,145,914	21,733,041 26,125,588	16,630,583 20,171,431	61,325,343 59,752,377	111,790,622 127,195,310
Interest payable on PIDIREGAS debt Suppliers and contractors Other liabilities	7,854,887 59,849,154 20,761,051	11,743,205 - -	8,363,221 - -	23,300,233 - -	51,261,546 59,849,154 20,761,051

Total

\$ <u>147,631,177</u> \$ <u>88,922,238</u> \$ <u>65,638,507</u> \$ <u>275,587,690</u> \$ <u>577,779,612</u>

#### Market risk

Because of its activities, CFE has exposure to foreign currency and interest rate risks.

#### Foreign currency exchange risk management

To fund its working capital requirements and public works financing, CFE contracts debt in foreign currency, consequently, it is exposed to exchange rate risk.

	Total debt as at 30 June	Total debt as at 31	Total debt as at 31
	2019	December 2018	December 2017
	million pesos	million pesos	million pesos
Local currency	162,077	154,334	169,449
Foreign currency	187,881	191,061	163,047

CFE primarily uses interest rate and foreign currency swaps and foreign currency forward contracts to manage its exposure to interest rate and foreign currency fluctuations in accordance with its internal policies.

The carrying amounts of CFE's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are discussed in Note 18.

#### Foreign currency sensitivity analysis

CFE is mainly exposed to exchange rate differences between the Mexican peso, the US dollar and the Japanese yen.

CFE's sensitivity analysis considers a 5% increase and decrease in the Mexican peso exchange rate against the other relevant foreign currencies. This 5% is the sensitivity rate used internally when the exchange risk is reported to key management personnel and represents Management's assessment of a reasonably possible change in exchange rates.

The sensitivity analysis only includes open items denominated in foreign currency and adjusts their translation for a 5% change in foreign currency exchange rates at period end. The sensitivity analysis includes foreign loans as well as loans from foreign operations within CFE, where the loan is denominated in a currency other than the loaner's or borrower's currency. A positive number (as observed in the table below) indicates an increase in profit where the Mexican peso strengthens 5% against the relevant currency. For a 5% weakening of the Mexican peso against the relevant currency, there would be a comparable impact on the profit, and the balances below would be negative.

30 June 2019			
	Documented	Pidiregas	Total
EUR	1,267	-	1,267
MXP/UDIS	736,802	71,696	808,498
USD	6,378,377	3,167,874	9,546,252
CHF	7,657	-	7,657
JPY	13,053	-	13,053
Total	7,137,156	3,239,570	10,376,727

#### 31 December 2018

	Documented	Pidiregas	Total
EUR	1,323	-	1,323
MXP/UDIS	1,088,341	97,156	1,185,497
USD	5,537,034	3,155,278	8,692,312
CHF	16,394	-	16,394
JPY	18,093	-	18,093
Total	6,661,184	3,252,434	9,913,619

# 31 December

2017				
	Documented	Pidiregas		Total
EUR	2,181	-		2,181
MXP/UDIS	- 12,044	- 7,577	-	19,621
USD	6,509,112	3,434,535		9,943,647
CHF	40,864	-		40,864
JPY	29,285	-		29,285
Total	6,569,398	3,426,958		9,996,355

The sensitivity analysis was estimated based on the fair value of the loans denominated in foreign currency.

Management believes that the impact of the inherent exchange risk is reflected in the electricity rates in the long-term through inflation adjustments and the peso to dollar exchange rate.

# Interest rate risk management

CFE is exposed to interest rate risks for loans borrowed at variable interest rates. CFE manages this risk by maintaining an appropriate mix of fixed and variable rate loans and by contracting derivative financial instruments designated as interest rate hedges:

	Total debt as at 30 June 2019	Total debt as at 31 December 2018	Total debt as at 31 December 2017
Fixed rate		242.971	million pesos 169.449
Variable rate	103,444	102,423	163,047

#### Interest rate sensitivity analysis

The sensitivity analyses have been determined based on the exposure to interest rates for derivative and non-derivative financial instruments at the end of the reporting period.

For variable rate liabilities, an analysis is prepared assuming that the amount of the liability reported at the end of the reporting period was the amount in effect throughout the whole year. When reporting interest rate risk internally to key management personnel, a 0.50-point increase or decrease is used for the Mexican Equilibrium Interbank Interest Rate (EIIR or TIIE, Spanish acronym) and a 0.01-point increase or decrease for the LIBOR. These changes represent Management's assessment of a reasonably possible change in interest rates.

30 June 2019	Documented	Pidiregas	Total
Fixed rate	94,634	48,835	143,470
Variable rate	11,548	18,880	30,428
	106,182	67,715	173,898
31 December 2018	Documented	Pidiregas	Total
Fixed rate	54,247	20,982	75,229
Variable rate	6,905	9,815	16,720

31 December 2017	Documented	Pidiregas	Total
Fixed rate	92,505	29,479	121,985
Variable rate	5,051	19,077	24,128
_	97,556	48,556	146,113

The sensitivity analysis of the debt without considering the derivative financial instruments was estimated based on the fair value of the loans.

The sensitivity analysis of the derivative financial instruments is described in Note 10.

Therefore, the hierarchy level of CFE's Mark-to-Market for derivatives financial instruments as at 31 March 2019 is level 2 due to the following:

a) Inputs are other than quoted prices and include inputs within Level 1 that are observable, either directly or indirectly.

- b) Quoted prices for similar assets or liabilities in active markets.
- c) Inputs other than quoted prices that are observable for the assets or liabilities.

#### Fair value of financial instruments

#### Measurement of fair values

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or, in its absence, the most advantageous market to which CFE has access at that date. The fair value of a liability reflects its non-performance risk.

When one is available, CFE measures the fair value of an instrument using the quoted price in an active market for that instrument. A market is regarded as 'active' if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

If there is no quoted price in an active market, then CFE uses valuation techniques that maximize the use of relevant observable inputs and minimize the use of unobservable inputs. The chosen valuation technique incorporates all of the factors that market participants would consider in pricing a transaction.

If an asset or a liability measured at fair value has a bid price and an ask price, then CFE measures assets and long positions at a bid price and liabilities and short positions at an ask price.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price – i.e. the fair value of the consideration given or received. If CFE determines that the fair value on initial recognition differs from the transaction price and the fair value is evidenced neither by a quoted price in an active market for an identical asset or liability nor based on a valuation technique for which any unobservable inputs are judged to be insignificant in relation to the measurement, then the financial instrument is initially measured at fair value, adjusted to defer the difference between the fair value on initial recognition and the transaction price. Subsequently, that difference is recognized in profit or loss on an appropriate basis over the life of the instrument but no later than when the valuation is wholly supported by observable market data or the transaction is closed out.

Fair value of financial instruments recognized at amortized cost

Management believes that the carrying amount of the financial assets and liabilities recognized at amortized cost in CFE's condensed consolidated financial information approximates fair value, including the following:

## Valuation techniques and assumptions used in determining fair value

	30 Ju	ne 2	2019 31 Dece			cem	ber 2018	31 Dec	ber 2017	
	Carrying		Fair		Carrying		Fair	Carrying		Fair
	 amount		value		amount	· -	value	 amount		value
Cash and cash equivalents	\$ 58,728,405	\$	58,728,405	\$	78,483,263	\$	78,483,263	\$ 67,237,901	\$	67,237,901
Accounts receivable	112,669,949		112,669,949		99,175,895		99,175,895	89,930,512		89,930,512
Loans to workers	13,126,608		13,126,608		12,367,879		12,367,879	12,339,193		12,339,193
Suppliers and contractors	50,234,234		50,234,234		60,377,913		60,377,913	59,849,154		59,849,154
Documented debt	216,977,237		216,977,237		216,045,238		216,045,238	206,921,928		206,921,928
PIDIREGAS debt	134,983,599		148,619,619		131,085,031		142,421,039	127,195,310		200,505,520

The fair value of CFE's financial assets and liabilities is determined as follows:

- The fair values of financial assets and financial liabilities with standard terms and conditions that are traded on active liquid markets are determined by references to quoted market prices.
- The fair value of other financial assets and liabilities (excluding derivative financial instruments) is determined in accordance with generally accepted pricing models, which are based on an analysis of discounted cash flows using current transaction prices observable in active markets and quoted prices for similar instruments.
- In conformity with the terms under which the ISDA (International Swaps and Derivatives Association) contracts were entered into, the counterparties or banking institutions are the appraisers who calculate and send the Mark-to-Market (which is the monetary valuation of the agreed upon transaction at a given time) on a monthly basis. CFE monitors this value and if there is any doubt or abnormal variance in the market value, CFE will request that the counterparty provide a new valuation.

#### Valuations at fair value recognized in the statement of financial position

The following table provides an analysis of the financial instruments valued at fair value after their initial recognition grouped in levels from 1 to 2, based on the degree to which their fair value is observable:

	_	30 June 2019	31 December 2018	31 December 2017
Available-for-sale financial assets:				
Temporary investments	\$	15,606,937	\$ 14,666,617	\$ 25,232,468
Total	\$ _	15,606,937	\$ 14,666,617	\$ 25,232,468

An analysis of the fair value of the derivative financial assets grouped in level 2, based on the degree to which their fair value is observable, is included in Note 11.

The levels referred to above are considered as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices);
- Level 3: inputs are unobservable inputs for the asset or liability.

# 5. Cash and cash equivalents

An analysis of Cash and cash equivalents as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

	_	30 June 2019	31 December 2018	31 December 2017
Cash on hand and cash in banks Temporary investments Stock certificates	\$	43,112,647 15,606,937 8,821	\$ 63,807,825 14,666,617 8,821	\$ 41,996,612 25,232,468 8,821
Total	\$	58,728,405	\$ 78,483,263	\$ 67,237,901

#### 6. Accounts receivable, net

An analysis of CFE's accounts receivable as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

	30 June 2019		31 December 2018	31 December 2017
Public consumers (*)	\$ 58,407,244	\$	57,453,309	\$ 60,335,248
Government agency consumers (*)	 23,360,291	-	22,060,633	20,887,093
	81,767,535		79,513,942	81,222,341

Impairment of receivables	(26,594,598)	(28,446,893)	(25,049,197)
	55,172,937	51,067,049	56,173,144
Other accounts receivable	32,228,587	37,205,453	33,512,182
Value added tax Total \$	25,268,425 <b>112,669,949</b>	10,903,393 \$ 99,175,895	\$ 5,382,194 <b>95,067,520</b>

(\*) Includes estimates of revenue for electricity supply services that are in the process of being billed.

An analysis of the allowance for doubtful accounts as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

	-	30 June 2019		31 December 2018	_	31 December 2017
Beginning balance	\$	28,446,893	\$	25,049,197	\$	26,493,149
Increase		6,991		4,706,151		239,337
Charges	-	(1,859,286)	_	(1,308,455)	_	(1,683,289)
Ending balance	\$	26,594,598	\$	28,446,893	\$	25,049,197

# 7. Inventory of operating materials

An analysis of inventory of operating materials as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

	-	30 June 2019	-	31 December 2018	31 December 2017
Spare parts and equipment	\$	1,816,143	\$	1,974,821	\$ 2,570,001
Fuel and lubricants		15,650,530		13,607,510	11,481,771
Nuclear fuel	-	3,868,001	-	4,160,798	3,994,473
		21,334,674		19,743,129	18,046,245
Allowance for obsolescence		(1,023,433)		(4,205,664)	(3,403,252)

Total	\$ 20,311,241 \$	15,537,465 \$	14,642,993

#### 8. Plants, facilities and equipment, net

An analysis of Plants, facilities and equipment, net, as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

	31 December 2018	Acquisitions	Retirements	Depreciation for the period	30 June 2019
Plants, facilities and equipment	1,986,326,296	24,454,520	1,660,425	-	2,009,120,391
Capitalized spare parts	7,306,914	317,397	-	-	7,624,311
Construction in progress	32,189,380	-	6,388,301	-	25,801,079
Advances and materials for construction	14,044,721	-	290,084	-	13,754,637
Right of use assets	-	<u> </u>	-		-
Subtotal	2,039,867,312	24,771,917	8,338,810	-	2,056,300,419
Accumulated depreciation	(853,277,054)	<u> </u>	(11,548,116)	(35,347,023)	(877,075,961)
Total	1,186,590,258	24,771,917	(3,209,306)	(35,347,023)	1,179,224,458

-	31 December 2017	Acquisitions	Retirements	Depreciation for the period	Reversal of impairment of assets	31 December 2018
Plants, facilities and equipment	1,990,250,148	5,672,205	9,596,057	-	-	1,986,326,296
Capitalized spare parts	7,233,445	73,469		-	-	7,306,914
Construction in progress	19,907,935	12,281,445	-	-	-	32,189,380
Advances and materials for construction	11,621,276	2,423,445	<u> </u>		<u> </u>	14,044,721
Subtotal	2,029,012,804	20,450,564	9,596,057	-	-	2,039,867,312
Accumulated depreciation	(809,483,251)	-	(8,587,789)	(52,381,592)	-	(853,277,054)
Impairment Total	(28,681,250)		(25,663,655)		(3,017,595)	-

1,190,848,303	20.450.564	(24.655.387)	(52.381.592)	(3,017,595)	1.186.590.258
1,100,010,000	20, 100,001	(21,000,001)	(02,001,002)	(0,011,000)	1,100,000,200

As at 31 December 2018, a partial amount of the impairment recognized in 2017 was reversed in the amount of \$2,074,323.

	31 December 2016	Acquisitions	Retirements	Depreciation for the period	Reversal of impairment of assets	31 December 2017
Plants, facilities and equipment Capitalized spare	\$ 1,943,244,845	\$ 6,682,159	\$ 19,676,856	\$ -	-	\$ 1,990,250,148
parts	6,367,288	866,157	-	-	-	7,233,445
Construction in progress Advances and materials for	18,433,272	1,474,663	-	-	-	19,907,935
construction	10,856,715	764,561	-	-	-	11,621,276
Subtotal Accumulated	\$ 1,978,902,120	\$ 69,787,540	\$ 19,676,856	\$ -	-	\$ 2,029,012,804
depreciation	(753,820,030)	-	-	(55,663,221)	-	(809,483,251)
Impairment	 -	-	-	-	(28,681,250)	(28,681,250)
Total	\$ 1,225,082,090	\$ 69,787,540	\$ 19,676,856	\$ (55,663,221)	(28,681,250)	\$ 1,190,848,303

As at 31 December 2017 CFE carried out an impairment test to Genco VI and recognized a loss for impairment in other comprehensive income of \$28,681,250 related to plant and equipment.

Based on the periodic review of the fair values of plants, facilities and equipment in operation, CFE revalues its assets to ensure that the carrying amount does not differ significantly from the amount that would have been calculated using fair values at the end of the reporting period.

Therefore, an analysis of fixed assets must be carried out to revalue the assets and review the useful life assigned to such.

**Construction in progress -** an analysis of the construction in progress balances as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

Plant:		30 June 2019	. <u>-</u>	31 December 2018	31 December 2017
Steam	\$	29,641	\$	24,587	\$ 326
Hydroelectric		1,184,153		1,180,110	1,248,917
Nuclear power		237,646		589,870	1,316,029
Turbo gas and combined cycle		11,289,899		11,171,320	416,051
Geothermal		325,828		870,738	1,220,462
Internal combustion		-		682	682
Transmission lines, networks an	d	11,346,722		16,698,221	14,594,645

substations Offices and general facilities			
-	 1,387,190	1,653,852	 1,110,823
Total	\$ 25,801,079 \$	32,189,380	\$ 19,907,935

#### Fair value measurement

As mentioned in Note 1, a valuation of plants, facilities and equipment was carried out in 2016. As a result of this process, the net increase in the value of these assets of \$ 210,725,169 was recognized in other comprehensive income.

i. Fair value hierarchies

The fair value of plants, facilities and equipment in operation was determined by independent external appraisers with a recognized professional capacity and experience in terms of the property, plant and equipment that underwent the appraisal. The independent external appraisers provided the fair value of the plants, facilities and equipment as at 31 December 2016.

ii. Valuation technique and relevant unobservable inputs

The following table shows the valuation technique used to measure the fair value of investment properties, as well as the significant unobservable inputs used.

Valuation technique	Significant unobservable inputs	Interrelationship between the key unobservable inputs and the measurement of fair value
Discounted cash flows: The valuation model uses the present value of the net cash flows that will be generated by the plants, facilities and equipment, considering the expected income growth rate. Net expected cash flows are discounted using risk- adjusted discount rates.	Generation Useful life of the assets (30-60 years) Discount rate 7.67%- 8.68% Transmission Useful life of the assets (30 years) Discount rate 7.67% Distribution Useful life of the assets (30 years) Discount rate 7.67%	The estimated fair value would increase (decrease) if: - Income growth is higher (lower) - The useful life is higher (lower) - The risk-adjusted discount rate is lower (higher)

# 9. Right of use asset

#### <u>Leases</u>

CFE has elected to adopt IFRS 16 Leases as at 1 January 2019, applying the retrospective approach to each period presented in the annual financial statements. Consequently, the cumulative effect of the adoption of IFRS 16 will be recognized as an adjustment to the beginning balance of taxable gains as at 1 January 2017.

CFE is not planning on using a practical expedient to adopt the definition on transition. This means that CFE again assessed the contracts identified as leases in accordance with IAS 17 and IFRIC 4.

An analysis of the net balances of the Right of use assets as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

Right of use assets	31 December			Depreciation		
	 2018	Acquisitions	Retirements	for the period	Reclassifications	30 June 2019
Property	\$ 356,727	\$ 16,724	\$ 13,274	\$	\$ (227,306)	\$ 132,871
Automotive equipment	2,302	-			(2,302)	
Furniture and equipment	48,219	113			(10,484)	37,848
Gas pipelines	1,569	-			(1,179)	390
Infrastructure	111,636,127	10,739,436			(2,591,137)	119,784,426
Gas pipelines	 287,211,961	-			38,406,255	325,618,426
Subtotal	\$ 399,256,905	\$ 10,756,273	\$ 13,274	\$	\$ 35,573,847	\$ 445,573,751
Accumulated	(61,763,672)	-		(10,170,295)	(2,564,000)	(74,497,967)
depreciation						
Total	\$ 337,493,233	\$ 10,756,273	\$ 13,274	\$ 10,170,295	\$ 33,009,847	\$ 371,075,784

# As at 30 June 2019

#### As at 31 December 2018

Right of use assets	31 December	Depreciation						31 December	
	 2017	Acquisitions		Retirements		for the period		Reclassifications	2018
Property	\$ 225,146	\$ 131,581	\$	-	\$	-	\$	-	\$ 356,727
Automotive equipment	2,302	-		-		-		-	2,302
Furniture and equipment	743	47,476		-		-		-	48,219
Gas pipelines	1,569	-		-		-		-	1,569
Infrastructure	111,636,127	-		-		-		-	111,636,127

Gas pipelines	205,594,715	81,617,246	-	-	-	287,211,961
Subtotal	\$ 317,460,602	\$ 81,796,303	\$ - \$	-	\$ -	\$ 399,256,905
Accumulated	(44,428,453)	-	-	-	(17,335,219)	(61,763,672)
depreciation						
Total	\$ 273,032,149	\$ 81,796,303	\$ - \$	-	\$ 17,335,219	\$ 337,493,233

# As at 31 December 2017

Right of use assets	31 December			Depreciation		31 December
	 2016	Acquisitions	Retirements	for the period	Reclassifications	2017
Property	\$ 195,710	\$ 29,436	\$ -	\$ -	\$ -	\$ 225,146
Automotive equipment	2,302	-	-	-	-	2,302
Furniture and equipment	-	743	-	-	-	743
Gas pipelines	1,569	-	-	-	-	1,569
Infrastructure	111,626,783	9,344	-	-	-	111,636,127
Gas pipelines	 118,730,936	86,863,779	-	-	-	205,594,715
Subtotal	\$ 205,557,300	\$ 89,903,302	\$ -	\$ -	\$ -	\$ 317,460,602
Accumulated	(30,226,463)	-	-	-	(14,201,990)	(44,428,453)
depreciation						
Total	\$ 200,330,837	\$ 89,903,302	\$ -	\$ -	\$ (14,201,990)	\$ 273,032,149

#### 10. Intangibles and other assets

An analysis of Intangibles and other assets as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

		30 June 2019	-	31 December 2018	31 December 2017
Rights of way (1)	\$	37,176,133	\$	30,444,834	\$ 29,979,671
Deposits and advances	-	7,667,422	-	3,837,030	2,857,316
Total	\$	44,843,555	\$	34,281,864	\$ 32,836,987

(1) Includes rights of way in the amount of \$24,064,610 that are part of the assets contributed by the Federal Government to CFE through INDAABIN.

# **11. Derivative Financial Instruments**

# a. Accounting classifications and fair values

CFE is exposed to interest rate and foreign currency risks which it tries to mitigate through a hedging program that includes the use of derivative financial instruments. CFE mainly uses foreign exchange "cross currency swaps" and "forwards" to mitigate its foreign currency risk. To reduce its interest rate risk exposure, CFE uses interest rate swaps.

Also, for the periods ended 30 June 2019 and 31 December 2018 and 2017, the derivative financial instruments have been designated as and qualify mainly as cash flow hedges since they are referenced to contracted debt. The effective portion of gains or losses on cash flow derivatives is recognized in equity under the concept of "Effects on the fair value of derivatives", and the ineffective portion is charged to profit or loss of the period.

The fair value of the total derivative financial position as at 30 June 2019 and 31 December 2018 and 2017 amounts to \$10,645,929, \$17,783,141 and \$16,084,937, respectively.

#### **Derivative Financial Instruments Held for Trading**

As at 30 June 2019 and 31 December 2018 and 2017, the CFE had derivatives designated as held for trading whose fair value represented a liability of \$193,187 as at 30 June 2019, an asset of \$24,963 as at 31 December 2018, and a liability of \$438,115 as at 31 December 2017.

This transaction consists of a series of currency forwards that allow CFE to lock in a JPY/USD exchange rate of 54.0157 JPY per USD over the established term of the transaction. As part of this transaction, CFE pays annual interest in U.S. dollars at a rate of 8.42%. These instruments have not been designated as hedges as required by the financial reporting standard, consequently, the valuation effect of these instruments is recognized in financial cost; a gain (loss) in said value offsets a loss (gain) in the underlying liability.

In addition to the series of forwards, the derivative instrument includes two options: a long European call option through which CFE has the right to purchase Japanese yens upon maturity in the spot market in case the yen/dollar exchange rate is quoted below 118.75 yens per dollar, and a short European call option through which CFE is required to sell dollars at the yen/dollar exchange rate of 27.80, if the prevailing exchange rate at the settlement date exceeds this level.

CFE suspends cash flow hedge accounting when the derivative has matured, the hedge is not effective enough to offset the changes in the cash flows of the hedged item, or CFE decides to revoke the hedge designation. The gains or losses recognized in Other comprehensive income and accumulated in Equity, remain in Equity and are recognized when the forecast transaction is ultimately recognized in profit or loss.

If CFE decides to cancel this economic hedge (currency forwards on the yen/dollar exchange rate), it would give rise to an estimated extraordinary loss at 30 June 2019 and 31 December 2018 and 2017 as follows:

		Thousands of pe	esos		
			30 June	31	31
Instrument	Underlying	Maturity	2019	December	December

				2018	2017
FWD JPY/USD	Exchange rate and interest rate	2036	(193,187)	24,963	(438,115)
		Total	(193,187)	24,963	(438,115)

**Financial instruments for hedging purposes –** As at 30 June 2019 and 31 December 2018 and 2017, CFE maintains its hedging derivative position on exchange rates and interest rates, as shown below:

Instrument	Underlying	Type of hedge	Maturity	Primary position (Lines/Bonds)	Hedge Ratio	30 June 2019	31 December 2018	31 December 2017
CCS	Exchange rate and interest rate		2021	1100000074 to 76	100%	178,237	237,481	339,264
CCS	Exchange rate and interest rate	Cash flow	2022	1100000077 to 79	100%	57,006	71,531	93,469
CCS	Exchange rate and interest rate	Cash flow	2023	110000080	100%	699,077	1,815,259	3,971,843
CCS	Exchange rate and interest rate	Cash flow	2024	1100002956	100%	2,292,696	3,835,201	5,081,946
CCS	Exchange rate and interest rate	Cash flow	2027	1100003606	100%	1,483,473	2,585,145	2,589,860
CCS	Exchange rate and interest rate	Cash flow	2032	1200002801	100%	142,724	387,053	(427,998)
CCS	Exchange rate and interest rate	Cash flow	2036	1200000551 Pidiregas Line	100%	3,216,118	4,718,366	4,763,554
CCS	Exchange rate and interest rate	Cash flow	2042	BOND 2042	100%	316,304	1,015,880	-
CCS	Exchange rate and interest rate	Cash flow	2047	Formosa 1	100%	284,833	1,210,485	-
CCS	Exchange rate and interest rate	Cash flow	2045	BOND 2045	60%	1,678,779		
CCS	Exchange rate and interest rate	Cash flow	2048	Formosa 2	100%	478,026	1,714,359	-
Participating Swap	Exchange rate and interest rate	Cash flow	2027	Bond 2027	100%	37,607	83,185	(108,664)
Forwards	Exchange rate	Cash flow	Less than one year	CFE Qualified	100%	(36)	115	105,058
IRS	Interest rate	Cash flow	2023	NAFIN Line	100%	(52,192)		
IRS	Interest rate	Cash flow	2020	1100003807, 1200001251 and 1200001451	100%	36,092	84,118	114,720
Options	Exchange rate	Cash flow	2019	Current expense	100%	(6,337)		
CCS	Exchange rate/Commodities	Cash flow	2020	Sale of energy	100%	(2,661)		
			Subtotal			10,839,746	17,758,178	16,523,052
CCS	Exchange rate JPY/USD	Trading		Line of credit in yens	N/A	(193,817)	24,963	(438,115)
	Total thousands of Mexican pesos					10,645,929	17,783,141	16,084,937

The table above includes the mark to market of the hedging derivatives. As at 30 June 2019 the total mark-to-market corresponding to the hedging and trading derivatives was \$10,645,929 based on their carrying amount.

The results of the effectiveness tests for these hedging instruments showed that the relationships are highly effective. CFE estimated that the amount of ineffectiveness is minimum.

Fair value (Mark to market - MTM) is determined using valuation techniques at present value to discount future cash flows, which are estimated using observable market data. The carrying amount of OI includes the fair value (mark to market) and the reclassifications to profit and loss correspond to accrued interest and currency hedging (gain or loss).

# b. Measurement of fair values

The valuation techniques for estimating the fair value of derivative instruments are described in the accounting policy mentioned above, depending on the derivative instrument for which the fair value is estimated. CFE uses the corresponding valuation technique to estimate such value.

# Adjustment of fair value or Mark to Market by credit risk

To reflect counterparty risk, the valuation is adjusted based on the probability of default and the recovery rate with the counterparties of the derivative positions.

The net of the fair value of derivative financial instruments (Mark to Market) effective as at 30 June 2019, before considering credit risk, amounts to \$10,913,924 which is included in the balance sheet and represents the amount in favor of the Corporate with the counterparties.

The net of the fair value of derivative financial instruments (Mark to Market) effective as at 31 December 2018, before considering credit risk, amounts to \$18,027,897 which is included in the balance sheet and represents the amount in favor of the Corporate with the counterparties.

The net of the fair value of derivative financial instruments (Mark to Market) effective as at 31 December 2017, before considering credit risk, amounts to \$17,112,665 which is included in the balance sheet and represents the amount in favor of the Corporate with the counterparties.

CFE applies a credit valuation adjustment (CVA) to reflect the creditworthiness of the counterparty of the derivative financial instrument. The CVA is the market value of the counterparty credit risk and reflects the estimated fair value of the hedging required to cover the counterparty credit risk included in such instruments

# Methodology to adjust fair value or Mark to Market by credit risk

This mechanism was approved by the Interinstitutional Delegate Committee for Financial Risk Management associated to the financial position and price of fossil fuels (CDIGR), as the methodology for adjusting derivative financial instruments to fair value.

As at 30 June 2019, the adjustments to fair value based on the CVA (Credit Valuation Adjustment) are shown below:

Counterparty	Fair value MTM subject to CVA	Adjusted fair value MTM	Adjustment as at 30 June 2019
BBVA BANCOMER	652,086	638,979	13,107
BNP PARIBAS	464,844	459,266	5,578
CITIBANAMEX	1,012,505	992,918	19,588
CREDIT AGRICOLE	3,553	3,502	51
CREDIT SUISSE	267,879	262,763	5,116
DEUTSCHE BANK	2,351,352	2,269,055	82,297
GOLDMAN SACHS	2,987,166	2,922,046	65,120
HSBC	-48,587	-48,682	95
JP MORGAN	146,290	144,212	2,078
MORGAN STANLEY	965,693	943,032	22,661
SANTANDER	967,128	955,813	11,315
BARCLAYS BANK	1,140,694	1,102,859	37,835
BANK OF AMERICA	197,174	194,019	3,155
MONEX	-36	-36	0
GOLDMAN SACHS (Trading)	-193,817	-193,817	0
	10,913,924	10,645,929	267,995

As at 31 December 2018, the adjustments to fair values based on the CVA (Credit Valuation Adjustment) are shown below:

Thousands	of pesos
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Counterparty	Fair value MTM subject to CVA	Adjusted fair value MTM	Adjustment as at 31 December 2018
BBVA BANCOMER	227,559	225,761	1,798
BNP PARIBAS	3,051,653	2,977,803	73,850
CITIBANAMEX	2,232,949	2,146,936	86,013
CREDIT AGRICOLE	1,687,633	1,679,195	8,438
CREDIT SUISSE	771,993	767,593	4,400
DEUTSCHE BANK	1,081,491	1,074,569	6,922
GOLDMAN SACHS	5,035,369	4,976,669	58,700
HSBC	1,088,699	1,082,711	5,988
JP MORGAN	7,694	7,650	44
MORGAN STANLEY	7,793	7,763	30
SANTANDER	392,195	390,156	2,039
BARCLAYS BANK	2,442,869	2,421,372	21,497
GOLDMAN SACHS (Trading)		24,963	-24,963
	18,027,897	17,783,141	244,756

As at 31 December 2017, the adjustments to fair values based on the CVA (Credit Valuation Adjustment) are shown below:

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	Thousands of pesos					
Counterparty	Fair value MTM subject to CVA	Adjusted fair value MTM	Adjustment as at 31 December 2017			
CREDIT SUISSE	233,994	233,994	0			
DEUTSCHE BANK	3,102,561	3,102,561	0			
MORGAN STANLEY	2,811,977	2,663,721	148,256			
SANTANDER	3,133,420	3,133,420	0			
BNP PARIBAS	1,409,163	1,408,675	488			
BBVA BANCOMER	2,270,034	2,270,034	0			
GOLDMAN SACHS	2,234,522	2,234,522	0			
CITIBANAMEX	128,596	128,426	170			
CREDIT AGRICOLE	14,663	14,663	0			
HSBC	15,476	4,875	10,601			
JP MORGAN	5,915	-424,143	430,058			
BARCLAYS BANK	1,752,344	1,752,304	(40)			
J Aron (Trading)	0	-438,115	438,115			
	17,112,665	16,084,937	1,027,648			

# Fair Value hierarchy or Mark-to-Market

To increase consistency and comparability of fair value measurements and related disclosures, IFRS established a fair value hierarchy that categorizes into three levels the inputs to valuation techniques. This hierarchy grants the highest priority to quoted prices (unadjusted) in active markets for assets and liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The availability of relevant inputs and their relative subjectivity might affect the selection of appropriate valuation techniques. However, the fair value hierarchy prioritizes the inputs to valuation techniques.

# Level 2 inputs

As explained above, and according to the terms under which the ISDA contracts were entered into, the counterparties or banking institutions are the appraisers and they calculate and send the Mark-to-Market calculation monthly.

Therefore, the hierarchy level of CFE's Mark-to-Market for derivatives financial instruments as at 30 June 2019 is level 2 due to the following:

- a) Inputs are other than quoted prices and include inputs within Level 1 that are observable, either directly or indirectly.
- b) Quoted prices for similar assets or liabilities in active markets.
- c) Inputs other than quoted prices that are observable for the assets or liabilities.

# c. Financial risk management

CFE is exposed to the following financial risks for maintaining and using derivative financial instruments:

- Credit risk
- Liquidity risk
- Market risk

# Credit risk

Credit risk associated with financial derivative instruments is the risk of experiencing a financial loss if a counterparty to these financial instruments fails to meet its financial obligations. To mitigate its credit risk, CFE follows a policy of maintaining a significant portion of its positions with investment grade counterparties and substantially limiting its positions with counterparties below investment grade.

To manage credit risk, CFE monitors the credit rating and the probability of default of the counterparty, which is applied to the market value of the derivative.

The carrying amount of the derivative financial assets represents the maximum exposure to credit risk. As at 30 June 2019 and 31 December 2018 and 2017, this amounted to \$10,913,924. \$18,027,897 y \$17,112,665, respectively.

#### Liquidity risk

The liquidity risk associated with financial derivative instruments is the risk that CFE may encounter difficulties in meeting the financial obligations arising from these instruments.

To manage credit risk, CFE monitors the market value of the derivative and the use by the operating lines (threshold).

Exposure to liquidity risk for holding derivative financial instruments arises from the carrying amount of the financial liabilities corresponding to these instruments. As at 30 June 2019 and 31 December 2018 and 2017, it amounted to \$445,269, \$72,615 and \$589,533, respectively.

# Market risk

The market risk associated with derivative financial instruments is the risk that changes in market prices, such as exchange rates and interest rates, will affect CFE's income for holding derivative financial instruments.

CFE uses financial derivative instruments to manage market risk, generally seeking access to hedge accounting to control or immunize the volatility that could arise in the results.

#### a) Currency exchange risk

57.3% of CFE's debt is denominated in foreign currency, mainly in US dollars, whereas most of CFE's assets and revenues are denominated in pesos. As a result, CFE is exposed to devaluation risks of the peso against the dollar. In conformity with its risk management policy, CFE has contracted currency swaps to reduce the impact of currency fluctuations. The effect of this instrument is to replace the obligation to pay fixed interest rates in dollars for an obligation to pay a fixed rate in pesos. As at 30 June 2019 and 31 December 2018 and 2017, CFE maintains foreign exchange swaps as a hedge of its debt in foreign currency of \$108,742 and \$108,837 million pesos, respectively.

To cover the exchange risks of the \$32 billion debt in yens, CFE uses a series of exchange rate forwards under which it purchases Japanese yens. The market value of this transaction as at 30 June 2019 and 31 December 2018 and 2017 was \$(193,817) and \$24,973, respectively. These derivative instruments were not designated as hedges.

#### Sensitivity analysis for exchange rate effects

A possible and reasonable strengthening (weakening) of the MXN/USD and JPY/USD exchange rate as at 30 June 2019 would have affected the fair value of the total position of the derivative financial instruments in foreign currency, and thus, profit and loss of the period and other comprehensive income (since some of them are designated as hedges), as shown in the following table:

30/06/2019	Instrument	+100 pips	-100 pips
	Cross Currency	59,301	(59,301)
	JPY/USD	2,694	(2,694)
	FWD	617	(617)
	Total	62,612	(62,612)

This analysis assumes that the other variables, specifically interest rates, remain constant (amounts in thousands of pesos).

#### b) Interest rate risk

32.4% of CFE's debt accrues interest at variable rates, which is calculated at the TIIE rate in the case of debt denominated in pesos. As at 30 June 2019 and 2018, the notional amounts of

interest rate swaps used by CFE were \$6,321 and \$3,912, respectively, for its debt denominated in pesos with variable interest rates.

#### Interest rate sensitivity analysis

A potential and reasonable strengthening (weakening) of interest rates as at 30 June 2019 would have affected the fair value of the total position of derivative financial instruments associated with variable interest rates, and thus, profit and loss of the period and other comprehensive income (since some of them are designated as hedges), as shown in the following table:

30/06/19	+ 100 basis points	- 100 basis points
Interest rate swaps	63,217	(63,217)

This analysis assumes that the other variables, in particular interest rates, remain constant.

# 12. Short-term and long-term debt

An analysis of CFE's debt as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

	30 June 2019	31 December 2018	31 December 2017
Bank loans Documented debt PIDIREGAS debt	\$ - 16,704,447 18,115,241	\$ 7,494,715 15,554,180 16,780,375	\$ 1,433,452 25,918,516 21,145,914
Total short-term debt	34,819,688	39,829,270	48,497,881
Documented debt PIDIREGAS debt	200,272,790 116,868,358	200,491,058 114,304,657	181,003,413 106,049,396
<b>Total long-term debt</b> Total debt	\$ 317,141,148 351,960,836	\$ 314,795,715 354,624,985	\$ 287,052,809 335,550,690

An analysis of the debt and each its concepts is as follows:

As at 30 June 2019 and 31 December 2018 and 2017, the following affiliated entities have bank loans with third parties:

30 June	31 December	31 December
2019	2018	2017

CFE Internacional LLC	\$ - \$	394,273 \$	-
CFEnergía	 	7,100,442	1,433,452
Total bank loans	\$ - \$	7,494,715 \$	1,433,452

## a) CFE Internacional LLC

In December 2018 CFE International LLC acquired a short-term loan from JPMorgan Chase Bank NA that is repayable in a term of 30 days, with repayment due by January 17, 2019, and which bears interest at a rate equal to the LIBOR plus a margin of 1.25%.

#### b) CFEnergía

i. On December 22, 2017, CFEnergía contracted a revolving line of credit with Grupo Financiero Banorte of USD \$85,000,000 million (eighty million dollars), which can be withdrawn in dollars and/or local currency for up to the aforementioned amount. Drawdowns in Mexican pesos bear interest equal to the 28-day Mexican weighted interbank rate (TIIE) + 95 and drawdowns in U.S. dollars bear interest equal to the one-month London Interbank Offered Rate (LIBOR) + 195.

On August 17, 2018, CFEnergía entered into an agreement with Banorte to amend the current account loan agreement entered into on December 22, 2017 in order to increase the available line of credit to USD\$ 250,000,000 (two hundred fifty million dollars 00/100).

- ii. On December 20, 2018, CFEnergía contracted a revolving line of credit with Monex for up to USD \$25,000,000 (twenty-five million dollars 00/100), which may be drawn down in U.S. dollars or Mexican pesos. Drawdowns in Mexican pesos (MXN) bear interest equal to the Mexican weighted interbank rate (TIIE) + 2 percentage points and drawdowns in U.S. dollars bear interest equal to the LIBOR + 1.75 percentage points, as indicated on the corresponding promissory notes.
- iii. An analysis of bank loans at 31 December 2018 is as follows:
  - Drawdowns made against the line of credit with BANORTE on December 27 in the amounts of \$ 4,450,000 and \$ 150,000, which will mature on January 28, 2019. Interest accrued on the drawdowns mentioned above amounted to \$4,860, which was recognized as part of comprehensive financing cost. CFE repaid the principal plus accrued interest on this loan on January 22, 2019.
  - As at December 31, CFEnergía obtained a one-time special line of credit from BANORTE in the amount of \$ 2,000,000, which will mature on February 4, 2019. This drawdown will bear interest at a rate equal to the Mexican weighted interbank rate (TIIE) plus 1 percentage point. CFE repaid the principal plus accrued interest on this loan on January 28, 2019.

- On December 27, 2018, CFE drew down \$ 495,000 against its line of credit with MONEX. This drawdown will mature on January 28, 2019. Accrued interest on the drawdown amounted to \$582, which was recognized as part of comprehensive financing cost. CFE repaid the principal plus accrued interest on this loan on January 22, 2019.
- iv. As at 31 December 2017, bank loans are comprised of the drawdowns made on December 27, 2017 in the amount of USD \$65,000,000 (sixty-five million dollars 00/100) and USD \$150,000,000 (one hundred fifty million dollars 00/100), both of which mature on January 22, 2018.

CFEnergía repaid the drawdowns in due time and form in January 2018.

- v. CFEnergía repaid the drawdowns referred to in the preceding points in January 2019.
- vi. The loan agreement stipulates affirmative and positive loan covenants that CFE must adhere to. These loan covenants require CFE to refrain from doing the following until the loan has been repaid in full:
  - a) Modify its corporate purpose, except for adding complementary or secondary activities to its main activity;
  - b) Modify its line of business and the nature of its principal activities or cease engaging in them altogether;
  - c) Initiate its dissolution or liquidation;
  - d) Merge into another company or carry out a corporate transformation or spin-off, etc.;

CFE agrees that its non-compliance with any of these obligations would be sufficient cause for the Bank to demand the immediate settlement of the loan, plus all accrued interest and related accessory charges.

An analysis of the debt and each of the items that comprise it is as follows:

#### COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries

Notes to the consolidated financial statements for the six-month period ended 30 June 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)

#### i) Documented debt

An analysis of the documented debt as at 30 June 2019 and 31 December 2018 and 2017 is as follows: FOREIGN DEBT-

FOREIGN DEBT -				2019		2018	B	2017	
Foreign	debt		Maturities	Local currency	Foreign currency (thousands)	Local currency	Foreign currency (thousands)	Local currency	Foreign currency (thousands)
IN US DOLLARS: at an exchange rate									
of \$19.1442 per dollar at June 2019 and	BILATERAL	Fixed and variable – 2.34% Fixed and variable –	Various through 2023 Various through	1,433,300	74,869	1,892,101	96,129	1,720,686	86,962
\$19.6829 at December 2018	BONDS	5.29% Fixed and variable –	2045 Various through	92,825,440	4,848,750	96,020,078	4,878,350	97,696,628	5,206,964
	REVOLVING	3.33% Fixed and variable –	2020	975,614	50,961	1,459,081	74,129	2,660,379	134,453
SYNDICATED	3.83%	2023	17,229,781	900,000	11,809,740	600,000	-	-	
TOTAL IN U.S. DOLLARS				112,464,135	5,874,580	111,181,000	5,648,609	102,077,693	5,428,378
IN EUROS: at an exchange rate	BILATERAL	Fixed and variable – 2% Fixed and variable –	Various through 2024 Various through	23,065	1,055	24,710	1,100	41,741	1,768
of \$21.8719 per Euro at June 2019 and \$22.4691 at December 2018	REVOLVING	2.05%	2020	1,146	52	2,307	103	4,946	210
TOTAL EUROS				24,211	1,107	27,017	1,202	46,687	1,978
IN SWISS FRANCS: at an exchange rate of \$19.6966 at June 2019 and		Final and a sinkle							
\$19.944 at December 2018	REVOLVING	Fixed and variable – 0.83%	Various through 2021	168,297	8,544	338,458	16,970	909,359	45,080
TOTAL SWISS FRANCS:				168,297	8,544	338,458	16,970	909,359	45,080
IN JAPANESE YENS: at an exchange rate of \$0.1783 per yen at June 2019 and \$0.179 at December 2018	BILATERAL	Fixed and variable – 1.29%	Various through 2021	261,246	1,465,203	388,555	2,170,700	676,485	3,874,487

#### COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries

# Notes to the consolidated financial statements for the six-month period ended 30 June 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)

			261,246	1,465,203	388,555	2,170,700	676,485	3,874,487
Bond	Fixed - 3.83%	2032	5,705,600	32,000,000	5,728,000	32,000,000	5,587,200	32,000,000
Assets received for financial instruments, net (Note 10b)			(546,736)		(423,970)		(255,199)	
TOTAL JAPANESE YENS			5,420,110	33,465,203	5,692,585	34,170,700	6,008,487	35,874,487
	TOTAL FOREIGN	TOTAL FOREIGN DEBT		39,349,434	117,239,060	39,837,481	109,042,225	41,349,923

DOMESTIC DEBT -			_	2019	)	2018	3	201	17
					Foreign		Foreign		Foreign
-				Local	currency	Local	currency	Local	currency
Dom	estic debt		Maturities	currency	(thousands)	currency	(thousands)	currency	(thousands)
LOCAL CURRENCY	BANKING STOCK MARKET	Fixed and variable – 9.54% Fixed and variable – 7.61%	Various through 2023 Various through 2027	7,500,000 70,987,330		7,500,000 70,987,330		7,600,000 79,000,000	
TOTAL MEXICAN PESOS:			-	78,487,330	_	78,487,330	-	86,600,000	
IN UDIS: at an exchange rate of	STOCK								
\$6.2587 per UDI at June 2019 and \$6.2266 at December 2018	MARKET	Fixed - 4.49%	2032 _	20,157,865	3,220,775	20,054,478	3,220,775	11,141,672	1,878,454
TOTAL UDIS			-	20,157,865	3,220,775	20,054,478	3,220,775	11,141,672	1,878,454
TOTAL DOMESTIC DEBT				98,645,195		98,541,808		97,741,672	
<b>COMICIÓN EEDEDAL Γ</b>					п	ACE 26			

COMISIÓN FEDERAL DE ELECTRICIDAD

Summary			
Total foreign debt	118,076,753	117,239,060	109,042,225
Total domestic debt	98,645,195	98,541,808	97,741,672
Interest payable	2,593,599	2,602,680	2,476,342
Debt amortization expenses	(2,338,310)	(2,338,310)	(2,338,310)
Total documented debt	216,977,237	216,045,238	206,921,929
Short-term debt	14,110,848	12,951,500	23,442,174
Short-term interest payable	2,593,599	2,602,680	2,476,342
Total short-term	16,704,447	15,554,180	25,918,516
Long-term debt	202,611,100	202,829,368	183,341,723
Debt amortization expenses	(2,338,310)	(2,338,310)	(2,338,310)
Total long-term	200,272,790	200,491,058	181,003,413
Total short- and long-term	216,977,237	216,045,238	206,921,929

The short-term and long-term documented debt liabilities mature as follows:

30 JUNE 2019	Amount
2019 2020 2021 2022 2023 2024	14,246,658 21,886,813 24,494,107 223,473 26,648,418 24,093,349
2025 SUBSEQUENT	21,162,726
YEARS	84,221,693
TOTAL	216,977,237

#### **Documented debt**

An analysis of drawdowns from January 1 to June 30, 2019 is as follows:

#### Domestic debt

From January 1 to June 30, 2019 no new debt has been acquired.

In February 2018, CFE drew down 2,500 million pesos against its revolving line of credit with BBVA Bancomer, S. A. and in March it drew down 2,500 million pesos, that bear monthly interest at the 28-day TIIE rate plus 0.48%.

In May 2018, CFE drew down 5,000 million pesos against its revolving line of credit with Banco Santander, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.20%.

In June 2018, CFE placed three Stock Certificate issuances in the domestic market for a total amount of 15,290.0 million pesos.

- 1. Second reopening of the CFE 17 series for an amount of 2,550.0 million pesos, that bears semi-annual interest at a fixed rate of 8.18% and matures in December 2027.
- 2. First reopening of the CFE 17 series for an amount of 1,342,321,400 UDIS, equal to 8,053.020 million pesos, that bears semiannual interest at a fixed rate of 4.54% and matures in September 2032.
- 3. Of the CFE 18 series, Stock Certificates were auctioned for an amount of 4,687.33 million pesos that bears variable interest at the 28-day TIIE rate plus 0.30% and matures in June 2021.

In July 2018, CFE drew down 4,000 million pesos against its revolving line of credit with Banco Santander, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.20% and 3,000 million pesos against its revolving line of credit with BBVA Bancomer, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.30%, both with monthly interest payments.

In October, CFE drew down 4,000 million pesos against its revolving line of credit with Banco Santander, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.20% and 3,000 million pesos against its revolving line of credit with BBVA Bancomer, S.A., that bears monthly interest at the 28-day TIIE rate plus 0.30%, both with monthly interest payments.

In April 2017, CFE drew down \$2,500 million pesos against its revolving line of credit with Banco Santander (México), S.A., and in July 2017 it drew down an additional \$2,500 million pesos, that bear monthly interest at the 28-day TIIE rate plus 0.1%. These amounts were repaid in October 2017.

In July 2017, CFE placed two Stock Certificate issues:

1. Of the CFE 17 series, Stock Certificates were auctioned in the amount of \$7,000 million pesos at a fixed interest of 8.2% and mature in December 2027.

2. Of the CFE 17-2 series, Stock Certificates were auctioned in the amount of \$1,000 million pesos that bears variable interest at the 28-day TIIE rate plus 0.4% and matures in July 2020.

In August 2017, CFE drew down \$2,500 million pesos against its revolving line of credit with BBVA Bancomer, S. A. that bears monthly interest at the 28-day TIIE rate plus 0.5%. This amount was repaid in November 2017.

In October, CFE placed three Stock Certificate issuances:

- 1. First reopening of the CFE 17 series in the amount of \$3,000 million pesos, that bears monthly interest at a fixed rate of 8.2% and matures in December 2027.
- 2. First reopening of the CFE 17-2 series in the amount of \$1,500 million pesos, that bears monthly variable interest at the 28-day TIIE rate plus 0.4% and matures in July 2020.
- 3. Base placement of the CFE 17U series in the amount of 944,092,800 UDIS, that bears interest at a fixed rate of 4.5%, and matures in September 2032.

In November 2017, CFE drew down \$2,500 million pesos against its revolving line of credit with Banco Santander (México), S.A., that bears monthly interest at the 28-day TIIE rate plus 0.1%. This amount was repaid in December 2017.

#### Foreign debt

In April 2019, CFE drew down \$300 million US dollars against the syndicated revolving loan signed in July 2018 for a total of \$1,260 million US dollars with Mizuho Bank, LTD., as the administrative agent, at the USD LIBOR rate plus 0.95%, for a term of 5 years.

In July 2018, CFE drew down \$20.87 million US dollars against its line of credit with Banamex, S.A. to finance enriched uranium for the Laguna Verde Central, for a term of three years and semiannual payments and interest payments, at the 6-month USD LIBOR rate + 0.90%.

In July 2018, CFE drew down \$300 million US dollars against the syndicated loan (BBVA Bancomer, S.A. is the Administrative Agent), at the USD LIBOR rate plus 1.15%. This amount was repaid in August 2017.

In August 2018, CFE drew down \$900 million US dollars against the syndicated revolving loan signed in July 2018 for a total of \$1,260 million US dollars with Mizuho Bank, LTD., as the administrative agent, at the USD LIBOR rate plus 0.95%, for a term of 5 years.

In September, CFE drew down \$5.2 million US dollars against the line of credit with BBVA, S.A. Madrid, to finance Spanish goods and services with a guaranty of Compañía Española de Seguros de Crédito a la Exportación (the Spanish Export Credit Agency).

In November 2018, CFE drew down \$21.52 million US dollars against its line of credit with Banamex, S.A. to finance enriched uranium for the Laguna Verde Central, for a term of three years and semiannual payments and interest payments, at the 6-month USD LIBOR rate + 0.90%.

In January, CFE drew down \$126.3 million dollars against its line of credit with Banco Santander, (Mexico), S. A. to finance enriched uranium for the Laguna Verde Central, for a term of three years and semiannual payments and interest payments, at the 6-month USD LIBOR rate + 1.5%.

In February, CFE drew down \$200 million dollars against the syndicated loan (BBVA Bancomer, S.A. is the Administrative Agent), at the USD Libor rate plus 1.2%, This amount was repaid in November 2017.

In addition, to finance various payments of Financed Public Work (OPF, Spanish acronym) projects, \$750 million dollars were placed through the issue of an international bond. Such bond bears 5.2% fixed interest, and the last payment will be in September 2047.

Lastly, to finance imports from Japan, Canada and Switzerland, CFE drew down \$115,488,810 JPY (equal to \$1 million dollars) against its line of credit with Japan Bank for International Cooperation (JBIC), \$2.1 million dollars against its line of credit with Export Development of Canada (EDC), as well as \$218,049.75 CHF (equal to \$229,745.80 million dollars) against its line of credit with UBS Switzerland AG (UBS).

#### ii) Debt for long-term infrastructure projects (PIDIREGAS)

An analysis of the balances and maturities of the PIDIREGAS (direct investment) debt and capital lease obligations as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

		30 June 2019		31 December 2018		31 December 2017
Short-term	\$	18,115,241	\$	16,780,375	\$	21,145,914
Long-term	_					
2018		-		-		688,164
2019		-		-		1,705,968
2020		119,006		479,952		293,720
2021		134,651		171,891		3,493,333
2022		1,718,412		2,196,057		2,154,690
2023		1,317,750		1,577,996		5,748,122
2024		4,013,186		4,520,686		-
2025		1,135,204		-		-
Subsequent years		108,430,149		105,358,075		91,965,399
Total long-term	\$	116,868,358	\$	114,304,657	\$	106,049,396
Total	_	134,983,599	-	131,085,032		127,195,310

#### -Direct investment (PIDIREGAS):

As at 30 June 2019 and 31 December 2018 and 2017, the debt corresponding to the acquisition of plants, facilities and equipment through PIDIREGAS was recognized in accordance with International Financial Reporting Standards, an analysis is as follows:

	Term of	Balance as at 30 June 2019 (amounts in thousands of the corresponding currency)			Balance as at 31 December 2018 (amounts in thousands of the corresponding currency)			Balances as at 31 December 2017 (amounts in thousands of the corresponding currency)					
Credit amount	the agreement	Local currency		Foreign c	urrency	Local c	urrency	Foreign currency		Local currency		Foreign currency	
	-	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term
Foreign debt													
- million dollars	2019	-	-	-	-	144,872	-	7,360	-	539,009	145,636	27,241	7,360
27 million dollars	2020	522,662	-	27,301	-	537,369	268,684	27,301	13,651	540,203	810,304	27,301	40,952
34 million dollars	2026	86,633	563,112	4,525	29,414	89,070	623,492	4,525	31,677	89,540	716,320	4,525	36,202
279 million dollars	2029	522,889	4,827,524	27,313	252,166	537,603	5,232,168	27,313	265,823	540,438	5,800,198	27,313	293,136
402 million dollars	2032	1,153,252	6,533,596	60,240	341,283	1,185,703	7,310,297	60,240	371,403	1,191,956	8,540,805	60,240	431,644
814 million dollars	2036	841,414	14,735,447	43,951	769,708	865,091	15,350,493	43,951	779,890	869,653	16,301,098	43,951	823,841
681 million dollars	2047	956,583	12,076,691	49,967	630,828	983,500	12,765,641	49,967	648,565	1,367,974	22,954,350	69,137	1,160,090
1,410 million dollars	2048	1,059,276	25,925,229	55,331	1,354,208	1,072,434	26,855,367	54,487	1,364,401	1,001,014	22,004,000	00,107	-,100,000
Total foreign debt	-	5,142,709	64,661,599	268,628	3,377,607	5,415,642	68,406,142	275,144	3,475,410	5,138,773	55,268,711	259,708	2,793,225

#### COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries

Notes to the consolidated financial statements for the six-month period ended 30 June 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)

#### Domestic debt

-	million pesos	2018	-	-		-	-		1,915,888	-
209	million pesos	2019	208,886	-		554,554	-		1,011,552	542,528
777	million pesos	2020	658,429	119,006		656,653	211,268		1,143,268	895,664
256	million pesos	2021	121,828	134,651		121,828	171,891		181,999	293,720
3,056	million pesos	2022	1,337,225	1,718,412		1,298,802	2,196,057		2,265,874	3,493,333
2,012	million pesos	2023	694,362	1,317,750		576,694	1,577,996		792,720	2,154,690
5,302	million pesos	2024	1,288,404	4,013,186		1,302,860	4,520,686		1,578,043	5,748,122
1,550	million pesos	2025	414,342	1,135,204		491,312	1,985,983		644,745	2,736,176
10,886	million pesos	2026	2,283,980	8,601,744		2,051,277	9,566,386		2,550,125	12,027,493
7,939	million pesos	2027	1,433,401	6,505,120		1,332,149	7,364,884		1,612,159	9,360,896
2,315	million pesos	2028	353,715	1,960,891		261,525	1,714,698		-,	-
15,991	million pesos	2033	1,602,213	14,388,644		444,262	3,871,210		_	_
1,464	million pesos	2036	83,664	1,380,462		83,664	1,422,294		83,664	1,505,959
11,677	million pesos	2042	753,617	10,922,868		726,943	11,286,341		753,692	12,013,283
Total dome	stic debt	-		· ·	_		<u> </u>	-	·	
		=	11,234,066	52,197,938	=	9,902,524	45,889,694	=	14,533,729	50,771,864
Interact no.	abla									
Interest paya	able		1,738,466			1,462,209			1,473,412	
CEBURES				8,821			8,821			8,821
Total PIDIR	EGAS debt	-	18,115,241	116,868,358	_1	6,780,375	114,304,656	-	21,145,914	106,049,396
		-						-		_

#### COMISIÓN FEDERAL DE ELECTRICIDAD, Productive State Enterprise and Subsidiaries

Notes to the consolidated financial statements for the six-month period ended 30 June 2019 and 31 December 2018 and 2017. (Amounts expressed in thousands of Mexican pesos, unless explicitly indicated otherwise)

a. As at 30 June 2019 and 31 December 2018 and 2017, minimum payment commitments on PIDIREGAS are as follows:

	30 June 2019	31 December 2018	31 December 2017
PIDIREGAS	195,394,760	190,029,498	176,974,622
less:			
Unaccrued interest	62,158,448	60,415,497	49,788,133
Present value of obligations	133,236,312	129,614,001	127,186,489
Current portion of obligations	16,376,775	15,318,165	21,145,914
Long-term portion of PIDIREGAS CEBURES	116,859,537 8,821	114,295,836 8,821	106,040,575 8,821
Total CEBURES and PIDIREGAS	116,868,358	114.304.657	106,049,396
	110,000,000		100,0 10,000

#### Capital lease obligations (conditioned investment)

As at 30 June 2019, CFE has entered into 26 contracts with private investors, called independent energy producers (PIE, Spanish acronym). Such contracts establish an obligation for CFE to pay various considerations to the PIEs in exchange for the PIEs to guarantee the provision of electricity supply services, based on a previously agreed-upon generation capacity through power generation plants financed and built by said investors.

The future payments obligation includes: a) rules for quantifying the acquisition amount of the power generating plants whenever a contingent event occurs that, under the terms of each contract, is considered an event of force majeure, applicable from the construction stage of each project until the termination of the contracts; and b) fixed charges for power generation capacity, as well as variable charges for the operation and maintenance of the generation plants, which are determined in accordance with the variable terms set forth in the contracts, applicable from the start-up testing stage until the termination of the contracts.

The lease agreements with private investors are for 25-year terms. The average annual interest rate on these lease agreements is 11.19%.

				Present value of minimum						
	Minim	num lease payme	nts	lease payments						
	30/06/2019	<u>31/12/2018</u>	31/12/2017	<u>30/06/2019</u>	<u>31/12/2018</u>	<u>31/12/2017</u>				
Current liabilities	\$17,979,329	\$18,103,949	\$15,631,775	\$8,606,409	\$8,576,870	\$8,121,848				
From one to five years	81,162,907	83,338,889	86,151,051	43,471,301	42,800,629	38,507,349				
More than five years	82,532,778	98,336,124	103,923,053	57,813,660	64,629,251	75,596,469				
Total accumulated equity	\$181,675,014	\$199,778,962	\$205,705,879	\$109,891,370	\$116,006,750	\$122,225,666				

#### An analysis of the capital lease obligation as at 30 June 2019 is as follows:

			Foreign c	urrency	Local currency		
Name	Lease beginning date	Original amount of the obligation	Short term	Long term	Short term	Long term	
CT MERIDA III	JUN-00	242,685	15,818	114,445	302,818	2,190,964	
CC HERMOSILLO	OCT-01	156,144	8,776	92,984	168,008	1,780,110	
CC SALTILLO	NOV-01	152,383	8,223	84,490	157,427	1,617,494	
TUXPAN II	DEC-01	283,133	15,057	172,458	288,261	3,301,575	

Brecont value of minimum

EL SAUZ BAJIO	MAR-02	399,773	20,184	265,500	386,401	5,082,777
CC MONTERREY	MAR-02	330,440	16,876	161,082	323,084	3,083,782
CC ALTAMIRA II	MAY-02	233,234	11,168	163,901	213,811	3,137,753
CC RIO BRAVO II	MAY-02	232,108	11,857	129,800	226,987	2,484,919
CC CAMPECHE	MAY-03	196,554	9,251	121,058	177,106	2,317,568
CC TUXPAN III & IV	MAY-03	587,064	27,079	384,791	518,405	7,366,512
CC MEXICALI	JUL-03	569,345	26,719	312,090	511,518	5,974,711
CC CHIHUAHUA III	SEP-03	275,327	12,752	151,089	244,134	2,892,478
CC NACO NOGALES	OCT-03	238,016	10,548	102,867	201,934	1,969,308
CC ALTAMIRA III & IV	DEC-03	600,897	26,937	356,457	515,695	6,824,089
RIO BRAVO III	APR-04	312,602	12,995	212,000	248,772	4,058,568
CC LA LAGUNA II	MAR-05	367,578	13,956	261,033	267,175	4,997,268
CC RIO BRAVO IV	APR-05	270,697	9,787	200,021	187,368	3,829,240
CC VALLADOLID III	JUN-06	288,160	10,172	206,101	194,737	3,945,645
CC TUXPAN V	SEP-06	284,997	8,290	229,413	158,710	4,391,936
CC ALTAMIRA V	OCT-06	532,113	13,385	451,200	256,241	8,637,870
CC TAMAZUNCHALE	JUN-07	482,562	13,773	386,237	263,672	7,394,197
CCC NORTE	AUG-10	450,097	12,957	354,167	248,056	6,780,243
CCC NORTE II	JAN-14	427,733	9,356	377,449	179,119	7,225,956
Total			325,916	5,290,633	6,239,439	101,284,963

(1) The short-term balance does not include interest in the amount of \$2,366,970, \$2,501,319 and \$2,639,798 as at 30 June 2019 and 31 December 2018 and 2017, respectively.

#### 13. Lease liability movements.

An analysis of Lease liability changes as at 30 June 2019 is as follows:

30 June 2019	\$	460,082,272
Acquisitions		10,742,102
Reclassification		30,333,610
Interest		6,374,503
Charges		(8,101,273)
Exchange differences		<u>(9,889,580)</u>
Total liabilities	<u>\$</u>	489,541,634

#### 14. Other Accounts Payable and Accrued Liabilities

An analysis of Other accounts payable and accrued liabilities as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

	31 December	31 December
30 June 2019	2018	2017

Suppliers and contractors	\$ 50,234,234	\$ 60,377,913	\$ 59,849,154
Accounts payable CENACE	0	0	0
Employees	5,379,189	5,229,076	4,213,117
Deposits from users and contractors	28,604,220	25,619,843	22,974,717
Other liabilities	28,833,909	18,007,260	20,761,052
Total	\$ 113,051,552	\$ 109,234,092	\$ 107,798,040

#### **15. Taxes and Duties Payable**

An analysis of Taxes and duties payable as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

Payable by CFE			
_	30 June 2019	31 December 2018	31 December 2017
Income tax payable on behalf of third parties	254,485	389,296	411,290
Mexican Social Security Institute (IMSS) contributions	728,032	755,693	698,046
Rights for the use and exploitation of national waters	552,200	813,342	370,375
Payroll tax	56,995	61,492	45,556
Federal Housing Financing Agency (INFONAVIT) contributions	12,126	10,760	12,481
Special tax on production and services (IEPS)	120,604	50,002	-
VAT payable	1,531,960	848,082	-
Subtotal	3,256,402	2,928,667	1,537,748
Withholdings			
Income tax withheld from employees	661,557	571,327	738,923
Withheld value added tax	46,947	40,056	68,441
Income tax on interest paid abroad	36,580	35,342	27,993
Income tax on foreign residents	-	31	45,677
0.5% to contractors	15,054	29,303	50,404
Income tax on professional fees and rent to individuals	3,761	2,932	7,101
0.2% to contractors	512	517	547
Other	1,170	2,372	422
	765,581	681,880	939,508
Total Taxes and Duties	4,021,983	3,610,547	2,477,256
Short-Term Deferred Taxes	113,86	60 113,860	0

The deferred tax liability amounts to \$113,860 thousand pesos.

#### 16. Other Long-term Liabilities

An analysis of Other long-term liabilities as at 30 June 2019 and 31 December 2018 and 2017 is as follows:

	30 June 2019	_	31 December 2018	_	31 December 2017
Third-party contributions	\$ 7,498,861	\$	5,839,143	\$	8,039,903
Asset retirement obligation	8,740,735		8,610,763		11,101,187
Other provisions	6,001,288	_	6,001,288	_	4,283,577
Total	\$ 22,240,884	\$	20,451,194	\$	23,424,666

#### 17. Employee Benefits.

CFE has employee benefits plans for terminations of employee relationships and for retirements for reasons other than a restructuring event. The retirement benefits plan considers the number of years of service completed by the employee and the employee's compensation at the retirement date. The retirement benefits plan includes the seniority bonus that employees are entitled to receive upon termination of the employee relationship, as well as other defined benefits.

The actuarial valuations of the plan assets and the present value of the defined benefit obligation are performed annually by independent actuaries using the projected unit credit method.

No significant changes or amendments were made to the plans during the six-month period ended as at 30 June 2019.

#### 18. Foreign Currency Position

As at 30 June 2019 and 31 December 2018 and 2017, CFE had the following foreign currency denominated assets and liabilities:

		2019							
	Assets			Liabiliti	es				
	Cash and cash		Internal	Internal	Capital lease obligations and	Short foreign currency			
	equivalents	Suppliers	debt	debt	PIDIREGAS	position			
U.S. dollars	140,222	118,523		- 6,144,054	9,262,790	15,385,146			

Euros	-	-	- 1,107	-	1,107
Japanese yens	-	-	- 1,465,203	-	1,465,203
Swiss francs	-	-	- 8,544	-	8,544

		2018								
	Assets			Liabilities						
Name	Cash and cash equivalents	Supplier	Domestic debt	Foreign debt	Capital lease obligations and PIDIREGAS	Foreign currency position				
U.S. dollars	127,920	234,417	-	5,918,083	9,517,257	15,541,837				
Euros	-	-	-	1,202	-	1,202				
Japanese yens	-	-	-	2,170,700	-	2,170,700				
Swiss francs	-	-	-	16,970	-	16,970				

		2017								
	Assets			Liabilities						
Name	Cash and cash equivalents	Suppliers	Domestic debt	Foreign debt	Capital lease obligations and PIDIREGAS	Foreign currency position				
U.S. dollars	1,215,536	21,659	-	5,428,378	9,096,684	13,331,185				
Euros	505	-	-	2,360	-	1,855				
Japanese yens	1,335,513	-	-	3,874,487	-	2,538,974				
Swiss francs	31,644	-	-	45,080	-	13,436				

Note: The JPY foreign debt includes the 32 billion bond in yens.

The foreign currency denominated assets and liabilities were translated to local currency at the exchange rate published in the Official Gazette by Banco de Mexico as at 30 June 2019, as shown below:

Currency	June 2019	December 2018	December 2017
U.S. dollars	19.1442	19.6829	19.7867
Japanese yen	0.1783	0.1790	0.1746
Swiss francs	19.6966	19.9440	20.1721
Euro	21.8719	22.4691	23.6062

#### **19. Contingencies and Commitments**

#### Contingencies

CFE is party to several lawsuits and claims filed against it in the normal course of its business. The amounts of such lawsuits are deemed immaterial with respect to CFE's current financial position and its expected financial performance in the following years.

#### Commitments

#### a. Natural gas supply contracts

CFE has entered into contracts for services related to the reception, storage, transportation, regasification and supply of liquefied natural gas. The contractual commitments consist of acquiring, during the supply period, daily base amounts of natural gas as set forth in the respective contracts.

#### b. Financed public work contracts

As at 30 June 2019, CFE has entered into several financed public work contracts and the payment commitments will begin on the dates when the private investors complete the construction of each of the investment projects and deliver the related the assets to CFE for their operation. The estimated amounts of such financed public work contracts and the estimated dates of construction completion and start up of operations are shown in the table included on the next page.

#### Transmission lines and substations:

Project	Cap	acity	Estimated an contract ex millio	Operational stage	
	Kmc	MVA	Dollars	Pesos	
188 SE 1116 Transformación del Noreste F4	97.60	500.00	50.00	957.21	31-MAY-17
209 SE 1212 Sur - Peninsular F9 (DIST)	20.31	20.00	8.17	156.39	12-AUG-17
321 SLT 1920 Subestaciones y Lineas de Distribución F5	1.42	30.00	5.46	104.47	31-AUG-17
274 SE 1620 Distribución Valle de México F2	26.20	420.00	89.80	1,719.15	31-OCT-17
304 LT 1805 Línea de Transmisión Huasteca - Monterrey	441.80		126.83	2,428.06	30-JAN-18
310 SLT 1821 Divisiones de Distribución F1 (DIST)		50.00	4.69	89.79	01-MAR-18
336 SLT 2001 Subestaciones y Líneas Baja California Sur - Noroeste F1	225.00	950.00	44.50	851.82	25-MAY-18
274 SE 1620 Distribución Valle de México F1	16.10	780.00	94.60	1,811.04	31-MAY-18
350 SLT 2121 Reducción de Pérdidas de Energía en Distribución F1 (DIST)	3.10	2.51	1.36	26.02	26-AUG-18
266 SLT 1603 Subestación Lago	80.40	660.00	91.20	1,745.91	22-SEP-18

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337 SLT 2002 Subestaciones y Líneas de las Áreas Norte - Occidental F1 240 SLT 2120 Subestaciones y Lineas de Distribusión E1	208.70	975.00	35.84	686.03	19-OCT-18
349 SLT 2120 Subestaciones y Lineas de Distribución F1 (DIST)	7.90	120.00	17.01	325.64	21-NOV-18
310 SLT 1821 Divisiones de Distribución F11 (DIST)	31.97		5.58	106.82	27-APR-20
310 SLT 1821 Divisiones de Distribución F10 (DIST) 338 SLT 2020 Subestaciones, Líneas y Redes de	5.24	30.00	6.23	119.27	29-MAY-18
Distribución F2 (DIST)	0.07	30.00	4.59	87.87	05-JUL-20
288 SLT 1722 Distribución Sur F3	3.96	40.00	6.00	114.87	23-FEB-19
348 SE 2101 Compensación Capacitiva Baja - Occidental	-	-	5.71	109.31	12-JUN-18
280 SLT 1721 Distribución Norte F5 (DIST)	4.68	30.00	5.22	99.97	17-JUN-20
273 SE 1621 Distribución Norte-Sur F5 (DIST)	12.11	20.00	4.72	90.32	12-JUN-18
273 SE 1621 Distribución Norte-Sur F7 (DIST)	5.96	30.00	5.24	100.74	23-APR-20
	1,192.52	4,687.51	612.75	11,730.70	

#### Generation

Project	MCA capacity	contract express of:	mount of the ssed in millions Dollars sos	Operating Stage
268 CCI Guerrero Negro IV	7.52	20.63	394.90	01-APR-17
298 CC Valle de Mexico II	615.23	425.31	8,142.30	31-JAN-18
38 CC Norte III (Juárez) C2	906.71	562.37	10,766.10	13-APR-18
313 CC Empalme II	791.17	397.00	7,600.20	28-APR-18
327 CG Azufres III F2 (DIST)	25.00	51.29	981.80	15-JUN-18
289 CH Chicoasén II	240.00	386.42	7,397.70	12-SEP-18
42 CC Noroeste (Topolobanpo II) C2	887.39	334.50	6,403.70	02-JAN-19
45 CC Topolobampo III C2	665.88	630.87	12,077.50	01-JAN-20
	4,138.90	2,808.39	53,764.20	

#### **Renovation and/or modernization**

Project	Estimated amount of the contract expressed in millions of:		Operational stage
	Dollars	Pesos	
312 RM CH Temascal Unidades 1 a 4 (GEN)	26.50	507.30	18-SEP-18
278 RM CT José López Portillo (GEN)	214.00	4,096.90	27-FEB-19
258 RM CT Altamira U1 y 2	380.00	7,274.60	01-JUL-19

620.50 11,878.80

These projects are registered under the PIDIREGAS scheme (long-term productive infrastructure projects).

#### c. Trusts

- 1 Area of competence
  - 1.1. CFE currently participates as Trustor or Beneficiary in 10 (ten) Trust Funds, of which 2 (two) are in the process of termination.
  - 1.2. In conformity with its purpose and operating characteristics, the trust funds can be classified in the following groups:
    - a. Energy saving
    - b. Prepaid expenses
    - c. Construction contract management
    - d. Indirect participation trust funds

#### a. Energy saving

Trust funds to promote energy saving programs.

Trust fund	Role of CFE			
Tust fulla	Trustor	Trustee	Trust Beneficiary	
Trust fund for Energy Savings (FIDE), created on August 14, 1990	Creation of the Trust: Confederación de Cámaras Industriales (CONCAMIN), Cámara Nacional de la Industria de Transformación (CANACINTRA), Cámara Nacional de Manufacturas Eléctricas (CANAME), Cámara Nacional de la Industria de la Construcción (CNIC), Cámara Nacional de Empresas de Consultoría (CNEC) and Sindicato Único de Trabajadores Electricistas de la República Mexicana (SUTERM)	Nacional Financiera, S.N.C.	<ul> <li>a. Electric energy consumers who are beneficiaries of the services rendered by the Trust fund.</li> <li>b. CFE, only for the materials that will form part of the public energy services infrastructure.</li> </ul>	

Trust fund	Role of CFE			
Trust fullu	Trustor	Trustee	Trust Beneficiary	
Mexicali Housing Thermal Isolation Trust (FIPATERM), created on October 19, 1990	CFE	Banco Nacional de Obras y Servicios Públicos, S.N.C.	CFE	

As at 30 June 2019, the Trust fund for Housing Thermal Isolation (FIPATERM) has assets amounting to \$1,577,434 and liabilities amounting to \$65,745.

#### b. Prepaid expenses

Prepaid expenses finance and cover expenses prior to the execution of projects, and are subsequently recoverable and charged to CFE that incurs such expenses to comply with the regulations applicable to the type of project.

Trust fund		Role of CFE			
Trust fund	Trustor	Trust Beneficiary	Trustee	Type of project	
CPTT prepaid expense management, created on August 11, 2003	CFE	CFE	Banco Nacional de Comercio Exterior, S.N.C.	Direct investment	
Management and transfer of ownership 2030, created on September 30, 2000	CFE	Primary beneficiary: Contract winners Second beneficiary: CFE	Banobras, S.N.C.	Conditioned investment	

As at 30 June 2019, the Prepaid Expenses Management Trust fund has assets amounting to \$3,542,228 and liabilities amounting to \$3,125,614.

The Domain Transfer and Administration Trust 2030 has assets of \$456,550.

#### c. Construction contract management

At the beginning of the '90s, the Federal Government implemented several off-budget schemes to continue to invest in infrastructure projects. The schemes were designed under two modalities:

- Turnkey Projects (1990)

- Build, Lease and Transfer Projects (1996)

Turnkey Projects. - Under this scheme, works were carried out for the construction of power generation plants and installation of transmission lines, through an irrevocable management and transfer of ownership trust, linked to a lease agreement. Under this modality, the trustee is responsible for the following:

Contracting credits, managing the trust property (assets), receiving the lease payments from CFE, and transferring the asset at no cost to CFE after the leases have been paid in an amount sufficient to pay the contracted credits.

CFE participates in the payment of the leases to the trustee, based on the credits contracted by the trust, instructing the trustee to pay the contractors receiving, in exchange, invoices approved by the construction area, payment of taxes and other charges, including trustee fees.

The trusts for managing and transferring ownership were carried out in accordance with the Guidelines for the performance of thermoelectric projects with off-budget funds, as well as with the Guidelines for the performance of transmission lines and substations with off-budget funds issued by the Ministry of Public Administration (formerly known as the Ministry of Comptrollership and Administrative Development).

The Trust shown below has completed its payment commitments; therefore, it is in process of termination by the General Counsel.

Trust fund	Role of CFE		Trustee
Trust fullu	Trustor	Trust Beneficiary	Trustee
Topolobampo II (Electrolyser, S. A. de C. V.), created on November 14, 1991	Bufete Industrial Construcciones, S. A. de C. V. and Electrolyser, S. A. de C. V., with respect to its contribution to the Trust	Primary beneficiary: Electrolyser, S. A. de C. V., with respect to its contribution to the Trust and Second beneficiary: CFE	Santander, S. A.

Build, Lease and Transfer Projects ("CAT", Spanish acronym).- The transition stage to carry out the CAT trusts began in 1996, whereby the trustee manages the trust property (assets) and transfers it to CFE after the lease payments have been covered. Credits are contracted directly with a consortium that is a special purpose entity, for which there is an irrevocable management and transfer of ownership trust contract.

In these types of trusts, CFE participates in making the lease payments based on quarterly amortization tables presented by the consortiums in their bids. Most of these tables include forty quarterly payments.

The only project under this modality that has completed its financial obligations and is in the process of being terminated is CC Samalayuca II; therefore, it is in the process of being terminated by the Office of the General Counsel.

Trust fund	Role of CFE		Tructoo
Trust fulla	Trustor	Trust Beneficiary	Trustee
C.T. Samalayuca II, created on May 2, 1996	Compañía Samalayuca II, S.A. de C.V.	Primary beneficiary: The foreign bank that is the common representative of the creditors; Second beneficiary: Compañía Samalayuca II, S.A. de C.V. Third beneficiary: CFE	Banco Nacional de México, S.A.

The last rent was paid on February 15, 2019.

Coal Terminal of the Thermoelectric Power Station Presidente Plutarco Elias Calles

Trust fund	Role of C	Role of CFE	
Tust fullu	Trustor	Trust Beneficiary	Trustee
Coal Terminal of the Thermoelectric Power Station Presidente Plutarco Elías Calles (Petacalco) was created on November 22, 1996	Techint, S. A., Grupo Mexicano de Desarrollo, S.A. de C.V. and TechintCompagnia Tecnica Internazionale S.P.A.	Primary beneficiary: Carbonser, S.A. de C.V Second beneficiary: CFE	Banco Nacional de México, S. A. (Banamex)

The irrevocable management, guarantee, and transfer of ownership trust agreement number 968001 was entered into 1996 which, among other considerations, sets forth that the trustee will enter into a service contract with CFE.

Upon the entry into force of the coal management service contract between CFE and Banco Nacional de México, S. A. (Banamex) as trustee of the Petacalco Trust, comprised of Techint Compagnia Tecnica Internazionale S.P.A., Grupo Mexicano de Desarrollo, S. A. de C. V., and Techint, S. A. that was entered into on November 22, 1996, in accordance with clause 8.1, CFE will pay the invoice amounts related to the fixed charge for capacity.

Facility	Recognition of fixed charge for capacity from Jan-June 2019	
Petacalco Coal	\$49,963	

#### d. Indirect participation trust funds

Additionally, CFE maintains an indirect relationship since it is not a Trustor, but it participates as a beneficiary in two guarantee and loan payment Trusts, created by Financial Institutions as Trustors and Trust Beneficiaries for the issue of securities linked to credits granted to CFE. CFE is named as Second Beneficiary of the Trust, due to the specific possibility that it may acquire some of the certificates issued and it maintains representation in its Technical Committees in conformity with the contractual provisions. (See Note 11).

CFE is required to reimburse to the Trust in the terms of the Indemnity Contract that forms part of the Trust Contract, the expenses incurred by the Trust for the issue of securities and their management.

Trust fund	Role	OF CFE	Trustee
Trust fullu	Trustor	Trust Beneficiary	Tustee
Trust No. 232246 created on November 3, 2006	Banco Nacional de Mexico, S.A., a member entity of Grupo Financiero Banamex	<b>Primary beneficiary:</b> Each of the preferred holders of each issue. <b>Second beneficiary:</b> CFE	HSBC México, S.A., Grupo Financiero HSBC
Trust No. 411 created on August 6, 2009	Banco Nacional de Mexico, S.A., a member entity of Grupo Financiero Banamex	Primary beneficiary: Each of the preferred holders of each issue. Second beneficiary: CFE	Banamex

As at 30 June 2019, available funds in trust No. 232246 amount to \$8,821.

#### 2 Legal nature

- 2.1 In conformity with the Federal Public Administration Act, none of the trusts are considered Public Trusts with the status of "entity", pursuant to the following:
  - a. In six of the Trusts, CFE is not a Trustor in their creation.
  - b. The four remaining trusts do not have an organic structure similar to the state-owned entities that comprise them as "entities" in terms of the Law.
- 2.2 The SHCP has maintained a record for purposes of the Federal Budget and Financial Responsibility Law, of 4 (four) of the Trusts, due to the allocation of federal funds or the contribution of land owned by CFE where the works will be carried out.

Registration of Trusts with SHCP

No.	Trusts	Record
1	Mexicali Housing Thermal Isolation Trust (FIPATERM)	700018TOQ058
2	Prior Expense Trust	200318TOQ01345
3	Trust Management and Transfer of Ownership 2030	200318TOQ01050
4	Trust for Power Savings (FIDE)	700018TOQ149

#### 20 . Segment Information

#### Information regarding the operating segments

The information is presented to the Board of Directors to seek approval of budgets, investments and measure compliance with respect to the business objectives set out by the Board itself is consolidated financial information and not financial information of each operating activity of CFE.

#### Information by type of services

Information on products and services	30 June 2019	30 June 2018
Domestic Service	33,723,028	31,708,912
Commercial Service	24,103,433	21,148,005
Public Lighting Service	7,643,370	5,720,170
Agricultural Service	3,677,728	3,980,680
Industrial Service	121,324,520	89,464,885
Total Sales	190,472,079	152,022,652
Block for resale	746,824	-
Total electricity supply revenue	191,218,903	152,022,652
OTHER PROGRAMS		
Consumption in the process of being billed		-54,163
Illegal Uses	1,505,181	510,931
Measurement failure	1,223,033	180,752
Billing error	771,646	341,233
Total income obtained from other programs	3,499,860	978,753
Other income	1,675,882	5,498,038
Revenue from the sale of electricity	196,394,645	158,499,443

## 21. Subsequent Events

The Ministry of Energy issued the agreement amending the terms for the strict legal separation of Comisión Federal de Electricidad which were published in the Official Gazette on January 11, 2016.

As of the date of publication of this Agreement in the Official Gazette, CFE will have 60 calendar days to present to the Ministry of Energy its proposal for the reallocation of assets and power generation contracts in the EPS and Affiliated Entities that it considers better contribute to efficiency.

Once the allocation of the assets and power generation contracts are published in the Official Gazette, the CENACE will carry out within 30 calendar days the reallocation of the assets registered in the Market Information System according to the new structure.

During a period of two years as of the date of issuance of the allocation of the assets and power generation contracts, the transfer of the assets, rights and obligations required for the reorganization referred to in the agreement will not need to be formalized in a public document, therefore, the resolutions of the Board of Directors will serve as title deed or deed transferring ownership for all legal purposes, including the registration in the relevant public registries.

## 22. Issuance of the Consolidated Financial Information

The consolidated financial statements and their notes will be approved by Management. Such financial information will be approved by the Board of Directors at a later date. The Board of Directors has the power to modify the accompanying consolidated financial information. Subsequent events were considered to date.