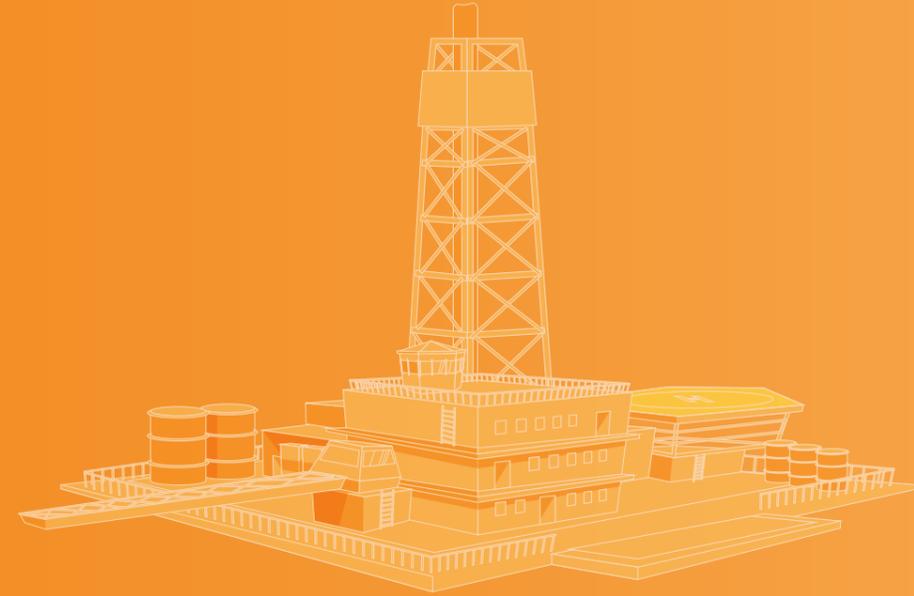


ANNUAL REPORT

2020



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A Word from the CHAIRMAN



« 2020 a singular year in several respects »

“

The health crisis that has affected us all has been coupled with a global economic crisis that has had a particular effect on the energy sector, with crude oil and natural gas prices falling to unprecedented levels, averaging 40% lower than in 2019..

In addition to this drop in prices, there was an unprecedented 9% decline in global demand for oil products.

Since the beginning of this health crisis, SONATRACH has implemented prevention and protection measures to preserve the personnel's health and safety, maintain the production tool and pursue its development plan.

The Company also had to respond to adverse market conditions. We have adapted our production and marketing plans while ensuring the uninterrupted supply of oil and gas to our customers. We have also reduced our investments and ensured a sustained effort to reduce costs and foreign exchange expenses.

So many priorities that the company and its workers have managed to handle in an exceptional and difficult situation and in compliance with health regulations.

In this respect, I would like to pay tribute to all our workers and managers who have shown a high sense of responsibility, spared no effort and remained on the front line, at the level of our facilities and projects, during the entire period of the pandemic and continue to work actively for the development of our company and the continuity of our activities.

The results for the year 2020, although impacted by this crisis, bear witness

to all the efforts made by the entire company team.

In terms of the market, we have fully complied with the OPEC+ production reduction measures, which have greatly contributed to the recovery of prices since June 2020 and have enabled us to close the year with an average of nearly 42 US dollars per barrel.

At the operational level, and despite the difficulties and constraints encountered during the year, we were able to exceed the objectives set for the year 2020 in terms of exploration and reserve renewal, despite the reduction of the investment budget by half compared to 2019.

In addition, the new facilities, especially gas facilities, which were received in 2020, will allow us to continue to meet our commitments, both on the domestic market and with our foreign customers, including the Tinhert field, the Hassi R'Mel Boosting for the South Zone, the Hamra Boosting and the GR7 southwestern gas pipeline.

We have pursued the company's development plan through the launch of the Bir Sbaa Phase II and Touat West oilfields development projects and projects to strengthen our hydrocarbon processing capacities such as the new Hassi Messaoud refinery and the renovation of the GL1Z and GL2Z gas liquefaction complexes

We have also made significant progress in the maturation of structuring projects like the development projects of Touggourt and Ghardaia in own effort and other projects planned in association in the upstream and petrochemical.

As such, eleven (11) development projects of deposits have been discussed with partners, two (02) projects are in the implementation phase.

Also, two (02) petrochemical projects are in the phase of choosing the constructor (MTBE Arzew and PDH/PP Turkey) and two (02) others are in the phase of FEED engineering studies (LAB Skikda and PDH/ PP Arzew).

SONATRACH has also continued the implementation of its structuring projects aiming at modernizing its management and to equip it with practices that meet international standards, such as the

integrated information system (ERP), the transformation of human resources processes, cost optimization and the improvement of HSE practices.

On another level, 2020 was a pivotal year for global awareness of the planet's fragility.

In many ways, we recognize that the world has changed dramatically. The energy transition is now a reality

We need to start thinking about sustainability and clean energy now and seize the opportunities for growth in the future global energy landscape.

”

Toufik HAKKAR
Chairman and CEO O SONATRACH



1

EXECUTIVE COMMITTEE

Members of the Executive Committee



Toufik HAKKAR
President and CEO



Fatiha NEFFAH
Vice President
Marketing



Mohamed SLIMANI
Vice President
Exploration -
Production



Amine MELAIKA
Vice President
Pipeline
Transportation



Batouche BOUTOUBA
Vice President
Refining and Petrochemicals



Nasreddine FATOUHI
Vice President
Liquefaction
and Separation



Rachid ZERDANI
Vice President
Strategy, Planning
and Economy



Madjid BENARAB
Vice President
Finance



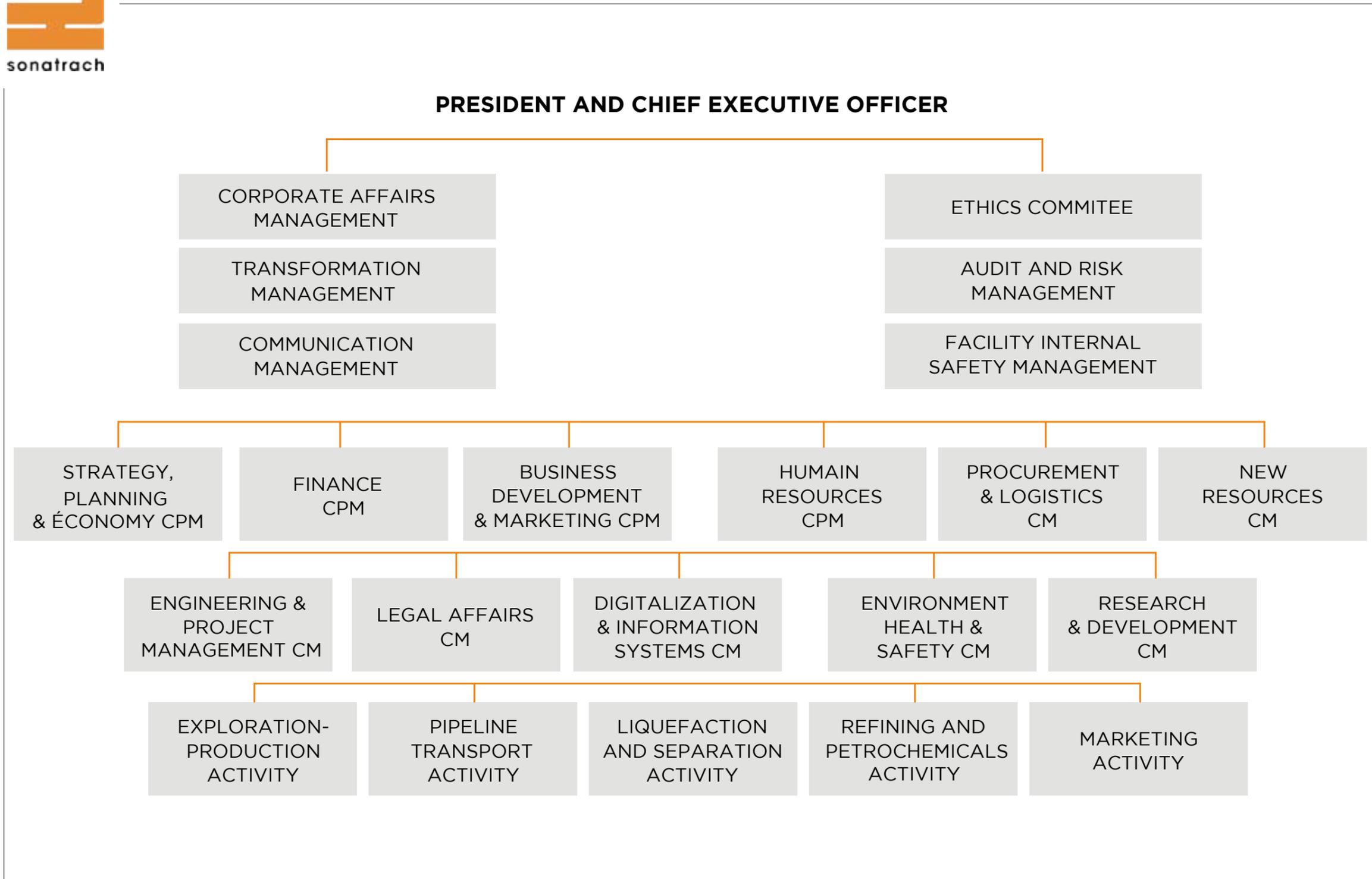
Fethi ARABI
Vice President Business
Development & Marketing



Azzedine DJOUABRI
Human Resources
Executive Director



SONATRACH'S MACROSTRUCTURE ORGANIZATION CHART



CPM : Corporate Management
 CM : Central Management



MANAGEMENT OF THE COVID-19 HEALTH CRISIS

The context of the **COVID-19** pandemic that marked the year 2020 and the related risks have put SONATRACH in front of new challenges, mainly related to the safety of its personnel, the continuity of its activities and its adaptation to the difficult market conditions.

Measures have been taken throughout the year to save human and financial resources, ensure continued operation of the hydrocarbon chain, pursue the development plan and optimize the placement of oil and gas volumes in an unfavorable market.

Thus, the company has undertaken major actions that had a positive impact on the year's outcomes, they can be summarized as follows :

Ensuring the staff's health and safety

- Exceptional leave of absence for some of the staff, mainly vulnerable people.
- Massive screening campaign for COVID-19.
- Isolation of people who are ill or likely to have contracted the virus.
- Mobilization and distribution of individual collective means of prevention (Masks and hydro alcoholic gel).
- Cleaning and sanitization of accesses, work areas, restaurants, parking lots and elevators.
- Limiting access to work sites and taking staff temperatures on entry.
- Temporary suspension of cultural and educational activities.
- Several communication and awareness campaigns on prevention measures and barrier actions.

Ensuring the continuity of operational activities

- Maintaining staff on site beyond the regulatory period and reorganizing work rotations.
- Use of special flights to transport personnel to the sites and to supply emergency equipment.
- Restriction on the presence of expatriate personnel at production sites.

- Increased mobilization of own resources and recourse to national companies.
- Implementation of telecommuting and use of video-conferencing for meetings and training.
- Re-scheduling of construction tasks and activities.
- Processing of administrative files via email.
- Negotiate with contractors to implement plans to address project backlogs.

Adapting sales to the market context

- part of the natural gas volume not taken by customers to the spot market in liquefied form (5 million m3 LNG).
- Maximizing the diesel fuel production, allowing to meet the totality of the national market demand since March 2020.
- Optimization of the refineries' production in order to maximize the production of gasoline and diesel, to meet the national market demand and limit Fuel oil imports.
- Export of 620 000 tons of diesel and 93 000 tons of gasoline after an absence of over a decade from the market.

In addition, and taking into account the significant drop in crude oil prices from the second quarter of 2020, SONATRACH has revised its investment and operating budgets through the prioritization of its expenses, retaining only those having an impact on the

production and exploitation and by optimizing expenses related to programs and projects to be launched.

Thus, the investment and exploitation budgets for 2020 have been revised downwards by 38% and 13% respectively.

A special effort has been made to control foreign currency expenditure, enabling it to be reduced by 40% compared with 2019, and by 53% compared with the 2020 forecast.



Key facts and main aggregates in figures

Reserve renewal rate : 117%

- Contribution of 175 million TOE in recoverable reserves.

New production starts : 05 projets gaziers.

- Tinhert / Lot Ohanet field.
- Gassi Touil towards Rhourde Onus periphery deposit.
- MLSE satellite field.
- Hassi R'Mel South boosting station.
- Hamra gas boosting.

Reinforcement of pipelines : laying of 344 Km.

- Gas pipeline expansion GR7 / section (El Menia - Hassi R'Mel).
- Gas pipeline renovation GG1 / section (M'Djedel - Bordj Menail).
- Replacement of OB1 oil pipeline / section (M'Sila - Oued Ghir).

Fuel oils : Stopping imports

- Stopping imports of diesel in March 2020 and gasoline in August 2020.
- Export of volumes of gas oil (620 000 Tons) and gasoline (93 000 Tons), for the first time this decade.

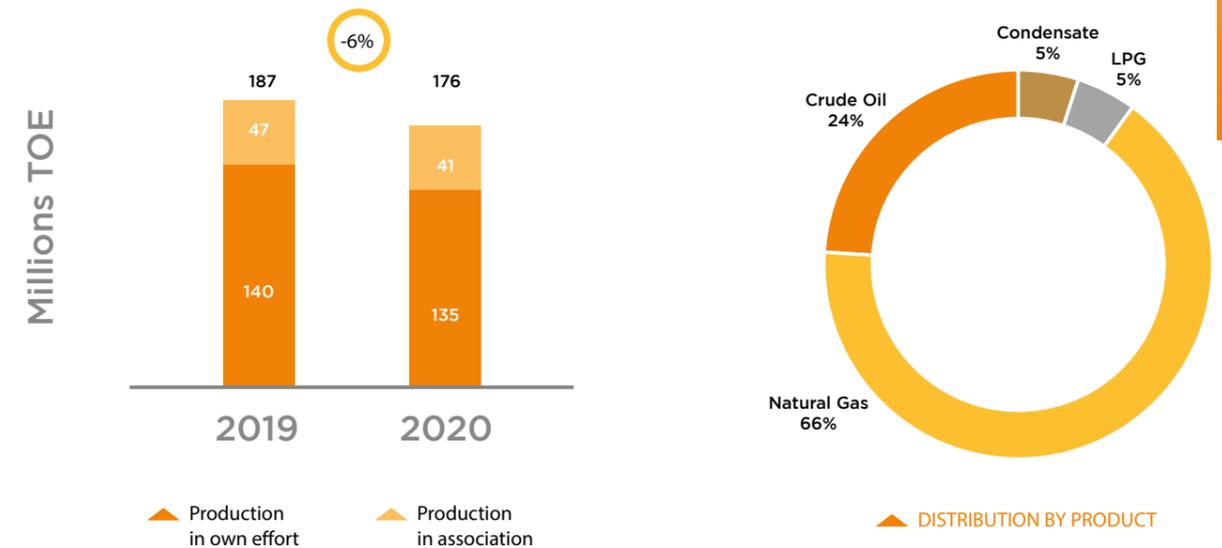
Partnerships :

- Signature of a Memorandum of Understanding (MoU) with Eni, Cepsa and Wintershall Dea, aiming at identifying opportunities for joint investment in the exploration and production of hydrocarbons in Algeria and internationally.



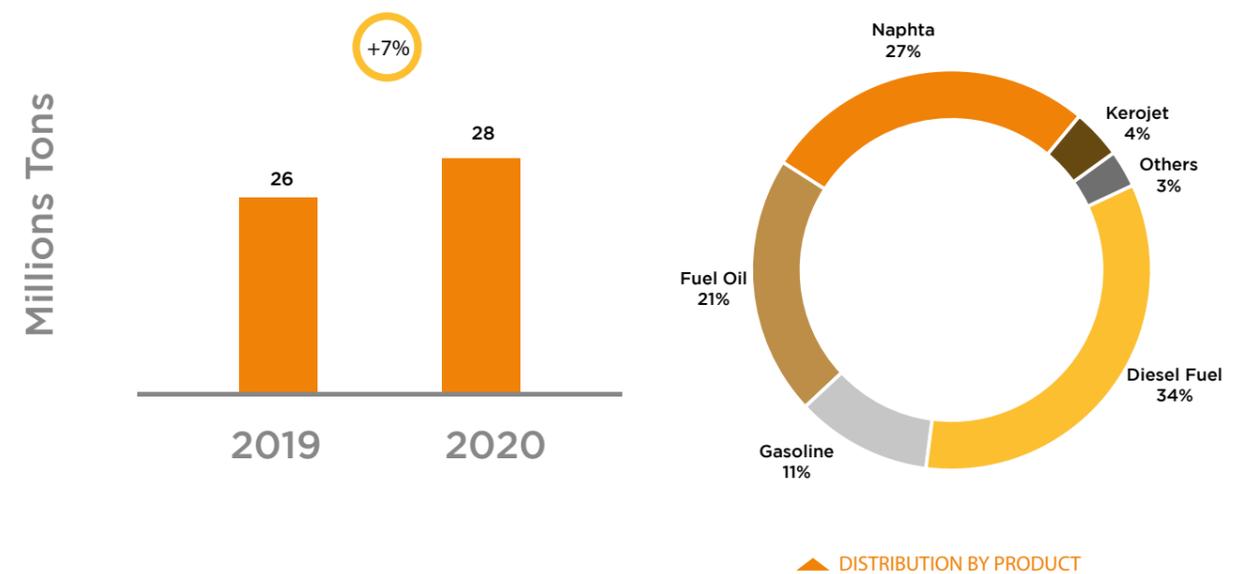
Primary production of hydrocarbons

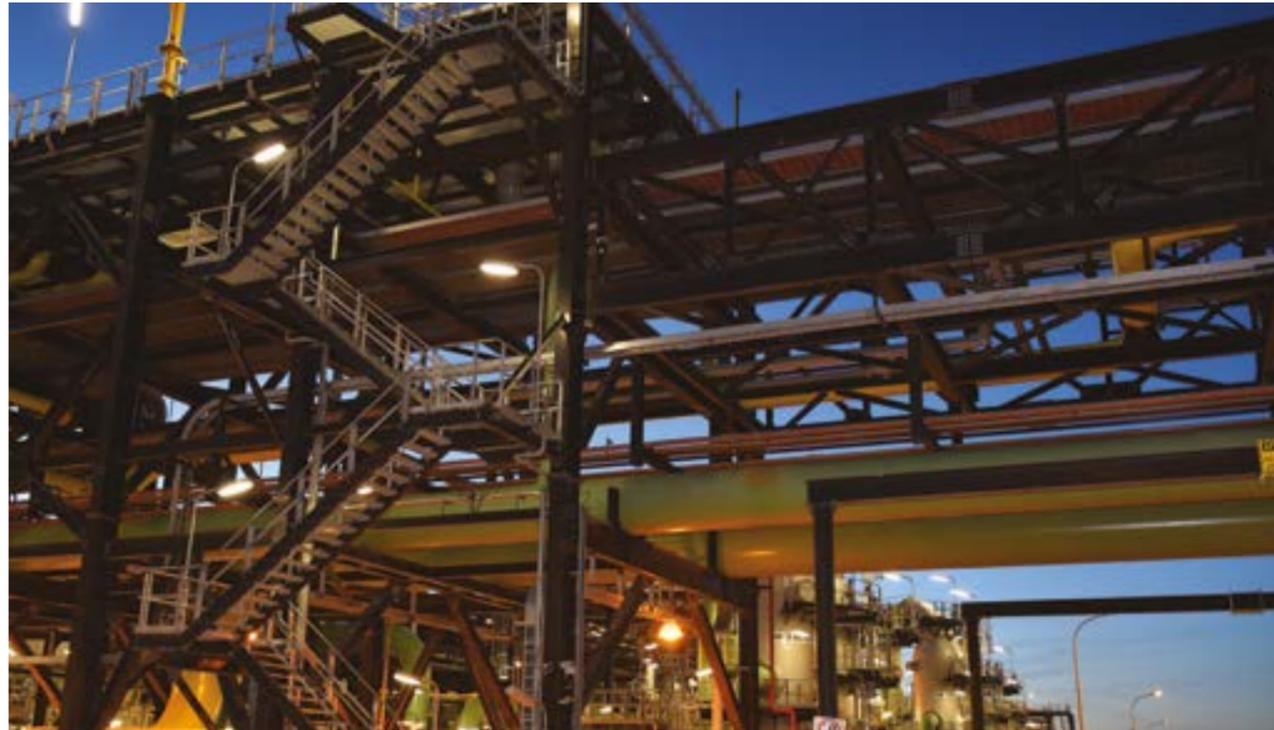
- Compliance with crude oil production quotas following the OPEC+ agreement.
- Decrease in demand for natural gas from foreign customers.



Production of refineries

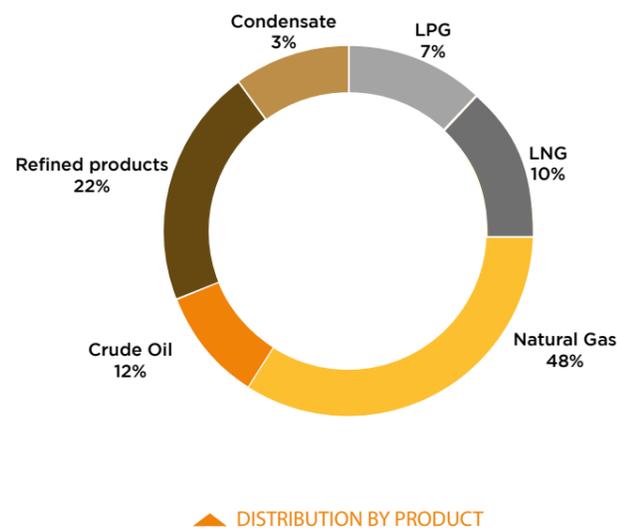
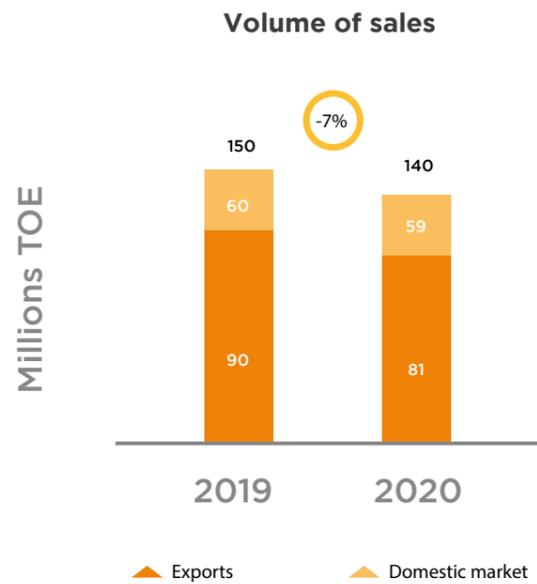
- Commissioning of all Algiers refinery units after renovation works.
- Performance of the two Skikda refinery reforming units.





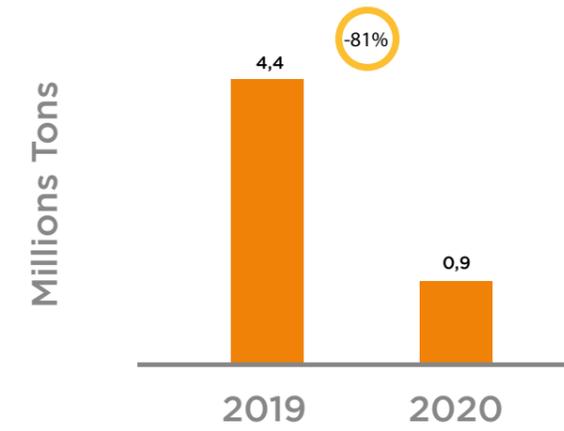
Marketed production

- Compliance with crude oil production quotas following the OPEC+ agreement.
- Decline in demand from foreign customers for natural gas.



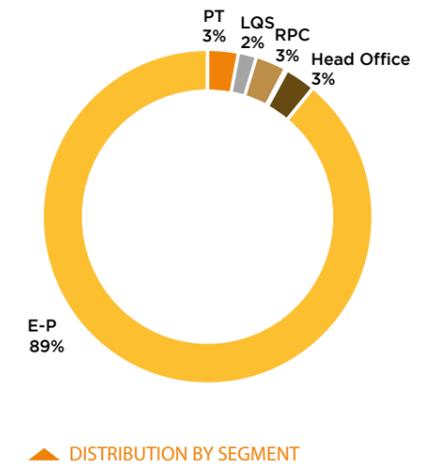
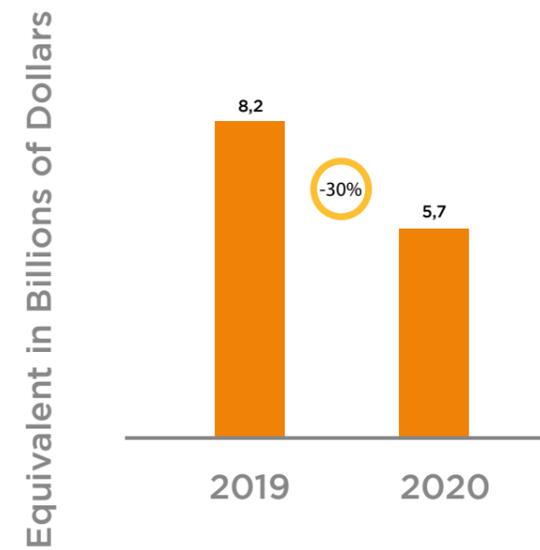
Import of petroleum products

- Drop in fuel consumption favored by the Covid-19 health crisis.
- Increase in production at Algiers refinery (+1.6 MT).
- Good performance of the Skikda refinery reforming.



Investments

- 64% of investments carried out in Dinars.



Exploration-Production Activity

The Exploration-Production activity covers prospecting, research, development and exploitation of oil and gas deposits.

This activity is undertaken by SONATRACH and its partners present in Algeria, in accordance with the laws governing hydrocarbon activities and in compliance with the principles of conservation of deposits and preservation of the environment in order to ensure access to energy for present and future generations.



Ensuring the country's long-term energy security and contributing to its development

The deposit development and exploitation are part of a long-term vision focused on the country's energy security and contribution to its development and the well-being of its citizens.

The deposit production level is determined on the basis of extraction rates allowing an optimal conservation of the deposits.

Appreciable potential of production, of reserves to be mobilized and of resources to be highlighted

The national mining area, of more than 1.5 million Km², presents a geological interest and an important potential of resources, as well in the conventional, the non-conventional and the offshore.

SONATRACH considers partnership as a strategic axis allowing to enlarge the level of investment, to share the risks and to access to the necessary technology to discover and mobilize new reserves.

The new Hydrocarbons Law 19-13 offers SONATRACH the flexibility to attract new partners capable of providing the financing and technology necessary to ensure the maximization of our hydrocarbon resource value over the long term.

On the production side, SONATRACH and its partners operating in Algeria possess significant hydrocarbon extraction, processing and shipping capacities that offer great flexibility to take on new volumes without major additional investments.

The assets of SONATRACH and its partners in Algeria at the end of 2020 are summarized as follows :

In own effort activities

In own effort activities include :

- 37 exploration contracts in force and 14 contracts in the process of obtaining concessions, covering an area of more than 300 000 km².
- 08 exploration authorizations, covering more than 250 000 km².
- 134 operating perimeters in production.
- More than 5 500 wells.
- A collection and service network of more than 21 000 km.
- 7 400 static equipment and 3 700 rotating machines.

The management of production operations is organized in 10 regions, the most important of which are Hassi R'Mel and Rhourde Nous for gas and Hassi Messaoud for crude oil.

Activities in association

The activities in association are governed by thirty-one (31) contracts, four (04) of which are in the exploration phase and twenty-seven (27) in the development & exploitation phase.

The exploration contracts concern the El Assel perimeter with Gazprom, and the Sif Fatima II, Ourhoud II and Zemlet El Arbi perimeters with Eni.

Out of the twenty-seven (27) contracts in development & exploitation phase, there are :

- 18 production sharing contracts.
- 02 contracts of participation type.
- 07 contracts concluded under the modified and completed law (05-07).

These contracts are operated in association with 23 partners of 17 nationalities. These partnerships constitute a wealth for the sharing of know-how and cultural diversity. The list of SONATRACH partners and their nationalities is given below :

Partner	Nationality
Anadarko (Western) USA	USA
BP	UK
Neptune Energy	
Edison	Italy
Eni	
Cepsa	Spain
Repsol	
CNOOC	China
CNPC	
Sinopec	
DEA	Germany
FCP	Canada
Gazprom	Russia
Rosneft	
TOTAL	France
BHPBilliton	Australia
Pertamina	Indonesia
Petroceltic	Ireland
PTTEP	Thailand
PVEP	Vietnam
Equinor	Norway
Teikoku	Japan
Numhyd	Tunisia

Contracts in development and exploitation phase include 112 fields, of which 34 are in development phase and 78 in exploitation phase.



2020 Main Achievements

The main achievements of the Exploration-Production segment in 2020 are as follows:

- Hydrocarbon discoveries : 18 discoveries in own effort
- Primary production of hydrocarbons : 176 million TOE
- Crude oil: 42 million tons.
- Natural gas: 123 billion m3.
- Drilling: 162 drilled wells - 43 exploration wells.
- 119 development wells.
- Investment : US\$ 5.1 billion equivalent.
- Major projects delivered: 5 projects.

Exploration effort and hydrocarbon discoveries

Main exploration indicators	2020	2019
2D seismic acquisition (Km)	7 417	14 302
3D seismic acquisition (Km2)	16 880	14 802
Drilling (number of wells)	43	80
Investment (millions US\$)	686	1 411

Despite the significant reduction in exploration investments in 2020, due to low crude oil prices, the exploration effort has been focused, in accordance with the adopted strategy, on the best prospects that meet the criteria of volume, economics and geological risks.

Thus, the effort has been maintained on the mature basins around the main fields, taking advantage of the availability of infrastructures for a rapid mobilization of reserves.

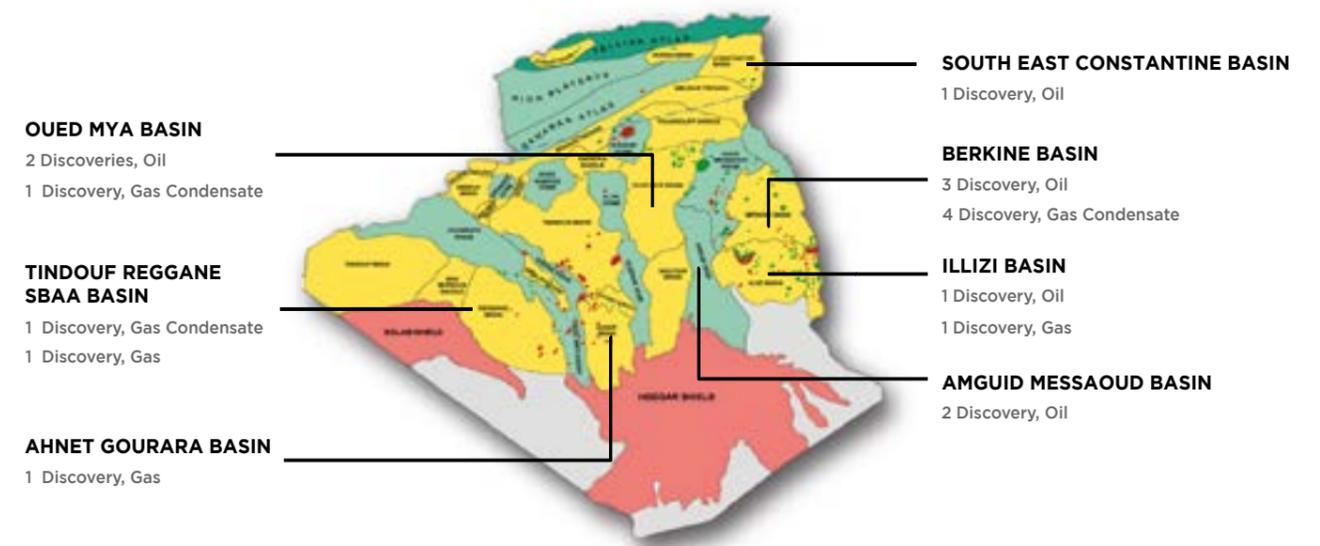
We have also focused on emerging and frontier basins in order to establish potential new production hubs and identify new petroleum provinces.

The results for the year 2020 in terms of success rate and cost of discovery, show a clear improvement compared to the last five years.

	2016	2017	2018	2019	2020
Discovery cost (\$/Boe)	0,9	0,8	0,9	2,7	0,6
Success rate (%)	50%	43%	52%	38%	53%

The effort carried out in 2020 allowed SONATRACH to identify, in own effort, 18 new discoveries, distributed by product as follows: nine (9) oil discoveries, three (03) gas discoveries and six (06) gas condensate discoveries.

These discoveries have allowed to highlight a volume of hydrocarbons of 142 million TOE in 2P, including 52% oil, 39% gas and 9% condensate.



Development Drilling

Key development drilling indicators	2020	2019
Activity Volume Drilled meter	321 003	499 595
Own effort	272 517	403 220
Association	48 486	96 375
Drilling (number of wells)	119	185
Own effort	105	155
Association	14	30

The initial development drilling program for the year 2020 has been revised downwards, taking into account the unfavorable market situation and the impact of the health crisis on the mobilization of drilling contractors

and service companies. Thus, 119 wells were drilled by SONATRACH and its partners, down 36% compared to 2019.

Primary production of hydrocarbons

Primary production of hydrocarbons (in million TOE)	2020	2019
Total production	175,9	186,8
Production in own effort	134,7	139,8
Production in association	41,2	47,0

Total primary production in 2020 amounted to 176 million TOE, down by almost 11 million TOE compared to 2019. This decrease is explained by :

- 6 million TOE of crude oil, following compliance with the OPEC quota.

- 0.5 million TOE of Condensate and LPG, due to lower production of associated gas in oil fields whose production has been reduced in compliance with the OPEC quota.

- 4 million TOE of natural gas reduced due to lack of offtake from foreign customers.

The details of the production in own effort and in association are as follows :

Primary production of hydrocarbons in own effort		2020	2019
Crude oil	10⁶ tons	26,0	28,7
Condensate	10⁶ tons	6,3	6,3
LPG	10⁶ tons	5,8	5,9
Natural gas	10⁹ m³	100,6	102,8
Total	10⁶ TOE	134,7	139,8

Primary production of hydrocarbons in association		2020	2019
Crude oil	10⁶ tons	16,4	19,6
Condensate	10⁶ tons	1,5	1,9
LPG	10⁶ tons	1,5	1,8
Natural gas	10⁹ m³	22,6	24,6
Total	10⁶ TEP	41,2	47,0



Investments

Investissement (Millions US\$ Équivalent)	2020	2019
Exploration	686	1 411
Own effort	656	1 230
Association	30	181
Deposit development	4 353	5 893
Own effort	3 403	4 355
Association	950	1 538
Technical support	17	19
TOTAL	5 056	7 324

Investments in the Exploration & Production segment accounted for the bulk of the investments made in 2020 (89% of the total), with a level of US\$ 5.1 billion equivalent, broken down as follows:

- In own effort: US\$ 4.1 billion equivalent.
- In association: US\$ 1.0 billion equivalent.

This level is down 31% compared to 2019, following the downward revision of projects and programs related to drilling and field development, mainly due to the drastic drop in the price of oil and the containment measures related to the health crisis that impacted the progress of projects.

Despite the impacts of the health crisis, SONATRACH has pursued its development plan during the year 2020 aiming mainly at mobilizing new hydrocarbon reserves, especially gas reserves, through :

The start of production of the following gas fields :

- Tinhert / Lot Ohanet First gas, with a production capacity of 10 million m³/d of gas.
- Periphery Gassi Touil on Rhourde Nouss, with a production capacity of 7 million m³/d of gas.
- MLSE satellites, with a production capacity of 4 million m³/d of gas.
- Hassi R'Mel Phase III Southern Gas Boosting Station, to maintain the production plateau of the largest gas field in Algeria and Africa.
- Hamra phase I gas boosting station, allowing to maintain the production plateau of the deposit.

The launch of the following development projects :

- Bir Sbaa oil field phase II, operated in association with PVEP/PTTEP, allowing the treatment of an additional capacity of 20 000 barrels/day of oil.
- Touat Ouest phase II oil field, with a capacity of 6 500 barrels/day of oil.
- Gathering network of the gas fields of the South-West of Hassi Mouina and Hassi Ba Hamou, with a capacity of 11 million m³/d of gas.

Continuing of the development effort of the following deposits :

Gas fields

- Tinhert / Lot Alrar, with a production capacity of 14 million m³/d of gas.

- Gassi Touil perimeter on Gassi Touil, with a production capacity of 5 million m³/d of gas.
- Isarène, with a production capacity of 10 million m³/d of gas.
- TFT South, with a production capacity of 3 million m³/d of gas.

Oil deposits

- Hassi Bir Rekaiz, with a production capacity of 13 000 b/d of oil.
- Rhourde Chegga, with a production capacity of 14 000 b/d of oil.
- Touggourt, with a production capacity of 100 000 b/d of oil.



Pipeline Transport Activity

The Pipeline Transportation activity covers a network of oil and gas pipelines with a total length of more than 22 000 km, enabling the evacuation of hydrocarbon products from fields in the South to storage and consumption centers in the North, under optimal conditions of safety, cost and quality.



A strategic and regulatory link in the hydrocarbon chain

The pipeline transportation segment plays an important role in regulating the flow of liquid and gaseous hydrocarbons according to fluctuations in demand and constraints upstream and downstream of the network. This role confers on the company the reputation of being a safe, reliable and quality supplier to its domestic and foreign customers.

Major facilities spread across the country, requiring constant effort to ensure their availability and integrity.

The pipeline transportation network consists mainly of:

- 40 pipelines, divided into 22 Pipeline Transportation Systems.
- 85 pumping and compression stations and 387 machines installed along the network.

- 127 liquid hydrocarbon storage tanks with a useful capacity of 3.25 million TOE.
- Three (03) oil ports in Arzew, Skikda and Bejaia, with a loading capacity of 1.3 million tons. The oil ports have 05 loading buoys in the open sea.
- Two main hubs where hydrocarbons from the South are delivered and shipped to the North. These are the Center for Dispatching Liquid Hydrocarbons (CDHL) in Haoud El Hamra and the National Center of Dispatching Center (CNDG) in Hassi R'Mel.
- Three (03) international gas pipelines connecting Algeria and Europe, with a transport capacity of more than 50 billion m3 per year. These pipelines are:
 - The Enrico Mattei Gas Pipeline (EMGP), connecting Algeria to Italy via Tunisia.

- The Pedro Duran Farrell Gas Pipeline (DFGP), connecting Algeria to Spain via Morocco.
- The MEDGAZ pipeline, linking Algeria

directly to Spain from Beni Saf. An interconnection has just been made between the MEDGAZ and the GPDF at El Aricha.

Key Achievements in 2020

The main achievements of the pipeline transportation segment in 2020 are as follows :

- Volume transported on the Northern network: 136 million TOE, including 26 billion m3 of natural gas delivered to foreign customers via export pipelines.

- Investment: US\$ 160 million equivalent
- Major projects received: 03 projects

Transported quantities

Quantity of hydrocarbons transported (in million TOE)	2020	2019
Northern network	136	148
Southern network	73	80

The quantity of hydrocarbons transported on the North network, in 2020, amounted to 136 million TOE, down 8% compared to 2019, as a result of the reduction in oil production and the lack of gas offtake by foreign and domestic customers, following the drop in economic activity induced by COVID-19.

On the Southern network, the quantity of hydrocarbons transported from the production fields to the two dispatching centers of liquid and gaseous hydrocarbons, amounts to 73 Million TOE, down 9% compared to 2019.



The quantities transported on the Northern network by product are as follows:

Transport sur le réseau Nord		2020	2019
Crude oil	10 ⁶ tons	40,9	46,6
Condensate	10 ⁶ tons	7,6	8,2
LPG	10 ⁶ tons	7,2	7,6
Natural gas	10 ⁹ m ³	83,2	88,1
Total	10⁶ TOE	136,3	147,7

The quantities delivered via the transmission system to the various customers during the year 2020 are presented by product as follows :

Deliveries of natural gas

- 26 billion m³ of natural gas to foreign customers via the three export pipelines
- 18 billion m³ of natural gas to the LNG complexes of Arzew and Skikda.
- 35 billion m³ to Sonelgaz for the needs of electricity generation, public distribution and industrial customers supplied by Sonelgaz.
- 4 billion m³ to national industrial customers supplied directly by SONATRACH.

- 2 billion m³ to meet the needs of SONATRACH units.

Crude oil deliveries

- 24 million tons delivered to the refineries of the North.
- 17 million tons delivered to oil ports for direct export.

Deliveries of condensate

- 4.2 million tons delivered to Skikda condensate refinery.
- 3.4 million tons delivered to ports for direct export.

Deliveries of LPG

- 7.2 million tons delivered to GP1Z and GP2Z complexes.



Investments

Investment (Million US\$ Equivalent)	2020	2019
Development	80	291
Renovation	12	56
Others	69	113
TOTAL	160	460

The investment achievements in 2020 reached US\$ 160 million equivalent, i.e. 3% of SONATRACH's total investments.

The main part of the investment achievements involved the development and renovation projects of the transport capacities, particularly through :

The commissioning of the following projects :

- Expansion of the South-West gas pipeline GR7 48» / section (El Menia - Hassi R'Mel) 346 km, with a capacity of 5.3 billion m³ of gas per year.
- Renovation of 210 km of the gas pipeline GG1 42» / Section (M'Djedel - Bordj Menail), allowing to restore its design capacity.
- Replacement of 164 km of the pipeline OB1 24"/22"/Section (M'Sila - Oued Ghir), allowing to restore its design capacity.
- Gas pipeline (PS4/GR5 - Adrar) 28», 110 km long, for Sonelgaz in order to supply the axis

«Reggane - Adrar - Timimoun» in natural gas.

The continuation of the effort on the following main projects :

- Construction of the section (El Aricha - Beni Saf), to ensure the connection between the two export pipelines, GPDF and MEDGAZ.
- Construction of a metering system at the CNDG and a pipeline supervision center, allowing to modernize and optimize the management of hydrocarbon flows.
- Construction of a turbo-compressor at the Ouargla station of the GR1/GR2 gas pipeline, in order to secure the capacity of the station on the South-East gas axis.

Liquefaction & Separation Activity

The Liquefaction and Separation segment encompasses natural gas liquefaction and LPG separation into propane and butane.

These activities are carried out through four LNG complexes with a design production capacity of 56 million m³ LNG per year and two LPG complexes with a design separation capacity of 10.4 million tons per year.

This segment also includes the management of two large industrial zones in Arzew and Skikda which contain important oil and gas industrial assets.



A strategic tool which allows the company to benefit from the flexibility of gas export between pipelines and LNG and to seize the opportunities offered by the market

Since the commissioning of the first LNG complex in Arzew in 1964, the first in the world, the LNG industry has been a

strategic tool for Algeria, allowing a better development of gas and flexibility in terms of exports.

The current gas liquefaction asset is composed of the following 04 complexes :

GL1Z (Bethioua)

Commissioning	1977
Capacity (millions m ³ LNG)	17,56

GL2Z (Bethioua)

Commissioning	1981
Capacity (millions m ³ LNG)	17,82

GL3Z (Bethioua)

Commissioning	2014
Capacity (millions m ³ LNG)	10,5

GL1K (Skikda)

Commissioning	2013
Capacity (millions m ³ LNG)	10



For the separation of LPG, two complexes are in operation to supply the domestic market and foreign customers with propane and butane :

GP1Z (Mers El Hadjadj)		GP2Z (Arzew)	
Commissioning	1983	Commissioning	1973
Capacity (In million tons)	9	Capacity (In million tons)	1,4

2020 Achievements

The main achievements, in 2020, of the liquefaction and separation activity are as follows :

- Propane production: 4.1 million tons
- Butane production: 3.2 million tons
- Investment: US\$ 122 million equivalent
- LNG production: 23.1 million m³ LNG

Natural gas liquefaction

NG liquefaction		2020	2019
Complex inlet gas	10⁹ m³	18,5	21,0
LNG production	10⁶ m³ LNG	23,1	27,1
Propane Production	10⁶ tons	0,2	0,3
Butane Production	10⁶ tons	0,2	0,2

LNG complex production in 2020 reached 23.1 million m³ LNG, down 15% compared to 2019.

This decrease is mainly due to unfavorable market conditions in 2020 and historically low

LNG prices, particularly during the second quarter of 2020.

The breakdown of production by complex is as follows:

LNG Production (106 m ³ LNG)	2020	2019
GL1Z	4,2	3,6
GL2Z	7,5	6,7
GL3Z	7,2	8,9
GL1K	4,1	7,9
Total	23,1	27,1

LPG Separation

LPG Production (10 ⁶ tons)	2020	2019
GP1Z	5,6	6,0
GP2Z	1,4	1,4
LNG Complexes	0,4	0,5
Total	7,3	7,9
Including Propane	4,1	4,4
Including Butane	3,2	3,4

The amount of LPG from GP1Z and GP2Z complexes and LNG complexes in 2020 reached 7.3 million tons, a decrease of 7% compared to 2019.

Investments

Investment (Million US\$ equivalent)	2020	2019
Development	89	74
Maintenance, reliability and safety	32	53
Others	0,3	1
TOTAL	122	129

The investments made in the Liquefaction and Separation segment amount to US\$ 122 million equivalent, i.e. 2% of the total investments in Algeria.

The investments in this segment are part of the consolidation of the gas sales capacities by way of LNG, mainly through :

- Continuing the works of construction of a new jetty at the port of Skikda, allowing to deliver large capacity vessels for distant markets.
- Launching the renovation program of the GL1Z and GL2Z complexes, allowing to restore their design capacity.





Refining & Petrochemicals Activity

This business segment covers the refining and processing of hydrocarbons in order to provide the national and international markets with petroleum and petrochemical products that meet the required quality specifications.

The industrial assets of this segment are composed of five crude oil refineries with a processing capacity of 25 million tons per year, a condensate refinery with a processing capacity of 5 million tons per year, and two petrochemical complexes for the production mainly of methanol and polyethylene.

Meeting the domestic market's needs for petroleum and petrochemical products and generating export value

During the last decade, SONATRACH has undertaken a major investment program at the three refineries of Skikda, Arzew and Algiers, in order to renovate and modernize their facilities and optimize the production of fuels. These investments have allowed today to meet the needs of the domestic market up to 15 million tons per year and to export nearly 15 million tons per year of refined products.

The refining assets are composed of the following six (06) refineries :



RA1K (Skikda)

Commissioning	1980
Capacity (In million tons)	16,5

RA1Z (Arzew)

Commissioning	1973
Capacity (In million tons)	3,75

RA1G (Alger)

Commissioning	1964
Capacity (In million tons)	3,65

RA2K/Condensate (Skikda)

Commissioning	2009
Capacity (In million tons)	5

RA1D (Adrar)

Commissioning	2007
Capacity (In million tons)	0,6

RHM2 (Hassi Messaoud)

Commissioning	1962
Capacity (In million tons)	1,07

In terms of petrochemicals, the production tool aims to enhance the value of hydrocarbon products through the two complexes operated in own effort :

CP1Z (Arzew)		CP2K (Skikda)	
Commissioning	1976/78	Commissioning	2005
Capacity (In thousand Tons)	124	Capacity (In thousand Tons)	130

SONATRACH also operates other petrochemical complexes in partnership for the production mainly of ammonia and urea, helium and nitrogen.

Achievements in 2020

The main achievements of the refining and petrochemicals activity in 2020, in own effort, are as follows:

- Production of petrochemicals: 115 000 tons.
- Investment: US\$ 150 million equivalent
- Refinery production: 28 million tons.

Refinery processing

Refinery processing (In million tons)	2020	2019
RA1K	15,9	16,6
RA1Z	4,5	4,0
RA1G	3,2	1,4
RA1D	0,4	0,4
RHM2	1,0	1,1
RA2K	4,2	3,7
Total	29,2	27,2



The processed quantities of oil and condensate reached 29.2 million tons, up 7% compared to 2019.

This increase is the result of commissioning the entire Algiers refinery facilities following its renovation and the performance achieved by the Skikda refinery's reforming units.

The crude oil refineries processed 25 million tons, the RA2K condensate refinery processed 4.2 million tons.

Refinery Production

Refinery Production (in million tons)	2020	2019
LPG	0,7	0,7
Gasoline	3,1	2,1
Diesel fuel	9,5	8,5
Naphta	7,3	7,3
Kero	1,0	1,2
Fuel oil	5,9	5,9
Bitumen	0,1	0,1
Others	0,2	0,2
Total	27,8	26,0

Refinery production amounted to 27.8 million tons, up 7% compared to 2019, and in line with the quantities processed.

The quantities produced of gasoline and diesel accounted for 45% of total refinery production in 2020, compared with 41% in 2019.

Petrochemicals

Production of petrochemical complexes (In thousand tons)

Production of petrochemical complexes (in thousand tons)	2020	2019
CP1Z Complex	112	95
Methanol	102	89
Urea-formaldehyde	9	5
Urea Resin and Formol	1	1
CP2K Complex	3	14
HDPE	3	14





The investments made in 2020 in the Refining and Petrochemicals segment amount to US\$ 150 million equivalent, i.e. 3% of total investments.

The effort in refining and petrochemicals aims essentially at:

- Optimizing the operation of the units and the related investments in order to satisfy the totality of the current and future needs of the national market in petroleum and petrochemical products.
- Setting up an industry of transformation of hydrocarbons by concentrating on the development of the local loads and by leaning on the partnership.

Thus, it has been decided :

In terms of refining

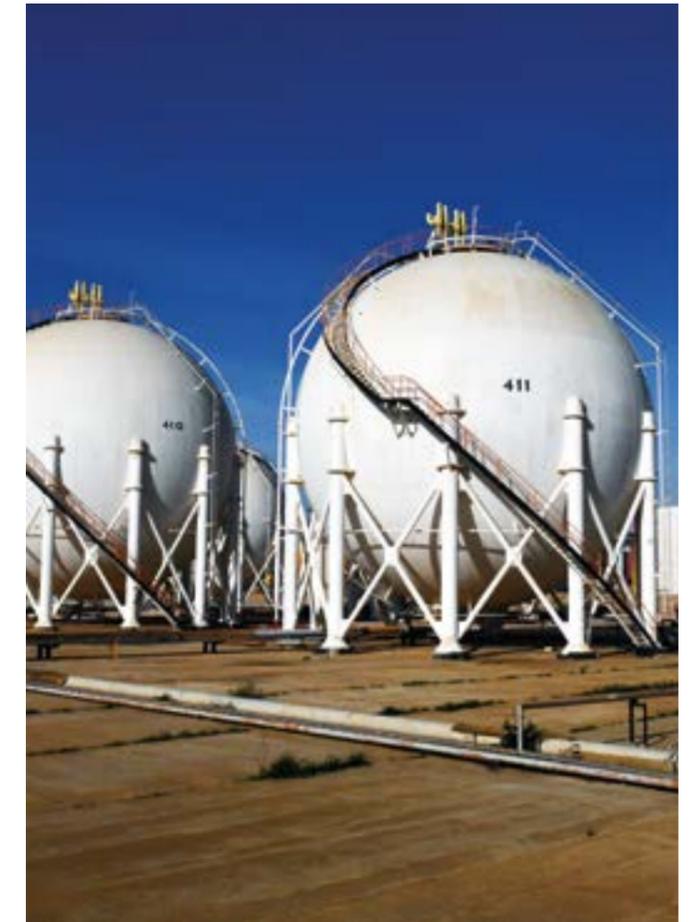
- Commissioning the last units of the refinery of Algiers, within the framework of the program of its renovation and modernization, allowing to increase the production of gasoline of more than 1 million ton.
- To launch the realization of a new crude oil refinery in Hassi Messaoud, with a processing capacity of 5 million tons per year, allowing to bring the refining capacity in Algeria to 35 million tons per year.

- To continue FEED studies for the construction of a fuel oil cracking unit at the Skikda refinery, in order to maximize the production of white products (naphtha, kerosene and diesel fuel).

As to petrochemicals

- Finalization of the FEED studies for the construction project of an MTBE (Methyl Tert Butyl Ether) production unit in Arzew, with a capacity of 200 000 tons per year, allowing to meet the refineries' needs in MTBE.
- Continuation of the FEED studies of the construction of a LAB (Linear Alkyl Benzen) production unit in Skikda, with a capacity of 100 000 tons per annum, allowing the development of Kerosene to supply the LAB detergent industry.
- Continuation of FEED studies relating to the construction of a polypropylene production complex in Arzew, in partnership with TOTAL, with a capacity of 550 000 tons per year, allowing the recovery of propane from the LPG separation complexes of Arzew by hydrogenation for the production of polypropylene, a thermoplastic used in almost all sectors and in particular in the packaging, automotive, household appliances, sanitary and textile industries.

- Finalization of FEED studies relating to the construction of a polypropylene production complex in Turkey, in partnership with Rönesans, with a capacity of 450 000 tons per year.
- Continuing discussions and feasibility studies with potential partners on world-scale projects to develop oil products for the production of commodity polymers



Marketing Activity

The Marketing activity is in charge of supplying the domestic market with oil and gas products, and marketing and upgrading primary and processed hydrocarbons internationally.

Securing traditional markets and accessing new markets

Due to its proximity to the European market, the flexibility of its export routes, especially for gas, the fleet of ships at its disposal and the sustained investment effort throughout the hydrocarbon chain, Sonatrach enjoys the quality of a secure, reliable and quality supplier.

The company's medium-term development program aims at strengthening Sonatrach'

sales capacities and placing on the domestic and international markets products that meet quality requirements and environmental challenges, particularly those related to the reduction of the carbon footprint.

Sonatrach is also attentive to the conditions and prospects of the oil and gas market and aims to maintain quality relationships with its customers and to meet their needs by developing flexible and adapted offers.

Achievements in 2020

The year 2020 was a particularly difficult year for the marketing segment, in a context marked by the oil crisis and the health crisis.

The total volume of hydrocarbons sold amounted to 140 million TOE, down 7% compared to 2019.

The oil market in 2020 was characterized by a sharp decline in global demand in OECD and non-OECD countries. It averaged 93.07 million b/d in 2020, compared to 101.395 million b/d in 2019, an average decline of 8.325 million b/d.

The first quarter of 2020 saw a supply/demand imbalance in crude oil, due particularly to a record increase in US production, which reached 12.3 million barrels per day. The supply was established 100.77 million barrels/day against a demand

of 94.97 million barrels/day. This oversupply has led to the beginning of a decline in crude oil prices on the various international markets, which has been exacerbated by the spread of COVID-19 and the containment measures taken by the various countries to slow the spread of the pandemic.

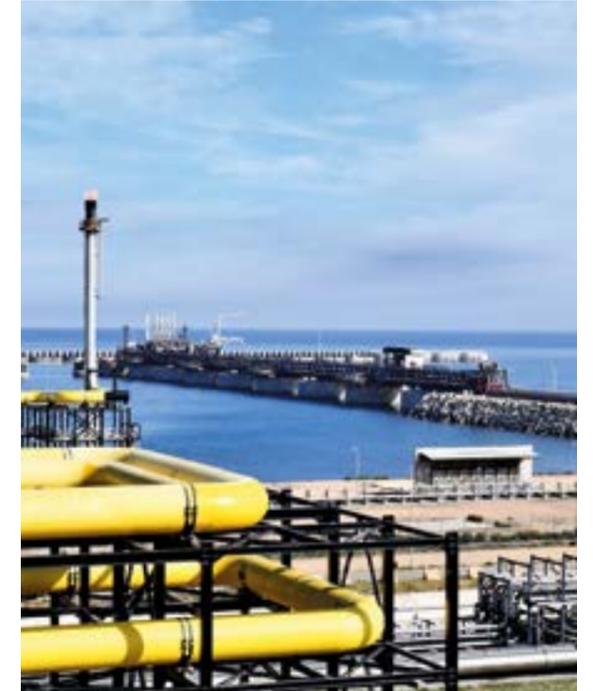
In March 2020, OPEC member countries and their allies failed to reach an agreement on production cuts in order to maintain a correct price level. This failure resulted in a price decline that accelerated during the month of April, with levels recorded on 20 April 2020 of US\$13.2/bbl for Brent and -37.6 US\$/bbl for WTI.

In view of this situation, a new OPEC+ meeting was held on April 12, 2020 during which a decision was made to extract 9.7 million barrels per day from the market as of May 1, 2020. This decision has resulted in a gradual recovery of oil prices.

From the second half of 2020, the partial deconfinement measures and the gradual recovery of economic and social activity have allowed demand to be readjusted and prices to be maintained at levels around US\$40-45/bbl.

At the end of the year, the announcement of an anti-COVID-19 vaccine and the US presidential elections helped to improve oil prices, which hovered around US\$ 50/bbl during December.

As regards the gas market, global consumption already impacted by an exceptionally mild winter in the northern hemisphere was affected by the COVID-19 pandemic and the various measures taken to limit its spread, and natural gas prices fell sharply on all gas markets, disconnecting from long-term prices



indexed to crude oil.

However, global demand for natural gas recovered in the second half of 2020, benefiting from the gradual economic recovery and the record decline in coal production, which favored the use of gas in the power sector.

The main achievements of marketing for the year 2020 is as follows :

- Marketed production: 140 million TOE
 - Export: 81 million TOE
 - Domestic market: 59 million TOE
- Value of exports: US\$ 20 billion
- Average price of Sahara Blend: \$41.9/bbl



Exports

Volume of Exports		2020	2019
Crude oil	10 ⁶ tons	16,7	22,2
Condensate	10 ⁶ tons	3,3	4,4
Refined products	10 ⁶ tons	14,6	13,7
LPG	10 ⁶ tons	5,6	6,3
Natural gas	10 ⁹ m ³	25,6	26,7
LNG	10 ⁶ m ³ LNG	22,9	26,6
Total	10⁶ TOE	80,7	90,3

Exports amounted to 81 million TOE against 90 million TOE in 2019, due to the application from May 1, 2020 of the OPEC+ crude oil production cut, and to the decrease in

natural gas exports whether by pipelines or in liquefied form due to the adverse context of the international market.

Domestic Market

Volume of sales on the domestic market		2020	2019
Refined products	10 ⁶ tons	12,9	12,0
LPG	10 ⁶ tons	2,4	2,4
Natural gas	10 ⁹ m ³	44,8	46,1
Total	10⁶ TOE	59,2	59,5

The volume of sales on the national market reached 59 million TOE, down 1% compared to 2019.

This decline was favored by the decrease in natural gas consumption due to the mild weather and also the recession

in economic activity generated by the containment measures taken to fight the [Covid-19](#) pandemic.

Imports

Volume of imports (in thousand tons)	2020	2019
Diesel fuel	285	2 083
Gasoline	392	1 735
Bitumen	41	368
Imported reduced crude oil	-	160
Bunker C	-	51
MTBE	127	-
Ethylene	7	16
Others	7	3
Total	859	4 415

The achievements in 2020 are down by 81% compared to 2019, totaling a volume of 0.9 million tons against 4.4 million tons in 2019.

This significant drop in imports is due, on the one hand, to the decline in consumption favored by the confinement measures and the limitation of movements

enacted by the authorities in the fight against [COVID-19](#) and on the other hand, to the increase in production of refineries, including the refinery of Algiers whose production recorded an increase of 1.6 million tons compared to 2019 as well as the good performance of the units of the refinery of Skikda.



Research & Development

The Central Research and Development Central Management plays a key role in Sonatrach's development across the entire oil and gas value chain. It is responsible for promoting applied research and the development of innovative, efficient and environmentally friendly technologies and processes in all of the Group's businesses. The Central Research and Development Central Management is also responsible for implementing industrial processes that promote energy savings and cost reduction. Its master plan is in line with the Company's strategy of sustainable development and corporate social responsibility.

Research & Development, Key to competitiveness

During the year 2020, the Research and Development Central Management has focused on translating Sonatrach's strategic objectives into concrete actions, particularly in terms of cost reduction, production increase and technological development.

With the unfailing commitment of its human resources, the Research and Development Central Management has been particularly mobilized around the challenge of the Company's competitiveness, making the major objective «do better and cheaper» the roadmap of its action plan.

The objectives of the Research and Development Central Management are essentially based on research themes organized around three axes:

- Projects identified and taken up by the Research and Development Relays and/or already identified at the level of operational structures in harmony with Sonatrach's strategy.
- Projects launched by the Research and Development Central Management, according to the needs of a structure and/or the initiative of the Research and Development Central Management for the resolution of recurrent problems.
- Finalized national projects (ANVREDET, ATRST, Start-Up...) and having an impact on the value chain of the company Sonatrach.

In order to achieve these objectives, the Research and Development Central Management relies on two essential levers of excellence: on the one hand, a mobilized human resource, both internal and external to the Company, qualified and capable of completing projects, and on the other hand, an

efficient scientific and technological watch, in order to «capture and list» advances likely to have an impact on its activities and on the development of its capacities dedicated to research (laboratories, technological platforms, pilots and other means and resources).



Research and development at the heart of the Company

Considered as a main event, The year 2020 saw the installation of Sonatrach's Scientific and Technical Council, whose mission is to guide and advise the Company's top management on its strategic options in terms of research & development, Innovation and technological choices.

The installation of this body is a strong signal of a willingness to raise the research and development to the rank of priority and associate all structures and their staff to the innovation effort.

In the same perspective, during the same year, two strategic procedures regarding the implementation and management of Research and Development projects and the protection of intellectual property have been finalized, in addition to other provisions such as:

- The signature of several partnership agreements with universities and schools including a cooperation dimension in the field of research and development, and in particular with the Polytechnic Military School.
- The participation in the implementation of national projects of Research with the General Directorate of Scientific Research and Technological Development (DGRSDT) in the energy security component.

- The participation in the implementation of the white paper motivating the energy transition and the design of a model to the horizon 2030.
- The implementation of a communication plan including a periodic reporting targeting all the activities of Sonatrach.
- Setting up and designing a Research and Development portal to be online by 31/12/2020



2020 Highlights

Major achievements of the Research and Development Central Management

- Issuance of a patent in favor of Sonatrach, by the Algerian National Institute of Industrial Property (INAPI), for the work of Ms. Khellouf and her team (Researchers at the central research and development department) on a hybrid process for treating polluted water.
- Finalization of 05 research and development projects launched and presentation of 04 of them to the Restricted Executive Committee during the months of March and April.
- Development and deployment of a new choke formula for the calculation of the daily production of the Hassi-Messaoud field.
- Development of an intelligent solution for the optimization of well locations and trajectories within the reservoirs. Validation of this solution's applicability on the Gassi El Agreb field.
- Design and production of an electronic card "VALVE CONTROLLER" by the researchers of the Research and Development Central Management: an automaton, allowing to follow-up the behavior of the automatic valves installed at the level of the gas lift wells. Implementation of the solution through the in-house manufacturing of cards to be implemented in 300 wells in Hassi- Messaoud.



Human Resources

Sonatrach places the development of human capital at the heart of its strategy. Within the framework of its development plan, and in order to meet its needs in qualified personnel, the national company places the management of human resources very high on its list of priorities.

In order to attract the best talents and skills, the national company offers attractive career opportunities in the wide range of professions that the company has today.

In addition to the operational training in the field of energy and mining provided, in particular by the Algerian Institute of Petroleum (IAP), «Sonatrach Management Academy» offers a very wide range of solutions for the improvement and specialization of its employees.

Targeted training courses and professional situations are part of this skills development system.

In this sense, the Algerian Petrol Institute (IAP) and Sonatrach Management Academy «SMA» offer e-learning and blended “training programs combining face-to-face and distance learning” adapted to the needs of all Sonatrach structures as well as to environmental, regulatory and socio-economic changes.

The Human Resources Transformation Project (TRH), a turning point in the life of the Company

Launched in 2020, the Human Resources Transformation Project (TRH) of Sonatrach constitutes a turning point in the life of the

Company. Breaking with the traditional modes of human resources management, this «structuring» project advocates a qualitative transformation which will allow to optimize the career management of the teams in a sustainable way.

As a major innovation, the evolution of each employee will now be monitored «in real time» and all skills will be identified, developed and supported to ensure a «motivating» career for the benefit of the development of Sonatrach's activities.



Reactivity and anticipation in view of the Covid-19 crisis

Highly dependent on human activity, the energy sector has been severely impacted by the COVID-19 pandemic worldwide.

In order to limit the harmful effects of this crisis on its activities, the Sonatrach Group has shown anticipation and reactivity, by adopting a series of preventive measures.

Within the framework of the anti-Covid system, the Company worked with 30% of its functional staff and 40% of its operational staff, focusing all its efforts on the maintenance of the production tool and the continuity of activities at the installations and projects level.

Employment

Structure and evolution of the workforce

The year 2020 closed with an overall workforce of 66 697 agents, up 3.4% from 2019.

- From 53 443 agents in 2019, the permanent workforce increased to 55,816 agents in 2020.

- The average age of the permanent workforce is 40 years with an average seniority of 11 years.
- The female workforce increased from 8 886 agents in 2019 to 9 222 agents in 2020, i.e. an increase of 3.8%.

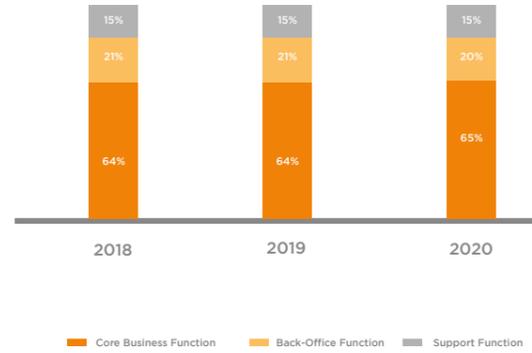
Nearly 33% of this workforce is employed in core business functions, compared with 31% in 2019.

WORKFORCE BY SOCIOPROFESSIONAL CATEGORY



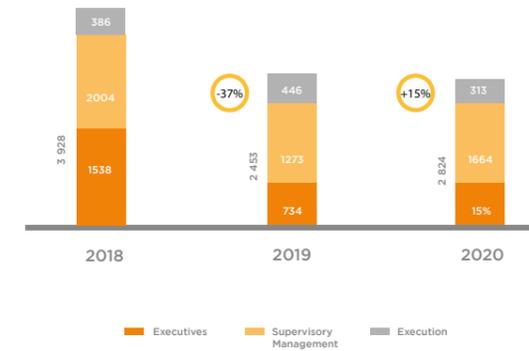
Broken down by socio-professional category, 49% of the Company's permanent workforce is made up of managers, 45% of supervisors and 6% of operating staff.

WORKFORCE BY FUNCTION

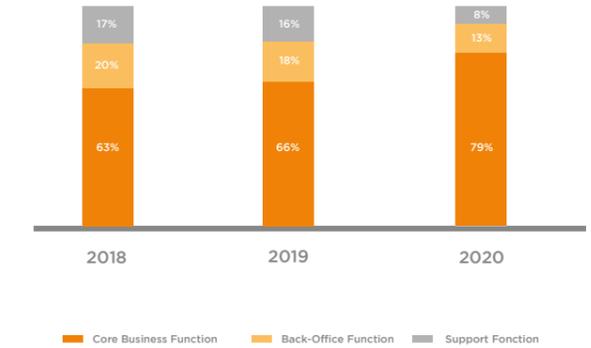


At the end of December 2020, the number of permanent staff working in the core business functions (totaled 36,401, representing 65% of the total permanent workforce, up 6% compared with 2019.

HIRING THROUGH A PROFESSIONAL EMPLOYABILITY AGREEMENT



WORKFORCE BY FUNCTION



Despite the constraints imposed by the COVID-19 pandemic, external recruitment in 2020 increased: 2 824 permanent staff (+15% compared to 2019) have entered the company. 79% of these employees were directed towards core business

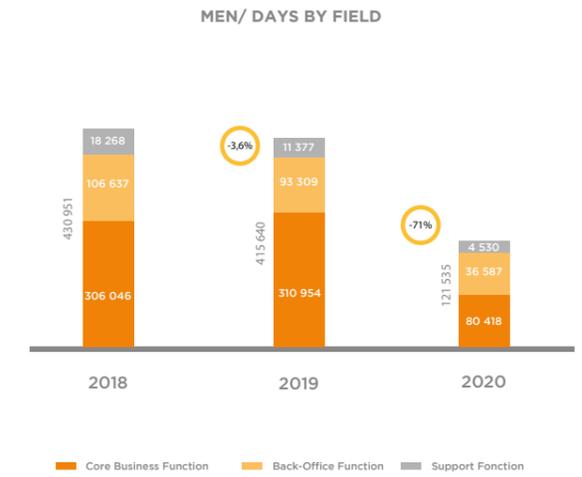
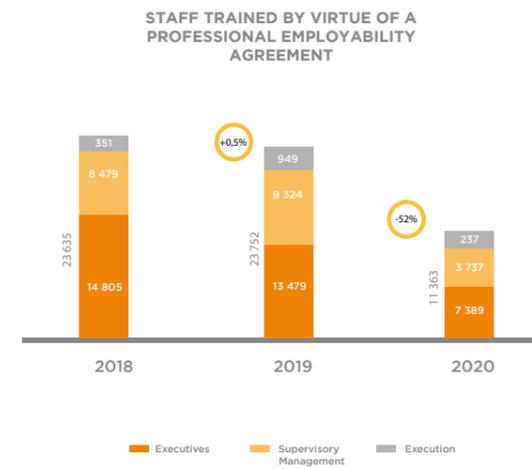
functions, mainly industrial maintenance, industrial safety, hydrocarbon processing and upstream oil.



Training

The training effort has mainly targeted the executive population (66%) and the supervisory management (32%). The training cycles were mainly in the following areas: Industrial Maintenance (19%), Industrial Safety (18%), Upstream Oil & Gas (14%), Management (8%)...

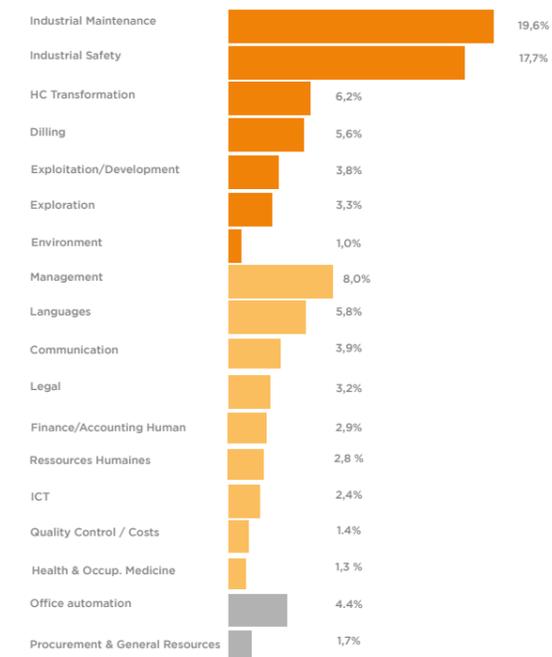
A scale of priorities that reveals the desire to optimize the production tool while achieving the objectives of excellence in the core businesses.



The overall number of trained students has decreased from 23,752 learners for a teaching volume of 415,640 h/d in 2019 to 11,363 learners for a teaching volume of 121,535 h/d.

Training of permanent staff involved 10,984 agents, representing 20% of the total permanent workforce for a duration of 81,757 H/d (an average of 7 days per agent). Of these, 66% were managers, 32% supervisors and 2% supervisors. Nearly 52% of this workforce has been with the Company for less than 10 years, 60% of whom have been with the Company for less than 3 years.

95% OF THE DEVELOPMENT TRAINING COURSES WERE IN THE FOLLOWING AREAS



Training of permanent staff has been refocused on the following areas (82%) Industrial Maintenance (19%), Industrial Safety (18%), Upstream Oil & Gas (14%), Management (8%), HC Transformation (6%), Languages (6%), Office Automation (4%), Communication (4%), Legal (3%).

A photograph of an industrial facility, likely an oil or gas refinery, under a clear blue sky. In the foreground, a large white pipe is angled downwards. Two workers in dark blue protective suits and red hard hats are visible. One worker in the foreground is leaning over a piece of machinery, possibly a valve or pump, while another worker stands behind him. The background shows a complex network of metal structures, pipes, and scaffolding. The ground is a mix of gravel and asphalt.

HSE Health, Safety and Environment

The main missions of the Health, Safety and Environment, Central Management, are to ensure effective risk management, personal health and safety, environmental protection and the integrity of facilities and assets.

As a leading energy player and a driving force of the national economic development, Sonatrach reaffirms more than ever, in 2020, its clear will to reach and respect the best standards and performances in terms of HSE policy (Environmental, Health and Safety Protection).

This commitment is reflected in a strategy based on three performance levers or fundamental values: Human Resources, Communication and Transparency.

In the general declaration of HSE policy, adopted on April 16, 2021, Sonatrach recalls its commitments in this field and underlines, in particular, its determination to:

- Give priority to the health and safety of workers, as well as to the protection of the Environment.
- Ensure the safety of its assets and to make sure that all the risk control devices are constantly functional and efficient.
- Involve all its employees in risk management.
- Comply with HSE legal and regulatory requirements wherever it operates.
- Ensure that no project is launched before assessing its environmental impacts and social acceptability, and implement appropriate measures throughout its life cycle.
- Reduce its carbon footprint.

Priority to the workers' health and safety

Sonatrach puts the health of its employees at the heart of its managerial priorities. This choice is reflected in an HSE policy based on a strong commitment to safeguarding the health of workers through a system of accident prevention at the workplace that targets both Sonatrach personnel and that

of partner companies and subcontractors working on its sites.

This system is accompanied by a range of other measures regarding the regulatory compliance of hydrocarbon installations and structures, the management of occupational diseases, the prevention of road risks, etc...

Accident prevention at the workplace

The progress made over the last few years, particularly during the year 2020, is due to the constant efforts made in the area of health and safety of people, and notably regarding:

- The implementation of regularly audited HSE guidelines.
- The priority given to accidents at the workplace when drawing up HSE training plans, through the choice of targeted topics: defensive driving, wearing personal protective equipment, and high-risk work.
- General safety training and awareness aimed at all levels of the supervisory staff.
- The introduction of HSE objectives in the remuneration system.

- Deployment of the Work Permit System

In order to reinforce the prevention of accidental risk, Sonatrach has deployed the work permit system. The requirements of the work permit system are updated and audited regularly.

- Application of HSE standards to subcontractors

HSE commitments are imposed on external companies and subcontractors. This measure is implemented through qualification and selection processes for companies during

audits/inspections of open sites at the various sites.

- Road risk prevention

In order to reinforce the prevention of road risk, Sonatrach has a road safety procedure, aiming at reducing accidents related to road risk. Sonatrach has been monitoring for several years the number of road accidents involving its personnel and the personnel of external companies. The 39% reduction in the number of traffic-related accidents between 2016 and 2020 is proof of the efforts made.

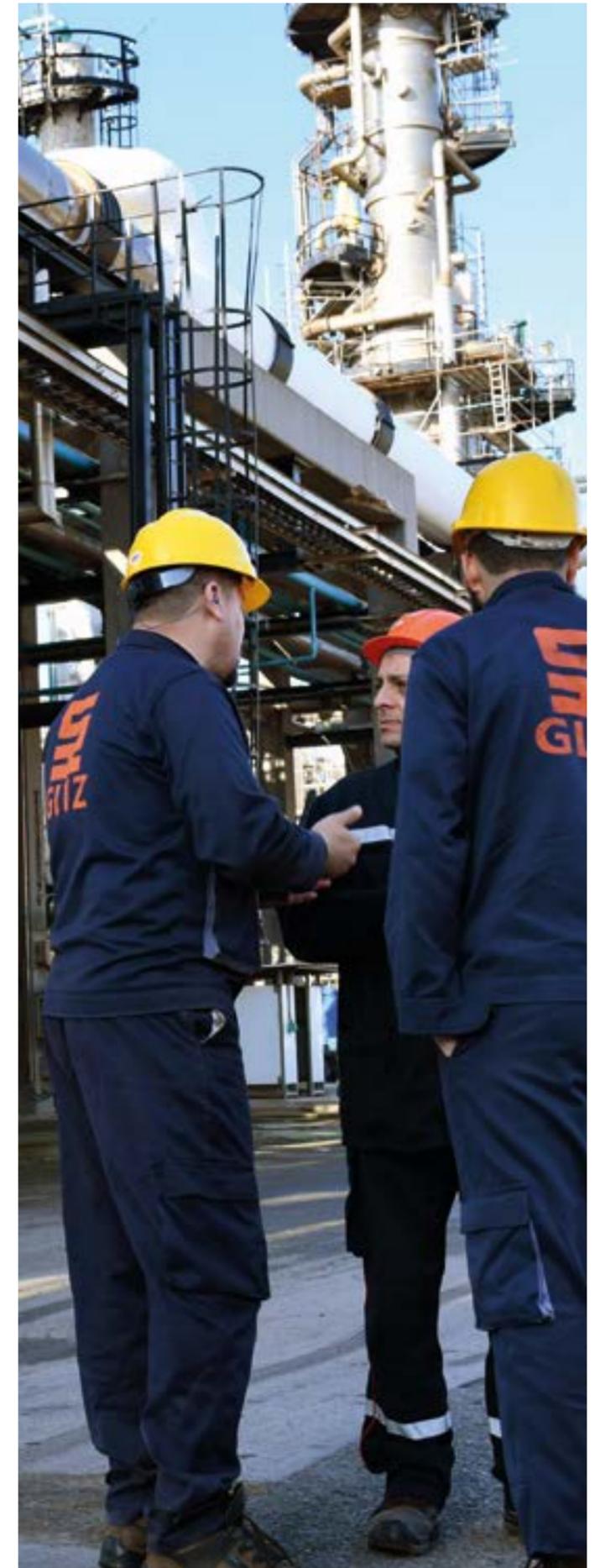
- Management of experience feedback

Sonatrach has implemented a process of analysis of accidental events that can, if necessary, give rise to an alert through a bulletin called «Safety Alert» to share the lessons learned from accidents and incidents recorded.

- The crisis and emergency management system 'ICS'

Sonatrach relies on a crisis and emergency management system that requires regular review, testing and upgrading of intervention plans through exercises.

In 2020, more than 2 100 simulation exercises were carried out by Sonatrach's operational structures.



- Regulatory compliance of hydrocarbon facilities and structures

In 2020, a Project Department for the follow-up of the regulatory compliance of hydrocarbon installations and structures was created by decision n°479/DG. This Project Department, which reports to the Central HSE Director, is responsible for monitoring and coordinating:

- The compliance of facilities and structures, in accordance with Executive Decree No. 14-349 of December 08, 2014, setting the conditions for compliance of facilities and equipment under the hydrocarbon activities.
- The actions to be undertaken by the structures concerned in the context of the problem of encroaching protection perimeters of hydrocarbon installations and works.

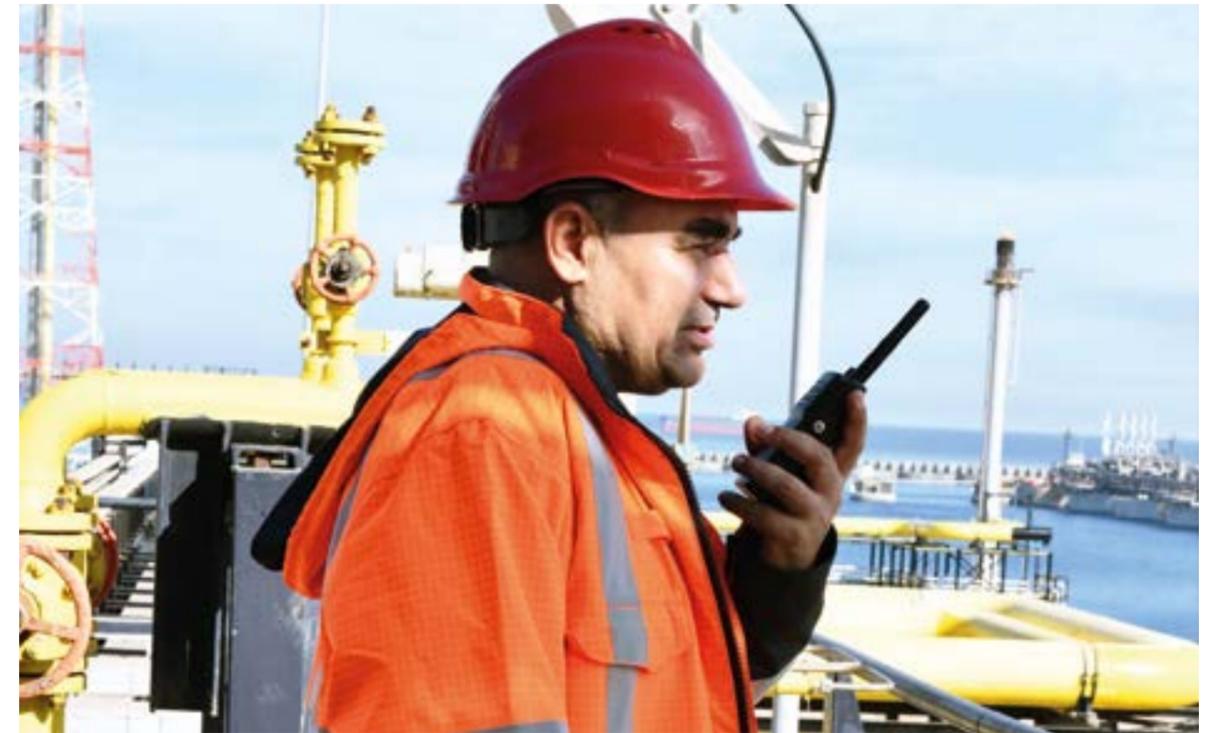
- Implementation of a system for the evaluation of professional risks

Sonatrach has set up an occupational risk assessment system and ensures its proper application. The analysis covers the identification of risks (chemical, physical, biological, ergonomic, etc.). Where necessary, the system leads to the establishment and deployment of action plans. At each site, the risk assessment is carried out by a multidisciplinary group that has received prior training.

In 2020, all Sonatrach structures have updated their risks in accordance with the methodology adopted by the Company.

Workplace accidents to decrease significantly in 2020

- The frequency rate (FR), which is 1.27, is down by 34%.
- The severity rate (SR) is down 29% to 0.12.



	2020	2019
Frequency rate (FR)	1,27	1,93
Severity rate (SR)	0,12	0,16

This improvement in 2020 is mainly attributable to the combined efforts of top management, management, crisis management units, and especially the workers of Sonatrach workers.

These results are all the more deserving as they were recorded during a period characterized by the emergence of additional risks, namely:

- The stress generated by the COVID-19 health crisis.
- Over-activity due to the reduction of staff, especially during the first three months, as well as the prolongation of the stay in the workplace (more than 4 weeks of work).

- Suspension of the rotation of the southern units personnel.

In 2020, of the 305 accidents reported, 240 were work-place. 68% of these accidents were due, in descending order, to falls, excessive efforts / false movements and contact with an object/collision.

More generally, the safety measures implemented over the past 10 years have **enabled us to reduce the frequency rate (FR) by 69%** over the period 2011 to 2020.

Environmental protection

Along with health and safety, Sonatrach's HSE policy makes respect for the environment a strategic priority. It states the company's commitment to ensure, in particular:

- That no project is launched before assessing its environmental impacts and social acceptability
- Adopt best industry practices and implement appropriate measures for efficient and optimal use.
- Reduce its carbon footprint.

Work and studies

In 2020, the Central HSE Department drew up a diagnosis of environmental and sustainable development management.

It is a synthesis of the elements of a «Pre-diagnosis of environmental management and sustainable development at the level of operational sites» at the level of Sonatrach activities.

The study is focused on the following aspects:

- General information on the site.
- Organization and compliance with environmental regulations.
- Management of environmental communication with stakeholders.
- Management of environmental self-control.
- Management of resources and discharges (water, energy, natural environments, discharges: liquid, solid and atmospheric).



The analysis of the results has allowed to establish Sonatrach's environmental strategy and to design the environmental program for the year 2030, based on the Sustainable Development Goals (SDGs), with a particular attention to the reduction of the use of natural resources and to the reduction of discharges by introducing the principles of the circular economy in the process of management of the Company's Environment.

Climate and greenhouse gas (GHG) emission management
Being aware of the issues related to climate change and its impacts on the Company, Sonatrach has, for many years, taken actions to reduce its greenhouse gas emissions. The first levers of intervention have been the reduction of flared gas volumes and the improvement of energy efficiency, which have respectively enabled the company to achieve a gas recovery rate of 97% and to implement energy use management programs at its operational sites.

During the year 2020, the renewal of the framework agreement with the National

Agency for the Rationalization of Energy Use (APRUE) has allowed to systematize the conduct of Energy Audits, to generalize the launch of energy saving programs, as well as the certification of 04 operational sites of the Exploration-Production Activity (E&P), to the energy management system, according to the international standard ISO50001.

During the same year, priority was given to strengthening and improving the transparency framework of climate action, through the launch of the GHG Inventory System up to the site level in accordance with Sonatrach's GHG Inventory Repository, and the implementation of the Mitigation Measurement, Reporting and Verification (MRV) system which will allow the identification and quantification of all significant mitigation actions and the estimation of avoided GHG gains (elaboration of Sonatrach's Mitigation MRV repository).

This initiative has allowed the conduct of a strategic planning for the reduction of Sonatrach's carbon footprint by 2030.

New Resources

The mission of the New Resources Central Management is to materialize Sonatrach's commitment to the energy transition, through the development of renewable energies, in particular solar energy, and the development of gas resources, energy of the energy transition par excellence, through offshore and non-conventional resources.

The objective is twofold: on the one hand, to develop the capacity of electricity generation from renewable energies, including photovoltaic to save quantities of gas that would have been consumed for the production of electricity, and on the other hand, to expand the Algerian exploration field in order to renew our gas reserves.



I. RENEWABLE ENERGIES

SONATRACH is fully involved in the national policy for the development of renewable energies and considers this option as one of the pillars to guarantee the future energy security of the country and to meet the climate challenges, including the reduction of greenhouse gas emissions.

SONATRACH's actions in this field are based on two programs for the realization of photovoltaic solar power plants as well as the identification of other projects within the framework of the energy transition:

1. Sonatrach's contribution to the National Renewable Energy Program

Sonatrach has been mandated to carry out a program of large-scale photovoltaic solar power plants connected to the national electrical grid.

Actions taken

- The designation of Sonatrach as the executing agency of the project to support the development of Renewable Energies in Algeria, piloted by the Ministry of Energy Transition and Renewable Energies (MTEER) and financed up to 1 million US\$ by the African Development Bank (ADB) - the Sustainable Energy Fund for Africa (SEFA).
- Signing in December 2020, of the letter of agreement for the ADB technical assistance project.
- A series of site visits has been initiated in 2019 for the selection of eligible sites. 6 sites were shortlisted of which 03 were identified as a priority.
- Granting by the Directorate of Energy of the Wilayas of Laghouat, Biskra, Msila of

the orders of authorization to enter the sites to carry out the pre-feasibility studies (topographic and geotechnical studies).

- Preliminary study of connection to the national network carried out by the Operator System (OS).
- Elaboration of an economic model for the implementation of solar photovoltaic power plants in the wilayas of Laghouat and El Oued.

2. Solarization of Sonatrach's industrial sites (1.3 GW Program)

Sonatrach is already committed to developing the energy mix by equipping its industrial oil and gas production sites with solar power plants, with an estimated potential of 1.3 GW.

Actions carried out

- Signature of a new MoU with ENI in April 2020, for the realization of renewable energy projects in Sonatrach's sites operated in association
- Elaboration of a technical pre-feasibility study and economic evaluation of the extension project of the BirRebaa North (BRN) solar power plant, already in service:
 - **Technical aspect** : Collection and analysis of technical data, including: connection point, busbar, transformer, tripping, storage, PMS and frequency disturbance of the BRN PV plant.
 - **Economic aspect** : Collection and analysis of economic data and development of an economic model for the BRN solar PV plant expansion project as well as identification of cost reduction opportunities for future projects.

3. Other opportunities

- Discussions on the investment opportunity in the Menzel Ledjmet East (MLE) solar power plant, in partnership with ENI.
- Identification of new avenues of collaboration with foreign partners in the context of energy transition (Green Hydrogen, Circular Economy, Biorefinery/ Biofuels, Power to X)

II. OFFSHORE

Within the framework of the memoranda of understanding signed by Sonatrach with two partners, ENI and Total, and following the prospecting authorizations granted by ALNAFT, the main works carried out during the year 2020 are:

OAZE (SH-ENI-TOTAL) Operator ENI

- Finalization of 3D & 2D seismic and gravimetry data processing.
- Workshop on the follow-up of the progress of the exploration works in partnership with ENI and Total on the OAZE perimeter.
- Expiry of the exploration authorization (OAZE) in December 2020.
- Application for renewal of the Offshore Algeria East Zone (OAZE) exploration authorization.

- Summary of the work carried out within the framework of the OAZE exploration authorization.
- Renewal of the OAZE perimeter exploration authorization granted by ALNAFT from December 25, 2020 for 2 years.

OAZO (SH-TOTAL-ENI) TOTAL Operator

- Workshop on the follow-up of the exploration works progress in partnership with ENI and Total on the OAZO perimeter.
- Expiry of the exploration authorization (OAZO) in December 2020.
- Summary of the work carried out within the framework of the OAZO exploration authorization.
- The exploration permit for the OAZO perimeter expired on December 24, 2020 and has not been renewed.

III. Assessment studies of non-conventional resources

As part of the mobilization of new hydrocarbon resources, notably natural gas, an energy that should play a major role in the energy transition, SONATRACH carries out studies to evaluate the potential of non-conventional resources in the Algerian mining sector.

SONATRACH's actions in this regard mainly concern the assessment of non-conventional plays, seismic inversion studies and environmental impact studies.

A group of children in school uniforms are sitting on chairs, playing acoustic guitars. The child in the foreground is a boy with dark hair, wearing a white shirt and a dark tie, focused on playing his orange acoustic guitar. Behind him, a girl in a purple top is also playing a guitar. To the left, another boy in a white shirt and a red bow tie is playing a guitar. In the background, a man in a black t-shirt is watching them. The scene is brightly lit, suggesting an indoor setting like a classroom or a school activity room.

Social Affairs

Sonatrach has always attached great importance to the well-being of its employees. Driven by a concern for ethics and fairness, the handling of social issues follows a long tradition within the national company.

Since its creation, the Social Affairs Management has been working to establish working conditions and an environment conducive to the development of its employees.

Its mission is to constantly improve the living and working conditions of employees, retirees and their families wherever Sonatrach's operational units are present and throughout the national territory. The missions entrusted to the Social Affairs Management as defined in the decision 307/DG/ May 2020 cover a wide range of services, including:

- The management of the Social Affairs budget, funds and assets.
- The implementation of policies, procedures and working methods in the area of social action and protection.
- The implementation of policies, and procedures in the field of occupational health.
- The promotion of actions for the protection of the health of workers and their dependents.
- The participation in the elaboration of policies and procedures in the field of occupational health as well as their implementation.
- The development of sociocultural and sports activities.
- The development of leisure and educational activities for children.

Health in the workplace

The services offered by the Social Affairs Management include occupational and social medicine for the benefit of the Group's employees and retirees, as well as their families.

Occupational medicine centers (OMC) cover all the regions where Sonatrach is present through its economic and industrial activities. The doctors working in these centers are trained in the risks of occupational accidents in the energy industry.

Thirty-nine medical and social centers (MSC) provide medical consultations and explorations for the benefit of workers, retirees and their beneficiaries throughout the national territory. For some Social Affairs, whose medical structures are located in remote areas, the local population is also taken care of in the name of the principle that Sonatrach is more than ever a Corporate Citizen.

In 2020, the Social Affairs Department continued to improve the quality of its services by improving the reception and care conditions in the various centers while ensuring the modernization and renewal of specific medical equipment and a regular supply of pharmaceutical products.

A mechanism to fight the COVID-19 pandemic

In 2020, the Health activity was marked by major efforts to fight the COVID-19 pandemic, in particular through preventive measures aimed at preventing the spread of this virus within the Company.

As part of this effort, medical equipment, particularly laboratory equipment, was purchased in 2020 for the following Social Affairs structures:

- In Aménas Region: reception of 03 devices for the laboratory.
- In Hassi R'Mel Region: acquisition, installation and commissioning of medical analysis laboratory equipment
- In Algiers Region: acquisition of medical analysis laboratory equipment.
- In Béjaïa Region : acquisition of medical equipment
- In Boumerdès Region: acquisition of laboratory equipment.
- In Arzew Region: acquisition of laboratory equipment.

Health, Safety and Environment

Due to the health crisis, the HSE activity has been one of the most prominent structures for the implementation and application of instructions and prevention measures defined at the level of the Sonatrach's crisis unit.

Due to the nature of its missions and the particularity of the Social Affairs Management, the HSE staff was forced to observe maximum vigilance in terms of prevention of COVID-19, given the importance of the human influx (Sonatrach workers, beneficiaries, retirees ...) affecting the various structures (CMS, laboratories, center for early childhood ...).



Activity

Social actions

Again, due to the sanitary context related to **Covid-19**, it is necessary to note the cancellation or the pause observed regarding the unfolding of certain actions such as:

- The suspension of stays in thermal spas after the completion of four (04) sessions out of forty (40) planned.

In terms of social protection

In spite of the obstacles caused by the pandemic, financial aid has been granted, in particular regarding:

Sports activity & Leisure

Sociocultural activities for the Company's workers and their dependents were temporarily suspended due to the **COVID-19** pandemic.

These include:

- The suspension of all leisure activities for workers and their families.
- The cancellation of the February 24, 2020 festivities.

- The cancellation of the OMRA operation.

- The cancellation of the circumcision campaign (a purchase of 1200 circumcision kits was made at the beginning of the year).

- The reduction of medical and social procedures (visits to the sick, medical appointments, social investigations, transportation of the sick and hospitalizations).

- Annual assistance to the families of deceased agents.

- Financial aid for social cases.

- Aid for medical care.

- School kits.

- Suspension of permanent sports activity at the regional level.

- Suspension of outdoor activities at the regional level.

However, a plan for the gradual and progressive resumption of sociocultural activities has been elaborated by the Social Affairs Management.

- the family centers of Corso and Zemmouri have been requisitioned by the Wilaya of Boumerdes for a confinement because of the pandemic of the **COVID-19**.



Childhood

As part of the prevention measures against the pandemic, early childhood education in kindergartens has been given special attention.

Guidelines have been issued for the benefit of educators. They are focused on the pedagogy of applying the barrier gestures in order to convey the health message to the child and to put forward the measures to be taken before the admission of the

children within the classes, and the different premises of the kindergarten.

- Posters illustrating barrier measures adapted to this age group were also designed.

- In terms of health, a population of 2 410 children was examined out of 3 562 children by the doctors assigned to the kindergartens during the first quarter of the year 2020.

Financial Report on the Consolidated Financial Statements



In 2020 Sonatrach Group, through its subsidiaries and holdings, is present nationally and in several countries abroad.

The consolidation scope comprises 414 accounting units representing the parent company Sonatrach, a joint-stock company, and 117 entities, of which 70 are fully consolidated and 48 are accounted for by the equity method. Of the 117 subsidiaries and affiliates, 43 are located abroad, mainly in Europe.

All the entities of the consolidation scope generated a consolidated turnover of about DZD 3 980 445 million for the financial year 2020, 72% of which was generated by the parent company Sonatrach.

These figures are obtained from the Sonatrach Group's consolidated financial statements, which are prepared in accordance with the accounting rules and principles recommended by the Algerian legislation, approved by the Company's corporate bodies and certified by the statutory auditors, reflecting a true and fair view of the financial position of Sonatrach Group.

The consolidated financial statements as well as the analysis of the accounts are briefly presented in this report.

It should be noted that the financial year 2020 was impacted by the health crisis. The financial, economic and fiscal situation of the Group's companies has developed in a negative direction overall. This has resulted in a decline in revenues and consolidated net income.

1- ACCOUNTING PRINCIPLES

The consolidated financial statements of the Sonatrach Group were prepared in accordance with:

- The accounting principles generally accepted in Algeria, in particular with the law 07-11 dated 25 November 2007.
- The Ministerial Order of July 26, 2008 setting out the rules for the presentation of financial statements, valuation and accounting.
- Standards specific to the hydrocarbons sector (Law 05-07 of 28 April 2005).
- The valuation and operating rules applied to the individual financial statements.
- Article 732 bis 4 of the Commercial Code relating to the presentation of consolidated accounts.
- Art. 24 of the law 10-01 relating to the professions of chartered accountant and statutory auditor.

1.1. Consolidation period

The financial year covers a period of 12 months from January 1 to December 31 of each year.

1.2. Currency of Consolidation

The presentation currency of the consolidated financial statements is the Algerian Dinar (DZD). Unless otherwise indicated, the figures presented in this report are in millions of Algerian Dinars (MDZD).

1.3. Consolidation principles

1.3.1 Consolidation methods

The Ministry of Finance decree of July 26, 2008 defines the consolidation methods:

- Exclusively controlled companies (direct or indirect holding of the Group > 50%) are fully consolidated.
- Companies in which the Group has a direct or indirect influence (< or = 50%) are accounted for by the Equity Method.

1.3.2 Group threshold criteria

The threshold for the inclusion of subsidiaries and affiliates in the scope of consolidation is determined each year in accordance with the rules of consolidation, and depending on the size of the entity to be consolidated (sales, earnings and balance sheet total) or where the parent company exercises direct and strategic influence over the investment.

1.3.3 Conversion methods

The financial statements of subsidiaries and holdings are drawn up in the currency of the country in which they are established:

- The balance sheets of foreign subsidiaries and holdings are converted into Algerian Dinars on the basis of the exchange

rates in force on the closing date, thus generating «Conversion Reserves».

- Income and expenses are converted at the average rate for the financial year. The conversion differences are recorded under the heading «conversion result».



2. CONSOLIDATED FINANCIAL STATEMENTS

2.1. Balance sheet

2.1.1. Assets

(In millions of DZD)	NOTES	2020	2019
NON-CURRENT ASSETS			
Goodwill	3.1.1	14 897	17 266
Fixed intangible assets	3.1.2	99 545	88 141
Fixed tangible assets	3.1.3	3 846 187	3 784 339
Lands & amenities		51 503	52 247
Constructions		349 551	346 314
Other tangible fixed assets		592 194	527 551
Assets under concession		782	615
Fixed and complex production equipment		2 852 157	2 857 612
Fixed assets under construction	3.1.4	2 393 626	2 310 544
Financial assets	3.1.5	1 348 475	1 502 858
Financial assets Equity method		410 164	223 200
Investments and receivables related to investments		142 250	311 884
Other financial assets		792 981	967 683
Other non-current receivables		3 081	91
Total fixed assets		7 702 731	7 703 148
Non-current deferred tax asset	3.1.6	45 975	37 997
Total Non-Current Assets		7 748 706	7 741 146
CURRENT ASSETS			
Inventories and work-in-progress	3.2.1	796 506	715 063
Receivables and similar uses	3.2.2	4 424 370	4 358 543
Financial assets		2	0
Clients		524 444	608 752
Other debtors		2 131 333	2 170 669
Taxes		1 758 113	1 554 037
Others current assets		10 479	25 086
Cash and near cash	3.2.3	693 679	707 595
Investments and other financial assets		647	127
Cash (net)		693 032	707 468
Total Current Assets		5 914 556	5 781 201
Total Assets		13 663 262	13 522 346

2.1.2. Liabilities

(In millions of DZD)	NOTES	2020	2019
SHAREHOLDERS EQUITY			
	4.1		
Share capital		1 000 000	1 000 000
Property vested by the State		-	1 940
Valuation Difference		187 888	124 590
Premiums & Reserves		5 728 884	5 310 162
Other shareholders equity - Retained earnings		1 602	-
Shareholders' equity excluding parent company income (A)		6 918 373	6 436 693
Consolidated reserves (B)		1 011 275	1 106 077
Group Reserves		1 005 386	1 091 790
Minority reserves		5 889	14 287
Equity valuation difference (C)		-34 287	-7 124
Profit / Loss for the financial year (D)		-6 598	373 581
Translation differences on group's profit / loss		-2 382	-13
Net income of all consolidated accounts		-4 216	373 594
Group's profit / loss		-13 971	373 135
Minority income		9 754	459
Minority income		8 888	459
Translation differences on minority results		867	-
TOTAL SHAREHOLDERS EQUITY (A) + (B) + (C) + (D)		7 888 763	7 909 228
NON-CURRENT LIABILITIES			
	4.2		
NC loans & financial debts		235 255	186 820
Taxes (deferred and provided for)		219 789	201 361
NC Other debts and adjusting accounts		15 107	12 074
NC Derivative financial liabilities		(0)	(0)
Provisions and deferred revenue		362 342	318 033
Total non-current liabilities		832 492	718 288
CURRENT LIABILITIES			
	4.3		
Suppliers & related accounts		499 861	372 894
Taxes		666 301	787 725
Other debts		3 773 696	3 713 653
Cash liabilities		2 148	20 558
Total current liabilities		4 942 007	4 894 830
Total liabilities		13 663 262	13 522 346

2.2. Consolidated income statement

(In millions of DZD)	NOTES	2020	2019
Sales of goods, manufactured products, services and related products		3 980 445	5 537 884
Stored or destocked production (Var)		11 909	6 177
Capitalized production		287 527	453 045
Operating subsidies		52 155	142 599
Production for the financial year	5.1.1	4 332 036	6 139 706
Purchases consumed		1 077 691	1 373 949
External services		862 461	1 188 920
Other external services		101 507	141 855
Total annual expenses	5.2.1	2 041 659	2 704 724
Operating added value		2 290 376	3 434 981
Personnel costs	5.2.2	390 914	383 440
Taxes & duties	5.2.3	923 854	1 376 136
Gross operating surplus		975 608	1 675 406
Other operational products		163 569	177 785
Other operating expenses		135 638	117 817
Amortization, provision and impairment loss expenses		869 138	795 627
Impairment charges and provisions for financial items		-2 753	3 900
Net impairment of goodwill		78	46
Reversal of impairment losses and operating provisions		30 703	81 334
Reversals of impairment losses and provisions of financial items		-384	-2 075
Operating result		167 395	1 015 060
Financial result	5.1.3	96 601	69 579
Financial expenses	5.2.4	291 840	544 536
Financial result		-195 239	-474 957
Ordinary income before taxes		-27 844	540 103
Income taxes	5.2.5	22 794	215 262
Total revenue from ordinary activities		4 622 525	6 466 328
Total expenses from ordinary activities		4 673 163	6 141 487
Net result from ordinary activities		-50 638	324 841
Extraordinary items (products)		91	52
Extraordinary items (expenses)		4 066	-
Extraordinary result		-3 975	52
Net result for the financial year		-54 613	324 892
Share in the net result of Equity-accounted companies		49 529	48 701
Net result of the consolidated group		-5 083	373 594
Minority interests		8 888	459
Net result - group share		-13 971	373 135

2.3. Consolidated cash-flow statement

(In millions of DZD)	2020	2019
Income before tax	-31 815	540 159
Gains or losses on disposal of assets	-491	2 226
Amortization of intangible fixed assets	782 334	620 072
Depreciation of tangible fixed property	-15	-404
Amortization of intangible fixed assets	19 611	20 549
Provision for goodwill	1 107	1 023
Other Provisions	80 604	14 236
Operating subsidy	52 155	142 599
Deferred taxes	-4 492	27 991
Amortizations and provisions	931 304	826 066
Income taxes	-22 794	-215 262
Interest paid	-14 790	14 275
Cash flow from operating activities	861 414	1 167 463
Cash flow related to extraordinary elements	-3 975	52
Cash flow before extraordinary items	-3 975	52
Stocks	-102 355	-40 543
Accounts receivable	290 058	-93 813
Suppliers	114 426	-57 541
Other - Operating Working capital requirement (WCR)	-349 290	-1 088 260
Incidence of the change in operating WCR	-47 160	-1 280 158
Other - non-operating WCR	20 349	-19 196
Intra-group plug accounts	-30 464	7 352
Incidence of the change in non-operating WCR	-10 115	-11 845
Fair value Revaluation of derivative financial instruments	-439	-127
Other non-cash operations	-439	-127
Cash flows from operating activities	799 725	-124 615
Acquisition of tangible fixed assets	-1 506 113	-2 732 285
Acquisition of intangible fixed assets	-46 995	-115 659
Acquisition of financial assets	-85 396	-657 955
Acquisition of treasury stocks	-104 212	-35 180
Interest received	-7 949	228
Cash flow requirements (investments)	-1 750 665	-3 540 851
Disposal of tangible fixed assets	710 302	1 917 039
Disposal of intangible fixed assets	24 088	40 238
Disposal of financial assets	326 331	232 675
Resources related to investments	1 060 721	2 189 953
Cash flows from investing activities	-689 945	-1 350 898
Capital increase	-76 141	22 546
Issue of loans	38 638	27 316
Loan repayments	-25 124	-19 455
Non-current Increase (decrease) in other financial debts	-33 820	-1 932
Short term Increase (decrease) in other financial debts	-126 775	469 944
Dividends paid	128 694	80 392
Cash flows from financial activities	-94 528	418 026
Unexplained differences-translation adjustment	17 153	228
Unexplained differences - consolidation method variation	-29 317	37 957
Unexplained differences - reclassification	0	-70
Unexplained differences - Entry in the scope of consolidation	-17 522	1 074
Unexplained differences - exit	-	2 837
Unexplained differences	-29 687	42 026
Cash - movement (calculated)	-14 436	-1 015 460
Cash - closing (calculated)	693 032	707 468
Cash- opening	707 468	1 722 928
Change in cash	-14 436	-1 015 460

2.4. Variation in the consolidated shareholders' equity

(In millions of DZD)	Share capital	Premiums, Reserves & consolidated result	Valuation difference	Total equity	Group's equity	Minority equity
As at 31 December 2018	1 000 000	6 516 538	115 624	7 632 162	7 620 384	11 778
Allocation of income	-	-281	-	-281	-281	0
Dividends	-	-141 937	-	-141 937	-141 551	-386
Result	-	373 598	-	373 598	373 138	459
Increase	-	186 524	11 645	198 170	195 378	2 791
Decrease	-	-176 545	-2 679	-179 224	-178 894	-330
Translation adjustment on opening	-	-4 400	-	-4 400	-4 400	-
Translation differences on flows	-	698	-	698	698	-
Reclassification	-	13 418	-	13 418	13 418	-
Change in the scope of consolidation	-	15 989	-	15 989	15 931	58
Entry in the scope of consolidation	-	1 082	-	1 082	706	375
As at 31 December 2019	1 000 000	6 784 637	124 590	7 909 228	7 894 482	14 746
Allocation of income	-	80 712	-	80 712	80 712	(0)
Dividends	-	14 198	-	14 198	14 265	-67
Result	-	-5 079	-	-5 079	-13 967	8 888
Increase	-	397 643	64 199	461 842	448 337	13 505
Decrease	-	-540 082	-902	-540 983	-523 565	-17 419
Translation adjustment on opening	-	83 232	-	83 232	83 747	-514
Translation differences on flows	-	-17 463	-	-17 463	-18 253	791
Reclassification	-	-6 177	-	-6 177	-6 177	-
Change in the scope of consolidation	-	-216 114	-	-216 114	-211 904	-4 210
Entry in the scope of consolidation	-	125 293	-	125 293	125 370	-76
As at 31 December 2020	1 000 000	6 700 875	187 888	7 888 763	7 873 119	15 644

3. ASSETS ACCOUNTS ANALYSIS

3.1. Non-current assets

3.1.1. Goodwill

Goodwill is the excess of the cost of an acquisition, in the case of taking a stake or merger, over the acquirer's share

of the identifiable assets and liabilities fair value.

In 2020, net goodwill amounted to DZD 14 897 million or EUR 92 million.

(In millions of DZD)	2020	2019
SONATRACH RAFFINERIA ITALIANA (SRI)	14 897	17 266
Total net Goodwill	14 897	17 266

3.1.2. Intangible fixed assets

Intangible fixed assets increased by 12.94%, i.e. an amount of DZD 11 404 million.

The latter consists mainly of development costs, concessions, patents, licenses and trademarks. Intangible assets by entity are allocated as follows:

(In millions of DZD)	2020	2019
SIPEX LIBYE	34 065	30 741
SPC BVI	21 585	25 262
SIPEX NIGER	18 963	17 340
SONATRACH JSC	17 935	10 474
Other entities (subsidiaries and affiliates)	6 998	4 324
Total net intangible fixed assets	99 545	88 141
Including SONATRACH JSC	18%	12%

3.1.3. Tangible fixed assets

Net tangible fixed assets increased by DZD 61 848 million, i.e. 1.63% compared to the previous year.

In addition, the fixed and complex production equipment represents 74.16% of tangible fixed assets.

Net tangible fixed assets, by entity are as follows:

(In millions of DZD)	2020	2019
SONATRACH JSC	3 199 939	3 242 071
MEDGAZ	85 720	
SONATRACH RAFFINERIA ITALIANA (SRI)	81 954	69 008
NAFTAL	74 191	76 398
Hyproc Shipping Company	63 272	62 033
G-CCO	48 285	50 005
TAL	37 953	38 828
ENAFOR	32 542	38 918
GCB	32 059	31 771
ENTP	28 158	25 797
SH PEROU	20 303	21 199
ENSP	16 898	16 329
ENGTP	15 359	15 468
KAHRMA	14 083	13 816
ENAGEO	10 327	9 874
Other entities	85 144	72 823
Total les immobilisations corporelles nettes	3 846 187	3 784 339
Including SONATRACH JSC	83%	86%

3.1.4. Fixed assets in progress

The level of fixed assets in progress was almost stable compared to financial year 2019, they are as follows:

(In millions of DZD)	2019	Increase	Decrease	Operating allowances	Reversal of operating provisions	Translation adjustment	Reclassification	Other variations	2020
Tangible fixed assets in progress (Gross)	2 467 204	1 151 662	454 747	-	-	1 660	619 859	0	2 545 911
Intangible fixed assets in progress (Gross)	57 476	41 898	14 850	-	-	23	22 660	0	61 889
Advances & instalments on fixed assets (Gross)	75 473	35 889	40 188	-	-	203	-	0	71 378
Fixed assets in progress (Gross)	2 600 154	1 229 449	509 785	-	-	1 886	642 519	0	2 679 178
Tangible fixed assets in progress (impairment losses)	288 397	-	-	2 829	7 131	44	-	0	284 138
Intangible fixed assets in progress (impairment losses)	1 061	-	-	192	-	-	-	0	1 253
Advances & instalments on fixed assets (impairment losses)	151	-	-	9	0	-	-	0	160
Fixed assets in progress (impairment losses)	289 610	-	-	3 030	7 131	44	-	0	285 552
Fixed assets in progress (Net)	2 310 544	1 229 449	509 785	3 030	7 131	1 843	642 519	0	2 393 626

3.1.5. Financial fixed assets

The situation of the financial fixed assets has known a decrease of 10% at the financial closure, which is mainly due to the decrease of the account "Other long-term receivables" because of the early repayment of financial investments in Algeria.

The financial securities accounted for by

the equity method increased by 83.77% following the integration of new entities, namely AGLIC, IAHEF, ENERGIE DE PORTUGAL and NATURGY

3.1.6. Deferred tax assets by entity

The deferred tax asset item experienced a net increase of DZD 7 978 million in 2020 i.e., a 21% change compared to financial year 2019.

(In millions of DZD)	2020	2019
SONATRACH Spa	21 258	17 594
NAFTAL	8 372	7 740
ENTP	4 841	2 570
ENGTP	2 914	2 723
ENSP	1 212	1 264
SGS HOLDING	1 037	1 215
TAL	1 023	253
ENAGEO	759	1 110
ENAFOR	733	647
HYPROC SHIPPING COMPANY	608	590
SOMIZ	468	445
BJSP	377	376
Other entities	2 373	1 470
Net total of deferred tax	45 975	37 997
Including SONATRACH JSC	46%	46%

3.2. Current assets

3.2.1. Inventories and work in progress

Consolidated inventory and work in progress (net) recorded an amount of

DZD 796 506 million for financial year 2020, of which 75% represents the parent company's share, i.e. an increase of 11% compared to financial year 2019.

(In millions of DZD)	2020	2019
Inventories and work in progress (Gross)	891 002	769 405
Inventories and work in progress (impairment loss)	94 496	54 342
Inventories and work in progress (Net)	796 506	715 063

Inventories and work in progress mainly involve finished hydrocarbon products and other supplies at Sonatrach JSC.

The allocation per entity is as follows:

(In millions of DZD)	2020	2019
SONATRACH JSC	600 100	520 834
SONATRACH RAFFINERIA ITALIANA (SRI)	65 413	81 921
NAFTAL	31 069	29 987
ENAFOR	23 501	20 026
ENTP	21 883	18 122
ENAGEO	15 291	12 370
Others entities	39 249	31 803
Total Inventories and work in progress	796 506	715 063
Including SONATRACH JSC	75%	73%

3.2.2. Receivables and similar assets

In 2020, receivables and similar uses remained practically stable compared to financial year 2019.

(In millions of DZD)	2020			2019
	Gross	« Impairment loss »	Net	Net
Clients	575 938	51 494	524 444	608 752
Taxes	1 758 113		1 758 113	1 554 037
Other receivables	2 300 830	159 017	2 141 814	2 195 754
Receivables and similar assets	4 634 881	210 511	4 424 370	4 358 543

In this section, 43% of the trade receivables are made up of Sonatrach JSC's clients, which decreased by 14%.

The receivable and similar assets net item is presented by entity as follows:

(In millions of DZD)	2020	2019
SONATRACH JSC	222 779	415 990
NAFTAL	41 703	14 062
CASH	32 069	29 566
ENGTP	15 331	8 094
SONATRACH RAFFINERIA ITALIANA (SRI)	15 189	23 997
SPC BVI	15 174	43 048
GCB	12 030	11 363
ENSP	11 060	1 993
ENTP	10 816	2 662
OTHER ENTITIES	148 293	57 977
Total Net Accounts Receivable And Similar Assets	524 444	608 752
Including Sonatrach JSC	42%	68%

3.2.3. Cash and near cash

Compared to the previous financial year, cash and near cash decreased by DZD 14 436 million, i.e. a variation of - 2% during the financial year 2020.

(In millions of DZD)	Opening	Movement	Translation difference	Entry in the scope of consolidation	Change in the scope of consolidation	Other Variations	Closing
Banks	678 788	-58 402	18 343	-	1 990	-	640 720
Marketable securities	11 425	9 105	1 471	-	-	-	22 001
Deposits in transit	10 415	-306	0	-	-	-	10 109
Term deposits exceeding 3 months	897	641	-	-	-	-	1 538
Accrued interest	1 894	-34	7	-	0	-	1 868
Cash, Postal current accounts	5 377	12 739	1	-	(0)	-	18 117
Cash (Gross)	708 796	(36 256)	19 822	-	1 990	-	694 353
Cash (Impairment loss)	1 329	(109)	102	-	-	-	1 321
Cash (Net)	707 468	(36 146)	19 721	-	1 990	-	693 032

La répartition des disponibilités et assimilés par entité se présente comme suit :

(In millions of DZD)	2020	2019
SONATRACH JSC	152 272	223 431
NAFTAL	204 974	168 644
SRI	57 733	24 276
SIHC	29 989	14 841
SPC BVI	27 041	19 620
ENAGEO	21 369	12 671
ENSP	20 336	18 555
SIPEX	15 027	12 606
KAHRAMA	12 981	11 610
ENGTP	12 895	13 409
SONATRACH-RÉ	11 483	6 042
ENAFOR	11 068	16 772
HYPROC SHIPPING COMPANY	10 718	9 285
HOLDING SOALKIM	9 925	26 624
AEC	8 689	12 661
Other entities	86 532	116 421
Total Net cash	693 032	707 468
Including Sonatrach JSC	22%	32%

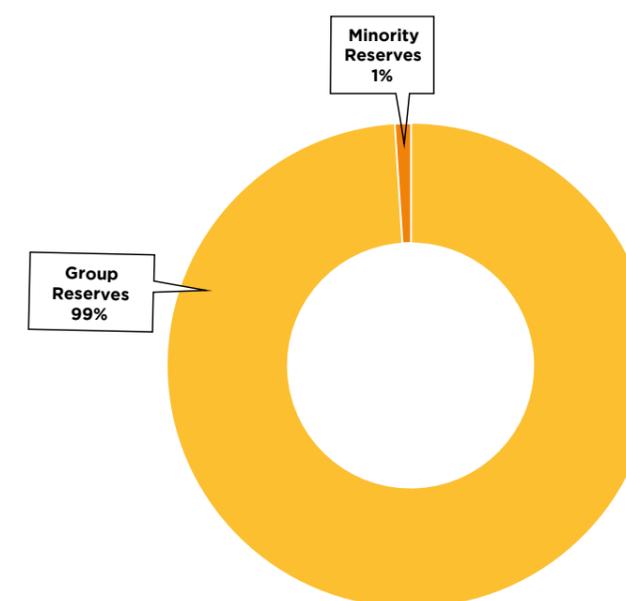
4. ANALYSIS OF LIABILITIES ACCOUNTS

4.1. Shareholders' equity

- Consolidated shareholders' equity is amounting to DZD 7 888 763 million, and consists of :
- Share Capital: DZD 1 000 000 million.
 - Consolidated reserves are amounting to DZD 1 011 275 million and are composed of:
 - Group reserves DZD 1 005 386 million
 - Minority reserves: DZD 5 889 million
 - Equity valuation difference : DZD - 34 287 million
 - Consolidated net result : DZD (- 4 216 million), composed of the following sections:
 - Group's profit / loss : DZD (-13 971 million)
 - Minority result : DZD 9 754 million

(In millions of DZD)	2020	2019	Variation
Shareholders' equity	1 000 000	1 000 000	0%
Property held by the state	-	-	0%
Uncalled subscribed capital	-	1 940	-100%
Valuation differences	187 888	124 590	51%
Issue, merger & contribution premiums	31 667	31 667	0%
Legal reserve	100 000	100 000	0%
Optional reserves and other reserves	5 597 217	5 178 495	8%
Adjustments resulting from changes	1 602	-	100%
Total shareholders' equity of Sonatrach JSC (a)	6 918 373	6 436 693	7%
Group reserves	1 005 386	1 091 790	-8%
Minority reserves	5 889	14 287	-59%
Consolidated reserves (b)	1 011 275	1 106 077	-9%
Equity valuation difference (c)	- 34 287	- 7 124	-381%
Group's profit / loss	- 13 971	373 135	-104%
Translation difference on group's profit/loss	- 2 382	- 13	18764%
Restatements & currency conversion impact on result	-	-	0%
Total group's profit / loss	- 16 353	373 123	-104%
Minority income	9 754	459	2024%
Income of all consolidated entities (d)	- 6 598	373 581	-102%
Net income of all consolidated entities	- 4 216	373 594	-101%
Total of Shareholders equity (a)+(b)+(c)+(d)	7 888 763	7 909 228	0%

Distribution of Consolidated Reserves in 2020



4.2. Non-current liabilities

At the financial year-end 2020, this item shows an amount of DZD 832 492 million compared to DZD 718 288 million in 2019, i.e. an

increase of 15.9%. This variation is mainly due to the increase in the value of loans and financial debts, as well as provisions for risks and charges.

(In millions of DZD)	2020	2019
NC Loans & financial debts	235 255	186 820
Taxes (deferred and provisioned)	219 789	201 361
NC other debts & adjusting accounts	15 107	12 074
Provisions and deferred revenue	362 342	318 033
Total of Non-current liabilities	832 492	718 288

Non-current liabilities, per entity, are as follows:

(In millions of DZD)	2020	2019
SONATRACH spa	485 813	435 561
NAFTAL	125 284	105 968
MEDGAZ	53 429	
HYPROC SHIPPING COMPANY	35 793	38 892
ENAFOR	19 955	24 984
GCB	14 957	14 164
ENGTP	12 771	14 489
SIPEX LYBIE	11 490	10 016
SONATRACH-RÉ	10 095	8 527
SPIC BV	9 438	14 193
ENTP	7 929	7 942
SBAC	7 108	6 366
SONATRACH RAFFINERIE ITALIANA (SRI)	5 732	2 517
SIHC HOLDING	5 024	3 752
Others	27 673	30 916
Total non-Current liabilities	832 492	718 288
Including SONATRACH JSC	58%	61%

4.3. Current liabilities

Current liabilities increased by DZD 47 177 million. This item mainly includes accounts payable, State's liabilities and other liabilities.

The item payable accounts and related accounts increased by 34%.

Other liabilities mostly relate to the parent company's partners in the context of production sharing contracts.

(In millions of DZD)	2019	Increase	Decrease	Operating allowances	Reversal of operating provisions	De-ferred taxes decrease	Movement	Translation difference	Change in the scope of consolidation	Reclassification	Other changes	2020
Payable accounts and related accounts	347 638	-	-	-	-	-	118 074	10 775	331	-	-	476 819
Fixed asset liabilities and related current accounts	25 256	-	-	-	-	-	(2 216)	2	(0)	-	-	23 042
Suppliers and related accounts	372 894	-	-	-	-	-	115 859	10 777	331	-	-	499 861
Current State's liabilities (including integ)	785 766	-	-	-	-	-	(121 864)	609	0	-	-	664 511
Current deferred tax liability	1 960	-	-	-	-	364	-	194	-	-	-	1 790
Taxes	787 725	-	-	-	-	364	(121 864)	804	0	-	-	666 301
Provisions for liabilities and charges	26 219	-	-	26 037	23 708	-	-	-	-	-	-	28 548
Current loans & financial debts	5 091	5 054	5 140	-	-	-	-	0	-	-	(0)	5 004
Other current debts	3 561 144						12 488	8 370	2 160	38 823	-	3 622 986
Current liabilities adjusting accounts	5 483	1 216	494	-	-	-	3	36	0	-	(0)	6 244
Advances received on orders	36 224	-	-	-	-	-	(1 793)	92	(524)	-	-	33 998
Reductions, Rebates and discounts to be granted & other credit notes to be issued	14 056	-	-	-	-	-	(1 855)	7	(4 178)	-	-	8 030
Workforce debts	46 942	-	-	-	-	-	356	12	-	-	-	47 311
Employee-related liabilities	18 493	-	-	-	-	-	2 986	94	-	-	-	21 573
Other debts	3 713 653	6 270	5 634	26 037	23 708	-	12 185	8 612	(2 542)	38 823	(0)	3 773 696
Cash liabilities	20 558	-	-	-	-	-	(18 409)	(0)	-	-	-	2 148
Total Current Liabilities	4 894 830	6 270	5 634	26 037	23 708	364	(12 229)	20 192	(2 211)	38 823	(0)	4 942 007

5. ANALYSIS OF THE CONSOLIDATED INCOME STATEMENT

decrease of 101% compared to the previous financial year.

It is made up of the following:

- The net result share of the Group that is : DZD - 13 971 million
- Minority result, i.e.: DZD 8 888 million.

The net result of the consolidated group shows a deficit of DZD 5 083 million in 2020, i.e. a

The net result (Group share) by entity is as follows:

(In millions of DZD)	2020	2019
AOA	17 672	9 565
NAFTAL	10 596	26 230
MEDGAZ	7 400	5 145
SORFERT	6 509	3 760
KAHRAMA	5 959	5 384
TG PERU	5 767	5 767
HYPROC HIPING COMAPNY	5 475	6 245
SH PEROU	5 149	5 697
ENSP	4 840	5 076
SKE (Ex SKS)	4 204	4 730
SPC BVI	4 134	5 150
ENGTP	3 262	3 637
GCB	3 194	3 311
ENERGIA DE PORTUGAL	2 759	-
ASMIDAL	2 744	1 481
TMPC	2 730	1 063
SKH	2 664	6 060
BASP - PROPANCHEM	2 167	3 297
DEM HONAIN (MBH)	1 433	1 279
ENAGEO	1 422	5 258
HELIOS	1 263	246
ASFERTRADE	1 108	908
DEM BENI SAF (BWC)	1 067	1 424
DEM MOSTAGANEM (STMM)	1 000	673
Other entities (subsidiaries and affiliates)	-118 490	261 750
Total net result by group	-13 971	373 135

5.1. The Products

5.1.1. Production of the financial year

The production of the financial year showed a strong decrease of 29.44% compared to the previous financial year, i.e. DZD 4 332 million against DZD 6 140 million.

The item Production for the financial year is subdivided as follows:

- Sales of goods, manufactured products, services and related products.
- Stocked or destocked production.
- Capitalized production.
- Operating subsidiaries.

5.1.2. Turnover

The consolidated turnover realized during the year 2020 is 3 980 445 MDZD, compared to 5 537 884 MDZD. A decrease of 28% is noticed compared to the previous year.

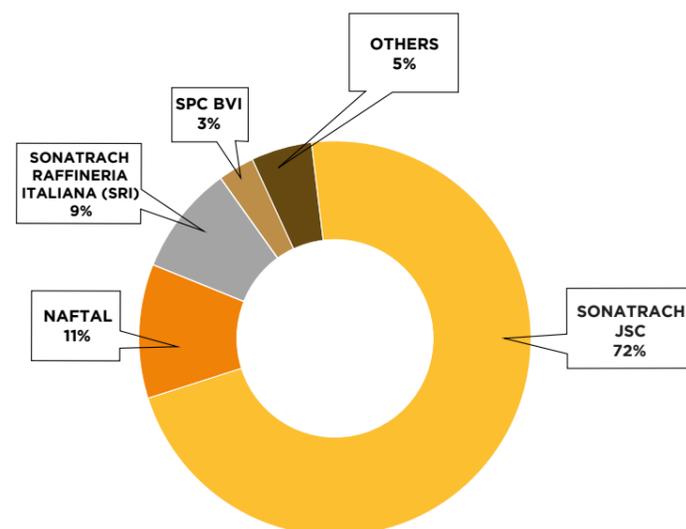
It should be noted that 71.67% of the consolidated turnover is achieved by the parent company Sonatrach.

There is a 30% drop in Sonatrach's own turnover due to the drop in the average price of the barrel of crude oil which records an average price of US\$41.9 in 2020, against US\$64.5 in 2019.

The consolidated turnover by entity is as follows:

(In millions of DZD)	2020	2019
SONATRACH JSC	2 852 658	4 055 014
NAFTAL	435 451	471 957
SONATRACH RAFFINERIA ITALIANA (SRI)	338 379	488 462
SPC BVI	131 991	309 611
MEDGAZ	34 232	-
ENGTP	31 071	18 819
SH PEROU	24 699	27 677
SGM	22 420	55 023
ENSP	21 799	8 941
SGC	13 642	-
KAHRAMA	10 079	9 176
GCB	10 067	20 911
Tassili airlines TAL	6 742	11 699
SARPI	5 181	9 361
Others	42 036	51 232
Total Consolidated Turnover	3 980 445	5 537 884
Including SONATRACH JSC	72%	73%

Consolidated turnover by entity



5.1.3. Financial incomes

Financial incomes amounted to DZD 96 601 million in 2020, i.e. an increase of 39%.

They represent, for the most part, interest on various financial investments, income from investment securities and foreign exchange gains.

(In millions of DZD)	2020	2019
Interest income on loans & other debts	6 155	1 192
Received dividends	-	-28 493
Income from other financial assets	25 144	10 949
Income from operating receivables	1 464	3 025
Exchange gains & forward transactions	47 064	60 456
Other financial incomes	15 872	22 450
Financial income from participation	95 700	69 578
Net income from disposal of non-current financial assets	902	-
Financial incomes	96 601	69 579

5.2. Expenses

Total expenses reached an amount of DZD 4 677 228 million, in 2020, against DZD 6 141 487 million in 2019. That is a decrease of 23.84%.

5.2.1. Consumption for the financial year

The consumption of the year is DZD 2 041 659 million, a decrease of 24.52% compared to the previous year.

The latter includes purchases consumed as well as services.

(In millions of DZD)	2020	2019
Consumed purchases	1 077 691	1 373 949
External services	862 461	1 188 920
Other external services	101 507	141 855
Consumption for the financial year	2 041 659	2 704 724

5.2.2. Personnel expenses

Personnel expenses marked a slight increase of 1.95% between the two financial years 2019 and 2020.

Personnel expenses by entity are as follows:

(In millions of DZD)	2020	2019
SONATRACH JSC	188 253	184 141
NAFTAL	50 176	47 674
ENTP	24 357	22 974
GCB	19 627	18 068
ENAFOR	17 231	17 291
ENGTP	16 100	16 295
SONATRACH RAFFINERIA ITALIANA (SRI)	10 160	10 140
ENSP	9 810	10 058
ENAGEO	9 710	11 391
2SP	8 092	7 525
HYPROC SHIPPING COMPANY	5 415	5 085
ENAC	4 289	4 538
TASSILI AIRLINES TAL	3 942	4 744
SOMIK	3 445	2 996
SOMIZ	3 144	2 822
SARPI	2 338	3 702
SORTAZ	2 015	2 115
STH	1 645	1 690
CASH	1 406	1 328
HESP	1 261	1 191
BJSP	1 173	1 201
BAG	828	776
SSPA MCA	723	965
TTA	526	51
KAHRAMA	516	316
MEDGAZ	508	-
G-CCO	465	566
ASFERTRADE	443	431
SAFIR	379	488
Others	2 936	2 878
Total personnel expenses	390 914	383 440
Including SONATRACH JSC	48%	48%

5.2.3. Taxes and duties

The taxes and duties section has decreased by 32.86 % en 2020 against financial year 2019.

This change is explained by a drop in the tax on oil revenues directly linked to Sonatrach JSC's turnover.

(In millions of DZD)	2020	2019
Taxes & duties on wages	810	450
Tax on professional activity	15 746	17 098
Property taxes	449	377
Non-recoverable taxes and duties on turnover	5 796	1 982
Taxes & duties other levies related to oil activity	886 140	1 345 731
Other taxes & duties	14 914	10 498
Taxes & duties	923 854	1 376 136

This item is distributed among the Group's entities as follows:

(In millions of DZD)	2020	2019
SONATRACH JSC	901 146	1 359 402
NAFTAL	6 106	6 245
MEDGAZ	4 844	-
SPIC BV	1 723	73
ENTP	1 399	1 396
SIHC HOLDING	1 143	112
ENGTP	1 052	858
GCB	969	1 001
ENAFOR	827	1 337
ENAGEO	761	1 295
ENSP	555	537
SPC BVI	497	571
HYPROC SHIPPING COMPANY	365	260
ENAC	244	337
Others	2 223	2 712
Total taxes and duties	923 854	1 376 136
Including SONATRACH JSC	98%	99%

5.2.4. Financial expenses

The level of financial expenses decreased by 46.4%, compared to 2019; from DZD 544 536 million to DZD 291 840 million. They consist mainly of foreign exchange losses and various financial expenses. The latter mainly concern the remuneration of the partner at Sonatrach JSC within the framework of the production sharing contracts in the upstream oil sector.

(In millions of DZD)	2020	2019
Interest expenses	13 180	8 113
Credit losses linked to shareholdings	-	945
Exchange losses	67 511	58 144
Net losses on disposals of current financial assets	6	-
Various financial expenses	211 144	477 334
Interests & similar expenses	291 840	544 536

La composition des charges financières par entité se présente comme suit :

(In millions of DZD)	2020	2019
SONATRACH JSC	275 426	530 486
MEDGAZ	4 898	-
SPIC BV	3 828	3 400
NAFTAL	1 925	1 589
HYPROC SHIPPING COMPANY	1 225	878
ENAFOR	1 175	1 403
SBAC	750	706
SIPEX NIGER	703	238
SGC	403	-
GCB	335	311
ENAC	241	300
SH PEROU	224	237
CASH	214	215
ENGTP	200	297
OTHERS	292	4 475
Total financial expenses	291 840	544 536
Including SONATRACH JSC	94%	97%

5.2.5. Incomes taxes

Income tax experienced a decrease of 89.41% in 2020 compared to financial year 2019, i.e. a decrease of DZD 192 468 million.

The decrease in the item 'other income taxes' is mainly due to the tax deficit that affected in 2020 the Exploration-Production activity of Sonatrach JSC subjected to the additional income tax.

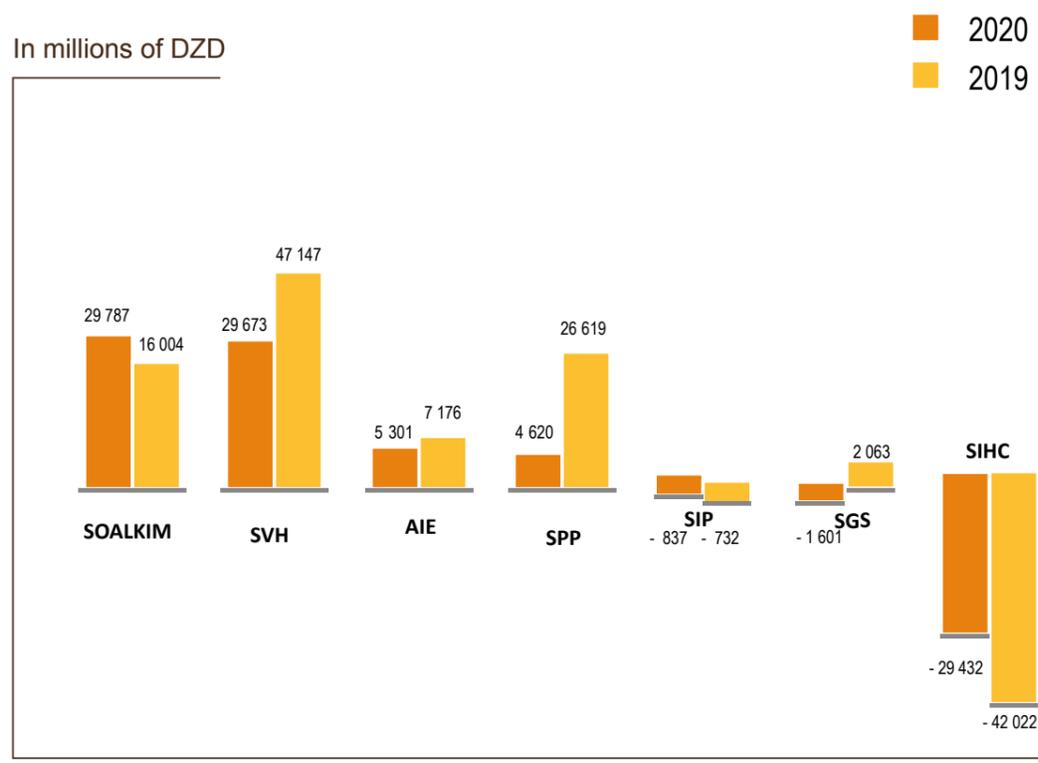
(In millions of DZD)	2020	2019
Tax payable (fiscal integration)	14 476	25 553
Deferred taxes assets	-5 660	-18 017
Deferred taxes liabilities	13 934	36 321
Other Incomes taxes	45	171 406
Incomes taxes	22 794	215 262

6. SUMMARY OF INCOMES BY HOLDING

Consolidated net incomes by Holdings are as follows:

(In millions of DZD)	Consolidated net income		Net income Group share		Minority interests	
	2020	2019	2020	2019	2020	2019
SOALKIM HOLDING	29 787	16 004	28 574	15 768	1 214	236
SVH HOLDING	29 673	47 147	29 673	47 147	-	-
AIE HOLDING	5 301	7 176	5 301	7 176	-	-
SPP HOLDING	4 620	26 619	4 526	26 496	94	124
SIP HOLDING	-837	-732	-1 158	-916	322	183
SGS HOLDING	-1 601	2 063	-1 600	2 063	-1	-
SIHC HOLDING	-29 432	-42 022	-29 432	-42 022	-	-

Evolution of the consolidated income by Holding company



7. SCOPE OF CONSOLIDATION

In 2020, the consolidation scope is composed of 414 accounting units representing the parent company Sonatrach and 117 subsidiaries and affiliates, of which 69 are fully consolidated and 49 are accounted for by the equity method.

7.1. Subsidiaries and affiliates in Algeria

Entity Name	Share Capital Owner
AIE HOLDING	100% SONATRACH JSC
SKH	10% AIE, 29% AEC, 51% AUI, 10% SONEGGAZ
KE Ex SKS (*)	49% AIE, 51% SONEGGAZ
SIP HOLDING	100% SONATRACH JSC
SOMIZ	100% SIP
SOMIK	100% SIP
2SP	98% SIP, 1% SOMIZ, 1% SOMIK
SOTRAZ	100% SIP
G-CCO	100% SIP
CASH	63.82% SIP, 18.23% NAFTAL, 11.96% CAAR, 5.98% CCR
AGLIC	42.5% CASH
BAOSEM	50% SIP, 15% Naftal, 35% Sat Info
SARPI	100% SIP
STH	60% SIP, 20% EPA, 15% EPS, 5% EPB
SVH HOLDING	100% SONATRACH JSC
HYPROC SHIPPING COMPANY	100% SVH
NAJDAMAGREB	100% HYPROC SHIPPING COMPANY
NEAL	45% SVH
SPP1	14% SVH, 20% NEAL, 51% ABENER ENERGIA, 15% COFIDES
AEC	100% SVH
KAHRAMA	100% AEC
DEM SOUK TLATA (AAS) (MYAH TILIMCANIA)	49% AEC
DEM FOUKA (MT)	49% AEC
DEM TENES	49% AEC
DEM MOSTAGANEM (STMM)	49% AEC
DEM HAMA (HWD)	30% AEC
DEM BENI SAF (BWC)	49% AEC
DEM SKIKDA (ADS)	49% AEC
DEM CAP DJENET (SMD)	49% AEC
DEM MAQTAA	43% AEC
DEM HONAIN (MBH)	49% AEC
NAFTAL	100% SVH
BAG	100% NAFTAL
STPE	50% NAFTAL, 50% SNTF
COGIZ	100% SVH

(*) Merger-takeover of the companies SKB, SKD and SKT by the company SKS whose corporate name becomes: Société Shariket Kahraba El Djazair SKE.

Entity Name (continued)	Share Capital Owner
SOALKIM	100% SONATRACH JSC
HELIOS	51% SOALKIM, 49% HELAP France
AOA	49% SOALKIM, 51% Divers
SORFERT	49% SOALKIM, 51% OCI
HELISON PRODUCTION	49% SOALKIM, 51% LIND AG
ASMIDAL	100% SOALKIM
ASFERTRADE	100% ASMIDAL
ALPHYT	100% ASMIDAL
WG SOMIAS	45% ASMIDAL
FERTIAL	34% ASMIDAL
SGS	20% ASMIDAL
ISGA	16.67% ASMIDAL, 16.67% SIP
SPP HOLDING	100% SONATRACH JSC
ENAC	100% SPP
ENAGEO	100% SPP
GCB	100% SPP
ENGTP	100% SPP
SAFIR	100% SPP
ENSP	100% SPP
BJSP	80% ENSP, 20% BAKER HUGHES
HESP	51% ENSP, 49% HALLIBURTON CORPORATION
BASP	40% ENSP, 60% HALLIBURTON
MESP	49% ENSP
ENTP	100% SPP
ENAFOR	100% SPP
FORAQUA	67% ENAFOR
SAHARA WELL(SWCS)	49% ENAFOR
SPA JSS	75% ENAFOR, 21.40% CSA, 3.60% Others
ALGESCO	24% SPP
M.I. ALGERIA	40% SPP
APEC	51% SPP, 49% BHGE
ALBARYTE SPA	20% ENAFOR, 20% ENTP, 20% ENSP, 40% ENOF
SGS HOLDING	100% SONATRACH JSC
TAL	82.44% SGS, 17.56% SONATRACH JSC
TTA	100% TAL
COMINTAL	20% SGS
SSPA MCA	99.48% SGS
IAHEF	10% SGS
AGRO ALIMENTAIRE ACTIVITE	100% SGS

7.2. Subsidiaries and affiliates abroad

Entity Name	Share Capital Owner
ANGT	25% SONATRACH JSC, 25% HYPROC SHIPPING COMPANY, 25% ITOCHU, 25% MOL
MLTC	25% SONATRACH JSC, 25% HYPROC SHIPPING COMPANY
SLTC	25% SONATRACH JSC, 25% HYPROC SHIPPING COMPANY
TRANSMED	50% SONATRACH JSC, 50% ENI
SONATRACH-RÉ	90% SONATRACH JSC, 10% SIHC Holding
MEDGAZ	51% SONATRACH JSC, 34.05% Cepsa, 14.95% GNA
MARICONSULT	50% SONATRACH JSC, 50% ENI
ENERGIA DE PORTUGAL	2.19% SONATRACH JSC
NATURGY	4.007% SONATRACH JSC
GALSI	47.06% SONATRACH JSC, 23.53% EDISON Spa, 17.64% ENEL PRODUZIONE, 11.77% HERA Spa
STEP	51% SONATRACH JSC, 49% TOTAL
SIHC HOLDING	100% SONATRACH JSC
TMPC	50% SIHC, 50% ENI
SAMCO	90% TMPC, 5% SONATRACH JSC, 5% ENI
SPTC BVI	100% SIHC BVI
SBAC	100% SPTC BVI
SBSC	30% HYPROC SHIPPING COMPANY, 20% SPTC BVI, 50% BW GAS
SIPEX	100% SIHC BVI
SH PEROU	80% SIPEX, 20% SIHC BVI
SIPEX LYBIE	100% SIPEX
SIPEX NIGER	100% SIPEX
SIPEX MALI	100% SIPEX
NUMHYD	50% SIPEX
SPI BVI	100% SIHC BVI
HELISON MARKETING	49% SPI BVI
SPC BVI	100% SIHC BVI
ALTC	100% SPC BVI
RNTC	100% SPC BVI
HMTC	100% SPC BVI
SPOTC	100% SPC BVI
SGCC	100% SPC BVI
NEW OCEAN VENTURE	100% SPC BVI
SIFID (ex SPC NA)	100% SIHC BVI
SPIC BV	100% SIFID
SGM	100% SPIC BV
BASP - PROPANCHEM	49% SPIC BV
CGC	30% SPIC BV
SGC	100% SPIC BV
GEPESA	30% SPIC BV
SRI	100% SPIC BV
SIPCO	100% SIHC BVI
SIPCO PEROU	100% SIPCO
TG PERU	21.18% SIPCO PEROU

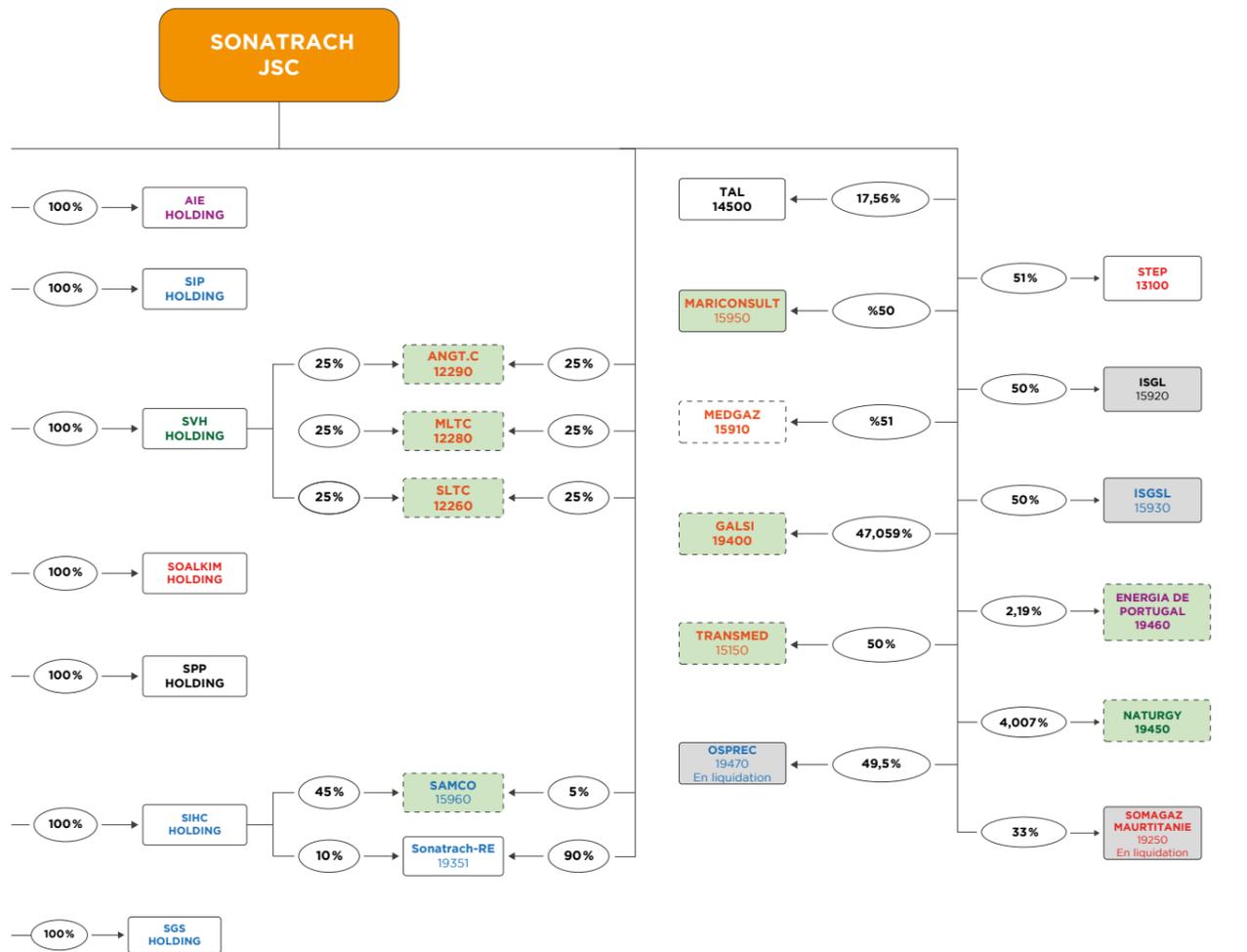
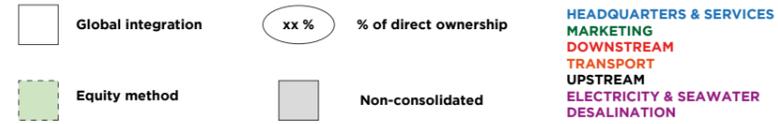
7.3. Legal organization charts

The legal organization charts below show the subsidiaries and affiliates held by the Sonatrach Group in 2020 through holding companies.

7.3.1. SONATRACH JSC

Group's simplified legal organization chart

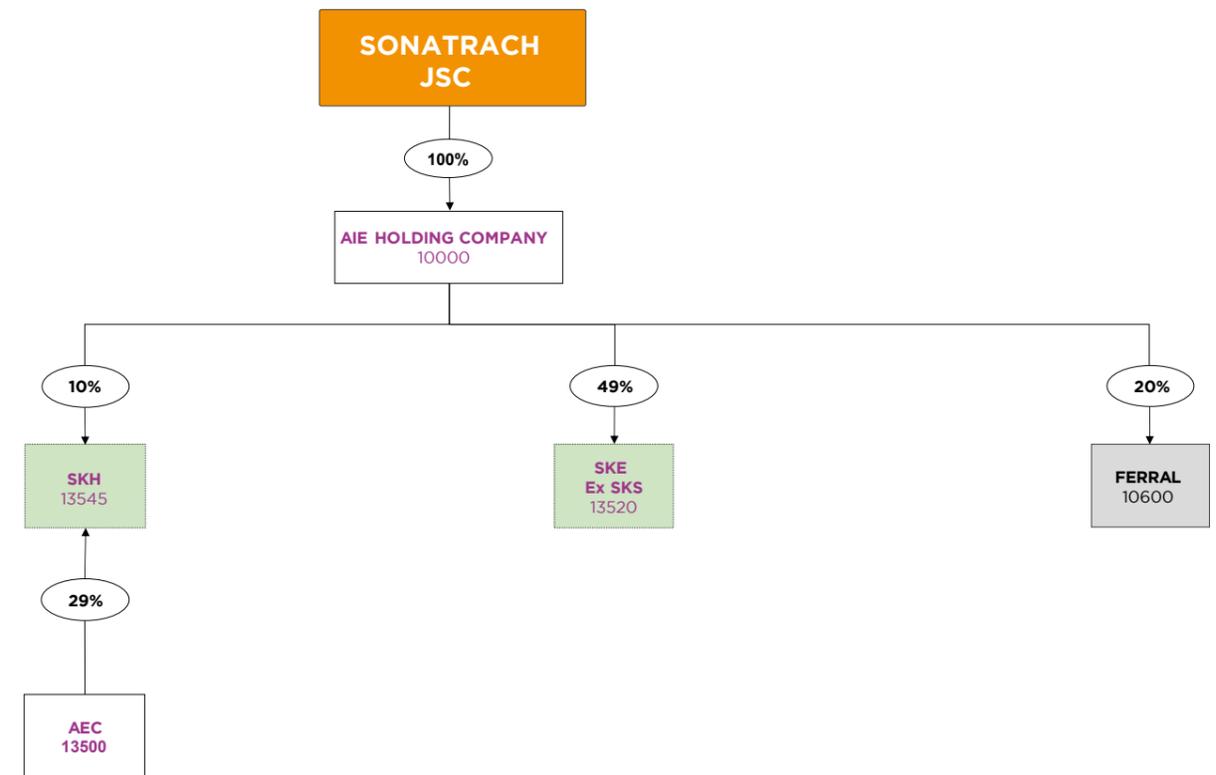
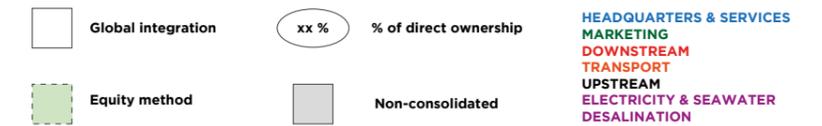
As of 31/12/2020



7.3.1.1. SONATRACH Holding Company External Industrial Activities 'AIE' JSC

AIE Holding Company Legal simplified organization chart

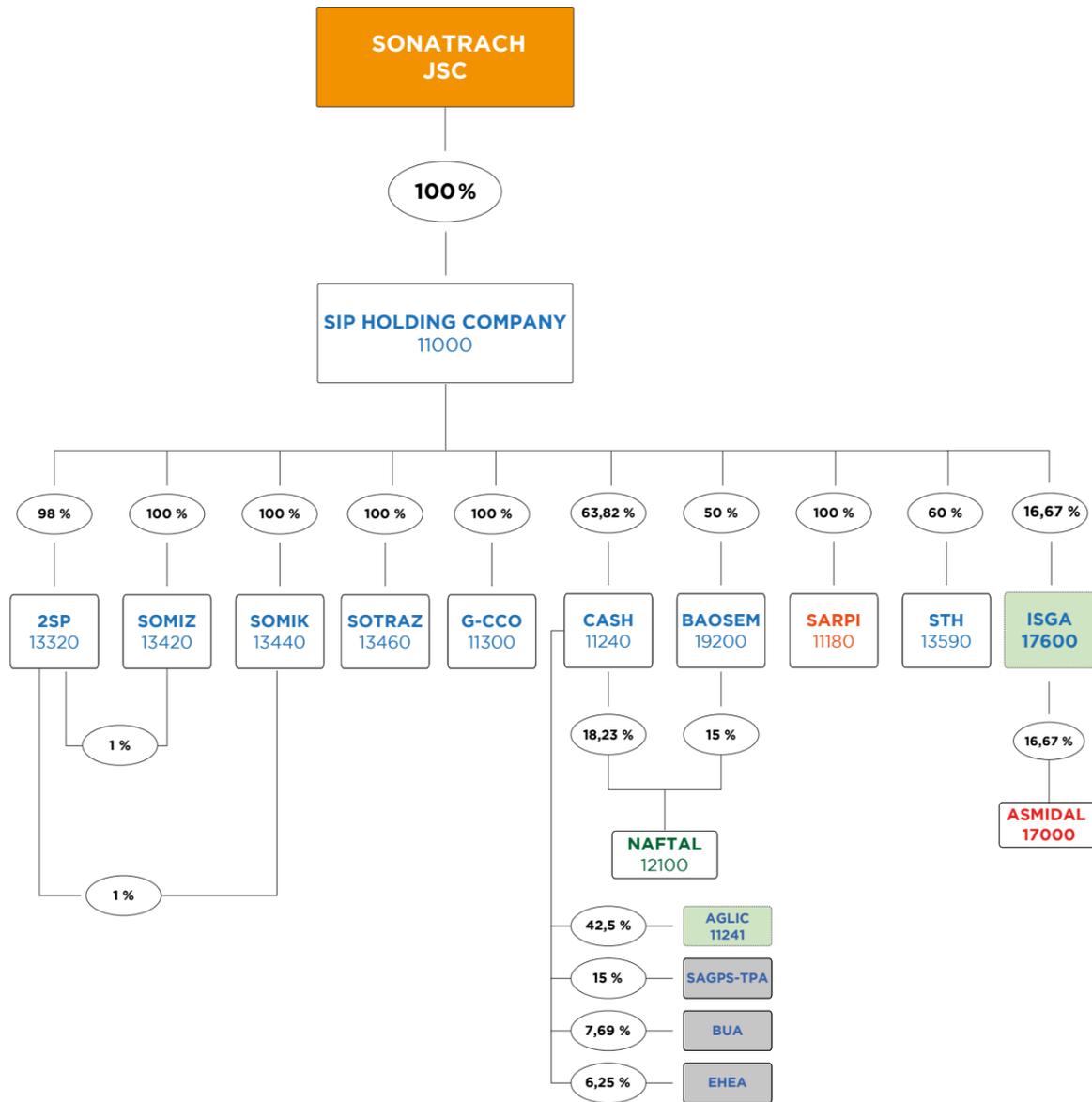
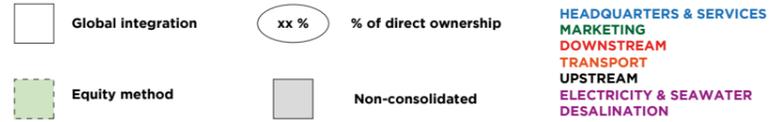
As of 31/12/2020



7.3.1.2. SONATRACH Investment and Participation Holding Company 'SIP' JSC

SIP Holding Company legal simplified organization chart

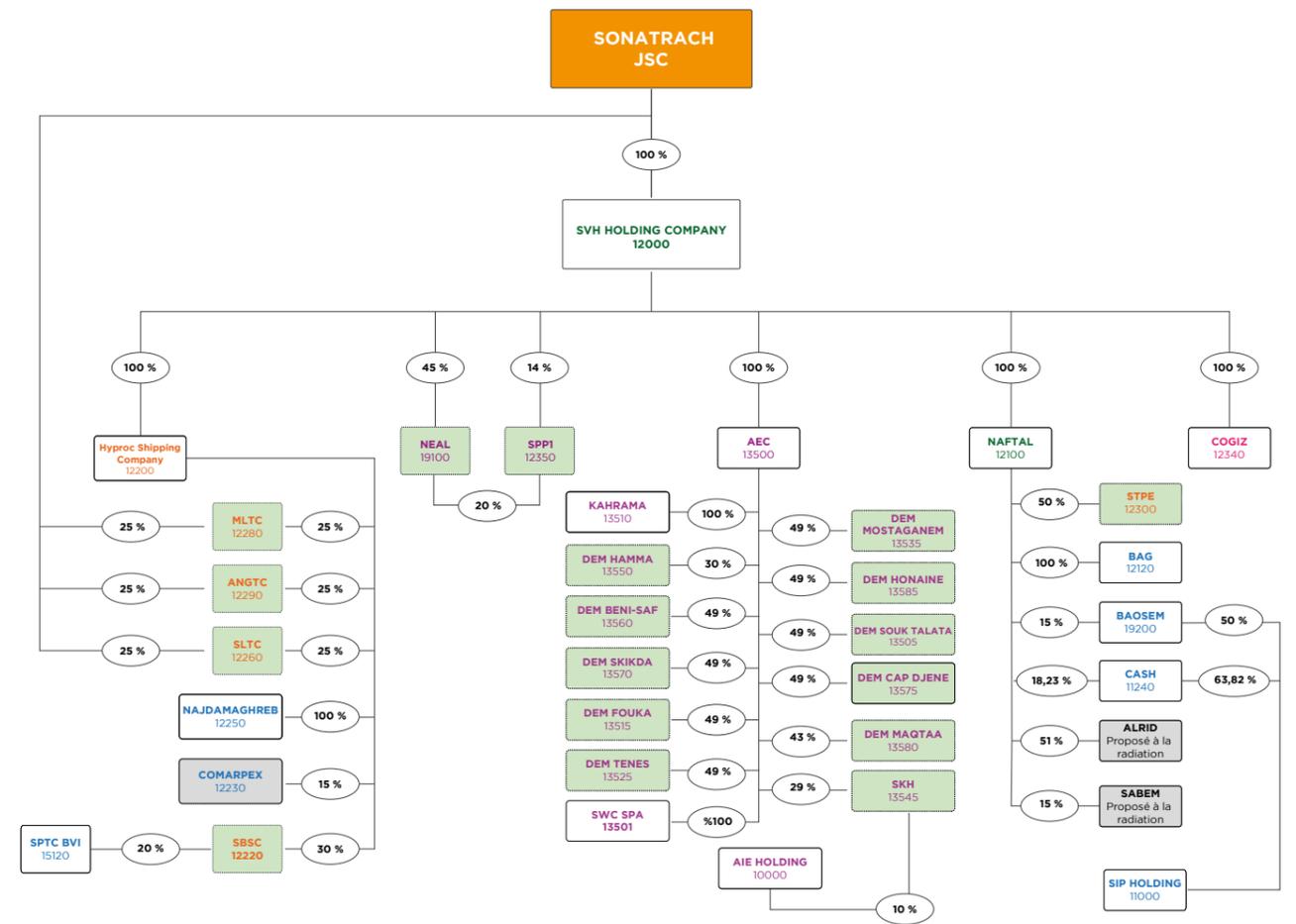
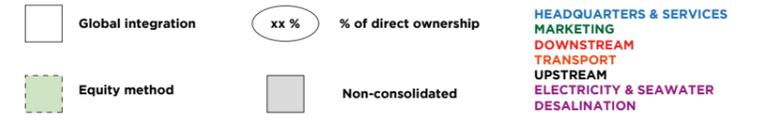
As of 31/12/2020



7.3.1.3. SONATRACH Hydrocarbon Development Holding Company 'SVH' JSC

SVH Holding Company legal simplified organization chart

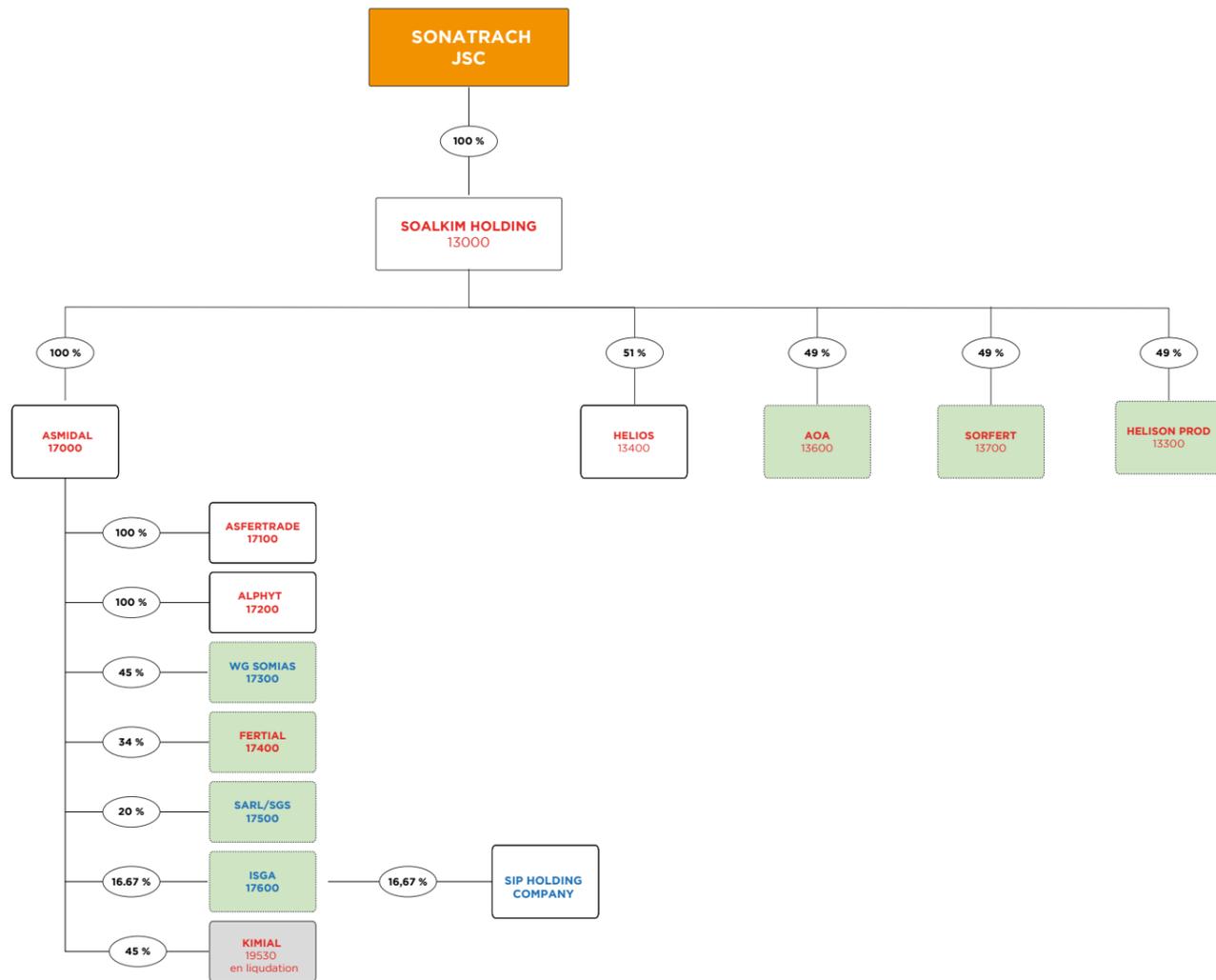
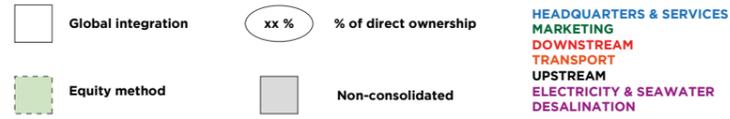
As of 31/12/2020



7.3.1.4. SONATRACH Al Kimya Holding Company 'SOALKIM' JSC

SOALKIM Holding Company legal simplified organization chart

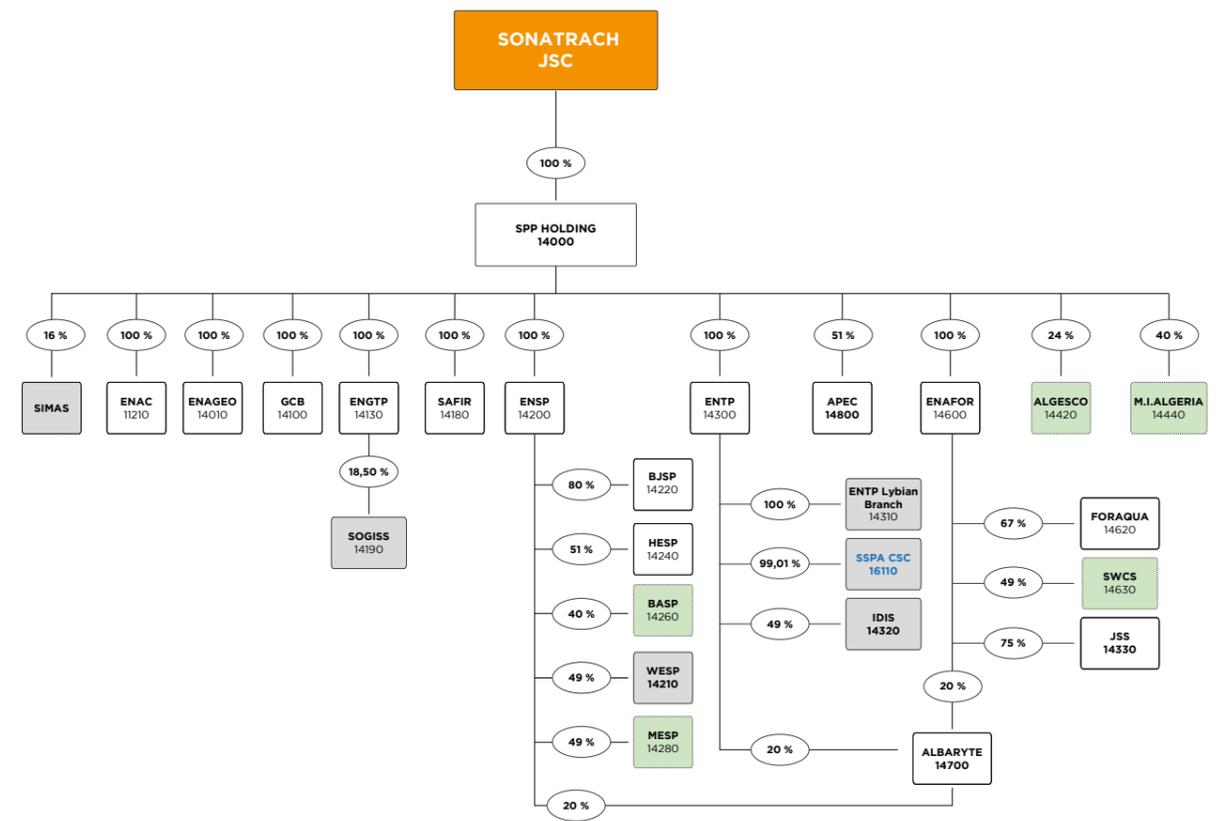
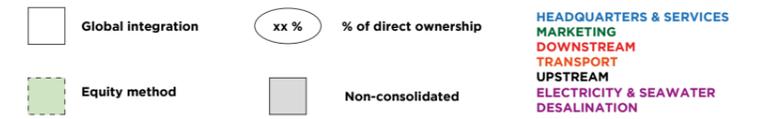
As of 31/12/2020



7.3.1.5. SONATRACH Parapetrolic Holding Company 'SPP' JSC

SPP Holding Company legal simplified organization Chart

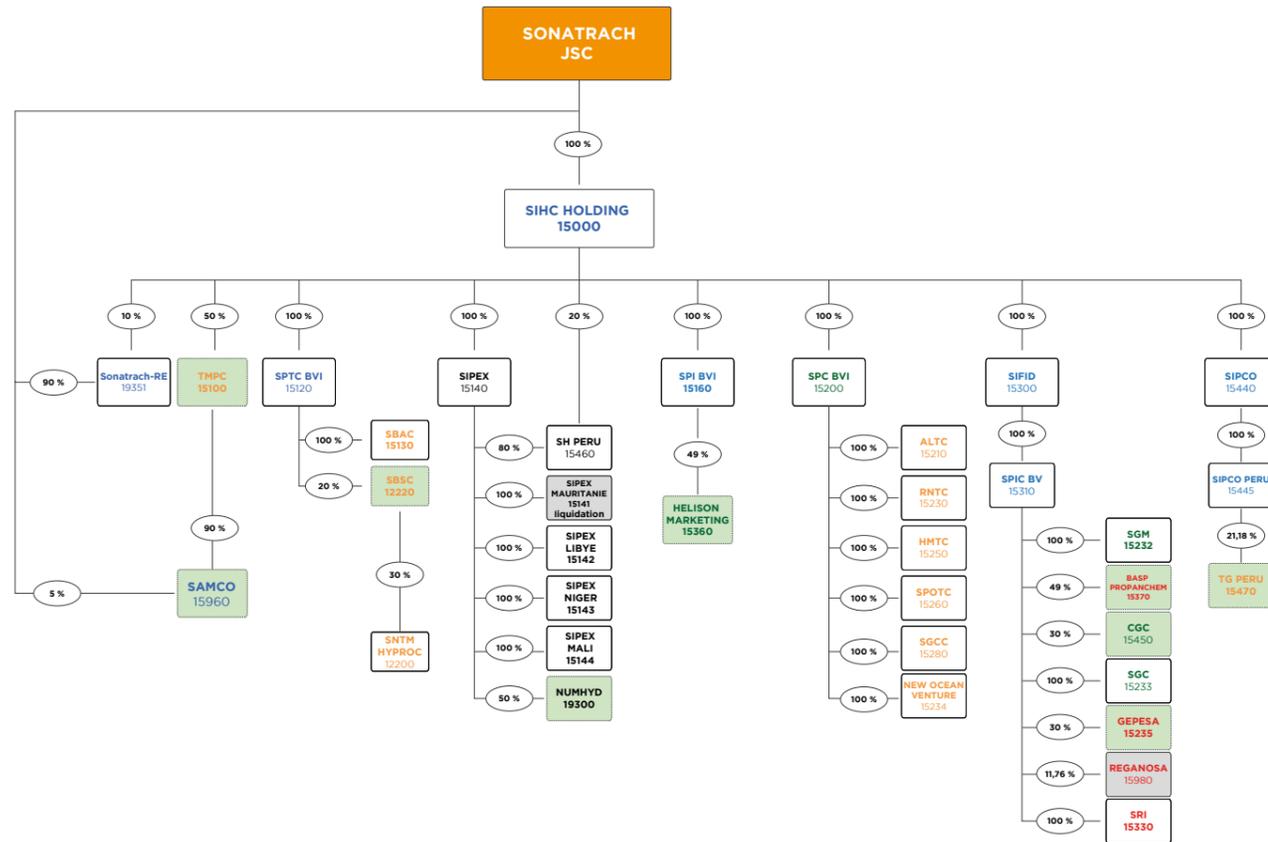
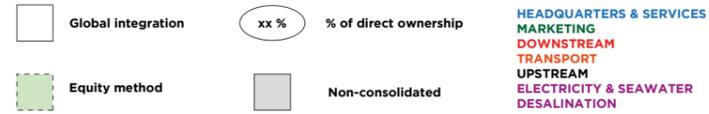
As of 31/12/2020



7.3.1.6. SONATRACH International Holding Corporation 'SIHC' JSC

SIHC Holding Company
legal simplified organization
Chart

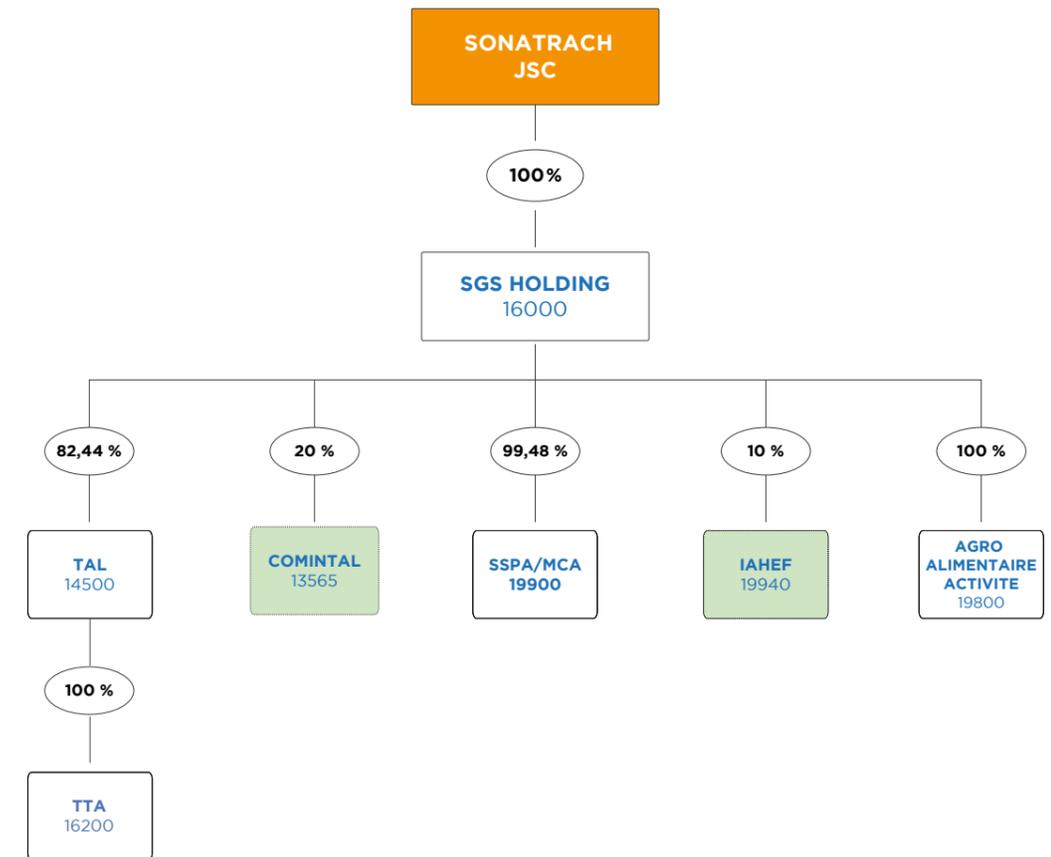
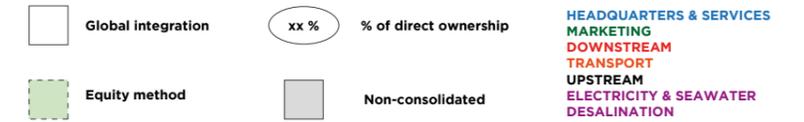
As of 31/12/2020



7.3.1.7. Holding SONATRACH Gestion et Services de Soutien « SGS » Spa

SGS Holding Company
legal simplified organization
Chart

As of 31/12/2020





Certification of the Statutory Auditors

To the members of the General Meeting of Sonatrach,

We are pleased to report to you on our audit assignment as statutory auditors.

We have examined the financial statements, as drawn up by the Board of Directors of your Company for the financial year 2020, with a balance sheet total assets/liabilities of thirteen trillion six hundred sixty-three billion two hundred sixty-one million five hundred ninety thousand nine hundred seventy-five dinars and forty-three centimes (DZD 13 663 261 590 975,43) and a net profit of negative thirteen billion nine hundred seventy million eight hundred fourteen thousand seven hundred sixty-eight dinars and fifty-two cents (DZD -13 970 814 768,52).

Our different audit works, carried out essentially on the basics of surveys, cross-checking and techniques which appeared to us to be the most appropriate, have been accomplished in accordance with the rules of normal diligence.

Based on the results of our work, we hereby certify, subject to the remarks and observations made and the aspects relating to the physical inventories of the Group's entity assets, that the consolidated financial statements of the Sonatrach Group presented are, in all material respects and with regard to the accounting rules and principles of the Algerian financial accounting system, sincere and regular, and give a true and fair view of your Group's financial standing for the financial year ending on December 31, 2020.

Algiers, June 10th, 2021

The Statutory Auditors

MEGUELLATI Enchaellah
MEGUELLATI Enchaellah
Expert Comptable - Diplômé d'Etat
Commissaire aux Comptes
Cité 214 Logis GARDIA 1 B.P. 22, MOULOUZIA

TERKMANE Rachid

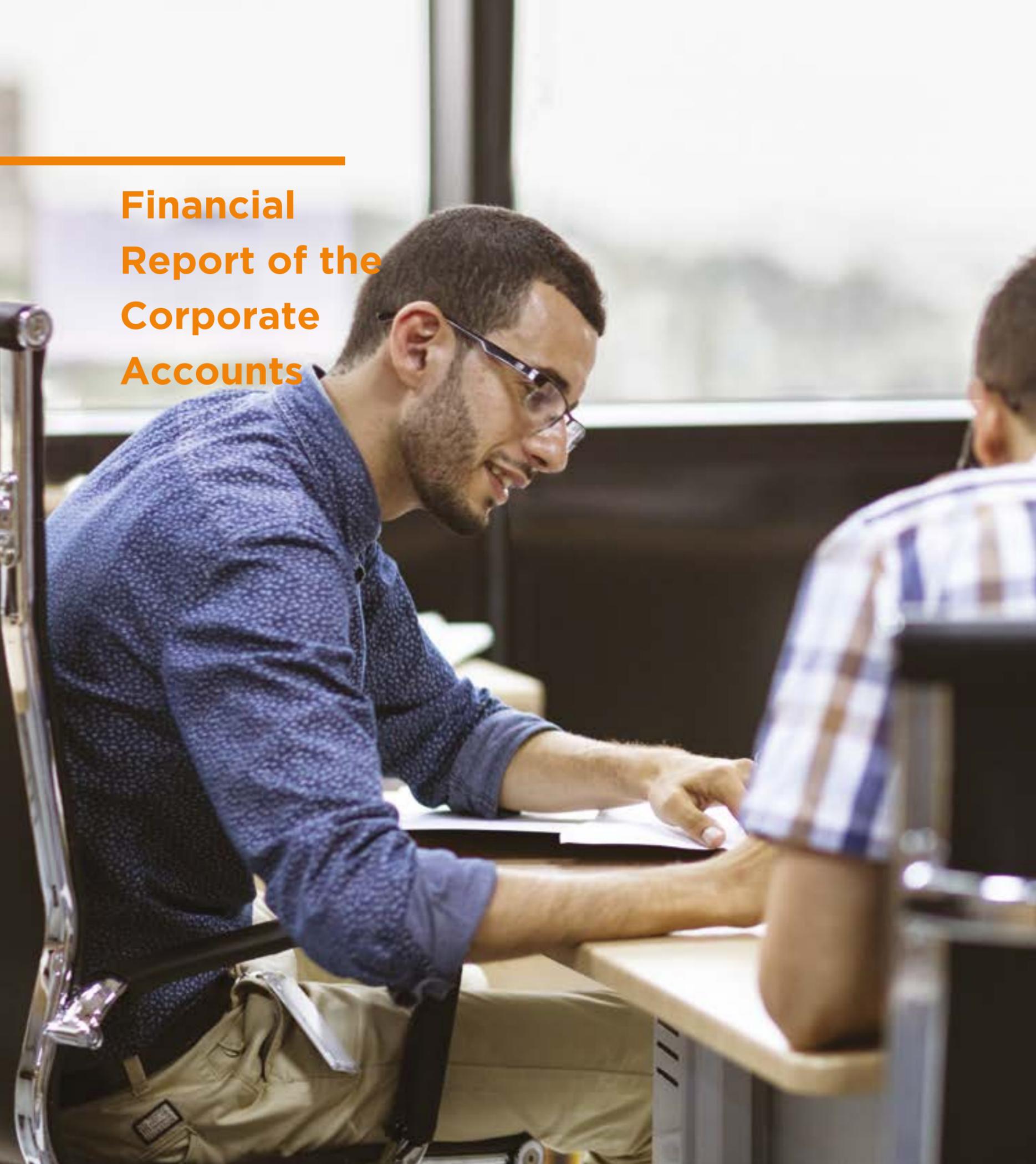


OUZZANI Samir
Samir OUZZANI
EXPERT - COMPTABLE
COMMISSAIRE AUX COMPTES
Cité des 440 Logis - B1 10, Etage 95 appartement 101
Ain Maïcha - G. de la Concorde (Algiers)

BENKHLIFA Abdelhamid

عبد الحميد بن خليفة
معاينة حسابات معتمد
Abdelhamid BENKHELIFA
Commissaire aux Comptes Agréé
ARCAM - أرقام
BP.386 GHARDAIA / Tél / Fax : 0292230721
E-mail : abdben747@gmail.com





Financial Report of the Corporate Accounts

The year 2020 was marked by the decrease in oil prices inducing a substantial reduction in the main financial indicators by bringing them to lower levels in comparison with previous years.

Thus, our Company achieved a net profit of DZD 20 billion, i.e. a decrease of 94% compared to financial year 2019.

Regarding the key indicators for financial year 2020, these are as follows:

- The average annual sales price is US\$41.91, a decrease of 35% compared to financial year 2019.
- Hydrocarbon revenues are DZD 2 809 billion, a decrease of 34% compared to financial year 2019.
- The oil tax paid is DZD 1 853 billion, a decrease of 31% compared to fiscal 2019.

SONATRACH's financial results and situation as of December 31, 2020 are presented succinctly in this report.

The corporate accounts of SONATRACH JSC, which are mandatory, are:

- Closed in accordance with the accounting principles contained in the Financial Accounting System, subject of the law N° 07-11 of November 25, 2007 and the texts taken for its application.
- Adopted according to the same methods and principles as those of the financial year ending on December 31, 2019.
- Established by its Board of Directors held on June 3, 2021 and approved by its Ordinary General Meeting held on June 10, 2021.
- Certified by the Company's Statutory Auditors to be true and fair and to reflect the financial position and assets and liabilities of the Company.

The unit of presentation of the financial statements is the billion Algerian Dinars.

2. Presentation of the financial statements

A- Assessment as at 31 December 2020

Assets	Unit: DZD Billion	
	2020	2019
NON-CURRENT ASSETS - NET	6 965	7 011
• Intangible fixed assets	19	10
• Tangible fixed assets	440	460
• Fixed assets under concession	-	-
• Fixed and complex production equipment	2 765	2 782
• Fixed assets in progress	2 289	2 211
• Investments and related receivables	769	689
• Other financial fixed assets	661	841
• Active deferred taxes	21	18
CURRENT ASSETS - NET	5 090	4 921
INVENTORY AND WORK IN PROGRESS	600	521
• Inventories of goods	-	-
• Raw materials and supplies	5	4
• Other supplies	409	353
• Product inventories	186	164
• inventories from fixed assets	-	-
• Inventories held outside	-	-
RECEIVABLES AND SIMILAR ASSETS	4 338	4 176
• Suppliers and related accounts	21	133
• Clients and related accounts	358	553
• Personnel and related accounts	-	-
• Social agencies and related accounts	6	1
• Government, public bodies	1 710	1 489
• Group and associates	2 099	1 918
• Miscellaneous debtors	136	73
• Prepaid expenses	8	9
CASH AND NEAR CASH	152	223
• Marketable securities	-	-
• Banks, financial institutions and similar institutions	138	222
• Funds	-	-
• Impressed accounts and letters of credit	14	1
TOTAL ASSET	12 055	11 932

Liabilities	Unit: DZD Billion	
	2020	2019
STOCKHOLDERS' EQUITY	6 939	6 853
• Emitted capital	1 000	1 000
• Premiums & reserves	5 917	5 435
• Net income	20	338
• Retained earnings	2	81
NON-CURRENT LIABILITIES	486	436
• Provisions for charges	275	238
• Taxes (differed and provisions)	210	197
• Borrowings and financial debts	1	1
• Other non-current debts	-	-
CURRENT LIABILITIES	4 630	4 642
• Suppliers and related accounts	388	363
• Clients and related accounts	12	14
• Personnel and related accounts	25	26
• Social agencies and related accounts	8	9
• Government, public bodies	619	752
• Group and associates	3 558	3 440
• Miscellaneous creditors	18	18
• Deferred income	-	-
• Cash liabilities	2	20
TOTAL LIABILITIES	12 055	11 932

B. Income statements as at December 31st 2020

DESIGNATION	Unit: DZD Billion	
	2020	2019
Sales and related products	2 855	4 303
Stored or destocked production	28	5
Fixed asset production	284	444
Operating subsidies	52	141
1. PRODUCTION OF THE FINANCIAL YEAR	3 220	4 893
Consumed purchases	202	336
External services	989	1 338
Other external services	132	157
2. TOTAL EXPENSES OF THE FINANCIAL YEAR	1 324	1 831
3. ADDED-VALUE	1 896	3 062
Personnel expenses	188	184
Taxes, duties and similar payments	901	1 359
4. GROSS OPERATING SURPLUS	807	1 519
Other operational products	147	146
Other operational expenses	58	63
Amortization, provision and impairment loss expenses	749	710
Reversal of impairment losses and provisions	22	67
5. OPERATIONAL INCOME	169	958
Financial products	139	114
Financial expenses	275	530
6. FINANCIAL INCOME	-137	-416
7. ORDINARY INCOME BEFORE TAX (5 + 6)	32	542
Taxes payable on ordinary income		171
Deferred taxes (variations) on ordinary result	10	33
- TOTAL PRODUCTS FROM ORDINARY ACTIVITIES (c)	3 528	5 221
- NET INCOME FROM ORDINARY ACTIVITIES (d)	3 506	4 883
8. INCOME FROM ORDINARY ACTIVITIES (c-d)	22	338
Extraordinary items (Products)		
Extraordinary items (Expenses)	2	
9. EXTRAORDINARY INCOME		
10. FINANCIAL YEAR NET INCOME	20	338

C. Cash Flow Statement as to December 31st, 2020

Designation	Unit: DZD Billion	
	2020	2019
Cash flow from operating activities		
Net income for the financial year	20	338
Adjustment for:		
• Depreciation and provisions	704	608
• Changes in deferred taxes	10	33
• Share of subsidies transferred to income	51	141
• Changes in inventories	-81	-65
• Change of clients and other receivables	116	-125
• Change of suppliers and other payables	-338	-702
• Gains or losses on disposals, net of tax	1	-
• Retained earnings & liaison accounts	-79	81
Net cash flow from operating activities (A)	404	310
Cash flow from investment activities		
• Acquisitions of intangible and tangible assets	-1 348	-2 485
• Disposals of intangible and tangible assets	642	1 781
• Acquisitions of financial assets	-112	-659
• Disposals of financial assets	217	147
• Equipment and Investment subsidies		
Net cash flow from investment activities (B)	-601	-1 216
Cash flow from financing activities		
• Change in shareholders' equity	482	272
• Change in borrowings and financial debts		
• Income appropriation (n-1)		
• Coupons and dividends		-150
• Optional reserves	-338	-265
Net cash flow from financing activities (C)	144	-143
Cash flow for the period (A+B+C)	-52	-1 049
Opening balance	203	1 252
Closing balance	151	203
Change in cash flow for the period	-52	-1 049

D. Statement of changes in shareholders' equity as at December 31st 2020

Designation	Share Capital	Merger premium	Valuation difference	Unit: DZD Billion	
				Reserves and incomes	Total of shareholders' equity
Balance as at December 31st 2018	1 000	33	116	5 428	6 577
• Change in accounting methods				-	-
• Correction of significant errors				81	81
• Profits or losses unrecognized In the Statement of Incomes		-1	9		8
• Paid dividends				-150	-150
• Properties conferred by the State				-	-
• Net income for the financial year				338	338
Balance as at December 31st 2019	1 000	32	125	5 697	6 854
• Change in accounting methods				-	-
• Correction of significant errors				2	2
• Profits or losses unrecognized In the Statement of Incomes			63		63
• Paid dividends				-	-
• Properties conferred by the State				-	-
• Net income for the financial year				20	20
Balance as at December 31st 2020	1 000	32	188	5 719	6 939

3. ACCOUNTING RULES AND PRINCIPLES

A. Accounting rules and methods

Accounting methods are the specific principles, bases, procedures and practical rules applied to prepare and present the financial statements; they are applied on a permanent basis by Sonatrach.

When a specific transaction is not covered by any of the financial accounting system rules, the Company uses its judgment to define and implement accounting methods that provide relevant and reliable information.

The objective of the financial statements is to provide useful information about:

- The Company's financial position (Balance Sheet).

- Performance (Income Statement).
- Changes in the cash position (Cash Flow Statement).
- Detailed changes in equity (Statement of Changes in Equity).

In accordance with Law 05-07 of April 28, 2005, on Hydrocarbons, as amended and supplemented, SONATRACH's accounts are kept by operating perimeter and by pipeline transport system. It is also kept by refining, petrochemical, liquefaction and hydrocarbon processing facility.

The basic methods used for the evaluation and presentation of the items recorded in the accounts are defined as follows:

Intangible fixed assets	Production/acquisition cost
Tangible fixed assets	Production/acquisition cost
Financial fixed assets	Acquisition/right value cost
Amortization of fixed assets	Linear
Depreciations	Applicable to all concerned categories
Breakdown by components	Applicable to some industrial facilities
Re-assessment	Option not selected
Raw material and goods inventories	Valuation at purchase cost
Inventory of finished products	Valuation at production cost
Outgoing inventories	Weighted average unit cost
Follow-up of inventories	Permanent inventory
Change in accounting method	Impact on retained earnings
Corrections of significant errors	Impact on retained earnings
Receivables and Payables	Conversion at the exchange rate of 31/12/N for receivables and payables denominated in foreign
Income statements	Presentation in list
Cash-flow statement	Indirect method

B. Accounting principles

INTANGIBLE FIXED ASSETS

Intangible fixed assets include computer software or other operating licenses and mining deposit development costs.

The necessary expenses for the development phase of an internal project are expenses to be used as intangible fixed assets when all the conditions below are met simultaneously:

- The development project is clearly identifiable.
- The intention to achieve the project for an internal use or external sale.
- The availability of all the essential resources to the completion of the project.
- The existence of a market to sell the project or a proof of its usefulness internally.
- Project expenditures are reliably estimated.

If these conditions are not met, costs incurred are not capitalized.

Intangible fixed assets are entered at their directly attributable cost.

TANGIBLE FIXED ASSETS

The tangible fixed assets are entered at their directly attributable cost, including all acquisition and installation costs, paid

taxes, non-recoverable taxes and other direct expenses.

The following principles are applicable to gather or separate tangible fixed assets:

- Items of minor value and those consumed during the financial year are not entered as fixed assets.
- Spare parts and specific maintenance equipment are entered as tangible fixed assets when their use is related to certain fixed assets, and if they are used on more than one financial year.
- The components of an asset are handled as separate elements if they have different duration of utility or provide economic advantages according to a different rhythm.

HYDROCARBON PRODUCTION ASSETS

Development costs (development-wells drilling and the construction of production capacities) are capitalized at their execution cost.

All the materials, parts or elements, which even separable by nature, are technically essential to the operation of the production assets, and are incorporated in this unit in an irreversible way, and recorded at the cost of acquisition or the cost of achievement.

Major maintenance tasks on wells, in particular Workover and Snubbing, intended to maintain or improve the recovery rate, are capitalized at their execution cost.

Costs linked to sites abandonment and restoration are not capitalized, but are subject to the constitution of annual provisions noted as operating expenses, in accordance with the provisions of law 05-07 dated April 28th 2005, relating to hydrocarbons, amended and supplemented.

The production assets of hydrocarbons are amortized on a straight line basis according to the rates defined by the above mentioned law:

- Unproductive development wells: 100%
- Productive development wells : 12.5%
- Other wells (water, injection, etc.):12.5%
- Surface facilities : 10%

Transactions Related to Production Sharing Contracts

Exploration, development and exploitation costs are entered into the relevant fixed assets or expense accounts against recognition of a debt to the partner of Sonatrach.

Exploration costs which did not result in commercially exploitable reserves are depreciated 100% in exchange for cancelling the debt attached to them.

The repayment of debt to partners under production sharing contracts is conditional upon sufficient production in accordance with the production sharing terms defined in the association contract..

The remuneration of partners (profit oil) determined in accordance with the

production sharing terms as defined in the association contract, is entered into the accounts as financial expenses against the recognition of a debt to the partner of Sonatrach.

Debt to the partner is reduced each year from the partner's production share (cost oil) as repayment.

A 38% net income tax as well as a production share as windfall profit tax (WPT) are withheld by Sonatrach then repaid to the Government, under the provisions of laws 86-14 and 05-07, relating to hydrocarbons.

INVENTORIES AND WORK IN PROGRESS

Inventory cost includes all costs incurred to bring the inventories to their present location and condition:

- Acquisition costs (purchases, consumables, expenses related to purchases ...);
- Processing costs (personnel expenses and other variable or fixed costs except for expenses attributable to a sub-activity of the entity);
- Overheads, financial and administrative expenses directly attributed to inventories.

Financial Assets

The financial assets held by Sonatrach are recorded, at the date of their entry into the assets, at their acquisition cost, including brokerage fees, non-recoverable taxes and bank charges. They consist of :

- Equity securities and related receivables, when owned for long-term are deemed beneficial to the entity's business, especially because they enable the company to exercise influence on the company issuing the shares or to control it. That is the case for investments in subsidiaries, associated companies or joint ventures.
- Investment securities, providing sooner or later a satisfactory profitability to the entity, but without interference into the management of companies whose securities are held.
- Other investment securities, representing capital shares or long term investments which the entity is entitled to, and intends or is compelled to keep until their maturity.
- Loans and receivables issued by the company and which it does not intend or have the possibility to sell in the short term. Loans for more than 12 months granted to third parties.

Monetary Elements

Foreign currencies transactions are converted at the exchange rate prevailing at the transaction date.

Differences between the values initially entered in the accounts at historical cost and those resulting from the conversion at the inventory date are recorded as expenses or financial income for the financial year.

Exchange differences related to a monetary item which, in essence, is an integral part of a net investment in a foreign entity, are:

- Entered to the company's financial statement shareholders' equity until the disposal of this net investment.
- Upon disposal of this investment, are recognized as revenue or expenses.

Turnover

Turnover corresponds to sales of goods and production sold of goods and services, evaluated on the basis of the sale price exclusive of tax, and achieved in the course of its ordinary business.

- Hydrocarbon domestic market: Sales, in order to meet domestic market needs, are valued at prices notified by regulation.

- Hydrocarbon external market : Export sales are valued at the international market prices or contract price depending on products.

Provisions for Benefits

Granted To Employees

At each end of a financial year, a provision is recognized and registered to cover the amount of the Company's commitments in respect of end of career allowances, the awarding of loyalty medals or similar benefits to its employees.

These provisions are determined on the basis of the present value of all obligations to employees using calculation assumptions and appropriate actuarial methods.

These provisions are adjusted annually.

Retained earnings

The retained earnings consist of the unallocated part of the results achieved by the company as well as the amounts generated by the change of method and correction of significant errors.

The decision to make such a registration is up to the Ordinary General Meeting.

Valuation Difference

The valuation difference results from the difference between the fair value and the net book value of financial fixed assets as well as net investments in foreign subsidiaries.

Extraordinary Profit or Loss

Extraordinary profit or loss arises from income and expenses corresponding to events or transactions clearly distinct from the company's ordinary activity, and presenting an exceptional nature.

Tax System

Sonatrach's activities are subject to two (2) tax systems, namely: an oil taxation and an ordinary taxation of common law.

- Oil Taxation

Sonatrach is subject to the oil taxation system in accordance with provisions of law 05-07 dated April 28th 2005, amended and supplemented, on hydrocarbons, which provides for the payment of:

- A royalty on all extracted hydrocarbon quantities discounted at the measuring point of each exploitation perimeter, valued at the price notified by ALNAFT agency with respect to exported products, and by ARH (Hydrocarbon Regulatory Authority) with respect to products sold on the domestic market. The royalty rates depend on the exploitation perimeter classification zone, as well as on the daily production portions. They vary between 5.5% and 23%.

The hydrocarbon production royalty, at the accounting level, is recorded in the 'Services' account. It is not treated as a tax, but as an operating expense.

- A Petroleum Income Tax (PIT) at a rate varying between a minimum of 30% and a maximum of 70%, fixed according to the initial cumulative production value, applied to the calculation basis of royalty (production value).
- A surface tax on perimeters that are in the research and/or the exploitation phase, at a unit amount per km² (cf. article 84 - law 05-07).
- A 30% complementary income tax on hydrocarbon production activities, applicable to the upstream segment (in own effort and in partnership).
- A tax on exceptional profits applicable to the production share going to foreign partners when the monthly arithmetic average of Brent oil prices exceeds \$30 per barrel.

Law 05-07 relating to hydrocarbons also provides for the payment of other duties and taxes, namely:

- Flaring tax.
- Fee to transfer rights.
- Water use tax.
- Greenhouse gas emission credit tax.

- The Common Law Taxation

Common law taxation is applied to all Sonatrach activities except hydrocarbons exploration and exploitation.

These entities are:

- Transportation via Pipeline: this activity is subject to the tax on professional activity at a 3% rate, and to the corporate profit tax (CPT) at a 26% rate.

- Natural gas liquefaction and separation from LPG to butane and propane: CPT at a 26% rate.
- Refining and petrochemicals: CPT at a 26% rate.
- Incomes earned by the head office: Dividends, interest and capital gains: 26%.



4. Key Financial Data

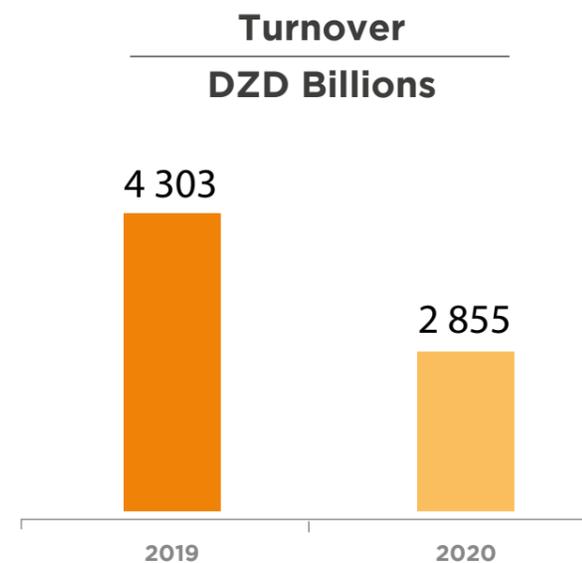
1- Total turnover

The global turnover achieved includes hydrocarbon production, resales without further processing, and services provided to third parties.

This turnover reached DZD 2 855 billion against DZD 4 303 billion in 2019, i.e. a decrease of 34%.

Exports in financial year 2020, expressed in billions of US \$, reached 20.07 against 32.98 in 2019, i.e. a decrease of 39%.

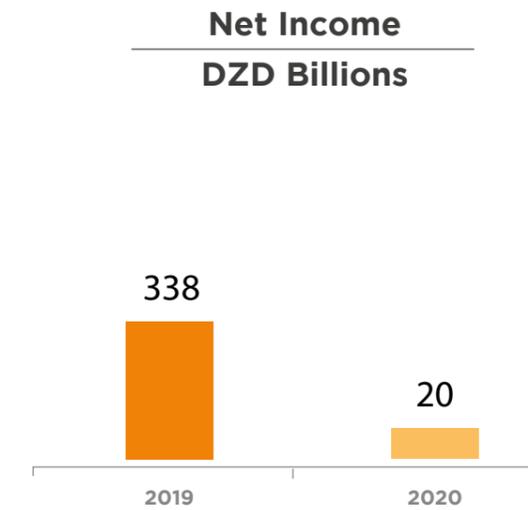
Sales on the domestic market amounted to DZD 275 billion, a decrease of 10% compared to 2019.



2- Net Income

The Company's net income decreased from DZD 318 billion to DZD 20 billion.

This decrease is explained essentially by the decrease in turnover induced by the stagnation of the world economy due to the COVID-19 pandemic.



3- Acquisitions of fixed assets

The acquisitions of fixed assets during the financial year consist of acquisitions from third parties as well as the Company's production for its own needs, amounting to DZD 763 billion compared to DZD 926 billion in 2019.

The financial fixed assets dropped from DZD 1 530 billion in 2019 to DZD 1 431 billion in 2020, i.e. a decrease of DZD 99 billion.

4- Cash and cash equivalents for the financial year

Cash and cash equivalents as at 12/31/2020 are about DZD 152 billion, i.e. a reduction of DZD 71 billion in comparison with financial year 2019 due to a decline in hydrocarbon revenues.

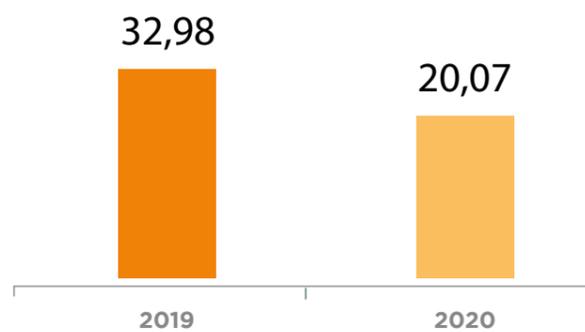
A. Sales

	2020		2019	
	Export in USD	National in DZD	Export in USD	National in DZD
Crude oil	5 510		11 233	
LNG (Condensate)	1 134		2 192	
NG	4 394	62 313	6 492	69 522
LPG (Butane / Propane)	1 822	6 655	2 434	6 643
LNG	2 468		3 805	
Refined products	4 722	204 307	6 815	229 635
Petrochemical products	17	1 936	15	529
TOTAL	20 067	275 211	32 984	306 328

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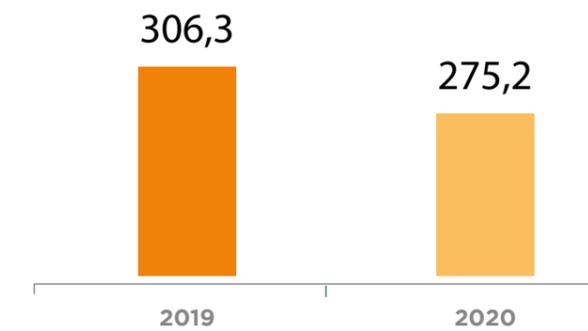
Exports

Billion USD



Domestic market

Billion DZD



B. Off-balance sheet commitments

Off-balance sheet commitments are rights and obligations whose effects on the amount or composition of the assets are subject to the fulfilment of subsequent conditions or operations.

Commitments include contingent liabilities, which are defined as follows:

- Either a potential obligation of the entity towards a third party resulting from events whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain

future events that are not completely under the control of the entity.

- Or an obligation of the entity towards a third party that is not likely or certain to result in an outflow of resources without at least an equivalent compensation expected from the third party.

The status of the remaining balance of commitments as at December 31st, 2020 is DZD 63 billion, representing guarantees given to financial institutions and customs administration, namely: collection credits, customs guaranties, letters of guarantee, documentary credits and guarantee bonds.

5. Note to the financial statements

A. Capitalized production

This section includes expenses for the achievement of investments requiring the mobilization of own resources in addition to the services of third parties, namely in the fields of drilling and exploration.

It is set at DZD 284 billion in 2020, compared with DZD 444 billion in 2019.

B. Financial products

Financial income reached DZD 139 billion compared to DZD 114 billion in 2019, thus marking a 22% rise.

This section includes income from investments that amount to DZD 79 billion, as well as the following sections:

• Foreign exchange gains	30.5
• Other financial incomes (interests of current accounts)	14.6
• Income from financial assets	10.4
• Income from receivables	3.3
• Net profits on disposal of financial assets	0.9

C. Consumptions for the financial year

Consumptions for the financial year reached DZD 1 324 billion and include

the purchase of materials and supplies as well as all the services, they are distributed as follows :

• Consumed purchases	202.4
• External services	525.8
• Royalty	463.3
• Other external services	132.1

The item 'Consumed purchases' consists of:

- Consumed goods: they represent goods resold without further processing. Such goods consist mainly of imported petroleum products (petrol and diesel) to be resold in the domestic market.
- Consumed Materials and supplies: include mainly spare parts, chemicals, construction materials, casing and tubes.

D. Added-value

Added value which represents the difference between production and total annual consumptions recorded a decrease of 38% compared with 2019, passing from DZD 3 062 billion to DZD 1 896 billion, it breaks down as follows :

• Production of the financial year	3 220
• Consumption of the financial year	1 324

E. Personnel expenses

Personnel expenses increased by DZD 4 billion in comparison with 2019, going up from DZD 184 billion to DZD 188 billion

F. Taxes, duties and similar payments

This section recorded an amount of DZD 901 billion, DZD 826 billion (92%) of which are tax on oil income.

G. Amortization and provision expenses

Amortization and provisions expenses for financial year 2020 are DZD 749 billion, showing an increase of 5% compared to financial year 2019.

H. Financial expenses

This item recorded an amount of DZD 275 billion, constituted mainly of payment to partners and foreign exchange losses related

to the discounting of receivables and payables in foreign currencies.

Payment to partners (Profit oil) decreased from DZD 470 billion in 2019 to DZD 206 billion in 2020, that is to say a 56% decrease

DZD 66 billion represent the exchange losses on foreign currency assets and invoices in foreign currencies recorded in the balance sheet (receivables and payables), based on the exchange rate as at 12/31/2020.



6. Other Information:

Insurance

As part of its policy of protecting the Group's assets, Sonatrach establishes insurance coverage programs for both (02) categories of risks generated by its activities and those of its subsidiaries.

They include industrial risks, ordinary risks and protection of people.

In 2020, industrial risk insurance policies were renewed, and ordinary risk insurance and protection of people contracts were automatically renewed for the following periods:

- Industrial risks from July 1st 2020 to June 30th 2021.
- Simple risks from July 1st 2020 to June 30th 2021.
- Protection of people from January 1st 2020 to December 31st 2020.

I. Industrial Risks

The insurance coverage of this type of risks resulted in the following insurance contracts:

- 'All Risks Except' (ARE) insurance for industrial facilities and complexes. The insurance premium for the period 2020 - 2021 was USD 47 306 million, i.e. an increase by 51 % compared with the period 2019 - 2020.
- 'Cost Of Control' Insurance (COC), the amount of the premium over the period

2020 - 2021 was USD 0.986 million, i.e. a 13% decrease in comparison with the period 2019 - 2020.

- Drilling Rig Insurance (DR), the premium amount for the period 2020 - 2021 was USD 2 491 millions, i.e. a 54% increase in comparison with the financial year 2019 - 2020.
- General Civil Liability Insurance, the premium portion amount that is transferred to the international market was USD 0.947 million for the period 2020 - 2021, i.e. a 44% increase in comparison with the period 2019 - 2020. As to the portion of the premium allocated to the domestic market, it increased by DZD 7 million from DZD 25 million to DZD 32 million i.e.28%.
- Insurance Civil Liability Victualing, the amount of the premium over the period 2020 - 2021 was USD 0.175 million, i.e. a 16.66 % increase compared with the period 2019 - 2020.

With the exception of the 'Cost Of Control' coverage, the other policies have experienced premium increases, particularly the 'All Risks Except' and 'General Civil Liability Insurance' policies. This is explained by the tightening of the reinsurance market following:

- Poor technical results due to a significant loss ratio throughout the world (Down Stream Sector).
- The impact of the COVID-19 health crisis.

For all these covers, the insured values have increased from USD 88 907 billion for the period 2019 -2020 to USD 91 036

billion for the period 2020 - 2021, i.e. a change of about 1.02%.

It should be noted that the allocation of various risks is split between the domestic market (local insurers and the 'Compagnie Centrale de réassurance'- "CCR"), 'Sonatrach Ré', the reinsurance captive based in Luxembourg, and the international reinsurance market.

II. Ordinary Risks

The insurance cover for this type of risk is reflected for Sonatrach Joint Stock Company and its Subsidiaries, through agreements of three (03) years (2018-2021).

The insurance premiums, through contracts related to Sonatrach's activities, are the following:

- 'Miscellaneous Facilities and Construction Machinery' Insurance Contract. The insurance premiums for the 'All Risks Except' and 'Natural Disasters' coverage for the period 2020 - 2021 were respectively DZD 70.4 million and DZD 140.47 million for an insured value of DZD 350.74 billion.
- 'Immovable and Movable Property' Insurance Contract. Insurance premiums for 'All Risks Except' and 'Natural Disasters' coverage for the period 2020 - 2021 were respectively DZD 49.62 million and DZD 228.42 million for an insured value of DZD 494.83 Billion.

- All Risks Except 'Pulled Tanks and Loss of Products' Insurance Contract. The insurance premium for the period 2020 - 2021 was DZD 2.68 million for an insured value of DZD 0.44 billion.

- 'Transport on Body' in All Risks Except, Insurance Contract. The insurance premium for the period 2020 - 2021 was DZD 0.297 million for an insured value of DZD 0.391 billion.

- 'Cargo Transportation' Insurance Contract. The preferential premium rates were 0.0135 % in maritime transport and 0.0015 % in air and land transport for the period 2020 - 2021.

- 'Automobile' Insurance Contract with the 'Algerian Company of Insurance and Reinsurance'.

For a reduction ratio of 85%, i.e. 02% of additional reductions in comparison with preceding convention.

III. Risks related to individuals

Insurance coverage for this type of risk is intended to cover death and certain illnesses contracted by illnesses contracted by the personnel.

The contract with AXA is concluded for 03 years (2020-2022) and generates an annual premium of DZD 652 303 000.

Certification of the Statutory Auditors

To the members of the General Meeting of Sonatrach,

We are pleased to report to you on our audit assignment as statutory auditors.

We have examined the financial statements, as drawn up by the Board of Directors of your Company for the financial year 2020, with a balance sheet total - assets/liabilities of twelve thousand and fifty-five billion nine million two hundred and fifty-seven thousand six hundred and one dinars and ninety-six centimes (DZD 12 055 009 257 601.96) and a net profit of twenty billion one hundred and sixty-two million two hundred and thirty-nine thousand seven hundred and thirty-one dinars and seventy-nine centimes) (DZD 20 162 239 731.79).

Our different audit works, carried out essentially on the basis of surveys, cross-checking and techniques which appeared to us to be the most appropriate, have been accomplished in accordance with the rules of normal diligence.

Based on the results of our work, we hereby certify, subject to the remarks and observations made, that the presented annual accounts are regular and sincere and give a true and fair view of the results of the activities, the financial situation and the assets and liabilities of your company for the financial year ending December 31st, 2020.

Algiers, June 10th, 2021

The Statutory Auditors

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MEGUELLATI Enchaellah
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Commissaire aux Comptes
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