

سوناطراک



sonatrach

Annual Report

2021

SUMMARY



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A Word from the CHAIRMAN



The year 2021 was undeniably marked by a clear recovery of the oil market, under the effect of the decline of the COVID-19 pandemic and the recovery of global demand.

This external situation, combined with the efforts made by the Company to optimize its production tool, enabled us to significantly improve our results, both in terms of volumes and financial results.

In 2021, we were thus able to meet the challenge of regularly supplying the national market with gas and petroleum products, while placing the maximum volume of hydrocarbons on an international market boosted by strong demand. The export turnover achieved in 2021 amounted to 35.4 billion dollars, boosted by the volume of hydrocarbon exports that has increased to 95.0 million TOE, up to 18% compared to the achievements of 2020.

This turnaround notable in our results constitutes, for us, a motive of encouragement to carry out our development plan by concentrating on the increase of our capacities of production of hydrocarbons, the control and the reduction of our costs of investment and exploitation, the maintenance of our export market shares and the timely completion of our structuring projects, particularly upstream, but also in downstream industries, particularly refining and petrochemicals.

The results recorded in 2021 are, we must remind this, the fruit of the effort of maintenance of fields in operation, and the commissioning of several major projects,

.....
« Fully assume our role
as a locomotive of the
national development »
.....

including the Hassi R'mel boosting project and the gas fields of Tinhert and the outskirts of Gassi Touil, as well as the GPDF gas pipeline expansion project.

In the same vein, we will not omit to mention the positive impact of the refinery rehabilitation program as well as the various actions undertaken to optimize production which made it possible in 2021 to satisfy all the national demand in gasoline and diesel and to stop their imports.

Upstream, as part of the efforts made to mobilize new hydrocarbon reserves, the 2021 financial year was also marked by the signature of the first exploration and production contract, under the aegis of the new law on hydrocarbons, with the partner ENI for the development of the south Berkine basin.

All these efforts are supported by major industrial investments downstream. We can mention, in this respect, the association with the Turkish company "Rönesans Holding" for the realization of a polypropylene complex in Turkey, and the Integrated Phosphates Project which will allow Algeria to be one of the main exporting countries of manures and fertilizers.

In the agenda of the highlights of the year 2021, we will also not fail to note the signing of the "General Declaration of the Policy of Local Content and National Integration" which aims to maximize the use of the goods and services national production tool. This option in favor of national integration is, moreover, already concretized by the attribution of more than 80% of the contracts concluded by SONATRACH to companies with exclusive Algerian right, for the equivalence of a total value of more than 5 Billion Dollars .

Concerning the modernization of the Companies' management, we have intensified our efforts with a view to completing.

The implementation of various structuring projects such as the integrated information system (ERP), the transformation of Human Resources processes, and the optimization of costs.

In July 2021, a new SONATRACH code of ethics was signed. It sets out the standards of behavior and ethical principles expected of its managers, employees and other stakeholders. In addition, in December 2021, the SONATRACH Group and IANOR signed two support contracts on the ISO 37001 and ISO 26000 standards, relating respectively to anti-corruption management and social responsibility.

Regarding, in particular, the measures adopted in to fight the Covid-19 pandemic which raged for most of the year 2021, the Company has opted to maintain and strengthen vigilance and prevention systems. A vaccination campaign was launched in 2021 for the benefit of SONATRACH staff and their dependents and more than 110,000 doses of vaccines were administered.

SONATRACH's marked interest in safeguarding the health of its employees and the efficiency of HSE practices in general is also attested to by the signing in 2021 of the General Declaration of the HSE Policy which underlines the will of the Company to achieve and maintain the highest standards and performance in Health, Safety and Environmental protection.

All these commitments are challenges for the Company, but our conviction is that the competence, the genius, the mobilization of the workers and managers of SONATRACH will allow us to meet these challenges in the near future.

Toufik HAKKAR

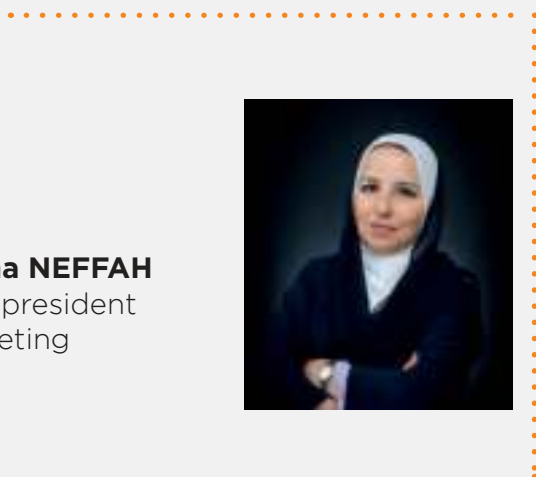
President and General
Manager of SONATRACH



Members of the Executive Committee



Toufik HAKKAR
Chairman and CEO



Fatiha NEFFAH
Vice-president
Marketing



Mohamed SLIMANI
Vice-president
Exploration - Production



Amine MELAIKA
Vice-president
Transportation
By piping



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

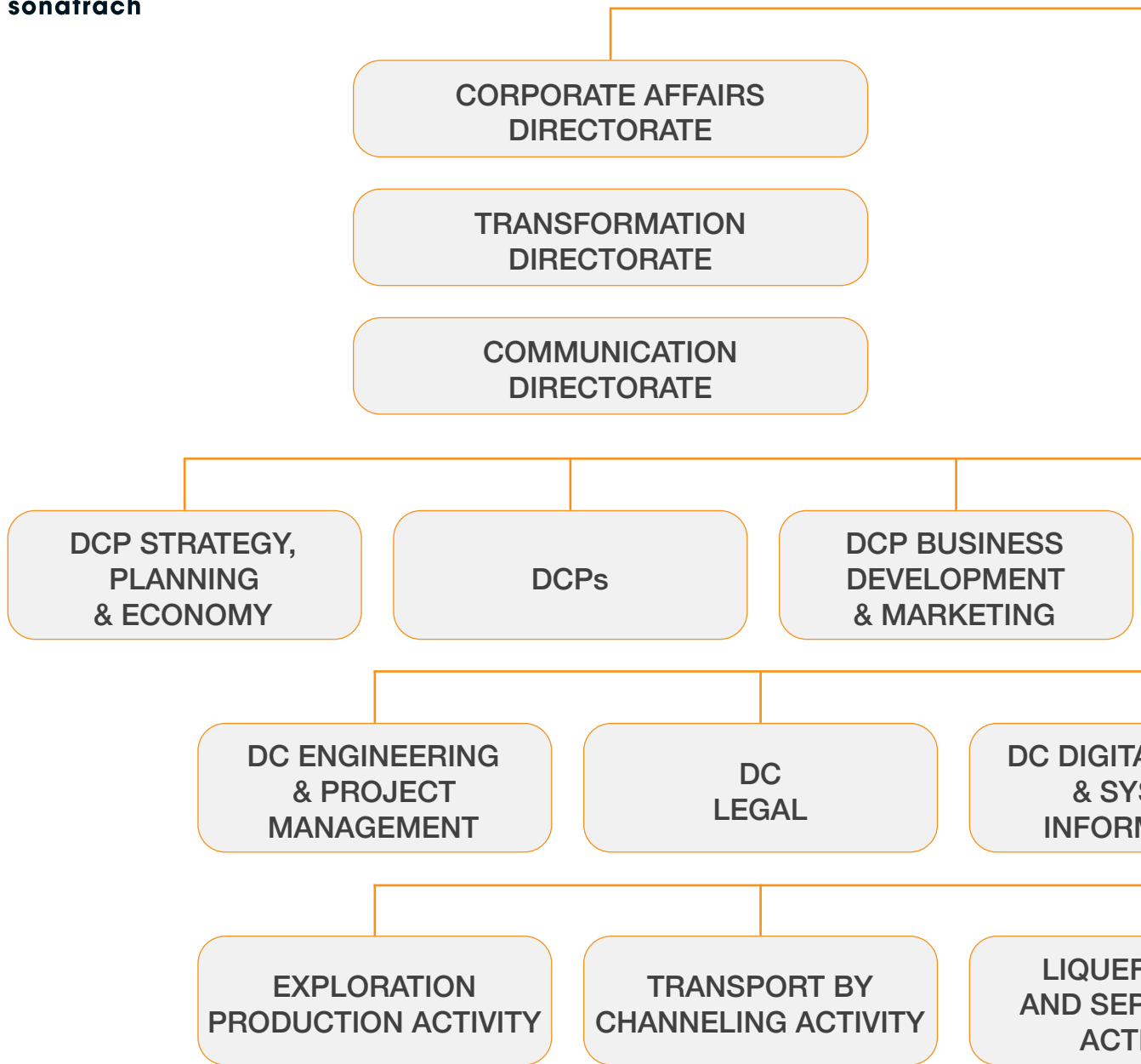


Azzedine DJOUABRI
Executive Director
Human resources

MACRO FLOW CHART STR

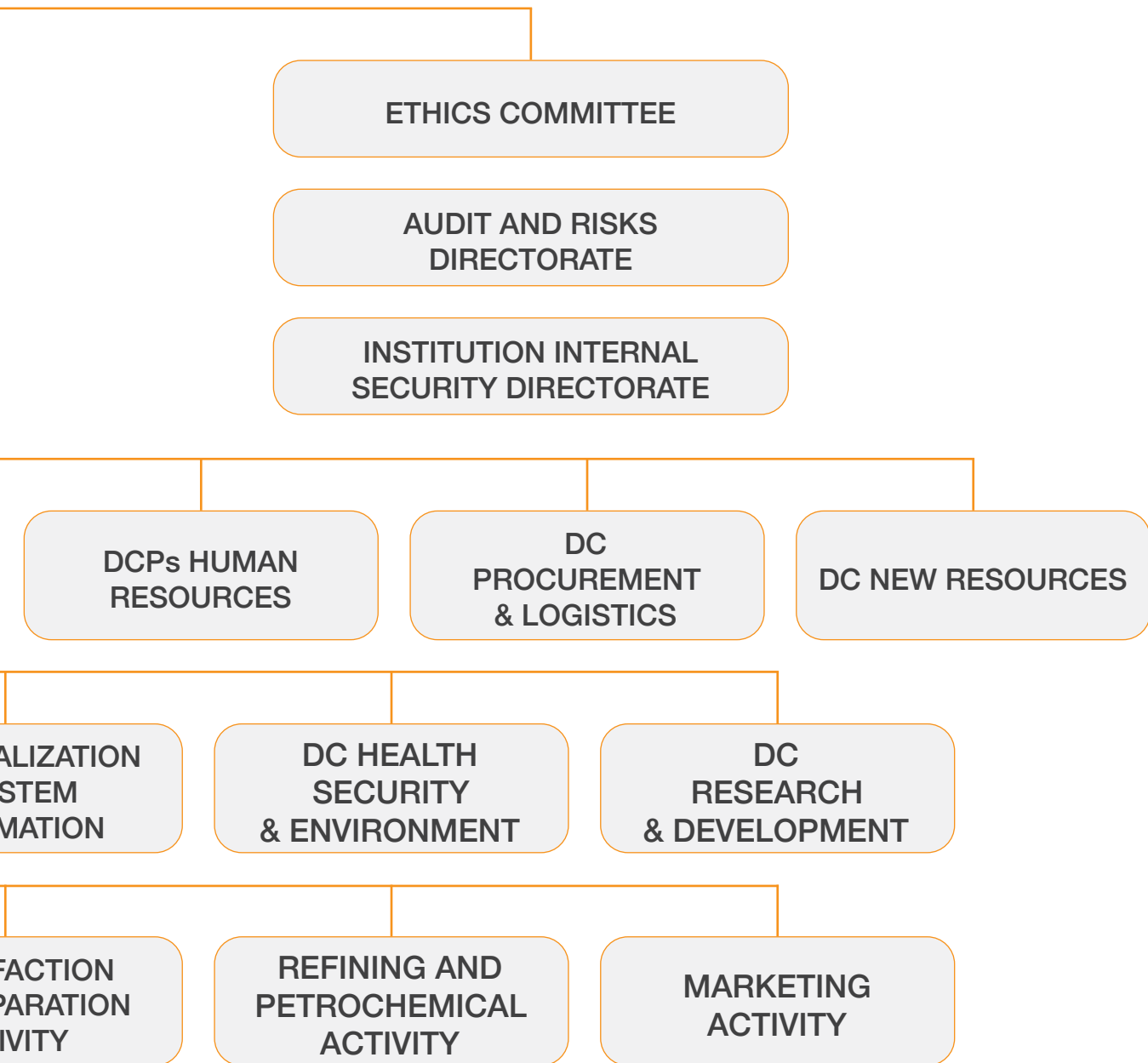


Chief Exec



STRUCTURE OF SONATRACH

Executive Officer



DCPs : Corporate Management
 DC : Central Management

General perception

With the recovery of the market in 2021, the SONATRACH Group remains more than ever committed to fully assuming its fundamental mission towards the nation ensuring the country's energy security in the long term and contributing to the revitalization and modernization of the national economy.

The favorable evolution of the market, combined with the efforts made by the Company to optimize its production tool, made it possible in 2021 to significantly improve the results of the SONATRACH Group, both in terms of volumes and financial results.

Primary hydrocarbon production stood at 185.2 million TOE in 2021, up 5% compared to 2020.

Sales of hydrocarbons on the national market during the year 2021 reached 64.3 million TOE, up 9% compared to 2020. The volume of hydrocarbon exports rose to 95.0 million TOE, up 18% compared to the achievements of 2020.

A significant increase in the turnover

Total turnover reached 5,154 Billion DA versus 2,855 Billion DA in 2020, an increase of 81%. The net income of 81% was the Company has therefore experienced a Large increase of DA 571 billion From 20 to 591 billion DA.

The export turnover achieved in 2021 amounted to 35.4 billion dollars, up 75% compared to 2020 under the effect of rising of the prices (76%) and the volumes (24%).

A major development program

Consequence of an upward trend prices on the oil market, this significant improvement in results is also the result of the effort to maintain deposits in operation, and the implementation of the development program through the implementation of several major projects, among which the project boosting Hassi R'mel and the Alrar gas fields First-Gas and outskirts Gassi Touil.

In the same direction, the realization of the rehabilitation program for refineries and the taken actions for the optimization of the production made it possible in 2021 to satisfy all the national demand for gasoline and Gasoil and stop importing them.

On another level, as part of the efforts aimed at mobilizing new hydrocarbon reserves, the year 2021 has been marked by the signing of the first exploration and production contract, under the aegis of the new law on hydrocarbons, with the partner ENI on the Berkine basin.

This continuous development effort allows the company to diversify its investment portfolio.

Major investments in downstream

As part of the flagship projects launched in 2021, figure the Integrated Phosphates Project which will allow Algeria to be one of the main fertilizer exporting countries.

This project initiated by Algerian groups ASMIDAL (subsidiary of SONATRACH) and Manadjim El Djazair (MANAL) was the subject of a call for demonstration of an open interest launched in May 2021.

Representing an investment of approximately seven (07) billion USD, the future industrial complex must eventually produce 5.4 million tons of fertilizer per year.

In the petrochemical sector, the Group SONATRACH and the Turkish society “Rönesans Holding” have joined forces for the production of polypropylene.

With a production capacity of 450,000 tonnes/year, the future project will be located in the Turkish city of Ceyhan.

As part of the group’s commitments in favor of an energy transition progressive, it should be mentioned, the creation of the new Algerian Company renewable energies (SHAEMS).

Owned by SONATRACH groups (50%) and Sonelgaz (50%), SHAEMS is responsible for carrying out the national program for the renewable energies development for the electricity production.

National integration, a confirmed choice

Locomotive of national development, SONATRACH proceeded to the signature of the “General Declaration of the local policy content and national integration”.

Through this commitment, the Group has set objectives strategies aimed at developing the national integration and the maximization of the national goods and services production tool.

As such, a series of news provisions aimed at encouraging the development of local content have been integrated into the award procedure Company’s contracts.

Through the Research and Development activities, SONATRACH plays an essential

role in this area through the mobilization of its researchers around the objective of reducing the technological dependence through the increase of the integration national rate (raw materials and processes), and the mastery of available technologies.

Managerial excellency and valuation of human resources

SONATRACH has also continued the implementation of its projects structuring measures aiming at modernizing its management and bringing it up to international required standards, such as the integrated information system (ERP), the transformation of the human resources process, the cost optimization and the improving of HSE practices.

Always concerned by consolidating its Social Responsibility, SONATRACH has set up, starting from January 2021, a Ethics Committee responsible for following, monitor and ensure compliance of the actions, activities and behaviors within SONATRACH with the standards.

and the universal principles of ethics, helping to promote a culture of transparency and a climate of confidence to prevent and penalize illegal acts and abuses committed to the detriment of the general interest, of integrity, of the reputation and of SONATRACH’s brand image.

In July 2021, a new code of ethics of SONATRACH has been signed, as a result of a collective reflection around corporate ethical values. He sets out the standards of behavior and the ethical principles expected of its officers, its employees and other stakeholders and which arise from the core values and principles of SONATRACH.

Furthermore, in December 2021, the SONATRACH Group and IANOR have signed two support contracts on the repositories ISO 26000 and ISO 37001, covering respectively on anti-corruption management and social responsibility.

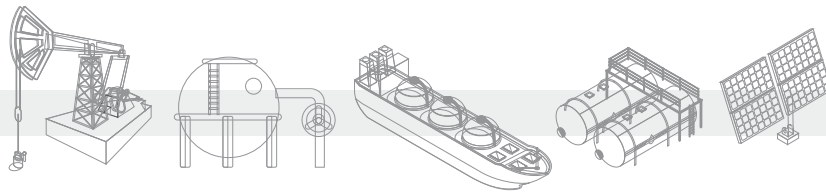
Still in this perspective, we quote the signature between SONATRACH and the National Employment Agency, ANEM, of a framework agreement, in October 2021, which includes jobs bid management under the new offer of exclusive Internet developed service by the ANEM for the benefit of large companies. The objective of this framework agreement is to provide more transparency and flexibility in the handling of SONATRACH's recruitment needs, depending on the skills required for each job.

With regard, in particular, to the measures adopted fighting the COVID-19 pandemic,

Which went down sharply in 2021, the Company has opted the maintenance of the devices of vigilance and prevention. A campaign program was launched in 2021 in benefit of SONATRACH's personnel and their beneficiaries: 110,348 doses of vaccines were administered.

In pursuit of operational excellence and management, the SONATRACH Group takes a keen interest the internal training of its staff. Outraged operational training in the field of energy and mining provided by the Algerian Institute of Petroleum, the Company's Advanced Training Center SONATRACH ManagementAcademy offers a very wide beam development solutions and also the specialization that aims improving the competitiveness of company executives





M

ain Highlights

The put into Production of perimeters

Oil scopes

- Oued Merabia (Hassi R'Mel), El M'zaid (Haoud Berkaoui), In Ekker (In Amenas), North Nezla (Gassi Touil), Tamadanet North and Taouratine South (Ohanet), in own effort.
- Hassi Touiza East (North Berkine), in association.

Gas scopes

- Dimeta South East (Ohanet), Hassi Imoulaye and Ifefane Tehert North (Stah), Horst North In Amenas and Meksem/ TRIAS (Rhourde Nous), in effort own.

Acceptance and commissioning of projects:

- Development of the Tinhert fields to Ohanet (First Gas).
- Realization of a Separation Center and Compression Upside Nord-HMD.
- Development of gas fields Gassi Touil to Rhourde Nous.
- Development of gas fields Gassi Touil to Gassi Touil.
- Development of the Tinrhert fields -Alrar - First Gas.
- Revamping South Hassi Satellite Units Messaoud.
- Boosting Hassi R'Mel Phase III, Stations Center and North.

- Reinforcement at Amenas, Phase III.
- Compression and reinjection station of MLN gas.
- Gas pipeline extension GPDF from El Aricha to the Beni Saf Terminal.
- Gas pipeline extension 12" Tiguentourine - Assekaifaf.
- Condensate storage tank at the Terminal Arrival from Skikda.

Signing of the 1st Exploration & Production of hydrocarbons under the aegis of law 19-13: on the Berkine perimeter South with the Italian partner ENI.

Signing of contracts for the performance of the following projects:

- Development of the production of polypropylene in Ceyhan city in Turkey with the company RÖNESANS.
- Development of the Tinhert field - Alrar - Complete development (Network bundle of collect).
- Rehabilitation of the OB1 24"/22" pipeline (TD HEH - SP1 Bis Djemaa).
- Rehabilitation of the OH1 30" oil pipeline 46 km section.
- Replacement of the OD1-140 pipeline 16 km route.
- Replacement of the SP1 starting station HEH from STC OK1 34.
- Rehabilitation of the GZ2 40" gas pipeline (SC4/Nador- Arrival Terminal/Arzew).
- Expertise of the foundations for the project Studies, supply and replacement of four (04) main interchanges at GL1Z complex Arzew.

Memorandums of Agreement and Memorandums of Understanding (MoU)

Signature of three agreements with ENI

- The first agreement is part of the process of concluding a new hydrocarbons contract under the aegis of the new hydrocarbons law 19-13. It aims to carry out an ambitious program for the revival of the exploration and development activities in the Berkine basin region and foresees for the creation of a gas and crude oil development hub through synergy with the already existing facilities.
- The second is a memorandum of understanding concerning the development of bio-refining, the production of hydrogen and the promotion of renewable energies.
- The third agreement concerns the field of training and expertise, through cooperation between ENI Corporate University and the Algerian Petroleum Institute.
- Signature of a memorandum of understanding with SHELL international trading and shipping company limited to explore ways of cooperation on the supply and trading of crude oil, natural gas and petroleum derivatives as well as on the trading of environmental products.
- Signature of a memorandum of understanding with EQUINOR allowing the two partners to examine the opportunities for cooperation in the fields of exploration and production of hydrocarbons in Algeria and abroad, environmental protection and new technologies.
- Signature of a Memorandum of Agreement and a Memorandum of Understanding with SINOPEC aiming to strengthen the historical partnership on the contractual

perimeter of Zarzaitine in the Illizi basin beyond 2023 and to identify new joint investment opportunities.

- Signature of a cooperation agreement with ANADE on the development of micro- enterprises and support of young entrepreneurs with projects.
- Signature of a framework agreement with the National Center for Cleaner Production Technologies (CNTPP) with the aim of establishing a partnership in terms of environmental management and clean technologies.
- Signing of a framework agreement with the Algerian Institute for Standardization allowing the adoption of international standards dealing with social responsibility and business ethics.

Local content development

- Signature of the General Declaration of the Policy of Local Content and National Integration aiming to promote the industrial fabric of SMEs / SMIs, micro-enterprises and Algerian startups.

Modernization of the Group management

- Installation of the Company Ethics Committee which aims to strengthen the image of the Company, trust with its workers and the business climate with its partners.
- Signature of the new general HSE policy.
- Standardization of gasoline grades and manufacture of a single unleaded grade starting from 1st July 2021.

Principaux Agrégats 2021

Hydrocarbon discoveries

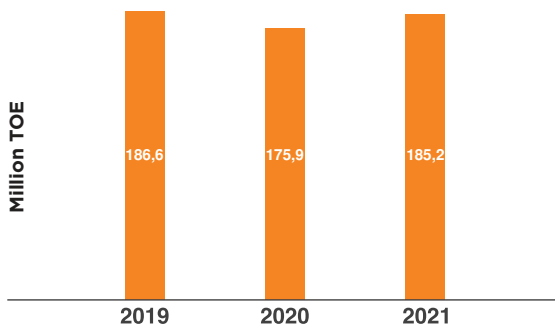
Realization of thirteen (13) new discoveries, in own effort, allowing the

demonstration of a proven and probable volume of hydrocarbons in place of 70.4 million TOE, of which 86% oil and 14% gas.

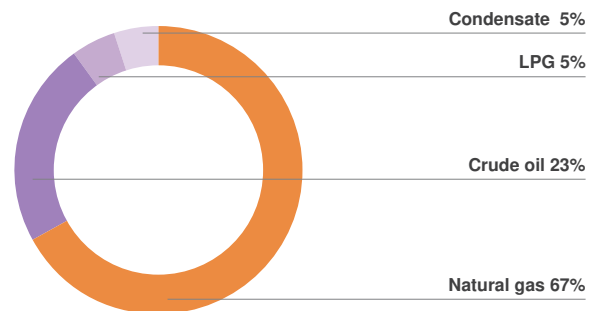
Production primaire

Primary hydrocarbon production stood at 185.2 million TOE in 2021, up 5% compared to 2020.

Primary production of hydrocarbons



Distribution of the total primary production of 2021



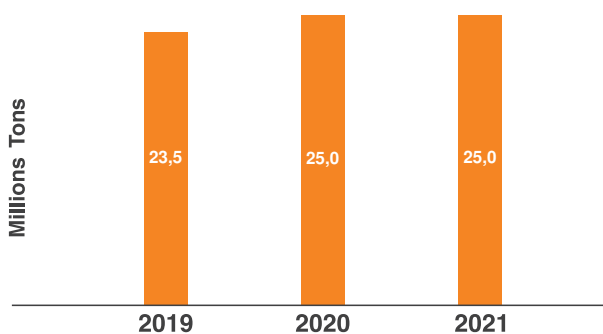
Refining

The volume of crude oil processed by refineries in Algeria reached 25.0 million tons.

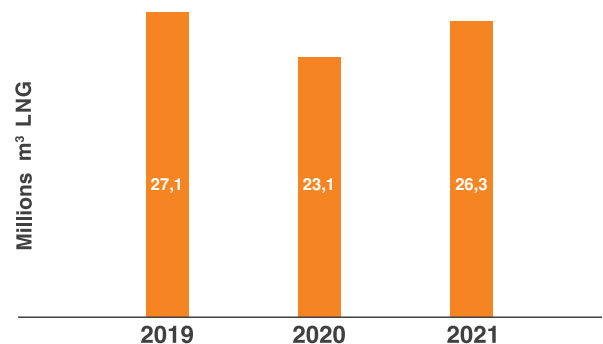
Liquefaction and Separation

The volume of LNG produced reached 26.3 Million m³ LNG.

Crude Oil Processing

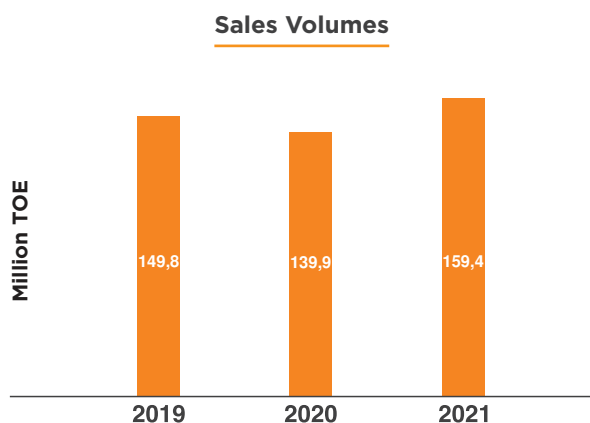


LNG production



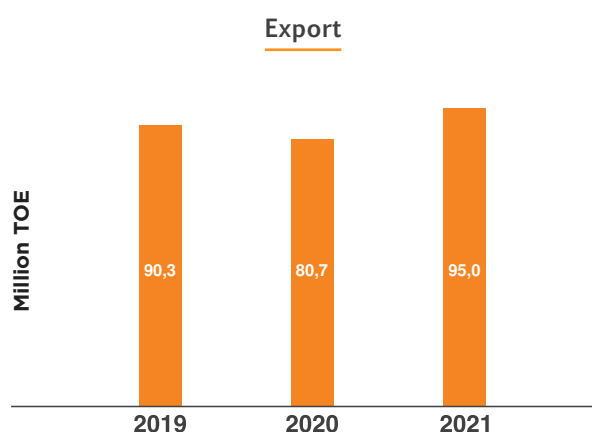
Marketing

The total volume of hydrocarbons sold amounted to 159.4 million TOE, or 14% more than 2020



Sales of hydrocarbons on the national market during the year 2021 have reached 64.3 Million TOE, an increase of + 9% compared to 2020.

The volume of the exports of the hydrocarbons stood at 95.0 million TOE, up 18% compared to the achievements of 2020.



Investments

Achievement of the investments in 2021 reached 713 billion DA (5.1 billion US\$ equivalent), The foreign exchange share in the achievements represented 38% of the total.

- Exploration segment production 87% of the total with a level of 623 billion DA (4.4 billion US\$ equivalent).
- Pipeline transport segment 37 billion DA (264 million US\$ equivalent), or 5% of total investments.
- Liquefaction and Separation Segment: 28 Billion DA (202 Million US\$ equivalent), i.e. nearly 2% of total investments.
- Refining and Petrochemicals segment: 11 billion DA (82 million US\$ equivalent),
- Other investments: 14 billion DA (97 million US\$ equivalent), or 2% of total investments.



Exploration Production Activity

The E&P Activity occupies a central place in the basic businesses of SONATRACH. It covers prospecting, research, development and exploitation of oil and gas deposits.

This activity is carried out 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.



Algeria, by virtue of its geographical situation and its rich subsoil in hydrocarbons, have a vast mining area of more than 1.5 Million Km², still largely unexplored, offering significant resource potential, both in the conventional, the non conventional and offshore.

Three major objectives are attributed to the Exploration-Production Activity:

- The constant renewal and increasing of the reservations portfolio.
- Development and operation deposits for an optimal resource valuation.
- Research and development of new projects on the national territory.

To achieve these goals, the recourse to partnership constitutes for SONATRACH a strategic option which share the risks associated to prospecting operations, insure a renewal of reserves and strengthen the country's energy security in the medium and long term. The adoption of the new Hydrocarbons Law 19-13, aims to increase the attractiveness of the national mining area and give a new impetus to the partnership option.

Still sustained Investments

In an international context marked by the high prices of hydrocarbon and the continued strong demand, both nationally and internationally, SONATRACH sticks to on concentrating its efforts on the development of the Activity Exploration-Production (EP).

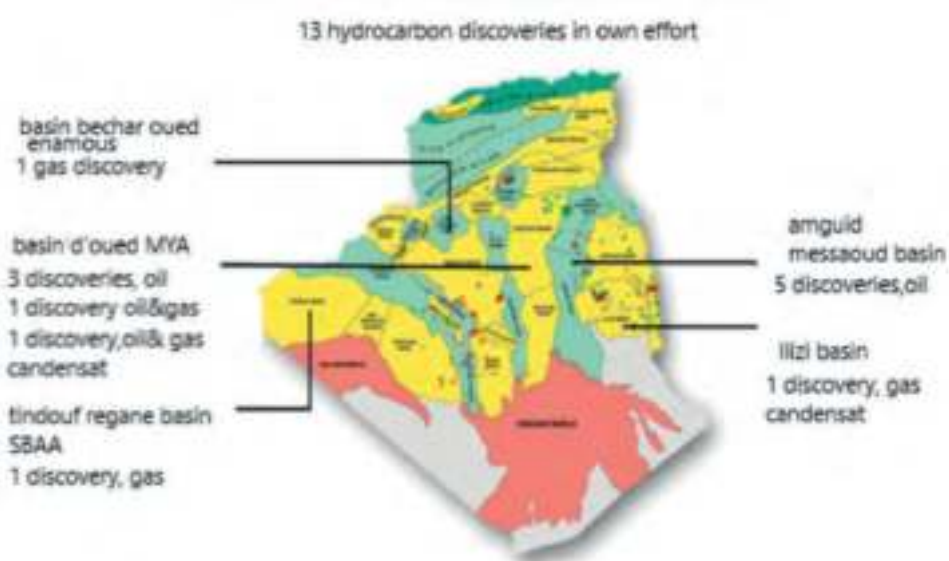
Main achievements

- Discoveries of hydrocarbons:
 - 13 discoveries made in own effort
- Primary production of hydrocarbons: 185.2 Million TOE.
 - Crude oil: 42.5 million tons.
 - Natural gas: 132.2 billion Sm³.
 - Condensate: 7.8 Million Tons.
 - LPG: 7.8 Million Tons.
- Drilling: 113 wells drilled
 - 21 exploration wells.
 - 92 development wells.
- Investment: 4.4 billion US\$ equivalents.

As in 2020, the exploration effort has been focused, in accordance with the stopped strategy , on the best prospects that meet the volume criteria, economics and geological risks.

Hydrocarbon discoveries

Completion of thirteen (13) short stories discoveries, in own effort, allowing highlighting a proved hydrocarbons volume in the area with a probability of 70.4 million TOE, of which 86% is oil and 14% is gas.



DEVELOPMENT DRILLING

Development Main drilling indicators	2020	2021
Activity volume (Drilled meter)	321 003	285 164
In Own effort	272 517	215 666
In partnership	48 486	69 498
Drilling (number of wells completed)	119	92
In Own effort	105	73
In partnership	14	19

Primary production of hydrocarbons

Primary hydrocarbon production stood at 185.2 million TOE in 2021, up 5% compared to 2020.

Primary production of hydrocarbons (in million TOE)	2020	2021
Total production	175.9	185.2
Own effort production	134.7	143.9
in partnership Production	41.2	41.3

Primary production of hydrocarbons in own effort	Unit	2020	2021
Crude oil	10 ⁶ tons	26.0	26.6
Condensate	10 ⁶ tons	6.3	6.7
LPG	10 ⁶ tons	5.8	6.2
Natural gas	10 ⁹ m ³	100.6	108.5
Total	10⁶ TOE	134.7	143.9

Primary production of hydrocarbons in association	Unit	2020	2021
Crude oil	10 ⁶ tons	16.4	15.9
Condensate	10 ⁶ tons	1.5	1.1
LPG	10 ⁶ tons	1.5	1.6
Natural gas	10 ⁹ m ³	22.6	23.7
Total	10⁶ TOE	41.2	41.3

Investments

Investments in the Exploration and Production segment have represented the bulk of the investments made in 2021 (i.e. 87% of the total) with a level of 623 billion DA (4.4 billion US\$ equivalent), broken down as follows:

- SONATRACH in own effort: 498 billion DA (3.6 billion US\$ equivalent).
- SONATRACH in association: 124 billion DA (0.9 billion US\$ equivalent).

Breakdown of investments in Exploration-Production

Investments (Billions of DA)	2020	2021
Exploration	94	66
In Own effort	90	62
In partnership	4	4
Development-Operation	596	554
In Own effort	466	435
In partnership	130	120
Other investments	2	2
Total E-P	493	623

In terms of exploration, investments for the year 2021 amounted to 66 billion DA (474 million US\$ equivalent) and related mainly to the acquisition of 3,970 km of 2D seismic profiles, 8,654 km² of 3D seismic profiles and the drilling of 34 wells, 21 of which have been completed.

In the development and exploitation of deposits, the level of investment made during the year 2021 reached 554 Billion DA (4.0 Billion US\$ equivalent) of which 78% realized in own effort.

These efforts have been made, mainly, in the realization of:

- Major development projects deposits: Boosting Hassi R'Mel Phase III, Revamping of satellite units South Hassi Messaoud, Periphery Hassi Messaoud, Tinrhert, Hassi Bir Rekaiz, Periphery Gassi Touil, Hassi Mouina, Hassi Ba Hamou, Touat and Isarene.
- From the development drilling program, the physical effort of which amounted to 92 wells completed, including 73 self-drilling wells.





Pipeline Transport Activity

Transport Pipeline Activity is in charge of the operation of facilities and equipment for the transport of liquid and gaseous hydrocarbons, the maintenance and development of the transport network, and this in accordance with the rules of the art in terms of safety, cost and quality.

The Activity has three main missions

A tool for transporting and regulating the flow of liquid and gaseous hydrocarbons

The pipeline transport activity has the strategic objective of ensuring the availability and integrity of the pipeline transport network in order to evacuate and deliver all planned production under optimal safety, quality and cost conditions.

The pipeline transport network consists mainly of:

- 21,189 km total length of the network.
- 43 pipelines (23 gas pipelines and 20 oil pipelines).
- 85 pumping and compression stations and 387 machines installed along the network.
- 128 liquid hydrocarbon storage tanks with a useful capacity of 4.3 million TOE.
- (03) Three oil ports in Arzew, Skikda and Bejaïa, with a loading capacity of 1.3 million tons. The oil ports have 05 loading buoys on the high seas.
- (02) two main hubs at:
 - Hassi R'Mel: National Gas Dispatching Center (CNDG) with a capacity of 390 million Sm³/day.
 - Hassi Messaoud: Dispatch Center Liquid Hydrocarbons (CDHL) with a capacity of 1.4 million barrels/day.
- (02) two international gas pipelines linking Algeria and Europe, with a transport capacity of more than 43 billion m³ per year:

- The Gaspipeline Enrico Mattei (GEM), linking Algeria to Italy via Tunisia.
- The MEDGAZ gas pipeline, linking Algeria directly to Spain from Béni Saf.

Transportation Activity by Pipeline covers a network of oil and gas pipelines with a total length of more than 21,000 km, enabling hydrocarbon products from deposits in the South to be evacuated to storage and distribution centers in the North.

A strategic link and regulator of the hydrocarbon chain

The pipeline transportation segment plays an important role in regulating the flow of liquid and gaseous hydrocarbons according to fluctuating domestic and international market demand. This role gives the Company the virtue of a safe, reliable and quality supplier to its domestic and foreign customers.

TRC's transport network is divided into two complementary parts:

• The Southern Network

Which departs from the fields and transports the effluents to the Haoud El Hamra Liquid Hydrocarbons Dispatching Center (CDHL) for crude oil and condensate and to the "National Center of Gas Dispatching" located in Hassi R'Mel (CNDG) for natural gas and LPG.

• The Northern Network

Who provides transport:

- Crude oil from CDHL to refineries and export ports.

- Condensate from the CDHL and the Hassi R'mel deposit to the Skikda refinery and export ports.
- Natural gas from the CNDG to the gas pipelines for export and liquefaction complexes on the national market.
- LPG from Hassi R'Mel to separation complexes.

Main achievements

The main achievements, in 2021, of the pipeline transport segment are as follows:

- Volume transported on the Northern network: 155.1 Million TOE.
- Investment: an equivalence of 264 Million US\$.

Quantities of hydrocarbons transported by pipeline

Quantity of hydrocarbons transported (in millions of toe)	2020	2021
North network	136.3	155.1
South network	72.7	80.3

South network

The quantity of hydrocarbons transported on the North network, in 2021, amounted to 155.1 million TOE, up 14% compared to 2020, a consequence of the recovery in demand on the oil market, following the decline of the COVID-19 pandemic.

The quantities transported on the Northern network by Product

Transport on the Northern network	Unit	2020	2021
Crude oil	10 ⁶ tons	40.9	40.9
Condensate	10 ⁶ tons	7.6	7.7
LPG	10 ⁶ tons	7.2	7.6
Natural gas	10 ⁹ m ³	83.2	102.6
Total	10⁶ TOE	136.3	155.1

By product, the quantities delivered via the North network to the various customers during 2021 break down as follows:

• Natural gas

102.6 billion Cm³ of which:

- 39.5 billion m³ of natural gas to foreign customers via gas export pipelines.
- 20.5 billion m³ of natural gas at the Arzew and Skikda LNG complexes.
- 39.1 Billion m³ to Sonelgaz for the needs of electricity generation, public distribution and for industrial customers supplied by Sonelgaz.
- 6.1 Billion m³ to national industrial customers supplied directly by SONATRACH.

• Crude oil

40.9 Million Tons, of which:

- 23.5 Million tons delivered to refineries in the North.
- 17.6 million tons delivered to oil ports for direct export.

• Condensate

7.7 Million Tons, of which:

- 4.3 million tons delivered to the Skikda condensate refinery.
- 3.3 million tons delivered to ports for direct export.

• LPG

- 7.6 million tons delivered to the LPG separation complexes, GP1Z and GP2Z at Arzew.

On the southern network

The quantities transported on the Southern transmission network stood at: 80.3 million TOE, up 10% compared to 2020.

Investments

Investment achievements in 2021 reached nearly 37 billion DA (264 million US\$ equivalent), or 5% of total SONATRACH investments. Compared to 2020, an increase of more than 60% has been observed.

Most of the achievements related to projects for the development and rehabilitation

of transport, in particular the extension of the GPDF gas pipeline, the Ouargla compressor station, the gas coolers of the GZ1/GZ2/GZ3 stations, the 12" gas pipeline (Tiguentourine-Assekaifaf), the Skikda condensate storage tank, the pipeline supervision center of the TRC Activity and the rehabilitation of the OB1 gas pipeline.

Investments (Billion DA)	2020	2021
Development	10	10
Rehabilitation	2	11
Operation	10	16
Total	22	37



Liquefaction & Separation Activity

The Liquefaction and Separation segment covers the activities of natural gas liquefaction and separation of LPG into propane and butane.

These activities are carried out through four LNG complexes and two LPG complexes.

This segment is also responsible for the management of two large industrial zones in Arzew and Skikda which host major industrial, oil and gas assets.

The Liquefaction and Separation segment is a strategic tool, a guarantee of export flexibility, making it possible to seize the best opportunities offered by the market.

Since the commissioning of the first LNG complex in Arzew in 1964, the first in the

world, the liquefaction industry constitutes for Algeria a decisive asset allowing a better valorization of its gas resources and a major asset to meet the demand of its customers.

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

GL1Z (Bethioua)	
Commissioning	1977
Design capacity (Million m ³ LNG)	17.56

GL2Z (Bethioua)	
Commissioning	1981
Capacité design (Million m ³ LNG)	17.82

GL3Z (Bethioua)	
Commissioning	2014
Design capacity (Million m ³ LNG)	10.5

GL1K (Skikda)	
Commissioning	2013
Design capacity (Million m ³ LNG)	10

For the separation of LPG, two complexes in operation make it possible to supply the national market and foreign customers with propane and butane:

GP1Z (Mers El Hadjadj)	
Commissioning	1983
Design Capacity (Million Tons)	9

GP2Z (Arzew)	
Commissioning	1973
Design Capacity (Million Tons)	1.4

Main achievements

The main achievements, in 2021, of the Liquefaction and Separation Activity are as follows:

- LNG production: 26.3 million m³ LNG
- Propane production: 4.4 million tons
- Butane production: 3.4 million tons
- Investment: equivalence of 202 million US\$.

Natural gas liquefaction

The production of LNG complexes in 2021 reached 26.3 million m³ LNG, up 14% compared to 2020.

This increase is mainly due to the revival of demand on the gas markets.

Separation of LPG

In terms of separated LPG, the volume of propane and butane produced stood at 8.1 million tons, an increase of 8% compared to 2020. These volumes come from the northern separation complexes GP1Z and GP2Z (92 %), LNG complexes (6%) and separation in the South (3%).

The quantity of propane produced in 2021 amounted to 4.5 million tons against 3.6 million tons of butane.

Production of LPG (10 ⁶ tons)	2020	2021
Total	7.5	8.1
Of which propane	4.2	4.5
Of which Butane	3.3	3.6

Investments

Investments made in 2021 in the Liquefaction and Separation segment amounted to more than 28 billion DA (equivalence of 202 million US\$).

Breakdown of investments in Liquefaction and Separation

Investment (Billions of dinars)	2020	2021
Development	12	22
Maintenance, reliability and safety	4	6
Infrastructure	0.04	0.2
Total	17	28

Most of the achievements related to the construction projects of a new pier at the port of Skikda, the supply and assembly of (04) interchanges

at the GL1Z complex as well as maintenance, reliability and safety investments.





Refining & Petrochemicals Activity

This segment of activity covers the activities of refining and transformation of liquid hydrocarbons to make available to the national and international market petroleum and petrochemical, products with the required quality specifications.

Thanks to a major investment program in refining and petrochemicals, the SONATRACH Group aims to be a major player in the diversification of the national economy.



The industrial assets of this segment are made up of :

- Five crude oil refineries, with a processing capacity of 25 million tons per year.
- A condensate refinery with a treatment capacity of 5 million tons per year.
- Two petrochemical complexes for the production mainly of methanol and polyethylene.

Satisfy the needs of the national market in petroleum and petrochemical products and capture export value.

During the last decade, SONATRACH has undertaken an important program

Of investment, aimed at rehabilitating and modernizing the refining tool and optimizing fuel production. These investments, granted, in particular at the level of the three refineries of Skikda, Arzew and Algiers, have today made it possible to meet the needs of the national market to the tune of 14.2 million tons per year and to export nearly 13.6 Million tons per year of refined products.

The asset of refining is composed of the six (06) refineries:

RA1K (Skikda)	
Commissioning	1980
Capacity (million tons)	16.5

RA1Z (Arzew)	
Commissioning	1973
Capacity (million tons)	3.75

RA1G (Alger)	
Commissioning	1964
Capacity (million tons)	3.65

RA2K/Condensat	
Commissioning	2009
Capacity (million tons)	5

RA1D (Adrar)	
Commissioning	2007
Capacity (million tons)	0.6

RHM2 (Hassi Messaoud)	
Commissioning	1979
Capacity (million tons)	1.07

In terms of petrochemicals, the production tool aims to transform and enhance hydrocarbon products through the two complexes operated on their own:

CP1Z (Arzew)	
Commissioning	1976/1978
Capacity (million tons)	152

CP2K (Skikda)	
Commissioning	2005
Capacity (million tons)	130

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

Refinery processing

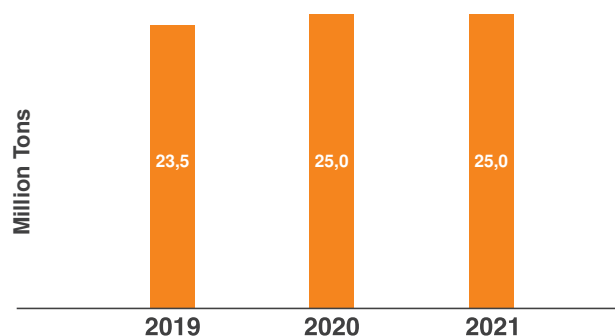
The volume of crude oil processed by refineries in Algeria reached 25 million tons, up 0.1% compared to 2020.

Main achievements

The main achievements, in 2021, of the Refining and Petrochemicals Activity, in own effort, are as follows:

- Overall production of refineries: 28 million tons.
- Production of petrochemical complexes: 137,433 Tons
- Investment: equivalence of 82 Millions US\$.

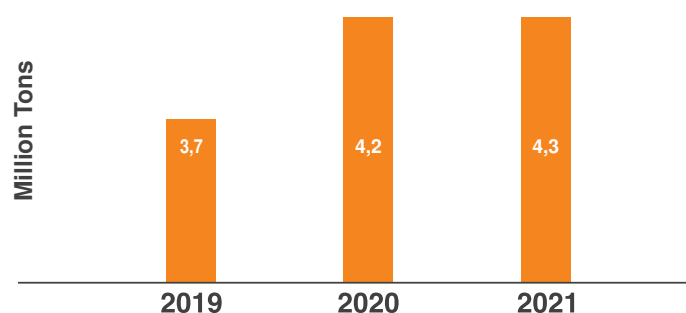
Crude oil treatment



Condensate treatment

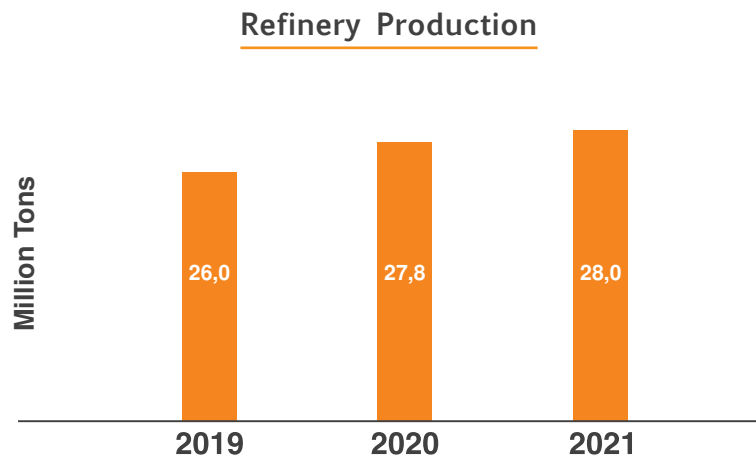
The volume of condensate processed by the Skikda RA2K refinery reached 4.3 million tons.

Condensate Treatment



Refinery production

Overall refinery production in petroleum products has increased at: 28 Million Tons, which is an increase of 0.8% compared to 2020.



Petrochemicals

Concerning the Petrochemical Activity, the production of the CP1Z complex in Arzew reached a volume of 114,724 Tons. The complex's sales reached 8,530 Tons on the national market and 95,153 Tons for export. The turnover of these exports reached 31 Million Dollars.

The Skikda CP2K petrochemical complex recorded a production level of 22,709 tons of HDPE. Sales of this product amounted to 25,686 tons.

Investments in the Refining and Petrochemicals segment

Investments made in the Refining and Petrochemicals segment amounted to more than 11 billion DA (an equivalence of 82 million US\$), or 2% of total investments.

The essential of the achievements concerned the works of the new Hassi Messaoud refinery as well as investments in maintenance, reliability and safety. The Hassi Messaoud refinery, with a processing capacity of 5 million tons per year, will increase the refining capacity in Algeria to 35 million tons per year.

Breakdown of investments in the Refining and Petrochemicals segment

Investment (Billions of dinars)	2020	2021
Development	16	7
Refining	16	5
Petrochemicals	0.1	2
Maintenance, reliability and safety	4	5
Other investments	0.1	0.1
Total CPP	21	11





Marketing Activity

The Marketing Activity is in charge of supplying the national market with oil and gas products and marketing and developing primary and processed hydrocarbons internationally.

As part of its development strategy, SONATRACH has set itself two essential objectives: to guarantee the supply of the national market, on the one hand, and to better enhance its exports and consolidate its market shares in order to maintain its competitive position on the international market on the other hand.



SONATRACH, a safe and reliable partner on the international energy scene

The significant potential of its hydrocarbon reserves, the sustained investments throughout the oil and gas chain, the proximity of the European market associated to the flexibility of export infrastructure (gas pipeline, LNG, hydrocarbon transport service) are the major advantages that make SONATRACH a safe and reliable partner on the international energy scene.

Significant increase in export turnover

After 2020 which was characterized by the double health and oil crisis, 2021 was a year of the revival of economic activity in the world, with in its wake a sharp increase in demand for energy products, thus leading to an increase in hydrocarbon prices.

This favorable external context, combined with the development efforts made by the Company, has enabled SONATRACH to significantly improve its performance, both in terms of volumes and financial results. Thus, the Company achieved in 2021 an export turnover exceeding 35 billion dollars, against 20 billion dollars in 2020, consequence of the increase, in particular of export volumes with an increase of 18% compared to 2020.

The stop of gasoline and diesel imports

The total volume of hydrocarbons sold (including to SONATRACH units) has raised to 159.4 million TOE, i.e an increase of 14% comparing to 2020.

The volume of hydrocarbon exports stood at 95.0 million TOE, up 18% compared to the achievements of 2020.

Sales of hydrocarbons on the national market during the year 2021 reached 64.3 million TOE, an increase of +9% compared to 2020.

Notably, in the context of satisfying the national fuel market, the completion of the refinery rehabilitation program and the Company actions to optimize production, made it possible in 2021 to meet all of the demand for gasoline and diesel and stop importing them.

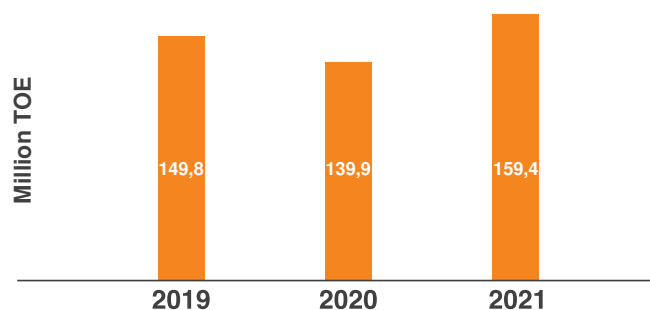
Main achievements

- Marketed production: 159.4 million TOE
- Export: 95 Million TOE
- National market: 64.3 million TOE
- Export turnover: 35.4 billion US\$
- Average price of Sahara Blend: \$72.3/bbl

Total volume of the sales

The total volume of hydrocarbons sold (including to SONATRACH units) amounted to **159.4 Million TOE**, i.e. an increase of 14% compared to 2020.

Total Sales Volume



Exports

The volume of hydrocarbon exports stood at **95.0 Million TOE**, up 18% from 2020 achievements.

The export turnover achieved in 2021 amounted to 35.4 billion dollars, up 75% compared to 2020 under the combined effect of rising prices (76%) and volumes (24%).

By product, exports in 2021 break down as follows:

Volume of exports	Unit	2020	2021	Evolution Rates
Crude oil	10 ⁶ tons	16.7	17.1	+2%
Condensate	10 ⁶ tons	3.3	3.1	-3%
LPG	10 ⁶ tons	5.6	5.9	+5%
Refined Products	10 ⁶ tons	14.6	13.6	-7%
Natural gas	10 ⁹ m ³	25.6	35.9	+54%
LNG	10 ⁶ m ³ LNG	22.9	25.9	+13%
Total	10⁶TOE	80.7	95.0	+18%

For Natural Gas and LNG

The sharp increase in exports compared to 2020 is mainly due to the recovery in demand on the international market and to the Company's effort to increase primary production to honor its commitments and maximize its turnover in export

In the case of refined products

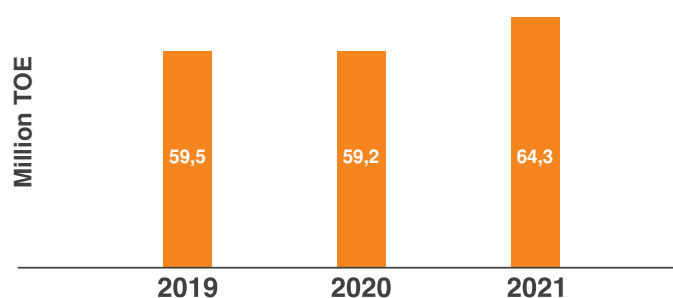
The decline in exports of refined products is explained by the orientation of the refining tool towards the maximization of products in high demand on the national market, namely diesel and gasoline. This strategy, combined with other measures, has made it possible to not import fuels during the whole of 2021.

The Domestic Market

Sales of hydrocarbons on the national market during the year 2021 have Achieved

64.3 Million TOE, an increase of +9% compared to 2020.

Domestic Market



Sales on the domestic market by product are as follows:

National Market Sales Volume	Unit	2020	2021	Evolution Rates
Natural gas	10 ⁹ m ³	44.8	48.4	+8%
LPG	10 ⁶ tons	2.4	2.6	+10%
Refined Products	10 ⁶ tons	12.9	14.2	+10%
Total	10⁶ TOE	59.2	64.3	+9%

• Natural gas

The increase in sales is explained by the increase in demand from large national companies.

- Sonelgaz: + 9% compared to 2020, i.e. 3.2 billion cm³.
- Ferial: + 52% compared to 2020.
- Sorfert: + 12% compared to 2020.

• LPG

LPG consumption increased by 10% compared to 2020. This increase is explained by the strong demand for propane intended for use as LPG fuel.

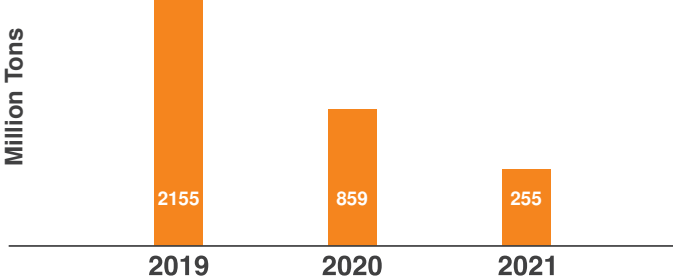
• Refined products

An increase of 10% compared to 2020 is observed under the effect of a revival of the demand for land fuels (gasoline and diesel) and this following the revival of the country's economic activities.

Import of petroleum products

In terms of imports of petroleum products, a volume of 254,741 Tons was achieved in 2021 compared to 858,939 tons in 2020, i.e. a significant drop of 70%. This decrease is explained by the satisfaction of the national production tool of the domestic need for gasoline and diesel, which led to a total stoppage of land fuel imports.

Import





Promotion Policy of Local Content and National Integration

The adoption of the General Declaration of the policy for the promotion of local content and national integration is one of the most significant events of the year 2021.

Signed by Mr. Toufik HAKKAR, Chairman and CEO of SONATRACH, on October 10, 2021, this reference document emphasizes that the policy for the Promotion of Local Content and National Integration aims to strengthen and accelerate the use of the national tool of production for the realization and the development of the activities of the company and this, within the framework of an overhaul building of the national economy centered on the valorization of the national resources.

Maximize the participation of the national production tool

The text of the general declaration for the Promotion of Local Content and National Integration opens up new perspectives allowing SONATRACH to better assume its role as the locomotive of the national economy and outlines a series of strategic objectives aimed at:

- Maximize the participation of the national production tool in the hydrocarbon value chain.
- Control expenses related to the importation of goods and services.
- Encourage the emergence of new Algerian companies based on innovation, competitiveness, quality and knowledge.
- Reach a high degree of technological mastery in the various activities related to the hydrocarbon chain.



Nine commitments solemn for promote local content

To reach these fundamental objectives, nine solemn commitments are set out in the text of the Declaration by which Sonatrach undertakes to:

1/ Integrate

in its procurement procedure of the modalities contracts of imposing on the operational and functional structures of SONATRACH to resort, in priority, to the Local Content, when it is able to meet the need.

2/ Adapt

the contractual strategy to promote the priority use of the national production tool.

3/ Require

to foreign contracting parties, the recourse to local subcontracting, following there availability and qualification.

4/ Accompany

Algerian companies for the manufacture of goods and/or the realization of projects likely to constitute an alternative to importation, including in terms of international certification and standardization.

5/ Sustain

companies governed by Algerian law with State institutions, in order to facilitate the implementation of actions relating to the promotion of local content and national integration.

6/ Communicate

regularly, in particular with Small and Medium Enterprises, Startups and Universities, on the needs and business opportunities offered in SONATRACH's Procurement plans.



7/ Associate

companies affiliated with SONATRACH in the actions of development and promotion of local content and national integration.

8/ Contribute

to the development of national capacities in terms of technological mastery in SONATRACH's professions, through collaboration with national and foreign partners, universities, research & development centers, start-ups and professional training organizations

9/ Encourage

partnerships between Algerian public and private companies set up in an organized framework, in order to enhance competitiveness and federate their implementation capacities.

Development of the regulatory framework

The company's desire to promote the development of local content is concretized by the new Procedure for Awarding Contracts E-025 (R1), signed on July 31, 2021, which includes several provisions contributing to promoting the national production tool:

- **Recourse** to simple mutual agreement in order to promote the national production tool.
- **Easing** bidding requirements for small and medium enterprises and newly created companies under Algerian law, to enable them to participate in bidding processes.
- **The appeal** priority recourse to the use of Algerian labour.
- **The integration** of the "Local participation" criterion in the evaluation of technical offers, including subcontracting remunerated in Algerian dinar.
- **The recourse** systematically to the national call for tenders when national production or the national production tool is able to meet the needs.
- **The obligation** to devote 10%, in volume or amount, of the operations carried out to micro-enterprises, according to the supplier consultation process.
- **The actualization**, at any time, short-lists of pre-qualified companies for repetitive contracts, through processes intended exclusively for companies governed by Algerian law.
- **The appeal** for a local subcontracting, up to a minimum of 30%, in value of the subcontracted part.
- **Enlargement** of the use of OTC intra-group sub-subsidiaries of SONATRACH.



A communication to the Algerian economic operators

This strategic axis is supported in particular through the launch of a communication campaign aimed at Algerian economic operators.

The latter targets in particular Startups, micro-enterprises, small and medium-sized enterprises, and all companies under Algerian law wishing to make themselves known to SONATRACH.

Among the most significant communication actions, it is worth mentioning:

- **The participation** of SONATRACH & its subsidiaries at the 10th edition of the North Africa Petroleum Exhibition & Conference (NAPEC) and at the 6th edition of the ALGEST 2021 industrial subcontracting fair.
- **The organization** by the Subsidiary of SONATRACH «ENAGEO», of an information day for the benefit of Startups in Hassi Messaoud (November 17, 2021).
- **Creation** of an electronic platform linked to the site: [//make-you-know.sonatrach.dz/](http://make-you-know.sonatrach.dz/) for Startups, micro enterprises, small and medium enterprises in Algeria.



The requirement of technological mastery primarily concerns all the Subsidiaries of SONATRACH which intervene on the entire value chain of hydrocarbons. The companies affiliated with SONATRACH play a central role in the actions of development and promotion of local content.

Promotion of local content: remarkable progress in 2021

The technological mastery and promotion of local content component saw significant progress in 2021, attested to by the implementation of structuring projects using national means, the adoption of incentive measures in favor of national production and the management of major projects.

Many contracts signed

- Contract concluded between the Pipeline Transport Activity and the ENGCB - ENGTP - SARPI Consortium, relating to «Replacement of the SP1/OK1 departure station at Haoud El Hamra (HEH) of the STC OK1/34”.
- Conclusion of 5 contracts relating to the realization of structuring projects of SONATRACH.
- Conclusion of a pilot service contract between the Exploration-Production Activity and the Start-up Oil Steam Services (OSS) in the Berkine basin.
- Signature of around ten agreements between SONATRACH and Universities and great schools to encourage scientific and technological research in the field of the hydrocarbons industry.

- Signing of agreements to launch seawater desalination projects on July 29, 2021 at the headquarters of the General Management of SONATRACH.

Incentives in favor of the national production tool

- The year 2021 saw the pre-qualification of 22 companies under Algerian law for the design and manufacture of precision mechanical parts for all SONATRACH structures.
- The signing, on March 9, 2021, of a cooperation agreement with the National Agency for Support and Development of Entrepreneurship (ANADE ex ANSEJ), relating to the development of micro-enterprises and support for young entrepreneurs.
- The development by the Central Research & Development Department of several promising projects (SH-Valve Controller, PEP-PGPR-Enhanced Phytoremediation, bioremediation of drilling sloughs) that can contribute effectively to the creation of new local activities.
- The pre-qualification of the «House of the filter» for the needs of SONATRACH in air filters for gas turbines.

The establishment of a local innovation ecosystem

- Management of an EPF (Early Production Facility) manufacturing project in Algeria, through the establishment of a local innovation ecosystem in which interact Subsidiaries of the SONATRACH Group, companies under Algerian law, universities and world-renowned foreign partners.
- The development by ENGCB, a subsidiary of the SONATRACH Group, of a preliminary catalog of equipment likely to be manufactured in Algeria (fittings, cathodic protection, electricity, scraper station, etc.) and the production of prototypes of certain equipment, such as scraper stations and solar energy supply system masts.



Volume of contracts signed with Algerian companies (Fiscal year 2021)

The performances recorded by SONATRACH in the promotion of local content are perfectly illustrated by the large volume of contracts signed with companies under Algerian law.

Figures for the 2021 financial year

Number of contracts

- + 1 700** Contracts signed with companies under Algerian law
- ≈ 81%** Of all contracts signed by SONATRACH
- ≈ 67%** Contracts with private companies
- ≈ 33%** Contracts with public companies

Contractual commitment

≈ 438 Billion DA
(≈ 3,2 Billion \$)



Research & Development

In light of the strategic objective chosen by SONATRACH, the Central Research and Development (R&D) Department is responsible for promoting and implementing the policy of applied research and the development of innovative, efficient and environmentally friendly technologies and processes in all the group trades.

It thus assumes a central role in the development of the Company throughout the oil and gas value chain.

Energy savings, cost reduction and promotion of local content

Thanks to the mobilization of its teams of researchers, this important structure works to implement processes that promote energy savings, cost reduction, and the promotion of local content, by increasing the rate of national integration (materials raw materials and processes).

The year 2021 saw, in this sense, the signing of the General Declaration of the Policy of Local Content and National Integration.

Research & development, the keystone of operational excellency

During 2021, the Central Research and Development Department carried out several concrete actions including, in particular, the development of scientific and technical work, procedures, patents, and other prototypes. This work and research has been undertaken in accordance with the strategic objectives of SONATRACH aimed, in particular, at promoting development throughout the hydrocarbon value chain, but also by diversifying into several ancillary and related activities to its core business.

Among the major actions carried out by the Central Research and Development Department, the establishment of an action plan for the short-term implementation of Quick Wins results with identification of technological advances likely to impact the structures should be retained. operations such as:

- The creation of an inter-sectorial dynamic through mixed project teams.
- The development of capacities dedicated to research (laboratories, technological platforms, pilots and other means and resources).

- The realization of a synergy based on the optimization of existing resources.

In terms of innovative ideas, the Central Research and Development Department was able to collect 53 proposals in its own effort and 235 formulated by partners.

After processing these proposals, internally and by the Scientific and Technical Council, 46 operational projects including 28 in partnership were selected.

Integrated projects to support operational structures

Proposed research and explored themes through various workshops by the Central R&D Department revolve around eight areas of research. The projects selected cover most of the Company's needs, namely:

- Reservoir Engineering (05 projects).
- EOR / IOR (05 projects).
- Biotechnologie Pétrolière et Environnement (08 projets).
- Petroleum Biotechnology and Environment (08 projects).
- Materials, Corrosion, Integrity and Inspection (07 projects).
- Technological Mastery and Development (08 projects).
- New Energies and Energy Efficiency (06 projects).
- Numerical Simulation, Modeling and Optimization (05 projects).
- Refining and Petrochemicals (02 projects).

Convincing results and projects in the implementation phase

The year 2021 saw the finalization of several projects initiated in own effort by SONATRACH. More than 08 projects have been finalized after validation and verification of the result's veracity.

Three of these finalized projects have been in the implementation phase in the field and have already given convincing results. The finalized projects include:

- **The valve controller implementation** in order to increase the production of the HMD field (2000 barrels/day produced additionally for the 43 cards installed on the 300 planned.
- **The new improved Duse equation, specific to SONATRACH** with the aim of accurately calculating back allocation production and reducing gauging costs, ensuring the preservation of nearly 40% of the cost of these operations.
- **The app for blowout control in oil drilling** (in the test phase) with the aim of preventing in advance uncontrolled gas eruptions thus increasing safety in oil drilling.

- **The implementation of the water treatment pilot at TFT**, in order to treat the necessary water according to the prerequisites of the SWCTT without additional costs.
- **The realization of a SKID injection of chemical products** locally with more than 70% integration rate.
- **The development of a Cathodic protection monitoring remote map** for the purpose of continuous monitoring of the protection of the structures on site.
- **The welding procedure in service** for certification of welding operations.

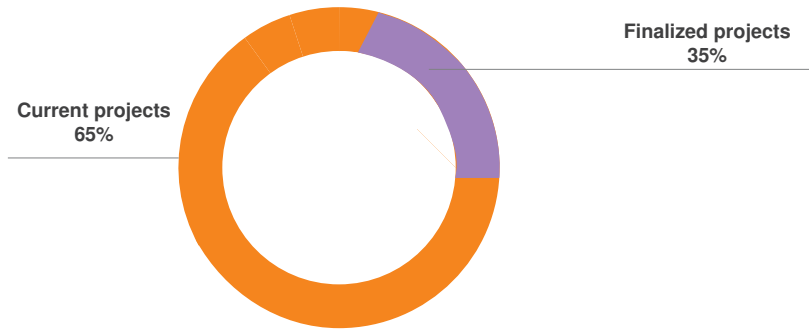
Highlights

Among the significant achievements to be recorded as assets of the Central R&D Department, we note the signing of more than fifty agreements and contracts with various research and teaching centers, the launch of numerous research projects, including nearly 65% are being finalized, and finally the filing of several patents with INAPI.

Important point to underline all these research work has been undertaken in response to the concerns expressed by the operational structures.

Framework Convention	Number of signed agreements	Percentage %
University	40	70
Research Center	4	7
School	3	5
Specific contracts	6	11
Various	4	7
Total	57	100

reakdown of finalized and ongoing R&D projects



Patents filed with INAPI

Patent title	Applicant
Process for the Characterization of Reservoir Rocks by CT-Scan based on Learning.	SONATRACH/Research and Development Department. Advanced Technologies Development Center, Baba Hassen, Algiers.
Identification of Minerals and Estimation of the Porosity of Rocks Reservoir Process by CT-Scan at Low Resolution.	SONATRACH / Central Department for Research and Development. Advanced Technologies Development Center, Baba Hassen, Algiers.
Prediction of total organic carbon in shale gas reservoirs using the Passey model combined with prestack simultaneous seismic inversion and genetic systems.	SONATRACH / Algerian Petroleum Institute, Boumerdès.





HUMAN RESOURCES

SONATRACH has listed, in 2021, the development of its human resources at the top of its priorities. To achieve the objectives of managerial and operational excellence, the Company has invested heavily in the development of its human capital through the implementation of a structuring project called Human Resources Transformation (HRT). A real turning point in the life of the Company, the latter aims for a qualitative transformation of the management of human resources by targeting four important processes: recruitment, skills development, performance management and career management.



The TRH project will thus have to optimize the career management of the collectives in a sustainable way, by offering a development framework adapted to each profile and by promoting the emergence of skills and talents; the objective being to eventually achieve a high level of operational efficiency in all activities.

The human resources transformation project is based on a cardinal rule: fairness.

By emphasizing on equal opportunities and transparency in career management, SONATRACH intends to focus on attracting, strengthening and promoting the best talents.

Training is the second important part of the Group's Human Resources management policy. Through continuous training, the Company strives to maintain the skills of its employees at their best levels. Professionalization paths, targeted or even specific training, and professional simulations, participate in this skills development approach.

The strengthening of partnerships between SONATRACH and universities constitutes another important focus of the Group's training policy aimed at meeting the specific needs of the various activities.

Employment stream

Structure and evolution of the workforce

The year 2021 ended with a total workforce of 66,379 agents, down 0.5% compared to 2020.

From 55,816 agents in 2020, the permanent workforce increased to 55,661 permanent agents in 2021.

- By socio-professional category, the Company's permanent workforce consists mainly of managers and supervisors:

- Executives: 28,833 workers (52%), including 16,026 engineers.
- Control: 23,696 agents (42%), including 16,366 senior technicians.
- Execution: 3,132 agents (6%).

- By function, core businesses drain most of the workforce (65%), followed by support functions (20%):

- Core business functions: 36,382 agents (65%).
- Support functions: 11,327 agents (20%)..
- Support functions: 7,952 agents (15%).

- The female workforce reached 9,152 agents in 2021 (16.4% of the total permanent workforce), compared to 9,222 agents in 2020.

- External recruitments, carried out during the year 2021, reached 576 permanent agents and mainly concerned the categories of executives and masters (88%)

- The wage bill increased by 5.7%, from 179.5 billion DA in 2020 to 189.8 billion DA in 2021.

Training component

The year 2021 was marked by a clear revival of the training activity, after the slowdown caused by the COVID-19 health crisis during the previous two years.

Face-to-face training is once again becoming preeminent, but still concurrently with distance (E-Learning) and blended (mixed: face-to-face and distance) options.

IAP and SMA, two strategic training centers

Relying on its two strategic training centers which are the Algerian Institute of Petroleum (IAP) and the SONATRACH Management Academy (SMA), the Company takes care to bring together the best skills, and to ensure the development of its employees through the acquisition of new know-how throughout their career.

In addition to the operational training provided, in particular by the Algerian Petroleum Institute (IAP) and targeting core businesses, the SONATRACH Management Academy (SMA) offers a wide range of training in terms of improving the Company's managers, professionalization and coaching of executives in cross-functional professions: management, finance, audit, project management.

A significant fact concerning the IAP, since 2021, the institute has been engaged in an ISO 9001 version 2015 quality process, through the implementation of a Quality Management System (QMS).

A strong revival of training actions

The year 2021 was marked by a strong revival of training actions thanks to the decline of the COVID-19 pandemic.

18,313 employees and pre-employees for a total duration of 199,063 h/d received training, an increased figure up 64% compared to 2020.

Nearly 5% of this man/day volume was achieved in blended mode, 16% remotely and 79% in face-to-face mode.

Training targeting core businesses

As part of the training of permanent staff, 191,216 man/day (i.e. an average of ten days per agent) were devoted by the Company to the training of 18,218 permanent agents; a marked increase in performance compared to 2020 (81,757 man/day, i.e. an average of seven days per agent).

On 191 216 H/D, 88% from the volume (that is 169815 man/day) were carried out with the Company's training centers (IAP, SMA and the Activities training centers).

In terms of man/days, these actions were refocused up to 69% on core business areas and 31% on support/support areas.

Training for permanent staff mainly targeted (97%) the categories of executives and supervisors:

- Managers: 11,088 agents, or 61% of the workforce trained.
- Control: 6,585 agents or 36% of the workforce trained.
- Execution: 545 agents, ie 3% of the workforce trained.

Advanced training represents 87% of the total volume of man-days (i.e. 173,591 man-days for 27, 327 participations).

These training courses mainly concerned the following areas:

Industrial Maintenance (23%), Industrial Safety (21%), Upstream Oil & Gas (18%), HC Transformation (5%), Management (5%).



HSE

Health, Safety and Environment

Achieving and maintaining the best standards and performance in terms of health, safety and environmental protection, these are the objectives assigned to the Central HSE Department.

In its preamble, the General Declaration of the HSE policy, adopted by SONATRACH in 2021, underlines «that in reference to its status as an energy actor and locomotive of the national economy, as well as to its strategic objectives, SONATRACH invests in its desire to achieve and maintain the best standards and performance in terms of Health, Safety and Environmental protection. Signed by the CEO of SONATRACH, Mr. Toufik Hakkar, on March 16, 2021, this document specifies that the Company “aims for excellence in the HSE field to create added value and meet the expectations of all its internal stakeholders and external”.

Three Core Values

For SONATRACH, its strong HSE commitment is explained by the conviction that the effective management of Health, Safety and the Environment produces economic value, improves the productivity of assets and people and makes it possible to establish good relations with all stakeholders.

To achieve its objectives in the HSE fields, SONATRACH relies on three fundamental values:

- The Human Resource.
- Communication.
- Transparency.

Action plan and commitments

The HSE General Declaration adopted in 2021 outlines a real action plan to achieve excellence in this area. A series of commitments are set out in the document by which the Company undertakes, in particular to:

- Giving priority to health, worker Safety and Environmental Protection.
- Develop a system for the identification and continuous assessment of risks and implement provisions for their mitigation.
- Ensure the security of its assets and ensure that all risk management systems are constantly functional and effective.
- Develop the leadership and commitment of all its Managers to improve its performance related to the HSE component.
- Involve all its employees, by developing an HSE culture based on information, training and feedback.

- Comply, wherever it operates, with legal and regulatory HSE requirements.
- Ensure that no project is launched before assessing its environmental impacts and social acceptability.
- To improve self-emergency plans and commit the appropriate means and resources to ensure a rapid, effective and integrated response to the risk of an accident.
- Reduce its carbon footprint by improving its energy and operational performance.

Prevention of workplace accidents: a major priority

SONATRACH places the health and safety of its personnel at the top of its managerial priorities. This commitment is reflected, in particular, in the establishment of an accident prevention system at the workplace which targets SONATRACH workers as well as those of partner companies and subcontractors working on its sites. A range of other measures has also been implemented in this area, in particular those concerning the regulatory compliance of hydrocarbon facilities and structures, the management of experience feedback, the establishment of an occupational risks, road risk management, etc.

Record of work accidents

In 2021, occupational accidents recorded at SONATRACH sites experienced a slight increase compared to 2020, in terms of frequency and severity.

The Company recorded 02 deaths in 2021 following two road accidents.

373 work accidents were recorded in 2021 compared to 305 accidents recorded in 2020, for an average workforce of 61,196 workers and 140,477,951 hours worked.

The nature of these accidents is as follows:

- 311 Workplace accidents including 177 accidents with work stoppage.
- 62 Commuting accidents including 29 Lost time accidents.

The indicators relating to work accidents in 2021 are as follows:

- A frequency rate **(FR)** of 1.55, up **22%**;
- A severity rate **(TG)** of **0.12**.

The increase in the TF frequency rate recorded during 2021 is mainly due to the occurrence of accidents caused by falls.

in the workplace and those concerning road traffic. This slight upturn, compared to the previous year, can however be explained by the re-launch of activities in 2021, following the observed decline in the COVID-19 pandemic.

A clear reduction of material and environmental accidents

The number of material and environmental accidents recorded during the year 2021 amounts to 398 accidents. This figure marks a drop of 12% compared to the balance sheet of material accidents recorded during the year 2020.

This drop translates into a 26% decrease in the number of hydrocarbon leaks on pipelines to 144 leaks during 2021.

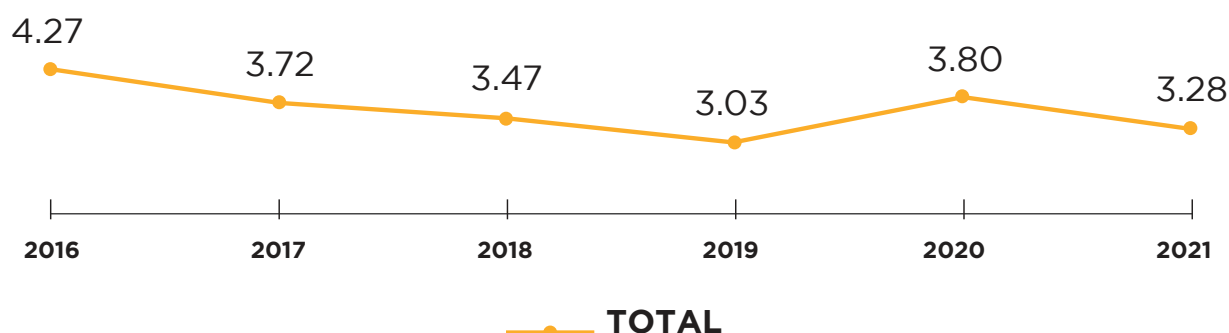
Environment management

A slight decrease in the quantity of gas flared observed

The quantities of flared gas in 2021 recorded a slight decrease compared to 2020.

Billion m³

Evolution of Flared Gases quantities

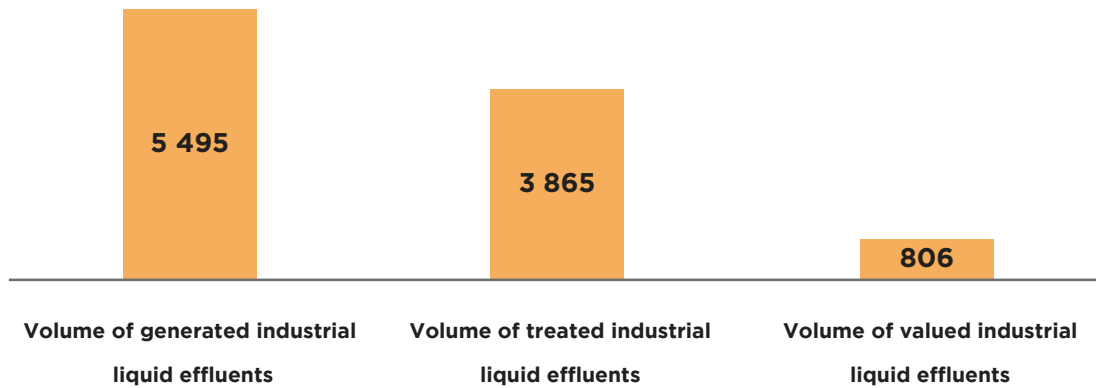


Although the production of associated gas doubled between 2000 and 2021, the flaring rate has dropped considerably, dropping from 15% in 2000 to minus 4% in 2021.

This performance reflects the efforts made by SONATRACH, for the recovery of associated gases via the various projects carried out which have made it possible to achieve a recovery rate of 96%.

In terms of treatment of industrial liquid effluents, the results for 2021 show the following achievements:

Treatment of industrial liquid effluents (Thousand m³)



Management of COVID-19: 110,000 doses of vaccines administered

During 2021, 6,053 cases were declared positive for COVID-19 in all SONATRACH Group sites, including 650 sub-contractors.



NEW RESOURCES

The Central New Resources Department (DC-REN) has the mission of concretizing SONATRACH's commitment to an efficient energy transition; a choice that should guarantee the country's long-term energy security and meet the needs of future generations.

The New Resources Central Department has set itself two main objectives:

- Contribute to the renewal of hydrocarbon reserves through Off-shore exploration and the development of unconventional resources.
- Engage in an energy transition process to reduce the environmental impact through the development of renewable energy sources in all SONATRACH activities.



Renewable energies

In terms of renewable energies, SONATRACH's strategy is based on two essential axes:

- The implementation of photovoltaic power plants in SONATRACH sites leading to the reduction of electrical energy production and consumption costs, generating gas savings that will be used in other sectors or for export.
- Reducing the environmental footprint by switching from the use of carbon energy to clean energy.

Achievements for 2021

Completion of Photovoltaic Solar Power Plant projects, to which are added the actions undertaken in the prospecting of Lithium, the development of green hydrogen and the bio-refining:

• Photovoltaic Solar Power Plants

The launch of the second photovoltaic solar power plant with a capacity of 10 MW at Bir Rebaa North. This project, being carried out in partnership with ENI, will allow a reduction in the cost of electricity of 100,000 USD/month and a gas saving of 180MMm³, with an estimated reduction in greenhouse gas emissions of 300Ktons of CO² equivalent throughout the life of the project.

• Lithium prospecting project

This project undertaken in partnership with ENI in the North Berkine region aims in its first phase to assess the potential in Lithium in brackish water from end-of-life oil wells at production sites.

Sampling campaigns on several sites have been initiated in order to collect a representative set of data to be subsequently analyzed at the level of the SONATRACH laboratories.

• Hydrogen

Contribution to the roadmap on the national strategy for the development of the Hydrogen sector. Identification of two green hydrogen pilot projects.

• Bio-raffinage

Creation of a roadmap for the realization of a pilot project for the cultivation of oilseeds as part of the transition to bio-refining.

Offshore prospecting program

The prospecting program in the Algerian offshore domain in the medium term aims to identify prospective areas to define the opportunity for a first offshore drilling.

For the year 2021, several works were carried out on the OAZE perimeter in partnership with ENI and Total Energies. The main actions undertaken in this area include:

- The renewal of the prospecting authorization for a period of two years.
- The elaboration of the summary report of the Geoscience works, carried out within the framework of the two prospecting authorizations OAZE & OAZO and geophysical studies for the identification of new prospects on the central part of the Algerian offshore.
- The launch of seismic data reprocessing, with the National Geophysical Society ENAGEO as part of the promotion of the national tool.

Ressources Non Conventionnelles

The Non-Conventional Resources program has the following medium-term objectives:

- Self-assessment of the potential for unconventional resources in the various Algerian basins and Identification of potential areas of interest for future development
- The commitment to contact and discuss with the various partners with a view to sign new contracts under the aegis of the new law for the development of these resources.

The main works carried out in 2021 the evaluation of the potential in Non-Conventional Resources and its development, concern:

Data acquisition

- Acquisition of data through drilling dedicated to the evaluation of the unconventional potential in the South-West basins.
- Data acquisition through exploration drilling in basins and prospective areas.

The Proppant Project

As part of the work to assess sand deposits suitable for use as a «natural propping agent» in hydraulic fracturing operations, three (03) field missions for prospecting and sampling sand sites were carried out in the zones of interest, at the level of the basins of the South-West, South-East and central zone. In total, 30 sites were visited and more than 80 samples taken.

These samples will be subject to specific analyzes in the SONATRACH laboratories.

Synthesis efforts:

- Launch of study reports on the potential of Frasnian and Silurian unconventional resources in the areas of interest and preparation of the conceptual development plan for the projects.

Discussions and workshops were held during the year 2021, relating to the opportunity for partnership in the field of research and development of unconventional resources.



SOCIAL AFFAIRS

The Department of Social Affairs plays a central role in the implementation of the social policy of the SONATRACH Group. It is, in particular, responsible for ensuring the constant improvement of life conditions and also the working conditions of employees, the social situation of retirees, their families and other dependents. Among its main missions are:

- The management of the Budget of the funds and the heritage of the Social Affairs.
- Participation in the development of occupational health policies and procedures.



SONATRACH pays particular attention to respecting the value of equity in the implementation of its social policy. Acting within the framework of this ethics, the Department of Social Affairs is responsible for:

- The promotion of actions to protect the health of workers and their dependents.
- The development of socio-cultural and sporting activities.
- The development of leisure activities and education of children.

Health activity

Through occupational medicine centers and social medical centers (CMS), the Department of Social Affairs works to improve the quality of reception and care conditions for patients, while also ensuring the modernization and renewal of infrastructure, specific medical equipment and ensuring a regular supply of pharmaceuticals.

Fight against the COVID-19 pandemic

In order to stem the pandemic, the Management of Social Affairs has focused its efforts on prevention, by setting up an awareness program for unit personnel focused on compliance with preventive measures: adoption of barrier gestures and management of containment and de-confinement of workers.

In addition, there are two important measures:

- The launch of a vaccination campaign in accordance with the protocol issued by the Ministry of Health.
- Implementation of letter 1085 concerning the «Antigen test» on D1 and D3.

Realization of Medical Infrastructures and Acquisition of medical equipment

For this part, it should be noted:

- The reopening of the medical analysis laboratory of the ASL Boumerdès Medico-social Center.
- The Signing of a contract for the construction of a social -medical center in Djanet ASL In Amenas.
- The start-up of the scanner device of the Benaly Chérif site imaging center- Department of Social Affairs.
- Purchasing concentrators of oxygen 10L and 20L.
- Donation of two (O2) hemodialysis machines for the benefit of the locality of “Debdeb”, Wilaya Illizi.

Third-party payment services

- The third-party payment system has enabled the conclusion of 260 agreements with private medical structures. More than 27,000 medical claims were issued in 2021.

Activity Health, Safety & Environment (HSE)

The 2021 financial year was marked by the realization of several actions in different regions and sites (headquarters of the General Management, of the Algiers, Arzew, Skikda, Biskra, and Boumerdès Regions, etc.).

They concern, in particular:

- Emergency management through the development of PIUs, signage of evacuation plans, development and installation of emergency exits.
- The construction and/or rehabilitation of the fire protection network, the reinforcement of fire detection systems, in particular in kindergartens, shops and administrative premises.

- Elimination of hazardous special and dangerous waste (expired drugs, asbestos fiber cement, ferrous and non-ferrous waste).
- Infrastructure Renewal made following safety standards for the well-being of staff and the acquisition of new Saharan cabins.

With regard to actions related to the protection of the environment:

- Organization of information and awareness days for children in gardens in the Boumerdès region.
- Celebration of National Tree Day on October 27, 2021 at the Taksebt forest and International Mountain Day at the arboretum of the Harouza recreational forest (W.Tizi Ouzou).

Childhood activity

Regarding the care of early childhood in kindergartens, preventive measures against the pandemic were renewed and reinforced in 2021.

They are focused on the pedagogy of the application of barrier gestures in order to convey the health message to the child and the highlighting of the measures to be taken before the admission of children, within the classes and the various premises of the kindergartens.

In the 2021/2022 preschool start, 2,190 children were taken care of, a rising figure due to the opening of five new teaching classes within the Arzew Region and three others for the Algiers Region and one (01) in each of the Regions of Adrar, Skikda and Hassi R'Mel.

Activities: Social Actions & Protection

Due to the persistence of the conditions linked to the COVID-19 pandemic, the cancellation in 2021 of OMRA operations should be noted.

However, despite the obstacles linked to the pandemic, financial aid was allocated at the appropriate time to its beneficiaries.

The report for 2021 highlights, in particular:

- An overall achievement rate of 77% with an increase to 100% in terms of death assistance. (COVID-19 pensioners and/or their spouses).
- A satisfying realization of thermal stays (participation of 1,170 Pensioners and Widows).

Activities Sport, leisure and Culture

For the 2021 financial year, the health crisis caused a freeze on the majority of socio-cultural activities intended for workers and their dependents. A very low rate of achievement for outdoor activities is thus observed.

Among the leisure activities, only Spa Resorts Stays in Algeria and Excursion Stays in Algeria were carried out.

In terms of sporting events, mention should be made of the organization of the 1st International Inter-Company Football Tournament which took place from December 20, 2021 to January 2, 2022 at Hassi Messaoud.

This event brought together five teams representing energy company countries, namely SONATRACH for Algeria, SINOPEC for China, ENI for Italy, Total Energies for France, and ETAP for Tunisia.



SPONSORSHIP & MECENATS

SONATRACH, the country's leading company, the locomotive of the national economy, has always fully assumed its role as a corporate citizen.

Through the implementation of its strategy in terms of sponsorship, patronage and social investment, SONATRACH is fully involved in the financial support of a multitude of events and/or actions: scientific projects, economic, sporting, cultural events, Environmental Protection...



Sports sponsorship

Sport is the ideal medium to provide positive values to the image of a Company. SONATRACH attaches paramount importance to sports sponsorship, which represents more than 50% of the SPM budget for the 2021 financial year. In this section, we can mention, in particular:

- Sponsorship of the SSPA MCA for the 2021 sports year.
- Coverage of SSPA-JSK air transport costs to Lusaka (Zambia as part of the Confederation of African Football (CAF) Cup.
- Financial support for the travel of Algerian fans during the African Cup of Nations in Egypt in 2019.
- Recognition of athletes who obtained medals at the TOKYO 2020 Paralympic Games.

Cultural and Artistic Activities

SONATRACH has always invested in the promotion of culture and art. This commitment was reflected in 2021 by multiple supports:

- Sponsorship of the national competition for the promotion of tourism organized on July 05, 2021 in Algiers.
- The sponsorship of two shows in tribute to the legendary voices of Algerian song, for the benefit of the Opera of Algiers on

December 10 & 16, 2021.

- Support for the printing of two (02) volumes of the Algerian Toponymic Dictionary.
- Sponsorship of the award ceremony for the winners of the 26th edition of the November 1, 1954 prize.

Scientific Activities

Concerning the support to scientific activities, we will retain:

- The sponsorship of the closing ceremony of the event «one Project one Patent», on June 19, 2021 at the University of Science and Technology of Oran.
- The sponsorship (CRNA) of the 1st National Meeting relating to New Modalities of Radiotherapy in Algeria «NMRT 2021», in October 2021.

Economic Events

Various economic events have benefited from the sponsorship of SONATRACH:

- Sponsorship of the 1st edition of the National Exhibition of Innovation in Training and Vocational Education in Algiers.
- Sponsorship of the 5th Edition of the National Seminar on Energy Saving and Energy Efficiency “SNEE5”.
- Sponsorship of the Algerian-Libyan Business Forum and Commercial Exhibition, May 2021.

- Sponsorship of the Forum on the contribution of Algerian women in economic development, December 2021.
- Sponsorship of the 2nd International Industrial Maintenance Exhibition. December 2021.
- Sponsorship of the celebration of the 60th anniversary of the creation of APS. December 2021.
- The acquisition of medical equipment for an RT-PCR Unit for the benefit of the Public Hospital Establishment of the Wilaya of Relizane.
- Donation of two (02) hemodialysis machines for the health services of the municipality of Debdeb / Wilaya d'Illizi.
- The purchase of ten (10) oxygen plants for the benefit of hospital structures in the health sector.

Sponsorship actions

Social Action

The subsidized operations targeted primarily to assist associations and companies that want to improve the living conditions of underprivileged populations.

- Donation of twenty (20) tablets and twenty (20) wheelchairs for children with reduced mobility.
- Donation for the development of a reading room for children at the Office Riadh El-Fateh.

Social Investment

The support actions were mainly oriented towards the health sector given the health context of the year 2021.

As such, SONATRACH contributed to finance:

Environment

Environmental protection also received special attention through multiple actions:

- Continued sponsorship of the operation to restore degraded land because of the forest fires (2019 and 2020).
- Partial financing of expenses related to the "My Space is Green" Environmental Awareness and Education Program.
- Sponsorship of the 1st edition of the National Competition for the Best OASIS for the year 2020.
- Financing of the awareness campaign on the ecological importance of Gouraya National Park.



Financial Report on the Consolidated Financial Statements

In 2021 SONATRACH Group, through its subsidiaries and participations is present nationally and in several countries abroad.

The scope of consolidation is made up of 421 accounting units representing the parent company SONATRACH Spa and 121 entities, including 72 are fully consolidated and 49 accounted for using the equity method. Of the 121 subsidiaries and holdings, 43 are located abroad, mainly in Europe.

All the entities within the scope of consolidation generated a consolidated turnover of around 6,494 M DZD for the 2021 financial year, including 73.43% was achieved by the parent company SONATRACH. The net income of the consolidated group rose from - 4,216 MDZD to 812,272 MDZD due to the increase in the price of a barrel on the international market, which represents a significant change compared to the previous financial year.

These figures are obtained from the consolidated accounts of the SONATRACH Group, which are closed in accordance with the accounting rules and principles recommended by Algerian legislation, approved by the corporate bodies of the Company and certified by the auditors, reflecting a faithful, sincere and regular image of the financial situation of the SONATRACH Group.

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

The financial, economic and tax situation of Group companies has changed overall in a positive direction. As a result an increase in turnover and consolidated net income were the result of this.

1- ACCOUNTING PRINCIPLES

Consolidated accounts of the SONATRACH Group are established in accordance with:

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

1.1. Consolidation Period

The Fiscal Year covers a 12-month period from January 1 to December 31 of each year.

1.2. Consolidation Currency

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

1.3. Consolidation Principles

1.3.1. Consolidation methods

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

- Companies under exclusive control (direct or indirect holding of the Group > 50%) are consolidated by global integration.
- Companies in which the Group the financial years significant influence (direct or indirect holding < or = 50%) are accounted for using the equity method (MEE).

1.3.2. Group threshold criteria

The integration threshold of subsidiaries and holdings, within the scope of consolidation, is determined in each financial year in

accordance with the consolidation rules, and according to the importance of the entity to be consolidated (turnover, results and total balance sheet) or in the case where the parent company the financial years a direct and strategic influence on the participation.

1.3.3. Conversion methods

The accounts of subsidiaries and holdings are established in the currency of the country in which they are located:

- The balance sheet accounts of subsidiaries and holdings abroad are converted into Algerian Dinars on the basis of the exchange rates in force on the closing date, thus generating “Conversion reserves”.
- The income and expense account is converted at the average rate for the year. Conversion differences are recorded in the item “conversion result”.

2. CONSOLIDATED FINANCIAL STATEMENTS

2.1. Balance sheet

2.1.1. Asset

(In millions of DZD)	NOTES	2021	2020	2019
<u>NON-CURRENT ASSETS</u>				
Goodwill - Goodwill	3.1.1	14 403	14 897	17 266
Intangible assets	3.1.2	100 167	99 545	88 141
Tangible assets	3.1.3	3 900 827	3 846 187	3 784 339
Land & facilities		50 583	51 503	52 247
Buildings		345 043	349 551	346 314
Other property, plant and equipment		577 282	592 194	527 551
Assets under concession		819	782	615
Fixed equipment and production complexes		2 927 100	2 852 157	2 857 612
Assets in progress	3.1.4	2 345 744	2 393 626	2 310 544
Financial fixed assets	3.1.5	1 490 864	1 348 475	1 502 858
Financial assets Equity method		404 276	410 164	223 200
Shareholdings and receivables related to shareholdings		26 495	142 250	311 884
Other financial assets		1 058 545	792 981	967 683
Other non-current receivables		1 548	3 081	91
Total fixed assets		7 852 004	7 702 731	7 703 148
Deferred tax asset NC	3.1.6	54 913	45 975	37 997
Total Non-Current Assets		7 906 917	7 748 706	7 741 146
<u>CURRENT ASSETS</u>				
Inventory and work in progress	3.2.1	837 840	796 506	715 063
Receivables and similar uses	3.2.2	4 173 673	4 424 370	4 358 543
Immo. financial		2 004	2	0
Clients		725 135	524 444	608 752
Other debtors		2 367 897	2 131 333	2 170 669
Taxes		1 067 503	1 758 113	1 554 037
Other current assets		11 133	10 479	25 086
Availabilities and similar	3.2.3	1 362 905	693 679	707 595
Investments and other financial assets		1 185	647	127
Treasury		1 361 719	693 032	707 468
Total Current Assets		6 374 418	5 914 556	5 781 201
Total Asset		14 281 335	13 663 262	13 522 346

2.1.2. Passive

(In millions of DZD)	NOTES	2021	2020	2019
<u>EQUITY</u>	4.1			
Share capital		1 000 000	1 000 000	1 000 000
Subscribed capital not called		-	-	1 940
Valuation difference				
Premiums and Reserves		82 678	187 888	124 590
Other equity - Retained earnings		5 750 648	5 728 884	5 310 162
Equity excluding parent company income (A) Consolidated reserves (B)		2 309	1 602	-
Group reserves		6 835 634	6 918 373	6 436 693
Minority reserves Equivalence difference (C)		985 209	1 011 275	1 106 077
Result for the financial year (D)		972 094	1 005 386	1 091 790
Translation differences on Group results Net result of the consolidated group Group result		13 115	5 889	14 287
Minority results		18 722	(34 287)	(7 124)
Minority result		813 645	(6 598)	373 581
Conversion differences on minors result		1 373	(2 382)	(13)
Résultat Net de l'ensemble consolidé		812 272	(4 216)	373 594
Résultat Groupe		801 915	(13 971)	373 135
Résultats minoritaires		10 357	9 754	459
Résultat minoritaires		10 514	8 888	459
Ecart de conversion sur résultat minors		(157)	867	-
Total equity (A)+(B)+(C)+(D)		8 653 211	7 888 763	7 909 228
<u>NON-CURRENT LIABILITIES</u>	4.2			
Borrowings & financial debts NC		215 937	235 255	186 820
Taxes (deferred and provisioned)		216 446	219 789	201 361
Other debts & regulation accounts. CN		13 920	15 107	12 074
Derivative liability financial instruments NC		(0)	(0)	(0)
Provisions and deferred income		395 004	362 342	318 033
Total non-current liabilities		841 308	832 492	718 288
<u>CURRENT LIABILITIES</u>	4.3			
Suppliers & related accounts		355 013	499 861	372 894
Taxes		515 364	666 301	787 725
Other debts		3 914 018	3 773 696	3 713 653
Liability cash		2 422	2 148	20 558
Total current liabilities		4 786 817	4 942 007	4 894 830
Total liabilities		14 281 335	13 663 262	13 522 346

2.2. Consolidated income statement

(In millions of DZD)	NOTES	2021	2020	2019
Sales of goods, manufactured products, provision of services and appendix pdts	5.1.2	6 494 387	3 980 445	5 537 088
Stored or removed production (Var)		66 449	11 909	6 177
Immobilised production		317 515	287 527	453 045
Operating grants		720	52 155	142 599
Production of the financial year	5.1.1	6 879 070	4 332 036	6 139 706
Consumed purchases		1 112 982	1 077 691	1 373 949
External services		1 254 553	862 461	1 188 920
Other external services		132 986	101 507	141 855
Financial year consumption	5.2.1	2 500 521	2 041 659	2 704 724
Operating Value Added		4 378 549	2 290 376	3 434 981
Staff costs	5.2.2	403 709	390 914	383 440
Taxes & duties	5.2.3	1 968 051	923 854	1 376 136
Gross operating surplus		2 006 789	975 608	1 675 406
Other operating income		188 038	163 569	177 785
Other operating expenses		77 988	135 638	117 817
Depreciation, provisions and losses of operating value		878 346	869 138	795 627
Allowances for impairment and financial elements provisions		6 867	(2 753)	3 900
Net impairment on goodwill		(212)	78	46
Reversal of impairment losses and operating provisions		49 435	30 703	81 334
Reversals of impairment losses and financial elements provisions		4 612	(384)	(2 075)
Operating income		1 285 884	167 395	1 015 060
Financial products	5.1.3	81 075	96 601	69 579
Financial expenses	5.2.4	556 586	291 840	544 536
bottom line		(475 511)	(195 239)	(474 957)
Ordinary profit before tax		810 373	(27 844)	540 103
Income taxes	5.2.5	104 050	22 794	215 262
Total revenue from ordinary activities		7 202 230	4 622 525	6 466 328
Total expenses from ordinary activities		6 495 907	4 673 163	6 141 487
Net income from ordinary activities		706 323	(50 638)	324 841
Extraordinary items (income)		813	91	52
Extraordinary items (expenses)		10 955	4 066	-
Extraordinary result		(10 143)	(3 975)	52
Net income for the year		696 181	(54 613)	324 892
Share in net income MEE (Equity-Accounted Companies)		116 248	49 529	48 701
Net result of the consolidated group		812 429	(5 083)	373 594
Minority interests		10 514	8 888	459
Net income - group share		801 915	(13 971)	373 135

2.3. Consolidated cash flow statement

(In millions of DZD)	2021	2020	2019
result before taxes	800 235	(31 815)	540 159
PMV sale of assets	(412)	(491)	2 226
real estate depreciation	730 733	782 334	620 072
Depreciation of tangible property	1 389	(15)	(404)
real estate depreciation	13 602	19 611	20 549
Prov. for goodwill	-	1 107	1 023
OthersProvisions	3 276	80 604	14 236
operating grant	720	52 155	142 599
Deferred taxes	(5 506)	(4 492)	27 991
Amortization and provisions	744 223	931 304	826 066
Income Taxes	(104 050)	(22 794)	(215 262)
Interest paid	(400)	(14 790)	14 275
Treso cleared operational activities.	1 439 595	861 414	1 167 463
Cash flows related to extraordinary items	(10 143)	(3 975)	52
Cash flow before extraordinary items	(10 143)	(3 975)	52
Inventory	(19 727)	(102 355)	(40 543)
Receivables	(277 561)	290 058	(93 813)
Suppliers	(125 679)	114 426	(57 541)
Other - operating WCR	566 182	(349 290)	(1 088 260)
Impact of the var of BFR operat.	143 215	(47 160)	(1 280 158)
Others - BFR not operational	9 111	20 349	(19 196)
Intragroup Link Accounts	48 705	(30 464)	7 352
Impact of BFR var not operated.	57 816	(10 115)	(11 845)
Revaluation JV End Inst Derivatives	(570)	(439)	(127)
Other non-cash transactions	(570)	(439)	(127)
Cash flows related to operational activities (A)	1 629 913	799 725	(124 615)
Acquisition of tangible assets	(1 204 457)	(1 506 113)	(2 732 285)
Acquisition of intangible assets	(15 079)	(46 995)	(115 659)
Acquisition of financial assets	(496 608)	(85 396)	(657 955)
Acquisition of securities - self-check	(67 079)	(104 212)	(35 180)
Interest received	3 716	(7 949)	228
Cash requirement (investment)	(1 779 507)	(1 750 665)	(3 540 851)
Disposal of tangible assets	492 603	710 302	1 917 039
Disposal of intangible assets	359	24 088	40 238
Disposal of financial assets	370 522	326 331	232 675
Investment Resources	863 485	1 060 721	2 189 953
Cash flow related to investment activities (B)	(916 022)	(689 945)	(1 350 898)
capital increase	(177 097)	(76 141)	22 546
debts issues	12 609	38 638	27 316
Loan repayments	(31 931)	(25 124)	(19 455)
increase (decrease) other financial debt NC	(1 472)	(33 820)	(1 932)
increase (decrease) other financial debt Ct	(26 352)	(126 775)	469 944
Paid dividends	23 817	128 694	(80 392)
Cash flows related to financial activities (C)	(200 426)	(94 528)	418 026
Unexplained discrepancies - conv discrepancies	1 108	17 153	228
Unexplained discrepancies -var meth conso	154 087	(29 317)	37 957
Unexplained differences - reclassification	(99)	0	(70)

Unexplained discrepancies - perimeter entry	126	(17 522)	1 074
Unexplained discrepancies - output	(0)	-	2 837
Unexplained discrepancies (D)	155 222	(29 687)	42 026
Cash - movement (calculated)	668 687	(14 436)	(1 015 460)
Cash - closing (calculated)	1 361 719	693 032	707 468
Cash - opening	693 032	707 468	1 722 928
Variation de trésorerie (A)+(B)+(C)+(D)	668 687	(14 436)	(1 015 460)

2.4. Statement of Change in Consolidated Equity

(In millions of DZD)	Share capital	Premiums, reserves & consolidated results	Valuation spread	Total equity	Group equity	Minority interests
As at December 31, 2019	1 000 000	6 784 711	124 590	7 909 301	7 894 555	14 746
Assignment results	-	80 712	-	80 712	80 712	(0)
Dividends	-	14 198	-	14 198	14 265	(67)
Interim dividend	-	-	-	-	-	-
Results	-	(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 difference on opening	-	83 232	-	83 232	83 747	(514)
Translation difference on stream	-	(17 463)	-	(17 463)	(18 253)	791
Reclassification	-	(6 177)	-	(6 177)	(6 177)	-
Change in scope	-	(216 114)	-	(216 114)	(211 904)	(4 210)
Perimeter entrance	-	125 293	-	125 293	125 370	(76)
As at December 31, 2020	1 000 000	6 700 875	187 888	7 888 763	7 873 119	15 644
Assignment results	-	(0)	-	(0)	0	(0)
Dividends	-	(8 854)	-	(8 854)	(1 666)	(7 188)
Interim dividend	-	(16 302)	-	(16 302)	(8 314)	(7 988)
Results	-	812 433	-	812 433	801 919	10 514
Increase	-	253 797	(100 885)	152 912	141 940	10 972
Decrease	-	(325 583)	(4 326)	(329 909)	(327 930)	(1 979)
Translation difference on opening	-	(733)	-	(733)	(878)	145
Translation difference on stream	-	1 617	-	1 617	2 639	(1 022)
Reclassification	-	-	-	-	-	-
Change in scope	-	149 597	-	149 597	145 809	3 788
Perimeter entrance	-	2 183	-	2 183	1 598	586
Perimeter exit	-	1 503	-	1 503	1 503	-
As of December 31, 2021	1 000 000	7 570 533	82 678	8 653 211	8 629 739	23 472

3. ANALYSIS OF ASSETS ACCOUNTS

3.1. Non-current assets

3.1.1. Goodwill - Goodwill

Goodwill or positive goodwill corresponding to the excess of the acquisition cost, when taking participation or merger, on the share

part of the buyer in the fair value of identifiable assets and liabilities.

In 2021, following the amortization applied, the goodwill shows a net amount of 14,403 MDZD (i.e. 91,717,135 EUR).

(In millions of DZD)	2021	2020
SONATRACH RAFFINERIA ITALIANA (SRI)	14 403	14 897
Total GW net acquisition eq.	14 403	14 897

3.1.2. Intangible assets

Net intangible fixed assets increased by 6.24%, i.e. amount of 621 MDZD.

These are mainly made up of capitalized development costs at

SIPEX LIBYA (35,833 MDZD), SIPEX NIGER (18

340 MDZD) and the SONATRACH Petroleum Engineering and Development unit (78,640 MDZD).

The increase in concessions, patents & licenses & trademarks mainly concerns SPC BVI (40,327 MDZD), the unit of SONATRACH Petroleum Engineering and Development (2,168 MDZD) and the Boumerdes Exploration Division for an amount of (1,028 MDZD).

3.1.2.1. Change in gross of intangible assets

(In millions of DZD)	2020	Increase	Decrease	Translation difference	Reclassification	Others variations	2021
Establishment costs (Gross)	0	-	-	-	-	-	0
Development costs fixed assets (Gross)	218 609	(940)	0	1 178	5 997	0	224 845
Concessions, patents & licenses & trademarks (gross)	40 521	4 966	55	1 830	1	0	47 263
Commercial funds & right to lease (Gross)	4	-	-	-	-	-	4
Other fixed assets intangible (gross)	50 576	1 025	183	(29)	426	1	51 815
Total fixed assets intangible (gross)	309 711	5 050	238	2 979	6 424	1	323 926

3.1.2.2. Amortization of intangible assets

(In millions of DZD)	2020	Operating allowances	Operating takeovers	Translation difference	Other Variations	2021
Capitalized development costs (Depreciation)	164 076	6 481	0	9	(0)	170 568
Concessions, patents, licenses & trademarks (Depreciation)	16 772	3 506	15	683	(0)	20 946
Goodwill, right to lease (depreciation)	-	-	-	-	-	-
Other intangible assets (Depreciation)	29 318	3 795	166	(12)	0	32 236
Total Intangible assets (Amortization)	210 165	13 783	181	680	0	223 751

Net intangible assets by entity are broken down as follows:

(In millions of DZD)	2021	2020
SIPEX LIBYA	35 833	34 065
SPC BVI	24 688	21 585
SIPEX NIGER	18 525	18 963
SONATRACH Spa	13 241	17 935
OTHER ENTITIES	7 880	6 998
Total	100 167	99 546
Including SONATRACH Spa	13%	18%

3.1.3. Fixed assets

Net property, plant and equipment have experienced an increase of 1.42% compared to the previous year, ie an amount of 154,640 MDZD.

Fixed and complex production equipment represents 78.74% of the fixed assets; the majority is held by the parent company, i.e. 98.96% of the totality.

3.1.3.1. Changes in gross property, plant and equipment

(In millions of DZD)	2020	Increase	Decrease	Translation difference	Reclass-ifying	Other Variations	2021
Grounds & facilities (gross)	77 148	2 007	534	(17)	306	(0)	78 912
Buildings (Gross)	686 660	(8 616)	12 807	(67)	37 616	0	702 784
Social facilities	262 376	2 940	2 386	(22)	18 279	0	281 188
Install. tech., material & out. Industrials (Raw)	806 712	43 397	22 780	(5 659)	2 546	(0)	824 217
Transportation equipment (Raw)	295 202	21 251	15 479	3 567	380	(0)	304 922
Office equipment, info. & mod. (Raw)	18 075	2 120	1 319	3	203	(0)	19 081
Fixtures and facilities	348 099	4 754	4 051	5	11 552	0	360 360
Other fixed assets tangible (Gross)	141 129	26 773	19 156	2 741	5 841	1 207	158 535
Fixed assets in concession (gross)	1 023	104	1	-	-	-	1 127
Wells and instruments extraction and collar-hydrocarbon reading	4 062 585	10 134	13 269	-	470 574	(0)	4 530 024
Facilities of transportation / pipeline	1 305 835	265	303	-	32 333	(0)	1 338 130
Treatment facilities, of processing and manufacturing	2 815 773	3 544	5 910	(2 872)	197 698	(0)	3 008 233
Ancillary facilities of production	854 308	251	639	-	15 607	(0)	869 528
Instruments of conditioning	3 182	(46)	-	-	-	-	3 136
reception facilities, storage and shipping	358 048	(1)	379	-	2 832	0	360 501
Investment property	535	1	3	-	-	-	533
Total tangible fixed assets (Gross)	12 036 691	108 879	99 014	(2 321)	795 769	1 207	12 841 210

3.1.3.2. Depreciation of property, plant and equipment

(In millions of DZD)	2020	Operating allowances	Operating takeovers	Translation difference	RReclassification	Other Variations	2021
Land & facilities (Province)	25 645	2 667	27	-	-	0	28 285
Buildings (Depreciation)	336 985	23 425	3 038	9	240	0	357 621
Social facilities (Depreciation)	147 088	13 736	984	(7)	(78)	(0)	159 755
Install. technology, hardware, out, in-costs (depreciation)	566 062	47 000	6 913	(2 902)	77	0	603 324
Transport equipment (Amor-weaves)	176 193	18 174	7 847	2 051	(23)	(0)	188 548
Office equipment, info. & mod. (Depreciation)	14 939	1 237	700	0	7	(0)	15 484
Fixtures and facilities (Depreciation)	272 189	18 494	3 170	5	(1 083)	0	286 436
Others fixed assets (depreciation)	101 864	13 405	2 703	1 775	685	(0)	115 025
Assets under concession (Depreciation)	242	66	0	-	-	-	308
Wells and instruments extraction and hydrocarbon collection (Depreciation)	2 797 973	318 735	3 132	-	(152)	(0)	3 113 425
Transport instruments / pipelines (depreciation)	883 012	64 486	-	-	(32)	(0)	947 465
Treatment Instruments, of processing and manufacturing (Depreciation)	1 945 215	181 366	5 821	(296)	(82)	(0)	2 120 382
Instruments annexed to production (depreciation)	629 896	57 093	636	0	1 137	(0)	687 491
Conditioning instruments (Depreciation)	2 936	22	-	-	-	(0)	2 959
Instruments of reception, of storage and shipping (Depreciation)	285 652	22 554	379	-	-	0	307 827
Investment property (Depreciation)	156	32	13	-	-	-	175
Total tangible fixed assets (Depreciation)	8 186 049	782 495	35 364	634	697	(0)	8 934 512

3.1.3.3. Impairment losses on property, plant and equipment

(In millions of DZD)	2020	Operating allowances	Operating takeovers	Deviation from-conversion	Others variations	2021
Land & facilities (Loss of values)	0	43	-	-	-	44
Constructions (Impairments)	123	-1	1	-	-	121
Install. tech, hardware, tool, industrial (Impairments)	150	112	59	-	0	203
Transport equipment (Impairment losses)	12	4	6	-	-0	10
Fixtures and installations (Loss of value)	10	0	-	-	-	10
Other real estate. (losses of values)	1 269	1 286	1	0	-	2 553
Instruments for treatment, transformation and manufacturing (POS)	1 801	-	-	-	-	1 801
Ancillary production instruments (losses of value)	342	16	2	-	-0	356
Instruments for reception, storage and shipping(Impairments)	745	-	-	-	-	745
Total Tangible fixed assets (Impairment losses)	4 455	1 488	71	0	-0	5 872

Net tangible fixed assets, by entity, are as follows:

(In millions of DZD)	2021	2020
SONATRACH Spa	3 258 426	3 199 939
MEDGAZ	75 033	85 720
SONATRACH RAFFINERIA ITALIANA (SRI)	79 337	81 954
NAFTAL	71 025	74 191
HYPROC SC	59 971	63 272
G-CCO	46 598	48 285
NLP	35 371	37 953
ENAFOR	29 553	32 542
GCB	30 929	32 059
ENTP	28 547	28 157
SH PERU	21 303	20 303
ENSP	17 547	16 898
ENGTP	15 566	15 359
KAHRAMA	12 519	14 083
ENAGEO	10 699	10 327
OTHER ENTITIES	108 403	85 145
Total Net Tangible Assets	3 900 827	3 846 187

Including SONATRACH Spa

84%

83%

3.1.4. Assets in progress

The level of fixed assets under construction fell slightly by 2% compared to the 2020 financial year, they are as follows:

(In millions of DZD)	2020	Increase	Decrease	Operating allowances	Operating takeovers	deviations conversion	Reclassification	2021
Tangible fixed assets in progress (Gross)	2 545 911	1 068 760	353 793	-	-	-378	-765 126	2 495 373
Intangible assets in progress (Gross)	61 889	10 029	122	-	-	-1	-10 802	60 993
Advances & accounts on fixed assets (Raw)	71 378	26 818	39 795	-	-	58	44	58 503
Fixed assets in progress (Raw)	2 679 178	1 105 606	393 710	-	-	-321	-775 884	2 614 870
Intangible assets in gross (Impairment losses)	284 138	-	-	-12 455	4 082	-	-	267 602
Fixed assets as-sets in progress (Impairment losses)	1 253	-	-	38	19	-	-	1 273
Advances & accounts on fixed as-sets (Impairment)	160	-	-	91	1	-	-	250
Assets in pro-gress (Losses valuable)	285 552	-	-	-12 325	4 102	-	-	269 125
Total assets under construction (Net)	2 393 626	1 105 606	393 710	12 325	-4 102	-321	-775 884	2 345 744

3.1.5. Financial fixed assets

Financial fixed assets increased by 10.56%, Mainly due to the increase in accounts receivable linked to equity investments (MDZ2,542) and other locked-in receivables (MDZ252,610).

3.1.6. Deferred tax assets by entity

Deferred tax assets experienced a net increase of 8,047 MDZD in 2021, which means a variation of 17.50% compared to the 2020 financial year.

(In millions of DZD)	2021	2020
SONATRACH Spa	27 268	21 258
NAFTAL	8 312	8 372
ENTP	5 285	4 841
ENGTP	3 358	2 914
ENSP	1 260	1 212
SGS HOLDING	1 726	1 037
NLP	1 053	1 023
OTHER ENTITIES	6 651	5 318
Total	54 913	45 975
Including SONATRACH Spa	50%	46%

3.2. Current Assets

3.2.1. Inventory and in progress

The net consolidated stock and work-in-progress heading is around 837,840 MDZD for

the 2021 financial year, Including 73% belong to the parent company. Inventories and work-in-progress showed a net increase of 5.19% during the year.

(In millions of DZD)	2020	Movement	Translation difference	Perimeter entrance	Change in scope	2021
Goods(gross) raw materials	26 525	1 589	(30)	-	0	28 084
(Raw)	67 711	(567)	(1 279)	-	-	65 865
Others supplies (Raw)	543 356	(22 231)	33	64	-	521 222
In production. of goods (Gross)	4 164	(276)	(17)	-	-	3 872
In progress. of services (Gross)	1 951	(115)	-	-	-	1 836
Finished products (gross)	224 129	45 429	(1 204)	-	(0)	268 355
Intermediate products (Gross)	15 619	(51)	(509)	-	-	15 059
Stock from real estate (Gross)	92	-	-	-	-	92
Stock outside (Gross)	7 456	(4 052)	(1)	-	-	3 403
Total	891 002	19 727	(3 006)	64	(0)	907 788

(In millions of DZD)	2021	2020
Inventories & work in progress (Gross)	907 788	891 002
Stocks & in progress (Prov)	69 947	94 496
Inventories & work in progress (Net)	837 840	796 506

Inventories and work in progress mainly concern finished hydrocarbon products and other supplies at SONATRACH Spa.

The breakdown by entity is as follows:

(En millions de DZD)	2021	2020
SONATRACH Spa	613 468	600 100
SONATRACH RAFFINERIA ITALIANA (SRI)	90 212	65 413
NAFTAL	32 191	31 069
ENAFOR	24 763	23 501
ENTP	19 997	21 883
ENAGEO	13 374	15 291
OTHER ENTITIES	43 835	39 249
Total	837 840	796 506
Including SONATRACH Spa	73%	75%

3.2.2. Receivables and similar uses

In 2021, the receivables and similar uses item recorded a decrease of 6% compared to the 2020 financial year.

(In millions of DZD)	2021			2020
	Raw	Impairments	Net	Net
Clients	765 599	40 464	725 135	524 444
Taxes	1 067 503		1 067 503	1 758 113
Other receivables	2 395 686	14 652	2 381 034	2 141 814
Receivables and similar uses	4 228 789	55 116	4 173 673	4 424 370

In this section, the customer item is made up of 68% of SONATRACH Spa customers, it has increased by 27.6%.

The net trade receivables and related accounts item breaks down by entity as follows:

(In millions of DZD)	2021	2020
SONATRACH Spa	501 845	246 344
NAFTAL	68 321	50 485
CASH	37 275	32 870
SONATRACH RAFFINERIA ITALIANA (SRI)	21 507	24 143
ENGTP	17 628	15 373
GCB	14 204	12 104
OTHER ENTITIES	64 355	143 125
Total Customer Receivables & Related Accounts Net	725 135	524 444
Including SONATRACH Spa	69%	43%

3.2.3. Availabilities and similar

The cash and equivalent item recorded an increase of 669,226 MDZD, i.e. a variation of 96.47% during the 2021 financial year.

(In millions of DZD)	Opening	Movement	Devia- tion from conversion	Perimeter entrance	Change of perimeter	Other Varia- tions	Fencing
Banks	640 720	597 081	3 206	126	(0)	-	1 241 133
VMP	22 001	18 533	1 472	-	-	-	42 006
Values at collection	10 109	443	0	-	0	-	10 552
Term deposits over 3 months	1 538	56	-	-	-	-	1 595
Accrued interest	1 868	257	0	-	-	-	2 124
Crates, CCP	18 117	47 647	0	-	(0)	-	65 765
Cash (Gross)	694 353	664 016	4 679	126	(0)	-	1 363 175
Treasury (Prov)	1 321	104	30	-	-	-	1 455
Cash (Net)	693 032	663 912	4 649	126	(0)	-	1 361 719

The breakdown of net cash by entity is as follows:

(In millions of DZD)	2021	2020
SONATRACH Spa	773 865	152 272
NAFTAL	191 522	204 974
IRS	41 482	57 733
SIHC	67 447	29 989
SPC BVI	20 544	27 041
ENAGEO	22 546	21 369
ENSP	18 106	20 336
SIPEX	12 149	15 027
KAHRAMA	13 092	12 981
ENAFOR	11 660	11 068
HYPROC SHIPPING COMPANY	17 212	10 718
HOLDING SOALKIM	37 957	9 925
AEC	12 444	8 689
SH PERU	12 452	6 334
Other entities	109 241	104 576
TOTAL	1 361 719	693 032
Including SONATRACH Spa	57%	22%

4. ANALYSIS OF LIABILITIES ACCOUNTS

4.1. Equity

Consolidated shareholders' equity is around 8,653 MDZD and is made up of:

- Share capital 1,000 MDZD.
- Consolidated reserves which amount to 985 MDZD consist of:
 - Group reserves 972 MDZD.
 - Minority reserves: 13 MDZD.
- Equivalence difference: 19 MDZD.
- Consolidated net income which amounts to 812MDZD, comprising the headings:
 - Group share: 802 MDZD.
 - Minority share: 10 MDZD.
 - Conversion differences on group results: -1 MDZD.
 - Conversion differences on minority results: -0.1 MDZD.

(In millions of DZD)	2021	2020	Variation
Share capital	1 000 000	1 000 000	0%
Valuation spread	82 678	187 888	-56%
Premiums and Reserves	5 750 648	5 728 884	0%
Other equity - Retained earnings	2 309	1 602	44%
Parent company equity excluding income (A)	6 835 634	6 918 373	-1%
Consolidated reserves (B)	985 209	1 011 275	-3%
Group reservations	972 094	1 005 386	-3%
Minority reserves	13 115	5 889	123%
Equity difference (C) Profit for the year (D)	18 722	(34 287)	-155%
Conversion differences on group result	813 645	(6 598)	-12 431%
Ecart de conversion sur résultat groupe	1 373	(2 382)	-15 8%
Net result of the consolidated group	812 272	(4 216)	-19 364%
Group result	801 915	(13 971)	-5 840%
Minority results	10 357	9 754	6%
Minority result	10 514	8 888	18%
Conversion differences on minors result	(157)	867	-118%
Total equity (A)+(B)+(C)+(D)	8 653 211	7 888 763	10%

4.2. Non-current liabilities

Non-current liabilities total 841,308 MDZD in 2021 and 832,492 MDZD in 2020, which means an increase of 1.06%.

(In millions of DZD)	2021	2020
Borrowings & financial debts NC	215 937	235 255
Taxes (deferred and provisioned)	216 446	219 789
Other debts & regul. CN	13 920	15 107
Provisions and deferred income	395 004	362 342
Total non-current liabilities	841 308	832 492

Non-current liabilities by entity are as follows:

(In millions of DZD)	2021	2020
SONATRACH SPA	515 746	485 813
NAFTAL	125 962	125 284
MEDGAZ	49 415	53 429
SNTM HYPROC	32 847	35 793
ENAFOR	16 078	19 955
GCB	13 170	14 957
SIPEX LIBYE	12 088	11 490
ENGTP	11 455	12 771
SONATRACH-Ré	10 107	10 095
ENTP	9 951	7 929
HELIOS	7 373	3 791
SBAC	6 472	7 108
SONATRACH RAFFINERIA ITALIANA (SRI)	4 447	5 732
ENSP	4 395	4 190
OTHERS	22 070	34 154
Total Non-Current Liabilities	841 308	832 492
Including SONATRACH Spa	61%	58%

4.3. Current liabilities

Current liabilities recorded a drop of 155,190 MDZD. This item mainly includes suppliers' accounts, debts to the State and other debts.

The trade payables and related accounts item fell by 29%.

The other debts concern mainly the partners of the parent company within the framework of the contracts of production sharing.

(In millions of DZD)	2020	Increase	Decrease	Endowments exploitation	Operating takeovers	Increase	Tax reduction	Movement	Deviation from conversion	Entry of perimeter	Change in scope	Reclassification	Other Variations	2021
Trade payables & accounts attached	476 819	-	-	-	-	-	-	(138 782)	(569)	106	19	-	-	337 592
Fixed assets debts & accounts ratt. CT	23 042	-	-	-	-	-	-	(5 618)	(3)	-	-	-	-	17 421
Suppliers & linked accounts	499 861	-	-	-	-	-	-	(144 400)	(573)	106	19	-	-	355 013
Debts on state (Including integ.) Ct	664 511	-	-	-	-	-	-	(150 713)	(166)	114	-	-	-	513 746
Deferred tax liability Ct	1 790	-	-	-	-	8	264	-	84	-	-	-	-	1 618
Taxes	666 301	-	-	-	-	8	264	(150 713)	(82)	114	-	-	-	515 364
Provisions for risks & charges	28 548	-	-	26 930	27 511	-	-	-	-	-	-	-	-	27 968
Loans & debts financiers Ct	5 004	4 764	5 423	-	-	-	-	-	-	-	155	-	-	4 500
Other debts Ct	3 622 986	-	-	-	-	-	-	127 785	1 348	664	(0)	(9 043)	-	3 743 740
Accounts of regularization Passive CT	6 244	2 753	1 282	-	-	-	-	1 089	20	-	-	-	-	8 824
Advances & accounts received on com.	33 998	-	-	-	-	-	-	7 372	(65)	-	3 466	-	-	44 771
RRR at accor & aut assets to be established	8 030	-	-	-	-	-	-	5 731	(3)	-	-	-	-	13 759
Debts on the personal	47 311	-	-	-	-	-	-	(2 917)	(0)	-	-	-	-	44 393
Social debts	21 573	-	-	-	-	-	-	4 508	(18)	-	-	-	-	26 063
Other debts	3 773 696	7 517	6 705	26 930	27 511	-	-	143 568	1 281	664	3 621	(9 043)	-	3 914 018
Treasury Passive	2 148	-	-	-	-	-	-	271	3	-	-	-	-	2 422
Total Current Liabilities	4 942 007	7 517	6 705	26 930	27 511	8	264	(151 275)	629	883	3 640	(9 043)	-	4 786 817

5. ANALYSIS OF THE CONSOLIDATED INCOME STATEMENT

Consolidated expenses and income, for the 2021 financial year, are respectively around 6,506,862 MDZD and 7,203,043 MDZD, i.e. a net result for the financial year of 696,181 MDZD.

The net result of the consolidated group totals an amount of 812,429 MDZD, including 801,915 MDZD relating to the share of the group. The latter increased by 815,886 MDZD, thus absorbing all the deficit for the year 2020. Minority results increased by 1,626 MDZD compared to the 2020 financial year.

The Group share of net income by entity is as follows:

(In millions of DZD)	2021	2020
SONATRACH SPA	586 689	- 61 372
SORFERT	36 994	6 509
AOA	36 123	17 672
SH PEROU	14 166	5 149
SONATRACH RAFFINERIA ITALIANA (SRI)	11 615	- 49 359
MEDGAZ	9 379	7 400
NATURGY ENERGY GROUP	7 775	569
SIPCO	7 463	- 6
KAHRAMA	7 306	5 959
NAFTAL	7 106	10 596
TG PERU	6 688	5 767
SIPEX	5 757	377
SKE (formerlySKS)	5 295	4 204
SGC	4 983	- 447
SNTM HYPROC	4 390	5 475
ENSP	3 682	4 840
ENGTP	3 650	3 262
AIE HOLDING	3 110	- 6
CGC	2 976	- 1 938
TMPC	2 937	2 730
ASMIDAL	2 500	2 744
ENAGEO	2 468	1 422
ENERGIA OF PORTUGAL	2 299	2 759
GCB	2 209	3 194
GEPESA	2 152	16
OTHERS	22 204	8 512
Total	801 915	-13 971

5.1. Products

- Operating grants.

5.1.1. Production of the the financial year

The production of the financial year increased by 58.80% compared to the previous financial year, ie 2,547,036 MDZD.

The Production item for the year is subdivided as follows:

- Sales of goods, manufactured products, services and ancillary products.
- Production stored or destocked.
- Immobilised production.

5.1.2. Turnover

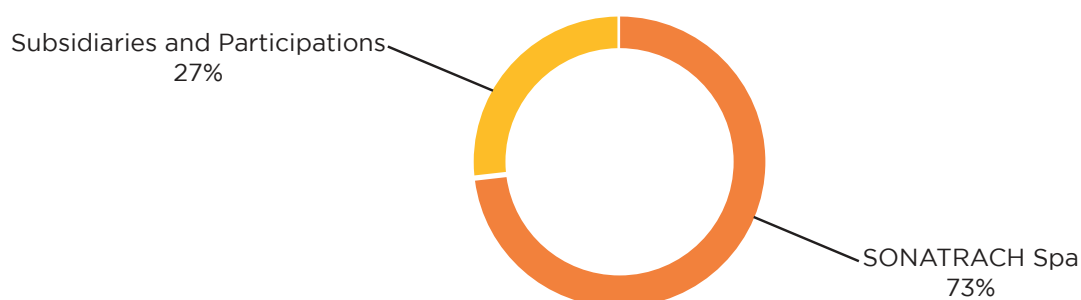
The consolidated turnover is of the order of 6,494,387 MDZD, whereas it recorded 3,980 MDZD in 2020, an increase of 63.16%. The parent company SONATRACH participates in this item for 73.43%.

The increase in turnover is linked to the increase in the price of a crude barrel, the average price Including rose from US\$41.9 in 2020 to US\$72.3 in 2021.

Consolidated revenue by entity is presented as follows:

(In millions of DZD)	2021	2020
SONATRACH SPA	4 768 933	2 852 658
SONATRACH RAFFINERIA ITALIANA (SRI)	668 475	338 379
NAFTAL	497 005	435 451
SPC BVI	147 189	131 991
SGM	110 698	22 420
SH PEROU	56 044	24 699
GCB	46 294	10 067
ENGTP	28 615	31 071
SGC	28 518	13 642
MEDGAZ	21 316	34 232
ENSP	15 115	21 799
KAHRAMA	11 016	10 079
ENAC	9 630	69
Tassili Airlines TAL	9 341	6 742
OTHERS	76 198	47 149
Total	6 494 386	3 980 445
Including SONATRACH Spa	73,43%	71,67%

Consolidated revenue 2021



SONATRACH Spa	73,43%	71,67%
Subsidiaries and Participations	26,57%	28,33%

5.1.3. Financial products

Financial products decreased by 16%. They recorded an amount of 81,075 MDZD in the year 2021 against 96,601 MDZD in the year 2020.

Financial income essentially represents income from the various securities shareholdings, exchange gains, and interest on various investments made with cash surpluses.

(In millions of DZD)	2021	2020
Interest income on loans & other debts	6 380	6 155
Received dividends	3 305	-
Income from other financial assets	38 971	25 144
Income from operating receivables	1 320	1 464
Exchange gains & forward transactions	19 691	47 064
Other financial incomes	8 102	15 872
Financial income from participation	77 769	95 700
Net income from disposal of non-current financial assets	3 306	902
Financial incomes	81 075	96 601

5.2. The charges

Expenses reached an amount of 6,506,862 MDZD, for the 2021 financial year against an amount of 4,677,229 MDZD for the 2020 financial year.

5.2.1. The financial year consumption

Consumption for the year reached 2,500,521 MDZD, an increase of 22.47%.

The latter includes purchases consumed as well as services.

(In millions of DZD)	2021	2020
Achats consommés	1 112 982	1 077 691
Services extérieurs	1 254 553	862 461
Autres services extérieurs	132 986	101 507
Consommation de l'exercice	2 500 521	2 041 659

5.2.2. Staff costs

Staff costs rose slightly by 3.27% compared to the previous year, ie 12,795 MDZD, mainly at the parent company.

(In millions of DZD)	2021	2020
Staff remuneration	301 129	287 370
Staff remuneration	50 333	48 926
Pension expenses	9 627	9 401
Pension contributions	15 275	14 564
Other social charges	9 293	8 569
Other staff costs	10 137	8 774
Incentive & participation	7 915	13 310
Staff costs	403 709	390 914

Staff costs broken down by entity as follows:

(In millions of DZD)	2021	2020
SONATRACH SPA	194 563	188 253
NAFTAL	49 750	50 176
ENTP	23 513	24 357
GCB	19 777	19 627
ENAFOR	17 726	17 231
ENGTP	17 254	16 100
ENSP	10 897	9 810
ENAGEO	10 700	9 710
SONATRACH RAFFINERIA ITALIANA (SRI)	10 674	10 160
2SP	8 518	8 092
SNTM HYPROC	5 735	5 415
ENAC	4 228	4 289
SOMIK	3 990	3 445
Tassili Airlines TAL	3 866	3 942
SOMIZ	3 425	3 144
SARPI	2 705	2 338
SOTRAZ	2 186	2 015
CASH	1 610	1 406
STH	1 605	1 645
BJSP	1 552	1 173
HESP	1 153	1 261
BAG	868	828
SSPA MCA	804	723
MEDGAZ	634	508
KAHRAMA	591	516
TTA	583	526
ASFERTRADE	471	443
SAFIR	446	379
G-CCO (THE Méridien of Oran)	440	465
AUTRES	3 447	2 935
Total	403 709	390 914
Including SONATRACH Spa	48,19%	48,16%

5.2.3. Taxes and duties

The taxes and duties section increased by 113% during the 2021 financial year compared to the previous financial year. This increase is explained by the increase in turnover relating to hydrocarbons.

(In millions of DZD)	2021	2020
Taxes & duties on wages	564	810
Tax on professional activity	17 692	15 746
Property taxes	510	449
Non-recoverable taxes and duties on turnover	7 543	5 796
Taxes & duties other levies related to oil activity	1 930 684	886 140
Other taxes & duties	11 058	14 914
Taxes & duties	1 968 051	923 854

This item is distributed among the Group entities as follows :

(En millions de DZD)	2021	2020
SONATRACH SPA	1 945 264	901 146
NAFTAL	6 561	6 106
MEDGAZ	6 484	4 844
ENTP	1 254	1 399
ENGTP	1 063	1 052
ENAFOR	936	827
GCB	925	969
SIHC HOLDING	796	1 143
ENAGEO	638	761
ENSP	543	555
SPC BVI	428	497
SNTM HYPROC	312	365
ENAC	270	244
2SP	267	242
OTHERS	2 310	3 705
Total	1 968 051	923 854
Including SONATRACH Spa	98,84%	97,54%

5.2.4. Financial expenses

Financial charges amount to 556,586 MDZD in 2021 against 291,840 MDZD in 2020, an increase of 90.72%.

(In millions of DZD)	2021	2020
Interest charges	12 004	13 180
Credit losses linked to shareholdings	0	-
Exchange losses	43 208	67 511
Net losses / disposals of current financial assets	-	6
Interest & similar charges	556 586	291 840

The breakdown of financial expenses by entity is as follows:

(In millions of DZD)	2021	2020
SONATRACH SPA	538 276	275 426
MEDGAZ	4 986	4 898
SPIC BV	3 465	3 828
SGC	2 167	403
NAFTAL	2 072	1 925
SNTM HYPROC	1 012	1 225
SONATRACH RAFFINERIA ITALIANA (SRI)	967	14
ENAFOR	879	1 175
SIPEX MALI	450	-448
SH PEROU	383	224
SIHC HOLDING	361	73
SBAC	333	750
APEC	311	84
GCB	268	335
OTHERS	655	1 928
Total	556 586	291 840
Including SONATRACH Spa	96,71%	94,38%

5.2.5. Income taxes

Income tax increased significantly by 81,256 MDZD (i.e. 356%) in 2021 compared to the 2020 financial year. This increase is explained by the increase in the tax base.

The taxes payable increased by 41,918 MDZD, 65% including represents the share of the parent company SONATRACH Spa.

The other income taxes amounting to 50,773 MDZD mainly relate to the petroleum tax recorded at the level of the parent company SONATRACH Spa.

The tax charge is presented as follows:

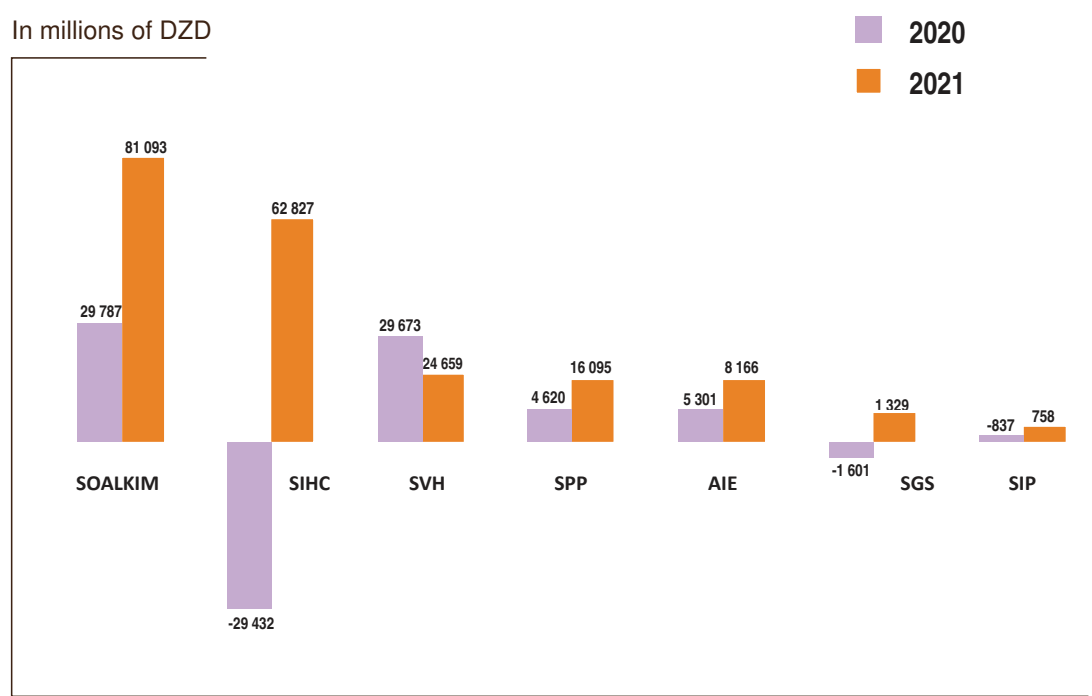
(In millions of DZD)	2021	2020
Current tax (tax consolidation)	56 394	14 476
Deferred tax assets	(4 692)	(5 660)
Deferred tax liabilities	1 575	13 934
Other income taxes	50 773	45
Income tax	104 050	22 794

6. PRESENTATION OF RESULTS BY HOLDING

The net results consolidated by Holding are as follows:

(In millions of DZD)	Consolidated net income		Net income Group share		Minority interests	
	2021	2020	2021	2020	2021	2020
SOALKIM - SONATRACH Al Kimia	81 093	29 787	80 007	28 574	1 086	1 214
SIHC- SONATRACH International Holding Corporation	62 827	(29 432)	62 827	(29 432)	-	-
SVH - SONATRACH Valorisation of Hydrocarbones	24 659	29 673	24 659	29 673	-	-
SPP - SONATRACH Para Petrolier	16 095	4 620	16 030	4 526	65	94
AIE - External Industrial Activities	8 166	5 301	8 166	5 301	-	-
SGS - SONATRACH Management and Support Services	1 329	(1 601)	1 331	(1 600)	(3)	(1)
SIP-Investment Company and Participation	758	(837)	344	(1 158)	415	322

Evolution of the consolidated income by Holding company



7. CONSOLIDATION SCOPE

In 2021, the scope of consolidation consists of 121 entities, including 43 abroad. 72 are fully consolidated and 49 accounted for using the equity method. The main variations in 2021 can be summarized as follows:

- Integration of three investments consolidated by the equity method and one by the global integration method:
 - In Algeria
 - **SIDAL** Spa : Company for the Installation and Distribution of Technical Equipment in Algeria (IG)
 - **SHAEMS** Spa: Algerian Renewable Energy Company (MEE)
 - **FERAAL** Spa: National Society of Iron and Steel (MEE)
 - Abroad :
 - **CPP** : Ceyhan Polipropilen Uretim A.Ş.
- Leaving the perimeter:
 - **GALSI** : Algeria-Italy Gas Pipeline Study Company via Sardinia

7.1. Subsidiaries and Participations in Alegria

Entity Name	Share Capital Owner
SHAEMS	50% SH Spa, 50% SONELGAZ
STEP	51% SH SPA, 49% TOTAL
AIE HOLDING	100% SH Spa
SKH	10% AIE, 29% AEC, 51% AUI, 10% SONELGAZ
SKE Ex SKS	49% AIE, 51% SONELGAZ
FERRAL	35% Groupe IMETAL 25% Groupe MANAL 20% Holding AIE 20% G.I.C.A
SIP HOLDING	100% SH spa
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% SatInfo
SARPI	100% SIP
STH	60% SIP, 20% EPA, 15% EPS, 5% EPB
SVH HOLDING	100% SH spa
HYPROC SHIPPING COMPANY	100% SVH
NAJDAMAGREB	100% HYPROC SHIPPING COMPANY
NEAL	45% SVH
SPP1	14% SVH, 20% NEAL, 51% ABENER ENERGIA, 15% CO-FIDES
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

Name of entity	Share Capital Owner
SOALKIM	100% SH spa
HELIOS	51% SOALKIM, 49% HELAP France
SIDAL spa	100% HELIOS
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% SH spa
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% Autres
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% SH SPA
TAL	82,44% SGS, 17,56% SH SPA
TTA	100% TAL
COMINTAL	20% SGS
SSPA MCA	99,48% SGS
IAHEF	10% SGS
AGRO ALIMENTAIRE ACTIVITE	100% SGS

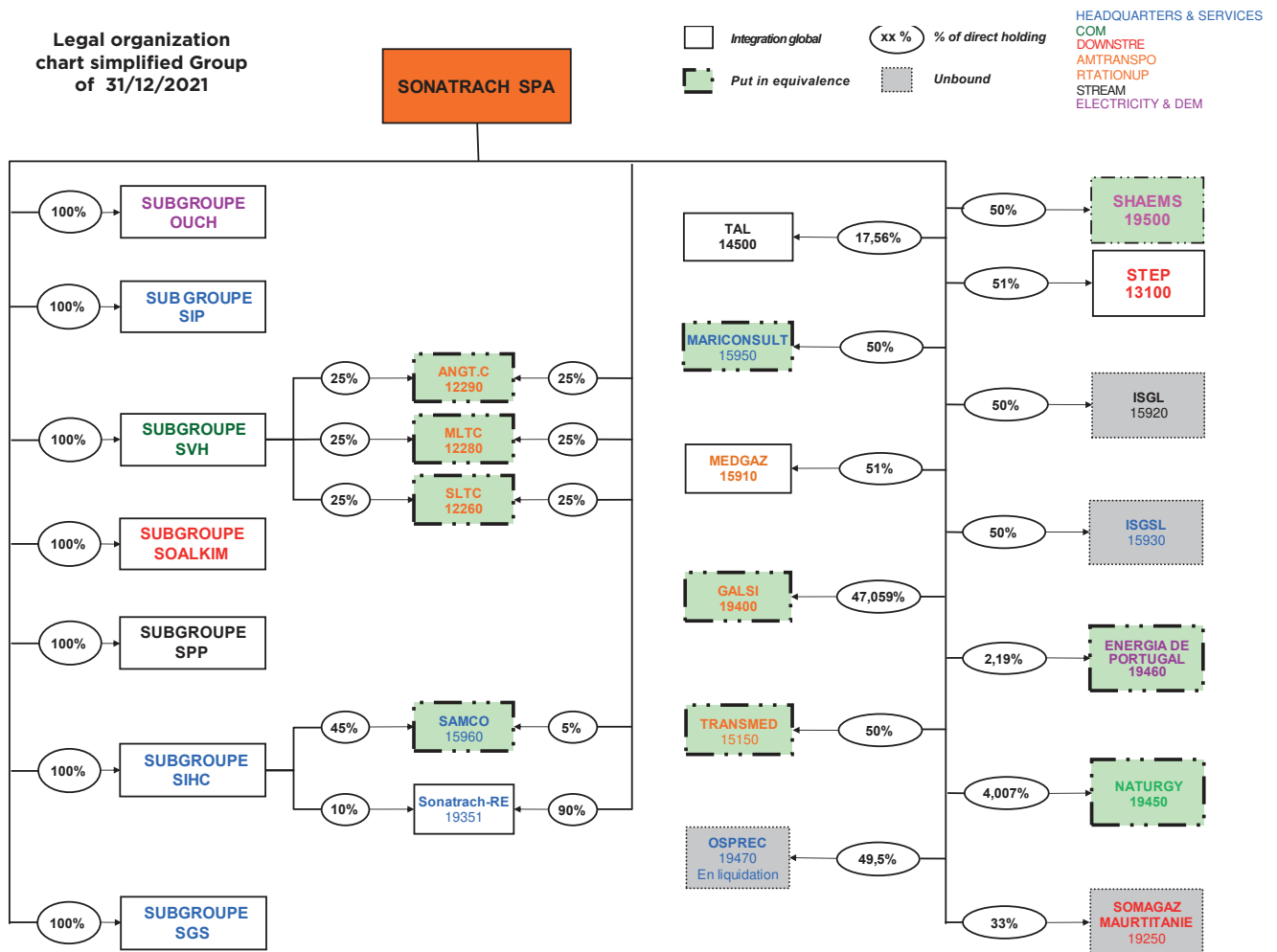
7.2 Subsidiaries and Participations abroad

Name of entity	Share Capital Owner
ANGT	25% SH SPA, 25% HYPROC SHIPPING COMPANY, 25% ITOCHU, 25% MOL
MLTC	25% SH SPA, 25% HYPROC SHIPPING COMPANY
SLTC	25% SH SPA, 25% HYPROC SHIPPING COMPANY
TRANSMED	50% SH Spa, 50% ENI
SONATRACH-RÉ	90% SH SPA, 10% SIHC Holding
MEDGAZ	51% SH Spa, 34,05% Cepsa, 14,95% GNA
MARICONSULT	50% SH SPA, 50 %ENI
ENERGIA OF PORTUGAL	2,19% SH SPA
NATURGY	4,007% SH SPA
GALSI	47,06 % SH SPA, 23,53% EDISON Spa, 17,64% ENEL PRODUZIONE, 11,77% HERA Spa
SIHC HOLDING	100% SH SPA
TMPC	50% SIHC, 50% ENI
SAMCO	90% TMPC, 5% SH Spa, 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 (formerly 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
CPP TURQUIE	34% SPIC
TG PERU	21,18% SIPCO PEROU

7.3. Legal organization charts

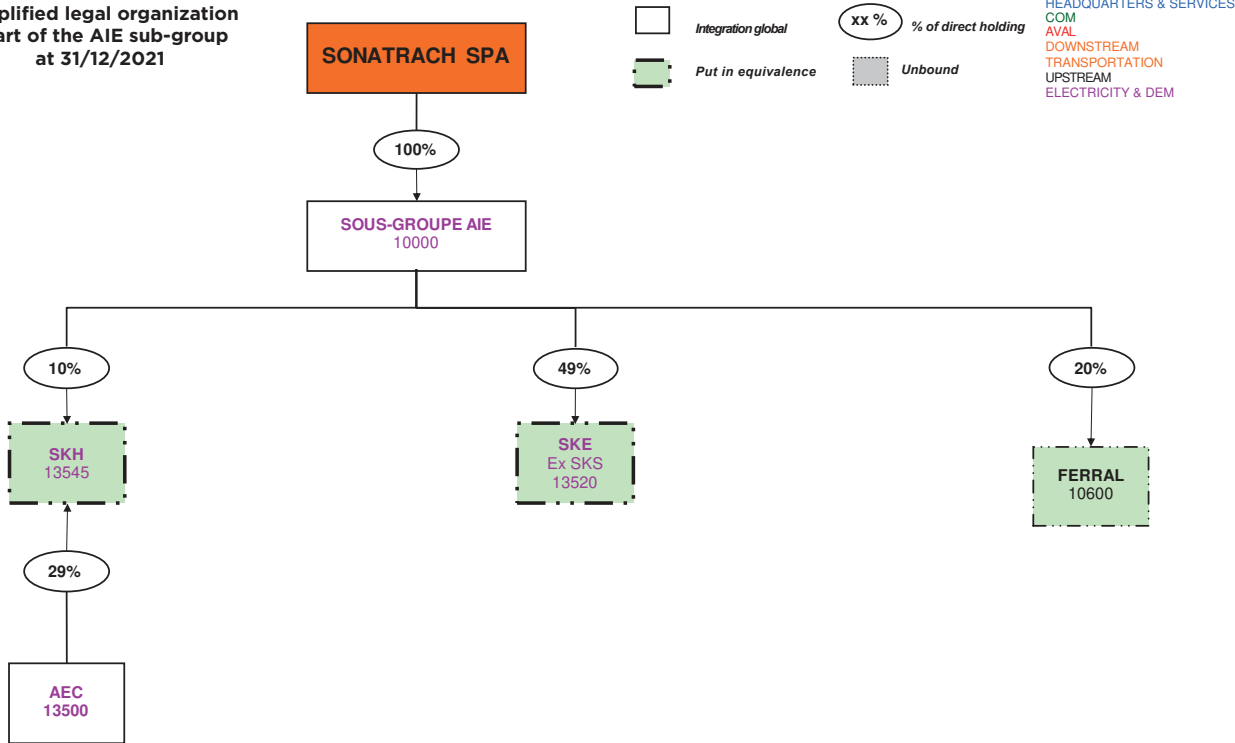
The legal organization charts below presented by Holding, display the subsidiaries and holdings held by the SONATRACH Group in 2021.

7.3.1. SONATRACH Spa



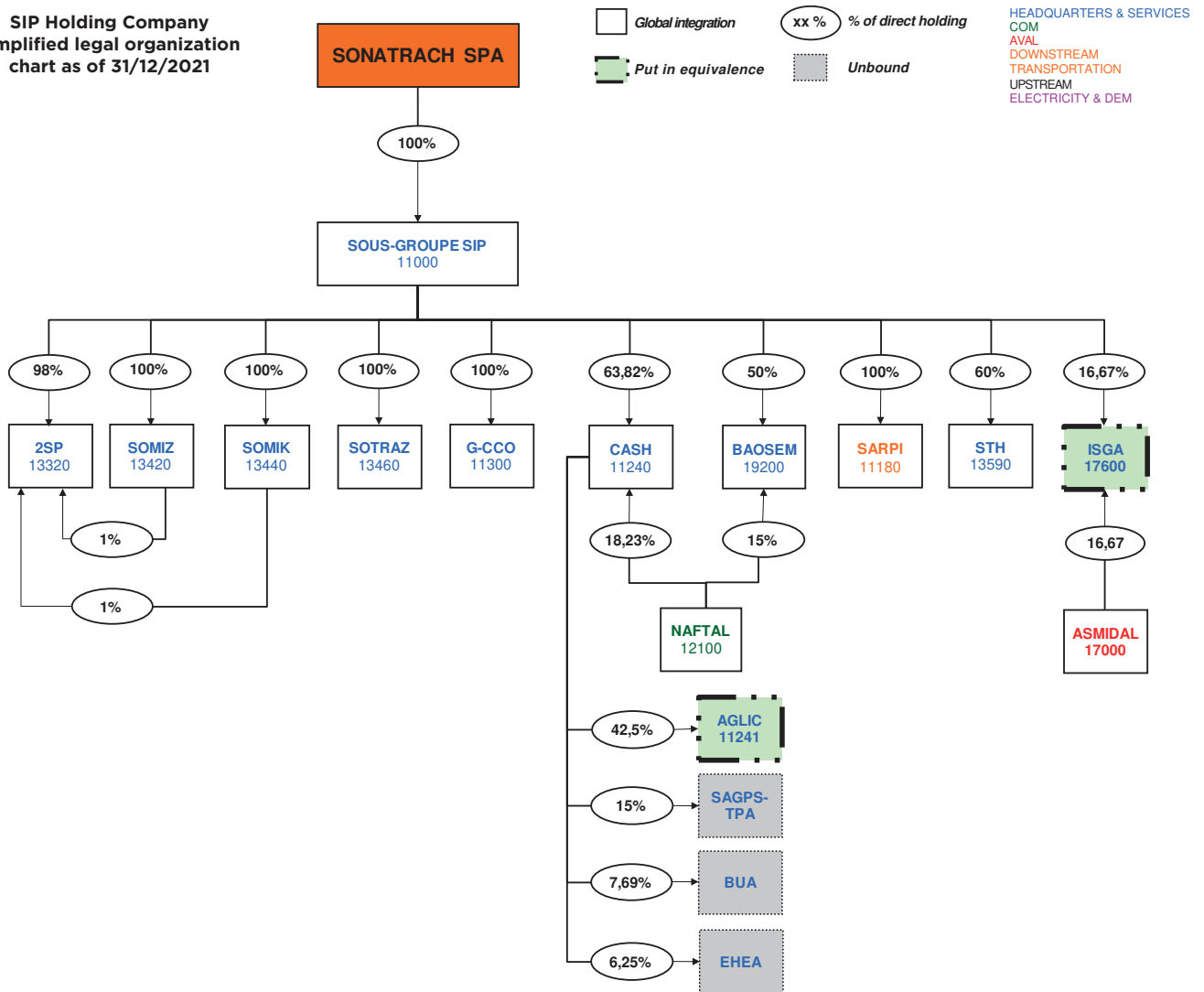
7.3.2. Holding SONATRACH External Industrial Activities “AIE” Spa

Simplified legal organization chart of the AIE sub-group at 31/12/2021



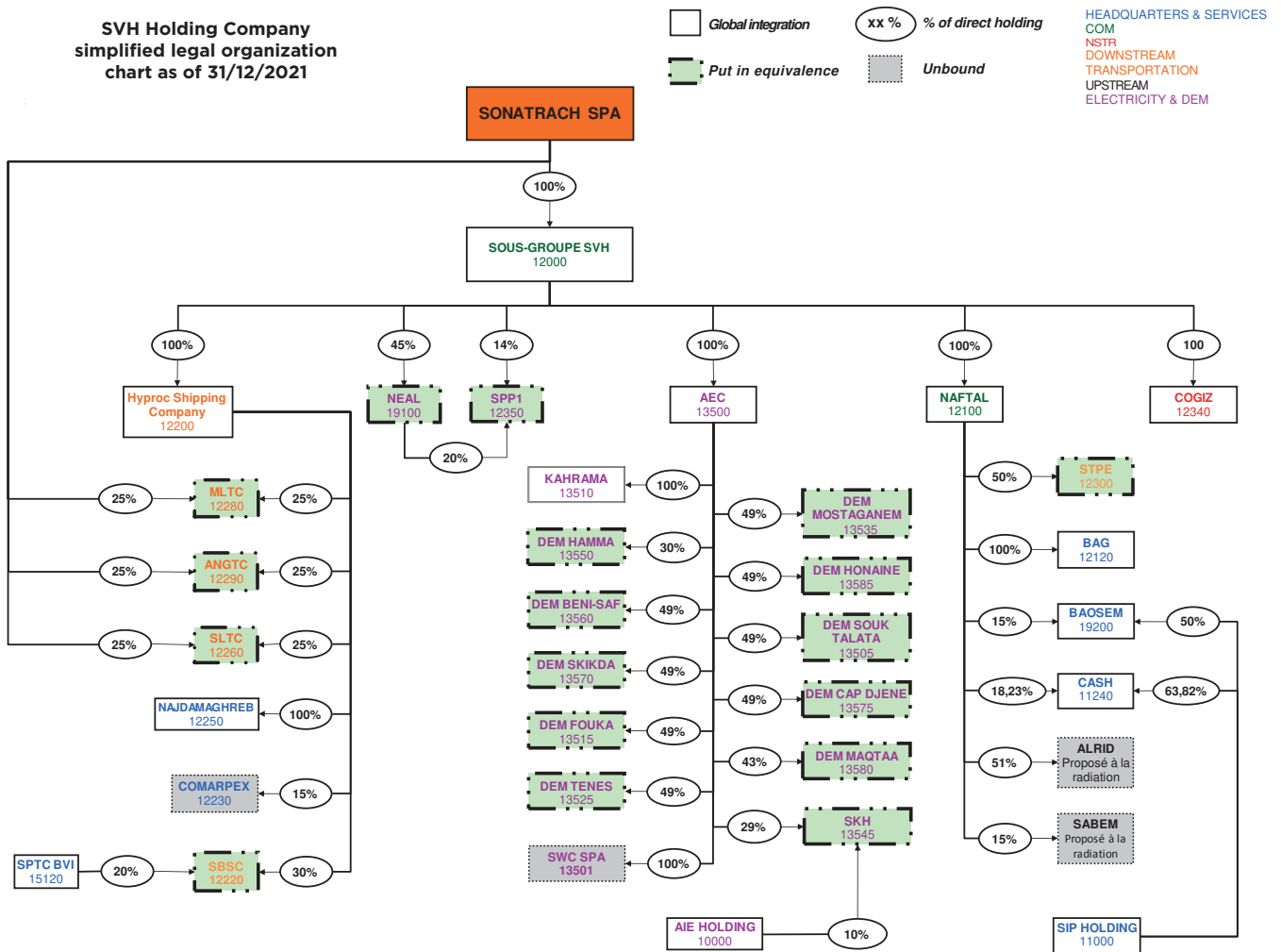
7.3.3. Holding SONATRACH Investment and Participation «SIP» Spa

SIP Holding Company simplified legal organization chart as of 31/12/2021



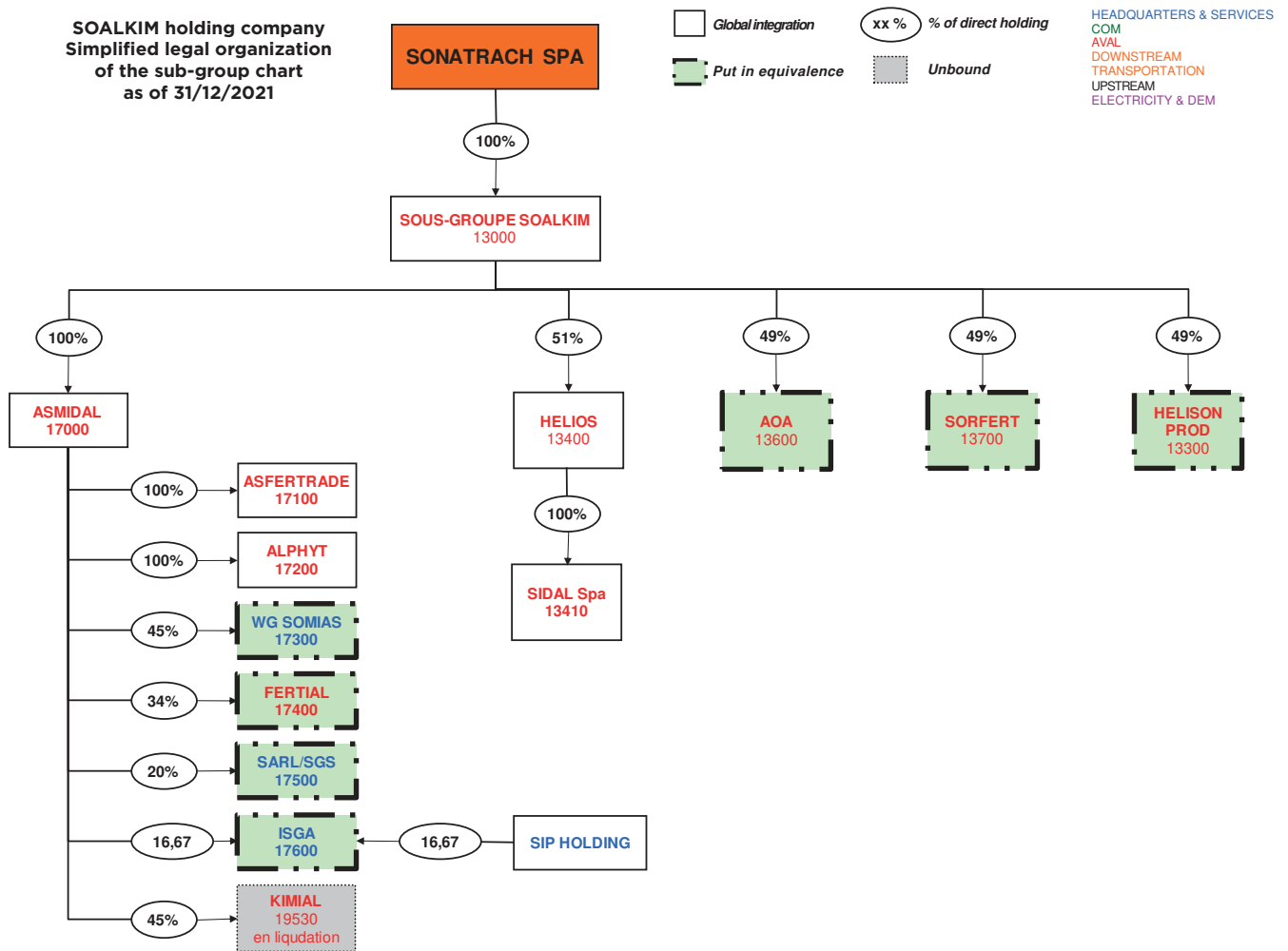
7.3.4. Holding SONATRACH Valorization of Hydrocarbons «SVH» Spa

SVH Holding Company simplified legal organization chart as of 31/12/2021



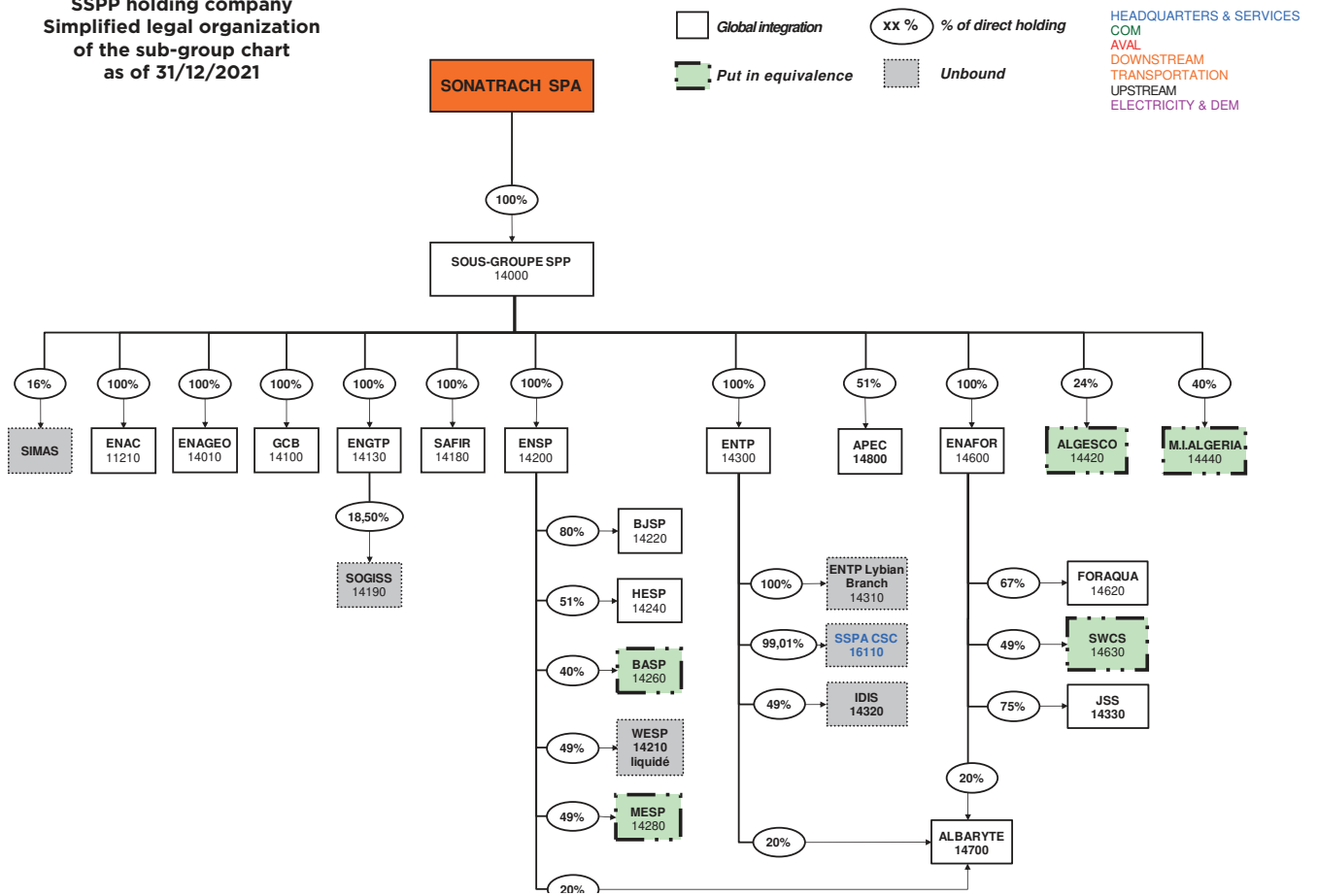
7.3.5 Holding SONATRACH Al Kimya “SOALKIM” Spa

SOALKIM holding company
Simplified legal organization
of the sub-group chart
as of 31/12/2021



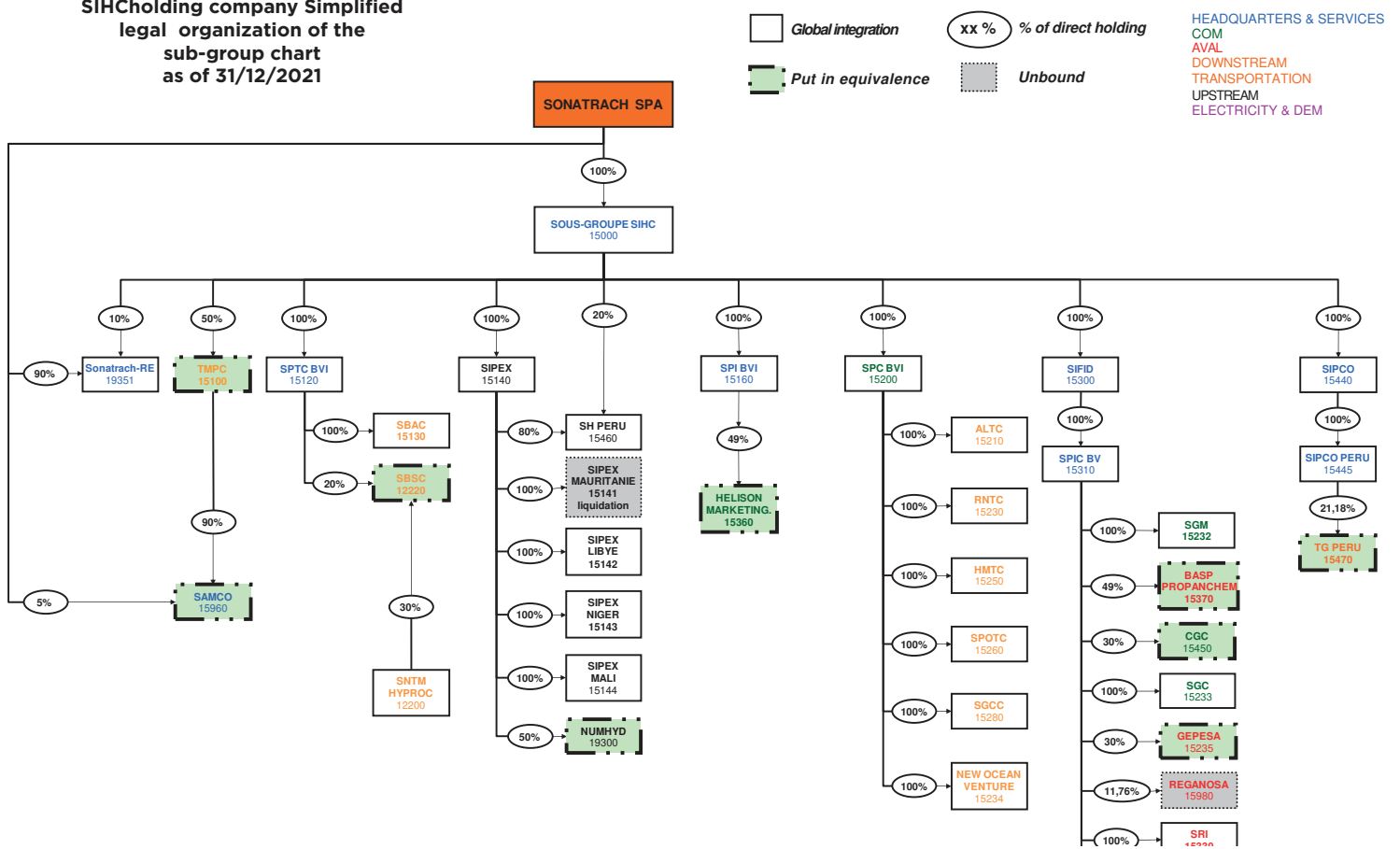
7.3.6 Holding SONATRACH Para-Petroleum “SPP” Spa

SSPP holding company
Simplified legal organization
of the sub-group chart
as of 31/12/2021



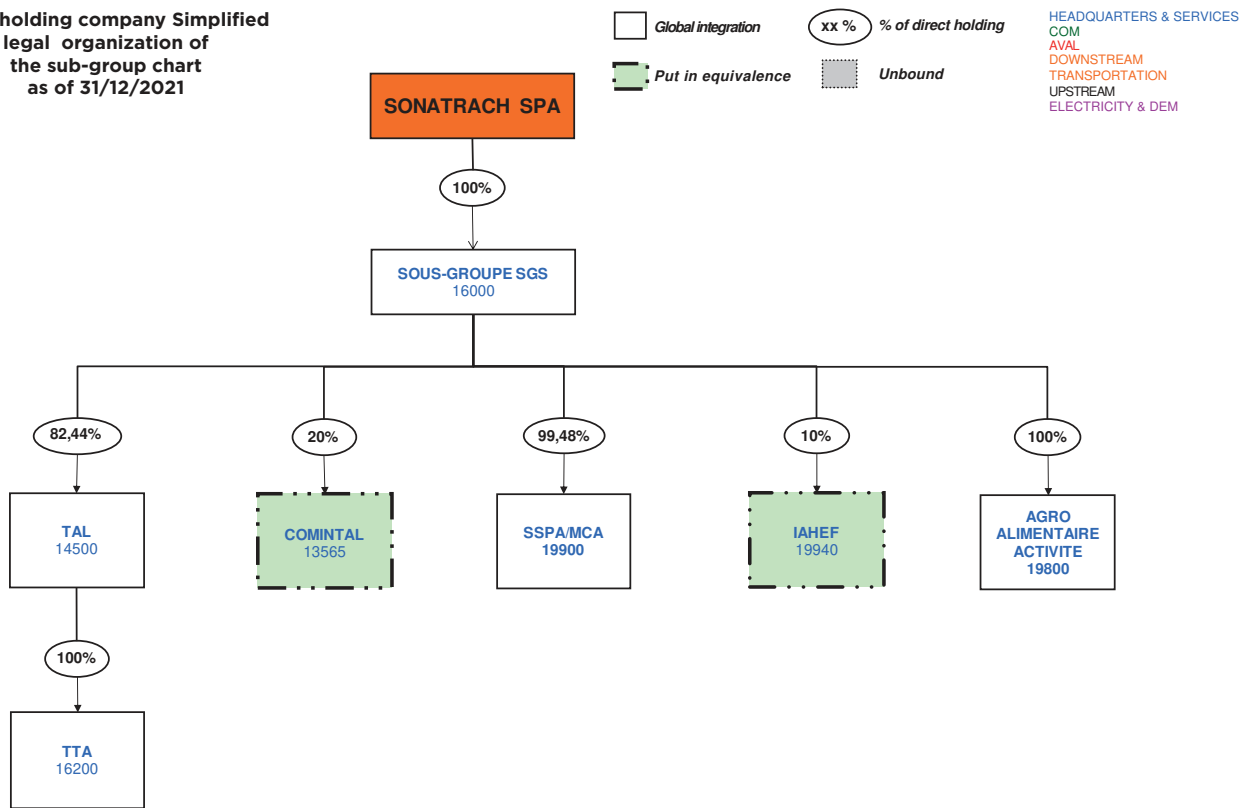
7.3.7 SONATRACH International Holding Corporation “SIHC”

SIHC holding company Simplified legal organization of the sub-group chart as of 31/12/2021



7.3.8 Holding SONATRACH Gestion et Services de Soutien « SGS » Spa

SGSS holding company Simplified legal organization of the sub-group chart as of 31/12/2021



Members of the General Assembly of SONATRACH

We have the honor to report to you on the audit mission that we carried out as statutory auditors.

We have examined the consolidated financial statements of the SONATRACH group, as approved by the Board of Directors of your Company for the 2021 financial year, with a total balance sheet assets/liabilities of fourteen thousand two hundred and eighty-one billion three hundred and thirty-five million three hundred and seventy-four thousand two hundred and twelve dinars and sixty centimes (14,281,335,374,212.60) and a net profit attributable to the Group of eight hundred and one billion nine center fifteen million two hundred and five thousand six hundred and fifty- eight dinars and nineteen cents (801,915,205,658.19).

Our various control work, carried out essentially on the basis of surveys, groupings and techniques which we considered to be the most appropriate, have been carried out in accordance with the rules of normal diligence.

Taking into account the results of this work, we certify, subject to the remarks and observations made, and the aspects relating to the physical inventories of the Group's entities assets, that the consolidated financial statements of the SONATRACH Group presented are in their aspects significant and with regard to the accounting rules and principles of the Algerian SCF, sincere and regular and give a faithful image of the financial situation of your Group for the financial year ended December 31, 2021.

Algiers, June 27, 2022

The Statutory Auditors

MEGUELATI Enchaallah

MEGUELATI Enchaallah
Expert Comptable
Commissaire aux Comptes
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ALGER

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Financial Report of the Corporate Accounts

The year 2021 was characterised by the rise in oil prices, which led to a significant improvement in the main financial indicators, raising them to higher levels than in previous years. Thus, our Company has achieved a net profit of DZD 591 billion, an increase of 2,855% compared to the year 2020.



Concerning the key indicators of fiscal year 2021, they are as follows:

- The Average Annual Sales Price is US\$ 72.31, an increase of 73% over FY 2020;
- The Hydrocarbons turnover is DZD 5,115 billion, an increase of 82% compared to FY 2020;
- The oil tax paid is DZD 2,601 billion, an increase of 40% compared to FY 2020.

SONATRACH's financial results and position as of December 31, 2021 are summarized in this report.

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

- Established in accordance with the accounting principles contained in the Financial

Accounting System (FAS), under Law No. 07-11 of 25 November 2007 and its implementing regulations;

- Established according to the same methods and principles as those of the fiscal year ended December 31, 2020;
- Established by its Board of Directors held on June 9, 2022 and approved by its Ordinary General Meeting held on June 27, 2022;
- Certified by the Company's Statutory Auditors to be true and fair and to reflect the financial situation and assets and liabilities of the Company.

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

1. Presentation of the financial statements

A- Balance sheet as of December 31, 2021

Actif	Unit : Billion DZD	
	2021	2020
NON-CURRENT ASSETS - NET	7 255	6 965
• Intangible assets	16	19
• Property, plant and equipment	434	440
• Fixed assets under concession	-	-
• Fixed equipment and production facilities	2 845	2 765
• Fixed assets in progress	2 229	2 289
• Participating interests and related receivables	812	769
• Other financial assets	892	661
• Deferred tax assets	27	21
CURRENT ASSETS - NET	5 400	5 090
INVENTORIES AND WORK IN PROGRESS	614	600
• Stocks of goods	-	-
• Raw materials and supplies	10	5
• Other supplies	376	409
• Stocks of products	228	186
• Inventories from fixed assets	-	-
• External stocks	-	-
RECEIVABLES AND SIMILAR USES	4 012	4 338
• Suppliers and related accounts	15	21
• Trade receivables and related accounts	620	358
• Personnel and related accounts	-	-
• Social organizations and related accounts	6	6
• State and public authorities	1 018	1 710
• Group and associates	2 266	2 099
• Miscellaneous debtors	80	136
• Prepaid expenses	7	8
CASH AND CASH EQUIVALENTS	774	152
• Marketable securities	-	-
• Banks and financial institutions	712	138
• Cash registers	-	-
• Imprest accounts and letters of credit	62	14
TOTAL ASSETS	12 655	12 055

Liabilities	Unit : Billion DZD	
	2021	2020
SHAREHOLDERS' EQUITY	7 587	6 939
• Issued capital	1 000	1 000
• Premiums and reserves	5 994	5 917
• Net income	591	20
• Retained earnings	2	2
NON-CURRENT LIABILITIES	516	486
• Provisions for expenses	305	275
• Taxes (deferred and provisions)	210	210
• Borrowings and financial debts	1	1
• Other non-current liabilities		
CURRENT LIABILITIES	4 552	4 630
• Suppliers and related accounts	348	388
• Trade receivables and related accounts	16	12
• Personnel and related accounts	22	25
• Social organizations and related accounts	8	8
• State and public authorities	466	619
• Group and associates	3 671	3 558
• Miscellaneous creditors	20	18
• Deferred income	-	-
• Passive cash flow	1	2
TOTAL LIABILITIES	12 655	12 055

B. Statement of Income as of December 31, 2021

INCOME STATEMENT TABLE		Unit : Billion DZD	
DESCRIPTION	2021	2020	
Sales and related products	5 154	2 855	
Production stored or removed from inventory	46	28	
Capitalized production	314	284	
Operating subsidies		52	
I. PRODUCTION FOR THE YEAR	5 514	3 220	
Purchases consumed	147	202	
External services	1 324	989	
Other external services	139	132	
II. CONSUMPTION OF THE FISCAL YEAR	1 610	1 324	
III. ADDED VALUE	3 904	1 896	
Personnel expenses	195	188	
Taxes and similar payments	1 945	901	
IV. GROSS OPERATING SURPLUS	1 764	807	
Other operating income	168	147	
Other operating expenses	41	58	
Depreciation, amortization, provisions and impairment losses	790	749	
Reversals of impairment losses and provisions	35	22	
V. OPERATING INCOME	1 135	169	
Financial income	78	139	
Financial expenses	538	275	
VI. FINANCIAL RESULT	-461	-137	
VII. ORDINARY INCOME BEFORE TAXES (V+VI)	675	32	
Current taxes on ordinary income	87		
Deferred taxes (changes) on ordinary income	-5	10	
- TOTAL REVENUE FROM ORDINARY ACTIVITIES (c)	5 795	3 528	
- TOTAL EXPENSES FROM ORDINARY ACTIVITIES (d)	5 203	3 506	
VIII. INCOME FROM ORDINARY ACTIVITIES (c-d)	592	22	
Extraordinary items (income)			
Extraordinary items (expenses)	1	2	
IX. EXTRAORDINARY RESULT			
X. NET INCOME FOR THE YEAR	591	20	

C. Cash Flow Statement as of December 31, 2021

Headings	Unit : Billion DZD	
	2021	2020
Cash flow from operating activities		
Net income for the year	591	20
Adjustment for:		
• Depreciation and provisions	730	704
• Changes in deferred taxes	-5	10
• Share of subsidies transferred to income		51
• Changes in inventory	-23	-81
• Change in accounts receivable and other receivables	-202	116
• Change in suppliers and other payables	442	-338
• Capital gains and losses on disposals, net of tax	4	1
• Retained earnings & liaison accounts	1	-79
Net cash flow from operating activities (A)	1 538	404
Cash flow from investing activities		
• Acquisition of intangible and tangible assets	-1 041	-1 348
• Disposals of intangible and tangible assets	347	642
• Acquisition of financial assets	-341	-112
• Disposal of financial assets	62	217
• Equipment and investment subsidies		
Net cash flow from investing activities (B)	-973	-601
Cash flow from financing activities		
• Changes in shareholders' equity	77	482
• Change in loans and financial debts		
• Allocation of the result (n-1)		
• Coupons and dividends		
• Optional reserves	-20	-338
Net cash flow from financing activities (C)	57	144
Cash flow for the period (A+B+C)	622	-52
Opening cash flow	151	203
Closing cash position	773	151
Change in cash and cash equivalents for the period	622	-52

D. Statement of Changes in Equity as of December 31, 2021

					Unit : Billion DZD	
Description	Share capital	Merger Bonus	Valuation difference	Reserves and results	Total shareholders' equity	
Balance as of December 31, 2019	1 000	32	125	5 697	6 854	
<ul style="list-style-type: none"> • Change in accounting policies • Corrections to material errors • Gains/losses not recognized in CDR • Dividends paid • Property vested in the State • Net income for the year 			63	- 2 - - 20	- 2 63 - - 20	
Balance as of December 31, 2020	1 000	32	188	5 719	6 939	
<ul style="list-style-type: none"> • Change in accounting policies • Corrections of material errors • Gains/losses not recognized in CDR • Dividends paid • Property vested in the State • Net income for the year 			55	- 2 - - 591	- 2 55 - - 591	
Balance as of December 31, 2021	1 000	32	243	6 312	7 587	

2. Accounting Rules and Principles

A. Accounting Rules and Principles

Accounting policies are the specific principles, bases, procedures and practices used to prepare and present the financial statements and are applied consistently by SONATRACH.

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

The purpose of financial statements is to provide useful information about:

- The financial position of the Company (Balance Sheet).
- The performance (Income Statement).

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

Pursuant to the provisions of Law 19-13, dated December 11, 2019, governing hydrocarbon activities, the accounts for upstream activities must be kept for each upstream concession or hydrocarbon contract, as the case may be. However, for the research and/or exploitation contracts governed by the Law 05-07, dated April 28, 2005, amended and supplemented, relating to hydrocarbons, still in force, the accounting of SONATRACH SPA is kept per exploitation perimeter. Also, it is kept by pipeline transport system, refining, petrochemical, liquefaction and hydrocarbon transformation facilities.

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

Intangible assets	Cost of acquisition/production
Tangible fixed assets	Cost of acquisition/production
Financial assets	Acquisition cost/fair value
Depreciation of fixed assets	Linear
Depreciation	Applicable for all categories concerned
Breakdown by component	Applicable for some industrial facilities
Revaluation	Option not retained
Inventories of raw materials and goods	Valuation at purchase cost
Finished goods inventory	Valuation at production cost
Outgoing inventory	Weighted average unit cost
Inventory tracking	Continuous inventory
Change in accounting method	Impact on retained earnings
Correction of material errors	Impact on retained earnings
Receivables and Payables	Conversion at the exchange rate of 31/12/N for receivables and payables in foreign currencies
Income statement	List presentation
Cash flow statement	Indirect method

B. Accounting Principles

INTANGIBLE ASSETS

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

Expenditure required to complete the development phase of an internal project is an expense to be capitalised as an intangible asset when all of the following conditions are met simultaneously:

- The development project is clearly identifiable.
- The intention to complete the project for internal use or external sale.
- The existence of a market for the sale or evidence of the project's usefulness internally.
- The availability of all resources necessary to complete the project.
- The expenses attributable to the project are reliably measured.

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

Intangible assets are stated at their directly attributable cost.

Property, Plant And Equipment

Property, plant and equipment are stated at their directly attributable cost, including all acquisition and installation costs, taxes paid, non-recoverable taxes and other direct expenses.

The following principles shall apply for grouping or separating property, plant and equipment:

- Items of low value and those consumed during the year are not recognized as fixed assets.
- Spare parts and specific maintenance equipment are recognized as fixed assets when their use is linked to certain fixed assets and if they are used over more than one financial year.
- The components of an asset are considered as separate items if they have different useful lives or provide economic benefits at different rates.

Hydrocarbon Production Assets

Development costs (drilling of development wells and construction of production capacity) are capitalized at their production cost.

All equipment, parts or components which, even if separable by nature, are technically indispensable to the operation of the production assets and irreversibly incorporated into the production assets, are recorded at acquisition cost or production cost.

Major maintenance work on wells, in particular workovers and snubbings, intended to maintain or improve the recovery rate, is capitalized at cost.

The costs of abandoning and returning sites are not capitalized and are subject to annual provisions recognized as operating expenses, in accordance with the provisions of Law 19-13 of December 11, 2019, governing hydrocarbon activities.

Hydrocarbon production assets are depreciated on a straight-line basis, in accordance with the rates defined by the aforementioned law:

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

Operations Related To Production Sharing Contracts (Law 86-14)

Exploration, development and operating costs are recorded in the appropriate fixed asset or expense accounts in consideration of a debt to SONATRACH's partner.

Exploration costs that have not resulted in commercially exploitable reserves are amortized at 100% in consideration of the cancellation of the related debt.

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

The remuneration of the partners (profit-oil) defined in accordance with the production sharing terms defined in the partnership agreement, is recorded as financial expenses in consideration of a debt owed to the partner by SONATRACH.

The debt to the partner is reduced each year by the share of production due to the said partner (cost-oil) for its reimbursement.

A 38% tax on remuneration as well as a share of the production as Tax sur les Profits Exceptionnels (TPE) (Tax on Exceptional Profits) are deducted at source by SONATRACH and paid to the State, in accordance with the provisions of Laws 86-14 and 05-07 respectively.

Inventories And Work In Progress

The cost of inventories includes all costs incurred in bringing the inventories to their present location and condition:

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

Financial Assets

The financial assets held by SONATRACH SPA are recorded at their acquisition cost, including brokerage fees, non-recoverable taxes and bank charges. They are broken down as follows::

- Equity investments and related receivables, the long-term holding of which is considered useful for the entity's business, in particular because it enables it to exercise influence over the issuer of the securities or to have control over it, as is the case for investments in subsidiaries, associates or joint ventures;
- Long-term securities intended to provide the entity with a satisfactory return over a period of time, but without any involvement in the management of the enterprises in which the securities are held;
- Other long-term securities, representing shares in the capital or in long-term investments, which the entity has the possibility, as well as the intention or the obligation, to hold until their maturity;
- Loans and receivables issued by the company that it does not intend or is not able to sell in the short term; loans with a maturity of more than 12 months granted to third parties

Monetary Elements

Transactions in foreign currencies are converted at the exchange rate prevailing on the value date of the payment.

Differences between the values first recorded in the accounts at historical cost and those resulting from the conversion at the balance sheet date are recognized as financial expenses or income for the period.

Exchange differences relating to a monetary item, that is, in substance, an integral part of the net investment in a foreign operation, are:

- Recorded in the equity of the Company's financial statements until the disposal of this net investment
- Recognized as income or expense when the investment is disposed of.

Revenues

Revenues correspond to the sales of goods, productions, and services, valued on the basis of the selling price excluding taxes and achieved in the course of its ordinary business.

- Hydrocarbons national market:
The sales, for the needs of the national market, are valued at the prices set by regulation.
- Hydrocarbons external market:
Export sales are valued at the international market price or at the contractual price depending on the product.

Provisions For Employee Benefits

At each balance sheet date, a provision is recognized and recorded to cover the amount of the Company's obligations in respect of end-of-career allowances, loyalty medals and similar benefits for employees.

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

Retained Earnings

Retained earnings consist of the unallocated portion of the Company's profits and of amounts generated by the change in accounting method and material error corrections.

The decision to make such an entry is made by the Ordinary General Meeting.

Valuation Difference

The valuation difference results from the difference between the fair value and the

net book value of financial assets and net investments in foreign subsidiaries.

Extraordinary Income

Extraordinary income and expenses arise from events or transactions that are clearly distinct from the Company's ordinary activities and are of an exceptional nature.

Taxation

SONATRACH's activities are subject to two (2) tax schemes, namely: a petroleum tax and an ordinary tax of common law.

- Oil Taxation

SONATRACH is subject to the petroleum tax scheme provided for by the provisions of Law N°19-13, dated December 11, 2019, governing hydrocarbon activities, which provides for the payment of:

- A surface tax on the perimeters during the research, retention or exploitation period at the rate of a unit amount per Km²
- A hydrocarbon royalty on all the quantities of hydrocarbons extracted and counted at the measurement point of each exploitation perimeter, valued at the prices notified by the ALNAFT agency for products intended for export and by the ARH agency for products intended for the national market.

The basis for calculating the hydrocarbon royalty is equal to the valorized production minus the cost of transportation by pipeline and, possibly, the cost of liquefaction of natural gas and that of LPG separation.

The royalty rate is 10%, with the possibility of benefiting, under certain conditions, from a reduced rate that cannot be less than 5%. The royalty on hydrocarbon production is recorded in the «Services» account. It is not considered as a tax, but as an operating expense.

- A Tax on Hydrocarbon Income (IRH) at a rate varying between a minimum of 10% and a maximum of 50%, determined according to a factor R calculated by the ratio of cumulative net revenues and cumulative expenses achieved in the exploitation perimeter. This rate applies to the same basis of calculation of the hydrocarbon royalty.
- An income tax (IR) on hydrocarbon production activities of 30%, applicable to Upstream petroleum (in own effort and in association)
- A flat fee on anticipated production (produced during the research period). The amount of this royalty is equal to 50% of the value of the production minus the cost of transportation by pipeline and, if applicable, the cost of liquefying natural gas and the cost of separating LPG.

Law N° 19-13 on hydrocarbons also provides for the payment of other duties and taxes, namely:

- Flaring tax (applies to both upstream and downstream activities);
- Transfer of rights fee (upstream activities) ;
- Water use tax (upstream activities);
- Property tax on non-operating assets (upstream activities), as governed by the applicable tax legislation.

In addition, in accordance with the provisions of the aforementioned law, SONATRACH is responsible, under production sharing contracts or risk service contracts, for paying:

- A tax on the remuneration of the foreign co-contractor on behalf of his partner(s). The amount of this tax is equal to 30% of the value of the gross remuneration due to the foreign partner.

In addition, pursuant to Article 230 of Law 19-13 on hydrocarbon activities, SONATRACH is subject to certain payments determined in accordance with the terms of the tax scheme of Law 05-07, as amended and supplemented, relating to hydrocarbons.

In fact, for the old exploitation perimeters, whose production start was recorded before February 20, 2013 (date on which Law 13-01 modifying and supplementing Law 05-07 was promulgated), SONATRACH proceeds to the payment of:

- A surface tax on the perimeters in research, retention or exploitation phase at the rate of a unit amount per Km² (Cf. Article 84 - Law 05-07).
- A royalty on all the quantities of hydrocarbons extracted and counted at the measuring point of each exploitation perimeter, valued at the prices notified by the ALNAFT agency for products intended for export and by the ARH agency for products intended for the national market. The royalty rates depend on the classification of the operating area and the daily production levels. They vary between 5,5% et 23%.

The royalty on hydrocarbon production is recorded in the «Services» account. It is not considered as a tax, but as an operating expense.

- A Petroleum Revenue Tax (PRT) at a rate varying between a minimum of 30% and a maximum of 70%, determined according to the value of the

cumulative production since the origin, applied to the basis of calculation of the royalty (value of the production).

It should also be noted that, in accordance with Law 05-07, amended and completed, SONATRACH is responsible for making payments on behalf of its foreign partners:

- A 38% tax on the partner's remuneration applicable to the gross remuneration of foreign partners;
- A Tax on Exceptional Profits (TPE) applicable to the share of production accruing to foreign partners when the monthly arithmetic average of Brent oil prices exceeds 30 dollars per barrel.

COMMON LAW TAXATION

Common law taxation applies to activities other than upstream oil activities carried out by SONATRACH.

These are the following entities:

- Pipeline transport: this activity is subject to the tax on professional activity at a rate of 3% and to the corporate income tax (IBS) at a rate of 26%.
- Liquefaction of natural gas and separation of LPG into butane and propane: IBS at 26%.
- Refining and petrochemicals: IBS at 26%.
- Income realized by the head office: Dividends, interests and capital gains: 26%.

4. Key Financial Data

4.1. Overall Turnover

The overall turnover includes the production of hydrocarbons, resales 'as is' and services provided to third parties.

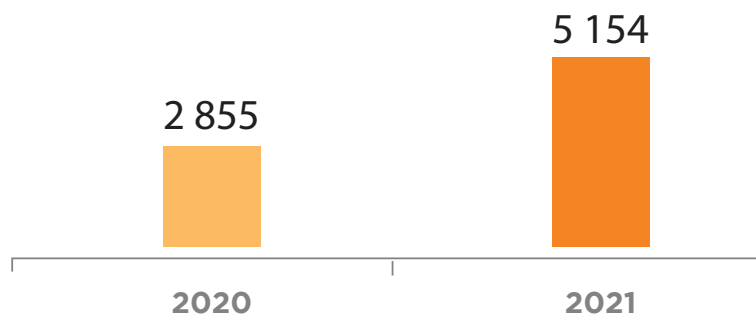
This turnover reached 5,154 billion DZD in 2021, as compared to 2,855 billion DZD in 2020, an increase of 81%.

Exports in fiscal year 2021 have reached 35 billion

US dollars, as compared to 20 billion US dollars in 2020, an increase of 75%.

Sales on the domestic market amount to 352 billion DZD, an increase of 28% compared to 2020.

Turnover (Billions of DZD)

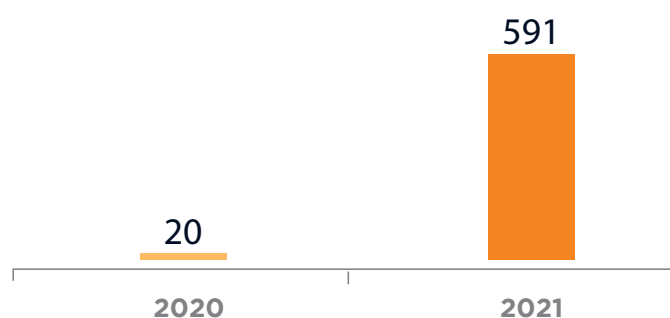


4.2. RNet Income

The net income of the Company increased by 571 billion DZD from 20 to 591 billion DZD. This considerable increase is due to:

- Increased quantities marketed for export;
- A more favorable international market with an increase in prices compared to 2020;
- The control of expenses and the reduction of costs.

Net Income (Billions of DZD)



3- Acquisition of Fixed Assets

The acquisitions of fixed assets for the financial year are made up of acquisitions from third parties as well as the production of the Company for itself and amount to 769 billion DZD, compared to 763 billion DZD in 2020.

The financial fixed assets increased from 1,431 billion DZD in 2020 to 1,704 billion DA in 2021, an increase of 273 billion DZD.

4- Cash and Cash Equivalents for the Year

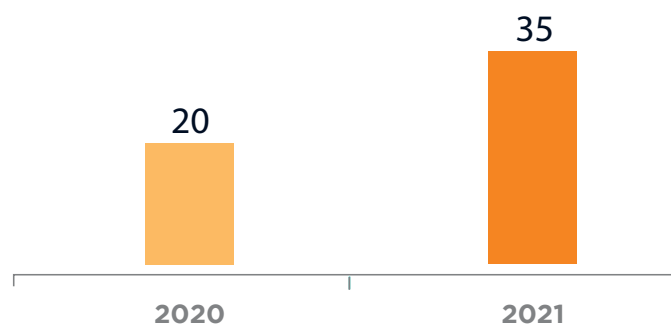
Cash assets as of 31/12/2021 amount to 774 billion DZD, i.e. an increase of 622 billion DZD compared to fiscal year 2020, due to the increase in hydrocarbon revenues.

A. Sales

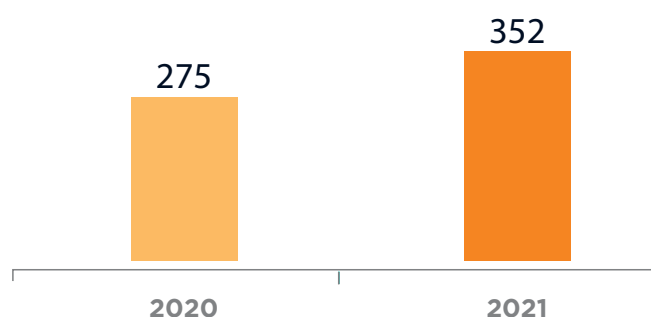
	2021		2020	
	Export in USD	Domestic in DZD	Export in USD	Domestic in DZD
Crude Oil	9 742		5 510	
NGL (Condensate))	2 031		1 134	
NG	7 416	105 111	4 394	62 313
LPG (Butane/Propane)	3 588	7 533	1 822	6 655
LNG	4 369		2 468	
Refined Products	7 995	234 990	4 722	204 307
Petrochemicals	33	4 766	17	1 936
TOTAL	35 174	352 400	20 067	275 211

Exportations

Milliards de USD



Domestic Market (Billions of DZD)



B. Off-balance sheet commitments

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

Commitments include contingent liabilities which are defined as follows:

- A potential obligation of the entity to a third party resulting from events whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity;

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

The situation of the remaining balance of the commitments as of 31 December 2021 is 100 billion DZD, representing the guarantees given to financial institutions and customs administration, namely: collection credits, customs bonds, letters of guarantee, documentary credits and guarantee bonds..

5. Note to the financial statements

A. Capitalized Production

This heading includes expenses incurred for the realization of investments requiring the mobilization of own means, in addition to the recourse to third parties, in particular for drilling and exploration services.

It amounts to 314 billion DZD in 2021, compared to 284 billion DZD in 2020.

B. Financial Income

The financial income reached 78 billion DZD, compared to 139 billion DZD in 2020, a decrease of 44 %.

This heading includes the products of the participations, 17 billion DZD, as well as the following headings:

• Foreign exchange gains	31
• Income from financial assets	15.6
• Other financial income (interest on current accounts)	7.7
• Income from receivables	3.1
• Net gains on disposal of financial assets	3.3

C. Consumption for the year

Consumption for the year amounted to 1,610 billion DZD and includes purchases of materials and supplies, as well as all services, broken down as follows: ces et se répartissent comme suit :

• Purchases consumed	146.6
• External services	529.2
• Royalty	794.9
• Other external services	139.3

The Purchases Consumed heading is made up of:

- Consumed goods, which represent goods that are resold 'as is'.
- Materials and supplies consumed, including mainly spare parts, chemicals, building materials, cases and tubes.

D. Added value

The added value, representing the difference between the production and the consumptions of the year, increased by 106% compared to 2020, from 1,896 billion DZD to 3,904 billion DZD, namely:

• Production for the year	5 514
• Consumption for the year	1 610

E. Personnel Expenses

Personnel costs have increased by 7 billion DZD compared to 2020, from 188 billion DZD to 195 billion DZD.

F. Taxes, Duties and Similar Payments

This heading recorded an amount of 1,945 billion DZD, made up mainly of the tax on the oil income for 1,898 billion DZD, that is 98%.

G. Depreciation and Provisions

Depreciation, amortization and provisions for fiscal year 2021 amounted to 790 billion DZD, an increase of 5% compared with fiscal year 2020.

H. Financial Expenses

This item recorded an amount of 538 billion DZD, consisting mainly of the remuneration of associates and exchange losses related to the discounting of receivables and debts in foreign currencies.

The remuneration of associates (Profit Oil) increased from 206 billion DZD in 2020 to 493 billion DZD in 2021, an increase of 139%.

Exchange losses on foreign currency assets and invoices in foreign currencies recorded in the balance sheet (receivables and payables) amount to 41 billion DZD.

6. Other information: Insurance

SONATRACH, as part of its policy of protecting the Group's assets, has established insurance coverage programs for the two (02) categories of risks generated by its activities and those of its subsidiaries.

This insurance coverage include industrial risks as well as simple risks and personal protection.

In 2021, Industrial Risks insurance contracts and Simple Risks and Personal Protection insurance contracts were renewed for the following periods:

- Industrial risks from July 1, 2021 to June 30, 2022;
- Simple risks from July 1st 2021 to June 30th 2022;
- Protection of Persons from January 1, 2021 to December 31, 2021.

I. Industrial Risks

Insurance coverage for this type of risk is provided by the following contracts:

- "All Risks Except" coverage, covering industrial facilities and complexes. The net insurance premium for the 2021 - 2022 period was 52.616 million USD, an increase of 11.22% compared to the 2020 - 2021 period.
- "Cost of Control" coverage, the net premium for the 2021 - 2022 period was 0.861 million USD, a decrease of 13% compared to the 2020 - 2021 period.
- "Drilling Rigs" coverage, the net premium for the 2021 - 2022 period was 1,400 million USD, a decrease of 44% compared to the previous year.

- “General Civil Liability” coverage, the amount of the net premium transferred to the international market was 1.078 Million USD for the 2021 - 2022 period, that is to say an increase of 13.75% compared to the 2020 - 2021 period. As for the net premium intended to the domestic market, it was 32 million DZD;
- “Tanker Civil Liability” coverage, the net premium for the 2021 - 2022 period was 0.133 million USD, a decrease of 23.80% compared to the 2020 - 2021 period.

For this coverage, the insured values have increased from 91.036 billion USD for the 2020 - 2021 period to 92.871 billion USD for the 2021 - 2022 period, i.e. an increase of about 2%.

It should be noted that these various risks are divided between the domestic market (local insurers and the Compagnie Centrale de Réassurance - CCR), the La Captive de Réassurance «SONATRACH Ré» based in Luxembourg and the international reinsurance market.

II. Simple Risks

The insurance of this type of risk, for SONATRACH SPA and its subsidiaries, are covered by (03) three-year agreements (2021 - 2024).

The insurance premiums, through contracts, related to SONATRACH activities, are the following:

- “Miscellaneous Facilities and Construction Equipment» insurance contracts: The net insurance premiums for the «All Risks Except» and «Natural Disasters» coverage, for the 2021 - 2022 period, were respectively of 109.07 million DZD and of 149.58 million DZD for an insured value of 381 billion DZD.
- «Property and Furnishings” insurance contracts: The net insurance premiums for the «All Risks Except» and «Natural Disasters» coverage, for the 2021- 2022 period, were respectively of 51.61 million DZD and of 246.14 million DZD for an insured value of 645 billion DZD.
- «Towed Tanks and Loss of Products» insurance contract: The net insurance premium for the “All Risks Except” coverage, for the 2021 - 2022 period, was 0.47 million DZD, for an insured value of 0.474 billion DZD.
- «Transport on Body» insurance contract: The net insurance premium for the “All Risks Except” coverage, for the 2021 - 2022 period, was 0.156 million DZD for an insured value of 0.391 billion DZD.
- «Capacities Transport» insurance contract: The preferential premium rates were 0.0080% in Sea and Air Transport and 0.0100% in Land Transport for the 2021 - 2022 period
- “Automobile» insurance contract with the CAAR insurance company, with a discount rate of 85%.

III. Risks To Individuals

The insurance coverage for this type of risk is intended to cover death and certain illnesses sustained by the staff.

The contract concluded with AXA is for 03 years (2020 - 2022) and generates a net annual premium of 652 million Algerian dinars.

**Certification des Commissaires Aux Comptes des
comptes sociaux**

Messieurs les membres de l'Assemblée Générale de SONATRACH,

Nous avons l'honneur de vous faire rapport de la mission de contrôle que nous avons effectuée en qualité de Commissaires Aux Comptes.

Nous avons examiné les états financiers individuels, tels qu'arrêtés par le Conseil d'Administration de votre Société au titre de l'exercice 2021, avec un total bilan actif/passif de douze mille six cent cinquante-quatre milliards cinq cent soixante-un millions quatre cent quarante-deux mille cinq cent vingt-huit dinars et cinquante-sept centimes (12 654 561 442 528.57 DA) et un résultat net bénéficiaire de cinq cent quatre-vingt-dix milliards cinq cent quatorze millions cinq cent soixante-dix mille huit cent cinquante-huit dinars et quatre-vingt centimes (590 514 570 858.80 DA).

Nos différents travaux de contrôle, réalisés essentiellement à base de sondages, de recoupements et de techniques qui nous sont apparus les plus appropriés, ont été accomplis conformément aux règles de diligence normale.

Compte tenu des résultats de ces travaux, nous certifions, sous réserve de prendre en charge les remarques et observations formulées, que les comptes annuels présentés sont réguliers et sincères et donnent une image fidèle du résultat des activités, de la situation financière et patrimoniale de votre société au titre de l'exercice clos au 31 décembre 2021.

Alger, le 27 juin 2022

Les Commissaires aux Comptes

MEGUELLATI Enchaellah

MEGUELLATI Enchaellah
Expert Comptable - Diplômé d'Etat
Commissaire aux Comptes
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