

# ANNUAL REPORT 2017



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# INTEGRATED DIVERSIFIED AFRICAN

## **PROFILE**

Managem is an African mining operator which develops a balanced portfolio of assets and metals. The Group operates strategic natural resources for the global economy and helps to respond to demand in raw materials from a fast growing technological and economic market. In nearly 90 years of activity, the Group was able to consolidate its expertise on the entire mining value chain: from exploration, extraction, valuation up to commodities marketing.



# 2017 KEY FIGURES

**11**  
COUNTRIES

2017  
KEY FIGURES  
**5,200**  
MMAD

NIGS  
**879**  
MMAD

**13**  
MINES

**14**  
MARKETED  
PRODUCTS

INVESTMENTS  
**1,200**  
MMAD

EMPLOYEES  
**5,600**

**21**  
INDUSTRIAL  
UNITS



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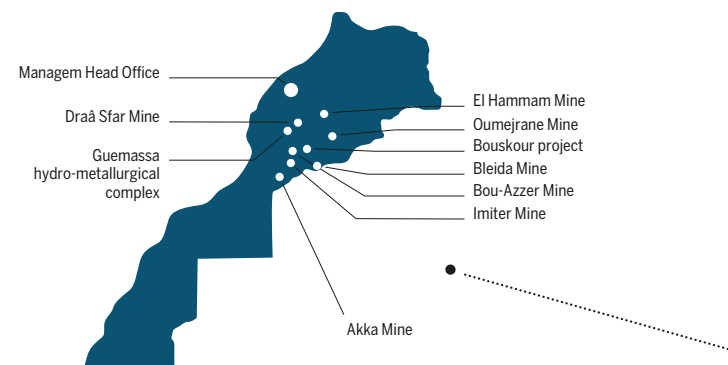
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## MOROCCO

Managem Group is a leading operator in the mining and hydro-metallurgical sector in Morocco since 1930. Managem operates 12 mines and holds 850 research permits. Managem produces raw materials diversified between base metals (Copper, Zinc and Lead). Precious metals (Silver and Gold). Cobalt and Fluorite.

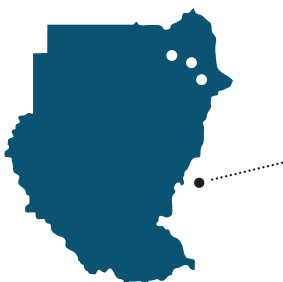
# A 100% AFRICAN OPERATOR

A Moroccan mining Group, Managem has operations in nine African countries. Managem develops a balanced portfolio of assets and metals with 13 operational mines primarily in Morocco, and several high-potential mining projects at different stages of advancement on the continent.



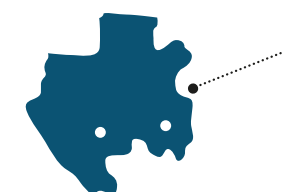
## GUINEA

The Group develops the Tri-K high-potential Gold-based project, in partnership with Avocet Mining. This project is currently at the finalisation stage of the feasibility study, for scheduled opening in 2020. Production targeted at 120,000 ounces per year.



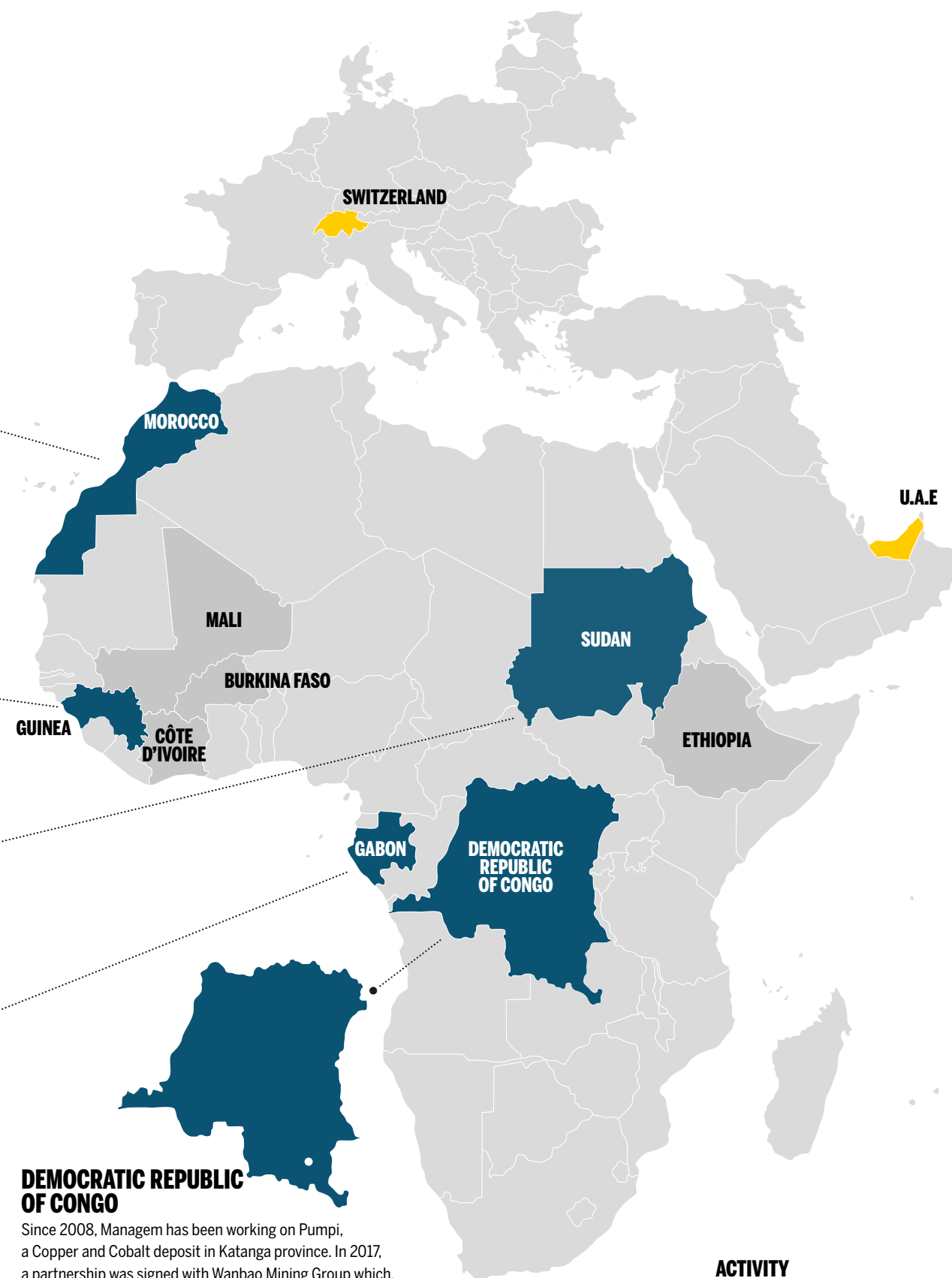
## SUDAN

Managem has been developing gold-based mining assets since 2009. Its export permits cover nearly 14,000 square km. The production of the pilot plant, in activity since 2012, is being enhanced thanks to the extension project which started in 2017. **Goal:** production of 2 tonnes of Gold per year.



## GABON

From 2012 to the end of 2017, Managem has operated the Gold mine of Bakoudou (at the end of its life cycle: see "Highlights"). Managem conducts exploration works on the gold-based project of Etéké, currently at the pre-feasibility stage.



## DEMOCRATIC REPUBLIC OF CONGO

Since 2008, Managem has been working on Pumpi, a Copper and Cobalt deposit in Katanga province. In 2017, a partnership was signed with Wanbao Mining Group which, in addition to becoming the project's majority shareholder, continued to finalize the bankable feasibility study. The project aims at annual production of more than 40,000 tonnes of Copper and 5,000 tons of Cobalt.

## ACTIVITY

- Operational assets and projects
- Assets under exploration
- Marketing





“  
**OUR STRATEGY: REPOSITION  
 OURSELVES ON OUR HIGH-PERFORMING  
 ASSETS AND STRENGTHEN OUR INVESTMENTS  
 ON HIGH-POTENTIAL  
 GOLD PROJECTS IN AFRICA.**  
 ”

# INTERVIEW WITH IMAD TOUMI

## CHIEF EXECUTIVE OFFICER

### WHAT IS YOUR ASSESSMENT OF THE PAST YEAR?

2017 was a great year for Managem with a very buoyant metals market. The Group recorded a strong surge in financial results, and for the first time in its history, Managem's turnover exceeded MAD 5 billion.

In addition to the turnover, we recorded a 34% increase in Current Net Income compared with 2016 and Net Income Group Share reached MAD 879 million, which represents an excellent performance for this year. These exceptional results are not just a reflection of good operational performances, but also reflect the impact of the transaction completed in 2017 concerning the disposal of minority

shares in the Pumpi project in the DRC.

On the operational level, we increased our production capacities in order to generate larger volumes. As such, in 2017, we raised the tonnage processed at the SMI Silver mine and we recorded a 57% increase in Gold production in the MANUB pilot plant. The global production of Copper also improved by 4% this year thanks to the launch of new construction projects and the R&D effort which continuously improves the upgrade processes of the ore processed by the Group.

### HOW DID 2017 HELP THE GROUP TO MOVE FORWARD ON THE STRATEGIC PLAN?

2017 was the first year in which we implemented our Managem 2020 strategic

plan. This plan is the result of brainstorming in 2016 to launch a growth strategy, aimed at positioning Managem as a diversified regional leader with sustainable and responsible growth. The defined roadmap will ultimately help us to strengthen our existing reserves, develop our current production capacities, but more importantly, to accelerate our growth in Africa through new acquisitions and partnerships, especially in our Gold business in West Africa. In 2017, we therefore launched our Managem 2020 strategy by repositioning ourselves on our high-performing assets and strengthening our investments on high potential gold projects, Tri-K in Guinea and Gabgaba in Sudan.

As part of this repositioning, we discontinued activity in Gabon after the expiry

of the Bakoudou mine and our disposal of part of the Pumpi project in DRC.

To back this strategy, we strengthened our fundamentals in 2017 by implementing a capital increase transaction of MAD 973 million and by significantly reducing the Group's consolidated debt. Our development necessarily implies significant investments. To this end, in 2017, we stepped up our investment program aimed at research and development of our projects but also to boost our production capacities by expanding the extension of certain industrial units.

### MANAGEM HAS ACCELERATED ITS GROWTH IN AFRICA IN RECENT YEARS. WHAT WERE THE VISIBLE SIGNS IN 2017?

Managem Group does have great ambitions in Africa. Remember that the Group has a well-established African identity, and that it developed its presence on the continent very early. We acquired a permit in Guinea as far back as in 1997. Since then, our activities have kept on expanding, and we are currently present in nine African countries including Morocco, with a portfolio of balanced assets at different stages of maturity. This year, we have made progress with respect to the announced timetable, on the feasibility study of the Tri-K project in Guinea. This high-potential gold project was acquired by Managem at the end of 2016. In Sudan, our Group has mainly launched the first phase of the Gabgaba project with in particular the extension of the Gold production pilot

plant, by raising investment of USD 28 million. Lastly, in Côte d'Ivoire, the Group acquired exploration permits which expand our assets portfolio and will allow us to perpetuate our activity. Not to mention the considerable Greenfield and Brownfield exploration effort that our Group deploys and which provides us with opportunities to renew our resources and discover new deposits.

### WHAT ARE YOUR AMBITIONS FOR MANAGEM IN UPCOMING YEARS?

Today, Managem plans to step up its development and its investments in Africa, with the goal of doubling its turnover. As such, in upcoming years, the group has the ambition of achieving nearly 50% of its turnover from activities in Sub-Saharan Africa. We plan to prioritise high-potential projects such as Tri-K in Guinea, whose feasibility study will be finalised in 2018. In the short term, the first phase of the Gabgaba project in Sudan will be completed with the launch of a new Gold production unit with a capacity of 1.2 Mt per year. Generally, our strategy will focus on creating value through investments for new projects or acquisitions to accelerate the development of our assets with better resilience to risk.

Our goal is to remain an operator that supplies strategic raw materials to the global economy and to technology players. Accordingly, Managem will continue to contribute to the development of the African region

through substantial investments, but also through the transfer of its expertise and its standards at the level of its business operations. On the operational level, the group plans to maintain a high productivity level and to continue taking advantage of the favourable economic situation of metal stock prices. But we cannot have total operational excellence without showing exemplary corporate social responsibility. That is why Managem intends to keep on implementing continuous improvement in sustainable development and CSR. Managem will maintain its maximum requirements on all safety-related issues. The Group has already launched a process in 2017 to establish a Safety policy aimed at "0 accident".

“  
**TODAY, MANAGEM  
 GROUP HAS ALL THE  
 TOOLS REQUIRED TO  
 ADDRESS OPERATIONAL  
 CHALLENGES AND CALMLY  
 FACE THE FUTURE.**  
 ”

I would like to pay tribute to all our employees whom I congratulate for their commitment because, without their relentless efforts, Managem would not have achieved such performance in 2017. I would also like to seize this opportunity to thank our partners, our customers and our shareholders for their continued trust in the Group. ♦

# HIGHLIGHTS

## 2017

### SHARP GROWTH IN TURNOVER AND THE GROUP'S RESULTS

**Exceeding the MAD 5 billion target:** For the first time in its history, Managem Group exceeded the target of MAD 5 Billion in annual turnover in 2017. This 19% growth over the previous year is the result of the consolidation of operational performances in a favourable context of soaring metal prices. In 2017, thanks to robust operational performances, to the global context of commo-

dities prices and to the operation carried out on the Pumpi project, the Group's Net Income increased sharply and reached MAD 879 million. Thanks to the efforts of Managem Group, the Group's Net Income has been rising steadily since 2014 (see NIGS chart). In the past year, the group optimized its WCR considerably and reported a 50% increase in free cash flow. ♦



### REINFORCEMENT OF THE INVESTMENT PROGRAM

2017 was the year of significant progress in the consolidation of Managem's growth strategy. Accordingly, the Group launched a substantial investment program for an amount of MAD 1,200 million. A budget of MAD 350 million was allocated to the development of new projects and nearly MAD 250 million to exploration. ♦

### CONSOLIDATION OF THE FINANCIAL STRUCTURE

In order to consolidate its growth over time, Managem Group strengthened several of its financial fundamentals in 2017. The Group recorded a significant drop in its debt ratio, falling from 69% in 2016 to 39% in 2017. Furthermore, Managem repositioned its activities on the DRC PUMPI project, by selling of its shares which resulted in a positive cash impact and optimized the Group's WCR. Furthermore, in 2017, Managem completed a capital increase for an amount of **MAD 973 million**. Reserved for Managem employees

and shareholders, this transaction provides backing for the Group's development plan, especially its future investments for the African continent. Lastly, in December 2017, Managem Group obtained the approval of the Moroccan Financial Markets Authority (the AMMC) to implement a commercial paper issuance program. With this transaction, Managem Group will be able to optimise its short-term financing costs, cope with its occasional cash needs and diversify its sources of funding. ♦

## DEVELOPMENT



### DRC PARTNERSHIP WITH WANBAO MINING FOR THE PUMPI PROJECT

Managem entered into a strategic partnership with the Chinese mining group Wanbao Mining, in order to develop a large scale Copper mining project, in the Democratic Republic of Congo. At the end of 2016, following the efforts deployed by Managem Group for nearly 10 years in DRC, the independent mineral resources evaluation report revealed a discovery of 660,000 tonnes of Copper.

In this context, the partnership between Managem and Wanbao Mining turned out to be strategic as it will allow Managem to position itself as a benchmark miner in RDC and to raise the investments required to develop the Pumpi project. Managem aims to achieve annual production of 50,000 tonnes of Copper by 2019 through this partnership. ♦

### CÔTE D'IVOIRE NEW ACTIVITIES IN PERSPECTIVE

As an African operator, Managem endeavours to continuously develop its mining assets by integrating high-potential assets into its portfolio. In 2017, the Managem Group extended its geographical presence to Côte d'Ivoire. Through its Ivorian subsidiary Manaci, the Group will undertake a research and exploration

program in the Bouaké and Dabakala region. This new operation is in line with the Group's determination to develop its gold activities on the African continent, by relaunching the Greenfield exploration program to secure its long-term operations and by exploiting high-potential deposits. ♦

### GABON RESPONSIBLE SHUT DOWN OF THE BAKOUDOU MINE

After confirming the depletion of the deposit's reserves, the Group decided to shut down the Bakoudou Gold mine in 2017. The mine which began production in 2012 is managed by REG in Gabon. The measured reserves indicated an estimated 3.5 years of activity. Thanks to the R&D investments and a favourable macro economic situation for Gold prices, REG managed to extend the mining period by two more years. At the

end of 2016, due to signs of a slump in production, the group began to consider a shut down plan, completed by restoration actions for the area. In accordance with its sustainable development commitments, the Group plans to redevelop and plant trees in the area and to secure and monitor the place in 2018. An employee and community support plan will also be implemented in accordance with the ethics and regulations in force in the country. ♦

### GUINEA PARTNERSHIP WITH WANBAO MINING FOR THE PUMPI PROJECT

At the end of 2016, Managem reached a partnership agreement with Avocet and Elliot for the development of Tri-K, an important gold project located in Mandiana in Guinea. The conclusion of this partnership was followed by the signing of a mining agreement in December 2016 between the Guinean government and Avocet Mining. Initially developed by Avocet Mining, this project

raised more than USD 39 million for research and feasibility studies. In 2017, Managem decided to continue the certification and exploration program as well as the launch of the feasibility study, which is scheduled for completion in 2018. As part of the Gold activity development strategy Managem Group has the ambition of starting the Tri-K activity in 2020 with a target production of 120KOz per year. ♦



## HIGHLIGHTS 2017

### MOROCCO

#### VISIT OF THE MOROCCAN MINISTER OF ENERGY, MINES AND SUSTAINABLE DEVELOPMENT AT THE DRAÂ SFAR MINE

In July 2017, Managem Group welcomed Mr. Aziz Rabbah, Minister of Energy, Mines and Sustainable Development, to Draâ Sfar, the deepest mine in North Africa with a depth of more than 1,000 meters. His visit included a tour to the bottom of the mine shaft and of the mining installations in the presence of top management and representatives of the polymetallic activity of the Managem Group. This

visit was also the opportunity to present the different activities and expertise of the Group to Mr. Rabbah in addition to ongoing projects. At the end of this visit, the Minister praised the efforts deployed by the Group and its employees to develop the mine and to create wealth that is beneficial not only for the region but also for the entire country. ♦

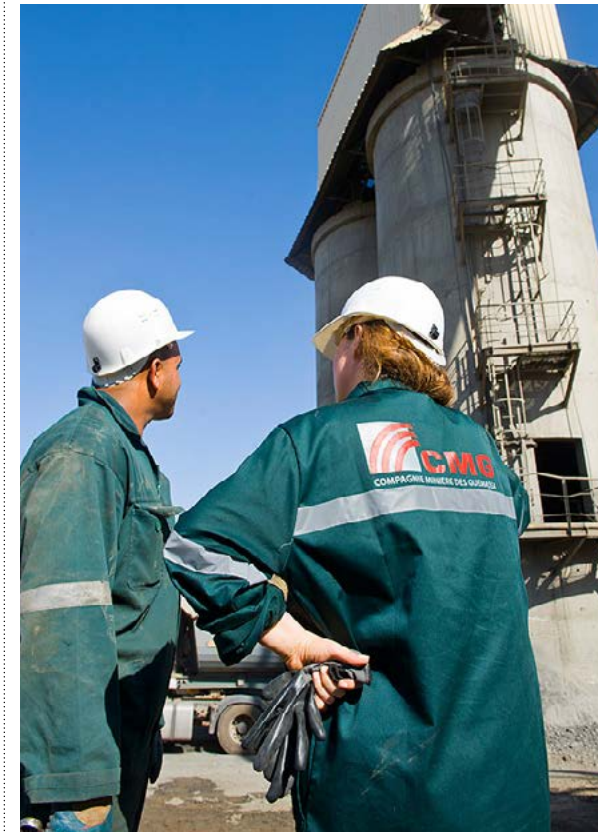


### CORPORATE CULTURE VALUES TO SUPPORT THE 2020 VISION

The Group launched a process to build corporate values system over a period of nearly one year. Four values emerged: **“Goodwill”, “Commitment”, “Integrity” and “Audacity”**. As the foundation for the involvement of the Group’s employees, these Values characterise the corporate

culture at Managem as well as its commitments. These Values were unveiled at the Group’s Executive Convention, which was held in July 2017. On this occasion, nearly 500 executives from Morocco and from international subsidiaries came together in Marrakesh. ♦

## PRODUCTIVITY



### SUDAN EXTENSION OF INDUSTRIAL UNITS

As part of the Group’s Gold strategy aimed in particular at the total production of 8 million tonnes of Gold per year, Managem launched in the second half of 2017, an extension project for its Gold production plant in Sudan. The plant started production in 2012. The extension project, which requires an investment of USD 28 million, has a production target of 2 tonnes per year. The studies were completed in 2017 and 75% of progress has been

reported on construction. Start-up is scheduled for the second half of 2018. ♦

### MOROCCO SMI PLANT EXPANSION

In line with its goals to ensure the sustainability of its mining activities and ensure support for industrial production, the Group finalised in 2017 the development of the extension of the industrial unit of the Imiter Silver mine, operated by the subsidiary SMI. The aim of this investment is to increase annual processing capacity by 30%. ♦

## CSR

### MANAGEM AND SMI NAMED CSR TOP PERFORMERS

Once again this year, Managem Group and its subsidiary SMI ranked among the most recognised companies for their CSR approach. Indeed, Managem and its SMI subsidiary have kept their ranking in the Best EM Performers since December 1st 2017. As a reminder, the Vigeo Eiris ranking selects from among 850 issuers listed in 31 developing countries.

100 companies that have the most outstanding social responsibility policy. The Vigeo Eiris evaluation benchmark assigns a score to each company without any sector or product filter on nearly 300 indicators. Managem and its subsidiary SMI are thus part of the twelve mining companies in developing countries whose overall scores are the highest in their universe. ♦





## HIGHLIGHTS 2017

# PARTICIPATION IN TRADE FAIRS

In 2017, the Managem Group attended numerous professional mining events organised at the international level. This presence demonstrates the Group's strong will to develop on internationally. Each event is indeed the opportunity to become visible on the international scene, but also to seek alliances with its international counterparts, to forge partnerships and exchange expertise.

### INDABA MINING

**South Africa**  
**From 6 to 9 February**

Indaba Mining is the largest mining trade show organized in Africa. attended each year by nearly 7.000 participants. stakeholders in the African mining sector.

### PDAC - Canada

**From 5 to 8 March**

A large-scale international event. this business convention brings together each year nearly 25.000 mining sector professionals. representing more than 130 countries.

### SIMFE

**Sudan**

**From 27 to 29 March**

The benchmark mining trade show in Sudan. attended by Managem for the past 10 years. is a gathering of the leading mining stakeholders operating in Sudan and internationally.

### SAMAO

**Burkina Faso**

**From 28 to 30 September**

SEMAO. the week of mining activities in West Africa. is an event organized to promote and develop the West African mining sector.



# COMMITTED FOR ENTREPRENEURS

## MANAGEM R&D PRIZE PROGRAMMABLE IRRIGATION

An integral part of our activities, R&D is the engine that drives progress for all companies. In a momentum to encourage future young entrepreneurs, Managem, in partnership with Injaz Al Maghrib, rewarded the most promising R&D project in the national Company Program contest organized by Injaz Al Maghrib. This program seeks to train young high-school and university students in business creation and management, 19 junior enterprises participated in this contest. with eight of them competing for the Managem R&D prize. The award ceremony, cele-

brated on the same occasion. the 10th anniversary of Injaz Al Maghrib's commitment. Created under the impetus of Al Mada, the association strives to develop entrepreneurial spirit in young people while still at school with the appropriate programs. Since its launch in 2007, Injaz Al Maghrib has trained nearly 95.000 young people in how to start a new business. The 2017 Managem R&D Prize was awarded to MAEV, a high-school junior enterprise created under the Company Program for its outstanding "IRRIGO Pro" project built for programmable irrigation. ♦



# INNOVATION SECOND EDITION OF THE MANAGEM SCIENTIFIC COMMITTEE

Managem organized the second edition of its Scientific Committee in November 2017. It was marked by the presence of renowned guests, internationally recognised in their area of expertise, such as **Dr Khalil Amine**, expert in batteries technology, **Pr Hervé ARRIBART** member of the energy scientific committee for the national research agency, and **Pr David BASTIN**, expert in the flotation of oxidized minerals. This two-day event was the opportunity for the researchers of the Managem Group Research Center to present and discuss their research programs

on the first day. The scientific committee met on the second day, chaired by **M. Ismail AKALAY**, General Manager for mining and industrial activities in Morocco, in the presence of **M. Imad TOUMI**, Chief Executive Officer of Managem and all the members of the Board of Directors. Managem Group strives to maintain constant efforts in terms of R&D and innovation and is part of the handful of mining groups with a dedicated research center with substantial investment in human and financial resources. ♦

“  
FURTHERMORE,  
SUCH A CONFERENCE  
IS THE SIGN OF A GREAT  
OPEN-MIN, WHICH  
IS A DISTINCTIVE  
AND CHARACTERISTIC  
TRAIT OF MANAGEM  
COMPARED TO ITS  
INDUSTRIAL PEERS.  
”

**Hervé ARRIBART**  
Professor





# STRATEGY

## A DEVELOPMENT STRATEGY FOCUSED ON GROWTH IN AFRICA

Since 2016, Managem has adopted a strategic plan known as "Managem 2020". Important stage in the group's development. "Managem 2020" seeks to double Gold and Copper production capacities by maintaining a diversified portfolio. This development strategy relies on enhanced operational excellence and acceleration of investment in Africa, specifically through acquisitions and partnerships. "Managem 2020" reasserts the ambition of Managem Group to remain a foremost African operator with sustainable, responsible growth.

**MAD**  
**1.2M**  
of investments  
in 2017

**Extension  
of 2 industrial  
units in 2017**

## STRATEGY BASED ON OPERATIONAL EXCELLENCE

As the Group's first strategic priorities, the production sites seek the best operational returns, to renew their reserves every year and to discover new deposits. Managem Group endeavours to maintain high productivity which is

manifested by the extension of industrial production capacities. In 2017, MAD 109 million were granted for the extension of the industrial units relating to Gold activities in Sudan and Silver in Morocco. ♦





**MAD**  
**351M**  
 invested in  
 exploration in  
 2017

## STRATEGY BACKED BY EXPLORATION EXPERTISE

“Exploration” has been the Group’s flagship expertise for several decades. The Group has recorded major exploration successes, such as the Mana Gold project in Burkina Faso, the Copper and Cobalt project known as Pumpi in DRC and the Wadi Gabgaba Gold project in Sudan.

### MANAGEM IMPLEMENTS AN INTERNAL EXPLORATION PROCESS STRUCTURED ON SEVERAL PHASES

#### STRATEGIC EXPLORATION

with the goal of identifying exploration targets through a range of mapping, geophysics and geochemistry works.

#### TACTICAL EXPLORATION

which involves test drilling and the existence of prospective mineralization as soon as exploration targets are identified.

#### DELIMITATION OF RESOURCES

in order to verify the systemic extensions of the resource following the confirmation of mineralization.

#### CERTIFICATION OF RESOURCES

the final step to certify the resources according to the usual industry standards adapted to the typology of deposits.

The Group’s geological expertise has traditionally been at the cutting edge of new global exploration technologies, Managem also maintains constant dialogue with external expertise thus enabling it to challenge interpretations and models with renowned experts.

### TODAY, MANAGEM CONTINUES TO ACTIVELY EXPLORE MORE THAN 30 PROJECTS ON THE EQUIVALENT OF 55,000 SQUARE KM.

The Group’s sustained research efforts enhance its know-how and guarantee the renewal of reserves and the discovery of new resources every year. In 2017, nearly one third of the Group’s investment was dedicated to exploration, i.e. MAD 350 million.



## DEVELOPMENT STRATEGY SPURRED BY NEW ACQUISITIONS AND INVESTMENTS

“Managem Group” is an integrated Group with access to the full range of mining value chain expertise to leverage its development.

Managem 2020 marks a new growth era for Managem. The Group has thus began a new opening phase with the purpose of strengthening its capabilities through external expertise in order to boost its development. To do so, Managem has accepted strategic partnerships with renowned mining groups and has repositioned itself on the most efficient assets. Indeed, the Group has developed a portfolio of balanced assets that strengthen its resilience to fluctuating metal stock prices and in geographic positions that have a favourable geological context, which represents a significant development potential. In line with this

strategy, implemented since the end of 2016, Managem has carried out two large-scale operations with international mining groups. The first concerns the Lamikal mine Copper project in DRC with Wanbao Mining for a transaction concerning the disposal of the shares held by Managem. The second transaction was carried out on the Tri-K gold project in Guinea with Avocet Mining. This investment concerns the ultimate acquisition by Managem of 60% to 70% of the mining company’s equity shares. Today, Managem seeks to strengthen its pan African positioning on the Gold activity

and is implementing sustained efforts to ensure the growth of this business segment. To do so, Managem has high potential mining assets such as Gabgaba in Sudan and the Tri-K project in Guinea. ♦

**Strategic  
partnerships  
in DRC  
and in Guinea**



# COVER THE SHORT TERM AND INVEST FOR THE LONG TERM

## MAINTAIN A SUSTAINABLE BALANCED PORTFOLIO OF PROJECTS

### A BALANCED PORTFOLIO FOR BETTER RESILIENCE

In line with its 2020 Vision, Managem Group has adopted a strategy of accelerated development, focused on expansion in Africa and creating value. Managem Group currently operates in nine African countries and develops a portfolio of diversified and balanced mining

assets in terms of metals, and geographic locations. Managem opted for mining assets with high growth potential which are operated on different types of projects (Exploration, development, production in expansion) and in varying stages of completion. ♦

### GREENFIELD EXPLORATION TO GUARANTEE THE FUTURE

In this respect, Managem mainly invests in the Greenfield exploration works in order to guarantee promising deposits for the future. Managem strives to expand its research permits across the African continent with both short and long-term targets. ♦

**GOLD**  
Burkina Faso,  
Mali,  
Côte d'Ivoire

**GOLD**  
Gabon (Eteke)  
Ethiopia (Assosa),  
Sudan

**GOLD**  
Guinea  
(Tri-K Project)

**ZINC**  
Morocco  
(Draa Sfar Extension)

**SILVER**  
Morocco  
(Usine SMI Extension)

EXPLORATION

ADVANCED EXPLORATION

FEASIBILITY STUDY

CONSTRUCTION AND FUNDING

**COPPER, ZINC, LEAD**  
Morocco  
(Jbilet Project)

**COPPER**  
RDC (Pumpi Project),  
Morocco (Tizert)

**GOLD**  
Sudan  
(Block 15 Wadi Gabgaba)



# SAFETY FIRST

Safety is considered as one of the Group's leading performance criteria. This commitment, which is carried at the highest management level, has a formal framework and is visible on all of the Group's mining sites through the Managem safety policy.

“

WE CANNOT SPEAK OF INDUSTRIAL AND FINANCIAL PERFORMANCE WITHOUT HAVING EXEMPLARY PERFORMANCE IN WORKPLACE HEALTH AND SAFETY.

”

**Imad TOUMI**  
Chief Executive Officer  
of Managem

## EVERY DAY ACTIONS

As safety is everyone's business, each employee has a role to play by unconditionally following the safety policy and by constantly adapting their behaviour to the safety requirements. The Group has set itself a target of **“0 serious accident”** and has

implemented a group-wide organization and action plan that can be used to involve all resources.

At the level of mining sites, the safety awareness programs begin with the start-up of each workstation. Anomaly searches are also conducted to ensure

the observance of standards especially regarding the wearing of PPE and the prevention of risky situations. We pay great attention to industrial risk analysis which is manifested through group-wide projects rolled out by the Safety Department, operating staff at the level of sites and by the Risk Management Department.

The safety process is assessed internally and externally at the level of each activity site. In 2017, these internal audits concerned more than 15,000 employees, up by 32% with respect to the previous year. ♦

### OHSAS 18001 Certification renewed In 2017 for 10 sites in operational operation



✓ CTT  
✓ CMG  
✓ AGM  
✓ SOMIFER

✓ SAMINE  
✓ Centre de Recherche REMINEX  
✓ TECHSUB  
✓ REG Gabon

## A NEW SAFETY APPROACH IN 2017

### 100% discipline and 0 tolerance.

The new approach in safety issues is aimed at two decisive aspects namely, organization and a culture of safety.

Managem Group has consequently set up a “safety” roadmap to be achieved by 2020. The roadmap reviews the Health and Safety and working conditions approach in order to achieve 0 accident. Furthermore, Managem has called on a specialized firm in order to benefit from its expertise in behavioural and operational safety management, for assistance in implementing its roadmap.

In 2017, the accident frequency rate fell, yet the severity rate rose compared to the previous year.

Each accident is subjected to in-depth study to track the circumstances of the accident, its causes and a specific action plan is developed to prevent other accidents from occurring. ♦

“

OUR DEPARTMENT WILL SPARE NO EFFORT TO PREVENT ACCIDENTS AND STRENGTHEN THE CULTURE OF SAFETY INSIDE THE GROUP.

”

**Mohammed CHERRAT**  
Executive Director  
of Human Resources, Communication  
and Sustainable Development

### Evolution of safety indicators

Indicator	2016	2017
Workplace accidents frequency rate	3.95	3.42
Workplace accidents severity rate	0.15	2.67



# R&D

## A PILLAR FOR INNOVATION AND GROWTH OF MANAGEM



“  
R&D SHOULD  
PREPARE THE NEW  
GROUP BUSINESS  
LINES BY CREATING  
NEW BUSINESSES FOR  
MANAGEM IN THE  
LONG TERM.  
”

Imad TOUMI  
CEO of Managem

## INNOVATION

IN 2010, MANAGEM FILED A PATENT FOR THE INVENTION OF A LITHIUM-ION TYPE OF BATTERY, USED IN MOBILE TELEPHONES AND IN PERSONAL COMPUTERS, THIS INNOVATION COULD ALSO BE USED IN THE ELECTRIC CAR INDUSTRY.

Founded more than 30 years ago, the Managem Research Center is developed many processes and new products for the Group.

**R&D accompanies the Group's activities on the entire value chain.**

From exploration to production, by monitoring product quality, the optimization of resources and customer satisfaction. R&D intervenes at each stage to create value. Through its R&D efforts, Managem has been able to develop innovative “home-grown” processes allowing it to diversify its activities in an environmentally friendly manner,

In 1997, thanks to R&D efforts, the Group's Cobalt sector benefited from the development of a process used to convert Cobalt into high-quality Cobalt Cathodes, thus creating added value for the entire Group and for Morocco. Indeed, it is essential for Managem to integrate the notion of durability into the development of the mining activity, in order to preserve its resources, deploy the cleanest technologies and limit its impact on the environment. The Research Center has been able to develop world class high-level expertise in the treatment of ore, hydro-metallurgy, in chemical

analyses and mineralogical characterisation. As such, thanks to R&D efforts, processes for treating and reclaiming mining waste on production sites have been developed. Concrete achievements have emerged in this field, which include the transformation of stored mining waste into sulphuric acid and iron oxide. Furthermore, Managem Group seeks to develop a dyke reclamation policy through the recovery of their metal content. In addition to reducing its ecological footprint, the Group creates value by transforming final waste.

**R&D mainly strengthens the responsible process and helps to create value and diversify the Group's product portfolio.**

Other research fields, at the service of sustainable development, are part of R&D efforts and concern water-related projects in order to optimise water use, treatment and recycling. These areas of research also concern the recycling of WEEE (Waste Electrical and Electronic Equipment) which will allow the Group to exploit other urban deposits and promote the circular economy! ♦



Through its innovation efforts, the Research Center helps Managem Group to diversify its activities and encourages the promotion of the use of metals and their derivatives in different activity sectors such as farming, catalysis or alloys.

### PARTNERSHIP WITH IAV IN 2017

As part of its innovation-based development strategy and in order to study new opportunities for using products, the research center is conducting works to synthesize and produce trace elements derived from Managem products. To this end, a research agreement with the Agronomic and veterinary institute was signed in 2017. The aim of this agreement is to conduct field studies on potted plants and plots in order to scientifically and experimentally verify and validate the contribution of the trace elements in question to several crops such as sugar beet, sugar cane and wheat. The contribution in trace elements for ground fertilisation and for plant growth could constitute a genuine competitive advantage for improving crop yield. ♦

**30  
YEARS**  
of existence



**30**  
Industrialised  
processes

A team of  
**133**  
researchers

**8**  
Patents filed



DIVERSIFICATION OF THE METAL  
AND ACTIVITIES PORTOFOLIO

# HISTORY

**THANKS  
TO ITS  
AGILITY AND  
EXPERTISE  
OVER  
89 YEARS,  
MANAGEM  
HAS BEEN ABLE  
TO DIVERSIFY**

**AND INNOVATE  
TO HAVE A  
BALANCED  
PORTFOLIO  
AND INVEST  
TO CREATE  
VALUE.**

ACCELERATION OF PARTNERSHIPS  
IN AFRICA

PAN-AFRICAN EXPANSION OF THE GROUP  
AND DEVELOPMENT OF THE GOLD ACTIVITY

**1983**  
**R&D**  
Establishment of REMINEX, subsidiary specialised in R&D, engineering and exploration

**1942**  
**Mg**  
Magnesium reclamation  
Tiouine deposit  
Morocco

**1969**  
**Ag**  
Reclamation of Silver-based  
spill heaps  
Imiter Mine  
Morocco

**1974**  
**CaF2**  
Opening of the Fluorite  
production mine  
El Hammam Mine  
Morocco

**1930**  
**Co**  
Production of Cobalt  
concentrate  
Bou-Azzer Mine  
Morocco

**1928**  
**Co**  
Discovery  
of the Cobalt deposit  
Bou-Azzer Region  
Morocco

**1981**  
**Cu**  
Opening  
of the Bleida mine  
Morocco

**1992**  
**Polymetallic**  
Opening of the Hajar Mine  
Morocco

**1996**  
Establishment of the  
Managem holding  
combining the mining interests of  
the AI MADA Group (formerly ONA)  
Launch of the  
hydro-metallurgy activity

**1997**  
**Co**  
Production  
of Cobalt cathodes

**1997**  
Acquisition of the first  
international permits  
Guinea

**1999**  
Exploration  
Acquisition of shares  
in SEMAFO,  
a Canadian exploration  
company.

**2001**  
**Au**  
Opening of the Akka mine  
Morocco

**2002**  
**Au**  
Opening  
of the Kiniero mine  
Guinea

**2004**  
**Polymetallic**  
Opening of the Draa Sfar mine  
Morocco  
**Au**  
Opening  
of the Samira Hill mine  
Niger

**2006**  
Start of exploration  
DRC

**2008**  
Acquisition  
of a research permit  
Sudan

**2012**  
**Au**  
Production at Bakoudou  
Gabon

**2013**  
**Cu**  
Production of the Jbel Laâssal mine  
Morocco  
**Recycling**  
Launch of the Polymetallic  
waste disposal plant.  
Morocco

**2014**  
**Cu**  
Opening  
of the Oumejrane mine  
Morocco

**2016**  
Agreement with Wanbao Mining  
presenting the completion of a significant  
development program to create value  
around the LAMIKAL project  
DRC  
Partnership with Avocet Mining  
Development of the Tri-K Gold project  
Guinea

**2017**  
Acquisition of a research permit  
Côte d'Ivoire  
Launch of extension works  
for the MANUB plant  
Sudan  
Extension of the SMI plant  
Morocco



## THE GROUP'S ACTIVITIES



### EXPLORATION

Detecting opportunities: Experts in Brownfield and Greenfield exploration, the geological teams backed by cutting-edge technology and expertise in engineering, act on all phases of the Group's mining activities.

# MANAGEM.

EXPLORING  
OPTIMIZING  
CREATING WEALTH  
FOR ALL STAKEHOLDERS



### R&D ENGINEERING

Supporting the production and development of new high-potential projects. Developing treatment and reclamation processes and creating value through innovation and research.

#### THE GROUP'S SUBSIDIARIES REMINEX

Exploration, design and project management R&D and industrial support through its Research Center.

#### SAGAX

Geophysical work.



### MARKETING

Addressing market demand and ensuring supply through service that meets the highest international standards.

THE GROUP'S SUBSIDIARIES  
MANADIST  
TRADIST  
MANATRADE

## CREATING VALUE AT EACH STAGE OF THE PRODUCTION CHAIN.



### CONSTRUCTION

Oversight of works and the efficient execution of works for the Group's projects under development.

#### THE GROUP'S SUBSIDIARIES TECHSUB

Performance of drilling and mining works



### OPERATIONS

Providing the expertise in mining and hydro-metallurgical activities: extraction, treatment and reclamation of ore to ensure production at the best standards and optimize the costs.

# AN INTEGRATED GROUP

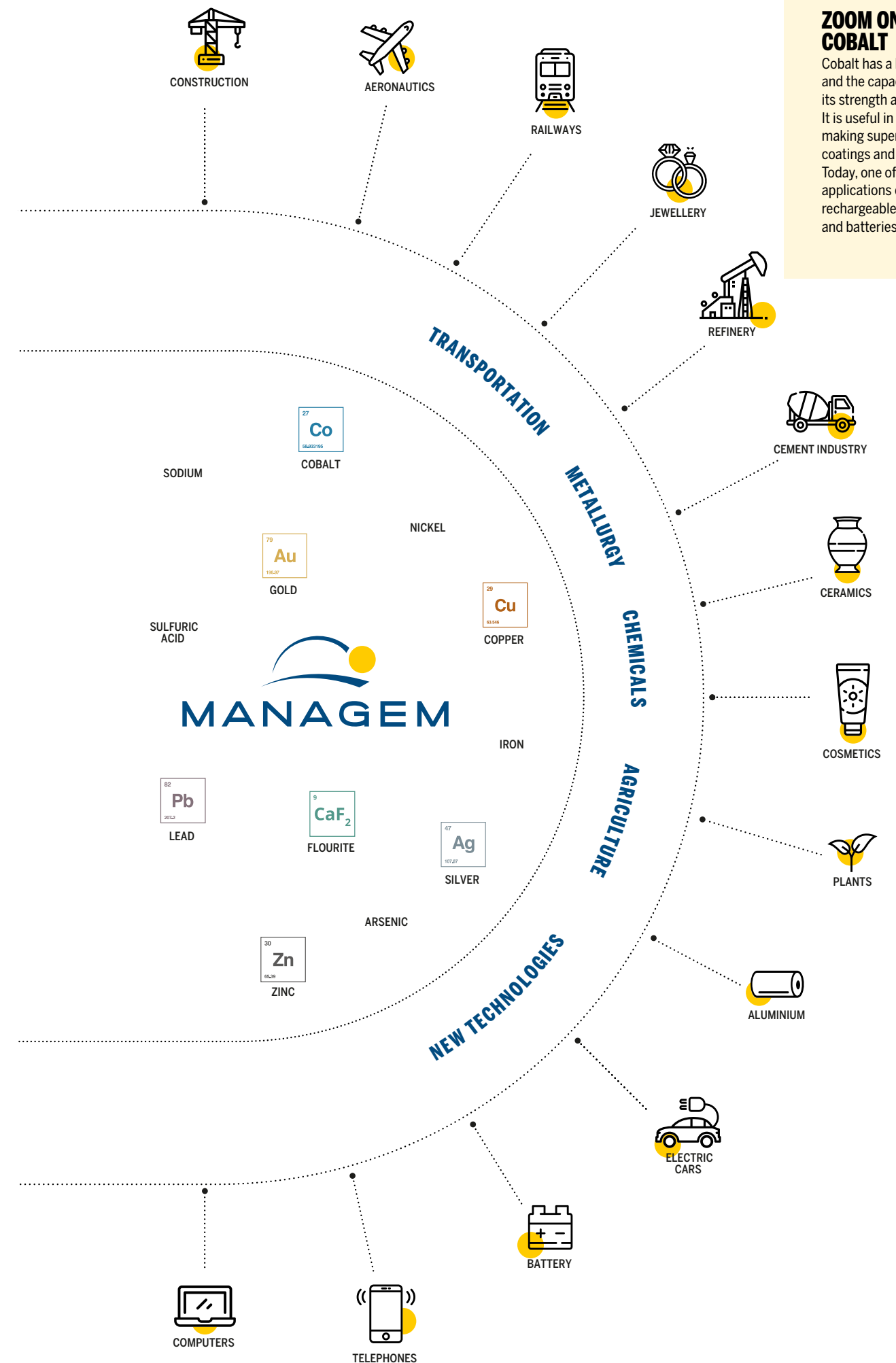


# PLAYER IN THE DEVELOPMENT OF INDUSTRIES

## RAW MATERIALS IN THE EVERYDAY ECONOMY

Managem Group supplies raw materials to more than 50 customers on five continents.

For consumer goods, electronics, transportation industry or agriculture, Managem products are essential compounds used to manufacture several everyday products.



### ZOOM ON COBALT

Cobalt has a high melting point and the capacity to maintain its strength at high temperatures. It is useful in cutting tools, making super-alloys, surface coatings and high-speed steels. Today, one of the primary applications of Cobalt is in rechargeable batteries and batteries.



# CAPITAL AND STOCK EXCHANGE

Managem is a public limited corporation incorporated under Moroccan law.  
a subsidiary of Al Mada - positive impact.  
Pan African private equity investment fund based in Casablanca.

**+71%**  
Exceptional performance of the Managem stock in 2017

## SHAREHOLDING STRUCTURE

Al Mada\*  
**81.4%**

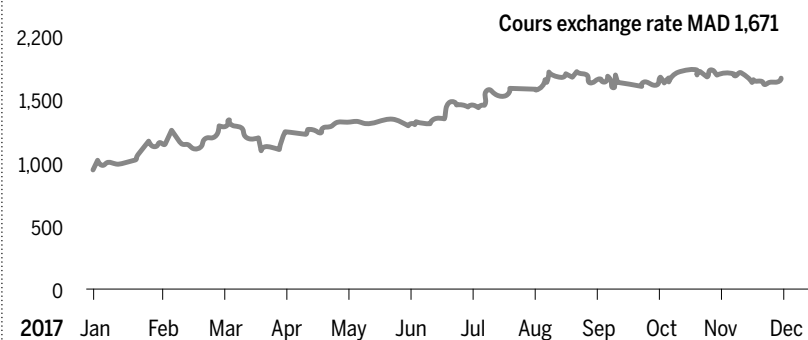
\*In March 2018, SNI, the leading shareholder of Managem, changed its name to become Al Mada.

Free float  
**10.3%**

CIMR  
**8.3%**

Managem is listed in the 1st section of the Casablanca Stock Exchange under the ticker MNG. Managem was floated on the stock market in July 2000 through the sale of 2,126,930 shares. i.e. 25% of the capital. The total amount of the float was MAD 1,172 million for a unit disposal price of MAD 551 per share. Managem completed a capital increase of **MAD 973.319.921** in 2017.

## SHARE TREND IN 2017



## THE MAIN STOCK EXCHANGE INDICATORS IN 2017

Number of shares	9,991,308
Highest closing price (MAD)	1,759
Lowest closing price (MAD)	965
Market capitalization at 31 December (MAD million)	16,735

Source: Casablanca stock exchange

## DIVIDENDS

2016 Dividend per share

**MAD 21**

2017 Dividend per share

**MAD 23**

In fiscal year 2017, the Board of Directors meeting on 20 March 2018. Proposed a dividend per share of MAD 23. up 9.5% compared to 2016.

# GOVERNANCE

## BOARD OF DIRECTORS

The Managem Board of Directors consists of eight directors. The Board is tasked with watching over the corporate interest of the company. It defines upstream, the strategic guidelines and oversees their implementation. The Chief Executive Officer is a member of the Board of Directors. he represents the Company in its dealings with third parties. As the Chief Executive Officer of the Board of Directors, he organizes and directs Board proceedings in accordance with the law.

## BOARD MEMBERS AS OF DECEMBER 31ST 2017

Chief Executive Officer  
**Imad TOUMI**  
Directors  
**Bassim JAI HOKIMI**  
**Hassan OURIAGLI**  
**Ramses ARROUB**  
**Noufissa KESSAR**  
**AL MADA** rep.  
by **Aymane TAUD**  
**ONHYM** rep.  
by **Amina BENKHADRA**  
**SIGER** rep.  
by **Hassan OURIAGLI**

## BOARD OF DIRECTORS

At the end of 2017, the Board of Directors consisted of seven members, including the Chief Executive Officer

Board of Directors	Members Entry into service
<b>Imad TOUMI</b>	Chief Executive Officer
<b>Ismail AKALAY</b>	General Manager of Mining and Industrial Activities in Morocco
<b>Youssef EL HAJJAM</b>	General Manager of Development and International Activities
<b>Naoual ZINE</b>	Deputy General Manager in charge of Strategy and Finance
<b>Amine AFSAHI</b>	Executive Director Marketing and Commercial
<b>Mohammed CHERRAT</b>	Executive Director Human Resources. Communication and Sustainable Development
<b>Lhou MAACHA</b>	Executive Director for Exploration

## SPECIALIZED COMMITTEES

The Board of Directors set up a number of specialized several years ago: the Strategic Committee, the Appointments and Remuneration committee, and the Risks and Accounts Committee. These committees work within the powers and delegations given to them by the Board of Directors of Managem S.A., in accordance with the law on public limited corporations. They review issues forwarded to them by the Board for their opinion and report their activity, opinions and recommendations at board meetings. To best manage the Group's different activities, two new committees were created in 2017, the Purchasing Superior Committee and the Investment Committee. ♦



# MANAGEMENT COMMITTEE

## Mr LHO MAACHA

Executive Director  
for Exploration

## Mrs NAOUAL ZINE

Deputy General Manager  
in charge of Strategy  
and Finance

## Mr IMAD TOUMI

Chief Executive  
Officer

## Mr YOUSSEF EL HAJJAM

General Manager  
of Development  
and International Activities



## Mr ISMAIL AKALAY

General Manager of Mining  
and Industrial Activities  
in Morocco

## Mr MOHAMED AMINE AFSAH

Executive Director Marketing  
and Commercial

## Mr MOHAMMED CHERRAT

Executive Director Human Resources,  
Communication  
and Sustainable Development

## Mr IMAD TOUMI

### Chief Executive Officer

Mr. Imad TOUMI, 53 years, is a graduate of École Polytechnique (Class of 82), holds a PhD from the University of Paris 6, and an MBA from the Paris École des Hautes Études Commerciales (MBA HEC 2000). He has more than 20 years of experience in industrial project management in the energy and mining sector. After starting his career at the French Atomic Energy Commission (CEA), he joined AREVA in 2002 where he held several positions including the General Management of AREVA South Africa, then AREVA Niger. He was also a member of the Executive Committee of the Mining Division of AREVA and director of several mining companies in Africa and Canada.

## Mr ISMAIL AKALAY

### General Manager of mining and industrial activities in Morocco

Mr. AKALAY has 32 years of experience in the research and development of mining recovery processes, mining and industrial management. He holds a PhD in mineral chemistry from Pierre et Marie Curie University (Paris 6) and is also a laureate of the HEC Paris Strategic Management Program and of the Executive Management Program of the Madrid Instituto de Empresa. He has held several executive positions within Managem, especially at the Research Department before becoming General Manager of the Hydro-metallurgical units in 2001. He was also the Head of the Research and Development Department until 2016. In 2008, he was appointed General manager of the Cobalt and Specialties Division. Since May 2016, Mr. AKALAY is the General Manager of mining and industrial activities in Morocco. Mr. AKALAY is a member of the Board of Directors of the Cobalt Institute in London, former corresponding member of the Hassan II Academy of Science and Technology in Morocco and Director of the College of Engineering, Transfer and Technological Innovation. He has been at the origin of several invention patents and has completed several industrial and mining projects.

## Mr YOUSSEF EL HAJJAM

### General Manager of Development and International Activities

Mr. EL HAJJAM graduated from Ecole Polytechnique in 1993, then from the Ecole des Mines de Paris in 1995. He then joined Managem that same year as a processing engineer at CTT Guemassa. He then held several executive positions in the Hydro-metallurgical activity, in particular as Hydro II Project Manager and as Cobalt II Plant Operations manager. In 2002, he joined the "engineering" activity as Project

Director. He subsequently became Head of the SAMINE mine. In 2005, he held the position of Technical Director for mining operations before being appointed Director of Development. In 2008, he was appointed General manager of the Precious Metals Division. Since May 2016, Mr. EL HAJJAM has been General Manager of Development and International Activities.

## Mrs NAOUAL ZINE

### Deputy General Manager in charge of Strategy and Finance

Mrs. Naoual ZINE Deputy General Manager in charge of Strategy and Finance is a graduate of the Mohammedia School of Engineers (1998). She joined Managem that same year and was in charge of managing the extension project for the Imiter silver processing plant (SMI). One year later, she became head of mining planning at SMI. After being in charge of operational responsibility covering different functions of the mine, in 2001, Mrs ZINE Was given corporate responsibility which allowed her to develop a single management process for all of the Group's mines until 2003 when she joined The General Management of Morocco mining operations as Head of business management control. From 2005 onwards, she was in charge of creating the general control department which combines the three steering functions of the group's governance structure: strategic management control, internal audit and risk management. In May 2009, Mrs ZINE, appointed Chief Financial Officer and Director of Corporate Management Control, was able to successfully complete the restructuring of commodities and currency hedging transactions and transform the Group's financial reporting system with the introduction of the International Financial Reporting Standards (IFRS). In May 2016, Mrs ZINE was appointed head of the strategy and finance departments in charge of steering and deploying the Group's development strategy.

## Mr MOHAMED AMINE AFSAH

### Executive Director Marketing & Commercial

A graduate of the Ecole Spéciale des Travaux Publics of Paris in 1992, Mr. AFSAH earned an MBA from Ponts et Chaussées in 2005. He joined Managem Group in March 1993 for a first experience at CMG in the field of maintenance and as the person in charge of methods. In 1997, he was put in charge of the development of economic intelligence and the development of water and environmental business lines. In 2000, he was appointed Deputy Director for water and sanitation and was seconded to Véolia-Tétouan. In 2004, he returned to the Group to head risk management and Corporate management control. In 2005, he was appointed Director

of Purchasing and Logistics, then in 2008 General Manager of support activities, bringing together REMINEX ingénierie and TECHSUB. In 2001, he became head of major reclamation projects. Since 2013, has been in charge of the sale and marketing of Managem products.

## Mr MOHAMMED CHERRAT

### Executive Director of Human Resources, Communication and Sustainable Development

Mr. CHERRAT graduated from the Mohammedia School of Engineers in 1983 and immediately joined the Imiter Mine (SMI) where he held the position of Head of Funds. In 1988, he was promoted to Mine Director. In 1999, he joined the Bou-Azzer Mine as Operations Manager of the Cobalt Hydro-metallurgical mine and plants (CTT-CMBA). He subsequently became Head of the Operations Department of TECHSUB. In 2001, he was seconded to AMENDIS where he was in charge of the Human Resource Department until 2004, year in which he returned to Managem as Director of Human Resources and Communications. He was also in charge of sustainable development and information systems. Since May 2016, Mr. CHERRAT has been Executive Director.

## Mr LHO MAËCHA

### Executive Director of Exploration

Mr. MAËCHA is currently Executive Director of Exploration at Managem. He has built on 29 years of experience in the field of exploration, project generation and development both in Morocco and other countries. He began his career as mining geologist at the polymetallic mine of Hajjar, the Bou-Azzer cobalt mine and the Copper mine in Beida. He subsequently became Director of Exploration then General Manager of Exploration and Development inside the Group. His area of expertise spans several types of mineralizations and commodities especially precious metals, base metals, cobalt and magmatic mineralisations. He was also director of operations for Managem, which allowed him to cover the entire value chain of the mining industry and to develop skills in Economic Geology. He is director of several subsidiaries of the Group and Vice-President of the Moroccan Association of Earth Sciences in Morocco. Academically, Mr. MAËCHA has developed partnerships with universities and research institutes in Morocco and worldwide. In this framework, he has published more than 50 scientific articles and four books in the field of Geoscience. He holds a PhD in Geophysics and Metallogeny in 2013, with a post-graduate degree from the Cadi University in 1995, and an engineering degree in 1989.



# FINANCIAL PERFORMANCE

## CONSOLIDATED RESULTS (UNDER IFRS)

Change in consolidated key indicators under IFRS at the end of 2017

		31/12/2017	31/12/2016	Change in MMAD Vs 2016	In%
Turnover	MMAD	5,200	4,377	<b>823</b>	<b>19%</b>
Earnings before interest and taxes (EBIT)	MMAD	1,906	1,488	<b>418</b>	<b>28%</b>
Current operating income	MMAD	903	675	<b>228</b>	<b>34%</b>
Operating income or loss	MMAD	1,333	672	<b>662</b>	<b>98%</b>
Financial income	MMAD	-194	-148	<b>-46.4</b>	<b>-31%</b>
Income before tax	MMAD	1,140	525	<b>616</b>	<b>117%</b>
Consolidated net income	MMAD	925	397	<b>528</b>	<b>133%</b>
Net income - Group share	MMAD	879	288	<b>591</b>	<b>205%</b>
Cashflow from operations	MMAD	1,583	1,249	<b>334</b>	<b>27%</b>

2017 WAS  
MARKED  
BY A SHARP  
INCREASE  
IN THE GROUP'S  
RESULTS

## TURNOVER

Turnover at the end of December 2017 reached **MAD 5 200 million**, increased by **MAD 823 million**, i.e. **+19%** compared to 2016.

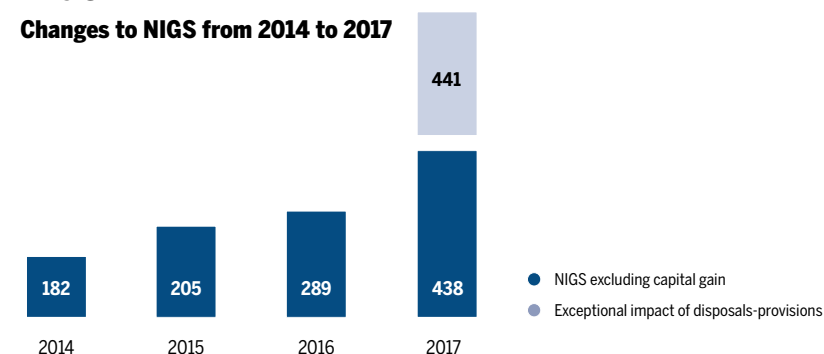
This change can be mainly explained by

- The effects of the increase in productions for **+ MAD 134.3 million**
- The activity slowdown at Bakoudou, i.e. an effect of **MAD -246.1 million**
- The increase in metal prices for an impact of **MAD +1,054.7 million**
- The drop in the average currency exchange rate with an impact of **MAD -57.0 million**
- And other effects for an impact of **MAD -63.4 million**.

EXCEEDING  
THE MAD  
5 BILLION TARGET  
FOR TURNOVER

## NIGS

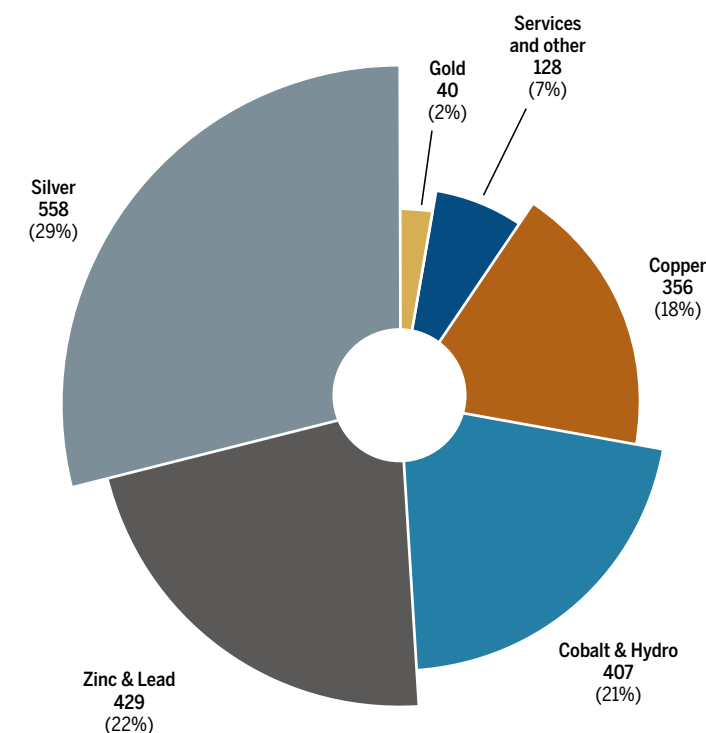
Changes to NIGS from 2014 to 2017



SINCE 2014,  
MANAGEM GROUP  
HAS REPORTED  
A STEADY INCREASE  
IN RESULTS

## Contribution per metal to EBIT

The EBIT of MAD 1,906 million breaks down as follows, by activity and metal



## HEDGES

Overall, Managem reported a negative result of **MAD (-114 million)** on hedges at the end of December 2017, broken down as follows:

- The result of commodities hedges is **USD -4.9 million** of which **USD -4.6 million** linked to Copper results.
- **USD -1.7 million** on Zinc and **USD +1.8 million** on Silver
- The loss on currency hedges is **MAD -66.7 million**, due to the settlement of **USD 66.5 million** at an average hedge price of 8.67 versus a market price of 9.67

### Result of Hedges at 31/12/2017

Metals/Change	Currencies (USD/MAD)	Silver	Copper	Gold	Lead	Zinc
Hedged positions (M\$/Oz/TM)	66.50	1,940,000	7,065	800	2,425	5,860
Average commitment price (\$/MAD \$)	8.67	18.07	5,487	1,286	2,171	2,616
Average closing price (\$/MAD \$)	9.67	17.15	6,144	1,253	2,355	2,902
<b>Hedging result</b>	<b>MAD -67 M</b>	<b>USD 1.8 M</b>	<b>USD -4.6 M</b>	<b>USD 0.026 M</b>	<b>USD -0.45 M</b>	<b>USD -1.7 M</b>

### Commodities hedging commitments and foreign exchange at 31/12/2017

Underlying	Year	Protection (Oz/T)	Protection price (\$/T/Oz)	Commitment (Oz/T)	Commitment price (\$/T/Oz)
Silver	2018	180,000	16.96	180,000	17.31
Copper	2018	1,380	6,502	1,380	7,203
Gold	2018	1,950	2,882	1,950	3,424
Lead	2018	780	2,268	780	2,774
<b>\$/MAD</b>	<b>2018</b>	<b>111,024,873</b>	<b>8,55</b>	<b>111,024,873</b>	<b>8,55</b>





MARK TO MARKET

Mark to Market of the Hedging Book at 31/12/2017

At the end of December 2017, the mark-to-market of the commodities hedge positions in KUSD was USD -524K versus USD 1,795K at the end of December 2016, i.e.. a change of USD -2,319K:

Raw material	31/12/2016	31/12/2017	Change
Silver	4,010	-6	-4,015
Gold	132	0	-132
Copper	-1,715	-341	1,374
Zinc	-739	-178	560
Lead	107	1	-105
<b>MtM en KUSD</b>	<b>1,795</b>	<b>-524</b>	<b>-2,319</b>
MtM impacting equity	2,089	-245	-2,334
MtM impacting P&L	-294	-278	15

At the end of December 2017, the Mark to Market of currency hedge positions in KDH was DH -85,281K versus DH-254,310K at the end of 2016, i.e.. a change of +DH 169,029K. This change can be explained by the partial unwinding of the currency positions and by the decrease of the USD/MAD prices

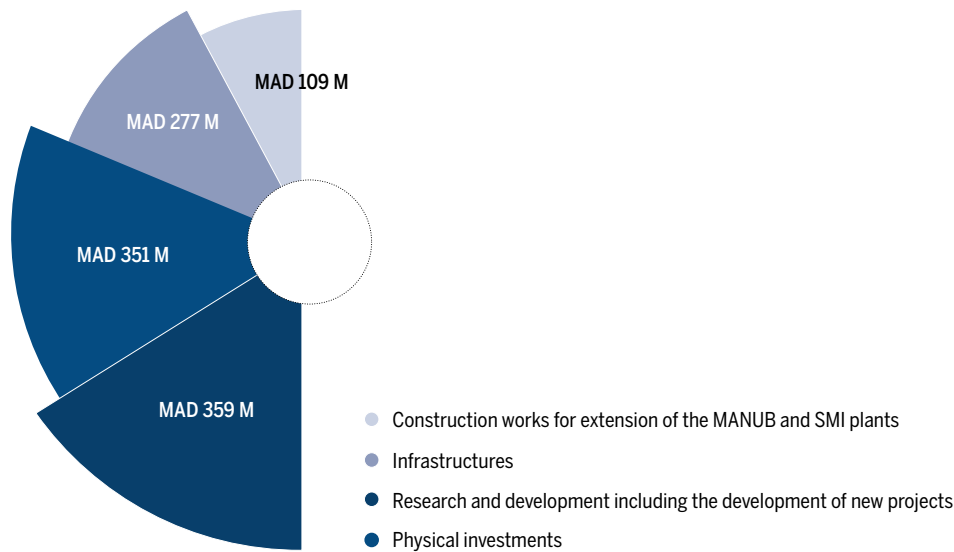
Currency derivatives	31/12/2016	31/12/2017	Variation
In Cash Flow Hedge (CFH)	-258,035	-82,130	175,905
In Trading	3,725	-3,151	-6,876
<b>Total MtM K MAD</b>	<b>-254,310</b>	<b>-85,281</b>	<b>169,029</b>

INVESTMENTS

To support its development strategy, the group undertakes significant investments, up by 18% compared to the previous year. Consolidated investments recognized at the end of December 2017 (under IFRS) amounted to MAD 1.095 million (excluding investment of MAD 131 million for the development of the TRI-K project in Guinea)

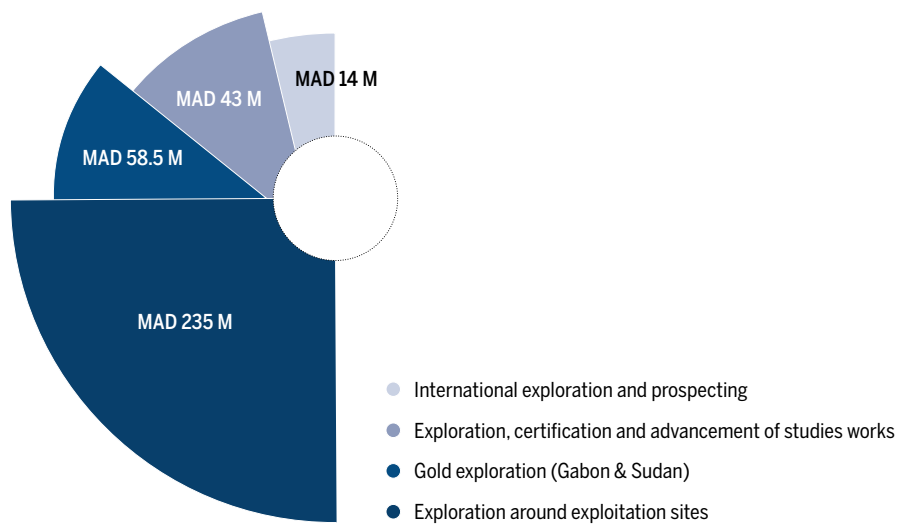
32% of the IFRS consolidated investments represent research and exploration expenses

Investment in 2017



67% of exploration investments are dedicated to exploration around production sites in order to renew reserves and discover new reserves.

Exploration investment in 2017





# OPERATIONS AND REALISATIONS 2017

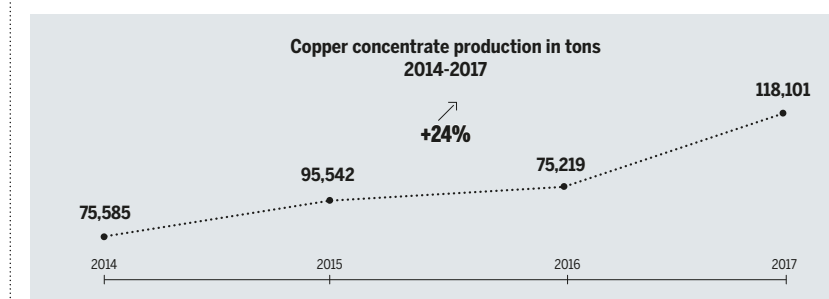
## COPPER

**STRATEGIC RAW MATERIAL,  
BOOSTED BY GLOBAL DEMAND  
AND MARKET FORECASTS  
FOR THE ELECTRIC CAR.**

Group Copper Indicators	31/12/2017	Change vs. 2016
Production (TC)	118,101	4%
Reserves (TM)	282,750	
Resources (TM)	1,016,700	

## THE GROUP HAS REPORTED STEADY INCREASE IN PRODUCTION SINCE 2014

Managem produces Copper Concentrate from several mining assets run by the subsidiaries AGM, CMG and SOMIFER in Morocco. Managem Group's Copper operations date back to more than 25 years. It was launched in 1982, with the opening of the Beida mine located in eastern Morocco. Today, the Group has several assets on the African continent, mines under production, assets under exploration and projects under development such as Pumpi in DRC and Tizert in Morocco.



**MAD  
80M**  
Invested  
in exploration

## A FAVOURABLE MACRO ECONOMIC SITUATION DRIVEN BY GLOBAL DEMAND AND SUPPLY

In 2017, there was a worldwide increase in base metal prices. Up by 27% compared to 2016, the price of Copper reached its highest level since 2014, rising from an average price of USD 5,466 in 2016 to an average annual value of USD 6,163 at the end of December 2017. This upward trend became even more pronounced in the second half of the year. In 2017, global demand was spiked by the +3.3% increase in Chinese demand, and by the infrastructure program launched in the USA. With other base metals, Copper also benefited from the growth prospects of the electric vehicle sector. The change in Copper price can be explained by the surge in global demand but also by the increase in mining supply, drained by productions on the African continent, especially in DRC and in Zambia, the launch of new projects in Peru and the resumed production in Chile. Against this background, Managem Group endeavours to position itself on the Copper market, by continuously improving its productivity and its quality.

Managem's performances stem from an aggressive cost control policy, strongly backed by R&D efforts. In 2017, the Group's R&D branch achieved significant progress in improving the treatment processes of Copper oxides, which are more complex to process than Copper sulphide. This development had a direct impact on the Group's Copper productivity, which improved by roughly 1% to 2% depending on subsidiaries. Managem achieved annual production of 118,100 TM in 2017, up 4% compared to the previous year.

### Opening of the Ouansimi mine in Morocco and signing of a strategic partnership in DRC.

In 2017, the Copper activity was marked by the opening of the Ouansimi mine which contributed to the 22% increase in the production of subsidiary AGM in 2017. The other significant event was the Group's repositioning on the Pumpi Copper-based project in DRC, thanks to the conclusion of a partnership with

the Chinese group Wanbao Mining in order to develop this important project. This transaction backs the African ambitions of Managem Group and facilitates the development of a large-scale project with a renowned partner, while minimizing risks. Over a period of nearly 10 years, considerable exploration works were carried out upstream by the geological experts of Managem Group. The resource evaluation report revealed the discovery of substantial mineral resources of 660,000 tons of Copper at the end of 2016. The Pumpi project is currently in the feasibility study phase. Lastly, the development of the Tizert project was accelerated in 2017. Located in the province of Taroudant in Morocco, the Tizert project is a high-potential deposit with resources estimated at 611,000 tonnes of metal. Thanks to this project, Managem Group plans to double its Copper segment production by 2021. The feasibility study which is currently in progress, should be completed by the end of 2018. ♦



# SILVER

## DECLINE IN GLOBAL SUPPLY IN 2017

Group Silver Indicators	31/12/2017	Change vs. 2016
Production (kg)	222.120	0%
Reserves (TM)	4.700	
Resources (TM)	1.221	

## STRENGTHENING OF PRODUCTION RESOURCES AND CAPACITIES

The Silver operations of Managem Group are handled by the subsidiary Société Métallurgique d'Imiter (SMI) which operates the Imiter Mine located at 150 km east of Ouarzazate in Morocco. SMI produces highly pure Silver metal (99.5% Silver) in the form of silver anodes.

The Group's silver operations began with the reclamation of Imiter's silver-based spoil heaps in 1969. Since then, SMI has pursued an ambitious development program for the mine. Thanks to the numerous exploration works supported by the Group's R&D activity, SMI was able to design controlled reclamation processes. Listed on the Casablanca Stock Exchange since 1996, SMI is one of the leading producers of primary Silver in Africa, as this ore is usually a by-product. On the global scale, the leading Silver producing countries include Mexico, Peru, China, Australia and Chile. In 2017, some producer countries reported reduced activity and sometimes the shut down of mines, in particular in Mexico and in China. The slump in the production of Zinc and Lead, of which Silver is a by-product, also led to a drop in Silver supply in 2017. The global price of Silver remained steady throughout the year, compared to 2016. The Gold/Silver ratio fluctuated between **USD 69** and **USD 80** in 2017. With respect to the Group's achievements, **SMI's Silver production** remained steady with 222 MT at the end of 2017 versus **221 MT** in 2016. Thanks to an adaptation policy deployed by the Group, the recorded reduction in ore content,

was offset by the **34% increase in treated tonnage** during 2017. Furthermore, to cope with this decrease in content, Managem also strengthened its investments, up by 21% compared to 2016. These funds are used to develop industrial units designed to strengthen production.

**Thanks to its geological and exploration expertise, Managem Group also implements a continuous research program, that allows it to renew its reserves and consolidate its activities.**

2017 was marked by the discovery of **581 tonnes of metal** in new reserves. The Imiter mine has a life cycle estimated at 12 years and presents an interesting growth potential with more than 5.900 MT of combined resources and reserves. As part of the Group's sustainable development strategy, SMI has launched the development of a new industrial line, following the finalization of the plant's extension in 2018. This unit will enable the Group to diversify the sources of silver-based ore by processing residues stored in open-air pits. SMI invested MAD 100 million to build this processing plant. ♦

**581<sup>TM</sup>**  
New reserves  
in 2017

**+34%**  
Processed tonnage  
in 2017



# GOLD

**2017 WAS THE YEAR OF RALLYING GLOBAL PRICES WITH STRONG DEMAND ON THE INTERNATIONAL MARKET.**

The Group's Gold Indicators	31/12/2017	Change vs. 2016
Production (T)	1.423	- 24%
Measured and indicated Resources (Oz)	5.029.000	

## ACCELERATION OF ACTIVITIES IN SUBSAHARAN AFRICA



2017 was marked by uncertainties on financial markets, expected tax reforms in the United States and a protectionist economic policy, against a backdrop of anti-inflationary policy monetary context created by the ECB. The value of Gold, the traditional safe haven metal for investors, rose slightly in 2017 with strong demand on the international market. Its average price settled at USD 1.257 against an average value of USD 1.248 in 2016, i.e., a change of +0.7%. Demand from physical investors rose by 16% in 2017, while demand for gold bars jumped 45%. The boom in crypto currencies cannot be ignored, especially if they were to become a safe investment for investors.

### Managem Group holds promising gold mining assets in favourable geological contexts.

Managem Group has been reclaiming gold-based deposits on the African continent for nearly 20 years now. Furthermore, it develops exploration projects at different stages. At the end of 2017, two gold mines were operational at Group level, the Bakoudou mine in Gabon and the Gabgaba mine in Sudan. The Bakoudou mine has reached the end of its life cycle after more than six years of operations. The mine's declining production generated a 24% drop in the Group's Gold production which fell to nearly 1.5 tonnes in 2017. The Gabgaba mine recorded excellent performances at the pilot level in 2017, with a production increase of more than 57% compared to

2016 and a decline in cash costs. Managem Group, a leading African operator, continued to roll out a strategy aimed at high-potential growth assets in 2017. Today, the Group develops large-scale projects in Sudan and in Guinea, countries whose measured and indicated gold resources amount to nearly 4.5 Moz. After the partial acquisition of the Tri-K project in Guinea at the end of 2016, Managem launched the feasibility study and devoted significant investment to research and exploration. After the exploration work on the Tri-K project in Guinea, the Group made an upward adjustment to its estimate for the reserves with a target of 1 million Oz. Furthermore, 2017 was marked by the completion of phase 1 of the pilot plant extension project in Sudan. The Group's goal is to achieve production of 2 tonnes per year. ♦



# COBALT

## HIGH DEMAND FOR A STRATEGIC COMMODITY

The Group's Cobalt Indicators	31/12/2017	Change vs. 2016
Production (TM)	1.924	- 8%
Reserves (TM)	16.000	
Resources (TM)	910	

## DIVERSIFIED STRATEGY TO HEDGE SEVERAL DEADLINES AND ANTICIPATE FUTURE DEMAND

Cobalt mining is one of the oldest activities of Managem Group which began in 1930 with the production of Cobalt concentrate. For nearly 20 years, the Group has been producing Cobalt cathode using the processes developed by the steady research of the R&D division.



**In a very positive macro-economic context, Managem Group continued to develop its Cobalt activity and endeavours to anticipate changes on the global market.**

In 2017, Cobalt prices attained record levels, buoyed by an increase in demand of nearly 6% and 1.4% drop in supply. Global demand for Cobalt is driven by booming demand for mobile technology. The shift in global demand for cars towards the use of electric engines currently represents one of the main factors influencing global demand for Cobalt. The market of electric and hybrid cars is estimated at 63% of global need in 2022. The increase in the batteries consumption represented more than 50% of global demand. In terms of resources, the DRC holds more than half of global stock. The prosperity of the Cobalt price expected in the next years will be accompanied by a surplus expected to start from 2020, in addition to any substitution by other metals such as Lithium and Nickel.

**Managem Group is present on the global Cobalt market through its subsidiary CTT. This subsidiary operates one of the only primary Cobalt mines in the world: the Bou-Azzer mine, located south of Ouarzazate in Morocco.**

Thanks to this high-purity Cobalt, CTT, subsidiary of Managem Group, has positioned itself on the hydro-metallurgical activity. Currently leader of the hydro-metallurgical market in Morocco, CTT develops and sells through its industrial complex, the CMBA brand of Cobalt cathode, patented and recognized worldwide. In 2017, the Group's production reached 1.924 tonnes of metal, recording a slight drop of 8% compared to 2016. This contraction was, however,

largely offset by the price surge. To do so, the Group implements a diversified strategy with different time frames to respond as best as possible to the demand for its present and future customers. In order to secure and consolidate its production, the Group has strengthened its exploration and research activity near exploitation sites, for CAPEX of MAD 40 million. In 2017, Managem took over the Green-field exploration investments including the permits held by CTT. In addition to this organic growth strategy, and in the light of the future size of the global battery market, the Group plans to deploy its expertise in the medium and long term on the recycling of batteries and the production of metals derived from this activity. ♦





# LEAD & ZINC

## INCREASE IN METAL PRICES, DRIVEN BY GLOBAL DEMAND

The Group's Zinc Indicators	31/12/2017	Change vs. 2016	The Group's Lead Indicators	31/12/2017	Change vs. 2016
Production (TC)	16,233	3%	Production Zinc Concentrates (TC)	77,173	- 1%
Reserves (TM)	139,000		Production Zinc Oxide (T)	7,594	47%
Resources (M)	73,900		Reserves (TM)	421,500	
			Resources (M)	133,000	

Managem Group produces Zinc and Lead primarily from three polymetallic mines in the region of Marrakesh in Morocco: Hajjar, Tighardine and Drâa Sfar. The polymetallic activity of Managem Group has been carried out since 1988 by the subsidiary CMG (Compagnie Minière de Guemassa) which mainly produces Zinc and Lead concentrates. The Group uses its expertise in hydro-metallurgy to produce Zinc oxide as well.

### INCREASE IN THE GROUP'S PRODUCTIVITY

Thanks to a continuous improvement policy and the Group's R&D expertise, the polymetallic activity completed, in 2017, the re-engineering project for base metal reclamation processes. Thanks to this innovation, Managem researchers have prepared a simultaneous treatment process for multi-site ore treated in Guemassa, presenting different characteristics. With this innovation and the significant increase in tonnages and contents treated, CMG achieved a 47% increase in the annual production of Zinc oxide in 2017 compared to the previous year. Lead production was also boosted by this progress, which changed from 16,233 TC, i.e.. an increase of 3% compared to 2016 production. Managem Group maintained its research and exploration efforts with the aim of perpetuating the activity and ensuring its durability. Thanks to the exploration work in the past year, new polymetallic reserves have been discovered, extending the life cycle of the exploitation by two years.

### LEAD: MORE THAN 22% PRICE INCREASE IN 2017

Lead price continued rising in 2017, rising by more than 22% compared to 2016. This trend was enhanced by a 3% increase in consumption in 2017. Indeed, in 2017, consumption was spurred by the increase in automotive sales, the continuous development of infrastructures in China and demand for the energy sector. Demand for Lead was also impacted by the continuous growth of batteries for SLI (Starting, Lighting and Ignition) and by the completion of wireless network projects in Europe and in America, and by the extension of telecoms networks on other continents. Meanwhile mining supply remained mixed in 2017 due to several reasons: shut down of mines and reduction in mining production, development of a secondary market (55% of supply) benefiting from the arrival in recycling of batteries from Chinese "e-bikes" produced the previous decade. As Lead is a by-product of Zinc, the reduction of Zinc production in China for ecological reasons, also contributed to the decline in Lead supply on the market. ♦

### ZINC: SHARP PRICE RALLY IN 2017

The increase in the prices of base metal was also beneficial to Zinc in 2017. Zinc price climbed from an average of USD 2,091 in 2016 to an average of USD 2,892 in 2017. In October 2017, Zinc price reached an unprecedented record high since 2014. This increase occurred following the market deficit linked to the depletion of iconic mines in Australia and in Ireland estimated at more than 400 KT. Indeed, the market was driven by the positive momentum of the global automotive sector, in China in particular, and by the rising demand from the construction and infrastructure sectors.

### The economic situation was marked by a 1.2% increase in global consumption.

Furthermore, the anti-dumping measures adopted in 2017 by the European Union introduced new mandatory customs duties on Chinese steel, which led several manufacturers to dip into their inventories thus influencing market supply. With regard to refined Zinc supply. 2017 recorded a drop of 0.6% compared to 2016, mainly linked to the closure of mines in Canada, South Korea and in Ireland. This decline can also be explained by the reduction in the production of leading Chinese mines due to environmental constraints. ♦

# FLUORITE

## DIVERSIFICATION FOR NEW DEVELOPMENT OPPORTUNITIES

The Group's Fluorite Indicators	31/12/2017	Change vs. 2016
Production (TM)	56,395	- 15%
Reserves (TM)	379,800	
Resources (TM)	470,000	

Managem Group produces Fluorite concentrate from the El Hammam deposit, operated by the Samine subsidiary. It ranks among the leading Fluorite producing companies in the world and exports its product to numerous customers worldwide.

The mine is known for the production of outstanding high-quality concentrate with 98% CaF2 content. In 2017, the Group recorded a 15% drop in the production of Fluorite concentrate which stood at 56,400 TC. In the light of the foregoing, Managem Group decided to pursue a development strategy geared towards products diversification and the search for new growth opportunities for the Fluorite segment. In this respect, the works of Managem Group experts in R&D are a continuous source of innovation. In 2017, R&D efforts allowed the confirmation of the development of a new product designed for cement plant market in Morocco, known as metallurgical Fluorite.

The product is developed in the existing plant of Samine. The 2017 production of metallurgical Fluorite was multiplied by 5.5 compared to 2016 and reached 27,400 tonnes. Furthermore, R&D developed during the year, the process for treating mining waste stored in open-air pits. Accordingly, in 2017, the Group's Fluorite activity began the reclamation of the dyke, which contributed to nearly 10% of treated tonnage. This activity played a role in the Group's sustainable development policy which seeks to spread to all subsidiaries, the treatment of mining waste and the creation of value from waste. ♦



# CSR, MUCH MORE THAN AN APPROACH...

## ... AN INTEGRAL PART OF THE GROUP'S DNA

Managem's sustainable development policy confirms its determination to remain a committed player and is visible in everyday actions, in how it conducts all its activities. It is manifested through substantial investments and socially responsible actions.

## MANAGEM FOCUSES ITS EFFORTS ON SURROUNDING COMMUNITIES.

### PARTICIPATING IN THE WELFARE OF COMMUNITIES

Mining activities are usually located in isolated regions where access to essential services is often difficult. For Managem, contributing to community welfare is a priority and a continuous participative process, which the Group and its subsidiaries endeavour to build with the stakeholders in the areas of activity. The Group strives to contribute to the building of infrastructures, bringing water closer, sanitation actions and cultural and social initiatives through the sponsoring of targeted activities. Participation and assistance to the welfare of communities rank among the most important interventions and accounted for more than 50% of the committed CSR budget in 2017. ♦

**50%**  
of the CSR  
budget assigned  
to well-being

### PROMOTING ACADEMIC SUCCESS

The Group intervenes in several areas to improve school life and promote success, from nursery schools to secondary school and even beyond. Through nearly 39 initiatives in 2017, Managem helped to support educational or social-cultural opportunities and provided school supplies and transportation. ♦

**39**  
Initiatives  
to support academic  
success



### PROMOTING NEW OPPORTUNITIES

In the light of the specific nature of the Group's activity and its isolated areas, Managem has rolled out a program offering new social inclusion opportunities for neighbouring communities. This program, primarily addressed to women and youth, covers a non-formal education stage and a promotion stage for training with a diploma to allow effective socio-economic inclusion. ♦

**380**  
Women targeted  
by the new  
opportunities program

### ENCOURAGING ENTREPRENEURSHIP

To meet socio-economic challenges, entrepreneurship is an obvious sustainable solution and has become a pillar of Managem's CSR strategy. The goal of this approach is to train communities and to provide them with the right practical skills to cope with the challenges of the economic market. The Group also endeavours to support associations and cooperatives in order to help them upgrade their skills and become more autonomous and competitive. ♦



In 2017, several awards recognized the efforts deployed by the Group for the integration of CSR practices into its development strategy.



#### Best Emerging Market performers

Managem and subsidiary SMI kept their position in the Ranking, updated every six months



#### "Top performers RSE" of the year 2017 in Morocco

Out of 43 market capitalizations, Managem and its subsidiary SMI, rank among the top 15.





**HUMAN CAPITAL,  
PILLAR OF SUSTAINABLE  
GROWTH**

**HUMAN RESOURCES REPRESENT A GENUINE PERFORMANCE  
DRIVER FOR THE COMPANY**

**17,000**  
Training man-days

**5,660**  
Employees

**165**  
New hires in 2017

**HR POLICY**

Conscious of the wealth of its human capital, Managem Group implements an HR policy that seeks to enhance and develop its human resources. With Managem 2020, the Group's actions are in line with a new HR momentum built on three major pillars

**1**

**REVEAL  
POTENTIAL**

To attract and grow talents and develop leadership

**2**

**ENCOURAGE  
COLLECTIVE STRENGTH**

thanks to the corporate culture, by promoting well-being and developing sharing

**3**

**TRIGGER  
CREATIVITY**

by driving innovation and going along transformation



# VALUES THAT REFLECT THE SPIRIT OF MANAGEM GROUP.

Values are the engine for the intentions and actions of each employee. In 2007, the Group's values were unveiled. The result of collective work over nearly

one year involving multiple Group employees, these values were unveiled at an executive convention organized by Managem in July 2017. ♦

## INTEGRITY

to be transparent, loyal, honest, fair and respectful

## GOODWILL

To one's employees, the environment and Surrounding communities

## COMMITMENT

to actively participate in building tomorrow and striving for excellence, while fighting for the Group's interests.

## AUDACITY

to explore, show agility, resilience and dare to transform.



### 2017 EXECUTIVE CONVENTION

At the 2017 Executive Convention, the leaders of Managem Group shared Vision 2020 and rolled out the Group's Values. This event brought together 500 Managem executives from Morocco, Switzerland, Sudan, Gabon and Guinea. The program featured organized activities, projections, round tables and group work.



### THE WELL-BEING OF EMPLOYEES AND THEIR FAMILIES: A HISTORIC GROUP POLICY

Each year, Managem Group implements proximity actions for its employees and their families.

**Actions aimed at children represent nearly half of the budget devoted to social actions. These actions are organized around summer camps, "Achoura" and "Deserving students" operations.**

In 2017, 1,035 children enjoyed trips to summer camps. Managem strives to improve the well-being of children during the Achoura day, an iconic day in Morocco which is the festival for children, as in previous years, the Group distributed toys to nearly 7,000 children

of its employees. In the same spirit and to encourage academic success, Managem rewarded the most deserving children of employees who demonstrated academic excellence during the year, by offering them vacations with numerous activities and entertainment.

**The Group strives to encourage an athletic mindset in its employees.**

In 2017, Managem offered several employees the opportunity to participate in different sports events such as the 28th Marrakesh International Marathon or the Bousjoura 15Km race. "Botola Managem" intersite tournaments are also organized on a regular basis. ♦

30%  
OF THE BUDGET  
ASSIGNED IN 2017  
TO SOCIAL  
ACTIONS

424  
FAMILIES  
ENJOY HOLIDAY  
ACCOMMODATION

1,034  
CHILDREN  
IN SUMMER CAMPS

60  
DESERVING  
STUDENTS  
REWARDED

6,890  
TOYS  
DISTRIBUTED





# ENVIRONMENT

**ENVIRONMENTAL PROTECTION IS CENTRAL TO SUSTAINABLE DEVELOPMENT.**

As a sustainable development pioneer, Managem Group is strongly committed to reducing the environmental footprint of its activities. The primary goal of its environmental policy is to optimize its resources and give a new lease of life to its waste in line with its sustainable growth policy. To this end, the 12 subsidiaries of Managem in Morocco and other countries have certified their environmental management system in accordance with ISO 14001.

**ISO 14001 certification renewed in 2017 for 12 Managem subsidiaries in Morocco and internationally**



- ✓ CTT
- ✓ CMG (Hajjar et Draâ Sfar)
- ✓ AGM
- ✓ SOMIFER
- ✓ CMO

- ✓ Centre de Recherche REMINEX
- ✓ SMI
- ✓ TECHSUB
- ✓ SAMINE
- ✓ REG Gabon

## COMMITTED IN FIGHTING CLIMATE DEREGULATION

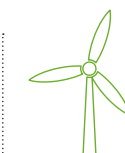
To reduce its CO2 emissions, Managem Group launched in 2015 a strategy to improve the quality of air and pledged to reduce its emissions by 10% by 2020.

## COMMITTED TO ENERGY EFFICIENCY

Managem's sustainable development strategy has naturally resulted in working to improve the energy efficiency of its installations and activities. This entails optimizing its consumptions and using wind power. Thanks to its efforts and investments, Managem Group has managed to considerably reduce its energy bill. At the same time, since 2013, it has been making increasing use of renewable energy.

## COMMITTED FOR THE PRESERVATION OF WATER RESOURCES

The smart management of water is one of the priorities of Managem, considering its mining activities. As part of its developments, the Group systematically seeks to introduce efficient technologies to save water and encourage sustainable use of resources. As such, at the level of its mining sites, Managem Group has developed multiple actions to manage water inclusively and sustainably such as recycling dyke water and waste water, using sewage treatment plants, using drip irrigation, etc. ♦



**WIND POWER REPRESENTS**

**55%\***

**OF CONSUMPTION OF ELECTRICAL POWER**



**RECYCLING REPRESENTS**

**49%\***

**GLOBAL WATER CONSUMPTION**

\*Consumption Morocco





The image features three gold bars of varying shades and textures. The top bar is a bright, polished yellow-gold. The middle bar is a darker, more weathered yellow-gold with visible surface imperfections. The bottom bar is a lighter, almost white-gold color, showing significant signs of wear and oxidation. All three bars are rectangular with slightly irregular edges and are set against a dark, textured background.

# **CONSOLIDATED FINANCIAL STATEMENTS**

PERIOD RUNNING FROM  
JANUARY 1 TO DECEMBER 31, 2017



## CONSOLIDATED INCOME STATEMENT

(In MAD millions)	December 2017	December 2016
Turnover	5,199.52	4,376.9
Other income from the activity	67.95	(12.7)
<b>Income from ordinary activities</b>	<b>5,131.58</b>	<b>4,364.2</b>
Purchases	1,836.18	(1,636.9)
Other external charges	983.20	(864.4)
Personnel expenses	1,045.82	(945.4)
Taxes and duties	73.72	(56.0)
Depreciation, amortization and operating provisions	1,071.99	(883.4)
Other operating income and expenses	781.85	697.1
<b>Current operating expenses</b>	<b>4,229.06</b>	<b>(3,689.0)</b>
<b>CURRENT OPERATING INCOME</b>	<b>902.52</b>	<b>675.2</b>
Asset disposals	1.72	0.4
Restructuring charges	-	-
Disposals of subsidiaries and equity interests	679.70	0.00
Negative goodwill	-	-
Income from financial instruments	6.51	6.57
Other non-recurring operating income and expenses	242.78	3.36
<b>INCOME FROM OPERATING ACTIVITIES</b>	<b>1,334.65</b>	<b>672.5</b>
Interest income	18.60	12.6
Interest expenses	183.53	(206.0)
Other financial income and expenses	29.24	45.5
<b>FINANCIAL INCOME</b>	<b>194.17</b>	<b>147.9</b>
<b>PRE-TAX INCOME OF CONSOLIDATED COMPANIES</b>	<b>1,140.48</b>	<b>524.6</b>
Corporate income tax	1,140.48	110.03
Deferred taxes	112.52	17.34
<b>NET INCOME OF FULLY CONSOLIDATED COMPANIES</b>	<b>924.56</b>	<b>397.2</b>
Share in the income of companies accounted for by the equity method	0.008	-
<b>NET INCOME FROM CONTINUING OPERATIONS</b>	<b>924.57</b>	<b>397.19</b>
<b>CONSOLIDATED NET INCOME</b>	<b>924.57</b>	<b>397.19</b>
Minority interests	45.46	108.7
<b>NET INCOME - GROUP SHARE</b>	<b>879.11</b>	<b>288.46</b>
Number of shares - parent	9,991,308.00	9,158,699.00
Calculation of earnings per share	87.99	31.50

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(In MAD millions)	December 2017	December 2016
<b>INCOME FOR THE YEAR</b>	<b>924.57</b>	<b>397.19</b>
<b>Other elements of comprehensive income (gross of taxes)</b>		
Foreign currency translation differences	-131.49	29.83
Gains and losses on the revaluation of available-for-sale financial assets		
Effective portion of income or loss on cash flow hedging instruments	152.70	-6.35
Change in the revaluation reserve for fixed assets		
Actuarial differences on defined benefit plan obligations	-1.88	-13.31
Income tax on other comprehensive income items	-45.32	4.51
Share of other elements of the comprehensive income in affiliated companies	3.39	
Costs of capital increases by subsidiaries		
<b>Other components of comprehensive income net of taxes</b>	<b>-22.60</b>	<b>14.68</b>
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>	<b>901.97</b>	<b>411.86</b>
<b>Of which minority interests</b>	<b>35.02</b>	<b>113.35</b>
<b>OF WHICH NET COMPREHENSIVE INCOME - GROUP SHARE</b>	<b>866.95</b>	<b>298.52</b>

## STATEMENT OF FINANCIAL POSITION

(In MAD millions)	December 2017	December 2016
<b>ASSETS</b>		
Goodwill	305.4	319.8
Intangible assets, net	1,382.6	1,960.1
Tangible assets, net	4,204.6	4,382.1
Investment property, net	25.5	25.9
Investments in affiliated companies	136.5	
Other financial assets	136.5	304.2
• Derivative hedging instruments		41.6
• Loans and receivables, net	5.7	4.3
• Available-for-sale financial assets	260.2	258.3
Corporate tax receivables		
Deferred tax assets	127	272.7
Other non-current receivables, net		
<b>NON-CURRENT ASSETS</b>	<b>6,447.4</b>	<b>7,264.7</b>
Other financial assets	0.0	3.7
• Derivative financial instruments		3.7
• Loans and receivables and investments, net	0.0	0.0
Inventories and work-in-progress, net	615.1	594.8
Trade receivables, net	780.7	422.3
Other current receivables, net	2,122.3	1,721.3
Cash and cash equivalents	1,482.7	502.5
<b>CURRENT ASSETS</b>	<b>5,000.9</b>	<b>3,244.6</b>
<b>TOTAL ASSETS</b>	<b>11,448.3</b>	<b>10,509.3</b>
<b>LIABILITIES</b>		
Capital	999.1	915.9
Issue and merger premiums	1,668.8	784.0
Reserves	1,527.7	1,328.5
Currency translation differences	105.8	230.9
Net income, group share	879.1	288.5
Equity attributable to ordinary shareholders of the parent company	5,180.6	3,547.7
Minority interests	454.0	471.6
<b>CONSOLIDATED SHAREHOLDERS' EQUITY</b>	<b>5,634.6</b>	<b>4,019.3</b>
Provisions	81.7	54.4
Employee benefits	178.1	156.1
Non-current financial debts	2,276.4	1,988.4
• Derivative financial instruments	4.1	18.7
• Loans from credit institutions	533.4	867.2
• Debts represented by a security	1,650.0	950.0
• Debts related to finance leases	88.9	152.5
Debts for corporate income tax		
Deferred tax liabilities	24.3	17.8
Other non-current creditors	8.2	12.6
<b>NON-CURRENT LIABILITIES</b>	<b>2,568.7</b>	<b>2,229.31</b>
Provisions		
Current financial debts	1,413.9	2,238.5
• Derivative financial instruments	86.0	262.9
• Loans from credit institutions	1,327.9	1,975.6
• Debts represented by a security	-	-
Current trade payables	823.6	902.0
Other current creditors	1,007.5	1,120.2
<b>CURRENT LIABILITIES</b>	<b>3,244.9</b>	<b>4,260.6</b>
<b>TOTAL LIABILITIES</b>	<b>5,813.7</b>	<b>6,490.6</b>
<b>TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES</b>	<b>11,448.3</b>	<b>10,509.30</b>



## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

In MAD millions	Capital	Reserves	Currency translation differences	Net income group share	Total group share	Minority interests	Total
<b>As at January 1, 2016</b>	<b>915.87</b>	<b>2,108.93</b>	<b>203.32</b>	<b>204.85</b>	<b>3,432.89</b>	<b>434.09</b>	<b>3,867.10</b>
Change in shareholders' equity for 2010	-	-	-	-	-	-	-
Net income for the period	-	-	-	288.46	288.6	108.72	397.19
Cash flow hedging income	-	9.46	-	-	9.46	3.11	6.35
Translation gains and losses	-	-	27.65	-	27.65	2.18	29.83
Gains and losses on AFS revaluations	-	-	-	-	-	-	-
Actuarial gains/losses	-	12.56	-	-	12.56	-0.76	13.31
Taxes relating to other comprehensive income items	-	5.17	-	-	5.17	0.66	4.51
Other comprehensive income items	-	-	0	-	0	-	-
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>	<b>-</b>	<b>16.84</b>	<b>27.65</b>	<b>288.46</b>	<b>299.27</b>	<b>112.59</b>	<b>411.86</b>
Dividends paid	-	183.18	-	-	183.18	75.05	258.22
Capital increase	-	0.04	-	-	0.04	0.00	0.04
Elimination of treasury shares	-	-	-	-	-	-	-
Other transactions with shareholders	-	1.36	-	-	1.36	0.00	1.36
Transfer to retained earnings	182	204.90	-	204.90	-	0.03	0.03
<b>Total transactions with shareholders</b>	<b>-</b>	<b>20.32</b>	<b>-</b>	<b>204.90</b>	<b>184.58</b>	<b>75.01</b>	<b>259.59</b>
<b>As at December 31, 2016</b>	<b>915.87</b>	<b>2,112.41</b>	<b>230.97</b>	<b>288.41</b>	<b>3,547.58</b>	<b>471.67</b>	<b>4,019.37</b>
<b>As at January 1, 2017</b>	<b>915.87</b>	<b>2,112.41</b>	<b>230.97</b>	<b>288.41</b>	<b>3,547.58</b>	<b>471.67</b>	<b>4,019.37</b>
Net income for the period	-	-	-	879.11	879.11	45.46	924.57
Cash flow hedging income	-	158.64	-	-	158.64	5.94	152.70
Translation gains and losses	-	125.07	-	-	125.07	6.42	131.70
Gains and losses on AFS revaluations	-	-	-	-	-	-	0
Actuarial gains/losses	-	3.31	-	-	3.31	1.43	1.88
Taxes relating to other comprehensive income items	-	45.81	-	-	45.81	0.49	45.32
Other comprehensive income items	-	-	-	-	-	-	0
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>	<b>-</b>	<b>109.52</b>	<b>125.07</b>	<b>879.11</b>	<b>863.56</b>	<b>35.02</b>	<b>898.58</b>
Dividends distributed	-	195.49	-	-	195.49	53.01	248.50
Capital increase	83.26	878.50	-	-	961.76	-	-961.76
Elimination of treasury shares	-	-	-	-	-	-	-
Other transactions with shareholders	-	3.39	-	-	3.39	-	3.39
Transfer to retained earnings	-	288.50	-	288.50	-	-	-
<b>Total transactions with shareholders</b>	<b>83.26</b>	<b>974.90</b>	<b>-</b>	<b>288.50</b>	<b>769.66</b>	<b>53.01</b>	<b>716.66</b>
<b>As at January 1, 2017</b>	<b>999.13</b>	<b>3,196.82</b>	<b>105.90</b>	<b>879.02</b>	<b>5,180.81</b>	<b>453.68</b>	<b>5,634.60</b>

## CONSOLIDATED CASH FLOW STATEMENT

(In MAD millions)	December 2017	December 2016
Consolidated net income	<b>924.6</b>	<b>397.2</b>
<b>Adjustments for</b>		
Depreciation, amortization and provisions, impairment losses	1,131.5	900.3
Revaluation gains/losses (fair value)	6.5	6.6
Income from disposals and dilution gains and losses	(540.1)	0.9
Dividend income	0.0	0.0
Elimination of profits and losses on fair value Share of income from companies accounted for by the equity method	(140.9)	-
<b>CASH FLOW FROM OPERATIONS AFTER COST OF NET FINANCIAL DEBT AND TAX</b>	<b>1,381.6</b>	<b>1,304.9</b>
Elimination of tax expense (income)	215.9	127.4
Elimination of the cost of net financial debt	183.5	206.0
<b>CASH FLOW FROM OPERATIONS BEFORE COST OF NET FINANCIAL DEBT AND TAX</b>	<b>1,781.0</b>	<b>1,638.3</b>
Impact of changes in working capital requirements	114.6	(104.8)
Deferred taxes	(5.2)	0.0
Taxes paid	(103.4)	(110.0)
<b>NET CASH FLOW FROM OPERATING ACTIVITIES</b>	<b>1,787.0</b>	<b>1,423.5</b>
Impact of changes in the scope	(1.0)	4.2
Acquisition of tangible and intangible fixed assets	(1,095.0)	(930.5)
Acquisition of financial assets	(0.5)	(0.9)
Change in other financial assets	(4.8)	1.2
Investment subsidies received		
Disposals of tangible and intangible fixed assets	4.1	8.0
Disposals of financial assets	539.0	0.0
Dividends received	0.0	0.0
Financial interest paid	(183.5)	(206.0)
<b>NET CASH FLOWS FROM INVESTING ACTIVITIES</b>	<b>(741.9)</b>	<b>(1,123.9)</b>
Capital increase	961.6	0.0
Transactions between shareholders (acquisitions)	0.0	0.0
Transactions between shareholders (transfers)	0.0	0.0
Issuance of new loans	700.0	0.0
Repayment of loans	(354.0)	(300.9)
Change in receivables and payables under finance leases		
Repayment of finance leases	(66.9)	(68.9)
Other cash flows related to financing activities		
Dividends paid to shareholders of the parent company	(195.5)	(183.2)
Dividends paid to minority shareholders	(53.0)	(75.0)
Change in partner current accounts	(379.2)	(104.6)
<b>NET CASH FLOW FROM FINANCING ACTIVITIES</b>	<b>(613.0)</b>	<b>(732.7)</b>
Impact of exchange rate fluctuations	(50.4)	6.9
Impact of changes in accounting methods and principles		
<b>CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>(1,607.7)</b>	<b>(426.2)</b>
<b>Net cash and cash equivalents at the beginning of the year*</b>	<b>(748.4)</b>	<b>(748.4)</b>
Net cash and cash equivalents at the end of the year*	433.1	(1,174.6)
<b>CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>1,607.7</b>	<b>(426.2)</b>



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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## NOTE 1. DESCRIPTION OF THE ACTIVITY

The Managem Group is a leading operator in the mining sector in Morocco and the region, with two main activities: mining and hydrometallurgy.

The Group's activities include the exploration, extraction, processing and marketing of mineral substances.

In addition to these activities, the Group is also involved in research & development and engineering aimed at developing new methods and processes for exploiting mining deposits.

The Group's operations are mainly conducted in Morocco, with a presence in some African countries, through projects under construction in Gabon and the DRC and exploration projects in Sudan.

The Group's main products are: Cobalt, Silver, Zinc, Copper, Cobalt Oxide, Zinc Oxide, Fluorite, Gold and Lead.

## NOTE 2. SIGNIFICANT EVENTS THAT OCCURRED DURING THE PERIOD

- Consolidation of silver production following a 22% decrease in grades offset by a significant increase in tonnage of 34%.
- Decrease in activity in Bakoudou following the current exhaustion of the mine, resulting in a 66% decrease in production (57% decrease in average grade)
- Significant increase in gold production in Sudan, +57%  
Copper production up 4% driven by good performance at AGM (+17%) and Somifer (+13%)
- Consolidation of Zinc and Lead production with the increase in processed tonnage (Mixed-grade project at CMG Decrease in cobalt cathode production -8%
- Discoveries of new mining reserves around active sites  
**Silver:** 581 tons of metal at SMI. **Copper SOMIFER:** 1,515 k TTV. **Polymetallic at CMG:** 2,741 k TTV
- Conclusion of a partnership agreement on 27 March 2017 between Managem and WANBAO Mining for the development of the PUMPI Copper project in the DRC, which resulted in the sale of 61.2% of the LAMIKAL shares to Wanbao
- Entry into force of the mining agreement signed by the State of Guinea for the development of the TRI-K gold project
- Completion of Managem's capital increase, i.e. MAD 973M
- Start-up of the OUANSSIMI mine in January 2017
- Launch of work to extend the production capacity of the pilot unit in Sudan
- Signing of a partnership agreement with Wanbao Mining for the sale of 61.2% of the PUMPI mining field in the DRC
- Progress according to the schedule of the feasibility study for the ETHEKE Gold Project in Gabon
- Progress according to the schedule of the feasibility study for the Gold Project in Sudan (Block 15)
- Completion of the feasibility study for the Bouskour Copper project in the Eastern Anti-Atlas
- Progress according to the schedule of the feasibility study for the TIZERT Copper project
- Progress according to the schedule of the feasibility study for the TRI-K Gold Project in Guinea

## NOTE 3. ACCOUNTING RULES AND METHODS

### 3.1. Accounting standards

Pursuant to Opinion No. 5 of the National Accounting Council (CNC) of 26/05/2005 and in accordance with the provisions of Article 6, paragraph 6.2 of Circular No. 07/09 of the Conseil Déontologique des Valeurs Mobilières (CDVM - Moroccan Securities Regulator) of 26 June 2009, the consolidated financial statements of the Managem Group are prepared in compliance with international accounting standards adopted within the European Union at 31 December 2017 and as published at that same date.

International accounting standards include IFRS (International Financial Reporting Standards), IAS (International Accounting Standards) and their SIC and IFRIC interpretations (Standards Interpretations Committee and International Financial Reporting Interpretations Committee). The Group's accounting principles and practices are described below and have been applied for the 2017 financial year, as well as for the comparative periods presented.

### 3.2. Assessment bases

The consolidated financial statements are presented in millions of dirhams (MAD millions), rounded to the nearest million. They are prepared in accordance with the historical cost convention with the exception of some asset and liability categories in accordance with the principles set out in IFRS. The categories involved are mentioned in the summary of the notes below.

### 3.3. Use of estimates and assumptions

The preparation of the consolidated financial statements in accordance with applicable international accounting standards has led the Group to make estimates and assumptions that have an impact on the financial statements and accompanying notes.

#### a) Depreciation of inventory

Inventories and work in progress are valued at the lower of cost and net realizable value. The calculation of inventory depreciation is based on an analysis of foreseeable changes in demand, technology or the market to determine obsolete or excess inventories.

Depreciation is recognized as a current operating expense or as a restructuring charge, as the case may be, depending on the nature of the amounts in question.

#### b) Depreciation of trade receivables and loans

A depreciation of trade receivables and loans is recorded if the present value of future collections is lower than the nominal value. The amount of the depreciation takes into account the debtor's ability to honor its debt and the age of the receivable. A lower than estimated recoverability rate or the default of our main clients may have a negative impact on our future performance.

#### c) Capitalized development costs, goodwill, intangible assets and tangible assets

The Group capitalizes exploration and mining research expenses in accordance with the accounting principles set out below.

Capitalized exploration expenses are reviewed for value depreciation when there is an indication of value depreciation and are written down if the carrying amount of these assets exceeds their recoverable amount.

The conditions for capitalizing development costs are set out below. Once capitalized, these costs are amortized over the estimated useful life of the products involved.

The Group must therefore assess the commercial and technical feasibility of these projects and estimate the resulting product useful lives. If it appears that a product is not able to meet initial expectations, the Group may be required to write down all or part of the capitalized costs in the future or to modify the initial depreciation plan.

The Group also has intangible assets acquired in cash or through business combinations as well as the resulting goodwill.

In addition to the annual impairment tests relating to goodwill, one-off tests are carried out if there is any indication of impairment of the intangible assets held. Any impairment losses result from a calculation of discounted future cash flows and/or market values for the relevant assets. A change in market conditions or in the initially estimated cash flows may therefore lead to a review and modification of the previously recognized impairment loss.

With regard to impairment tests for intangible and tangible assets, IAS 36 "Impairment of Assets" specifies that when events or changes in the market environment indicate a risk of impairment of these assets, they are subject to a detailed review to determine whether their net carrying amount is lower than their recoverable amount (the higher of value in use and fair value less costs of disposal) that could lead to the recognition of an impairment loss. Value in use is estimated by calculating the present value of future cash flows. Fair value is based on available information deemed to be the most reliable (market data, recent transactions, etc.).

The planned shutdown of certain sites, further staff reductions and the downward revision of market prospects may, in some cases, be considered as indications of impairment.

Assumptions and estimates are taken into account in determining the recoverable amount of tangible fixed assets, including market prospects, obsolescence and realizable value in the event of disposal or liquidation. Any change in these assumptions may have a material impact on the amount of recoverable amount and could lead to a review of the amount of impairment losses recognized.

#### d) Provisions

The amount of provisions recognized by the Group is based on the best estimate of the outflow of future economic benefits at the date the Group recognized this liability. The amount of provisions is adjusted at each balance sheet date to take into account any change in the estimated expected outflow of future benefits.

When the time effect is material on the measurement of a liability to pay future benefits, provisions are discounted, and the discount effect is subsequently recognized as a financial expense.

#### e) Deferred taxes

Deferred tax assets recognized mainly result from tax loss carryforwards and deductible temporary differences between the carrying amounts and tax bases of assets and liabilities. Assets relating to the carry-forward of tax losses are recognized if it is probable that the Group will have future taxable profits against which these tax losses can be offset.

Estimates of future profits are based on budgets and forecasts of accounting income, adjusted for tax adjustments. These estimates are based on market assumptions that may not be confirmed in the future.

Deferred tax assets and liabilities, regardless of their maturity, must be offset when they are levied by the same tax authority and concern the same tax entity that has the right to offset the tax assets and liabilities due. As a result, each Group entity has offset these deferred tax assets and liabilities.

#### f) Provision for pensions and other post-employment benefits

The Group has defined contribution pension plans. Furthermore, some other post-employment benefits such as medical coverage, retirement indemnities and long-service awards are covered by provisions. All these commitments are calculated on the basis of actuarial calculations based on assumptions such as the discount rate, medical inflation rate, future salary increases, employee turnover rate and mortality tables. These assumptions are generally updated on an annual basis.

#### g) Revenue recognition

Revenues are recorded at the fair value of the compensation received or to be received when the company has transferred to the buyer the significant risks and benefits inherent in the ownership of the property.

#### h) Fair value of derivatives and other financial instruments

The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. The Group selects the most appropriate methods and assumptions based mainly on current market conditions at each balance sheet date.



### 3.4. Consolidation principles

#### 3.4.1. Subsidiaries

Companies in which the Group exercises exclusive de facto or de jure control are consolidated using the full consolidation method. Control is defined as the power to steer the financial and operating policies of an entity in order to obtain the benefits of its activities. The financial statements of controlled companies are consolidated as soon as control becomes effective and until such control ceases.

Control is considered to exist when the parent holds, directly or indirectly through subsidiaries, more than half of the voting rights of an entity, unless in exceptional circumstances where it can be clearly demonstrated that such ownership does not allow control.

To determine whether one group entity exercises control over another, account is also taken of the existence and effect of potential voting rights that may be exercised at the balance sheet date. However, the distribution between the group's percentage stake and minority interests is determined on the basis of the current percentage stake.

The share of net income and shareholders' equity is presented on the heading "minority interests".

#### 3.4.2. Investments in affiliated companies and joint ventures

Companies in which the Group exercises significant influence over management and the financial policy are consolidated using the equity method; significant influence is deemed to exist when more than 20% of the voting rights are held.

**Under the equity method, investments are recorded at cost, adjusted for post-acquisition changes in the investor's share of the entity held, and for any impairment losses on the net investment. Losses of an entity consolidated using the equity method that exceed the value of the group's interest in that entity are not recognized unless:**

- The Group has a legal or constructive obligation to cover these losses; or
- The Group made payments on behalf of the affiliated company.

Any excess of the acquisition cost over the Group's share of the fair value of the affiliated company's identifiable assets, liabilities and contingent liabilities at the acquisition date is recognized as goodwill but is not included in the balance sheet as part of the Group's other goodwill. The latter is included in the carrying amount of the investment accounted for by the equity method and is tested for impairment in the total carrying amount of the investment. Any excess of the Group's share in the net fair value of the entity's identifiable assets, liabilities and contingent liabilities over the acquisition cost is immediately recognized in the income statement.

Investments in entities over which the Group has ceased to exercise significant influence are no longer consolidated from this date and are measured at the lower of their value in accordance with the equity method at the date of exit from the consolidation scope or of their value in use. As permitted by IAS 31 "Interests in Joint Ventures", the Group has chosen to use the proportional consolidation method to consolidate the entities over which it exercises joint control.

Investments in entities over which the Group has ceased to exercise joint control or significant influence are no longer consolidated from that date and are measured in accordance with the provisions of IAS 39.

Equity interests in subsidiaries, joint ventures and affiliated companies that are classified as held for sale (or included in a disposal group that is classified as held for sale in accordance with IFRS 5) are recognized in accordance with the provisions of this standard.

At present, the Group does not have any affiliated companies or joint ventures within its scope of consolidation.

#### 3.4.3. Exclusions from the scope of consolidation

In accordance with IFRS, there is no exemption for the Group's scope of consolidation. Non-material equity investments are treated as AFS securities.

#### 3.4.4. Consolidation adjustments

All intra-group transactions, as well as material inter-company assets and liabilities between fully or proportionately consolidated companies, are eliminated. The same applies to the Group's internal profits (dividends, capital gains, etc.).

Income from intercompany transfers with companies consolidated by the equity method is eliminated up to the limit of the Group's percentage stake in these companies.

#### 3.4.5. Closing date

All Group companies are consolidated on the basis of the annual financial statements for the year ended December 31, 2017.

### 3.5. Translation of financial statements and transactions in foreign currencies

The functional currency of MANAGEM is the dirham, which is also the currency in which the Group's consolidated financial statements are presented.

#### 3.5.1. Translation of the financial statements of foreign companies

**The financial statements of autonomous foreign subsidiaries, whose functional currency is different from the dirham, are translated into dirhams as follows:**

- With the exception of shareholders' equity, for which historical rates are applied, balance sheet accounts are translated using the exchange rates prevailing at the balance sheet date,
- Income statements and cash flow statements are translated using the average exchange rates for the period,
- The resulting translation difference is recorded under "Translation differences" included in shareholders' equity.

Goodwill and fair value adjustments arising from the acquisition of a foreign entity are considered as assets and liabilities of the foreign entity and are expressed in the functional currency of the acquired entity and are translated into dirhams at the closing rate. The financial statements of foreign entities that are not self-sustaining, whose functional currency is different from the dirham and whose activity is an extension of the parent company, are translated into dirhams using the historical rate method.

#### 3.5.2. Translation of foreign currency transactions

Transactions in foreign currencies (i.e. in a currency other than the entity's functional currency) are translated at the exchange rate prevailing at the date of the transaction.

Assets and liabilities denominated in foreign currencies are valued at the rate prevailing at the balance sheet date or at the rate of the hedge assigned to them, if applicable.

The corresponding exchange differences are recorded in the income statement, changes in the fair value of hedging instruments are recorded in accordance with the treatment described in Note 3.17.3 "Derivative instruments 410 below".

### 3.6. Business combinations

**Rules specific to first-time adoption:** business combinations prior to the transition date (January 1, 2006) have not been restated in accordance with the option provided by IFRS 1.

#### Combinations subsequent to January 1, 2006:

Acquisitions of subsidiaries are accounted for using the purchase method. The acquisition cost includes the following items at the date of the combination:

- The fair value, at the exchange date, of the assets given, liabilities incurred or assumed;
- Any equity instruments issued by the Group in exchange for control of the acquired entity;
- Other costs that may be attributable to the business combination.

The identifiable assets, liabilities and contingent liabilities of the acquired entity that meet the recognition criteria set out in IFRS 3 are recognized at fair value, with the exception of assets (or groups of assets) that meet the requirements of IFRS 5 for a qualification as non-current assets held for sale, which are then recognized and measured at fair value less costs to sell.

In the case of the first consolidation of an entity, the Group measures all assets, liabilities and contingent liabilities at fair value within a period not exceeding one year from the acquisition date.

Goodwill corresponds to the difference between the acquisition cost and the acquirer's share of interest in the net fair value of identifiable assets, liabilities and contingent liabilities. It follows the principles defined in section "3.7 Goodwill".

### 3.7. Goodwill

Goodwill is measured in the functional currency of the acquired entity. It is recorded as an asset on the balance sheet. It is not amortized and is subject to annual impairment tests or as soon as there are indications that the value recorded in the balance sheet may be impaired. Impairment losses recorded may not be reversed at a later date.

When the share of the fair value of assets, liabilities and contingent liabilities acquired exceeds the acquisition cost, negative goodwill is immediately recognized in the income statement, after re-evaluation of the valuation of identifiable assets, liabilities and contingent liabilities. On the disposal of a subsidiary or a jointly controlled entity, the amount of goodwill attributable to the subsidiary is included in the calculation of the gain or loss from the disposal.

For acquisitions that took place before January 1, 2006, goodwill is maintained at its deemed cost, which represents the amount recognized in accordance with Moroccan accounting principles (opinion n°5 of the Conseil National de la Comptabilité - CNC). The classification and treatment of business combinations that took place before January 1, 2006 were not modified upon adoption of IFRS on January 1, 2006 in accordance with the provisions of IFRS 1.

### 3.8. Intangible assets

Items recognized as intangible assets are mainly exploration and mining research expenses, patents and software.

#### a. Exploration and mining research expenses

**In accordance with IFRS 6:** "Exploration for and Evaluation of Mineral Resources", the Group maintains its accounting principles for the measurement and recognition of mining exploration expenses.

**These expenses mainly include costs directly related to the following items:**

- General geological studies to assess the potential of an area or permit;
- Detailed geology and geochemistry work;
- Geophysical work;
- Drilling work;
- Mining work;
- Sampling;
- Treatment tests.



Exploration expenses also include the costs incurred to obtain or acquire exploration rights “mining research permits”.

**Exploration expenses are recorded:**

- On the assets side if these expenses make it possible to identify new deposits; or
- As expenses in the period in which they are incurred, if they have not led to the identification of new mining reserves.

Capitalized exploration expenses are amortized over the life of the identified reserves and reviewed for impairment if there is any indication of impairment.

**b. Other intangible assets**

Intangible assets are recorded at initial acquisition cost less accumulated amortization and any impairment losses.

Acquired identifiable intangible assets with a finite useful life are amortized based on their own useful lives as soon as they are in operation.

Acquired identifiable intangible assets with an indefinite useful life are not amortized but are tested annually for impairment or when there is any indication that the carrying amount may not be as it appears on the balance sheet. If necessary, an impairment loss is recorded.

Intangible assets with a finite useful life are amortized over the following periods:

This amortization method accurately reflects the rate of consumption of economic benefits.

**3.9. Property, plant and equipment**

**Rules specific to first-time adoption:**

As part of the first-time adoption of IFRS and in accordance with the provisions of IFRS 1, the Group measured some of its assets (mainly certain technical installations) at fair value as at January 1, 2006, and used this valuation as deemed cost. The fair value measurements were carried out by independent experts.

**Principles applicable since January 1, 2006:**

In accordance with IAS 16, tangible fixed assets are recognized at historical acquisition or initial manufacturing cost, less accumulated depreciation and, where applicable, accumulated impairment losses.

The financial interest on the capital used to finance the investments during the period before they are put into operation is an integral part of the historical cost.

Current maintenance costs are recognized as expenses for the period except for those that extend the useful life or increase the value of the asset concerned, which are then capitalized.

Depreciation is calculated on the basis of the useful lives of property, plant and equipment or their components, within the limit of the life of the deposit for equipment and other mining assets.

- Buildings and constructions:
- Other tangible fixed assets:

The depreciation method used by the Group is the straight-line method. All provisions relating to property, plant and equipment are also applied to tangible assets held through a finance lease. The depreciation periods of these fixed assets are provided below:

**Tangible fixed assets:**

Types of tangible fixed assets	Depreciation method	Depreciation period
Mining infrastructure	Straight-line	Expected operating life of the deposit
Technical installations	Straight-line	5 to 10 years
Machinery and equipment	Straight-line	5 to 10 years

**3.10. Investment properties**

Investment property is real estate held for rent, capital appreciation or both, rather than for use in the production and supply of goods and services or for administrative purposes or for sale in the ordinary course of business.

In accordance with the option offered by IAS 40, investment property is recognized at cost less accumulated depreciation and any impairment losses.

As part of the first-time adoption of IFRS and in accordance with the provisions of IFRS 1, the Group measured certain investment properties (land presented as investment properties) at fair value as at January 1, 2006, and used this valuation as deemed cost. The fair value measurements were carried out by independent experts.

**3.11. Biological assets**

In accordance with IAS 41, starting January 1, 2009, the Group recognizes biological assets, related agricultural products at the time of harvest and public subsidies.

Biological assets are measured at initial recognition and at each balance sheet date at fair value less costs to sell. Also, agricultural production harvested from biological assets is measured at fair value less costs to sell.

Under IAS 41, fair value is defined as the market price of a biological asset or agricultural product in its current position and condition.

For the first application of IAS 41, biological assets are valued at their costs corresponding to their market values as well as their acquisition values.

**3.12. Lease contracts**

In accordance with IAS 17 “Leases”, leases are classified as finance leases when the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Assets held under a finance lease are recognized as assets at the lower of the present value of the minimum lease payments and their fair value, determined at the inception of the lease. The corresponding liability due to the lessor is recorded in the balance sheet as an obligation under the finance lease, under financial liabilities.

These assets are depreciated over the shorter of the useful life of the assets and the term of the finance lease, when there is reasonable assurance that there will be no transfer of ownership at the end of the lease term.

For operating leases where the Group is a lessee, payments made under operating leases (other than costs of services such as insurance and maintenance) are recognized as an expense in the income statement on a straight-line basis over the term of the lease.

Leases signed by the Group (lessor) with its customers are operating leases. In these contracts, rental income is recorded on a straight-line basis over the firm terms of the leases. As a result, the specific provisions and benefits defined in the lease agreements (rent-free periods, stepped rent, entrance fees) are spread over the firm term of the lease, without taking indexation into account. The reference period used is the first firm period of the lease. Costs directly incurred and paid to third parties for the establishment of a lease are recorded as assets under “investment property” or other relevant fixed assets and amortized over the firm term of the lease.

**3.13. Impairment testing and impairment of assets**

In accordance with the provisions of IAS 36, the Group reviews at least annually the carrying amounts of property, plant and equipment and intangible assets with finite useful lives to assess whether there is any indication that these assets may have been impaired. If such an indication exists, the recoverable amount of the asset is estimated in order to determine, if necessary, the amount of the impairment loss. The recoverable amount is the higher of its fair value less costs to sell and its value in use.

Goodwill and intangible assets with indefinite useful lives are subject to an annual impairment test. An additional impairment test is performed whenever an indication of impairment has been identified.

The Group has determined that the lowest level at which assets can be tested for impairment is constituted by the various mines operated by the Group.

When the recoverable amount of a Cash Generating Unit (CGU) is less than its carrying amount, an impairment loss is recognized in the income statement. This impairment loss is first allocated to the carrying amount of goodwill in the balance sheet. The remainder is allocated to the remaining assets included in the CGU in proportion to their carrying amounts.

The recoverable amount of CGUs is determined on the basis of discounted projections of future operating cash flows over an extrapolated three-year period, within the limit of the deposit’s lifespan. The discount rate used for these calculations and the weighted average cost of capital differ according to the CGUs and the business sectors in which they operate. These rates vary between 5 and 10%.

For a listed subsidiary, the recoverable amount of the Cash Generating Unit (CGU) used is its market capitalization unless it is less than the net carrying amount, in which case, an estimate of the value in use is made.

**3.14. Non-current assets held for sale and discontinued operations**

Assets or groups of assets held for sale meet the criteria for such classification if their carrying amount will be recovered primarily through a sale transaction rather than through their continued use. This condition is considered to be met when the sale is highly probable and the asset (or group of assets to be sold) is available for immediate sale in its current condition. Management must be committed to a sales plan, and the sale is expected to be completed within twelve months of the date on which the asset or group of assets was qualified as a non-current asset held for sale.

At each balance sheet date, the Group assesses whether it is engaged in a process of disposal of assets or activities and presents them, where applicable, as “assets held for sale”.

These assets held for sale are presented separately from other assets on the balance sheet. Any liabilities related to these assets held for sale are also presented on a separate line on the liabilities side of the balance sheet.



Assets held for sale and groups of assets held for sale are measured at the lower of their carrying amount and fair value less disposal costs. As from the date of such classification, the asset ceases to be depreciated. A discontinued operation represents a significant business or geographical area for the Group that is either sold or classified as held for sale. The income from discontinued operations is presented in the income statement separately from the income from continuing operations.

### 3.15. Inventories

Inventories are measured at the lower of cost or net realizable value.

Cost is the acquisition cost or production costs incurred to bring inventories to their present condition and location. The latter include, on the basis of a normal level of activity, direct and indirect production costs. Cost costs are generally calculated using the weighted average cost method. The net realizable value of inventories corresponds to the estimated selling price in the normal course of business less the estimated costs to complete the products and the estimated costs necessary to make the sale.

### 3.16. Treasury shares

Treasury shares held by the Group are deducted from consolidated shareholders' equity at their acquisition cost. Subsequent disposals are charged directly to shareholders' equity and do not give rise to the recording of any income.

### 3.17. Financial assets

Financial assets should be classified into the four following categories:

- **Assets measured at fair value in the income statement:** fair value with changes in fair value in the income statement;
- **Held-to-maturity assets:** amortized cost, any provisions for impairment are recognized in the income statement. This category is not used by the Group;
- **Loans and receivables:** amortized cost, any provisions for impairment are recognized in the income statement;
- **Available-for-sale assets:** fair value with changes in fair value in shareholders' equity, or in the income statement to provide for an objective impairment that is permanent (six months) or significant (decrease of more than 20%) and in this case any subsequent decrease will be recognized in the income statement while any subsequent increase will be recognized in shareholders' equity.

#### 3.17.1. Valuation of trade receivables and non-current financial assets

Trade receivables, loans and other non-current financial assets are considered as assets issued by the company and are accounted for using the amortized cost method. They may also be subject to a provision for impairment if there is objective evidence of impairment.

A provision for impairment of receivables is recorded when there is an objective indicator that the Group is unable to recover all amounts due under the conditions initially provided for in the transaction. Significant financial difficulties encountered by the debtor, the likelihood of bankruptcy or financial restructuring of the debtor or non-payment are indicators of impairment of a receivable. The amount of the provision represents the difference between the carrying amount of the asset and the value of the estimated future discounted cash flows, if any. The amount of the loss is recognized as an impairment on accounts receivable and is offset by an impairment charge on current assets.

#### 3.17.2. Unconsolidated equity securities and other long-term securities

Unconsolidated equity interests and other long-term investments qualify as available-for-sale assets (AFS) and are recorded in the balance sheet at their fair value. Unrealized gains and losses are recorded in a separate component of shareholders' equity. For listed securities, the fair value corresponds to the stock market price. For other securities, if the fair value cannot be reliably estimated, it corresponds to the acquisition cost less any impairment losses.

An impairment loss is recognized in the event of objective evidence of impairment of assets other than those classified as held for trading. Except in exceptional circumstances, the Group considers that a significant or lasting decline is deemed to have occurred when the equity instrument has lost at least 20% of its value over a period of 6 consecutive months.

This criterion of a significant or lasting decline in the value of the security is a necessary but not sufficient condition to justify the recording of a provision. The latter is only constituted to the extent that the impairment will result in a probable loss of all or part of the invested amount. This impairment loss may only be reversed through the income statement when the shares are sold, with any previous reversal recorded in shareholders' equity.

#### 3.17.3. Derivatives

Derivatives are recorded in the balance sheet at their fair value on the derivative instrument lines as current or non-current financial assets or current or non-current financial liabilities. The accounting impact of changes in the fair value of these derivatives can be summarized as follows:

- **Application of hedge accounting:**
  - For cash flow hedges, the effective portion of the change in fair value of derivatives is recognized directly in shareholders' equity and the ineffective portion has an impact on other financial income and expenses;
  - For the hedge of a net investment abroad, the gain or loss resulting from the hedge will be deferred in shareholders' equity until the investment is fully or partially sold.
- Dans le cas où la comptabilité de couverture n'est pas appliquée. la variation de juste valeur des instruments dérivés est enregistrée en résultat.

### 3.18. Investment securities

In accordance with IAS 39 "Financial Instruments: Recognition and Measurement", investment securities are measured at fair value. No investments are analyzed as held-to-maturity. For investments classified as held for trading, changes in fair value are systematically recognized in the income statement (under other financial income and expenses). For available-for-sale investments, changes in fair value are recognized directly in shareholders' equity or in the income statement (under other financial income and expenses) in the event of objective evidence of a more than temporary impairment of the security or in the event of a disposal.

### 3.19. Cash and cash equivalents

In accordance with IAS 7 "Statement of Cash Flows", cash and cash equivalents on the balance sheet include cash (cash on hand and demand deposits) and cash equivalents (short-term, highly liquid investments that are readily convertible into a known amount of cash and are subject to an insignificant risk of change in value). Investments in listed shares, investments with an initial short to medium term maturity without the possibility of early exit and bank accounts subject to restrictions (blocked accounts) other than those related to regulations specific to certain countries or sectors of activity (exchange controls, etc.) are excluded from cash and cash equivalents in the cash flow statement. Bank overdrafts related to financing transactions are also excluded from cash and cash equivalents.

### 3.20. Derecognition of financial assets

A financial asset as defined by IAS 32 "Financial Instruments: Disclosure and Presentation" is derecognized in whole or in part when the Group no longer expects future cash flows from it and transfers substantially all of the risks and benefits associated with it.

### 3.21. Deferred taxes

The Group recognizes deferred taxes for all temporary differences between the tax and carrying amounts of assets and liabilities in the balance sheet, with the exception of goodwill.

The tax rates used are those adopted or almost adopted at the balance sheet date, depending on the tax jurisdiction.

The amount of deferred taxes is determined at the level of each tax entity.

Tax assets relating to temporary differences and tax loss carryforwards are only recognized to the extent that it is probable that a future taxable profit determined with sufficient precision will be generated at the level of the tax entity.

Taxes due and/or deferred are recognized in the income statement for the period unless they are generated by a transaction or event that is recognized directly in shareholders' equity.

### 3.22. Employee benefits

The Group's commitments in respect of defined benefit health insurance plans and lump-sum retirement payments are determined, in accordance with IAS 19, on the basis of the projected unit credit method, taking into account the specific economic conditions of each country (mainly Morocco for the Group). Commitments are covered by provisions recorded in the balance sheet as and when the rights vest.

#### Provisions are determined as follows:

- The actuarial method used is the projected unit credit method, which stipulates that each period of service gives rise to the recognition of a unit of entitlement to benefits and separately measures each of these units to obtain the final obligation. These calculations include assumptions regarding mortality, employee turnover and future salary projections...
- The Group immediately recognizes all actuarial differences in other comprehensive income as required by the revised IAS 19 standard.
- Bonuses paid for the award of long-service medals throughout the employees' working period are covered by a provision. The latter is assessed on the basis of the probability that employees will achieve the required seniority for each grade and is updated.
- A provision is also made for retirement indemnities. The latter is measured by taking into account the probability of employees' presence in the Group at their retirement date. This provision is discounted.

### 3.23. Provisions

The Group recognizes a provision when there is a legal or constructive obligation to a third party that will result in an outflow of resources, with no consideration expected, necessary to settle the obligation and that can be reliably estimated. Amounts recognized as provisions take into account a disbursement schedule and are discounted when the effect of the passage of time is material. This effect is recognized in financial income.

Restructuring provisions are recognized when the Group has established a formalized and detailed plan, which has been announced to the parties concerned.

When a legal, contractual or constructive obligation requires the redevelopment of sites, a provision for restoration costs is recognized in other operating expenses. It is recognized over the operating life of the site based on the level of production and progress of the site's operation.

Costs incurred to limit or prevent environmental risks and which generate future economic benefits, such as extending the useful lives of assets, increasing production capacity and improving safety, are capitalized.

### 3.24. Capital increase costs

The costs of capital increases are deducted from the issue, merger or contribution premiums.



3.25. Financial liabilities

3.25.1. Financial debts

Loans and other interest-bearing financial liabilities are measured using the amortized cost method using the effective interest rate of the loan. Share issue costs and premiums impact the entry value and are spread over the life of the loan via the effective interest rate. In the event of financial liabilities arising from the recognition of finance leases, the financial liability recognized to offset the tangible fixed asset is initially recognized at the fair value of the leased asset or, if lower, at the present value of the minimum lease payments.

3.25.2. Other financial liabilities

Other financial liabilities mainly concern trade and other payables. These financial liabilities are recognized at amortized cost.

3.26. Income from ordinary activities

The Group's income from ordinary activities is mainly composed of the following types of turnover:

- Sales of goods and services produced;
- Construction contracts;
- Rental income.

Income is recognized as income from ordinary activities when the company has transferred to the buyer the significant risks and benefits inherent in the ownership of the assets.

Income from ordinary activities is measured at the fair value of the consideration received or receivable. Rental income is recognized on a straight-line basis over the firm terms of the leases. Rental expenses re-invoiced to lessees are deducted from the corresponding expense accounts and are excluded from turnover.

In general, income from ordinary activities relating to the sale of goods and services is recognized when there is a formal agreement with the client, the delivery has occurred, the amount of income can be measured reliably and it is probable that the economic benefits associated with the transaction will flow to the Group.

3.27. Other operating income

Other operating income includes non-recurring income or income that is not directly related to the operations described in the “turnover” paragraph.

3.28. Cost of net debt

It includes interest income and expenses on bank loans, bonds and other financial debts (including debts on finance leases).

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset are included in the cost of the asset.

3.29. Earnings per share

Basic earnings per share are calculated by dividing net income, group share, by the average number of shares outstanding during the year. The average number of shares outstanding for the period and previous years presented is calculated excluding treasury shares and shares held under stock option plans.

To date, the Group has not issued any financial instruments with a dilutive impact. As a result, basic earnings per share are equivalent to diluted earnings per share.

3.30. New standards and interpretations

Standards or amendments that are mandatory in 2017

New standards and interpretations

Standards or amendments applicable as at January 1, 2017 and adopted by the EU.

- **Amendments to IAS 12:** Recognition of deferred tax assets for unrealized losses
- **Amendments to IAS 7:** Disclosure Initiative

Texts applied early in 2017

None.

Texts not applied early in 2017

- **IFRS 9:** Financial instruments
- **IFRS 15:** Income from customer contracts

Texts not yet adopted by the European Union (not to be applied early)

- **IFRS 14:** Regulatory deferral accounts
- **IFRS 17:** Insurance contracts
- **IFRIC 23:** Uncertainty over tax treatments

The Group's accounting principles and methods partially described below have been applied for the interim period from January 1 to December 31, 2017.

CHANGES IN THE SCOPE OF CONSOLIDATION DURING THE PERIOD

3.31. Disposals

Conclusion on **March 27, 2017** of a partnership agreement between Managem and WANBAO Mining for the development of the PUMPI Copper project in the DRC. This partnership resulted in the sale of **61.2%** of the LAMIKAL shares to Wanbao.

3.32. Segment information

The primary segmentation of the Managem Group is based on business segments, the secondary segmentation is based on geographical segments. Inter-segment transactions mainly concern sales of gold concentrate and Copper sulphate between CTT and certain relevant subsidiaries in the mining sector, in particular AGM and CMG. These transactions are invoiced by CTT using international market prices.

3.32.1. First level of segment reporting: business segments

Mining operations

This activity consists of exploiting several deposits by the Managem Group as well as producing such diverse concentrates as Zinc, Copper, Lead and Fluorite concentrates. Production also includes precious metals such as Gold and Silver.

Hydrometallurgy

This activity involves the processing and upgrading of ores to obtain high value-added products, in particular metal derivatives and specialty chemicals, such as cobalt cathodes, cobalt oxide, nickel derivatives, Copper sulphate, sodium sulphate, gold coal and arsenic trioxide. Hydrometallurgy uses specific techniques and technologies such as: liquid extraction, electrolysis, drying, calcination, roasting, etc.

3.32.2. Second level of segment reporting: geographical segments

The geographical breakdown of the Group's activities is as follows:

- Morocco
- Europe
- Other



**3.33. Information by business segment**

As at December 31, 2017

In MAD millions	Mine	Hydro	Other	TOTAL
External	4,960.44	196.169	45.915	5,199.52
Inter-segment	-	-	-	-
<b>Total turnover</b>	<b>4,960.44</b>	<b>196.17</b>	<b>42.92</b>	<b>5,199.52</b>
<b>Income from operating activities</b>	<b>293.0</b>	<b>475.6</b>	<b>566.0</b>	<b>1,334.7</b>
Financial income	88.4	118.7	12.9	194.2
Share in companies consolidated under the equity method	0.0	-	-	0.0
Corporate tax	-110.1	-83.6	-22.1	-215.91
<b>Income from continued operations</b>	<b>91,498.04</b>	<b>267,968.04</b>	<b>565,104.35</b>	<b>924,570.91</b>

As at December 31, 2016

In MAD millions	Mine	Hydro	Other	TOTAL
External	4,247.4	121.8	7.8	4,376.9
Inter-segment	-	-	-	-
<b>Total turnover</b>	<b>4,247.4</b>	<b>121.8</b>	<b>7.8</b>	<b>4,376.9</b>
<b>Income from operating activities</b>	<b>492.4</b>	<b>93.2</b>	<b>86.9</b>	<b>672.5</b>
Financial income	25.0	-70.6	-102.3	-147.9
Share in the income of companies accounted for by the equity method	-	-	-	-
Corporate tax	-98.6	-22.6	-6.2	-127.4
<b>Income from continuing operations</b>	<b>418.9</b>	<b>-0.0</b>	<b>-21.7</b>	<b>397.2</b>

As at December 31, 2017

Miscellaneous revenue mainly corresponds to sales made by the service operating segment, in particular Reminex and Techsub.

The main balance sheet items can be allocated to the different business segments as follows:

In MAD millions	Mine	Hydro	Other	TOTAL
<b>Turnover</b>	<b>3,889.8</b>	<b>3,424.1</b>	<b>4,134.4</b>	<b>11,448.3</b>
Other income (if applicable)	-	-	-	-
<b>Total</b>	<b>3,889.8</b>	<b>3,424.1</b>	<b>4,134.4</b>	<b>11,448.3</b>
Investments	702.8	355.0	38.5	1,096.3
<b>Liabilities</b>	<b>4,125.0</b>	<b>2,419.9</b>	<b>731.2</b>	<b>5,813.7</b>
<b>Total consolidated liabilities</b>	<b>4,125.0</b>	<b>2,419.9</b>	<b>731.2</b>	<b>5,813.7</b>

As at December 31, 2016

In MAD millions	Mine	Hydro	Other	TOTAL
<b>Assets</b>	<b>5,574.6</b>	<b>1,542.8</b>	<b>3,391.9</b>	<b>10,509.3</b>
Investments in companies accounted for by the equity method	-	-	-	-
<b>Total consolidated assets</b>	<b>5,574.6</b>	<b>1,542.8</b>	<b>3,391.9</b>	<b>10,509.3</b>
Investments	759.3	133.4	29.6	922.4
<b>Liabilities</b>	<b>5,230.1</b>	<b>1,208.9</b>	<b>50.9</b>	<b>6,490.0</b>
<b>Total consolidated liabilities</b>	<b>5,230.1</b>	<b>1,208.9</b>	<b>50.9</b>	<b>6,490.0</b>

**4.3. Information by geographic segment**

As at December 31, 2017

In MAD millions	Morocco	Europe	Other	TOTAL
Turnover	135.65	4,067.56	996.32	5,199.52
Other income (if applicable)	26.33	-	41.62	67.95
<b>Total</b>	<b>109.32</b>	<b>4,067.56</b>	<b>954.70</b>	<b>5,131.58</b>
<b>Investments</b>	<b>893.94</b>	<b>0.47</b>	<b>201.86</b>	<b>1,096.27</b>

As at December 31, 2016

In MAD millions	Morocco	Europe	Other	TOTAL
Turnover	7.7	4,201.2	167.9	4,356.9
Other income (if applicable)	-17.1	-	4.5	-12.7
<b>Total</b>	<b>-9.4</b>	<b>4,201.2</b>	<b>172.4</b>	<b>4,364.4</b>
<b>Investments</b>	<b>774.3</b>	<b>0.0</b>	<b>201.86</b>	<b>1,096.27</b>

**NOTE 4. TURNOVER**

The turnover (income from ordinary activities) of the Managem Group consists of the following elements:

- Sales of goods and services produced;
- Construction contracts;
- Rental income.

The turnover is broken down as follows:

In MAD millions	December 2017	December 2016
Turnover	5,199.5	4,376.9
Other income (if applicable)	(67.9)	(12.7)
Total income from ordinary activities	5,131.7	4,364.2

(a) Including services.

(b) Other operating income mainly includes changes in product inventories. At the end of the 2017 financial year, turnover increased by MAD 823 M compared to 2016, mainly due to the significant improvement in the turnover of the various metals, in particular silver (+34%), Cobalt (+112%), Sudan Gold (+51%), Somifer Copper (+31%), AGM Copper (+57%), thus offsetting the negative effect of the decline in Gabonese gold turnover (-62%)

**NOTE 5. PURCHASES AND OTHER EXTERNAL EXPENSES**

Purchases and external expenses are broken down as follows:

In MAD millions	December 2017	December 2016
Purchase of goods	(1.4)	(18.9)
Purchase of supplies and consumable materials	(1,834.8)	(1,617.9)
<b>Purchases</b>	<b>(1,836.2)</b>	<b>(1,636.9)</b>
Operational rents	(107.3)	(77.8)
Maintenance and repairs	(44.1)	(34.0)
Remuneration of personnel outside the company	(74.4)	(60.9)
Miscellaneous external costs	(757.6)	(691.7)
<b>Other external costs</b>	<b>(983.2)</b>	<b>(864.4)</b>
<b>Total purchases and external expenses</b>	<b>(2,819.5)</b>	<b>(2,501.3)</b>

(a) Purchases and other external expenses increased by MAD 118 million compared to the previous year, following the combined effects of: increase in rental expenses MAD 26/transport MAD 22 travel MAD 23 management MAD 7 maintenance MAD 4/management remuneration MAD 12 /fees MAD 15 other MAD 9



**NOTE 6. PERSONNEL EXPENSES AND HEADCOUNT****6.1. Personnel expenses**

Personnel expenses for the year are detailed below by type of cost:

In MAD millions	December 2017	December 2016
Wages and salaries	(741.2)	(687.7)
Other social security contributions	(284.5)	(242.6)
Net charges to provisions for employee benefits	(20.1)	(15.2)
Employee profit-sharing	0.0	0.0
<b>Total</b>	<b>(1,045.8)</b>	<b>(945.4)</b>

Note 18 details other information relating to employee benefits.

**6.2. Remuneration of administrative and management bodies**

The administrative and management bodies are composed of:

- Board of Directors whose members are remunerated by attendance fees;
- Executive Committee whose members receive salaries

**NOTE 7. DEPRECIATION, AMORTIZATION AND OPERATING PROVISIONS**

Changes in depreciation, amortization and provisions impacting current operating income for the periods ended December 31, 2017 and December 31, 2016 are broken down as follows:

In MAD millions	December 2017	December 2016
<b>Net depreciation and amortization impacting current operating income</b>		
Intangible assets	(243.9)	(183.8)
Property, plant and equipment	(805.1)	(754.1)
Biological assets	0.0	0.0
Investment properties	(0.4)	(0.4)
<b>Total</b>	<b>(1,049.6)</b>	<b>(938.3)</b>
<b>Provisions and net impairment losses impacting current operating income</b>		
Fixed assets	(20.4)	53.1
Inventories	(9.8)	1.7
Receivables	(297.8)	0.0
Provisions for risks and charges	(27.8)	0.0
<b>Total</b>	<b>(369.5)</b>	<b>54.9</b>
<b>Total</b>	<b>(1,418.9)</b>	<b>(883.4)</b>

(a) A description of changes in amortization and impairment of fixed assets is included in Note 12 to these financial statements.

(b) Details of changes in impairment losses on inventories and receivables are included in notes 13 and 14 to these financial statements.

**NOTE 8. OTHER OPERATING INCOME AND EXPENSES**

Other operating income and expenses can be summarized as follows:

In MAD millions	December 2017	December 2016
Sale of assets	1.7	0.4
Disposals of subsidiaries and equity interests	679.7	0.0
Unrealized gain on fair value on commodity trading transactions	0.0	0.0
Income from commodity derivatives - trading	0.4	(3.0)
Income from foreign exchange derivatives - trading	(6.9)	(3.6)
<b>Other operating income and expenses*</b>	<b>539.1</b>	<b>700.4</b>
<b>Total operating income and expenses</b>	<b>1,214.0</b>	<b>694.3</b>

The changes in value between the two periods are attributable to the change in fair value of derivatives classified as trading due to the following factors:

**a) Metal hedging:**

- Commodities trading reflects the part of financial instruments not eligible for hedge accounting corresponding to the time value of tunnels and the asymmetrical part of "Call" put option,
- Currency hedging: corresponds to the time value and the asymmetrical part of the tunnels

**8.1. Other non-recurring operating income and expenses**

Other non-recurring operating income and expenses are detailed as follows:

In MAD millions	December 2017	December 2016
Other non-recurring income	144.1	9.3
Other non-recurring expenses	(386.9)	(5.9)
Other net operating income and expenses*	781.8	697.1
<b>Total other operating income and expenses</b>	<b>539.1</b>	<b>700.4</b>

Le poste autres produits et charges d'exploitation enregistre principalement les productions des immobilisations à soi-même.

**NOTE 9. FINANCIAL INCOME**

The financial income as at December 31, 2017 and 2016 is broken down as follows:

In MAD millions	December 2017	December 2016
<b>Financial expenses</b>		
Interest on loans	(183.5)	(206.0)
Other financial expenses	0.0	0.0
Impairment of financial assets	0.0	0.0
Net allocations to provisions	(0.0)	(0.0)
<b>Total financial expenses</b>	<b>(183.5)</b>	<b>(206.0)</b>

<b>Financial income</b>		
Interest and other financial income	18.5	12.6
Other income	0.0	2.0
Reversals of impairment losses on financial asset	0.0	0.0
Financial exchange gains and losses	(29.2)	43.6
<b>Total financial income</b>	<b>(10.7)</b>	<b>58.1</b>

<b>Financial income</b>	<b>(194.2)</b>	<b>(147.9)</b>
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MAD -47 million decrease in financial income mainly due to the decrease in foreign exchange income

**9.1. Tax expense****9.1.1. Recognized in the income statement**

The tax charge for the years ended December 31, 2017 and 2016 is as follows:

In MAD millions	December 2017	December 2016
<b>Current tax charge</b>		
Charge for the year	(103.4)	(110.0)
Adjustment of income tax expense from previous years	0.0	0.0
	<b>(103.4)</b>	<b>(110.0)</b>

<b>Deferred tax (charges)/income</b>		
Changes in temporary differences	39.1	(5.6)
Changes in tax rates	(0.0)	0.0
Change in prior tax losses	(151.6)	(11.8)
	<b>(112.5)</b>	<b>(17.3)</b>
<b>Total tax (charges)/income</b>	<b>(215.8)</b>	<b>(127.4)</b>

- The increase in taxes due is related to the increase in SMI's taxes due, following the increase in income at the end of December 2017;
- The current tax charge corresponds to the amounts paid and/or still to be paid in the short term to the tax authorities for the 2017 financial year, depending on the rules in force in the various countries and the specific agreements.
- Deferred tax income results from the recognition of a deferred tax asset on tax losses resulting from amortizations that can be carried forward indefinitely.



**9.1.2. Deferred taxes recognized on other comprehensive income**

Deferred taxes recognized on other comprehensive income are broken down as follows:

In MAD millions	December 2017			December 2016		
	Pre-tax	Tax	After-tax	Pre-tax	Tax	After-tax
Translation differences of foreign activities	(131.5)	0.0	(131.5)	29.8	(0.0)	29.8
Gains or losses relating to the revaluation of available-for-sale financial assets	0.0	0.0	0.0	0.0	0.0	0.0
Effective portion of gains or losses on cash flow hedging instruments	152.7	47.7	105.0	(6.3)	1.6	(4.8)
Change in the revaluation reserve of fixed assets			0.0			0.0
Actuarial differences on defined benefit obligations	(1.9)	2.4	0.5	(13.3)	2.9	(10.4)
Share of other comprehensive income in associated companies	3.4	0.0	3.4			
<b>Total</b>	<b>22.7</b>	<b>(45.3)</b>	<b>(22.6)</b>	<b>10.2</b>	<b>4.5</b>	<b>14.6</b>

**9.1.3. Deferred taxes recognized in shareholders' equity**

Deferred taxes recognized in shareholders' equity are broken down as follows:

Net tax assets are limited to the ability of each tax entity to recover its assets in the near future.

**9.1.4. Deferred taxes recognized in the balance sheet**

In MAD millions	Assets	Liabilities	Net
<b>Deferred taxes</b>			
From temporary differences	(21.8)	(20.9)	(1.0)
From tax losses	148.2	45.2	103.0
From tax credits	0.6	0.0	0.6
<b>Total</b>	<b>127.0</b>	<b>24.3</b>	<b>102.7</b>

**Unrecognized deferred tax assets****9.1.5. Proof of tax**

In MAD millions	December 2017	December 2016
<b>Consolidated net income</b>	<b>924.6</b>	<b>397.2</b>
Share of profit of companies accounted for by the equity method	0.0	0.0
<b>Consolidated net income (excluding S.M.E.)</b>	<b>924.6</b>	<b>397.2</b>
Income tax	(103.4)	(110.0)
Deferred taxes	(112.5)	(17.3)
<b>Total tax charge</b>	<b>(215.9)</b>	<b>(127.4)</b>
<b>Pre-tax consolidated net income (excluding S.M.E.)</b>	<b>1,140.5</b>	<b>524.6</b>
<b>Effective tax rate (Total tax charge/Pre-tax accounting income)</b>	<b>-18.93%</b>	<b>-24.28%</b>
Tax on permanent differences	46.5	43.4
Tax on unrecognized tax losses	0.0	0.0
Tax on the use of prior years' tax losses that did not give rise to DT	0.0	0.0
Non-capitalized tax credits	-	-
Difference of parent/subsidiary rate	(104.4)	(56.5)
Change in CT rate N/N-1	-	-
Other differences	(65.2)	14.6
<b>Recalculated tax charge</b>	<b>(453.0)</b>	<b>(157.6)</b>
<b>Moroccan statutory tax rate (Recalculated tax charge/Pre-tax accounting income)</b>	<b>-30.72%</b>	<b>-30.04%</b>

**NOTE 10. ASSETS HELD FOR SALE AND RELATED LIABILITIES**

At present, the Group has no assets or liabilities held for sale.

**NOTE 11. EARNINGS PER SHARE**

Basic earnings per share are calculated by dividing net income, Group share, by the average number of shares outstanding during the year. The average number of shares outstanding for the period and previous years presented is calculated excluding treasury shares and shares held under stock option plans.

Years ended December 31	December 2017	December 2016
Weighted average number:		
• of common shares issued	9,991,308	9,158,699
• of shares held under stock option plans	-	-
• of treasury shares	-	-
<b>Number of shares used to calculate basic earnings per share</b>	<b>9,991,308</b>	<b>9,158,699</b>
Number of dilutive instruments	-	-
<b>Number of shares used to calculate diluted earnings per share</b>	<b>9,991,308</b>	<b>9,158,699</b>

To date, the Group has not issued any financial instruments with a dilutive effect.

As a result, basic earnings per share are equivalent to diluted earnings per share.

Years ended December 31	December 2017	December 2016
<b>Net income for the year attributable to shareholders of the parent company</b>	<b>879.1</b>	<b>288.5</b>
Number of shares used to calculate earnings per share	9,991,308	9,158,699
<b>Basic earnings per share</b>	<b>87.9</b>	<b>31.5</b>
Of which portion on discontinued operations	-	-
<b>Diluted earnings per share</b>	<b>87.9</b>	<b>31.5</b>
Of which portion on discontinued operations	-	-

<b>Goodwill</b>		
In MAD millions	December 2017	December 2016
<b>As at January 1st</b>	<b>319.8</b>	<b>319.5</b>
Gross Value	813.1	812.8
Accumulated impairment losses	(493.3)	(493.3)
Change in scope	0.0	0.0
Currency conversion rate	(1.1)	0.3
Divestments	0.0	0.0
Impairment losses	(13.3)	0.0
Other movements	0.0	0.0
<b>At the end of the period</b>	<b>305.4</b>	<b>319.8</b>
Gross value	798.7	813.1
Accumulated impairment losses	(493.3)	(493.3)

On the balance sheet, net goodwill relates to the following companies:

In MAD millions	December 2017	December 2016
IMITER	161.2	161.2
CMG	130.9	130.9
CTT	13.3	13.3
RGGG	0.0	14.4
<b>Total</b>	<b>305.4</b>	<b>319.8</b>



## NOTE 12. INTANGIBLE ASSETS

In MAD millions

	Development costs	Telecom and Software licenses	Patents and similar rights	Concessions	Other	Total
<b>Gross values</b>						
<b>As at January 1, 2016</b>	<b>4,071.0</b>	<b>1.1</b>	<b>168.7</b>	<b>0.0</b>	<b>511.8</b>	<b>4,752.5</b>
Acquisitions	300.2	0.1	0.6	0.0	22.0	322.9
Changes in scope	324.1	0.0	0.0	0.0	0.0	324.1
Disposals and assets classified as held for sale	0.0	0.0	0.0	0.0	0.0	0.0
Currency translation differences	28.2	0.0	0.0	0.0	0.0	28.2
Other movements	30.1	0.0	28.0	0.0	(52.7)	5.3
<b>As at January 1, 2017</b>	<b>4,753.5</b>	<b>1.3</b>	<b>197.2</b>	<b>0.0</b>	<b>481.1</b>	<b>5,433.1</b>
<b>As at January 1, 2017</b>						
<b>As at January 1, 2017</b>	<b>4,753.5</b>	<b>1.3</b>	<b>197.2</b>	<b>0.0</b>	<b>481.1</b>	<b>5,433.1</b>
Acquisitions	265.8	0.3	1.4	0.0	59.5	327.1
Disposals and assets classified as held for sale	0.0	0.0	0.0	0.0	0.0	0.0
Currency translation differences	(70.5)	(0.1)	(0.1)	0.0	0.0	(70.6)
Other movements	19.0	0.0	0.0	0.0	(18.8)	0.2
<b>As at December 31, 2017</b>	<b>4,360.7</b>	<b>1.1</b>	<b>198.6</b>	<b>0.0</b>	<b>521.8</b>	<b>5,082.2</b>
<b>Depreciation, amortization and impairment losses</b>						
<b>As at January 1, 2016</b>	<b>(2,999.5)</b>	<b>(0.5)</b>	<b>(103.5)</b>	<b>0.0</b>	<b>(181.6)</b>	<b>(3,285.2)</b>
Depreciation and amortization	(180.2)	(0.2)	(3.4)	0.0	0.0	(183.8)
Disposals and assets classified as held for sale	0.0	0.0	0.0	0.0	0.0	0.0
Changes in scope	0.0	0.0	0.0	0.0	0.0	0.0
Other movements	0.0	0.0	0.0	0.0	0.0	0.0
<b>As at December 31, 2016</b>	<b>(3,183.7)</b>	<b>(0.7)</b>	<b>(106.9)</b>	<b>0.0</b>	<b>(181.6)</b>	<b>(3,473.1)</b>
<b>As at January 1, 2017</b>						
<b>As at January 1, 2017</b>	<b>(3,183.7)</b>	<b>(0.7)</b>	<b>(106.9)</b>	<b>0.0</b>	<b>(181.6)</b>	<b>(3,473.1)</b>
Depreciation and amortization	(240.5)	(0.1)	(3.3)	0.0	0.0	(243.9)
Reversal of impairment losses	0.0	0.0	0.0	0.0	0.0	0.0
Disposals and assets classified as held for sale	0.0	0.0	0.0	0.0	0.0	0.0
Other movements	0.6	0.0	0.0	0.0	0.0	0.6
<b>As at December 31, 2017</b>	<b>(3,407.0)</b>	<b>(0.4)</b>	<b>(110.6)</b>	<b>0.0</b>	<b>(181.6)</b>	<b>(3,699.7)</b>
<b>Net values</b>						
<b>As at December 31, 2016</b>	<b>1,569.8</b>	<b>0.6</b>	<b>90.3</b>	<b>0.0</b>	<b>299.4</b>	<b>1,960.0</b>
<b>As at December 31, 2017</b>	<b>953.7</b>	<b>0.7</b>	<b>88.0</b>	<b>0.0</b>	<b>340.2</b>	<b>1,382.6</b>

Depreciation for the period is recognized in the income statement under the item “Depreciation, amortization and operating provisions”.

Intangible assets mainly include expenses related to exploration and mining research.

## Tangible fixed assets and investment property

The main variations are explained by:

In MAD millions

	Land	Buildings	Machinery and equipment	Assets under construction	Investment properties	Other	Total
<b>Gross values</b>							
<b>As at January 1, 2016</b>	49.7	4,277.4	4,702.6	624.5	28.9	1,502.6	11,185.7
Acquisitions	0.0	353.5	53.7	158.3	0.0	42.0	607.5
Changes in scope	0.0	0.3	3.1	0.0	0.0	9.2	12.6
Disposals and assets classified as held for sale	0.0	0.0	0.0	(5.4)	0.0	(5.5)	(10.8)
Currency translation differences	0.0	4.0	7.7	3.8	0.0	3.8	19.3
Other movements	4.0	107.0	125.2	(288.3)	0.0	46.8	(5.3)
<b>As at December 31, 2016</b>	<b>53.7</b>	<b>4,742.1</b>	<b>4,892.3</b>	<b>493.0</b>	<b>28.9</b>	<b>1,598.9</b>	<b>11,809.0</b>
<b>As at January 1, 2017</b>							
<b>As at January 1, 2017</b>	<b>53.7</b>	<b>4,742.1</b>	<b>4,892.3</b>	<b>493.0</b>	<b>28.9</b>	<b>1,598.9</b>	<b>11,809.0</b>
Acquisitions	0.0	310.5	132.8	237.4	0.0	87.3	768.0
Disposals and assets classified as held for sale	0.0	0.0	(0.8)	(1.9)	0.0	(20.6)	(23.4)
Currency translation differences	(0.0)	(15.6)	(31.1)	(13.8)	0.0	(15.0)	(75.5)
Other movements	1.1	19.7	78.6	(107.3)	0.0	7.8	(0.2)
<b>As at December 31, 2017</b>	<b>52.9</b>	<b>5,056.8</b>	<b>5,066.4</b>	<b>515.6</b>	<b>28.9</b>	<b>1,651.6</b>	<b>12,372.1</b>
<b>Depreciation, amortization and impairment losses</b>							
<b>As at January 1, 2016</b>	<b>(0.1)</b>	<b>(2,416.3)</b>	<b>(2,972.1)</b>	<b>0.0</b>	<b>(2.6)</b>	<b>(1,290.8)</b>	<b>(6,682.0)</b>
Depreciation and amortization	(0.0)	(389.9)	(278.4)	0.0	(0.4)	(85.9)	(754.5)
Impairment losses	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reversals of impairment losses	0.0	25.6	27.6	0.0	0.0	0.0	53.2
Disposals and assets classified as held for sale	0.0	0.0	0.0	0.0	0.0	3.2	3.2
Currency translation differences	(0.0)	(3.2)	(6.3)	0.0	0.0	(2.8)	(12.2)
Changes in scope	0.0	(0.1)	(1.7)	0.0	0.0	(6.9)	(8.7)
Other movements	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>As at December 31, 2016</b>	<b>(0.2)</b>	<b>(2,783.8)</b>	<b>(3,230.8)</b>	<b>0.0</b>	<b>(3.0)</b>	<b>(1,383.2)</b>	<b>(7,401.0)</b>
<b>As at December 31, 2016</b>	<b>(0.2)</b>	<b>(2,783.8)</b>	<b>(3,230.8)</b>	<b>0.0</b>	<b>(3.0)</b>	<b>(1,383.2)</b>	<b>(7,401.0)</b>
<b>As at January 1, 2017</b>							
<b>As at January 1, 2017</b>	<b>(0.2)</b>	<b>(2,783.8)</b>	<b>(3,230.8)</b>	<b>0.0</b>	<b>(3.0)</b>	<b>(1,383.2)</b>	<b>(7,401.0)</b>
Depreciation and amortization	(0.0)	(421.5)	(259.3)	0.0	(0.4)	(124.3)	(805.5)
Impairment losses	(0.0)	(10.6)	(5.3)	(28.8)	0.0	(2.7)	(47.3)
Reversals of impairment losses	0.0	4.2	23.1	0.0	0.0	0.0	27.3
Disposals and assets classified as held for sale	0.0	0.0	0.4	0.0	0.0	20.6	21.0
Currency translation differences	0.0	12.7	25.5	1.0	0.0	12.4	51.6
Changes in scope	0.0	0.0	5.3	0.0	0.0	6.5	11.8
Other movements	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>As at December 31, 2017</b>	<b>(0.2)</b>	<b>(3,199.0)</b>	<b>(3,441.1)</b>	<b>(27.8)</b>	<b>(3.4)</b>	<b>(1,470.6)</b>	<b>(8,142.1)</b>
<b>Net values</b>							
<b>As at December 31, 2016</b>		<b>1,569.8</b>	<b>0.6</b>	<b>90.3</b>	<b>0.0</b>	<b>299.4</b>	<b>1,960.0</b>
<b>As at December 31, 2017</b>		<b>953.7</b>	<b>0.7</b>	<b>88.0</b>	<b>0.0</b>	<b>340.2</b>	<b>1,382.6</b>



## Finance leases

Fixed assets under finance leases, mainly included in land, buildings and technical installations, amounted to MAD 460.5 million as at December 31, 2017.

## Investment properties

The Group did not revalue investment properties at fair value at the end of December 2017, as almost all of these properties are recognized at market value as part of the lease back transactions carried out during the 2009 and 2017 financial years.

### 12.1. Other financial assets

The Group's other financial assets are broken down into net amounts as follows:

In MAD millions	December 2017	December 2016
<b>Non-current portion</b>		
• Derivative financial instruments	0.0	41.6
• Financial assets at fair value through profit or loss	0.0	0.0
• Loans and receivables	5.6	4.3
• Held-to-maturity financial assets	0.0	0.0
• Available-for-sale financial assets	260.2	258.2
<b>Total</b>	<b>265.9</b>	<b>304.2</b>

#### Current portion

• Derivative financial instruments	0.0	3.7
• Financial assets at fair value through profit or loss	0.0	0.0
• Available-for-sale assets	0.0	0.0
• Held-to-maturity financial assets	0.0	0.0
• Loans and receivables	0.0	0.0
<b>Total</b>	<b>0.0</b>	<b>3.7</b>
<b>Total other financial assets</b>	<b>265.9</b>	<b>307.9</b>

## 12.2. Derivative financial instruments

### 12.2.1. Financial assets

Derivative financial instruments with a positive fair value are recognized as assets and are broken down as follows:

In MAD millions	December 2017 Fair value	December 2016 Fair value
Financial assets at fair value through profit or loss	2.5	5.9
<b>Total</b>	<b>2.5</b>	<b>5.9</b>

Derivatives with a negative fair value are recognized as liabilities and are broken down as follows:

In MAD millions	Notional	December 2017 Fair value	December 2016 Fair value
<b>Commodity instruments</b>		<b>-90.1</b>	<b>-281.6</b>
Forward contract			
Other commodity instruments		-90.1	-281.6
<b>Foreign exchange instruments</b>			
Forward exchange contracts			
Other foreign exchange instruments			
<b>Other derivative instruments</b>			
Interest rate derivatives			
Other derivatives			
<b>Total</b>		<b>-90.1</b>	<b>-281.6</b>

### 12.2.2. Derivative instruments classified by type and currency

In MAD millions	€	USD	Other	Total
<b>Commodity instruments</b>		<b>-3.9</b>	<b>-0.9</b>	<b>-4.8</b>
Forward contract		-3.9	-0.9	-4.8
Other commodity instruments				
<b>Foreign exchange instruments</b>			<b>-85.3</b>	<b>-85.3</b>
Forward exchange contracts			-85.3	-85.3
Foreign exchange swaps				
Currency options				
Other				
<b>Other derivative instruments</b>				
Interest rate swaps				
Interest rate options				
Equity derivatives				
Other				
<b>TOTAL</b>		<b>-3.9</b>	<b>-85.3</b>	<b>-90.1</b>

### 12.3. Available-for-sale financial assets or available-for-sale securities

Available-for-sale assets include non-consolidated equity investments, other long-term investments and securities not reclassified as cash equivalents.

All these items are measured at fair value at the balance sheet date.

Available-for-sale financial assets are broken down as follows as at December 31, 2017 and December 31, 2016:

In MAD millions	Fair value	% interest	Shareholders' equity	Income	Balance sheet date
<b>As at December 31, 2017</b>	<b>260.1</b>				31/12/2017
Other	15.8				
Entity: Other (BT)	244.3				
<b>As at December 31, 2016</b>	<b>258.3</b>				31/12/2016

### 12.4. Loans and receivables

Loans and receivables as at December 31, 2017 consist mainly of deposits and guarantees.

## NOTE 13. INVENTORIES AND WORK IN PROGRESS

Inventories and work-in-progress for the periods ended December 31, 2017 and December 31, 2016 are as follows:

In MAD millions	December 2017	December 2016
Inventories of goods	6.3	6.3
Inventories of consumables and supplies	458.1	357.7
Work in progress	0.0	10.7
Intermediate finished goods inventories	176.0	237.2
<b>Total inventories at gross value</b>	<b>640.4</b>	<b>611.9</b>
<b>Amount of impairment loss at the beginning of the period</b>	<b>(17.1)</b>	<b>(18.8)</b>
Impairment loss recognized over the period	(25.4)	(17.1)
Reversal of impairment losses following disposals and retirements	14.2	16.3
Reversal of impairment losses no longer applicable	1.5	2.5
Other movements	1.7	(0.0)
<b>Amount of impairment loss at the end of the period</b>	<b>(25.2)</b>	<b>(17.1)</b>
<b>Total Inventories, net</b>	<b>615.1</b>	<b>594.8</b>

During 2017:

Provisions amounted to MAD -25.2 million;

Reversals amounted to MAD 17.1 million.



**NOTE 14. TRADE AND OTHER RECEIVABLES**

The gross value and realizable value of trade receivables as at December 31, 2017 and December 31, 2016 are detailed in the table below:

In MAD millions	December 2017	December 2016
Trade receivables and related accounts	782.4	424.0
Impairment of trade receivables and related accounts	(1.7)	(1.7)
<b>Total Trade receivables</b>	<b>780.7</b>	<b>422.3</b>
Other receivables	22.6	28.9
Accruals and deferred income - Assets	70.7	70.4
Debit partner accounts	678.9	253.2
Receivables on asset disposals	0.0	0.0
Impairment of other receivables	0.0	0.0
Impairment of debit partner accounts	(287.9)	0.0
Impairment of trade receivables - advances & deposits	0.0	0.0
Impairment of personnel receivables	0.0	0.0
Impairment of receivables on asset disposals	0.0	0.0
Accrued interest on receivables on asset disposals	0.0	0.0
State - debtor	1,595.8	1,333.9
Trade receivables - advances & deposits	25.5	17.3
Personnel - receivables	16.8	17.6
<b>Total Other current receivables</b>	<b>2,122.3</b>	<b>1,721.3</b>

Increase in trade receivables of 358.4 correlated to the increase in turnover

**Increase in other receivables of MAD 401 million, mainly due to:**

- Increase in prepaid expenses of MAD 137.8
- Increase in VAT credits of MAD +261.9 million,

**NOTE 15. CASH AND CASH EQUIVALENTS**

Cash and cash equivalents consist of cash on hand, bank balances and short-term investments in money market instruments. These investments, with a maturity of less than twelve months, are easily convertible into a known amount of cash and are subject to negligible risk of change in value.

In MAD millions	December 2017	December 2016
Securities and investment securities	0.0	0.0
Bank	1,480.0	496.0
Other cash accounts	2.6	6.5
<b>Total</b>	<b>1,482.7</b>	<b>502.5</b>

**NOTE 16. SHAREHOLDERS' EQUITY****16.1. Capital management policy**

As part of its capital management policy, the Group's objective is to maintain its business continuity in order to provide a return to shareholders, provide benefits to other partners and maintain an optimal capital structure that can reduce the cost of capital.

**To maintain or adjust the capital structure, the Group can either:**

- Adjust the amount of dividends paid to shareholders;;
- Return the capital to shareholders;
- Issue new shares; or
- Sell assets to reduce the amount of debt.

The Group uses various indicators, including financial leverage (net debt/shareholders' equity), which provides investors with a view of the Group's debt compared to total shareholders' equity. This equity includes in particular the reserve for changes in the value of cash flow hedges and the reserve for changes in the value of available-for-sale financial assets (AFS).

**16.2. Changes in shareholders' equity, Group share**

In MAD millions	December 2017	December 2016
Consolidated shareholders' equity Group share beginning of year	3,548.0	3,433.0
Dividends paid	-195.4	-183.2
Currency translation difference	-125.0	28.0
Net change in fair value of financial instruments	158.6	-9.0
Other variations	-0.0	-14.0
Capital increase	961.7	0.0
Net income (Group share) for the period	879.11	288.5
Taxes relating to other comprehensive income	-46.0	5.0
<b>Consolidated shareholders' equity Group share</b>	<b>5,180.5</b>	<b>3,548.0</b>

**16.3. Changes in minority interests**

In MAD millions	December 2017	December 2016
Minority interests beginning of the period	472.0	434.1
Dividends paid	-53.0	-75.0
Net change in fair value of financial instruments	-5.9	3.0
Translation gains and losses	-6.4	2.0
Other variations	1.5	0.0
Increase in Capital	0.0	0.0
Capital increase	45.5	109.0
Taxes relating to other comprehensive income	0.0	-1.0
<b>Minority interests</b>	<b>453.9</b>	<b>472.0</b>

**NOTE 17. PROVISIONS**

Current and non-current provisions are broken down as follows:

In MAD millions	December 2017	December 2016
Environmental provision	12.0	1.1
Restructuring	-	-
Disputes	-	-
Guarantees	-	-
Other risks	69.7	53.4
<b>Total</b>	<b>81.7</b>	<b>54.4</b>

	December 2016	Translation differences	Change in scope	Charges for the year	Reversals of provisions used	Reversals of provisions not used	Reclassification	Autres mouvements	December 2017
In MAD millions									
Environmental provision	1.1	(0.5)	0.0	11.4	0.0	0.0	0.0	0.0	12.0
Restructuring	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Disputes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Guarantees	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other risks	53.4	(0.1)	0.0	59.3	(40.2)	(2.7)	0.0	0.0	69.7
<b>Total</b>	<b>54.4</b>	<b>(0.5)</b>	<b>0.0</b>	<b>70.7</b>	<b>(40.2)</b>	<b>(2.7)</b>	<b>0.0</b>	<b>0.0</b>	<b>81.7</b>
<b>Including:</b>									
• Non-current portion	<b>54.4</b>	<b>(0.5)</b>	<b>0.0</b>	<b>70.7</b>	<b>(40.2)</b>	<b>(2.7)</b>	<b>0.0</b>	<b>0.0</b>	<b>81.7</b>
• Current portion	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

(a) Provisions recorded at December 31, 2017 mainly concerned risks related to occupational diseases not covered by the insurance company during the 2003-2006 period, i.e. MAD 43 million.



**NOTE 18. EMPLOYEE BENEFITS**

The assumptions used at January 1, 2006, December 31, 2006 and December 31, 2017 are as follows:

**As at January 1, 2006:****Economic assumptions:**

• Evaluation date:	01/01/2006
• Inflation rate:	1.50%
• Medical inflation rate:	4%
• Discount rate	
• Health costs	6.20% or 6.95% depending on the entity
• End-of-career allowance	6.20%
• Average rate of social security contributions	15.00%
• Rate of salary increase (gross of inflation)	3.50%
• Revaluation rate of flat-rate allowances	1.50%

**Demographic assumptions:**

• Mortality	TVF 88-90
• Invalidity	Not taken into account
• Mobility rate by age group	

Age groups	Executives	Non-executives
29 years-old and younger	20.00%	10.00%
30 to 34 years-old	10.00%	5.00%
35 to 39 years-old	7.50%	3.75%
40 to 44 years-old	5.00%	2.50%
45 to 49 years-old	2.00%	1.00%
50 years-old and over	0.00%	0.00%

• Occupation rate until retirement	Same as at valuation date
• Retirement age	<b>Non-mining personnel:</b> 60 years old <b>Mining personnel:</b> 55 years old

**As at December 31, 2017**

• <b>Evaluation date:</b>	31/12/2017
Health costs	4.00%
End-of-career allowance	3.50%

The remaining economic and demographic assumptions remained unchanged from January 1, 2006.

In accordance with revised IAS 19, the Group immediately recognizes all actuarial differences in other comprehensive income.

The Group considers that the actuarial assumptions used are appropriate and justified, but the changes that will be made in the future may nevertheless have a significant impact on the amount of commitments and the Group's income. The sensitivity test to the discount rate is performed at the annual closing date.

**As at December 31, 2017****Other long-term benefits**

In MAD millions	Retirement and related allowances		Post-employment benefits other than pensions	
	Dec. 2016	Dec. 2017	Dec. 2016	Dec. 2017
<b>Market value of assets allocated to plans at the opening</b>	<b>43.2</b>	<b>64.8</b>	<b>80.7</b>	<b>88.3</b>
Cost of services	7.4	5.7	12.5	10.2
Interest charges	1.9	2.6	3.5	3.7
Employee contributions	0.0	0.0	0.0	0.0
Change in plans (Past service cost)	0.0	0.0	0.0	0.0
Change in scope	0.0	0.0	0.0	0.0
Business combination(only if meaningful)	0.0	0.0	0.0	0.0
Deduction	0.0	0.0	0.0	0.0
Liquidation of plans	0.0	0.0	0.0	0.0
Completed payments	-3.2	-1.4	-2.1	-2.3
Currency spreads	15.6	-11.4	-6.3	-4.4
Écarts de Change	0.0	0.0	0.0	0.0
Other : IFRS 5 reclassification (groups to be divested)	0.0	0.0	0.0	0.0
<b>Amount of commitments at the end of the financian year</b>	<b>64.8</b>	<b>60.3</b>	<b>88.3</b>	<b>95.5</b>

In MAD millions	Retirement and related allowances		Post-employment benefits other than pensions	
	Dec. 2016	Dec. 2017	Dec. 2016	Dec. 2017
Cost of services	7.4	5.7	12.5	10.2
Interest charges	1.9	2.6	3.5	3.7
Expected return on assets	0.0	0.0	0.0	0.0
Effect of limiting surplus	0.0	0.0	0.0	0.0
Amortisation of prior services costs	0.0	0.0	0.0	0.0
Amortisation of actuarial gains and losses	0.0	0.0	0.0	0.0
Deduction	0.0	0.0	0.0	0.0
Liquidation of plans	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0
<b>Charge for the period</b>	<b>9.3</b>	<b>8.3</b>	<b>16.0</b>	<b>13.9</b>

In MAD millions	Retirement and related allowances		Post-employment benefits other than pensions	
	Dec. 2016	Dec. 2017	Dec. 2016	Dec. 2017
<b>Net commitment</b>	<b>64.8</b>	<b>70.8</b>	<b>91.3</b>	<b>107.3</b>
Limitation on retirement assets	0.0	0.0	0.0	0.0
Unrecognised past service costs	0.0	0.0	0.0	0.0
Unrecognised actuarial costs/losses	0.0	0.0	0.0	0.0
<b>Net assets/provisions on the balance sheet</b>	<b>64.8</b>	<b>70.8</b>	<b>91.3</b>	<b>107.3</b>



In MAD millions	December 2017	December 2016
<b>Amount (Provisions) at opening</b>	<b>-153.1</b>	<b>-123.9</b>
Charges for the period/expenses for the period (including reversals of provisions)	-22.2	-25.3
Recoveries for use/services paid	3.7	5.3
Change in scope	0.0	0.0
Business combination (only if meaningful)	0.0	0.0
Currency conversion rate	0.0	0.0
Other: IFRS 5 reclassification (groups to be divested)	0.0	0.0
OIC (first application IAS 19 R)	15.8	-9.2
<b>Amount (Provisions) at closing</b>	<b>-155.8</b>	<b>-153.1</b>

> **Sensitivity of the commitment to the discount rate**

	December 2017
Sensitivity of engagement	-11.5%
Sensitivity of the cost of services	-15.8%
Sensitivity of interest expense (discount rate)	-11.3%

> **Sensitivity of the commitment to medical information**

	December 2017
Sensitivity of engagement	14.9%
Sensitivity of the cost of services	21.2%
Sensitivity of interest expense (discount rate)	-12.7%

## NOTE 19. FINANCIAL DEBTS

The Group's current and non-current financial debts are broken down as follows:

In MAD millions	December 2017	December 2016
Bonds	1,650.0	950.0
Loans from credit institutions	533.4	867.2
Finance lease debts	88.9	152.5
Other financial debts	-	-
Derivative financial instruments	4.1	18.7
<b>Total non-current financial debts</b>	<b>2,276.4</b>	<b>1,988.4</b>
Bonds	-	-
Loans from credit institutions	1,327.9	1,975.6
Finance lease debts	-	-
Derivative financial instruments	86.0	262.9
Total current financial debts	1,413.9	2,238.5
<b>Total</b>	<b>3,690.3</b>	<b>4,226.9</b>

Non-current financial debts increased by MAD 288.0 million, explained by:

- Issuance of commercial paper, i.e. MAD 700 million
- Repayment of debts: MAD 334 million

## NOTE 20. TRADE AND OTHER PAYABLES

In MAD millions	December 2017	December 2016
Trade payables	823,585	902,003
Other payables (excluding financial instruments)	1,015,655	1,132,813
<b>Total trade and other payables</b>	<b>1,839,240</b>	<b>2,034,816</b>

By maturity in MAD millions	- 1 year(*)	1 to 5 years	+ 5 years	End of period
Trade payables	823,169	-	-	823,585
Other payables	1,009,261	2,501	-	1,015,655
<b>As at December 31, 2017</b>	<b>1,832,430</b>	<b>2,501</b>	<b>-</b>	<b>1,839,240</b>
<b>As at December 31, 2016</b>	<b>2,023,505</b>	<b>2,598</b>	<b>-</b>	<b>2,034,816</b>

## NOTE 21. FINANCIAL INSTRUMENTS

### 21.1. Fair value of financial assets

Due to their short-term nature, the carrying amount of trade receivables, cash and cash equivalents and current cash accounts is an estimate of their fair value.

The fair value of other financial instruments is determined by reference to the market price resulting from trading on a national stock exchange or over-the-counter market.

When no listed market price is available, fair value is estimated using other valuation methods, such as discounted cash flows. In any event, the estimation of market values is based on a certain interpretation of the market information necessary for valuation. The use of different estimates, methods and assumptions may have a material impact on the estimated fair value amounts. The following methods are used:

• **Equity interests in non-consolidated companies:**

> Or shares of listed companies, fair value is determined on the basis of the share price published on the relevant closing date.

> For shares of unlisted companies, when the fair value cannot be reliably determined, the securities are valued at the share of IFRS net equity, or failing that at the share of net equity established in accordance with Moroccan rules. In the absence of information on IFRS or Morocco Gaap net equity, securities are valued at cost.

• **Derivative instruments:**

> The market value of interest rate, foreign exchange and commodity transactions is estimated on the basis of valuations from banking counterparties or financial models commonly used on the financial markets, based on market data at the balance sheet date.

The following table details the carrying amount and fair value of financial assets recognized in the balance sheet for which these two values are identical:

In MAD millions	December 2017	December 2016
	Carrying amount <=> Fair value	
Cash and cash equivalents	1,482.7	502.5
Trade and other receivables	2,903.0	2,143.6
Other financial assets	265.9	307.9
<b>Total</b>	<b>4,651.6</b>	<b>2,954.0</b>

### 21.2. Fair value of financial liabilities

Due to their short-term nature, the carrying amount of current bank overdrafts, trade and other payables and short-term loans appears as an estimate of their fair value.

The fair value of other financial instruments is determined by reference to the market price resulting from trading on a national stock exchange or over-the-counter market.

When no listed market price is available, fair value is estimated using other valuation methods, such as discounted cash flows. In any event, the estimation of market values is based on a certain interpretation of the market information necessary for valuation. The use of different estimates, methods and assumptions may have a material impact on the estimated fair value amounts. The following methods are used:

• **Financing liabilities:** the fair value of financing liabilities (bonds, debt with credit institutions, etc.) corresponds to their amortized cost (nominal value less the issue costs of the loan if the latter represent at least 1% of this value).

• **Derivative instruments:** the market value of interest rate and foreign exchange transactions is estimated on the basis of valuations from banking counterparties or financial models commonly used on the financial markets, based on market data at the balance sheet date.

The following table details the carrying amount and fair value of financial liabilities recognized in the balance sheet for which these two values are identical:

In MAD millions	December 2017	December 2016
	Carrying amount <=> Fair value	
Current bank overdrafts	1,327.9	1,975.6
Trade and other payables	1,831.1	2,034.8
Bonds	1,650.0	950.0
Finance lease liabilities	88.9	152.5
Other financial liabilities	86.0	262.9
Put options granted to minority shareholders		
Financing debts	533.4	867.2
<b>Total</b>	<b>5,517.3</b>	<b>6,243.0</b>



**21.3. Risk management**

The Group uses derivative financial instruments to manage its exposure to exchange rate and commodity price fluctuations.

Foreign exchange and commodity risks are managed on a decentralized basis by the subsidiaries, which manage their market risks in consultation with the holding company.

**21.4. Hedged price risks:**

Given the nature of its activities, the Managem Group is highly exposed to fluctuations in the prices of the commodities which are marketed at the exchange rates at which its sales are denominated.

The hedging policy aims to protect the Managem Group from price risks that could have a significant impact on its short- and medium-term profitability.

To manage these market risks, the use of derivative financial instruments (commodities and foreign exchange) is permitted for hedging purposes only.

Derivatives used by the Group qualify as cash flow hedges or trading instruments in accordance with IAS 39.

**21.4.1.1 Metal price risks**

Managem hedges the risk attributable to changes in the selling price of metals, which are denominated in US dollars.

The hedging relationship corresponds to the hedging of future cash flows from future sales of commodities (Zinc, Lead, Copper, Silver and Gold) determined on the basis of a production schedule.

Derivatives are intended to hedge a projected budget, i.e. future cash flows. It is a cash-flow hedge relationship.

**21.4.1.2 Foreign exchange risks**

The Group's foreign exchange risk policy aims to hedge highly probable budgetary exposures in foreign currencies and/or firm import and export commitments.

Future foreign currency exposures are determined as part of a regularly updated budget procedure.

The current hedging horizon does not exceed one year at each closing date.

Currency hedging instruments are intended to hedge a projected budget, i.e. future cash flows. It is a cash-flow hedge relationship.

**21.4.2 Recognition as at 31/12/2017****21.4.2.1 Commodity risk**

As at December 31, 2016, the recognition of derivatives used to hedge commodity risk at fair value in the balance sheet resulted in a gain of **MAD -4.9 million** recorded for **MAD -2.3 million** in cash flow hedges and **MAD -2.6 million** in trading.

In MAD millions	December 2017	December 2016
	Total Mtm	Total Mtm
<b>Cash flow hedging (a)</b>	<b>-2.3</b>	<b>20.97</b>
Silver	0.0	38.25
Gold		1.22
Zinc	-0.7	-4.58
Lead	0.0	0.85
Copper	-1.6	-14.75
<b>Derivatives classified as trading (b)</b>	<b>-2.6</b>	<b>-2.95</b>
<b>Total (a) + (b)</b>	<b>-4.9</b>	<b>18.03</b>

**21.4.2.2 Foreign exchange risk:**

As at December 31, 2016, the recognition of derivatives used to hedge foreign exchange risk in the balance sheet at market value resulted in a loss of **MAD -254.3 million**, of which **MAD -258.0 million** was recorded in shareholders' equity and **MAD +3.7 million** in the income statement.

In MAD millions	December 2017	December 2016
	Total Mtm	Total Mtm
Cash flow hedging	- 82.1	-258.0
Derivatives not qualifying as hedges	-3.2	3.7
<b>Total</b>	<b>-85.3</b>	<b>-254.3</b>

**21.4.3 Sensitivity analysis****21.4.3.1 Commodity risk**

The fair value of the Group's commodity derivatives at December 31, 2016 stood at **MAD +18.0 million**.

In MAD millions	MTM as at 31/12/2017 (a)	Mtm +10% variation (b)	Total variation of MTM (b-a)	Impact on income	Impact on shareholders' equity
<b>+10% underlying</b>	<b>-4.87</b>	<b>-19.9</b>	<b>-15.1</b>	<b>-3.0</b>	-17.0
Silver	-0.1	-2.7	-2.6	-0.1	-2.6
Gold	-	-	-	-	-
Zinc	-1.7	-5.8	-4.1	-1.7	-4.1
Lead	-0.0	-0.9	-0.9	-0.4	-0.5
Copper	-3.2	-10.5	-7.4	-0.7	-9.8

The scenario corresponding to metal price variations of +10% maximizing the Group's commodity risk, i.e. a 10% increase in the prices of Silver, Gold, Zinc, Lead and Copper compared to spot closing prices, would result in a loss of **MAD -19.9 million** recorded in equity for an amount of MAD -17.0 million and -3.0 million in income, i.e. a variation of **MAD -15.1 million**.

In MAD millions	MTM as at 31/12/2017 (a)	Mtm +10% variation (b)	Total variation of MTM (b-a)	Impact on income	Impact on shareholders' equity
<b>-10% sous-jacent</b>	<b>18.03</b>	<b>7.3</b>	<b>- 10.7</b>	<b>2.6</b>	<b>4.7</b>
Silver	40.3	2.6	-37.7	0	2.5
Gold	1.3	-	-	1.3	-
Zinc	-7.4	1.4	8.8	1	0.7
Lead	1.1	0.9	-0.1	0	0.4
Copper	-17.2	2.4	19.6	1	1.1

The scenario corresponding to metal price variations of -10% minimizing the Group's commodity risk, i.e. a 10% decrease in the prices of Silver, Gold, Zinc, Lead and Copper compared to spot closing prices, would result in a loss of **MAD 7.3 million** recorded in equity for MAD 4.7 million and 2.6 million in income, i.e. a change of **MAD -10.7 million**.

**21.4.3.2 Foreign exchange risk**

The fair value of the Group's foreign exchange derivatives as at December 31, 2017 was approximately MASD -85.3 million.

In MAD millions	MTM as at 31/12/2017 (a)	Mtm +10% variation (b)	Total variation of MTM (b-a)	Impact on income	Impact on shareholders' equity
<b>+10% underlying</b>	<b>-85.3</b>	<b>-187.2</b>	<b>-101.9</b>	<b>-1.9</b>	<b>-185.3</b>
Managem	-85.3	-187.2	-101.9	-1.9	-185.3

The scenario corresponding to **+10%** foreign exchange variations maximizing the Managem Group's foreign exchange risk, i.e. a 10% appreciation of the US dollar against the dirham, would result in a foreign exchange loss of **MAD -187.2 million**, including **MAD -1.9 million** in income and **MAD -185.3 million** in equity, i.e. a variation of **MAD -101.9 million**.

In MAD millions	MTM as at 31/12/2017 (a)	Mtm +10% variation (b)	Total variation of MTM (b-a)	Impact on income	Impact on shareholders' equity
<b>- 10% underlying</b>	<b>-85.28</b>	<b>16.7</b>	<b>101.9</b>	<b>-4.4</b>	<b>21.0</b>
Managem	-85.3	16.7	101.9	-4.4	21.0



The scenario corresponding to a **-10%** foreign exchange variation minimizing the Managem Group's foreign exchange risk, i.e. A 10% depreciation of the US dollar against the dirham, would result in a foreign exchange situation of **MAD 16.7 million**, including a loss of **MAD -4.4 million** in income and **MAD +21.0 million** in equity, i.e. a variation of **MAD +16.7 million**.

As at December 31, 2017, the undiscounted contractual flows (principal and interest) on outstanding financial liabilities by maturity date were as follows:

In MAD millions	December 2017	December 2016
Bonds	1,649.9	950.0
Loans from credit institutions	533.4	867.2
Finance lease debts	88.7	152.5
Other financial debts	0.0	0.0
Derivative financial instruments	4.1	18.7
<b>Total non-current financial debts</b>	<b>2,276.1</b>	<b>1,988.4</b>
Bonds	0.0	0.0
Loans from credit institutions	1,327.8	1,975.6
Finance lease debts	0.0	0.0
Derivative financial instruments	86.0	262.9
<b>Total current financial debts</b>	<b>1,413.8</b>	<b>2,238.5</b>
<b>Total</b>	<b>3,689.9</b>	<b>4,226.9</b>

## NOTE 22. OTHER COMMITMENTS

### Commitments given

In MAD millions	December 2017	December 2016
Sureties, endorsements and guaranties given	75.5	71.2
Debts collateralized by pledged or mortgaged assets	-	-
Other commitments given*	-	-
<b>Total</b>	<b>75.5</b>	<b>71.2</b>

### Commitments received

In MAD millions	December 2017	December 2016
Sureties, endorsements and guaranties given	20.1	20.1
Debts collateralized by pledged or mortgaged assets	-	-
Other commitments given*	-	-
<b>Total</b>	<b>20.1</b>	<b>20.1</b>

## NOTE 23. CONTINGENT LIABILITIES

SAMINE has entered into negotiations with the tax authorities with a view to resolving the dispute by concluding an amicable settlement agreement. With a view to reconciling positions, an additional MAD 5 million in provisions was recorded, representing a provision of MAD 15 million at the end of December 2017.

## RELATED PARTIES

### 23.1. Transactions with other related parties

Transactions with other related parties are broken down as follows:

In MAD millions	December 2017	December 2016
<b>Assets</b>		
Trade receivables (net)	-	-
Other current receivables	-	-
Other non-current assets	-	-
<b>Liabilities</b>		
Trade payables	5.6	12.9
Other current liabilities (Prepaid expenses)	-	670.0
Other long-term debt	-	-
	<b>5.6</b>	<b>682.9</b>

In MAD millions	December 2017	December 2016
Turnover	-	-
Other income	-	-
Purchases and other external charges	19.0	15.2
Other (FF)	18.8	32.6
	<b>37.8</b>	<b>47.8</b>

Other related parties include the parent company. Transactions relate to interest on current account advances and management fees.

## NOTE 24. CASH FLOW STATEMENT

### 24.1. Details of the impact of the change in working capital requirements on cash and cash equivalents for the period

In MAD millions	December 2017	December 2016
Change in inventories	-28.7	29.3
Change in receivables	-493.9	51.3
Change in liabilities	637.2	-185.4
<b>Change in working capital requirement</b>	<b>114.6</b>	<b>-104.8</b>

### 24.2. Reconciliation of cash on the balance sheet and on the cash flow statement

In MAD millions	December 2017	December 2016
Net cash and cash equivalents - balance sheet	-1,174.6	-748.4
<b>Cash and cash equivalents - cash flow statement</b>	<b>-1,174.6</b>	<b>-748.4</b>

## NOTE 25. EVENTS AFTER THE CLOSING DATE

Reimbursement of VAT credit receivables for 1.2 billion under the agreement concluded between the GPBM (Professional Grouping of Moroccan Banks) and the Ministry of Economy and Finance on January 24, 2018.

Company name	Country	December 2017	December 2016	Consolidation method
Managem	Morocco	100.00%	100.00%	Consolidating entity
Compagnie Minière des Guemassa	Morocco	76.91%	76.91%	FC(*)
Compagnie de Tifnout Tighanimine	Morocco	99.79%	99.79%	FC
Akka Gold Mining	Morocco	88.46%	88.46%	FC
Manatrade	Switzerland	100.00%	100.00%	FC
Managem international	Switzerland	100.00%	100.00%	FC
Manadist	Switzerland	100.00%	100.00%	FC
Société Métallurgique d'Imiter	Morocco	80.26%	80.26%	FC
Société Anonyme d'entreprise Minière	Morocco	99.79%	99.79%	FC
Somifer	Morocco	99.79%	99.79%	FC
Reminex	Morocco	100.00%	100.00%	FC
Techsub	Morocco	99.87%	99.87%	FC
Cie minière de SAGHRO	Morocco	100.00%	100.00%	FC
Cie minière Dadès	Morocco	100.00%	100.00%	FC
Cie minière d'Oumejrane	Morocco	100.00%	100.00%	FC
REG	Gabon	75.00%	75.00%	FC
LAMIKAL	DRC	20%	81.30%	Equity method (**): Closing
MANUB	Soudan	69.42%	69.42%	FC
MANAGOLD	UAE	100.00%	100.00%	FC
MCM	Soudan	89.00%	89.00%	FC
TRADIST	UAE	100.00%	100.00%	FC
MANAGEM GABON	Gabon	100.00%	100.00%	FC
LAMILU	DRC	-	75.00%	-
SMM	Guinea	34%		Equity method
MANACET	Morocco	40%		Equity method




(\*) FC: full consolidation





Twin Center, Tour A, Angle Boulevards Zerktouni et Al Massira Al Khadra - BP 5199, Casablanca

Tél : +212 5 22 59 65 65 - Email : [managem@managemgroup.com](mailto:managem@managemgroup.com)

 : /Managemgroup  : @Managem\_group  : groupe-managem