



AFRICAN  
GROWTH  
UNDERWAY



# Annual Report 2018

[www.managemgroup.com](http://www.managemgroup.com)



INTRODUCTION

# Managem 2018 in figures...



## ... and words



Throughout its 90-year history,

the Group has successfully consolidated its expertise at every link in the mining value chain, from exploration, extraction and development to the marketing of raw materials.

Managem is an African mining operator with a balanced portfolio of assets and metals. The Group provides natural resources of strategic importance for the global economy and contributes to meeting the worldwide demand for raw materials driven by an international market that is expanding fast technologically and economically.



# Contents

## INTRODUCTION

Managem 2018 in figures and words P. 04

## INSIGHT

Imad Toumi P. 08

Profile P. 11



## AN AFRICAN FUTURE

Managem, 90 years of expertise P. 12

Moroccan market leader and committed African operator P. 14

News P. 16



## THE STRATEGY

Managem 2020, a strategy for sustainable growth in Africa P. 22

Tomorrow, 2020 P. 26

Safety, an important driver of performance P. 28

R&D & technology-focused investment, the essence of the Managem pioneering spirit P. 30



## THE ESSENTIALS

2018 operations and achievements (by metal) P. 34

Capital & Stock Market performance P. 45

Governance P. 46

Financial performance P. 49



## MANAGEM, PROACTIVE WITHIN ITS ECOSYSTEM

Strong values and unshakeable unity P. 52

CSR, a proven commitment P. 54

Human capital... the heart of our growth strategy P. 58

Managem, an investor in sustainable growth P. 59



## FINANCIAL STATEMENTS

P. 61



## INSIGHT

# Imad Toumi

Chief Executive Officer - Managem



## THE BUSINESS QUESTION

Was 2018 a year like any other at Managem ?

*All our business lines are exposed and sensitive to market volatility. That's why we've focused our efforts on building a diversified portfolio and developing high-potential projects.*

*2018 marked a new turning point and rewarded all the efforts of our teams and the strategic investments made by the Group. It saw the inception or commencement of work on some major projects, with particular emphasis on gold, cobalt and copper. Whether we look at Tri-K in Guinea, Gabgaba in Sudan, Pumpi in the DRC or Imiter in Morocco, we've succeeded in creating new opportunities and once again demonstrated our advanced expertise in exploration, research, operational performance and innovation. Since we acquired our first permits in Africa more than 20 years ago, our operational activities have expanded continually to the point where we now have a presence in 9 African countries, including Morocco, with a portfolio of balanced assets at different stages of maturity. We are in no doubt of the potential for growth offered by the continent of Africa to which Morocco belongs, and we remain fully committed to being a proactive contributor to its economic and social development.*

*We are also aware that our operational excellence wouldn't be complete without exemplariness in terms of Health and Safety at work.*

*We make concrete efforts to reach our objective of "0 accident" and we will maintain our highest requirement level for optimal safety.*

## THE SUCCESS QUESTION

We hear a lot about great successes. But what is your best victory ?

*I'm in no doubt that our best victory of 2018 is our openness and the affirmation of our African roots. By openness I mean our open attitude to Africa, the continent in which our business is so deeply rooted, its rich diversity and the promise it holds out for the future. There's the openness we demonstrate through our investments in operations that create sustainable long-term value for the communities and regions we work in. Our openness to new, more ambitious, projects, to new perspectives on our business lines by embracing more new technologies for integration into all our processes and future operations. Not to mention our openness to more sustainable, more responsible means of production. To make Managem an integrated, prosperous, resilient and high value-added Group.*

## THE CSR QUESTION

Having a positive social and societal impact and values to transmit, is that the "Miner mindset" ?

*Acting in the best interests of society has always been part of our genetic make up. So at Managem, CSR is neither a fad nor just another topic of communication. This practical and effective commitment was recognised last year by our inclusion for the fifth year running in the Top Performers of 2018 and our selection to join the ESG 10 index, which calculates the real-time stock market performance of socially responsible companies listed on the Casablanca Stock Exchange. While we're delighted to receive awards and accolades like these, our commitment runs much deeper. The nature of the mining industry demands that we operate where the deposits are located; those locations are often isolated and their communities put their trust in us. So integrating the communities in these regions from the very outset of operations is crucial if we want our projects to be viable and sustainable for the long term. Contributing to the socio-economic development of Managem operating locations is one of the six commitments set out in the new Group CSR charter adopted in 2018; others address key issues such as health and safety, environmental protection and business ethics.*

*This is the background against which we continue our dynamic of constructive engagement with stakeholders, because we understand that this is the only way to create mutual prosperity and move forward together on the shared issues of sustainable development by pooling our resources to achieve mutually beneficial outcomes.*

*The sustainable development of our business activities is also central to our aims. Our global strategy for water conservation, reduced energy consumption, anticipating the negative impacts of Group activities on biodiversity and the environment, facilitating a circular economy to spearhead waste management, and lastly an R&D strategy of developing enhanced technology-based capabilities to achieve environmental excellence... all of these were introduced during 2018, and will be actively pursued going forward to support our vision of sustainable and responsible growth.*

*For years, we have been committed to transforming our mining waste into resources and to creating value throughout our mines lifecycle.*

*Thanks to our R&D efforts, we were able to recycle, in 2018, more than 40% of our mining waste across all our sites.*

*This year, we also completed the construction of the tailings treatment plant at Imiter silver mine.*

*This is an important and sustainable investment, contributing to creating regional jobs and reducing our wastes while creating value.*

*We also make sure to actively participate in the growth of our sites surrounding communities. In this matter, we focus on the promotion of entrepreneurship for a sustainable development. This year, we have signed a partnership with Injaz Al-Maghrib, a non-profit organization, to roll-out entrepreneurship initiation programs around the mining areas where we operate, targeting primary and high schools students but also cooperatives.*

## THE INNOVATION QUESTION

Innovating to transform, stimulate and unite... Is that a reality within the Group ?

*In a world of constant change where progress and technological innovation go hand-in-hand with development and provide powerful economic leverage, innovation is becoming a necessary and even essential alternative. It is inseparable from the sustainability of mining and a vector for growth. So it must be encouraged through investment in research and development: that's something we are fully aware of, and which we are already engaged in.*

*We are absolutely focused on the future, which is why Managem is engaged in a continual process of transformation through the introduction of a shared vision built around goals and imperatives driven by the challenges of a demanding future. This point is proved on the one hand by the level of investment we commit to R&D - our acquisition of the Raise Boring Rig is an innovation of real technical prowess that will support our ambitions in exploration - and on the other hand by our increasingly advanced research centre and upgraded processes. In this way, Managem will make an active contribution to decompartmentalising and expanding all sectors. Our most innovative project consists on the invention of lithium-ion battery, characterized by its safety and performance. It can be used in mobile phone industry and electrical vehicles.*

*Our R&D team also conducted important works on the synthesis of batteries components, particularly mixed hydroxides and cobalt salts. The end products comply with the requirements of Li-ion battery market. This*

*diversification will allow us to reduce the risk of cobalt price decline.*

## THE FUTURE QUESTION

Today's companies are all on a quest for meaning. So what actually is the vocation of Managem ?

*The vocation of Managem in 2018 was absolutely to generate meaningful outcomes. The actions we take have practical outcomes that impact not only on local communities, but also on the wider world. The metals we mine, process and produce are essential to the world we live in today. Gold, silver, cobalt, fluorite, to name just a few, are at the heart of the essential objects we use every day. But beyond this primary mission, Managem gives meaning to everything it does through its practical commitment to its operating regions and the people who live in them, and by working actively for the future we will all share. We are also anticipating that future by committing the Group to a process of redesigning its business lines in ways that allow them to meet the needs of our markets more accurately.*

*We will face the important phase of digitalizing our activities. A new step which is becoming a necessity to reach operational performance. Our Group will pursue its activities development to meet the needs of world mutation with the apparition of new energy sources. We are moving into new business lines that will boost our performance and make us resilient at every link in the value chain.*

# Profile

## YOUR MOTTO ?

*Agility, resilience and durability.*

## YOUR SOURCE OF INSPIRATION ?

*The story of Managem is my inspiration. A Group that has grown over many years to establish itself as a leader in its industry in Morocco, and which is engaged in a process of continual future-focused transformation.*

## THE THING YOU'RE MOST PROUD OF ?

*Our extraction and value-added processing of strategic raw materials means that Managem makes its own particular contribution to building the world around us. That's what I'm most proud of today.*

## A VALUE YOU HOLD DEAR ?

*Innovation : always thinking about tomorrow today. It's time for us to achieve a very high level of industrial performance. Other challenges include embracing digitalisation through connected mines and even more modern processes, and also recycling and production chain expertise.*

## WHAT WAS YOUR MOST UNFORGETTABLE EVENT OF 2018 ?

*Acquiring a majority stake in the Tri-K project and the completion of its feasibility study, which confirmed the presence of more than 1 million ounces of reserves. This high-potential project is one of the Group's most important for a decade, and represents an important milestone in the new era of growth for the Managem strategy for gold and the continent of Africa.*

## AN AMBITION THAT HAS BECOME A REALITY ?

*The practical implementation of the project to extend the industrial units at our Gabgaba mine in Sudan. In a context that is far from simple, and despite the complexity of the terrain and the issues surrounding the country's economy, we've succeeded in building one of the country's first industrial units to international standards. This plant is the first step in our ambitious investment plans for Sudan, and a significant 2020 strategy achievement in 2018.*



## IN 3 WORDS

### Africa

The potential at the heart of our ambitions.

### Safety

"Zero accidents", is a non-negotiable priority.

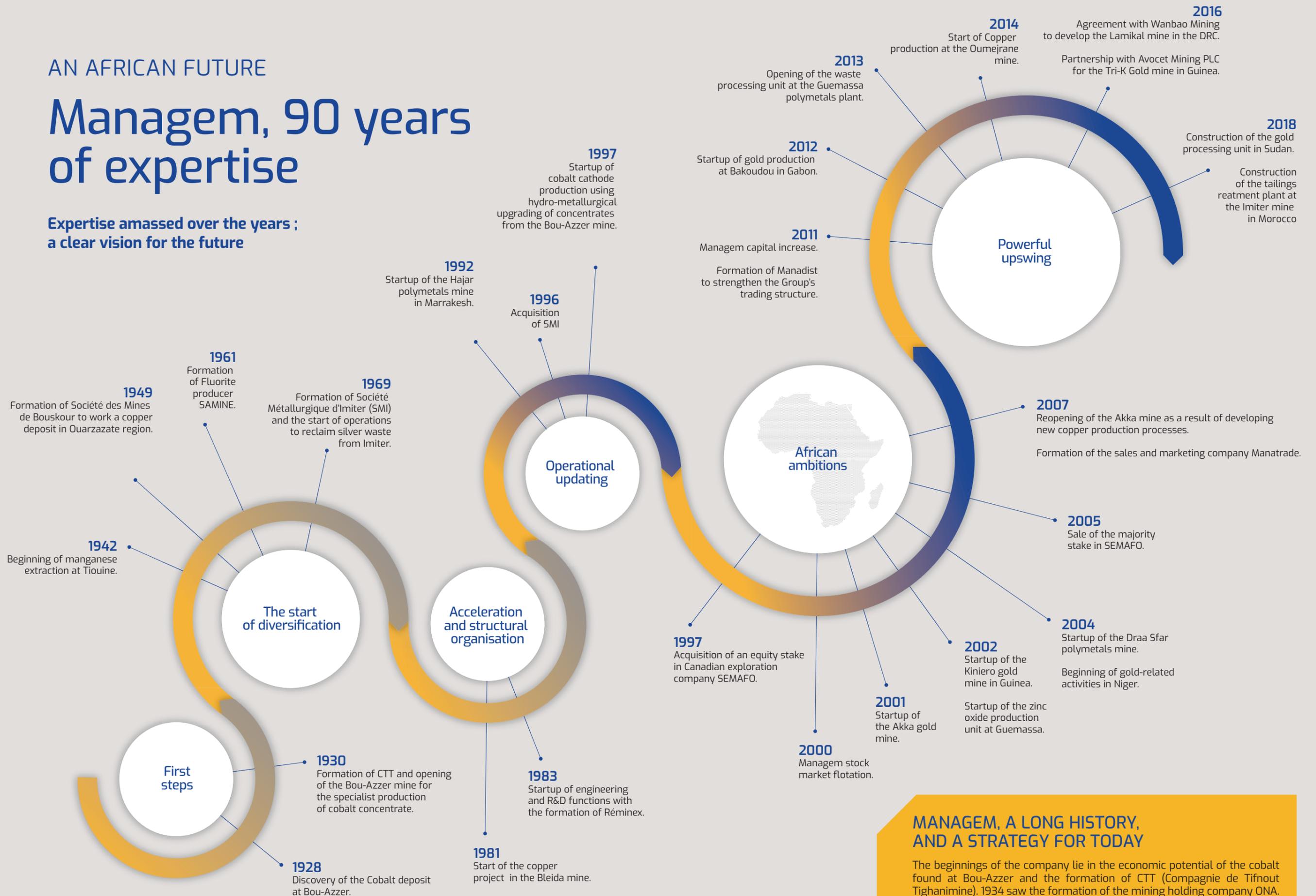
### Digital

Challenge, innovation and adaptability. An absolutely essential transformation.

AN AFRICAN FUTURE

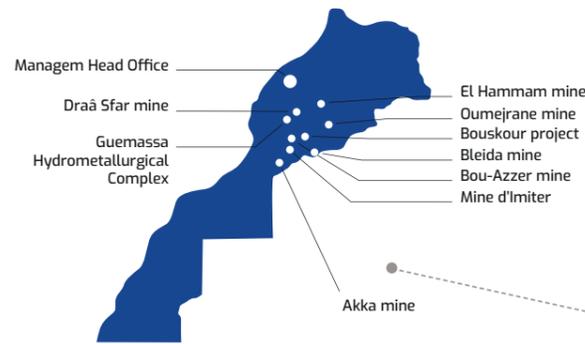
# Managem, 90 years of expertise

Expertise amassed over the years ; a clear vision for the future



## MANAGEM, A LONG HISTORY, AND A STRATEGY FOR TODAY

The beginnings of the company lie in the economic potential of the cobalt found at Bou-Azzer and the formation of CTT (Compagnie de Tifnout Tighanimine). 1934 saw the formation of the mining holding company ONA. 1996 was the year in which Société Anonyme Managem was formed ahead of its stock market flotation in 2000.



**MOROCCO**

A leading force in Moroccan mining and hydrometallurgy since 1930, Managem operates 13 mines and holds 850 research permits. Managem also produces a diverse range of commodities from base metals (Copper, Zinc and Lead) to precious metals (Silver and Gold), Cobalt and Fluorite.

# Moroccan market leader and committed African operator

The Moroccan mining group Managem continues to expand with a presence in 8 African countries in addition to its home in Morocco. With 13 mines in operation - the majority of them in Morocco - and capital mining projects initiated throughout Africa, Managem continues to develop its diversified, balanced and high growth potential portfolio.



**GUINEA**

The Group is developing the high-potential Tri-K gold based project in partnership with Avocet Mining. In 2018, Managem increased its equity stake to 70% to secure a majority shareholding in this project.



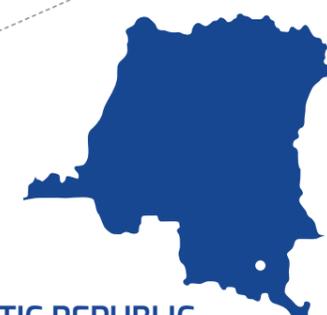
**SUDAN**

Managem has been developing gold mining assets here since 2009. Its exploration permits cover approximately 14,000 km<sup>2</sup>. In 2018, Managem completed construction of its production plant, which is designed to produce two tonnes of gold per year.



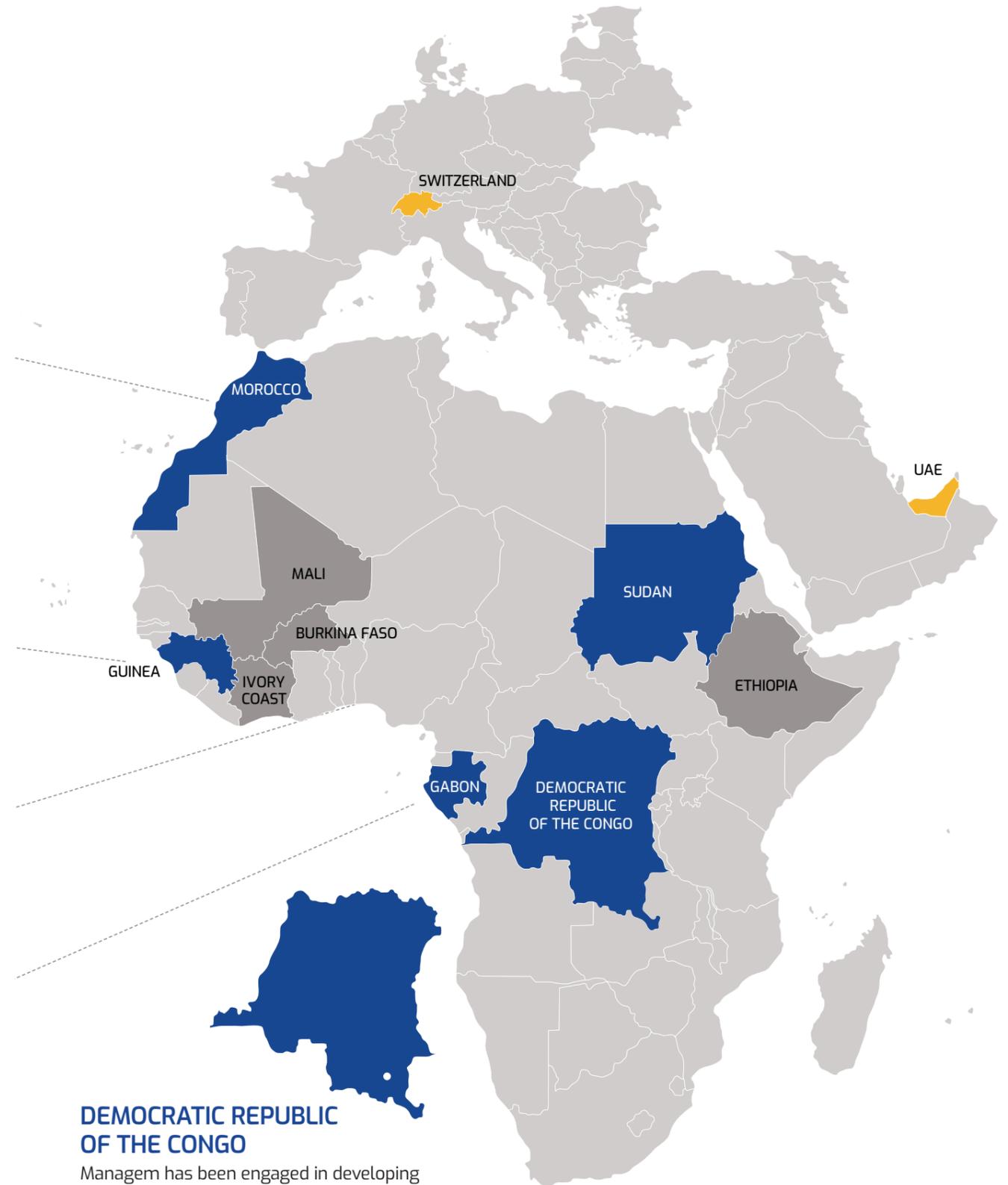
**GABON**

Managem is engaged in the exploration aspects of the Etéké gold project, which is currently at the pre-feasibility stage.



**DEMOCRATIC REPUBLIC OF THE CONGO**

Managem has been engaged in developing the Pumpi Copper and Cobalt deposit in Katanga province since 2008. In 2017, the Group signed a partnership agreement with Wanbao Mining Group giving it the majority shareholding in the project. The project target is annual production of more than 40,000 tonnes of Copper and 5,000 tons of Cobalt.



# News

**Managem performed impressively in 2018 by achieving major advances in its African strategy, despite a volatile market environment and challenging operational conditions. Focus on the highlights of the past year.**

## A MARKET OF CONTRASTS

2018 was a year of contrasts in a challenging economic environment influenced by a number of factors, including the closure of Bakoudou, the decrease in grades at SMI and lower metals prices in the second half of the year.

Cobalt prices quadrupled at the beginning of the year, while Copper and Nickel prices rose by 44% and 53% respectively, and Zinc prices were at twice their 2016 level. However, Gold and Silver prices remained highly volatile. Nevertheless, an analysis of 2018/2017 price trends reveals a more nuanced reality. On average, prices of the major non-ferrous metals have shown a relatively positive trend year-on-year, with a 9% price increase across all 6 major non-ferrous metals in 2018. It is, however, important to note that the second half of 2018 experienced a relative decline in prices.



A SIGNIFICANT  
DOWNWARD TREND  
IN METAL PRICES  
during H2

-30%  
for Cobalt

-20%  
for Zinc

-11%  
for Copper & Silver

## KEY FINANCIAL INDICATORS FOR 2018

**Managem has successfully delivered stable profits, despite high price volatility.**

CONSOLIDATED INDICATORS UNDER IFRS (MMAD)	2018	YEAR-ON-YEAR TREND VS. 2017*
Turnover	4356	-16%
Earnings Before Interest and Taxes (EBIT)	1323	-31%
Operating income*	669	-18%
Financial income	-230	-18%
Net Income Group Share*	370	+2%

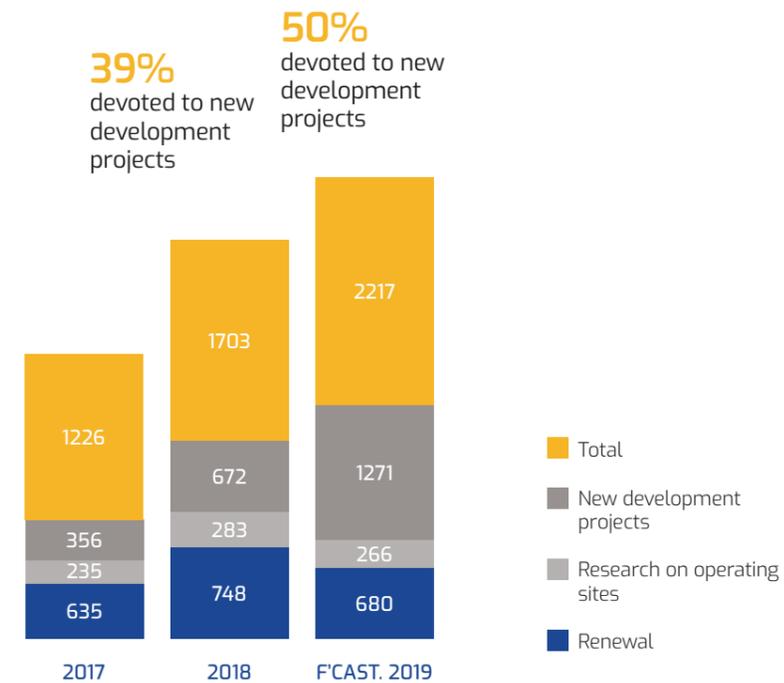
(\* ) Changes are restated to reflect the impact of the Pumpi development in 2017

*The diversified portfolio that balances the cash profile of the Group ensured that NIGS remained stable at around 370 MMAD.*

## TANGIBLE PROGRESS ON OUR STRATEGIC PROJECTS

### SUSTAINED INVESTMENT IN GROUP DEVELOPMENT

#### PLAN IMPLEMENTATION...



*400 MMAD in CAPEX on exploration to continue development of our operating sites and launch new growth projects.*

*500 MMAD in Capex on our Organic Growth Project (Gold, Silver and Cobalt).*

*670 MMAD invested in new project development.*

**GUINEA**  
THE TRI-K PROJECT MOVES AHEAD

The Tri-K project successfully passed a series of important milestones. Designed to ensure full compliance with international standards, the project feasibility study was completed during the year. The environmental and social impact study was also begun in 2018 for final delivery in early 2019. The second highlight was the completion of the 2nd closing, which enabled the Group to strengthen its position. Lastly, the end of 2018 marked the start of the funding phase for the commencement of construction work.



**DRC**  
FINALISATION OF THE PUMPI FEASIBILITY STUDY

Located at Kolwezi in Katanga province, Pumpi is a major mining project developed out of a Managem ten-year commitment to research in the Democratic Republic of the Congo. Revealed by an independent assessment report in 2016, this site has both Copper and Cobalt deposits. Further research has identified reserves of around 640,000 tonnes of Copper metal and 95,000 tonnes of Cobalt metal. The 2018 completion of the Pumpi project feasibility study marked the first major milestone, which triggers the commencement of construction work in preparation for the scheduled start of production in 2020. The project target is to produce more than 45,000 tonnes of Copper and 5,000 tonnes of Cobalt per year.

**SUDAN**  
PLANT EXTENSION FINALISED

In accordance with the Managem strategy for Gold, which is to be producing 5 tonnes of gold per year by 2020, construction work to extend its production plant in Sudan was completed in 2018, having been commenced in the second half of 2017. With operations scheduled to begin in the first quarter of 2019, this extension has targeted a production rate of 2,400 tonnes per day. The first production unit in Sudan, this state-of-the-art plant has attracted investment of USD40.8 million, including €12.9 million in local investments.

**MOROCCO**  
FINALISATION OF THE TIZERT PROJECT FEASIBILITY STUDY

The Tizert copper project in Taroudant province has geological resources estimated at approximately 657,000 tonnes of metal content. 2018 saw the continuation of exploration work, as well as the completion of the Trade Off of the Tizert copper project to define the optimal mining method. The launch of the project feasibility study is scheduled for 2019 following close collaboration between Managem Engineering and international experts.

**GABON**  
FINALISATION OF THE ETÉKÉ FEASIBILITY STUDY AND ENVIRONMENTAL IMPACT ASSESSMENT

The feasibility study for this project was conducted in parallel with an environmental impact assessment last year.

2018: an enhanced exploration programme and a new approach to geological data processing



**COBALT**

- The discovery of new Cobalt reserves extends the operating life of the Bou-Azzer mine by a further two years.
- Greenfield exploration investment was resumed during the year.



**POLYMETALS**

- 2018 was marked by the discovery of new Polymetals reserves, extending the operating life of CMG mines by two years, or around 2.5 million tonnes.



**SILVER**

- The exploration programme accelerated in 2018, despite the level of resources remaining stable, compared with 2017.
- 2018 also saw the development of a new approach to the digitalisation of geological data processing and mining operations scheduling at SMI.

## A PROACTIVE PRESENCE AT TRADE FAIRS

In 2018, the Managem Group was represented at a number of mining industry trade shows around the world. This level of presence raises the profile of the Group, at the same time as providing it with the opportunity to interact and network with its international counterparts. These major events also provide mining industry stakeholders with a forum for sharing their expertise.

### PDAC - CANADA

As in previous years, Managem was well represented at this international event in 2018. Every year, this major international industry event brings together around 25,000 mining industry professionals from more than 130 countries to meet with investors and international experts.

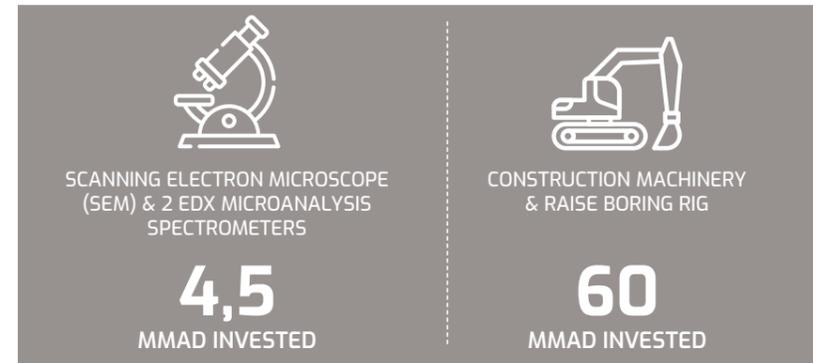
### INDABA MINING SOUTH AFRICA

Indaba Mining is the largest mining trade show in Africa, and is attended every year by around 7,000 visitors from the African mining industry. It provides a very special opportunity to meet mining industry decision-makers and key stakeholders from all over the continent.

### SIMFE - SUDAN

SIMFE brings together the leading mining stakeholders operating in Sudan and worldwide. It promotes the mining potential of its region, in which Managem is an experienced and respected operator.

## INVESTMENT IN R&D AND ADVANCED TECHNOLOGIES TO SUPPORT GROUP EXPANSION



## A HI-TECH ACQUISITION AND ANOTHER STEP TOWARDS ACHIEVING MANAGEM AMBITIONS

In 2018, Managem acquired a powerful RBR 600 Raise Boring Rig - only the 6th in existence worldwide - which makes it possible to drill large-scale vertical shafts for ore extraction or underground mine ventilation. With more than 65 years of expertise in surveying and mining, Managem subsidiary Techsub has expanded its fleet with this new hi-tech Raise Boring Rig. This hi-tech acquisition brings with it the major benefit of having the in-house ability to carry out large-scale drilling operations on key projects. This one machine increases the company's drilling capacity by a factor of eight, and provides the capability of drilling to depths of up to 1,200 metres in a single operation. The key goals of this major acquisition are to boost efficiency and performance, at the same time as reducing lead times. This capital investment will help to deliver the Group growth ambitions set out in the Managem Group development strategy. The purchase of this machine gives Managem the resource it needs to deliver future projects and reduce the time taken on major mining and drilling projects, while providing its operators with the benefits of greater safety and ease of operation.

### COBALT DEVELOPMENT INSTITUTE

Managem is a member of the international Cobalt Development Institute (CDI) whose members include all the leading Cobalt industry stakeholders. The CDI works to promote the sustainable and responsible production and marketing of Cobalt.

## CSR : TWO NEW ACCOLADES

The Managem Group CSR policy was once again the focus of official recognition in 2018. The Group was selected from among Morocco's 44 largest companies with the greatest commitment to corporate social responsibility to join the ESG 10 non-financial index that measures CSR performance. The selection was made by Vigeo Eiris on the basis of its environmental, social and good governance criteria. Managem and its subsidiary SMI were, for the fifth time, ranked as Top Performers among the 15 Casablanca stock market listed companies rated as most committed to CSR.

The Managem Group is a CSR policy pioneer in Morocco thanks to the impetus provided by the Al Mada Group, its own Top Management team and the uncompromisingly dedicated commitment of all its employees, from operational to corporate, who make their own daily contribution to the Group's status as a leading force for CSR in Morocco.



### ADOPTION OF A NEW CHARTER

The principles and requirements of CSR are changing all the time, so in 2018, the Managem Group updated its CSR charter with the incorporation of new topics into its social and environmental responsibility guidelines. The new charter reasserts the ongoing commitment of the Group by crystallising it in a formal charter built around six founding principles:

- Respecting individuals, employees and society as a whole,
- Promoting social dialogue and Human Capital development,
- Reducing its environmental footprint,
- Contributing to the socio-economic development of local communities,
- Complying with its own demanding code of business ethics,
- Delivering continuous corporate social responsibility improvements.

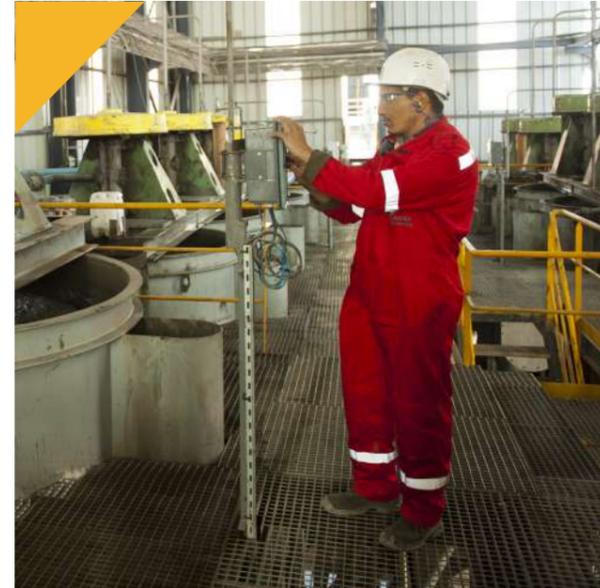
### PARTNERING WITH INJAZ AL-MAGHRIB TO PROMOTE ENTREPRENEURSHIP IN MINING AREAS

Under the aegis of the Al Mada Foundation and with support from the Ministry of National Education, Managem and the INJAZ AL-Maghrib association joined forces with the 2018 signature of a partnership agreement to introduce entrepreneurship training programmes in those mining areas where Managem operates. Structured around three initiatives - "jamaati" for primary school students, It's my Business for secondary school students and Cooper'Up for cooperatives and non-profits, this new programme is designed to open up new opportunities for future generations.

## THE STRATEGY

# "Managem 2020"... a strategy for sustainable growth in Africa

The "Managem 2020" strategic plan was adopted in 2016 as a roadmap for the development of the Group, and sets out the targets for achieving its vision. The central ambition of strategy is to double the size of the Group by expanding its Gold and Copper activities, at the same time as maintaining a properly balanced and diversified portfolio. Boosting operational excellence and accelerating investment in Africa through a series of partnerships are the cornerstones of this development strategy.

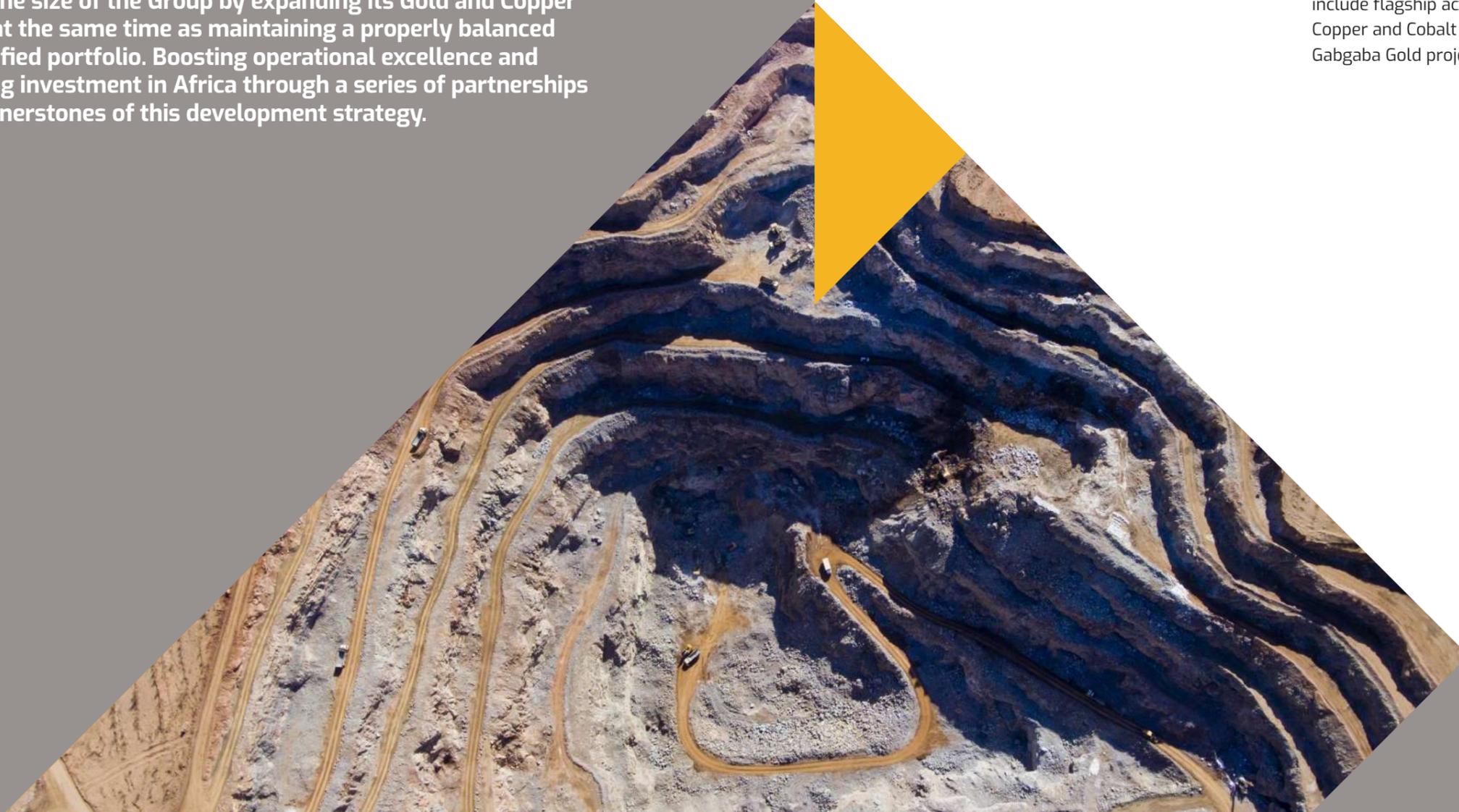


## OPERATIONAL EXCELLENCE, A STRATEGIC PRIORITY

The Group's sites spearhead its growth strategy of delivering the best-possible operational returns, renewing reserves every year, and continuing to discover new deposits. The Group is committed to maintain an optimum level of productivity by extending and expanding its industrial production units. In 2018, 75 MMAD was allocated to extending the SMI Silver plant, and 280 MMAD to extending the Gold industrial unit in Sudan.

## EXPLORATION, A KEY AREA OF EXPERTISE

Historically the Group's key area of expertise, exploration at Managem continues its record of success in discovering new deposits. These successes include flagship achievements such as the Pumpi Copper and Cobalt project in the DRC and the Wadi Gabgaba Gold project in Sudan.



## A MULTI-PHASE IN-HOUSE EXPLORATION PROCESS

### STRATEGIC EXPLORATION

where the aim is to pinpoint targets for exploration using a range of mapping, geophysical and geochemistry techniques.

### TACTICAL EXPLORATION

which involves test drilling to identify the existence of mineral extraction potential as soon as targets for exploration have been identified.

### RESOURCE DELIMITATION

to systematically verify the extent of the resource once its mineral extraction potential has been confirmed.

### RESOURCE CERTIFICATION

is the final step in which resources are certified in accordance with the usual industry standards specific to each type of deposit.

Traditionally at the cutting edge of new global exploration technologies, the Group's geological expertise continued to deliver excellent outcomes during the year. The Group constantly interacts and consults with external experts to maintain an advanced level of uncompromising expertise in a constant quest for innovation in models and techniques.

*In 2018, 30 active exploration projects covering more than 55,000 km<sup>2</sup> were underway at various stages of progress.*

The Group maintains a sustained level of research to ensure its ongoing corporate development, renew its reserves and discover new resources. In 2018, around one-third of investment for the year - 400 MMAD - was focused on exploration to ensure the long-term future of our operating sites and launch new growth projects.

# 1/3

*of annual investment focused on exploration.*



## ACCELERATING INVESTMENTS AND PARTNERSHIPS, OUR STRATEGIC SPRINGBOARD FOR DEVELOPMENT

With proven expertise at every link in the mining value chain, the Managem Group is an integrated corporate group that leverages a multitude of techniques and skills acquired over many decades to drive its development.

*"Managem 2020" defines a new era of growth for Managem.*

The Group has entered a new and more open phase of its development with the aim of boosting its capabilities by drawing on external expertise to accelerate its growth. For this purpose, Managem has proactively formed strategic partnerships with high-profile mining groups and is repositioning itself around its most profitable assets.



Its balanced asset portfolio makes it more resilient to fluctuations in metals prices, while its presence in high-potential locations gives the Group significant scope for development going forward.

This strategy was introduced at the end of 2016 with the completion of two major deals with international mining groups.

Delivery of this strategy continued in 2018 with a feasibility study conducted to the highest standards for the Tri-K Project in Guinea, and the successful Second Closing of the partnership with Avocet Mining. Managem has also increased its stake in the Tri-K project to 70%. The Group's ultimate aim is to consolidate its pan-African positioning and pursue its future growth.

# Tomorrow 2020

**The Group ambition for 2020 is to become a leading African mining operator committed to responsible operation and the ongoing development of the continent.**

Between now and 2020, Managem is committed to establishing itself as an international force in mining that develops natural resources locally and regionally while meeting the highest safety, environmental and technology standards in its creation of shared wealth. This ambition is built around a portfolio of mines and projects that is well balanced between base and precious metals to ensure the long-term future of the Group and its high level of resilience to price volatility.

## AMBITION 2020 : A CHANGE OF SCALE...



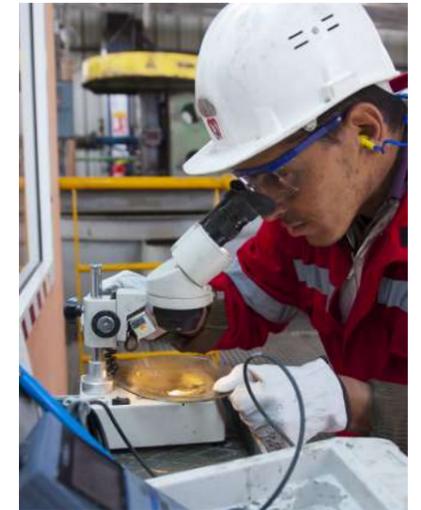
### OUR AMBITION

*"To become a regional leader through sustainable & responsible growth".*



## NEW DIRECTIONS

- Developing new sectors that create value for the Group by optimising activities around the recovery of metal content.
- Accelerating the Group's Greenfield projects for Cobalt, Gold and polymetals, with particular focus on project development via new acquisitions and/or partnerships.
- Investing in exploration by sustaining ongoing efforts to achieve a higher level of reserves.



## SIGNIFICANT ACHIEVEMENTS

### FROM LARGE-SCALE PROJECTS THAT WILL CHANGE THE SCALE OF MANAGEM...

#### COPPER

Progress with development work and studies required for the Tizert copper project

#### GOLD

2018 delivery of the feasibility study for the Tri-K gold project in Guinea

#### SILVER

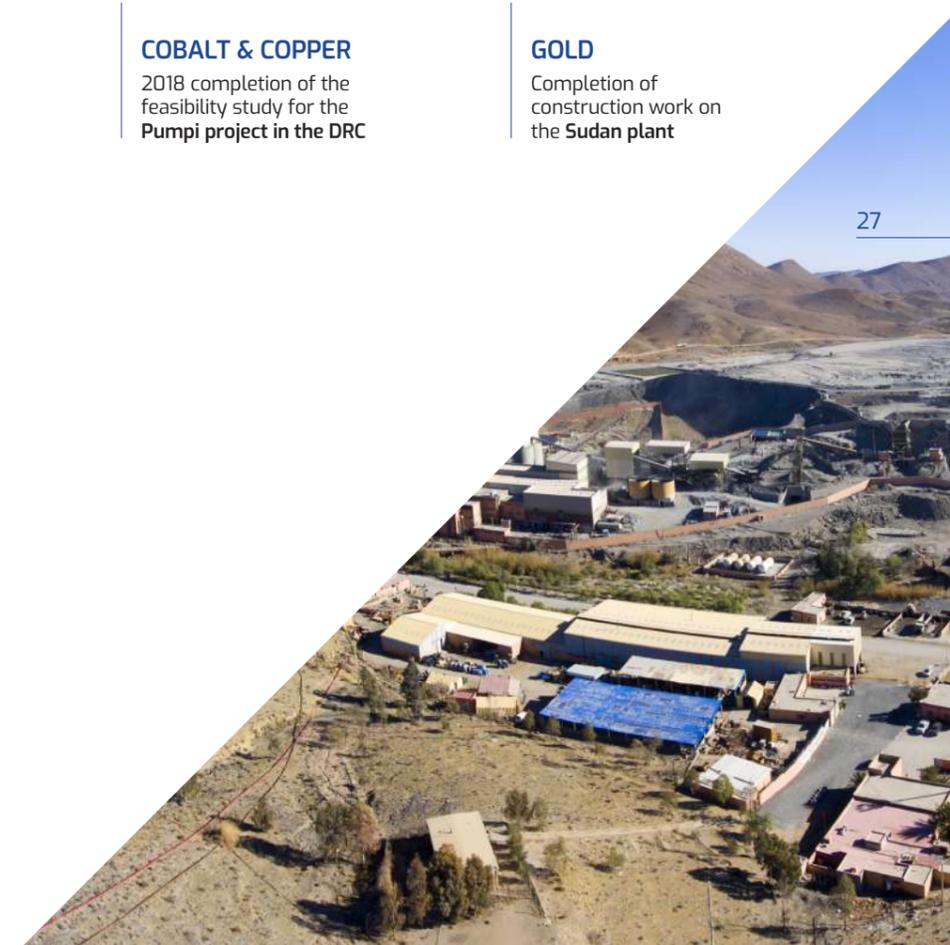
Completion of construction work on the SMI dyke reclamation and treatment plant



*2018 saw the achievement of major milestones for the delivery of our African growth strategy.*

**COBALT & COPPER**  
2018 completion of the feasibility study for the Pumpi project in the DRC

**GOLD**  
Completion of construction work on the Sudan plant



# Safety : an important performance criterion

**As a responsible African mining operator, Managem is committed to making its contribution to the development of the continent, while meeting the highest safety, environmental and technology standards in its creation of shared wealth.**

Safety is one of the Group's leading performance criteria. This commitment flows down from the highest level of management through a formal framework, and is visibly present on all Group mining sites through implementation of the Managem Safety Policy.



## AN UNCOMPROMISING SAFETY POLICY

*100% strict  
and 0 tolerance.*

The new safety policy targets two decisive aspects of this crucial issue: safety framework and safety culture.

To achieve these targets, the Managem Group has consequently implemented a safety roadmap for the period to 2020. This roadmap allows for Health & Safety policy to be reviewed in order to achieve the ultimate goal of 0 accidents.

## EVERYDAY ACTIONS

Safety is a collective responsibility within which every employee is a responsible contributor in his or her own working environment. To achieve its safety goals, the Managem Group has implemented a fully resourced Group-wide organisational structure and action plan.



At the operational level, safety awareness begins workstation startup. Potential safety issues are the subject of constant analysis to ensure compliance with standards, especially in terms of wearing appropriate personal protection equipment and preventing accidents in high-risk situations. Close attention is paid to industrial risk analysis, which drives a number of Group-wide projects rolled out and managed by the Safety Department, on-site operations employees and the Risk Management Department. The safety process is assessed internally and externally on every Group operating site.



# R&D & technology-focused investment... the essence of the Managem pioneering spirit

**The R&D department is an invaluable cornerstone of Managem growth, and continued to push forward with its development of innovations during 2018, as well as acquiring new cutting-edge technologies that offer unmissable growth opportunities for the Group.**

For more than 30 years, the Managem Research Centre has been engaged in developing many treatment and recovery processes, as well as new value-added products for the Group. Alive to the crucial importance of R&D and innovation challenges, the Managem Group accelerated the development of its research centre in 2018.

## R&D SUPPORTS THE GROUP AT EVERY LINK IN THE VALUE CHAIN

From exploration to production, R&D monitors product quality, optimises resources and maximises customer satisfaction at each stage to create value for the Group. Its commitment to R&D has enabled Managem to develop innovative home-grown processes that create value and diversification in ways that facilitate eco-respectable growth. In 1997, the work done by R&D teams brought the Group's Cobalt sector the benefits of a process developed to upgrade Cobalt into high-quality Cobalt Cathodes by creating a hydrometallurgy process that generated added value for the entire Group. In practical terms, it is essential for Managem to integrate the concept of sustainability into the development of its mining activities, in order to conserve its resources, implement only the cleanest technologies and limit its environmental impact. Thanks again to the efforts of the R&D teams, processes for treating and reclaiming mining waste on production sites have now been developed. In 2018, the Managem Group continued to step up the pace of its tailings treatment programmes by introducing non-hazardous industrial waste treatment programmes at its operating sites. 2018 also saw the construction of a treatment plant for the Imiter mine dyke at a total capital expenditure cost in excess of 80 MMAD. This plant now creates value by reclaiming metals from mine tailings stored above ground. This eco-responsible project is integral to a circular economy.



## 2018, A YEAR OF INNOVATION

In a business environment characterised by very pronounced price fluctuations, increased reserve complexity and very high pressures imposed by new regulatory and customer requirements, the research centre played a decisive role in supporting Managem to cope with, and withstand, all these pressures thereby supporting its development and operational excellence plan.

During 2018, the research centre also played a key role in advancing Managem development projects in Morocco in the context of the Tizert project, and internationally with the Tri-K project in Guinea and the Gold project in Sudan. Variability studies have been conducted and new processes developed.

Intense effort has been focused on improving the fundamentals of processing for all Group operations by seeking to optimise recovery, handle difficult mineralisations and improve the quality of finished products.

Expertise assignments in all these areas have been organised across all Managem Group operations.

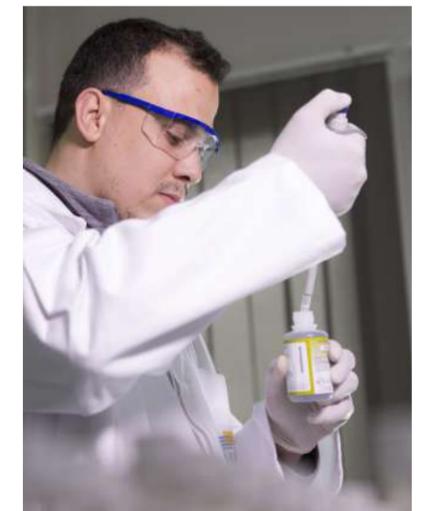
The Group's exploration teams continue to receive full support for their efforts to identify the optimum processes and conditions for enhancing the value of new projects within the mining asset base of Managem.

## A HIGHLY ACCREDITED RESEARCH CENTRE

The Managem research centre is fully certified as compliant with many international standards. These certifications include the ISO 9001 (quality), ISO 14000 (environmental) and OHSAS 18000 (safety) standards. It has also successfully completed the upgrading of its certifications to the ISO 9001 : 2015 and ISO 14001 : 2015 versions.

Its analytical laboratories are accredited compliant with the NF EN ISO/IEC 17025 : 2017 (Accreditation 1-0789 www.cofrac.fr) standard for three programmes:

- Materials, metallic materials and physico-chemical analyses
- Environment, water quality and physico-chemical analyses
- Industrial equipment and engineering products, industrial process products and physico-chemical analyses.



## AN R&D STRATEGY TO BOOST THE TECH CAPABILITY OF MANAGEM TO DELIVER ENVIRONMENTAL EXCELLENCE

The Managem Group is also developing a materials recovery policy for dykes. The aim here is to recover their metals content while creating value and reducing the Group's ecological footprint by recovering final waste products from tailings.

Research into other areas of sustainable development is also part of the R&D remit, and is focused particularly on projects design to optimise water use, treatment and recycling. These areas of research also include WEEE (Waste Electrical and Electronic Equipment) recycling to enable the exploitation of other urban deposits and promote a circular economy.

Reusable electronic waste (WEEE) is also a subject of great interest to the Managem Group, which, through its work as a member of the French waste recovery coalition COVAD, shares practical experience useful for developing specialist end-of-life reprocessing businesses throughout Morocco.



## HI-TECH ACQUISITIONS AND ENHANCED EXPERTISE



Innovation is a key Managem value for all Group business lines, and is integral to its business model.

Innovation drives competitiveness and is essential for :

- Accessing new markets ;
- Extending the value chain ;
- More effective development and conservation of natural resources ;
- Improved performance and fundamentals.

### KEY ACHIEVEMENTS

Development of a patent for a Li-ion battery that generates zero heat.  
Reclamation of concentrates and tailings from the Bou-Azzer mine for recycling as cobalt cathodes.  
Processing and reclamation of mining waste.



### RAISE BORING, A NEW DRILLING AND MINING ASSET

With more than 65 years of expertise in surveying and mining, Techsub expanded its fleet in 2018 with the addition of a new hi-tech Raise Boring Rig: a Herrenknecht RBR 600.

### IMPRESSIVE CAPACITIES FOR GUARANTEED PERFORMANCE AND EFFICIENCY

The RBR 600 is capable of drilling shafts up to 7 metres in diameter. The result is wider and much more efficient ventilation shafts for underground mines.

The acquisition of this machine at a capital expenditure cost of 60 MMAD gives the Managem Group the resource it needs to deliver its future projects and speed up major mining and drilling projects, at the same time as improving operator safety and convenience.

This acquisition also an integral part of the Group's strategy to provide Techsub with the resources required to update the subcontracting of underground mining operations through advanced mechanisation and strategic partnerships.

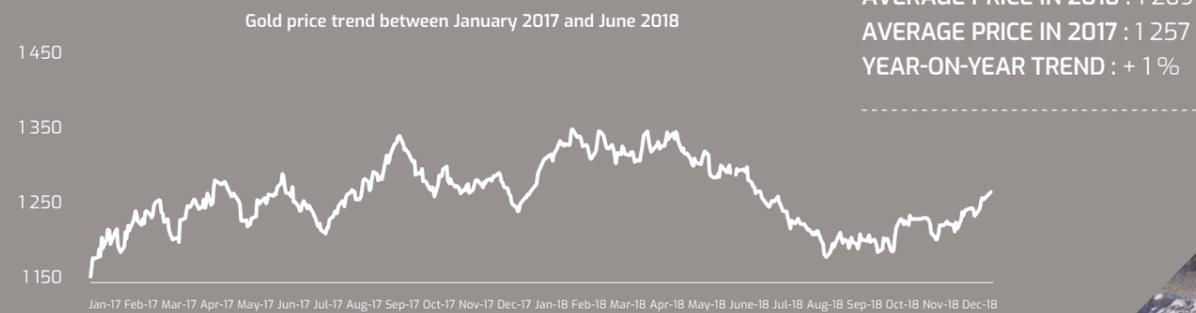
### MINERALOGIC SYSTEM MICROSCOPE, A MAJOR ADVANCE

In 2018, the Managem Group research centre saw the practical implementation of several projects with the introduction of new technologies and the development of its battery, electrochemical characterisation and precious metals recovery laboratories. During the year, the Managem Group invested around 40 MMAD in an automated scanning electron microscope linked to a latest-generation mineralogic system that conducts extremely detailed analyses of mineralogical data.

THE ESSENTIALS

# Operations and achievements (by metal) in 2018

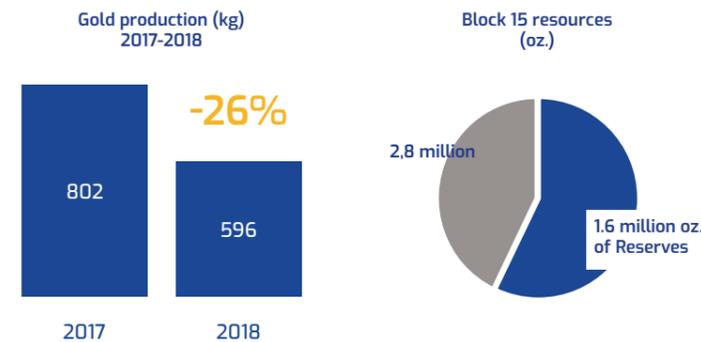
## GOLD : A MIXED YEAR IN AN UNSTABLE GLOBAL CONTEXT



2018 was marked by several significant events in the markets, including the emergence of new global producers like Nigeria, as well the current uneven level of demand internationally and a lower level of physical investment than that seen in 2017. As a result, gold prices remained moderate in 2018, virtually unchanged from 2017 with a slight year-on-year gain of 1%. The gold price trend for 2018 was characterised by a slight fluctuation during the first quarter, followed by a sharp decline from USD1,350 to USD1,178 between April and October, before recovering through the fourth quarter to end the year at USD1,268.

In 2018, the Managem Group gold production was provided by the Gabgaba mine. Last year was marked by a challenging economic situation in Sudan, with the combination of inflation and a shortage of diesel, which explains the decline in gold production reported by the Group, which was also impacted by the end-of-life closure of the Bakoudou mine. However, the significant potential of the Gabgaba mine holds out an attractive opportunity for growth, with estimated resources of 2.8 million ounces and reserves of 1.6 million ounces.

## LOWER PRODUCTION AS A RESULT OF CHALLENGING CONDITIONS IN SUDAN



## 2018, A YEAR OF MAKING AFRICAN AMBITIONS A REALITY

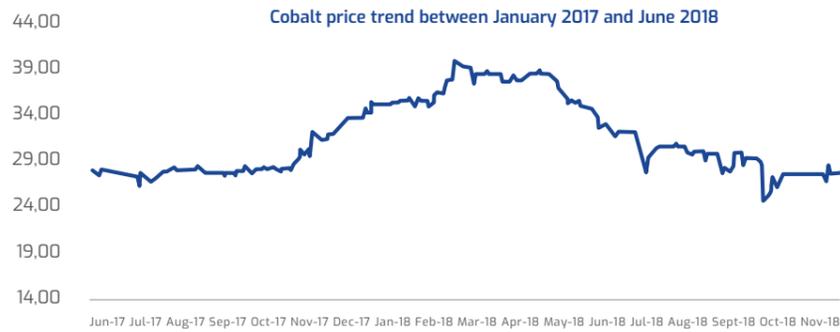
For twenty years, the Managem Group has been exploiting its gold deposits in Africa, at the same time as conducting exploration campaigns at various stages of advancement. In 2018, the Group continued to develop African gold projects with high growth potential :

- Managem strengthened its presence in Guinea and increased its stake in the Joint Venture company that holds the Tri-K project operating permit from 40% to 70%. The Group also took an essential step forward during the year with completion of the Tri-K project feasibility study. This study was conducted in accordance with the highest technical standards and in strict compliance with international CSR standards. At the end of the year, the Tri-K governance bodies gave their approval for the construction of the project, for which the funding programme will be launched in 2019, followed by the start of work on construction.

- In Gabon, Managem conducted a feasibility and environmental impact study for the Etéké project during the year. The Group also maintained the level of its investment in this country through its exploration projects. At the Bakoudou mine, the Group began an accelerated pace of remediation and greening work. The mine itself closed in 2017, having reached the end of its productive life after six years of operation.
- In Sudan, Managem completed work on the construction of a modern production plant with a production capacity of 2,400 tonnes per day. Constructed and equipped to meet international standards, this is one of the country's first industrial units. In 2018, and despite challenging conditions related to the country's economic challenges, including the shortage of diesel, the Managem Group succeeded in delivering this flagship project; the first step towards developing its gold mining activity in Sudan.
- The Group is continuing to invest actively in Greenfield exploration, with particular emphasis on gold in other African countries, including Mali, Burkina Faso, Côte d'Ivoire and Ethiopia Burkina-Faso, la Côte d'Ivoire ou encore l'Éthiopie.



## COBALT : SUSTAINED EXPLORATION FOR THIS STRATEGIC METAL



AVERAGE PRICE IN 2018 : 35,39  
 AVERAGE PRICE IN 2017 : 25,36  
 YEAR-ON-YEAR TREND : + 40%



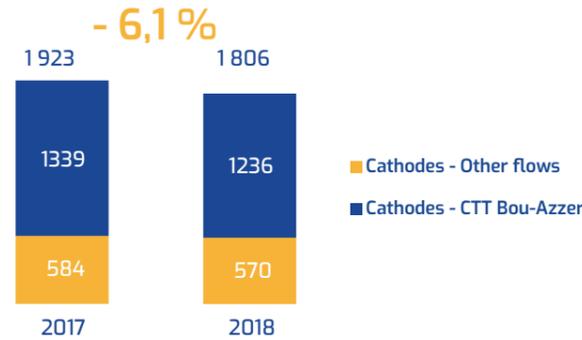
### CHALLENGING CONDITIONS

Having seen significant increases over a number of years, the value of Cobalt declined remarkably and dramatically during the second half of 2018, with its market price falling by 50% between May and November (from USD43.98 to USD21.99). The Cobalt market remains significantly impacted by the continuous increase in demand from manufacturing industries, the boom in mobile technology and the transformation of the automotive industry, the situation in the Democratic Republic of the Congo (the leading producer of this ore) with its political instability and particular geographic features - both of which influence productivity - and the abundance of Cobalt supplies.

The Managem Group operates in the global Cobalt market through its subsidiary CTT, which operates one of the very few primary Cobalt mines in the world: the Bou-Azzer mine to the south of Ouarzazate in Morocco. Managem Group subsidiary CTT operates in hydrometallurgy, where it leads the Moroccan market. The CTT industrial complex produces and markets the internationally patented and respected CMBA brand of Cobalt cathode.

### A SLIGHT DECLINE IN COBALT CATHODE PRODUCTION

Cobalt production in MT 2017/2018



The Group carries out industrial processing of cobalt from external sources.

Lower levels of by-product production.

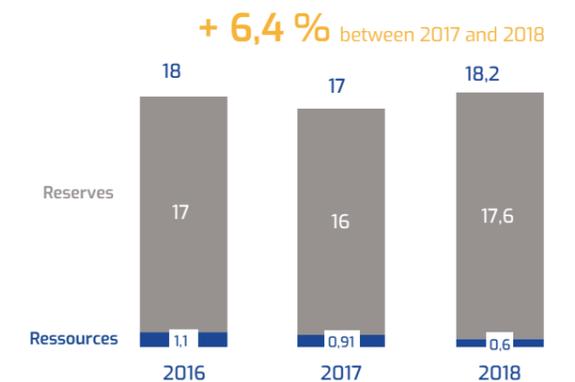
### A PROACTIVE STRATEGY

In 2018, the Group produced 1,807 tonnes of Cobalt metal, reflecting a slight reduction of 6% on 2017. To meet tomorrow's challenges today, the Managem Group is committed to expanding its Cobalt business by anticipating change. For this purpose, the Group is guided by a diversification plan with different time frames to ensure the best-possible response to the requirements of its present and future customers. To ensure the long-term development of its Bou-Azzer mine, the Group has stepped up its exploration and research activities in the vicinity of its operating sites, investing around 40 million MMAD in these activities last year. The expansion of the exploration programme in 2018 resulted in the discovery of new reserves that extend the working life of the Bou-Azzer mine by two years.

### NEW MINING RESERVES DISCOVERED AT BOU-AZZER, EXTENDING ITS LIFE BY 2 YEARS

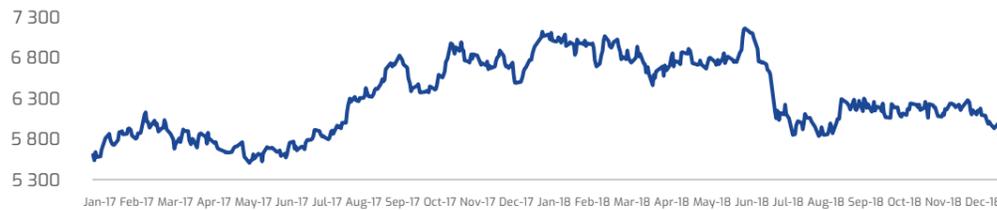
During 2018 in the Democratic Republic of the Congo, the Group completed the feasibility study for the Pumpi project in which it holds a 20% stake in partnership with Wanbao Mining (75%) and the Congolese Government (5%). This major project illustrates and bolsters the African ambitions of the Group. With targeted reserves of 95,000 tonnes of Cobalt and 570,000 tonnes of Copper, the project aims to produce 5,000 tonnes of Cobalt Concentrate.

CTT Cobalt Resources and Reserves (KT) 2016-2018



## COPPER : THE RAW MATERIAL OF TOMORROW

Copper price trend between January 2017 and December 2018



AVERAGE PRICE IN 2018 : 6 526  
 AVERAGE PRICE IN 2017 : 6 163  
 YEAR-ON-YEAR TREND : +5.9%

Managem produces Copper Concentrate from several mining assets operated by its subsidiaries AGM, CMG and SOMIFER in Morocco. The Copper operations date back to more than 25 years, having begun in 1982 with the opening of the Beida mine in eastern Morocco. Today, the Group has a number of assets on the African continent, mines in production, assets in the course of exploration, and projects under development, such as Pumpi in the DRC and Tizert in Morocco.

### STRONGER SUPPLY AND DEMAND

Copper prices went in two opposing directions during the two halves of 2018. Having trended upwards in the first half of the year (up 20% on the same period of 2017 and 12% year-on-year), the value of Copper fell by 11% in the second half to an average of USD5,953, compared with the first half average of USD6,692. The high global demand for Copper is expected to increase in 2018. Chinese demand increased by 4.4% year-on-year during 2018.

The growing production demand driven by the electric car and sustainable energy technology industries is the main explanation for the resurgence of global interest in Copper. Although demand was particularly strong, 2018 also saw a 2.8% increase in mining supply as a result of the absence of any disruption to mining operations.

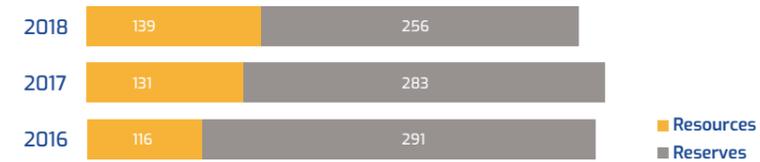
### AMBITIOUS PROJECTS

The Managem Group is committed to boosting its productivity and quality through a proactive policy of cost controls and strong R&D support. In 2018, the Group produced a total of 114,432,000 tonnes of Copper. The Group continues to pursue its strategy of developing and growing its Copper business on the basis of its Tizert and Pumpi projects.

## COPPER PRODUCTION STABLE AT AROUND 115 KT

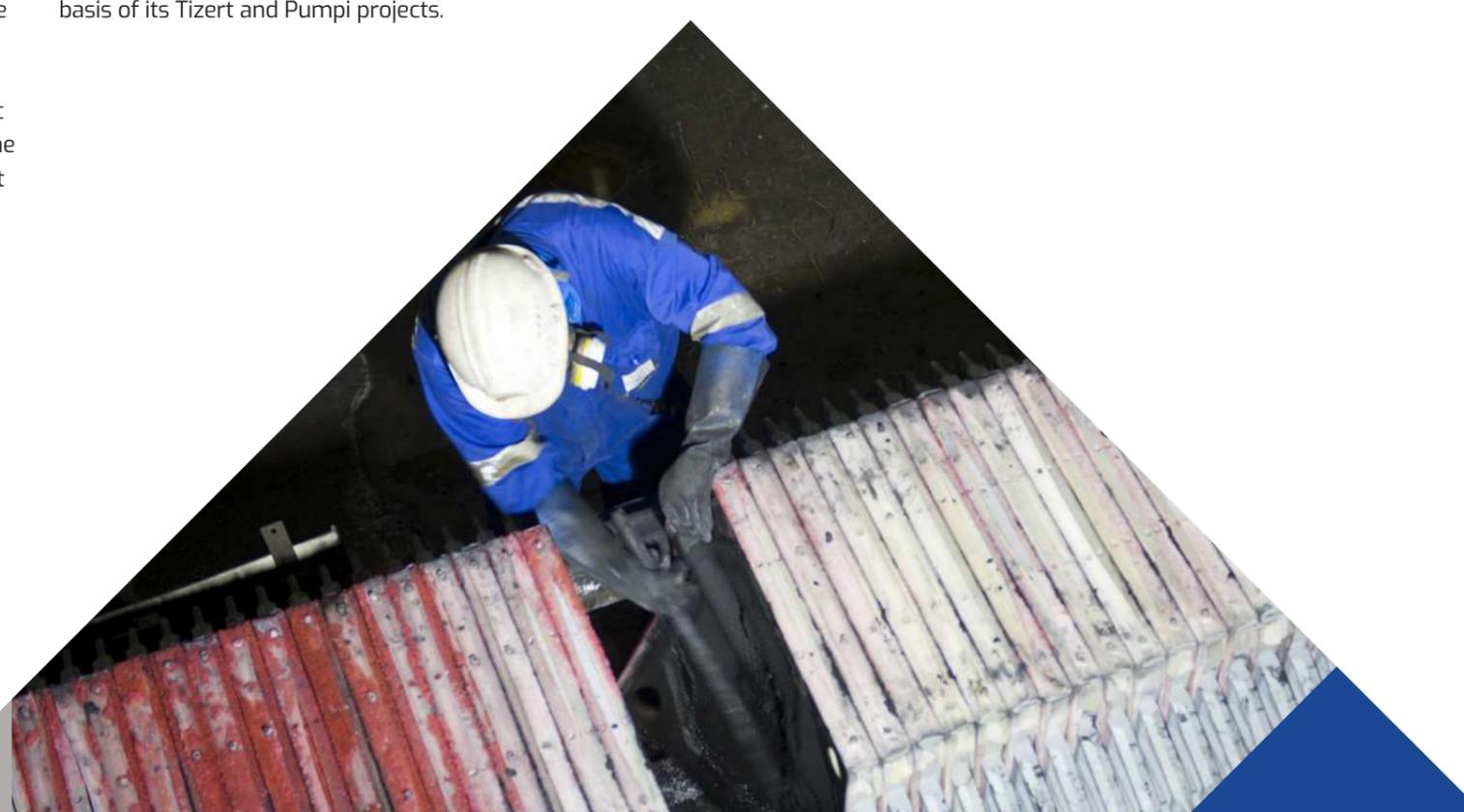
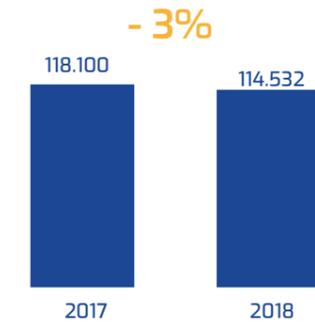
2018 also saw an acceleration of the Tizert project. Located in the Moroccan province of Taroudant, the Tizert project is a high-potential deposit with resources estimated at 657,000 tonnes of metal content. With this project, the Managem Group expects to double its Copper production by 2021. In 2018, the Group continued its exploration work on this project site and completed its Trade Off. A feasibility study will be conducted in 2019 with external international engineering support to determine the optimal operating method for this site. The Pumpi project in the RDC is another major project, and is conducted in conjunction with our partner the Chinese Wanbao Mining Group. This project embodies the Group's African ambitions, is being developed jointly with a respected partner, and reflects Managem's ongoing pursuit of its strategic goals. After 10 years of considerable exploration by Managem Group geologists and following preparation of an evaluation report indicating the discovery of a mineral resource totalling 660,000 tonnes of Copper, the project feasibility study was completed in 2018.

Resources and Reserves in Thousands of Tonnes of Metal



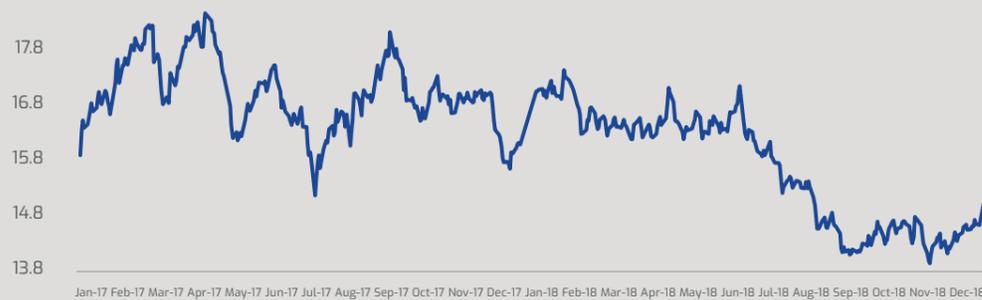
*A slight decrease in reserves was partly offset by an increase in measured and indicated resources.*

Copper Production (TC)



## SILVER : TOWARDS MORE PRODUCTIVITY AND GEOLOGICAL PRECISION

Silver price trend between January 2017 and December 2018



AVERAGE PRICE IN 2018 : 15.7  
 AVERAGE PRICE IN 2017 : 17.05  
 YEAR-ON-YEAR TREND : - 8 %

Managem Group Silver operations are handled by its subsidiary Société Métallurgique d'Imiter (SMI), which operates the Imiter Mine, 150 km east of Ouarzazate in Morocco. SMI produces high-purity Silver metal (99.5% silver) in the form of Silver anodes. The Group's silver operations began with the reclamation of Silver from the tailings of the Imiter mine in 1969, since when, SMI has pursued an ambitious development programme for the mine. Thanks to a large amount of exploratory work carried out with the assistance of the Group's R&D teams, SMI was ultimately able to develop a sustainable silver reclamation business.

Listed on the Casablanca Stock Exchange since 1996, Managem Group subsidiary SMI is one of Africa's leading producers of primary Silver.

In the first half of 2018, the price of Silver began to trend downwards, preceding a significant 11% decline in the second half of the year. As a result, the price fell from USD17.20 at the end of June to USD15 at the year end. The close and historical correlation between Silver and Gold price trends seems to be more nuanced than previously: at around 85 in 2018, the Gold/Silver ratio reached its highest point in more than 25 years. The world's leading producers of Silver are Mexico, Peru, China, Australia and Chile. 2018 saw production plateau, with a resumption of extraction in Central and South America, as well as an increase in production of Zinc and Lead, of which Silver is a by-product.

### INCREASED PRODUCTION

In terms of Group output, SMI maintained its level of Silver production. The policy of adaptation implemented by the Group meant that the reduction seen in ore grade was offset by a 10% increase in tonnage processed during the second half of 2018. SMI has committed to a 100 MMAD capital expenditure investment programme focused on developing the mine, with a further 80 MMAD earmarked for exploration.



### RESULTS FOR SMI

Indicators in MMAD	2018	Year-on-year trend vs. 2017
Turnover	678	- 40%
EBIT	136	- 76%
Net income	- 150	- 146%
Operating income/loss	- 19	- 19%
Financial Income	- 179	>100%

A significant improvement in SMI fundamentals in H2 2018.

As part of the measures implemented to offset the decline in grade, the Managem Group stepped up its investment and focused on the completion of an industrial unit designed to boost production by recovering mine tailings on the surface of the dyke. The SMI dyke reclamation plant was completed in 2018 at a cost of 105 MMAD, and is expected to produce 30 tonnes of Silver metal per year. Production began in the first quarter of 2019. The Managem Group is committed to stepping up its geological activity on the Imiter site. The Imiter mine has an estimated operating life of 12 years, but also significant potential for expansion, with more than 5,900 MT of resources and reserves combined. In 2018, the Group stepped up its new programme of exploration for new independent deposits, and introduced new hi-tech systems to support geological data processing and mining operations scheduling at SMI.

### INVESTMENT AT SMI IN 2018

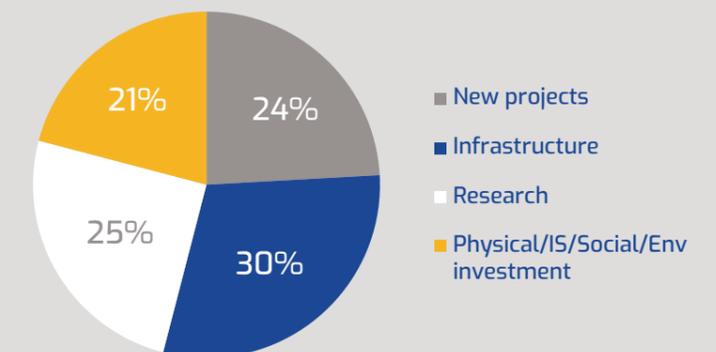
## CONTINUED INVESTMENT IN DEVELOPING THE MINE, DESPITE THE DECLINE IN RESULTS

CFO of 100 MMAD, despite the reduction in grade.

CAPEX of 300 MMAD in 2018 :

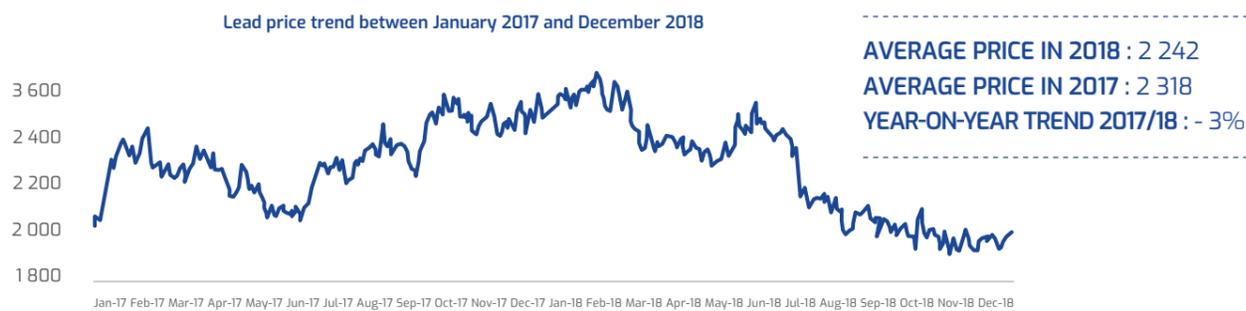
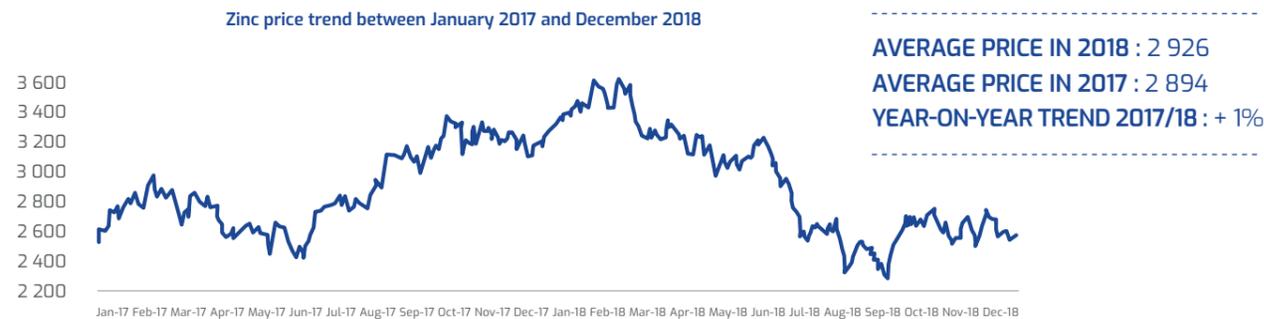
- CAPEX of 80 MMAD in exploration ;
- CAPEX of 80 MMAD in the dyke project (30 MT of silver) ;
- CAPEX of 100 MMAD to accelerate development of the mine.

Distribution of investment



## ZINC AND LEAD

The Managem Group produces the vast majority of its Zinc and Lead from three polymetals mines in the Marrakesh region of Morocco : Hajjar, Tighardine and Draâ Sfar. The Managem Group has been involved in polymetals since 1988 via its subsidiary CMG (Compagnie Minière de Guemassa), which produces primarily Zinc and Lead concentrates. The Group applies its hydrometallurgy expertise to produce Zinc Oxide as well.



Although production of Zinc and Lead Concentrate fell by 2% and 22% respectively due to a decrease in average grades processed and lower plant efficiency for these two metals, the resulting impacts were offset by a significant 12% increase in the tonnage processed. Zinc Oxide production also increased by 6% in terms of tonnage processed in 2018. The Managem Group maintained its level of research and exploration to ensure the long-term future and sustainability of this activity. 2018 was also marked by the discovery of new Polymetals reserves, extending the operating life of both sites by a further two years, or around 2.5 million tonnes run-of-mine. Since 2016, we have seen a continuous increase in resources (+7% over 3 years) and reserves, which totalled 581 tonnes of metal at the end of 2018.

## ZINC PRODUCTION UNCHANGED, BUT IMPACTED BY GRADES



*Production impacted by the decrease in concentrate grades in 2018.*

*Discovery of 2.5 million tonnes (run-of-mine) extending the operating life of CMG by 2 years.*

## ZINC : A YEAR OF CONTRASTS

In 2018, Zinc was affected by two contradictory trends. Following a significant recovery in prices at the beginning of the year, the value of Zinc fell by around 21% to an average of USD2,584 in the second half. Despite a slightly higher level of mining supply, the world market is nevertheless poised to see a significant increase in demand for Zinc driven by its use in batteries for electric cars, the result of which will be to drive prices higher. World demand was therefore concentrated around the automotive sectors, with demand from infrastructures and construction rising by 3.3% in 2018.

## LEAD : RISING CONSUMPTION, FALLING MINING SUPPLY

The price of Lead fell back by around 17% in the second half of 2018, compared with the first half of the year. World consumption and demand both increased very slightly by 1% in 2018.

### FALLING MINING SUPPLY

Chinese mining supply fell significantly during the year as a result of environmental constraints impacting global supply, despite operations at several mines in Australia, South Africa and Peru. In fact, world production declined by 2.9% during the first ten months of 2018. The automotive industry is expected to see a very significant migration from internal combustion engines to electric vehicles in the near future, which will have significant knock-on effects for the Lead market.

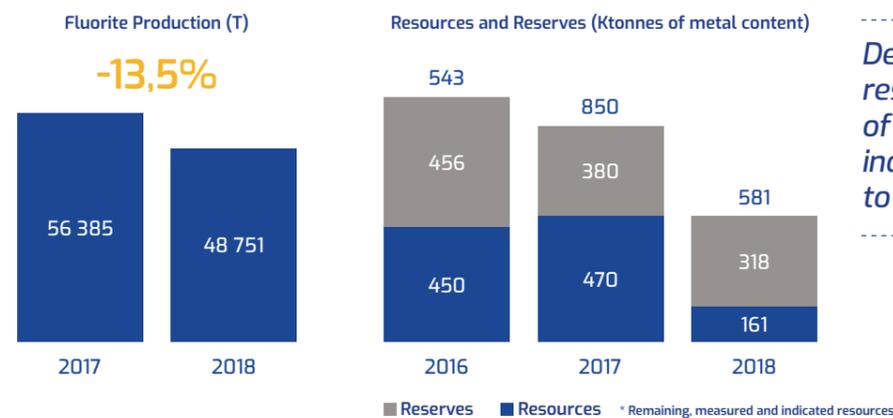
## FLUORITE : POSITIVE OUTLOOK

The Managem Group produces Fluorite concentrate from the El Hammam deposit operated by its Samine subsidiary. This company is one of the world's leading producers of Fluorite, and exports its product to a broad customer base worldwide. The mine is known for its production of extremely high-quality concentrate with 98% CaF2 content. The 14% reduction in the production of Fluorite concentrate is explained by the decline in ore grades processed. 2018 also saw a decrease in resources as a result of the 'downgrading' of part of previous years' indicated resources to inferred resources.



### HIGHER FLUORITE PRICES

### AND A POSITIVE OUTLOOK FOR THE SAMINE PLAN



*Decrease in resources as a result of the 'downgrading' of part of previous years' indicated resources to inferred resources.*

However, as the Fluorite price rises, the outlook for this activity is positive.

Against this background, the Managem Group is consolidating its development strategy focusing on product diversification and identifying new opportunities for growth in the Fluorite segment. In this context, Managem exploration and R&D provide a continuous source of innovation.

In 2016, R&D outcomes enabled the development of a new product targeting the cement production plant market in Morocco. Known as metallurgical Fluorite, this product lowers the melting point of metals. It therefore reduces heat consumption and ensures a good level of clinker reactivity in furnaces (clinker is an ingredient of cement).

## THE ESSENTIALS

# Capital and Stock Market Performance

**Managem is a Moroccan limited company and a subsidiary of Al Mada - Positive Impact, a Pan-African private equity investment fund based in Casablanca.**

### SHAREHOLDING STRUCTURE

- 81,42 % Al Mada
- 9,54 % Free float
- 8,26% CIMR
- 0,77% Wafa Assurance

Managem was floated on the stock market in July 2000. Shares representing 25% of its equity capital are listed in the 1st Compartment of the Casablanca Stock Exchange and traded under the code MNG. The total amount raised by the market flotation was 1,172 MMAD at a sTri-Ke price of 551 MAD per share. Managem raised a further 973,319,921 MAD with a capital increase in 2017.

In 2018, Managem joined the ESG10, a non-financial index that measures the CSR performance of listed companies based on environmental, social and good governance criteria.



# THE ESSENTIALS

## Governance



### BOARD OF DIRECTORS

The Managem Board Directors has 8 members whose responsibility is to supervise the best corporate interests of the company. The Board of Directors sets the strategic guidelines for the company and oversees their implementation.

The Chairman & Chief Executive Officer is a member of the Board of Directors, and represents the Company in its dealings with third parties. As Chairman of the Board of Directors, he structures and guides the work of the Board in accordance with all legal provisions and requirements.

BOARD MEMBERS AT 31 DECEMBER 2018 :

**M. Imad TOUMI** - Chairman & Chief Executive Officer  
**M. Ramsès ARROUB** - Director  
**M. Bassim JAÏ HOKIMI** - Director  
**M<sup>me</sup> Noufissa KESSAR** - Director  
**M. Hassan OURIAGLI** - Director  
**ONHYM** - Represented by **M<sup>me</sup> Amina BENKHADRA** - Director  
**SIGER** - Represented by **M. Hassan OURIAGLI** - Director  
**AL MADA** - Represented by **M. Aymane TAU** - Director

### THE EXECUTIVE COMMITTEE

Reporting to the Chairman and Chief Executive Officer, the members of the Executive Committee are divisional directors and heads of central services entities. The committee has responsibility for managing corporate strategy, coordinates the implementation of strategic guidelines and monitors the achievement of targets.

**Imad TOUMI** : Chairman & Chief Executive Officer ;  
**Youssef EL HAJJAM** : General Manager, International Activities and Development ;  
**Naoual ZINE** : Deputy General Manager, Strategy and Finance ;  
**Amine AFSAHI** : Executive Director, Sales & Marketing ;  
**Zakaria RBII** : Executive Director, Human Resources, Communication & Sustainable Development ;  
**Lhou MAACHA** : Executive Director, Exploration ;  
**Omar NAIMI** : Director, Purchasing, Procurement & Logistics.

In 2018, the Executive Committee gained the expertise of Zakaria RBII and Omar NAIMI, who bring to Managem their insights gained from exemplary previous career

experience across a diverse range of expertise. Mohammed CHERRAT, our former Executive Director, Human Resources, Communication & Sustainable Development has now retired, and Ismail AKALAY, our former General Manager, Mining and Industrial Activities Morocco, has moved on to new challenges outside the company.

### SPECIALIST COMMITTEES

Over recent years, the Board of Directors has formed a number of specialist committees : the Strategy Committee, the Risks and Accounts Committee, the Appointments & Remuneration Committee, the Senior Purchasing Committee and the Investment Committee.

All these committees work within the powers and delegated authorities granted them by the Board of Directors of Managem S.A. in accordance with the legislation governing Moroccan limited companies. They review issues submitted to them by the Board for their opinion, and report their proceedings, opinions and recommendations at board meetings.

### EXECUTIVE COMMITTEE

#### Imad TOUMI

Chairman & Chief Executive Officer  
 Imad Toumi is a graduate of the École Polytechnique (Class of 1982), holds a PhD from the University of Paris 6 and an MBA from the Hautes Études Commerciales business school in Paris (MBA HEC 2000), and has more than 20 years' experience in energy and mining industry project management. Having begun his career with the French Atomic Energy Commission (CEA), he joined AREVA in 2002 where he held several posts, including CEO of AREVA South Africa, followed by AREVA Niger. He was also a board member of AREVA's Mining Group and director of several mining companies in Africa and Canada.

#### Youssef EL HAJJAM

General Manager, International Activities and Development  
 Having graduated from the École Polytechnique in 1993, Youssef EL Hajjam joined Managem as a processing engineer at CTT Guemassa in 1995 following his graduation from the École des Mines de Paris. He then held several executive positions in hydrometallurgy, including Hydro II Project Manager and Cobalt II Plant Operations Manager. In 2002, he joined the engineering division as its Project Director. His next appointment was as Director of the SAMINE mine. In 2005, he was Technical Director for mining operations, before moving on to a new role as Development Director. In 2008, he was appointed as General Manager of the Precious Metals Division. Since May 2016, Youssef EL HAJJAM has been

General Manager, International Activities and Development.

#### NAOUAL ZINE

Deputy General Manager, Strategy and Finance  
 On her graduation from the École Mohammedia des Ingénieurs engineering graduate school in 1998, Naoual ZINE joined Managem, where she was given responsibility for managing the Imiter (SMI) silver processing plant expansion project. The following year, she was given full responsibility for mining planning at SMI. Having later assumed full operational responsibility for all mine operational functions, she moved on in 2001 to take up corporate responsibility for harmonising management processes across all Group mines.

In 2003, she joined the senior management team for mining operations in Morocco as Head of Business Management Control. From 2005 onwards, she had responsibility for setting up the General Compliance Department, which combines the three management functions of the Group governance structure: strategic management control, internal audit and risk management. In May 2009, as Chief Financial Officer and Head of Corporate Management Control, Naoual ZINE successfully restructured the commodities and currency hedging structure, and migrated the Managem financial reporting system to International Financing Reporting Standards (IFRS) compliance. In May 2016, she was appointed to head up both the Strategy and Finance departments, with responsibility for Group development strategy management and implementation.

**Mohamed AMINE AFSAHI**  
Executive Director, Sales & Marketing

Having graduated from the Ecole Spéciale des Travaux Publics de Paris in 1992, Mohamed AMINE AFSAHI gained his MBA at the École des Ponts et Chaussées in 2005. He joined the Managem Group in March 1993, and gained his first experience with the Group in the maintenance department of CMG as a method manager. In 1997, he joined the Economic Intelligence Development & Water & Environment Business Line Development Department. In 2000, he was appointed Deputy Director for Water & Sanitation, and was seconded to Veolia-Tétouan. In 2004, he returned to the Group to head up Risk Management

& Corporate Management Control. In 2005, he was appointed Director of Purchasing & Logistics, followed in 2008 by General Manager, Support Activities, with the combination of REMINEX ingénierie and TECHSUB. In 2011, he was appointed as Head of Major Reclamation Projects. Since 2013, he has had full responsibility for the sales and marketing of Managem products.

**Lhou MAACHA**

**Executive Director, Exploration**  
With 29 years of experience in exploration, project generation and development in Morocco and internationally, Lhou Maacha has a PhD in Geophysics and Metallogeny (2013), a Masters from Cadi Ayyad University in 1994, and a State engineering degree (1989). He began his career as a mining geologist at the Hajjar polymetals mine, the Bou-Azzer Cobalt mine and the Beida Copper mine. He was then appointed Group Director of Exploration and subsequently General Manager of Exploration and Development. His expertise spans several types of mineralisation and commodities, but especially precious metals, base metals, Cobalt and magmatic mineralisations. He has also been Director of Operations at Managem. He is a director of several Group subsidiaries and Vice-Chairman of the Moroccan Association of Earth Sciences in Morocco. In the academic world, Lhou MAACHA has developed partnerships with universities and research institutes in Morocco and around the world, and has published more than 50 scientific articles and four books on the Geosciences.

**Zakaria RBII**

**Executive Director, Human Resources, Communication & Sustainable Development**  
An engineering graduate of the École des Ponts, Zakaria RBII began his career in Human Resources at ST Microelectronics, before moving on to a series of Human Resources roles in a number of different industry sectors, from consumer products to automotive. He was Unilever's Human Resources Director for Morocco, Algeria and Tunisia, and has also worked for Mondelez and Toyota. His career experience spans a number of different countries, including Morocco, Algeria, Tunisia and China. He is also Chairman of the Moroccan National Association of Human Resources Managers and Trainers (AGEF). After 7 years at Centrale Danone, Zakaria RBII joined Managem as Head of its Human Resources, Communication & Sustainable Development Department in 2018.

**Omar NAIMI**

**Director, Purchasing, Procurement & Logistics**  
Omar Naimi is a graduate of the Mohammedia Engineering Graduate School, and began his career at the Bou-Azzer mine before gaining expatriate experience at Semafo in Guinea. He has held a number of positions at Managem, including Director of Operations at AGM, Director of TECHSUB and Director of International Operations prior to his current appointment as Director, Purchasing, Procurement & Logistics.

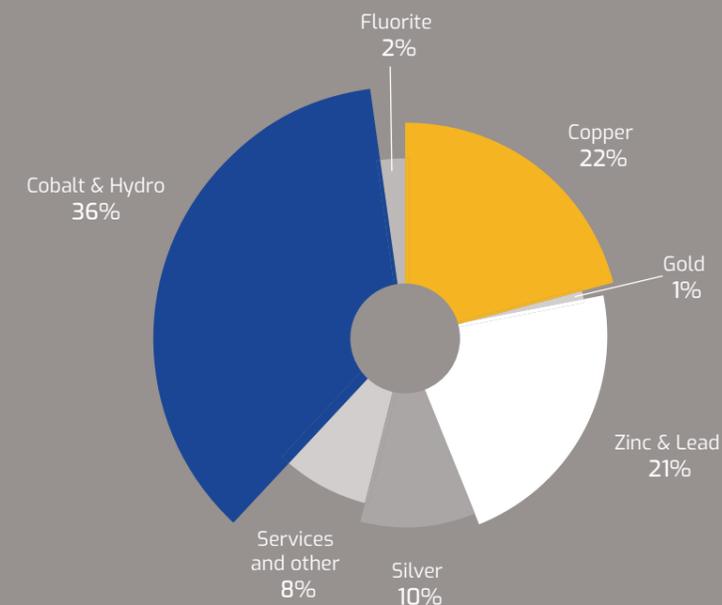
# THE ESSENTIALS

## Financial Performance

### Consolidated results (under IFRS) Change in consolidated key indicators under IFRS at end 2018

Summary of IFRS key indicators	In MMAD		Change vs. 2017	
	31/12/2018	31/12/2017	In MMAD	In %
Turnover	4 356,5	5 199,5	-843 ,0	-16%
Earnings Before Interest and Taxes (EBIT)	1 323,1	1 905,7	-582 ,6	-31%
Current operating income	461,4	902,5	-441,1	-49%
Operating income or loss	669,4	1 334,7	-665,2	-50%
Financial income	-230,3	-194,2	-36,1	19%
Income before tax	439,1	1 140,5	-701,4	-61%
Consolidated net income	345,2	924,6	-579 ,4	-63%
Net Income Group Share	369,7	879,1	-509,4	-58%
Cashflow from operations	1 000,7	1 584,8	-584,1	-37%

**EBIT contribution by metal (MMAD)**  
Group EBIT of 1,323.1 MMAD breaks down as follows by activity and metal



### HEDGES

- Commodities hedges generated a positive balance of 3.3 MUSD, of which 1.2 MUSD related to Silver, and 1.3 MUSD to Copper.
- The loss on currency hedges was 65.1 MMAD as a result of settling USD 84.5 million at an average hedging rate of 8.54, compared with the market rate of 9.32.

Hedging Balance at 31/12/2018

Métaux / Forex rate	USD/MAD	Ag	Cu	Zn	Pb
Hedged positions	84,5 MUSD	972 000	6 100 MT	7 700 MT	1 850 MT
Average commitment price	8,54	17,0 USD/Oz	6 759 USD/t	2 825 USD/t	2 342 USD/t
Average Closing Price	9,32	15,7 USD/Oz	6 543 USD/t	2 745 USD/t	2 283 USD/t
Hedging balance	-65,1 MMAD	1,2 MUSD	1,3 MUSD	0,6 MUSD	0,1 MUSD

Commodities and foreign exchange hedging commitments at 31/12/2018

Underlying	Year	Protection (Oz/T)	Protection price (USD/T/Oz)	Commitment (Oz/T)	Commitment price (USD/T/Oz)	Hedge Ratio
Copper	2019	2 100	6 184	2 100	6 302	11%
Zinc	2019	3 270	2 536	3 270	2 614	13%
Lead	2019	240	2 000	240	2 000	4%
Gold (CTT)	2019	150	1 250	150	1 250	3%
USD/MAD	2019	26 500 000	8,54	26 500 000	8,54	5,6%

MARK TO MARKET

Mark to Market of the Hedging Book at 31/12/2018

At the end of December 2018, the Mark to Market of hedging positions was :

- 813 KUSD for commodities, compared with -524 KUSD at end December 2017, i.e. a positive variance of +1,337 KUSD.
- -26,717 KMAD for foreign exchange derivatives, compared with -85,281 KMAD at end 2017, i.e. a variance of +58,565 KMAD.

This change is explained principally by the settlement of foreign exchange positions.

Commodity	31/12/2017	31/12/2018	Variance
Silver	-6	0	6
Copper	-341	517	858
Zinc	-178	306	484
Lead	1	-5	-6
MtM in KUSD	-524	813	1 337

MtM impacting equity	-524	813	1 337
MtM impacting P&L	0	0	0

Foreign exchange derivatives	31/12/2017	31/12/2018	Variance
In Cash Flow Hedge (CFH)	-85 281	-26 717	58 565
In Trading	0	0	0
Total MtM KMAD	-85 281	-26 717	58 565

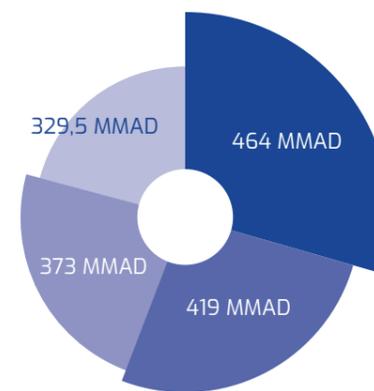
INVESTMENTS

As part of supporting its development plan, the Group made a sustained level of investment during the year at a level 39% higher than in the previous year. Consolidated investments recognised at the end of 2018 (under IFRS) totalled 1,703 MMAD.

39%

of consolidated investments (under IFRS) were devoted to new development projects.

Total investment in 2018:

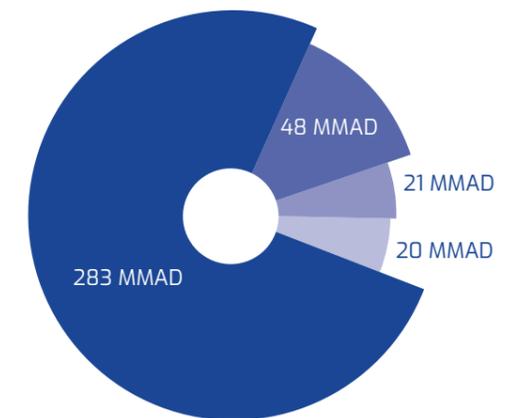


- Investment in the Group's new development projects (led by the MANUB extension at 280 MMAD, the SMI plant extension at 75 MMAD and the feasibility studies for strategic Group projects at 77 MMAD).
- Physical/IS/Social & environmental investments.
- Research & Development, including new project development.
- Infrastructures.

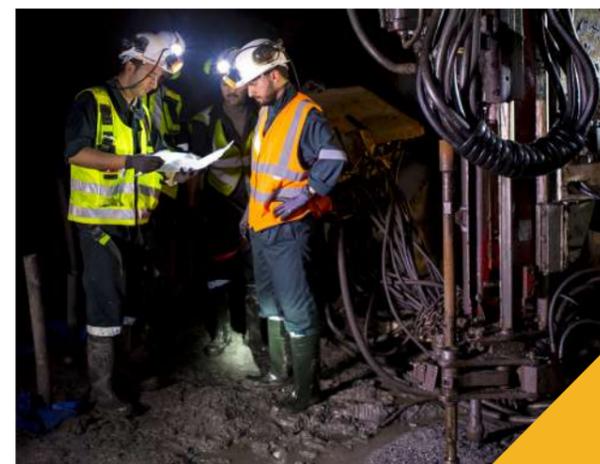
76%

of investment was dedicated to exploration around production sites to renew reserves and discover new deposits.

2018 investment in exploration :



- Exploration around existing operating sites to renew exhausted reserves .
- Gold exploration in Sudan.
- Exploration and certification work for the Tri-K Gold project.
- Exploration and certification work for the Tizert Copper project.



MANAGEM... PROACTIVE WITHIN ITS ECOSYSTEM

# Strong values and unshakeable unity

Both driving force and assets in their own right, the Group's core values crystallise a mindset focused on a shared vision that guides the ambitions of Managem and the daily actions of its employees. As symbols of concerted unity, they are the cornerstone of the Group's organisational structure and the founding principles of the Group's engagement with the issues and challenges defined by its growth strategy.

## WELFARE

- This means making employee health and safety one of our most important priorities, and putting people at the heart of our concerns ;
- It also means protecting our environment and taking care of local communities in ways that promote and facilitate their development.

## INTEGRITY

- This means delivering on our commitments and being loyal, honest, fair and respectful in all circumstances as the basis for securing and retaining the satisfaction and trust of our internal and external customers.

## AUDACITY

- This means perpetuating the Group's pioneering spirit and carrying it forward so that we continue to create value and explore new frontiers ;
- It also means being innovative, agile, resilient and having the confidence to renew our business through transformation.

## COMMITMENT

- This means making an active contribution to building tomorrow's world by targeting excellence, all working towards the same targets, and thinking collectively and individually as leaders by taking the action required to achieve our shared ambitions.

## EMPLOYEE WELLBEING, A GROUP-WIDE PRIORITY

Developing its people is a central focus for Managem. Throughout the year, the Managem Group runs local initiatives and events for employees and their families. In line with its vision in which its human capital is crucial to the Group, Managem continued its long-term commitment to the wellbeing of its people during 2018.

## IMPROVING THE RANGE OF WELFARE BENEFITS TO MEET EMPLOYEE EXPECTATIONS MORE EFFECTIVELY

In 2018, the Managem Group extended its CSR charter with the inclusion of an updated commitment to developing its human capital through the provision of targeted training programmes, improved occupational health and safety, career development opportunities and higher levels of occupational wellbeing. Accounting for around half its employee welfare budget, child-focused initiatives are very important to the Group. The majority of these initiatives are structured around summer camps and the Achoura and High Achievers programmes. A total of 1,255 children were able to enjoy visits to summer camps in 2018. Another high point of the year was the traditional Achoura Day event, when the Managem Group delighted more than 7,000 of its employees' children with free toys. Because tomorrow's successes will be their successes, Managem encourages academic excellence by rewarding the highest achieving of its employees' children with holidays packed with activities and fun.

**1255**  
Children attended  
summer camps.

**152**  
high achievers  
rewarded.

## PROMOTING WELLBEING THROUGH SPORT

Because sport can be extremely valuable in developing team spirit and the quest for performance, sporting initiative is strongly supported at Managem. In 2018, Managem encouraged all its employees to get involved with physical activities by competing in a number of sporting events, including the Marrakesh International Marathon, the Bouskoura 15K and the Casablanca Marathon.



# CSR, a proven commitment

The Managem commitment to sustainable development directly reflects its ambition to become an effective, high-profile force in social responsibility. Its policy is reflected in the Group's business activities, its significant level of investment in CSR issues and its programme of responsible initiatives.

## COMMITTED TO COMMUNITIES

Building trust-based relationships with the communities who lived near its facilities is a Managem priority, and in 2018, the Group took its community initiatives to a new level. In the Managem context, this means taking positive action in the often isolated regions where the Group operates by meeting the specific needs of local communities. In 2018, its community commitment was underlined by the introduction of a CSR charter that embraces these issues alongside other commitments, highlighting the Group's own vision of sustainable development.

## A CSR CHARTER SETTING OUT THE GROUP'S GUIDING PRINCIPLES

- PROTECTING THE HEALTH & SAFETY OF OUR PEOPLE
- VALUING & DEVELOPING THE GROUP'S HUMAN CAPITAL
- CONTRIBUTING TO SOCIO-ECONOMIC DEVELOPMENT IN OUR OPERATING REGIONS IN MOROCCO AND INTERNATIONALLY
- ENSURING FULL COMPLIANCE WITH THE RULES OF RESPONSIBLE GOVERNANCE
- RESPECTING HUMAN RIGHTS
- ENSURING FULL COMPLIANCE WITH THE RULES OF BUSINESS ETHICS AND MARKET REGULATIONS
- PROTECTING THE ENVIRONMENT



## ENTREPRENEURSHIP, BELIEVING IN THE FUTURE OF OUR OPERATING REGIONS

For 90 years, the Group has been the main corporate entity in its operating areas, and its business activities have generated continual two-way prosperity through the commitment of Managem and its subsidiaries to a policy of recruiting local people as part of its contribution to boosting the employability of local communities. The impact of the Group's presence in remote areas can also be seen in the creation of local subcontract businesses and inward investment by national companies, both of which promote and facilitate the use of local skills. Another major aspect of entrepreneurship encouraged by the Managem Group is the development of income-generating activities and the provision of support for the implementation of successful entrepreneurial ideas. This aspect is specifically designed to encourage local communities to become proactive in managing their own socio-economic development.

2018 investment in employee welfare :

**+46%**

**28% of investment dedicated to encouraging a greater level of entrepreneurship in local communities.**

**4 regions positively impacted by Group contributions to kick-starting self-employed entrepreneurship.**



## PRACTICAL INITIATIVES WITHIN LOCAL ECOSYSTEMS

As part of promoting the autonomy of the communities it works in, the Group has contributed to setting up a project to breed alpine goats and market dairy produce at Tanssifte in Morocco's Zagora province.

The Group also implements one-off community initiatives, such as the back-to-school campaign that distributed school kits to 175 children in Had Ait Mimoun, Bouqachmir and Khmisset in Morocco. With the same objective of empowering local communities, the Group has introduced an artisan crafts training programme in the Kasbah at Imider, which has been refurbished and repurposed as a training centre. Other measures, each focusing on a different dimension of community development in the Group's operating regions, also underline the Managem commitment to the communities it works among. In Moulay Brahim-EL Haouz, the Group helps 192 children from 8 villages to receive schooling by providing the school transport they need. At Bleida - Zagora, the Group focus is on improving school facilities by contributing to the construction of classrooms, toilet blocks and a preschool unit.

Lastly, the Group has provided Boutrouch-Tiznit with wells, pumps and pipes for easier access to water, which is not only a resource essential to life, but also key to improving living conditions.

## INNOVATIVE PARTNERSHIPS TO ENCOURAGE ENTREPRENEURSHIP... AMONG YOUNG PEOPLE

Entrepreneurship is an essential building block on the long road to sustainable development, and a culture that can be encouraged and nurtured from an early age. The Managem Group works alongside the non-profit organisation INJAZ Al-Maghrib to pursue their shared aspirations of creating positive impacts. The partnership gained new momentum in 2018, with the development and launch of programmes targeting primary and secondary school students, as well as 22 cooperatives and local non-profits. During the year, the Managem Group and Injaz Al-Maghrib signed a new partnership agreement to roll out a series of entrepreneurship training programmes. Under the aegis of the Al Mada Foundation, this partnership is being developed with support from the Moroccan Ministry of National Education, and is part of its strategic vision for 2015-2030. By pooling their expertise, INJAZ Al-Maghrib and Managem have developed 3 entrepreneurship programmes for people of all ages, from the youngest to adults of working age.

*"Our partnership with Injaz aligns perfectly with the action priorities of the Al Mada Foundation. It strengthens our commitment as a business that actively contributes to the sustainable development of the regions it operates in through societal initiatives that deliver positive impact".*

**Imad Toumi, Chairman & CEO of Managem**



**TARGET GROUP :** Children of primary school age.

**AIM :** To introduce children to how the local economy works and raise their awareness of entrepreneurship.

**245 children were involved in the first round of the programme.**

**16 classes were involved in the pilot phase of the programme.**

**20 teachers have been trained in teaching the values of entrepreneurship.**

### "JAMAATI", CULTIVATING CREATIVITY, CURIOSITY, TEAMWORK AND INITIATIVE FROM THE EARLIEST AGE

The "jamaati" programme is designed for children of primary school age. Launched exclusively in rural areas, this initiative is a first for INJAZ AL-Maghrib, which had previously offered its programmes from secondary school onwards, and is now extending it to include this more elementary level of school education. The learning programme is provided for more than 400 students in the Draâ-Tafilalet region and the province of Al Haouz in Morocco. "jamaati" introduces students to local government and the local economy, at the same time as giving them a first taste of the jobs that contribute to daily life within their communities. Like the 11 other Injaz AL-Maghrib training programmes developed by the Junior Achievement Worldwide global non-profit youth organisation and based on Learning by Doing, the "jamaati" programme is designed to raise the awareness of young people and teachers to the importance of acquiring entrepreneurial attitudes and skills that will contribute to expanding their personal horizons in ways that lead on to social and professional success.

**TARGET GROUP :** Children of secondary school age.

**AIM :** To familiarise these children with the concept of entrepreneurship through real-life examples of entrepreneurial success and fun activities.

**16 volunteer advisers from Managem.**

**170 children have completed the programme so far.**

### "IT'S MY BUSINESS", ENABLING TALENTED PEOPLE TO EMERGE THROUGH TEAMWORK, PUBLIC SPEAKING, MOTIVATION AND THE CULTURE OF RISK-TAKING AND SUCCESS.

It's My business is the 2nd programme developed by the partnership between Injaz and Managem. It brings entrepreneurship training to secondary school students in rural areas. The programme is designed for Year 3 secondary school students in the Moroccan regions of Zagora, Ouarzazate, Tinghir and Al Haouz. At an age where the students are considering the future direction of their education, it provides the encouragement they need to develop their talents through teamwork, public speaking and motivation. It's My Business helps to equip young people with the skills they need to make a successful transition to working life.

### ... OF COOPERATIVES AND NON-PROFITS

#### "COOPER UP", HELPING COOPERATIVES, NON-PROFITS AND ECONOMIC INTEREST GROUPS TO BOOST THEIR PERFORMANCE, ENSURE THE LONG-TERM FUTURE OF THEIR WORK, AND PLAY A FULL ROLE AS CONTRIBUTORS TO THE ECONOMY.

The Cooper Up programme is designed for cooperatives, non-profits and economic interest groups in the Draâ-Tafilalet Region and Marrakech-Tensift-Al Haouz. Cooper Up boosts the management and organisational skills of these cooperatives in ways that make them more efficient, ensure the long-term future of their work, and help them play a full role as contributors to the economy.



### ...SUPPORT FOR FINANCIAL AUTONOMY

For the third year running, the Managem Group supported the attendance of 11 cooperatives and 7 associations at the National Social and Solidarity Economy Show in Agadir between 9 and 18 November 2018. This support was provided in the context of the Group's partnership with the Moroccan Ministry of Crafts & Social and Solidarity Economy. 2018 was also marked by the creation of a number of IGA (Income Generating Activity) projects, that included the farming of local goat breeds and the marketing of dairy products in partnership with the National Initiative for Human Development (NHRI).

### EDUCATION AND YOUNG PEOPLE

As the leaders of tomorrow, our children and young people need to be supported and involved in development processes today. Education is a major cornerstone of the Group's community involvement, which takes an integrated approach focused primarily on improving the provision of education in the isolated areas where the Managem Group operates. In 2018, the support of institutional partners and parents enabled Managem to continue its implementation of support initiatives that improve access to education and training opportunities, from preschool through primary education to secondary school, as well as the opportunity to learn cross-disciplinary skills through extracurricular activities.

### Awards in 2018

For the fifth year, Managem and its subsidiary SMI were ranked as Top Performers among the 15 Moroccan companies rated as most committed to CSR. In 2018, Managem retained its ranking as one of the Best Emerging Market Performers. This index of more than 850 companies from 31 emerging countries has been updated every six months since July 2016, and is based on performance against key social responsibility indicators. Another distinction for the Managem Group in 2018 came with the introduction of the first ESG index for companies traded on the Casablanca Stock Exchange: the Casablanca ESG 10 index rates companies on their compliance with 330 environmental responsibility, governance, social and societal indicators set by Vigeo Eiris. This index is composed of 10 companies that together accounted for 68% of the total capital value of the Moroccan All Shares Index (MASI) in 2018. The distinction is all the more valuable since Managem was selected from among Morocco's 44 largest companies with the greatest commitment to corporate social responsibility to join the ESG 10 non-financial index that measures CSR performance. The Casablanca ESG10 index is updated and published in real time. It calculates the share price performance of its 10 member companies. It is based on the scores obtained by these companies against criteria that measure the relevance of their corporate commitments, their visibility, comprehensiveness, scope, processes and resources, their audit and compliance systems, their reporting structure, and their ability to update targets and report on them to shareholders and external stakeholders.

**18**  
cooperatives and non-profits attended the National Social and Solidarity Economy Show.

**100+**  
Women have benefited from IGA projects.

**21**  
rural communities.

**58+**  
projects and actions implemented to benefit children and young people in mining areas.

**569**  
students provided with school transport.

# Human Capital... the heart of our growth strategy



## 6000 Group Employees :

- 63% have been with the Group for more than 20 years
- 43,6% are under 40
- 14,4% of managers are women

By making the strategic choice to put people at the heart of its dynamic growth, Managem has given its commitment to promoting career development, improving health, hygiene and safety conditions for its employees, and putting in place a career development framework that enhances its employer appeal when recruiting and retaining highly qualified team members.

## THE MANAGEM VISION FOR ITS PEOPLE IS...

### PROTECTING THEIR OCCUPATIONAL HEALTH & SAFETY

An OHSAS 18001-certified occupational Health & Safety management system is the central pillar of the Group's commitment to these issues, because it guarantees that Managem complies fully with the most stringent international occupational accident prevention standards.

### ENSURING THAT EVERYONE IS IN THE RIGHT POSITION FOR THEM

ÉThe Group is uncompromisingly focused on achieving the highest international standards in terms of HR management practices.

### A DYNAMIC HUMAN CAPITAL

At the end of 2018, more than 3,000 Managem Group employees were aged under 40, highlighting the Group's determination to give young people their opportunity without compromising the growth and sustainability of its activities.

### A DIVERSITY OF EMPLOYEE PROFILES

Managem Group development in Africa is accompanied by a policy of recruiting employees locally in its operating countries.

### PROMOTING SOCIAL DIALOGUE

The Managem Group complies fully with all regulatory requirements. Regular meetings between its social partners have resulted in collective agreements that meet the needs of employees and their wellbeing.

### UNFAILING VIGILANCE IN TERMS OF HUMAN RIGHTS

In 2015, an employee relations barometer survey was introduced in collaboration with Optimum Conseil and IPSOS Morocco, since when no fewer than 1,024 Group employees have taken part.



# Managem, an investor in sustainable growth

## TRANSFORMING MINING INTO A POWERFUL LEVER FOR ENVIRONMENTAL PROTECTION

The Managem Group has made the environmental upgrading of its processes and production resources a central pillar of its environmental strategy through significant technical investment in mining and industrial mineral processing infrastructures to ensure that they align with the industry's most advanced environmental requirements.

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*ISO 14001 certification for the Oumejrane site.*  
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## A DIVERSE RANGE OF INITIATIVES

### DEVELOPING INDUSTRIAL SOLUTIONS FOR WASTE RECOVERY

Aware of the challenges posed by the need for effective waste management and its environmental impact, the Managem Group is a driving force for the circular economy in Morocco.



### CONTAINING THE ENVIRONMENTAL IMPACTS OF MANAGEM GROUP ACTIVITIES

Water is an essential resource for the economic and social development of the areas in which the Managem Group operates, so water conservation is the focus of special Group-wide attention, with particular emphasis on the implementation of instructions and rules to be followed by its operating sites to ensure the reasonable and rational use of water resources.

### DEPLOYING SOPHISTICATED SOLUTIONS AND RESOURCES TO REDUCE ENERGY CONSUMPTION AND ATMOSPHERIC EMISSIONS

The Managem Group continues to put considerable resources behind an advanced strategy to reduce the amount of energy consumed by its activities and expand its capacity to produce energy from renewable sources in order to reduce greenhouse gas emissions.

### ANTICIPATING THE NEGATIVE IMPACTS OF GROUP ACTIVITIES ON BIODIVERSITY AND THE ENVIRONMENT

The Managem Group has chosen to adopt a proactive approach to protecting biodiversity against all the environmental impacts that could potentially result from its activities.

## FINANCIAL STATEMENTS

# FINANCIAL STATEMENTS



Period from 1 January to 31 December 2018

**CONSOLIDATED FINANCIAL INCOME**

	(In MAD millions)	31-Dec-18	31-Dec-17
Turnover		4 356,5	5 199,5
Other operating income		57,4	-67,9
<b>Income from ordinary activities</b>		<b>4 413,9</b>	<b>5 131,6</b>
Purchases		-1 998,2	-1 836,2
Other external charges		-930,9	-983,2
Personnel expenses		-1 102,1	-1 045,8
Taxes and duties		-68,9	-73,7
Depreciation, amortisation and operating provisions		-929,3	-1 072,0
Other operating income and expenses		1 076,9	781,8
<b>Current operating expenses</b>		<b>-3 952,5</b>	<b>-4 229,1</b>
<b>CURRENT OPERATING INCOME</b>		<b>461,4</b>	<b>902,5</b>
Asset disposals		0,3	1,7
Restructuring charges			
Disposals of subsidiaries and equity interests		182,8	679,7
Negative goodwill		8,7	
Income from financial instruments			-6,5
Other non-recurring operating income and expenses		16,1	-242,8
<b>INCOME FROM OPERATING ACTIVITIES</b>		<b>669,4</b>	<b>1 334,7</b>
Interest income		26,8	18,6
Interest expenses		-213,6	-183,5
Other financial income and expenses		-43,6	-29,2
<b>FINANCIAL INCOME</b>		<b>-230,3</b>	<b>-194,2</b>
<b>PRE-TAX INCOME OF CONSOLIDATED COMPANIES</b>		<b>439,1</b>	<b>1 140,5</b>
Corporate income tax		-98,2	-103,4
Deferred taxes		4,3	-112,5
Net income of fully consolidated companies		345,3	924,6
Share in the income of companies accounted for by the equity method			8,0
<b>NET INCOME FROM ONGOING OPERATIONS</b>		<b>345,3</b>	<b>924,6</b>
<b>CONSOLIDATED NET INCOME</b>		<b>345,3</b>	<b>924,6</b>
Minority interests		-24,5	45,5
<b>NET INCOME - GROUP SHARE</b>		<b>369,8</b>	<b>879,1</b>
Number of shares - parent		9 991 308	9 991 308
<b>CALCULATION OF EARNINGS PER SHARE</b>		<b>37,01</b>	<b>87,99</b>

**CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**

	(In MAD millions)	31-Dec-18	31-Dec-17
<b>INCOME FOR THE YEAR</b>		<b>345,26</b>	<b>924,56</b>
<b>Other elements of comprehensive income (gross of taxes)</b>			
Foreign currency translation differences		48,89	-131,49
Gains and losses on the revaluation of available-for-sale financial assets			
Effective portion of income or loss on cash flow hedging instruments		71,20	152,70
Change in the revaluation reserve for fixed assets			
Actuarial differences on defined benefit plan obligations		-1,74	-1,88
Income tax on other comprehensive income items		-19,88	-45,32
Share of other comprehensive income in affiliated companies		3,39	
Costs of capital increases by subsidiaries		0,00	3,39
<b>OTHER COMPREHENSIVE INCOME NET OF TAXES</b>		<b>98,48</b>	<b>-22,60</b>
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>		<b>443,74</b>	<b>901,96</b>
Of which minority interests		-22,11	35,02
<b>OF WHICH NET COMPREHENSIVE INCOME - GROUP SHARE</b>		<b>465,85</b>	<b>866,94</b>

**STATEMENT OF FINANCIAL POSITION**

	(In MAD millions)	31-Dec-18	31-Dec-17
<b>ASSETS</b>			
Goodwill		305,4	305,4
Intangible assets, net		2 194,8	1 382,6
Property, plant and equipment, net		4 682,7	4 204,6
Investment property, net		8,9	25,5
Investments in affiliated companies		139,8	136,5
Other financial assets		272,6	265,9
· Derivative hedging instruments		7,8	
· Loans and receivables, net		6,6	5,7
· Available-for-sale financial assets		258,1	260,2
Corporate tax receivables			
Deferred tax assets		123,1	127,0
Other non-current receivables, net			
<b>NON-CURRENT ASSETS</b>		<b>7 727,1</b>	<b>6 447,4</b>
Other financial assets		0,0	0,0
· Derivative financial instruments			
· Loans and receivables and investments, net		0,0	0,0
Inventories and work-in-progress, net		892,4	615,1
Trade receivables, net		759,0	780,7
Other current receivables, net		1134,3	2 122,3
Cash and cash equivalents		731,6	1 482,7
<b>CURRENT ASSETS</b>		<b>3 517,2</b>	<b>5 000,9</b>
<b>TOTAL ASSETS</b>		<b>11 244,3</b>	<b>11 448,3</b>

	(In MAD millions)	31-Dec-18	31-Dec-17
<b>LIABILITIES</b>			
Capital		999,1	999,1
Issue and merger premiums		1 657,3	1 668,8
Reserves		2 132,6	1 527,7
Currency translation differences		153,5	105,8
Net income, Group share		369,8	879,1
<b>Equity attributable to ordinary shareholders of the parent company</b>		<b>5 312,3</b>	<b>5 180,6</b>
Minority interests		370,4	454,0
<b>CONSOLIDATED SHAREHOLDERS' EQUITY</b>		<b>5 682,8</b>	<b>5 634,6</b>
Provisions		58,5	81,7
Employee benefits		197,0	178,1
Non-current financial debts		1 565,0	2 276,4
· Derivative financial instruments			4,1
· Loans from credit institutions		290,2	533,4
· Debts represented by a security		1 250,0	1 650,0
· Debts related to finance leases		24,9	88,9
Debts for corporate income tax			
Deferred tax liabilities		35,6	24,3
Other non-current creditors		2,7	8,2
<b>NON-CURRENT LIABILITIES</b>		<b>1 858,8</b>	<b>2 568,7</b>
Provisions			
Current financial debts		1 849,8	1 413,9
· Derivative financial instruments		26,8	86,0
· Loans from credit institutions		1 823,0	1 327,9
· Debts represented by a security			
Current trade payables		998,9	823,6
Other current creditors		854,0	1 007,5
<b>CURRENT LIABILITIES</b>		<b>3 702,7</b>	<b>3 244,9</b>
<b>TOTAL LIABILITIES</b>		<b>5 561,5</b>	<b>5 813,7</b>
<b>TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES</b>		<b>11 244,3</b>	<b>11 448,3</b>

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(In MAD millions)	Capital	Reserves	Currency translation differ.	Net income Group share	Total Group share	Minority interests	Total
<b>At 1 January 2017</b>	<b>915,9</b>	<b>2 112,4</b>	<b>231,0</b>	<b>288,4</b>	<b>3 547,7</b>	<b>471,7</b>	<b>4 019,3</b>
Net income for the period				879,1	879,1	45,5	924,6
Cash flow hedging income		158,6			158,6	-5,9	152,7
Translation gains and losses			-125,1		-125,1	-6,4	-131,5
Gains and losses on AFS revaluations							
Actuarial gains/losses		-3,3			-3,3	1,5	-1,9
Taxes relating to other comprehensive income items		-46,1			-46,1	0,7	-45,3
Other elements of comprehensive income							
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>		<b>109,3</b>	<b>-125,1</b>	<b>879,1</b>	<b>863,3</b>	<b>35,3</b>	<b>898,6</b>
Dividends paid		-195,5			-195,5	-53,0	-248,5
Capital increase	83,3	878,5			961,8		961,8
Elimination of treasury shares							
Other transactions with shareholders		3,4			3,4		3,4
Transfer to retained earnings		288,5		-288,5			
<b>TOTAL TRANSACTIONS WITH SHAREHOLDERS</b>	<b>83,3</b>	<b>974,9</b>		<b>-288,5</b>	<b>769,7</b>	<b>-53,0</b>	<b>716,7</b>
<b>At 31 December 2017</b>	<b>999,1</b>	<b>3 196,6</b>	<b>105,9</b>	<b>879,0</b>	<b>5 180,5</b>	<b>453,9</b>	<b>5 634,6</b>
<b>At 1 January 2018</b>	<b>999,1</b>	<b>3 196,6</b>	<b>105,9</b>	<b>879,0</b>	<b>5 180,5</b>	<b>453,9</b>	<b>5 634,6</b>
Net income for the period				369,8	369,8	-24,5	345,3
Cash flow hedging income		70,2			70,2	1,0	71,2
Translation gains and losses			47,7		47,7	1,2	48,9
Gains and losses on AFS revaluations							
Actuarial gains/losses		-2,2			-2,2	0,5	-1,7
Taxes relating to other comprehensive income items		-19,6			-19,6	-0,3	-19,9
Other elements of comprehensive income							
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>		<b>48,4</b>	<b>47,7</b>	<b>369,8</b>	<b>465,9</b>	<b>-22,1</b>	<b>443,7</b>
Dividends paid		-229,8			-229,8	-40,1	-269,9
Capital increase							
Elimination of treasury shares							
Other transactions with shareholders		-104,5			-104,5	-21,3	-125,8
Transfer to retained earnings		879,1		-879,1			
<b>TOTAL TRANSACTIONS WITH SHAREHOLDERS</b>		<b>544,8</b>		<b>-879,1</b>	<b>-334,3</b>	<b>-61,4</b>	<b>-395,7</b>
<b>At 31 December 2018</b>	<b>999,1</b>	<b>3 789,7</b>	<b>153,6</b>	<b>369,7</b>	<b>5 312,1</b>	<b>370,4</b>	<b>5 682,7</b>

## CONSOLIDATED CASH FLOW STATEMENT

(In MAD millions)	31-Dec-18	31-Dec-17
<b>CONSOLIDATED NET INCOME</b>	<b>345,3</b>	<b>924,6</b>
Adjustments for		
Depreciation, amortisation and provisions, impairment losses	922,9	1 131,5
Revaluation gains/losses (fair value)	182,8	6,5
Income from disposals and dilution gains and losses	(0,3)	(540,1)
Dividend income		
Elimination of profits and losses on fair value Share of income from companies accounted for by the equity method	(182,8)	(140,9)
<b>CASH FLOW FROM OPERATIONS AFTER COST OF NET FINANCIAL DEBT AND TAX</b>	<b>1 267,8</b>	<b>1 381,6</b>
Elimination of tax expense (income)	93,9	215,9
Elimination of the cost of net financial debt	213,6	183,5
<b>CASH FLOW FROM OPERATIONS BEFORE COST OF NET FINANCIAL DEBT AND TAX</b>	<b>1 575,2</b>	<b>1 781,0</b>
Impact of changes in the WCR	188,4	114,6
Deferred taxes	(0,3)	(5,2)
Taxes paid	(98,2)	(103,4)
<b>NET CASH FLOW FROM OPERATING ACTIVITIES</b>	<b>1 665,19</b>	<b>1 787,0</b>
Impact of changes in consolidation scope	(3,0)	(1,0)
Acquisition of property, plant and equipment and intangible fixed assets	(1 702,9)	(1 095,0)
Acquisition of financial assets		(0,5)
Change in other financial assets	(0,9)	(4,8)
Investment subsidies received		
Disposals of property, plant and equipment and intangible fixed assets	0,6	4,1
Disposals of financial assets		539,0
Dividends received		
Financial interest paid	(213,6)	(183,5)
<b>NET CASH FLOW FROM INVESTING ACTIVITIES</b>	<b>(1 919,8)</b>	<b>(741,9)</b>
Capital increases	(1,6)	961,6
Transactions between shareholders (acquisitions)	(121,4)	
Transactions between shareholders (transfers)		
Issuance of new loans	350,0	700,0
Loan repayments	(1 065,1)	(354,0)
Change in receivables and payables under finance leases		
Repayment of finance leases	(68,5)	(66,9)
Other cash flows related to financing activities		
Dividends paid to shareholders of the parent company	(229,8)	(195,5)
Dividends paid to minority shareholders	(40,1)	(53,0)
Change in partner current accounts	95,5	(379,2)
<b>NET CASH FLOW FROM FINANCING ACTIVITIES</b>	<b>(1 080,9)</b>	<b>613,0</b>
Impact of exchange rate fluctuations	16,1	(50,4)
Impact of changes in accounting methods and principles		
<b>CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>(1 319,3)</b>	<b>1 607,7</b>
Net cash and cash equivalents at the beginning of the year*	433,1	(1 174,6)
Net cash and cash equivalents at the end of the year*	(885,0)	433,1
<b>CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>(1 319,3)</b>	<b>1 607,7</b>

\*This amount of cash and cash equivalents is not directly shown in the balance sheet as Cash and cash equivalents - Liabilities.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## CONTENTS

<b>NOTE 1. DESCRIPTION OF OPERATING ACTIVITIES</b>	68	3.17.3. Derivatives	77	<b>NOTE 7. DEPRECIATION, AMORTISATION AND OPERATING PROVISIONS</b>	84	<b>NOTE 16. SHAREHOLDERS' EQUITY</b>	92
<b>NOTE 2. SIGNIFICANT EVENTS OF THE FINANCIAL YEAR</b>	68	3.18. Investment securities	77			16.1. Change in shareholders' equity, Group share	92
<b>NOTE 3. ACCOUNTING RULES AND METHODS</b>	68	3.19. Cash and cash equivalents	78	<b>NOTE 8. OTHER OPERATING INCOME AND EXPENSES</b>	84	16.2. Change in minority interests	93
3.1. Accounting standards	68	3.20. Derecognition of financial assets	78	8.1. Other non-recurring operating income and expenses	85	16.3. Variation des intérêts minoritaires	93
3.2. Basis of measurement	68	3.21. Deferred taxes	78	<b>NOTE 9. FINANCIAL INCOME</b>	85	<b>NOTE 17. PROVISIONS</b>	93
3.3. Use of estimates and assumptions	69	3.22. Employee benefits	78	9.1. Tax charge	85	<b>NOTE 18. EMPLOYEE BENEFITS</b>	94
3.4. Consolidation principles	70	3.23. Provisions	79	9.1.1. Recognised in the income statement	85	<b>NOTE 19. FINANCIAL DEBTS</b>	96
3.4.1. Subsidiaries	70	3.24. Capital increase costs	79	9.1.2. Deferred taxes recognised on other comprehensive income	86	<b>NOTE 20. DTRADE AND OTHER PAYABLES</b>	96
3.4.2. Investments in affiliated companies and joint ventures	71	3.25. Financial liabilities	79	9.1.3. Deferred taxes recognised in shareholders' equity	86	<b>NOTE 21. FINANCIAL INSTRUMENTS</b>	97
3.4.3. Exclusions from the scope of consolidation	71	3.25.1. Financial debts	79	9.1.4. Deferred taxes recognised in the balance sheet	86	21.1. Fair value of financial assets	97
3.4.4. Consolidation adjustments	71	3.25.2. Other financial liabilities	79	9.1.5. Proof of tax	86	21.2. Fair value of financial liabilities	97
3.4.5. Balance sheet date	71	3.26. Income from ordinary activities	79	<b>NOTE 10. ASSETS HELD FOR SALE AND RELATED LIABILITIES</b>	86	21.3. Hedged price risk	98
3.5. Translation of financial statements and transactions in foreign currencies	71	3.27. Other operating income	80	<b>NOTE 11. EARNINGS PER SHARE</b>	87	<b>NOTE 22. OTHER COMMITMENTS</b>	100
3.5.1. Translation of foreign company financial statements	72	3.28. Cost of net debt	80	Goodwill	87	<b>NOTE 23. CONTINGENT LIABILITIES RELATED PARTIES</b>	101
3.5.2. Translation of foreign currency transactions	72	3.29. Earnings per share	80	<b>NOTE 12. INTANGIBLE ASSETS</b>	88	<b>NOTE 24. CASH FLOW STATEMENT</b>	101
3.6. Business combinations	72	3.30. New standards and interpretations	80	12.1. Other financial assets	90	24.1. Detailed impact of changes in WCR on cash and cash equivalents for the financial year	101
3.7. Goodwill	72	3.31. Disposals	81	12.2. Derivative financial instruments	90	24.2. Reconciliation of cash and cash equivalents shown in the balance sheet and in the cash flow statement	101
3.8. Intangible assets	73	Segment information	81	12.2.1. Financial assets	90	<b>NOTE 25. EVENTS AFTER THE BALANCE SHEET DATE</b>	102
3.9. Property, plant and equipment	74	3.32. Levels of segment information	81	12.2.2. Derivative instruments classified by type and currency	90		
3.10. Investment properties	74	3.32.1. Primary level of segment information: business sectors	81	12.3. Available-for-sale financial assets or available-for-sale securities	91		
3.11. Biological assets	74	3.32.2. Secondary level of segment information: geographic sectors	81	12.4. Loans and receivables	91		
3.12. Leases	75	3.33. Information by business sector	81	<b>NOTE 13. INVENTORIES AND WORK-IN-PROGRESS</b>	91		
3.13. Impairment testing and impairment of assets	75	3.34. Information by geographic sector	82	<b>NOTE 14. TRADE AND OTHER RECEIVABLES</b>	92		
3.14. Non-current assets held for sale and discontinued operations	76	<b>NOTE 4. TURNOVER</b>	83	<b>NOTE 15. CASH AND CASH EQUIVALENTS</b>	92		
3.15. Inventories	76	<b>NOTE 5. PURCHASES AND OTHER EXTERNAL EXPENSES</b>	83				
3.16. Treasury shares	76	<b>NOTE 6. PERSONNEL EXPENSES AND HEADCOUNT</b>	83				
3.17. Financial assets	76	6.1. Personnel expenses	83				
3.17.1. Measurement of trade receivables and non-current financial assets	76	6.2. Average headcount	84				
3.17.2. Equity investments in non-consolidated companies and other equity-based securities	77	6.3. Remuneration of administrative and management bodies	84				

## NOTE 1. DESCRIPTION OF OPERATING ACTIVITIES

The Managem Group is a leading mining industry operator in Morocco and its surrounding region in the two major business segments of mining and hydrometallurgy.

The Group's operating activities include the exploration, extraction, recovery and marketing of mineral substances. In addition to these operating activities, the Group is also involved in research & development and engineering with the aim of developing new methods and processes for exploiting mining deposits.

Although operations are concentrated chiefly in Morocco, the Group also maintains an operating presence in other African countries, with projects under development in Gabon and the DRC, as well as exploration projects in Sudan. The Group's main products are: Cobalt, Silver, Zinc, Copper, Cobalt Oxide, Zinc Oxide, Fluorine, Gold and Lead.

## NOTE 2. SIGNIFICANT EVENTS OF THE FINANCIAL YEAR

- > *Lower overall levels of gold and silver production, and consolidation of Cobalt and Zinc production.*
- A fall in the average silver content at SMI, which impacted negatively on annual production figures. Nevertheless, the second half of the year saw production increase by 10% compared with the first half.
- > *2018 was marked by significant levels of achievement in Group development projects.*
- Construction work on Phase 1 (2,400 tonnes per day) of the project to extend the Sudan project, where production is scheduled to begin early in 2019.
- Construction work on the Imiter mine tailings treatment plant project reached the final phase; the completed plant is designed to produce between 30 and 40 tonnes of silver per year. Production startup is scheduled for the end of Q1 2019.
- Delivery of the independent Tri-K Project feasibility study and completion of the Second Closing resulted in Managem increasing its stake from 40% to 70% in the Manacet offshore holding company that is the majority shareholder in Société des Mines de Mandiana (SMM), which holds the Tri-K operating permit. Managem also secured the approval of the relevant governance bodies to launch the project.
- Finalisation of the Etéké project feasibility and environmental impact studies.
- Completion of the Trade Off for the Tizert copper project by international engineering to define the optimum operating method. The feasibility study will begin in 2019.

## NOTE 3. ACCOUNTING RULES AND METHODS

### 3.1. Accounting standards

Pursuant to Opinion 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 - the Moroccan Securities Regulator) of 26 June 2009, the consolidated financial statements of the Managem Group are prepared in accordance with the international accounting standards applied by the European Union at 31 December 2018, and as published on that date. International accounting standards include IFRS (International Financial Reporting Standards), IAS (International Accounting Standards) and their SIC and IFRIC (Standard Interpretations Committee and International Financial Reporting Interpretations Committee) interpretations. The Group accounting principles and methods are described below and were applied for the 2018 financial year and for the comparative periods presented.

### 3.2. Basis of measurement

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, which are treated in accordance with IFRS principles. These categories are mentioned in the following summary of notes to the financial statements.

### 3.3. Use of estimates and assumptions

The process of preparing the consolidated financial statements in accordance with applicable international accounting standards has required the Group to make estimates and assumptions that affect the accompanying financial statements and notes.

#### a) Inventory impairment

Inventories and industrial work-in-progress are measured at their cost or net realisable value, whichever is the lower. The inventory impairment calculation is based on an analysis of foreseeable changes in demand, technology or market conditions to identify obsolete or excess inventories.

Impairment losses are recognised as a current operating expense or as a restructuring charge, as the case may be, depending on the nature of the amounts concerned.

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

Impairment losses on trade receivables and loans are recognised where the present value of future receipts is less than their face value. The amount of impairment takes account of the debtor's ability to honour its debt and the age of the receivable concerned. A lower than estimated recovery rate or any default by our leading customers may impact negatively on our future results.

#### c) Capitalised development costs, goodwill, intangible assets and property, plant and equipment

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

Capitalised exploration expenses are reviewed for impairment where there is evidence of impairment, and are written down if the carrying amount of these assets exceeds their recoverable amount.

The conditions for capitalising development costs are set out below. Once capitalised, these costs are amortised over the estimated useful life of the products concerned.

The Group must therefore assess the commercial and technical feasibility of these projects, and estimate the life expectancy of the resulting products. If a product proves unable to meet initial expectations, the Group may be required to write down all or part of the capitalised costs at a future date or to modify the initial impairment plan. The Group also has intangible assets purchased for cash or as a result of business combinations, together with the associated goodwill.

In addition to the annual impairment testing of goodwill, one-off tests are conducted where there is any indication of intangible asset impairment. Any impairment losses result from the calculation of discounted future cash flows and/or market values of the assets concerned. Any change in market conditions or the cash flows initially estimated may therefore lead to a review and possible modification of the previously recognised impairment loss. With regard to impairment testing of intangible assets and property, plant and equipment, 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 value is less than their recoverable value (their value in use or their fair value less selling costs, whichever is the lower), which may result in 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 considered as the most reliable (market data, recent transactions, etc.).

Planned closures of selected sites, further reductions in employee numbers and downward revisions of market outlooks may, in some circumstances, be considered as indications of impairment.

Assumptions and estimates are taken into account when determining the recoverable amount of property, plant and equipment, including factors such as market outlook, obsolescence and realisable value in the event of disposal or liquidation. Any change to these assumptions may have a significant effect on recoverable value, and could result in a review of the total amount of impairment losses recognised.

**d) Provisions**

The amount of provisions recognised by the Group is based on its best estimate of the outflow of future financial benefits on the date the liability was recognised in its accounts by the Group. The amount of provisions is adjusted at each balance sheet date to take account of any change in the level of the estimated outflow of future financial benefits.

Where time has a material effect on the measurement of a liability to pay future benefits, provisions are discounted and the effect of that discounting is subsequently recognised as a financial expense.

**e) Deferred taxes**

The deferred tax assets recognised arise chiefly 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 recognised 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 made on the basis of budgets and accounting forecasts, adjusted for tax adjustments. These estimates are based on market assumptions that may not be confirmed in the future.

Regardless of their maturity, deferred tax assets and liabilities must be offset when they are levied by the same tax authority, and apply to the same entity that is entitled to offset the tax assets and liabilities concerned. Each Group entity has therefore offset these deferred tax assets and liabilities.

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

The Group has defined contribution pension plans in place. In addition, certain other post-employment benefits, such as medical cover, retirement benefits and long-service awards, are provisioned. All of these commitments are calculated on the basis of actuarial calculations that use assumptions such as the discount rate, the medical inflation rate, future salary increases, the employee turnover rate and mortality tables. These assumptions are generally updated annually.

**g) Revenue recognition**

Revenues are recognised at the fair value of the payment received or receivable following transfer by the company to the buyer of the significant risks and rewards inherent to ownership of the goods concerned.

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

The fair value of financial instruments not traded on an active market is determined using value measurement techniques. The Group selects the most appropriate methods and assumptions based chiefly on market conditions at each period end.

**3.4. Consolidation principles****3.4.1. Subsidiaries**

All companies over 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 govern the financial and operating policies of an entity in order to receive the benefits of its trading activities. The financial statements of controlled companies are consolidated as soon as control becomes effective and until such control ceases.

Control is deemed to exist when the parent company, whether directly or indirectly via subsidiaries, holds 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 confer control.

To determine whether a Group entity exercises control over another, account is also taken of the existence and effect of potential voting rights exercisable at the reporting date. However, the relationship between the Group's percentage holding and minority interests is determined on the basis of the current percentage holding. The corresponding share of net income and shareholders' equity is presented under the 'Minority interests' item.

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

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

In the equity method, equity investments are recognised at their cost price, adjusted for post-acquisition changes in the investor's share of the entity held, and for any impairment losses on the net investment. Where the financial losses of an entity consolidated using the equity method exceed the value of the Group's interest in that entity, they are not recognised unless :

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

Where the cost of acquisition exceeds the Group share of the fair value of the identifiable assets, liabilities and contingent liabilities of the affiliated company on the date of acquisition, the surplus is recognised as goodwill, but is not presented in the balance sheet as part of other Group goodwill items. It is included in the carrying amount of the holding as measured using the equity method, and is tested for impairment in the total carrying amount of the holding. Where the Group share of the net fair value of the entity's identifiable assets, liabilities and contingent liabilities exceed the acquisition cost, surplus is recognised immediately in the income statement.

Equity holdings in entities over which the Group has ceased to exercise significant influence are no longer consolidated from the date of such cessation, and are measured at their equity value on the date of consolidation or their value in use, whichever is the lower.

As permitted by IAS 31 'Investments in Joint Ventures', the Group has opted to use the proportional consolidation method for those entities over which it exercises joint control.

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

Subsidiary, joint venture and affiliated company holdings recognised as held for sale (or included in a disposal group that is recognised as held for sale in accordance with IFRS 5) are recognised in accordance with the provisions of this standard.

At present, the Group scope of consolidation includes no affiliated companies or joint ventures.

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

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

**3.4.4. Consolidation adjustments**

All intra-group transactions and significant reciprocal assets and liabilities between fully or proportionally consolidated companies are eliminated. The same applies to Group internal profits (dividends, capital gains, etc.). Gains or losses on internal disposals of companies consolidated using the equity method are eliminated to the extent of the Group's percentage equity holding in these companies.

**3.4.5. Balance sheet date**

All Group companies are consolidated on the basis of the annual financial statements for the year ended 31 December 2018.

**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 foreign company financial statements

- The financial statements of autonomous foreign subsidiaries with functional currencies other than the dirham are translated into dirham as follows:
- With the exception of shareholders' equity, for which historic rates are applied, balance sheet accounts are translated using the exchange rates prevailing on 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 recognised in 'Translation adjustments' in shareholders' equity.

Goodwill and fair value adjustments arising from the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity, are expressed in the functional currency of the acquired entity, and are translated into dirham at the closing rate.

The financial statements of non-autonomous foreign entities whose functional currencies are different from the dirham and whose trading activities are an extension of the parent company are translated into dirham 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 functional currency of the entity) are translated at the exchange rate prevailing on the date of transaction.

Assets and liabilities denominated in foreign currencies are measured at the rate prevailing on the balance sheet date or, where applicable, at the rate of the associated currency hedge.

The corresponding exchange differences are recorded in the income statement, and changes in the fair value of hedging instruments are recognised in accordance with the treatment described in note 3.17.3 'Derivative instruments' below.

### 3.6. Business combinations

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

Combination subsequent to 1 January 2006 :

Acquisitions of subsidiaries are recognised using the acquisition method. The acquisition cost includes the following items at the date of the business combination :

- the transaction date fair value of the assets conveyed and liabilities incurred or assumed ;
- any equity instruments issued by the Group in exchange for control of the acquired entity ;
- any other costs that may be attributable to the business combination.

Those identifiable assets, liabilities and contingent liabilities of the acquired entity that meet the recognition criteria set out in IFRS 3 are recognised at fair value with the exception of assets (or groups of assets), which qualify under IFRS 5 as non-current assets held for sale, which are then recognised and measured at fair value, less the cost of sale.

When consolidating an entity for the first time, the Group values all assets, liabilities and contingent liabilities at fair value within one year of the acquisition date.

Goodwill is defined as the difference between the cost of acquisition and the value of the buyer's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities. It adopts the principles defined in paragraph '3.7 Goodwill'.

### 3.7. Goodwill

Goodwill is measured in the functional currency of the acquired entity. It is recognised as a balance sheet asset. It is not amortised, and is tested for impairment annually or whenever there is any indication that the value recognised in the balance sheet may be impaired. Recognised impairment losses may not be reversed at a later date.

Where the share of the fair value of the assets, liabilities and contingent liabilities acquired exceeds the cost of acquisition, negative goodwill is recognised immediately in the income statement following remeasurement of the identifiable assets, liabilities and contingent liabilities.

On disposal of a jointly controlled subsidiary or entity, the amount of goodwill attributable to the subsidiary is included in the calculation of the gain or loss on disposal.

For acquisitions made prior to 1 January 2006, goodwill is maintained at its deemed cost, which represents the amount recognised in accordance with Moroccan accounting principles (Opinion 5 of the Conseil National de la Comptabilité - CNC). In accordance with the provisions of IFRS 1, the procedures used for classification and treatment of business combinations before 1 January 2006 were not changed when IFRS was adopted on 1 January 2006.

### 3.8. Intangible assets

Items recognised as intangible assets relate mainly to mining exploration and research costs, patents and software.

#### a. Mining exploration and research costs

In accordance with IFRS 6: Mineral Resource Prospecting and Evaluation, the Group retains its accounting principles for the measurement and recognition of mining exploration expenses. The majority of these expenses relate directly to the costs involved in :

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

Exploration expenses also include the costs incurred in obtaining or acquiring mining research permits.

Prospecting expenses are recognised :

- As assets where the expenses incurred result in the identification of new deposits ;
- As expenses for the period in which they are incurred, where they have not resulted in the identification of new mining reserves.

Capitalised exploration expenses are amortised over the life of the reserves identified, and reviewed for impairment in the event of any indication of a loss in value.

#### b. Other intangible assets

Intangible assets are recognised at their initial cost of acquisition, less accumulated amortisation and any impairment losses.

Identifiable acquired intangible assets with a finite useful life are amortised on the basis of that useful life from the date of their first operational use.

Identifiable acquired intangible assets with an indefinite useful life are not amortised, but are tested for impairment every year or whenever there is any indication that the value recognised in the balance sheet may be impaired. Where applicable, an impairment loss is recognised.

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

This method accurately reflects the rate at which economic benefits are consumed.

### 3.9. Property, plant and equipment

Rule specific to first adoption :

When first applying IFRS, and in accordance with IFRS 1, the Group measured some of its assets (essentially certain technical installations) at their fair value on 1 January 2006, and has retained this measurement as their deemed cost. The fair value measurements were made by independent experts.

Principles applied since 1 January 2006 :

In accordance with IAS 16, property, plant and equipment are recognised at their historic cost of acquisition, less accumulated depreciation and, where applicable, accumulated impairment losses.

Financial interest charged on the capital to fund investment during the period prior to their first operational use is an integral part of the historic cost.

Ongoing maintenance costs are recognised as expenses for the period, with the exception of those that extend the useful life of the asset concerned or increase its value; these are then capitalised.

Mining equipment and other assets are depreciated over the useful life of property, plant and equipment or their component parts, up to the full extent of the life of the mineral deposit.

- Buildings and other constructions :

- Other property, plant and equipment :

The Group applies straight-line depreciation. All provisions relating to property, plant and equipment are also applied to property, plant and equipment financed under finance leasing agreements. The depreciation periods for these assets are as follows :

#### Property, plant and equipment :

Types of property, plant and equipment	Depreciation method	Depreciation period
Mining infrastructures	Straight-line	Expected operating life of the deposit
Technical installations	Straight-line	5 to 10 years
Equipment and tools	Straight-line	5 to 10 years

### 3.10. Investment properties

Investment properties are real estate assets held to generate rentals, capital growth or both, rather than those used in the production and supply of goods and services, for administrative purposes or for sale in the ordinary course of business.

In accordance with the option provided by IAS 40, investment properties are recognised at their cost, less accumulated depreciation and any impairment losses.

When first applying IFRS, and in accordance with IFRS 1, the Group measured some of its investment properties (land defined as investment properties) at their fair value on 1 January 2006, and has retained this measurement as their deemed cost. The fair value measurements were made by independent experts.

### 3.11. Biological assets

Since 1 January 2009, and in accordance with IAS 41, the Group has recognised biological assets, related agricultural products at harvest time and public-sector subsidies.

Biological assets are measured at the point initial recognition and at each balance sheet date on the basis of their fair value, less the cost to sell. In addition, agricultural produce harvested from biological assets is measured at fair value, less the cost 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 cost, which also corresponds to their market and acquisition values.

### 3.12. Leases

In accordance with IAS 17 Leases, leases are recognised 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 recognised as operating leases.

Finance leased assets are recognised as assets whose value is either the present value of the minimum lease payments or the fair value determined at the commencement of the lease, whichever is the lower. The corresponding liability to the lessor is recognised in the balance sheet under financial liabilities as a finance lease obligation.

Where there is reasonable certainty that there will be no transfer of ownership at the end of the lease period, these assets are depreciated over their useful life or the term of the finance lease, whichever is the shorter.

For operating leases where the Group is the lessee, payments made under operating leases (other than service costs such as insurance and maintenance) are recognised as expenses in the income statement on a straight-line basis over the lease period.

Leases signed by the Group (as lessor) with its customers are operating leases. For these agreements, rental income is recognised on a straight-line basis over the firm lease periods. Consequently, the specific provisions and benefits set out in the lease agreements (rent-free periods, step rents, front-end fees, etc.) are spread over the firm lease period with no indexation. The reference period adopted is the first firm lease period. Costs directly incurred and paid to third parties as lease setup fees are recognised as assets under 'investment properties' or other relevant fixed assets and amortised over the firm lease.

### 3.13. Impairment testing and impairment of assets

In accordance with the provisions of IAS 36, the Group reviews the book value of property, plant and equipment and intangible assets with a defined useful life in order at least once per year to assess whether there is any indication that these assets may have lost value. Where any such indication is found, the recoverable amount of the asset is estimated to determine, where applicable, the amount of the impairment loss. The recoverable amount is either the fair value of the asset, less the cost to sell, or its value in use, whichever is the higher.

Goodwill and intangible assets with indefinite useful lives are tested for impairment annually. An additional impairment test is applied whenever an indication of impairment is identified.

The Group has determined that the lowest level at which assets can be tested for impairment is that represented by the 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 recognised in the income statement. This impairment loss is first allocated to the carrying amount of goodwill shown in the balance sheet. The remainder is allocated to the other assets of 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 a period of three years extrapolated up to the limit of the duration of the mining deposit. The discount rate used for these calculations and the weighted average cost of capital differ between 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 capitalisation, unless this is lower than the net carrying amount, in which case its value in use is estimated.

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

Assets or groups of assets held for sale meet the criteria for classification where their carrying amount will be recovered primarily through a sale transaction rather than through continued use. This condition is deemed met when the sale is highly probable and the asset (or group of assets) for disposal is available for immediate sale in its present condition. Management must have committed to a sales plan that is expected to be completed within twelve months of the date on which the asset or group of assets was classified as non-current assets held for sale. At each balance sheet date, the Group assesses whether it is engaged in a process of exiting assets or businesses and presents them, where applicable, as 'assets held for sale'.

Assets held for sale are presented separately from other assets in the balance sheet. Any liabilities associated with these assets held for sale are also presented on a separate line on the liabilities side of the balance sheet.

Assets and groups of assets held for sale are measured at their carrying amount or fair value, less the cost to sell, whichever is the lower. Assets held for sale cease to be impaired from the date of such classification.

A discontinued operation is a business activity or geographic region of significant importance to the Group that is either sold or classified as held for sale. The financial results of discontinued operations are presented in the income statement separately from those of ongoing operations.

### 3.15. Inventories

Inventories are measured at their cost price or net realisable value, whichever is the lower.

The cost price is the cost of acquisition or production incurred in bringing the inventories to their current status and location. At normal levels of activity, these expenses include direct and indirect production expenses. Cost prices are generally calculated using the weighted average cost method.

The net realisable value of inventories equates to the estimated selling price in the normal course of business, less the estimated costs involved in completing the products and the estimated costs involved in completing the sale.

### 3.16. Treasury shares

Treasury shares held by the Group are deducted from consolidated shareholders' equity at their cost of acquisition. Subsequent disposals are allocated directly to equity, and do not result in the recognition of any income.

### 3.17. Financial assets

Financial assets must be classified into the following four categories :

- Assets measured at fair value in the income statement: fair value with changes in fair value in the income statement ;
- Held-to-maturity financial assets: amortised cost, any provisions for impairment are recognised in the income statement. This category is not used by the Group ;
- Loans and receivables: amortised cost, any provisions for impairment are recognised 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 (reduction in value of more than 20%), in which case any subsequent fall in value will be recognised in the income statement, and any subsequent increase in value will be recognised in shareholders' equity.

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

Trade receivables, loans and other non-current financial assets are treated as assets issued by the company and are recognised using the amortised cost method. They may also be subject to a provision for impairment where there is objective evidence of a loss in value.

A provision for impairment of receivables is recognised in the event of an objective indicator that the Group will be unable to recover all amounts due under the conditions initially provided for at the time of the transaction. Significant financial difficulties encountered by the debtor, the probability of bankruptcy or financial restructuring of the debtor and non-payment are all objective indicators of receivable impairment. The amount of the provision equates to the difference between the carrying amount of the asset and the value of estimated future cash flows, discounted where applicable. The amount of the loss is recognised as an impairment in receivables and is balanced by an impairment charge applied to the current asset.

#### 3.17.2. Equity investments in non-consolidated companies and other equity-based securities

Investments in non-consolidated companies and other equity-based securities are classified as available-for-sale (AFS) financial assets and recognised in the balance sheet at their fair value. Unrealised gains and losses are recognised in a separate component of shareholders' equity. The fair value of listed securities is their stock market price. For other securities, where the fair value cannot be reliably estimated, it equates to the cost of their acquisition net of any impairment.

An impairment loss is recognised where there is objective evidence of a loss of value in assets other than those classified as held for trading. Except in exceptional circumstances, the Group presumes a significant or lasting decline when an equity-based 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 concerned is a necessary, but insufficient, condition for constituting a provision. A provision is constituted only to the extent that the impairment will result in a probable loss of all or part of the amount invested. This impairment loss may be reversed only through the income statement when the securities concerned are sold, with any previous reversal recognised in shareholders' equity.

#### 3.17.3. Derivatives

Derivatives are recognised at their fair value in the derivative instruments item of the balance sheet 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 summarised as follows :

- Application of hedge accounting :
  - For cash flow hedges, the effective portion of the change in the fair value of the derivatives used is recognised directly in shareholders' equity, while the ineffective portion impacts other financial income and expenses ;
  - For hedges of a net investment in a foreign operation, the resulting gain or loss will be deferred in shareholders' equity until the investment is sold in part or in full.
- Where hedge accounting is not applied, changes in the fair value of derivatives are recognised in the income statement.

#### 3.18. Investment securities

In accordance with IAS 39 Financial Instruments: Recognition and Measurement, investment securities are measured at their fair value. No investment is considered as held to maturity. Changes in the fair value of investments held for trading are systematically recognised in the income statement (under other financial income and expenses). Changes in the fair value of available-for-sale investments are recognised directly in shareholders' equity or in the income statement (under other financial income and expenses) where there is objective evidence of a more than temporary loss of value for the security concerned or in the event of 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 to a known amount of cash, and that are subject to an insignificant risk of changes 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: Disclosures and Presentation is removed from the balance sheet in total or in part when the Group no longer expects future cash flows to be generated, and transfers substantially all the risks and rewards associated with it.

### 3.21. Deferred taxes

The Group recognises deferred taxes for all existing timing 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 applied or substantively applied on the balance sheet date by individual tax jurisdictions.

The amount of deferred tax is determined for each tax entity.

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

Current and/or deferred taxes are recognised in the income statement for the period, unless they are generated by a transaction or event recognised directly in shareholders' equity.

### 3.22. Employee benefits

In accordance with IAS 19, the Group's commitments in respect of defined benefit health insurance plans and lump-sum retirement payments are determined using the projected unit credit method, taking full account of the economic conditions specific to each country (mainly Morocco for the Group). These commitments are covered by balance sheet provisions recognised as and when the related rights are vested by employees. Provisions are determined as follows :

- The actuarial method used is the projected unit credit method, which stipulates that each period of service results in recognition of a unit of entitlement to benefits; each unit is individually measured to arrive at the final obligation. These calculations include assumptions regarding mortality, employee turnover and future salary projections...
- The Group immediately recognises all actuarial gains and losses in other comprehensive income, as is now required by IAS 19 (revised) ;
- The long-service bonuses paid throughout employees' working lives are provisioned. These provisions are measured on the basis of the probability that employees will achieve the required seniority for each grade, and are regularly updated ;
- Retirement benefits are also provisioned. These provisions are measured on the basis of the probability that employees will still be employed by the Group on their date of retirement. This provision is discounted.

### 3.23. Provisions

The Group recognises a provision wherever there is a legal or constructive obligation to a third party that will result in an outflow of resources (with no related inflow expected) to fulfil the obligation, and the amount of that outflow can be reliably estimated. The amounts recognised as provisions reflect a disbursement schedule and are discounted when the passage of time has a material effect. This effect is recognised in financial income.

Restructuring provisions are recognised when the Group has drawn up a detailed formal plan, the details of which have been notified to the parties concerned.

When a legal, contractual or implicit obligation requires the redevelopment of sites, a provision for refurbishment costs is recognised in other operating expenses. This provision is recognised over the period of operation of the site concerned, and reflects its level of production and operational progress.

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

### 3.24. Capital increase costs

Capital increase costs are charged to the issuance, merger or contribution premiums.

### 3.25. Financial liabilities

#### 3.25.1. Financial debts

Loans and other interest-bearing financial liabilities are measured in accordance with the amortised cost method by using the effective loan interest rate. Share issuance costs and premiums impact the entry value and are spread over the full period of the loan via the effective interest rate.

Where financial liabilities arise from the recognition of finance leases, the financial liability recognised for property, plant and equipment is initially recognised at the fair value of the leased asset or the current value of the minimum lease payments, whichever is the lower.

#### 3.25.2. Other financial liabilities

The majority of other financial liabilities relate to trade and other payables. These financial liabilities are recognised at amortised cost.

### 3.26. Income from ordinary activities

Income generated by the Group's ordinary activities consists mainly of the following types of turnover :

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

Income is recognised as income from ordinary activities at the point where the company has transferred the significant risks and rewards of ownership of the goods to the buyer.

Income from ordinary activities is measured at the fair value of the payment received or receivable. Rental income is recognised on a straight-line basis over the firm terms of the leases concerned. The rentals invoiced to tenants are deducted from the corresponding expense accounts, and excluded from turnover.

In general, income from ordinary activities generated as a result of sales of goods and services is recognised when there is a formal agreement in place with the customer, delivery has been made, the amount of income can reliably be measured, and it is probable that the economic benefits associated with the transaction will be received by 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**

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

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

**3.29. Earnings per share**

Basic earnings per share are calculated by dividing the Group share of net income by the average number of shares in circulation during the financial year. The average number of shares in circulation during the financial year and in the previous financial years shown is calculated on the basis of 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 whose application was mandatory in 2018****- Standards or amendments applicable from 1 January 2018 onwards and adopted by the EU.**

- IFRS 15: Income from contracts with customers ;
- IFRS 9: Financial instruments ;
- Amendments to IAS 40: Transfers of Investment Property ;
- Amendments to IFRS 4 on Insurance Contracts: Applying IFRS 9 Financial Instruments with IFRS 4 ;
- Annual Improvements to IFRS Standards – 2014-2016 cycle ;
- IFRIC 22: Foreign Currency Transactions and Advance Consideration.

**- Texts applied early in 2018**

None.

**- Texts not applied early in 2018**

- IFRS 16 : Leases
- Amendments to IFRS 9 – Prepayment Features with Negative Compensation ;
- IFRIC 23 : Uncertainty over Income Tax Treatments.

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

- IFRS 14 : Regulatory Deferral Accounts
- IFRS 17 : Insurance Contracts

**CHANGES IN THE SCOPE OF CONSOLIDATION DURING THE FINANCIAL YEAR****3.31. Disposals**

No disposals were made in 2018

**Segment information****3.32. Levels of segment information**

The primary segmentation of the Managem Group is based on business sectors, and the secondary segmentation on geographic sectors.

The majority of inter-sector transactions relate to sales of Gold Concentrate and Copper Sulphate between CTT and certain mining sector subsidiaries, particularly AGM and CMG. These transactions are invoiced by CTT on the basis of international market prices.

**3.32.1. Primary level of segment information: business sectors****Mining operations**

This activity consists of several mining deposits being exploited by the Managem Group, as well as the production of concentrates as varied as those of zinc, copper, lead and fluorite. 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, particularly metal derivatives and speciality chemicals, such as cobalt cathodes, cobalt oxide, nickel derivatives, copper sulphate, sodium sulphate, gold-bearing coal and arsenic trioxide. Hydrometallurgy uses special techniques and technologies, such as liquid extraction, electrolysis, drying, calcination, roasting... etc.

**3.32.2. Secondary level of segment information: geographic sectors**

Group activities are broken down geographically as follows :

- Morocco
- Europe
- Other

**3.33. Information by business sector**

At 31 December 2018

	Mines	Hydro	Other	Total
External	4192,90	155,10	8,50	4356,50
Inter-segment				
<b>TOTAL TURNOVER</b>	<b>4192,90</b>	<b>155,10</b>	<b>8,50</b>	<b>4356,50</b>
Income from operating activities	4,80	444,00	220,50	669,30
Financial income	-74,40	-164,40	8,50	-230,30
Share in companies consolidated under the equity method				-
Corporate income tax	-23,20	-59,80	-10,90	-93,90
<b>INCOME FROM CONTINUED OPERATIONS</b>	<b>-92,80</b>	<b>219,80</b>	<b>218,10</b>	<b>345,10</b>

## At 31 December 2017

	In MAD millions	Mines	Hydro	Other	Total
External		4960,44	196,17	42,92	5199,52
Inter-segment					
<b>TOTAL TURNOVER</b>		<b>4960,44</b>	<b>196,17</b>	<b>42,92</b>	<b>5199,52</b>
Income from operating activities		293,00	475,60	566,00	1334,70
Financial income		-88,40	-118,70	12,90	-194,20
Share in companies consolidated under the equity method		0,00	0,00		
Corporate income tax		-75,90	-12,20	-15,20	-103,40
<b>INCOME FROM CONTINUED OPERATIONS</b>		<b>86,40</b>	<b>273,30</b>	<b>564,90</b>	<b>924,60</b>

## At 31 December 2018

Miscellaneous revenue relates chiefly to sales made by the service operating segment, particularly Reminex and Techsub.

The main balance sheet items can be allocated to individual business sectors as follows :

## At 31 December 2018

	In MAD millions	Mines	Hydro	Miscellaneous	Total
Assets		3496,85	2961,14	4786,29	11244,28
Investments in companies accounted for by the equity method					
<b>TOTAL CONSOLIDATED ASSETS</b>		<b>3496,85</b>	<b>2961,14</b>	<b>4786,29</b>	<b>11244,28</b>
Investments		-1013,35	-544,75	-144,62	-1702,72
Liabilities		4152,40	1702,70	-293,61	5561,49
<b>TOTAL CONSOLIDATED LIABILITIES</b>		<b>4152,40</b>	<b>1702,70</b>	<b>-293,61</b>	<b>5561,49</b>

## At 31 December 2017

	In MAD millions	Mines	Hydro	Miscellaneous	Total
Assets		3 889,8	3424,1	4134,4	11448,3
Investments in companies accounted for by the equity method					
<b>TOTAL CONSOLIDATED ASSETS</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
Liabilities		4 125,0	2 419,9	731,2	5 813,7
<b>TOTAL CONSOLIDATED LIABILITIES</b>		<b>4 125,0</b>	<b>2 419,9</b>	<b>731,2</b>	<b>5 813,7</b>

## 3.34. Information by geographic sector

## At 31 December 2018

	In MAD millions	Morocco	Europe	Other	Total
Turnover		210,36	4146,13		4356,50
Other income (if applicable)		54,91		2,52	57,44
<b>TOTAL</b>		<b>265,28</b>	<b>4146,13</b>	<b>2,52</b>	<b>4413,93</b>
Investments		-1190,28	-	-512,06	-1702,34

## At 31 December 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>
Investments		893,94	0,47	201,86	1096,27

## NOTE 4. TURNOVER

Managem Group turnover (income from ordinary activities) is made up of the following elements :

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

Turnover breaks down as follows :

	In MAD millions	Dec.-18	Dec.-17
Turnover		4356,50	5199,50
Other operating income		57,40	(67,90)
<b>TOTAL INCOME FROM ORDINARY ACTIVITIES</b>		<b>4414,00</b>	<b>5131,60</b>

(a) Including the provision of services.

(b) The majority of other operating income relates to changes in product inventories.

The 16% decline in turnover compared with 2017 relates chiefly to lower silver production at SMI (although we note a 10% upturn in the second half of the year) and the effects of Bakoudou deposit depletion.

## NOTE 5. PURCHASES AND OTHER EXTERNAL EXPENSES

Purchases and external expenses are broken down as follows :

	In MAD millions	Dec.-18	Dec.-17
Purchase of goods		(22,20)	(1,40)
Purchases of supplies and consumables		(1976,00)	(1834,70)
<b>PURCHASES</b>		<b>(1998,20)</b>	<b>(1836,20)</b>
Operational rents		(150,20)	(107,30)
Maintenance and repairss		(54,10)	(44,10)
Remuneration of personnel outside the company		(63,40)	(74,40)
Miscellaneous external costs		(663,30)	(757,60)
<b>OTHER EXTERNAL COSTS</b>		<b>(930,90)</b>	<b>(983,20)</b>
<b>TOTAL PURCHASES AND OTHER EXTERNAL EXPENSES</b>		<b>(2929,20)</b>	<b>(2819,40)</b>

(a) Purchases and other external expenses increased by MAD 109 million, compared with the previous year as a result of the combined effects of :

> Lower SMI management remuneration, REG activity halted as a result of the inclusion of Tri-K into the Scope of Consolidation, and an increase in activity at CTT

## 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	Dec.-18	Dec.-17
Wages and salaries		(779,10)	(741,20)
Other social security contributions		(305,70)	(284,50)
Net charges to provisions for employee benefits		(17,20)	(20,10)
Employee profit-sharing		0	0
<b>TOTAL</b>		<b>(1102,10)</b>	<b>(1045,80)</b>

	In MAD millions	Dec.-17	Dec.-16
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
<b>TOTAL</b>		<b>(1045,8)</b>	<b>(945,4)</b>

## 6.2. Average headcount

The permanent headcount of fully consolidated companies breaks down as follows :

## 6.3. Remuneration of administrative and management bodies

The administrative and management bodies are :

- The Board of Directors, whose members are remunerated in the form of directors' attendance fees
- The Executive Committee, whose members are salaried

Note 26 contains further details of the remuneration paid to members of the administrative and management bodies.

## NOTE 7. DEPRECIATION, AMORTISATION AND OPERATING PROVISIONS

The following table provides a breakdown of changes in depreciation, amortisation and provisions that impacted on current operating profit for the financial years ended 31 December 2018 and 31 December 2017 :

	In MAD millions	Dec.-18	Dec.-17
<b>Net depreciation and amortisation impacting current operating income</b>			
Intangible assets		(236,3)	(243,9)
Property, plant and equipment		(761,3)	(827,5)
Biological assets		0	0
Investment properties		0	0,4
<b>TOTAL</b>		<b>(997,7)</b>	<b>(1071,9)</b>
<b>Provisions and net impairment losses impacting current operating income</b>			
Fixed assets		42,7	21,2
Inventories		2	-9,8
Receivables		0	0
Provisions for risks and charges		23,5	2,2
<b>TOTAL</b>		<b>68,2</b>	<b>-0,1</b>
<b>TOTAL</b>		<b>-929,5</b>	<b>-1071,9</b>

(a) A description of changes in the depreciation, amortisation and impairment of fixed assets is included in note 14 to these financial statements.

(b) Details of changes in impairment losses on inventories and receivables are included in notes 15 and 16 of these financial statements.

## NOTE 8. OTHER OPERATING INCOME AND EXPENSES

Other operating income and expenses are analysed as follows :

	In MAD millions	Dec.-18	Dec.-17
Sale of assets		0,3	1,7
Restructuring expenses		0	0
Disposals of subsidiaries and equity interests		182,8	679,7
Negative goodwill		8,7	0
Income from commodities derivatives - effective portion		0	0,4
Unrealised gain in fair value on commodity trading transactions		0	0
Income from commodities derivatives - trading		0	0,4
Income from foreign exchange derivatives - trading		0	(6,9)
Other operating income and expenses *		16	(242,7)
<b>TOTAL OPERATING INCOME AND EXPENSES</b>		<b>207,9</b>	<b>432,2</b>

The changes in value between the two financial years are attributable to the change in fair value of trading derivatives as a result of the following factors :

- a) Metal hedging :  
 a. Commodities trading refers to that portion of financial instruments not eligible for hedge accounting, which therefore corresponds to the time value of tunnels and the asymmetric portion of the 'Call' put option.  
 b. Currency hedging: the time value and asymmetric portion of tunnels.

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

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

In MAD millions	Dec.-18	Dec.-17
Other non-recurring income	34,9	144,1
Other non-recurring expenses	(18,8)	(386,9)
Other net operating income and expenses	1076,9	781,8
<b>TOTAL OTHER OPERATING INCOME AND EXPENSES</b>	<b>1093</b>	<b>539,1</b>

Other operating income and expenses refer chiefly to the internal production of fixed assets.

## NOTE 9. FINANCIAL INCOME

Financial income at 31 December 2018 and 2017 breaks down as follows :

In MAD millions	Dec.-18	Dec.-17
<b>Financial expenses</b>		
Interest on loans	(213,6)	(183,5)
Other financial expenses	(0,3)	0
Impairment of financial assets	0	(66,1)
Net allocations to provisions	0	66,1
<b>TOTAL FINANCIAL EXPENSES</b>	<b>(231,9)</b>	<b>(183,5)</b>
<b>Financial income</b>		
Interest and other financial income	26,7	18,6
Other income	47,8	0
Reversals of impairment losses on financial assets	0	0
Financial exchange gains and losses	(91)	(29,2)
<b>TOTAL FINANCIAL INCOME</b>	<b>(16,5)</b>	<b>(10,6)</b>
<b>FINANCIAL INCOME</b>	<b>(230,3)</b>	<b>(194,2)</b>

The majority of the MAD 36 million reduction in financial income is accounted for by VAT credit interest.

## 9.1. Tax charge

### 9.1.1. Recognized in the income statement

The tax charge for the financial years ended 31 December 2018 and 31 December 2017 is analysed as follows :

In MAD millions	Dec.-18	Dec.-17
<b>Current tax charge</b>		
Charge for the year	(98,2)	103,4
Adjustment of income tax expense from previous years	0	0
	<b>(98,2)</b>	<b>103,4</b>
<b>Deferred tax (charges)/income</b>		
Changes in temporary differences	(1,8)	39
Changes in tax rates	0	0
Change in prior tax losses	6,1	(151,6)
	<b>4,3</b>	<b>(112,5)</b>
<b>TOTAL TAX CHARGES / INCOME</b>	<b>(93,8)</b>	<b>(215,9)</b>

- The decrease in taxes payable reflects the decrease in tax payable by SMI as a result of its lower income at the end of December 2018 :

- The current tax charge refers to the amounts paid and/or payable in the short term to the tax authorities in respect of the 2018 financial year, based on the tax regulations applicable in individual countries and special tax agreements :

- Deferred tax income results from the recognition of a deferred tax asset on tax losses generated by amortisations that can be carried forward indefinitely.

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

Deferred taxes recognised on other comprehensive income break down as follows :

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

Deferred taxes recognised in shareholders' equity break down as follows :

Net tax assets are limited by 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
	Dec.-18	Dec.-17	Dec.-18	Dec.-17	Dec.-18
Deferred taxes					
From temporary differences	(78,2)	(33,3)	35,6	(32,4)	(113,9)
From tax losses	200,7	159,6	0	56,7	200,7
From tax credits	0,6	0,7	0	0	0,6
<b>TOTAL</b>	<b>123,1</b>	<b>127</b>	<b>35,6</b>	<b>24,3</b>	<b>87,5</b>

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

In MAD millions	Dec. 2018	Dec. 2017
Consolidated net income	345,3	924,6
Share in profit of companies accounted for by the equity method	0	0
Consolidated net income (exc. semi-public companies)	345,3	924,6
Income tax	(98,2)	(103,4)
Deferred taxes	4,3	(112,5)
Total tax charge	(93,8)	(215,9)
<b>PRE-TAX CONSOLIDATED NET INCOME (EXC. SEMI-PUBLIC COMPANIES)</b>	<b>439,1</b>	<b>1 140,50</b>
<b>EFFECTIVE TAX RATE (TOTAL TAX CHARGE / PRE-TAX ACCOUNTING INCOME)</b>	<b>(21,37 %)</b>	<b>(18,93 %)</b>
Tax on permanent differences	70,4	46,5
Tax on unrecognised tax losses	0	0
Tax on the use of prior years' tax losses that did not give rise to DT	0	0
Non-capitalised tax credits		
Difference between parent/subsidiary rates	(102,5)	(104,4)
Change in IT rate Current/Previous year		
Other differences	23,2	(65,2)
<b>RECALCULATED TAX CHARGE</b>	<b>(135,4)</b>	<b>(453)</b>
<b>MOROCCAN STATUTORY TAX RATE (RECALCULATED TAX CHARGE/PRE-TAX ACCOUNTING INCOME)</b>	<b>-30,90 %</b>	<b>-30,72 %</b>

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

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

**NOTE 11. EARNINGS PER SHARE**

Basic earnings per share are calculated by dividing the Group share of net income by the average number of shares in circulation during the financial year. The average number of shares in circulation during the financial year and in the previous financial years shown is calculated on the basis of excluding treasury shares and shares held under stock option plans.

Weighted average number :	31-Dec.-18	31-Dec.-17
- of ordinary shares issued		
- of shares held under stock option plans	9 991 308	9 991 308
- of treasury shares		
<b>NUMBER OF SHARES USED TO CALCULATE BASIC EARNINGS PER SHARE</b>	<b>9 991 308</b>	<b>9 991 308</b>
Number of dilutive instruments		
<b>NUMBER OF SHARES USED TO CALCULATE DILUTED EARNINGS PER SHARE</b>	<b>9 991 308</b>	<b>9 991 308</b>

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.

Financial years ended 31 December	31-Dec.-18	31-Dec.-17
<b>NET INCOME FOR THE YEAR ATTRIBUTABLE TO SHAREHOLDERS OF THE PARENT COMPANY</b>	<b>369,8</b>	<b>879,1</b>
Number of shares used to calculate earnings per share	9 991 308	9 991 308
<b>BASIC EARNINGS PER SHARE</b>	<b>37</b>	<b>87,9</b>
of which, portion relating to discontinued operations		
<b>DILUTED EARNINGS PER SHARE</b>	<b>37</b>	<b>87,9</b>
of which, portion relating to discontinued operations		

**Goodwill**

In MAD millions	Dec.-18	Dec.-17
<b>AT 1 JANUARY</b>	<b>305,4</b>	<b>305,4</b>
Gross value	812	812
Accumulated impairment losses	(506,6)	(506,6)
Change in scope of consolidation	0	0
Currency translation differences	(0,3)	(0,3)
Disposals	0	0
Impairment losses	0,3	0,3
Other movements	0	0
<b>AT THE END OF THE PERIOD</b>	<b>305,4</b>	<b>305,4</b>
Gross value	812	812
Accumulated impairment losses	(506,6)	(506,6)

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

In MAD millions	Dec.-18	Dec.-17
IMITER	161,2	161,2
CMG	130,9	130,9
CTT	13,3	13,3
RGGG	0	0
<b>TOTAL</b>	<b>305,4</b>	<b>305,4</b>

## NOTE 12. INTANGIBLE ASSETS

In MAD millions	Development costs	Telecom and Software Licences	Patent and similar rights	Concessions	Other	Total
<i>Gross values</i>						
AT 1 JANUARY 2017	4 753,50	1,3	197,2	0	481,1	5 433,10
Acquisitions	265,8	0,3	1,4	0	59,5	327,1
Changes in scope of consolidation	(607,1)	(0,4)	0	0	0	(607,5)
Disposals and assets classified as held for sale	0	0	0	0	0	0
Currency translation differences	(70,5)	(0,1)	(0,1)	0	0	(70,6)
Other movements	19	0	0	0	(18,8)	0,2
AT 31 DECEMBER 2017	4 360,70	1,1	198,6	0	521,8	5 082,20
AT 1 JANUARY 2018	4 360,70	1,1	198,6	0	521,8	5 082,20
Acquisitions	264,4	0	2,3	0	294,5	561,3
Disposals and assets classified as held for sale	0	0	0	0	0	0
Currency translation differences	24,2	0	0	0	13,9	38,1
Other movements	0	0	0	0	0	0
AT 31 DECEMBER 2018	4 649,30	1,1	201,1	0	1 284,70	6 136,20
<i>Depreciation, amortisation and impairment losses</i>						
AT 1 JANUARY 2017	(3 183,70)	(0,7)	(106,9)	0	(181,6)	(3 473,00)
Depreciation and amortisation	(240,5)	(0,1)	(3,3)	0	0	(243,9)
Disposals and assets classified as held for sale	0	0	0	0	0	0
Changes in scope of consolidation	0	0,3	0	0	0	0,3
Other movements	0,6	0	0	0	0	0,6
AT 31 DECEMBER 2017	(3 407,00)	(0,4)	(110,6)	0	(181,6)	(3 699,80)
AT 1 JANUARY 2018	(3 407,00)	(0,4)	(110,6)	0	(181,6)	(3 699,80)
Depreciation and amortisation	(234,4)	(0,4)	(1,7)	0	0,2	(236,3)
Reversal of impairment losses	0	0	0	0	0	0
Disposals and assets classified as held for sale	0	0	0	0	0	0
Other movements	0	0	0	0	0	0
AT 31 DECEMBER 2018	(3 646,90)	(0,8)	(112,3)	0	(181,5)	(3 941,50)
<i>Net values</i>						
AT 31 DECEMBER 2017	953,7	0,7	88	0	340,2	1 382,50
AT 31 DECEMBER 2018	1 002,50	0,3	88,7	0	1 103,30	2 194,80

Amortisation for the period is recognised in the " Depreciation, amortisation and operating provisions " item of the income statement. The majority of intangible assets are expenses related to mining exploration and research.

## PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTIES

The main changes are due to :

In MAD millions	Land	Buildings	Machinery and equipment	Assets under construction	Investment properties	Other	Total
<i>Gross values</i>							
AT 1 JANUARY 2017	53,7	4742,1	4892,3	493	28,9	1589,9	11809
Acquisitions	0	310,5	132,8	237,4	0	87,3	768
Changes in scope of consolidation	(1,9)	0	(53)	(91,7)	0	(6,8)	(105,7)
Disposals and assets classified as held for sale	0	0	0,8	(1,9)	0	(20,6)	(23,4)
Currency translation differences	0	(15,6)	(31,1)	(13,8)	0	(15)	(75,5)
Other movements	1,1	19,7	78,6	(107,3)	0	7,8	(0,2)
AT 31 DECEMBER 2017	52,9	5056,8	5066,4	515,6	28,9	1651,6	12372,1
AT 1 JANUARY 2018	52,9	5056,8	5066,4	515,6	28,9	1651,6	12372,1
Acquisitions	0	363	127,5	621,4	0	29,8	1141,6
Disposals and assets classified as held for sale	0	0	(0,3)	0	0	(0,5)	(0,8)
Currency translation differences	0	5	10,2	10,8	0	4,9	30,9
Other movements	4,6	23,6	46,3	(74,4)	(20)	19,9	0
AT 31 DECEMBER 2018	57,5	5448,4	5251	1073,4	8,9	1705,6	13544,7
<i>Depreciation, amortisation and impairment losses</i>							
AU 1 <sup>ER</sup> JANVIER 2017	(0,2)	(2783,8)	(3230,8)	0	(3)	(1383,2)	(7401)
Depreciation and amortisation	0	(421,5)	(259,3)	(28,8)	(0,4)	(124,3)	(834,3)
Impairment losses	0	(10,6)	(5,3)	(28,8)	0	(2,7)	(47,3)
Reversals of impairment losses	0	4,2	23,1	0	0	0	27,3
Disposals and assets classified as held for sale	0	0	0,4	0	0	20,6	21
Currency translation differences	0	12,7	25,5	1	0	12,4	51,6
Change in scope of consolidation	0	0	5,3	0	0	6,5	11,8
Other movements	0	0	0	0	0	0	0
AT 31 DECEMBER 2017	(0,2)	(3199)	(3441,1)	(27,8)	(3,4)	(1470,6)	8142,1
AT 31 DECEMBER 2017	0,2	(3199)	(3441,1)	27,8	(3,4)	(1470,6)	(8142,1)
Depreciation and amortisation	0	(427,2)	(261,3)	0	0	(72,8)	(761,3)
Impairment losses	0	0	0	0	0	0	0
Reversals of impairment losses	0	64,3	4,1	0	0	0	68,4
Disposals and assets classified as held for sale	0	0	0	0	0	0,5	0,6
Currency translation differences	0	(4,5)	(8,8)	(0,7)	0	(4,7)	(18,7)
Change in scope of consolidation	0	0	0	0	0	0	0
Other movements	0	(3,4)	0	0	3,4	0	0
AT 31 DECEMBER 2018	0,2	(3569,8)	(3707,1)	(28,5)	0	(1547,6)	(8853,2)
<i>Net values</i>							
AT 31 DECEMBER 2017	52,7	1857,9	1625,3	487,8	181	181	4230,1
AT 31 DECEMBER 2018	57,3	1878,6	1543,9	1044,9	158,1	158,1	4691,5

## Finance leases

Property, plant and equipment covered by finance leases (essentially land, buildings and technical installations) totalled MAD 360.8 million at 31 December 2018.

## Investment properties

The Group did not revalue investment properties at fair value at the end of December 2018, since almost all of these properties are recognised at market value under the terms of the leaseback deals concluded during the 2009 and 2018 financial years.

**12.1. Other financial assets**

The Group's other financial assets break down as follows by net value :

In MAD millions	Dec.-18	Dec.-17
Non-current portion		
- derivative financial instruments	7,8	0
- financial assets at fair value through profit or loss	0	0
- loans and receivables	6,5	5,6
- held-to-maturity financial assets	0,0	0
- available-for-sale financial assets	258,1	260,2
<b>TOTAL</b>	<b>272,6</b>	<b>265,9</b>
Current portion		
- derivative financial instruments	0	0
- financial assets at fair value through profit or loss	0	0
- available-for-sale assets	0	0
- held-to-maturity financial assets	0,000	0
- loans and receivables	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>
<b>TOTAL OTHER FINANCIAL ASSETS</b>	<b>272,6</b>	<b>265,9</b>

**12.2. Derivative financial instruments****12.2.1. Financial assets**

Derivative financial instruments with a positive fair value are recognised as assets and break down as follows :

In MAD millions	31-Dec.-18	31-Dec.-17
	Fair value	Fair value
Financial assets at fair value through profit or loss	7,8	2,5
<b>TOTAL</b>	<b>7,8</b>	<b>2,5</b>

Derivatives with a negative fair value are recognised as liabilities and break down as follows :

In MAD millions	Notional	31-Dec.-18	31-Dec.-17
		Fair value	Fair value
Commodities instruments		-26,7	-90,1
Forward contract			
Other commodity instruments		-26,7	-90,1
Foreign exchange instruments			
Forward exchange contracts			
Other foreign exchange instruments			
Other derivative instruments			
Interest rate derivatives			
Other derivatives			
<b>TOTAL</b>		<b>-26,7</b>	<b>-90,1</b>

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

	BALANCE SHEET DATE	MAD	EURO	USD	OTHER
Forward contract	7,7	7,7			
Commodity instruments	7,7	7,7			
Forward exchange contracts	-26,7	-26,7			
Foreign exchange derivatives	-26,7	-26,7			
Derivative instruments - Trading					
<b>TOTAL DERIVATIVE INSTRUMENTS</b>	<b>-18,9</b>	<b>-18,9</b>			

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

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

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

Available-for-sale financial assets break down as follows at 31 December 2018 and 31 December 2017 :

In MAD millions	Fair value	% interest	Shareholders' equity	income	Balance sheet date
At 31 December 2018 :	258,1				31/12/2018
Other	13,8				
Entity: Other (BT)	244,3				
At 31 December 2017	260,1				31/12/2017

**12.4. Loans and receivables**

At 31 December 2018, the majority of loans and receivables took the form of deposits and guarantees.

**NOTE 13. INVENTORIES AND WORK-IN-PROGRESS**

Inventories and work-in-progress for the financial years ended 31 December 2018 and 31 December 2017 break down as follows :

In MAD millions	Dec.-18	Dec.-17
Inventories of goods	6,3	6,3
Inventories of consumables and supplies	679,9	458,1
Work in progress	0	0
Intermediate finished goods inventories	229,5	176
<b>TOTAL INVENTORIES AT GROSS VALUE</b>	<b>915,7</b>	<b>640</b>
Total impairment losses at the beginning of the period	(25,2)	(17,1)
Impairment losses recognised for the period	(19,5)	(25,4)
Impairment losses following disposals and retirements	11,5	14,2
Reversal of impairment losses no longer applicable	10	1,5
Other movements	-0,1	1,7
<b>TOTAL IMPAIRMENT LOSSES AT THE END OF THE PERIOD</b>	<b>(23,3)</b>	<b>(25,2)</b>
<b>TOTAL INVENTORIES, NET</b>	<b>829,4</b>	<b>615,1</b>

In 2018:  
- Provisions totalled MAD -23.3 million  
- Reversals totalled MAD 25.2 million

## NOTE 14. TRADE AND OTHER RECEIVABLES

The gross value and realisable value of trade receivables at 31 December 2018 and 31 December 2017 are detailed in the following table:

In MAD millions	Dec.-18	Dec.-17
Trade receivables and related accounts	760,7	782,4
Impairment of trade receivables and related accounts	(1,7)	(1,7)
<b>TOTAL TRADE RECEIVABLES</b>	<b>759</b>	<b>78,07</b>
Other receivables	65,3	22,6
Accruals and deferred income - Assets	92,7	70,7
Debit partner accounts	361,1	678,9
Receivables on asset disposals	0	0
Impairment of other receivables	0	0
Impairment of debit partner accounts	(162,2)	(287,9)
Impairment of trade receivables - advances & deposits	0	0
Impairment of personnel receivables	0	0
Impairment of receivables on asset disposals	0	0
Accrued interest on receivables on asset disposals	0	0
State - debtor	685,6	1595,8
Trade receivables - Advances and deposits	74,6	25,5
Personnel - receivables	17,2	16,8
<b>TOTAL OTHER CURRENT RECEIVABLES</b>	<b>1134,3</b>	<b>2122,3</b>

Reduction of MAD 21.7 million in trade receivables as a direct result of falling turnover

Reduction of MAD 988 million in other debtors largely as a result of:

- VAT refund;
- CC Managem refund to CTTA;
- Inclusion of Tri-K into the Scope of Consolidation.

## NOTE 15. CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprise cash on hand, bank balances and short-term investments in money market instruments. These investments, all of which are due to mature within twelve months, are easily convertible into a known amount of cash, and are subject to negligible risk of changes in value.

In MAD millions	Dec.-18	Dec.-17
Securities and investment securities	0	0
Bank	724,9	1480
Other cash accounts	6,7	2,6
<b>TOTAL</b>	<b>731,6</b>	<b>1482,7</b>

## NOTE 16. SHAREHOLDERS' EQUITY

### 16.1. Capital Management Policy

As part of its capital management strategy, the Group is committed to maintaining operational continuity in order to provide a return to shareholders, deliver benefits to other partners, and maintain an optimal capital structure that may reduce the cost of capital.

In maintaining or adjusting its capital structure, the Group may either:

Adjust the amount of dividends paid to shareholders

- Return capital to shareholders
- Issue new shares, or
- Sell assets to reduce its debt

The Group uses a range of indicators, including financial leverage (net debt/shareholders' equity) to provide investors with a comparative overview of Group debt versus total shareholders' equity. The majority of this equity capital is accounted for by 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).

### 16.1.1. Change in shareholders' equity, Group share

In MAD millions	31-Dec.-18	31-Dec.-17
Consolidated shareholders' equity, Group share at the beginning of the year	5180,5	3548
Dividends paid	-229,8	-195,4
Currency translation difference	47,7	-125
Net change in the fair value of financial instruments	70,1	158,6
Other changes	-106,2	0
Capital increase	0,0	961,7
Net income (Group share) for the period	369,8	879,11
Taxes relating to other comprehensive income	-19,8	-46
<b>CONSOLIDATED SHAREHOLDERS' EQUITY, GROUP SHARE</b>	<b>5312,3</b>	<b>5180,5</b>

### 16.2. Change in minority interests

In MAD millions	31-Dec.-18	31-Dec.-17
Minority interests at the beginning of the year	453,9	472
Dividends paid	-40,1	-53
Net change in the fair value of financial instruments	1	-5,9
Currency translation gains and losses	1,2	-6,4
Other changes	-20,9	1,5
Capital increase	0	0
Profit for the financial year	-24,5	45,5
Taxes relating to other comprehensive income	-0,3	0
<b>MINORITY INTERESTS</b>	<b>370,4</b>	<b>453,9</b>

## NOTE 17. PROVISIONS

Current and non-current provisions break down as follows :

In MAD millions	Dec.-18	Dec.-17
Environmental provision	13,2	12
Restructuring	-	-
Disputes	-	-
Guarantees	-	-
Other risks	45,3	69,7
<b>TOTAL</b>	<b>58,5</b>	<b>81,7</b>

In MAD millions	Dec.-17	Currency translation differences	Change in scope of consolidation	Charges for the year	Reversal of provisions used	Reclassification	Other movements	Dec.-18
Environmental provision	12	0,3	0	7,1	(6,3)	0	0	13,2
Restructuring	0	0	0	0	0	0	0	0
Disputes	0	0	0	0	0	0	0	0
Guarantees	0	0	0	0	0	0	0	0
Other risks	69,7	0	0	0	(59,4)	0	0	45,3
<b>TOTAL</b>	<b>81,7</b>	<b>0,3</b>	<b>0</b>	<b>51,2</b>	<b>(65,7)</b>	<b>0</b>	<b>0</b>	<b>58,5</b>
Of which :								
Non-current	81,7	0,3	0	51,2	65,7	0	0	58,5
Current	0	0	0	0	0	0	0	0

(a) The majority of provisions recognised at 31 December 2018 cover risks related to occupational illnesses not covered by the insurer during the period from 2003 to 2006, i.e. MAD 44.3 million.

**NOTE 18. EMPLOYEE BENEFITS**

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

**At 1 January 2006 :**

## Economic assumptions:

- Valuation date:	01.01.2006
- Inflation rate:	1.50%
- Medical inflation rate:	4%
- Discount rate	
- Healthcare costs	6.20% or 6.95% (varies from entity to entity)
- Retirement bonuses	6.20%
- Average rate of social security contributions	15.00%
- Rate of salary increase (gross of inflation)	3.50%
- Flat-rate allowance revaluation rate	1.50%

## Demographic assumptions:

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

Age ranges	Management	Non-management
29 and younger	20.00%	10.00%
30 to 34	10.00%	5.00%
35 to 39	7.50%	3.75%
40 to 44	5.00%	2.50%
45 to 49	2.00%	1.00%
50 and older	0.00%	0.00%

- Occupation rate until retirement	Identical to valuation date
- Retirement age	Non-mining personnel: 60 Mining personnel: 55

**At 31 December 2014**

- Valuation date :	31.12.2014
- Taux d'actualisation	
Healthcare costs	4,15%
Retirement bonuses	3,70%

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

In accordance with IAS 19 Revised, the Group recognises all actuarial gains and losses immediately in other comprehensive income.

The Group considers that the actuarial assumptions used are appropriate and justified, but any future changes may, however, have a significant impact on the total amount of Group commitments, as well as on its income. The discount rate sensitivity test is conducted annually on the balance sheet date.

**At 31 December 2018****Other long-term benefits**

In MAD millions	Retirement and related allowances		Post-employment benefits other than pensions	
	31-Dec.-17	31-Dec.-18	31-Dec.-17	31-Dec.-18
Total commitment at the beginning of the financial year	64,8	70,8	91,2	107,3
Cost of services	6,5	6	11,2	11,4
Interest charges	2,6	2,6	3,7	4,3
Member contributions	0	0	0	0
Changes to plans (previous service costs)	9,7	0	7,9	0
Changes in scope of consolidation	0	0	0	0
Business combination (where significant)	0	0	0	0
Reduction	0	0	0	0
Liquidation of plans	0	0	0	0
Completed payments	-1,4	-5	-2,5	-2,6
Actuarial gains/losses	-11,4	-1,7	-4,3	-0,4
Currency translation differences	0	0	0	0
Other: IFRS 5 reclassification (groups held for sale)	0	0	0	0
<b>TOTAL COMMITMENT AT THE END OF THE FINANCIAL YEAR</b>	<b>70,8</b>	<b>72,7</b>	<b>107,3</b>	<b>120</b>

In MAD millions	Retirement and related allowances		Post-employment benefits other than pensions	
	31-Dec.-17	31-Dec.-18	31-Dec.-17	31-Dec.-18
Market value of plan assets at the beginning of the financial year				
Expected return on assets	0	0	0	0
Employer contributions	0	0	0	0
Member contributions	1,4	5	2,5	2,6
Changes in scope	0	0	-1,4	0
Business combination (where significant)	0	0	0	0
Reduction	0	0	0	0
Liquidation of plans	0	0	0	0
Services paid	-1,4	-5	-2,5	-2,6
Actuarial gains/losses	0	0	0	0
Currency translation differences	0	0	0	0
Other	0	0	0	0
<b>MARKET VALUE OF PLAN ASSETS AT THE END OF THE FINANCIAL YEAR</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

In MAD millions	Retirement and related allowances		Post-employment benefits other than pensions	
	31-Dec.-17	31-Dec.-18	31-Dec.-17	31-Dec.-18
Cost of services	6,5	6	11,2	11,4
Interest charges	2,6	2,6	3,7	4,3
Expected return on assets	0	0	0	0
Effect of limiting surpluses	0	0	0	0
Amortisation of previous service costs	0	0	0	0
Amortisation of actuarial gains/losses	0	0	0	0
Reduction	0	0	0	0
Cancellation of liquidation	0	0	0	0
Other	0	0	0	0
<b>CHARGE FOR THE FINANCIAL YEAR</b>	<b>9,1</b>	<b>8,6</b>	<b>14,9</b>	<b>15,7</b>

In MAD millions	Retirement and related allowances		Post-employment benefits other than pensions	
	31-Dec.-17	31-Dec.-18	31-Dec.-17	31-Dec.-18
Net commitment	70,8	72,7	107,3	120
Limitation of pension assets	0	0	0	0
Unrecognised past service costs	0	0	0	0
Unrecognised actuarial gains/losses	0	0	0	0
<b>NET ASSETS/PROVISIONS SHOWN ON THE BALANCE SHEET</b>	<b>70,8</b>	<b>72,7</b>	<b>107,3</b>	<b>120</b>

In MAD millions	31-Dec.-17	31-Dec.-18
Amount (Provisions) at the beginning of the financial year	-156,1	-178,1
Charges for the period/expenses for the period (including reversals of provisions)	-24	-24,3
Reversals for use/services paid	3,9	7,6
Change in scope	0	0
Business combination (where significant)	0	0
Currency translation differences	0	0
Previous service costs	-17,6	0
OCI (First-time application of IAS 19 R)	15,8	2,1
<b>AMOUNT (PROVISIONS) AT THE END OF THE FINANCIAL YEAR</b>	<b>-178,1</b>	<b>-192,7</b>

## Sensitivity of the commitment to the discount rate

	31-Dec.-18
Sensitivity of the commitment	-9,90 %
Sensitivity of the cost of services	-14,00 %
Sensitivity of interest charges (discount rate)	11,30 %

## Sensitivity of the commitment to medical inflation

	31-Dec.-18
Sensitivity of the commitment	15,70 %
Sensitivity of the cost of services	21,60 %
Sensitivity of interest charges (discount rate)	16,40 %

## NOTE 19. FINANCIAL DEBTS

The Group's current and non-current financial liabilities break down as follows :

In MAD millions	Dec.-18	Dec.-17
Bond debt	1250	1650
Loans from credit institutions	290,2	533,4
Finance lease liabilities	24,9	88,9
Other financial debts	-	-
Derivative financial instruments	-	4,1
<b>TOTAL NON-CURRENT FINANCIAL DEBTS</b>	<b>1565</b>	<b>2276,4</b>
Bond debt	-	-
Loans from credit institutions	1823	1327,9
Finance lease liabilities	-	-
Derivative financial instruments	26,8	86
<b>TOTAL NON-CURRENT FINANCIAL DEBTS</b>	<b>1849,8</b>	<b>1413,9</b>
<b>TOTAL</b>	<b>3414,8</b>	<b>3690,3</b>

Non-current financial debt fell by MAD 711,4 million as a result of :  
 - Issuance of commercial paper, i.e. MAD 700 million  
 - Debt repayments: MAD 334 million

## NOTE 20. TRADE AND OTHER PAYABLES

In MAD millions by maturity	- 1 year	1 to 5 years	+ 5 years	End of financial year
Trade payables	998 478	-	-	998 894
Other payables	846 563	7 437	-	845 000
<b>AT 31 DECEMBER 2018</b>	<b>1 845 041</b>	<b>7 437</b>	<b>-</b>	<b>1 852 894</b>
<b>AT 31 DECEMBER 2017</b>	<b>1 828 564</b>	<b>2 501</b>	<b>-</b>	<b>1 831 065</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 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 of actual trades on a national stock exchange or over-the-counter market.

Where 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 degree of interpretation of the market information required for valuation purposes. The use of different estimates, methods and assumptions may have a significant effect on the fair value amounts estimated. The methods used are as follows :

## Equity interests in non-consolidated companies :

- The fair value of listed company shares is determined on the basis of the share price published on the balance sheet date concerned.
- Where the fair value of shares in unlisted companies cannot be reliably determined, these securities are valued as a proportion of the IFRS net asset value or, where this is not possible, at the net asset value determined in accordance with Moroccan accounting regulations. In the absence of information on the net IFRS or Maroc Gaap position, shares are valued at cost price.

Derivative instruments: the market value of interest rate, foreign exchange and commodity transactions is estimated on the basis of valuations obtained from banking counterparties or financial models commonly used in financial markets, which are based on market data for the balance sheet date.

The following table details the carrying amount and fair value of those balance sheet financial assets where these two values are identical :

In MAD millions	Dec.-18	Dec.-17
Securities and investment securities	0	0
Bank	724,9	1480
Other cash accounts	6,7	2,6
<b>TOTAL</b>	<b>731,6</b>	<b>1482,7</b>

## 21.2. Fair value of financial liabilities

Due to their short-term nature, the carrying amount shown for bank overdrafts, trade and other payables and short-term borrowings is an estimate of their fair value.

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

Where 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 degree of interpretation of the market information required for valuation purposes. The use of different estimates, methods and assumptions may have a significant effect on the fair value amounts estimated. The methods used are as follows :

- Financing liabilities: the fair value of financing liabilities (bonds, debts with credit institutions, etc.) is equivalent to their amortised cost (nominal value less loan issuance costs where 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 obtained from banking counterparties or financial models commonly used in the financial markets, and based on market data for the balance sheet date.

The following table details the carrying amount and fair value of those balance sheet financial liabilities where these two values are identical :

In MAD millions	31-Dec.-18	31-Dec.-17
Carrying amount <=> Fair value		
Bank overdrafts	1823	1327,9
Trade and other payables	1852,9	1831,1
Bonds	1249,9	1650
Finance lease debts	24,8	88,9
Other financial debts	26,7	86
Put options granted to minority shareholders		
Financing debts	290,1	533,4
<b>TOTAL</b>	<b>5 267,70</b>	<b>5 517,30</b>

### 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 decentralised basis by individual subsidiary companies, which manage their own market risks in consultation with the holding company.

### 21.3. Hedged price risk:

The nature of its activities exposes the Managem Group to fluctuations in the prices of the commodities it markets at the exchange rates applying to those currencies in which its sales are denominated.

The hedging policy is designed to protect the Managem Group against price risks that could impact significantly on its short- and medium-term profitability.

The use of (commodities and foreign exchange) derivative financial instruments to manage these market risks is permitted solely for the purposes of hedging.

The derivatives used by the Group qualify as cash flow hedges or trading instruments within the meaning of IAS 39.

#### 1. Metal price risks

Managem covers the risk posed by fluctuations in the selling price of metals, which are denominated in US dollars. The hedging relationship is one of hedging future cash flows to be generated from future sales of commodities (zinc, lead, copper, silver and gold) on the basis of a forecast production schedule.

The purpose of derivative instruments is to hedge a projected budget, i.e. future cash flows. It is a cash flow hedge relationship.

#### 2. Foreign exchange risks

The Group's foreign exchange risk policy is designed to hedge highly probable budgetary foreign currency exposures and/or firm import and export commitments.

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

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

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

#### 2. Recognition at 31/12/2018

### 2.1. Commodity risk

At 31 December 2018, the balance sheet fair value recognition of derivative instruments used to hedge commodity risk showed a gain of **MAD 7.8 million** of which **MAD 7.8 million** related to cash flow hedges, and **MAD 0.0 million** related to Trading.

In MAD millions	31-Dec.-18	31-Dec.-17
	MtM total	MtM total
<b>CASH FLOW HEDGING (A)</b>	<b>7,8</b>	<b>7,81</b>
Silver	0	0
Gold		
Zinc	2,9	2,92
Lead	0	-0,05
Copper	4,9	4,94
<b>DERIVATIVES CLASSIFIED AS TRADING (B)</b>	<b>0</b>	<b>0</b>
<b>TOTAL (A) + (B)</b>	<b>7,8</b>	<b>7,8</b>

### 2.2. Foreign exchange risk:

At 31 December 2018, the market value balance sheet recognition of derivative instruments used for currency hedging showed a loss of **MAD 26.7 million**.

In MAD millions	31-Dec.-18	31-Dec.-17
	MtM total	MtM total
Cash flow hedging	-26,7	-85,3
Derivatives not qualified as hedges	0	0
<b>TOTAL</b>	<b>-26,7</b>	<b>-85,3</b>

### 3. Sensitivity analysis

#### 3.1. Commodity risk

The fair value of the Group's commodity-related derivative instruments at 31 December 2018 was **+ MAD 7.8 million**.

In MAD millions	MTM at 31/12/2018 (a)	MTM +10% change (b)	Total change in MtM (b-a)	Impact on income	Impact on shareholders' equity
<b>+10% UNDERLYING</b>	<b>7,8</b>	<b>-10,5</b>	<b>-18,3</b>	<b>-</b>	<b>-10,5</b>
Silver	-	-	-	-	-
Or	0	-0,2	-0,2	-	-0,2
Zinc	2,9	-4	-6,9	-	-4
Lead	0	-0,5	-0,5	-	-0,5
Copper	4,9	-5,8	-10,7	-	-5,8

The scenario in which a metal price change of +10% would maximise the Group's commodities risk exposure - i.e. a 10% increase in the prices of Silver, Gold, Zinc, Lead and Copper compared with closing spot market prices - and result in a loss of **MAD 10.5 million** being recognised in shareholders' equity at MAD -10.5 million and in income at 0.0, i.e. a change of **MAD -18.3 million**.

In MAD millions	MTM at 31/12/2018 (a)	MTM +10% change (b)	Total change in MtM (b-a)	Impact on income	Impact on shareholders' equity
<b>-10% UNDERLYING</b>	<b>7,8</b>	<b>26,8</b>	<b>19</b>	<b>-</b>	<b>26,8</b>
Silver	-	-	-	-	-
Or	0	0,1	0,2	-	0,1
Zinc	2,9	9,9	6,9	-	9,9
Lead	0	0,4	0,5	-	0,4
Copper	4,9	16,4	11,4	-	16,4

The scenario in which a metal price change of -10% would minimise the Group's commodities risk exposure - i.e. a -10% decrease in the prices of Silver, Gold, Zinc, Lead and Copper compared with closing spot market prices - and result in a gain of MAD 10.5 million being recognised in shareholders' equity at **MAD 26.8 million** and in income at 0.0, i.e. a change of **MAD +19.0 million**.

### 3.2. Foreign exchange risk

The fair value of the Group's foreign exchange derivatives at 31 December 2017 was approximately MAD -26.7 million.

MAD millions	MTM at 31/12/2018 (a)	MTM +10% change (b)	Total change in MtM (b-a)	Impact on income	Impact on shareholders' equity
<b>+10% UNDERLYING</b>	-26,7	-51,9	-25,2	-	-51,9
Managem	-26,7	-51,9	-25,2	-	-51,9

The scenario in which an exchange rate change of +10% would maximise the Managem Group's exchange rate risk exposure - i.e. a 10% rise in the US dollar rate against the dirham - would result in an foreign exchange loss of **MAD -51.9 million** being recognised in shareholders' equity, i.e. a change of **MAD -25.2 million**.

IMAD millions	MTM at 31/12/2018 (a)	MTM +10% change (b)	Total change in MtM (b-a)	Impact on income	Impact on shareholders' equity
<b>-10% UNDERLYING</b>	-26,7	-1,6	25,2	-	-1,6
Managem	-26,7	-1,6	25,2	-	-1,6

The scenario in which an exchange rate change of +10% would minimise the Managem Group's exchange rate risk exposure - i.e. a -10% fall in the US dollar rate against the dirham - would result in an foreign exchange situation of **MAD -1.6 million** being recognised in shareholders' equity, i.e. a change of **MAD -1.6 million**.

At 31 December 2018, the undiscounted contractual cash flows (principal and interest) on outstanding financial liabilities by maturity date were as follows :

	In MAD millions	Dec.-18	Dec.-17
Bonds		1 249,90	1 649,90
Loans from credit institutions		290,1	533,4
Finance lease debts		24,8	88,7
Other financial debts		0	0
Derivative financial instruments		0	4,1
<b>TOTAL NON-CURRENT FINANCIAL DEBTS</b>		<b>1564,8</b>	<b>2 276,10</b>
Bonds		0	0
Loans from credit institutions		1 823,00	1 327,80
Finance lease debts		0	0
Derivative financial instruments		26,7	86
<b>TOTAL CURRENT FINANCIAL DEBTS</b>		<b>1 849,70</b>	<b>1 413,80</b>
<b>TOTAL</b>		<b>3 414,50</b>	<b>3 689,90</b>

## NOTE 22. OTHER COMMITMENTS

Commitments given

	In MAD millions	Dec. 2018	Dec.-17
Endorsements, sureties and guarantees given		89,4	75,5
Debts secured by pledged or mortgaged assets		-	-
Other commitments given*		-	-
<b>TOTAL</b>		<b>89,4</b>	<b>75,5</b>

Commitments received

	In MAD millions	Dec. 2018	Dec.-17
Endorsements, sureties and guarantees given		20,1	20,1
Debts secured by pledged or mortgaged assets		-	-
Other commitments given*		-	-
<b>TOTAL</b>		<b>20,1</b>	<b>20,1</b>

## NOTE 23. CONTINGENT LIABILITIES

None.

## RELATED PARTIES

### 23.1. Transactions with other related parties

Transactions with other related parties break down as follows :

	In MAD millions	31-Dec-18	31-Dec-17
<b>Assets</b>			
Trade receivables (net)		-	-
Other current receivables		-	-
Other non-current assets		-	-
<b>Liabilities</b>			
Trade payables		3,9	5,6
Other current liabilities (Prepaid expenses)		200,0	-
Other long-term debt		-	-
		<b>203,9</b>	<b>5,6</b>
<b>Turnover</b>			
Other income		-	-
Purchases and other external charges		17,2	19,0
Other (FF)		0,0	18,8
		<b>17,2</b>	<b>37,8</b>

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

## NOTE 24. CASH FLOW STATEMENT

### 24.1. Detailed impact of changes in WCR on cash and cash equivalents for the financial year

In MAD millions	31-Dec-18	31-Dec-17
Change in inventories	-274,7	-28,7
Change in receivables	819,3	-493,9
Change in liabilities	-356,1	637,2
<b>CHANGE IN WCR</b>	<b>188,4</b>	<b>114,6</b>

### 24.2. Reconciliation of cash and cash equivalents shown in the balance sheet and in the cash flow statement

	In MAD millions	31-Dec-18	31-Dec-17
Net cash and cash equivalents - balance sheet		-885	433,0
<b>CASH AND CASH EQUIVALENTS - CASH FLOW STATEMENT</b>		<b>-885</b>	<b>433,0</b>

## NOTE 25. EVENTS AFTER THE BALANCE SHEET DATE

Company name	Pays	Dec. 2018	Dec. 2017	Consolidation method
Managem	Morocco	100.00%	100.00%	Consolidating entity
Compagnie Minière des Guemassa	Morocco	86.96%	76.91%	FC(*)
Compagnie de Tifnout Tighanimine	Morocco	99.79%	99.79%	FC
Akka Gold Mining	Morocco	93.47%	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 %	20 %	EM (**): 2017 BS date
MANUB	Sudan	78.00%	69.42%	FC
MANAGOLD	UAE	100.00%	100.00%	FC
MCM	Sudan	100.00%	89.00%	FC
TRADIST	UAE	100.00%	100.00%	FC
MANAGEM GABON	Gabon	100.00%	100.00%	FC
LAMILU	DRC	-----	-----	-
SMM	GUINEA	59 %	34 %	FC
MANACET	Morocco	70 %	40 %	FC

(\*) FC: Full Consolidation





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