

Identifying the main issues that could impact our business

WE UNDERSTAND THAT KEY RISKS TO OUR BUSINESS MIGHT ALSO OFFER
UNIQUE OPPORTUNITIES FOR US TO GROW AND CREATE VALUE

1 REGULATORY AND LEGAL CONTEXT

STRATEGIC FOCUS AREA
ECONOMIC PERFORMANCE
VALUE CHAIN AND SOCIETY
ECO-EFFICIENCY

CHANGE IN RISK PROFILE



Increase

CHANGE IN OPPORTUNITY PROFILE



Increase

POTENTIAL IMPACT

Umicore is exposed to the evolution of the regulatory environment in the countries or regions in which it operates. Umicore's businesses stand to benefit from certain regulatory trends, notably those regarding more stringent emission controls for vehicles, low carbon mobility and enforced recycling of end-of-life products.

Some regulations, such as environmental or product-related laws, can present operational challenges, higher costs and a potentially uneven competitive environment.

Active management and remediation of risks that have resulted from historical operations is an integral part of the Umicore Way.

The growth in technology driven businesses results in an even greater importance of IP and IP protection-related matters.

CHANGE IN CONTEXT

Worldwide, changes to existing product-related legislation and the introduction of new legislation might impact our business. Although the European REACH regulation is still the most relevant one for Umicore, the Korean-REACH is gaining importance. For more information, see page 202.

The trend towards more stringent emission legislation and targets continued, while new measures on vehicle emissions push industry to innovate in emission control system design, including catalysts and catalytic filters.

In terms of legal risk please refer to the contingencies section (see page 161 for the note F36). This relates primarily to cases brought against Umicore in the domain of cathode materials for rechargeable battery materials.

MEASURES TAKEN BY UMICORE

Umicore manages its historical environmental legacy, ensuring adequate financial provisions that are reviewed twice a year. For more information, see page 149.

To ensure ongoing compliance with environmental legislation at our industrial sites, Umicore has a well-established EHS compliance audit programme and constantly monitors changes in legal requirements where we operate. For more information, see page 182.

Umicore continues to play an active role in informing European legislators of various emission control technologies for both diesel and gasoline powered vehicles, to help legislators make informed decisions about future emission and testing norms.

In 2017, Umicore took steps to ensure its ability to meet the surging demand for cathode materials for rechargeable batteries used in electrified transportation. This involves continued investment on production capacity of cathode materials in China and Korea.

In 2017, as part of regular maintenance, 14 REACH dossiers were updated for reasons that included increasing the tonnage band, replying to ECHA requests and including new information on composition, uses or Chemical Safety Reports. In preparation of the third phase of the EU REACH regulation, 115 new registrations were submitted.

The patent case brought by BASF and Argonne National Laboratory in the United States was settled to the satisfaction of all parties.

Identifying the main issues that could impact our business

2 SUSTAINABLE AND ETHICAL SUPPLY

STRATEGIC FOCUS AREA
ECONOMIC PERFORMANCE
VALUE CHAIN AND SOCIETY

CHANGE IN RISK PROFILE



Increase

CHANGE IN OPPORTUNITY PROFILE



Increase

POTENTIAL IMPACT

Umicore requires certain metals or metal-containing raw materials to manufacture its products and feed its recycling activities. Some of these raw materials are comparatively scarce and require very specific sourcing strategies. Obtaining adequate supplies of these materials is important for the ongoing success and growth of our business.

Some metals are also found in regions facing social challenges. Trading in precious metals and minerals can be used to finance armed conflict, cause human rights abuses, draw upon forced or child labour and support corruption and money laundering. It is important that we ensure that the procurement of 'conflict minerals' is in line with Umicore's values, while providing an advantage to our customers.

Given the scarcity of resources, treating complex materials from above-ground sources, such as industrial residues and "End-of-life" materials, is increasingly important. Our facility in Hoboken is the world's largest and most complex precious metals recycling operation, processing over 200 types of raw material and recovering over 20 different metals.

CHANGE IN CONTEXT

Adopted in 2017, the European Union's Conflict Minerals Regulation will come into full force 1 January 2021. This law aims to drive responsible sourcing of tin, tantalum, tungsten and gold, which are sometimes extracted from conflict regions or mined under abusive conditions, in order to meet international responsible sourcing standards as set by the OECD in the 'Due Diligence Guidance for Responsible Supply Chains from Conflict-Affected and High-Risk Areas.' The conditions in the US Dodd-Frank Wall Street Reform and Consumer Act of 2010 legislation, which covers the same four minerals, will also be met by this new law.

MEASURES TAKEN BY UMICORE

Umicore has implemented policies and measures covering human rights, the right for workers to organise and collective bargaining, equal opportunities and non-discrimination, banning of child labour, banning of forced labour, consistent with International Labour Organisation (ILO) standards. These commitments are supported through a Global Framework Agreement on Sustainable Development with IndustriALL Global Union.

In addition to existing policies and charters such as the Umicore Code of Conduct, Human Rights Policy and Sustainable Procurement Charter, Umicore also has a specific policy for "Responsible global supply chain of minerals from conflict-affected and high-risk areas".

Umicore's Sustainable Procurement Framework for Cobalt, which covers Umicore's cobalt purchases worldwide, was adapted in 2017 to be fully aligned with the OECD 'Due Diligence Guidance for Responsible Supply Chains from Conflict-Affected and High-Risk Areas'.

Umicore is growing its capacity to cater to rising recycling demand. Umicore's recycling not only offers environmental and ethical sourcing benefits, but also increased resource security.

Increasingly Umicore customers request a guarantee and the necessary documentation to assure the conflict-free status of our products. The Umicore internal 'Metals and Minerals' working group, which includes procurement and raw material experts, streamlines and optimises the efforts required for this growing customer demand by sharing best practices.

Identifying the main issues that could impact our business

3 TECHNOLOGY AND SUBSTITUTION

STRATEGIC FOCUS AREA
ECONOMIC PERFORMANCE
VALUE CHAIN AND SOCIETY
ECO-EFFICIENCY

CHANGE IN RISK PROFILE



No change

CHANGE IN OPPORTUNITY PROFILE



Increase

POTENTIAL IMPACT

Umicore is a materials technology group with a strong focus on the development of innovative materials and processes. The choice and development of these technologies represents the single biggest opportunity and risk for Umicore.

Achieving the best cost-performance balance for materials is a priority for Umicore and its customers. There is always a risk that customers will seek alternative materials for their products should those of Umicore not provide this optimum balance. The risk is especially present in businesses producing materials containing expensive metals (especially those with historically volatile pricing characteristics).

CHANGE IN CONTEXT

Trends in rechargeable battery materials for automotive applications have underscored that NMC materials with increasing Nickel content are the technology of choice for customers in current and upcoming electrified vehicle platforms.

In vehicle emission control, regulatory debates have reinforced the need to have a broad spectrum of technologies available for both gasoline and diesel applications.

MEASURES TAKEN BY UMICORE

Every year, the Executive Committee identifies innovation projects ("Top 10") which are key to achieving Horizon 2020 (and beyond) growth ambitions and cover product and process developments. A selection of these projects is reviewed during the year either through dedicated technology reviews or as part of strategic business reviews.

Previous years' R&D investments have brought great success and created a space to shift R&D positioning. Umicore invested selectively in new fields relevant to core activities in 2017. Overall spend was equivalent to 6% of revenues.

Umicore patents disruptive technologies. In 2017, Umicore registered 48 new patent families.

For more information on Umicore's approach to managing its innovation and technology portfolio see pages 64-65.

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4 MARKET

STRATEGIC FOCUS AREA
ECONOMIC PERFORMANCE
VALUE CHAIN AND SOCIETY

CHANGE IN RISK PROFILE



Change in perimeter
 (see Change in context)

CHANGE IN OPPORTUNITY PROFILE



Increase

POTENTIAL IMPACT

The main end markets served by Umicore are automotive (for clean mobility products) and non-ferrous metal mining and refining industries (recycling activities). Umicore is sensitive to any major growth or global reduction in activity levels in these sectors.

Activity levels in other areas of the economy such as consumer electronics are also relevant to Umicore as are the levels of activity in specific industries or with specific customers where Umicore provides closed-loop recycling services.

In the longer term, market disruptions such as new models of consumption have the possibility to significantly alter the landscape of the markets that Umicore serves, posing risks as well as creating new opportunities.

CHANGE IN CONTEXT

Overall, the global economic outlook remained stable in 2017. Market forecasts continue to point to a supportive economy with global growth expected to be driven by Asian markets, in particular China.

The automotive industry performed well with higher levels of demand in several regions and a remarkable acceleration in demand for electrified vehicles.

In all important markets, more stringent vehicle emission legislation has come into force or has been announced for the coming years.

The risk profile of Umicore reflects a growing exposure to the automotive industry and, from a geographical point of view, to Asia, in both cases driven by the fast growing sales of cathode materials for use in electrified vehicles. Following the divestment of its Building Products business, Umicore is no longer materially exposed to the construction industry.

The early positioning of Umicore in the market of cathode materials for rechargeable batteries and qualification for several automotive platforms mean that Umicore should benefit from the accelerating demand for electrified vehicles. This trend may be amplified by the decreasing sales of diesel-engine passenger cars.

MEASURES TAKEN BY UMICORE

Umicore's increasing presence in fast-growing market segments that are driven by global megatrends meant that our economic performance in 2017 again far outstripped that of the economy in general and that of most of our competitors.

The Executive Committee undertook a review of potentially disruptive market and technology trends in automotive and discussed its findings with the Board of Directors.

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5 METAL PRICE

STRATEGIC FOCUS AREA ECONOMIC PERFORMANCE

CHANGE IN RISK PROFILE



No change

CHANGE IN OPPORTUNITY PROFILE



No change

POTENTIAL IMPACT

Umicore's earnings are exposed to risks relating to the prices of the metals which we process or recycle. The structural metal price risk relates mainly to the impact that metal prices have on the surplus metals recovered from materials supplied for recycling. It concerns platinum, palladium, rhodium, gold and silver as well as a wide range of base and specialty metals. For some metals quoted on futures markets, Umicore hedges a proportion of its forward metal exposure to cover part of the future price risks.

For more information on the structural risk, as well as on the transactional and inventory risk related to the metal prices, see pages 107-109.

CHANGE IN CONTEXT

Prices for precious metals strengthened in 2017. Prices for gold, palladium and rhodium increased significantly, while silver and platinum prices faced a volatile environment in which gains were often completely offset by subsequent losses, leaving a small increase over the full year cycle.

MEASURES TAKEN BY UMICORE

Over the course of 2017, Umicore entered into forward contracts securing a portion of its structural price exposure for certain precious metals and base metals in 2018 and 2019, thereby increasing earnings predictability.

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6 TALENT ATTRACTION AND RETENTION

STRATEGIC FOCUS AREA GREAT PLACE TO WORK

CHANGE IN RISK PROFILE



Increase

CHANGE IN OPPORTUNITY PROFILE



Increase

POTENTIAL IMPACT

The attraction and retention of skilled people are important factors in enabling Umicore to fulfil its strategic ambitions and to build further expertise, knowledge and capabilities in the business. Being unable to do so would compromise our ability to deliver on our goals.

Horizon 2020 is predicated on disproportionate growth for Umicore in Asia – a region characterised by highly competitive and fluid labour markets. Umicore's challenge is to attract and retain talent in the region on a sufficient scale and at an appropriate pace.

CHANGE IN CONTEXT

Our accelerated expansion combined with competitive labour markets have created even greater recruitment needs.

MEASURES TAKEN BY UMICORE

To enhance our recruitment pool, we developed a global employer brand with a special focus on challenging labour markets in Europe and Asia. This branding supports our specific recruitment initiatives.

In 2017, Umicore developed a group policy on diversity to support an inclusive work culture that offers equal opportunities, leading to a high level of employee engagement for all employees, irrespective of their diverse backgrounds.