

## Glossary Annual report 2016

### FINANCIAL DEFINITIONS

#### AVERAGE CAPITAL EMPLOYED

For half years: average of capital employed at start and end of the period; For full year: average of the half year averages.

#### CAPITAL EMPLOYED

Total equity (excluding fair value reserves) + net financial debt + provisions for employee benefits – deferred tax assets and liabilities – IAS 39 impact.

#### CAPITAL EXPENDITURE

Capitalised investments in tangible and intangible assets, excluding capitalised R&D costs.

#### CASH FLOW BEFORE FINANCING

Net cash generated by (used in) operating activities + net cash generated by (used in) investing activities.

#### EBIT

Operating profit (loss) of fully consolidated companies, including income from other financial investments + Group share in net profit (loss) of companies accounted for under equity method.

#### EPS

Earnings per share for equity holders.

#### EPS, BASIC

Net earnings, Group share/average number of outstanding shares.

#### EPS, DILUTED

Net earnings, Group share/(average number of outstanding shares + number of potential new shares to be issued under the existing stock option plans x dilution impact of the stock option plans).

#### GEARING RATIO

Net financial debt/(net financial debt + equity of the Group).

#### IAS 39 EFFECT

Non-cash timing differences in revenue recognition in case of non-application of or non-possibility of obtaining IAS hedge accounting to:

- a) transactional hedges, which implies that hedged items can no longer be measured at fair value, or
- b) structural hedges, which implies that the fair value of the related hedging instruments are recognised in the income statement instead of the equity and this prior to the occurrence of the underlying forecasted or committed transactions, or
- c) Derivatives embedded in executory contracts, which implies that the change in fair value on the embedded derivatives must be recognised in the income statement as opposed to the executory component where the fair value change in the income statement cannot be recognised.

#### NET FINANCIAL DEBT

Non-current financial debt + current financial debt – cash and cash equivalents.

#### NON-RECURRING EBIT

Includes non-recurring items related to restructuring measures, impairment of assets, and other income or expenses arising from events or transactions that are clearly distinct from the ordinary activities of the company. Any writedowns on those metal inventories permanently tied up in operations are part of the non-recurring EBIT of the business groups.

#### OUTSTANDING SHARES

Issued shares – treasury shares.

#### RECURRING EBIT

EBIT – non-recurring EBIT – IAS 39 effect.

#### RECURRING EBIT MARGIN

Recurring EBIT of fully consolidated companies/revenues excluding metals.

#### RECURRING EBITDA

Recurring EBIT + recurring depreciation and amortisation of fully consolidated companies.

#### RECURRING EFFECTIVE TAX RATE

Recurring tax charge/recurring profit (loss) before income tax of fully consolidated companies.

#### RECURRING EPS

Recurring net earnings, Group share/average number of (issued shares – treasury shares).

#### RETURN ON CAPITAL EMPLOYED (ROCE)

Recurring EBIT/average capital employed.

#### REVENUES (EXCLUDING METAL)

All revenue elements – value of purchased metals.

#### REVENUES BY GEOGRAPHY

Group revenues attributable to a geographic destination, including associates and joint ventures revenues adjusted for Umicore's shareholding. This means that for recycling activities the revenue component is based on the location of the suppliers of raw materials, as determined by the refining charges.

#### R&D EXPENDITURE

Net research and development charges of fully consolidated activities (i.e. excluding R&D income such as research grants). Includes capitalised costs.

The above financial definitions relate to non-IFRS performance indicators except for EPS, basic and EPS, diluted.

## OTHER DEFINITIONS

### API (ACTIVE PHARMACEUTICAL INGREDIENT)

Biologically active substance used in pharmaceutical products.

### APS (ASSESSMENT OF PRODUCT (AND SERVICES) SUSTAINABILITY)

This Umicore specific methodology is used for assessing the sustainability of Umicore's products and services and uses a tool consisting of 58 preformatted questions and answers with scoring and weighting factors and organised around eight themes.

### ASSOCIATE

An entity in which Umicore has a significant influence over the financial and operating policies but no control. Typically this is evidenced by an ownership of between 20% and 50%. Associates are accounted for using the equity method.

### BEST AVAILABLE TECHNOLOGY (BAT)

A term relating to technology used to limit pollutant discharges.

### BIOMARKER OF EXPOSURE

Substance or its metabolite that is measured in biological fluids (e.g. blood) to assess internal body exposure.

### BRAZING

A metal-joining process whereby a filler metal is heated above melting point and distributed between two or more metal parts.

### CARBOXYLATE

A carboxylate is a salt of a carboxylic acid.

### CATALYSIS/CATALYST

Catalysis is a chemical process whereby one of the elements used in the reaction process, the catalyst, makes this chemical reaction possible, or speeds up this process, without being consumed in the reaction process, and therefore can be re-used.

### CATHODE

The cathode is the positive side in a (rechargeable) battery. In the charging phase ions are released from the cathode and migrate to the anode (negative side), thereby storing electricity. In the discharging phase, the ions move back to the cathode, thereby releasing electricity.

### CHARITABLE DONATION

A donation to a not-for-profit organisation that is not for the commercial benefit of Umicore. Donations can be in cash or in kind. Political donations are not permitted.

### CLOSED LOOP

For Umicore a "closed loop" involves taking back secondary materials from customers (e.g. production residues) or end-of-life materials (e.g. used mobile phones, automotive catalysts) to recover the metals to be fed back into the economic cycle.

### CO<sub>2</sub> EQUIVALENT

The universal unit of measurement to indicate the global warming potential (GWP) of each of the six greenhouse gases, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis.

### COMBINED HEAT POWER COGENERATION

The use of heat to generate electricity.

### CONCENTRATES

Ore or metal separated from its containing rocks or earth.

### CONFLICT MINERALS

Minerals mined in conditions of armed conflict or human rights abuses, particularly gold, tin, tungsten and tantalum in the context of the Dodd Frank Act (see above).

### CONTACT MATERIAL

Materials (usually containing silver) that are used for their conductive properties in electrical applications e.g. for switches.

### COSO FRAMEWORK

The Committee of Sponsoring Organisations of the Treadway Commission (COSO) is a voluntary private-sector organisation which has established a common internal control model against which companies and organisations may assess their control systems.

### DATASET (EHS)

A defined set of data on the physical, chemical and toxicological properties of a product.

### DECIBEL

Unit of noise level.

### DODD FRANK ACT

Full title: Dodd-Frank Wall Street Reform and Consumer Protection Act. The Dodd Frank Act aims to promote the financial stability of the United States by improving accountability and transparency in the financial system.

### EHS

Environment, health & safety.

### ELECTROPLATING

Electroplating is a plating process in which metal ions in a solution (electrolyte) are moved by an electric field to coat another material. The process is primarily used for depositing a layer of material to bestow a desired property on that other material.

#### **END-OF-LIFE (EOL) MATERIALS**

Materials that have ended a first life cycle and will be re-processed through recycling leading to a second, third... lifetime.

#### **EMPLOYEE TURNOVER**

Expressed in terms of voluntary leavers: number of employees leaving at their own will (excluding lay-offs, retirement, and end of fixed-term contract). This number is related to the total workforce.

#### **EURO 6**

European emission standard for exhaust emissions of new passenger vehicles set for implementation in 2014.

#### **EV – ELECTRIFIED VEHICLE**

Vehicle (passenger car or other) that runs fully or partially on electricity, rather than on conventional fuel.

#### **EXCESS READING**

A result of a biological monitoring analysis that exceeds the (internal) target level.

#### **FRASCATI MANUAL**

The Frascati Manual is a document prepared and published by the Organisation for Economic Co-operation and Development that sets forth the methodology for collecting statistics about research and development.

#### **FREQUENCY RATE LOST TIME ACCIDENTS**

Number of lost time accidents per million hours worked. Accidents on the road to and from work are excluded.

#### **GREENHOUSE GASES (GHG)**

GHGs are the six gases listed in the Kyoto Protocol: carbon dioxide (CO<sub>2</sub>); methane (CH<sub>4</sub>); nitrous oxide (N<sub>2</sub>O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF<sub>6</sub>).

#### **HDD – HEAVY DUTY DIESEL**

Large diesel vehicles – either on-road, such as trucks and buses, or non-road such as heavy plant and mining equipment or locomotives and agricultural equipment.

#### **HOURS OF TRAINING PER PERSON**

Average number of training hours per employee – including internal and external training and training on-the-job. Training on-the-job can include the hours a person is being trained on the shop-floor, without being fully productive. The total number of training hours is divided by the total workforce.

#### **INDUSTRIAL BY-PRODUCTS**

See Secondary (raw) materials.

#### **INTERMEDIATE**

A substance that is manufactured for and consumed in or used for chemical processing in order to be transformed into another substance.

#### **ISO 14001**

'International Standards Organisation' specification for environmental management systems (ref. ISO).

#### **ITO – INDIUM TIN OXIDE**

A transparent conducting oxide used in specific layers for its electrical conductivity and optical transparency. It is used in diverse applications, such as flatscreen displays, photovoltaics and architectural glass.

#### **JOINT VENTURE**

A contractual arrangement whereby Umicore and another party undertake an economic activity that is subject to joint control. Joint ventures are accounted for using the equity method.

#### **KYOTO PROTOCOL**

A protocol to the United Nations Framework Convention on Climate Change (UNFCCC). It requires countries listed in its Annex B (developed nations) to meet reduction targets of GHG emissions relative to their 1990 levels during the period of 2008–20.

#### **LCO – LITHIUM COBALTITE**

Cathode material used in lithium ion rechargeable batteries, particularly suited for portable electronic applications.

#### **LDV – LIGHT DUTY VEHICLE**

Primarily passenger cars – using either diesel or gasoline fuel, or other.

#### **LED – LIGHT EMITTING DIODE**

LEDs are a semiconductor-based light source offering many advantages over traditional incandescent light sources, among which long lifetime and energy efficiency.

#### **LI-ION – LITHIUM ION BATTERY**

Lithium ion is a technology for rechargeable batteries in which lithium ions move from the positive electrode (the cathode) to the negative electrode (the anode) during the charging phase, thereby storing electricity. In the discharging phase, the lithium ions move back to the cathode, thereby releasing electricity.

#### **LOST-TIME ACCIDENT**

A work related injury resulting in more than one shift being lost from work.

#### **MATERIALITY**

The identification of the most relevant and significant factors influencing the organisation and the organisation's own most significant economic, social and environmental impacts.

#### **MICROGRAMME PER DECILITER BLOOD**

Unit of metal content in blood.

#### **MICROGRAMME PER GRAMME CREATININE**

Unit of metal content in urine.

#### **NMC – LITHIUM (NICKEL-MANGANESE-COBALT) OXIDE**

Relatively new type of cathode material, which is used in the emerging (H)EV market and also more and more in portable electronic applications.

#### **OEM**

Original equipment manufacturer. In the automotive industry context it refers to car manufacturers.

#### **OHSAS 18001**

'Occupational Health and Safety Assessment Series': a Health & Safety management system.

#### **PGM – PLATINUM GROUP METALS**

Platinum, palladium, rhodium, ruthenium, iridium and osmium (in Umicore's case it refers mainly to the first three).

#### **PHOTOVOLTAICS**

Photovoltaics is a method of generating electrical power by converting solar radiation directly into electricity.

#### **PLATFORM (AUTOMOTIVE)**

A combination of chassis and engine type that is used on one or more models of passenger car, sometimes between different manufacturers.

#### **PNEC**

Predicted no effect concentrations representing the concentration of a chemical which has no predicted effect on the environment.

#### **PRECURSOR**

Chemical substance that participates in the chemical reaction that produces another compound.

#### **PROCESS EMISSIONS**

Emissions generated from manufacturing processes, such as the CO<sub>2</sub> that is arising from the breakdown of calcium carbonate (CaCO<sub>3</sub>).

#### **PROCESS SAFETY**

Safety issues related to the use and storage of hazardous chemical substances that may present a hazard to the employees, neighbouring people and the environment.

#### **REACH**

'Registration, Evaluation and Authorisation of Chemicals'; EU chemicals policy.

#### **RECORDABLE INJURY**

A work related injury resulting in more than one first aid treatment or in a modified working programme but excluding lost-time accidents.

#### **RISK ASSESSMENT**

The evaluation of the risks of existing substances to man, including workers and consumers, and to the environment, in order to ensure better management of those risks.

#### **SAFESTART®**

An advanced safety awareness training and skills development programme.

#### **SCOPE 1, 2 CO<sub>2</sub>E EMISSIONS**

Scope 1 CO<sub>2</sub>e emissions: A reporting organisation's direct GHG emissions.

Scope 2 CO<sub>2</sub>e emissions: A reporting organisation's GHG emissions associated with the generation of electricity, heating/cooling, compresses air or steam purchased for own consumption.

#### **SDG – SUSTAINABLE DEVELOPMENT GOALS**

The 17 Sustainable Development Goals adopted by the United Nations on September 25 2015. They seek to build on the Millennium Development Goals and aim at ending poverty, protecting the planet, and ensuring prosperity for all as part of a new UN sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years.

#### **SECONDARY (RAW) MATERIALS**

By-products of primary material streams.

#### **SEVERITY RATE LOST TIME ACCIDENTS**

Number of calendar days lost per thousand hours work. Accidents on the road to and from work are excluded.

#### **SUBSTRATE**

A surface onto which a layer of another substance is applied. In automotive catalysts the substrate is the honeycomb structure, which enhances the surface area, on which the catalytic solution is deposited.

In photovoltaics, semiconductors such as germanium are used as substrates, on which the rest of the solar cell layers are deposited.

#### **TEMPORARY WORKERS**

Umicore employees with a temporary contract. They are not considered part of the stable workforce, but are included in the total workforce.

#### **VOLUNTARY LEAVERS**

Number of employees leaving at their own will (excluding lay-offs, retirement, and end of fixed-term contract). This number is related to the total workforce.