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## **KEY FINANCIAL DATA**

Billion KRW



## SALES BY REGION IN 2014







"We are rapidly becoming the additives partner of choice and a leading supplier in emerging markets."

> Jongho Park Chairman of the Board & CEO



Maurizio Butti Chief Operating Officer

"This year we streamlined necessary business processes to increase our competitiveness, respond quickly to global challenges and shifting market conditions and to ensure that we remain a best-in-class supplier delivering superior quality and service."

Maurizio Butti, COO

#### Dear Shareholders,

Entering 2014 we knew that the overall economic situation was still uncertain and volatile, but had expected the economic recovery to gain some traction. Instead it has been a disappointing year for Songwon Industrial Group.

Songwon delivered consolidated revenues of 665.5 Billion KRW with a 4% decrease year over year and a consolidated net loss of 13.4 Billion KRW. Key operational results were also affected with a Gross Profit after capacity variances of 13.3%, 6 points lower compared to last year. Our EBITDA was around 6% of sales — 6% percent lower than in 2013.

A combination of unexpected and unpredictable events (both internal and external) have negatively affected and contributed to the present business situation and results.

Key geographic regions faced challenging conditions. North America in particular experienced a harsh winter resulting in plant shutdowns and decreased demand. Europe continued to be weak while other regions previously leading growth, such as South America and India also showed a significant slowdown. Although, demand improved slightly during the final months of 2014, overall demand stagnated. As a result, sales volumes were about 4% lower than expected. Our core business, polymer stabilizers was most affected and to a lesser extent tin intermediates.

Most importantly, the industry situation led to increased competitive actions in the market, with some players trying to secure volume through price concessions. This inevitably led to increased pressure on selling prices, especially on polymer stabilizers. Throughout 2014, we experienced a significant decrease in our average selling price that accounted for almost twice the reported net loss for 2014. In addition to this pressure on market prices, raw material prices were rising  a trend that had begun in Q4/2013 and continued through July/August 2014. During this period, some key raw material prices rose more than 10%, leading to a double margin squeeze.

Another macroeconomic factor that significantly shaped 2014 were the foreign exchange rate developments that notably affected sales and profitability in certain regions, especially Japan. Despite strong efforts to raise prices in Japan, we were confronted with the fact that the currency was devaluating faster than our ability to implement these price increases.

Towards the end of 2013 and beginning of 2014, we also experienced totally unexpected, serious technical issues on two main production lines dedicated to two of our key antioxidants. Although we know that technical issues occur and are wellprepared to deal with them quickly, having two key production lines affected at the same time is rare. This situation caused production losses, yield decreases and greatly affected our production costs. Following a Korean tax audit, Songwon was required to pay a significant amount of additional taxes, which represented more than one third of the reported losses. In retrospect, these negative events and situations could have been much worse for us. Executing a number of actions enabled us to reduce the impact in 2014 and placed us in a stronger position going forward.

For polymer stabilizers, we have maintained our global market position. We tried initially to re-establish profitability in April by increasing market prices, against the very aggressive stand of some players and the weak growth of demand, but this move was not supported by the market. Throughout the year, we continued to improve the pricing/currency situation in Japan and announced a new general price



Jongho Park Chairman of the Board & CEO

increase in November. On this occasion, the market was more receptive. These price increases have not had any major effect on 2014, but they do put us in a better position for 2015.

Interestingly, raw material prices steadily increased until July/August, then stabilized and started to go down again. In line with the general oil and natural gas trend, the decrease accelerated towards the end of 2014, even though for several of our raw materials there is no direct correlation with oil. Again, we have not seen any positive effect on our 2014 results, owing to the structure of our sourcing contracts, but we expect them to be mirrored in the 2015 results.

From a technical perspective, we fixed the mentioned issues and continued to implement necessary measures. This resulted in improved production costs towards the end of 2014 compared to 2013. We see this continuing as we go forward.

After analyzing and dealing with all fixed cost items, we launched several cost saving initiatives which helped in 2014 and will support us in future. In parallel, we have also persevered with seamlessly executing the main elements of our strategy to create the conditions for achieving Songwon's ambitious targets. This is our central aim which must remain unaffected by shortterm, difficult situations.

Understanding and anticipating market needs allows us to build strong customer and supplier relationships, enables us to consolidate our competitive position, focus on Songwon's market offering and create a strong platform for sustainable growth.

During 2014 we centered our efforts on:

#### **Our Global Footprint**

Construction of our OPS (One Pack Systems) plant in Abu Dhabi progressed and it will start commercial operations in Q2/2015. We also established our commercial company in Dubai to manage our Middle East sales and commercial activities.

We successfully acquired SeQuent Scientific Ltd.'s specialty chemicals business in India, with its R&D division and state-of-the-art manufacturing plant in Panoli. Songwon now has a local manufacturing presence in India and expanded manufacturing capabilities for our existing and new products. Furthermore, we gained **SONGNOX® PQ**, an important high performance phosphite antioxidant for our polymer stabilizers portfolio.

#### **Polymer Stabilizers**

One of our key business growth engines for the future, we continued to improve and consolidate our 'Number 2' position in the global market. In 2014, we concentrated on the growth of thioesters produced by our joint venture, Songwon Baifu in China and of our UV Stabilizers business leveraging our co-operation with Sabo SpA.

As a strategic driver for growth and geographical expansion, we further invested in our One Pack System (OPS) business. Expanding Songwon's product offering is a key element in our strategy (e.g. SONGNOX® PQ). In 2014, we also worked with customers on innovative new solutions under our trademark SONGXTEND<sup>TM</sup>.

#### Tin Intermediates

This year, we helped our customers shift from DBTO to DOTO as required by the new regulation; a shift which Songwon anticipated by proactively reducing our DBTO capacity in favor of DOTO. Furthermore, we actively worked on developing advanced solutions for other tin intermediates.

#### Polyurethanes

In 2014, we concentrated on developing new product solutions despite the difficult economic environment.

#### **Business Development**

In order to establish a balanced and optimized business portfolio, we directed our innovation efforts towards areas which will allow us to enter new, high end growing businesses. In particular, we identified sectors and related products where Songwon's strengths can create a competitive advantage.

After successful developments by R&D, we also added commercial key resources and expect the first positive results in 2015.

#### **Operational Excellence**

This year we streamlined necessary business processes to increase our competitiveness, respond quickly to global challenges and shifting market conditions and to ensure that we remain a best-in-class supplier delivering superior quality and service. By always reviewing our proprietary processes, identifying areas of improvement and implementing the identified solutions, we are achieving greater efficiencies, improved costs and increased capacities. We also successfully implemented our new ERP system in all subsidiaries of Songwon Industrial Co. Ltd., with the exception of India and China where completion will take place in 2015.

#### Sustainability

In 2014, we maintained our strong commitment to sustainability as one of our core values. Infused in all our activities, our engagement comprises a strong focus on governance, improving EH&S performance, taking responsibility for employees and being a responsible company within our communities. At Songwon, we live these values by showing irreproachable business conduct and ensuring that all our products and activities are 100% compliant with or actually exceed international standards.

Through analyzing the environmental impact of our products, we strive for sustainable development. Our aim is to further reduce the environmental impact of our business by controlling and reducing energy and water consumption, as well as increasing the use of renewable raw materials whenever possible.

These efforts and attention to EH&S delivered good results in 2014. Our plants all delivered very strong performance and we included our contractors in Songwon's EH&S systems. This year, we invested considerable resources to improve the safety and risk profile of our plants. Although the major part of this effort is complete, risk assessment and mitigation will remain one of our key focuses for the future.

#### Human Resources & Organization

We constantly review our organization to ensure it is aligned with our strategic targets. In 2014, we reduced fixed costs where possible, while adding resources to those areas driving growth and profitability. We are also building the future of Songwon on our key asset: our people and strive to strengthen our expert teams, by adding key resources and talents. Although 2014 has been difficult, we remain convinced of, and expect a bright future for Songwon. Short-term economic development remains unpredictable and volatile, and the world economy is not yet showing consistent and sustainable growth but fundamental megatrends (population growth, demand for end-use products in emerging markets and inter-material competition) remain unaffected. And this will be the driver of demand growth. We have taken and continue to take vital steps to put Songwon Industrial Group in a leading position to benefit from these developments.

Songwon has proprietary technologies, excellent economics and offers bestin-class quality and reliability. Our commercial and manufacturing global footprints are taking shape and we offer our customers a robust and growing product portfolio that enables them to take advantage of new market opportunities. We are rapidly becoming the additives partner of choice and a leading supplier in emerging markets. Furthermore, our focus on innovation and on establishing a strong, balanced business portfolio is starting to give the expected results and the entrance into new high value/high growth markets is within reach.

We remain committed to you, our shareholders, and thank you for your continued confidence and support.

Jongho Park Chairman of the Board & CEO

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Maurizio Butti COO

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#### **OUR BRANDS**

## **SONGNOX®**

**Basic & Specialty Antioxidants** 

## SONGNOX<sup>®</sup> OPS

One Pack Systems

## **SABO®STAB**

Hindered Amine Light Stabilizers

## **SONGSORB®**

**UV Light Absorbers** 

## ■ SONGXTEND<sup>™</sup>

**Stabilizer Solutions** 

## ■ SONGSTAB<sup>™</sup>

Acid Scavengers & PVC Stabilizers

## ■ SONGCAT<sup>™</sup>

Tin Intermediates

## ■ SONGCIZER<sup>™</sup>

Plasticizers

## ■ SONGSTAR<sup>™</sup>

**Polyester Diols** 

## HI-THANE

Polyurethane Adhesives & Ink Binders

## ■ SONGSTOMER<sup>™</sup>

Thermoplastic Polyurethanes

## ■ SONGFLOC<sup>™</sup>

Flocculants

■ HI-SWELL<sup>™</sup> Super Absorbent Polymers

## **OUR HIGHLIGHTS IN 2014**

SIBUR/UTS cooperation agreement to enhance commercial & technical growth opportunities in Russia	PANOLI SITE expanded production footprint into India
PRODUCTION	REACH
5 Million USD spent	provided <b>12.900</b>
on production	SDS in 15 languages,
improvements	as well as TDS and RDS
HR	EH&S
successfully integrated	total water consumption
103 new people into the	reduced by 23% versus
Songwon organization	2013
R&D	BUSINESS DEVELOPMENT
developed >20 new	entered new high value
products to expand the	segments to secure
portfolio and assure new	future business of the
business in the future	Songwon Group
EH&S invested 7 Million USD in EH&S and Risk Management measures	HR increased our workforce by <b>13.2%</b>

### **GLOBAL PRESENCE AT A GLANCE**

Our comprehensive distributor network ensures that our customers receive the highest quality of service and rapid response anywhere in the world.

- ★ Headquarters/Affiliates
- Manufacturing
- Applications
- Technical service
- × R&D
- Sales/Distribution
- ▲ Logistic hubs

#### HEADQUARTERS/AFFILIATES

Ulsan, Korea Frauenfeld, Switzerland Mumbai, India Dubai, UAE Manama, Kingdom of Bahrain Shanghai, PR China Tokyo, Japan Houston, USA

#### MANUFACTURING

Ulsan, Korea Maeam, Korea Suwon, Korea Greiz, Germany Panoli, India Shanghai, PR China Tangshan, PR China Houston, USA Abu Dhabi, UAE (under construction)

## APPLICATIONS

Ulsan, Korea Brussels, Belgium

#### TECHNICAL SERVICE

Ulsan, Korea Frauenfeld, Switzerland Mumbai, India Manama, Kingdom of Bahrain Houston, USA

R&D Ulsan, Korea



#### SALES/DISTRIBUTION

Seoul/Busan, Korea Frauenfeld, Switzerland Mumbai, India Dubai, UAE Manama, Kingdom of Bahrain Shanghai, PR China Tokyo, Japan Houston, USA

Akron, USA Bangkok, Thailand Barcelona, Spain Bogot, Indonesia Bogotá, Colombia Brussels, Belgium Bucharest, Romania Budapest, Hungary Buenos Aires, Argentina Cairo, Egypt Caracas, Venezuela Cheshire, United Kingdom Hamburg, Germany Helsingborg, Sweden Ho Chi Minh City, Vietnam Istanbul, Turkey Jakarta, Indonesia Johannesburg, South Africa Kuala Lumpur, Malaysia Lima, Peru Melbourne, Australia Mexico City, Mexico Milano, Italy Moscow, Russia Norwalk, USA Paris, France Prague, Czech Republic Quito, Ecuador Rotterdam, Netherlands Santiago, Chile Sao Paulo, Brazil Santo Domingo, Dominican Republic Singapore, Republic of Singapore Sofia, Bulgaria Tehran, Iran Tel Aviv, Israel Toronto, Canada

Warsaw, Poland Vienna, Austria Zagreb, Croatia

#### LOGISTIC HUBS

Ulsan, Korea Antwerp, Belgium Abu Dhabi, UAE Ankleshwar/Panoli, India Edmonton, Canada Greiz, Germany Hong Kong, PR China Houston, USA Mogadore, USA Mumbai, India Shanghai, PR China Tokyo, Japan

Aspropyrgos-Attiki, Greece Barcelona, Spain Bangkok, Thailand Brockville, USA Brownsville, USA Ciudad de Guatemala, Guatemala Cleveland, USA Dover, USA Dyersburg, USA Genova, Italy Hamburg, Germany Ho Chi Minh City, Vietnam Indianapolis, USA Johannesburg, South Africa Joliet, USA Manchester, Great Britain Melbourne, Australia Mexico City, Mexico Milano, Italy Mocksville, USA Murray, USA Port Arthur, USA Port Klang, Malaysia Sankt Augustin, Germany Santos, Brazil Singapore, Republic of Singapore Stow, USA Suwanee, USA Tanjung Priok, Indonesia

#### **SONGWON HISTORY**

Songwon Industrial Co. Ltd. is the 2nd largest manufacturer of polymer stabilizers in the world. As a leader in the development and production of additives and specialty chemicals, we have been providing high quality products and innovative solutions to the plastics industry for almost 50 years.

At Songwon, we strive to operate our business in a sustainable manner and continually seek ways to reduce the environmental impact of our products and services.

Songwon Industrial Co. Ltd. established with the Head Office and plant in Busan (Korea)	1965 ————————————————————————————————————
Korean Ministry of Commerce and Industry granted Songwon its Trader's License	1973 ————————————————————————————————————
Start-up of Songwon's 2nd production site in Suwon (Korea) Songwon Industrial Co. Ltd. went public (Korea)	1977 ———————————————————————————————————
Songwon Moolsan Co. Ltd. Songwon's holding company established in Seoul (Korea)	1979 ———————————————————————————————————
Songwon's R&D Center is established in Ulsan with the approval of the Ministry of Science and Technology (Korea)	1983 ————————————————————————————————————
Start-up of Songwon's plant in Ulsan (Korea)	1986 ————————————————————————————————————
Head Office and plant moved from Busan to Ulsan (Korea)	1988 ———————————————————————————————————
Company moved to its newly constructed Songwon Building in Seoul (Korea)	1992
Songwon awarded ISO-9002 certification	1995
Office opened in Maeam (Korea)	2002
Songwon Brilliant Chemicals Co. Ltd. established in Shanghai (China)	2005
Songwon International AG established in Frauenfeld near Zurich (Switzerland) Songwon International - Americas Inc. established in Friendswood, Texas (USA)	2006



# > OUR BUSINESS

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Governance



#### SONGWON'S LEADERSHIP

With today's ever-shifting markets and competition, organizations must continuously evolve in order to stay on course for success. The ability to adapt is crucial for international expansion, global operations and capturing value from partnerships and acquisitions. Our Executive Committee drives the strategic direction of the organization while helping us stay true to our vision. Working collaboratively, the team is committed to Songwon's core values and creating an environment that enables the company's stakeholders to meet our corporate goals.

#### THE SONGWON INDUSTRIAL GROUP EXECUTIVE COMMITTEE

Bringing vast expertise & experience to our business

 Jongho Park, Chairman & CEO

 Head of the Songwon Industrial Group Executive Committee

 Since: January 1, 2011
 Nationality: Korean

 Jongho has been President of Songwon Industrial Co. Ltd. since 2006.
 He has a wealth of experience in the chemical industry having held

 leadership positions with Sumitomo Chemical Co. Ltd
 with their Overseas

 & Marketing Department in Japan, as well as Shanghai Grace Fabric Co. Ltd.





## Maurizio Butti, Chief Operating Officer

Since: January 1, 2011Nationality: ItalianMaurizio has been President and COO of Songwon International AG since July2006. Before joining Songwon, he was EVP Polymer Stabilizers and a memberof the Chief Executive Council of Great Lakes Chemical Corporation. Prior tothat he held various marketing, business, strategic planning and corporatedevelopment management positions at Great Lakes, EniChem and SOL Industries.

Hans-Peter Wüest, Chief Financial Officer Since: January 1, 2011 | Nationality: Swiss Hans-Peter gained his broad international experience in a wide variety of financial positions in the manufacturing and service industries. Before taking up his role at Songwon, he held finance leadership positions with DHL/Deutsche Post and Great Lakes Chemicals.





#### Olivier Keiser, EVP Business Management

Since: March 1, 2013Nationality: LuxembourgerOlivier has been Vice President EMEA Songwon International AG sinceFebruary 2011. Prior to Songwon, Olivier held various positions in businessmanagement, change management, corporate development, strategicplanning and marketing & sales at Almatis, National Adhesives, GreatLakes Chemical, the Von Roll Group and The Dow Chemical Company.

Douglas Excell, EVP Supply Chain and OPS BusinessSince: March 1, 2013Nationality: AmericanDoug has been Vice President Operations Songwon International Americas,<br/>since August 2010. Before joining Songwon Doug held various supply chain,<br/>business management, marketing, procurement and corporate

development positions at Compass Minerals, Chemtura, Great Lakes





#### Dieter Morath, EVP Global Sales

Chemical and Amcol International.

Since: January 1, 2011Nationality: GermanDieter has been President Sales Songwon International AGin Europe, the Middle East and Asia since 2006. Before takingon this role, he held a number of commercial leadershippositions atGreat Lakes Chemical and GE Plastics (now SABIC).



Philippe Schlaepfer, EVP Corporate Development Since: January 1, 2011 Nationality: Swiss Before joining Songwon, Philippe spent more than 20 years as a key contributor to the Ciba Polymer Additives business. With 15 years of experience in the Asia Pacific region, he headed up Ciba's global antioxidant product portfolio to serve the polymer industry.

Giacomo Sasselli, EVP Manufacturing & Engineering Since: July 1, 2011 Nationality: Italian Giacomo held a number of key technology positions with the EniChem Group. He then broadened his experience as site manager. Later, he joined the Great Lakes Chemical Corporation where he was responsible for the operation of a worldwide network of polymer additive production sites.





Since: April 1, 2014

#### Byungsoo Boo, EVP Manufacturing

Since: April 1, 2014 Nationality: Korean Byungsoo has held several functions within Songwon over the course of his 27-year career. Since joining Songwon Industrial Co. Ltd. in the QC department in 1988, his positions have included R&D researcher, production manager for Polymer Stabilizers and plant manager at the Maeam site.

#### Duksuk Jung, EVP Process & Engineering

Nationality: Korean

Duksuk joined Songwon in January 1985. He has over 30 years' experience in Antioxidants, UVA, HALS and PVC Stabilizers with a focus on the technical aspects of process control, process design, process development, technical support and quality assurance in polymer additives. From 2010, he headed the process and engineering team for chemical plants.





#### Dong-Kyung Park, Head of R&D

Since: March 1, 2013 

Nationality: Korean Dong-Kyung started his career with Songwon Industrial Co. Ltd. in 1995 as researcher of the R&D center. He has over 19 years of experience in R&D and lead strategic product and technology development for Songwon's innovations. In 2010, he was appointed Head of R&D for Songwon.

Dongbek Park, Management Consultant Since: January 1, 2011 Nationality: Korean Dongbek started his career with Songwon Industrial Co. Ltd. in 1976 as Manager of Overseas Business. In 1997, he was appointed CEO & Representative Director of the company. Since retiring in 2004, he has continued to work for Songwon as a consultant in a general advisory role on overall company policy.



#### THE BOARD OF DIRECTORS (BOD)

Songwon's Board of Directors comprises 4 members all nominated and elected by the company shareholders.

- Jongho Park, Chairman, CEO & Member of the Executive Committee
- Chongsik Kim, President, Representative Director
- Kisoo Byun, Independent Director
- Yonghoon Kwon, Standing Auditor





Our Business
Songwon Profile

#### SONGWON INDUSTRIAL GROUP STRUCTURE

Our Industrial Group structure is designed to meet the specific needs of our industry, deliver outstanding value to our customers and optimize returns to our shareholders.

Through a combination of fully and partially owned subsidiaries and joint ventures we

are able to ensure that we have the right balance for our international expansion. Holding companies enable us to manage risk and facilitate joint ventures. Where appropriate, joint ventures provide us with market access, shared risks and economies of scale.





\*: 49% share holding plus 25% economical interest

Sales & Distribution
 Holding
 Service Company
 Manufacturing

#### SONGWON SHARE PRICE DEVELOPMENT

#### A VOLATILE YEAR ENDS WITH STRONG SIGNS OF RECOVERY

Share prices were volatile throughout 2014. Our generally modest business performance this year resulted in a loss of market confidence. In addition, the overall very weak performance of Korea's chemical industry and its outlook also affected Songwon shares. We saw this trend continuing until November.

However, share prices rebounded sharply at the end of November on the back of upward price adjustments by major polymer additive suppliers, and raw material price drops which encouraged institutional and foreign investors to buy Songwon stock. This led to a positive rising trend in December, which continued until Songwon's stock price hit a peak closing stock price of KRW 8.630 on December 17th and the year closed at KRW 8.120.

The market outlook in general remains stable and investors regained confidence in Songwon. This was reflected in the positive stock development at the end of 2014. Songwon remains the solid number 2 supplier in the industry with a global presence and we expect our business performance to further improve in 2015.



#### **SONGWON SHARE PRICE & VOLUME 2014**

#### SONGWON PRODUCT PORTFOLIO

#### MAXIMUM VALUE SOLUTIONS FOR THE GLOBAL POLYMER INDUSTRY

Plastics have become indispensable in the modern world. Today, we can hardly imagine life without plastics. Most of our daily activities involve them. And plastics need additives!

At Songwon, we offer our customers an extensive portfolio of plastic additives. Furthermore, we continually evaluate our product offering in relation to customer needs and market demands to ensure that we provide solutions that add maximum value.

Songwon's products are used throughout a broad range of industries to produce lightweight, environmentally friendly solutions. Our products also help improve mechanical performance and energy efficiency. In addition, they make innovative new design solutions possible for a wide range of applications and extend life cycles. The ever-increasing performance requirements on materials means that additives such as the wide range Songwon provides are gaining importance. For example in the automotive sector, the test norm VDA 278 currently required is a VOC level smaller than 200  $\mu$ g/g for interior automotive applications. In fact today, many of the required and most desired performance characteristics would be

impossible to achieve without our products and new solutions.

Songwon has a unique position on OPS, combining its technology and its back integration in antioxidants and UV stabilizers. In addition, Songwon has established a manufacturing postion in each of the key regions of the world and is able to supply the products from each of these locations using the same proprietary technology.

Wherever you are in the world and whatever you may do, it is very likely that you are in contact with Songwon products.

#### Songwon Industrial Group offers

- SONGNOX® Antioxidants,
- SONGNOX® One Pack Systems,
- SABO®STAB Hindered Amine Light Stabilizers,
- SONGSORB® Ultraviolet Light Absorbers,
- SONGXTEND<sup>™</sup> Stabilizer Solutions,
- SONGSTAB™ Acid Scavengers,
- SONGSTAB<sup>™</sup> PVC Stabilizers,
- SONGCAT™ Tin Intermediates,
- SONGCIZER<sup>™</sup> Plasticizers for the plastics industry,
- as well as lubricants, surface coating agents, polyester diols, polyurethanes, alkyl phenols, flocculants, super absorbent polymers and other chemicals.

#### **SONGWON PRODUCT GROUPS**

# Matching our products to customers' needs

In order to best meet our customers' diverse needs, our product lines are organized into 9 product groups.

Our products are distributed to and sold in more than 52 countries around the globe via our comprehensive network of experts.

- Polymer Stabilizers
- Alkyl Phenols
- Tin Intermediates
- PVC Stabilizers
- Polyester Diols
- Polyurethanes
- Plasticizers
- Super Absorbent Polymers
- Flocculants



#### **SONGWON PRODUCT GROUPS**

#### POLYMER STABILIZERS

Songwon offers a wide range of polymer stabilizers and is the 2nd biggest supplier in the world of plastic antioxidants. The product range includes phenolic and phosphite antioxidants (both 'main' and specialties), thioesters, metal deactivators, HALS, UV absorbers (benzotriazoles, benzophenones and benzoates) and One Pack Systems. Our products are available in a variety of blends and physical forms to facilitate the handling of the materials.

Our polymer stabilizers are used to protect the polymer during processing and to ensure physical property retention during the final product's lifetime.

#### Phenolic and Phosphite Antioxidants, Blends

Songwon is one of the few companies offering all three Main AOs and we have the second largest global capacity. Our antioxidants provide protection during processing and against oxidation throughout the life of the finished article.

#### **Speciality Antioxidants**

Songwon's differentiated specialty phenolic and phosphite antioxidants are complementary to the more essential Main AO range. Our specialty antioxidants provide plastics and resins with enhanced performance and robustness for even the harshest conditions.

Our strong engineering and technology position in phenolic and phosphite chemistry enables us to continuously expand our specialty antioxidant portfolio.

#### Thioesters

Thioesters are used to decompose and neutralize hydroperoxides formed by the oxidation of polymers. They provide heat aging protection and improve the color stability of polymers.



Physical forms of polymer stabilizers

Thioesters are produced by our JV Songwon Baifu Chemicals (Tangshan) Co. Ltd. in China and offered to customers through our global sales and support network.

#### HALS, UVAs & Hydroxybenzoates

Songwon has one of the largest product ranges of light stabilizers, including Hindered Amine Light Stabilizers (HALS).

As a primary antioxidant with low color generation, HALS protect polymers from degradation due to UV exposure. UV Absorbers provide protection by absorbing the energy from the UV radiation and through a reversible process, dissipate the energy as heat. Optimal UV protection is achievable with combinations of HALS and UVAs.

Once a polymer has been damaged by UV light and free radicals are formed, hydroxybenzoates act as free radical scavengers to protect the polymer from degradation. Some hydroxybenzoates can also act as UV absorbers. By performing in synergy with HALS they provide superior performance. We have a distribution arrangement in place with Sabo SpA, the global 'Number 2' manufacturer of monomeric and polymeric HALS.

#### One Pack Systems (OPS)

**SONGNOX® OPS** is the unique fusion of Songwon's world class antioxidants, UV stabilizers and other products using a state-of-the-art technology. Offering unlimited flexibility and versatility, it is this combination that makes it possible to produce tailor-made blend compositions. Several additives are combined into an integrated dust free pellet form using a broad range of compaction technology. OPS can offer several key advantages in terms of productivity, quality, EH&S and cost reduction.

#### Songwon stabilization solutions

Our **SONGXTEND™** range of innovative stabilization packages solve a number of well-known key issues encountered during processing, conversion and the end-use life cycle of polyolefins.

#### ALKYLPHENOLS

Songwon is fully back integrated in alkylphenols and alkylcresols, which are the key raw materials for the production of plastic antioxidants. We are further back integrated having our own IBL (isobutylene) production in-house.

#### TIN INTERMEDIATES

Songwon's Organo-Tin Intermediates are used as raw materials for Organo-Tin Stabilizers, polyurethane catalysts, car paints, esterification reactions and glass coatings. With excellent heat-stability, anti-weathering and transparency, our stabilizers are primarily used for PVC and Styrenics.

Committed to security of supply, our Organo-Tin Intermediates business is backward integrated based on the Grignard process.



Grinding tin metal prior to being used for the Grignard reaction

#### PVC STABILIZERS

PVC stabilizers protect the polymer from dehydrochlorination during processing that leads to the 'unzipping' effect causing degradation.

Our business was started in 1965 with PVC stabilizers and we are now one of the global leading suppliers. Our customers benefit from our broad range of PVC stabilizers comprising of tin and mixed metal stabilizers, acid scavengers, lubricants, as well as liquid phosphites.

We are back integrated in the production of tin intermediates. The Songwon PVC application lab in Ulsan, Korea ensures support with expert formulation and performance evaluations.

#### POLYESTER DIOLS

Songwon's Polyester Diols' business has set the standard in superior and stable quality combined with excellent service for our customers for over 40 years. **SONGSTAR™** Polyester Diols are used for Polyurethane adhesives, synthetic leather and Thermoplastic Polyurethane for extrusion and injection molding.

#### **POLYURETHANES**

Polyester- or Polyether-Polyols are base materials for Polyurethanes, which have a vast range of applications. At Songwon, we differentiate between solution type Polyurethanes & Thermoplastic Polyurethanes (TPU).

Since starting our Polyurethanes business in 1973, we have grown and established a leadership position in the Korean market. Furthermore, Songwon is the biggest producer of ink binders for flexible packaging in North East Asia.

#### TPUs for injection molding & extrusion

Our **SONGSTOMER**<sup>™</sup> series of products are polyester- or polyether-based thermoplastic polyurethanes. They are used to improve the flexibility, breathablity, non-blooming and transparency of polyurethane films and also facilitate the calender process.

#### Solution Type PUs

Our HI-THANE products are used in the production process of synthetic leather (wet & dry process), flexible packaging and as ink binders on different plastic films.

#### **PLASTICIZERS**

Plasticizers improve processing ability and physical properties such as flexibility, low temperature resistance, volatility and electrical properties for products made with PVC such as leather, chairs, films and electrical wires. Used as a base for PVC processing, they complement our broad range of PVC stabilizers for the PVC industry. Songwon has manufactured plasticizers since 1979. Today, we are specialized in DOA (dioctyl adipate), TOTM (trioctyl trimellitate), polymer type plasticizers based on adipic acid.

#### SUPER-ABSORBENT POLYMERS (SAP)

SAP materials can absorb over 100 times their weight in liquid and do not release the absorbed fluids easily even under pressure. They are used for disposable diapers, incontinence underpads, water holding agents for agricultural/horticultural use, industrial dewatering agents etc. Songwon began producing SAP commercially in 1994. Since then, we have developed and patented a unique UV continuous production process.

## FLOCCULANTS

Flocculants are highly efficient, water soluble polyelectrolytes (anionic, cationic, nonionic) based on acrylamides and its copolymers. They are mainly used in solid liquid separation processes such as precipitation, filtering, thickening and dewatering in waste water treatments. We have been producing Flocculants since 1979. Our plant that runs on UV continuous anion type Songwon technology was built in 1998, which enabled us to become a specialized flocculants manufacturer.

#### MARKETS, RISKS & OPPORTUNITIES

#### **AN INSIGHT TO THE MARKET**

Most of Songwon's products are used in the polymer or related industries. Therefore, it is appropriate to use the trends of the polymer industry as a high level reference for Songwon's products. The polymer industry has constantly shown significant growth rates over the last two decades. Polymer demand has traditionally been a few percentage points (1-1.5%) higher than the growth of the global GDP, largely because of the key megatrends of population growth, developments in emerging economies, inter-material competition, new and demanding applications and climate change. Demand for Songwon's products shows a similar trend. There is no reason to believe that this trend will not be maintained over the medium to longterm. However, the growth rate year over year has been very difficult to predict recently due to the continuing volatile global economic situation.

While the long-term outlook for the chemical industry remains intact, the cyclical and recurring global economic crises in 2008-2009 and 2011-2012, which still basically remain unresolved today, have adversely affected the short-term growth outlook. These crises have made it necessary for companies in the chemical sector to restructure and consolidate. An industry trend that is driving constant cost reduction and economy of scale initiatives, this consolidation has given purchasers greater power, with a few large global players sourcing increased volumes across multiple regions. Similar steps have also been taken as a result in supply chains, where additives are a key element.

Until a few years ago, the polymer industry was strong in industrialized countries. However, in recent years the explosive growth of China, and to a lesser extent the BRIC countries, together with globalization and the need for access to competitively priced raw materials, has shifted entire "A redesign of the geoeconomics of polymer production is likely, but to what extent depends on economic and political considerations."

Maurizio Butti, COO

value chains from West to East. China and India have mainly driven demand, and investments in new capacities in this region were not enough to cope with such demand. This was due to a lot of new investment into the Middle East because of the very favorable raw material (oil and natural gas) costs. Growth of demand in the developing countries has slowed down significantly in 2013 and 2014, with the exception of China. Production growth is continuing in the Middle East, with new opportunities beginning to emerge.

There has been limited growth in Europe and Japan, while opportunities arising from shale gas, can give a fresh boost to the petrochemical industry in traditional regions such as the US. This is likely to lead to a redesign of the geo-economics of polymer production, but to what extent this happens will depend on economic and political considerations.

After a moderate recovery in 2013, 2014 did not demonstrate the predicted growth. The overall economic situation was difficult. Europe struggled to get out of its crisis, Japan is showing only limited improvement, and the US experienced a diverse year, with a very weak start and good growth in Q3 that was not repeated in Q4. Apart from China, all other developing countries experienced a slowdown, and in some cases a serious deterioration of their economic situation. Furthermore, there was pronounced volatility in raw material prices (particularly oil and gas) which after a strong first half of the year, sunk to a very low level. Such a decrease has not been seen for many years and to a certain extent it is even more dramatic than what happened to currencies, particularly towards the end of the year.

#### Looking ahead

It is not clear yet what the real effect of these new situations on the global economy will be. This makes attempting to predict economic growth for 2015 and beyond, particularly difficult. In addition, the continuous shortening of economic cycles and the speed at which the changes take place add to the uncertainties. The situation has made customers cautious towards a fragile economic recovery and they will continue to demand less expensive items. However, consumers expect improvements year on year which continues to put pressure on component prices and the speed that products are launched. Nevertheless, in the medium term the polymer industry should continue to display healthy growth as the key megatrend will remain in place, unaffected by the shorter term economic forces.

While consolidation in the polymers industry has been driven by commoditization, producers seek out every opportunity to boost margins and profitability. The abundant innovation seen in the 1990s slowed down in the early 2000s. In the past few years, it has almost reached a standstill and its focus has changed to process speed and cost. Suppliers are faced with performance-based contracts, which can result in severe production-related penalties. Nevertheless, key megatrends such as inter-material competition, new and demanding applications and environmental issues, could restore the desire for innovation and innovative solutions. Songwon has the resources and the knowledge in place, to help the industry

to capitalize on these new opportunities. The biggest risk is the volatile and unpredictable global economy which shows hardly any signs of stable growth. Western economies are struggling and the risk of recession cannot be ruled out vet. This has inevitably put pressure on demand, as well as pricing and continues to affect suppliers by squeezing margins further. Only the strongest can survive in such an environment. However, opportunities are often embedded in business risks. Polymer demand is driven by consumer demand for products, housing, mobility and general well-being. Songwon's products are essential to boost the properties and performance of polymers used in these applications.

In the coming decade, the polymer industry landscape will change dramatically as Western companies meet new challenges and value chains move eastwards. However, this may not be true for regions with access to the new cheap sources of natural gas (shale gas). It is not yet clear how these trends will modify the global footprint of industries but they will define how suppliers can, and must react to support the industries they serve in the future.

Competitive risk in the polymer additives sector will also come from consolidation defined by economics. Technology will be driven by costs and innovation will focus on system costs for the customer. Value will be driven by performance and cost parameters.

## Minimizing negatives & capitalizing on positives

Songwon's established economic advantages in proprietary technology, economies of scale, backward integration and geography, alleviates our exposure to risk to a large extent. Furthermore, we are refocusing our efforts in R&D and business development, with the aim of establishing our presence in new high end business areas less exposed to economic cycles and where our ability to deliver innovation is a key factor for success. Our local presence in some of the key growth areas and our industry commitment, flexibility and ability to understand and anticipate market needs and trends, combined with a strong technical team, create the foundation for minimizing negative impacts. It also enables us to take advantage of the opportunities arising from the megatrends. Evaluating possible threats to Songwon's activities we view aspects like climate change as an opportunity that can be



A variety of products containing Songwon polymer additives

leveraged through new technology developments.

With Songwon's manufacturing footprint in India. Korea and China, we are ideally positioned to capitalize on Asia's demand and growth potential. Our efforts to improve processes together with the significant capacities installed, which increase competitiveness, have made us one of the most reliable additive suppliers in the market. It also means that we are strongly positioned and ready to support our customers as, and when there is growth in demand.

Our recent acquisition from SeQuent Scientific Ltd. has enabled us to strengthen our local position in India, which is likely to become one of the most important markets in the near future. The addition of an important additive to our product range and the modern manufacturing facility also gives us the chance to expand both our output and our portfolio.

We have established One Pack System (OPS) manufacturing facilities in key geographic regions which allow us to take advantage of the growth opportunities in these areas. This is particularly the case in the US owing to the expected growth of the polymer industry there based on the shale gas availability. In the Middle East, construction of our new plant is almost completed and will be operational in the first half of 2015. The Middle East is one of the fastest growing areas for the polymer industry supported by the feedstock cost advantage, and its major demand for additives in OPS form.

As companies restrict their businesses, and possibly add or move capacity to the Middle East, the US and Asia, Songwon is well-placed to be the customers' supplier of choice. We already anticipated that OPS' role will grow because it reduces the need for capitial investment where equipment is not yet in place. Solutions such as these will become ever more important as polymer producers look for improved productivity and compounders aim to combine diversification with lower costs.

Songwon has become renowned for offering one of the most complete product portfolios and delivering innovative, cost-effective solutions. We continuously focus on our customers' existing and future needs, and consistently add new products and polymer applications to meet their demands. In 2014, our R&D team focused on developing new solutions for high-end applications and we have already identified new development opportunities in industries showing high growth potential.

By developing and offering innovative solutions for improved polymer performance and opening the door to new markets and applications, Songwon is supporting industry growth and providing customers with products that improve processing efficiencies and the return on their investment.

#### **BUSINESS & CORPORATE DEVELOPMENT**

#### DEDICATED TO SUPPORTING MARKET GROWTH & ADDING VALUE

As a leader in the additives industry, Songwon is committed to supporting market growth and is contributing significantly to it. In a market where prices are often under very high pressure, Songwon is absolutely convinced that cost competitiveness is a key factor for success. Therefore, we continuously review all of our production processes with the aim of identifying and implementing technological improvements that will lead to increased cost competitiveness, and expanded capacities.

The growth of demand for our products was not as high in 2014 as in previous years due to the continuing overall difficult and volatile economic situation and other influences like the very harsh winter weather in the US. However, the global capacity utilization was stable at a reasonable level. Despite the present situation, the polymer industry's medium term growth perspective is still very healthy, with an expected average growth exceeding global GDP growth. As and when the global economy re-stabilizes, the continued market growth will result in demand exceeding capacity if investments are not forthcoming. Hence, the need to restore a reasonable re-investment value in order to justify the level of investment necessary to meet the growth of the polymer industry, still remains one of the key issues for the industry. In line with this, we started a price increase initiative in 2014 to help re-establish the required and necessary re-investment value.

While Songwon has continued its investments in the existing sites we are constantly working on refocusing our business portfolio. Based on the market dynamics, investments into expanding our global production footprint have been started. In addition to focusing on the geographic expansion of our production footprint and the extension of Songwon's product offering, we continue to concentrate on our OPS business. After having more than doubled the capacity of our plant in Greiz (Germany) and successfully starting up our plant in Houston (USA) in 2013, we have been constructing the new OPS plant in Abu Dhabi. Expected to be fully operational in Q2/2015, the plant will further strengthen Songwon's position as a leader in this market segment with a total capacity of approximately 30.000 tons.

"Based on the market dynamics, investments into expanding our global production footprint have been started."

In addition, Songwon's plants are all designed for further capacity expansions and this highlights our commitment to supporting the growth of demand in this key market segment.

In August 2014, we completed the acquisition of SeQuent Scientific Limited's specialty chemical division and plant located in Panoli, India. With this acquisition, Songwon has established a manufacturing footprint in India, one of the fastest growing regions in the world. The new site, with its state-of-the-art facilities is being used for the production of existing and new Songwon products. The acquisition also brought an important addition to Songwon's product offering, **SONGNOX® PQ**, a high performance secondary antioxidant for organic polymers. We are continuing to progress with the reassessment and subsequent adjustment refocusing of Songwon's business portfolio. In 2013, we made the decision to exit our biphenol, **SONGNOX® PTBP**, as well as our aminic antioxidants business, Antioxidant FR and RD, because they were not showing the necessary competitive strength or growth prospects and had the potential to negatively impact the Songwon Group's overall performance in the medium term. However, we kept the fixed assets related to these activities to use for further expanding Songwon businesses.

In addition, we have recognized the need to enter into the new high value specialty chemicals segment in order to secure the future successful development of the Group. In line with our strengths and capabilities, we have identified areas of interest that indicate above average future growth prospects. In the course of 2014, we directed our R&D efforts towards these new areas with successful preliminary results. We have started hiring key resources for the commercial development of these activities. The first tangible results from these activities are expected in the course of 2015. Although the immediate impact of these efforts may not be huge, in the medium term they will create the basis for us to establish a stronger, more balanced business portfolio for the Songwon Group.

Building a global business has forced us to develop regional strategies and local presences. Songwon's business is global, but our execution is local so we are able to better serve the specific regional needs of our customers and their markets. We have now established 17 entities in 9 different countries. Once Abu Dhabi comes on stream, Songwon will have manufacturing capabilities in Korea, China, India, Europe, USA and the Middle East, and will be strongly positioned to better meet both market and customer requirements.

During 2014 no significant changes took place in Songwon's ownership, operational

# Songwon has established **17** entities in **9** different countries

or management structure. New operations were started as described above, but the fundamental processes continued unchanged. However, to further our streamlining efforts, all of our processes are constantly monitored and improved with a best-in-class approach. In particular, we continued to implement the new enterprise resource planning (ERP) system in Songwon's subsidiaries. The new system is already operational in all of our subsidiaries, except India and China, where it is in the final stages of implementation.

Despite the sensitive nature of investment in today's uncertain global economy with margins that have been squeezed and are slow to recover, we remain focused on implementing Songwon's strategy and dedicated to supporting market growth and delivering value to our rapidly growing global customer base.
# SALES

# **BUILDING RELATIONSHIPS & EXCEEDING EXPECTATIONS**

Our customers are always at the center of everything we do. That's why we believe in building solid, long lasting relationships with them based on transparency, respect and trust. Combined with our high-quality solutions and services, our customer-focused approach has been pivotal to Songwon's growth and success as a global leader.

# Songwon's sales organization is comprised

of world-class professionals. Our locally based sales teams are experts in their respective regions and enjoy an outstanding reputation for their professional approach and service attitude. They have a firm understanding of market challenges and trends, as well as our customers' requirements. Their willingness and ambition to exceed expectations, combined with their product expertise and ability to deliver value-added services and insights into customers' businesses are the keys to their success.

#### More than just selling

Throughout 2014, instability, political changes and extreme weather conditions

#### Our sales organization consists of:

- SONGWON INTERNATIONAL AG IN SWITZERLAND is responsible for Europe
- SONGWON INTERNATIONAL AMERICAS INC. IN HOUSTON services North, Central & South America
- SONGWON INTERNATIONAL INDIA PVT. LTD. IN MUMBAI is responsible for India & South East Asia
- SONGWON INTERNATIONAL JAPAN K.K. IN TOKYO serves Japan

were among the challenges that businesses faced. In order to address the subsequent impacts, our sales teams worked closely with our customers to help them meet their strategic objectives.

Translating global and regional best practices to meet local needs, they offered customers Songwon's focused service approach that includes:

- high-quality products at an attractive price & performance ratio
- technical service & application support
- a commitment to long-term supply
- access to the latest Songwon & industryrelated information & developments

In 2014, we also strengthened our distributors' network, which is a strategically important part of our sales organization. We select each of our distributors based on their expertise, strategic local market knowledge and ability to support our customers.

Through ongoing training and other informative initiatives, we ensure that our teams are always equipped to assist customers. On the job training exposes our teams to best practices in various regions,

- SONGWON INDUSTRIAL COMPANY CO. LTD. IN KOREA covers the Korean market
- SONGWON CHINA CO. LTD. &
- SONGWON TRADING CO. LTD. IN SHANGHAI serve the Chinese market
  - SONGWON BAIFU CHEMICALS TANGSHAN CO. LTD. IN CHINA sells thioesters in the Chinese market
  - SONGWON ADDITIVE TECHNOLO-GIES MIDDLE EAST FZE IN DUBAI serves the Middle East

markets and cultures. We believe that this type of practical learning enhances motivation and provides essential skills for developing business in the global marketplace.

# Harnessing opportunities through sharing

Sharing industry knowledge, including local and global trends is at the heart of our sales organization. It enhances both our customers', and our own understanding of the market and contributes to our mutual strategic benefit. Having insight into customers' needs also enables us to respond to potential market requirements and align our supply with future demand.

One example of our commitment to proactively share knowledge is our approach to regulatory affairs. Our REACH newsletters and interactive information sessions help customers stay up-to-date on this important business driver.

Our Sales organization enables us to respond quickly to enquiries from customers, affiliates and other market players which often lead to new opportunities and development projects. They also collaborate closely with our technical and business teams to evaluate possibilities. In some industries, such as automotive, Songwon is asked to get involved in developing compounds with enhanced performance. This synergy between our Sales and Technical teams is integral to all our solutions and drives our projects effectively and efficiently.

In 2014, we maintained our visibility and highly respected profile at leading global industry conferences. These include: International Polyolefins Conference (RETEC), Plastomotive India, Polyolefins Performance Conference, SPE Automotive TPO conference. The technical papers we produce provide our customers with relevant and important information and application data.

During 2014, we continuously strengthened relationships and delivered solutions that met the diverse needs of our customers around the world. Going forward, we will continue to position ourselves to take advantage of market trends, and further collaborate and build relationships with our potential and existing customers to realize mutual opportunities for growth.

# **REGIONAL HIGHLIGHTS IN 2014**

- OPS opportunities continue to grow throughout the regions.
- In India, the acquisition of SeQuent's Specialty Chemicals Division enhanced our product portfolio and strengthened Songwon's position as a key polyolefin player in the region.
- MEA saw growth in polyolefin products, as well as compounds for downstream automotive and military applications.
- In the EU and Asia, HALS and SONGXTEND<sup>™</sup> products and solutions continue to meet the needs of customers in downstream and more demanding applications.
- In India and China, Songwon became a player in the Lubes additive market.
- In the Americas, expertise in industry requirements, formulations and a strong additive portfolio has allowed us to develop formulations in stringent automotive and blow molded film applications.
- In Egypt, Songwon is now present in the agricultural film market.
- In Saudi Arabia, a targeted approach realized growth in the compounding/masterbatch sector.
- In the EU, Songwon is able to meet the stringent regulatory and engineering requirements for antioxidants.

# **GLOBAL TECHNICAL SERVICE**

### **COMMITTED TO QUALITY**

Our dedicated and experienced Global Technical Service team is always on hand to offer customers in-depth support. At Songwon, we want to make sure that our customers get the most value out of the products they purchase from us. This means ensuring that they choose exactly the right product for their application.

Our Global Technical experts work closely together with customers to develop custom-made solutions to meet their individual demands. In 2014, they helped develop a **SONGXTEND™ 1102** solution blend for a customer in North East Asia. The blend helped the customer to get better performance with regard to gas fading for one of their PP tape grades.

Based on a Center of Excellence model, Songwon's Global Technical Service is an invaluable part of our business because they help our customers optimize application performance and identify new market segments and product improvements. This year, they were successful in replacing the more expensive Polyamide with Polypropylene in under the hood automotive applications.

Global Technical Service is an important facilitator between our customers, our sales teams and our internal organization – Business Management, Manufacturing, R&D and Global Application Community. The team generates ideas, drives project efficiency and provides advice on process optimization.

#### Expertise close at hand

We have dedicated support centers based in 6 countries:

- Ulsan, Korea
- Manama, Kingdom of Bahrain
- Houston, USA
- Frauenfeld, Switzerland
- Mumbai, India
- Suwon, Korea



Songwon sales representatives

Having a global organization with a flat structure makes it possible for our Global Technical Service team to better understand and anticipate market needs. It also gives them the ability to assess global megatrends and react quickly to customer enquiries.

# Songwon's Global Technical Service offers support by:

- responding to customers' global technical needs
- developing high performance solutions together with customers

# **CUSTOMER SERVICE**

# **BEST-IN-CLASS CUSTOMER SERVICE**

Service to customers is one the most important corporate principles at Songwon. Supporting our customers before, during and after they purchase our products not only contributes to their ongoing success, but also ensures the continued success of our global organization.

With thousands of customers in more than 52 countries, we need to ensure that our people, systems and operations are both flexible and responsive. We know that delivering best-in-class customer service is only possible through building strong relationships with our customers. Dedicating time to these relationships helps us to gain a first-hand understanding of our customers' needs so that we can successfully serve them. Furthermore, we gain valuable insight into new business opportunities and new ways to meet the needs of our expanding customer segments. Our customers benefit from our extensive knowledge of their industries and markets that we have acquired over many years. The combination of our solid understanding of the industry, our drive for best-in-class quality and customer service excellence enables us to reliably serve our customers while continuing to contribute to the development of the global polymer industry.

Our Customer Service Centers effectively apply global and regional best practices to meet local needs.

# We have Customer Service Centers in:

Ulsan,	Frauenfeld,
<sub>Korea</sub>	<sup>Switzerland</sup>
Seoul,	Houston,
<sub>Korea</sub>	<sup>USA</sup>
<b>Tokyo,</b>	Dubai,
<sub>Japan</sub>	<sub>UAE</sub>
Shanghai,	Mumbai,
<sub>China</sub>	India

52 countries served globally

41 LOGISTIC HUBS ESTABLISHED GLOBALLY

# **SUPPLY CHAIN & PURCHASING**

# COMMITTED TO RELIABLE SUPPLY & SUSTAINABLE SOURCING

We understand that having a reliable supply and on-time delivery is crucial to our customers' operations and to their success. Therefore, to ensure that our products are close to our customers and available when they are needed, we have set up an effective and efficient supply chain organization that can meet our customers' requirements. With state-of-the-art IT systems, careful planning and optimized processes, we have integrated our supply chain all the way from sales forecasting, raw material purchases, production planning and finished product distribution.

In 2014, to further improve our delivery-topromise and accuracy with timely deliveries, we upgraded our production planning system. We have already experienced the positive benefits and will be looking to further enhance our supply chain management capabilities in 2015.

In line with this, we work closely with our logistics services suppliers to maintain and further develop our customer services. We also make a point of regularly reviewing their performance to ensure they reliably deliver. Each of our distribution partners has been carefully chosen, and by continually adding to our extensive global network we are increasing availability for our customers in the different regions.

Our dedicated purchasing team ensures that we meet both our responsibilities and the purchasing criteria of our growing business. By selecting, contracting and maintaining the most reliable supplier base, the team contributes to Songwon's quality and profitability. In addition, Purchasing continually strives to establish an enduring competitive advantage with respect to costs, quality, service and social responsibility of our sourcing chains. Plans are in place for 2015 to further explore additional sustainable sourcing opportunities and to incorporate enhanced supplier selection criteria. We always make sure that suppliers working with us are aware of Songwon's sustainability targets and share in our principles that encourage sustainable business standards.

At Songwon, we regularly streamline distribution, optimize transportation and seek relationships with sustainable suppliers that give us a competitive advantage. It is this supply chain approach that contributes to our ongoing success.

# Our Supply Chain Organization is:

- based on a proven service model
- flexible and willing to go the extra mile for our customers
- global in its reach but local in its execution focused on the security of supply of raw materials
- equipped with state-of-the-art supply chain processes & tools

# **INNOVATION & TECHNOLOGY**

# PURSUING EXCELLENCE

The innovative drive that exists within Songwon is key to our growth and future success. Based on technical expertise and a fundamental understanding of the industries and the markets we serve, our objective is to create a focused portfolio of global specialty chemicals that provide Songwon customers with a sustainable competitive advantage. In close collaboration with customers, we are always seeking new opportunities to develop ground-breaking solutions. All of our innovations are driven by the most advanced in-house developed technologies.

It is this high-technology that provides the platform for our success and is an important requirement for manufacturing the highest quality solutions for the most diverse applications. To ensure we remain competitive, we consistently review our plant and process efficiencies to ensure they meet the highest standards while enabling us to deliver the quality and innovation our customers have come to expect.

# At Songwon, there are 3 groups actively involved in innovation:

- Research & Development
- Global Application Community
- New Product Introduction Group

# Songwon's innovation efforts are centered on:

- Continuous improvement
   The ongoing improvement of our process
   technologies allows us to produce
   products in volumes that meet the
   demand, are commercially attractive and
   are at, or exceed the levels of quality and
   reliability that our customers require.
- Creating new solutions
   In partnership with our customers,
   we seek to create new solutions never
   previously considered that offer
   increased performance, valuable
   reductions in energy consumption
   and contribute to technological
   advancements in a variety of applications
   Constant development
- We constantly seek to develop new technologies and products, which will allow Songwon to enter into new high end business sectors where we are not or only marginally operating today.

# **GLOBAL APPLICATION COMMUNITY**

## **TURNING VISION INTO REALITY**

Songwon's Global Application Community plays a crucial role in bridging customer needs with our application development process. Leveraging their in-depth knowledge of the polymer industry and decades of experience, we combine creative innovation with technical competency to bring product development visions to reality.

By continually increasing their understanding of what our customers' challenges are, Global Application Community are able to identify ways for Songwon to contribute to customers' success.

# Solving our customers' most pressing challenges

Today, polyolefins are used in a wide variety of applications and in more applications than any other polymers. They are attractive due to their low cost and for their adaptable mechanical properties. However, with ever-increasing performance and safety requirements, combined with the market's speed, our customers demand more than just a product to improve their compounding and production processes. They need application support and help to keep up with industry rules and regulations. Our Global Application Community is always a step ahead and standing by to offer our customers the comprehensive support they need.

Our specialists and engineers working in Songwon's Global Application Community are committed to helping our customers shape their futures. The diverse industries like consumer electronics, healthcare, building & construction, agriculture, transportation and automotive our customers serve, all require the stabilizer solutions Songwon offers to boost their polymers' properties. And it's our relentless focus on innovation and finding breakthrough solutions that can make the big difference to our customers and their products. In order to respond as quickly as possible, Global Application Community is always on the lookout for new directions in the industry. For example, the issue of nonintentionally added substances (NIAS) has raised concern among our customers. NIAS occur when reaction and degradation products are formed when plastic materials and articles are manufactured. These chemical compounds are non-intentionally present in the plastic material and can appear as:

- oxidation products
- oligomers
- impurities
- processing/transportation contaminants

In response to the recent focus of debate, Global Application Community is looking at ways to avoid the issue of non-intentionally added substances (NIAS) in sensitive applications like drinking water pipes.

#### Paving the way

Global Application Community works hand-in-hand with Global Technical Service. They pave the way forward by developing valuable solutions and passing them on to Technical Service to take to the customer for implementing or testing. For example, this year, Original Equipment Manufacturers (OEMs) were setting new, stricter criteria to lower the VOC levels of thermoplastic materials used in automotive interior applications. This was one of the areas Global Application Community focused on in 2014, together with Global Technical Service.

# Global Application Community contributes to the growth of our business by:

- identifying trends in the respective markets
- providing innovative solutions to customers
- aligning, coordinating and collaborating with Technical Service and R&D

# **NEW PRODUCT INTRODUCTION**

# DEMONSTRATING EXCELLENCE IN PRODUCT DEVELOPMENT

At Songwon, product development is a never-ending process. Our goal is to consistently stay at the forefront of market requirements by maintaining close contact with our customers and listening to their current challenges and potential needs. When developing new products, our actions are always governed by what they require.

In 2014, we started to build on the success of our stabilizer solutions, **SONGXTEND™ 1101** and **SONGXTEND™ 1102** which enable polypropylene (PP) producers and processors to maintain high temperatures during manufacturing. By extending our product range with blends based on our newly acquired **SONGNOX®** PQ stabilizer, we are now able to target new biaxially oriented polypropylene film (BOPP) markets with optimized solutions such as our **SONGNOX® 1162** stabilizer blend.

#### Expertise for the automotive market

This year, we also broadened our portfolio with new experimental stabilizer solutions based on SONGXTEND<sup>™</sup> 2121, SONGXTEND<sup>™</sup> 2122 and SONGXTEND<sup>™</sup> 2123, that address fogging and odor issues in car interiors.

Having similar features to our **SONGXTEND™** 2121, **SONGXTEND™** 2122 and **SONGXTEND™** 2123 stabilizer solutions, these new experimental solutions target the talc filled automotive compounding market and provide even better, long-term thermal stability. Furthermore, we developed new experimental stabilizer solutions for the glass fiber re-enforced PP market, for use in both short- or long-glass fiber PP compounds.

In Europe we saw an increased need for higher quantities of recycled PP for the automotive market. This specific demand triggered us to enter several new projects with customers in 2014. The outcome of ongoing studies will foster the further innovation of our well-established stabilizer package for the PP recycling market, **SONGNOX® 3001-2** stabilizer blend.

## Meeting today's challenges

After a recent regulatory change in Europe, the extruded polystyrene (XPS) market has moved from using the former hexabromocyclododecane (HBCD) flame retardant to the new polymeric flame retardant (pFR). The new pFR places higher demands on the processing and heat stability in masterbatch production and later in the XPS process. After analyzing this situation, we realized that despite the fact that Songwon offers a wide range of processing stabilizers, our existing solutions still had limitations. In response, our innovation team screened a large number of formulations and recently selected a few for validation. Once successful, we plan to commercialize these solutions in 2015.

Throughout 2014, due to our cooperation with SABO, we witnessed continued success in the light stabilizer market and particularly in the greenhouse film market. Although the light stabilizer, **SABO®STAB UV 119** has been a key element in formulations for greenhouse films for many years, customers are now demanding more long-lasting films. In response, both Songwon and SABO are combining innovation resources and focusing on the development of new and better solutions for the greenhouse market.

"New stabilizer solutions are gaining momentum to keep up with increasingly stringent industry standards."

Maurizio Butti, COO

# **RESEARCH & DEVELOPMENT (R&D)**

# PROVIDING STRATEGIC SUPPORT & CREATING GROWTH

We know that effective Research and Development (R&D) is essential to our success. In such a rapidly changing industry, focusing on the continual improvement of existing products, and bringing new products and technologies to the marketplace is crucial to maintaining Songwon's leadership in the field.

We understand how vital it is for us to constantly adapt to our customers' evolving needs. To help us meet the technical demands they face, we make sure that R&D has the necessary resources and conditions to continue developing new and advanced solutions. We also ensure that R&D has what it needs to provide essential strategic support, innovation and technology to all the functions within Songwon.

#### Focusing on improvement & development

In 2014, R&D concentrated on process improvement and new product development guided by Songwon strategy. New processes for five of our existing products were developed this year. It was an important contribution by R&D, driving Songwon's competitiveness and leading to a substantial and sustainable cost reduction in manufacturing. Going forward, R&D will continue to fulfill its main role of improving and developing more efficient processes in a step by step way, while keeping sustainability at the heart of all process development at Songwon.

In 2014, R&D took up the challenge to develop new products in new innovative areas, according to Songwon strategy. In collaboration with customers and development partners, R&D developed more than 20 new products. All of these specialty chemicals were introduced to selected customers in 2014. These solutions have not only further expanded Songwon's product portfolio, but they are an important milestone for the future because they will lead us to new businesses and be key to innovation.

### **Regulatory** expertise

Our regulatory team within R&D is involved in the earliest development stages of new products. These experienced professionals manage and monitor regulations worldwide and ensure product development activities and outputs are in alignment with global regulatory requirements.

Throughout 2014, the team has prepared documentation and support for all functions in collaboration with the EHS team and in preparation of Korean REACH which will be implemented in 2015.

### R&D key areas of focus:

- Process improvement is key to ensuring Songwon cost competitiveness and maintaining our best-in-class quality position. Process improvement will continue to play a key role in Songwon's strategic approach.
- New product development is mainly focused on two key areas:
  - complete the range of polymer stabilizers with key high end products
  - develop new products to facilitate Songwon's entrance into high end and innovative new specialty chemical businesses.
- Regulatory affairs
   ensures that our products are compliant
   with all known chemical regulations, both
   existing and emerging, and enables the
   creation of relevant documents including
   MSDS (Material Safety Data Sheet),
   Labels and RDS (Regulatory Data Sheet)
   for Songwon products.



Employees at Songwons quality control laboratories in Maeam, Korea

# MANUFACTURING EXCELLENCE

# FLEXIBILITY & SPEED ENSURE SUPPLY RELIABILITY

In our drive to become the preferred supplier to our customers, sustaining manufacturing excellence is critical. With our rigorous EH&S culture, a talented, committed workforce and our proven manufacturing excellence model, we produce the highest quality products while ensuring that world-class operating standards are met.

We place great strategic importance on backward integration and optimizing Songwon's large-scale plants. All of our manufacturing facilities have been equipped with the latest systems and are operated with state-of-the-art equipment. In order to guarantee the quality and supply reliability that our customers have come to expect, we are continuously upgrading our facilities with technological innovation, improved automation and reduced complexity.

Our team of skilled and experienced engineers manages Songwon's facilities so that the highest levels of operational efficiency are maintained. Their consistent efforts to improve our production processes have enabled us to develop such an extensive range of products for a multitude of applications. And by expertly combining manufacturing speed and flexibility, it is possible for us to respond quickly to any surges in demand. This agility provides us with a large competitive advantage.

# Optimizing plant performance & consumption

For us, safety, health and environmental care are top priorities. In line with this, we make every effort to improve our plants' performance in terms of the consumption of raw materials and utilities.

During 2014, we made successful progress by further minimizing solvent losses for our main production lines and recovering as many valuable products from our residues as possible. Furthermore, we are implementing an additional level of plant automation, especially in our bagging and packaging operations. This will optimize our labor costs and further improve the quality and reliability of the product packaging we dispatch to our customers.

We care about every employee and employee safety is a core value at Songwon. Apart from providing safe working conditions and using environmentally responsible manufacturing processes, we treat our people with dignity and respect. Our ability to integrate Korean, Western and as of this year, Indian approaches in a mutually respectful way has created an atmosphere of trust and an openness to learn that enables us to continuously improve.

#### Strategic expansion & new opportunities

Part of our strategic approach has been to meet emerging market needs through international expansion. In 2014, we made the fundamental step of acquiring SeQuent Scientific's specialty chemicals business and its manufacturing site in Panoli, India.

The acquisition was a significant milestone. It gave us our first chemical manufacturing site outside of Korea, and the chance to take advantage of new technologies and manufacturing opportunities supported by very competitive manufacturing costs. The smaller sized equipment, very high technical background, flexibility and speed have already shown many new production opportunities and ways to expand the existing ones.

In addition, we have been completing preparations to open our new facility in Abu Dhabi in 2015. When this new plant goes on-stream, it will significantly increase the annual production capacity of our One Pack System (OPS) product range.

Since 2006, in order to remain in line with market needs, we have doubled our capacity. The additional expansions in 2014 will make it possible for us to further provide the level of reliability and continuity of supply that Songwon is known for.

Moving from 2014 into 2015, we are going to demonstrate our flexibility, speed and outstanding functional synergies in order to modernize Songwon's product portfolio. We will also be further rationalizing and optimizing the utilization of our existing manufacturing lines. After reviewing some of our more mature products and checking that they contribute acceptable profitability levels to our business in the future, decisions will be made to discontinue some in order to make way for new higher performance products developed by R&D. With our production flexibility and synergetic set-up, we are well-positioned to use our existing production lines for manufacturing these new products at elevated profitability levels.

# Our Manufacturing Strategy involves:

- monitoring evolving customer needs and promptly providing them with the highest quality products
- responding to the increasing need for a more cost-effective approach to locating manufacturing assets thereby attaining a win-win for both Songwon and customers
- guaranteeing security of supply by ensuring safety and reliability at our manufacturing facilities
- producing economies of scale and operating efficiencies by leveraging our existing know-how and assets



Pelletizer for SONGNOX® semi-beads

# **QUALITY ASSURANCE**

# **COMMITTED TO QUALITY**

In our stringent and ever-changing regulatory environment, maintaining the highest level of quality assurance possible is vital to our success and is supervised at the highest level of our organization. Senior representatives from Manufacturing, Sales, Supply Chain and Business Management attend a monthly Quality System meeting where all relevant quality issues are discussed, analyzed and evaluated.

Since our ISO certification in 1995, we have had a rigorous set of operating procedures in place and our knowledgeable professionals implement extensive, well-documented quality control measures. Our strong commitment to continual improvement drives our efforts to maximize quality and service levels for all of our customers. We ensure that any complaint received is traced in a Non-Conformance Report with corrective actions and is addressed immediately.

Throughout 2014, we concentrated on improving our post-production service level which included transport and a timely, reliable supply. Optimizing the quality and reliability of service to our customers is one of the factors that sets us apart from several competitors.

# **OUR PEOPLE**

# A PERSONAL APPROACH WITH GLOBAL REACH

As the world's 2nd global leader in polymer additives, we are known for our high quality products and solutions. But we also know that in an industry as dynamic and competitive as ours, it's our people who really make the difference. We understand how important each individual employee is to our continued success as an industry leader.

**37%** EMPLOYEES ARE WORKING > 10 YEARS FOR SONGWON Songwon's people are driven to succeed – for our clients, our business and themselves. At all levels there is something fundamental that unites us: our commitment to meet and exceed our customers' expectations. And it's our aim to ensure that although our reach is global, our approach is personal.

We have 781 employees working in a multinational environment across the globe. Songwon's team is built upon years of experience and each and every one of us pursues excellence in everything we do.

Our HR philosophy recognizes the contribution our people make. We acknowledge the crucial role each employee plays in delivering growth and adding value for our shareholders and customers. We offer challenging career opportunities to self-motivated, customerfocused and talented individuals in all areas of our global organization.

#### A culture of collaboration

At Songwon, we value a work environment where diversity is embraced and employees are recognized for their achievements. In our organization people treat each other with mutual respect and dignity. And right at the very core of our company is a culture in which colleagues feel like part of a family. This is also why all of our policies and practices (such as e.g.parental leave) are centred on fostering diversity, respecting human rights and supporting non-discrimination. We believe in the power of collaboration and teamwork and we have an open, approachable style.

We expect our employees to be flexible, creative and to embrace new experiences and challenges. Working with us gives them the opportunity to work in a friendly, fast-paced and international environment – an environment where they are hands-on contributors. Everyone is encouraged to share their thoughts, opinions and ideas so that we keep moving forward as a company.

To ensure that our employees at all levels always feel valued and engaged, we:

- create an environment in which each individual feels appreciated, empowered and encouraged to grow.
- value the diversity and commitment of our people, enabling us to shape our future with confidence and innovative thinking.
- bring the best talents together and encourage an entrepreneurial team spirit to attain our strategic goals.

#### Our multicultural working environment

At Songwon, we strive not only to be our customers' preferred supplier of preference; we are dedicated to being the employer of choice in the areas we operate. Our aim is to hire the most talented, skilled and experienced employees available.

At Songwon, individuals get the chance to:

- work with people who are committed to doing their best — and to being the best
- earn the trust of our customers
- become the experts at what they do
- shape the future of Songwon

Our people work with customers and colleagues from different cultures throughout the world. In a truly international and dynamic environment, our employees are able to expand their horizons both professionally and personally. Excellent on-the-job training provides them with the hands-on experience they require to advance their skills, as well as the knowledge they need to perform at the highest level possible. "Our business relies on the talent and diversity of our employees. Their expertise and commitment are among the most important drivers for ensuring our long-term success."



Beatrice Iuorno, Head Global HR



This on-the-job experience is supplemented by targeted trainings, tailored to the needs of the specific position. We focus on continually building and maintaining a multicultural and motivated workforce.

#### Supporting individual development

The entrepreneurial spirit and collaborative culture that exists at Songwon ensures that our employees are responsive, driven by measurable results and 'live' their creativity. In our experience, the best path to success is to enjoy creating exceptional results. We also recognize that personal development is an integral part of employee satisfaction and life success. This is firmly set in in our culture and in our Performance Review System (PRS).

Our PRS aims to help our employees achieve Songwon's strategic plan. By aligning work with organizational goals and assessing performance against a clear set of leadership expectations, targets and measures, we motivate and develop our people. The process provides both context



and purpose for each employee's work and helps them clearly understand their contribution to the Songwon team.

Our ultimate goal is that the results and discussions provide two-way feedback that is fair, accurate, inspirational and developmental for both the manager and employee.

At Songwon, development and training varies from site to site across the globe, according to an individual's role and responsibility. In addition, we also create policies within our corporate teams and do internal trainings across our entities in order to implement them locally.

As well as investing in and developing the talent already within Songwon, we will continue to hire exceptional people to ensure we are well-placed to meet our customers' future needs and support their success.

# Sharing our values & principles

Being a successful company is not just about our performance and achievements, it's also about acting in a responsible, ethical and law-abiding way. Our Code of Conduct sets out our business principles and how every single person at Songwon should apply them. We make sure that all of our employees are trained in and are aware of Songwon's values right from the start.

We want our employees to feel proud about working for a company that has the highest standards of integrity and passionately protects its people, assets and reputation. Our culture of responsibility to each other and all our stakeholders demonstrates our commitment to living our values every day.

We have no incidents to report that go against our principles, such as corruption. And there have been no significant fines (of either monetary or non-monetary value) for non-compliance with laws and regulations.

Employment relationship	December 31, 2014
Total workforce (head count)	781
Permanent	780
Men	702
Full time men	702
Part time men	
Women	78
Full time women	75
Part time women	3
Temporary	1
Men	-
Women	1
Type of employment	
Total workforce (head count)	781
Salaried	779
Men	702
Women	77
Hourly	2
Men	-
Women	2
Gender	
Total workforce (head count)	781
Men	702
Women	79
Number of employees leaving employment during year (YTD) by gend	ler
Total workforce (head count) of employees leaving	32
Men	26
Women	6
Number of employees leaving employment during year (YTD) by age g	group
Total workforce (head count) of employees leaving	32
Over 50 years old	11
From 30 to 50 years old	16
Under 30 years old	5
Number of employees hired during year (YTD) by gender	
Total workforce (head count) of employees hired	46
Men	35
Women	11
Number of employees hired during year (YTD) by age group	
Total workforce (head count) of employees hired	46
Over 50 years old	
From 30 to 50 years old	10
Under 30 years old	36

Number of employees working for Songwon for m	ore than 20 years
Total workforce (head count)	129
Men	128
Women	1



# **CORPORATE SOCIAL RESPONSIBILITY**

# AN INTEGRAL PART OF OUR BUSINESS

At Songwon, Corporate Social Responsibility (CSR) is an integral part of our business. CSR underpins our strategy and helps us to manage our impact on society, and it contributes towards a more sustainable way of doing business.

CSR means including economic, social and ecological considerations in the core activity areas of our company. It ensures that we consciously consider the direct and indirect impacts of our operations on all Songwon's stakeholders including our customers, suppliers, workforce and the local community. And it leads us to adopt ethical and socially-responsible management approaches to complement environmental considerations.

We continually work to improve our performance and the consistent quality of our products, as well as how we do business, how we treat our people, the communities we serve and the environment around us.

Beyond this, we have always believed that it is our duty to take an active interest in the community and the environment that our company is part of. This commitment is rooted in Songwon's culture and has been a common theme throughout our history. In short, we firmly believe that performance and responsibility should go hand in hand. In 2014, we focused our efforts on initiatives relating to health. Good health is the key to a good quality of life. Therefore, Songwon supports the Korean Red Cross, as well as Bluecross medical missions to Cambodia to help low income patients with thyroid and breast cancer.



Bluecross Medical Volunteers on a mission in Cambodia

# **REGULATORY AFFAIRS & REACH**

# COMPLIANCE IS THE CORE OF OUR BUSINESS

As a global company operating in a regulated industry, we are committed to conducting our business in compliance with all regional and country-specific laws and regulations, and in accordance with the highest ethical principles. Monitoring our actions to ensure 100% compliance has become an integral part of our daily business process and crucial to our success.

Our commitment to compliance is at the core of everything we do. It starts with our employees and their high awareness of compliance responsibility. Everyone working at Songwon takes compliance seriously. Each individual strives to be a good, ethical 'corporate citizen' dedicated to ensuring that all of Songwon's business activities adhere to the required standards, laws and regulations. At Songwon, we are also dedicated to offering our customers fully compliant, high-quality products that enable them to meet their EH&S goals. We see it as our responsibility to provide expert support to assist our customers in handling the complex aspects of compliance, registration and certification.

Therefore, we offer extensive information on the REACH processes, requirements, deadline developments and achievements to our customers through a newsletter. Our regular updates on the substances registration process allows our customers to proceed with their business, knowing that Songwon's products will be 100% compliant within REACH deadlines. Customers in our industry are accustomed to receiving 3 data sheets for each product: the specification (CoA), a technical data sheet (TDS) and a safety data sheet (SDS). We go a step further and give them a 4th. We call this data sheet the regulatory data sheet (RDS). It gives our customers a summary of all global regulatory approval that a particular Songwon product has. The RDS also enhances our customers' sense that we care about their business. Another important aspect of how we create value for our customers and their businesses is anticipating future regulatory change, adapting our production in anticipation and informing them as early as possible.

## Supporting REACH objectives

Presumptions that all chemicals are toxic, unsafe and pollute the environment, cause the chemical industry to be under constant attack. For this reason, it is important that every organization operating in the industry assumes adequate responsibility through applying the right product stewardship measures.

Not only is it important for us to take great care in how we produce chemicals, but

also in how we can use them safely. As a responsible global manufacturer, Songwon cares for the safety and health of people and the environment. We place a very high priority on compliance and we support the intervention of regulators to develop new regulations, like the establishment of REACH (EU Regulation on Registration, Evaluation Authorization and Restriction of Chemicals).

We also fully support REACH objectives. It is our policy to minimize the risks associated with our production activities and products, and to continuously improve their safety, health and environmental performance. Our organization cooperates with co-producers, suppliers and customers to help us achieve our REACH goals. We understand that through REACH, we can make a positive contribution to our common future.

Songwon provided 330 REACH Coverage Statements and 560 Import Certificates for our customers for 2013 imports. The 2014 import certificates are currently being compiled by our Only Representative.	Prior to developing new substances for our Specialty Chemicals business portfolio, we check and review issues regarding toxicological properties or concerns in order to secure a safer and greener future.
Songwon provided 105 Regulatory Data Sheets (RDS), all updated in 2014.	All Mixtures SDS were converted to the CLP/GHS* requirements.
New SDS were created and 4.880 SDS updated.	Songwon is working within industry
Due to refinement of risk assessments and the availability of new studies, all affected REACH Dossiers were updated.	associations to demonstrate that polymer additive uses are safe after coming under the scrutiny of regulators for their 'persistent' properties (in reference to the discussion for e.g. Benzotriazoles or Organotin products).
All registrations of substances from the SeQuent acquisition were completed successfully and volume update considerations are underway.	For our customers, we are administering a total of 12.900 Safety Data Sheets (SDS) in 15 EU languages, as well as different versions for Asia and the Americas.

# SONGWON & REACH IN 2014:

\* CLP: EU regulation on Classification, Labelling and Packaging GHS: Globally Harmonized System

# **EH&S & SUSTAINABILITY**

# **OUR SUSTAINABILITY STRATEGY**

At Songwon, sustainability is an essential part of our corporate culture and we have rooted it firmly in our everyday business activities. We understand that how we conduct our business is of equal importance to our results and we aim to align our structures, processes and systems toward sustainability. Our overall strategic objective is to create lasting value by managing our innovation, operations and business practices to meet the changing demands of our markets, our shareholders and society.

We are committed to sharing our expertise and working even more closely with our customers to develop products, applications and solutions that meet their sustainability needs. Our product portfolio, combined with our technological expertise and innovation, give us the opportunity to develop sustainable products and solutions that can help our customers address a wide variety of environmental issues.

By fully optimizing our production processes and developing more applications that bring savings in energy and resources, we are adding value value for our customers, value for our people, value for society and value for future generations.

#### Committed to EH&S

We know that sustainability begins within our own operations. Therefore, at Songwon we have established high performance standards for environment, health and safety at our facilities that extend beyond compliance with laws and regulations. Our proactive implementation of these standards demonstrates our commitment to sustainability leadership in our industry. Our organization is dedicated to the long-term health and safety of everyone at Songwon and protecting the environment in which we operate. We have driven tremendous improvement and heightened awareness of the importance of EHS across our organization. Employees are engaged in identifying and managing risk and are active participants in continuously improving the environment, health and safety of our operations.

We recognize our obligation to provide safe and healthy work environments for all of our stakeholders (employees, contractors, neighbors) and we have made this a top priority. At every Songwon location, safety is taken very seriously and is not negotiable. We place great importance on being trusted and seen by the public as an organization with a high level of safety awareness and clear safety processes.

#### Achieving zero accidents

Incident-free production can only be achieved in safe plants with qualified, safety-aware employees. At Songwon, efficient production and preventing injuries go hand in hand. We know that a zero accident target is difficult to reach but we also know that it is achievable and that is our goal.

All accidents must be reported at Songwon and we compile this data in a global data base. We classify any injuries that occur according to the local laws and recordkeeping criteria. These data include all employees of Songwon Industrial Co. Ltd. and all contractors operating in our plants.

Due to our heightened focus on safe operations and raised awareness among our plant operators, the total recordable accidents steadily decreased over the past few years, reaching 0.5 in 2013. In 2014, the Total Recordable Case Rate (TRCR) and Total Lost Day Rate (LDR) increased slightly after we began recording all accidents relating to the contractors operating inside our plants (mainly in bagging operations). As this is still largely manual work, this data is increasing the total recordable case rate (TRCR) recorded in 2014, as well as the total LDR (Lost Day Rate).

#### TRCR: Total Recordable Case Rate

Recordable accidents \*200.000 / total working hours



In 2015, we will be implementing the appropriate improvements for reducing the occurrences in manual operations. There were no fatalities and we achieved a zero Occupational Diseases Rate (ODR) and zero Absentee Rate (AR).

Even if these performances are aligned with the best-in-class chemical companies, we continue to be committed to the on-going improvement of our Health and Safety performance.

#### LDR: Lost Day Rate



We have introduced an accurate monitoring system for our near miss accidents and incidents, which includes the contractors operating in our plants. Focusing on corrective actions, we have established an annual plan for reviewing and updating the risk assessment of our technologies, equipment and safety devices' design.

At Songwon, there are stringent procedures in place to continuously investigate and assess all possible risks, and to improve the existing operating procedures. In 2014, we dedicated more than 25% of our annual capital budget to improving the safety and environmental protection aspects of our plants and facilities.

For example, we installed an automated firefighting system on all of our Ulsan site production lines. We also undertook necessary equipment relocation in order to establish safe distances between the production buildings.

#### **Environmental awareness**

A long-standing commitment of Songwon's leadership team has been to make use of every opportunity to demonstrate to our customers, and to the chemical industry, the potential to contribute to a better world. As a global leader, developing processes that reduce our overall carbon footprint, saving energy and reducing emissions is a top priority.

We have an aggressive program in place to improve processes that not only increase competitiveness through cost reductions, but also to significantly reduce energy consumption as well as waste production and CO<sub>2</sub> emissions. In addition, we are continually investing in renewable energy resources.



Songwon's headquarters in Ulsan, Korea

#### **Raw materials**

At Songwon, we look for every opportunity to use raw materials from renewable sources. However, unfortunately only a few of the key raw materials we use are available from these sources. The majority are oil derivatives or metals. The only raw materials available from renewable sources are stearic acid and stearyl alcohol. Both are derived from palm kernel oil and represent approximately 7% of the total raw materials we use.

### **Recycled materials**

In our plant we produce the methanol and chloridric acid we use as raw materials in other production lines. The total amount of those recycled corresponds to approx. 2000 t/y in 2013, namely 1% of the total raw materials used.

#### Direct energy consumption

100% of Songwon's direct energy consumption is in the form of natural gas and the majority is used for steam generation and the heating of hot oil. In 2014, we used 1.043.000 GJ (gigajoules), the total direct energy consumption of the Group decreased by 25%. This was mainly due to the increased amount of steam we purchased from our neighboring plant where it is created by a chemical reaction.





In 2014, we decreased our total direct energy consumption by 25%

#### Indirect energy consumption

We also purchase electricity and steam for our facilities. More than 75% is attributable to steam purchases. We typically make these purchases from the local utility companies using non-renewable energy sources.

# Indirect energy consumption



## Songwon initiatives

Here is an overview of the initiatives that have resulted in providing energy-efficient or renewable energy-based products and services, as well as reducing our energy needs.

Songwon is engaged in an energy consumption reduction program. One of the actions we have undertaken in the plants is to incinerate all the volatile organic compounds (VOC) produced. In doing this, we produce the steam we need in the production process.



This action reduces the overall energy consumption and contributes to a cleaner and safer environment. We had 3 incinerators in operation in 2014. The last one was installed in 2010 and is based on a patented technology that we jointly developed with eTEC, the incinerator supplier.

To improve the long term efficiency of our operations and products, we also have several energy consumption reduction initiatives:

- optimizing the use of steam in the distillation step
- partial recycling of washing solvents and mother liquors after the crystallization step
- steam condensate reuse to boiler feeder water
- installation of solar panels on the warehouse roof
- using an inverter for saving electricity
- direct recycling in crystallization of the solvents recovered from the final product drying step

Thanks to the above initiatives in 2014 and compared to 2013, we have reduced the total energy consumption for power generation by 14.460 GJ. However, our total energy consumption for steam generation increased by 130.841 GJ due to higher steam volumes sourced.

Total withdrawal of water by source Songwon purchases the water from the local municipality for the Ulsan and Maeam plant. In the Suwon plan, water is sourced from underground.

Songwon has reduced the total water consumption in 2014 by 23% compared to 2013, largely exceeding the original 10% target. The main reason for such a significant reduction is due to using the scrubber water for the dilution of the foam agent used in the waste water treatment. The Ulsan Chemical Industrial area is served with water from the municipality and the Songwon water consumption is only a very small part of the total use by the Chemical Industrial area. In 2014, we reduced our total water consumption by 23% compared to 2013 At the moment, the total volume of water recycled and reused at Songwon plants is less than 2% of the total water we use.

#### **Biodiversity**

Songwon does not own, lease or manage anything that is in or near protected areas or areas of high biodiversity. To our knowledge, none of our activities, products or services have any significant impact on biodiversity. Songwon has taken proactive steps to eliminate products which could potentially affect biodiversity (e.g. Tinbased agrochemicals).

# Direct & indirect greenhouse gas emissions

Our overall objective at Songwon is to work progressively towards a reduction in carbon emissions.

We set up several projects in 2013 to reduce steam consumption and we achieved a general greenhouse gas (GHG) emission reduction of 15% during 2014.



The data reported do not show the positive impact on the total GHG emission originating from our ongoing backward integration into isobutylene (IBL). This backward integration reduces the overall carbon footprint by eliminating waste and transport (e.g. the Maeam plant is now capable of producing 40.000 tons of isobutylene that, under normal circumstances, would have to be delivered from an outside source). The reported data do include the direct emissions and the indirect emissions from our electricity and steam purchasing. There are no other indirect emissions to be recorded.

#### Significant air emissions

In Songwon's plants, nitrogen oxide (NOx), Sulfur oxide (SOx) and particulate matter (PM) emissions are measured automatically by in-line analyzers.







The increase of the SOx emissions is due to the reduction of the neutralized chemical used in the vent scrubbers and occurred because of the need to reduce the salt content in the waste water discharged.

# Total water discharged

After being internally treated, all the water discharged by Songwon's plants is conveyed to the municipality's central water treatment plant to have the organic content reduced further and then discharged to the sea. As already mentioned specific water reduction projects were implemented during 2014 and resulted in reducing our total water consumption by 14% compared to 2013.





The worsening quality of the discharged water was due to the exceptionally hot and long-lasting weather during the summer season which significantly reduced the bioreactor's effectiveness during 2013 and 2014. The corrective actions implemented during 2014 were not successful. New and improved methods are under review and will be implemented during 2015.

## Other wastes

There are no hazardous wastes created by Songwon's operations.

Currently, approximately half of the liquid organic wastes are incinerated on site, while half are disposed offsite by incineration. All the solid wastes are disposed of outside via landfilling.



# Significant spills

We have had no spills recorded or reported since 2008 or during 2014.

#### Non-compliance

We have been in full compliance with all environmental rules and regulations and we received no fines in 2014.

## An overview of the most important organizations where Songwon has membership:

Society of Plastics Engineers Korea (www.spekorea.org) The Korean Chemical Society (www.kcsnet.or.kr) Korea Industrial Safety Association (www.safety.or.kr) ELISANA (www.cefic.org/About-us/How-Cefic-is-organised/ Petrochemistry-and-Plastic-Additives/Light-Stabilisers-and-Anti-Oxydants-ELiSANA/) CEFIC (www.cefic.org) ORTEPA (www.ortepa.org) LiSAO (REACH Consortium) (www.reachcentrum.eu) OrganoTinREACH REACH Consortium (www.reachcentrum.eu) PSRC – Phosphate Stabilisers REACH Consortium (chemicalwatch.com/reach-consortia) EPCA (www.epca.eu) GPCA (www.gpca.org.ae) AFPM (www.afpm.org)



# **CORPORATE GOVERNANCE**

# GOVERNING RESPONSIBLY & TRANSPARENTLY

At Songwon, corporate governance is not just about formally adhering to statutory obligations. We move beyond this to embrace the spirit that lies at its core and remain dedicated to the highest standards of integrity, transparency and governance.

Our organization is rich in tradition and we understand that to ensure success and sustained value creation we must strengthen the trust of our customers and our investors. Therefore, in our daily work, we place the highest priority on transparent and responsible corporate governance and this makes it possible for us to meet the ever-increasing demand for information from national and international stakeholders.

Furthermore, Songwon's Executive Committee and Board of Directors align our management and supervision with nationally and internationally recognized benchmarks of good corporate governance.

# Annual General Meeting

Songwon holds an Annual General Meeting each year that all shareholders are invited to attend. At the meeting, decisions on matters concerning Songwon Industrial Co. Ltd. and the Group are made. Shareholders are also invited to ask questions relating to the agenda of the meeting, which customarily deals with the annual report and accounts.

In addition, Korean law provides mechanisms for shareholders that require directors of companies to hold a shareholders' meeting and to propose resolutions submitted by the shareholders.

In 2014, the Annual General Meeting was held on March 21, 2014. At the meeting, the Annual Report for 2013 financial year was adopted together with the proposal for distributing profits.

# The Board of Directors (BOD)

The Board of Directors consists of 4 Members all nominated and elected by the company's shareholders. Directors are elected for a period of 3 years. "Songwon is committed to Corporate Governance." Maurizio Butti, C00 New elections took place at the General Meeting in 2014 and all directors were re-elected. There was one position change: Chongsik Kim assumed the role of President, Representative Director. The next election will take place in 2017. The Board's responsibilities are regulated by the Korean Company Act.

#### The Executive Committee

In recent years, our business has grown steadily. Songwon is now a key global player in specialty chemicals and number 2 globally in polymer stabilizers. Four years ago, in order to oversee the activities of the Group and maintain our position as the supplier of preference, we created an organization based on global functions. At that time, the Executive Committee was established and currently comprises 12 key executives (see 'Leadership' section).

The Committee's role is to manage all aspects of our business, create policies and make key decisions concerning Songwon's strategy, investments and people. However, with the exception of decisions reserved for the Board of Directors according to the Korean Company Act.

In these instances, the Committee prepares their proposals and passes them to the BOD for final approval. The Executive Committee is also responsible for the economic, social and environmental performance of the Group. The Committee members meet in person once every quarter and hold regular teleconferences.

# Chief Executive Officer (CEO) & Executive Management

The CEO of the Songwon Group is elected by the BOD and is also the CEO of the parent company Songwon Industrial Co. Ltd. The CEO manages according to the BOD's instructions and in line with the division of responsibilities between the CEO and BOD as approved by the BOD. The CEO exercises ongoing control of the Group. The CEO nominates the Chief Operating Officer (COO), who reports directly to him. All of Songwon's executive managers report to the COO.

The remuneration for members of our highest governance body, senior managers, and executives (including departure arrangements) is in line with the overall performance of the company including the social, economic and environmental results.

#### **External auditors**

Auditors for Songwon are elected at the Annual General Meeting for a period of 3 years. As for the previous 9 years, the current audit consultants are Ernst & Young. In order to remain well informed about relevant issues concerning the accounts, reporting procedures and management of the Group's assets, the Board and the Executive Committee aim to foster a close relationship with the auditors.

The company's Vision and Mission statements form a roadmap which drives Songwon's approach to business. The Vision and Mission statements have been communicated to all employees and released publicly to reach all of our stakeholders globally.

We also have a complete set of Songwon policies that cover all aspects of doing business which are accessible to all employees. They outline our commitment to high ethical standards and our compliance with the applicable laws wherever we operate.

Songwon's Code of Conduct is available on our website. The code guides employees on how to apply basic principles in line with our core values and our 'safe, honest, trustworthy, professional, customer focused' culture. It also provides practical advice on how to comply with laws and regulations and how to relate to our customers, communities and colleagues. We have endeavored to ensure that our Code of Conduct is in line with internationally agreed standards. All of our policies are applied across the organization in all the regions and strictly enforced.

There have not been any incidents against our principles, as e.g. corruption or discrimination. We also do not have any significant monetary or non-monetary fines for non-compliance with laws and regulations to report.

#### Internal control

Internal control is fundamental to Songwon's company culture. It involves implementing an effective control system and follow up of the Group's activities. It also ensures that Songwon's rules of business engagement are followed diligently with regard to external legislation and regulations, as well as internal guidelines and control documentation.

An important element of internal control is identifying risks and then ensuring that they are managed effectively. Our aim is to minimize the exposure to risk as far as possible, while ensuring that desired opportunities are capitalized upon at the same time.

The Group is organized to meet the requirements for effective internal control. Our working methods are characterized by organizational transparency and a clear division of responsibilities. The Group also has the necessary financial and business reporting systems in place. These are important control instruments that enable us to achieve reliable consolidation and financial reporting.

Using well established procedures, internal group reports are compiled once a month and then presented in a document which includes extensive analysis. A number of people from the Group, department and company level work on the quarterly and annual accounts. The summarized results are reviewed and approved by the management team, the Executive Committee and the BOD. To ensure the highest levels of corporate governance, should a conflict of interest arise, the member concerned will abstain from voting on the issues involving a conflict of interest. Songwon is not aware of any conflicts of interest that arose or could have arisen in 2014.

#### **Clear communication**

At Songwon, we believe that effective internal communication is essential to achieving Songwon's business and strategic objectives. Therefore, we encourage all employees to promote and contribute to an effective, transparent and open atmosphere of communication.

Songwon's communication and consultation with stakeholders may take place as face-to-face meetings, group meetings, team briefings, meetings with union representatives, announcements, email, letters, memos, notices and telephone calls. The appropriate method of communication and/or consultation is decided depending on the nature of the topic involved.

# Stakeholder groups engaged with Songwon:

- Shareholders
- Local/Regional/National Governments
- Employees
- Unions
- Customers
- Suppliers
- Communities
- Industry/Trade Associations
- Civil Organizations

#### Identifying stakeholders

Stakeholders are identified by each individual site and business operation as part of the communication process. We have no formal corporate mechanism currently in place for this.

The content of this document has been put together taking into consideration the feedback and recommendations of all our stakeholders relating to the reported topics and their importance without having a formal process in place.

# > SUSTAINABILITY REPORT



Global Reporting Initiative Application Level B.....

**GRI Application Level B** 



# STANDARD DISCLOSURES PART I: Profile Disclosures

On the following pages of the report, the GRI Index and Profile Disclosures for Application Level B are presented.

Profile			
Disclosure	Disclosure	Location of disclosure	Page
1. STRATE	GY AND ANALYSIS		
1.1	Statement from the most senior decision-maker of the	Letter to Shareholders	2ff
	organization.		
1.2	Description of key impacts, risks, and opportunities.	Markets, Risks & Opportunities	29ff)
2. ORGANIZ	ZATIONAL PROFILE		
2.1	Name of the organization.	Letter to Shareholders	2ff
2.2	Primary brands, products, and/or services.	Our brands	8
		Product Portfolio/Product Groups	24ff
2.3	Operational structure of the organization, including main divisions,	Songwon Industrial Group	22
	operating companies, subsidiaries, and joint ventures.	Structure	
2.4	Location of organization's headquarters.	Contact (back cover inside)	
2.5	Number of countries where the organization operates, and names	Songwon Global Locations	10f
	of countries with either major operations or that are specifically		
	relevant to the sustainability issues covered in the report.		
2.6	Nature of ownership and legal form.	Songwon Industrial Group	22
		Structure	
2.7	Markets served (including geographic breakdown, sectors served,	Inside Cover	
	and types of customers/beneficiaries).	Songwon Product Portfolio	24ff
		Songwon Global Locations	10f
2.8	Scale of the reporting organization.	Consolidated Financial Statements	72ff
		Our People	46ff
		Manufacturing Excellence	43ff
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2.9	Significant changes during the reporting period regarding size,	Business and Corporate	32ff
	structure, or ownership.	Development	

Profile			
	Disclosure	Location of disclosure	Page
3. REPORT	PARAMETERS	1	
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	Consolidated Financial Statements	72ff
3.2	Date of most recent previous report (if any).	Further Notes about this report	149
3.3	Reporting cycle (annual, biennial, etc.)	Further Notes about this report	149
3.4	Contact point for questions regarding the report or its contents.	Contact (back cover inside)	
3.5	Process for defining report content.	Further Notes about this report	149
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Further Notes about this report	149
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	Further Notes about this report	149
3.8	Basis for reporting on joint ventures, subsidiaries, leased	Consolidated Financial Statements	72ff
	facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Further Notes about this report	149
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	Further Notes about this report	149
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g.,mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	Further Notes about this report	149
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Further Notes about this report	149
3.12	Table identifying the location of the Standard Disclosures in the report.	Sustainability Report	64ff
3.13	Policy and current practice with regard to seeking external assurance for the report.	Further Notes about this report	149

Profile			
Disclosure	Disclosure	Location of disclosure	Page
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	under the highest governance body responsible for specific tasks,	Leadership	18f
	such as setting strategy or organizational oversight.	Board of Directors	18f
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Governance	61ff
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	Governance	61ff
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Governance	61ff
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	Governance	61ff
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Governance	61ff
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	Governance	61ff
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Governance	61ff
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	Governance	61ff
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Governance	61ff
4.11	Explanation of whether and how the precautionary approach or	Governance	61ff
	principle is addressed by the organization.	Letter to Shareholders	2ff
		Markets, Risks & Opportunities	29ff
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	There are none	
4.13	Memberships in associations (such as industry associations) and/ or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	Governance	61ff
4.14	List of stakeholder groups engaged by the organization.	Governance	61ff
4.15	Basis for identification and selection of stakeholders with whom to engage.	Governance	61ff
4.16	Approaches to stakeholder engagement, including frequency of	Governance	63
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4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Governance Songwon Product Portfolio,	63 24ff

# STANDARD DISCLOSURES PART II & III:

# Disclosures on Management Approach (DMA's) and Performance Indicators.

Indicator	Disclosure	Location of disclosure	Page			
ECONOM	lic	1				
DMA EC	DISCLOSURE ON MANAGEMENT APPROACH ECONOMIC					
Economic	performance					
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Markets, Risks & Opportunities	29ff			
EC3	Coverage of the organization's defined benefit plan obligations.	Consolidated Financial Statements	72ff			
Market pr	esence					
EC7	Procedures for local hiring and proportion of senior management	Our People	46ff			
	hired from the local community at significant locations of operation.					
ENVIRON	IMENTAL					
DMA EN	DISCLOSURE ON MANAGEMENT APPROACH ENVIRONMENTAL					
Materials		1				
EN1	Materials used by weight or volume.	EH&S	54ff			
EN2	Percentage of materials used that are recycled input materials.	EH&S	54ff			
Energy		1	1			
EN3	Direct energy consumption by primary energy source.	EH&S	54ff			
EN4	Indirect energy consumption by primary source.	EH&S	54ff			
EN5	Energy saved due to conservation and efficiency improvements.	EH&S	54ff			
EN7	Initiatives to reduce indirect energy consumption and reductions	Manufacturing Excellence	43ff			
	achieved.	EH&S	54ff			
Water						
EN8	Total water withdrawal by source	EH&S	54ff			
EN9	Water sources significantly affected by withdrawal of water.	EH&S	54ff			
EN10	Percentage and total volume of water recycled and reused.	EH&S	54ff			
Biodivers	•		0 111			
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	EH&S	54ff			
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	EH&S	54ff			
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	EH&S	54ff			
Emissions	s, effluents and waste					
EN16	Total direct and indirect greenhouse gas emissions by weight.	EH&S	54ff			
EN17	Other relevant indirect greenhouse gas emissions by weight.	EH&S	54ff			
EN18	Initiatives to reduce greenhouse gas emissions and reductions	EH&S	54ff			
	achieved.					
EN20	NOx, SOx, and other significant air emissions by type and weight.	EH&S	54ff			
EN21	Total water discharge by quality and destination.	EH&S	54ff			
EN22	Total weight of waste by type and disposal method.	EH&S	54ff			
EN23	Total number and volume of significant spills.	EH&S	54ff			
Indicator	Disclosure	Location of disclosure	Page			
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Complian	ce					
EN28	Monetary value of significant fines and total number of non-monetary	EH&S	54ff			
	sanctions for non-compliance with environmental laws and regulations.					
SOCIAL:	LABOR PRACTICES AND DECENT WORK					
DMA LA	DISCLOSURE ON MANAGEMENT APPROACH LABOR PRACTICES AND DECENT WORK					
Employme	ent	1				
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	Our People	46ff			
LA2	Total number and rate of new employee hires and employee       Our People         turnover by age group, gender, and region.       Our People					
LA15	Return to work and retention rates after parental leave, by gender.	Our People	46ff			
Occupatio	nal health and safety					
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	EH&S	54ff			
Diversity	and equal opportunity	·				
LA13	Composition of governance bodies and breakdown of employees	Governance	61ff			
	per employee category according to gender, age group, minority	Our People	46ff			
	group membership, and other indicators of diversity.					
SOCIAL:	HUMAN RIGHTS					
DMA HR	DISCLOSURE ON MANAGEMENT APPROACH HUMAN RIGHTS					
Non-discr	imination					
HR4	Total number of incidents of discrimination and actions taken.	Governance	61ff			
HR9	Total number of incidents of violation involving rightys of indigenous people and actions taken.	No incidents occurred				
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	Our People	46ff			
SOCIAL:	SOCIETY					
DMA SO	DISCLOSURE ON MANAGEMENT APPROACH SOCIETY					
Corruptio	n					
S03	Percentage of employees trained in organization's anti-corruption policies and procedures.	Our People	46ff			
S04	Actions taken in response to incidents of corruption.	Our People	46ff			
Anti-com	petitive behavior					
S07	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	Our People	46ff			
Complian		I				
S08	Monetary value of significant fines and total number of non- monetary sanctions for non-compliance with laws and regulations.	Our People	46ff			
	I monetary salicitoris for non-compliance with laws and regulations.					

Indicator	Disclosure	Location of disclosure	Page
SOCIAL:	PRODUCT RESPONSIBILITY	1	
DMA PR	DISCLOSURE ON MANAGEMENT APPROACH PRODUCT RESPONSIBILITY		
Product a	nd service labelling		
PR3	Type of product and service information required by procedures,	Sales	34ff
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	such information requirements.	REACH & Regulatory Affairs	52
Complian	ce		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	Governance	61ff

# > CONSOLIDATED FINANCIAL STATEMENTS



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Consolidated Financial Statements Independent Auditor's Report



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#### Independent auditors' report

## To the shareholders and board of directors of SONGWON INDUSTRIAL CO., LTD. and its subsidiaries

We have audited the accompanying consolidated financial statements of SONGWON INDUSTRIAL CO., LTD. (the Company) and its subsidiaries (collectively referred to as the Group), which comprise the consolidated statements of financial position as at December 31, 2014 and 2013, and the consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Korean International Financial Reporting Standards (KIFRS), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the Republic of Korea. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



#### Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of SONGWON INDUSTRIAL CO., LTD. and its subsidiaries as at December 31, 2014 and 2013, and its financial performance and cash flows for the years then ended in accordance with Korean International Financial Reporting Standards.

#### Emphasis of Matter

The Note 25 to the consolidated financial statements describes the Company was in breach of its loan covenant. The result of such breach allows the creditors to exercise their legal right to recall the outstanding amounts with immediate effect. Our opinion is not qualified in respect of this matter.

#### Other matter

The 2013 comparative consolidated financial statements of SONGWON INDUSTRIAL CO., LTD. and its subsidiaries were audited in accordance with previous auditing standards generally accepted in the Republic of Korea.

February 24, 2015

Einsthe Jourg Han Jourg

This audit report is effective as at February 24, 2015, the independent auditors' report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditors' report to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

Consolidated Financial Statements

#### INTRODUCTION TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### STATEMENT OF THE BOARD OF DIRECTORS & CFO

On the following pages 80 to 150, consolidated financial statements for the year 2014 are presented. The financial statements disclosed are prepared according to the Korean International Financial Reporting Standards ("K-IFRS") and represent the one as submitted for approval to the annual general shareholder's meeting taking place on March 20, 2015 in Ulsan, Korea.

While the management of the Group is responsible for the preparation and presentation of the financial statements, the responsibility of the independent Group auditor is to express an opinion on these financial statements. The report on the consolidated financial statements issued by our Group auditor, Ernst & Young Han Young can be found on pages 76 to 77.

**Jongho Park,** Chairman, CEO & Member of the Executive Committee

Jons 1000 Part

**Chongsik Kim,** President & Representative Director

Chomesik Kim

**Kisoo Byun,** Independent Director

Kiso Byun

**Yonghoon Kwon,** Standing Auditor

won Yong-Hoon

Hans-Peter Wüest, CFO & Member of the Executive Committee

#### CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

as at 31 December

	Notes	2014 Million KRW	2013 Million KRW
ASSETS			
Non-current assets		517,944	498,431
Property, plant and equipment	7, 25, 26	434,604	426,277
Investment properties	8, 26	31,281	27,935
Intangible assets	9, 10	41,452	36,443
Investments accounted for using the equity method	11	3,100	2,310
Available-for-sale financial investments	12	1,473	1,854
Other non-current financial assets	13	2,675	2,495
Deferred tax assets	28	3,359	1,117
Current assets		337,913	367,591
Inventories	14	169,014	182,684
Trade and other receivables	15	111,423	109,811
Income tax receivables		954	193
Other current assets	16	3,921	4,513
Other current financial assets	13	7,209	6,713
Cash and cash equivalents	17	45,392	63,677
Total assets		855,857	866,022
EQUITY AND LIABILITIES			
Equity		288,627	306,423
Non-controlling interests		3,110	271
Equity attributable to owners of the parent		285,517	306,152
Share capital	18	12,000	12,000
Capital surplus	18	24,361	24,361
Reserves	18	26,607	26,439
Retained earnings		225,280	247,175
Accumulated other comprehensive income	18	-2,731	-3,823
Non-current liabilities		145,482	213,344
Interest-bearing loans and borrowings	19, 25, 26	76,014	152,341
Pension liability	20	18,707	12,101
Other long-term employee-related liabilities	21	2,009	1,247
Other non-current financial liabilities	22	2,447	1,883
Other non-current liabilities		38	-
Deferred tax liabilities	28	46,267	45,772
Current liabilities		421,748	346,255
Interest-bearing loans and borrowings	19, 25, 26	344,163	262,630
Trade and other payables	23	74,202	76,917
Other current financial liabilities	22	778	1,077
Other current liabilities		2,005	1,758
Income tax payable		600	3,873
Total liabilities		567,230	559,599
Total equity and liabilities		855,857	866,022

#### CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

as at 31 December (see Note 2.3)

	2014 Thousand USD	2013 Thousand USD
ASSETS		
Non-current assets	471,719	453,947
Property, plant and equipment	395,817	388,233
Investment properties	28,489	25,442
Intangible assets	37,753	33,191
Investments accounted for using the equity method	2,823	2,104
Available-for-sale financial investments	1,342	1,689
Other non-current financial assets	2,436	2,271
Deferred tax assets	3,059	1,017
Current assets	307,755	334,785
Inventories	153,930	166,380
Trade and other receivables	101,479	100,011
Income tax receivables	869	176
Other current assets	3,570	4,110
Other current financial assets	6,566	6,114
Cash and cash equivalents	41,341	57,994
Total assets	779,474	788,732
EQUITY AND LIABILITIES		
Equity	262,868	279,076
Non-controlling interests	2,833	247
Equity attributable to owners of the parent	260,035	278,829
Share capital	10,929	10,929
Capital surplus	22,187	22,187
Reserves	24,233	24,080
Retained earnings	205,174	225,115
Accumulated other comprehensive income	-2,488	-3,482
	122 (00	10/ 20/
Non-current liabilities	132,498	<b>194,304</b>
Interest-bearing loans and borrowings	69,230	138,745
Pension liability	17,037	11,021
Other long-term employee-related liabilities	1,830	1,136
Other non-current financial liabilities	2,228	1,715
Other non-current liabilities Deferred tax liabilities	35	- /1 /07
	42,138	41,687
Current liabilities	384,108	315,352
Interest-bearing loans and borrowings	313,447	239,191
Trade and other payables	67,580	70,052
Other current financial liabilities	709	981
Other current liabilities	1,826	1,601
Income tax payable	546	3,527
Total liabilities	516,606	509,656
Total equity and liabilities	779,474	788,732

#### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

for the year ended 31 December

		2014	2013 (restated*)
	Notes	Million KRW	Million KRW
Sales of goods	6	665,498	692,164
Cost of sales		-576,914	-560,839
Gross profit	27.2	<b>88,584</b> -85,186	<b>131,325</b> -89,246
Selling and administration costs Operating profit	27.2	-80,186 <b>3,398</b>	-89,240 <b>42,079</b>
Other income	27.3	22,404	17,757
Other expenses	27.3	-19,924	-12,449
Revaluation loss due to step acquisition	27.4	-17,724	-12,447
Share of result from investments accounted for using the		-02	
equity method	11	676	923
Finance income	27.6	24,433	20,368
Finance costs	27.7	-39,671	-36,813
(Loss) / profit before tax		-8,716	31,865
Income tax expense	28	-4,675	-8,938
(Loss) / profit for the year		-13,391	22,927
Other comprehensive income, net of taxes			
Net other comprehensive income to be reclassified to profit or loss in subsequent periods		1,048	-430
Gain / (loss) on valuation of available-for-sale financial investments	18.4	-4	191
Gain / (loss) on valuation of interest rate swap	18.4	-88	-45
Exchange differences on translation of foreign operations	18.4	1,140	-576
Net other comprehensive income not to be reclassified to profit or loss		-7,387	-684
Re-measurements gain / (loss) on defined benefit plans	18.4	-7,387	-684
Total other comprehensive income, net of taxes		-6,339	-1,114
Total comprehensive income		-19,730	21,813
(Loss) / profit of the year attributable to:			
Owners of the parent		-12,660	23,997
Non-controlling interests		-731	-1,070
(Loss) / profit for the year		-13,391	22,927
Total comprehensive income attributable to:			
Owners of the parent		-18,955	22,883
Non-controlling interests		-775	-1,070
Total comprehensive income		-19,730	21,813
Earnings per share		KRW	KRW
Basic / diluted, (loss) / profit for the year attributable to ordinary equity holders of the parent	29	-527	1,000

\*See Note 2.4 for further details

#### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

for the year ended 31 December (see Note 2.3)

	2014	2013
	Thousand USD	Thousand USD
Sales of goods	606,104	630,391
Cost of sales	-525,426	-510,786
Gross profit	80,678	<b>119,605</b>
Selling and administration costs	-77,583	-81,281
Operating profit Other income	<b>3,095</b> 20,405	<b>38,324</b> 16,172
	-18,146	
Other expenses	-10,140	-11,338
Revaluation loss due to step acquisition Share of result from investments accounted for using the	-27	
equity method	616	841
Finance income	22,251	18,550
Finance costs	-36,130	-33,528
(Loss) / profit before tax	-7,938	29,021
Income tax expense	-4,258	-8,140
(Loss) / profit for the year	-12,196	20,881
	12,170	
Other comprehensive income, net of taxes		
Net other comprehensive income to be reclassified to profit or loss in subsequent periods	954	-392
Gain / (loss) on valuation of available-for-sale financial investments	-4	174
Gain / (loss) on valuation of interest rate swap	-80	-41
Exchange differences on translation of foreign operations	1,038	-525
Net other comprehensive income not to be reclassified to profit or loss	-6,728	-623
Re-measurements gain / (loss) on defined benefit plans	-6,728	-623
Total other comprehensive income, net of taxes	-5,774	-1,015
Total comprehensive income	-17,970	19,866
(Loss) / profit of the year attributable to:		
Owners of the parent	-11,530	21,856
Non-controlling interests	-666	-975
(Loss) / profit for the year	-12,196	20,881
Total comprehensive income attributable to:		
Owners of the parent	-17,264	20,841
Non-controlling interests	-706	-975
Total comprehensive income	-17,970	19,866
Earnings per share	USD	USD
Basic / diluted, (loss) / profit for the year attributable to ordinary equity holders of the parent	-480	911

#### CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

for the year ended 31 December 2013 and 31 December 2014

		Attri	butable to o	wners of the	parent			
	Issued capital	Capital surplus	Reserves	Retained earnings	Accumu- lated OCI	Total	Non- controlling interests	Total equity
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Notes	18	18	18	18, 20	18		5	
As at January 1, 2013	12,000	24,361	26,247	226,379	-3,393	285,594	1,122	286,716
Profit for the period	-	-	-	23,997	-	23,997	-1,070	22,927
Gain / (loss) on available-for-sale financial instruments, net of tax	-	-	-	-	191	191	-	191
Gain / (loss) on valuation of interest rate swap, net of tax	-	-	-	-	-45	-45	-	-45
Exchange differences on translation of foreign operations, net of tax	-	-	-	-	-576	-576	-	-576
Re-measurement gain / (loss) on defined benefit plans, net of tax	-	-	-	-684	-	-684	-	-684
Total comprehensive income	-	-	-	23,313	-430	22,883	-1,070	21,813
Acquisition of interests	-	-	-	-405	-	-405	-19	-424
Issue of share capital of a subsidiary	-	-	-	-	-	-	238	238
Dividends	-	-	-	-1,920	-	-1,920	-	-1,920
Appropriation to reserves	-	-	192	-192	-	-	-	-
As at December 31, 2013	12,000	24,361	26,439	247,175	-3,823	306,152	271	306,423

#### Attributable to owners of the parent

	Issued	Capital		Retained	Accumu-		Non- controlling	Total
	capital	surplus	Reserves	earnings	lated OCI	Total	interests	equity
	Million KRW	Million KRW						
Notes	18	18	18	18, 20	18		5	
As at January 1, 2014	12,000	24,361	26,439	247,175	-3,823	306,152	271	306,423
Loss for the period	-	-	-	-12,660	-	-12,660	-731	-13,391
Gain / (loss) on available-for-sale financial instruments, net of tax	-	-	-	-	-4	-4	-	-4
Gain / (loss) on valuation of interest rate swap, net of tax	-	-	-	-	-88	-88	-	-88
Exchange differences on translation of foreign operations, net of tax	-	-	-	-	1,184	1,184	-44	1,140
Re-measurement gain / (loss) on defined benefit plans, net of tax	-	-	-	-7,387	-	-7,387	-	-7,387
Total comprehensive income	-	-	-	-20,047	1,092	-18,955	-775	-19,730
Change in non-controlling interests due to step acquisition	-	-	-	-	-	-	832	832
Change in non-controlling interests due to capital increase	-	-	-	-	-	-	2,782	2,782
Dividends	-	-	-	-1,680	-	-1,680	-	-1,680
Appropriation to reserves	-	-	168	-168	-	-	-	-
As at December 31, 2014	12,000	24,361	26,607	225,280	-2,731	285,517	3,110	288,627

#### CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

for the year ended 31 December 2013 and 31 December 2014 (see Note 2.3)

	Attributable to owners of the parent							
	lssued capital	Capital surplus	Reserves	Retained earnings	Accumu- lated OCI	Total	Non- controlling interests	Total equity
	Thousand <sup>-</sup> USD	Thousand USD	Thousand USD	Thousand USD	Thousand USD	Thousand USD	Thousand USD	Thousand USD
As at January 1, 2013	10,929	22,187	23,905	206,175	-3,090	260,106	1,022	261,128
Profit for the period	-	-	-	21,856	-	21,856	-975	20,881
Gain / (loss) on available-for-sale financial instruments, net of tax	-	-	-	-	174	174	-	174
Gain / (loss) on valuation of interest rate swap, net of tax	-	-	-	-	-41	-41	-	-41
Exchange differences on translation of foreign operations, net of tax	-	-	-	-	-525	-525	-	-525
Re-measurement gain / (loss) on defined benefit plans, net of tax	-	-	-	-623	-	-623	-	-623
Total comprehensive income	-	-	-	21,233	-392	20,841	-975	19,866
Acquisition of interests	-	-	-	-369	-	-369	-17	-386
Issue of share capital of a subsidiary	-	-	-	-	-	-	217	217
Dividends	-	-	-	-1,749	-	-1,749	-	-1,749
Appropriation to reserves	-	-	175	-175	-	-	-	-
As at December 31, 2013	10,929	22,187	24,080	225,115	-3,482	278,829	247	279,076

#### Attributable to owners of the parent

	Issued capital	Capital surplus	Reserves	Retained earnings	Accumu- lated OCI	Total	Non- controlling interests	Total equity
	Thousand <sup>-</sup> USD	Thousand USD	Thousand USD	Thousand USD	Thousand USD	Thousand USD	Thousand USD	Thousand USD
As at January 1, 2014	10,929	22,187	24,080	225,115	-3,482	278,829	247	279,076
Loss for the period	-	-	-	-11,530	-	-11,530	-666	-12,196
Gain / (loss) on available-for-sale financial instruments, net of tax	-	-	-	-	-4	-4	-	-4
Gain / (loss) on valuation of interest rate swap, net of tax	-	-	-	-	-80	-80	-	-80
Exchange differences on translation of foreign operations, net of tax	-	-	-	-	1,078	1,078	-40	1,038
Re-measurement gain / (loss) on defined benefit plans, net of tax	-	-	-	-6,728	-	-6,728	-	-6,728
Total comprehensive income	-	-	-	-18,258	994	-17,264	-706	-17,970
Change in non-controlling interests due to step acquisition	-	-	-	-	-	-	758	758
Change in non-controlling interests due to capital increase	-	-	-	-	-	-	2,534	2,534
Dividends	-	-	-	-1,530	-	-1,530	-	-1,530
Appropriation to reserves	-	-	153	-153	-	-	-	-
As at December 31, 2014	10,929	22,187	24,233	205,174	-2,488	260,035	2,833	262,868

#### CONSOLIDATED STATEMENTS OF CASH FLOWS

for the year ended 31 December

		2014	2013
	Notes	Million KRW	Million KRW
(Loss) / profit for the year		-13,391	22,927
Adjustments of non-cash items	30	49,227	65,984
Changes in operating assets and liabilities	30	21,295	-25,226
Interest received		528	720
Receipt of dividends		7	34
Payment of income tax		-9,351	-5,401
Net cash flow from operating activities		48,315	59,038
Proceeds from sale of property, plant and equipment		82	797
Proceeds from sale of intangible assets	9	819	154
Purchase of property, plant and equipment	7	-36,250	-19,929
Purchase of investment properties	8	-	-195
Purchase of intangible assets	9	-290	-1,716
Proceeds from sale of available-for-sale financial instruments		500	5,542
Purchase of available-for-sale financial instruments		-123	-1,001
Acquisition of a subsidiary, net of cash acquired		200	-
Acquisition of a business, net of cash acquired	5	-19,746	-
Increase of other financial assets		-761	-3,432
Net cash flow from investing activities		-55,569	-19,780
Proceeds from borrowings (current)		738,154	943,285
Repayment of borrowings (current)		-786,059	-1,139,900
Proceeds from interest-bearing borrowings (non-current)		52,458	180,000
Increase / (decrease) in other financial liabilities		366	-16,138
Interest paid		-16,833	-20,050
Acquisition of non-controlling interests	1.2.4	-	-424
Proceeds from issue of share capital of a subsidiary		2,782	238
Dividends paid	18	-1,680	-1,920
Net cash flow from financing activities		-10,812	-54,909
Decrease in cash and cash equivalents		-18,066	-15,651
Net foreign exchange difference		-219	-2,210
Cash and cash equivalents at January 1	17,30	63,677	81,538
Cash and cash equivalents at December 31	17,30	45,392	63,677

#### CONSOLIDATED STATEMENTS OF CASH FLOWS

for the year ended 31 December (see Note 2.3)

	2014	2013
	Thousand USD	Thousand USD
(Loss) / profit for the year	-12,196	20,881
Adjustments of non-cash items	44,834	60,095
Changes in operating assets and liabilities	19,394	-22,975
Interest received	481	656
Receipt of dividends	6	31
Payment of income tax	-8,516	-4,919
Net cash flow from operating activities	44,003	53,769
Proceeds from sale of property, plant and equipment	75	726
Proceeds from sale of intangible assets	746	140
Purchase of property, plant and equipment	-33,015	-18,150
Purchase of investment properties	-	-178
Purchase of intangible assets	-264	-1,563
Proceeds from sale of available-for-sale financial instruments	455	5,047
Purchase of available-for-sale financial instruments	-112	-912
Acquisition of a subsidiary, net of cash acquired	182	-
Acquisition of a business, net of cash acquired	-17,984	-
Increase of other financial assets	-693	-3,125
Net cash flow from investing activities	-50,610	-18,015
Proceeds from borrowings (current)	672,276	859,100
Repayment of borrowings (current)	-715,905	-1,038,167
Proceeds from interest-bearing borrowings (non-current)	47,776	163,936
Increase / (decrease) in other financial liabilities	333	-14,698
Interest paid	-15,331	-18,261
Acquisition of non-controlling interests	-	-386
Proceeds from issue of share capital of a subsidiary	2,534	217
Dividends paid	-1,530	-1,749
Net cash flow from financing activities	-9,847	-50,008
Decrease in cash and cash equivalents	-16,454	-14,254
Net foreign exchange difference	-199	-2,013
Cash and cash equivalents at January 1	57,994	74,261
Cash and cash equivalents at December 31	41,341	57,994

### 1 CORPORATE INFORMATION

#### 1.1 THE COMPANY

Songwon Industrial Group (the "Group") consists of the parent company Songwon Industrial Co. Ltd. (the "Company") and its consolidated subsidiaries as listed below. The Company was incorporated on December 15, 1965 under the law of the Republic of Korea to engage in the manufacture and commercial sale of antioxidants, stabilizers and polyurethanes. The Company's main manufacturing plants are located in Ulsan and Suwon, Korea. The address of the registered office (Songwon Industrial Co. Ltd.) can be found at the end of the annual report.

The Company listed its common shares on the Korea Exchange in June 1977 pursuant to the provisions of the Korean Securities and Exchange Act.

#### 1.2 SCOPE OF CONSOLIDATION

#### 1.2.1 CHANGES IN THE SCOPE OF CONSOLIDATION

In 2014, the scope of consolidation for the consolidated financial statements encompasses 15 entities (2013: 14 entities). One of them was a first-time consolidation in 2014 (2013: 2 entities). One entity was first-time fully consolidated in 2014; it was classified as a joint operation in 2013. Additionally, two entities were classified as joint ventures in 2014 (2013: 2 entities) and accounted for using the equity method.

Changes in the scope of consolidation in 2014 comprised:

- Songwon Specialty Chemicals India Pvt. Ltd. (India), newly established during the second quarter of 2014 and running a production facility for the polymer stabilizer business.
- Polysys Additive Technologies Middle East LLC (Abu Dhabi) a partnership with Polysys Industries LLC, building up an additional production facility for the OPS business. The entity was first-time fully consolidated on April 1, 2014. Until April 2014, this entity was categorized as a joint operation and was proportionally consolidated.

Changes in the scope of consolidation in 2013 comprised:

- Songwon Additive Technologies Middle East (Dubai), newly established at the end of the first quarter of 2013 as sales company for the Middle East region.
- Polysys Additive Technologies Middle East LLC (Abu Dhabi) a partnership with Polysys Industries LLC, newly established during the first quarter of 2013 and building up an additional production facility for the OPS business. The entity was proportionally consolidated in 2013.

The consolidated financial statements include the financial statements of the company and the subsidiaries listed in the following table. The table also includes joint ventures, which are accounted for using the equity method.

		December	31, 2014	December	31, 2013
Name	Location	Status	Interest	Status	Interest
Consolidated entities					
Songwon Industrial Co. Ltd.	Korea	Parent		Parent	
Songwon International-Japan KK	Japan	Subsidiary	100%	Subsidiary	100%
Songwon China Ltd.	Hong Kong	Subsidiary	100%	Subsidiary	100%
Songwon Trading Co. Ltd.	China	Subsidiary	100%	Subsidiary	100%
Songwon Chemicals Co. Ltd.	China	Subsidiary	100%	Subsidiary	100%
Songwon International-India Pvt. Ltd.	India	Subsidiary	100%	Subsidiary	100%
Songwon Specialty Chemicals-India Pvt. Ltd.	India	Subsidiary	100%	n/a	n/a
Songwon International-Americas Inc.	US	Subsidiary	100%	Subsidiary	100%
Songwon Holdings AG	Switzerland	Subsidiary	100%	Subsidiary	100%
Songwon International AG	Switzerland	Subsidiary	100%	Subsidiary	100%
Songwon Additive Technologies AG	Switzerland	Subsidiary	75%	Subsidiary	75%
Songwon ATG GmbH	Germany	Subsidiary	75%	Subsidiary	75%
Songwon Additive Technologies-Americas Inc.	US	Subsidiary	75%	Subsidiary	75%
Songwon Additive Technologies-Middle East FZE	Dubai (UAE)	Subsidiary	75%	Subsidiary	75%
Polysys Additive Technologies-Middle East LLC	Abu Dhabi (UAE)	Subsidiary	55,5%	Joint	
	,	e aberaiar y	001070	operation	0011010
Entities accounted for using the equity method (jo	oint ventures)				
			500/		500/
Chemservice Asia Co. Ltd.	Korea	Joint	50%	Joint	50%
		venture	0.004	venture	0.001
Songwon Baifu Chemicals (Tangshan) Co. Ltd.	China	Joint	30%	Joint	30%
		venture		venture	

## 1.2.2 SUMMARIZED STATEMENTS OF FINANCIAL POSITION AND COMPREHENSIVE INCOME OF SUBSIDIARIES

The summarized statements of financial position and comprehensive income of subsidiaries are as follows:

						Total
	Total	Total	Total	Sales	Net	comprehen-
	assets	liabilities	equity	revenue	income	sive income
	Million	Million	Million	Million	Million	Million
	KRW	KRW	KRW	KRW	KRW	KRW
as at December 31, 2014						
Songwon Industrial Co. Ltd.	810,847	517,845	293,002	569,720	-4,729	-9,498
Songwon International-Japan KK	23,331	20,473	2,858	71,505	340	340
Songwon China Ltd.	5,377	3,939	1,438	8,390	1,054	1,054
Songwon Trading Co. Ltd.	3,325	2,248	1,077	8,822	220	220
Songwon Chemicals Co. Ltd.	1,936	257	1,679	1,507	78	78
Songwon International-India Pvt. Ltd.	1,866	523	1,343	3,351	452	452
Songwon Specialty Chemicals-India Pvt. Ltd.	27,586	23,086	4,500	3,134	-2,051	-2,051
Songwon International-Americas Inc.	59,434	55,951	3,483	137,152	-8	-8
Songwon Holdings AG	39,470	21	39,449	-	-900	-900
Songwon International AG	116,618	83,995	32,623	225,734	2,078	-642
Songwon Additive Technologies AG	33,180	18,440	14,740	-	1,259	1,259
Songwon ATG GmbH	7,400	2,844	4,556	6,222	-152	-152
Songwon Additive Technologies-Americas Inc.	5,240	4,325	915	1,641	-1,065	-1,065
Songwon Additive Technologies-Middle East FZE	14,607	15,191	-584	21,525	-792	-792
Polysys Additive Technologies-Middle East LLC	18,392	16,083	2,309	-	-1,013	-1,013
as at December 31, 2013						
Songwon Industrial Co. Ltd.	829,172	524,992	304,180	596,635	17,964	17,380
Songwon International-Japan KK	27,252	24,448	2,804	78,301	1,411	1,360
Songwon China Ltd.	8,007	7,599	408	13,490	-140	-121
Songwon Trading Co. Ltd.	3,011	1,717	1,294	7,178	73	97
Songwon Chemicals Co. Ltd.	2,497	258	2,239	1,451	173	214
Songwon International-India Pvt. Ltd.	1,644	759	885	3,082	294	188
Songwon International-Americas Inc.	46,045	42,680	3,365	142,562	1,472	1,396
Songwon Holdings AG	30,160	20	30,140	-	142	-271
Songwon International AG	91,975	78,490	13,485	231,084	-1,112	-1,127
Songwon Additive Technologies AG	18,915	16,913	2,002	-	-2,013	-1,871
Songwon ATG GmbH	8,221	3,106	5,115	6,325	-309	31
Songwon Additive Technologies-Americas Inc.	5,174	3,241	1,933	226	-403	-392

289

70

219

Songwon Additive Technologies-Middle East FZE

-81

-69

-

#### 1.2.3 INTEREST IN JOINT VENTURES

The Group has a 50% interest in Chemservice Asia Co. Ltd., a jointly controlled entity operating as a compliance service provider. Further, the Group has a 30% interest in Songwon Baifu Chemicals (Tangshan) Co. Ltd., determined to be a jointly controlled entity involved in the production of thioesters. Determination was driven by contractually agreed sharing of control in regard to relevant activities, which require unanimous consent of the control-sharing parties. The summarized statement of financial position and summarized statement of comprehensive income of joint ventures (accounted for using the equity method) are as follows:

Statement of financial position	Cash and cash T equiva- lents	otal cur- rent assets		Current financial liabilities		Non- current financial liabilities	Total non- current liabilities	Equity	Carrying amount
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Chemservice Asia Co. Ltd.	38	52	-	-	8	-	13	31	16
Songwon Baifu Chemicals (Tangshan) Co. Ltd.	2,231	6,691	4,616	3,240	3,660	-	-	7,647	2,294
December 31, 2013	2,269	6,743	4,616	3,240	3,668	-	13	7,678	2,310
Chemservice Asia Co. Ltd.	35	55	-	8	8	-	16	30	15
Songwon Baifu Chemicals (Tangshan) Co. Ltd.	926	7,770	5,914	3,243	3,401	-	-	10,283	3,085
December 31, 2014	961	7,825	5,914	3,251	3,409	-	16	10,313	3,100

Statement of comprehensive income	Revenue	Depre- ciation & Amorti- zation	Interest income	Interest expense	Profit before tax	Income tax ex- penses	Profit for the year	Other compre- hensive income	Total compre- hensive income
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Chemservice Asia Co. Ltd.	-	-	-	-	1	- 1	-	-	-
Songwon Baifu Chemicals (Tangshan) Co. Ltd.	18,604	-43	2	-166	3,833	-759	3,074	-80	2,994
2013	18,604	-43	2	-166	3,834	-760	3,074	-80	2,994
Chemservice Asia Co. Ltd.	-	-	-	-	-	-	-2	-	-2
Songwon Baifu Chemicals (Tangshan) Co. Ltd.	19,992	-50	2	-145	3,028	-771	2,257	380	2,637
2014	19,992	-50	2	-145	3,028	-771	2,255	380	2,635

All joint ventures are measured using the equity method. All operations are continuing. The financial statements of all joint ventures have the same reporting dates as the Group. No dividends were received from the joint ventures during the periods reported.

#### 1.2.4 NON-CONTROLLING INTERESTS

#### 1.2.4.1 TRANSACTIONS WITH NON-CONTROLLING INTERESTS

#### Purchase of economic interests in Polysys Additive Technologies – Middle East LLC, Abu Dhabi, UAE:

On April 1, 2014, Songwon Industrial Group – through its subsidiary Songwon Additive Technologies AG – acquired an additional economic interest of 25% in Polysys Additive Technologies – Middle East LLC (PATME-UAE), an unlisted company based in Abu Dhabi, United Arab Emirates.

After the acquisition of the additional 25% economic interest, the assessment of the Group's power to control PATME-UAE led to the conclusion that the Group will control the entity going forward. Accordingly, PATME-UAE became a subsidiary of the parent company, while it was accounted for as a joint operation until March 31, 2014.

See Note 5.1 "Business Combinations in 2014" for further details.

#### Purchase of non-controlling interests in Songwon Additive Technologies AG, Switzerland:

In December 2013, the Group purchased an additional equity interest of 15% in Songwon Additive Technologies AG, Switzerland, increasing its equity stake from 60% as of December 31, 2012 to 75% as of December 31, 2013. Cash consideration of 424 Million KRW was paid to the non-controlling shareholders. The carrying value of the net assets of Songwon Additive Technologies AG was 127 Million KRW. The effect of changes in the ownership interest of Songwon Additive Technologies AG on the equity attributable to owners of the Group during the year is summarized as follows:

	Million KRW
Cash consideration paid to non-controlling shareholders	-424
Carrying value of the additional interest in Songwon Additives Technologies AG	19
Decrease in parent's equity	-405

#### 1.2.4.2 INTEREST OF NON-CONTROLLING INTERESTS

The Group has one subsidiary [Songwon Additive Technologies AG, Switzerland] with non-controlling interests representing ownership of 25% as of December 31, 2014 (25% as of December 31, 2013). Within the Additive Technologies subgroup, there are non-controlling interests of 26% in Polysys Additive Technologies-Middle East LLC, United Arab Emirates. The net loss attributable to the non-controlling interests for the year 2014 is -731 Million KRW (2013: net loss of -1,070 Million KRW). Summarized cash flow information of the partly owned subsidiaries is as follows:

	2014	2013	
	Million KRW	Million KRW	
	MILLION KKW		
Operating cash flow	4,145	-395	
Investing cash flow	-9,721	-5,895	
Financing cash flow	13,720	5,861	
Net cash flow	8,144	-429	

### 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### 2.1 BASIS OF PREPARATION

The financial statements of the Group have been prepared in accordance with Korean International Financial Reporting Standards ("K-IFRS") established adopting International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) in accordance with Item 1 of the 1st Clause of Article 13 of External Audit Law.

The financial statements have been prepared on a historical cost basis, except for certain items, such as financial instruments, which are mentioned separately in the following accounting principles. The financial statements are presented in Korean won (KRW) and all values are rounded to the nearest million (000,000), except when otherwise indicated.

The Group maintains its official accounting records in Korean won and prepares statutory financial statements in the Korean language in conformity with K-IFRS. In the event of any differences in interpreting the financial statements or the independent auditor's report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

#### 2.2 BASIS OF CONSOLIDATION

The consolidated financial statements comprise the financial statements of the Group and its subsidiaries as of December 31, 2014. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure or rights to variable returns from its involvement with the investee
- The ability to use its power over the investee to affect its returns

When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement with the other vote holders of the investee
- Rights arising from other contractual arrangements
- The Group's voting rights and potential voting rights

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when it loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of comprehensive income from the date that the Group gains control until the date that it ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to align their accounting policies with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

#### 2.3 CONVENIENCE TRANSLATION INTO UNITED STATES DOLLAR AMOUNTS

The company operates primarily in Korean won and its official accounting records are maintained in Korean won. The US dollar amounts provided in the financial statements represent supplementary information solely for the convenience of the reader. All won amounts are expressed in US dollars at the rate of KRW 1,097.99 to US \$1, the exchange rate in effect on December 31, 2014. Such a presentation is not in accordance with generally accepted accounting principles, and should not be construed as a representation that the won amounts shown could be readily converted, realized or settled in US dollars at this or at any other rate.

## 2.4 RESTATEMENT OF THE PRIOR YEAR FIGURES IN THE STATEMENT OF COMPREHENSIVE INCOME

As the disclosure of capacity variance was changed as of January 1, 2014, going forward, the disclosure of financial statements for 2013 is changed accordingly. While in previous periods capacity variance was reclassified from cost of goods sold (COGS) to other expenses, this reclassification is not performed any longer. In the presented financial statements for the year 2013 capacity, variance of 1,966 Million KRW is therefore reclassified into COGS. This leads to higher COGS and lower gross profit, as well as lower operating profit for 2013. At the same time, other expenses decreased by the same amount. Other income statement positions are not impacted; net profit and earnings per share remain unchanged.

#### 2.5 BUSINESS COMBINATIONS AND GOODWILL

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest in the acquiree. For each business combination, the acquirer measures the non-controlling interest in the acquiree – either at fair value, or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed and included in administrative expenses.

In business combinations achieved in stages, any previously held equity interest in the acquiree is re-measured to its acquisition date fair value.

Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration, which is deemed to be an asset or liability, will be recognized in profit or loss.

Goodwill is initially measured at cost being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interest over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

#### 2.6 INTEREST IN JOINT ARRANGEMENTS

#### Joint ventures

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. The considerations made in determining joint control are similar to those necessary to determine control over subsidiaries.

The Group's investments in its joint ventures are accounted for using the equity method. Under the equity method, the investment in a joint venture is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the joint venture since the acquisition date.

The statement of profit or loss reflects the Group's share of the results of operations of the joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognized directly in the equity of a joint venture, the Group recognizes its share of any changes, when applicable, in the statement of changes in equity. Unrealized gains and losses resulting from transactions between the Group and the joint venture are eliminated to the extent of the interest in the joint venture.

The aggregate of the Group's share of profit or loss in a joint venture is shown on the face of the statement of profit or loss outside operating profit, and represents profit or loss after tax and non-controlling interests in the subsidiaries of the joint venture.

The financial statements of the joint venture are prepared for the same reporting period as the Group. When necessary, adjustments are made to align the accounting policies with those of the Group.

At each reporting date, the Group determines whether there is objective evidence that the investment in the joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the joint venture and its carrying value. It then recognizes the loss as "Share of profit of a joint venture" in the statement of profit.

Upon loss of significant influence over the joint venture, the Group measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the joint venture – upon loss of significant influence or joint control – and the fair value of the retained investment and proceeds from disposal is recognized in profit or loss.

#### Joint operations

A joint operation is defined as an arrangement in which the parties with joint control have rights to the assets and obligations for the liabilities relating to that arrangement. In respect of its interest in a joint operation, a joint operator must recognize all of its assets, liabilities, revenues and expenses, including its relative share of jointly controlled assets, liabilities, revenue and expenses.

The considerations made in determining joint control are similar to those necessary to determine control over subsidiaries.

#### 2.7 FOREIGN CURRENCY TRANSLATION

The financial statements are presented in Korean won, which is the parent company's functional currency. Each entity in the Group determines its own functional currency, and items included in the financial statements of each entity are measured using that functional currency.

Transactions in foreign currencies are initially recorded by the Group companies at their respective functional currency rates prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rate of exchange ruling at the reporting date. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

The assets, including goodwill and liabilities of foreign subsidiaries, where the functional currency is other than the Korean won, are translated using the exchange rate at the end of the reporting period, while the statements of income are translated using average exchange rates during the period. Differences arising from such translations are recognized within equity and reclassified to net income when the gain or loss on disposal of the foreign subsidiary is recognized.

#### 2.8 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is valued at cost less accumulated depreciation and accumulated impairment losses. Such costs include the cost of replacing part of the property, plant and equipment and borrowing costs for long-term construction projects, if the recognition criteria are met. Other repair and maintenance costs are recognized in the income statement as incurred. If the costs of certain components of an item of property, plant and equipment are significant in relation to the total cost of the item, they are accounted for and depreciated separately.

Depreciation expense is recognized using the straight-line method. The following useful lives are assumed:

Land	No depreciation
Buildings	18 to 54 years
Structures	6 to 39 years
Machinery	10 to 20 years
Other	1 to 10 years

Residual values and useful lives are reviewed annually and, if expectations differ from previous estimates, adjusted accordingly.

The gain or loss arising from derecognition of a property, plant or equipment shall be determined as the difference between the net disposal proceeds and the carrying amount of the asset. It shall be recognized in the income statement when the asset is derecognized.

#### 2.9 INTANGIBLE ASSETS

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is its fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses.

Intangible assets with useful finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected consumption pattern of future economic benefits embodied in the asset are accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in the income statement under cost of sales and selling and administration costs in the expense category that is consistent with the function of the intangible assets.

Intangible assets with indefinite useful lives (such as goodwill and memberships) are not amortized, but are tested for impairment annually either individually, or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset, and are recognized in the income statement when the asset is derecognized.

Intangible assets with finite useful lives are amortized using the straight-line method with the following useful lives:

Software	3 to 10 years
Industrial rights	10 years
Useful lives of items recognized in business combinations	over its useful life between 5 to 9 years
Customer relationships	5 to 9 years
Non-compete agreements	6 years
Process technologies	5 to 6 years

The useful lives of customer relationships and process technologies were adjusted in 2014 based on the effective useful lives of the newly acquired intangible assets.

#### 2.10 INVESTMENT PROPERTY

The Group classifies the property to earn rentals or for capital appreciation, or both, as investment properties. As investment properties are accounted for using a cost model, the same accounting policies applied to property, plant and equipment are used for their accounting treatment, except for their classification and presentation.

#### 2.11 LEASES

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at inception date, whether fulfillment of the arrangement is dependent on the use of a specific asset or assets, and the arrangement conveys a right to use the asset, even if that right is not explicitly specified in an arrangement.

#### Group as a lessee

Finance leases, which transfer substantially to the Group all the risks and benefits incidental to ownership of the leased item, are capitalized at the commencement of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance

charges and reduction of the lease liability, so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized in finance costs in the income statement.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of its estimated useful life and the lease term.

Operating lease payments are recognized as an operating expense in the income statement on a straight-line basis over the lease term.

#### Group as a lessor

Leases in which the Group does not transfer substantially all the risks and benefits of ownership of the asset are classified as operating leases. Initial direct costs incurred in negotiating an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which they are earned.

The Group has not entered into finance lease agreements as a lessor.

#### 2.12 IMPAIRMENT OF NON-FINANCIAL ASSETS

The Group reviews non-financial assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If any indication exists, or when annual impairment testing for assets, such as membership is required, the Group estimates the asset's recoverable amount. Recoverability of assets is measured by the comparison of the carrying amount of the asset to the recoverable amount, which is the higher of the asset's value in use and its fair value less costs to sell. If assets do not generate cash inflows that are largely independent of those from other assets or groups of assets, the impairment test is not performed at an individual asset level, instead, it is performed at the level of the cash-generating unit (CGU) that the asset belongs to.

Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, recent market transactions are taken into account, if available. If no such transactions can be identified, an appropriate valuation model is used.

For assets excluding goodwill, an assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such an indication exists, the Group estimates the asset or cash-generating unit's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited, so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such a reversal is recognized in the income statement.

The following criteria are also applied in assessing impairment of specific assets:

#### Goodwill

Goodwill is tested for impairment annually as of December 31, as well as whenever there are events or changes in circumstances (triggering events), which suggest that the carrying amount may not be recoverable. Goodwill is carried at cost less accumulated impairment losses.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to the (groups of) cash-generating unit(s) that is expected to benefit from the synergies of the business combination. If the carrying amount of the cash-generating unit(s), to which the goodwill is allocated, exceeds its recoverable amount, an impairment loss on goodwill is recognized. The recoverable amount is the higher of the cash-generating unit(s) fair value less costs to sell and its value in use.

Impairment losses relating to goodwill cannot be reversed in future periods.

#### Intangible assets with indefinite useful lives

Intangible assets with indefinite useful lives are tested for impairment annually as of December 31 either individually, or at the cash-generating unit level, as appropriate and when circumstances indicate that the carrying value may be impaired.

#### 2.13 BORROWING COSTS

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the respective assets.

#### 2.14 INVENTORIES

Inventory is valued at the lower of the acquisition or production cost and net realizable value, cost being generally determined on the basis of a weighted average. Production costs comprise direct material and labor and applicable manufacturing overheads, including depreciation charges based on normal operating capacity. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

#### 2.15 CASH AND CASH EQUIVALENTS

Cash and cash equivalents in the statement of financial position comprise cash at banks, as well as on hand and short-term deposits with a maturity of three months or less.

#### 2.16 PROVISIONS

A provision is recognized when the Group has a present legal or constructive obligation as a result of a past event. It is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. If the effect is material, provisions are recognized at present value by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money.

#### 2.17 PENSIONS AND OTHER LONG-TERM EMPLOYMENT BENEFITS

#### Pensions

The Group operates two main defined benefit pension plans: one in Korea and one in Switzerland. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method.

Re-measurements, comprising actuarial gains and losses, the effect of the asset ceiling, excluding net interest and the return on plan assets (excluding net interest), are recognized immediately in the statement of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Re-measurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognized in profit or loss on the earlier of:

- The date of the plan amendment or curtailment
- The date that the Group recognizes restructuring-related costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The pension expenses are recognized in the income statement under cost of sales and selling and administration costs.

#### Other long-term employment benefits

The parent company also implements a bonus plan designed to present a prescribed quantity of gold and entitles compensated vacation to long-term service employees. Accounting policies of the bonus plan are mostly the same as the defined benefit plan, except that re-measurements are recognized immediately in profit or loss.

#### 2.18 TAXES

#### Current income tax

Current income tax assets and liabilities for the current period are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted, or substantively enacted, at the reporting date in the countries where the Group operates and generates taxable income.

#### Deferred tax

Deferred tax is provided using the liability method on temporary differences at the reporting date between the tax basis of assets and liabilities, and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- Where the deferred tax liability arises from the initial recognition of goodwill, or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit, nor taxable profit or loss.
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, carry forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized, except:

- Where the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit, nor taxable profit or loss.
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future, and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be

utilized. Unrecognized deferred tax assets are reassessed at each reporting date, and recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognized in correlation to the underlying transaction, either in other comprehensive income, or directly in equity.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

#### 2.19 REVENUE RECOGNITION

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duty. The following specific recognition criteria must also be met before revenue is recognized:

#### Sale of goods

Revenue from the sale of goods is recognized when the significant risks and rewards of ownership of the goods have passed to the buyer.

#### Interest income

For all financial instruments measured at amortized cost and interest-bearing financial assets classified as available for sale, interest income or expense is recorded using the effective interest rate (EIR), which is the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability. Interest income is included in finance income in the income statement.

#### Rental income

Rental income arising from operating leases on investment properties is accounted for on a straight-line basis over the lease terms and included in revenue due to its operating nature.

#### Dividends

Revenue is recognized when the Group's right to receive the payment is established.

#### 2.20 FINANCIAL INSTRUMENTS

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

#### **Financial assets**

All financial assets are recognized initially at fair value plus; in the case of investments not at fair value through profit or loss, directly attributable transaction costs apply. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognized on the trade date i.e. the date that the Group commits to purchase or sell the asset.

The subsequent measurement of financial assets depends on their classification as follows:

- At fair value through profit or loss
- Held to maturity
- Loans and receivables
- All other financial assets are classified as "available-for-sale"

The Group determines the classification of its financial assets at initial recognition.

#### Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by K-IFRS 1039. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets at fair value through profit and loss are carried in the statement of financial position at fair value with changes in fair value recognized in finance income or finance costs in the income statement.

The Group has not designated any financial assets upon initial recognition as at fair value through profit or loss.

#### Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortized cost using the effective interest rate method (EIR), less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance income in the income statement. The losses arising from impairment are recognized in the income statement in finance costs.

#### Held-to-maturity investments

Non-derivative financial assets with fixed or determinable payments and fixed maturities are classified as held-to-maturity when the Group has the positive intention and ability to hold it to maturity. After initial measurement, held-to-maturity investments are measured at amortized cost using the effective interest method, less impairment. As for loans and receivables above the EIR amortization is included in finance income in the income statement. The losses arising from impairment are recognized in the income statement in finance costs.

#### Available-for-sale financial investments

Available-for-sale financial investments include equity and debt securities. Equity investments classified as available-for-sale are those which are neither classified as held for trading, nor designated at fair value through profit or loss. Debt securities in this category are those which are intended to be held for an indefinite period of time and which may be sold in response to needs for liquidity, or in response to changes in the market conditions.

After initial measurement, available-for-sale financial investments are subsequently measured at fair value with unrealized gains or losses recognized as other comprehensive income in the available-for-sale reserve until the investment is derecognized, at which time the cumulative gain or loss is recognized in other income, or determined to be impaired, at which time the cumulative loss is reclassified to the income statement in finance costs and removed from the available-for-sale reserve.

#### Derecognition of financial assets

A financial asset (or where applicable a part of a financial asset or part of a Group of similar financial assets) is derecognized when:

- The rights to receive cash flows from the asset have expired.
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a pass-through arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred, nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, and has neither transferred, nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the asset is recognized to the extent of the Group's continuing involvement in the asset. In that case, the Group also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained. Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset, and the maximum amount of consideration that the Group could be required to repay.

#### Impairment of financial assets

- Further disclosures relating to impairment of financial assets are also provided in the following notes:
- Disclosures for significant assumptions Note 3
- Trade receivables Note 15

The Group assesses, at each reporting date, whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that has occurred since the initial recognition of the asset (an incurred 'loss event'), has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganization and observable data indicating that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

#### Financial assets carried at amortized cost

For financial assets carried at amortized cost, the Group first assesses whether objective evidence of impairment exists individually for financial assets that are individually significant, or collectively for financial assets that are not individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be, recognized are not included in a collective assessment of impairment.

#### Available-for-sale financial investments

In the case of equity investments, objective evidence would include a significant or prolonged decline in the fair value of the investment below its cost – a 'significant decline' is evaluated against the original cost of the investment and a 'prolonged decline' against the period in which the fair value has been below its original cost. In the case of debt instruments, impairment is assessed based on the same criteria as financial assets carried at amortized cost. However, the amount recorded for impairment is the cumulative loss measured as the difference between the amortized cost and the current fair value, less any impairment loss on that investment previously recognized in the income statement.

#### **Financial liabilities**

All financial liabilities are recognized initially at fair value and in the case of loans and borrowings, including directly attributable transaction costs.

- The measurement of financial liabilities depends on their classification as follows:
- Financial liabilities at fair value through profit or loss
- Loans and borrowings

The Group determines the classification of its financial liabilities at initial recognition.

#### Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships.

Gains or losses on liabilities held for trading are recognized in the income statement. The Group has not designated any financial liabilities upon initial recognition as at fair value through profit or loss.

#### Loans and borrowings

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortized cost using the effective interest rate (EIR) method. Gains and losses are recognized in the income statement when the liabilities are derecognized as well as through the effective interest rate method amortization process. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance costs in the income statement.

#### Derecognition

A financial liability is derecognized when the obligation under the liability is discharged, cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the income statement.

#### Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the consolidated statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

#### Derivative financial instruments and hedge accounting

The Group uses derivative financial instruments, such as forward currency contracts and interest rate swaps, to hedge its foreign currency risks, interest rate risks and commodity price risks. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into, and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

#### Cash flow hedges

Any gains or losses arising from changes in the fair value of derivatives are taken directly to the income statement, except for the effective portion of cash flow hedges, which is recognized in other comprehensive income. Amounts recognized as other comprehensive income are transferred to the income statement when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognized. If the forecast transaction or firm commitment is no longer expected to occur, the cumulative gain or loss previously recognized in equity is transferred to the income statement. If the hedging instrument

expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, any cumulative gain or loss previously recognized in other comprehensive income remains in other comprehensive income until the forecast transaction or firm commitment affects profit or loss. The Group applies cash flow hedge accounting for interest rate swap contracts.

#### 2.21 NEW AND AMENDED STANDARDS AND INTERPRETATIONS

The accounting policies adopted are consistent with those of the previous financial year, except for the following amendments to K-IFRS effective as of January 1, 2014 and as adopted by the Group:

#### Investment Entities (Amendments to K-IFRS 1110, K-IFRS 1112 and K-IFRS 1027)

These amendments provide an exception to the consolidation requirement for entities that meet the definition of an investment entity under K-IFRS 1110. The exception to consolidation requires investment entities to account for subsidiaries at fair value through profit or loss. This amendment is not relevant to the Group, since none of the entities in the Group qualifies to be an investment entity under K-IFRS 1110.

#### K-IFRS 1032 Offsetting Financial Assets and Financial Liabilities – Amendments

These amendments clarify the meaning of "currently has a legally enforceable right to set-off" and the criteria for non-simultaneous settlement mechanisms of clearing houses to qualify for offsetting. These amendments are not relevant to the Group.

## Recoverable Amount Disclosures for Non-Financial Assets – Amendments to K-IFRS 1036 Impairment of Assets

These amendments remove the unintended consequences of K-IFRS 1113 on the disclosures required under K-IFRS 1036. In addition, these amendments require disclosure of the recoverable amounts for the assets or CGUs for which impairment loss has been recognized or reversed during the period. These amendments affect presentation only and have no impact on the Group's financial position or performance.

#### K-IFRS 1039 Novation of Derivatives and Continuation of Hedge Accounting – Amendments

These amendments provide relief from discontinuing hedge accounting when novation of a derivative designated as a hedging instrument meets certain criteria. The Group has not novated its derivatives during the current period. However, these amendments would be considered for future novations.

#### K-IFRS 2121 Levies – Amendments

K-IFRS 2121 clarifies that an entity recognizes a liability for a levy when the activity that triggers payment, as identified by the relevant legislation, occurs. For a levy that is triggered upon reaching a minimum threshold, the interpretation clarifies that no liability should be anticipated before the specified minimum threshold is reached. The Group does not expect that K-IFRS 2121 will have material financial impact on future financial statements.
# 3 SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS

The preparation of the Group's financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods. The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, which have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below.

Note	Description	Nature of estimation
7, 8, 9, 10	Impairment of	Impairment exists when the carrying value of an asset or cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs to sell and its value in use. The determination of the recoverable amount of a cash-generating unit involves the use of estimates by management. The fair value less costs to sell calculation is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow model. The cash flows are derived from the expectations for the next three years and do not include restructuring activities that the Group is not yet committed to or significant future investments that will enhance the asset's performance of the cash-generating unit being tested. The recoverable amount based on the value in use is most sensitive to the discount rate used for the discounted cash flow model (WACC), as well as the expected future cash-inflows and the growth rate used for extrapolation purposes. The recoverable amount based on the fair value less cost to sell is most sensitive to the market prices, premiums and the estimate of cost to sell. These estimates, including the methodologies used, can have a material impact on the fair value and ultimately the amount of any goodwill impairment.
9	Customer relations	Customer relations are depreciated over their estimated useful life. The estimated useful life is based on estimates of the time period during which this intangible asset generates cash flows, as well as historic empirical data concerning customer loyalty. Calculation of the present value of estimated future cash flows includes essential assumptions, especially of future sales. In addition, discounting is based on assumptions and estimations concerning business-specific capital costs, which are themselves dependent on national risks, and additional risks resulting from the volatility of the respective business.
20, 21	Pension and other employment benefits	The cost of defined benefit pension plans and other similar long-term employee benefits, and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions, which may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, the underlying assumptions and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions.
28.2	Deferred tax assets	Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.
24	Fair value of financial instruments	Where the fair value of financial assets and financial liabilities recorded in the statement of financial position cannot be derived from active markets, their fair value is determined using valuation techniques including the discounted cash flow model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgment is required in establishing fair values. The judgments include considerations of inputs, such as liquidity risk, credit risk and volatility. Changes in assumptions about these

factors could affect the reported fair value of financial instruments.

# 4 STANDARDS ISSUED BUT NOT YET EFFECTIVE

The standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these standards when they become effective.

#### Amendments to K-IFRS 1019 Defined Benefit Plans: Employee Contributions

K-IFRS 1019 requires an entity to consider contributions from employees or third parties when accounting for defined benefit plans. Where the contributions are linked to service, they should be attributed to periods of service as a negative benefit. These amendments clarify that, if the amount of the contributions is independent of the number of years of service, an entity is permitted to recognize such contributions as a reduction in the service cost in the period in which the service is rendered, instead of allocating the contributions to the periods of service. This amendment is effective for annual periods beginning on or after July 1, 2014. This amendment is relevant to the Group, since some of the entities within the Group have defined benefit plans with contributions from employees. The standard was applied for the annual actuarial calculation as per December 31, 2014.

#### Amendments to K-IFRS 1111 Joint Arrangements: Accounting for Acquisitions of Interests

The amendments to K-IFRS 1111 require that a joint operator accounting for the acquisition of an interest in a joint operation, in which the activity of the joint operation constitutes a business, must apply the relevant K-IFRS 1103 principles for business combinations accounting. The amendments also clarify that a previously held interest in a joint operation is not re-measured on the acquisition of an additional interest in the same joint operation, while joint control is retained. In addition, scope exclusion has been added to K-IFRS 1111 to specify that the amendments do not apply when the parties sharing joint control, including the reporting entity, are under common control of the same ultimate controlling party. The amendments apply to both the acquisition of the initial interest in a joint operation and the acquisition of any additional interests in the same joint operation, and are prospectively effective for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments are not expected to have any impact on the Group.

#### Amendments to K-IFRS 1016 and K-IFRS 1038: Clarification of Acceptable Methods of Depreciation and Amortization

The amendments clarify the principle in K-IFRS 1016 and K-IFRS 1038 that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part), rather than the economic benefits that are consumed through use of the asset. As a result, a revenue-based method cannot be used to depreciate property, plant and equipment, and may only be used in very limited circumstances to amortize intangible assets. The amendments are effective prospectively for annual periods beginning on or afterJanuary 1, 2016, with early adoption permitted. These amendments are not expected to have any impact on the Group as it has not used a revenue-based method to depreciate its non-current assets.

#### Amendments to K-IFRS 1027: Equity Method in Separate Financial Statements

The amendments will allow entities to use the equity method to account for investments in subsidiaries, joint ventures and associates in their separate financial statements. Entities already applying K-IFRS and electing to change to the equity method in its separate financial statements will have to apply this change retrospectively. The amendments are effective for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments will not have any impact on the Group's consolidated financial statements.

The Group is currently assessing that the impacts from the aforementioned standards on its consolidated financial statements will not be significant for the years in which it applies those standards for the first time.

# 5 BUSINESS COMBINATIONS

### 5.1 BUSINESS COMBINATIONS IN 2014

# 5.1.1 ACQUISITION OF POLYSYS ADDITIVE TECHNOLOGIES-MIDDLE EAST LLC, UNITED ARAB EMIRATES

On April 1, 2014, Songwon Industrial Group – through its subsidiary Songwon Additive Technologies AG – acquired additional 25% of the economic interest in Polysys Additive Technologies – Middle East LLC (PATME-UAE), an unlisted company based in Abu Dhabi, United Arab Emirates.

After the acquisition of the additional 25% economic interest, the assessment of the Group's power to control PATME-UAE led to the conclusion that the Group will control the entity going forward. Accordingly, PATME-UAE became a subsidiary of the parent company, while it was accounted for as a joint operation until March 31, 2014.

The assets, liabilities and contingent liabilities of the acquired company are valued at fair value on the date of acquisition. If the cost exceeds the fair value of the acquired identifiable assets, liabilities and contingent liabilities, the balance is reported as goodwill.

#### Assets acquired and liabilities assumed

The fair values of the identifiable assets and liabilities of the acquired business at the date of acquisition were (figures represent a 100% interest):

Fair value recognized on acquisition	Million KRW
Assets	
Property, plant and equipment	3,641
Other current financial assets	2
Other current assets	46
Cash and cash equivalent	2,221
Total assets	5,910
Liabilities	
Other long-term employee benefits	9
Long-term loans and borrowings	2,573
Other non-current financial liabilities	44
Trade and other payables	64
Other current financial liabilities	19
Total liabilities	2,709
Identifiable net assets at fair value	3,201
Goodwill arising on acquisition	115
Fair value of net assets acquired and goodwill arising	3,316
Consideration satisfied by:	
Cash paid on acquisition of 25% of economic interest	915
Cash consideration	915
Fair value of 49% economic interest in PATME-UAE	1,569
Fair value of non-controlling economic interest of 26% in PATME-UAE	832
Total cost of acquisition	3,316

The goodwill of 115 Million KRW comprises the value of expected synergies arising from the acquisition. Goodwill is allocated entirely to the parent company and the acquired entity. None of the goodwill recognized is expected to be deductible for income tax purposes.

From the date of acquisition, April 1, 2014 through December 31, 2014, the acquired company has contributed 0 KRW of revenue and -517 Million KRW (loss) to the net loss before tax of the Group. If the business combination had taken place on January 1, 2014, revenue from continuing operations of the Group would have been 665,498 Million KRW and the net loss before tax from continuing operations for the Group would have been -8,796 Million KRW.

#### Revaluation of previously held interest

The Group held an equity interest of 49% immediately before the acquisition date of Polysys Additive Technologies – Middle East LLC. In this business acquisition, which was achieved in stages, the Group re-measured its previously held interest in the acquired entity. The resulting loss of 32 Million KRW is included in the statement of comprehensive income.

# 5.1.2 ACQUISITION OF POLYMER STABILIZER BUSINESS FROM SEQUENT SCIENTIFIC LIMITED, INDIA

On August 1, 2014, the Group acquired the specialty chemicals business from SeQuent Scientific Limited, a publicly listed Indian company. The acquisition includes SeQuent's entire polymer stabilizer business, including one production site in Panoli, India.

The assets, liabilities and contingent liabilities of the acquired business are valued at fair value on the date of acquisition. If the cost exceeds the fair value of the acquired identifiable assets, liabilities and contingent liabilities, the balance is reported as goodwill.

#### Assets acquired and liabilities assumed

The fair values of the identifiable assets and liabilities of the acquired business at the date of acquisition were:

Fair value recognized on acquisition	Million KRW
Assets	
Property, plant and equipment	7,399
Intangible assets	8,343
Inventory	870
Other current assets	359
Total assets	16,971
Liabilities	
Pension liability	184
Deferred tax liability	424
Trade and other payables	80
Total liabilities	688
Identifiable net assets at fair value	16,283
Goodwill arising on acquisition	3,463
Fair value of net assets acquired and goodwill arising = Cost of acquisition	19,746

The goodwill of 3,463 Million KRW comprises the value of expected synergies arising from the acquisition. Goodwill is allocated entirely to the acquiring entity, Songwon Specialty Chemicals – India Pvt. Ltd., Panoli, India.

None of the goodwill recognized is expected to be deductible for income tax purposes.

From the date of acquisition, August 1, 2014 through December 31, 2014, the acquired business has contributed 3,134 Million KRW of revenue and -1,569 Million KRW (loss) to the net loss before tax of the Group. If the business combination had taken place on January 1, 2014, revenue from continuing operations of the Group would have been 669,885 Million KRW and the loss before tax from continuing operations for the Group would have been -10,912 Million KRW.

### 5.2 BUSINESS COMBINATIONS IN 2013

During 2013 there were no business combinations.

# 6 SEGMENT INFORMATION

For management purposes, Songwon Industrial Group is organized into one main operating segment. All of the Group's activities are interrelated, and each activity is dependent on the others. Accordingly, all significant operating decisions are based upon analysis of the Group as one segment. The results from this operating segment are equivalent to the financial statements of the Group as a whole.

The Group is acting worldwide and therefore, discloses geographic segments.

## 6.1 PRODUCT INFORMATION

	2014	2013
	Million KRW	Million KRW
Alkylphenol and intermediates	4,228	23,077
Plasticizers	8,275	9,306
Polyester diols	13,459	17,812
Polymer stabilizers (AOX and Uvs)	445,367	444,236
Polyurethanes	48,139	46,273
PVC stabilizers	48,919	53,452
SAP and flocculants	17,959	21,113
Tin intermediates	76,022	72,647
Others	3,130	4,248
Total revenue per consolidated income statement	665,498	692,164

## 6.2 GEOGRAPHIC INFORMATION

#### Revenue from external customers

	2014	2013
	Million KRW	Million KRW
Korea	198,546	221,790
Rest of Asia	149,015	160,114
Europe	157,860	145,777
North and South America	125,781	133,768
Australia	2,302	2,172
Middle East and Africa	31,994	28,543
Total revenue per consolidated income statement	665,498	692,164

The revenue information above is based on the location of the customer. Despite the material Korean home market, all other countries have been summarized within regions. Therefore, no country revenues are disclosed separately.

The Group is not recognizing more revenue than 10% of total revenue from one client during the reporting periods.

#### Non-current assets

	2014	2013
	Million KRW	Million KRW
Korea	434,152	445,527
Rest of Asia	23,155	997
Europe	30,469	35,903
North and South America	5,769	6,502
Middle East and Africa	13,792	1,726
Total	507,337	490,655

Non-current assets for this purpose consist of property, plant and equipment, investment properties and intangible assets.

# 7 PROPERTY, PLANT AND EQUIPMENT

	Land	Buildings	Structures	Machinery	Other	Construc- tion-in- progress	Total
	Million	Million	Million	Million	Million	Million	Million
COST	KRW	KRW	KRW	KRW	KRW	KRW	KRW
At January 1, 2013	151,373	58,294	63,250	400,137	12,523	3,803	689,381
Additions		30,274		3,865	2,414	24,675	30,985
Disposals	-178	-79	_	-611	-432	- 24,070	-1,300
Reclassification	-	3,078	647	20,849	123	-24,684	13
Net exchange differences	_	2	-	13	-64	88	39
At December 31, 2013	151,195	61,326	63,897	424,253	14,564	3,882	719,117
Additions	-	200	7	515	1,123	27,124	28,969
Disposals	-	-333	-52	-6,252	-280	-	-6,917
Reclassification	-3,261	2,444	103	9,526	677	-12,690	-3,201
Other changes in carrying amount	-	-	-	-41	-	-	-41
Business acquisitions	-	1,821	-	4,096	1,308	2,031	9,256
Net exchange differences	-	35	-	-402	34	500	167
At December 31, 2014	147,934	65,493	63,955	431,695	17,426	20,847	747,350
DEPRECIATION AND IMPAIRMEN	Т						
At January 1, 2013	-	-13,194	-21,890	-223,284	-10,051	-	-268,419
Depreciation charge for the year	-	-1,528	-3,134	-19,111	-1,156	-	-24,929
Impairment charge for the year	-	-	-	-277	-	-	-277
Disposals	-	28	-	341	408	-	777
Net exchange differences	-	-	-	-8	16	-	8
At December 31, 2013	-	-14,694	-25,024	-242,339	-10,783	-	-292,840
Depreciation charge for the year	-	-1,466	-3,127	-19,424	-1,161	-	-25,178
Impairment charge for the year	-	-204	-14	-686	-	-	-904
Reclassification	-	154	21	-	-	-	175
Disposals	-	123	38	5,493	243	-	5,897
Net exchange differences	-	1	-	122	-19	-	104
At December 31, 2014	-	-16,086	-28,106	-256,834	-11,720	-	-312,746
NET BOOK VALUE							
At December 31, 2014	147,934	49,407	35,849	174,861	5,706	20,847	434,604
At December 31, 2013	151,195	46,632	38,873	181,914	3,780	3,882	426,277

In 2014, fixed assets amounting to 904 Million KRW were impaired due to a production stop at the Ulsan plant, South Korea. In 2013, machinery items amounting to 277 Million KRW were impaired due to damage caused by a flood after heavy rains. Non-cash transactions amounting to 7,284 Million KRW are included in the additions for the year ending 2014.

#### Capitalized borrowing costs

Borrowing costs, which are directly attributable to the acquisition or production of a qualified asset, are capitalized as part of the cost of that asset. No borrowing costs have been capitalized during financial years 2014 and 2013.

#### Finance leases

There are no assets held under leasing agreements, which may be considered as an asset purchase in economic terms (finance lease), in the Group. Payment on leased assets defined as "operating lease" and having a rental character are expensed over the lease period.

#### Contractual commitments and pledged assets

A pledged asset is an asset that is transferred to a lender for the purpose of securing debt. The lender of the debt maintains possession of the pledged asset, but does not have ownership unless a default occurs (see Note 26). For contractual commitments to purchase property, plant and equipment, refer to Note 25.3.

# 8 INVESTMENT PROPERTIES

	Land	Buildings	Structures	Total
	Million KRW	Million KRW	Million KRW	Million KRW
COST				
At January 1, 2013	21,316	8,673	349	30,338
Additions	-	195	-	195
Net exchange differences	-4	-21	-	-25
At December 31, 2013	21,312	8,847	349	30,508
Additions	-	-	-	-
Reclassifications	3,261	413	32	3,706
Net exchange differences	-3	-7	-	-11
At December 31, 2014	24,570	9,253	381	34,204
DEPRECIATION				
At January 1, 2013	-	-2,286	-122	-2,408
Depreciation charge for the year	-	-167	-10	-177
Net exchange differences	-	10	-	10
At December 31, 2013	-	-2,441	-132	-2,573
Depreciation charge for the year	-	-170	-11	-181
Reclassifications	-	-154	-21	-175
Net exchange differences	-	6	-	6
At December 31, 2014	-	-2,759	-164	-2,923
NET BOOK VALUE				
At December 31, 2014	24,570	6,494	217	31,281
At December 31, 2013	21,312	6,406	217	27,935

Investment properties are stated at cost less any accumulated depreciation and impairment losses, if any. The same useful lives have been used as for property, plant and equipment.

	2014	2013
	Million KRW	Million KRW
Rental income	1,980	1,672
Operational expenses	1,008	886

The Group's major investment property is a building named Songwon Building located in Seocho-gu, Seoul, which is held for the purpose of leasing without a plan to sell. Thus the Group has currently not had its fair value assessed by an independent appraiser. However, based on deals on similar buildings nearby (as reference), the fair value of the building is estimated to be 38,000 Million KRW. Further, Songwon Japan KK owns an object which is subleased. The fair value of the building is 47 Million KRW.

Disclosure of pledged assets can be found in Note 26.

# 9 INTANGIBLE ASSETS

	Indu- strial rights	Soft- ware	Mem- bership	Cus- tomer relation- ship	Non- compete contracts		Goodwill	Con- struc- tion-in- progress	Total
	Million	Million	Million	Million	Million	Million	Million	Million	Million
COST	KRW	KRW	KRW	KRW	KRW	KRW	KRW	KRW	KRW
At January 1, 2013	1,592	2,435	1,895	24,323	13,427	637	35,215	1,303	80,827
Additions	-	99	-			-		1,617	1,716
Disposals	-154	-	-	-	-	-	-		-154
Reclassifications	1,652	-	-	-	-	-	-	-1,652	_
Net exchange differences	-	-26	-	-230	-127	15	-111	-	-479
At December 31, 2013	3,090	2,508	1,895	24,093	13,300	652	35,104	1,268	81,910
Additions	-	127	-	-	-	-	-	163	290
Disposals	-	-15	-818	-	-	-	-	-	-833
Reclassifications	-450	-	-	-	-	-	-	-62	-512
Business acquisitions	-	-	-	4,315	-	4,028	3,578	-	11,921
Net exchange differences	-	19	-	1,029	513	113	774	-	2,448
At December 31, 2014	2,640	2,639	1,077	29,437	13,813	4,793	39,456	1,369	95,224
AMORTIZATION AND IMPAIRM	IENT								
At January 1, 2013	-371	-1,517	-	-5,712	-4,479	-112	-27,947	-	-40,138
Amortization charge for the year	-257	-283	-	-3,262	-1,965	-116	-	-	-5,883
Net exchange differences	-	14	-	162	114	-	264	-	554
At December 31, 2013	-628	-1,786	-	-8,812	-6,330	-228	-27,683	-	-45,467
Amortization charge for the year	-247	-333	-	-3,191	-2,209	-455	-	-	-6,435
Disposals	-	15	-	-	-	-	-	-	15
Net exchange differences	-	-7	-	-447	-351	-11	-1,069	-	-1,885
At December 31, 2014	-875	-2,111	-	-12,450	-8,890	-694	-28,752	-	-53,772
NET BOOK VALUE									
At December 31, 2014	1,765	528	1,077	16,987	4,923	4,099	10,704	1,369	41,452
At December 31, 2013	2,462	722	1,895	15,281	6,970	424	7,421	1,268	36,443

The intangible assets (except for goodwill and memberships) are amortized over a finite useful life. The goodwill items consist of items acquired in a business combination. The intangible assets with indefinite useful lives are tested for impairment on an annual basis. No impairment was identified. An impairment test was carried out for goodwill and membership items on the basis of calculated value in use. For further details of the impairment test, see Note 10.

As a result of the business acquisition of SeQuent Scientific Limited, Panoli, India by the Group, such intangible assets as customer relationships (4,315 Million KRW), process technologies (4,028 Million KRW), as well as goodwill (3,463 Million KRW) were capitalized in the financial year 2014.

From the acquisition of PATME-UAE, Abu Dhabi, UAE, goodwill of 115 Million KRW was capitalized in 2014.

In the financial year 2013, no business combination took place that led to a capitalization of intangible assets.

		December 31, 2014	December 31, 2013	Remaining life
Description	Remark	Million KRW	Million KRW	
Industrial rights	REACH	1,637	2,380	7 years
Software	ERP	95	304	0.4 years
Membership	New Seoul Country	778	1,895	Indefinite
Goodwill	Acquisition of Songwon Holdings AG	1,887	1,817	Indefinite
Goodwill	Acquisition of Songwon Chemicals Co. Ltd.	222	215	Indefinite
Goodwill	Acquisition of ATG Additive Technology Greiz GmbH	4,942	5,389	Indefinite
Goodwill	Acquisition of Polysys Additive Technologies- Middle East LLC	121	-	Indefinite
Goodwill	Acquisition of Business SeQuent Scientific Ltd.	3,532	-	Indefinite
Intangible assets acquired in a business combination	Customer relatonships	16,987	15,281	4.6 years 5.0 years
Intangible assets acquired in a business combination	Non-compete contracts	4,923	6,970	2.0 years
Intangible assets acquired in a business combination	Capitalization process technology	4,099	424	2.8 years 4.6 years
Construction in progress	REACH	1,370	1,268	n/a
Significant intangible assets total		40,593	35,943	

### 9.1 DETAILS OF INDIVIDUALLY SIGNIFICANT INTANGIBLE ASSETS

# 10 IMPAIRMENT TESTING OF GOODWILL AND INTANGIBLES WITH INDEFINITE LIVES

### 10.1 IMPAIRMENT TEST ON INTANGIBLE ASSETS WITH INDEFINITE USEFUL LIFE

Goodwill acquired through business combinations and memberships with indefinite useful lives have been allocated to the cash-generating units (CGUs) according to their business activities. Goodwill acquired in a business combination is allocated to each cash-generating unit expected to benefit from the synergies of the business combination. The goodwill acquired during the acquisition of Songwon Holdings AG, Songwon ATG GmbH, Polysys Additive Technologies, as well as memberships are allocated to the CGU comprising the acquired entities and the parent company, which correspond almost to the entire Group. The goodwill resulting from the business acquisition of SeQuent Scientific Limited was allocated to the distinct CGU of Songwon Specialty Chemicals – India Pvt. Ltd., India (SWCI-IN). Insignificant CGUs were not included.

The allocation of the goodwill and intangible assets with indefinite useful life to the cash generating unit is as follows:

December 31, 2014 December 31, 2013

	Million KRW	Million KRW
Goodwill of Songwon Specialty Chemicals – India Pvt. Ltd., India (SWCI-IN)	3,532	-
Goodwill of the rest of the Group (main CGU)	6,950	7,206
Memberships with indefinite useful lives of the rest of the Group (main CGU)	778	1,895
Total tested goodwill and intangible assets with indefinite useful lives	11,260	9,101

The Group performed its annual impairment test in December 2014 and 2013. The recoverable amount of the CGUs – to which goodwill and intangible assets with indefinite lives are allocated – has been determined based on its value in use, calculated using the discounted cash flow (DCF) model.

There is no impairment loss recognized during 2014 and 2013 according to the impairment test on goodwill and memberships. As of the measurement date, the recoverable amount based on the value in use in 2014 and 2013 exceeded the carrying amount of the relevant CGUs.

As of December 31, 2014, the recoverable amount of the main CGU (rest of the Group) equals 834,795 Million KRW (2013: 783,858 Million KRW). The recoverable amount of the CGU of Songwon Specialty Chemicals – India Pvt. Ltd., India amounts to 1,400 Million KRW.

### 10.2 KEY ASSUMPTIONS USED IN CALCULATION OF VALUE IN USE

The calculation of the CGU value in use reflects the future cash flows for the next three years, discounted to the present value at the weighted average cost of capital (WACC) and an estimated residual value. The projected cash flows are estimated on the basis of the Budget 2015, as approved by management, and mid-term assumptions. For the free cash flows extending beyond the detailed planning period, a terminal value was computed by capitalizing the normalized cash flows using a constant growth rate. The long-term growth rate is in line with blended long-term inflation expectations for relevant countries.

In addition, a market risk premium of 5% and a small cap premium of 3.84% were applied for the calculation of the WACC.

The key assumptions underlying the calculation are as follows:

Parameters for the determination of	
the recoverable amount of the CGU	Description
Average annual growth	Average annual growth is calculated on the basis of mid-term assumptions.
WACC	WACC is calculated using the Capital Asset Pricing Model (CAPM). The latter comprises the weighted cost of own equity and of external borrowing costs. The application of WACC pre-tax and WACC post-tax results in the same value in use.
Long-term growth rate	Long-term growth rate is calculated on the basis of expected inflation rates for currencies of relevant countries.

Parameters for the determination of the recoverable amount of the CGU	2014	2013
Average annual growth	3.00%	3.00%
Pre-tax WACC	12.12%	13.57%
Post-tax WACC	9.92%	10.88%
Long-term growth rate	2.23%	1.72%

Parameters for the determination of the recoverable amount of the	2014
CGU of SWCI-IN	
Average annual growth	15.70%
Pre-tax WACC	19.25%
Post-tax WACC	15.14%
Long-term growth rate	6.00%

The following changes in material assumptions led to a situation where the value in use equals the carrying amount:

Parameters for the determination of the recoverable	Sensitivity analysis main	Sensitivity analysis
amount of the CGU	CGU (rest of the Group)	SWCI-IN
Average annual growth	0.77%	15.00%
Pre-tax WACC	14.43%	19.42%
Post-tax WACC	11.72%	15.26%
Long-term growth rate	0.00%	5.85%

# 11 INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

The changes in the interest in joint ventures are summarized as follows:

			Share of result			
	As of		from equity		Exchange	As of
	January 1,		method		rate	December 31,
	2014	Addition	revaluation	Dividends	effect	2014
	Million	Million	Million	Million		Million
	KRW	KRW	KRW	KRW		KRW
Chemservice Asia Co. Ltd.	16	-	-1	-	-	15
Songwon Baifu Chemicals (Tangshan) Co. Ltd.	2,294	-	677	-	114	3,085
Total	2,310	-	676	-	114	3,100

			Share of			
			result			
	As of		from equity		Exchange	As of
	January 1,		method		rate	December 31,
	2013	Addition	revaluation	Dividends	effect	2013
	Million	Million	Million	Million		Million
	KRW	KRW	KRW	KRW		KRW
Chemservice Asia Co. Ltd.	15	-	1	-	-	16
Songwon Baifu Chemicals (Tangshan) Co. Ltd.	1,396	-	922	-	-24	2,294
Total	1,411	-	923	-	-24	2,310

# 12 AVAILABLE-FOR-SALE FINANCIAL INVESTMENTS

	As per December 31, 2014			As per December 31, 2013				
	Number	% to		Book	Number	% to		Book
	of shares	equity	Cost	value	of shares	equity	Cost	value
Description			Million KRW	Million KRW			Million KRW	Million KRW
Ulsan Broadcasting Corp.	180,000	3.00%	900	900	180,000	3.00%	900	900
Jin Yang Development	900	-	450	450	900	-	450	450
Chemtura Corporation	4,527	-	123	123	-	-	-	-
Shilla Country Club	-	-	-	-	4	0.14%	-	-
Hybrid Tier 1 (Korea Exchange Bank)	-	-	-	-	-	-	400	404
Subordinated bonds (Citibank)	-	-	-	-	-	-	100	100
Total			1,473	1,473			1,850	1,854

Investments in equity instruments that do not have a quoted market price in an active market, and whose fair value cannot be reliably measured, are measured at cost.

#### Impairment on available-for-sale financial investments

For available-for-sale financial investments, the Group assesses at each reporting date whether there is objective evidence that an investment or a group of investments is impaired. In the case of equity investments classified as available-for-sale, objective evidence would include a significant or prolonged decline in the fair value of the investment below its cost.

Based on these criteria, the Group did not identify any impairment on available-for-sale investments as of December 31, 2014 and 2013.

## 13 OTHER FINANCIAL ASSETS

	December	<sup>.</sup> 31, 2014	December 31, 2013		
	Non-current	Current	Non-current	Current	
Description	Million KRW	Million KRW	Million KRW	Million KRW	
Bank deposits (> 3 months)	2,478	1,814	2,298	3,927	
Loans	-	5,000	-	346	
Derivative financial assets (Note 24)	-	320	-	294	
Guarantee deposits	197	75	197	2,146	
Total	2,675	7,209	2,495	6,713	

### 13.1 LOANS

Details of loans as of December 31, 2014 and 2013 are as follows:

	Annual interest rate	December 31, 2014	Annual interest rate	December 31, 2013
Description	(%)	Million KRW	(%)	Million KRW
Loans to related party (see Note 31)	3.5	5,000	8.0	346
Total		5,000		346

### 13.2 OTHER FINANCIAL ASSETS PLEDGED AS COLLATERAL

The bank deposits pledged as collateral in connection with interest-bearing loans and borrowings as of December 31, 2014 and 2013 are as follows:

	December 31, 2014	December 31, 2013
Bank deposits - Current (in Million KRW)	-	70
Bank deposits - Current (in Thousand USD)	1,213	1,211

# 14 INVENTORIES

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Raw materials and supplies	17,747	20,297
Work in progress	152	-
Finished goods	128,011	136,763
Goods in transit	22,611	25,474
Consignment stocks	493	150
Total inventories at the lower of cost and net realizable value	169,014	182,684

As of December 31, 2014, inventory write-off amounted to 3,506 Million KRW for raw material and finished goods (December 31, 2013: 2,610 Million KRW).

# 15 TRADE AND OTHER RECEIVABLES

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Trade and notes receivable (net) - third parties	108,370	106,483
Trade and notes receivable (net) - related parties	31	-
Other receivable (net) – third parties	2,988	3,269
Other receivable (net) – related parties	-	13
Accrued income	34	46
Total	111,423	109,811

Other receivable third parties include customs, rental income receivables and others.

The movements of the allowance for doubtful receivables are as follows:

	Individually impaired Million KRW	Collectively impaired Million KRW	<mark>Total</mark> Million KRW
January 1, 2013	-555	-59	-614
Charge for the year	-263	-	-263
Utilized	579	12	591
Unused amounts reversed	-	25	25
December 31, 2013	-240	-21	-261
Charge for the year	-878	-31	-909
Unused amounts reversed	710	-	710
December 31, 2014	-408	-52	-460

The aging analysis of trade and other receivables is as follows:

		Neither Pas			Past due, but not impaired			
		due, nor	< 30	30-90	90-120	120-180	> 180	
	Total	impaired	days	days	days	days	days	
	Million	Million	Million	Million	Million	Million	Million	
	KRW	KRW	KRW	KRW	KRW	KRW	KRW	
December 31, 2014	111,423	97,937	10,057	2,997	172	231	29	
December 31, 2013	109,811	96,335	10,485	2,725	191	62	13	

See Note 24.3.2 on credit risk of trade receivables, which discusses how the Group manages and measures credit quality of trade receivables that are neither past due, nor impaired.

# 16 OTHER CURRENT ASSETS

Other current assets as of December 31, 2014 and 2013 consist of the following:

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Advance payments	397	105
Prepaid expenses	3,407	4,185
VAT refundables	117	223
Total	3,921	4,513

# 17 CASH AND CASH EQUIVALENTS

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Cash on hand	83	73
Bank accounts	43,352	63,203
Time deposit (< 3 months)	1,957	401
Total	45,392	63,677

Cash at banks earns interest at floating rates based on daily bank deposit rates. Time deposits are made for varying periods of between one day and three months, depending on the Group's immediate cash requirements, and earn interest at the respective short-term deposit rates.

# 18 ISSUED CAPITAL AND RESERVES

## 18.1 SHARE CAPITAL

In accordance with the Articles of Incorporation, the company is authorized to issue 100,000,000 shares of common stock with a par value of 500 per share. As of December 31, 2014 and 2013, the company issued 24,000,000 shares of common stock with a carrying value of 12,000 Million KRW.

## 18.2 CAPITAL SURPLUS

As of December 31, 2014 and 2013, the company's capital surplus amounts to 24,361 Million KRW. It comprised paid-in capital in excess of par value of 20,065 Million KRW and gain on disposal of treasury stock of 4,296 Million KRW.

### 18.3 RESERVES

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Legal reserve	792	624
Asset revaluation surplus	25,815	25,815
Total	26,607	26,439

#### Legal reserves

In accordance with the Korean Commercial Code, an amount equal to at least 10% of cash dividends is required to be appropriated as a legal reserve until the reserve equals 50% of paid-in capital. The legal reserve may not be utilized for cash dividends but may only be used to offset a deficit, if any, or be transferred to capital. Appropriation to the legal reserve from retained earnings, pursuant to the approval of the General Meeting of Shareholders during 2014 and 2013, amounted to 168 Million KRW and 192 Million KRW, respectively.

#### Asset revaluation reserve

The Group re-valued certain of its property, plant and equipment in accordance with the Korean Asset Revaluation Act on January 1, 1984 and January 1, 1999, resulting in a revaluation surplus of 2,884 Million KRW and 64,277 Million KRW, respectively. An asset revaluation surplus amounting to 62,343 Million KRW, net of related revaluation tax, was credited to capital surplus. As of December 31, 2014 and 2013, the asset revaluation surplus is 25,815 Million KRW – the asset revaluation surplus of 23,312 Million KRW and 13,216 Million KRW were utilized in disposition of accumulated deficit pursuant to the approval of the stockholders on March 6, 2009 and March 7, 2008, respectively. The asset revaluation surplus may not be utilized for cash dividends, but may only be used to offset a deficit, if any, or be transferred to capital.

#### Dividends

Dividends approved by the shareholders are as follows:

Description	December 31, 2014	December 31, 2013
Subject to the year	2013	2012
Dividends on ordinary shares in KRW	1,680,000,000	1,920,000,000
Number of shares	24,000,000	24,000,000
Dividends per share in KRW	70	80

### 18.4 ACCUMULATED OTHER COMPREHENSIVE INCOME

Accumulated other comprehensive income, net of tax as of December 31, 2014 and 2013 is composed of the following:

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Available-for-sale financial investments	-	4
Exchange differences on translation of foreign operation	-2,598	-3,782
Interest rate swap	-133	-45
Total	-2,731	-3,823

Details of other comprehensive income for the year ended December 31, 2014 and 2013 are as follows:

	2014	2013
Description	Million KRW	Million KRW
Pretax amounts:		
	-4	191
Gain / (loss) on valuation of available-for-sale financial assets	-4	171
Gain / (loss) on valuation of interest rate swap	-88	-45
Exchange differences on translation of foreign operations	1,140	-576
Re-measurement gains / (losses)	-9,064	-880
Pretax amounts total	-8,016	-1,310
Tax effects:		
Gain / (loss) on valuation of available-for-sale financial assets	-	-
Gain / (loss) on valuation of interest rate swap	-	-
Exchange differences on translation of foreign operations	-	-
Re-measurement gains / (losses)	1,677	196
Tax effects total	1,677	196
Net amounts:		
Gain / (loss) on valuation of available-for-sale financial assets	-4	191
Gain / (loss) on valuation of interest rate swap	-88	-45
Exchange differences on translation of foreign operations	1,140	-576
Re-measurement gains / (losses)	-7,387	-684
Net amounts total	-6,339	-1,114

# 19 INTEREST-BEARING LOANS AND BORROWINGS

Interest-bearing loans and borrowings as of December 31, 2014 and 2013 are as follows:

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Long-term privately placed corporate bonds	10,000	10,000
Long-term borrowings	66,014	142,341
Non-current bank loans and bonds	76,014	152,341
Current portion of borrowings	128,849	35,244
Current portion of privately placed corporate bonds	-	5,000
Short-term borrowings	215,314	222,386
Current loans and borrowings	344,163	262,630
Total	420,177	414,971

Details of **long-term borrowings** as of December 31, 2014 and 2013 are as follows:

		Annual interest rate	December 31, 2014	December 31, 2013
Banks	Description	(%)	Million KRW	Million KRW
Woori Bank	General Loan	Std. interest rate (AAA 3y bank bonds)+2.02%; 10.45	54,075	53,455
Korea Development Bank	General Loan	1.75-3.94	50,697	21,214
Busan Bank	General Loan	Std. interest rate (AAA 3y bank bonds)+2.02%	14,909	17,818
Hana Bank	General Loan	Std. interest rate (AAA 3y bank bonds)+2.02%	14,909	17,818
NRW Bank	General Loan	6.03	153	251
Pan Gulf Holding Company W.L.L.	General Loan	2.25-6.52	3,941	3,804
Polysys Industries LLC	General Loan	6.50	3,997	862
Korean Exchange Bank	General Loan	Std. interest rate (AAA 3y bank bonds)+2.02%	37,273	44,545
Korean Standard Chartered Bank	General Loan	Std. interest rate (AAA 3y bank bonds)+2.02%	14,909	17,818
Sub-total			194,863	177,585
Less current portion			-128,849	-35,244
Non-current portion			66,014	142,341

Details of **privately placed bonds** as of December 31, 2014 and 2013 are as follows:

	lssuance date	Maturity date	Annual interest rate	December 31, 2014	December 31, 2013
Banks			(%)	Million KRW	Million KRW
Gyeong Nam Bank (see Note 24.1.2)	04.04.13	04.04.16	3MCD+2.27	10,000	10,000
Korea Development Bank	01.27.11	01.27.14		-	5,000
Sub-total				10,000	15,000
Less short-term bonds				-	-
Less current portion				-	-5,000
Non-current portion				10,000	10,000

Details for **short-term borrowings** are as follows:

		Annual interest rate	December 31, 2014	December 31, 2013
Banks	Description	(%)	Million KRW	Million KRW
Woori Bank	General & trade loans	1.82-4.13	49,318	37,502
Hana Bank	General & trade loans	1.54-4.13	11,159	10,657
Citibank	General & trade loans	2.58	6,545	32,144
Korea Development Bank	General & trade loans	1.67-4.19	69,815	64,631
Busan Bank	Trade loans	1.83	3,619	-
Korea Standard Chartered Bank	Trade loans	1.79	4,721	4,436
Gyeong Nam Bank	Trade loans	1.80-4.18	29,354	28,054
Korea Exchange Bank	General & trade loans	1.74-4.13	40,783	34,772
Suhyup Bank	General loans		-	10,000
Commerzbank AG	Trade loans		-	189
Total			215,314	222,386

# 20 PENSIONS LIABILITY

	2014	2013
	Million KRW	Million KRW
Korean pension plan	13,342	9,619
Swiss pension plan	5,200	2,483
Other	165	-
Total	18,707	12,101

The Group has two main defined benefit pension plans: one pension plan in Korea and one in Switzerland.

As a result of the Group's business acquisition of SeQuent Scientific Limited, India, an immaterial defined net benefit obligation of 184 Million KRW was taken over in the financial year 2014. After the revaluation as per December 31, 2014, the defined net benefit obligation amounted to 165 Million KRW. For materiality reasons, the Indian plan is not disclosed below.

The following tables summarize the components of net benefit expense recognized in the income statement and the funded status and amounts recognized in the statement of financial position for the respective plans.

### 20.1 DEFINED BENEFIT OBLIGATION

Changes in the defined benefit obligation:

	Korean plan	Swiss plan	Total
	Million KRW	Million KRW	Million KRW
Defined benefit obligation as of January 1, 2013	31,533	16,051	47,584
Pension cost charged to profit or loss			
- Service cost	2,466	874	3,340
	1,301	319	1,620
- Net interest			
Sub-total included in profit or loss	3,767	1,193	4,960
Benefits paid / received	-2,365	3,171	806
Re-measurement gains / (losses) in OCI			
<ul> <li>Actuarial changes arising from changes in demographic assumptions</li> </ul>	109	-	109
<ul> <li>Actuarial changes arising from changes in financial assumptions</li> </ul>	-2,291	244	-2,047
- Experience adjustments	2,979	-323	2,656
Sub-total included in OCI	796	-78	718
Employee contributions	-	484	484
Exchange differences	-	295	295
Defined benefit obligation as of December 31, 2013	33,732	21,115	54,847
Pension cost charged to profit or loss			
- Service cost	2,949	936	3,885
	1,594	413	2,007
- Net interest			
Sub-total included in profit or loss	4,543	1,349	5,892
Benefits paid / received	-1,648	1,196	-452
Re-measurement gains / (losses) in OCI			
<ul> <li>Actuarial changes arising from changes in demographic assumptions</li> </ul>	315	-	315
<ul> <li>Actuarial changes arising from changes in financial assumptions</li> </ul>	3,676	3,008	6,684
- Experience adjustments	1,560	35	1,595
Sub-total included in OCI	5,551	3,043	8,594
Employee contributions	-	589	589
Exchange differences	-	-1,724	-1,724
Defined benefit obligation as of December 31, 2014	42,178	25,568	67,746
Weighted average duration 2013 (years)	14.23	10.00	
Weighted average duration 2014 (years)	10.53	11.00	

### 20.2 PLAN ASSETS

Changes in the fair value of plan assets:

	Korean plan	Swiss plan	Total
	Million KRW	Million KRW	Million KRW
Fair value of plan assets as of January 1, 2013	19,090	13,677	32,767
Pension cost charged to profit or loss			
- Net interest	767	281	1,048
		14	14
- Administration expense	-	-46	-46
Sub-total included in profit or loss	767	235	1,002
Benefits paid / received	-2,364	3,171	807
Re-measurement gains / (losses) in OCI			
- Return on plan assets (excluding amounts included in	1/0	40	-162
net interest expense)	-149	-13	-102
- Actuarial changes arising from changes in financial			
assumptions	-	-	-
- Experience adjustments	-	-	-
Sub-total included in OCI	-149	-13	-162
Employer contributions	6,500	828	7,328
Employee contributions	-	484	484
Exchange differences	-	250	250
Pre-payments	269	-	269
Fair value of plan assets as December 31, 2013	24,113	18,632	42,745
Pension cost charged to profit or loss			
- Net interest	1,109	365	1,474
		-48	-48
- Administration expense	_	-40	-40
Sub-total included in profit or loss	1,109	317	1,426
Benefits paid / received	-1,375	1,196	-179
Re-measurement gains / (losses) in OCI			
- Return on plan assets (excluding amounts included in	<b>F11</b>	/ 1	-470
net interest expense)	-511	41	470
<ul> <li>Actuarial changes arising from changes in financial assumptions</li> </ul>	-	-	-
- Experience adjustments	-	-	-
Sub-total included in OCI	-511	41	-470
Employer contributions	5,500	924	6,424
Employee contributions	_	589	589
Exchange differences	-	-1,332	-1,332
Fair value of plan assets as December 31, 2014	28,836	20,367	49,203

The Group expects to contribute a comparable amount as in 2014 to its defined benefit pension plan in 2015.

### 20.3 NET PENSION LIABILITY

Changes in the net defined benefit liability are as follows:

	Korean plan	Swiss plan	Total
Defined not benefit obligation on of January 1, 2012	Million KRW	Million KRW	Million KRW
Defined net benefit obligation as of January 1, 2013 Pension cost charged to profit or loss	-12,147	-2,374	-14,522
- Service cost	0 ///	07/	0.0/0
	-2,466	-874	-3,340
- Administration expenses	-	-46	-46
- Net interest	-534	-38	-572
Sub-total included in profit or loss	-3,000	-958	-3,958
Benefits paid / received	1	-	1
Re-measurement gains / losses in OCI			
<ul> <li>Actuarial changes arising from changes in financial assumptions</li> </ul>	2,291	-244	2,047
<ul> <li>Actuarial changes arising from changes in demographic assumptions</li> </ul>	-109	-	-109
- Return on plan assets (excluding amounts included in net interest expense)	-149	-13	-162
- Experience adjustments	-2,979	323	-2,656
Sub-total included in OCI	-946	66	-880
Employee contributions	-	-	-
Employer contributions	6,500	828	7,328
Exchange differences	-	-45	-45
Change in prepayment to the NPS as per December 31, 2013	-26	-	-26
Defined net benefit obligation as of December 31, 2013	-9,619	-2,483	-12,102
Pension cost charged to profit or loss	· · ·		,
- Service cost	-2,949	-936	-3,885
- Administration expenses	-	-48	-48
- Net interest	-485	-48	-533
Sub-total included in profit or loss	-3,434	-1,032	-4,466
Benefits paid / received	273	-	273
Re-measurement gains / losses in OCI			
- Actuarial changes arising from changes in financial assumptions	-3,676	-3,008	-6,684
- Actuarial changes arising from changes in demographic assumptions	-315	-	-315
- Return on plan assets (excluding amounts included in net interest expense)	-511	41	-470
- Experience adjustments	-1,560	-35	-1,595
Sub-total included in OCI	-6,062	-3,002	-9,064
Employee contributions	-	-	-
Employer contributions	5,500	924	6,424
Exchange differences	-	393	393
Defined net benefit obligation as of December 31, 2014	-13,342	-5,200	-18,542
Other			-165
Total defined net benefit obligation as of December 31, 2014			-18,707

The re-measurement gains and losses recognized in the statement of comprehensive income were losses of -7,387 Million KRW (2013 losses of -684 Million KRW), net of tax. The total amount at December 31, 2014 of accumulated loss included in retained earnings is -17,845 Million KRW (2013: accumulated loss of -10,458 Million KRW), net of tax.

The principal assumptions used in determining pension benefit obligations for the Group's plans are shown below:

	Determining net expense		Determining pension benefit obligation		
	2014	2014 2013 D		December 31, 2013	
	%	%	%	%	
Discount rate:					
Korean plan	4.90%	4.20%	3.90%	4.90%	
Swiss plan	1.00%	2.00%	1.00%	2.00%	
Future salary increases:					
Korean plan	5.00%	5.00%	5.00%	5.00%	
Swiss plan	2.00%	2.00%	2.00%	2.00%	

A quantitative sensitivity analysis for significant assumptions as of December 21, 2014 is as follows:

	Sensitivity level	Impact on net defined benefit obligation
	Change	Million KRW
Discount rate:		
Korean plan	+1%	-4,086
	-1%	4,794
Swiss plan	+0.25%	-696
	-0.25%	735
Salary increase:		
Korean plan	+1%	4,692
	-1%	-4,082
Swiss plan	+0.25%	112
	-0.25%	-110

The sensitivity analysis above have been determined based on a method that extrapolates the impact on defined benefit obligation as a result of reasonable changes in key assumptions occurring at the end of the reporting period.

# 21 OTHER LONG-TERM EMPLOYEE-RELATED LIABILITIES

Other long-term employee-related liabilities consist of the following:

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Other long-term employee benefits – Korea	1,737	1,160
Other long-term employee benefits – Others	52	3
Share-based payment-related liability	220	84
Total other long-term employee-related liabilities	2,009	1,247

## 21.1 OTHER LONG-TERM EMPLOYEE BENEFITS - KOREA

The parent company implements a bonus plan designed to present a prescribed quantity of gold and entitle compensated vacation to long-term service employees. Accounting policies of the bonus plan are mostly the same as that of the defined benefit plan, except that all the past service cost and actuarial variances are recognized immediately in profit or loss.

Description	Million KRW
As of January 1, 2013	1,499
Current service cost	276
Interest cost	64
Re-measurement gain / (losses)	-559
Total payment	-120
As of December 31, 2013	1,160
Current service cost	148
Interest cost	55
Re-measurement gain / (losses)	476
Total payment	-102
As of December 31, 2014	1,737

	December 31, 2014	December 31, 2013
Discount rate	3.90%	4.90%
Compensation increase	5.00%	5.00%
Compensation per day for vacation	KRW 40,640 - 168,500	KRW 49,280 - 128,880
Rate of increase in gold price	5.90%	5.70%
Gold price per 3.75 gram	KRW 165,000	KRW 153,000

# 21.2. OTHER LONG-TERM EMPLOYEE BENEFITS - OTHERS

The remaining other long-term employee benefits refer to legally established termination benefits of Group companies located in United Arab Emirates of 36 Million KRW and to other long-term employee-related benefits from the business acquisition of SeQuent Scientific Limited, India of 16 Million KRW.

# 21.3 SHARE-BASED PAYMENT RELATED LIABILITY

On March 31, 2013, the Group granted virtual stock options to eligible employees of subsidiaries according to the Virtual Stock Option and Long-term Incentive Plan ("LTIP"). The virtual stock options granted are an entitlement in money, and are neither a stock, nor any other listed or unlisted security and do not grant any right to physically acquire stocks. Settlement of options exercised is in cash only. Upon exercise, Songwon shall pay the receiver the greater of the difference between the fair market value at the exercise date (listed stock price of Songwon Industrial Co. Ltd.) minus the strike price or 0 (zero). The virtual stock options, granted under the LTIP, are subject to a vesting period of two to four years during which the receiver of the options must be continuously employed by the Group.

The fair value of options granted, as of December 31, 2014, was estimated using the following assumptions:

	2014	2013
Dividend yield	0.86%	0.80%
Expected volatility	45.00%	49.20%
Risk-free interest rate	2.59%	2.67%
Weighted average expected life of share options (years)	6.3	7.3
Model used	Binomial tree	Binomial tree

The carrying amount of the liability relating to the LTIP at December 31, 2014 was 220 Million KRW (at December 31, 2013: 84 Million KRW). No share options had vested at December 31, 2014 and 2013. The expense for employee services received during the year 2014, recognized in the statement of comprehensive income, amounted to 136 Million KRW (2013: 84 Million KRW). There were no cancellations and modifications to the awards during the years 2014 and 2013.

#### Movements during the year

The following table illustrates the number and weighted average exercise prices (WAEP) of, and movements in, share options during the reporting period:

	December 31, 2014		Dec	ember 31, 2013
	Number	KRW	Number	KRW
Outstanding at January 1	85,500	11,900	-	n / a
Granted during the year	136,800	10,022	90,000	11,900
Forfeited during the year	-6,500	10,694	-4,500	11,900
Exercised during the year	-	n/a	-	n/a
Expired during the year	-	n/a	-	n/a
Outstanding at December 31	215,800	10,349	85,500	11,900
Exercisable at December 31	-	n / a	-	n / a

The weighted average remaining contractual life for the share options, outstanding as at December 31, 2014, was 8.9 years (at December 31, 2013: 9.3 years).

The weighted average fair value of options granted during the reporting period was 0 KRW (prior period: 0 KRW). The exercise price for options outstanding at the end of the reporting period was 11,900 KRW (prior period: 11,900 KRW).

# 22 OTHER FINANCIAL LIABILITIES

Other financial liabilities as of December 31, 2014 and 2013 are as follows:

	December	31, 2014	December	31, 2013
	Non-current	Current	Non-current	Current
Description	Million KRW	Million KRW	Million KRW	Million KRW
Other specific payables	768	-	330	-
Other withholdings	-	-	42	-
Long-term deposits received	1,546	-	1,466	-
Derivative liabilities (see Note 24)	133	5	45	130
Accrued interest expenses	-	771	-	945
Unpaid dividends	-	2	-	2
Total	2,447	778	1,883	1,077

# 23 TRADE AND OTHER PAYABLES

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Trade payables	39,777	37,977
Trade payables (related parties)	1,676	879
Other accounts payables	15,554	22,712
Other accounts payables (related parties)	7	7
Withholdings	681	535
Accrued expenses	16,455	14,790
Guarantee deposits	52	17
Total	74,202	76,917

Trade and other payables do not bear interest and usually become due within 30 to 60 days.

# 24 ADDITIONAL INFORMATION ON FINANCIAL INSTRUMENTS

### 24.1 DERIVATIVES FINANCIAL INSTRUMENTS

	December 31, 2014		December 31, 2013	
	Assets	Liabilities	Assets	Liabilities
Description	Million KRW		Million KRW	
Forward foreign exchange contracts (current portion)	320	5	294	78
Interest rate swaps (current portion)	-	-	-	52
Interest rate swaps (non-current portion)	-	133	-	45
Total	320	138	294	175

### 24.1.1 CURRENCY FORWARDS

Currency forward contracts, which the Group has entered into in order to hedge the risk of foreign exchange rate fluctuation of assets denominated in foreign currencies, as of December 31, 2014 and 2013 are as follows:

#### As per December 31, 2014

				Contracted exchange rate
Contractual party	Position	Contract amount	Maturity dates	(Korean won)
Gyeong Nam Bank	Sell	EUR 3,300,000	25.02.15	1,389.00
Korea Standard Chartered Bank	Sell	EUR 6,600,000	02.02.15 - 24.03.15	1,345.90 – 1,350.00
Korea Standard Chartered Bank	Sell	JPY 540,000,000	02.02.15 - 24.03.15	921.05 - 957.70

#### As per December 31, 2013

				Contracted exchange rate
Contractual party		Contract amount	Maturity dates	(Korean won)
Citibank	Sell	EUR 6,600,000	24.01.14 - 25.03.14	1,455.50 - 1,472.90
Citibank	Sell	JPY 360,000,000	25.02.14 - 25.03.14	1,017.00 - 1,047.60
Korea Standard Chartered Bank	Sell	EUR 3,300,000	25.02.14	1,445.55
Korea Standard Chartered Bank	Sell	JPY 180,000,000	24.01.14	1,097.00

#### 24.1.2 INTEREST RATE SWAP

As of December 31, 2014 and December 31, 2013 the Group has entered into the following interest rate swap contracts:

As per December 31, 2014		
Description	Bonds contract	Interest rate swap contract
Contract date	04.04.13	26.06.13
Maturity date	04.04.16	04.04.16
Contract amount	10,000 Million KRW	10,000 Million KRW
Fixed interest rate	n/a	5.35%
Floating interest rate	3MCD+2.27%	3MCD+2.27%

The Group applies cash flow hedge accounting on interest rate swap; currently in 2014, there is an interest rate swap designated as cash flow hedge. The balances included in accumulated other comprehensive income are 133 Million KRW as of December 31, 2014 and 45 Million KRW as of December 31, 2013 (see Note 18.4), net of income tax.

### 24.2 FAIR VALUES

Set out below is a comparison by class of the carrying amounts and fair value of the Group's financial instruments that are carried in the financial statements:

	Carrying	amount	Fair value	
	December 31, 2014	December 31, 2013	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW	Million KRW	Million KRW
Financial assets at fair value through profit and loss	320	294	320	294
Other financial assets (Derivatives)	320	294	320	294
Thereof current	320	294	320	294
Thereof non-current	-	-	-	-
Loans and receivables	166,379	182,402	166,379	182,402
Other financial assets	9,564	8,914	9,564	8,914
Thereof current	6,889	6,419	6,889	6,419
Thereof non-current	2,675	2,495	2,675	2,495
Trade and other receivables	111,423	109,811	111,423	109,811
Thereof current	111,423	109,811	111,423	109,811
Thereof non-current	-	-	-	-
Cash and cash equivalent	45,392	63,677	45,392	63,677
Thereof current	45,392	63,677	45,392	63,677
Thereof non-current	-	-	-	-
Available-for-sale financial assets	1,473	1,854	1,473	1,854
Thereof current	-	-	-	-
Thereof non-current	1,473	1,854	1,473	1,854
Total	168,172	184,550	168,172	184,550

	Carrying	j amount	Fair v	value
	December 31, 2014	December 31, 2013	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW	Million KRW	Million KRW
Financial assets at fair value through profit and loss	5	130	5	130
Other financial liabilities (Derivatives)	5	130	5	130
Thereof current	5	130	5	130
Thereof non-current	-	-	-	-
Financial liabilities at fair value through OCI	133	45	133	45
Other financial liabilities (Derivatives)	133	45	133	45
Thereof current	-	-	-	-
Thereof non-current	133	45	133	45
Financial liabilities measured at amortized costs	497,466	494,673	497,466	494,673
Interest-bearing loans and borrowings	420,177	414,971	420,177	414,971
Thereof current	344,163	262,630	344,163	262,630
Thereof non-current	76,014	152,341	76,014	152,341
Other financial liabilities	3,087	2,785	3,087	2,785
Thereof current	773	947	773	947
Thereof non-current	2,314	1,838	2,314	1,838
Trade and other payables	74,202	76,917	74,202	76,917
Thereof current	74,202	76,917	74,202	76,917
Thereof non-current	-	-	-	-
Total	497,604	494,848	497,604	494,848

The fair value of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. The following methods and assumptions were used to estimate the fair values:

The following methods and assumptions were used to estimate the fair values:
Cash and cash equivalent trade receivables other receivables trade pavables and other

- Cash and cash equivalent, trade receivables, other receivables, trade payables and other current liabilities approximate their carrying amounts largely due to the short-term maturities of these instruments.
- Fair value of available-for-sale financial assets is derived from quoted market prices in active markets, if available.
- Fair value of unquoted available-for-sale financial assets is estimated using appropriate valuation techniques (see Note 24.2.1).

### 24.2.1 FAIR VALUE HIERARCHY

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

Description	Valuation technique
Level 1	Quoted (unadjusted) prices in active markets for identical assets or liabilities
Level 2	Other techniques for which all inputs, which have a significant effect on the recorded fair value, are observable either directly, or indirectly
Level 3	Techniques which use inputs that have a significant effect on the recorded fair value that are not based on observable market data

As of December 31, 2014 and December 31, 2013 the Group held the following financial instruments carried at fair value on the statement of financial position:

	December 31, 2014	Level 1	Level 2	Level 3
	Million	Million	Million	Million
Description	KRW	KRW	KRW	KRW
Assets measured at fair value				
Financial assets at fair value through profit or loss	320	-	320	-
Derivatives	320	-	320	-
Available-for-sale financial assets	123	123	-	-
Chemtura Corporation	123	123	-	-
Liabilities measured at fair value				
Financial liabilities at fair value through profit or	5		5	
loss	5	-	0	-
Derivatives	5	-	5	-
Financial liabilities at fair value through OCI	133	-	133	-
Derivatives	133	-	133	-

	December 31, 2013	Level 1	Level 2	Level 3
	Million	Million	Million	Million
Description	KRW	KRW	KRW	KRW
Assets measured at fair value				
Financial assets at fair value through profit or loss	294		294	-
Derivatives	294	-	294	-
Available-for-sale financial assets	404		404	-
Hybrid Tier 1	404	-	404	-
Liabilities measured at fair value				
Financial liabilities at fair value through profit or	130		130	-
loss	130		130	
Derivatives	130	-	130	-
Financial liabilities at fair value through OCI	45		45	-
Derivatives	45	-	45	-

During the reporting period ending December 31, 2014 and December 31, 2013, there were no transfers between Level 1 and Level 2 fair value measurements.

For the financial assets and financial liabilities for which the fair value is disclosed (see Note 24.2) the carrying amount is a reasonable approximation of fair values and is measured using Level 3 measurement methods, except for cash and cash equivalent.

## 24.3 FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's principal financial liabilities comprise loans and borrowings, trade and other payables, and other financial liabilities. The main purpose of these financial liabilities is to finance the Group's operations. The Group has trade accounts and other accounts receivables, cash and cash equivalents, and other financial assets that arrive directly from its operations. The Group also holds available-for-sale investments and enters into derivative transactions and applies hedge accounting for cash flow hedges if applicable.

The Group is exposed to market, credit and liquidity risks. The Group's management oversees the management of these risks through appropriate risk assessment and monitoring activities to minimize their effects.

#### 24.3.1 MARKET RISK

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market prices comprise two types of risk:

- Interest rate risk
- Foreign currency risk

Financial instruments affected by market risk include loans and borrowings, deposits, available-for-sale investments and derivative financial instruments. The sensitivity analyses in the following sections relate to the position at 31 December in 2014 and 2013.

#### Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to its interest-bearing loans and borrowings, as well as bank deposits with floating interest rates.

The Group's exposure to the risk of changes in market interest rates relates substantially to its interest-bearing loans and borrowings with floating interest rates, which makes the Group exposed to cash flows risk. Responsively, the Group is minimizing the risk partially through interest rate swap contracts, or choosing the most favorable financing instruments by switching to the loans with more favorable conditions or improving the Group's credit rating.

#### Interest rate sensitivity

The following table demonstrates the sensitivity to a reasonably possible change in interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's interest-bearing loans and borrowings, as well as bank deposits with floating interest rates. With all other variables held constant, the Group's profit before tax is affected through the impact on floating rate borrowings as follows:

	Increase/decrease in %	Effect on profit before tax
		Million KRW
2014	1.00	-2,071
	-1.00	2,071
2013	1.00	-2,116
	-1.00	2,116

#### Foreign currency risk

The Group's exposure to the risk of changes in foreign exchange rates relates primarily to its operating activities. The risk of foreign exchange primarily relates to US Dollars (USD), Euro (EUR), Swiss Francs (CHF), Japanese Yen (JPY), United Arab Emirates Dirham (AED) and to the Indian Rupee (INR).

Foreign exchange risks arise when commercial transactions, recognized assets or liabilities are denominated in a currency that is not the entity's functional currency.

The objective of the management of foreign currency risk is to maximize the value of the firm through minimizing the fluctuation of net profit and uncertainty arising from the fluctuation in foreign currency. To accomplish this, the Group uses a strategy to accord the collection terms of receivables and payment terms of payables denominated in USD considering the similar volume of exports and imports. In regard to EUR and JPY, the Group manages the risk through currency forward contracts.

#### Foreign currency sensitivity

The Group carries out a sensitivity analysis for the dominant foreign currencies: US Dollars (USD), Euro (EUR), Swiss Francs (CHF), Japanese Yen (JPY), United Arab Emirates Dirham (AED) and Indian Rupee (INR). The assumed possible currency fluctuations are based on historical observations and future prognoses. Incorporated into calculations are the financial instruments. The following table demonstrates the sensitivity of consolidated net profit before tax to a reasonably possible shift in exchange rates related to financial instruments held in the balance sheet. Assuming that the other variables are constant, but only the foreign exchange rate changes by 10%, the impacts on net profit for the year ended on December 31, 2014 and 2013 are as follows:

	December 31, 2014		December 31, 2013	
Currency	10% increase	10% decrease	10% increase	10% decrease
	Million KRW	Million KRW	Million KRW	Million KRW
USD	-272	272	-406	406
EUR	-1,687	1,687	-717	717
JPY	-669	669	-687	687
CHF	-11	11	868	-868
AED	162	-162	-	-
INR	1,078	-1,078	-	-
Total	-1,399	1,399	-942	942

The Group's exposure to foreign currency changes for all other currencies is not material.

### 24.3.2 CREDIT RISK

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily for trade receivables) and investing activities.

The Group maintains a policy to keep a trade relationship only with customers with a high credit rating, assessed by credit assessment considering their financial position, past experience of defaults and other indicators of default. If a customer's credit rating worsens, the Group sets an individual credit limit on that customer and intensively manages the credit risk. In addition, the Group minimizes the credit risk by maintaining the exposure to the credit risk at an insignificant level through ongoing management, including periodical reviews on all the customers.

The Group is also exposed to credit risk with regard to bank deposits, as well as cash and cash equivalents in which the maximum exposure to credit risk at the reporting date is the carrying value. The exposure to the related credit risk, however, is relatively restricted because the Group maintains relationships with financial institutions with high credit ratings.

#### 24.3.3 LIQUIDITY RISK

Liquidity risk is the risk that the Group will encounter difficulty in meeting obligations associated with financial liabilities due to the unfavorable economy of the industry or financial market.

The Group manages its liquidity risk through its own strategy and plans, which consider the maturity of financial instruments and expected operating cash flows and include a policy to map out the maturity of financial assets and liabilities.

In addition, the Group maintains credit facilities with the banks to respond to an unexpected shortage in liquidity. The Group manages funding schedules and ongoing review procedures, considering the appropriate mix of long-term and short-term loans and borrowings, to maintain consistency and flexibility in obtaining liquidity and stable financing in response to expansion of the business.

The details of the maturity profile of the Group's financial liabilities, excluding financial derivative instruments, based on contractual undiscounted payments as of December 31, 2014 and 2013 are as follows (based on contractual undiscounted payments):

	Less than	1 to 3	3 to 12	1 to 5	> 5	
As of 31 December 2014	a month	months	months	years	years	Total
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Interest-bearing loans and borrowings	28,191	119,993	195,979	67,943	8,071	420,177
Other financial liabilities	723	50	-	2,314	-	3,087
Trade and other payables	62,646	11,053	503	-	-	74,202
Total	91,560	131,096	196,482	70,257	8,071	497,466
	Less than	1 to 3	3 to 12	1 to 5	> 5	
As of 31 December 2013	a month	months	months	years	years	Total
As of 31 December 2013	a month Million KRW		months Million KRW	·	·	
As of 31 December 2013 Interest-bearing loans and borrowings				·	·	
Interest-bearing loans and	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Interest-bearing loans and borrowings	Million KRW 63,196	Million KRW	Million KRW	Million KRW 149,271	Million KRW	Million KRW 414,971

### 24.3.4 CAPITAL MANAGEMENT

The capital managed by the Group is identical to the total amount of equity presented in the consolidated statement of financial position. The primary objective of the Group's capital management is to ensure its continued ability to provide consistency for its equity shareholders through a combination of capital growth and distribution. In order to achieve this objective, the Group monitors its gearing to balance risk and returns at an acceptable level, and also maintains a sufficient funding base to enable the company to meet its working capital and strategic investment needs. To maintain or adjust the capital structure, the company may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares, considering not only the short-term position, but also its long-term operational and strategic objectives. At Group level, the debt ratio is reviewed regularly. The debt-equity ratio as of December 31, 2014 and 2013 is 197 % and 183 %, respectively.

On a monthly basis, all subsidiaries have to report key performance indicators, which also include capital management information.

# 25 COMMITMENTS AND CONTINGENCIES

### 25.1 CONTINGENT LIABILITY

There are no current proceedings, such as lawsuits, claims, investigations and negotiations due to product liability, mercantile law, environmental protection, health and safety etc., which could have a significant influence on business operations, the Group's financial position or income.

### 25.2 OPERATING LEASE COMMITMENTS

The Group has entered into commercial leases on certain motor vehicles and items of machinery. These leases have a duration of between three and nine years with no renewal option included in the contracts. There are no restrictions placed upon the Group by entering into these leases.

Future minimum rentals payable under non-cancellable operating leases as at 31 December are as follows:

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Within one year	-1,129	-1,063
After one year, but not more than five years	-2,386	-2,448
More than five years	-886	-1,275
Total	-4,401	-4,786

### 25.3 OTHER COMMITMENTS

As part of its ordinary business, the Group could enter into various contractual commitments for the purchase of tangible fixed assets and intangible assets, as well as investment and promotion properties. As of December 31, 2014, commitments to purchase property, plant and equipment, as well as raw materials amounting to 7,086 Million KRW (December 31, 2013: 4,008 Million KRW) were entered.

The Group has provided two checks amounting to 22 Million KRW to Lotte Chemical Co. Ltd. and one blank promissory note to Hanwha Chemical Co. Ltd. as security on supply contracts.

One check and one promissory note, which the Group received from Korea Exchange Bank, are outstanding as of December 31, 2014 due to bankruptcy declared by the issuers of the check.

Details of the Group's available short-term credit line facilities (excluding general loans) as of December 31, 2014 are as follows:

Description	Currency	Credit limit	Used	Unused
LICANCE and L/C fan import	Thousand USD	25,000	12,189	12,811
USANCE and L / C for import	Million KRW	10,000	982	9,018
D/A and D/P	Thousand USD	138,000	92,593	45,407
D/A allu D/P	Million KRW	23,000	14,373	8,627
Trade loans	Million KRW	47,000	25,496	21,504
Syndicated short-term loans	Million KRW	50,000	30,000	20,000
L / G for import	Thousand USD	1,000	100	900
Other foreign currency guarantees	Thousand USD	12,000	12,000	-
Total	Million KRW	130,000	70,851	59,149
Total	Thousand USD	176,000	116,882	59,118

On February 18, 2013, the Group signed a syndicated loan facility of 220,000 Million KRW, comprising 170,000 Million KRW of a three-year term loan and 50,000 Million KRW of a Revolving Credit Facility (RCF) that revolves every year. Replacing the existing loans, the Group has withdrawn the long-term facility amounting to 126,727 Million KRW and revolving credit facility amounting to 30,000 Million KRW. The syndicated loan facility was organized by Korea Exchange Bank and Woori Bank as leading banks and Standard Chartered Bank, Hana Bank and Busan Bank as the three participating banks.

In connection with the syndicated loan agreement entered into on February 18, 2013, the parent company must maintain the following financial ratios:
Financial measure	Required ratio
DEBT / EBITDA	8 or less than 8
EBITDA / Interest	2.5 or more than 2.5
Debt / Equity	250% or less than 250%

Songwon provided collaterals to the banks, which provided the syndicated loan, and also committed to meet the above described covenants described throughout the period. However, as of December 31, 2014, the Company has not met the Debt/EBITDA ratio and EBITDA/Interest ratio. The ratio of debt/EBITDA of the Company as at the end of the period exceeds 8.0 and that of EBITDA/Interest is below 2.5. This may cause an immediate repayment of the loan, depending on the banks' decision.

# 26 ASSETS PLEDGED AS COLLATERAL AND GUARANTEES

Details of property, plant and equipment, and investment properties pledged by the Group as collateral for interest-bearing loans and borrowings as of December 31, 2014 and 2013, expressed in the maximum value registered to Korean court, are as follows:

		December 31, 2014	December 31, 2013
Pledged to	Pledged assets	Million KRW	Million KRW
Property, plant, equipment and in (Joint collateral in connection with the second seco			
Woori Bank	Land, buildings, investment properties and machinery		
Korea Exchange Bank	Land, buildings, investment properties and machinery		
Hana Bank	Land, buildings, investment properties and machinery	242,000	242,000
Busan Bank	Land, buildings, investment properties and machinery		
Korean Standard Chartered Bank	Land, buildings, investment properties and machinery		
Property, plant and equipment (Collateral for loans and borrowi	ngs other than syndicated loan)		
Korea Development Bank	Land, buildings and machinery	57,000	57,000
Total		299,000	299,000

Additionally, items of property, plant and equipment belonging to Songwon ATG GmbH (Germany) with a total value of 153 Million KRW are pledged as a collateral for interest-bearing loans and borrowings as of December 31, 2014 (December 31, 2013: 251 Million KRW).

Investment properties, pledged by the Group as collateral in connection with repayment of leasehold deposits received as of December 31, 2014 and December 31, 2013, amounted to 300 Million KRW (2013: 200 Million KRW).

Songwon Industrial Co. Ltd. is providing a payment guarantee of 800 Million KRW to Seoul Guarantee Insurance Company on behalf of H2 Logistics, which provides an ocean transportation arrangement service to the Group.

The Group has received payment guarantees amounting to 349,900 Million KRW and 8.28 Million USD provided by Jongho Park, CEO of the Group, in connection with the Group's borrowings from banks as of December 31, 2014.

The Company has also pledged the insurance claims as collateral in relation to syndicated loan and borrowings from the Korea Development Bank borrowings as of December 31, 2014 and 2013.

For further details regarding other financial assets pledged as collateral, see Note 13.2.

# 27 OPERATING PROFIT AND OTHER INCOME/EXPENSES

## 27.1 RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses of 2,301 Million KRW (2013: 1,668 Million KRW) are recorded in the income statement. Development expenses are not capitalized because the conditions for capitalization have not been met.

# 27.2 SELLING AND ADMINISTRATION COST

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Sales-related costs	-33,697	-37,942
Personnel expenses	-28,090	-25,619
Travelling and entertainment	-4,575	-6,447
Depreciation and amortization	-6,949	-6,531
Administration expenses	-9,063	-9,284
Bad debt loss	-199	-238
Others	-2,613	-3,185
Total	-85,186	-89,246

## 27.3 OTHER INCOME

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Fee income	275	260
Miscellaneous income	1,405	1,381
Gains on foreign exchange transaction	6,645	10,001
Gains on foreign exchange translation	11,948	1,533
Gain on disposal of property, plant and equipment, and operations	151	2,906
Rental income (third parties)	1,980	1,676
Total	22,404	17,757

# 27.4 OTHER EXPENSES

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Miscellaneous expenses	-2,046	-1,591
Loss on disposal of property, plant and equipment, and operations	-1,088	-14
Loss on foreign exchange transaction	-5,612	-6,929
Loss on foreign exchange translation	-11,178	-3,915
Total other expenses	-19,924	-12,449

# 27.5 EXPENSES CLASSIFIED BY NATURE

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Purchased material	-426,688	-414,490
Freight and logistic costs	-28,117	-28,833
Energy costs	-44,291	-46,189
Personnel expenses	-76,028	-69,327
Depreciation, amortization and impairment	-32,699	-31,266
Changes in inventories of finished goods and supplies	-3,317	2,718
Foreign exchange losses	-16,790	-10,844
Other expenses	-54,093	-64,303
Total	-682,024	-662,534
Thereof recorded in cost of sales	-576,914	-560,839
Thereof recorded in selling and administration costs	-85,186	-89,246
Thereof recorded in other expenses	-19,924	-12,449
Total	-682,024	-662,534

# 27.6 FINANCE COSTS

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Interest on borrowings	-17,883	-18,625
Total interest cost	-17,883	-18,625
Loss on foreign exchange	-21,010	-16,505
Loss on derivative transaction	-510	-686
Loss on valuation of derivatives	-5	-78
Loss on disposal of available-for-sale securities	-	-574
Bank charges	-263	-345
Total finance costs	-39,671	-36,813

# 27.7 FINANCE INCOME

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Gain on foreign exchange	21,459	16,210
Gain on derivative transaction	2,113	2,993
Gains on valuation of derivatives	320	336
Interest on loans and receivables (third parties)	519	782
Interest on loans and receivables (related parties)	16	13
Other	6	34
Total finance income	24,433	20,368

# 27.8 NET GAINS AND LOSSES OF THE CLASSES OF FINANCIAL INSTRUMENTS

Net gains or losses (excluding bank charges) on the classes of the financial instruments for the year ended December 31, 2014 and 2013 are as follows:

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Financial assets measured at fair value through profit or loss	1,910	2,522
Loans and receivables	3,688	855
Available-for-sale financial assets	6	-339
Financial liabilities measured at amortized cost	-20,579	-19,138
Total	-14,975	-16,100
Finance costs	-39,671	-36,813
Finance income	24,433	20,368
Bank charges	263	345
Total	-14,975	-16,100

# 28 INCOME TAX

The major components of income tax expense for the year ended December 31, 2014 and 2013 are:

# 28.1 CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Current income tax charge	-5,160	-6,264
Adjustments in respect of current income tax of previous year	-79	467
Deferred income taxes relating to changes of temporary differences, net	651	-1,482
Deferred income taxes relating to tax loss carry forwards	258	209
Deferred income taxes from tax credits	-2,022	-1,672
Deferred income taxes recognized directly In other comprehensive income	1,677	-196
Income tax expense reported in the income statement	-4,675	-8,938

	December 31, 2014	December 31, 2013
Description	Million KRW	Million KRW
Accounting (loss) / profit before income tax	-8,716	31,865
At parent company's statutory income tax rate of 21.75% (2013: 22.26%)	1,896	-7,094
Increase / (decrease) in income taxes resulting from:		
Adjustments in respect to current income tax of previous years	-79	467
Non-temporary differences	-161	-448
Tax credits	393	688
Non-deductible expenses	-555	-
Tax audit	-4,646	-
Effect of different tax rates in tax jurisdiction	-770	-1,722
Other (reassessment of impaired deferred tax assets etc.)	-753	-829
At the effective income tax rate -53.64% (2013: 28.05%)	-4,675	-8,938

# 28.2 DEFERRED TAX

## Deferred tax relates to the following:

	Consolidated statements of financial position		Consolidated st comprehensi	
	December 31, 2014	December 31, 2013	2014	2013
Description	Million KRW	Million KRW	Million KRW	Million KRW
Pension obligation	2,067	999	-543	-638
Other long-term employment benefits	407	266	141	-64
Trade receivables	-	1	-1	1
Inventories	2,126	906	1,220	-1,904
Fixed assets	-21,697	-21,926	658	7,262
Gain on revaluation of land	-24,911	-24,911	-	-6,803
Impairment loss on avilable-for-sale		0	2	2
investments	-	3	-3	3
Loss on currency forwards	-	-	-	-67
Other current assets	-5	-	-5	-
Other withholdings (governmental grant)	-	-	-	-55
Accrued income	-6	-10	4	151
Gain on foreign exchange	-	-	-	1,478
Loss on foreign exchange	-	-	-	-1,683
Prepaid expenses	92	65	27	65
Other current liabilities	169	5	164	-70
Other current provisions	87	89	-2	20
Other non-current provisions	-	10	-10	8
Gain on valuation of available-for-sale		-1	1	-42
investments	-	-1	1	-42
Gain on currency forwards	-	-	-	57
Intangible assets	-1,817	-2,381	564	603
Loss on interest rate swap	113	-	113	-
Losses available for offsetting against	467	209	258	209
future taxable income	407	207	200	
Tax credits carry forwards	-	2,022	-2,022	-1,672
Deferred tax income / (expense)			564	-3,141
Net deferred tax assets / (liabilities)	-42,908	44,655		
Reflected in the statement of financial				
position as follows:				
Deferred tax assets	3,359	1,117		
Deferred tax liabilities	-46,267	-45,772		

The Group offsets tax assets and liabilities if, and only if, it has a legally enforceable right to do so, and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same tax authority.

Reconciliation of deferred tax liabilities, net:

	2014	2013
Description	Million KRW	Million KRW
Opening balance as of January 1	-44,655	-41,653
Tax income/(expense) during the period recognized in total comprehensive income	2,261	-2,945
Deferred taxes income (expense) acquired in business combination	-424	-
Exchange differences	-90	-57
Closing balance as of December 31	-42,908	-44,655

Expecting sufficient taxable income, the Group recognized deferred income tax assets to the extent of future taxable income. For the following deductible temporary differences, tax loss carry forwards and tax credit carry forwards, no deferred tax assets as of December 31, 2014 and 2013 were recognized:

	2014	2013
Description	Million KRW	Million KRW
Temporary differences related to investments in subsidiaries	1,701	177
Total	1,701	177

Expected timing of expiration of recognized, tax loss carry forwards and tax credit carry forwards as of December 31, 2014 and 2013 are as follows:

	Recognized deferred tax assets		
	Tax loss	Tax credit	
	carry forwards	carry forwards	
December 31, 2014	Million KRW	Million KRW	
less 1 year	-	-	
1-5 years	-	-	
5 years and later	467	-	
Total	467	-	
December 31, 2013	Million KRW	Million KRW	
less 1 year	-	-	
1-5 years	-	2,022	
5 years and later	209	-	
Total	209	2,022	

# 29 EARNINGS PER SHARE

Basic earnings per share amounts are calculated by dividing net profit for the year attributable to ordinary equity holders of the parent company by the average number of ordinary shares outstanding during the year.

There is no difference between basic and diluted earnings per share in 2014 and 2013.

The following reflects the income and share data used in the basic per share computations:

	2014	2013
Description	KRW	KRW
Net (loss) / profit attributable to ordinary equity holders of the parent	-12,659,584,141	23,997,429,263
Weighted average number of ordinary shares	24,000,000	24,000,000
Earnings per share (basic / diluted)	-527	1,000

# 30 CASH FLOW STATEMENT

Cash and cash equivalents in the statement of cash flow are equal to those in the statement of financial position.

The Group's statement of cash flow is prepared using the indirect method. The adjustments to the net profit for the period of the non-cash and non-operating items, and changes in operating assets and liabilities for the year ended December 31, 2014 and 2013 are as follows:

		2014	2013
Description	Notes	Million KRW	Million KRW
Adjustments of non-cash items			
Depreciation and impairment of property, plant and equipment	7	26,082	25,206
Depreciation of investment properties	8	181	177
Amortization of intangible assets, except for goodwill	9	6,435	5,883
Depreciation and impairment of non-current financial assets		4	-
Revaluation loss due to step acquisition		32	-
Loss / (gain) on disposal of property, plant and equipment, net		937	-273
Loss on disposal of available-for-sale financial instruments		-	574
Share of result from investments accounted for using the equity method	11	-676	-923
Finance costs		16,829	29,908
Finance income		-5,272	-3,506
Income tax expenses	28	4,675	8,938
Total		49,227	65,984

	2014	2013
Description	Million KRW	Million KRW
Changes in operating assets and liabilities		
Trade receivables	619	-16,208
Other receivables	462	638
Other current assets	378	-2,439
Other current financial assets	-26	-37
Inventories	17,017	-14,455
Trade payables	2,610	8,506
Other payables	1,466	1,155
Other current financial liabilities	102	-98
Other current liabilities	600	1,240
Pension liabilities	-2,697	-3,278
Other long-term employment benefits	764	-250
Total	21,295	-25,226

# 31 RELATED PARTY DISCLOSURES

The following table provides the total amount of transactions that have been entered into with related parties for the relevant financial year and balances as per year-end:

		For the year ending on December 31,	
		2014	2013
Related party	Description	Million KRW	Million KRW
Jongho Park, Group CEO	Finance income	1	-
Songwon Baifu Chemicals	Sales	29	14
(Tangshan) Co. Ltd.	Purchase	-14,219	-12,110
(Joint venture)	Selling and administration costs	-	-
	Finance income	15	13
Chemservice Asia Co. Ltd.	Sales	-	-
(Joint venture)	Purchase	-	-
	Selling and administration costs	-73	-73
	Finance income	-	-
	Sales	29	14
Total	Purchase	-14,219	-12,110
	Selling and administration costs	-73	-73
	Finance income	16	13

		December 31, 2014	December 31, 2013
Related party	Description	Million KRW	Million KRW
Jongho Park, Group CEO	Other receivables	1	-
	Other current financial assets	5,000	-
	Trade receivables	31	-
Songwon Baifu Chemicals	Other receivables	-	13
(Tangshan) Co. Ltd.	Other current financial assets	-	346
(Joint venture)	Trade payables	1,676	879
	Other payables	-	-
	Trade receivables	-	-
Chemservice Asia Co. Ltd.	Other receivables	-	-
(Joint venture)	Other current financial assets	-	-
	Trade payables	-	-
	Other payables	7	7
	Trade receivables	31	-
Total	Other receivables	1	13
	Other current financial assets	5,000	346
	Trade payables	1,676	879
	Other payables	7	7

# 31.1 THE ULTIMATE PARENT

Songwon Industrial Co. Ltd. is the ultimate Parent based and listed in Korea.

# 31.2 TERMS AND CONDITIONS OF TRANSACTIONS WITH RELATED PARTIES

Outstanding balances at the year-end are unsecured, interest free and settlement occurs in cash. There have been no guarantees provided or received for any related party receivables or payables. For the year ended December 31, 2014, the Group has not recorded any impairment of receivables relating to amounts owed by related parties (2013: None). This assessment is undertaken each financial year through examining the financial position of the related party and the market in which the related party operates.

# 31.3 TRANSACTIONS WITH KEY MANAGEMENT PERSONNEL

In the 2014 reporting period, the Group granted a loan of 5,000 Million KRW to the Group CEO, Jongho Park at usual market conditions.

# 31.4 COMPENSATION OF KEY MANAGEMENT PERSONNEL OF THE GROUP

	2014	2013
Description	Million KRW	Million KRW
Short term employee benefits	8,688	8,765
Post-employment benefits	775	729
Other long-term benefits	741	861
Share-based payments	54	25
Total compensation paid to key management personnel	10,258	10,380

The amounts disclosed in the table are the amounts recognized as an expense during the reporting period related to key management personnel. Key management personnel are those persons with authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of that entity.

# 31.5 OTHER RELATED PARTIES

Other related parties are Songwon Moolsan Co. Ltd. (Korea) which has significant influence on the Group due to the interest held in the share capital of the parent company of 23.88%. Further, the subsidiary of Songwon Moolsan Co. Ltd., Kyungshin Industrial Co. Ltd., which holds interest in the share capital of the parent company of 9.15%, is identified as a related party to the Group.

# 32 EVENTS AFTER THE REPORTING PERIOD

The consolidated financial statements for the year ended December 31, 2014 were approved by the Board of Directors of the parent company on January 30, 2015.f

#### FURTHER NOTES ABOUT THIS REPORT

#### NOTE ON FORWARD-LOOKING STATEMENTS

This annual report contains forwardlooking statements concerning the future plans, strategies and performance of the Songwon Group. These statements reflect the views, expectations and assumptions of the Songwon Group management based on the current information available at the date of publication. Such statements are subject to various known and unknown factors, risks and uncertainties that may cause the actual future results, financial situation, development or performance of the company to differ from the expectations expressed in the annual report. The company assumes no liability whatsoever to update these statements or to confirm them to future events or developments.

#### **ABOUT THIS REPORT**

This is the most recent report of Songwon Industrial Group, giving an all-embracing overview of Songwon to all our stakeholders. It is the period between January 2014 to December 2014. It succeeds the previous Songwon Annual Report 2014, published in March 2014.

Songwon's Corporate Sustainability Report includes updates to the previous report to reflect data through end-of-year 2014 unless otherwise specified. Data for this report has been measured according to industry standard measurement methods unless otherwise stated. There are no significant changes in the scope, boundary or measurement methods applied in the report. Re-statements of information provided in earlier reports are disclosed separately.

Boundary of Report GRI: Responses provided in Operational Structure (GRI 2.3), Countries of Operations (GRI 2.5) and Report Basis (GRI 3.8) define the boundary for this report within the reporting period unless otherwise stated.

Songwon does not currently engage an external agency or organization to audit its GRI responses or its Corporate Sustainability Report.

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# > MISSION

## **PEOPLE**

Build a great place to work, **inspiring** our people to excel in a culture of **creativity**, collaboration and consistency.

## **PRODUCTS**

Provide a portfolio of **quality** products through the **innovative** application of sustainable chemistry.

## **PARTNERS**

Create **mutual**, enduring value by constructing a **winning** network of customers and suppliers.

## PERFORMANCE

Fulfill our **responsibilities** while maximizing **longterm** return to our shareholders.

# PRODUCTIVITY

Develop and nurture a **lean**, highly effective and **fast moving** organization.

# > VISION

**SONGWON** - Salient in Additives - achieves sustainable and profitable growth by **understanding**, **anticipating**, and **satisfying** the needs and desires of all our customers.

www.songwon.com