

PT Inocycle Technology Group Tbk

Company Note

November 26, 2019

Innovate to sustain the growth

9M19 revenue accelerated by 27% YoY. INOV booked revenue of IDR 380bn (+27.8% YoY) in 9M19, in line with our estimates by achieving 72.5% run-rate against the full-year projection. Solid top-line growth was mainly supported by the double-digit growth in the sales of fiber by 36.4% YoY, with a contribution to total net sales reached 79%, up from 74% recorded in 9M18. **We believe the increase was due to growing demand from export, representing around ~30% of total revenue, as the company manages to capture the opportunity from China's waste import ban and the country's ongoing trade conflict with the US.** The sales from homeware segment declined by -22.5% YoY, we suggest that it was caused by the shifting in sales mix as 68.1% are sold directly to its customer, while 31.9% are sold to affiliated parties in 9M19, lower compared to 34.8% in 9M18. Sales of non-woven products grew by 12.0% YoY and become the second-largest contributor to total net sales with 16%, relatively stable from 18% in 9M18 along with its versatility to be used in various industries such as geotextile and automotive.

Production capacity expansion. The company increased the Re-PSF production capacity for the Tangerang Plant from 850 tons per year in 2018 to 10,200 tons and also the Mojokerto Plant from 8,250 tons to 13,200 tons. This had led to an increasing raw material cost as the plant require higher grade and larger volume of waste PET bottle. As a result, the gross profit margin was down to 19.2% in 9M19 from 26.4% in 9M18 and resulting gross profit to decline by 6.9% YoY to IDR 73bn. Nevertheless, operating profit was jumped by 109.4% YoY to IDR 48bn, supported by the gain on foreign exchange amounted to IDR 17bn. Net profit came in at IDR 24bn with a stellar growth of 424.6% YoY, representing 74% of our full-year estimates.

Innovate the supply chain. Recently we visited INOV's Tangerang Plant and learned that the company will continue to increase its production capacity to anticipate increasing demand from domestic and also the global market, amid the rising awareness for environmental issues. Besides that, INOV will build new washing facilities located in Lampung to increase the efficiency of its raw material management. Furthermore, INOV to launch a payment platform "Plasticpay" to improve its supply chain process and reduce its raw material cost. The application provide an incentive and encourage people to collect their waste and recycle it, and get a reward or credit that could be used for transaction.

Valuation. On the back of INOV's solid domestic market position for Hollow Conjugated Re-PSF with a market share above 40% and the support from Indonesian Hilon Group as the parent company, we recommend buy in INOV. Strong relationship with its key customers, which consists of notable companies in Indonesia, provide another competitive advantage for INOV, in an already high barriers to entry industry, to ensure the growth in the future. **We derived our TP at IDR 478 (19% upside) based on blended DCF method. Our TP also implies the 2020 PE at 26x which is below the industry PE at 29x.**

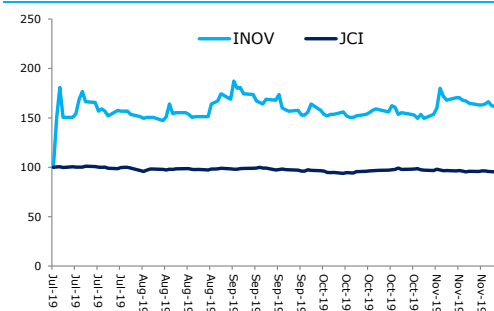
| Year to Dec. | Sales (bn IDR) | OP (bn IDR) | Pre-tax (bn IDR) | NP (bn IDR) | EPS (IDR) | BPS (%) | PER (IDR) | PBR (%) | ROE (%) |
|--------------|-------------------|----------------|---------------------|----------------|--------------|------------|--------------|------------|------------|
| 2017 | 327 | 30 | 20 | 15 | 8 | 75 | N/A | N/A | 10.8% |
| 2018 | 396 | 46 | 22 | 16 | 8 | 83 | N/A | N/A | 10.3% |
| 2019F | 524 | 64 | 44 | 33 | 16 | 171 | 25.1 | 2.4 | 12.9% |
| 2020F | 631 | 69 | 46 | 34 | 17 | 188 | 24.1 | 2.2 | 9.5% |
| 2021F | 724 | 79 | 52 | 39 | 19 | 207 | 21.3 | 2.0 | 9.8% |

Source: Company, Shinhan Sekuritas Indonesia

Buy

| | |
|-----------------------------|------------|
| Current Price (IDR) (25/11) | 400 |
| Target price (IDR) | 478 |
| Upside/Downside (%) | 19% |
| 52 Week High (IDR) | 480 |
| 52 Week Low (IDR) | 340 |
| Major Shareholders: | |
| PT Hilon Indonesia | 45.54% |

Stock Price Movement



Source: Bloomberg, Shinhan Sekuritas Indonesia

Billy Ibrahim
+6221 80869900
billy.ibrahim@shinhan.com

Helmi Therik, FRM
+6221 80869900
helmi@shinhan.com

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Table of Contents

| | |
|--|----|
| Investment Case | 4 |
| PT Inocycle Technology Group Tbk background | 5 |
| Steady growth of global demand | 7 |
| Apparel in the new era to be more environmental friendly | 8 |
| Indonesia consumption of polyester staple fiber | 9 |
| Indonesia non-woven automotive consumption | 10 |
| Indonesia non-woven in construction and civil works demand | 11 |
| Indonesia non-woven hygiene | 12 |
| Indonesia apparel and clothing market growth | 13 |
| Indonesia bedding consumption | 14 |
| Production process | 15 |
| Dominant market share in Indonesia Re-PSF industry | 16 |
| Virgin PSF and Re-PSF price trend | 17 |
| Financial projection | 19 |
| Key risks factors | 22 |

Investment Case

PT Inocycle Technology Group Tbk (INOV) engages in the production of Polyester Staple Fibers (PSF), which widely used in weaving non-woven. The company's PSF and Non-woven have a variety of uses in the textile, automotive, mining, construction, agriculture, manufacturing, and infrastructure industries. The bedding goods remains dominates the demand or about 45% of the total usage. However, the growing application in several sectors would increase the usage of Re-PSF ahead.

Robust growth of domestic consumption. The demand for the staple fiber in Indonesia is estimated to increase along with the increasing GDP growth and the huge population which could be translated in rising spending. The total polyester staple fiber consumption reached 814 kilotons in 2017 and estimated to grow by 7% to 871 kilotons in 2018 and 931 kilotons in 2019 by assuming the annual growth at the same growth path. This would provide a decent opportunity for the company to grow further.

Vertically integrated that creates synergetic value. As a group, the company has set the business model vertically integrated which creates the synergistic value chain to ensure the stability, efficient production, maintenance and quality control in each business process. This would be the comparative advantage the company has to compete and also to penetrate the market both domestically and internationally.

Higher capacity to penetrate the export market. The capacity expansion has opened the opportunity for the company to increase the export portion. The capacity reached 33,600ton/year. This provides the space for the company to penetrate the export market and would increase the export portion to 30% of the total revenue, from 0% last year.

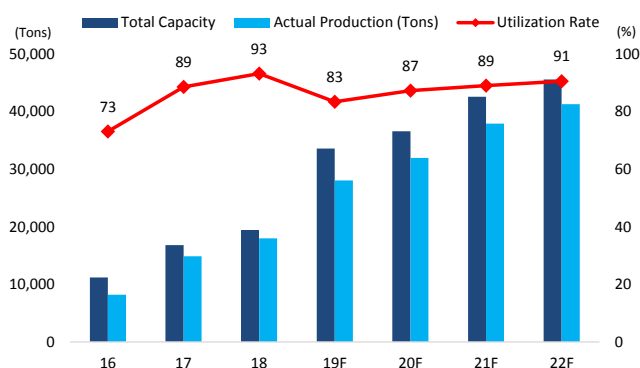
Well-positioned of the company that produces the recycle material to conserve and maintain the environment from further deterioration. The world has been gradually changing, and the concern for the environmental issue has gained its momentum. It was seen in the global trend in the textile industry to use recycled material to address the issue of environmental sustainability. This could be one of the growth drivers for the company like INOV that produce the recycle polyester staple fiber and would make it at the well positioned to capture this global trend in the future.

PT Inocycle Technology Group Tbk background

PT Inocycle Technology Group Tbk (INOV) is part of the Indonesian Hilon Group which was founded 40 years ago. It has been a long journey for the company to increase its core competence in this industry. Non-woven product is its core or the main product that could be used in many industries such as mining, construction, infrastructure, garment, and automotive. The company basically produces Recycle Polyester Fiber (Re-PSF) that used bottle flake as the raw material and thus will contribute to the economic and environmental sustainability. INOV sources the bottles from Australia and Indonesia. The company sources the bottle from Australia and then export back as PSF to cater to the Australian bedding Industry. To strengthen the supply chain, INOV plans to set up a payment platform so-called "Plasticpay" to collect bottles across Indonesia directly. Through this platform, the company would provide an incentive for the people to collect their plastic bottle waste and directly could contribute to reduce and recycle the waste while at the same time create the monetary benefit for the people. In 2018, the company has 1,608 tons per month of capacity production, which could be enhanced or scale up factories in different cities. The Re-PSF products are exported to Australia, China and the international market besides selling locally. The market diversification would make the company in a better position to capture the demand both domestically and globally.

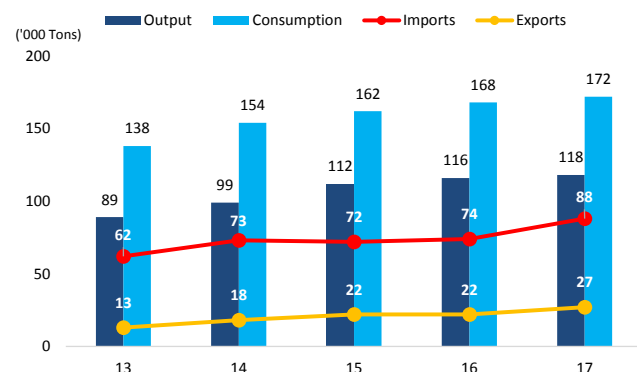
In Indonesia, INOV was first established in 2001 with the name of PT Hilon Felt, while the significant development was started in 2011 by establishing Karanganyar, Klaten and Semarang branch. The Karanganyar plant started in the same year with a total capacity of 600 tons/month. Palembang and Salatiga were the third and the forth branch and also production plant that sets up at 2013. By 2014, the Karanganyar plant has increased its capacity to 850 tons/month. In 2016 the company operated its new plant at Mojokerto with 688 tons/month of total capacity. Tangerang plant has also started production since 2016 with a total capacity of 71 tons/month. Thus, currently, the company runs the plant with a total capacity of 1,608 tons/month. The factories are geographically dispersed and have nationwide networks to respond quickly and efficiently to shipping and market requirements.

Total capacity production and utilization rate



Source: Company, Shinhan Sekuritas Indonesia estimation

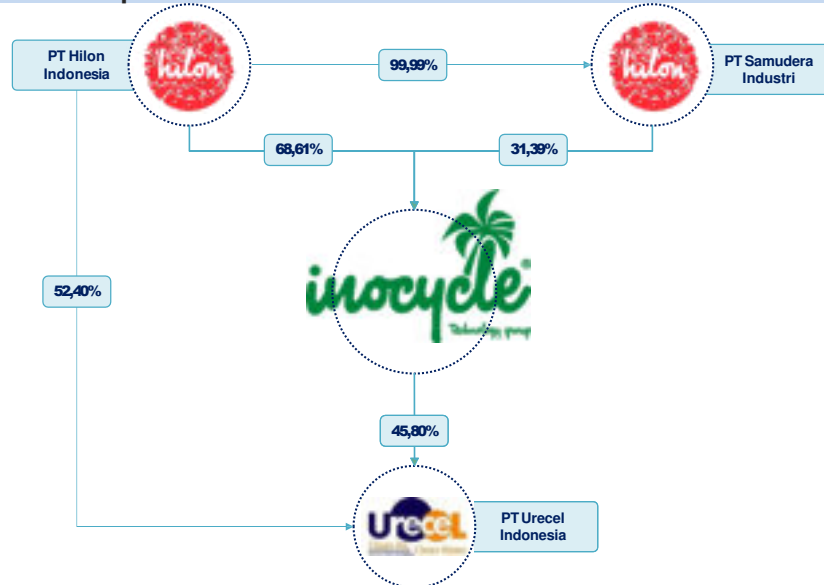
Indonesia non-woven consumption in kilotons



Source: Company, Shinhan Sekuritas Indonesia estimation

As a group, the company has set the business model vertically integrated, which creates a synergistic value chain to ensure the stability, efficient production, maintenance, and quality control in each business process. This would be the competitive edge the company has to compete and also to penetrate the market both domestically and internationally.

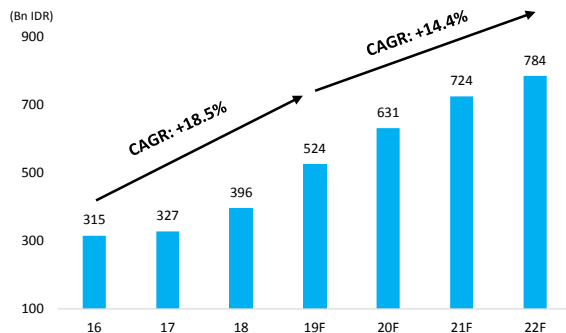
Inocycle ownership structure



Source: Company, Shinhan Sekuritas Indonesia

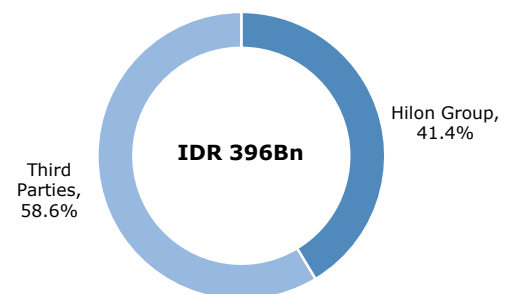
The company's primary business is the production and sales of Re-PSF. It purchases waste PET bottles as its main raw material and directly produces Bottle Flake, which is used as raw material for Re-PSF. Re-PSF accounted for about 75.7% of total sales in 2018. In addition to Re-PSF, INOV directly produces and sell some non-woven products and some household items such as bedclothes that are made from Re-PSF. In other words, INOV has established its business vertically integrated that covered upstream and downstream business of PSF to ensure the stability of the production and business process. INOV revenue is mainly driven by the sales of Re-PSF that come from 41.4% of related parties and 58.6% of third parties in 2018.

Revenue growth forecast



Source: Company, Shinhan Sekuritas Indonesia

Revenue breakdown in 2018



Source: Company, Shinhan Sekuritas Indonesia

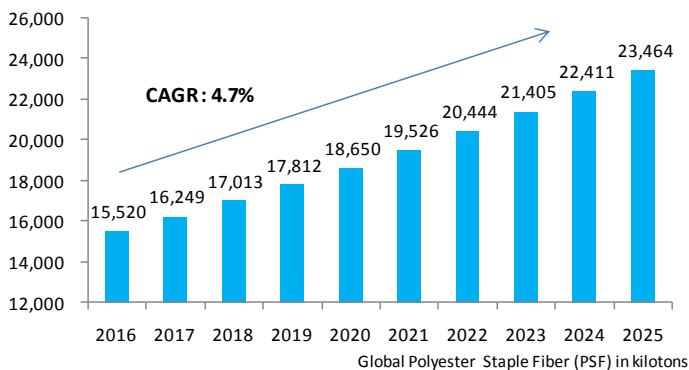
Steady growth of global demand

Global consumption of polyester staple fiber (PSF) is expected to continue with the total consumption of 17,812 kilotons in 2018. It is forecasted to increase by 4.7% annually to 23,464 kilotons in 2025 on the back of the various usage and the application of the polyester fiber in many sectors beyond the textile industry such as in building construction sector, automotive, home furnishing and civil works.

The new awareness of the environmental issue has contributed to the improving demand in the recycled staple fiber, especially for sustainable textile usage. The behavior toward the usage of sustainable material is believed would gain the increasing demand gradually. This trend would benefit the manufacturer that produces the product from the recycle material, especially for Re-SPF.

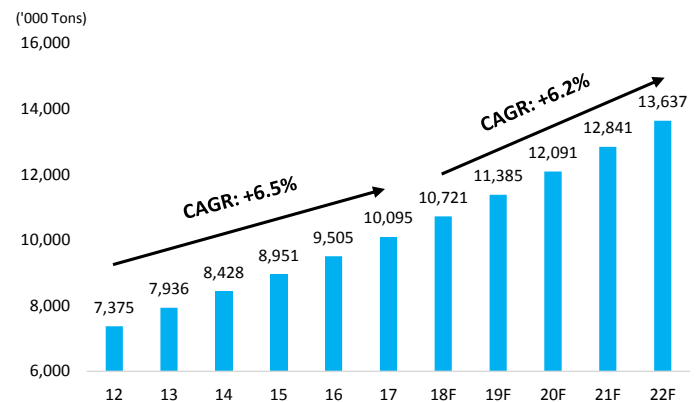
Polyester as the substitute for cotton has many advantages. The PSF is strong, can withstand repetitive movement, and is resistant to stretching, shrinking, or mildew. PSF can easily retain heat and is resilient when wet or dry. As PSF is hydrophobic, it can be used in wet or damp environments. The PSF, moreover, when molded into any shape will not wrinkle but present insulating properties. This is the uniqueness of the PSF that increasingly applied in many areas including fiber filling, automotive, textiles, filtration, and home furnishing. The wide usage of PSF has made the growth of the PSF consumption increase faster than population growth, but slightly in line with the GDP growth as reflected in the global consumption. The global non-woven consumption witnessed robust growth despite the modest GDP growth in the last 5 years. The global non-woven consumption is estimated to grow by 6.2% (CAGR) going forward to 13,637 kilotons in 2022.

Global Polyester Staple Fiber (PSF) consumption forecast (in kilotons)



Source: Company, Shinhan Sekuritas Indonesia

Global Non-woven consumption forecast (in kilotons)



Source: Company, Shinhan Sekuritas Indonesia

Apparel in the new era to be more environmental friendly

The world has been gradually changing, and the concern for the environmental issue has gained its momentum. One of the global brand, such as Nike since 2018 has started to produce its shoes and apparel by utilizing recycled PET plastic bottles as the material to reduce energy consumption by estimated 30% compared to manufacturing virgin polyester. The trend for using the recycled polyester could also be seen at another UK shoe brand company, so-called "Vivobarefoot". The company released its shoe collection that turns approximately 17 throw-away plastic bottles into a new pair of shoes. "Adidas" as the global sportswear brand has started to produce 5mn of the footwear from recycled plastic water bottle in 2018 and 11mn shoes at 2019. The company plans to get rid of virgin polyester by 2024. "New Sky" as another brand under "New Balance" has also used Re-PSF that made from 8 plastic bottles to produce a pair of shoes for its brand. The sustainability material in apparels would be one of the growth drivers for the company like INOV that produce the recycled polyester in the future. INOV has been well positioned to capture this global trend toward environmentally friendly material producer.

Nike uses re-cycle PET plastic bottle to reduce energy consumption by 30%



Source: www.soccerbox.com

Adidas aims to use recycled material for all its products by 2024 or increased from current uses



Source: www.ecowatch.com

"Vivobarefoot" used Re-PSF from 17 plastic bottles to produce a pair of shoes



Source: www.vivobarefoot.com

"New Sky" uses 8 plastic bottle (Re-PSF as the derivation of PET plastic bottle) to produce a pair of shoes



Source: <https://inhabitat.com>

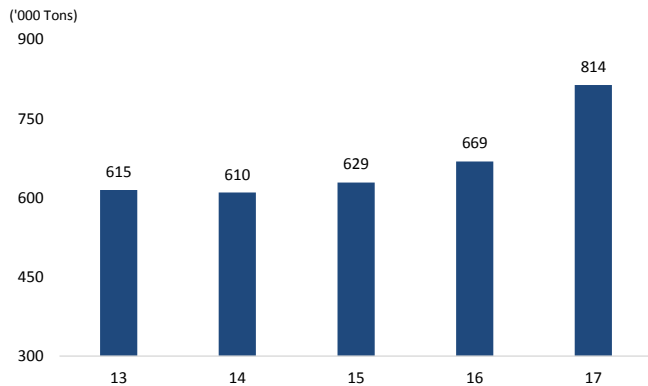
Indonesia consumption of polyester staple fiber

The demand for the staple fiber in Indonesia is estimated to increase along with the higher GDP growth and the considerable population which could be translated in the rising spending. The total polyester staple fiber consumption reached 814 thousand tons in 2017 and estimated to grow by 7% to 870 thousand tons in 2018 by assuming the annual growth at the same growth path. The Virgin PSF and Re-PSF are in substitutable or compete with each other. However, the Re-PSF are inexpensive compared to Virgin PSF due to the stabilization of the raw material cost. The Virgin PSF is a derivative product of oil. This makes the price of Virgin PSF fluctuates in line with the oil price movement or more sensitive toward the oil price shock. This is different from Re-PSF which is less sensitive to the oil price shock due to its cost component that comes from the waste bottle flake. The collection cost and the availability of the waste bottle flake (PET) as well as the regulation toward the waste are the main factors that have a major impact in the bottle flake (PET) as the primary raw material of Re-PSF.

In a global context, the price of the PET bottle flake remains at a low level due to the Chinese government regulation to ban the import of PET, which implying the higher supply of the PET at Asia that has pushed the PET price lower. The price differential between Re-PSF and Virgin PSF was around 10% which lead the Re-PSF more competitive compared to Virgin PSF.

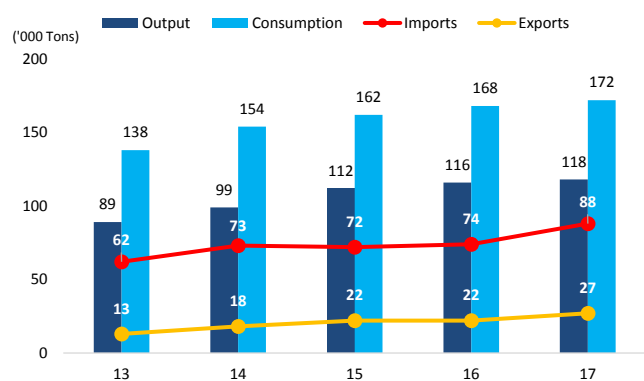
From the demand side, the total consumption of the Re-PSF is still low but growing. The portion of Re-PSF consumption to the total polyester staple fiber in Indonesia is about 17% or at 138 thousand tons. The demand for the Re-PSF in Indonesia can be described through its various applications of non-woven consumption in Indonesia in the automotive sector, construction, and civil works, bedding, and apparel sector. The availability of the raw material, competitive price of the Re-PSF and the growing demand are the supporting factor for INOV to develop and improve its business further.

Indonesia PSF consumption in kilotons



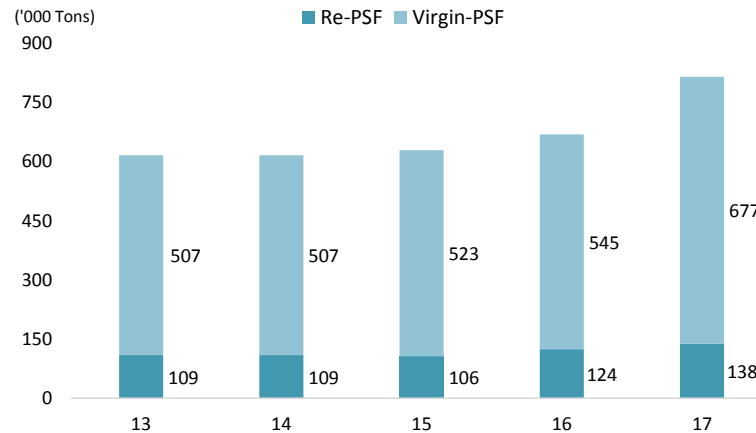
Source: Company, Smithers Apex, PwC Analysis, Shinhan Sekuritas Indonesia estimation

Indonesia non-woven consumption in kilotons



Source: Company, Smithers Apex, PwC Analysis, Shinhan Sekuritas Indonesia estimation

The composition usage of Re-PSF vs Virgin PSF consumption in Indonesia

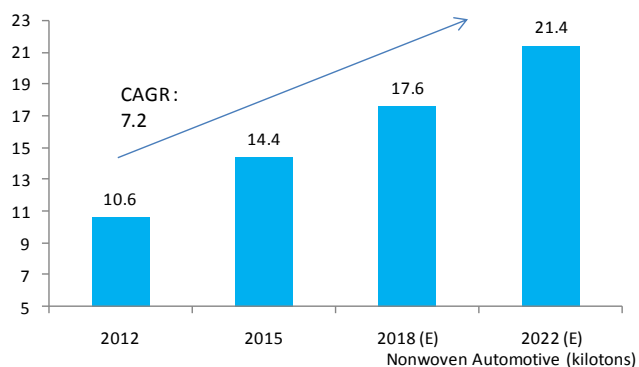


Source: Company, Smithers Apex, PwC Analysis, Shinhan Sekuritas Indonesia estimation

Indonesia non-woven automotive consumption

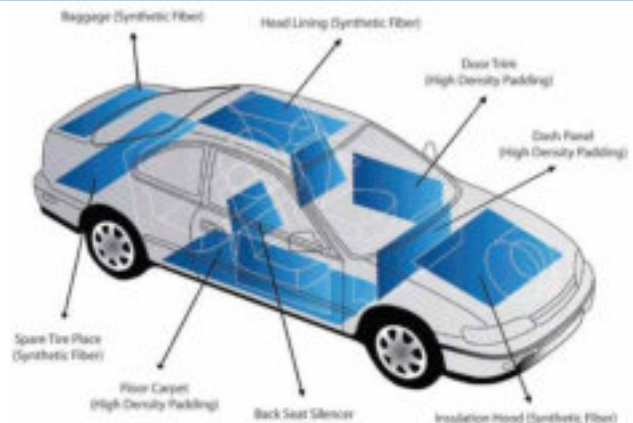
The demand would be boosted by the increased usage of the staple fiber application which would grow along with the automotive industry, due to the usage of staple fiber as the main material for headlining, door trims, insulation hood, and floor carpet. The increased car ownership in Indonesia on the back of the growing middle income amid the underpenetrated market in Indonesia would boost the demand for the non-woven material. The total motor vehicle ownership per 1000 inhabitants in Indonesia is at 87 or below other Asian countries such as Singapore or Malaysia at above 147 vehicles per 100 inhabitants, which points to the ample room for the Indonesia automotive industry to grow further. The car sales grew by 5%, while the non-woven automotive is expected to record 9.3% CAGR until 2022 or would reach 25.7 kilotons from 2018 that estimated at 17.6 kilotons. This provides the room for the Re-PSF producer such as INOV to grow further. INOV as a group has catered the several automotive brands in Indonesia such as Toyota, Honda, Daihatsu, Suzuki, Mitsubishi, and Nisan through its non-woven product for automotive that used the re-PSF as the primary material.

Estimated Indonesia non-woven automotive consumption in kilotons



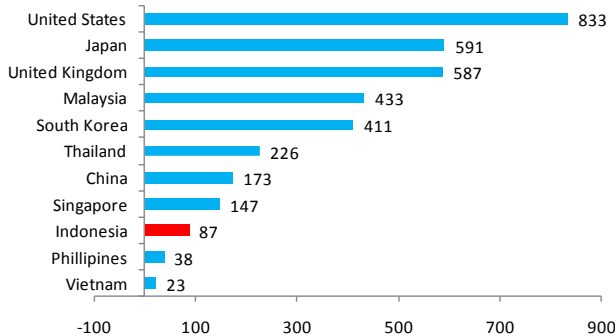
Source: Company, Smithers Apex, PwC Analysis, Shinhan Sekuritas Indonesia estimation

INOV's product in automotive



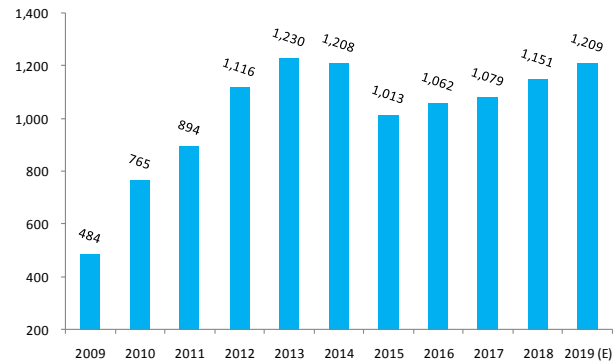
Source: Company

Number of motor vehicle including car per 1000 inhabitants. Indonesia motor vehicle is below the other Asian countries



Source: en.wikipedia.org, Shinhan Sekuritas Indonesia

Indonesia car sales growth witnessed modest growth

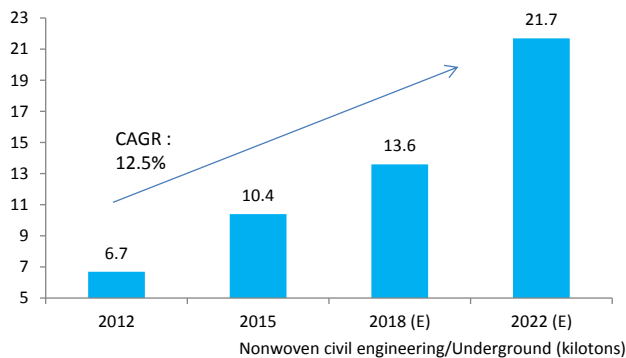


Source: Bloomberg, Shinhan Sekuritas Indonesia

Indonesia non-woven in construction and civil works demand

The consumption of staple fiber in Indonesia would also be exposed to the growth of the building construction and infrastructure by the government or private investment due to the application of the staple fiber as the geotextile industry. The non-woven consumption in Indonesia is estimated to reach 21.7 kilotons in 2022 by assuming the same growth path since 2012 at 12.5%. The application of the geotextile on which the PSF as the primary material is used as the separator, filtrating, drainage, stabilizer, and also strengthens the land in the civil works. Several projects that have used the INOV's geotextile product were: 1) Road curing at Prof.Dr.Ir.Sedyatmo Toll road, Jakarta, 2) Curing Barrier for Cipali Toll Road, 3) Double railway train separator from Bojonegoro-Surabaya, East Java, 4) Double Track railway Serpong-Manggarai, 5) Integrated shore base at Lamongan-JawaTimur.

Indonesia non-woven consumption in civil engineering in kilotons



Source: Company, Smithers Apex, PwC Analysis, Shinhan Sekuritas Indonesia estimation

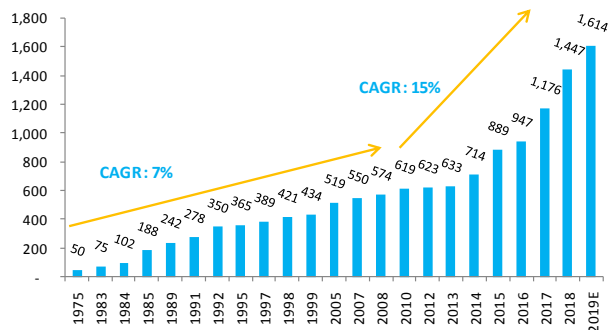
INOV's geotextile product application in civil works



Source: Company

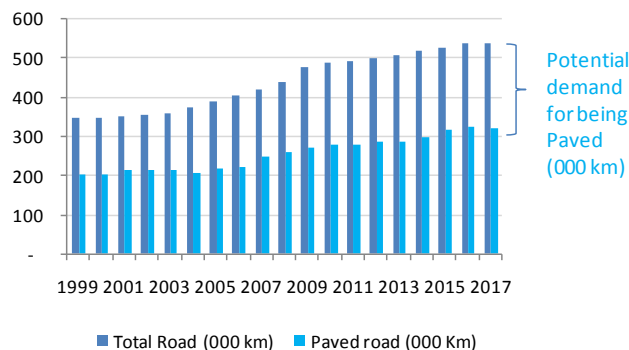
The potential for the geotextile demand is expected to increase steadily along with the infrastructure development in Indonesia. Based on the data from Indonesia central statistical bureau, the total unpaved road in Indonesia was at 40% or 218,260km that need to be paved which implicitly describe the potential demand for the geotextile ahead. The toll road development in Indonesia has also increased for the last 5 years with the total CAGR growth at 15% or double than the historical growth at 7% on the back of the government policy to build the connectivity and reducing the logistic cost through the toll road development. This also provides the opportunity for the geotextile product and Re-PSF as the main material to grow further.

Toll road development has increased with the total CAGR growth at 15%



Source: <http://bpjt.pu.go.id>, Shinhan Sekuritas Indonesia

Indonesia car sales growth witnessed modest growth

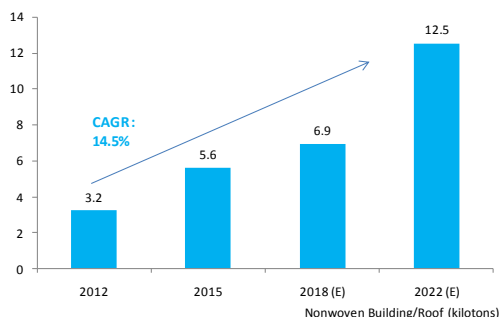


Source: BPS, Shinhan Sekuritas Indonesia

The total estimated Indonesia non-woven consumption for civil engineering in 2018 was at 13.6 kilotons and expected to grow by 12.5% to 21.7 kilotons in 2022. The various applications in the construction and civil works have driven the geotextile demand to increase beyond the GDP growth.

The non-woven demand in building construction is also estimated to grow driven by the residential and commercial building. The city development and the new property project would drive the demand for the non-woven textile as the supporting material. INOV and Hilon Group have several products to serve the building and construction such as thermal insulation pad (roll), acoustic insulation panel (sheet), flexible duct wrap (roll) and a Hvac air condition linear building construction. The potential demand in Indonesia for non-woven building/roof is estimated at 6.9 kilotons or grows by 13.6% (CAGR) since 2012 at 3.2 kilotons. The consumption of non-woven building/roof is expected to increase by 12% (CAGR) to 10.85 kilotons at 2022 or reflecting 2.x of GDP growth as reflected in the historical pattern.

Indonesia non-woven Building/ Roof consumption in kilotons



Source: Company, Smithers Apex, PwC Analysis, Shinhan Sekuritas Indonesia estimation

INOV polyester insulation product for roof building

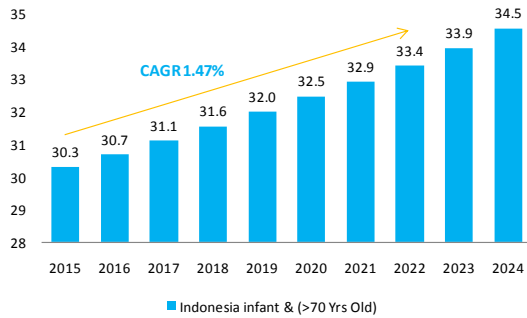


Source: Company, Shinhan Sekuritas Indonesia

Indonesia non-woven hygiene

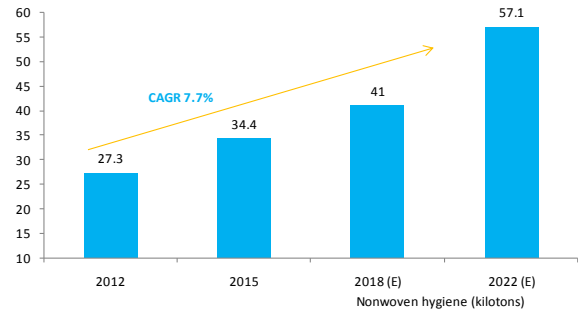
The potential growth is also coming from non-woven hygiene that has been grown by 7.7% to 57.1 kilotons at 2022 from 2018 at 41 kilotons. The potential demand from non-woven hygiene is believed would be expanded further on the back of the growing Indonesia population of infant and adult above 70 years old that at 31.6mn last year and forecasted to pick up by 1.4% CAGR to 34.5mn people at 2024. This segment would need the non-woven hygienically as a material for diaper both for adult and infant.

Indonesia infant and adults above 70Yrs old population estimation



Source: BPS, Shinhan Sekuritas Indonesia

Indonesia non-woven hygiene (kilotons)

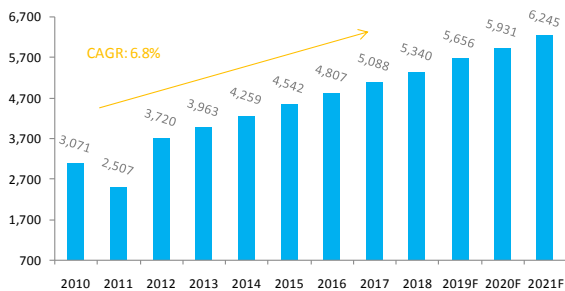


Source: Company, Smithers Apex, PwC Analysis, Shinhan Sekuritas Indonesia estimation

Indonesia apparel and clothing market growth

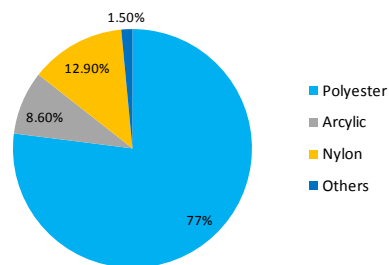
The application of the PSF as the substitution to the cotton in the apparel market is estimated to grow steadily. The INOV as the Re-PSF producer has become the prominent supplier of non-woven materials in Indonesia, ranging from jackets, shoes, hats, and bags. The middle-income class growth and the large population would provide a sizeable opportunity for the INOV to expand its business. The total market size as indicated by apparels revenue in Indonesia for male and female amounted to USD 5.340mn in 2018 or up by 5%yoy. The total apparel market size is estimated to grow by 5.9% to USD 6,245mn in 2021 by assuming the same pace growth. The polyester remains the dominant material in the textile that absorbs 77%, which points to the room for the Re-PSF to increase the share gradually.

Indonesia market size for female and male in mn USD



Source: Bank Indonesia, Shinhan Sekuritas Indonesia

Polyester contributed 77% of the total apparel material



Source: www.fibre2fashion.com, Shinhan Sekuritas Indonesia

INOV padding product to produce jacket



Source: Company

INOV padding usage for bulky, warm and smooth used for jacket

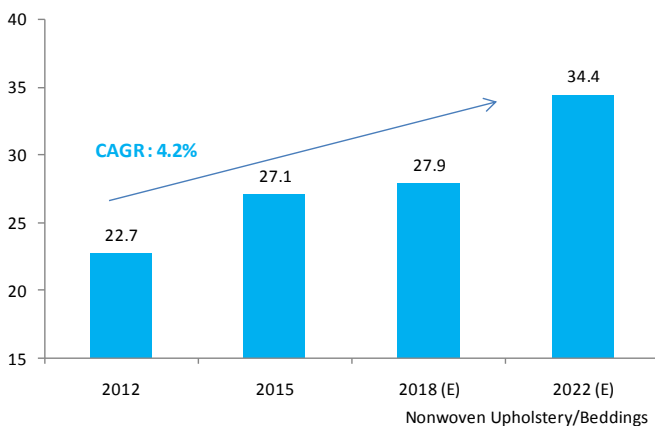


Source: Company

Indonesia bedding consumption

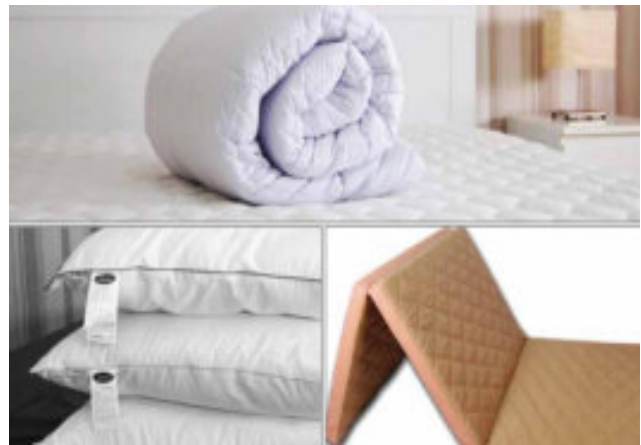
Indonesia bedding related product and mattress as the application of recycled polyester fiber and garment fabric is estimated to increase by 4.3% CAGR from 27.9 kilotons at 2018 to 34.4 kilotons in 2022. The growth of hotel and tourism has also triggered the demand for the bedding goods product. INOV and Hilon as a group has produced quick dry foam as the outdoor cushion that commonly used by the hotel as its outdoor furniture. The versatility application of the recycled polyester in Indonesia could support the outlook for the company to grow steadily. INOV bedding product has many accessories include pillows, bolsters protector, bed cover, duvet, mattress protector which has sold at modern market and traditional market in Indonesia. INOV claimed that 70% of the spring bad producer in Indonesia used its non-woven product such as King Koil, Spring Air, and Lady Americana. INOV, thus on the good position to capture the opportunity as the recycle polyester producer.

Non-woven Upholstery/Beddings consumption



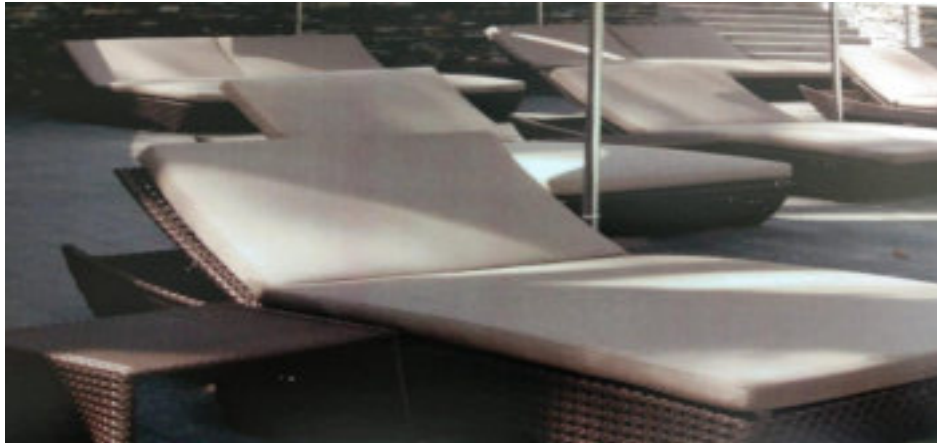
Source: Source: Company, Smithers Apex, PwC Analysis, Shinhan Sekuritas Indonesia estimation

Polyester contributed 77% of the total apparel material



Source: Company

INOV quick dry foam product that use UREGARD anti-microbial protection that already exists in the foam formulation to prevent mold growth in the outdoor cushion



Source: Company

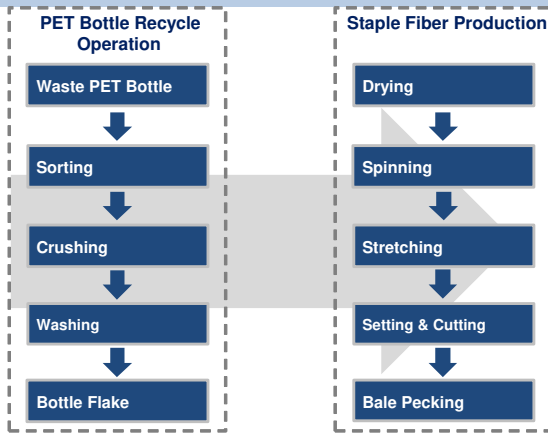
Production process

INOV engages in the production of PSF, which widely used in weaving non-woven. The company's PSF and non-woven have a variety of uses in the textile, automotive, mining, construction, agriculture, manufacturing, and infrastructure industries. Based on the source of its raw material, PSF can be categorized as Virgin PSF and Re-PSF. The production of Virgin PSF begins by the obtaining of polyethylene terephthalate (PET) polymer at one continuous line. PET production involves etherification of terephthalic acid (PTA) and monoethylene glycol (MEG) to produce the compound ester monomers, followed by polycondensation. The fluctuation of crude oil prices would affect the price of Virgin PSF, as PTA and MEG are derivative petrochemicals obtained from crude oil.

Re-PSF is a synthetic fiber made from PET waste and post-consumed PET bottles. Recycling of PET waste and used PET bottles is essential to maintain the cleanliness of the environment. The rising awareness regarding the environmental impacts of plastic, which takes an average of at least 450 years to degrade, has increased the used of PET bottles in manufacturing PSF. INOV used waste PET bottles as the raw material for Re-PSF, which collected through the company's vast supply chain and collaboration with waste collectors. In the manufacturing process, waste PET bottles were sorted out and separated by color and plastic type to avoid contamination. After the sorting process is finished, the raw materials are then crushed into flakes and are then washed and sterilized to remove further impurities in the PET bottle flakes.

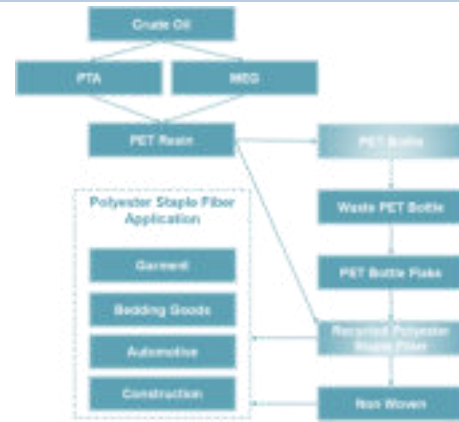
These flakes are then dried to take out surface inherent moisture and flakes becomes soft and crystallized. Then the dried flakes are taken to the spinning process to make either Hollow or Solid type of the PSF. INOV is able to produce PSF Hollow Conjugated Siliconized, Hollow Conjugated Non Siliconized, Solid White Regular, Solid Black Regular, Flame Retardant Fiber, Anti Fungy Fiber, and also Polypropylene Staple Fiber for PPSF Solid White and Black. The next step is the raw material are stretched several times to make the fiber. These fibers are then dried and cut in various length before bale packing. The Re-PSF is mainly used for Non-woven fabric with various applications for garment, bedding goods, automotive, and construction. INOV directly sells some of its Re-PSF and Non-woven products, which means the company has established a vertical integration business model that covers the upstream and downstream business of producing PET bottle flakes and also finished goods in the form of Re-PSF and Non-woven product.

Polyester Staple Fiber Manufacturing Process



Source: Company, Shinhan Sekuritas Indonesia

Recycle Polyester Staple Fiber Value Chain

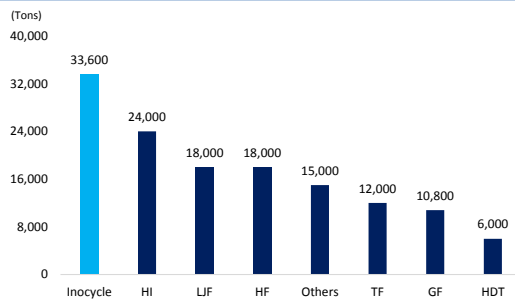


Source: Company, Shinhan Sekuritas Indonesia

Dominant market share in Indonesia Re-PSF industry

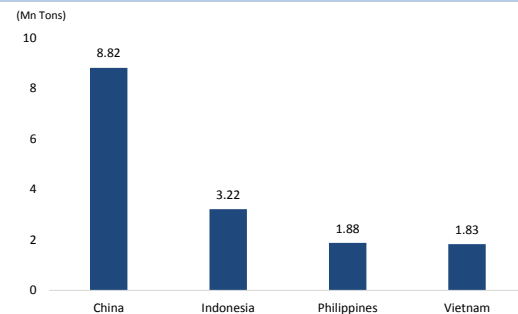
The production capacity until the end of 2018 reached 19,300 tons per year. The company plans to expand its production capacity to 33,600 tons per year in 2019. The expansion will be supported by factory expansion in Tangerang, which started to operate last year with a total production capacity of 850 tons, and expected to reach 10,200 tons this year. Besides that, INOV also owns factories located in Karanganyar and Mojokerto with a combined production capacity of 18,450 tons per year in 2018. Meanwhile, total actual production in 2018 stood at 18,006 tons with a factory utilization rate of 93%. INOV market share in domestic Re-PSF market estimated at 20% based on the annual production capacity. Meanwhile, based on the factory utilization rate and sales volume, the company's market share reached 25% in Indonesia. The company's dominance in the domestic market, especially for Hollow Conjugated Re-PSF, is expected to continue to increase along with the expansion strategy through the higher factory production capacity. In the midst of high competition environment, INOV's geographically dispersed factories become the competitive advantage to maintain its market share, as currently, the company owned production facilities located in Karanganyar, Mojokerto, Tangerang, Salatiga and Palembang. The nationwide networks make INOV closer to the source of demand. INOV manages to respond quickly and efficiently shipping the products to meet the market requirements.

Annual Production Capacity Compared to Peers (2019F)



Source: Company, Shinhan Sekuritas Indonesia

Global Sources of Plastic Trash

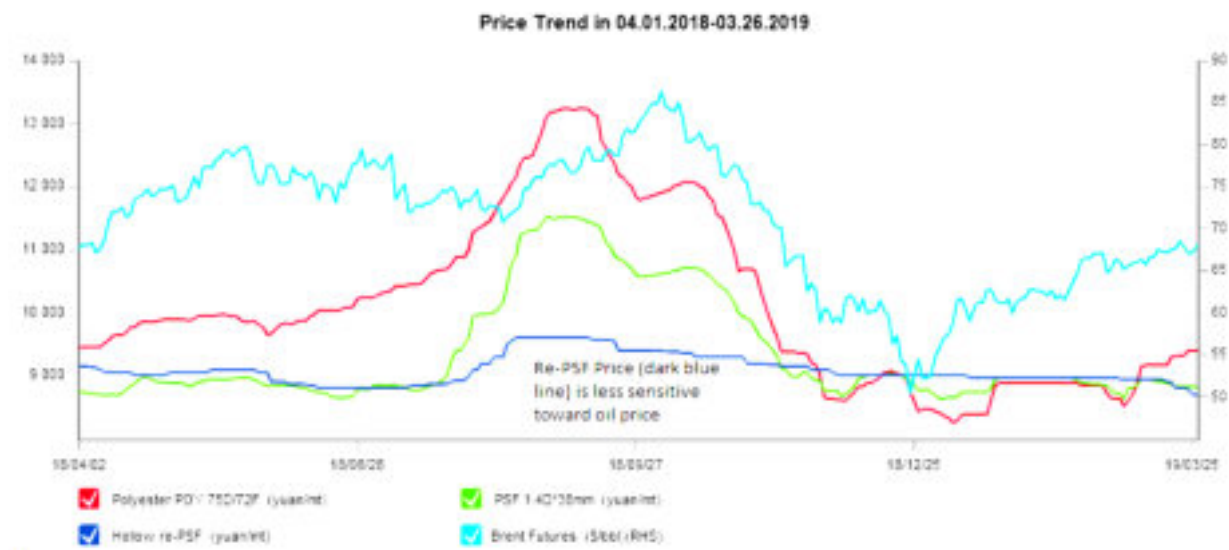


Source: Various Sources, Shinhan Sekuritas Indonesia

Virgin PSF and Re-PSF price trend

The average sales price of the global Virgin PSF and Re-PSF is similar to the price in China. In 1H17, the price of Virgin PSF was falling to USD 1.2 per Kg from USD 1.8 per Kg in 2013. Re-PSF average sales price also dropped from USD 1.7 per Kg to USD 1.1 per Kg. Nevertheless, the price was started to recover gradually to USD 1.2 per Kg in 2H17. The fluctuation of Virgin PSF price is also influenced by the price of crude oil. The increase of crude oil price will influence PET Chip price, which will also propel the Virgin PSF price, as a result, Re-PSF price is likely to rise as well. The current price trend showed that Re-PSF is sold at around 7.7% lower than Virgin PSF. The attractiveness of Re-PSF price and cost competitiveness also supported by Indonesian government efforts to boost the demand of domestic Re-PSF, to tackle the environment issue, by encouraging the recycling of waste PET bottle as part of plans to reduce marine plastic waste around 70% by 2025. Indonesia is ranked 2nd as the top sources of plastic trash with 3.22 million metric tons, only behind China with 8.82 million metric tons.

Polyester Staple Fiber Historical Price Trends



Source: China Chemical Fiber Group

Virgin PSF and Re-PSF are less expensive compared to the other chemical fibers. However, Virgin PSF usually cost higher than Re-PSF due to its high sensitivity to the fluctuation of oil price as its raw material. On the other hand, Re-PSF cost competitiveness is secured by more stable raw material costs, which is a PET bottle waste gathered from the waste collector. Yet, Virgin PET resin is to set a price ceiling for Re-PSF. Moreover, the global PET waste price expected to decline due to the Chinese government's waste PET import regulations introduced in 2018. Indonesia is the largest PET waste exporter to China from SEA countries. As a result, Indonesia Statistics show a 48% YoY decreased of plastic and waste scrap in 2018, creating additional plastic waste to be recycled. The abundant amount of raw material will push the PET bottle waste price lower and help to increase the margin of Re-PSF.

China import policy to boost Re-PSF price

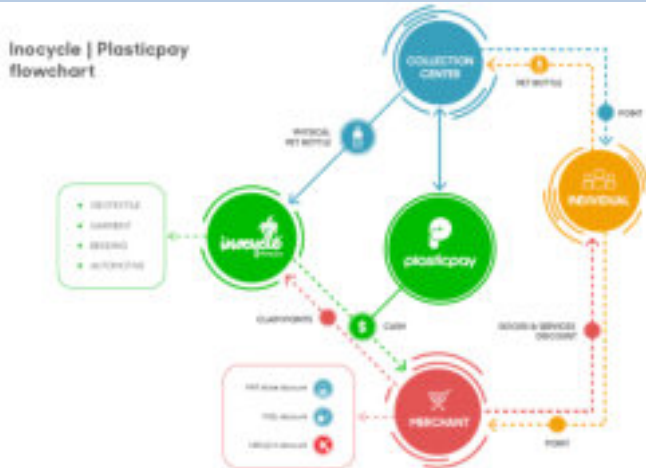
China has announced the policy to ban the import of 32 types of waste and scrap material, including waste PET bottle and also PET bottle flakes in 2018. The regulation in China is expected to drive Re-PSF price higher and offered an opportunity for exports. In the global PSF market, China production is the largest with a proportion of 59% of the total global production. However, China's Re-PSF industry is highly dependent on imports as the country imports about half of its raw material needs. It is expected that the supply of Re-PSF in the global market to decrease due to China's waste plastics import regulations. The shortage of supply that arise along with China declining production volume, expected to boost the price of Re-PSF. This situation will benefit INOV to fulfill the potential demand for export. Indonesia currently ranks 6th in terms of Re-PSF export volume compared to the other global PSF exporter, but Indonesia recorded the highest export CAGR 2013-2017 of 17.6%. Indonesia Re-PSF exports proportion recorded at 4.1% of the total domestic production volume and estimated to increase to 6.0% as the decline in China's export of Re-PSF to the global market expected to be fulfilled by Indonesia. INOV plans to capitalize on the opportunities by increasing the contribution of export sales from ~20% to reach 50%. The export price of the company's Re-PSF for export is maintained at USD 1.3 per kg, which is around 15% higher compared to the domestic sales price and also provide higher profitability.

INOV plans to develop a payment platform to enhance the supply chain while at the same time contributes to conserve the environment through the "Plasticpay"

Total plastic bottle waste recorded as the second largest in the world. This, on the other hand, could be a serious problem for environmental sustainability. The marine waste would deteriorate the nature and the habitats. The plastic waste in the marine could be split into 0.3mm to 0.5mm or so-called micro plastic that easily can be consumed by the sea animal like fish. The total plastic waste, as mention earlier, was about 3.2 metric tons and estimated to increase along with the growing population, higher income, and consumption. The waste its self by nature would not be reduced, but even will increase. This would create social, ecological, and economic problem going forward. It needs a creative breakthrough to reuse the waste and recycle them into the new material that can be used to fulfill the variety of consumption. The waste plastic bottle is the raw material needed to produce Re-PSF. To bridge this problem, the company plans to launch the payment platform to collect the waste plastic bottle by providing an incentive to the people and encouraging them to collect their waste and saving the reward based on the volume they collect that could be used for the transaction. For the company, it could help to enhance the waste PET bottle collection to strengthen its supply chain by cutting the supply chain and thus reduce the collection cost. For the people and the society, it could help to monetize the waste that could give the monetary value. For nature, this would be part of the effort to reduce and reuse the waste to prevent and maintain the environment from further deterioration.

The company would also sell the plastic chip to export market or the domestic market as the raw material if the supply of the raw material exceeds their capacity to absorb and thus would be the next second revenue engine. This is expected would inspire the society and moreover would provide a positive contribution to the community to reduce the waste and also reduce poverty as well.

Plasticpay as the payment platform



Source: Company

Waste plastic bottle



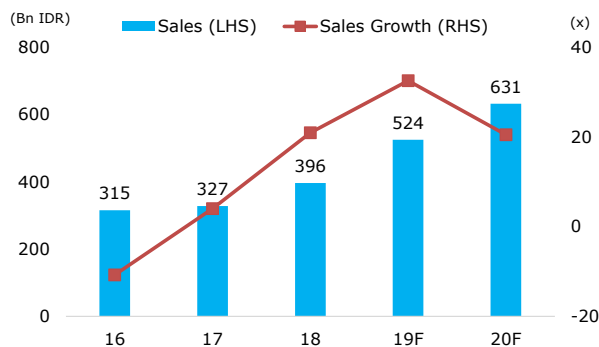
Source: www.thejakartapost.com

Financial projection

Revenue is projected to rise by 32.4% YoY to IDR 524bn this year. The significant revenue growth is expected to come from the export that has been improved in the first quarter this year. The higher capacity that grew by 14.9%yoy to 1,608 tons/month last year has created a room for the company to penetrate the export market. The higher export growth has reflected in the first three months of sales this year that has grown by 31.1%yoy. This was due to the contribution of the export revenue this year compare to last year that recorded without export portion. The export would be the new engine of growth after the capacity expansion that started to operate last year.

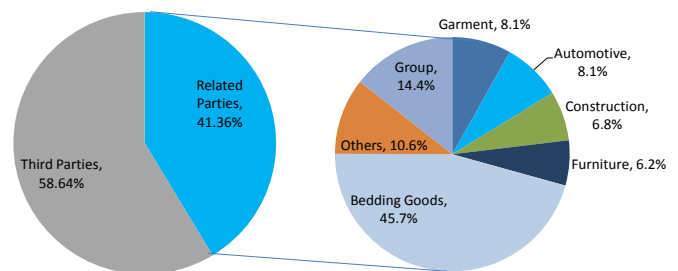
The seasonality factor in revenue, especially from export that commonly higher in the second semester is believed would make the 32.4%yoy growth assumption this year is still achievable according to the management discussion. This is related to the bedding goods and garment application to anticipate the higher demand in the winter season. From the domestic side, the seasonality factor is also expected to come from the higher geotextile and building application due to the government budget absorption that usually would be higher in the second semester based on the government budget cycle.

Revenue estimated to increase by 32.4% YoY in 2019F



Source: Company, Shinhan Sekuritas Indonesia

INOV sales by usage in 2018



Source: Company, Shinhan Sekuritas Indonesia

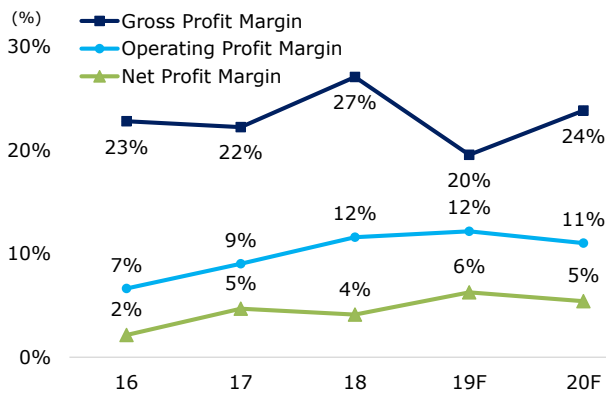
The high quality and the affordable price compared to the Virgin PSF are the competitive factors to penetrate the export market, especially, with the company that concerned over the environmental issue. The company has a global recycle standard certification (GRS) in PET bottles that requires ISO 9001, ISO 14000 and OHSAS 18000 which would enhance its offering power in B2B negotiation with the buyer overseas.

In terms of usage, the combined application of bedding goods and garment estimated to reach 53.8% of the demand, followed by 8.1% for automotive, and the rest expected to come from construction, furniture, and others. The growing versatility usage of the Re-PSF would support the revenue outlook ahead.

Operating margin improvement

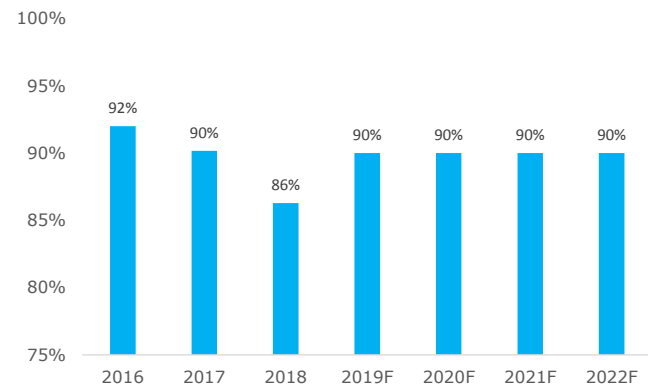
The higher operating profit this year by 39.0%yoy is stemmed from the higher operating margin that would be increased to 12.2% from 11.6% last year. This is due to the lower fixed cost per ton as a result of the higher sales volume with the same utilization rate that set at 90% after its expansion last year. By assuming the same ASP/kg at IDR 12,520 the higher operating margin is as the consequences of the lower manufacturing cost due to the lower overhead cost per kg. The figures below describe the breakdown of the cost as a percentage of the sales. The improvement of the operating margin is also expected to come from the better yield per waste bottle ratio that is likely to maintain at 90% this year compared to the last year at 86%. The better raw material imported from Australia, sorting, and also operating efficiency would be the company's strategy to produce a better yield with the same input material cost.

Profit margin continue to improve in 2019F



Source: Company, Shinhan Sekuritas Indonesia

Yield of Re-PSF to PET Bottle purchased

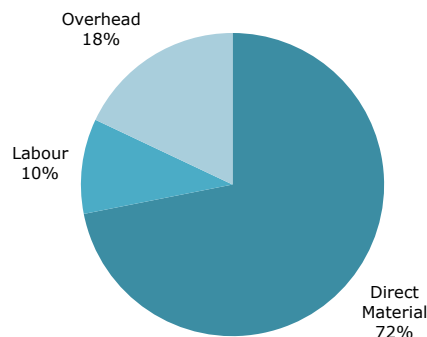


Source: Company, Shinhan Sekuritas Indonesia

Operating expense

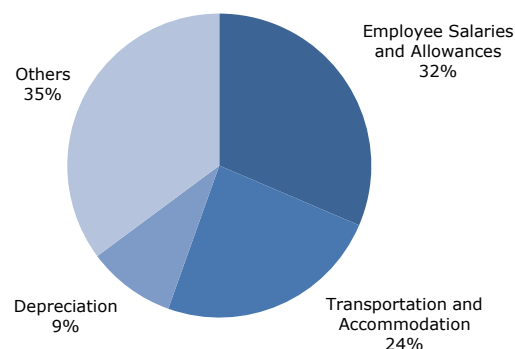
We assume the wages and transportation expense remains the largest portion of the total operating expense. The improvement of the net profit post IPO is estimated to come from the lower interest expense as a result of the debt payment that would push the net profit margin higher to 6.3% in 2019.

COGS composition (%) 2018



Source: Company, Shinhan Sekuritas Indonesia

Operating expense composition (%) 2018

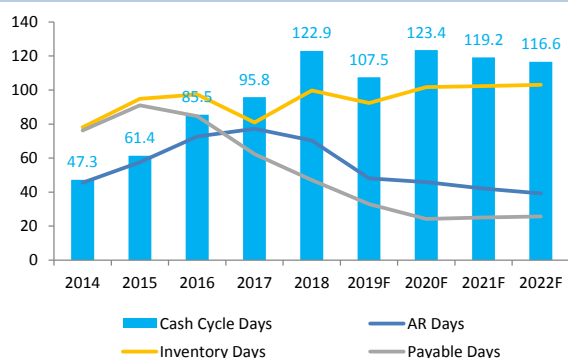


Source: Company, Shinhan Sekuritas Indonesia

Working capital

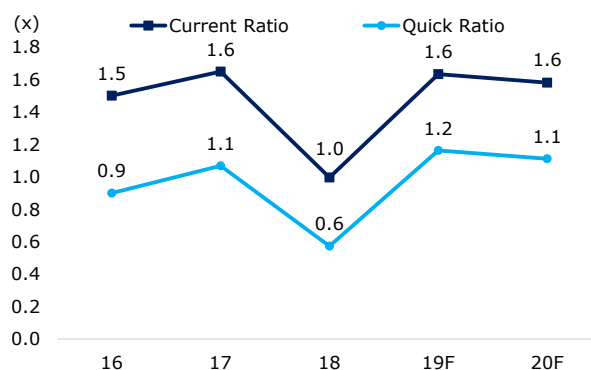
The nature of the recycling business is dominated by heavy working capital, as the company needs sizeable cash to buy the PET bottle from the collector as the main raw material. The raw material is about 72% of the COGS. The inventory, payable turnover, and receivable turnover are about 3.6, 11.6, and 7.3, respectively. The cash conversion cycle is expected to be in the better trend as the company would increase the portion to the export market as mentioned above. This shifting would reduce the working capital needs as the international market would offer better payment based on LC.

Cash conversion cycle



Source: Company, Shinhan Sekuritas Indonesia

Current ratio

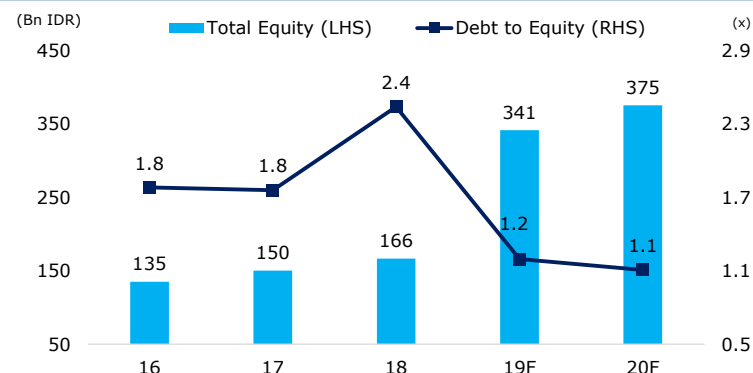


Source: Company, Shinhan Sekuritas Indonesia

EBITDA and Leverage Ratio, toward healthy posture

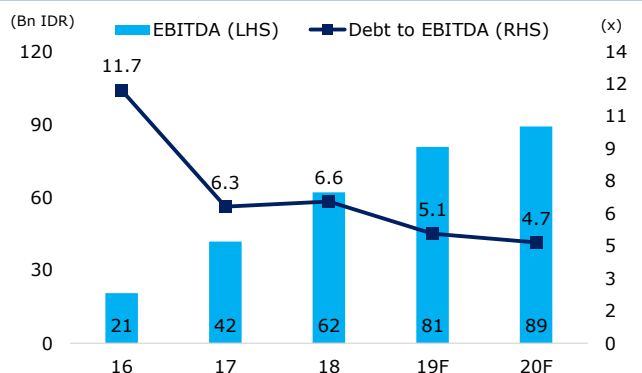
The company has spent IDR105.56Bn on its CAPEX last year, which contributed to the higher production capacity. The capex growth is estimated to be lower this year and next year after its expansion previous year or estimated at IDR18.19Bn. On the other hand, the operating cash flow is also forecasted to improve in 2020 on the back of its expansion of export and the better receivable turnover. The better operating cash flow that stemmed from, the higher EBITDA would relax the (long term) Debt to EBITDA ratio, which points to the higher capacity to serve the long term debt. The Debt to EBITDA is forecasted at 5.1x this year and 4.7x at 2020.

Debt to equity



Source: Company, Shinhan Sekuritas Indonesia

Debt to EBITDA



Source: Company, Shinhan Sekuritas Indonesia

Key risks factors

Raw material risk. The company uses waste PET Bottles as its primary raw materials, which then the PET bottles are crushed to produce Bottle Flake as intermediate goods. There is a risk associated with the availability and the quality of raw materials. Raw material prices also fluctuated depending on external conditions, such as economic growth, foreign exchange rate, taxes, changing regulations, and others. Any obstacles to obtain raw materials, in terms of quantity, quality, and the price could affect INOV production process which will affect revenue and operating performance. In order to reduce the risk of rising raw material prices, INOV cooperates with Hilon Indonesia group by using its extensive network throughout Indonesia to ensure the supply of PET Bottles and Bottles Flake with competitive prices.

Crude oil price risk. INOV's Re-PSF selling prices are affected by the fluctuation of crude oil prices considering that Re-PSF is substitute goods of Virgin PSF which use crude oil as its primary raw materials. The increase in crude oil prices will cause Virgin PSF customers to look for alternative products such as Re-PSF made by INOV. However, if the price of crude oil declines, the demand for Virgin PSF is expected to increase. In order to reduce the declining margin due to the fluctuation of crude oil prices, INOV strives to increase efficiency and improve production yield. Besides that, INOV also established a long-term partnership with its client and maintaining satisfactory levels of its customers.

Regional Minimum Wages (UMR) risk. Direct labor is one of the biggest costs incurred by the company as every increase in the regional minimum wages will directly increase the cost of goods manufactured and reduce the company's profit margin. Moreover, the increase in minimum monthly wages is unpredictable, given the absence of specific provisions to determine the amount of minimum monthly wages. The company might not be able to pass through the increase of production to the customers, which means that the company will be materially affected.

The limited source of funding risk. INOV mainly sourced its working capital and capital expenditure needs through internal cash, debt, and additional capital. The company's working capital and capex needs are expected to increase in the future in line the effort to expand its business. This expansion can lead to an increase in net debt that can limit INOV's funding flexibility and have a detrimental impact on the ability to expand its business. In the case of INOV is unsuccessful to meet its working capital needs, then this can have an impact on the company's business activities, financial condition, and operating performance.

Credit risk. The company faces a risk of a default on a debt that may arise from a borrower failing to make required payments. To anticipate the risk, INOV will only conduct business relationships with trustworthy and proven customers with an excellent credit record. For those with an unfavorable credit history, the customers can use the Cash Before Delivery (CBD) system. INOV also maintains a minimum cash balance to minimize credit risk which could affect the company's level of cash and cash equivalents.

Basic Electricity Tariff (TDL) risk. An increase in the TDL will reduce INOV number of sales channels. Higher TDL, which also means an increase in the production costs, while the company is unable to increase its selling price, and resulted in material impact.

Changing regulation risk. Indonesia's import of PET Bottle waste is regulated and limited by the government to improve the business and investment climate in both upstream and downstream industries. The policy is primarily to protect and enhance the competitiveness of the nation plastic industry to continue to grow and raise its competitiveness compared to imported products. Lack of support and incentive from the government will result in stagnant growth in domestic plastic industry, which then will have an impact on the sustainability of INOV's business activities. In order to mitigate the risk, the company will provide regular input to the government so that the business climate and investment in the textile industry will remain conducive.

Information Technology risk. INOV is using ERP, namely SAP Business One, as the company's management information system which covers all of the company's activities such as production, inventory management, distribution, customer and vendor databases, and others. Failures in the information technology system can disrupt the company's business activities and can result in transaction errors, inefficient management of inventory, and declining business performance. The damage and disturbance that occurs can have a material and adverse impact on the company. To minimize these risks, INOV has taken several steps by implementing a High-Availability system on its servers. The company also uses Redundant UPS and Generators if there is a power failure.

Litigation risk. The company can be involved in disputes and legal processes in carrying out its business activities, including those relating to the company's products, claim from the employee, labor disputes, or other disputes that can have a material and adverse impact on INOV's reputation, operations, and financial conditions. Currently, the company is not involved in any legal disputes or investigation. In addition, all litigation of legal proceedings can result in substantial court costs.

Income Statement

| Year-end 31 Dec (Bn IDR) | 2017 | 2018 | 2019F | 2020F |
|--------------------------|------------|------------|------------|------------|
| Net Sales | 327 | 396 | 524 | 631 |
| COGS | 255 | 289 | 422 | 481 |
| Gross Profit | 73 | 107 | 102 | 150 |
| EBITDA | 42 | 62 | 115 | 131 |
| Operating Expense | (43) | (61) | (39) | (81) |
| Operating Profit | 30 | 46 | 64 | 69 |
| Pre-Tax Profit | 20 | 22 | 44 | 46 |
| Income Tax - Net | 5 | 6 | 12 | 12 |
| Net Profit | 15 | 16 | 33 | 34 |
| EPS (IDR) | 8 | 8 | 16 | 17 |

Source: Company, Shinhan Sekuritas Indonesia

Cash Flow Analysis

| Year-end 31 Dec (Bn IDR) | 2017 | 2018 | 2019F | 2020F |
|-----------------------------|-------------|-------------|--------------|-------------|
| CFs from Operation | | | | |
| Net Profit | 15 | 16 | 33 | 34 |
| Change in NWC | (56) | 76 | (133) | (3) |
| CFs from Operation | (41) | 92 | (100) | 31 |
| CFs from Investments | (12) | (88) | (2) | (46) |
| CFs from Financing | 16 | 6 | 129 | 2 |
| Net Inc./(Dec.) in Cash | (22) | 27 | 59 | 21 |
| Cash at End Period | 19 | 45 | 105 | 126 |

Source: Company, Shinhan Sekuritas Indonesia

Balance Sheet

| Year-end 31 Dec (Bn IDR) | 2017 | 2018 | 2019F | 2020F |
|----------------------------------|------------|------------|------------|------------|
| Assets | | | | |
| Cash and Equivalent | 19 | 45 | 105 | 126 |
| Receivables | 75 | 77 | 157 | 139 |
| Inventories | 58 | 100 | 118 | 120 |
| Others | 12 | 12 | 29 | 19 |
| Total Current Assets | 164 | 235 | 409 | 405 |
| Net Fixed Assets | 209 | 298 | 299 | 344 |
| Other Assets | 41 | 40 | 41 | 42 |
| Total Assets | 414 | 573 | 749 | 791 |
| Liabilities and Equities | | | | |
| Payables | 23 | 51 | 51 | 62 |
| Other Short-Term Liabilities | 76 | 184 | 199 | 194 |
| Total Current Liabilities | 100 | 235 | 250 | 256 |
| LT. Debt | 159 | 167 | 139 | 141 |
| Other Long Term Liabilities | 5 | 3 | 19 | 19 |
| Total Long-Term Liabilities | 164 | 171 | 158 | 160 |
| Total Liabilities | 264 | 406 | 408 | 415 |
| Shareholders' Equity | 150 | 166 | 341 | 375 |

Source: Company, Shinhan Sekuritas Indonesia

Key Ratio Analysis

| Year-end 31 Dec (Bn IDR) | 2017 | 2018 | 2019F | 2020F |
|--------------------------|--------|-------|--------|-------|
| Profitability | | | | |
| Gross Margin | 22.2% | 27.0% | 19.5% | 23.8% |
| Operating Margin | 9.0% | 11.6% | 12.2% | 11.0% |
| EBITDA Margin | 12.8% | 15.7% | 22.0% | 20.8% |
| Net Income Margin | 4.7% | 4.1% | 6.3% | 5.4% |
| ROAA | 3.9% | 3.3% | 5.0% | 4.4% |
| ROAE | 10.8% | 10.3% | 12.9% | 9.5% |
| Growth | | | | |
| Revenue | 4.0% | 20.8% | 32.4% | 20.4% |
| Operating Profit | 41.6% | 55.1% | 39.0% | 9.0% |
| EBITDA | 103.6% | 48.3% | 86.0% | 13.6% |
| Net Income | 123.7% | 5.1% | 104.5% | 4.1% |
| Solvability | | | | |
| Current Ratio (x) | 1.6 | 1.0 | 1.6 | 1.6 |
| Quick Ratio (x) | 1.1 | 0.6 | 1.2 | 1.1 |
| Debt to Equity (x) | 1.8 | 2.4 | 1.2 | 1.1 |

Source: Company, Shinhan Sekuritas Indonesia

Valuation

| Year-end 31 Dec | 2017 | 2018 | 2019F | 2020F |
|-----------------|------|------|-------|-------|
| PER (x) | N/A | N/A | 25.1 | 24.1 |
| PBV (x) | N/A | N/A | 2.4 | 2.2 |
| EV/EBITDA (x) | N/A | N/A | 9.8 | 8.6 |
| EV/Sales (x) | N/A | N/A | 2.2 | 1.8 |

Source: Company, Shinhan Sekuritas Indonesia



| Research Team | | |
|----------------------------|------------------|---------------------------|
| Helmi Therik, FRM | Head of Research | helmi@shinhan.com |
| Billy Ibrahim Djaya | Research Analyst | billy.ibrahim@shinhan.com |

| Office |
|---|
| <p>PT. Shinhan Sekuritas Indonesia Member of Indonesia Stock Exchange</p> |
| <p>Head Office : International Finance Center 2 Floor. 30 Jl. Jendral Sudirman Kav. 22-23 Karet Jakarta 12920 Indonesia Telp.: (+62-21) 80869900 Fax : (+62-21) 22057925</p> |