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1 March 2022

Recommendation to exclude Young Poong Corp from investment by the Norwegian Government Pension Fund Global

UNOFFICIAL ENGLISH TRANSLATION

## **Summary**

The Council on Ethics recommends that Young Poong Corp (Young Poong) be excluded from investment by the Norwegian Government Pension Fund Global (GPFG) due to an unacceptable risk that Young Poong is responsible for or contributes to severe environmental damage.

Young Poong is listed on the stock exchange in South Korea. As of 31 December 2020, the GPFG owned 0.24 per cent of the company's shares, worth a total of NOK 18.8 million.

Young Poong owns and operates the Seokpo smelter in South Korea, which went into operation in 1970. Following multiple expansions, the smelter is currently one of the largest producers of zinc in the world. Annual production at the smelter is approximately 400,000 tonnes of zinc bars, 728,000 tonnes of sulphuric acid, 1,830 tonnes of copper sulphate, 3,000 tonnes of electrolytic copper cathode, 100 tonnes of indium, and 46,000 tonnes of silver byproduct.

The Seokpo smelter has been accused of causing serious pollution as well as harm to both the environment and human health for many years. Such allegations have been made by local people, workers at the smelter, civil society organisations, researchers and the public authorities. Studies show that the smelter can be linked to serious persistent and ongoing pollution. This includes the emission of heavy metals (e.g. cadmium, zinc, lead and arsenic) and sulphur dioxide (SO<sub>2</sub>) to the air. Regular discharges of polluted wastewater during operations, combined with accidental releases, also result in heavy metals (e.g. cadmium, zinc, lead and copper), fluorine and selenium polluting the Nakdong River that runs next to the smelter. This river is also a source of drinking water. Recent studies show that the pollution continues.

Substantial pollution has resulted in high levels of metals, including arsenic, cadmium, zinc, lead, copper and mercury, in soils in surrounding areas. Workers at the smelter are exposed to health risks due to dust with metals and gasses that have resulted in health problems and illness.

For years, government authorities have ordered the company to implement remedial measures and temporary shutdowns until improvements have been made. Authorities have also issued fines, some of which the company has contested in the courts. The authorities continue to issue new remediation orders to Young Poong. A company executive and an employee at a firm providing environmental monitoring services have received prison sentences for comprehensive manipulation of emission monitoring data. In this instance, values for air pollution that were substantially above national limits and international standards had been changed to show values far below these limits.

Young Poong has neither replied to the Council on Ethics' questions nor commented on a draft recommendation to exclude it from the GPFG.

The Council considers that Young Poong is responsible for or contributes to long-term and substantial pollution as well as harm to human health and the environment. Levels of air, water and soil pollution are far above national limits and international standards. Despite having had a long period to implement corrective measures, the company does not appear to have taken steps that substantially reduce ongoing or historically accumulated pollution in surrounding areas. Given the company's repeated and continuing violations of requirements and standards, and failure to implement measures that substantially reduce pollution, the Council finds that there is an unacceptable risk of future pollution and severe environmental damage.

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#### 1 Introduction

The Council on Ethics has assessed the investment by the Norwegian Government Pension Fund Global (GPFG) in Young Poong Corp<sup>1</sup> (Young Poong) against the Guidelines for Observation and Exclusion from the GPFG (the ethical guidelines).<sup>2</sup> The Council has assessed the company's Seokpo smelter in South Korea and the pollution, environmental damage and health risks caused by its operation.

Young Poong is one of the largest producers of zinc in the world. The company is listed on the South Korea Stock Exchange (KRX). As of 31 December 2020, the GPFG owned 0.24 per cent of the company's shares, worth a total of NOK 18.8 million. The company owns and operates the Seokpo smelter, which produces zinc and other products. Young Poong Corp is part of a South Korean conglomerate, Young Poong Group, whose activities include mining, metals, electronics and the sale of books.

## 1.1 Matters considered by the Council

The Council has considered whether there is an unacceptable risk that Young Poong, through its operation of the Seokpo smelter, is contributing to or is itself responsible for severe environmental damage, pursuant to section 4(e) of the GPFG's ethical guidelines. In particular, the Council has considered the smelter's emissions to air, water and soil of substances that are harmful to the environment and health. The main emphasis has been placed on pollution of the Nakdong River, which passes close by the smelter and is one of the longest rivers in South Korea.

When considering potentially severe environmental damage, the Council normally assesses the extent to which:

- the damage is substantial,
- the damage has irreversible or long-term effects,
- the damage has a considerable negative impact on human health and lives,
- the damage is a result of violations of national legislation or international norms,
- the company has failed to implement measures to avoid damage,
- the company has implemented adequate corrective measures, and
- it is likely that the company's unacceptable practice will continue.

Information on emission and pollution levels is compared with national standards where such are referred to in the available documentation. International standards, such as limits defined by the World Health Organisation (WHO), are also used for comparison in this recommendation.

Due to limited available information, the Council has not been able to assess health and safety risks to workers at the smelter or the allegations of serious health impacts for its current and former employees. This issue is nevertheless briefly mentioned in Section 3.4 below.

<sup>&</sup>lt;sup>1</sup> Issuer ID: 129482.

<sup>&</sup>lt;sup>2</sup> Guidelines for Observation and Exclusion GPFG 29 November 2021 (regieringen.no)

The Council's assessment of future risk is also affected by available information about the company's conduct. In this context, the Council attaches importance to several government reports (white papers) to the Norwegian parliament (Storting) stating that a lack of information, particularly when a company is unwilling to share information, could contribute to the risk being considered unacceptable.

#### 1.2 Sources

This recommendation is based primarily on articles obtained through searches of scientific journal databases and articles in various media in South Korea and internationally.

Young Poong does not appear to publish information about environmental or health issues related to the Seokpo smelter on its English-language website.

The Council has requested Young Poong for information about the smelter and has subsequently requested comments on a draft recommendation to exclude it. However, the company has not responded in either case.

# 2 Background

## 2.1 The Seokpo smelter

The Seokpo smelter in eastern South Korea (see Figure 1) started production in 1970. Following multiple expansions, the smelter has become one of the largest zinc production facilities in the world. The Seokpo smelter was established in this area due to its proximity to what was at that time the largest lead and zinc mine in South Korea, the Yeonhwa mine, which was closed in 1998. The current sources of ore for the smelter are not specified in the documentation available to the Council.

The smelter produces zinc bars using electrolysis, where ore is melted for subsequent extraction of the metal. The smelter includes, among other things, three factories. Annual production is currently approximately 400,000 tonnes of zinc bars, 728,000 tonnes of sulphuric acid, 1,830 tonnes of copper sulphate, 3,000 tonnes of electrolytic copper cathode, 100 tonnes of indium, and 46,000 tonnes of silver byproduct. Zinc from the smelter is used in the production of steel, vehicles, electronics and construction materials.

The smelter is located in the upper parts of the Nakdong river catchment (see Figure 1), one of the four longest rivers in South Korea. This means that water pollution from the smelter affects many people and contributes to the loss of biodiversity in rivers and lakes downstream. Further along its course, the river also runs through large cities like Daegu and Busan, which are also sources of pollution in the lower parts of the catchment area. All the studies referred to in this recommendation concern the upper part of the catchment area, the region where the smelter is located. There appears to be just over 2,000 people living in the vicinity of the smelter (Seokpo-Myeon), see Figure 2.

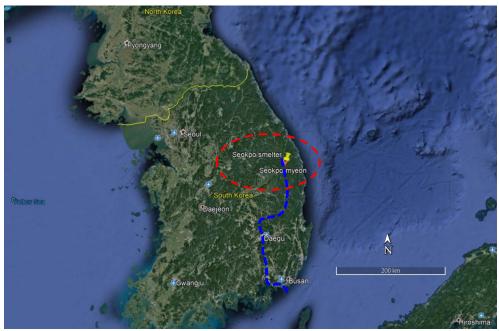


Figure 1: Location of the Seokpo smelter in eastern South Korea and indication of the Nakdong River running south to the sea (blue dotted line) near the major city of Busan.

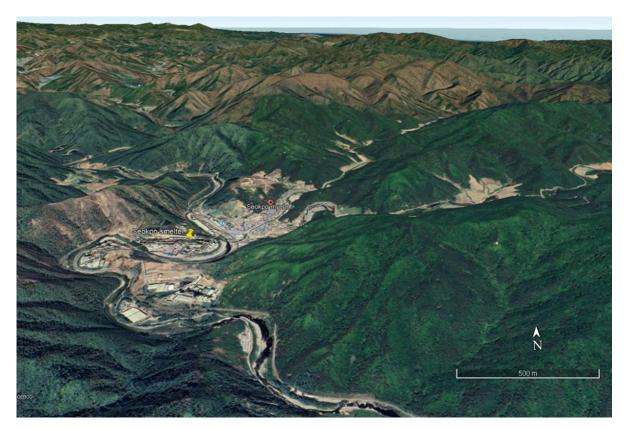


Figure 2: Location of the Seokpo smelter and nearby town (Seokpo-Myeon). The mountains surrounding the smelter contributes to "trap" air pollution within the valley where people live.

# 3 Environmental damage

The smelter extracts metal from ore, which typically contains other metals than those that are the primary products. The presence of multiple metals in the ore results in different types of pollution, including emissions of heavy metals during electrolysis. Such pollution can be highly damaging because the metals can have long-lasting adverse impacts due to their persistence in the environment. The metals can also accumulate in living organisms, including humans. The combined effects of metal pollution due to synergistic interactions can also be greater than the effects of the pollutants on their own. Metal pollution in soils and rivers that accumulate over time may require comprehensive remediation.

Production of zinc at the smelter results in emissions of lead, cadmium and zinc, for example. Persistent exposure to lead can adversely affect the cardio-vascular system, the nervous system, and kidneys. Cadmium is classified as carcinogenic. It can accumulate in the bones and cause adverse health effects, including kidney failure. Such metal pollution can also affect other organisms. Processing at the Seokpo smelter also involves the production and use of large quantities of sulphuric acid, which represents both an environmental and health risk.

## 3.1 Water pollution

The Seokpo smelter is located next to the Nakdong River (see Figure 3). Discharges of wastewater during normal operations, combined with accidental releases, have resulted in a number of substances harmful to health and the environment entering the river. Pollution includes high levels of metals (e.g. lead, cadmium, zinc and copper), fluorine and selenium, as well as accidental releases of sulphuric acid<sup>3</sup> and other pollutants.<sup>4</sup>

Studies and analysis of more than 30 water samples taken in October 2015 from the upper Nakdong River and tributaries near mining areas concluded that those containing high concentrations of sulphates, manganese, copper, zinc, cadmium and lead, were found mainly near the Seokpo smelter.<sup>5</sup> Another set of water samples taken at seven locations along the Nakdong River upstream and downstream of the Seokpo smelter in September 2016 showed no zinc upstream of the smelter, only downstream of it. These surveys also showed a correlation between high levels of zinc and morphological deformations of diatom (small algae) in the river. They also showed that algae downstream of the smelter were predominantly metal-tolerant species.<sup>6</sup>

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<sup>&</sup>lt;sup>3</sup> Article at the Korean news agency Newsis, 1<sup>st</sup> December 2014: https://newsis.com/view/?id=NISX20141201\_0013328247 (original in Korean)

<sup>&</sup>lt;sup>4</sup> Article at the Korean news site OhmyNews, 2<sup>nd</sup> March 2018: <a href="https://bit.ly/3nvYarF">https://bit.ly/3nvYarF</a> (original in Korean)

<sup>&</sup>lt;sup>5</sup> Kim, J., Choi, H.B., Choi, U., Yang, I.J., Ryu, J.S. & Lee, J. (2020). Assessments of natural and anthropogenic influences on water chemistry in the upper Nakdong River, South Korea. *Environmental Forensics*, 21(1), 59-70. https://doi.org/10.1080/15275922.2019.1694097

<sup>&</sup>lt;sup>6</sup> Shin, R.Y., Ryu, H.S. & Lee, J.H. (2017). Influence of Heavy Metal (Zn) Inflow on Species Composition and Morphological Abnormalities of Epilithic Diatom in the River. *Journal of Korean Society on Water Environment*, 33(4), 424-433. <a href="https://doi.org/10.15681/KSWE.2017.33.4.424">https://doi.org/10.15681/KSWE.2017.33.4.424</a>



Figure 3: The Seokpo smelter near the Nakdong River (source: Google Earth, satellite image from October 2018).

Pollution of the Nakdong River, caused by regular operational discharges as well as accidental releases, has been reported to have adverse impacts on life in the river and on people living downstream of the smelter. For instance, a release of 200 litres of sulphuric acid in 2014 resulted in widespread fish mortality in the Nakdong River.<sup>7</sup> In 2017, the Korean Ministry of Environment reportedly found heavy metal levels in fish that were 10–12 times above the permitted threshold at the same time as Young Poong allegedly had constructed a third unit at the smelter in violation of permits. 8 In 2017, there was widespread fish mortality in a hydropower reservoir downstream (Andong Inha Dam) allegedly associated with pollution from the smelter. <sup>9</sup> That same year, the local authority (Andong City Council) demanded that the smelter close due to heavy metal pollution of the Nakdong River and claimed that the smelter had caused pollution in the river system since its startup in 1970.<sup>10</sup> A media article in 2019 reported that the Ministry of Environment had measured heavy metal levels up to 1,600 times the threshold for water pollution in streams near the smelter, that fish were contaminated with eleven different heavy metals, 11 that cadmium levels in the Nakdong River were more than 4,500 times the permitted level due to discharges from the smelter, and that groundwater within the site (which leaches into the river)

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<sup>&</sup>lt;sup>7</sup> Article at the Korean news agency Newsis, 1<sup>st</sup> December 2014: https://newsis.com/view/?id=NISX20141201\_0013328247 (original in Korean)

<sup>&</sup>lt;sup>8</sup> Article at the Korean news site OhmyNews, 3<sup>rd</sup> September 2017: <a href="https://bit.ly/3vE1Bjt">https://bit.ly/3vE1Bjt</a> (original in Korean)

<sup>&</sup>lt;sup>9</sup> Article in the Korean daily newspaper Kyunghyang Shinmun, 12<sup>th</sup> July 2017: <a href="https://www.khan.co.kr/national/national-general/article/201707121123001">https://www.khan.co.kr/national/national-general/article/201707121123001</a> (original in Korean)

Article in the Korean newspaper Kyongbuk Ilbo, 22<sup>nd</sup> March 2017: <a href="http://www.kyongbuk.co.kr/news/articleView.html?idxno=988369">http://www.kyongbuk.co.kr/news/articleView.html?idxno=988369</a> (original in Korean)

Article in the Korean daily newspaper Kyunghyang Shinmun, 21st November 2019: https://bit.ly/3nh89R9 (original in Korean)

had cadmium levels hundreds of thousands of times the permitted level for the Nakdong River.  $^{12,\,13}$ 

## 3.2 Air pollution

The Council has found limited documentation concerning air quality measurements around the Seokpo smelter. The company is accused of emitting heavy metals to the air (e.g. cadmium, zinc, lead and arsenic) as well as sulphur dioxide (SO<sub>2</sub>), which represent risks to people and nature in the vicinity of the smelter. The company also pollute the soil and water, resulting in damage to vegetation. Photos from the area indicate damage to nearby vegetation, but satellite images do not indicate widespread forest die-off.

A study published in 2021 refers to eight previous air quality samples taken to measure lead and cadmium at four different locations around the smelter. Some of the samples showed lead levels above the Korean threshold of 0.5  $\mu$ g/m<sup>3</sup>. <sup>14</sup> In a study from 2014, <sup>15</sup> cadmium concentrations in the air near the smelter were shown to be 6–7 times the safe limits defined by the World Health Organisation, WHO (0.005  $\mu$ g/m<sup>3</sup>).

#### 3.3 Soil pollution

The Council has also found limited documentation concerning soil pollution around the smelter. Media articles refer to previous studies (in 2013 and 2014) that showed soil up to 4 km from the smelter was contaminated with arsenic, cadmium, zinc, lead and copper. A study from 2016, based on soil samples from 448 locations within a radius of 4 km from the smelter, showed levels exceeding Korean soil pollution limits for lead at 9 locations, for cadmium at 59 locations and for zinc at 219 locations. National monitoring data for mercury covering the period 1997–2016 show that the area around the Seokpo smelter consistently has the country's highest levels of mercury in the soil. 8

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<sup>&</sup>lt;sup>12</sup> Article at the Korean news agency Newsis, 23<sup>rd</sup> November 2021: https://newsis.com/view/?id=NISX20211123 0001660953 (original in Korean)

Article in the Korean daily newspaper Dong-a Ilbo, 8<sup>th</sup> October 2020: https://www.donga.com/news/Society/article/all/20201008/103306126/1 (original in Korean)

Korea Ministry of Environment (2016). Survey of Environmental Effects in the Region Surrounding Seokpo Zinc smelter. Korean Ministry of Environment: Sejong. (referenced in Jo, H.J., Kim, G.B., Chang, J.Y., Lee, K., Lee, C.W., & Lee, B.E. (2021). Chronic Exposure to Lead and Cadmium in Residents Living near a Zinc smelter. International Journal of Environmental Research and Public Health, 18, 1731. https://doi.org/10.3390/ijerph18041731).

<sup>&</sup>lt;sup>15</sup> Environment and Labor Committee (2014). *State of Heavy Metal Pollution by Young Poong Seokpo smelter*. Environment and Labor Committee: Seoul. (referenced in Jo *et al.* (2021), see full reference above).

<sup>&</sup>lt;sup>16</sup> Article at the Korean news site Nate, 23<sup>rd</sup> May 2017: https://news.nate.com/view/20170523n02426?mid=n0308 (original in Korean)

<sup>&</sup>lt;sup>17</sup> Korea Ministry of Environment (2016). *Survey of Environmental Effects in the Region Surrounding Seokpo Zinc smelter*. Korean Ministry of Environment: Sejong. (referenced in Jo *et al.* (2021). See full reference above).

<sup>&</sup>lt;sup>18</sup> Kim, P.R., Kim, D.Y. & Han, Y.J. (2019). A Review for Long-Term Trend and Spatial Distribution of Soil Mercury Concentration in South Korea. *Journal of Korean Society of Environmental Engineers*, 41(6), 346-355. <a href="https://doi.org/10.4491/KSEE.2019.41.6.346">https://doi.org/10.4491/KSEE.2019.41.6.346</a>

### 3.4 Health impacts

Allegations of adverse health impacts have been made multiple times with respect to both the workers at the smelter and people living in its vicinity. The Daegu Regional Ministry of Employment and Labour fined the Seokpo smelter a total of KRW 150 million in December 2014 and required corrective measures to remedy 327 violations of regulations on labour and working conditions. Several workers have been diagnosed with occupational illnesses in recent years. Workplace exposure to sulphuric acid was found to be 252 per cent higher than the permitted threshold, while cadmium exposure was 146 per cent higher.<sup>19</sup>

A study in 2017 showed that people living near the smelter had high levels of arsenic and cadmium in their bodies (above international standards), and these people complained of various health problems (e.g. problems with their kidneys and liver as well as allergies). <sup>20</sup> A study published in 2021 looked at 549 people living in the vicinity of the smelter (less than 3 km from the facility) and showed high levels of lead in the blood (average 4.19 µg/dl) compared with the control group of 265 people living more than 30 km away from the smelter (average 2.70 µg/dl). Both groups had levels above the national average for corresponding age groups in South Korea (1.89  $\mu g/dl$ ).<sup>21</sup>

The level of cadmium in the urine of people living near the smelter (average 1.32) µg/dl) was substantially higher than for people in the control area further away (average 0.80 µg/dl).<sup>22</sup> The study concluded, after having considered potentially confounding factors like sex, age, smoking and where the test subjects had lived previously, that the smelter causes lead and cadmium contamination and poses a health risk to the local population. It also recommended that measures to reduce the health risks should be implemented.

#### 3.5 Government ordered remediation

For years, local, regional and central government authorities have issued remediation orders that only to a limited extent appear to have been followed up by the company. In some instances, Young Poong has contested the orders in the courts; in other instances, the company has paid penalties and thereafter continued apparently as before, and in in some cases the company has continued without responding to the government orders.

In 2018, the provincial authorities (North Gyeongsang Province) ordered the facility to shut down for 20 days (June 2018) due to repeated violations of regulations and associated financial penalties over several years.<sup>23</sup> That same year, the company was criticised for mounting legal challenges to the government orders and, if necessary, paying penalties for pollution but continuing as before rather than addressing the

<sup>&</sup>lt;sup>19</sup> Article at the Korean news agency Newsis, 1<sup>st</sup> December 2014: https://newsis.com/view/?id=NISX20141201 0013328247 (original in Korean)

<sup>&</sup>lt;sup>20</sup> Article at the Korean news agency NSO, 6<sup>th</sup> April 2017: http://www.nspna.com/news/?mode=view&newsid=216555 (original in Korean)

<sup>&</sup>lt;sup>21</sup> Jo et al. (2021). See full reference above.

<sup>&</sup>lt;sup>22</sup> Jo et al. (2021 See full reference above.

<sup>&</sup>lt;sup>23</sup> Article in the Korean daily newspaper Hankyoreh, 5<sup>th</sup> April 2018: https://www.hani.co.kr/arti/society/area/839260.html? fr=mt2 (original in Korean)

underlying problems.<sup>24</sup>

The following year, in 2019, pollution resulted in the company being ordered to close the part of the production facility that produced cadmium.<sup>25</sup> In April 2019, inspections by the Ministry of Environment uncovered 52 illegal groundwater wells at the smelter, illegal storage of wastewater and other regulatory violations. The North Gyeongsang provincial government subsequently ordered the smelter to shut down for four months, which the company appealed.<sup>26</sup> Local authorities then failed to ensure that the temporary shutdown was implemented.<sup>27</sup>

Later in 2019, seven executives and employees at Young Poong were indicted for manipulating emissions monitoring data.<sup>28</sup> The manipulations allegedly took place between January 2016 and May 2019, and employees at the smelter reportedly asked staff at a separate company involved in emissions monitoring to delete evidence of the manipulation. Among other things, the manipulation included data for arsenic and sulphur dioxide emissions. The manipulation meant that the company avoided being fined, among other things. The firm supporting Young Poong in emissions monitoring and analysis was also accused of manipulating a large number of measurements for other companies.<sup>29</sup> Young Poong's employees were indicted for manipulation of air emission data relating to a total of 1,868 measurements in the period 2016–2019. 30 For instance, the monitoring data for arsenic were reduced to less than 1/1,400<sup>th</sup> of the actual measurements, which were 19 times the permitted level.<sup>31</sup> Later in 2019, one executive at the smelter was sentenced to one year and two months in prison, while employees in two firms that seem to have provided emissions monitoring support received suspended sentences for manipulation of air pollution data.

Early in 2020, the prosecuting authority asked the court (Daegu District Court) to hand down longer prison sentences for the smelter executive and employees at the firms which performed the analyses and helped to manipulate the emission data.<sup>32</sup> However, the penalty for systematic manipulation of emission data was reduced for

https://www.koreatimes.co.kr/www/nation/2020/06/371 273131.html

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<sup>&</sup>lt;sup>24</sup> Article in the Korean daily newspaper Hankyoreh, 27 August 2018: https://www.hani.co.kr/arti/society/environment/859331.html?\_fr=mt2 (original in Korean)

Article in the Korean daily newspaper Maeil Business Newspaper, 30<sup>th</sup> May 2019: https://www.mk.co.kr/news/society/view/2019/05/368031/ (original in Korean)

Article at the Korean news site Newsmin, 6<sup>th</sup> August 2019: https://www.newsmin.co.kr/news/40929/?ckattempt=1 (original in Korean)

<sup>&</sup>lt;sup>27</sup> Article in the Korean daily newspaper Kyunghyang Shinmun, 21<sup>st</sup> November 2019: https://bit.ly/3nh89R9 (original in Korean)

<sup>&</sup>lt;sup>28</sup> Article in the Korean newspaper Maeil Shinmun, 8<sup>th</sup> August 2019: https://news.imaeil.com/page/view/2019080814332223273 (original in Korean)

<sup>&</sup>lt;sup>29</sup> "Environment ministry sues Young Poong smelter for fudging emission data". Article in The Korea Times, 31<sup>st</sup> July 2019. Available at:

<sup>&</sup>lt;sup>30</sup> Article in the Korean newspaper Maeil Shinmun, 1<sup>st</sup> October 2019: https://news.imaeil.com/page/view/2019100115053667702 (original in Korean)

<sup>&</sup>lt;sup>31</sup> Article at the Korean news site OhmyNews, 27<sup>th</sup> April 2020: <a href="https://bit.ly/3m8oOHD">https://bit.ly/3m8oOHD</a> (original in Korean)

<sup>&</sup>lt;sup>32</sup> Article at the Korean news site Newsmin, 8the January 2020: https://www.newsmin.co.kr/news/44480/ (original in Korean)

one company executive from 14 to 8 months in prison.<sup>33, 34</sup> Early in 2022, there were media reports that Young Poong's CEO was under investigation on the grounds of illegal emissions from the Seokpo smelter.<sup>35</sup>

The provincial government's order to temporarily shut down the smelter in 2021, due to illegal discharges of contaminated water, was challenged by the company.<sup>36</sup> The order to shut down the smelter from 1 April to 31 May 2021 would, it was claimed, affect the world market for zinc<sup>37</sup> and the company's loss from a 60-day shutdown could amount to USD 1.3 billion.<sup>38</sup> It appears that no substantial shutdown was implemented. The provincial government later ordered the company to halt production for ten days in November 2021.<sup>39</sup>

# 4 Information from the company

The Council on Ethics has sent Young Poong both a letter requesting information and a draft recommendation to exclude it from investment by the GPFG. The company has not replied to either communication.

The company's English-language website does not include information on environmental conditions.

#### 5 The Council on Ethics' assessment

Based on the available information, the Council on Ethics has considered whether there is an unacceptable risk that Young Poong is responsible for or contributing to severe environmental damage.

The Council considers that the company is responsible for long-lasting and widespread pollution, including emissions of several different metals to water, air and soil. Such metals will remain in the environment and in organisms for a long time, which harms the health of both workers and people living near the smelter as well as causing long-term environmental damage. The Council attaches importance to the fact the levels of metal pollution found in the water, soil and air around the smelter far exceed national and international thresholds and that metal levels causing harm to health have been documented in the blood and urine of people living near the

<sup>&</sup>lt;sup>33</sup> Article at the Korean news agency Newsis, 14<sup>th</sup> February 2020: https://newsis.com/view/?id=NISX20200214 0000919846 (original in Korean)

<sup>&</sup>lt;sup>34</sup>Article at the Korean news site OhmyNews, 27<sup>th</sup> April 2020: <a href="https://bit.ly/3m8oOHD">https://bit.ly/3m8oOHD</a> (original in Korean)

Article at the Korean news agency Yonhap New Agency, 25<sup>th</sup> January 2022: <a href="https://m.yna.co.kr/amp/view/AKR20220125033700053">https://m.yna.co.kr/amp/view/AKR20220125033700053</a> (original in Korean)

Article in the Korean newspaper NewsPim, 23<sup>rd</sup> January 2021: https://www.newspim.com/news/view/20210122001004 (original in Korean)

<sup>&</sup>lt;sup>37</sup> "Youngpoong mulls legal appeal against Seokpo zinc smelter shutdown order". Article by Reuters, 6<sup>th</sup> January 2021. Available at: <a href="https://www.reuters.com/article/us-youngpoong-zinc-idUSKBN29B0SG">https://www.reuters.com/article/us-youngpoong-zinc-idUSKBN29B0SG</a>

<sup>&</sup>lt;sup>38</sup> "Youngpoong Corp, led by CEO Lee Gang-yin, is faltering from a \$1.3 billion loss in revenue". Article by Global Economic News, 20<sup>th</sup> January 2021. Available at: <a href="https://en.g-enews.com/view.php?ud=202101201316429069e8b8a793f7">https://en.g-enews.com/view.php?ud=202101201316429069e8b8a793f7</a> 9

<sup>&</sup>lt;sup>39</sup> Article at the Korean daily newspaper Financial News, 19<sup>th</sup> October 2021: https://www.fnnews.com/news/202110191055474977 (original in Korean)

smelter. This indicates that Young Poong's activities have far-reaching, long-term adverse impacts on both people and the environment.

Young Poong owns and operates the smelter and has been directly responsible for the pollution and environmental damage since 1970. Pollution has been ongoing for decades. A large zinc mine was probably also a source of pollution in the area. However, the mine closed more than 20 years ago and the smelter is now likely to be the most important source of severe pollution.

The Council notes that the company has previously received and continues to receive frequent government orders to improve its performance, including temporary halts in production until adequate corrective measures have been implemented. Such temporary shutdowns to improve the smelter facilities appear to be implemented to only a very limited extent. Young Poong has had a long time to undertake remedial measures but does not appear to have taken steps that substantially reduce pollution, harm to health and damage to the environment. The Council also notes that a company executive has been sentenced to prison for manipulation of emission data in order to falsely present levels that far exceeded threshold values as being well within the regulations. The company manipulated its emission data for several years, thereby avoiding fines and other remediation orders.

The Council also emphasises the fact that Young Poong has not contributed information that could assist in the Council's assessment. Since the company has failed to respond, the Council has no information indicating that it will change its practices.

Young Poong's repeated violations of standards and lack of adequate measures to reduce emissions mean that the Council considers the risk of future pollution and environmental damage to be high. The company has a long history of discharges from both day-to-day operations and accidents. There is no information indicating that measures have been implemented or are planned to mitigate the long-term impacts of accumulated pollution in soils or sediments in the river.

The Council on Ethics therefore concludes that there is an unacceptable risk that Young Poong Corp is responsible for or contributing to severe environmental damage.

#### 6 Recommendation

The Council on Ethics recommends that Young Poong Corp be excluded from investment by the Norwegian Government Pension Fund Global.

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Johan H. Andresen Chair	Svein Richard Brandtzæg	Cecilie Hellestveit	Trude Myklebust	Siv Helen Rygh Torstensen
(Sign.)	(Sign.)	(Sign.)	(Sign.)	(Sign.)