This risk assessment is made possible by the dues of Electronics Watch affiliates.

Electronics Watch is an independent monitoring organisation that helps public sector organisations work together, and collaborate with civil society monitors in production regions, to protect the rights of workers in their electronics supply chains. Monitoring partners conduct worker-driven monitoring, with the goal of strengthening workers’ own voices to report on and address labour and safety issues in their factories. Sedane Labour Resource Centre or Lembaga Informasi Perburuhan Sedane (LIPS) conducted the research and monitoring activities for this report. LIPS is an independent labour rights organisation based in Indonesia. Established in 1991, LIPS works to strengthen the labour movement by documenting labour rights compliance and workers’ realities through participatory action research and popular education with workers and labour groups.

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Published December 2018
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Summary

This regional risk assessment of the electronics industry in Indonesia is intended for Electronics Watch affiliates' internal education and contractor education. It can be used to promote dialogue on steps that contractors, brand suppliers, and contracting authorities can take to avoid practices that may cause or contribute to breaches of labour rights and safety standards.

Sedane Labour Resource Centre (LIPS) conducted the research for this risk assessment, including interviews and focus group discussion with 70 workers and 10 union leaders, and analysis of a range of secondary sources.

This assessment suggests that risks of breach of the following standards are of particular concern:

- **Freedom of employment.** Workers in the electronics sector can usually choose their employment freely. However, student interns are vulnerable to forced labour, as they may not be able to graduate unless they pass the internship program. Interviewees report that student interns have may have to work between nine and 10 hours per day and meet high production targets, in violation of government regulations.

- **Freedom of association and the right to collective bargaining.** Indonesia has ratified ILO Conventions 87 and 98 on freedom of association and the right to collective bargaining, and incorporate those rights in national labour law. However, union leaders or union members report that they often become targets of intimidation and violence, including fabricated criminal cases known as “kriminalisas.”

- **Working hours.** Indonesian Labour Law limits normal working hours to 40 hours per week and provides for a 30 minute break every four hours. However, workers reported that on average they work at least nine hours per day from Monday to Friday and half day on Saturday, or in total 50 hours per week, not including compulsory overtime. Workers also stated actual hours depend on whether or not they meet the production target, which could necessitate even longer hours.

- **Health and safety.** Indonesia has ratified the Promotional Framework for Occupational Safety and Health Convention (No. 187), reinforcing its commitment to sustained and continuous improvement of occupational safety and health. Yet, workers reported poor ventilation systems and very high temperatures and the use of chemical solvents without relevant training and personal protective equipment. Workers exposed to toxic chemicals have reported chronic headaches, thyroid disorders, respiratory problems, and lung cancer, among other illnesses.
Electronics Watch recommends that affiliates share this risk assessment with contractors and request that they discuss the Risk Assessment Table and Discussion Guide (Appendix) internally and with brand suppliers, and provide written responses to the discussion questions.

**Regional distribution of electronics industry in Indonesia and research locations for this risk assessment**

**Production & Research Locations:**
1. Bekasi, West Java province
2. Sukabumi, West Java province
3. Batam, Riau Islands province

**Production Locations:**
4. Depok, West Java province
5. Surabaya, East Java province
Introduction

The performance of the Indonesian manufacturing sector remains stable despite recent global economic downturns. Total employment in the sector increased by over 40% between 2004 and 2012. Employment then shrunk and recovered slightly, but the real output growth in manufacturing has remained steady in the last few years. This performance shows that Indonesia managed to play an important role in the global manufacturing market as the sector expanded between 2000 and 2015 and is now among the ten largest manufacturing countries in the world. Sub-sectors that have performed well include electronics, automotive, and food processing.

The Indonesian government designated electronics as one of the six manufacturing priorities with Presidential Decree No. 28/2008 on National Industrial Policy, which provides a road map of the industrial development and long-term development goals. The index of the World Bank's Ease of Doing Business in 2017 ranked Indonesia at number 72, up from 91 in 2016. Top destinations of Indonesian Foreign Direct Investment (FDI) in 2016 and 2017 was machinery and electronics, accounting for about 13.5% of the total.

In April 2018 the government selected electronics as one of the key industrial sectors to be developed in order to face the future of industrial development. The government unveiled a series of measures to help business, including easing some onerous regulations, cutting industrial energy tariffs, streamlining licensing procedures for firms on industrial estates, and providing tax incentives to invest in special economic zones.

Behind this growth of Indonesia’s electronics industry is the conditions of workers, which is largely invisible to consumers. Workers suffer from occupational illnesses in unsafe workplaces. Labour rights violations in the sector remains the norm despite recently enacted regulations, standards, and measures, and these violations are still underreported.

This risk assessment aims to identify common and significant labour rights violations in the Indonesian electronics sector.

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Methodology

Sedane Labour Resource Centre or Lembaga Informasi Perburuhan Sedane (LIPS) conducted this risk assessment between September 2017 and March 2018, using first-hand information and analysis of secondary sources. LIPS collected the data through a combination of a desk study, semi-structured interviews and focus group discussions with a total of 70 workers and 10 union leaders in Indonesia’s electronics industry. This report also includes data from LIPS’ previous surveys and research, local news outlets, as well as government, industry and academic reports.

The 70 workers and 10 union leaders who participated in this assessment are between 19-43 years old and work in factories in the industrial heartland of Bekasi and Sukabumi in West Java province, and Batam island in the Riau Islands province. Sixty of the 70 workers are women. They have worked in electronics factories for as little as six months and as long as nineteen years. For safety reasons, workers’ identities are confidential.

Overview of Electronics Industry in Indonesia

Indonesia is one of the most populated countries in the world with 262 million people in 2017, which accounts for 40% of the total of the Association of Southeast Asian Nations (ASEAN)’s population. The country lies at the intersection of the Pacific and the Indian Oceans, with over half of all international shipping activity going through its waters. This is one of the factors that makes Indonesia an internationally competitive economy, well integrated into globalized production networks. The Indonesian government has also been attracting direct investments to the country for its labour surplus and low labour cost.

4.1. Trajectory of Indonesia’s Electronics Industry

The trajectory of Indonesia’s electronics industry can be traced back to the 1950s with the founding of PT Transistor Radio Manufacturing Company (now known as PT National Panasonic Gobel Indonesia), the first domestic producer of transistor radios. The early 1960s became a new beginning for the country’s electronics industry with the first production of black-and-white televisions. At that time, most electronic products in Indonesia were imported. In the early 1970s Indonesia began the import substitution agenda, applying tariff and non-tariff barriers to restrict the imports of radios and televisions as finished goods. Rather than operating on their own, foreign electronics companies were encouraged to invest in the country through joint ventures and technical cooperation with domestic firms to supply domestic demand. The policy resulted in some initial flow of

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FDI from Japanese and European multinational companies (including National and Sanyo from Japan, and Grundig, Philips, and ITT from Europe), which established branches in Indonesia. Export growth from Indonesia's electronics industry only came about in the mid-1980s.

Investment policies in the 1990s included Government Regulation No. 20/1993 on foreign investment, which allowed foreign corporations to hold a 100% share of a company operating in Indonesia rather than requiring foreign firms to have a joint venture with local firms. These policies encouraged inflows of export-oriented foreign investment particularly from South Korea, Singapore and Taiwan, where Indonesia relied on imported components from Japan, South Korea, and Taiwan. The Indonesian electronics industry at that time was dominated by consumer electronics, contributing 49% of electronics production, while industrial electronics and components accounted for 29% and 22% respectively.

The 1997 Asian financial crisis dealt a blow to Indonesia's electronics industry, as a number of domestic and foreign companies were forced to end operations. The industry suffered a sharp decline in domestic demand during the peak of the crisis in 1998 and 1999 caused by a sudden drop of household purchasing power. However, in the early 2000s, a new era for the consumer electronics industry (TV industry) began with technological breakthroughs that included CRT technology, plasma display panels (PDP), and liquid crystal display (LCD) technologies. These developments helped the electronics industry to recover and attract new investments.

Today, the Indonesian electronics industry can be classified into three categories:

- Consumer electronics, e.g., audio, video, television, air conditioner, refrigerator, and washing machine;
- Industrial electronics used in factories; and,
- Electronics components, e.g., microchips, motherboards, and transistors.

The consumer electronics segment is the most developed due to a large domestic market of 62 million households, while the industrial electronics segment has been developing because of the expanding communications and telecommunications sector. On the other hand, the components electronics segment is relatively weak, with the electronics sector highly dependent on imported components to assemble. Even local brand producers mostly import their main components and parts. This marks the failure of the country's efforts to develop its supporting industry since the late 1970s. Only a small number of companies have the capability for basic modification, design, and engineering innovation.

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11 Ibid.
4.2. Economic Condition of Indonesia’s Electronics Industry

Today, electronics is a key priority development industry for the Indonesian government, which seeks to improve the business climate through tariff and taxation incentives as well as safeguards for companies operating domestically in the electronics industry. To attract foreign capital, the Indonesian government provides at least three types of incentives. Government Regulation No. 18/2015 reduces the corporate net income tax by 5% each year for a period up to six years. The Ministry of Finance Regulation No. 159/PMK.010/2015 provides tax reductions of 10-100% for a period of five to 20 years for firms that invest a minimum of US$ 71.8 million. Finally, the Ministry of Finance Regulation No. 176/PMK.011/2009 provides two years import duty exemption for machines and materials used for production purposes, or four years for companies using 30% of locally produced machines.

In 2014, the central government issued a certification scheme to declare certain economic units “national vital objects”. The Ministry of Industry has guaranteed an added layer of security for 49 industrial firms, (including many electronics firms, and 14 industrial estates (such as the ones in Bekasi and Batam) with the help of the National Police’s Directorate of Vital Object Security and with the help of the national army. This means that workers face more restrictions from any kind of protest in such factories or industrial areas.12

Most electronics companies are located in Special Economic Zones (SEZ), such as Batam Island where 80% of electronics manufacturing takes place, and Bekasi in West Java, the industrial heartland of Indonesia, which is home to several large SEZs with nearly one million workers. Some electronics firms, such as those in Sukabumi and Depok, are scattered in the region and located outside the zones. However, they still benefit from the export processing zone benefits, including preferential regulatory infrastructure and tax incentives. Those firms inside the SEZs also benefit from security and protection from the SEZ authority.

Precarious Labour in the Indonesian Electronics Industry

The government has implemented a flexible labour market policy to create a pro-business environment, especially since the Asian financial crisis in 1997, followed by the ouster of dictator Suharto in May 1998 after 32 years in power. During his dictatorship (1966-1998), the Suharto regime controlled and sought to depoliticize workers by fostering a corporatist industrial relations system. However, soon after he was toppled, organised labour entered the immediate post-authoritarian period with little political power. International pressure, rather than domestic labour activism, was the

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key factor in forcing Suharto’s successor, B.J. Habibie, to fundamentally change the industrial relations system, including the adoption of basic rights, such as the freedom of association. At the same time, the new administration embraced market-oriented and flexible labour policies. This double transition of Indonesia towards democracy and a free market economy occurred under the pressure of the IMF and World Bank during the Asian financial crisis, which forced Indonesia to adopt austerity measures and structural adjustment programmes.\textsuperscript{13}

Labour law reforms took place in early 2000s, including the enactment of Law No. 13/2003 that legalized contract work and allowed labour outsourcing practices. Since 2003, it has been the norm for companies to have three groups of workers: (1) regular or permanent workers; (2) contract or temporary workers; and (3) outsourced or agency workers. They receive different wages and benefits despite doing the same job. Regular or permanent workers are those who work with permanent status; they are entitled to receive benefits that are mandated by law. The proportion of regular workers has been declining overall, especially since mid-2000. Contract or temporary workers are hired directly by the company where they work for a limited period of one month to 24 months. Although the law limits the contract period to two years, some employers use loopholes to repeatedly hire the same workers for several years on a contract basis. Contract workers receive less benefits than regular workers or may not receive any benefits.

Outsourced or agency workers are employees in a factory where they work, just like regular and contract workers, but are hired through an employment agency rather than directly by the factory’s management. These workers remain employees of the agency and are temporarily contracted to work at a factory. Thus, the factory is not responsible for the workers’ benefits (such as social security payments, paid holidays, paid sick leave or any other benefits provided to regular workers by law). In practice most employment agencies do not provide those benefits either, although they are legally required to do so.

The typical composition of labour in a manufacturing company, including electronics, is as follows: 20\% permanent, 30\% contract, and 50\% outsourced (agency) workers. A study in 2011 showed drastic increase of contract and agency workers in many companies between 2005-2010, including electronics firms.\textsuperscript{14} Even those with permanent employment status have been changed into contracts in order to cut labour costs. Such contractualization has taken place especially since 2003, after the enactment of Law No.13/2003.\textsuperscript{15}

LIPS informants from an electronics factory suggested that out of 4,200 workers there are only about 300 workers with permanent status. The rest are contract workers, and many of them are short-term contracts. Even so, management is systematically seeking to persuade the regular workers to resign from the current employment. Those who accept the offer will be provided with severance payments and be re-hired as contract workers.\textsuperscript{15} This strategy helps factories cut labour costs and maintain a flexible workforce.


\textsuperscript{15} Ibid.
Findings

LIPS field investigations found risk of breach of several labour standards in the Indonesian electronics sector, including freedom of employment, freedom of association and the rights to collective bargaining, working hours, health and safety, and termination of employment.

6.1. Freedom of employment

In general, workers in the electronics sector can choose their employment freely. However, student interns are vulnerable to forced labour, as they may not be able to graduate unless they pass the internship program.

The Indonesian government issued the Manpower Minister Regulation No. 22/MEN/IX/2009 on internship targeting at least 400,000 workers in different manufacturing sectors, including electronics. According to the regulation, interns should learn the theory and concept (25%) as well as the practice (75%), and the internship should last for one year at the maximum. In reality, however, many interns work the same job as regular workers do for more than a year, and at best receive only one third of the minimum wages.

Electronics factories sometimes collaborate with vocational schools to recruit student interns as short-term workers. Factories pay a management fee to schools as an incentive. Union leaders interviewed report that electronics factories sometimes only provide lunch for the student interns despite the fact that they do the same job as the regular workers.

When student interns are required to perform the same work as regular workers for scant compensation in order to graduate, they may work in conditions of forced labour. According to the ILO, forced labour is “work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself (sic) voluntarily” (ILO Convention No. 29, Article 2). The ILO has further explained that “menace of penalty” includes various forms of coercion, such as physical violence, psychological coercion, and the loss of rights or privileges. The prospective loss of an educational diploma, necessary to obtain jobs and a decent livelihood, is an example of a “menace of penalty.” Indonesia has ratified ILO Convention No. 29.

Furthermore, workers interviewed stated that student interns have to work between nine and 10 hours per day and report high production targets. Those who fail to meet the daily target may have to compensate by working longer hours and during lunch break. Such additional working hours may not be counted as overtime and may not be paid. If overtime exceeds legal limits and workers would lose their job or suffer other punitive consequences if they refused the overtime, this too is a form of forced labour accoding to the ILO.

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19 Focus Group Discussion, workers and union leaders, 12 February 2018.

6.2. Working Hours

ILO Convention No. 1, which Indonesia has ratified, limits working hours.21 According to Article 77 of Indonesian Labour Law No. 13/2003, the normal working week consists of 40 hours (seven hours from Monday to Friday and five hours on Saturday). Article 79 states that a worker shall have at least a 30 minutes break every four hours. And Article 78 limits overtime to three hours per day or 14 hours per week, for a total maximum workweek, including overtime, of 54 hours. Articles 77-79 provide clear instruction for avoiding excessive working hours.

However, workers interviewed stated that in reality the production target determines how many regular hours they work. All hours required to meet the production target are counted as regular hours. Workers reported that on average they have to work at least nine hours per day from Monday to Friday (five days a week), plus half day on Saturday, for a total 50 regular hours per week (not counting overtime).

Workers also stated that it is difficult for them to leave their working sites for toilet breaks or to get a drink as that would increase the burden of meeting the production target for their peers.22 The lack of properly functioning toilets sometimes compounds this problem for workers.

6.2.1. Overtime

Overtime pay on regular days is 1.5 times the hourly wage for the first hour and two times the hourly wage for each additional hour, where the hourly wage is based on the local legal minimum wage. For overtime on Sundays and public holidays the rate of overtime pay is higher.23

However, lack of clear regulation results in workers putting in overtime without receiving the proper overtime rate of pay. For example, overtime is only counted in whole hours. Thus if workers work more than two hours and 30 minutes overtime, they receive the overtime for three hours. But if they work less than two hours and 30 minutes they only receive overtime for two hours. Workers suggested that companies often limit overtime against their interests to ensure they work for a period of time without receiving overtime pay.

Furthermore, as stated above, overtime pay may be tied to meeting the production target. For example, in one factory workers reported that their target is 3,000 pieces per hour. If they do not meet that target in an hour of overtime they do not receive the overtime pay for that hour.

While overtime requires the consent of workers by law,24 workers reported that they feel compelled to work overtime in order to earn a higher income for their subsistence. They may be in debt to informal

21 “Hours of work shall comply with applicable laws and industry standards. In any event, workers shall not on a regular basis be required to work in excess of 48 hours per week and shall be provided with at least one day off for every 7-day period. Overtime shall be voluntary, shall not exceed 12 hours per week, shall not be demanded on a regular basis and shall always be compensated at a premium rate.” (ILO Convention No. 1).

22 Focus Group Discussion, workers and union leaders, 29 October, 2017.

23 Article 11 of Decree No. 102/2004 of Ministry of Manpower and Transmigration.

24 Article 78 of Manpower Law No.13/2003 prohibits forced overtime.
lenders who charge a high rate of interest, up to 30%. For example, if they borrow 1,000,000 IDR, they have to pay back 1,300,000 IDR. Even when conditions of overtime do not meet the legal definition of “forced overtime,” workers may experience it as they struggle under a burden of debt.

6.3. Freedom of Association and the Right to Collective Bargaining

Indonesia ratified ILO Conventions 87 and 98 in 1998 and 1957 respectively. The conventions provide that “the right of all workers to form and join trade unions and bargain collectively shall be recognised.” These rights were incorporated into national labour law (Law No. 21/2000 on trade unions) in 2000, allowing previously banned trade unions at the local, provincial and national levels.

Nonetheless, Law 21/2000 that guarantee the freedom of association and the right to collective bargaining is not always effective. In more than 268,000 firms across Indonesia, there are only 13,000 collective bargaining agreements, a rate of about 5%.

Union leaders or union members at electronics factories often become targets of intimidation and violence due to their labour activism. Several union committee members interviewed reported they have been harassed and attacked by thugs, or threatened with termination of employment. Unfair dismissals and fabricated criminal cases against union leaders and supporters—known as “kriminalisasi”—also restrict the freedom of association and the right to collective bargaining. Union leaders or union members at electronics factories often become targets of intimidation and violence due to their labour activism. Several union committee members interviewed reported they have been harassed and attacked by thugs, or threatened with termination of employment. Unfair dismissals and fabricated criminal cases against union leaders and supporters—known as “kriminalisasi”—also restrict the freedom of association and the right to collective bargaining. Union leaders or union members at electronics factories often become targets of intimidation and violence due to their labour activism. Several union committee members interviewed reported they have been harassed and attacked by thugs, or threatened with termination of employment. Unfair dismissals and fabricated criminal cases against union leaders and supporters—known as “kriminalisasi”—also restrict the freedom of association and the right to collective bargaining. Union leaders or union members at electronics factories often become targets of intimidation and violence due to their labour activism. Several union committee members interviewed reported they have been harassed and attacked by thugs, or threatened with termination of employment. Unfair dismissals and fabricated criminal cases against union leaders and supporters—known as “kriminalisasi”—also restrict the freedom of association and the right to collective bargaining. Union leaders or union members at electronics factories often become targets of intimidation and violence due to their labour activism. Several union committee members interviewed reported they have been harassed and attacked by thugs, or threatened with termination of employment. Unfair dismissals and fabricated criminal cases against union leaders and supporters—known as “kriminalisasi”—also restrict the freedom of association and the right to collective bargaining. Union leaders or union members at electronics factories often become targets of intimidation and violence due to their labour activism. Several union committee members interviewed reported they have been harassed and attacked by thugs, or threatened with termination of employment. Unfair dismissals and fabricated criminal cases against union leaders and supporters—known as “kriminalisasi”—also restrict the freedom of association and the right to collective bargaining. Union leaders or union members at electronics factories often become targets of intimidation and violence due to their labour activism. Several union committee members interviewed reported they have been harassed and attacked by thugs, or threatened with termination of employment. Unfair dismissals and fabricated criminal cases against union leaders and supporters—known as “kriminalisasi”—also restrict the freedom of association and the right to collective bargaining. Union leaders or union members at electronics factories often become targets of intimidation and violence due to their labour activism. Several union committee members interviewed reported they have been harassed and attacked by thugs, or threatened with termination of employment. Unfair dismissals and fabricated criminal cases against union leaders and supporters—known as “kriminalisasi”—also restrict the freedom of association and the right to collective bargaining. Union leaders or union members at electronics factories often become targets of intimidation and violence due to their labour activism. Several union committee members interviewed reported they have been harassed and attacked by thugs, or threatened with termination of employment. Unfair dismissals and fabricated criminal cases against union leaders and supporters—known as “kriminalisasi”—also restrict the freedom of association and the right to collective bargaining.

In other cases, managements of electronics factories set up in-house workers’ unions, sometimes called a “company’s family” to show harmonious relations between workers and management. This type of union prevents the formation of or free operation of independent labour unions. In one of the factories LIPS investigated, management maintained a highly controlled in-house union that hindered the independent union from reaching and representing workers.

The company management has been collaborating with key people including the head of village and local groups (better known as thugs since they usually face the workers and unions in favour of the company whenever an industrial action takes place) at the local community around the factory. These key people and thugs receive a number of ‘consensual kick-back’ from the factories, such as being labour recruitment agency (workers have to pay illegal fee to recruitment brokers between 50-200 USD in order to get a job in the electronics factories), and receiving electronics wastes that can be recycled of which they would earn money.

25 Focus Group Discussion, workers and union leaders, 5 October, 2017.
28 One union activist related his experience of being attacked on the road while he was riding his motorbike. Interview, a union leader, 9 October 2017.
29 One informant of this risk assessment stated that she was fired in early February 2018 because of her union activities. However, the the union at the branch level helped to reinstate her to her job through advocacy and negotiation.
30 Gerintya, Scholastica, ‘Buruknya Jaminan Hak Pekerja Indonesia’ [Unprotected labour rights in Indonesia], Tirto.id, 5 April 2018. Available online: https://tirto.id/buruknya-jaminan-hak-pekerja-indonesia-chicE.
31 Focus Group Discussion, workers and union leaders, 29 October, 2017.
6.4. Living wages

Indonesia has not ratified ILO Conventions 131. Convention 131 states that “the elements to be taken into consideration in determining the level of minimum wages shall, so far as possible and appropriate in relation to national practice and conditions, include: (a) the needs of workers and their families, taking into account the general level of wages in the country, the cost of living, social security benefits, and the relative living standards of other social groups; (b) economic factors, including the requirements of economic development, levels of productivity and the desirability of attaining and maintaining a high level of employment.” Nonetheless, Indonesia has a government-mandated minimum wage, and no worker can be paid less than this mandatory minimum rate of pay. Employers who fail to pay the minimum wage may be subject to punishment under the law.

The recent government regulation No. 78/2015 ended the annual review of the minimum wage and replaced it with a combination of automatic annual increases using an official formula based on the economic growth rate and the inflation rate, and reviews of wages by the Wages Council, which consists of employers, unions and government representatives, every five years. The new formula removed the Dignified Living Needs calculation from the wage setting, using only the official statistics for productivity and economic growth. The result is that wages usually only increase between eight to 11% every five years and that workers continue to be paid wages that do not meet their needs. Therefore, labour unions generally oppose the new wage policy.

Workers interviewed said their wages are far from meeting their basic needs. In the case of one district, a union survey in August 2017 found that a single worker in that district needs a minimum of 4,000,000 Indonesian Rupiah (€230) per month to cover costs, measured against a market basket of 48 items included in the Dignified Living Needs calculation. However, the current minimum wages in the area is 2,377,000 IDR (€140) per month, including the attendance bonus of 95,000 IDR and menstrual leave bonus of 190,000 IDR, just short of 60% of a dignified living wage for a single person. All operators earn the same wage no matter how long they have worked there.

6.5. Health and Safety

Government regulations require Occupational Safety and Health (OSH) management systems in every undertaking employing 100 workers or more, or in a high risk workplace, to protect the safety and health of workers through the prevention of occupational accidents and diseases. In 2015, Indonesia ratified the Promotional Framework for Occupational Safety and Health Convention (No. 187), which reinforces Indonesia’s commitment to achieve sustained and continuous improvement of OSH to prevent occupational injuries, diseases and deaths. Despite these legal mechanisms, this
assessment reveals significant risks of violations of OSH standards in the electronics industry. These risks include: poor ventilation systems and very high temperatures; the use of chemical solvents without relevant training and personal protective equipment; poor implementation of health checks for workers exposed to work hazards; lack of government monitoring on the use of chemicals in workplaces; and inadequate social audits and certifications that may ignore or obscure hazards to workers.

6.5.1. Occupational Diseases

Workers exposed to toxic chemicals have reported chronic headaches, thyroid disorders, respiratory problems, and lung cancer, among other illnesses. In one of the factories visited for this risk assessment, workers reported almost half of all workers in the factory suffer from lung disease. During this investigation, one of these workers was reported to have died from lung disease. These reports are consistent with findings in LIPS previous research on occupational illness.

The problem of the use of toxic chemicals is aggravated by the outsourcing employment system where the company can terminate workers’ contract once they reach the maximum of two years employment. Therefore most workers are employed in several different factories over a period of time. It is difficult to track whether workers’ occupational illness is caused by conditions in the current employer, a past employer, or a combination of several employers.

Furthermore, in one key industrial area visited for this report, there is not a single occupational doctor provided by the government. Instead, the doctors practicing in that area work for the companies, possibly compromising their independence.

LIPS investigations also found that electronics factories in one of the industrial heartlands have been toxic and even deadly for workers, most of whom are women from 19-25 years old and thus of child-bearing age. Workers reported that they suffer from breast cancer, lung diseases, hepatitis and haemorrhoids, among other illnesses, which they believe are linked to workplace conditions. These workers are in dire need of medical treatment, removal, and transfer to a non-toxic environment at the same workplace, if available, or assistance in locating alternative work.

6.5.2. The Use of Chemicals

Many workers in the electronics industry have been exposed to toxic chemicals unsafely. The criteria and conditions for the use of a chemical have been established in a number of Indonesian regulations, laws and ministerial decrees. However, the regulations are not strictly enforced and monitored by the government. In addition, the existing regulations are not updated regularly, despite the fact that new scientific developments related to chemicals require

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35 Further investigation on workers’ lung diseases are needed. They may include chronic obstructive pulmonary disease, bronchitis, asthma, and emphysema.

36 Focus Group Discussion, 22 workers in an industrial area, 28 October, 2017.


38 Ibid.

39 Ibid.
As early as 1986, in their discussion of solvent contamination of well water in Silicon Valley, the United States, and its potential role in miscarriages and birth anomalies reported in the surrounding neighborhood, State Public Health staff members Drs Linda Rudolph MD and Shanna Swan PhD made a key observation about the gap between environmental and occupational exposure standards: “It should be noted that the contamination of well water by TCA in these studies occurred at levels substantially below the exposure levels likely for production work in the electronics industry. Electronics workers, exposed at the current standards, would be at risk of exposures at least 1,000 times those received in the Great Oaks Water Company Service Area. In addition, electronics workers have many simultaneous exposures to other substances associated with adverse reproductive outcomes.” See ‘Reproductive Hazards in the Microelectronics Industry’ in The Microelectronics Industry, State of the Art Reviews 1986 (guest editor Joseph LaDou). This gap between environmental and occupational exposure standards are not limited to the United States.

Assertions of risks associated with certain chemicals in this report are based on the “Chemical Hazard and Alternatives Toolbox;” available at: http://chemhat.org/en. This toolbox is a compilation of a variety of state, national and international governmental bodies and non-governmental organizations’ (NGOs) authoritative chemical hazard lists based on authoritative scientific review.

Several workers we interviewed—mostly young women of childbearing age—said they have been using and being exposed to toluene for many years without proper and effective personal protective equipment. Toluene is an organic solvent known to be especially toxic to women of childbearing age as it has been linked to birth defects and miscarriages. It may also affect the central nervous system, eyes, skin, respiratory system, liver, and kidneys.

One woman who had been washing the transparent film of speaker units with toluene, every working day for seven years, told LIPS researchers: “We inhale the toluene and feel dizzy. We use masks, but the masks are the normal thin masks, even though they are supposed to get us the proper [gas] masks. Some workers vomit. Sometimes, when it is hot, we do not use a mask. There is no air conditioning, only a fan. Many workers suffer from respiratory illnesses and allergies. They have lung diseases and difficulty breathing. This is caused by the fumes of the toluene. The fumes are everywhere because of the open work area.”

While organic solvents, including toluene, ethanol and TCE can cause a variety of acute and chronic health problems in a healthy adult worker, the neurodevelopmental harm that such solvents can cause a fetal brain when the pregnant mother is exposed are just as important. The precautionary principle and well established scientific research make clear that every solvent shown to be neurotoxic to healthy adults must be considered a potential cause of neurologic damage to an exposed fetus as well.

6.5.3. Production pressure

Workers also reported that excessive production targets cause stress and fatigue. Workers in one factory said that fainting is a normal and everyday occurrence. “Every day three workers faint,” they said, adding that sometimes workers are also possessed, falling unconscious and screaming for 15-30 minutes. One worker explained:

“Fainting happen because workers are tired or sick. Possessions are also psychological. Workers are affected psychologically by the working conditions. Workers fall unconscious, they scream and they cry. It lasts 15-30 minutes. This may be a myth, but it happens a lot.”
6.5.4. Electronics Waste

In general, there are two types of electronics waste produced by electronics factories. The first is the products rejected for not meeting certain production standards. Although these rejected products cannot be sold in the market, some of them are sold as components or as parts of a component or product. Some electronics factories also offer them to local thugs in exchange for their services to control labour. In some cases, local thugs compete with each other to get the waste from one factory. This e-waste business has involved local groups near the industrial areas, local leaders, thugs, and police.46

The second type of electronics waste is toxic pollutants and solid or liquid waste materials resulting from the production. As it requires certain capacity to handle such toxic pollutants, the government strictly regulates its management. Waste management companies must obtain a licence in order to be able to officially handle this e-waste. However, several workers and e-waste businesses have reported to LIPS that some factories have discarded their liquid waste in rivers during the rainy season.

According to an informant who runs an e-waste business, such violations have taken place in the rivers of Cibitung, Setu, and Cibatu Kalimalang, located in the industrial areas of Bekasi, West Java province.47 In one of the industrial areas on Batam, Riau Islands province, a number of scandals have been reported, including cases in which the toxic pollutants from Singapore ended up on Batam due to the inclination of local officials to accept bribes.48

6.6. Termination of Employment

Short-term contracts, between three to six months, can be used as an instrument of labour control as companies can terminate or refrain from renewing contracts without incurring the obligation to pay severance payments that would be owed to regular workers. Thus, it may be more difficult for workers on short-term contracts to voice a grievance or to work for systemic improvements in their workplace.

One factory LIPS investigated have recently terminated workers’ contracts, targeting especially union members. The usual timing for mass termination of employment is in the months that approach the Muslims’ Idul Fitri holidays to avoid paying allowances to the workers. This has hindered the union from expanding its membership, thus facing difficulties in advancing their rights. At the same time, management, aware of lax enforcement of labour laws and absence of labour inspections, reportedly favour non-union supporters with longer contracts.49

46 Focus Group Discussion, workers and union leaders, 5 October, 2017.
49 Focus Group Discussion, workers and union leaders, 29 October, 2017.
6.7. Prohibition of Child Labour

The Indonesian Provisions on the Prohibition of Using Child Labour, which prohibits the employment of children under the age of 16, is generally respected in the electronics industry. Indonesia ratified ILO Conventions 138 and 182\(^{50}\) in 1999 and 2000 respectively. Indonesian Labour Law No. 25 (1997) stipulates that the employment of children under the age of 15 years is prohibited. Compulsory schooling in Indonesia ends at the age of 14. Indonesians between 15 and 18 years of age are allowed to work under special circumstances, but only for four hours during the day. However, as the electronics industry employs vocational school students, between the age of 14 and 18, as interns, the risk of child labour violations increases.\(^{51}\)

6.8. Other Domestic Labour Standards

Despite the fact that women are the majority of the labour force in the electronics sector, female workers are still struggling to fully enjoy their legal rights. Article 81(1) Manpower Law No. 13/2003 requires employers to give their female workers two days menstruation leave on workers’ request, and article 82(1) provides a three-month maternity.

However, female workers’ rights to menstruation leaves are often not fulfilled. Some workers interviewed stated that they do not claim their right to menstruation leave because they fear deductions of their basic income, or worry about the additional burden of work on the next day or about conflicts with their peer workers because the burden of work shifted to them. Moreover, nursery rooms and breast milk freezers are rarely provided in the workplaces, although they are mandated by law.

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\(^{50}\) The convention stated “there shall be no use of child labour. The age for the admission to employment shall not be less than the age of completion of compulsory schooling and, in any case, not less than 15 years.”

\(^{51}\) Interview, union leader, 21 February 2018
Recommendations

The Electronics Watch Contract Conditions require the contractor to exercise effective due diligence to identify, mitigate, and prevent adverse human rights impact on workers involved in the production of goods that affiliates buy. Electronics Watch recommends that affiliates use this risk assessment for internal education and contractor education, and to promote dialogue on steps that contractors, brand suppliers, and affiliates themselves can take to avoid practices that may cause or contribute to breaches of labour rights and safety standards and to mitigate adverse human rights impacts to which they are linked.\(^\text{52}\)

The risk assessment suggests that risks of breaches of particular concern include the standards on freedom of association, forced labour, working hours, and health and safety.

Suggested actions:

- Discuss the risk assessment internally among staff.

- Share the risk assessment with the relevant contractors and ask them to report on steps that they take to mitigate risk and prevent breach in the areas identified in this risk assessment.

- Affiliates to Electronics Watch have access to a risk assessment tool, which includes a questionnaire for contractors based on the findings of this risk assessment.

\(^{52}\) This process of risk mitigation is in line with the United Nations Guiding Principles on Business and Human Rights (2011) and the OECD Due Diligence Guidelines for Responsible Business Conduct (2018).
Responsible public procurement.
Rights of electronics workers.