

NINA'S ACTION

STOP PLASTIC POLLUTION





Photos by Seunghyeok Choi on assignment for Break Free From Plastic and Uproot Plastic Coalition

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On Saturday afternoon (November 23), alongside 1,500 global environmental activists, Aeshnina Azzahra Aqilani, commonly known as Nina, a 12th-grade student at SMA Muhammadiyah 10 Gresik, called for a global reduction in plastic production and a ban on toxic chemicals in plastic manufacturing.

"Protect babies from the threat of microplastics! These tiny plastic fragments have been found in breast milk, the placenta, amniotic fluid, and even human organs. Babies must be shielded from the dangers of plastic toxins. It's time to stop plastic production to put an end to plastic pollution!" Nina shouted in the middle of a long march with fellow global environmental activists.

The protest march began at Busan Olympic Park on Jangsan-Ro Street and continued along Haeun-Daero Street in Busan, South Korea.

"The threat of microplastics is real. Babies are now at risk from plastic toxins because plastic contains thousands of added chemicals that can disrupt hormones and endanger their health,"

said Nina, Co-Captain of the River Warrior Indonesia community.





She explained that from November 25 to December 2, 2024, Busan hosted the Intergovernmental Negotiating Committee (INC-5) to discuss a global agreement on controlling plastic pollution, including its impact on the oceans.

“INC-5 will be crucial in determining the future of plastic pollution on Earth. If world leaders agree to reduce plastic production, we can protect ourselves from plastic pollution. However, if they choose to increase plastic production instead, we will face an environmental catastrophe caused by plastic waste,” Nina warned.

During the demonstration, Nina carried six jars containing baby figurines entangled in microplastics and held posters reading:

“Cradled in Contamination = Microplastics have reached the womb”

“Tiny lives, toxic threats = Microplastics in the womb”



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AESHNINA BRINGS IMPORTED WASTE TO BUSAN TO EXPOSE PLASTIC INJUSTICE



Aeshnina Azzahra Aqilani (Nina), coordinator of River Warrior Indonesia, brought two large suitcases filled with imported plastic waste, which were exhibited at the Youth and Stakeholder Assembly (YSA) on Plastic Pollution on November 24, 2024, at Dongseo University, Busan, South Korea.

The event, organized by the Children and Youth Major Group to the United Nations Environment Programme and supported by the United Nations, gathered the aspirations of young people from around the world, which were presented at the INC panel held in Busan from November 25 to December 1, 2024.



“I want to show young delegates from various countries that plastic waste is still being dumped from the European Union, the United States, Canada, Japan, the Netherlands, and other developed countries into developing countries like Indonesia. This is unfair because the dumped and recycled plastic waste causes river pollution, air pollution, and environmental contamination, which threaten the health of children in developing countries,”

Aeshnina Azzahra Aqilani



MICROPLASTIC TOXINS THREATEN BABIES

Nina Exhibits
Baby
Replica
Entangled
in Plastic
Inside a Jar

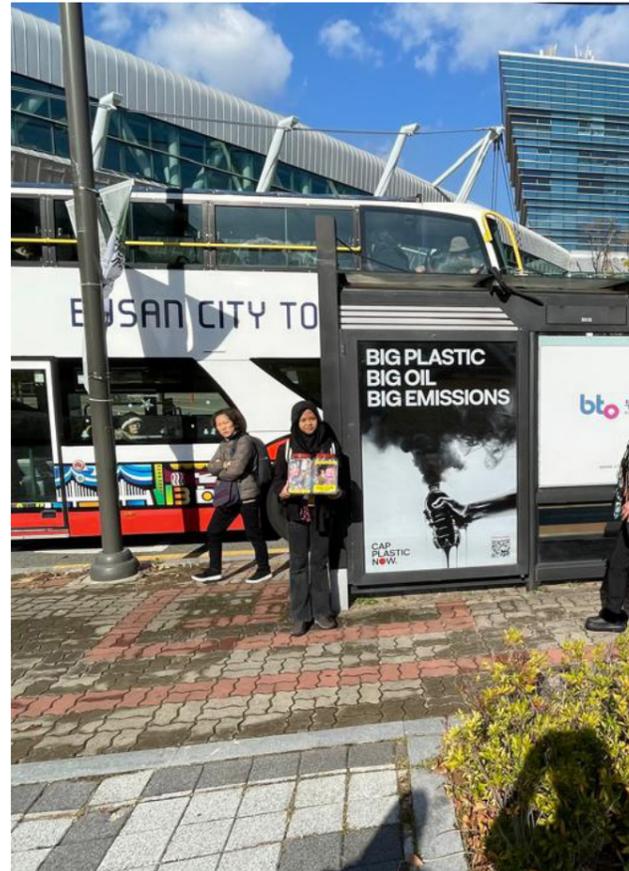
“We want a strong treaty to protect human health and the environment by reducing plastic production and eliminating the threat of toxic chemicals throughout the plastic life cycle.”

At the INC 5 event in Busan, Aeshnina Azzahara Aqilani, Captain of River Warrior Indonesia, brought 12 baby replicas placed inside jars. This art installation will be exhibited at the Zero Waste Alliance Indonesia booth at the Busan Exhibition and Convention Center (BEXCO), Hall 321-322, from November 25 to

December 1, 2024. The baby jar replicas depict babies contaminated with microplastics, emphasizing that there is no safe place left for newborns. Infant feces have been linked to environmental exposure after birth, including breast milk, formula milk, plastic baby bottles, or plastic packaging.

“A mother’s womb is already contaminated with microplastics. Now, the safest place for humans is polluted. Where else is safe for us?” said Aeshnina.





SHOCKING FINDINGS: MICROPLASTICS IN BABIES

Recent studies have detected microplastics in the human body, from the placenta to breast milk. The presence of microplastics in humans comes from consuming food and drinks packaged in single-use plastic, breathing contaminated air, and skin contact with personal care products containing microplastics (microbeads).

This situation is alarming as plastics contain 16,000 chemical compounds, including toxic substances such as Bisphenol A (BPA), phthalates, PCBs, and PBDEs, which are proven to have

harmful health effects. Exposure to these chemicals during pregnancy and early childhood can disrupt growth, neurological development, and the reproductive system.

Microplastics can be absorbed in the digestive tract through paracellular absorption and phagocytosis, entering the bloodstream. Particles smaller than 20 micrometers can be distributed to muscles, liver, kidneys, heart, brain, breast milk, and even the placenta. Microplastics in the placenta may enter amniotic fluid, potentially affecting fetal development.

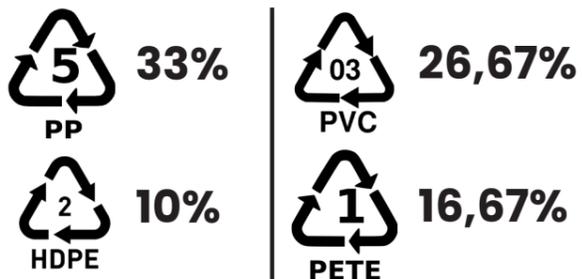


ALARMING MICROPLASTIC CONTAMINATION IN BABIES



01 Placenta

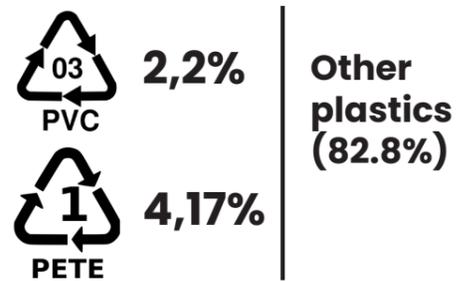
A study by Braun et al. (2021) found various microplastic types in the placenta of pregnant women:



Further research shows that microplastic exposure in the placenta has increased from 60% in 2006 to 100% in 2021 (Weingrill et al., 2023). This is concerning because the placenta plays a vital role in hormone balance and fetal organ development.

02 Meconium (Baby's First Stool)

Li et al. (2023) detected microplastics in meconium:



This suggests that fetuses are already exposed to microplastics during pregnancy. Microplastics likely transfer from the mother to the fetus via the placenta, accumulating in the baby's body even before birth.

03 Infant Stool – Li et al. (2023) found:



Exposure to microplastics after birth occurs through breast milk, formula milk, plastic baby bottles, and plastic toys. Babies who frequently drink from plastic bottles or suck on plastic toys had higher microplastic levels in their stool.



04 Breast Milk

Ragusa et al. (2022) reported microplastic contamination in breast milk, including:

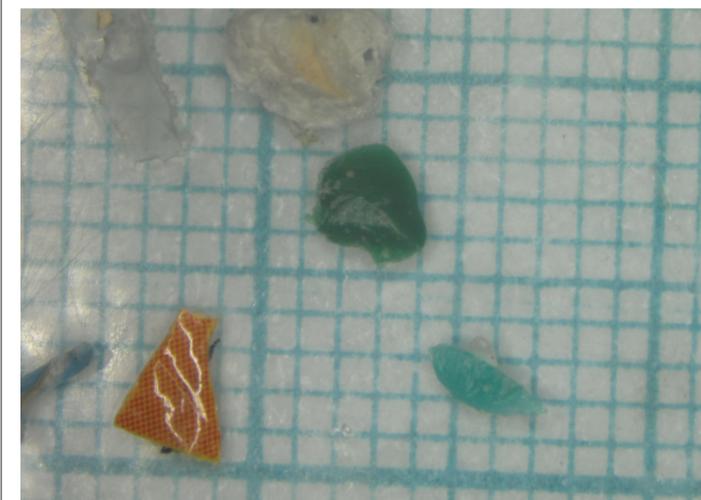


This suggests that fetuses are already exposed to microplastics during pregnancy. Microplastics likely transfer from the mother to the fetus via the placenta, accumulating in the baby's body even before birth.



05 Amniotic Fluid

The amniotic fluid, which protects the fetus during pregnancy, also contains microplastics. A study by Halfar et al. (2023) **found PET microplastics (72.72%)**, which can disrupt biological functions, leading to preterm birth and restricted fetal growth.



HEALTH RISKS FOR BABIES AND CHILDREN

Microplastics can absorb and bind harmful pollutants in the environment. They are bioaccumulative and persistent, meaning they build up in human

tissues over time. Microplastics and their chemicals also biomagnify, moving up the food chain and increasing in concentration in top predators, including humans.

Exposure to microplastics and their thousands of toxic chemicals poses serious risks to developing babies, including :

1. Inflammation and immune system disruption
2. Impaired brain and nerve development
3. Increased risk of infections
4. Long-term health issues



This research calls for urgent action to limit single-use plastics and improve the safety standards of plastic packaging used in daily life. Governments, industries, and the public must work together to protect babies and future generations from this threat.

“We want a strong treaty to protect human health and the environment by reducing plastic production, eliminating the threat of toxic chemicals throughout the plastic life cycle, and controlling the release and emissions of toxic plastic chemicals,” Nina emphasized.



On November 26, 2024 (14:00–15:30 Korea Time), during the NGO and civil society meeting in Room 311–312 at BEXCO, Busan, South Korea, organized by the Hungarian Presidency of the Council of the EU & European Commission, Aeshnina Azzahra Aqilani protested against the European Union sending waste to Indonesia.



Disappointed that INC 5 Did Not Meet Expectations, Nina Demands Youth Voices Be Heard in Meeting with UNEP Executive Director

The fifth international negotiation (INC 5) for a treaty to tackle plastic pollution did not meet expectations in stopping global plastic pollution through plastic production reduction. Delegations from participating countries were divided into two major groups.

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“The negotiations did not go as we had hoped. Delegates from petrochemical and chemical-producing countries, such as Saudi Arabia and Russia, tried to prevent a strong agreement on restricting production and regulating certain chemicals in plastics,”

said Aeshnina Azzahra Aqilani.

Furthermore, the civil society delegation from Indonesia, who is part of the Zero Waste Indonesia Alliance, explained that these

oil-producing countries rejected production restrictions because they believe it would disrupt their economic interests.

“Restricting plastic production is seen as a threat to oil and gas production since plastic is primarily derived from fossil fuels,”

Aeshnina added when met in Busan (Sunday afternoon, December 1, 2024).

Plastic-producing countries instead pushed for interventions at the downstream level, such as waste management and recycling, to address plastic pollution. “However, recycling creates new problems, such as toxic pollution. Moreover, in Europe, many recycling industries have collapsed due to high production costs and low market demand for recycled products,” Aeshnina stated.

From INC-1 to INC-5, Saudi Arabia and other oil- and gas-producing countries have consistently sought to prevent the treaty from including plastic production restrictions. Higher plastic

production leads to higher greenhouse gas emissions, in addition to its well-documented environmental and human health impacts. “Indonesia’s delegation also seems to lean toward the stance of oil-producing nations, as Indonesia’s proposals do not indicate any effort to reduce oil production,” Aeshnina remarked.

Their stance contrasts with that of African, Pacific Island, and Latin American countries, which are severely impacted by pollution and advocate for strong action, including limiting plastic production and banning hazardous chemicals.

Meeting Inger Andersen, Nina Demands a Strong Treaty to End Plastic Pollution

Aeshnina Azzahra Aqilani met with Inger Andersen, Executive Director of the United Nations Environment Programme (UNEP), during a dinner reception on Thursday at 7:00 PM Korea Time in Room 121, BEXCO Exhibition II, Busan, South Korea, as part of the INC 5 event.

During the meeting, Nina, as she is commonly called, presented replicas of babies contaminated with microplastics inside jars. These replicas symbolized the threat microplastics pose to unborn babies.

Nina then invited Inger Andersen to take a photo together while holding the jar, but Andersen stepped back, saying, "It is too much!" as she distanced herself from the replica.



Nina then approached the UNEP Executive Director, who has held the position since 2019, and highlighted the conditions of the paper recycling industry in Indonesia, which relies on imported waste paper from developed countries such as the United States, Germany, France, the Netherlands, Canada, and Australia. "Recycling imported waste in Indonesia pollutes the environment," Nina stated.

Inger Andersen responded by emphasizing that the facts Nina

presented should be conveyed to the Indonesian government. "These facts need to be shown to your country. I am aware of the frightening realities of recycling in your country (Indonesia)," said Andersen.

Nina then urged Andersen to push for a strong treaty to protect both the environment and human health from the threats of microplastics. "We need a strong treaty!" Nina declared, to which Andersen agreed.



“Reduce Plastic Pollution and Climate Crisis, Shut Off the Tap Now!”

An art installation in the form of a tap pouring out plastic waste has been installed in front of the Plastic Waste Museum of the River Warrior community in Wringinanom Village. “This plastic tap installation is our message to everyone to immediately shut off the tap that is releasing plastic waste so that our planet does not drown in plastic,” said Aeshnina Azzahara Aqilani. Furthermore, the

Coordinator of the River Warrior Community explained that the Earth is currently experiencing a climate crisis caused by plastic pollution. “Unmanaged plastic waste has polluted the oceans. Indonesia is the third-largest contributor to marine plastic waste after India and Nigeria,” said Nina, as Aeshnina Azzahara Aqilani is commonly called.



Reducing Single-Use Plastics

Nina: Stopping Plastic Production Will Reduce Pollution & Climate Crisis

“The climate crisis we are experiencing today is partly caused by plastic production, which contributes to carbon emissions,” said Nina. She further explained that, according to a report by the Center for International Environmental Law, global plastic production accounts for approximately 3.8% of the world’s greenhouse gas emissions.

Plastic contributes to climate change because it is made from fossil fuels such as petroleum and natural gas. The processes of extraction, refining, and manufacturing plastic generate greenhouse gas emissions, including carbon dioxide (CO₂) and methane (CH₄).

According to Nina, unmanaged plastic waste is usually burned (as 57% of Indonesia’s population handles waste by burning it), while plastic waste dumped in landfills releases harmful gases such as carbon dioxide and methane.

“Indonesia is one of the top plastic waste polluters in the ocean. This pollution damages marine ecosystems, including phytoplankton, which play a crucial role in absorbing carbon and regulating the climate,” said Nina, a 12th-grade student at SMA Muhammadiyah 10 Gresik.

“Reducing single-use plastics can help tackle climate change because it lowers emissions from plastic production, usage, and disposal. This step also protects marine ecosystems and supports innovations in more environmentally friendly materials. By switching to reuse systems and cutting down on single-use plastics, we can minimize plastic’s negative impacts while slowing down global warming,” Nina explained.

According to Nina, the daily use of single-use plastic, especially for food packaging, is highly dangerous and unhygienic because plastic contains toxic chemical additives such as bisphenol A (BPA), phthalates, and styrene, which pose serious health risks. These chemicals are often used in plastic production to enhance flexibility, strength, or durability but can

leach into food, beverages, or air, especially when exposed to heat.

Long-term exposure to these toxins can disrupt the endocrine system, leading to hormonal imbalances that increase the risks of fetal development issues, early puberty, and infertility. Additionally, certain compounds, such as styrene, have been linked to cancer, neurological disorders, and damage to vital organs such as the liver and kidneys.

As plastic waste continues to accumulate in the environment, humans are also increasingly exposed to microplastics, which carry harmful chemicals into our bodies, worsening both human and environmental health. Therefore, reducing single-use plastic is crucial to protecting human health and the planet.

Young Environmental Activist Writes to Prabowo, Urges Government to Limit Plastic Production

Gresik – Aeshnina Azzahra Aqilani, a student and young environmental activist from Gresik, East Java, has written a letter addressed to the President of the Republic of Indonesia, Prabowo Subianto. In her letter, she urges the government to take firm action in limiting plastic production to address the plastic pollution crisis, which is increasingly having negative impacts on the environment and human health.

In her letter, Nina highlights the dangers of microplastics to human health, including their discovery in various human organs such as blood, lungs, sperm, placenta, and kidneys. “According to research from various sources, microplastics can cause hormonal imbalances, inflammation, and even serious diseases such as cancer and heart disease,” said Nina, who is currently a 12th-grade student at SMA Muhammadiyah 10 Gresik.

Nina expressed her concern that young people are considered the most vulnerable group to these dangers. “We, the younger generation, are the future of this nation. We want to inherit a clean environment, not the burden of increasing plastic pollution,” she emphasized.

In her letter, Nina also calls for stricter regulations on plastic production, emphasizing the importance of environmental protection for future generations and the need to raise public

awareness through education. She hopes that Indonesia can take a leading role in the global fight against plastic pollution instead of becoming a dumping ground for the world’s plastic waste.

Her letter is accompanied by research data highlighting the impact of microplastics on human health, underscoring the urgency for the government to act.

Nina recently attended the Intergovernmental Negotiating Committee (INC-5) conference in Busan, South Korea, where she witnessed global discussions on solutions to the plastic crisis.

“I was disappointed that Indonesia did not join the High Ambition Coalition (HAC), a group of countries advocating for strict limits on plastic production,” she wrote in her letter dated December 31, 2024.

According to Nina, Indonesia should align itself with ambitious nations committed to stopping plastic pollution by advocating for restrictions on plastic production at the INC-5 conference in Busan, South Korea.

“I hope the government responds to this letter and eventually implements policies that demonstrate its seriousness in reducing plastic production in Indonesia,” Nina concluded.



Aeshnina Azzahra Aqilani, a student and young environmental activist from Gresik, East Java, has sent a letter addressed to the President of the Republic of Indonesia, Prabowo Subianto.



**To the Honorable
Mr. Prabowo Subianto
President of the Republic of Indonesia
In Jakarta**

Assalamualaikum warahmatullahi wabarakatuh,

I hope you are in good health and always under Allah's protection. My name is Aeshnina Azzahra, a student and environmental activist from Gresik, and I would like to share my experience attending the Intergovernmental Negotiating Committee (INC-5) in Busan, South Korea.

In Busan, I witnessed how delegations from various countries, including Indonesia, discussed solutions to the plastic crisis that pollutes both land and sea. The very existence of the INC is proof that the plastic crisis is a serious global issue that must be addressed immediately. Some ambitious countries are strongly committed to ending plastic pollution by pushing for plastic production limits through the High Ambition Coalition (HAC). However, some countries obstruct the INC's objectives by refusing to agree on restricting plastic production.

I am deeply disappointed that Indonesia is not part of the High Ambition Coalition. I believe that Indonesia needs to show commitment and serious effort in this global initiative.

Microplastics—tiny plastic particles—have been found worldwide and pose a severe threat to both human health and ecosystems. Studies have detected microplastics in the human body, including in blood, the brain, lungs, kidneys, sperm, and even the placenta. The safest place for the unborn is no longer safe, as microplastics from our everyday plastic consumption already contaminate them. The primary sources of microplastics come from degraded plastic waste such as plastic bottles, plastic bags, straws, Styrofoam, and microbeads in cosmetic products. These microplastics enter the food chain through air, water, and even marine organisms that people consume.

This is an extremely serious issue, as microplastics can cause hormonal imbalances, inflammation, heart disease, and cancer.

Children are among the most vulnerable to microplastic pollution. As their bodies are still developing, microplastics that enter their systems can affect brain growth and other organ functions. Research shows that children are more susceptible to microplastic exposure from contaminated air, food, and water.

According to the World Health Organization (WHO), children absorb toxins at a higher rate and have a lower ability to eliminate harmful substances compared to adults. Therefore, protecting Indonesia's young generation is crucial. As a young person, I feel fearful and anxious because we are the future of this nation. Seeing Indonesia's environment deteriorate and become more polluted is overwhelming to handle alone. Please do not add to our burden of plastic pollution. We want to see Indonesia beautiful again, free from plastic pollution, with clear oceans, clean rivers, and air without microplastics.

As President, I believe you have the power to bring meaningful change. Therefore, I respectfully ask you to:

1. Limit Plastic Production Both Globally and Nationally

Indonesia should advocate for global plastic production reduction while strengthening national policies to eliminate single-use plastics. However, there must be strict law enforcement and oversight, so violations result in sanctions.

2. Prioritize the Protection of Future Generations

A government that cares for future generations is one that protects the environment. This means safeguarding ecosystems and public health from

plastic and microplastic pollution, avoiding the exploitation of natural resources, and preserving Indonesia's natural reserves.

3. Enhance Education and Public Awareness

Education about the dangers of microplastics must be a priority. With better awareness, the public—especially young people—will be more engaged in supporting environmental policies.

I hope you will take firm action to protect this nation's future. As a young person, I want Indonesia to be recognized as a leader in the global fight against the plastic crisis—not as the world's dumping ground for plastic waste.

May Allah SWT grant you strength and guidance in leading Indonesia toward a cleaner, healthier, and plastic-free future for the next generations.

Thank you for your time and attention. I greatly appreciate it and look forward to your response.

Wassalamualaikum warahmatullahi wabarakatuh.

Sincerely,

**Aeshnina Azzahra Aqilani
Gresik, East Java**



Nina is a young environmental activist who aims to free the earth from plastic pollution and end the age of plastic. Through her efforts at the Intergovernmental Negotiating Committee on Plastic Pollution (INC 5) in Busan, South Korea, Nina is determined to change the world. Follow her inspiring journey in the global effort to create a cleaner and more sustainable future for all of us.