# The necessity of regulating plastic pollution by reducing production.

Sep 27, 2024

Shin Sooyun, Leader of Paran



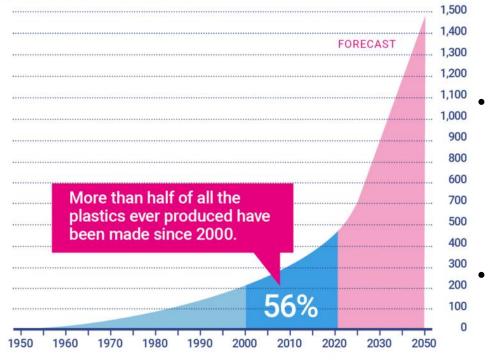
### **Contents**

- Plastic Worlds and Their Problems
- De-Plastic: Various Campaign Examples
- The De-Plastic Policy of the Korean Government and Jeju Special Self-Governing Province
- The true solution to plastic pollution is to reduce production!

### 1. Plastic World: Annual Plastic Production

#### PRODUCTION OF PLASTIC

Global annual plastic production in million tonnes.

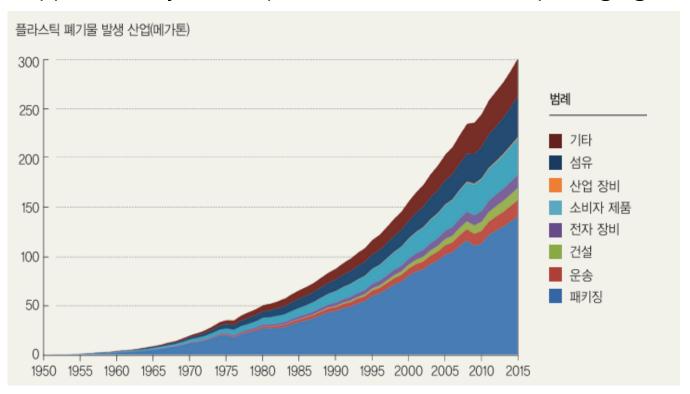


- The production increased from 2 million tons in 1950 to 391 million tons in 2021, reaching 400 million tons in 2022.
- The estimated amount is projected to reach 1.48 billion tonnes by 2050, which is four times the amount recorded in 2019.
  - More than half (56%) of all plastics ever produced have been manufactured since the year 2000.

DURCE: PLASTIC ATLAS ASIA EDITION 2021 LC PLASTIC SOUP FOUNDATION

### 1. Plastic World: Primary Waste Plastic Generation by Use (1950-2015)

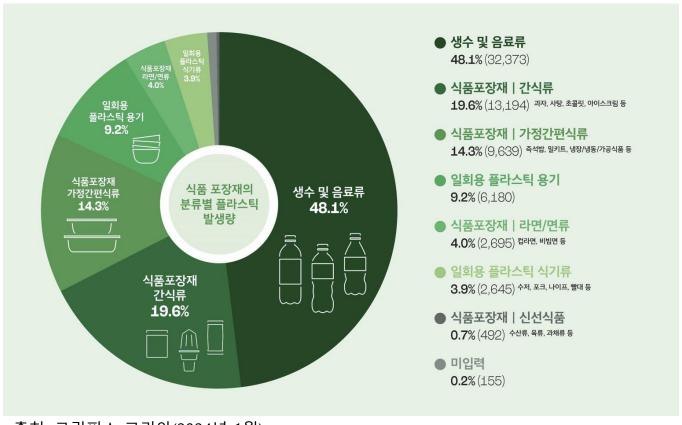
- The estimated amount of plastic waste generated in 2015 was approximately 300 million tons.
- Approximately half of plastic waste consists of packaging materials.



출처: Geyer R, Jambeck JR, Law KL. (2017) Production, use, and fate of all plastics ever made. Science Advances, Vol.3(7) / 편집: WWF-Korea

### 1. Plastic World: The Prevalence of Single-Use Plastic Products in Food Packaging

• 78.3% of domestic disposable plastic waste consists of food packaging, with bottled water and beverages accounting for 48.1% of that total.



출처: 그린피스 코리아(2024년 1월)

# 2. Problems in a Plastic-Based Society



A scene from the movie 'Plastic China' © CNEX

### Where does the trash we throw away go?

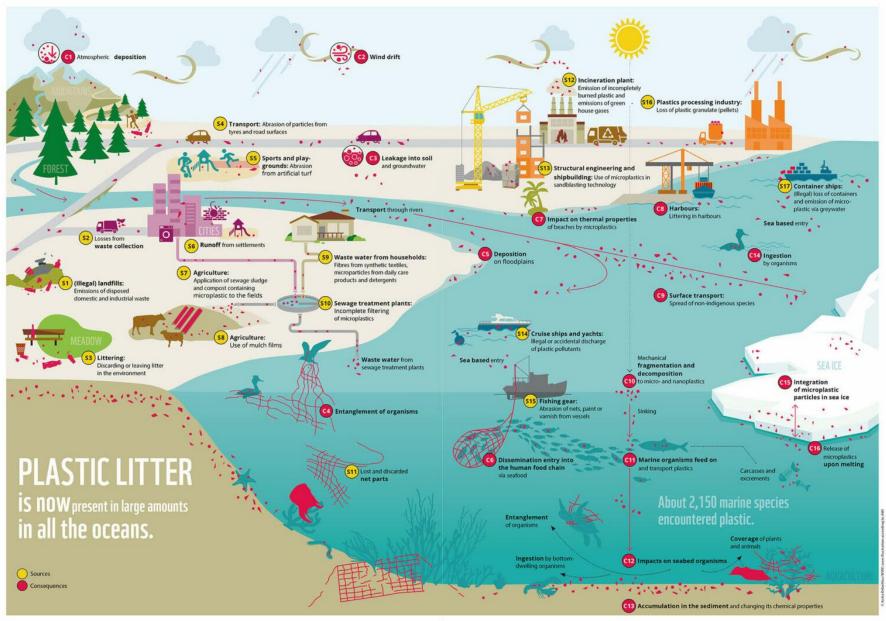
- Change in China, the largest importer of waste: Import ban (January 2018)
  - China imported 7.3 million tons of waste, valued at \$3.1 billion, in 2016.
  - This included 55% of waste paper and 25% of waste plastic from the UK, as well as 78% of all waste from the United States.
- The 'existence' of trash highlighted by the garbage crisis.
  - Outsourcing Waste Disposal

# 2. Problems in a Plastic-Based Society: Pollution



#### **Plastic Pollution**

- Hazardous Substances Exposure: Thousands of chemicals are incorporated into carbon-based polymers to impart characteristics such as color, flexibility, stability, water repellency, flame retardancy, and UV resistance.
- Soil, water, and air pollution.
- Microplastic Hazards
- Ecological Damage



© Anita Drbohlav /WWF

# 2. Problems in a Plastic-Based Society: The Threat to Marine Ecosystems from Entanglement



# 2. Problems in a Plastic-Based Society: The Threat to Marine

**Ecosystems from Entanglement** 





© HankookIlbo

### Unidentified Plastic Cone Poses a Threat to the Monk Seal, an Endangered Species in Hawaii.

- It turned out to be fishing gear used by fishermen in Northeast Asia to catch eels.
- The Korean fishing gear used for catching eels likely traveled to Hawaii via the GPGP along the Kuroshio Current.

# 3. Campaign for a De-plastic Society: Picking Up Marine Garbage







Environmental activists, individuals, and members of various organizations conduct initiatives to remove marine waste from the ocean near protected areas, mudflats, and residential zones.

# 3. Campaign for a De-Plastic Society: Ocean Citizen Science







- Records of threat factors affecting marine life, including marine waste
- Monitoring for the protection of marine ecosystems
- Activities to enhance data-driven maritime policies

# 3. Campaign for a De-Plastic Society: Advocating for the Right to Reject Disposable Products





© GreenKoreaUnited

- Plastic waste increased by 18.9% before and after the COVID-19 outbreak
  - 2.7 million daily food delivery orders generate at least 8.3 million of waste. Campaign to demand social responsibility to delivery App companies. 10,000 signatures to reject disposable items and advocate for a multi-use container system.
- The disposable spoons decreased by 65 million in just one month due to changes in the default settings of a delivery app.

# 3. Campaign for a De-Plastic Society: Advocating for the Right to Repair



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© Seoul KFFM

© repairshop Gomson

- National Assembly has passed the Circular Economic and Social Transformation Promotion Act, which guarantees the right to repair. (January 2023)
- Repair workshop
- Declaration of the right to repair
- Operation of educational and life skills programs on the climate crisis and resource circulation society

# 3. Campaign for a De-Plastic Society: Plastic Mandala, The Beginning of the Sea





© Eco-orot



Plastic Mandala (Community Art)

- Picking up microplastics on the beach
- Placement with microplastics in mandala
- Mourning for threatned marine life
- The Beginning of the Sea
  - picking up cigarette butts discarded in a rainwater drainage tray on the road
  - promoting the microplastic Issue

© KFEM

# 4. Korean Government's Plastic Policy and Assessment

### 1) Regulations on the Use of Disposable Plastics

- In 2019, the use of plastic bags was banned in large stores.
- Nov 2022, regulatory measures implemented to ban disposable products such as plastic bags, paper cups, plastic straws, and stirring rods, with a one-year guidance period.
- Nov 2023, Withdrawal of the ban on the use of disposable products
  - turn to encourage voluntary participation

### 2) Microplastic Regulation

- As of 2017, the use of microplastics in cosmetics and non-medical products, such as toothpaste and whitening agents, for the purpose of cleansing and exfoliating dead skin cells is prohibited.
- Microplastics have prohibited in detergents, removers, laundry detergents, and fabric softeners starting in 2021.

# 4. Korean Government's Plastic Policy and Assessment

### 3) De-plastic Policy

- Goal: Reduce plastic waste by 20% by 2025, compared to the levels recorded in 2021
- October 2022: 'De-plastic policy throughout the plastic life-cycle'
  - Plastic Weight Reduction: Minimizing disposable products through alternative solutions
  - Fully Recycled: Utilizing as a raw material for the production of materials and chemicals through incineration recycling
  - Fostering New Industries: Promoting renewable raw materials and alternative goods industries and markets
- Implementation of International Community Responsibilities: Responding UN Plastics Treaty and preventing environmental leakage

# 4. Korean Government's Plastic Policy and Assessment

#### 4) Assessment

- Decisions Contradicting 'De-Plastic Policy'
  - Withdrawal of disposable cup deposit system (Sep 2023)
  - Withdrawal of regulatory policy on the use of disposable products (plastic bags, paper cups, plastic straws) (Nov 2023)
  - Transition to support policies that prioritize voluntary participation over regulation.
- UN Plastics Treaty: The Korean Government's Passive Approach to Reducing Plastic Production
  - The 5th INC Meeting to be held in Busan: The government's pledge to as a global hub country leading the fight against plastic pollution and facilitating the transition to a circular economy."
  - But, a domestic regulation retreat
  - Waste Plastic Pyrolysis Recycling Policy: Emissions of greenhouse gases and hazardous substances, risks



Korean environmental activists are urging the government to strengthen plastic regulations and actively reduce production ©Solidarity to address the plastic problem

# 4. Jeju Special Self-Governing Province's Plastic Policy



### 2040 플라스틱 제로 샘, 제주



**주**진방향

탄소중립 연계 도내 플라스틱 폐기물 발생 원천 재감 및 째활용 확대



탈(脫)플라스틱 및 자원순환 정책 이행을 위한 제도적 기반 강화



범도민 추진위 구성 및 결의대회를 통한 도민**까회** 전반 일천 분위기 조성



정책목I





플라스틱에 의한 생물다양생 위협을 줄이고 생태계 회복력 유끼



버려끼는 플라스틱을 다시 자원으로 이용하는 기반 마련

생과목표		2020년		2030년		2040년
	배출량 감축	66,171톤/년		46,320톤/년	_	33,086톤/년(50% 감)
	깨활용률 증대	49,2%	•	70%	•	100%
	처분율(오각·매립)감축	50.8%		30%		Zero
	7					

# 4. Jeju Special Self-Governing Province's Plastic Policy

### 2040 Basic Plan for a Plastic-Free Jeju

- Goal: Transition to a post-plastic society by reducing the sources of plastic and expanding recycling efforts.
- Reduce plastic waste emissions by 50% by 2040 (compared to 2020 levels), increase recycling rates to 100% by 2040, and achieve zero waste disposal rates, including incineration and landfill
- Key Content (Included the majority of internationally recommended policies.)
  - Recommendation for Multiple Containers
  - Restrictions on the Use of Disposable Products in Public Institutions
  - Recommendations for Reducing the Weight of Plastic Containers
  - Return on Profits from Recycling and Emission Separation
  - Settlement of the Disposable Cup Deposit System
  - Support the production, distribution, and consumption of recycled products
  - Improve Conditions for Segregated Discharge
  - Expansion of Waste Treatment Facilities in the Surrounding Area
  - Creating a Resource Circulation Cluster in Jeju
  - Promote the recycling industry for transparent plastic bottles, as well as the industries focused on pyrolysis and hydrogen production.
  - In 2040, the Jeju Residents' Promotion Committee for Zero Plastic was established.
  - Establishment of a Circular Economy Support Center

### 5. The Real Solution to Plastic Pollution: Let's Reduce Production!



Sculptures installed in front of the UN headquarters in Kenya, : Turn Off Plastic Tap)

### Please turn off Plastic tap!

- Until now, major countries, including Korea, have concentrated their policies on recycling and disposal following the use and consumption of specific plastic items.
- The lesser-known aspects of mining fossil fuels for plastic production include the greenhouse gas emissions generated from incineration following transportation, refining processes, and consumption, as well as their impact on the climate.
- It also does not consider the issues related to soil and marine ecosystems caused by plastic, as well as the social costs associated with human health hazards.
- Measures such as reducing production, improving materials, and replacing products must be implemented collectively to decrease overall plastic emissions.



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