## Roadmap to Plastic-Free UP Diliman (2022)

The Philippines is a major contributor of plastic pollution with approximately 2.7 million tons of plastic waste generated each year, of which 0.28 - 0.75M metric tons end up in the ocean. Plastic pollution is a multifaceted problem caused by our 'sachet economy', lack of waste management and recycling systems, and lack of alternatives in the conventional market, among many others. From large plastics that clog rivers and canals to microplastics that have entered the food chain, plastic pollution is a serious environmental, health, and social justice issue that affects everyone.

In line with Chancellor Fidel R. Nemenzo's vision of UP Diliman as "a model for the entire nation as it moves to confront the impact of pollution and climate change," this *Roadmap to Plastic-Free UP Diliman* lends itself to community efforts to transition "towards becoming a plastics-free campus and a renewable energy champion" (2020). It strengthens our collective commitment to protect and revitalize the UP Diliman environment, and reduce its overall carbon footprint.

To these ends, this Roadmap draws out a policy guide toward reducing plastic waste and mainstreaming sustainability principles in the whole UP Diliman community, by

- 1. providing a 10-year strategy for plastic reduction in UP Diliman; and
- 2. setting short-term, medium-term, and long-term milestones to guide policy and action toward imbibing sustainable practices.

This Roadmap recognizes that rampant plastic use is rooted largely in habits of convenience reinforced by its affordability and accessibility. As such, the successful implementation of this Roadmap fundamentally rests on **a broad, multisectoral effort** and **a democratic, participatory process** to address the economic and sociocultural dimensions of the issue.

In 2019, "UP Diliman's Commitment to Environmental Sustainability" set the framework for an environmental policy that is human rights-based, participatory, non-discriminatory, gender-fair, and grounded in social justice and ecological balance. In the same vein, this Roadmap provides the following policy recommendations with a view toward building a cultural and behavioral shift among all members of the community – faculty, students, staff, REPS, administrators, researchers, vendors, and other stakeholders – on which honor and excellence are manifested in a revitalized campus that stands as a model for environment-friendly practices.

## PHASE 1. Short Term (2022-2023)

UP Diliman's short-term goals toward a plastic-free campus necessitates drawing attention to two things: (1) reducing *use* of plastic by community members and stakeholders; and (2) implementing proper *disposal* practices to reduce plastic pollution. To these ends, this Roadmap sets the following goals for the first year of implementation in the UP Diliman Campus:

- 1. Promote and implement existing resolutions and policies relating to plastic reduction and waste management.
- 2. Create resolutions reinforcing existing guidelines and encouraging limiting the use of plastics in UPD units and UPD-based businesses.
- 3. Mainstream UPD's Commitment to Environmental Sustainability to encourage the community to be more proactive in pursuing sustainability practices.
- 4. Identify gaps and roadblocks to the implementation of plastic reduction policies through participatory dialogues with UPD community members and other stakeholders.

Some concrete strategies toward achieving these goals are provided below.

GOALS	STRATEGIES
Promote and implement existing resolutions and policies relating to plastic reduction and waste management.	<ol> <li>Ban the purchase and use by UPD units and UPD-based businesses of "unnecessary single-use plastics" identified in National Solid Waste Management Commission (NSWMC)     Resolution No. 1362, Series of 2020.<sup>1</sup></li> <li>Enforce Memorandum No. CGCG 10-22 ("Campaign for Styrofoam-free Campus") which effectively bans the use of styrofoam and/or plastic food and drink receptacles/utensils for take-out sales effective February 23, 2010.</li> </ol>
Create resolutions reinforcing existing guidelines and encouraging limiting the use of plastics in UPD units and UPD-based businesses.	<ol> <li>Craft a UPD Waste Management Policy that considers proper waste segregation and recycling strategies for plastics. This policy may include provisions to         <ul> <li>a. update lease contracts with business concessionaires to include points on plastic reduction;</li> <li>b. limit the consumption of food products individually wrapped in plastic (e.g. breads, biscuits, chips, candies) in UP Diliman units;</li> </ul> </li> </ol>

<sup>&</sup>lt;sup>1</sup>This includes the following items:

a. Plastic cups (lower than 0.2 mm in thickness)

b. Plastic drinking straws

c. Plastic coffee stirrers

d. Plastic spoons

e. Plastic forks

f. Plastic knives

g. Plastic labo and thin-filmed sando bags (lower than 15 microns)

	c. limit the purchase and consumption of beverages in tetra packs, aluminum, and plastic bottles in UP Diliman units;  d. ban disposal of plastic packaging (e.g. plastic pouches, bubble wrap) from personal deliveries within campus premises, to encourage individual mindfulness of unsustainable behaviors;  e. procure the appropriate number of waste bins and to encourage proper waste disposal and implement the segregation system in UPD;  f. other relevant initiatives.  2. Craft Environmental Sustainability Guidelines for Events, Decors, and Promotions in UP Diliman. These guidelines may include recommended protocols to  a. limit the use of plastic in institutional gifts and decors (e.g., balloons, confetti) in university events;  b. limit the use of tarpaulins and other plastic-based materials in university programs and events;  c. promote reusable and/or recyclable materials in event paraphernalia;  d. ensure sustainable packaging for food provisions;  e. and other pertinent protocols.  3. Establish a Memorandum of Agreement with plastic recycling organizations or facilities in connection with the implementation of the UPD Waste Management Policy.
Mainstream UPD's Commitment to Environmental Sustainability to encourage the community to be more proactive in pursuing sustainability practices.	<ol> <li>Establish and maintain April as UP Diliman's Environmental Sustainability Month (Memorandum No. FRN 22-045). Adjunct activities to foster community onboarding in environmental sustainability practices may be continued and expanded:         <ol> <li>Interschool Forum on Campus Environmental Sustainability (InForCE Sustainability) Forum;</li> <li>Environmental Sustainability Grants Program under the Office of the Chancellor;</li> <li>Environmental Sustainability Month Student Competitions;</li> </ol> </li> </ol>

	<ul> <li>d. environmental sustainability social media campaigns;</li> <li>e. other activities in coordination with the UPD community members and stakeholders.</li> <li>2. Establish and maintain the UPD Environmental Sustainability Portal in the university's official website as a central repository of memoranda, resolutions, programs, and research relating to the UPD environment and biodiversity.</li> <li>3. Maintain and enhance the social media accounts (e.g. Facebook, Instagram, Twitter, YouTube, etc.) related to the UPD Environmental Sustainability Portal which are alternative modes of information dissemination and which can be linked to the said portal.</li> </ul>
Identify gaps and roadblocks to the implementation of plastic reduction policies through participatory dialogues with UPD community members and other stakeholders.	<ol> <li>Conduct consultative and onboarding dialogues with community members and stakeholders to promote sustainability practices and navigate challenges to policy implementation in a participatory manner. This includes         <ul> <li>a. faculty,</li> <li>b. staff,</li> <li>c. REPS,</li> <li>d. students,</li> <li>e. administrators,</li> <li>f. business concessionaires,</li> <li>g. the Samahan ng Manininda sa UP Campus,</li> <li>h. other community members of UP Diliman.</li> </ul> </li> <li>Identify needs in terms of infrastructure and equipment in UPD units and offices for inclusion in the offices' procurement plans. This may include         <ul> <li>a. procurement of water refilling stations;</li> <li>b. procurement of additional waste bins;</li> <li>c. provisions for utility sinks;</li> <li>d. identification of drop-off points for plastic waste;</li> <li>e. other capital and equipment outlay needs.</li> </ul> </li> </ol>

## PHASE 2. Medium Term (2024-2031)

The next phase/s of this Roadmap's plastic reduction strategy proposes increasing rigor in the implementation of established policies. The following goals may be achieved simultaneously in increments or chronologically oriented so that one leads to the next:

- 1. Revise policies and protocols to influence behaviors surrounding plastic use and popularize alternatives to plastic use.
- 2. Create an environment where plastic avoidance is cost-effective and easy to reduce plastic use and model environmentally sustainable practices.
- 3. Push a cultural and behavioral shift in the whole UP Diliman community to be mindful of sustainable practices and to promote environmental sustainability in any and all aspects of university life.
- 4. Provide incentives (i.e. awards, cash gifts, research grants, tax discounts, etc.) to encourage UPD units and UPD-based businesses to be more conscious in implementing policies on plastic use reduction.

To these ends, strategies – to be implemented according to (a) the readiness of community members and stakeholders, and (b) the level of support the university is able to provide toward increasing the community's capacity to comply – are proposed below.

GOALS	STRATEGIES
Revise policies and protocols to influence behaviors surrounding plastic use and popularize alternatives to plastic use.	<ol> <li>Create and implement a procurement policy that will support the avoidance of plastic waste in the purchase of various goods and services through environment-friendly technical specifications.</li> <li>Include points for sustainable practices in the evaluation of new campus-based business applications.</li> <li>Require compliance with the <i>Environmental Sustainability Guidelines for Events, Decors, and Promotions in UP Diliman</i> from offices, units, and student formations.</li> <li>Launch and promote the <i>UP Diliman Handbook on a Plastic-Free Campus</i> compiling all updated protocols and released issuances on plastic use and reduction. In line with this, encourage unit-level policies aligning with the <i>Handbook</i>.</li> <li>Strengthen the position of the Diliman Environmental Management Office in the implementation of environmental sustainability initiatives.</li> </ol>

	<ul> <li>6. Continuously assess and calibrate memoranda with recycling organizations and facilities to gear toward influencing behavioral change.</li> <li>7. Increase support for the operations of the Materials Recovery Facility.</li> <li>8. Ban the sale of beverages in tetra packs, aluminum, and plastic bottles; as well as food products individually wrapped in plastic.</li> </ul>
Create an environment where it is not only necessary but also easy and cost-effective to reduce plastic use and model environmentally sustainable practices.	<ol> <li>Ban and replace "unnecessary single-use plastics" in UP Diliman, including among campus-based businesses, with reusable and/or biodegradable alternatives.</li> <li>Procure, install and ensure maintenance of adequate water refilling stations around the campus and inside UPD units.</li> <li>Install LED walls in prominent areas around the campus to replace tarpaulins and other plastic-based promotional materials.</li> <li>Establish and sustain partnerships with campus-based barangays and locators to implement UP Diliman's Plastic-Free Campus Roadmap.</li> <li>Encourage (or, if needed, incentivize and commission) local, multidisciplinary, and interdisciplinary research on alternatives to plastic.</li> <li>Popularize alternatives to plastic through different campaigns, projects, and programs.</li> </ol>
Push a cultural and behavioral shift in the whole UP Diliman community to be mindful of sustainable practices and to promote environmental sustainability in any and all aspects of university life.	<ol> <li>Continuously educate and assist UPD community members and stakeholders in their adjustment to plastic-free practices.</li> <li>Continuously provide guides and materials to help the community in implementing UPD's Plastic-Free Campus policies.</li> <li>Recognize and incentivize best practices in plastic reduction across different community members.</li> <li>Recognize and incentivize studies and initiatives that reduce the carbon footprint of UP Diliman.</li> </ol>

## PHASE 3. Long Term (2032 onwards)

In 10 years, this Roadmap imagines a UP Diliman community that has developed an appreciation for environmental sustainability principles and leads in policy formation, programs innovation, and research and development in eco-friendly practices and environmental sustainability.

- 1. Continuously and sustainably provide easy access to alternative lifestyle choices across all offices and campus-based establishments.
- 2. Explore the possibility of building in-house recycling technologies and facilities in the campus to increase environmental awareness and promote sustainable practices.
- 3. Promote research practices and innovations that lend themselves to broader-scale implementation of environment-friendly concepts and technologies.