HOW CITIES ARE BUILDING THE FUTURE WE WANT: city progress towards meeting Advancing Towards Zero Waste Declaration commitments



In September 2018, C40 cities from around the world made an ambitious commitment to cut the amount of waste generated by each citizen by 15%, reduce the amount of waste sent to landfills and incineration by 50%, and increase the diversion rate to 70% by 2030.

Signatory cities describe in their own words^{*} what they are doing now to act on this commitment and create the future we want

Auckland Copenhagen Dubai London Los Angeles Milan Montreal New York City Paris Philadelphia Portland Rotterdam San Francisco Sydney Tel Aviv Tokyo Toronto Vancouver Washington, D.C.

*Cities will publicly report on progress annually after signing the declaration. These cities have voluntarily reported in advance of the first 2020 reporting deadline. Auckland Council adopted Te Mahere Whakahaere me te Whakaiti Tukunga Para i Tamāki Makaurau – Auckland Waste Management and Minimisation Plan 2018. The plan which was signed off in September outlines a Zero Waste vision for Auckland by 2040 that considers care for people and the environment. Some of the projects and initiatives that have enabled Auckland Council to move towards our goal in 2018/2019 are:

• Community Partners: The Community Waste Wise team in Auckland Council works with community partners to strengthen and grow the 'Getting to Zero' movement. Community Partners work with residents, community groups and local businesses empowering them to reduce waste. They deliver waste minimisation education and engagement, with a focus on reducing food waste, engaging with council services, recycling right and turning waste into resources. In addition, the Community WasteWise team deliver the following programmes in the Auckland Region: Compost Collective, Love Food Hate Waste, Waste Free Parenting and Zero Waste Events.

• Community Recycling Centres: Auckland Council is continuing with the roll-out of 12 Community Recycling Centres where residents can take unwanted goods and materials to be reused and recycled.

• Residential Food Scraps Collection: Since March 2018, a food scraps collection service has been provided to approximately 17000 residents in Papakura. A recent survey reported average participation rate of 49 per cent in Papakura.



Since signing the 'Advancing Towards Zero Waste Declaration' in 2018, the City of Copenhagen has kicked off the different projects in the 'Resource-and Waste Management Plan 2024', covering a range of actions toward waste reduction (recycling, reuse and CO2-reduction). The three main aims of the plan are 70 % recycling of municipal solid waste (household waste + light industrial waste), reducing CO2 by 59.000 ton and a threefold increase of reuse among the citizens. 28 actions under six themes are set to be implemented by 2024, whereof many are in line with the commitments to this declaration. At this state the different projects have been organised and resources

have been allocated for each of them. With a change in national legislation, funding of the activities related to light industry waste has been removed. Targets on recycling and CO2-reduction will not be met unless alternative financing is found. Activities related to light industry waste are not financed. The rest of the activities are on track.



Since signing the 'Advancing Towards Zero Waste Declaration' in 2018, the City of Dubai has completed the update and revision of the Dubai Waste Minimization Strategy which was approved for implementation early 2019. The latter strategy has benefited from the best practices shared through the C40 Waste to Resources Network and workshops, which have namely reinforced the need to optimise (re) use of waste and prioritise it over waste incineration. Several initiatives under the strategy are currently being developed such as the waste portal which will allow any individual or organisation to post their waste for sale/exchange and the Smart Sustainability Oasis located in 13 sites around the city for recyclables not typically collected at curb-side. Separately, Dubai is currently also

updating its Integrated Waste Management Master Plan which is expected to be completed by end of 2019. Together the Integrated Waste Management Master Plan and the Waste Minimization Strategy shall provide a clear roadmap to achieve the targets set in the Waste Declaration.

Changes to waste tipping fees have not yet been implemented due to the restricted economic performance over the past couple of years. There was therefore a reluctance to increase fees that would impact the private sector.



Since signing the Declaration in 2018, the Mayor is putting in place the measures to increase recycling rates. The London Environment Strategy (published May 2018) requires London boroughs to provide a minimum recycling service; collecting the six main dry materials that can be recycled as well as food waste separately from every household (including flats where feasible) by 2020. Borough waste contracts are now being reviewed, and the Mayor is supporting London boroughs to produce Reduction and Recycling Plans setting out their approach and targets to meet the Mayor's 65 per cent recycling target by 2030.

To help achieve these targets, working through LWARB, the Mayor is working with waste authorities to identify and implement the best mechanisms for improving recycling performance in flats in a cost-effective way. The Mayor considers that further waste incineration capacity is not required within London and is opposing an application to develop a 665,000 tonnes per annum incinerator in east London.

To reduce single-use plastic bottle waste, the Mayor has installed a network of over 40 drinking water fountains, 28 of which were in partnership with Zoological Society London, and we have started installing over 100 more with Thames Water. The first 20 fountains dispensed the equivalent to more than 155,000 half litre plastic bottles.

The Mayor has also worked with City to Sea to launch London Refill - a water refill scheme where businesses can sign up and offer free tap water refills to the public. London now has more than 2,700 refill stations across the city. Together these schemes will help Londoners use reusable bottles instead of buying single-use plastic bottles. Leading by example, City Hall has also phased out sale of single use plastic bottles in its café and placed a 10p charge on non-reusable coffee cups.

The Mayor is a Sustainable Development Goal 12.3 Food Waste Champion, working with national and global food sector organisations and the London Waste and Recycling Board (LWARB), to cut food waste by 50 per cent per person by 2030 and avoid surplus edible food becoming waste. London is an Ellen MacArthur Foundation Food Initiative Flagship City and will work with the Foundation to bring together food industry leaders to accelerate a transition towards a regenerative food system that produces significantly less food waste. This builds on work already being undertaken with LWARB delivered through the EU funded Trifocal Project providing food waste reduction training to environmental health practitioners, completing waste audits and working with community groups and hospitality businesses to reduce their food waste. LWARB's Advance London programme, supports 132 SMEs to capitalise on circular economy opportunities, leading to 24 new products launched, and creating 33 new jobs. Through LWARB, the Mayor has published the London's Circular Economy Route Map that, if fully implemented, could contribute £2.8bn a year by 2036 to London's economy.

Los Angeles

Since signing the 'Advancing Towards Zero Waste Declaration' in 2018, the City of Los Angeles released L.A.'s Green New Deal (GND), the 4-year update to its Sustainable City pLAn originally released in 2015. L.A.'s GND incorporates Paris-compatible emission reduction pathways with the goal of L.A. becoming carbonneutral by 2050. In order to achieve this goal, emissions from L.A.'s waste sector must be reduced dramatically. The goals of the declaration were incorporated into the Waste and Resource Recovery chapter of L.A.'s GND to ensure the declaration informs the citu's actions moving forward. We've

made progress on small-scale pilots, specifically around organic waste, such as food scraps drop off pilots at farmers markets, and continue to expand our edible food rescue efforts through the city's waste franchise. Additionally, we've begun conversations around restricting single-use plastics in the city with the County and neighbouring cities. We've also begun conversations on how to expand our food rescue and organics processing capacity in and around the City.



Since the signature of the "Advancing Towards Zero Waste Declaration" in 2018, the City of Milan has initiated a campaign for reducing the use of single-use plastic items through the Milano Plastic Free initiative (https:// www.plasticfree.milano.it/). Additionally, in municipal school canteens plastic cutleries have been banned and substituted with biodegradable alternatives. In its Food Policy (2015), the City of Milan has established to reduce food losses and waste and to increase the overall sustainability of the food system, coordinating a wide range of actions in school canteens, open street markets, general markets, neighbourhoods networks of charities, private sector, and local authorities. This will be achieved by introducing different kinds of incentives, like tax reduction, municipal empty spaces for the logistics, new spaces for networking and knowledge sharing in order to scale-up all the initiatives.

Concerning waste collection, the quantity of Municipal Solid Waste (MSW) sent to incineration has decreased by 8.000 tons since 2015 and in 2019 separate collection reached 62% thanks to new actions and service optimizations included in the Strategic Plan 2017-2021. The reduction in the frequency of collection of the residual waste from twice a week to once a week is starting to get the expected results. Due to the rise of e-commerce, a new commingled paper and cardboard collection is being rolled out in the whole city. The introduction of separate collection (food waste and mixed packaging) is the third action of the plan; with food waste being one of the biggest streams, this process will considerably improve the city's diversion rate towards the 2030 commitments of 70%.



Agglomeration of Montréal 2020-2025 Draft Waste Management Master Plan Ville de Montréal is preparing its Draft Waste Management Master Plan for 2020-2025. The Plan presents the major orientations and initiatives to be implemented in order to divert waste materials from being eliminated and attain the C40 objectives.

Reduction at the source

The City has undertaken measures to develop a plastic reduction strategy, intending to:

• Prohibit the purchase and distribution of single-use plastic water bottles, particularly the 500 ml format, in all of the City's departments and business units.

• Develop by 2020 a regulatory framework to reduce the use of single-use plastic items (straws, disposable utensils, cups, etc.).

• Assess the impact on consumer behavioural changes of By-law 16-051 prohibiting the distribution of certain types of shopping bags in retail stores, in force since January 1, 2018, to, if required, adjustment and enhance its efficiency. The City will also hold a public consultation in September 2019 on the opportunity of restricting the distribution of flyers and other promotional materials of a similar nature, following a citizen petition which gathered more than 15,000 signatures.

Deployment of the collection of organic waste materials

Collection of organic waste materials has now been completed in 99 % of buildings of 8 units and less (for a total of 536,067 dwellings). This implementation needs to be finalized in two areas of the City whose built environment is more complex. As far as buildings of 9 units and more are concerned, some 18,000 units already have access to organic waste collection, out of a total of approximately 300,000 units. A strategy is being developed to ensure the servicing of all buildings of 9 units and more. The City is also intent on deploying its organic waste collection to institutions, businesses and industries, while prioritizing schools.



Since signing the "Advancing Zero Waste Declaration" in 2018, the City of New York has signed an Executive Order that will end the direct City purchase of unnecessary single-use plastics in favor of compostable or recyclable alternatives. The City has also implemented a ban on foam products, launched a food donation portal to facilitate hyperlocal food donations, held the first ever Refashion Week highlighting the advancements in the secondhand fashion world, began requiring an additional 2,000 business to source separate their organic waste, and kicked off a new "Make Compost, Not Trash" campaign to increase participation in its Organics Collection program. In April, the Mayor announced a path to mandatory organics collection, hoping to have legislation in place by the end of this year.

The implementation schedule for expansion has been temporarily placed on hold. OneNYC 2050 commits to "transition to mandatory organics collection citywide." The City will work with the City Council to establish mandatory organics recycling citywide — phasing in starting in low- and medium-density areas that already have access to organics collection and expanding over time to include the entire city — so that all New Yorkers can participate.



Paris

After the planning period of the Zero Waste Strategy, the various actions of these plans started to be implemented in 2018. This included the launch of the 'zero waste street' and a 'zero waste family challenge' as testing grounds for identifying the most relevant and effective measures. The City of Paris also conducted awareness campaigns on waste prevention and waste sorting with nearly 64,000 people, through various local communication actions.

In 2017, the City of Paris adopted a Compost Plan that provides communities with free equipment (more than 2,000 vermicomposters) for local composting. These systems are experiencing a real boom with more than a hundred new composting stations set up in Paris every year, whether at the bottom of residential buildings, in schools and public buildings, or in neighbourhoods through the mobilization of local associations. In parallel, the collection of organic waste has been deployed since March 2018, to all major municipal producers (>10t/year). This means that 95 public service canteens and restaurants benefit from selective collection, in addition to the 53 food markets that have already had this service since 2016. The door-to-door collection of organic waste from households continues

in the 2nd and 12th arrondissement and will be implemented in the 19th arrondissement in the autumn of 2019.

At the end of 2018, there were 15 resourcing/recycling facilities located in Paris. These open and city-supported structures divert approximately 2,700 tonnes of waste from landfill and incineration each year. In 2018, new agreements were signed with textile collection operators to grow the collection fleet and thus increase the quantity of textiles redirected towards reuse.

The City of Paris has signed a waste management charter for private and social housing with 10 of the largest building managers, committing them to increased waste sorting. Sorting instructions for Parisians have been simplified since 1 January 2019 and now all packaging can be thrown into the recycling bin. 1,000 "Trilib'" sorting stations will be installed throughout the municipal territory, providing a waste sorting solution for all Parisians.





Since signing the 'Advancing Towards Zero Waste Declaration' in 2018, the City of Philadelphia has worked very hard to implement the 2017 Zero Waste and Litter Action Plan which will be the guiding document to achieve Zero Waste. We have shown much success with our Zero Waste Events Program plus our establishment of reporting structures such as the Commercial Waste Report, Municipal Building Waste Audit, Zero Waste Partnership Program and Zero Waste based diversion report that provides our City with a solid baseline for where we are with waste and where we need to go. We also have two very exciting projects to expand composting in the City and are continuing to build our food recovery program through our work in Recreation Centers as well as promoting the Food Connect App at events. We also have a new recycling contract that will refocus our recycling efforts and a new Recycling Director who is working hard on an anti-contamination

campaign that will include a behavioural study on contamination in conjunction with the Cabinet. This work is not without its challenges. Although Zero Waste Events are still going strong and we have a new recycling contract, the downturns in the recycling market affected the funding for our Philacycle Recycling Rewards Program, which we had to discontinue July 1st, 2019. The City is also expanding its population and adding thousands of more houses and hundreds of new businesses every year, which is contributing to our waste stream. However, we will continue to implement our plan to not only keep up with this new amount of waste generation, but continue to reduce it. Although total waste has gone up, we are proud that our diversion rate rose by 4% since last year. And we will continue to work on reduction to meet our goals.



Since signing the Advancing Towards Zero Waste Declaration in 2018, the City of Portland, Oregon adopted an ordinance that prohibits the provision of single-use plastic service ware unless the customer requests it. The ordinance takes effect Fall 2019. We are also preparing to roll out a mandatory food scrap collection program aimed at large commercial food generators beginning Spring 2020. We are partnering with other jurisdictions in the Pacific Coast Collaborative to recruit food manufacturers and retailers to join a voluntary agreement to explore and implement industry-wide actions to prevent wasted food. We have begun working on a strategy to prioritize local government activities

that support a shift to lower-carbon consumption patterns. We are increasing the number of homes where deconstruction is required instead of demolition to support salvage of building materials. We are making improvements to our multifamily recycling program to provide equitable service and increase recovery. And we are collaborating with recycling industry partners to identify ways to improve Oregon's recycling system, including updating recycling infrastructure and developing strategies for local market development.



Since signing the 'Advancing Towards Zero Waste Declaration' in 2018, the City of Rotterdam has initiated a campaign on awareness around circular economy called "van Zooi naar Mooi" (From Trash to Treasure). An overview of the campaign can be found at https://www.youtube.com/ watch?v=WYiJRp5eolE(in Dutch). On May 21st the post-separation plant for the separation of plastic packaging and tetra packs was officially opened. The rest of the year will be used to fine-tune the facility and starting at the

latest by January 1st, 75% of all of all plastic packaging and tetra packs in our residual waste is mechanically sorted out. On June27th, 2019 the new Waste and Resources Framework of the City of Rotterdam will be passed, and it includes measures to reduce the amount of food waste, introduce segregate collection of food waste in high rise buildings as one of the main measures to divert waste from incineration.



Since signing the 'Advancing Towards Zero Waste Declaration' in 2018, the City and County of San Francisco have been strategizing efforts to reduce generation and disposal. We are developing key construction & demolition debris and food waste reduction strategies, such as the recently-adopted Refuse Separation Compliance Ordinance and the Single-Use Food Ware Plastics, Toxics, and Litter Reduction Ordinance that went into effect July 1, 2019.

We conducted a source reduction and reuse campaign to reduce consumption. And Recology, our primary refuse service provider, rolled-out smaller trash and larger recycling bins to residents throughout the City, which is a very clear visual signalling our priorities. The new bin configuration resulted in a 7% decrease in trash, a 10% increase in recycling, and a 1% increase compost. Recology also made recycling facility improvements including adding a new set of optical sorters to improve paper recovery and reach the 0.5% contamination rate required by China. Recology automated a portion of its sorting line with industrial robots programmed with AI to sort plastics and to characterize the oncoming material stream and make global adjustments to the container lines to increase recovery. It also constructed a new, larger organics transfer facility. Employee headcount was maintained in order to help meet materials quality rate.



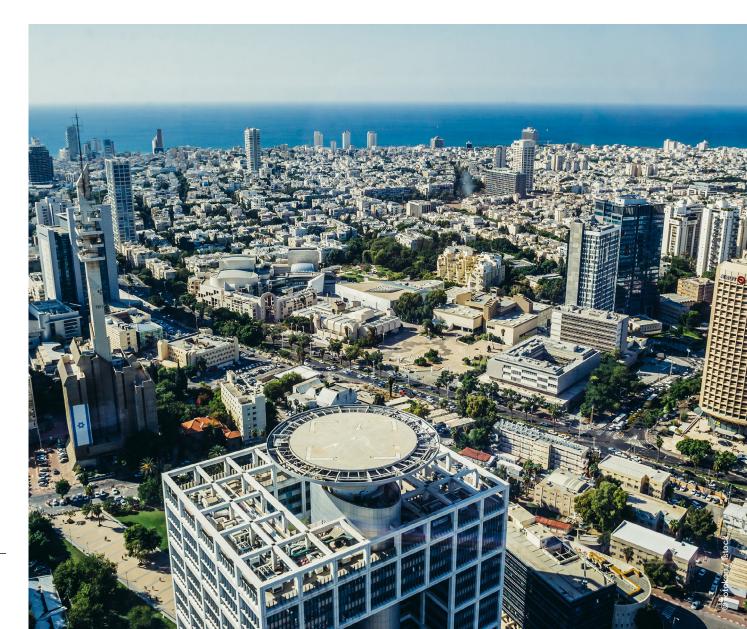
Since signing the 'Advancing Towards Zero Waste Declaration' in 2018, the City of Sydney has initiated a campaign on reducing the use of single-use items and is now intensely working on building up systems for alternative forms of consumption with reusable items, aiming to reduce the city's residential waste by 15 percent per capita by 2030. Our new e-waste collection and food waste collection trial will commence in July 2019. These two new services will assist the City in achieving its 35% source separated recycling target by 2021.

In designing both the single use items program and the food waste trial the City has taken advantage of the experiences and knowledge provided by other cities in the C40 Waste to Resources Network introducing similar initiatives.



Since the city signed 'Advancing Towards Zero Waste Declaration' in 2018, the sanitation and waste management department has added six new recycling coordinators positions, and to instate a recycling supervisor by the end of the year. The goal of this process is to maximize the potential of waste separation at the source for recycling and recovery in 2019 and to some extend 2020 will be dedicated to precising our action plans, assessing the challenges and establishing know how and partnerships. This year, the city was the first city in Israel to establish separation at the source in largescale public events. The initiative

was launched during the Eurovision Song Contest, which took place this year in Tel Aviv Yafo. During a week of related events, with over half a million participants, 17 tons of waste were diverted from landfills. The Zero Waste plan depends to a large extent on the Israeli governments, national plan for Sustainable Waste Management, which is somewhat in delay, due to the elections and reelections in September.



Tokyo

Tokyo Metropolitan Government (TMG) will establish the Tokyo Style Reducing Waste Program by FY2020 in order to halve the waste by FY2030. Also, TMG has built "Team Mottainai" (meaning: something is "too precious to waste"; expresses "respect" for the Earth's resources.) in partnership with businesses, NGOs, etc. to raise citizens' awareness of "mottainai" and to encourage people to change their behaviour to reduce waste of food, materials, and energy. Especially for plastics, a Senior Director from TMG engaged in national level policymaking as a committee member, and the national government adopted the plastic strategy including setting targets in June. It calls for a 25-percent reduction in the consumption of disposable plastic products by 2030. At the session of U20 Summit which was held in Tokyo on May 21st, the Governor of Tokyo declared that it will seek to achieve the 1.5 degree goal and by 2050, become a 'Zero Emission Tokyo' that contributes to the world's net-zero carbon emissions. As part of it, TMG will work to reduce and recycle plastic waste from households and largescale office buildings, with the aim of reducing plastic waste incineration by 40% by 2030. TMG itself takes the lead to reduce the use of single-use plastics, and formulated "TMG Plastic Reduction Policy" on June 5th. In this policy, TMG bans the use of pet bottles and plastic straws at conferences held at TMG office as well as promotes the use of recycled plastics at events and in our business operations. The immediate goal is not to use the single-use plastic cups at the official events held by TMG from 2020. TMG is accelerating international cooperation and knowledge sharing to realize the commitments, and has been accepting delegates from various countries. C40's Waste to Resources Network workshop is also going to be held in Tokyo in September 2019.



The City of Toronto has a longterm Waste Management Strategy which was approved in July 2016. It emphasizes the importance of waste reduction, reuse, and recycling and includes a goal of 70% diversion of waste from landfill by 2026 and supports the City in its move towards a circular economy and zero waste future. The Waste Strategy commits to prioritizing reduction, reuse and recycling through policies, programs and new technology to achieve our goals. The Waste Strategy aligns with the 'Advancing Towards Zero Waste Declaration.' In 2018 some of the key initiatives included the following: food waste reduction strategy, textile collection and reuse strategy, sharing library,

community composting, data management and accessibility, exploration of waste reduction bans and the establishment of a Unit for Research, Innovation & Circular Economy. A framework for circular procurement was also developed, kicking off a two-year pilot period to examine how the City's purchasing power can be used to drive waste reduction, economic growth, and social prosperity.



Signing the 'Advancing Towards Zero Waste Declaration' in 2018 coincided with City of Vancouver adopting Zero Waste 2040, a longterm strategic plan for Vancouver as a community to achieve zero waste. More recently, Vancouver declared a state of Climate Emergency and adopted a response plan which includes zero waste actions. Progress over the last year has been considerable. Edible food waste reduction planning is underway to compliment Vancouver's well established organics diversion program, the City is implementing its Single-Use Item Reduction Strategy, Green Demolition By-law requirements have increased, and options for recovering organics from mixed waste to produce renewable natural gas and processing waste construction materials into biofuel are being studied. Vancouver has

also made significant progress with increasing accessibility to zero waste programs for all communities and increasing education and outreach. Examples include the opening of a comprehensive Zero Waste Centre, expansion of recycling stations in streets and parks, partnering with not-for profits to deliver zero waste programs for schools, expanding community zero waste drop-off events, and working with volunteers to pilot community repair events for items such as clothing, computers and small appliances.



Washington, D.C.

Since signing the 'Advancing Towards Zero Waste Declaration' in 2018, the District of Columbia has updated its Sustainable DC Plan (2.0) which expands previous actions and targets for source reduction, waste diversion, and promoting good behaviour at work and at home via education & outreach. The Department of Public Works has released its FY 17 Solid Waste Diversion Progress Report which captures both anecdotal and quantitative successes, most notably increasing the Citywide Residential Waste Diversion Rate for the third straight year. Existing programs such as the City's Food Waste Drop-off Program has continued to see strong growth in participation and volume of material diverted. In accordance with the law, the electronics extended producer responsibility requirements became more stringent in 2019, with diversion requirements increasing from 50% to 80% as a percent of sales or to meet convenience requirements. A requirement for compostable straws was passed as well as policy to promote commercial food

donation. The Solid Waste Collector Registration and Reporting program launched in 2017 requiring all commercial haulers to report tons collected and destination which will assist in waste measurement and planning. Also, a Waste Characterization Study is underway and nearly complete, which will establish baseline generation figures and estimate composition of citywide waste streams for calendar year 2018 and 20-year waste generation projections.

On track with delivery plan to meet declaration commitments? No

The PAYT pilot is not anticipated to be completed in 2019, however, a solicitation for a pay as you throw feasibility study has been issued. The city is still confident it can meet the set targets. All other milestones are on track to be completed on time.



