This Is Not Fine:

Hottest Summer on Record Calls for a Reboot of LA's Climate Plan

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Status Analysis by the City of Los Angeles Controller's Office

EXECUTIVE SUMMARY

2023 turned out to be the hottest summer on record – scientists say July was the hottest month in 120,000 years. UN Secretary General António Guterres warned last fall, "We are on a highway to climate hell with our foot still on the accelerator."

While a promising start for climate action, LA's 2019 "Green New Deal" is in urgent need of a reboot. When unveiled four years ago, the "Green New Deal" was described as a "greenprint" for "a moral imperative, an environmental emergency and an economic opportunity." But today it has largely outlived its usefulness.

The 2019 plan consisted of 47 long-term sustainability targets and 97 short-term milestones designed to help the City meet those targets. **Instead of focusing on the Green New Deal's ambitious long-term climate goals, the last report on progress (released in May of 2022) mostly inventoried the short-term milestones. Nearly half of those have been "achieved or exceeded," but 39 were lagging ("making progress" was how they are described in the report), and just nine were "on track" to meet ambitious future goals set for 2025 or beyond.** Of those nine, five are too general to meaningfully evaluate (such as "improve access to community programs in low-income areas").

In fact, measuring actual progress toward a carbon neutral city is a shortcoming of the 2019 plan. The "achieved" or "exceeded" programs were often low bars. Many lack meaningful targets ("deploy additional charging stations by 2021" - how many is "additional"?) Even more were simply focused on writing policies, starting pilots or simply embarking on publicity efforts, e.g., "Launch Green New Deal engagement program by 2020." Some are too vague to

measure. For example, while it is a laudable goal to "Create 100,000 green jobs by 2025" there is no definition of what exactly qualifies as a "green" job.

During Climate Week last month, Mayor Karen Bass recently released an impressive array of recent achievements that will "lead Los Angeles to a new era of sustainability that supports frontline communities while making major investments in energy efficiency and creating thousands of good-paying jobs in the process." Yet these accomplishments are also not benchmarked against measurable goals. **They clearly represent progress – but how much remains unmeasured.**

Meaningful metrics are generally grouped as measuring "inputs" (programs launched or money spent); "outputs" (specific effects produced); and "outcomes" (measurable results achieved). The Green New Deal contains a mix of inputs and outputs, but **there are very few measurable outcomes directly related to climate change, or even environmental sustainability more broadly.**

As might be expected with the first iteration of a "Green New Deal" (which is an update of the City's first "Sustainability pLAn" released in 2015), inputs dominate the milestones. Nearly a third of the 97 milestones are devoted to creating (or revising) a policy, commencing a study or formulating a new program, e.g., "Adopt a Mobility First policy by 2021" or "Launch an educational awareness campaign on source reduction by 2021." **Inputs (tasks completed) are easiest to fulfill – and not surprisingly they rank high as "achieved" or "exceeded." Yet the real test comes over whether the new policy, study or pilot makes a measurable impact.** For example – to simply "Establish a healthy food cart program and support early-stage good food entrepreneurs" is one thing – to generate a significant growth in "healthy food" vending is another. The good intentions behind policy and programmatic initiatives do not necessarily produce the desired outputs, much less outcomes.

The outputs spelled out in the "Green New Deal" vary widely in both their validity and significance. To "install 10,000 commercial EV chargers by 2022; and 28,000 by 2028" is both ambitious and measurable. To "use energy efficiency to deliver 15% of LA's projected electricity needs by 2020" is more difficult to measure. Because it is so challenging to

specifically quantify energy savings from "energy efficiency" measures (versus all the other factors that go into variations in energy demand such as fluctuations in the economy and changing energy demand), researchers rely on mathematical models to estimate those savings. It's easy on a building or a college campus, for example, to see how implementing energy efficiency produces specific reductions in energy usage. But extrapolating what role such efficiency measures played in overall electricity demand in a city of 4 million people and hundreds of thousands of businesses is more challenging.

Given what former Mayor Garcetti described as "the existential threat of climate change," the small number of outcomes in the Green New Deal fall short of a comprehensive and actionable set of steps to reduce greenhouse gas emissions, the primary driver of climate change. The strongpoints of the plan focus on lower-hanging fruit, including reducing energy usage from new and existing commercial buildings (less than 6% of California's 2000-2020 greenhouse gas emission inventory done by the California Air Resources Board/CARB) and shifting the city-owned Department of Water and Power toward renewable energy sources. But California's largest contributor to GHG, according to CARB, is transportation. However, while the 2019 Green New Deal included a target to "reduce vehicle miles traveled per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050" the 2022 report didn't track this number at all. Instead, it focused more on efforts to electrify vehicles.

To be fair, the climate action plans of most major cities show many of the same shortages of meaningful metrics. Good intentions, however, only go so far. It is important to note that LA was breaking new ground in launching the outlines of what a Green New Deal might look like at the municipal level. It is not the purpose of this analysis to second-guess what was a promising start four years ago.

The goal of revisiting the Green New Deal is to work with the new Mayor (who made ambitious climate goals a plank in her campaign), Council, City departments and the public to build on the progress to date. UN Secretary General Guterres proclaimed last year that "We are in the fight of our lives. And we are losing. Greenhouse gas emissions keep growing. Global temperatures keep rising. And our planet is fast approaching tipping points

that will make climate chaos irreversible." That makes it urgent to reboot a more substantive and rigorous "greenprint" that meets the magnitude of what the 2019 plan called "a moral imperative, an environmental emergency and an economic opportunity." While a number of potentially promising planning efforts are underway (a Climate Vulnerability Assessment, a Climate Action Plan and and a Heat Action Plan), they lack the "whole of government" focus needed for prompt completion and effective implementation.

To that end, we have looked to other cities and other sources for meaningful goals and metrics that focus on outcomes. Without a constantly monitored dashboard to mark progress against actionable targets, Los Angeles cannot mobilize the creative energy and passion of its leaders and people to address what Secretary General Guterres has warned are "catastrophic" and "irreversible" impacts of failure to curb greenhouse gas emissions.

C40, the international consortium of Climate Action cities (of which LA was a founding member), has issued a "Climate Action Planning Framework." LA's 2019 Plan was an early pilot for this effort. The guide sets these goals for an effective plan:

- **Consider adaptation & mitigation in an integrated way, identifying interdependencies to maximize efficiencies and minimize investment risk** (LA's next iteration of the Green New Deal should integrate into its Sustainability pLAn not only its many other plans for land use, transportation, water, energy, etc., but also those of the State, County, neighboring cities and regional agencies)

- **Set an evidence-based, inclusive and deliverable plan for achieving transformational mitigation and adaptation, centered on an understanding of the City's powers and wider context** (The most meaningful contribution LA can make to mitigating and adapting to climate change is to focus on the ways it can directly or indirectly reduce greenhouse gas emissions rather than aspirational goals that without meaningful means of implementation devolve into virtue signaling.)

- **Establish a transparent process to monitor delivery, communicate progress and update climate action planning in line with governance and reporting systems**

("What gets measured gets done," was Peter Drucker's shorthand for the need to track incremental progress and adjust our strategies when we fall behind. The best targets are SMART -- Specific, Measurable, Achievable, Relevant, Timely. Aspirational long-term goals may be inspiring, but we can't afford empty promises.)

This report first analyzes the existing Green New Deal milestones and progress made toward them and recommends the kind of metrics that might serve as improved targets for a Greener New Deal. As Controller, it is not our role to set those targets, but we are anxious to play a constructive role in helping the Mayor, Council and citizens of Los Angeles not only set them, but ultimately achieve – or exceed – them.

Our analysis leads us to the following 10 Key Takeaways:

1. **Be Bold: Renewable Energy; More Housing, Fewer Cars; Emphasize Equity**
2. **Goals Must Contain Meaningful Metric**
3. **All Goals and Milestones Aren't Created Equal, So Don't Treat Them Equally**
4. **Make the Biggest Goals Easy to Understand and Track**
5. **EVs Are the Future of Cars, but Cars Cannot Be Our Future**
6. **Be Wary of Double Counting Carbon Gains**
7. **Find Ways to Leverage LA's Assets and Power**
8. **Find Ways to Make Reducing Carbon Emissions Easier**
9. **Protect LA, Especially the Most Vulnerable Communities, From the Impacts of Climate Change**
10. **LA Is A Global Model, So LA Must Lead**

In 2019, LA's pioneering embrace of a local version of a national Green New Deal set a baseline for a citywide mobilization in response to a planetary emergency. The mixed results in the following four years contain vital clues about how we must improve our response. It is obvious that announcing ambitious goals and strategies is not sufficient; we need measurable targets to help ensure we are making tangible progress toward achieving

those goals on time. That's transparency and accountability. We need both to tackle the most critical global issue of our time.

Ultimately, the changes required to both mitigate and adapt to the colossal challenge of a warming planet go far beyond the borders of Los Angeles and far beyond the adjustments within the current policy discourse. Just as the original New Deal evolved over a decade from an ad hoc response to an unprecedented economic crisis into a transformative shift that fundamentally reshaped American life, we must go beyond an ad hoc response to this unprecedented convergent environmental, economic and social crisis.

A livable, sustainable Los Angeles of the future is not one where we simply wean ourselves off fossil fuels. It is one where we intentionally design a more resource efficient and green metropolis made up of vibrant neighborhoods less reliant on a global supply chain and more resilient in the face of a changing climate.

It's time to embrace a new vision for Los Angeles, committing to renewable energy; more housing, fewer cars; and emphasizing equity. That vision lies beyond the present focus of policy makers, but the alternative is one of permanent fiscal stress and social strain, punctuated by catastrophic wildfires, droughts, tropical storms, heat waves and floods. History shows that absent vigorous public intervention, the heaviest burden falls on lower-income communities.

The hottest July in 120,000 years, the destruction of Lahaina, the inexorable rise in sea levels and other grim portents require both a sense of urgency and an understanding that ad hoc responses may seem like they meet the moment, but cannot address the long-term transformational imperative. That is not an excuse for denial or delay; that is a stern reminder we have no time to waste. We must initiate the serious, fundamental changes needed for a livable future for current and future generations.

It's time to reboot the Green New Deal to ensure Los Angeles leads the way on urgent climate action.

10 Key Takeaways for a Reboot of LA's Green New Deal

- **Be Bold: Renewable Energy; More Housing, Fewer Cars; Emphasize Justice**
    - We are past the stage of changing light bulbs, carrying our groceries in reusable bags and virtue signaling by driving a Prius or Tesla. Collective action and systemic change are required to tackle the climate crisis.
    - The drivers of greenhouse gas emissions in our city of four million are burning fossil fuels for energy and living in a city largely designed for cars, not people.
    - Los Angeles, whose growth was fueled by the oil boom that began over a century ago, continues to actively pump oil (to be phased out over the next two decades) and contains thousands of inactive wells, many of which are improperly capped and to this day are emitting toxic fumes into surrounding communities.
    - Creating a resilient, sustainable city for a greener future is a generational shift that offers huge positive opportunities for jobs, security against dire threats and improved quality of life for all. It also involves major (and uncomfortable) changes that are politically difficult.
    - The crisis offers a path to a city of safer, greener and more affordable neighborhoods where everyone is housed and everyone has access to healthy food and rewarding employment. The next Los Angeles must continue to evolve toward compact, transit-oriented development where local needs can be met within a 15 minute walk, bike or transit trip.
    - "Green jobs" must be more than a politician soundbite. We need comprehensive training paths and labor protections to support rewarding careers for those shortchanged by today's economy as well as just transitions for those working in today's fossil fuel industries.

- **Goals Must Contain Meaningful Metrics**
    - It must be clear who is measuring, what they're measuring, how often they're measuring it, where the measurements will be published, and what baseline they are measuring against.
    - Once that's established, the City has to stick to those commitments. Results need to be publicly and transparently tracked.
    - We should make clear the expected benefits of each goal, and how much each smaller step works towards achieving that goal.
- **Not All Goals and Milestones are Created Equal, So Don't Treat Them Equally**
    - While short-term incremental progress is important, achieving the ambitious long-term goals require transformational improvements to the shape of the city, retrofitting older buildings, reducing travel distances, and reducing our reliance on material and energy consumption. That's not to say we shouldn't set smaller or interim goals, but we should be realistic about their effectiveness.
- **Make the Biggest Goals Easy to Understand and Track**
    - The goal of a genuinely "Green" New Deal must be to drastically cut the emission of greenhouse gasses (GHG) while promoting environmental sustainability, social equity and resilient communities.
    - We primarily track GHG emissions with models, which do not provide real time data. More research and development must be devoted to improving our measurement tools.
    - Therefore, we should also focus on the most important inputs for those models, like the sources of energy supplied by LADWP, electrification of transportation and buildings (including how that affects LADWP's energy sources), and vehicle miles traveled.

- Fewer, clearer targets gives policymakers clearer questions to ask when making decisions. Similar to how the CAO studies the potential budget impacts of different policies, policymakers should have a sense of potential climate impacts.

- Easy and accessible open data portals must be established so that constituents can track climate progress and fully participate in public debate

- **EVs Are the Future of Cars, but Cars Cannot Be Our Future**

    - The transition from internal combustion engines to zero emission vehicles is a huge step forward for reducing greenhouse gas emissions. However, zero emission vehicles are only as clean as the grid they are drawing power from.

    - If everyone in Los Angeles converted to electric vehicles overnight, the grid couldn't handle it.

    - Even if the grid could handle it, the stress that would put on the grid would make it harder (maybe impossible) to convert the grid to 100% renewable energy, at least in the near term.

    - Any Green New Deal plan must keep in mind that LADWP's plans for transitioning to clean energy can only accommodate a limited amount of EVs.

    - EVs also require dedicated parking for charging, at a time when we should be looking to reduce parking, not increase it.

    - EVs encourage the same poor land use and development decisions as gas burning cars. (Highways, parking lots, sprawl, etc.)

    - As a recent report from NexGen Policy notes, auto-dependence is "the direct result of the state's transportation planning decisions, which have left most Californians without choices in how they get around. When we measure driving levels in vehicle miles traveled (VMT), the trendline in the data is clear: despite

urgent calls and promises from the state to reduce car dependence, vehicle use continues to rise. "

- We should keep the focus on reducing VMT by investing in mass transit, bike and pedestrian infrastructure, and other non-private vehicle mobility options. We must develop a seamless network of public mobility to supersede the myopic infrastructure and land use investment in auto-dependence.

- **Be Wary of Double Counting Carbon Gains**

  - LADWP's move towards 100% renewable energy is the most important step towards decarbonizing Los Angeles and the step that promises to deliver the highest reduction when measured as metric tons of CO2e. However, as we count those GHG savings we should be mindful that since the City is both the producer and the consumer of electricity, we can only count those savings once.

  - For example, if a building continues to use the same amount of electricity, but is connected to a grid that is reducing its carbon emissions, that building could legitimately claim it is reducing its carbon footprint without doing anything. This would technically be correct, but when we look at the emissions of our community as a whole, we can only count those carbon savings once. For that building to really reduce its carbon footprint, it would need to make actual improvements, like transitioning from gas to electricity, becoming more efficient, etc.

  - The big GHG models take this into account, but as we break down our larger goals into smaller steps, we should be careful to ensure that we're not giving the public the impression that the results were better than they really are.

- **Find Ways to Leverage LA's Assets and Power**
    - There are "whole of government" opportunities for impact on everything from pavement, landscaping, water and urban forest policies and priorities to purchasing and lobbying efforts to reduce waste and foster recycling.
    - While the City can't unilaterally change shipping and aviation, we own among the most valuable seaports and airports in the world. We should be using those assets to change those industries.
    - The City also owns Van Nuys Airport, which handles a lot of private jet travel. Commercial aviation is necessary for modern society. Private jet travel is not. How can the city leverage its ownership of a small airport to reduce private jet travel, or at least get the users of private jet travel to pay the real cost of its externalities?
    - The City has a large budget and numerous resources at its disposal. That financial power should be used to invest in social programs such as housing, healthcare, libraries and more?
    - LACERS and the Police and Fire Pensions should divest from fossil fuel investments.
    - The power of the City can be deployed to fight climate change through our influence on regional bodies. For example, the Mayor is the Chair of LA Metro, which continues to spend billions on freeway expansions that induce increased GHG emissions.
- **Find Ways to Make Reducing Carbon Emissions Easier**
    - For example, currently the Los Angeles Department of Building and Safety (LADBS) has the Existing Building Energy and Water Efficiency (EBEWE) program that requires buildings over a certain size to calculate their energy and water usage and report it to the City. However, since all buildings in Los Angeles get

their electricity and water from LADWP, the City already has much of the information (SoCal Gas would have much of the rest).

    - The City should be providing this information to buildings, instead of the other way around.

- **Protect LA, Especially the Most Vulnerable Communities, From the Impacts of Climate Change**

    - Climate change means both a hotter environment and more extreme weather.

    - We must build a City that is resilient against these threats (heat waves, fires, droughts, floods), especially protecting the most vulnerable communities, who have contributed the least to these problems but stand to suffer the most, including the LA Repair neighborhoods of Arleta - Pacoima; Boyle Heights; Harbor Gateway - Wilmington - Harbor City; Mission Hills - Panorama City - North Hills; West Adams - Baldwin Village - Leimert Park; Westlake; Skid Row; South Los Angeles; and Southeast Los Angeles.

- **LA Is A Global Model, So LA Must Lead**

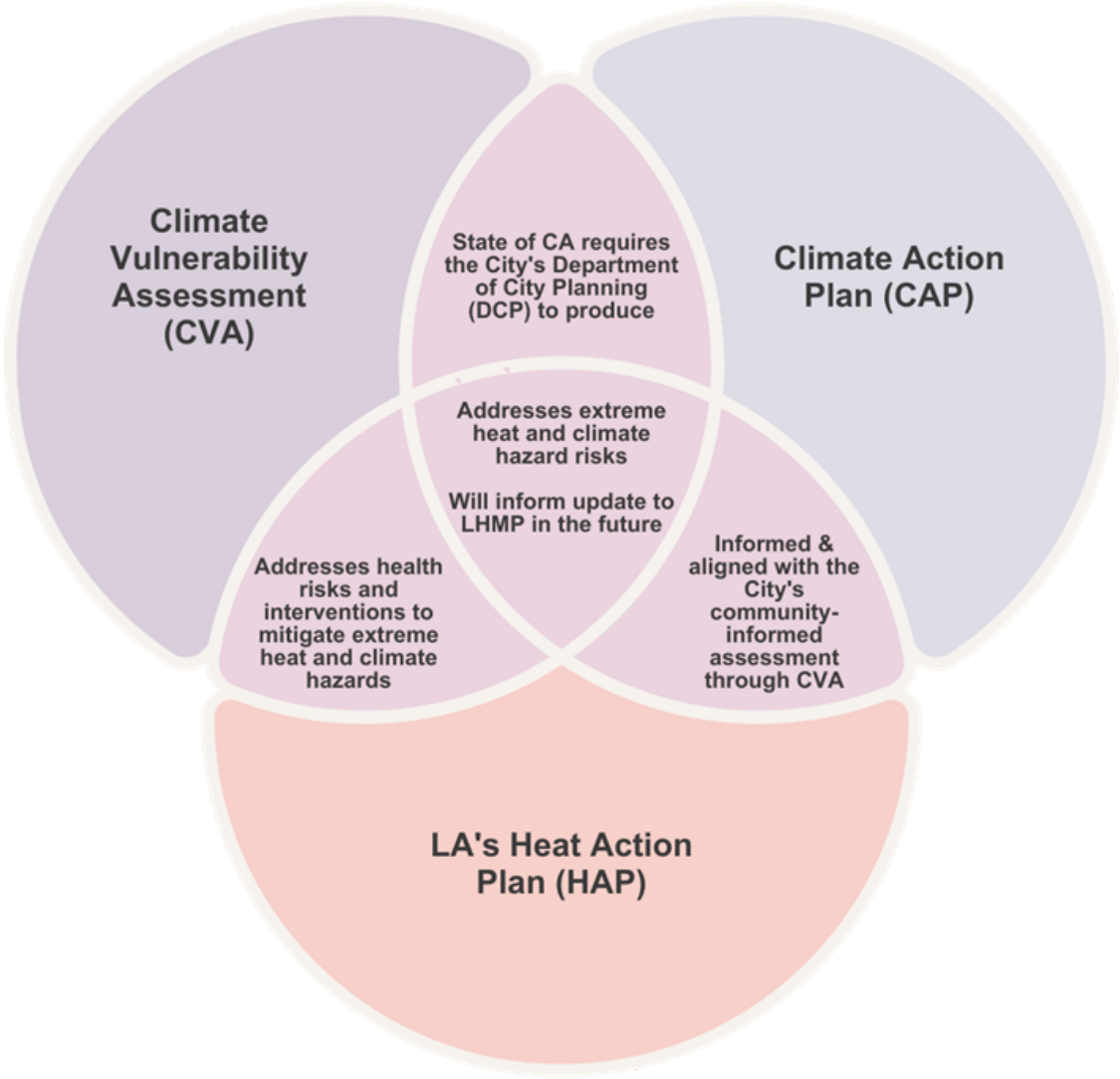
    - At one point, LA was the biggest oil producing region in the US. Later, LA became the symbol of car culture. Our unique media/entertainment influence magnifies what is done here whether we take responsibility for that or not.

    - LA continues to create more than our fair share of GHGs, so it's our obligation to do more than our share to clean up this mess.

    - Given that LA exerts such global impact, we have a moral imperative for global leadership. As a city so closely identified with cars and sprawl, LA is in a position to show the world how we can change for the better. If LA does a good job transitioning to clean energy while making a more equitable and sustainable city, the world will take notice.

- If Los Angeles can’t lead on climate change, how can we expect other mega-cities like Houston, Mumbai, Beijing, Jakarta or Lagos to effectively do their part?

The Road Ahead: What Form Could a Reboot Take?



Source: Climate Emergency Mobilization Office

The LA Planning Department has committed to preparing a Climate Action Plan; Council has mandated a Heat Action Plan and the City is preparing a Climate Vulnerability Assessment. Potentially, all these could work together. But these individual documents cannot substitute for an integrated "whole of government" approach to climate mitigation and adaptation and an integrated set of metrics for measuring progress toward a carbon-free future.

The City adopted its first Sustainability pLAn in 2015, which was revised and updated as the Green New Deal in 2019. Many cities nationally and across California have adopted Climate Action Plans. The LA Planning Department has committed to preparing a **Climate Action Plan**, Council has mandated a **Heat Action Plan** and the City is preparing a **Climate Vulnerability Assessment** in line with changes to State law requiring them as part of updating the Safety Element of the City's General Plan. Potentially, all these could work together. But **these individual documents cannot substitute for an integrated "whole of government" approach to climate mitigation and adaptation and an integrated set of metrics for measuring progress toward the City's overall goal of Carbon Neutrality by 2045.**

Moreover, the time and effort that go into preparing elaborate plans can divert energy and delay action. The international scientific consensus points to 2030-2035 as the pivotal timeframe for avoiding "catastrophic and irreversible" global impacts. As Mayor Karen Bass described her approach to the Homelessness Emergency, urgency requires "building the plane while flying it."

There needs to be clarity about goals – and effective measurement of how well policies and programs are achieving them. Effective real time measurement enables flexibility in implementing and revising policies by doing more of what works and less of what doesn't. Any comprehensive approach to climate action must continually be a work in progress, tenacious about meeting ambitious goals and adaptable on the means of achieving them.

The upshot is that while strategic plans and frameworks have real value, they are not ends in themselves. **Rebooting the Green New Deal does not mean going back to square one to prepare a new document – it means learning from the successes and shortcomings of the last four years of "Green New Deal" implementation in order to successfully execute a U-Turn on the highway to climate hell.**

Analysis of the Green New Deal's 47 Targets and 97 Milestones

LA's "Green New Deal" reflects a national push to address the "planetary red alert" of climate change in the context of environmental justice and sustainability. Like other big city "sustainability" and "climate action" plans, it aspires to be both a bold commitment to ambitious targets to curb greenhouse gas emissions and a comprehensive game plan for a greener and more equitable future.

Both the initial 2015 Sustainable City pLAn and the revised 2019 Green New Deal separate the City's response to the climate crisis into 13 categories like "Renewable Energy" and "Environmental Justice." Each one of those categories contains several "targets" or long term goals, along with several "short-term milestones" which are the smaller steps intended to help the City reach its targets.

In general, the longer-term major targets tend to be measurable and cite sources of baseline numbers against which they can be judged. An example of a well constructed target from the Green New Deal is to source 70% of our water locally by 2035 and building "at least 10 new multi-benefit stormwater capture projects by 2025 to improve local water quality and increase local water supply." These are all definitive, knowable numbers, and the City can demonstrate its progress (or lack thereof) with simple graphs.

However, instead of clearly tracking the more important targets, the 2021-2022 Green New Deal Annual Report only scores the progress of the impactful short-term milestone. The report presents data on some (but not all) of the targets, but typically without any reference to the targets themselves. These charts give us no indication of how close (or far) we are from hitting our goal.

Furthermore, the grading system used for the milestones only uses four grades: "milestone exceeded/achieved early," "milestone achieved," "on track to achieve milestone by target date" and "making progress towards milestone." **The top two scores of "exceeded" and**

"achieved" are meaningful, but "on track" and "making progress" are much less so. The report card presents no data to show what progress is being made on these milestones and how close or far they are from being on track. For grades like these to be useful, the City has to be willing to admit difficulties and failures, as well as celebrating its successes, and it must show progress with hard data, not icons.

The emphasis on short-term milestones may have been a way to jump start policy and programmatic initiatives. Yet simply achieving a milestone doesn't necessarily translate into meaningful progress toward the targets. For example, releasing a plan for "100% renewable energy" might be a good first step, but **the true test comes with implementation and monitoring to gauge the effectiveness of the strategies at meeting the target.**

This analysis uses the most recent targets from the 2019 LA Green New Deal and the milestones from the 2021-2022 Green New Deal Annual Report since those are the latest incarnations of each. Going category by category, this report analyzes which metrics presented in the targets and short-term milestones are the most important, measurable, and meaningful in terms of reducing carbon emissions and achieving environmental justice. In addition, our report makes suggestions on more meaningful data metrics as well as how that data could best be tracked.

Renewable Energy

2019 Targets	Grade	Measureable	Source	Input/Output
LADWP will supply 55% renewable energy by 2025, 80% by 2036, and 100% by 2045	n/a	Yes	LADWP	Output
Increase cumulative renewable Megawatts (MW) by 2025; 2035; and 2050 of:	n/a	Yes	LADWP	Output

• Local solar to 900-1,500 MW; 1,500-1,800 MW; and 1,950 MW • Energy storage capacity to 1,654-1,750 MW; 3,000 MW; and 4,000 MW • Demand response (DR) programs to 234 MW (2025) and 600 MW (2035)				

2022 Short-Term Milestones	**Grade**	**Measurable**	**Source**	**Input/Output**
Release 100% Renewable Energy Plan by 2020	Achieved	Yes	LADWP	Input
Expand Feed-in-Tariff (FiT), community solar, and increase cumulative MW of local solar to 500MW by 2021	Exceeded	Yes	LADWP	Output
Increase cumulative MW of energy storage to 1428-1524 by 2021	Making Progress	Yes	LADWP	Output
Launch residential thermostat demand response (DR) program, and increase cumulative MW of DR to 96 MW by 2021	Making Progress	Yes	LADWP	Output

Invest $8 billion to upgrade power system infrastructure and ensure power system reliability by 2022	On Track	Yes	LADWP	Input

The Los Angeles Department of Water and Power is the nation's largest public utility. While demand for electric power has grown, improvements in efficiency have held down "peak" demand (the maximum power needed at any given time). The utility's highest ever peak load of 6502 Megawatts (MW) occurred during a heat wave in 2017. The power generated to meet electricity demand in the city currently comes from a mix of burning carbon-based fuels as well as renewable energy sources such as solar, wind, geothermal and hydroelectric.

Transitioning LA's power grid from 40% coal and 20% renewable in 2013 to 36% renewable and 13% coal in 2022 is a tangible, meaningful achievement LA should be proud of.[1] To make this happen, the City leveraged its resources (in this case LADWP, the city-owned utility) and was even able to accelerate its timeline. LA is now looking to achieve a 100% renewable grid by 2035, a full ten years earlier than previously sought.

However, LA's work is not done. The LA 100 and 2022 LADWP Power Strategic Long-Term Resource Plan, which are the blueprint for achieving 100% renewable energy, must now be meticulously tracked as they are implemented. Wind and solar are fantastic sources of renewable energy, but when the sun goes down and the wind lets up, the people of LA still need to turn on the lights. The plans account for this, of course, looking to a mixture of energy sources, including expanded storage, community solar, hydroelectric power, and possibly hydrogen as ways to keep our grid reliable and meet peak demand. In order to accurately address this peak demand problem, we need to be tracking the energy sources for our grid not on an annual basis but in as close to real-time as possible. Also, instead of static graphs, the people of Los Angeles should be presented with choices for how to view the data (graphs, tables, charts) and how to analyze the data (hourly, 7 day averages, year-over-year, etc.)

[1] https://www.ladwp.com/powercontent

Decarbonizing our electrical grid is a complex problem, and the story of how we can solve it can't be told in a couple simple charts.

One of the biggest looming decisions about LA's energy future isn't directly mentioned in the Green New Deal: the Scattergood Generating Station. Scattergood is currently powered by natural gas, and the City is exploring transitioning it to hydrogen. While burning of hydrogen does not create carbon dioxide, the creation of usable hydrogen can, depending on how it is sourced. Also, burning hydrogen can create nitrogen oxides, which is a harsh pollutant, and much of that pollution will be concentrated in the same communities that bore the brunt of the pollution from natural gas. As the City gets ready to spend $800 million on this transition, we must be certain that moving towards hydrogen is the right choice.

As for the rest of the renewable energy milestones, they present a less rosy picture of our ability to achieve our climate goals. According to LADWP, Los Angeles had 132 MW of local solar capacity available at the end of 2014. The short term milestone of exceeding 500 MW of solar capacity in 2021 is good, but that doesn't mean that we're on track to hit our stated target of 900-1,500 MW of solar capacity by 2025. Unlike the energy mix going through LADWP's wires, the City can't track solar capacity in real time. However, we should try to track these data points at least quarterly.

The same goes for tracking LA's energy storage capacity and demand response programs, which are programs to encourage energy users to shift the time they use energy (like car chargers) away from peak demand (evenings) to times of lower demand (middle of the night). **Producing local solar, storing energy, and shifting demand to manage peak loads are necessary to achieving 100% renewable energy, and to know if we're on track, we need to be tracking the MW in each category as closely as possible.**

Finally, as for investing $8 billion to ensure power grid reliability, the annual report doesn't give us much insight into whether that money will achieve its desired result. Is that enough? Is it too much? The report doesn't say. Instead of tracking money invested, we must track the power system's reliability and projected peak demand. **If the City is going to spend $8 billion**

(which is equivalent to about 60% of the rest of the City's annual budget), we should make sure it delivers results.

Recommended Renewable Energy Data to Track and Publish:

1. LADWP energy sources in real time
2. MW of local solar, updated quarterly
3. MW of local energy storage, updated quarterly
4. MW expected from demand response programs, updated quarterly
5. Current and projected peak power system capacity and reliability

Environmental Justice

2019 Targets	Grade	Measureable	Source	Input/Output
Improve the raw scores of CalEnviroScreen indicators of L.A. communities in the top 10% by an average of 25% by 2025; and 50% by 2035	n/a	Yes	OEHHA	Output
Reduce the number of annual childhood asthma-related emergency room visits in L.A.'s most contaminated neighborhoods to less than 14 per 1,000 children by 2025; and 8 per 1,000 children by 2035	n/a	Yes	LA County Public Health	Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Dramatically reduce exposure to health-harming pollutants in our most disadvantaged communities by 2025	On track	Yes	OEHHA	Outcome
Invest in housing, services, and infrastructure upgrades that will improve the quality of life for sensitive populations including children, the homeless, and elders by 2025	On track	Yes		Input
Implement cost-saving programs to alleviate financial burdens in our most vulnerable communities by 2025	On track	Potentially		Input
Improve access to community programs in low-income areas by 2025	On track	No		Output
Deploy air quality tracking in high scoring CalEnviroScreen neighborhoods by 2021	On track	Yes		Input
Create an annual oil well and facilities compliance inspection program, prioritizing communities in closest proximity to facilities by 2021	Making Progress	Yes	LAFD	Input
Increase the percentage of zero emission vehicles in the city to 25% by 2025; 80% by 2035; and 100% by 2050	Making Progress	Yes	DMV	Output

While climate change is a global problem, the effects of it are not felt equally among all populations. For years, frontline communities have borne the brunt of vehicle emissions, petroleum extraction, and industrial pollution, and our work building a sustainable future must begin with helping the communities that are currently suffering the most.

The Green New Deal does a good job of highlighting these issues of environmental justice, but the short-term milestones it tracks are unfortunately not concrete enough to give us an indication of whether we're achieving our goal. For example, the 2021-2022 Annual Report says the city is "on track" to "[d]ramatically reduce exposure to health-harming pollutants in our most disadvantaged communities by 2025", but it gives no indication of which pollutants it's referring to and what constitutes a "dramatic" reduction. Other milestones we're "on track" for are to "invest in housing, services, and infrastructure," "implement cost savings programs," and "improve access to community programs." While all are good initiatives, none of these milestones have any quantified goals that can measure success.

Again, by going back to the original targets, we find metrics that are much more useful and meaningful. The first target concerns improving scores as measured by CalEnviroScreen, a tool created by the California Office of Environmental Health Hazard Assessment (OEHHA), that "uses environmental, health, and socioeconomic information to produce scores for every census tract in the state." **As with any rating system that uses a variety of inputs to create an aggregate score, CalEnviroScreen isn't perfect. However, when measuring success with a complex problem like environmental justice, imperfect tools are much better than nothing.**

Also, the 2019 Green New Deal doesn't just simply rely on the aggregate CalEnviroScreen scores. Instead, it focuses on the "raw scores" that go into the calculation of CalEnviroScreen like "ozone pollution," "drinking water contaminants," and "hazardous waste." OEHHA is already tracking these and 17 other factors for every census tract in the state, so the City should take advantage of that to track how our most impacted communities are getting better (or worse) because of our efforts.

Additionally, LA shouldn't limit its CalEnviroScreen tracking to only the most impacted census tracts. Instead, **LA should track the entire city. It would be extremely useful to know if the most impacted areas are improving or declining faster or slower than elsewhere.** If the CalEnviroScreen scores get marginally better in Wilmington and dramatically better in Bel Air, we'll know we're not employing our resources effectively. Also, since environmental justice indicators are extremely localized, it would be useful to monitor the entire city to see if certain interventions like capping oil wells or adding bike lanes are making improvements. Once we identify the most impactful changes, we can begin to implement them elsewhere.

Next, according to the 2021-2022 Annual Report, the City "exceeded" their short term milestone of deploying "air quality tracking in high scoring CalEnviroScreen neighborhoods by 2021." That is a good first step, but **simply deploying the air quality tracking is meaningless unless we're using it to track air quality. Let's publish the data we're collecting in a way that's easy to find and understand** to demonstrate to the people of LA whether or not we're living up to our promises.

Another target present in the 2019 Green New Deal and not tracked in the Annual Reports concerns reducing "the number of annual childhood asthma-related emergency room visits in L.A.'s most contaminated neighborhoods to less than 14 per 1,000 children by 2025; and 8 per 1,000 children by 2035." Childhood asthma is an epidemic in frontline communities. **The City must actively track childhood asthma cases in order to determine the scope of the problem and to design strategies to alleviate it.**

The final two short-term milestones for environmental justice concern "Creating an annual oil well facilities inspection program" and increasing "the percentage of zero emissions vehicles in the city." For oil wells, an annual inspection program is a good step. **However, now that the City has moved to stop oil production entirely over the next two decades, we should focus on the goal of plugging all idle/orphaned wells and remediating the well locations.** Equally important, we should establish a process to ensure that the oil companies who profited for decades from drilling in our City pay their fair share of the cost of cleaning up the dangerous mess that is left behind.

As for electric cars, it is great to get carbon emitting cars off the streets, but electric cars are not a panacea. First, electric cars are only as clean as the grid they're attached to. As we discussed with the city's efforts to move to a 100% renewable grid, limiting demand, especially peak demand, is the key to our success. The more electric cars we have, the more difficult it will be to reach our 100% renewable goal. Also, electric cars do not address issues like traffic violence, sprawl, and other unintended consequences of decades of auto-centric city planning that has shaped Los Angeles. Further, there is increasing recognition of the global environmental and societal damage caused by the production of electric cars and their batteries[2], as well as particles from their tires[3]. **Simply electrifying vehicles will not realize our climate goals soon enough. We must also reduce vehicle miles traveled.**

Recommended Environmental Justice Data to Track and Publish:

1. Raw CalEnviroScreen scores for all census tracts
2. Childhood asthma-related hospital visits
3. Number and locations of active oil wells and uncapped oil wells
4. Barrels of oil pumped in LA and estimated amount remaining unpumped
5. Vehicle miles traveled broken down by electric vs gas

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[2] https://www.nytimes.com/2021/03/02/climate/electric-vehicles-environment.html

[3] https://www.theatlantic.com/technology/archive/2023/07/electric-vehicles-tires-wearing-out-particulates/674750/

Local Water

2019 Targets	Grade	Measureable	Source	Input/Output
Source 70% of L.A.'s water locally and capture 150,000 acre ft/yr of stormwater by 2035	n/a	Yes	LADWP	Output
Recycle 100% of all wastewater for beneficial reuse by 2035	n/a	Yes	LASAN	Output
Build at least 10 new multi-benefit stormwater capture capture projects by 2025; 100 by 2035; and 200 by 2050	n/a	Yes	LASAN	Output
Reduce potable water use per capita by 22.5% by 2025; and 25% by 2035; and maintain or reduce 2035 per capita water use through 2050	n/a	Yes	LADWP	Output
Install or refurbish hydration stations at 200 sites, prioritizing municipally-owned buildings and public properties such as parks, by 2035	n/a	Yes		Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Ensure that $80 million annually from Measure W supports multi-benefit projects that improve water quality by 2020	Achieved	Yes	LASAN	Input

Increase stormwater capture to 75,000 AFY by 2021	Exceeded	Yes	LASAN	Output
Complete programmatic environmental impact report (EIR) by 2022 for 100% water recycling by 2035 plan	On track	Yes	Planning	Input
Replace 108 miles of water mainlines by 2021	Exceeded	Yes	LADWP	Output
Produce 1.5 millions of gallons per day (MGD) of recycled water at Hyperion Water Reclamation Plant (WRP) for use at LAWA and other local facilities by 2021	Making Progress	Yes	LASAN	Output
Establish guidelines for incorporation of green infrastructure into street and sidewalk repair projects by 2021	Exceeded	Yes	Public Works: Streets & Engineering	Input
Expand existing programs and develop targeted campaigns to increase awareness on L.A.'s water policy goals by 2021	Exceeded	Yes	LASAN	Input
Establish permanent drinking water access in Skid Row by 2021	Exceeded	Yes		Output

Three of the 2019 local water targets stand out for being direct, measurable and impactful. Sourcing water locally, capturing stormwater, recycling wastewater, and reducing potable water use per capita are all metrics that can be measured and in most cases already are by LADWP and LASAN. **All of these metrics should be on an easily accessible dashboard, updated as often as the agencies are able to.**

Building new stormwater capture projects is surely an important step towards capturing 150,000 acre ft/yr by 2035. However, **the total capacity of stormwater capture projects is much more important than the number of projects themselves.**

As for the 2022 short-term milestones, the $80 million in Measure W money spent annually is a means, not an end. It would be useful to know how much money the city is spending, through Measure W and other sources, on improving water quality and increasing local water supply – and the results achieved. This would give the City a sense of our return on investment, not just our cost.

Next, increasing stormwater capture to 75,000 AFY (acre feet/year) is a step towards our ultimate goal, but not a goal in and of itself. Also, it's good that we exceeded the short-term milestone of replacing 108 miles of water mainlines, and replacing LA's aging water infrastructure is urgently needed. However, the 108 miles of mainlines is a numerator without a denominator. LA has around 7,200 miles of water pipes. How many miles need to be replaced today? In the next 10 years? Are we making progress or falling behind? That is what needs to be tracked.

Producing 1.5 million gallons per day of recycled water at the Hyperion Water Reclamation Plant is good, but it doesn't give us a sense of how close it gets us towards our 2035 goal of reusing 100% of wastewater. How many gallons per day of wastewater are we producing in total, and how many of those gallons are we producing through recycling? Those are the key metrics to track.

When it comes to completing the environmental impact report for water recycling, establishing guidelines for green infrastructure, and expanding awareness campaigns, the Green New Deal is closer to bureaucratic box ticking than mandating a plan that can be measured. **Tracking results is more important than guesstimating how processes are going.**

Recommended Local Water Data to Track and Publish:

1. Amount of water used and amount of water sourced locally
2. Amount of stormwater captured and amount of stormwater not captured
3. Amount of wastewater produced and amount of wastewater recycled
4. Potable water used per capita

Clean & Healthy Buildings

2019 Targets	Grade	Measureable	Source	Input/Output
All new buildings will be net zero carbon by 2030 and 100% of buildings will be net zero carbon by 2050	n/a	Yes	LADWP, Building & Safety	Output
Reduce building energy use per sq. ft. for all building types 22% by 2025, 34% by 2035 & 44% by 2050	n/a	Yes	LADWP	Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Use energy efficiency to deliver 15% of LA's projected electricity needs by 2020	Achieved	Yes	LADWP	Output
Design and implement policies to decarbonize new buildings by 2021	Making Progress	Yes	Building & Safety	Input

Design and implement policies to decarbonize existing buildings by 2021	Making Progress	Yes	Building & Safety	Input
Invest $100 million in energy efficiency programs to renters and affordable housing customers by 2021	Exceeded	Yes	LADWP	Input
Achieve and maintain +85% compliance with Existing Building Energy & Water Efficiency (EBEWE) program by 2021	Making Progress	Yes	Building & Safety	Output

The "Vision for Los Angeles" laid out in the 2019 LA Green New Deal starts with a bold statement that "[t]o be carbon neutral by 2050, all of L.A.'s buildings must operate 100% on clean power—because buildings have to be transformed from our largest source of climate pollution to 21st century models of efficiency."[4] This is certainly true, but it elides two very important but distinct issues. If LADWP converts to 100% clean power by 2050 (or 2035 as is the current target), then by definition every fully electrified building attached to the DWP grid will be using 100% clean energy. However, that does not mean those buildings are "models of efficiency." In order to achieve that, those buildings must reduce the amount of energy they use.

That is why the specific benchmarks of reducing building energy use per square foot by 22% by 2025, 34% by 2035, and 44% by 2025 are so useful. Not only are these measurable and trackable, but they represent real energy savings that will reduce the burden of LADWP. Those benchmarks are also ones that can be tricky to attain, since one of the most important steps in making existing buildings more efficient is to transition from natural gas for cooking and heating to cleaner electricity.

[4] LAGND, p. 54.

The short term milestones to come up with plans to decarbonize new and existing buildings by 2021 is a bureaucratic milestone, and one that must tackle the issue of simultaneously increasing the electrification of buildings while also not stressing the power grid as we move towards 100% renewables. As for using energy efficiency to provide 15% of our projected energy needs, it is great we've exceeded that, and now it's time to set a new goal. Also, as we've discussed with previous milestones citing investing specific dollar amounts, investing $100 million in energy efficient programs for renters and affordable housing residents is only as good as the results that $100 million bought us. Now that the money has been spent, the city should go back and evaluate the program to see if it achieved its goals.

Unfortunately, the Existing Buildings Energy and Water Efficiency (EBEWE) program, one of the City's most important initiatives to help us achieve our building efficiency goals, is greatly lagging in compliance. The purpose of the EBEWE program is to produce a baseline energy usage for all large buildings in the City, and then have those buildings conduct periodic audits of their energy use to identify where efficiencies can be found. It is partially mandated by the state as part of AB 802, although to LA's credit, our program goes above and beyond what is required. However, the **program was paused during COVID, and as of the end of July 2023, only 41% of buildings have complied with the program's benchmarking requirement and less than 7% of buildings have complied with the audit requirement, far short of the 85% compliance milestone by 2021 envisioned by the Green New Deal.**

Now that the program is up and going again, it might be useful to consider how it can better achieve the goal of increasing energy efficiency. Most of the information required to establish a building's benchmark energy and water usage comes from just two sources: LADWP and the Southern California Gas Company. The Department of Building & Safety, which has been tasked with administering this program, works with both of these utilities to transfer this information directly from LADWP and SoCalGas, but the process is still complicated enough that a cottage industry of compliance consultants has blossomed. Similarly, the periodic energy audits the program requires can cost thousands of dollars, but any efficiency recommendations that arise from those audits are purely optional. The result is a program

that costs building owners and managers time and money, but doesn't necessarily lead to any climate gains.

To the extent possible, **we shouldn't be asking building owners and managers to tell us about their energy and water usage, we should be giving the information to them.** This would not only achieve compliance, but it would be less onerous for the building owners and managers and ensure that the city's data is more accurate. Similarly, the city should explore how it can lessen the financial burden of the periodic audits, and instead find a way to incentivise efficiency instead of making it a bureaucratic burden.

Recommended Clean & Healthy Buildings Data to Track and Publish:

1. Energy use per square foot for all LA buildings, from LADWP and SoCalGas, updated monthly

Housing & Development

2019 Targets	Grade	Measureable	Source	Input/Output
End street homelessness by 2028	n/a	Yes	LAHSA	Output
Increase cumulative new housing unit construction to 150,000 by 2024 and 275,000 by 2035	n/a	Yes	City Planning	Output
Ensure 57% of new housing units are building within 1500 ft of transit by 2025, and 75% by 2035	n/a	Yes	City Planning	Output

Create or preserve 50,000 income-restricted affordable housing units by 2035 and increase stability for renters	n/a	Partially	LAHD	Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Complete Transit Neighborhood Plans underway for Purple Line Extension and Orange Line by 2020	Making Progress	Yes	City Planning	Input
Implement the Mayor's A Bridge Home program by building at least 1,500 beds across the city by 2021	Exceeded	Yes		Output
Build 100,000 new housing units by 2021	Exceeded	Yes	City Planning	Output
Complete Downtown Community Plan by 2021	Making Progress	Yes	City Planning	Input
Enforce the Rent Stabilization Ordinance and further enhance tenant protections by 2021	Exceeded	Yes	LAHD, City Attorney	Input
Build 15,000 units of affordable housing by 2021	Exceeded	Yes	LAHD, City Planning	Output

Housing, or really the lack of affordable housing, is the most salient issue in Los Angeles. As rents rise and homelessness increases, it is important to remember that housing is a climate issue as well. As the economic engine of the region, the City of Los Angeles is where jobs are concentrated, but unaffordability and lack of public transportation options forces many

people who work in Los Angeles into grueling (and carbon intensive) commutes. **The only way to achieve the simultaneous goals of reducing homelessness and reducing GHG emissions is to build more housing.**

Unfortunately, the targets listed in the 2019 Green New Deal are out of date, well below the city's latest Regional Housing Needs Assessment (RHNA) allocations (275,000 by 2035 vs 456,643 by 2029). Below is a chart showing LA's RHNA allocations that the City Planning department presented to the Planning and Land Use Management Committee in June, 2023:

RHNA Progress - Permitted Units by Affordability

Income Level	RHNA Allocation by Income Level	2022	Total Units Permitted to Date (6th Cycle)	Total Remaining RHNA by Income Level
Very Low	115,978	2,150	3,697	112,281
Low	68,743	1,042	1,657	67,086
Moderate	75,091	88	127	74,964
Above Moderate	196,831	20,142	27,939	168,892
Total Units	**456,643**	**23,422**	**33,420**	**423,223**

Source: *RHNA Status Update, Los Angeles City Planning, 6/6/23, p. 15*

The RHNA numbers come from a process created by state law that projects how many new housing units are needed in an area to satisfy future population needs. **While these numbers represent one estimate among many, failure to build housing will mean less affordability, more homelessness, longer commutes, and a higher climate impact. If anything, LA's Green New Deal should set a higher, not a lower, target than RHNA.**

The target of 57% of new housing units being built within 1,500 feet of transit, while laudable, only focuses on part of the problem. It makes sense to encourage density in the city's transit corridors, but it also is vital to make suburban parts of the city less car-dependent, including

increasing housing density. While it is important to fast track development in transit rich neighborhoods, there needs to be both transit investments and increasing housing density in the rest of the city as well. **To achieve our RHNA goals, let alone our climate goals, the City of Los Angeles is going to have to become less dependent on car travel, and that means pursuing so-called "missing middle housing" (duplexes, courtyard apartments etc.) appropriate to promote in existing suburban areas.**

The short-term milestones for Housing and Development also include two instances of completing plans and one promise to enforce the Rent Stabilization Ordinance. Hopefully the implementation of ULA will expand the Housing Department's ability to enforce the RSO, along with the new Just Cause Ordinance and the Tenant Anti-Harassment Ordinance. TAHO in particular is an important tool to help tenants who might otherwise be displaced by aggressive landlords. Unfortunately, even though TAHO has been on the books for over two years, the Housing Department and City Attorney have yet to prosecute a case. As for the milestones concerning the Community and Transit Neighborhood Plans, the Downtown Community Plan has been completed, but the Purple & Orange Line Transit Neighborhood Plans have not. Completing plans like these is less about planning and more about the political will to get the plans passed. As we've stated before, if Los Angeles is going to hit its climate goals, we're going to have to reduce vehicle miles traveled. These Transit Neighborhood Plans must reflect that reality and policymakers must follow through on that promise.

Recommended Housing & Development Data to Track and Publish:

1. Total number of housing units, separated by affordable and market rate
2. Number of new housing units permitted and built, separated by affordable and market rate
3. Number of housing units taken off the market, separated by affordable and market rate

Mobility and Public Transit

2019 Targets	Grade	Measureable	Source	Input/Output
Increase the percentage of all trips made by walking, biking, micro-mobility / matched rides or transit to at least 35% by 2025; 50% by 2035; and maintain at least 50% by 2050	n/a	Yes		Output
Reduce VMT per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050	n/a	Yes	SCAG/ Google	Output
Ensure Los Angeles is prepared for Autonomous Vehicles (AV) by the 2028 Olympic and Paralympic Games	n/a	Yes	DOT	Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Launch a behavior change campaign to encourage shared, sustainable mobility options	Exceeded	Yes		Input
Adopt a Mobility First policy by 2021	Achieved	Yes		Input
Launch a user-friendly, searchable app mapping all curbside designations throughout the city by 2021	Making progress	Yes	LADOT	Input

Use transportation data to ensure that new transit, app-enabled, and for-hire mobility options are equitably available across the City by 2021	Making progress	No		Input
Expand Metro Bike Share to at least three new neighborhoods by 2021	Exceeded	Yes	Metro	Input
Ensure all autonomous vehicles used for sharing services are electric by 2021	Making progress	Yes		Output

Like much of the 2019 Green New Deal, the Mobility and Public Transit targets start off strong, but the scope and impact of the 2022 short term milestones are lacking. **The goal of increasing the percentage of all trips made by walking, biking or transit (i.e. not cars) to 35% by 2025 is great. Unfortunately, it is a target where the City is moving backwards, not forwards.** According to Google Environmental Insights, in 2018 23.6% of all trips in Los Angeles were by methods other than cars. By 2022, the number **decreased** to 16.2%. Not only are we moving in the wrong direction, we're moving in the wrong direction fast.

Part of the shift towards private cars is undoubtedly due to the COVID-19 pandemic, where some people were understandably wary of public transportation. However, even if some people were avoiding public transportation in 2020 and 2021, **the City needs to be doing everything it can to make alternatives to driving safer, more convenient and more affordable.** The City also needs to be meticulously tracking travel behavior, and not just citywide. Data on what neighborhoods are more conducive to non-car travel would help policymakers to identify the parts of the city that should be replicated and the parts that need change. Similarly, it would be useful to have data broken down by date and time, so policymakers can explore car usage by time of day, day of the week, and season in order to find insights that can help move Angelenos out of their cars.

The next target, concerning reducing vehicle miles traveled per capita, is essential, and is likely the most important data point when it comes to transportation. As stated earlier, electric cars are only as clean as the grid they're attached to, and rapid adoption of electric cars, while it means less direct carbon emissions from transportation, also represents a huge stress on the electric grid, especially at times of peak usage when providing renewable energy is most difficult. Also, the primacy of cars, no matter the fuel, has led to a century of poor land use decisions. Decreasing vehicle miles traveled will go hand-in-hand with better land use and transportation decisions in the future.

The final target, ensuring that LA is prepared for autonomous vehicles by the 2028 Olympics, has no discernable connection to climate policy. The 2019 Green New Deal provides no explanation why autonomous vehicles are more friendly to climate than non-autonomous vehicles, or why the onus should be on LA should prepare for autonomous vehicles instead of autonomous vehicle manufacturers to prepare for LA, or why the 2028 Olympics was selected as a deadline. Therefore, **this target should be ignored.**

The Mobility and Public Transit short-term milestones contain a lot of bureaucratic benchmarks like "adopt a Mobility First policy," "launching a behavioral change campaign," launching apps, and "using data." Unfortunately, none of these milestones has accomplished any meaningful reduction in the number of non-car trips taken and vehicle miles traveled. **Angelenos won't move out of cars because of a marketing campaign. Angelenos will move out of cars when the city creates an environment (through land use policy, public transportation, congestion pricing, or any other carrot or stick we can think of) that makes alternative travel choices more attractive than driving.**

Likewise, the City's Mobility-First policy is only as good as its implementation. Currently, activists have taken it upon themselves to bring a ballot initiative to force City Council to abide by their own complete streets plan that was part of this policy. If the City will only implement these programs if they are forced to at the ballot box, then the plans are of little value.

An app mapping all curb designations sounds nice, but something like that is years away. Recently, the Department of Transportation told the City Council that they do not have a database of curb designations. In order to make one, DOT would have to go into the field and catalog all the existing parking signs in the city. However, even if the city was able to make such an app, this milestone misses the point of the problem with parking in the city. **Parking minimums and the obsession with provisioning "free" parking to everybody at all times leads to less density, terrible land use decisions and a de facto subsidy of automobile use at a time where the city ostensibly wants to reduce vehicle miles traveled. What we need is a better policy to get people out of cars, not a better parking app.**

"Using transportation data" to ensure mobility options are equitably available is an odd milestone. Was the plan to do this without using transportation data? **The goal should be the equitable distribution of mobility options, not using data to get there.**

Ensuring autonomous vehicles used for sharing services are electric is another odd milestone, and another example of the Green New Deal's focus on autonomous vehicles with only a tenuous relationship to climate change. Sure, make autonomous vehicles electric instead of gas. However, the wisdom and implementation of autonomous vehicles is a much larger question than the fuel used in the engines.

Next, **expanding Metro Bike Share to three new neighborhoods represents a huge lowering of ambition for Los Angeles.** More bike share is good, but the issue with bicycles in Los Angeles is about much more than the accessibility of Metro Bike Share. With its good weather and large areas of relatively flat terrain, Los Angeles should be one of the best bicycle cities in the world. What is holding the city back isn't the lack of bike share, but the mortal peril bicyclists face on the city's streets. Unfortunately, while the 2019 Green New Deal made reference to Vision Zero, that milestone was gone by 2022. Instead of incrementally increasing bike share, **the City needs to make a real commitment to making cycling less deadly**. To that end, **the City's climate dashboard should be tracking cyclist and pedestrian accidents and deaths (possibly expressed per mile traveled), and reducing those numbers to zero should be a top priority for all levels of City government.**

Finally, **the most notable aspect of the Mobility & Public Transit section of the 2019 Green New Deal is the lack of any milestones focused on expanding public transit as a way of reducing car dependency.** While it's true that much of the public transit in Los Angeles is the purview of Metro, not the City of LA, that doesn't make the City a passive observer. First, the City has its own bus system. How can it be expanded to accomplish our climate goals? Second, the City of Los Angeles is the single most important member of Metro, and many Metro decisions, especially those impacting land use in the City of Los Angeles, are made by the City as much as by Metro. For example, Metro is currently weighing options for a new rail line over the Sepulveda Corridor that would connect Westwood with the San Fernando Valley. One option is a slower, less useful monorail, while the other option is heavy rail that would be faster and move more people. **If the City is serious about fighting climate change, it should forcefully come out for the heavy rail option since that would do the most to reduce vehicle miles traveled and increase non-car trips in the City.** Similarly, the City officials who sit on the Metro board should **evaluate projects based on whether those projects promise to reduce vehicle miles traveled and increase non-car trips. If projects do not meet those two criteria, then those projects should be considered incompatible with the stated climate goals of the City.**

Mobility & Public Transit Data to Track and Publish:

1. Vehicle Miles Traveled
2. Mode share: % Trips by car/foot/bicycle/pedestrian/etc.
3. Pedestrian and cyclist accidents and deaths

Zero Emission Vehicles

2019 Targets	Grade	Measu reable	Source	Input/Output
Increase the percentage of electric and zero emission vehicles in the city to 25% by 2025; 80% by 2035; and 100% by 2050	n/a	Yes	DMV	Output
Electrify 100% of LA Metro and LADOT buses by 2030	n/a	Yes	Metro, LADOT	Output
Reduce port-related GHG emissions by 80% by 2050	n/a	Yes	Port of LA	Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Distribute 1,000 used electric vehicle (EV) rebates, 11,500 Level 2 EV charger rebates, and 75 DC fast charger rebates by 2021	Exceeded	Yes		Output
Develop a zero emission roadmap for LAX by 2021	Making Progress	Yes	LAX	Input
Develop roadmap for Fossil Fuel Free Zone by 2021; and implement by 2030	Achieved	Yes		Input
Electrify LA Metro's G (Orange) and J (Silver) Lines by 2021	Making Progress	Yes	Metro	Output

Introduce 155 new electric DASH buses into fleet by 2021	Making Progress	Yes	DOT	Output
Install 10,000 commercial EV chargers by 2022; and 28,000 by 2028	Exceeded	Yes		Output

As noted earlier, electric vehicles are only as clean as the grid they're attached to, and an increase in electric vehicles will mean more stress on the grid, especially at times of peak power consumption, when using renewable energy is the most difficult.

A full understanding of how increased zero emission vehicle adoption will stress the grid is necessary to evaluate whether the 2019 Green New Deal target of 80% zero emission vehicles by 2035 is even possible. Below are two graphs, one from the LA100 study and the other from the draft 2022 DWP Strategic Long Term Plan (SLRP), that show the projections that those studies used for electric vehicles. In both cases, it appears that DWP is planning for many fewer electric vehicles than what the 2019 Green New Deal is calling for:

Figure 25. Projections of EV stock by electrification projection

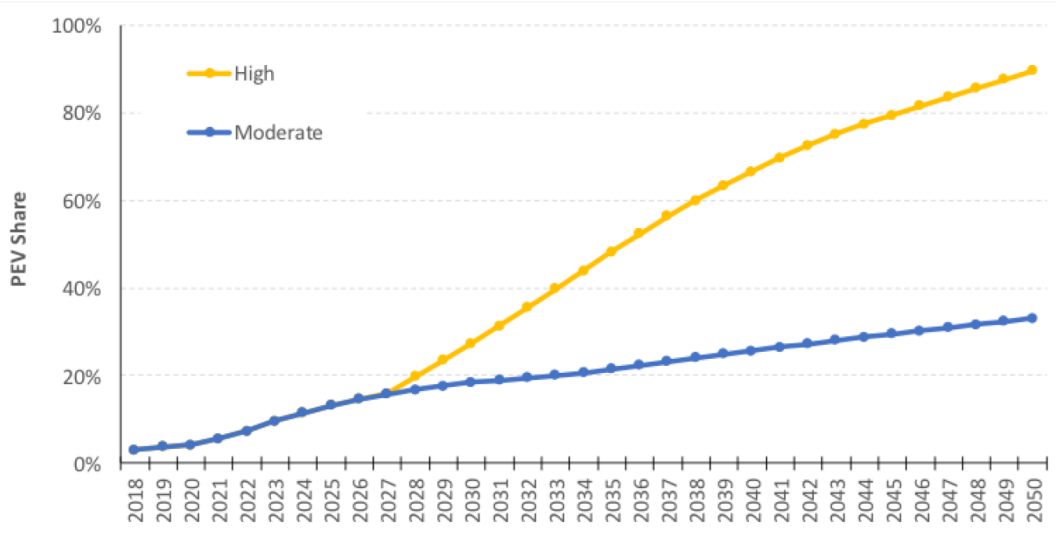
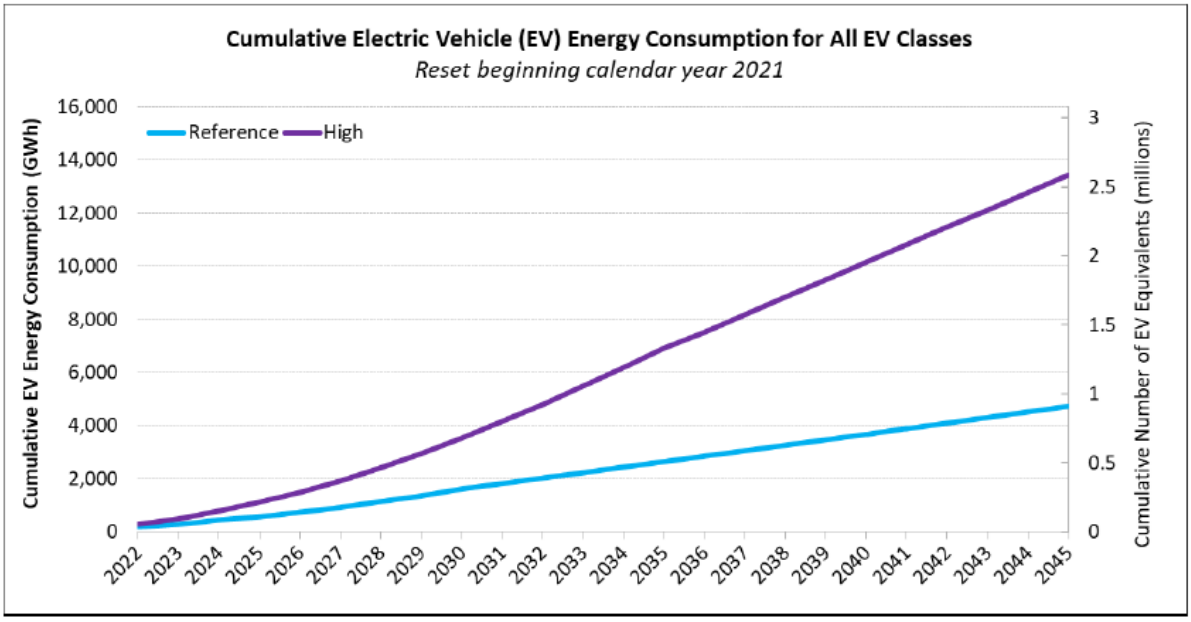


Figure 26. Projections of EV stock as a share of LA light-duty vehicles, by electrification projection

Source: *LA100 Renewable Energy Study, NREL, Chapter 3, p. 31*

3.1.17 Transportation Electrification



Notes:
1. Cumulative EV Energy Consumption (GWh) is reset beginning calendar year 2021, in accordance with the 2021 FSO Load Forecast, which acts as the load basis for modeling in the 2022 SLTRP.
2. The "Reference" projections are obtained from the 2021 FSO Load Forecast, and are based on the approved 2017 SLTRP levels of "High" transportation electrification, with adjustments based on near-term electrification projects.
3. The "High" projections are obtained from the Electric Transportation Programs group and reset beginning calendar year 2021, as cumulative consumption through the end of calendar year 2020 is already incorporated into the 2021 FSO Load Forecast.
4. Energy consumption includes contributions from all EV classes (light duty, medium duty, and heavy duty).
5. Cumulative number of EV equivalents is for illustrative purposes only and calculated based on estimates for "Annual Energy Consumption per EV Equivalent" derived from data provided by the Electric Transportation Programs group.

Source: LADWP Draft 2022 Strategic Long Term Resources Plan, p. 3-28

The SLRP goes on to say that LADWP is planning for 762,000 EVs in LA by 2030, which is about 30% of the City's total fleet. If this is the case, then a jump to an 80% EV fleet by 2035 seems like it would not just be impossible, but would be a disaster. Not only would that represent a huge increase in peak electricity usage, but it would also likely stress LADWP's power distribution infrastructure across the city.

Furthermore, **while EVs solve the problem of emissions from internal combustion engines, they may present other problems.** Because EVs tend to be heavier, they wear down tires faster and produce more toxic tire particles. Heavier cars are also more dangerous for pedestrians, cyclists, and other drivers. Electric vehicles also require dedicated parking for charging at a time when the city should be finding better uses for space than parking. Obviously, EVs are preferable to gas powered vehicles, but at the end of the day, they're still

cars, and the City must take action to ensure that cars, electric or not, play a smaller role in our transportation in the future.

For the EV-related short term milestones, distributing EV rebates and installing EV charges has the same benefits and drawbacks listed above. On the other hand, while electric trains and buses also draw on the power grid, mass transit is so much more efficient at moving people than private cars, so there's no doubt those projects are worthwhile.

The target of reducing port-related emissions by 80% by 2050, on the other hand, is much less discussed yet hugely important. According to the 2021 Port of Los Angeles Emissions Inventory, the port complex, consisting of the machinery, buildings, and ocean-going vessels accounted for around 1.25 million metric tons of CO2eq, which is a little less than 5% of LA's total emissions. **While the Port has been working hard to reduce emissions from the vehicles and machinery on land, the biggest gain moving forward is to reduce the emissions from the oceangoing vessels that move the cargo itself, especially in the form of diesel particulate matter that has negative health consequences for the communities who live near the Port.** The 2019 Green New Deal recommends expanding the use of shore power, which is a good starting point.

Los Angeles World Airports (LAWA), who runs the City-owned airport LAX, has a sustainability plan of its own that appears to be the "zero emission roadmap" called for in the short-term milestone. However, the targets and milestones for the Port and LAX are both missing a huge source of greenhouse gas emissions: the ships and airplanes that use those facilities. While LAX and the Port of LA can't unilaterally change the energy mix used for aviation and ocean transportation, they're not idle observers either. These city assets are the most important airport and sea port on the West Coast and some of the most important in the world. **Both need to be aggressively searching for ways to clean up their sectors, leveraging their position as important hubs of global transportation and cargo to force these industries to change.**

In addition to LAX, LAWA also owns Van Nuys Airport, one of the busiest general aviation airports in the world. Unlike LAX, which provides necessary passenger transportation, Van

Nuys is the home to a huge amount of private jet traffic, which is an environmentally disastrous indulgence of the ultra rich. **The city should explore how to reduce or at least adequately tax private jets going in and out of its airports.**

Zero Emissions Vehicles Data to Track:

1. Number and % of EVs in Los Angeles
2. Estimated peak and annual power consumption of LA EVs
3. Estimated peak and annual load from EVs that can be accommodate by LADWP
4. Total port-related carbon emissions, on land and at sea
5. Total airport-related carbon emissions, commercial and private

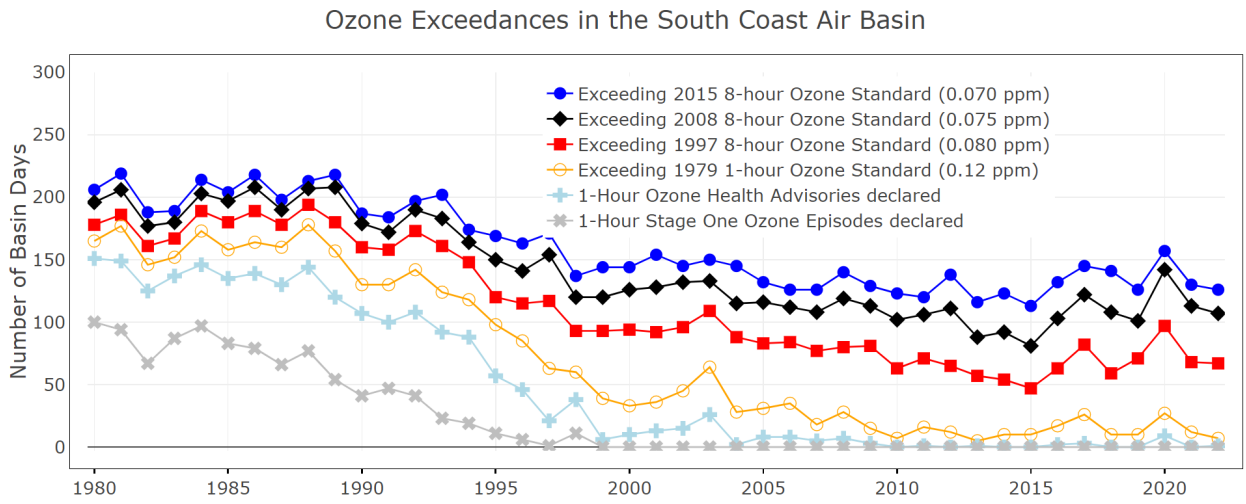
Industrial Emissions & Air Quality

2019 Targets	Grade	Measureable	Source	Input/Output
The City will reach the U.S. EPA 80 ppb ozone attainment standard by 2025 and meet all future compliance dates	n/a	Yes	South Coast AQMD	Output
Reduce industrial emissions by 38% by 2035; and 82% by 2050	n/a	Yes	LASAN	Output
Reduce methane leak emissions by 54% by 2035; and 80% by 2050	n/a	Yes	LASAN	Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Deploy community air quality monitoring networks by 2021	Exceeded	Yes		Input
Expand the city's efforts to improve air quality from industrial sources by 2021	Achieved	No		Input
Create an annual oil well and facilities compliance inspection program by 2021	Making Progress	Yes	LAFD	Input
Support the implementation of refinery and heavy duty industry emission reduction plans by 2021	Achieved	No		Input
Reduce oil production by 40% below 2013 levels by 2021	Exceeded	Yes	CalGEM	Output
Eliminate backlog of leaks within the natural gas supply chain by 2021	Making Progress	Yes		Output
Develop an auditing and tracking program for oil and gas wells through the City by 2021	Making Progress	Yes	LAFD	Input
Improve tracking for emissions from imported oil and by by 2021	Achieved	Yes		Input

Many of the targets in the Industrial Emissions & Air Quality section could also appear in the Environmental Justice section. However, since industrial emissions account for 24% of LA's GHG emissions, it is important to break down the approach to these emissions even further.

For meeting the EPA 80 parts per billion ozone attainment standard, the City should first clarify what the standard currently is. According to the EPA, as of 2015 the standard was lowered to 70 ppb. Similarly, the South Coast Air Quality Management Board (AQMD) tracks ozone exceedance on their website, and they show that for the AQMD basin (which includes Los Angeles), there were 126 days exceeding the 70 ppb standard in 2022 (plus 67 exceeding the older, higher standard). These numbers are up from 2015, where they were 113 and 47 respectively, so it appears that the City has work to do here.



Source: South Coast ADMQ

Next, **the target for reducing overall industrial emissions by 38% by 2025 and 82% by 2050 sound like good goals, although it would be useful to get a better understanding of exactly where these industrial emissions are coming from.** Presumably a good amount of reduced industrial emissions can come from electrifying processes that currently run on oil and gas. **Like the transition to electrification elsewhere in the City, these savings are only as good as the cleanliness and reliability of the grid they're attached to. To ensure this transition can occur, it will be necessary to track the additional load on the power grid that is expected as a result.**

For industrial processes that can't be electrified, it would be useful to see a breakdown of what specific industries are the biggest greenhouse gas emitters. Gaining an

understanding of where the specific industrial emissions are coming from is key to tackling the problem.

The target for reducing methane leak emissions is important as methane is a dangerous, toxic gas and a greenhouse gas in its own right. **As the City weans itself off natural gas for heating and cooking, it is essential to ensure that the natural gas infrastructure left behind is safe and secure.**

Central to LA's contribution to curbing climate change is keeping the oil underneath us in place instead of pumping it out for burning. Many of the short-term milestones for Industrial Emissions & Air Quality concern Los Angeles's once-vast oil extraction industry. The City is currently on a path to end oil drilling in 20 years, and phasing out production impels focus on securely abandoning idle wells. Some oil companies, such as in the AllenCo field in South LA, appear determined to avoid remediating the land they've been profiting off of and leaving the cleanup to the State. **Oil companies who have profited over the years have a responsibility to pay for the mess they are leaving behind.**

One place where the City can help to encourage the end to drilling is to stop charging oil companies for abandoning their wells. LAFD is in charge of certifying that wells are properly abandoned, and they currently charge $2,696 for that service and are considering raising that charge to $3,610. This charge represents the costs incurred to the LAFD for the service, **but it also represents a perverse disincentive for oil companies to commence responsible abandonment plans. We should consider amending the Fire Code to take into account the embedded costs of eventual well abandonment.**

8A	Abandon any Oil Well	$2,696 First 8 hours or fraction thereof; $337 /hour or fraction thereof thereafter	$3,610 First 10 hours or fraction thereof; $361 /hour or fraction thereof thereafter	**10.0** 1.0
8B	Oil Well Inspection	$2,696 First 8 hours or fraction thereof; $337 or fraction thereof thereafter	$2,888 First 8 hours or fraction thereof; $361 /hour or fraction thereof thereafter	8.0 1.0

Industrial Emissions & Air Quality Data to Track:

1. Ozone, using up-to-date 70ppb standard
2. Industrial emissions (Metric tons CO23e), separated by industry
3. Number of active/idle/plugged oil wells in Los Angeles

Waste & Resources

2019 Targets	Grade	Measureable	Source	Input/Output
Increase landfill diversion rate to 90% by 2025, 95% by 2035, and 100% by 2050	n/a	Yes	LASAN	Output
Reduce municipal solid waste generation per capita by at least 15% by 2030, including phasing out single-use plastics by 2028	n/a	Yes	LASAN	Output
Eliminate organic waste going to landfill by 2028	n/a	Yes	LASAN	Output
Increase proportion of waste products and recyclables productively reused and/or repurposed within L.A. County to at least 25% by 2025; and 50% by 2035	n/a	Yes	LASAN	Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Pass legislation requiring take-out foodware be made with compostable material / Ban expanded polystyrene citywide by 2021	Making Progress	Yes		Input
Cut illegal dumping by one-third by 2021	Making Progress	No		Output
Reduce the number of street grids rated 'unclean' by one-third by 2021	Making Progress	Yes	LASAN	Outcome
Increase construction and demolition (C&D) waste recycling requirements to at least 80% by 2021	Making Progress	Yes	LASAN	Input
Pilot a sector-specific recycling program by 2021	Achieved	Yes	LASAN	Input
Conduct a waste characterization and diversion study every four years with the first one being done by 2021	Achieved	Yes	LASAN	Input
Design and implement a zero waste policy for City-sponsored and permitted events by 2021	Making Progress	Yes	LASAN	Input
Launch an educational awareness campaign on source reduction by 2021	Making Progress	Minimally		Input

Establish food scraps drop-off locations at all city farmers markets by 2021	Making Progress	Minimally		Input
Launch citywide residential food scraps collection by 2021	Making Progress	Yes	LASAN	Input
Modernize the City's environmentally preferable purchasing policy to include waste reduction strategies by 2021	Making Progress	Minimally		Input
Pilot an industrial materials exchange program by 2021	Making Progress	Minimally	LASAN	Input

By far the most important of the 2019 targets for Waste & Resources (formerly Waste & Resource Recovery) is to increase the landfill diversion rate to 90% by 2025. The baseline given is 76.4% in 2011, according to LA San's Zero Waste Progress Report, done in collaboration with UCLA in 2013. That report, along with Sanitation's Solid Waste Integrated Resources Plan - A Zero Waste Master Plan that same year ostensibly set a template for how the City could achieve a zero waste future. Unfortunately, it does not appear that the City has been publicly reporting our landfill diversion rate, instead focussing on landfill emissions. Both are useful data, but we should make sure that our targets are expressed in the same format as our tracking so our progress can be easily evaluated. In fact, **the State no longer sets "waste diversion rates" as their reporting standard, having switched to per capita waste sent to landfill.**

The same issue applies to the target to reduce municipal solid waste generation and elimination of organic waste. Presumably the city has made strides reducing organic waste through its program to collect food scraps and other compostable material. However, it

should be noted that this program was instituted to abide by a Senate Bill 1383, a state law that Los Angeles was slow to implement.

Despite the long-term goal of "zero waste," the 2022 short-term milestones for Waste & Resources show limited ambition for steps the City should take to reduce waste and very little success at achieving those. Only two of the ten milestones were achieved, and a third that was achieved (residential food scrap collection) only happened in response to a State law. According to the 2021 Community Greenhouse Gas Inventory, waste accounts for 1.2 million metric tons of CO2e, which is about 4.5% of the city's emissions. Waste is also the only category where the City's emissions have increased since 1990, up 5% in that time. Clearly, waste is a category where the City can, and must, be doing much more.

Waste & Resources Data to Track

1. Per capita waste sent to landfill and per capita waste recycled

Food Systems

2019 Targets	Grade	Measureable	Source	Input/Output
Ensure all low-income Angelenos live within ½ mile of fresh food by 2035	n/a	Yes	USDA	Output
Increase the number of urban agriculture sites in L.A. by at least 25% by 2025; and 50% by 2035	n/a	Yes	CultivateLA	Output
Prepare for natural disasters by increasing the resiliency of our food systems infrastructure	n/a	No		Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Increase food recovery beyond pre-packaged food at LAX by 2021	Achieved	Yes		Output
Establish a healthy food cart program and support early-stage good food entrepreneurs by 2021	Making Progress	Yes		Input
Leverage public property for urban agriculture by increasing the number of edible gardens in City parks and public libraries by 50% by 2021	Making Progress	Yes	Parks, Library	Input
Double participation in the Urban Agriculture Incentive Zone program by 2021	Making Progress	Yes		Input
Commission a study to strengthen our infrastructure for a more resilient local food system by 2021	Achieved	Yes		Input
Pilot two healthy soil projects by 2021	Achieved	Yes		Input

Ensuring all low-income Angelenos have access to fresh food is an important sustainability goal, but one that is more likely to be determined by the supermarket industry's increasing consolidation than City policies. The city should absolutely increase the number of urban agricultural sites, but we should be realistic that these initiatives aren't going to make up for the grocery industry's divestment from low income communities.

Many of the 2022 short-term food security milestones are good but relatively small projects (two healthy soil projects, edible gardens, urban agriculture incentive zones, healthy food carts) that underscore the difficulty of crafting city policies to expand food access. Expanding food recovery across the City would be good at stopping food waste and is also worthwhile. The City is currently waiting for a report back on a motion that was made in the Spring of 2022 (Council File 22-0437) that seeks to study the City's programs to incentivize grocery stores to operate in underserved communities. Hopefully this report will contain actionable recommendations that can be put into action immediately.

Food Systems Data to Track:

1. % of Angelenos who live within a half mile of fresh food, separated by income levels

Urban Ecosystems & Resilience

2019 Targets	Grade	Measureable	Source	Input/Output
Increase tree canopy in areas of greatest need by at least 50% by 2028	n/a	Potentially	Street Services	Output
Complete or initiate restoration identified in the 'ARBOR' Plan by 2035	n/a	Yes	US Army Corp of Engineers	Input
Create a fully connected LARiverWay public access system that includes 32 miles of bike paths and trails by 2028	n/a	Yes	Public Works: Engineering	Output

Reduce urban/rural temperature differential by at least 1.7 degrees by 2025; and 3 degrees by 2035	n/a	Yes	Climate Emergency Mobilization Office	Output
Ensure proportion of Angelenos living within ½ mile of a park or open space is at least 65% by 2025; 75% by 2035; and 100% by 2050	n/a	Yes	Trust for Public Land	Output
Achieve and maintain 'no-net loss' of native biodiversity by 2035	n/a	Yes	LASAN	Output

2022 Short-Term Milestones	**Grade**	**Measurable**	**Source**	**Input/Output**
All new roofs must be cool roofs by 2020; and install 13,000 additional cool roofs by 2021	Exceeded	Yes	Building & Safety	Output
Plant and maintain at least 90,000 trees citywide by 2021	Making Progress	Yes	Street Services	Output
Complete citywide tree inventory by 2021; and an Urban Forest Management Plan by 2025	Making Progress	Yes	Street Services	Input
Create a partnership to develop an 100-acre L.A. River open space by 2021	Exceeded	Yes		Output
Initiate work on L.A. River reaches 6, 7, and 8 by 2021	Exceeded	Yes		Output

Increase access by completing 3 active transportation bridges by 2021	Exceeded	Yes	DOT	Output
Complete at least 1 additional mile of LARiverWay bike paths and trails by 2021	Making Progress	Yes	DOT	Output
Pilot 6 cool neighborhoods in vulnerable communities by 2021	Achieved	Yes		Output
Set biodiversity targets and pilot L.A.'s first wildlife corridor by 2021	Achieved	Yes	LASAN	Input
Update a citywide Integrated Pest Management plan by 2021	Making Progress	Yes		Input
Add at least 8 parks by 2021	Making Progress	Yes	Parks	Output

The Urban Ecosystems & Resilience targets and milestones are heavy on projects like planting trees, adding parks, and building bike lanes along the LA River. While these are all good projects, LA's long term resilience to climate change will require a much larger scope.

In the last few years, our city has seen an increase in droughts, floods, fires, and even a tropical storm, and in the future these extreme weather events are only more likely to get worse. Also, **like so many of the effects of climate change, the city's poorest residents are likely to bear the brunt of the damage.** The city's climate plan needs to directly address these growing risks.

One example of an initiative that could materially help poorer residents of LA is council file 23-0453, which seeks to learn what would be needed to require air conditioning in all rental properties. Many older residential buildings were constructed at a time when air conditioning was not considered necessary in LA. **The Climate Emergency Mobilization Office is working**

hard to study how to mitigate these heat effects, and our next climate plan should seek to give that office the resources and support it needs to turn their plans into reality.

For the targets and milestones that do appear in the plan, most are either difficult to track or have a scope so small that the impact will unfortunately not be enough. For example, when the plan says to increase tree canopy in the areas of "greatest need", but how do they define "greatest need"? Also, planting trees is presumably part of the way LA can "reduce the urban/rural temperature differential", but how much of a cooling effect will the trees have versus other interventions like cool roofs?

Meanwhile, the short term milestones for one off programs for more parks and amenities at the LA River are good, but their impact is small and localized. **Furthermore, as the city strives to plant more trees, it should do more to protect the trees it already has.** Street Services does not appear to be enforcing their rules against non-sanctioned tree trimming. These rules must be strengthened and enforced.

Urban Ecosystems and Resilience Data to Track:

1. Urban/rural heat differential
2. Number of trees, by census tract
3. % of Angelenos living within ½ mile of a park

Prosperity & Green Jobs

2019 Targets	Grade	Measureable	Source	Input/Output
Create 300,000 green jobs by 2035, and 400,000 green jobs by 2050	n/a	Potentially		Output

Increase private sector green investment in L.A. by $750 million by 2025; and $2 billion by 2035	n/a	Potentially	Los Angeles Cleantech Incubator	Output
Eliminate unemployment rate gap between City of L.A. and L.A. County	n/a	Yes	Bureau of Labor Statistics	Output

2022 Short-Term Milestones	**Grade**	**Measurable**	**Source**	**Input/Output**
Open green career pathways through various programs and partnerships by 2021	Achieved	Yes		Input
Create 100,000 green jobs by 2025	On Track	Potentially		Output
Increase the total number of businesses certified and recertified through the Green Business Certification Program to 1,000 by 2025	On Track	Yes		Output
Support businesses in the city through a robust range of programs and services focused on the specific needs of businesses by 2025*	On Track	No		Input

The Bureau of Labor Statistics (BLS) defines a green job as either:

1. Jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources.

2. Jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources.[5]

This definition includes jobs in fields such as renewable energy, energy efficiency, recycling, and conservation. Unfortunately, **BLS stopped tracking green jobs over a decade ago** as part of President Obama's sequestration deal to pass the 2011 budget.[6] With no official source of green jobs available, we are forced to rely on unofficial tallies.

Another issue with counting green jobs is what qualifies as a "new" green job. For example, as LADWP transitions to renewable energy, does that mean that LADWP's 11,000 workers all now have green jobs? If so, can we say we created 11,000 new green jobs, even if everybody has the same job they had last year? With no standardized, sanctioned entity tracking these numbers in a consistent manner, it will be very difficult to track the success of this target.

The challenge of tracking private sector green investments is even more daunting. One of the most frequently cited indicators of sustainable investing is ESG (Environmental, Social, Governance), which is supposed to take the environment, social issues, and corporate governance into account. However, if you look at Investor Business Daily's top 100 ESG stocks, you see names like ConocoPhillips, Chevron and Exxon Mobil. Given the dangers of greenwashing, we must be wary of depending on third-party certification programs that can be gamed by savvy, well funded corporations.. Also, the goals of the Green Business Certification Program are good, but its reach is small. However, the **city could study that program to see what changes had the most climate impact.**

Prosperity & Green Jobs Data to Track and Publish:

1. Likely will need to track on a program by program basis.

[5] https://www.bls.gov/green/green_definition.pdf

[6] https://www.bls.gov/green/home.htm

Leading by Example

2019 Targets	Grade	Measureable	Source	Input/Output
Reduce municipal greenhouse gas emissions 55% by 2025; 65% by 2035; and reach carbon neutral by 2045	n/a	Yes	LASAN	Output
Reduce municipal energy use by 18% by 2025; 35% by 2035; and 44% by 2050	n/a	Yes	LASAN	Output
Reduce municipal water use by at least 25% by 2025; and 30% by 2035	n/a	Yes	LADWP	Output
Lead on zero waste and achieve a zero waste City Hall by 2025	n/a	Yes	LASAN	Output
Convert all City fleet vehicles to zero emission where technically feasible by 2028	n/a	Yes	General Services	Output
Ensure all new municipally owned buildings and major renovations will be all-electric, effective immediately	n/a	Yes	LADBS	Output
Reach 2 million Angelenos through outreach, education, and training programs by 2025	n/a	No		Output

2022 Short-Term Milestones	Grade	Measurable	Source	Input/Output
Install 15 MW of solar at the Port by 2021	Exceeded	Yes	Port of LA	Output
Expand municipal and proprietary buildings retrofits by 2021	Making Progress	Potentially	General Services	Output
Transition to paperless personnel files by 2021	Making Progress	Yes	Personnel	Output
Adopt and implement a sustainable technology policy across all City departments by 2021	Exceeded	Yes	ITA	Input
Ensure all City facilities are equipped with appropriate recycling, including recycling for machining material and organics collection, by 2021; and proprietary facilities by 2024	Making Progress	Yes	General Services	Output
Deploy additional charging stations by 2021	Achieved	Yes		Output
Lead locally and nationally on EV adoption by 2021	Achieved	No	DMV	Output
All vehicle procurement will follow a “zero emission first” policy for City fleets by 2021	Achieved	Yes	General Services	Input
Implement GHG performance standards for material procurement for purchasing by City Departments by 2021	Achieved	Yes		Input

Create a Climate Emergency Commission that empowers impacted communities in implementation of L.A.'s GND by 2019	Achieved	Yes		Input
Launch GND engagement campaign by 2020	Achieved	Yes		Output
Develop and implement sustainability training for on-boarding all new City employees by 2020; and current employees by 2021	Making Progress	Yes	Personnel	Output
Convene 10 citywide forums through the Department of Neighborhood Empowerment, inviting participation from 96 Neighborhood Councils on critical sustainability issues by 2021	Achieved	Yes	DONE	Output

One of the biggest emitters of greenhouse gasses in LA is the apparatus of the City of Los Angeles itself. According to the Municipal Greenhouse Gas Inventory compiled by LASAN, the City itself released 7.7 million metric tons of CO2e. However, 94% of those emissions are from the power being generated by LADWP. We've already dealt with LADWP's efforts towards sustainable energy, so the important factors in this section are the remaining 6% of municipal emissions. Part of reducing the final slice of municipal emissions is encompassed in the fourth and fifth targets, to electrify the city's vehicle fleet and buildings. However, electrification isn't enough. **The even more important targets are the second and third ones, to reduce municipal energy and water consumption.**

The target for a zero waste city hall is laudable, but presents a challenge for the city to prove it can execute it well. Meanwhile, the target for reaching 2 million Angelenos with outreach

and education is difficult to judge. Not only is it nearly impossible to measure how many people have been reached with an outreach effort, it's impossible to judge the utility of an outreach campaign without knowing its message. Just reaching a lot of people isn't enough – we actually have to move them to make changes for the better.

The 2022 short-term milestones for Leading by Example include multiple small-scale, one off projects that are good to do, but we should recognize that they won't do much to curb greenhouse gas emissions. In fact, it's not even clear all of them would be carbon negative. Transitioning to paperless personnel files is clearly a best practice and good management, but the servers that hold digital files consume a lot of energy, while filing cabinets do not. While this project is a step forward for organizational efficiency, it's not necessarily climate efficiency.

One short term milestone, however, represents a project the city should consider expanding. **Adding solar panels at the Port of LA to create 15 MW of energy is a good pilot project that, if successful, should be expanded.** If the City could expand this project to installing solar panels as many places as it can (buildings, parking lots, unused plots of land not suitable for development, etc.), it could demonstrate the power that can be created and the money that can be saved with in-basin solar. That would be a very useful example to set for our entire city.

Lead by Example Metrics to Track and Publish:

1. Municipal energy use
2. Municipal water use
3. MW of municipal solar power created and money saved

APPENDIX A

Comparable Climate Action Plans

In analyzing LA's "Green New Deal," our office reviewed similar sustainability/climate action plans from other major cities, specifically San Francisco, Denver (2018), Seattle (2019), Boston (2019) and New York (2023). Each has a unique format but in substance they address the major areas of greenhouse gas emission reduction strategies (transportation, buildings, energy etc.) **Each of the plans sets ambitious long-term major targets and include a grab bag of pilots, program launches, policy initiatives, short- and medium range targets as well as often aspirational goals around topics such as equity, resilience, workforce development etc.**

No plan we reviewed represents a significant advance over the strengths and weaknesses of LA's Green New Deal. However, collectively, they do offer some valuable insights to help guide the needed reboot. LA should carefully study what has worked (or not) in other cities. As a city committed to national (and even global) leadership in climate action, LA can't afford to ignore the lessons learned elsewhere.

Finally, **there are local and national academic and advocacy resources that LA should draw upon in rebooting our Green New Deal. The best we examined was the "Climate Action Planning Framework"** produced in 2020 by C40, the international megacity consortium on climate action (LA is a founding member.)

The inventory of specific goals and targets is not comprehensive. **We have only included specific actions that could be tracked or specific targets that could be measured.** Each of the plans includes aspirational language about general policies and programs but like LA, they often lack enough specificity to be meaningfully monitored.

SAN FRANCISCO: Climate Action Plan (2021)

ENERGY SUPPLY (ES)

ES 1 Supply 100% renewable electricity to residents and businesses by 2025

ES 2 Invest in local renewable energy and energy resilience projects

- 100% of the growth in electricity demand is met with renewable electricity

ES 3 Design and develop the reliable and flexible grid of the future

ES 4 Develop workforce capacity to deliver clean energy resources

ES 5 Plan for the equitable decommissioning of the City's natural gas system

- By 2025, report annually on the status of gas decommissioning, including reduction of methane leakage in San Francisco attributable to decommissioning or removal of gas distribution, along with cost, equity, safety, and just transition.
- By 2025, publish a Decarbonization Masterplan documenting the systematic approach to decommissioning natural gas distribution and transmission in San Francisco. Specify difficult to address loads/uses that are likely to remain "residual" in 2040. Provide neighborhood groups and business districts with interactive planning mechanisms to empower coordination of electrification, and to set localized goals and priorities.
- By 2026, establish memorandum of understanding between the City, state regulators, and utilities stating mutual intent to de-commission natural gas transmission and distribution in San Francisco.
- By 2030, transition the district system steam loop serving downtown and Civic Center to renewable energy.

BUILDING OPERATIONS

BO 1 Eliminate fossil fuel use in new construction

- By 2021, require newly constructed buildings to be efficient and all-electric with no on-site carbon emissions.

BO 2 Eliminate fossil fuel use in existing buildings by tailoring solutions to different building ownership, systems, and use types

- By 2023, develop a system to monitor the replacement rate of existing private sector natural gas-fueled equipment with all-electric. Annually report to BOS whether fossil-fuel using equipment is being switched at a rate sufficient to meet climate goals, including access to electrification by BIPOC and low income communities.

- By 2023, develop a time-of-replacement policy that phases in requirements that all newly installed residential and other small building equipment be efficient and all-electric. The policy should customize requirements for simple equipment replacements to full renovations.
- By 2024, begin recording decarbonization status for each property at time of sale and permit review to ensure compliance with time of replacement policy.
- By 2023, perform an inventory of natural gas-fueled equipment in municipal buildings.
- By 2024, ensure the City's Capital Plan is updated to reflect the need to replace gas-fueled equipment, in alignment with the City's 2040 net-zero goal.
- SFO will a) evaluate an efficient, all-electric Terminal Central Utility Plant that would reduce total direct (Scope 1) airport emissions by approximately 80% by 2030, and b) prioritize all-electric equipment replacements throughout campus buildings, including terminal and non-terminal spaces that are occupied by tenants and the Airport Commission.
- By 2023, develop and adopt tenant protection and anti-displacement policies for renters in buildings transitioning to efficient and all electric systems.
- By 2023, begin offering targeted technical assistance for BIPOC and low-income owners and tenants including information about incentives, rebates, and public and private financing options.
- By 2024, pass a residential time-of-sale policy that requires an electrification plan, prioritizing water and space heating, indoor air quality, electric safety, how to access emergency response information, and recording of the presence or absence of gas service for each property.
- By 2024, develop and implement prescriptive criteria and permit & inspection processes for residential heat pump water heaters to be installed with a single integrated permit.

BO 3 Expand the building decarbonization workforce, with targeted support for disadvantaged workers.

BO 4 Transition to low-global warming potential refrigerants

- By 2023, publish guidelines for refrigerant management best practices for selection of lowest-GWP refrigerants in new and replacement equipment, and collection and recovery of refrigerants from existing equipment to enhance compliance with state regulations

TRANSPORTATION & LAND USE (TLU)

TLU 1 Build a fast and reliable transit system that will be everyone's preferred way to get around

- By 2025, implement 50 miles of Muni Forward transit priority improvements, including 30 miles of new transit-only lanes. to increase reliability, frequency and safety for riders.

TLU 2 Create a complete and connected active transportation network that shifts trips from automobiles to walking, biking, and other active transportation modes

- Expand the protected bikeway network by at least 20 miles by 2025.

TLU 3 Develop pricing and financing of mobility that reflects the carbon cost and efficiency of different modes and projects, and correct for inequities of past investments and priorities

TLU 4 Manage parking resources more efficiently

TLU 5 Promote job growth, housing, and other development along transit corridors

TLU 6 Strengthen and reconnect communities by increasing density, diversity of land uses, and location efficiency

TLU 7 Where motor vehicle use or travel is necessary, accelerate the adoption of zero-emissions vehicles (ZEV's) and other electric mobility options

- Expand publicly available EV charging across the city that is financially and geographically accessible to low-income households and renters.
    - a) By 2022, complete an evaluation framework to develop curbside charging pilots
    - b) By 2023, expand charging to 10% of spaces in municipally owned parking lots
    - c) By 2023, expand charging to 10% of spaces within privately owned large commercial garages
    - d) By 2023, create three "fast-charging hubs" with one serving a disadvantaged community within San Francisco.
    - e) By 2025, install charging to 10% of SFOowned parking stalls supported by load management software.

HOUSING (H)

H 1 Anchor BIPOC families and advance their return to San Francisco through robust housing and stabilization programs.

H 2 Support vulnerable populations and underserved communities through both the preservation and rehabilitation of existing housing and new housing development that serves their needs.

H 3 Advance zoning and implementation improvements that support new housing production sufficient to meet goals, especially sustainable, small, mid-sized, family, and workforce housing in lower density neighborhoods.

H 4 Expand subsidized housing production and availability for low-, moderate-, and middle-income households.

- Meet Regional Housing Needs Allocation (RHNA) targets and requirements to affirmatively further fair housing by increasing production of affordable housing, especially for families with children, in both higher resource neighborhoods and Priority Geographies that have historically been home to lower income communities of color.

RESPONSIBLE PRODUCTION & CONSUMPTION (RPC)

- By 2030 buildings constructed will have a 40% reduction in embodied carbon.

RPC 1 Achieve total carbon balance across the buildings and infrastructure sectors

- By 2025, develop a suite of incentives, policies, and/or guidelines for adaptive reuse of existing buildings, as well as the design and procurement of low-carbon structural materials for new construction.
- By 2025, establish a maximum allowance for embodied carbon of buildings, to be adjusted at regular intervals.
- By 2025, amend existing policies to require deconstruction of buildings and increase the source separation of specific materials.

RPC 2 Reduce the carbon footprint of the food system by reducing waste, promoting climate friendly diets, and getting excess food to communities in need.

- By 2030, reduce food waste by 50% in alignment with the City's voluntary commitment to the Pacific Coast Collaborative initiative by implementing food waste reduction guidelines and recommendations in partnership with food retail, distributors, and manufacturers.
- By 2024, adopt a Food Waste Prevention and Edible Food Recovery policy and develop a program and incentives structure for compliance and monitoring in alignment with California's State Bill 1383 food recovery regulations

RPC 3 Promote reduction, reuse, repair, and recovery of goods and materials.

By 2030, through a combination of policy, education and outreach, and new infrastructure solutions, San Francisco cuts its generation of discards by 15%, and the disposal of discards to landfill and incineration by 50%.

RPC 4 Lead the aviation sector by reducing emissions across the airline passenger journey.

HEALTHY ECOSYSTEMS (HE)

HE 1 Advance citywide collaboration to continually refine nature-based climate solutions that sequester carbon, restore ecosystems and conserve biodiversity.

- By 2022, complete the Alameda watershed carbon case study and quantify the value of carbon storage provided by protecting this natural area.
- By 2022, launch the municipal soil calculator and initiate an assessment of the potential for all City owned lands to sequester carbon while maximizing indigenous biodiversity.
- By 2025, develop best practice guidelines for improving or maintaining carbon sequestration and retention in soils, plants and natural habitats, while preserving biodiversity and ecosystem services.

HE 2 Increase equitable community participation and perspectives in nature-based climate solutions, including meaningful efforts to prioritize Indigenous science and Traditional Ecological Knowledge.

HE 3 Restore and enhance parks, natural lands and large open spaces.

By 2025, create a 3-acre horizontal levee at Heron's Head Park. HE.3-4 By 2030, restore and create 173 acres of natural ecological parkland on Yerba Buena and Treasure Islands, including implementing the Yerba Buena Island Habitat Management Plan. HE.3-5 By 2030, restore 100+ acres of upland and wetland habitats at the San Bruno Jail and SFO West of Bayshore Properties.

HE 4 Optimize management of the city's entire urban forest system.

HE 5 Maximize trees throughout the public realm.

- By 2040, plant 30,000 street trees in the sidewalk tree wells, approximately a 25% increase, to complete the street tree network.,
- By 2023, create a City-managed and -dedicated street tree nursery.
- By 2023, create a policy to require preservation of mature trees during development or infrastructure modifications and for planting of basal area equivalent of mature trees whose removal is unavoidable.

HE 6 Maximize greening and integration of local biodiversity into the built environment.

- By 2023, create permanent code and financial incentives for nurseries to sell local natives and for private property owners to preserve green space, protect existing mature trees and shrubs, plant local natives, and install living roofs and walls.
- By 2025, create a City-owned and managed local native plant nursery that supplies plants annually to City agencies that do not currently have access to local native plants.
- By 2030, build 10 pollinator habitat landscapes at public housing sites.

HE 7 Conduct carbon sequestration farming pilot projects and research

- By 2024, apply approximately 500 wet tons of biosolids per year as a soil amendment and to sequester carbon on newly identified sites such as mine reclamation projects in Northern California.

DENVER: 80 x 50 Climate Action Plan • July 2018

2020 15% reduction

• Commercial buildings 10% reduction in energy use - • 200 electric vehicles in the City fleet

2025 30% reduction

• Residential single-family homes 10% reduction in energy use

• Municipal buildings 100% renewable electricity

• 15% of Denver vehicle registrations are electric 2030 45% reduction

• Commercial buildings 30% reduction in energy use

• Community 100% renewable electricity

• 30% of Denver vehicle registrations are electric

• Meet Mobility Action Plan goals including:

- 16% of commuters will use public transit
- 9% of commuters will walk to work
- 8% of commuters will bike to work
- 7.5% of commuters will telecommute 3 Year Reduction in GHG Emissions (2005 Baseline)

2035 55% reduction

• Residential single-family homes 20% reduction in energy use

• New buildings Net Zero Energy

2040 65% reduction

• Reduce thermal heating emissions in residential and commercial buildings 25% and 50%, respectively, through efficiency and fuel switching - -

2045 75% reduction

2050 80% reduction

• Commercial buildings 50% reduction in energy use

• 100% of light duty vehicles are electric

• 75% of freight trucks will use carbon neutral fuel

• 100% of taxis and transportation network vehicles are electric

• 100% of public transportation will be carbon free

SEATTLE: Climate Action Strategy • April 2018

TRANSPORTATION

Improving mobility through pricing: Develop a strategy to address congestion and transportation emissions through pricing, coupled with investments in expanded transit and electrification in underserved communities.

Transportation Emissions: 8-12% Total Emissions: 5.5-8% (depends on price and other factors)

Charging station network map & strategy: Map the optimal distribution of charging infrastructure and develop a strategy to support the build out of the system through public and private investment.

Enabling Strategies: Convenient access to charging facilitates EV adoption. Impact by 2035 of meeting the 30% EV by 2030 goal: Transportation Emissions: 11-21% Total Emissions: 5.7–10%

Electric vehicle readiness ordinance for new construction: Ensure new construction or renovation of parking structures is built for EV infrastructure. For-hire fleet electrification Work with stakeholders to develop recommendations for making all new for-hire vehicles in Seattle electric.

Enabling: For-hire vehicles account for an increasing percentage of vehicle trips in Seattle.

Green Fleet Action Plan update: Update the city's Green Fleet Action Plan to accelerate the electrification of the municipal fleet and phase out fossil fuel use in municipal vehicles.

Transportation Emissions: 1% Total Emissions: < 1 %

CARBON PRICING

Assess GHG emissions impact of City decisions: Implement climate impact analysis into city planning and project data.

Enabling: Makes carbon impacts transparent & priced.

BUILDINGS

Oil to heat pump conversion: Develop program and funding strategy to incentivize conversion of oil heated homes to electricity.

Building Energy: 2-3% Building Emissions: 8-9% Total Emissions: 2-3% 2030

District Pilot: Pilot will offer significant additional height and floor space incentives for up to 20 major renovations in urban villages outside the International District.

Estimates to be determined.

Washington State tiered residential energy code: Adopt a tiered state residential energy code that can be adopted by cities.

Building Energy: 2-3% Building Emissions: 3-4% Total Emissions: 1-2%

Incentive-driven 2030 performance standards for commercial and multifamily buildings: Provide programs and incentives to spur improved energy efficiency and reduced carbon emissions, backed by a minimum performance standard beginning in 2030.

Building Energy: 20-21% Building Emissions: 17-18% Total Emissions: 5-6%

Improve municipal building energy efficiency and reduce carbon emissions through 2025: Extend and expand municipal building energy efficiency program, with increased funding to achieve deeper reductions in energy use and carbon emissions.

Building Energy: 1 % Building Emissions: 1% Total Emissions: < 1%

Pay for Performance and Energy Efficiency as a Service: Implement City Light programs targeted at entire commercial buildings using incentives.

BOSTON: Climate Action Plan • October 2019

BUILDINGS

Construct new municipal buildings to a zero net carbon standard

Adopt a zero net carbon standard for city-funded 2 affordable housing

· 100 percent of new publicly funded affordable housing built after 2020 is ZNC or ZNC-ready

Strengthen green building zoning requirements to a zero net 3 carbon standard

· 100 percent of developments covered by the policy are built to a ZNC standard

Invest in energy efficiency and renewable energy 4 generation in municipal buildings

Develop a carbon emissions performance standard to decarbonize existing large buildings

Expand workforce development programs for building decarbonization

· Construction work hours on public and large private projects performed by:

  - Boston residents: 51 percent
  - Women: 12 percent
  - People of color: 40 percent

· 50 percent of individuals who begin training go on to graduate from or complete training ›

· 75 percent placement rate into jobs or additional training for individuals who complete training

Advocate for state building policies that align with carbon neutrality by 2050

· The State Board of Building Regulations and Standards approves a ZNC Stretch Code, or comparable policies or programs, that allows municipalities in Massachusetts to adopt ZNC requirements for all new construction.

TRANSPORTATION

Advocate for Boston's priority transit projects within regional plans

· 25 miles of new bus priority lanes by 2030

· Increase public transit commuter rates by a third by 2030

Improve and expand active transportation infrastructure

· A fourfold increase in biking rates by 2030

· 50 percent increase in walking rates by 2030

· 100 percent of homes located within a 10-minute walk of a bike share station

· 3-5 neighborhoods receive traffic-calming measures annually through the Neighborhood Slow Streets program

Encourage mode shift through transportation demand management and sustainable parking policies

Support citywide zero-emission vehicle (ZEV) deployment

· Public charging infrastructure available in every Boston neighborhood by 2023

· 100 percent of residents within a 10-minute walk of a public EV charger or EV carshare facility

Accelerate municipal fleet transition to zero- and low-emission vehicles

· All vehicles purchased for Central Fleet are electric or zero-emissions vehicles, or best in class if an appropriate ZEV is not available

· 100 percent of passenger vehicles are emissions free by 2035

· 100 percent of medium-duty vehicles are emissions free by 2050

· 100 percent of heavy-duty vehicles are emissions free or low emissions by 2060

ENERGY SUPPLY

Implement and expand community choice energy

· New sources of renewable electricity added to the grid

· Number of residents who become and remain CCE customers

· Number of residents who opt to purchase 100 percent renewable electricity › Number of low- and fixed-income residents whose energy bill becomes more predictable and affordable as a result of their participation in the program

Plan for the deployment of carbon-neutral district energy microgrid systems

Support state policies and programs that further decarbonize the region's and Boston's energy supply

CARBON-FREE COMMUNITY

Decarbonize the consumption of Boston residents and businesses

Green municipal investments

Develop a values-based framework for carbon offsets

NEW YORK: PlaNYC: Getting Sustainability Done • April 2023

PROTECTING US FROM CLIMATE THREATS

EXTREME HEAT

Maximize access to indoor cooling:

· Develop a maximum summer indoor temperature policy to protect all New Yorkers from extreme indoor heat by 2030

· Include mandatory cooling requirements for new construction by 2025

Cool our built environment

· Install 1 million square feet of cool roofs annually

Achieve a 30% tree canopy cover

· Expand the Tree Risk Management Program, and in 2023, establish the Climber and Pruner Training Program pilot

· Ensure that all new buildings meet the City's street tree planting requirements through improved enforcement by 2035

FLOODING

Create a new leadership structure for coastal flood resilience in 2023, headed by the Department of Environmental Protection

Implement a multilayered strategy for flood resilience:

· Develop minimum flood resilience standards for shoreline assets by 2026

· Develop a stormwater flooding adaptation plan by 2024 to establish a citywide flood protection target for stormwater infrastructure

Launch a voluntary housing mobility and land acquisition program to provide housing counseling and facilitate future land acquisition with Federal and State funds

BUILDINGS

Support building owners in complying with Local Law 97 emissions reduction goals by 2030

· Develop financing tools and innovative mechanisms to accelerate Local Law 97 compliance by 2030

· Develop trainings and certifications to support Local Law 97 compliance and implement resilience retrofits by 2024

· Expand NYC Accelerator by 2024

Decarbonize affordable housing

· Install window heat pumps in 10,000 NYCHA units

Pursue fossil fuel free City operations

Reduce localized air pollution in NYC

· Develop a new air quality monitoring program by 2024

Reduce the carbon footprint of the construction industry by 2033

· Implement performance-based standards for low-carbon materials and equipment by 2025

CLEAN & RELIABLE ENERGY

Maximize climate infrastructure on City-owned property

· Evaluate all City roofs undergoing repair work for climate infrastructure installation by 2025

· Install solar energy, electric building infrastructure, green roofs, or other renewable energy on all viable City-owned property by 2035

Connect NYC to clean electricity resource

Assist building and homeowners with clean energy projects and solar installation

· Launch Public Solar program for one- to four-family low-income homeowners in environmental justice communities by 2025

· Advocate for enactment of the City of Yes for Carbon Neutrality Citywide Text Amendment in 2023 to expand renewable energy generation in the city

IMPROVING OUR QUALITY OF LIFE

GREEN SPACE

Create an accessible and connected network of open spaces

· Connect over 300 miles of trails and make 12,000 acres of natural areas accessible to all New Yorkers

· Create over 10 acres of new open space and safe connections between parks as part of the greenway network expansion

Improve the health of our forested areas

· Restore and steward 1,000 acres of forests across 10 sites, planting more than 30,000 native trees and shrubs

WATERWAYS

Reduce combined sewer overflows by more than 4 billion gallons per year by 2045 to improve water quality

· Deliver the Long-Term Control Plans by 2045

Develop a strategy to end the discharge of untreated sewage into the New York Harbor by 2060

Improve the health and ecological function of wetlands

TRANSPORTATION

Get polluting trucks off NYC streets

· Pilot the East Coast's first low-emission zone centered on environmental justice through incentives and other methods

· Create shared charging depots by 2030 to support the transition to electric trucks

· Accelerate adoption of cargo bikes for deliveries by 2026

· Reactivate the marine highway by 2025 to move freight off trucks and onto waterways

Prioritize public transit, walking, and biking first

· Bring New Yorkers back to the transit system to achieve a sustainable mode share of 80% by 2050

· Implement congestion pricing and use it to promote environmental justice

Ensure every New Yorker can access a bike or scooter

· Create thousands of secure public bike parking spots, starting in 2025

Help New Yorkers who must drive to drive electric

· Ensure every New Yorker is no more than 2.5 miles from an electric vehicle fast-charging hub by 2035

· Mandate private parking garages and lots to make electric vehicle charging available by 2030

· Electrify school buses by 2035

FOOD

Reduce emissions of City agency food purchases 33% by 2030

· Reduce emissions of City agency food purchases 33% by 2030

Promote reduction in institutional food-related emissions 25% by 2030

Reduce emissions from commercial cooking

· Require retrofitting of charbroilers by 2027

· Develop an NYC Restaurant Accelerator Program to assist businesses with compliance

Support NYC's watershed farmers in expanding sustainability practices and food production

· Create an incentive program to support farmers in the NYC watershed who expand agricultural production of fruits and vegetables

BUILDING THE GREEN ECONOMIC ENGINE

GREEN ECONOMY

Launch new clima**te education and training programs for public schools**

· Launch new Career Connected Learning Programs for public school students dedicated to green job training and placement

Grow NYC's green workforce

· Establish a Green Economy Advisory Council in 2023

Support entrepreneurship and industry innovation

· Launch portal to connect public agencies with private startups and investors by 2024

WASTE & CIRCULAR ECONOMY

Collect organic materials and turn into energy and reusable assets

Launch citywide curbside organics collection by 2024

· Expand commercial organics separation requirements to all food businesses by 2026

Develop new markets and expand recycling and reuse

· Expand the Clean Soil Bank program by 2030